TOWN OF BLACKFALDS
STANDING COMMITTEE OF COUNCIL
Monday, November 16, 2026, at 6:00 p.m.
Civic Cultural Centre - 5018 Waghorn Street

AGENDA

1. **WELCOME AND CALL TO ORDER**

2. **LAND ACKNOWLEDGEMENT**

2.1 In the spirit of Truth and Reconciliation, the Town of Blackfalds acknowledges that we are on Treaty 6 territory, the ancestral lands of Cree, Saulteaux (So-toe), Blackfoot, Métis, Dene (De-nay) and Nakota Sioux (Sue). We acknowledge all the many First Nations, Métis, Inuit, and non-status peoples whose footsteps have marked these lands since time immemorial.

We recognize the inherent relationships Indigenous communities have with this land and its creatures and commit to supporting reconciliation and healing. We honour the resilience, culture, and contributions of Indigenous peoples, past and present.

As we gather, we pledge to listen, learn, and take meaningful action toward a future based on mutual respect and understanding as we continue on our journey of truth and healing. We recognize that reconciliation is not a single act but a lifelong journey—one that requires accountability, humility, and the centering of Indigenous voices.

3. **ADOPTION OF AGENDA**

3.1 Adoption of the November 16, 2026, Agenda

4. **ADOPTION OF MINUTES**

4.1 Adoption of the October 19, 2026, Meeting Minutes

5. **DELEGATIONS**

5.1 Lacombe Regional Tourism 2026 Annual Report

6. **BUSINESS**

6.1 Request for Direction, Fire Service Master Plan

6.2 Request for Direction, Proposed Transportation Revisions to OSL Bylaw 1357.26 - 2nd Reading

6.3 Request for Direction, Enforcement and regulations relating to Prohibited Miniature Vehicles, in Alberta

6.4 Request for Direction, Council Policy – Flags

7. **CONFIDENTIAL**

None

8. **ADJOURNMENT**

Future Meetings/Events:

- *Regular Council Meeting – November 24, 2026*
- *Regular Council Meeting – December 8, 2026*

TOWN OF BLACKFALDS
STANDING COMMITTEE OF COUNCIL MEETING
Monday, October 19, 2026, at 6:00 p.m.
Civic Cultural Centre – 5018 Waghorn Street

MINUTES

A Standing Committee of Council Meeting for the Town of Blackfalds was held on Monday, October 19, 2026, at 5018 Waghorn Street in Council Chambers, commencing at 6:00 p.m.

MEMBERS PRESENT

Mayor Laura Svab
Deputy Mayor Jim Sands
Councillor Shane Hanson
Councillor Ryan Brown
Councillor Aaron J. Hoyte
Councillor Cory Twerdoclib
Councillor Brenda Dennis

ATTENDING

Rick Kreklewich, Director of Community Services/Acting CAO
Kim Isaak, Chief Administrative Officer
Aws Al Sammarraie, Engineering Services Manager
Jessica Robinson, Legislative Advisor
Renan Bravo, IT Technician

REGRETS

None

OTHERS PRESENT

Chris Andrew, Trustee, Red Deer Catholic Regional Schools

1. WELCOME AND CALL TO ORDER

Deputy Mayor Sands welcomed everyone to the Standing Committee of Council Meeting of October 19, 2026, and called the meeting to order at 6:01 p.m.

2. LAND ACKNOWLEDGEMENT

A Land Acknowledgement was read to recognize that the Town of Blackfalds is on Treaty 6 territory.

3. ADOPTION OF AGENDA

106/26 Councillor Hanson moved That Standing Committee of Council adopt the Agenda for October 19, 2026, as presented.

CARRIED UNANIMOUSLY

4. ADOPTION OF MINUTES

107/26 Councillor Brown moved That Standing Committee of Council adopt the Minutes for October 13, 2026, as presented.

CARRIED UNANIMOUSLY

5. DELEGATIONS

5.1 Red Deer Catholic Regional Schools Board of Trustees - St. Veronica Catholic School Playground

Chris Andrew, Trustee, Red Deer Catholic Regional Schools, provided a presentation to the Committee on a joint-funding model to widen the scope of the St. Veronica Catholic School Playground, which would include equipment accessible for toddlers.

DRAFT

6. BUSINESS

6.1 Report for Committee, Northwest Stormwater Area Linear Wetland and Outlet Trunk – Project Update

Aws Al Sammarraie, Engineering Services Manager, provided an update on the Northwest Storm Area Linear Wetland and Outlet Trunk.

108/26 Councillor Twerdoclib moved That Standing Committee of Council receive the Northwest Storm Area Linear Wetland and Outlet Trunk – Project Update, as information.

CARRIED UNANIMOUSLY

6.2 Request for Direction, Proposed Recreation Rates and Fees

Rick Kreklewich, Director of Community Services/Acting CAO, presented the updated Recreation Rates and Fees for Committee's consideration.

109/26 Councillor Hoyte moved That Standing Committee recommend that the proposed Recreation Rates and Fees, as reviewed by the Recreation and Parks Board, be incorporated into Schedule "C" of the Rates Bylaw and an amending Bylaw be brought forward to a Regular Council Meeting for consideration, with an effective date of January 1, 2027, with the exception of ice rental rates, which will take effect for the 2027/2028 ice season.

CARRIED
Opposed: Deputy Mayor Sands and Councillor Brown

110/26 Mayor Svab moved That Standing Committee of Council recommend to Council that the non-prime ice rate be effective retroactively to the beginning of the 2026/2027 ice season.

CARRIED UNANIMOUSLY

6.3 Request for Direction, Council Policy – Community Grant Program Policies

Rick Kreklewich, Director of Community Services/Acting CAO, presented the Community Grant Program Policies for Committee's consideration.

111/26 Mayor Svab moved That Standing Committee of Council recommend to Council that Council Policy – Public Donation be forwarded to a future Regular Council Meeting for consideration, with the following amendment:

- Section 6.6 striking "Council may require" and replacing with "Council shall require".

CARRIED UNANIMOUSLY

112/26 Councillor Hoyte moved That Standing Committee of Council recommend to Council that Council Policy – Community Initiatives Grant be forwarded to a future Regular Council Meeting for consideration.

CARRIED UNANIMOUSLY

113/26 Councillor Hanson moved That Standing Committee of Council recommend to Council that Council Policy – Event Attraction and Hosting Grant be forwarded to a future Regular Council Meeting for consideration.

CARRIED UNANIMOUSLY

DRAFT

6.4 Request for Direction, Council Conferences and Professional Development Policy

CAO Isaak presented to Committee the proposed Council Conference and Professional Development Policy.

114/26 Councillor Brown moved That Standing Committee of Council recommend that Council consider the adoption of the Council Conferences and Professional Development Policy at a future Regular Meeting of Council and consider rescinding the Elected Officials Development Opportunities at the same time.

CARRIED UNANIMOUSLY

CONFIDENTIAL

None

ADJOURNMENT

Deputy Mayor Sands adjourned the Standing Committee of Council Meeting at 6:58 p.m.

Jim Sands, Deputy Mayor

Kim Isaak, Chief Administrative Officer

DRAFT

TOWN OF BLACKFALDS
STANDING COMMITTEE OF COUNCIL
DELEGATION

MEETING DATE: November 16, 2026

PRESENTED BY: Austin Weaver, Executive Director, Lacombe Regional Tourism and Marketing Association

SUBJECT: **Lacombe Regional Tourism 2026 Annual Report**

BACKGROUND

Austin Weaver, Executive Director of the Lacombe Regional Tourism and Marketing Association, presented the organization's 2026 Annual Report and provided an overview of its activities, achievements, and goals for 2027.

ATTACHMENTS

- Presentation

APPROVALS

Kim Isaak,
Chief Administrative Officer

Lacombe
REGIONAL TOURISM

Town of Blackfalds

Lacombe Regional Tourism

2026 Annual Report

Presented by Austin Weaver

Agenda

Lacombe
REGIONAL TOURISM

- The Team and Board
- What Do We Do?
- Why is it Important?
- 2026 In Review
  - Data
  - Reaching Visitors
  - Presence, Governance & Strategy
  - 2026 Spring/Fall Marketing
- 2027 Looking Forward
  - 2027 Goals
  - New Measurement Metrics
  - New Projects



The Board and Team

Lacombe REGIONAL TOURISM

BOARD OF DIRECTORS

RK — **Rachel Kraay**
President

RK — **Reiley Kay**
Vice President

AP — **Alida Prins**
Treasurer

SF — **Sarah Fahey**
Member at Large East

DS — **Diana Spelt**
Member at Large West

SD — **Sonja Dykslag**
Town of Blackfalds Rep

RV — **Roger Van Haren**
Lacombe County Rep

PM — **Peter McGee**
Member at Large

STAFF TEAM

AW — **Austin Weaver**
Executive Director

SL — **Savannah Lalonde**
Marketing Coordinator

HP — **Helen Peck**
Membership Contractor

Eight-member volunteer board | Three-person staff team

What do we do ?

Lacombe
REGIONAL TOURISM

MANDATE

To responsibly grow the regional visitor economy

HOW WE DELIVER IT

01

Partnerships

We leverage key public and private partnerships

02

Promotion

We lead regional destination promotion and development activity

03

Engagement

We Engage all community members across the Lacombe region

WHY IT MATTERS

Together these promote the Town of Blackfalds and its local businesses to visitors– and much more

Why is it important

Lacombe
REGIONAL TOURISM

Boosts the Local Economy

$15.2B Alberta visitor spending in 2025
Visitor spending stays with local businesses

Creates Jobs

86,000+ full-time jobs supported in 2025
Hospitality, retail and service employment

IMPACT

Tourism drives community growth

Promotes Local Events

1.47M guests at the 2025 Calgary Stampede
Festivals and gatherings draw regional crowds

Showcases Community

38.1M visitors to Alberta in 2024
Heritage and story become a visitor draw

Encouraging long-term growth — attracting new families and building a stronger tax base

Lacombe
REGIONAL TOURISM

2026 In Review – Data

FACEBOOK VIEWS

265,500

Total views in 2026

Expands awareness through regional audiences.

WEBSITE USERS

9,300

To Sept. 14, 2026

Measures interest in regional visitor information.

BOUNCE RATE

72.7%

Up from 47.6% in 2025

Indicates whether users keep engaging with content.

WEBSITE EVENTS

53,000

2025 full year: 95,000

Directs prospective visitors to local information.

PHOTO ASSETS

+1,638

New high-quality assets

Shows direct benefit to community stakeholders.







2026 In Review: Reaching Visitors



2026 Visitor Guide

- 5000 copies printed and distributed
  - Higher than average distribution through communities of Medicine Hat, Rocky Mountain House, & Hinton Alberta.
- Print and digital guide profiling member
- communities, events and operators
  - Designed in-house to reduce cost
- Gives small operators reach they cannot buy alone
  - Additional tracking components to be added for 2027



New Website

- Mobile-first trip planning and event listings
  - Current data suggests that 78% of Site users engage with the site via mobile devices
- Member directory with direct links to operators
- Foundation for future campaign landing pages



2026 Business Membership

- 87 Business and Non Profit Members
- 6 Community Members
- + 4 new members added after Guide Print
- 2027 Goal +100 plus Members

New for 2026: Presence, Governance & Strategy



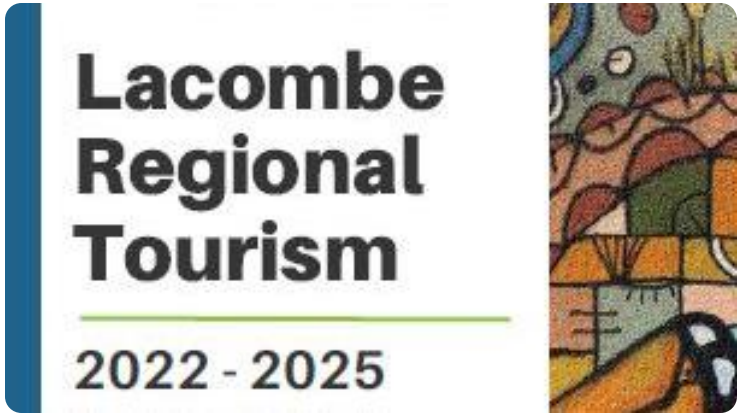
New Parade Float

- Travels to parades and celebrations across the region
- Carries one consistent look and message
- Low-cost, high-visibility community outreach



New Terms of Reference

- Defines roles, membership and decision-making
- Sets expectations for member municipalities
- Supports consistent planning year over year



Strategic Review

- First full strategic review since 2025
- Sets 2027–2030 direction and priorities
- Board and Member will be an asset in shaping the plan
- Ties activity to measurable economic outcomes

2026: Marketing Campaigns



Spring Marketing – Digital Forward

- **Pattison Media —** 359,812 impressions; our largest reach driver across prairie markets
- **Postmedia —** 3,800 clicks and the strongest CTR at 0.24%
- **Daily Hive + Nearby Media —** 183,751 impressions of mobile-first exposure
- **Takeaway —** mobile led every channel; display built awareness, Facebook drove action
- **Consumer shows —** 2026 Calgary Outdoor Adventure Show 13,330 Show attendees

Fall Marketing

- **Goal —** Move from awareness to bookable stays, backed by a Travel Alberta grant
- **Markets —** Calgary, Edmonton, Red Deer and Rocky Mountain House drive traffic
- **Tactics —** 4 seasonal itineraries, 15+ bookable experiences, influencer tour, paid media
- **Targets —** 500,000+ impressions, 10,000+ website events, 1,500+ itinerary engagements

2027 Looking Forward



2027 Goals

Lacombe REGIONAL TOURISM

Digital Targets for 2027

FACEBOOK VIEWS

+300,000

Total views in 2026

Expands awareness through regional audiences.

WEBSITE USERS

+15,250

To Sept. 14, 2026

Measures interest in regional visitor information.

BOUNCE RATE

60.7%

Up from 47.6% in 2025

Indicates whether users keep engaging with content.

WEBSITE EVENTS

65,000

2025 full year: 95,000

Directs prospective visitors to local information.

PHOTO ASSETS

+6,500

New high-quality assets

Shows direct benefit to community stakeholders.







+110 Business and Non-profit Members with Summer Villages as new Community Members

Measurement & Metrics

Lacombe REGIONAL TOURISM

WHAT WE WILL TRACK IN 2027

Net Tax Benefit
New measure — net municipal gain from visitor spending

Direct Fiscal ROI
New measure — return on every dollar invested

Google Analytics
Website traffic, sources and campaign reach

Location Check-Ins
Visitor foot traffic at key destinations

1 in 5

EARLY DATA SUGGESTS
of businesses registered in the Town of Blackfalds rely on direct foot traffic or are service-sector oriented.



2027 New Projects

Four priorities for 2027

Lacombe Farm Pass

- An agri-tourism pass connecting farm experiences
- Bundles farm gates, markets and producers
- Encourages visitors to travel between communities
- Direct revenue for local agricultural operators



Live, Work and Invest

- Tourism is the front door to the region
- Visitors today become residents and investors tomorrow
- Shared story for economic development partners
- Aligns with the Regional Growth Strategy



Business Membership

- Goal of +110 business and non-profit members
- Extend membership to the Regional Summer Villages
- Wider regional representation for partners



Host Travel Alberta and Tourism Industry professionals in Familiarization Visit

- Four season-ready itineraries built for drive markets
- 15+ bookable experiences packaged with local operators
- Promoted through paid media to convert interest into stays

Questions?



MEETING DATE: November 16, 2026

PREPARED BY: Robert Cote, Fire Chief

PRESENTED BY: Robert Cote, Fire Chief

SUBJECT: **Fire Service Master Plan**

BACKGROUND

Administration approved the completion of a Fire Master Plan as part of the 2026 budget year. Behr Integrated Solutions Inc. was awarded the contract to complete the project and develop the Fire Master Plan. The plan provides a comprehensive review of the Fire Department, an assessment of community risks, and a strategic framework to guide the future direction of fire services. The resulting plan will provide both short-term and long-term guidance for the Fire Department.

A review of the Fire Department and community risks was undertaken to:

- **Vision, Goals, and Measurable Objectives:** Define a long-term vision and establish clear, measurable goals and objectives for fire service improvement, based on the findings of the Community Risk Assessment (CRA), to support future community growth and development.
- **Resource Allocation:** Identify the staffing, financial, and operational resources required to achieve the established goals. This includes a detailed analysis and recommendations regarding:
    - Staffing levels and organizational structure.
    - Training and certification requirements.
    - Equipment and apparatus needs, including a lifecycle replacement plan.
    - A multi-year financial forecast and budget model.
    - Compliance requirements under the Alberta Safety Codes Act and enhancements to the existing Quality Management Plan.

DISCUSSION

Administration reviewed the Fire Master Plan, which was completed in two phases. The first phase involved conducting a Community Risk Assessment (CRA). The CRA is a systematic process used to identify, evaluate, and prioritize potential risks that may impact the Town as they relate to fire protection and public safety. This assessment serves as the foundation for developing the future vision of the Town's fire services by ensuring that critical operational elements, including response capabilities, staffing levels, training, equipment, apparatus, and facilities, are aligned to effectively mitigate fire and emergency-related risks within the community.

The second phase involved the development of a Fire Services Master Plan (FSMP). The FSMP translates the findings of the Community Risk Assessment into a strategic and actionable roadmap for the future of the Fire Department. The primary objectives of the FSMP are to:

- Provide prioritized, evidence-based recommendations to address and mitigate the risks identified through the CRA.
- Establish a sustainable framework for the growth and development of the Fire Department, ensuring the continued delivery of reliable, effective, and responsive fire protection, fire prevention, and emergency response services for the Town of Blackfalds.

STRATEGIC PLAN ALIGNMENT / OTHER MASTER PLAN ALIGNMENT



The completed Fire Master Plan supports Council's Strategic Plan by advancing **Community Life, Safety, and Inclusion** and **Sustainable Services and Infrastructure** through a long-term framework for fire protection, emergency response, resource planning, and service delivery as the Town continues to grow.

FINANCIAL IMPLICATIONS

None

COMMUNICATION / ENGAGEMENT CONSIDERATIONS

Communication and engagement include ongoing coordination with the Town of Blackfalds and the Fire Department to ensure the Strategic plan alignment / Other Master Plan alignments.

ADMINISTRATIVE RECOMMENDATION

That Standing Committee of Council consider the following motion:

1. That Standing Committee of Council recommend Council accept the Fire Master Plan and Community Risk Assessment at a future Regular Meeting of Council.

ALTERNATIVES

None

ATTACHMENTS

- Blackfalds Community Risk Assessment (CRA) Final Report
- Blackfalds Fire Services Master Plan Final Report Oct 28

APPROVALS

Kim Isaak,
Chief Administrative Officer

Department Director/Author

Town of Blackfalds
COMMUNITY RISK ASSESSMENT

Final Report

September 2, 2026



Prepared for:

Prepared by:

Behr Integrated Solutions Inc.
Suite 750, 600 – 6 Avenue SW
Calgary AB T2P 0S5

www.behrintegrated.com

PREFACE

This Community Risk Assessment will serve as a foundational document to inform and direct the development of a municipal Fire Services Master Plan for the Town of Blackfalds to address the strengths, threats and vulnerabilities that are unique to Blackfalds, to protect lives, the environment and property.

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ACRONYMS

Acronym	Definition
CEMP	Community Emergency Management Program
FSMP	Fire Service Master Plan
CRA	Community Risk Assessment
HIRA	Hazard Identification and Risk Assessment
MVC	Motor Vehicle Collision
NBC	National Building Code
NFC	National Fire Code
NFPA	National Fire Protection Association
BFD	Blackfalds Fire Department
PPE	Personal Protective Equipment

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EXECUTIVE SUMMARY

Introduction

A Community Risk Assessment (CRA) is a process used to identify, evaluate, and prioritize potential hazards, vulnerabilities, and risks to the public within a specific community or geographic area. As per NFPA 1300 *Standard on Community Risk Assessment and Community Risk Reduction Plan Development (2026)*, the CRA serves to inform the development and implementation of future community risk reduction plans and programs, to mitigate, reduce or eliminate the community's risk. It involves gathering information, analyzing data, and engaging with stakeholders to understand the potential threats and vulnerabilities that could lead to various types of emergencies or disasters. The goal of a CRA is to inform emergency management and response agencies to enhance community resiliency and reduce the impact of potential future emergencies.

Community Risk Assessment Process

As per NFPA 1300, there are nine (minimum) mandatory profiles that must be examined during the development of the community's CRA. This CRA will examine the nine mandatory profiles below, including assessing the critical infrastructure in the community. The profiles are explained below.

1. **Geographic Profile:** Physical features of the community.
2. **Building Stock Profile:** Types, numbers, uses and ages of buildings in the community.
3. **Critical Infrastructure Profile**: Facilities and services that meet vital needs, sustain economy, and protect public security.
4. **Demographic Profile:** Composition of the community's population.
5. **Public Safety and Response Profile:** Organized agencies and organizations within and external to the community that can respond to certain types of incidents.
6. **Community Services Profile:** Community agencies, organizations and associations that can provide supportive services.
7. **Hazard Profile:** Natural, human-caused, and technological hazards in the community.
8. **Economic Profile:** Economic sectors that are critical to financial stability of the community.
9. **Past Loss and Event History Profile:** Past emergency responses in the community.

Each profile is considered and where applicable, taken through the core five-step process of a CRA development as outlined in the table below.

Table 1: Five-step process of a CRA

No.	Step	Description
1	Data Collection	Gather relevant data about the community, including demographics, geography, infrastructure, land use, historical disaster data, socio-economic factors, and stakeholder input.
2	Hazard Identification	Identify the various hazards that could affect the community. Hazards include natural, human-made and technological events.
3	Vulnerability Analysis	Assess the community's vulnerabilities in relation to each identified hazard. Consider factors such as population density, housing quality, socio-economic status, access to community resources and community protection agencies.
4	Risk Assessment	Combine information about hazards and vulnerabilities to assess the overall risk to the community by quantifying the likelihood and potential impact of various hazards occurring and affecting vulnerable areas.
5	Risk Ranking and Risk Treatment	Assign each risk a ranking score and potential treatment options to accept, avoid, mitigate, or transfer the risk.

The results of the five-step process will provide a series of identified risks and key findings. Identified risks are factors which may highlight a need for future consideration during the development of a Fire Services Master Plan (FSMP) when examining emergency service levels, while key findings may be noted as strengths in the community's current response model and/or trends to be monitored.

The identified risks and key findings of Blackfalds's CRA are summarized in the next section and a full analysis of the risk assessment process is outlined in Section 11 of this report.

Summary of Identified Risks and Key Findings

The following identified risks and key findings are drawn from analyses presented throughout the report. They are grouped based on the nine mandatory profiles and in the order in which they appear in the report.

The risk treatments presented in this report are a generalized basis for further consideration and in-depth analysis during the development of a FSMP, which will serve to account for their feasibility, cost, and execution.

Table 2: Summary of Identified Risks

No.	Profile	Identified Risk	Risk Level	Rationale
1	Geographic	Transportation and Road Incidents	High	• Blackfalds is located adjacent to major transportation corridors including Highway 2, Highway 2A, and Highway 597, which experience high traffic volumes and commercial transport activity. This increases the likelihood of serious motor vehicle collisions, traffic disruptions, and hazardous materials incidents. Rail crossings may also delay emergency response times and evacuation routes.
2	Geographic	Railway and Dangerous Goods Risks	High	• The active CPKC rail line poses significant risks associated with derailments, hazardous materials releases, fires, and blocked crossings. The 2019 derailment near Blackfalds, which released approximately 295,000 litres of flammable fuel, demonstrates the potential severity and environmental impact of a rail-related incident.
3	Geographic	Flooding and Drainage Infrastructure Failures	Moderate	• While Blackfalds is not typically subject to large-scale river flooding, localized flooding risks exist due to heavy rainfall, spring melt, and drainage infrastructure limitations. Blocked or frozen culverts and stormwater system failures can result in roadway damage, erosion, property impacts, and restricted emergency access.
4	Geographic	Wildland and Grass Fire Exposure	Moderate to High	• Agricultural lands, riparian areas, and dry seasonal conditions create elevated wildfire and grass fire risk, particularly during prolonged hot and dry periods. Natural areas and the nearby river valley may contribute to fire spread and complicate suppression efforts, especially during periods of high winds and low humidity.

No.	Profile	Identified Risk	Risk Level	Rationale
5	Building Stock	Older Residential Building Stock	Moderate	• Approximately 13.6% of Blackfalds' occupied dwellings were constructed prior to the adoption of modern Alberta building and fire codes in 1990–1992. Older construction methods may lack modern fire separation, alarm systems, and fire-resistant materials, increasing the potential for rapid fire spread and life safety concerns.
6	Building Stock	Lightweight Construction Collapse Risk	High	• Most modern residential homes in Blackfalds are constructed using lightweight truss systems, which are susceptible to premature structural failure during fire conditions. This creates increased operational risk to firefighters and occupants during suppression activities
7	Building Stock	Growing Building Density and Community Expansion	Moderate to High	• Rapid residential and commercial growth is increasing infrastructure demands and exposure risks. Higher-density developments, townhouses, and infill projects increase the likelihood of fire spreading between adjacent buildings and may complicate firefighting access
8	Building Stock	High-Risk Assembly and Institutional Occupancies	High	• Facilities such as the Abbey Centre, Eagle Builders Centre/Multiplex, schools, and recreation complexes contain high occupant loads and complex evacuation requirements. Fires or emergencies in these occupancies could have significant life-safety impacts
9	Building Stock	Industrial and Fuel Load Hazards	High	• Commercial and light industrial properties containing fuels, compressed gases, chemicals, warehouses, and automotive operations present elevated fire and hazardous materials risks. Increasing storage and use of lithium-ion battery products further increases potential fire severity.

No.	Profile	Identified Risk	Risk Level	Rationale
10.	Critical Infrastructure	Interdependency Failure of Critical Infrastructure Systems	High	• Blackfalds relies heavily on interconnected regional infrastructure systems including water supply, wastewater treatment, power distribution, transportation corridors, and telecommunications. A disruption in one system (e.g., regional power outage or water supply interruption from Red Deer) could cascade into failures across multiple services, impacting emergency response, public safety, and municipal operations.
11.	Critical Infrastructure	Transportation Disruptions and Emergency Response Constraints	High	• The Town depends significantly on Highway 2 and Highway 2A for commuter traffic, goods movement, and emergency access. With 200 motor vehicle incidents between 2021 and 2025 representing 16.61% of all calls, roadway incidents already create operational pressures. Severe weather, major collisions, or hazardous material incidents could restrict access routes and delay emergency services.
12.	Critical Infrastructure	Capacity Pressures Due to Rapid Population Growth	Moderate to High	• Ongoing residential, commercial, and industrial growth places increasing strain on water servicing, transportation infrastructure, emergency response resources, healthcare access, and utility systems. Existing infrastructure may face challenges maintaining service reliability, staffing levels, and long-term asset management without continued investment and expansion.
13	Demographic	Rapid growth and increasing service demand	High	• Population growth from 3,042 in 2001 to 10,470 in 2021 increases pressure on fire response, inspections, prevention programming, and municipal infrastructure.
14	Demographic	High youth population requiring prevention focus	Moderate	• Blackfalds has a large proportion of children and youth, creating a need for sustained school-based fire and life safety education.
15	Demographic	Future Senior Vulnerability	Moderate	• While the current senior population is lower than Alberta's average, the 55–64 age group will age into a higher-risk category for residential fire injury and fatality.

No.	Profile	Identified Risk	Risk Level	Rationale
16	Demographic	Commuter-related transportation risk	Moderate to High	• Most workers commute outside Blackfalds, with heavy peak-hour travel. This may increase motor vehicle collision risk and affect emergency response travel times.
17	Demographic	Household Cost and Occupancy Pressures	Moderate	• Some households face high shelter costs and larger household sizes, which may reduce fire safety investments and increase consequences during emergencies.
18	Hazard	Transportation and Hazardous Materials Risk	High	• Blackfalds faces elevated risk from major roadway collisions, rail accidents, and hazardous materials transportation incidents. These events may result in injuries, fatalities, environmental contamination, roadway or rail closures, and complex multi-agency emergency responses that could exceed local fire service capacity.
19	Hazard	Wildfire and Grassfire Risk	Moderate to High	• Seasonal wildfire and grassfire conditions pose a threat to residential areas, infrastructure, and public health through fire spread, smoke exposure, and potential evacuation requirements. Prolonged wildfire events may also increase operational demands on fire services and mutual aid resources.
20	Hazard	Sever Weather and Human Health Emergency	High	• Severe weather events such as blizzards, tornadoes, windstorms, and hail can create dangerous travel conditions, infrastructure damage, and utility outages, while human health emergencies may significantly strain emergency response resources, staffing, and service delivery capabilities.
21	Economic	Industrial and commercial occupancy fire risk	High	• Construction, manufacturing, logistics, and commercial operations may contain higher fuel loads, industrial equipment, and hazardous materials that increase the potential severity and complexity of fire incidents.

No.	Profile	Identified Risk	Risk Level	Rationale
22	Economic	Economic disruption from infrastructure or employer incident	Moderate to High	• Fires, hazardous material events, or transportation disruptions affecting key employers or regional transportation corridors could negatively impact local employment, supply chains, and business continuity within Blackfalds.
22	Past Loss and Event History	Increasing Emergency Call Volume	High	• Emergency calls increased from 184 calls in 2021 to 255 calls in 2025, representing a 27.84% increase over five years. This trend indicates growing demand on fire and emergency services resources, staffing, and response capacity
23	Past Loss and Event History	High Frequency of Motor Vehicle Collisions (MVCs)	High	• MVCs accounted for approximately 16.78% of all emergency incidents (2021–2025), making them one of the leading response categories. Seasonal increases from July to November suggest elevated risks associated with travel, agricultural activity, and winter driving conditions
24	Past Loss and Event History	Residential Fire Risk	High	• Residential occupancies represented nearly 58% of all fires and accounted for over 99% of structure fire losses. This indicates that residential fires pose the greatest life safety and property risk within the community
25	Past Loss and Event History	False Alarm and System Demand	Moderate	• False alarms accounted for approximately 42–45% of total incidents over the five-year period. This creates operational strain by diverting resources from higher-priority emergencies and increasing unnecessary apparatus utilization.
26	Past Loss and Event History	Smoke Alarm Deficiencies in Residential Fires	High	• Smoke alarms were absent in 28.57% of residential fire incidents, and activation status was unknown in many cases. This increases the risk of delayed occupant notification, injury, and property loss during residential fires

Table 3 Summary of Key Findings

No.	Key Finding
	Geographic Profile
1	Blackfalds is experiencing significant residential and infrastructure growth, which is increasing pressure on transportation systems, utilities, and emergency response services.
2	Highways, rail infrastructure, and regional commuter traffic are central contributors to the community's risk profile, particularly for collisions, hazardous materials incidents, and emergency response delays.
3	Newer residential construction, engineered stormwater systems, and strong regional partnerships improve overall resilience; however, continued growth will require ongoing infrastructure investment and coordinated emergency planning
	Building Stock Profile
4	Blackfalds' building stock is overwhelmingly residential, with single-detached homes representing approximately 71.8% of all dwellings. This indicates that residential fire prevention and public education should remain a primary focus for the fire service.
5	Blackfalds currently has no high-rise buildings and does not contain a full-service hospital or major long-term care facility, reducing some of the complex fire risks commonly found in larger municipalities.
6	The town is expected to continue experiencing significant residential, commercial, and institutional growth over the next five years. This expansion will increase demands on emergency services, infrastructure, transportation systems, and fire prevention activities

No.	Key Finding
	Critical Infrastructure
7	Strong Regional Infrastructure Connectivity Blackfalds benefits from well-developed regional infrastructure connections including potable water supplied through Red Deer, access to Highway 2, proximity to freight rail infrastructure, and regional airport access. These systems support economic development, mobility, and long-term community growth.
8	Critical Dependence on Regional Partnerships Several essential services — including healthcare, water treatment, wastewater servicing, transportation, and policing — rely on regional partnerships and external service providers. This regional integration strengthens service access but also increases dependency on outside infrastructure and agencies.
9	Emergency Services Infrastructure Faces Growing Demands Blackfalds maintains key emergency infrastructure including a fire hall, hydrant systems, emergency management systems, and RCMP services. However, the community currently operates with one fire station and no standalone paramedic station, creating potential response capacity concerns during large-scale emergencies, severe weather events, or continued population growth.
	Demographic Profile
10	Blackfalds is young and growing, with a median age of 31.8 and significant long-term population growth.
11	Socioeconomic conditions are generally strong, including higher median household income and higher homeownership than Alberta.
12	Most residents commute outside the community, making transportation planning and peak-hour response readiness important.
13	Language barriers are limited but still present, with a small newcomer and non-official-language population requiring inclusive public education materials.

No.	Key Finding
	Hazard Profile
14	Transportation-related incidents represent a major operational demand, particularly motor vehicle collisions, and the potential for hazardous materials incidents along transportation corridors.
15	Seasonal and environmental hazards increase community vulnerability, particularly during wildfire season and severe weather periods that may disrupt infrastructure and emergency operations.
16	Large-scale or prolonged emergencies may exceed local response capabilities, requiring regional mutual aid, specialized resources, and coordinated multi-agency emergency management responses.
	Economic Profile
17	Blackfalds maintains a diversified local economy, with employment distributed across municipal services, construction, manufacturing, retail, logistics, education, and regional service sectors.
18	Trades, sales and services, and business administration occupations represent the largest employment sectors contributing to the community's economic base.
19	The Highway 2 corridor plays a critical economic role, supporting regional commuting patterns, goods movement, and access to employment opportunities in Red Deer and surrounding Central Alberta communities.
	Past Loss & Event History Profile
20	Emergency response demand is steadily increasing, with total incident volume rising significantly between 2021 and 2025.
21	Residential fires are the primary contributor to fire loss, accounting for the majority of structure fires and nearly all associated property damage
22	Motor vehicle collisions and false alarms represent the largest categories of emergency responses, together accounting for a substantial portion of operational workload.
23	Most fires were determined to be unintentional, with mechanical/electrical failures and miscellaneous acts or omissions identified as the leading contributing causes, highlighting opportunities for targeted public education and prevention initiative

SECTION 1
INTRODUCTION

1.1 Background

This Community Risk Assessment (CRA) has been developed for the Town of Blackfalds (Blackfalds) as a foundational document to inform the Fire Service Master Plan (FSMP) being developed and any other future programs and standards being developed for Blackfalds, to further analyze and address the identified risks as they relate to service models and response areas, current programs, standards of cover and standards of practice.

The methodology and analysis utilized to develop this CRA has been directly informed by NFPA 1300 that recognizes the value of understanding the fire risk within a community, and the importance of developing fire risk reduction and mitigation strategies in addition to providing fire suppression services. The CRA would serve as a living document which would include regular (e.g. annual) review and updates to the CRA's data and information.

1.2 Purpose

The primary purpose of this CRA is twofold:

1. To develop a Community Risk Assessment for Blackfalds to identify the fire related risks within the community; and
2. To utilize the risk conclusions of the Community Risk Assessment to inform comprehensive analyses of the existing, and future fire protection needs of Blackfalds.

1.3 Methodology

The methodology applied to develop this CRA has been informed by current industry standards and best practices. These include:

1. 10th Edition CFAI Accreditation Model
   - NFPA 1300, Standard on Community Risk Assessment and Community Risk Reduction Plan Development (2020 Edition)
   - NFPA 1730, Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations (2019 Edition)
2. Vision 20/20 Community Risk Assessment: A Guide for Conducting a Community Risk Assessment (Version 1.5, 2016)
3. Vision 20/20 Community Risk Reduction Planning: A Guide for Developing a Community Risk Reduction Plan

As required by NFPA 1300, this CRA includes a comprehensive analysis of the nine mandatory profiles including:

1. Geographic Profile
2. Building Stock Profile
3. Critical Infrastructure Profile
4. Demographic Profile
5. Public Safety and Response Profile
6. Community Services Profile
7. Hazard Profile
8. Economic Profile
9. Past Loss and Event History Profile

Within each of the nine profiles, there are several sub-topics examined. These sub-topics are illustrated in Figure 1. These profiles are based on an analysis of several sources of information, including data provided by Blackfalds, Blackfalds Fire Department (CFD), Statistics Canada, Office of the Fire Commissioner, and desktop research.

The mandatory profile analyses result in a series of risk related conclusions that will be used to inform service levels or other strategies in alignment with the three lines of defense through a risk treatment process. These are referred to as a '**key finding**' or an '**identified risk**.'

Identified Risks: These are hazards or risks that currently exist within a community and could potentially be worsened in the event of an emergency, leading to a detrimental impact on the community, the Fire Department or both. Risks may arise from specific hazards identified in individual profiles or from compounded risks that span multiple profiles. The risk level is determined by evaluating the probability and potential consequences of each risk, which in turn guides how the Fire Department resources are allocated.

Key Findings: These are future trends or developments that should be closely monitored. While these concerns may not currently qualify as identified risks requiring immediate action, they are significant enough to be flagged, monitored, and reviewed as part of the annual CRA update.

Those findings referred to as an 'Identified Risk' are taken through a risk assignment process to assist with risk prioritization. In specific circumstances, being those that involve additional jurisdictional or legislative considerations, a risk-related conclusion is referred to as a Special Consideration. All risk-related conclusions will be taken through a risk treatment process and aligned with the three lines of defense to inform decision making. Figure 2 illustrates the risk treatment process.

Figure 1: Community Risk Profiles and Sub-topics

COMMUNITY RISK ASSESSMENT PROFILES AND SUB-TOPICS								
Geographic	**Building Stock**	**Critical Infrastructure**	**Demographics**	**Hazards**	**Public Safety Response**	**Community Services**	**Economic**	**Past Loss & Event History**
• Road network • Bridges • Railways • Airport • Natural features and landforms • Wildland Urban Interface	• Property stock by occupancy type • Building age, construction • Building density and exposure • Building height and area • Potential high fire risk occupancies • Historically or culturally important features	• Food and water • Oil and natural gas • Electricity • Telecommunications • Public safety and security • Continuity of government • Transportation • Health • Financial institutions	• Population and dispersion • Age • Gender • Socioeconomic circumstances • Ethnic and cultural considerations • Transient populations	• Hazard Identification and Risk Assessment (HIRA)	• Public safety response agencies within the community	• Community service agencies, organizations, and associations	• Major employers and economic sectors	• Overall fire loss • Fire loss by occupancy type • Civilian fire deaths and injuries • Fire cause and ignition • Smoke alarm status • Call volume • Call types

Figure 2: Risk Treatment Process



The analysis presented within this CRA has been informed by a wide range of data sources. Where applicable, all numerical data has been rounded to the nearest 1/100 (hundredth) decimal point to provide consistency in the analysis. As a result, the numerical totals presented within each analysis, although stated as reflecting 100%, may show a minor variance based on the use of only the nearest 1/100 (hundredth) decimal points.

SECTION 2
GEOGRAPHIC PROFILE

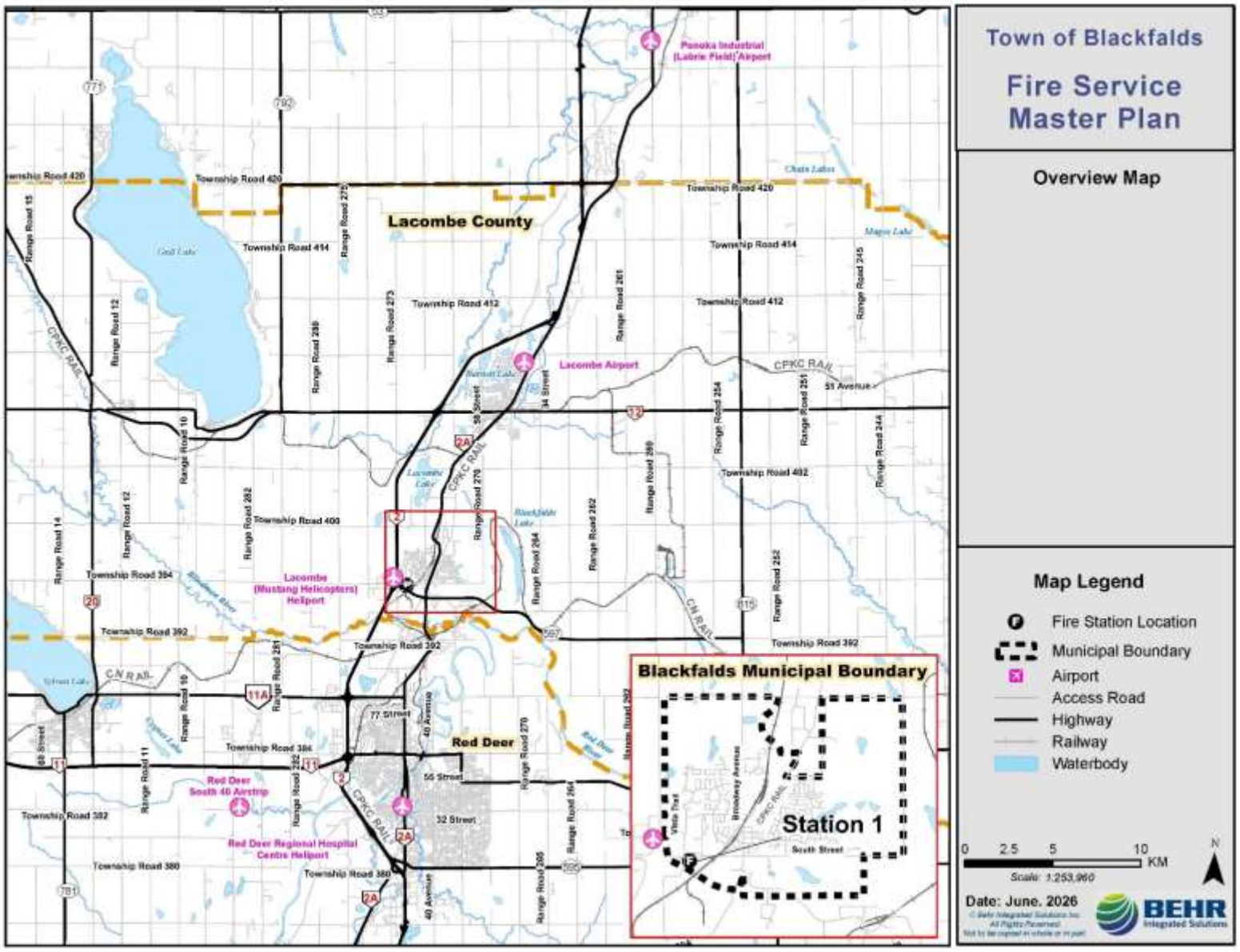
The geographic profile of a community is an assessment of the physical features of a community, such as highways, waterways, railways, bridges, landforms, quarries, and wildland-urban interfaces, which may present inherent risks to the community and affect emergency services' access to incidents and response capabilities. This section contains a detailed analysis of these geographical features for Blackfalds to assist in determining the type and level of fire protection services needed for the community and any potential impacts these features may pose on service delivery.

2.1 Geographic Overview

Blackfalds is a growing town in central Alberta within Lacombe County, positioned along the Queen Elizabeth II Highway between Calgary and Edmonton. It lies approximately13 km north of Red Deer, making it closely connected to that city's economic and service area. The surrounding landscape is part of Alberta's aspen parkland, characterized by gently rolling plains, a mix of open farmland and small wooded areas, and an elevation of roughly 850–900 meters.

While the town itself is not directly on a major river, it is near the Red Deer River and sits within the South Saskatchewan River watershed. The region experiences a humid continental climate with cold winters, warm summers, and most precipitation occurring in late spring and summer. Historically rooted in agriculture, the area has transitioned toward rapid residential and light industrial growth, supported by strong transportation access and proximity to regional infrastructure, while the surrounding land remains largely rural and farm based. As of the 2021 federal census, Blackfalds had a population of about 11,000 residents, with continued steady growth in recent years.

Map 1: Blackfalds Overview Map



2.2 Transportation Network

2.2.1 Road Network

Road networks and transportation systems provide fire services with access throughout a community when responding to emergency calls. The road network is how fire apparatus travel through a municipality; therefore, it is valuable to consider areas where there may be a lack of connectivity due to road network design, as well as other natural barriers (e.g. rivers, lakes, etc.) or human-made barriers (e.g. rail lines, traffic calming measures, etc.). Road networks can also contribute to vehicle congestion, causing delays in emergency response travel times. Where possible, Blackfalds's transportation planning processes should include BFD as a stakeholder to provide consideration for emergency services' needs and challenges relating to the road network, traffic congestion, and traffic calming and related topics.

Blackfalds, Alberta is served by a straightforward and efficient road network that reflects its small-town scale and proximity to larger regional centers. The town's primary external connections are defined by Highway 2A, which runs along its eastern boundary and links residents directly to Lacombe to the north and Red Deer to the south, and Highway 597, an east–west route just south of town that provides access to Highway 2, the major Calgary–Edmonton corridor. These highways carry the bulk of commuter and commercial traffic, making Blackfalds well-integrated into central Alberta's regional transportation system despite its relatively compact footprint.

Within the town, traffic movement is organized around a small number of key arterial and collector roads. Womacks Road functions as the main east–west spine, connecting residential neighborhoods with commercial areas and civic facilities, while Broadway Avenue serves as a significant north–south route, particularly for newer developments on the west side. Additional collector roads branch from these arterials, distributing traffic into neighborhoods and linking subdivisions back to the main corridors. This hierarchical layout, arterials feeding collectors, which in turn feed local street, keeps traffic flows predictable and minimizes congestion.

At the neighborhood level, Blackfalds follows a curvilinear suburban design, with crescents, loops, and cul-de-sacs that discourage through-traffic and enhance residential safety. Complementing the road system is an extensive network of multi-use pathways that connect parks, schools, and community amenities, offering viable alternatives to driving for short trips. Commercial development is concentrated along Highway 2A and Broadway Avenue, ensuring convenient access and visibility, while civic destinations are centrally positioned within the network. Overall, Blackfalds road system prioritizes ease of navigation, safety, and scalability for future growth.

2.2.2 Bridges and Culverts

Bridges must be considered when conducting a CRA, as they can create physical barriers to emergency responses and negatively impact response times. An apparatus may face restrictions from crossing, such as load limitations, or roadway connectivity may be disrupted if a bridge is out of service for maintenance or repairs. Incidents occurring on a bridge pose increased risks, including spills, congestion, and difficulty accessing the scene. Such incidents may also necessitate specialized skills and equipment for slope rope rescue operations.

Blackfalds has a modest but important bridge network that supports transportation, drainage, recreation, and emergency response throughout the community. The most significant bridge-related infrastructure is associated with the Blindman River and regional transportation corridors such as Highway 2, Highway 2A, and local collector roads connecting Blackfalds with Red Deer and Lacombe. The community's bridge inventory primarily consists of small roadway bridges crossing drainage channels or stormwater convenance features; pedestrian bridges within the extensive trail system that cross natural drainage courses, stormwater ponds, or small watercourses rather than roads; and, regional highway bridges located outside or on the outskirts of the community, such as those carrying Highway 2 and Highway 2A over the Blindman River. There are no road-over bridges, roadway overpasses or pedestrian bridges spanning municipal streets. These bridges are important for maintaining community connectivity, supporting emergency response routing, and ensuring transportation access during severe weather or flooding events. As Blackfalds continues to grow, bridge infrastructure will remain an important component of the town's transportation and public safety systems. Bridge related risks are generally low as Blackfalds does not rely on significant grade-separated roadway infrastructure.

Culverts are widespread throughout Blackfalds and form a critical part of the community's stormwater and drainage infrastructure. They are used extensively beneath roads, driveways, pathways, and drainage channels to manage runoff, snowmelt, and water movement associated with residential development and natural drainage systems. Newer neighbourhoods rely heavily on engineered stormwater systems that include concrete and corrugated steel culverts connected to storm ponds and drainage outfalls. Culverts are particularly important during spring melt and heavy rainfall events, when blocked or frozen systems can contribute to localized flooding, erosion, and roadway damage. From a Community Risk Assessment perspective, culverts are considered essential infrastructure because failures or obstructions can disrupt transportation routes, affect emergency access, and increase flood-related risks within the community.

2.2.3 Rail

At-grade rail crossings, intersections where a road crosses a rail line at the same level, can cause delays in emergency response by obstructing roadway access and pose a threat of dangerous collisions with motor vehicles. Moreover, the physical barriers created by rail infrastructure, such as rail yards or the placement of tracks, grade separations, and level crossings, can significantly impact emergency services travel times and overall response times throughout a community. Additionally, the frequency of trains passing through a community and the nature of goods they transport pose varying degrees of risk, including the potential for derailments and releases of hazardous materials.

Blackfalds is served by a Canadian Pacific Kansas City (CPKC**)** railway line that runs through the area and has historically been an important part of the community's development. The town originally grew around the arrival of the railway in the late 1800s, and Blackfalds once had its own railway station, built in 1904.

Today, the rail line remains active primarily for freight transportation. Railway crossings and signal infrastructure are still present within and around the community, and the Town of Blackfalds directs railway-related concerns to Canadian Pacific Rail Police. The railway corridor is relevant in a Community Risk Assessment because it introduces potential risks associated with:

- Rail crossing collisions
- Hazardous materials transport
- Train derailments
- Delays to emergency response caused by blocked crossings

A notable example occurred in 2019 when a Canadian Pacific freight train carrying flammable liquids derailed near Blackfalds. Although there were no injuries, the incident resulted in 295,000 litres of flammable fuels to be spilled.

The transportation of dangerous goods along these routes, especially through populated areas, poses risks to public safety. Establishing information-sharing practices between railway operators and emergency responders can enhance awareness of the types and frequencies of dangerous goods being transported through the region.

2.3 Waterways and Marinas

The primary natural waterway associated with Blackfalds is the Blindman River, which runs near the community and contributes to local drainage, recreation, and environmental features. The town also contains:

- Stormwater ponds and drainage channels within newer subdivisions
- Wetlands and small creeks associated with agricultural and natural areas
- Trail systems and park spaces connected to riparian areas

These waterways contribute to:

- Flood and erosion considerations
- Ice and water rescue potential (limited but possible)
- Recreational use such as walking trails, fishing access, and natural habitat preservation

The nearby river valley and drainage systems also influence wildfire exposure and environmental protection planning.

Blackfalds does not have marinas, harbours, or significant boating infrastructure. The Blindman River is relatively small and shallow, making it unsuitable for large recreational boating or marina development. Water-based recreation in the area is generally limited to:

- Small non-motorized activities in regional areas
- Fishing and riverside recreation
- Nearby regional lakes outside the town

From a Community Risk Assessment perspective, marine-related risks are therefore considered very low compared to municipalities with lakes, reservoirs, or navigable rivers.

There have been two ice rescues related to animals falling through the ice in the fire district of Lacombe County and along the Blindman River.

2.4 Geographic Profile – Identified Risks and Key Findings

Table 4: Geographic Profile - Identified Risks and Key Findings

Identified Risk	Rationale
Transportation and Road Incidents	Blackfalds' proximity to Highway 2, Highway 2A, and Highway 597 increases the likelihood of major motor vehicle collisions, traffic congestion, and hazardous materials transportation incidents. Rail crossings may also delay emergency response times.
Railway and Dangerous Goods Risks	The active CPKC rail line presents risks associated with derailments, hazardous materials spills, and blocked crossings. A notable 2019 derailment near Blackfalds involved the release of approximately 295,000 liters of flammable fuel.
Flooding and drainage Infrastructure Failures	Extensive culvert and stormwater systems are vulnerable during spring melt and heavy rainfall events. Blocked or frozen culverts can lead to localized flooding, erosion, roadway damage, and restricted emergency access.
Wildland and Grass Fire Exposure	Surrounding agricultural lands, riparian areas, and dry seasonal conditions create exposure to grass and wildland fires, particularly during hot and dry periods. The nearby river valley and natural areas also influence wildfire planning considerations.
Key Finding	
Blackfalds is experiencing significant residential and infrastructure growth, which is increasing pressure on transportation systems, utilities, and emergency response services.	
Highways, rail infrastructure, and regional commuter traffic are central contributors to the community's risk profile, particularly for collisions, hazardous materials incidents, and emergency response delays.	
Newer residential construction, engineered stormwater systems, and strong regional partnerships improve overall resilience; however, continued growth will require ongoing infrastructure investment and coordinated emergency planning	

SECTION 3
BUILDING STOCK PROFILE

A building stock profile assessment includes an analysis of the types and uses of the building stock within a municipality. Important considerations include the number, type, and use of buildings, as well as any building-related risks known to the fire service. There is potential fire risks associated with different types or uses of buildings, depending on the presence or absence of fire safety systems and equipment at the time of construction and maintenance thereafter. This section examines these building characteristics within Blackfalds.

3.1 National Building Code Occupancy Classifications

A building stock profile assessment includes an analysis of the types and uses of the building stock within Blackfalds, and the potential fire risks. This involves assessing the prevalence of each occupancy classification within a community, and the presence of fire and life safety systems and equipment.

The National Building Code (NBC) of Canada - 2023 Alberta Edition categorizes buildings into six major building occupancy classifications (groups). Within each group the occupancies are further defined by division.

Table 5: NBC Major Occupancy Classifications

Group	Division	Description of Major Occupancies
A	1	Assembly occupancies intended for the production and viewing of the performing arts
A	2	Assembly occupancies not elsewhere classified in Group A
A	3	Assembly occupancies of the arena type
A	4	Assembly occupancies in which occupants are gathered in the open air
B	1	Detention occupancies
B	2	Care and treatment occupancies
B	3	Care occupancies
C	All divisions	Residential occupancies
D	All divisions	Business and personal services occupancies
E	All divisions	Mercantile occupancies
F	1	High-hazard industrial occupancies
F	2	Medium-hazard industrial occupancies
F	3	Low-hazard industrial occupancies

Table Source: National Building Code (NBC) of Canada – 2023 Alberta Edition

3.2 Fire Risk Model Occupancy Classification

For the purposes of this fire-risk assessment, only major occupancy groups (A, B, C, D, E, F) will be used, rather than the more detailed sub-divisions (A1, A2, A3, etc.). This approach enables comparative assessment of buildings within a community by major occupancy groups, ensuring consistent and recognized definitions for each major occupancy type. Moreover, it allows for further analysis of specific occupancy groups. Occupancies within a group can be individually assessed, subject to any site-specific hazards or concerns, and included within the broader scope of the CRA as needed.

Table 6 below provides an overview of the major occupancy groups, their definitions, related fire risks, and high-level risk reduction strategies.

Table 6: Fire Risk - Model Major Building Classifications

NBC Occupancy Classification	NBC Major Building Classifications	Definitions	Fire Related Risks	Proactive Measures for Reducing Risk
Group A	Assembly Occupancies	An assembly occupancy is defined as one that is used by a gathering of people for civic, political, travel, religious, social, educational, recreational or like purposes or for the consumption of food or drink.	Assembly buildings are often occupied by many people and may contain high quantities of combustible furnishings and decorations. Occupants are generally unfamiliar with the building's exit locations and may not know how to react in the event of an emergency. Low light conditions are inherent to some of these occupancies and can contribute to occupant confusion during an evacuation. Numerous examples exist of disastrous events that have occurred throughout the world, resulting in multiple fire fatalities in these occupancies. Therefore, these facilities require special attention. Accordingly, it is paramount to ensure that maximum occupant load limits are not exceeded, detection is available, an approved fire safety plan is in place and adequate unobstructed exits/means of egress are readily available.	• Regular fire prevention inspection cycles. • Automatic fire detection and monitoring systems. • Approved fire safety plan and staff training. • Pre-planning by fire suppression staff. • Fire Drills as required by the NFC.

NBC Occupancy Classification	NBC Major Building Classifications	Definitions	Fire Related Risks	Proactive Measures for Reducing Risk
Group B	Care or Detention Occupancies	A care or detention occupancy means the occupancy or use of a building or part thereof by people who: Are dependent on others to release security devices to permit egress. Receive special care and treatment; or receive supervisory care.	In addition to the presence of vulnerable occupants, these occupancies may contain quantities of various flammable/combustible liquids and gases, oxidizers and combustible furnishings that will impact the intensity of the fire if one should occur. The evacuation or relocation of patients, residents, or inmates to an area of refuge during an emergency poses additional challenges in these facilities. It is essential to ensure that properly trained staff are available and prepared to quickly respond according to the facility's approved fire safety plan.	• Regular fire prevention inspection cycles. • Automatic fire detection and monitoring systems. • Approved Fire Safety Plan and staff training. • Pre-planning by fire suppression staff. • Fire Drills as required by the NFC.
Group C	Residential Occupancies	A residential occupancy is defined as one that is used by people for whom sleeping accommodation is provided but who are not harbored or detained to receive medical care or treatment or are not involuntarily detained.	In Alberta, residential occupancies account for 70% of all structural fires and 90% of all fire deaths. Residential units that are in multi-unit buildings, including secondary units in a house, pose additional risks due to egress and firefighting accessibility challenges.	• Home smoke alarm programs. • Public education programming includes home escape planning. • Retro-fit and compliance inspection cycles for NFC compliance. • Pre-planning by fire suppression staff.

NBC Occupancy Classification	NBC Major Building Classifications	Definitions	Fire Related Risks	Proactive Measures for Reducing Risk
Group D	Business & Personal Services	A business and personal services occupancy is defined as one that is used for the transaction of business or the rendering or receiving of professional or personal services.	Many office buildings are occupied by many people during business hours and contain high combustible content in the form of furnishings, paper, books, computers, and other office equipment/supplies. Those that are in a high-rise building pose additional risks due to egress and firefighting challenges.	• Regular fire prevention inspection cycles to maintain NFC compliance. • Targeted fire prevention inspections for NFC retrofit compliance. • Staff training in fire prevention and evacuation procedures. • Public education programs. • Pre-planning by fire suppression staff.
Group E	Mercantile	A mercantile occupancy is defined as one that is used for the displaying or selling of retail goods, wares, or merchandise.	Larger mercantile occupancies such as department stores are generally occupied by many people and contain high quantities of combustibles in the form of merchandise, furnishings, and decorations. Customers may be unfamiliar with the building's exit locations and do not know how to react in the event of an emergency. Additional hazards will be present in "big box" type stores that sell and store large volumes of combustible materials in bulk. These stores generally have similar properties to industrial warehouses with the additional hazard of a higher number of occupants.	• Regular fire prevention inspection cycles. • Automatic fire detection and monitoring systems. • Approved Fire Safety Plan and staff training. • Pre-planning by fire suppression staff.

NBC Occupancy Classification	NBC Major Building Classifications	Definitions	Fire Related Risks	Proactive Measures for Reducing Risk
Group F	High/Medium/Low Hazard Industrial	An industrial occupancy is defined as one for the assembling, fabricating, manufacturing, processing, repairing, or storing of goods and materials. This category is divided into the following sub-categories based on its combustible content and the potential for rapid fire growth: • low hazard (F3) • medium hazard (F2) • high hazard (F1)	These occupancies constitute a special fire hazard due to elevated levels of combustible, flammable or explosive content and the possible presence of oxidizing chemicals and gases. Processing and other activities that involve various ignition sources often occur in these occupancies. The lack of security during non-operational hours also makes them susceptible to incendiary type fires. Industrial fires generally involve large quantities of combustible materials and potentially result in large financial losses (e.g., building, contents) and significant damage to the community's environment and economic well-being (e.g., loss of jobs).	• Regular fire prevention inspection cycles • Staff training in fire prevention and evacuation. • Public education. • Pre-planning by fire suppression staff. • Installation of early detection systems (e.g., fire alarm systems, heat detectors). • Installation of automatic sprinkler systems. • Approved Fire Safety Plans. • Fire extinguisher training.

3.2.1 Blackfalds Existing Major Building Stock Classification Summary

Analysis of Blackfalds's major building occupancy types was conducted using data provided by the municipal assessment of Blackfalds, municipal development plans, and data from the 2021 census[1]. Table 7 provides a summary of Blackfalds's existing major building occupancy classifications.

Visual observations of Blackfalds's building stock indicate that the majority of Blackfalds's existing property stock is comprised of Group C - Residential Occupancies totally 3,780 private dwellings with 13.6% being constructed prior to the adoption of the National Building Code (Alberta – 2023 Edition) in 1990.

Table 7: Existing Major Building Classification Summary

NBC Occupancy Classification	Major Building Classifications	Number of Occupancies
Group A	Assembly Occupancies	33
Group B	Care or Detention Occupancies	Unavailable
Group C	Residential Occupancies - Total	4,507
Group C	Residential Occupancies – Single Detached	3,326
Group C	Residential Occupancies – multi-unit	1054
Group C	Other single-attached house	0
Group C	Mobile Homes / Trailers	125
Group C	Hotel/Motel	2
Groups D & E	Commercial	67
Group F (all Divisions combined)	Low-Hazard Industrial	14
	Medium-Hazard Industrial	87
	High-Hazard Industrial	4

Table Source: Blackfalds Fire Department

[1] *Government of Canada, Statistics Canada. (2023, November 15). Profile table, Census Profile, 2021 Census of Population - Blackfalds, County (TP) [Census subdivision], Alberta.*

Note: The ability to conduct a comprehensive risk analysis based on building classification is currently constrained by the limited availability of detailed occupancy data. To enhance future risk assessment capabilities, it is recommended that the Blackfalds Fire Service collaborates with the Town's Building and Taxation Departments. This partnership would facilitate improved access to accurate and up-to-date information regarding the number, type, and classification of occupancies within the municipality. Establishing this data foundation is essential for refining community risk profiles and supporting evidence-based planning and resource allocation.

The Alberta Building Code (now the National Building Code – 2023 Alberta Edition) was adopted in 1990, and the Alberta Fire Code (now the National Fire Code – 2023 Alberta Edition) was adopted in 1992. Together, these two codes have provided the foundation for eliminating many of the inconsistencies in building construction and maintenance that were present before adoption. Census data shows that 13.60% of all private dwellings were constructed prior to 1990. 87.50% of structure fires responded to by BFD were in residential dwellings.

The codes were developed to ensure that uniform building construction and maintenance standards are applied for all new building construction. The codes also provide for specific fire and life safety measures depending on the use of the building.

Examples of fire and life safety issues addressed by the codes include:

- Occupancy
- Exits/means of egress (including signs and lighting)
- Fire alarm and detection equipment
- Fire service access
- Inspection, testing, and maintenance

In many cases, the age and construction of a building can be directly associated with whether it was constructed before or after the introduction of these codes. For instance, during the late 19th and early 20th centuries, balloon frame construction was common, allowing exterior walls to extend continuously from the main floor to the roof, often through multiple stories. This construction method facilitated unobstructed fire and smoke spread from the basement to the roof, resulting in rapid fire propagation without occupants' or firefighters' knowledge. The Alberta Building Code implemented requirements to change this construction method and introduce additional requirements to mitigate the potential of fire spread through wall cavities.

Similarly, the new codes recognize modern construction techniques such as lightweight wood frame construction, including the use of wood trusses and laminated veneer lumber. While these techniques and materials enhance construction efficiency and cost-effectiveness, they pose different challenges to firefighters compared to historical methods. For example, lightweight wood frame construction relies on structural components working together, so if one component fails due to exposure to high heat or fire, the entire roof system may fail. Lightweight construction is discussed further, later in this section.

Table 8 lists fire growth rates measured by the time it takes for a fire to reach one-megawatt (MW). Fire growth rate varies depending on the flammability of materials and contents within the building, introducing variances into the presented growth rates.

Table 8: Time to Reach 1 MW Fire Growth Rates in the Absence of Fire Suppression

Fire Growth Rate	Time in Seconds (Minutes) to Reach 1 MW	Time in Seconds (Minutes) to Reach 2 MW
Slow	600 seconds (10 minutes)	848 seconds (14.13 minutes)
Medium	300 seconds (5 minutes)	424 seconds (7.07 minutes)
Fast	150 seconds (2.5 minutes)	212 seconds (3.53 minutes)

The impact of increasing fire growth rates is directly related to the time lapse from ignition to flashover, where combustible items within a given space reach a temperature high enough for them to auto-ignite. Figure 3 (below) illustrates the exponential increase in fire temperature over time and the potential for property loss and loss of life.

Figure 3: Fire Propagation Curve

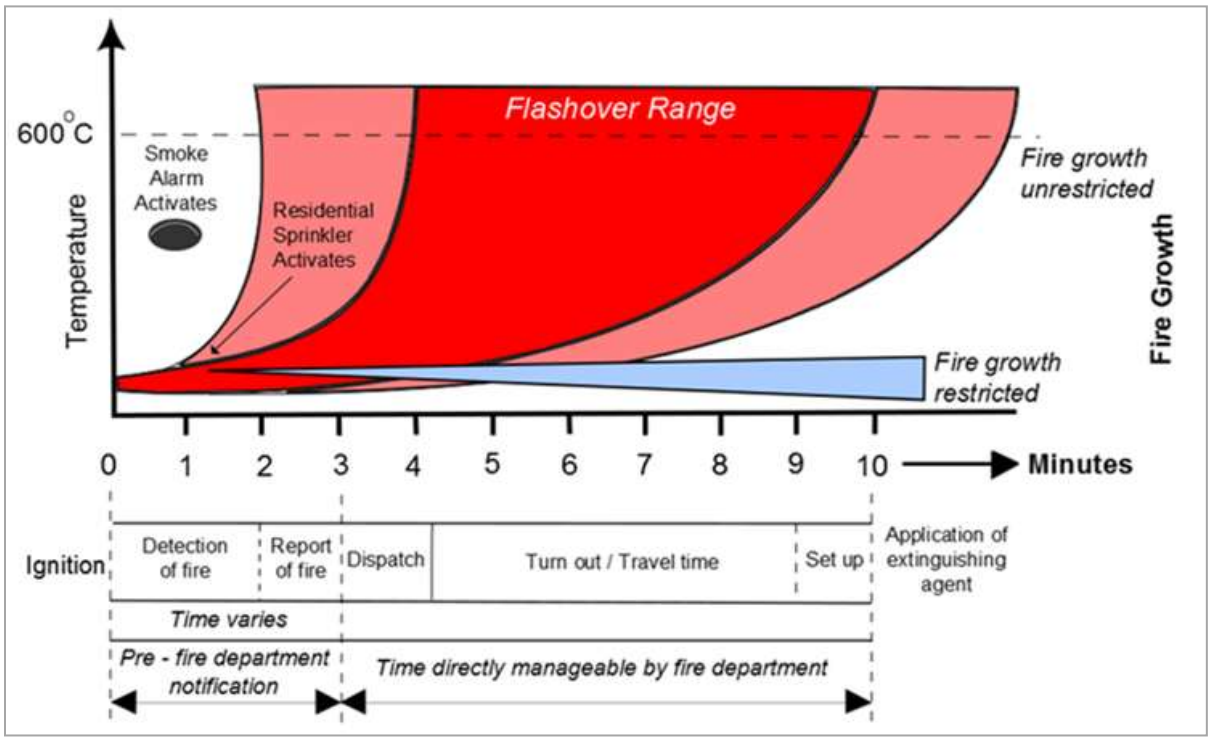


Figure Source: Fire Underwriters Survey "Alternative Water Supplies for Public Fire Protection: An informative Reference Guide for Use in Fire Insurance Grading" (May 2009) and NFPA "Fire Protection Handbook" (2001)

Understanding building construction and building materials is a critical component for firefighters in determining the appropriate type of fire attack and safety measures that need to be in place. As such, having knowledge of the age of a building may be directly related to the type of construction methods and materials used to build it, making building age and construction an essential component of this CRA.

Table 9 provides a summary of the age of the building stock within Blackfalds prior to the adoption of the Alberta building and fire codes. This analysis suggests that 13.6% of Blackfalds's building stock was constructed between 1961 and 1990, preceding the adoption of the 1992 National fire code. This represents a significant fire risk within the community.

Table 9: Occupied Private Dwellings by Period of Construction – Blackfalds and Alberta

Period of Construction	Blackfalds Dwellings	Blackfalds % of Dwellings	Alberta Total Number of Dwellings	Alberta % of Dwellings
Prior to 1960	85	2.2	168,925	10.34
1961-1980	295	7.8	428,655	26.25
1981-1990	135	3.6	188,550	11.54

Total prior to 1991	515	13.6	786,130	48.13
1991-2000	410	10.8	224,315	13.73
2001-2005	485	12.8	152,840	9.36
2006-2010	765	20.2	168,905	10.34
2011-2015	1,045	27.6	161,095	9.86
2016-2021	550	14.6	139,935	8.57
Total 1991-2021	3,255	86.4	847,090	51.87
Total Dwellings*	3,780	100.00	1,633,220	100.00
**Total occupied private dwellings 25% sample data*				

Table Source: 2021 Statistics Canada

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

3.2.2 Lightweight Construction

As part of building stock profile, the introduction of light weight truss construction was introduced into the home building construction in late 1980's and are prevalent in most new home construction. Buildings with lightweight construction pose a safety risk to responding firefighters due to their susceptibility to premature failure and rapid collapse under fire conditions. Pre-plans provide responding fire departments with awareness of the presence of lightweight construction, enabling proactive fire response strategies to protect the safety of firefighters.

The use of lightweight truss construction in residential homes became predominate in the 1980's. It should be considered that all residential dwellings (single detached) should be built with lightweight construction. Blackfalds should ensure identification of all buildings with lightweight construction, primarily those constructed using wood framing. It is anticipated that Blackfalds will collect and document information on buildings with lightweight construction to update the CRA during the annual review and updating process. Furthermore, it is expected that the BFD will integrate this information into their pre-planning program currently being utilized (First Due).

3.3 Building Density and Exposure

NFPA 1730 - Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations (2019) highlights building density as a crucial factor for understanding potential fire risk, particularly in core areas like downtown districts. Closely spaced buildings, typical of historic downtown core areas and newer infill construction, may pose a higher risk of fire spreading to adjacent exposed buildings. In densely built-up areas with minimal building setbacks, a fire originating in one building could extend to neighboring structures due to their proximity. Moreover, the proximity of buildings can impede firefighting operations by limiting access for firefighters and equipment.

As per the 2021 census, nearly all the residential building stock in Blackfalds is composed of single-detached dwellings (71.8%). Blackfalds has a population density of 631.4 per square kilometre. Blackfalds has had a steady population growth since 2001. Basic firefighting practices prioritize the protection of exposures as a primary function and consideration during fire and emergency service responses. As mentioned earlier, older developments as well as new infill projects may present increased exposure risks due to higher building density.

Table 10 below illustrates a comparison of Blackfalds's existing Group C – residential building stock with that of the province, based on the 2021 Statistics Canada Census. Table 10 is an indication of the number of dwelling types, whereas Table 7 above is an indication of the number of building/occupancy types driven by the NBC classifications.

Table 10: Group C Residential Building Stock Comparison

Dwelling Type	Blackfalds	%	Alberta	%
Single Detached	2,715	71.8	994,565	60.90
Semi-Detached	215	4.7	98,740	6.05
Row House	485	12.8	127,735	7.82
Apartment or flat in a duplex	45	1.2	43,730	2.68
Apartment < 5 Storeys	150	4.0	247,030	15.13
Apartment > 5 Storeys	0	0.0	74,880	4.58
Other single-attached house	0	0.0	1,215	0.07
Moveable dwelling	165	4.4	45,325	2.78
Total	3,780	100.00	1,633,220	100.00

Table Source: 2021 Census, Statistics Canada

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

This analysis highlights that Blackfalds has a higher percentage of single detached houses (78.2%) compared to that of the province at 60.90%. Blackfalds currently has a much lower percentage of mid- and low-rise occupancies as compared to the province; however, it would be anticipated that Blackfalds will continue to see a population growth consistent with its historical growth.

3.4 Building Growth

Blackfalds is expected to experience strong building growth over the next five years, driven by continued population increases, regional affordability, and proximity to Red Deer. Anticipated development includes significant residential expansion through new subdivisions, single-family homes, townhouses, and multi-family housing, along with increased commercial growth in retail and service areas, additional institutional buildings such as schools and recreation facilities, and continued light industrial development. Recent building permit values, subdivision approvals, and municipal planning initiatives indicate a sustained construction boom that will expand infrastructure demands and increase pressures on emergency services, transportation systems, and community facilities.

3.5 Building Height and Area

3.5.1 Building Height

The building height is a characteristic that can make firefighting operations difficult. Several factors contribute to these challenges, including density and the number of occupancies, vertical stacking that allows for vertical air movement, and the movement of smoke, heat, and fire upwards. Additionally, access for firefighting on upper floors, including suppression activities, rescue, and evacuation, can be problematic.

It is important to note that terms like "high rise," "tall buildings," and "high buildings" have various meanings. For the purposes of developing this Community Risk Assessment (CRA), the NBC/NFC definition has been used to analyze building height within Blackfalds which defines high-rise as 18 metres above grade, or six storeys.

The following fire safety features of high buildings are required by the NBC for new buildings, and the NFC once they are occupied:

- Building services (ventilation, firefighter elevators, water supply, etc.)
- Non-combustible construction (concrete and steel)

- Interior finishes (drywall, block, concrete slab)
- Fire detection and notification of occupants (pull stations, heat detectors, fire detectors, alarm system)
- Compartmentation (containment of fire and smoke spread, fire doors, fire shutters, self-closing mechanisms on doors, etc.)
- Means of egress (stairwells constructed with non-combustibles)
- Fire protection system (automatic sprinklers, standpipes and hose cabinets, fire pumps, fire extinguishers, etc.)
- Blackfalds does not have any tall or high buildings in their municipality.

3.5.2 Building Area

Building area can pose comparable challenges to those present in taller buildings. Horizontal travel distances, rather than vertical, can lead to extended response times for firefighters attempting rescue or fire suppression activities. Large buildings, such as industrial plants, warehouses, department stores, and big box stores, often contain significant volumes of combustible materials. Many of these occupancies also use high rack storage, making fires within these systems difficult to access and increasing the risk of collapse, which can endanger firefighter safety.

3.6 Potential High-Fire Risk Occupancies

Potential high-fire risk occupancy is another factor to consider within a municipality's building stock. High fire risk can be associated with a combination of factors, including building density (exposure), building age, and construction. Fuel load refers to the quantity and type of combustible content and materials within a building, encompassing combustible contents, interior finishes, and structural materials. Combustible content typically poses the greatest potential fire loss risk, as higher fuel loads increase the likelihood of ignition and severity of fires.

In many communities, large amounts of fuel load can be concentrated within a single occupancy, such as a building supply business, retail warehouse, a large multi-unit residential building, or a historic downtown core. This section of the CRA will primarily focus on fuel load for industrial occupancies.

3.6.1 Fuel Load Concerns

Buildings with potential fuel load concerns are identified in Table 11. These include buildings housing materials such as oxidizers and flammable and combustible liquids and chemicals.

Overall, Blackfalds' highest fire risks are concentrated less in heavy industry and more in high-occupancy institutional buildings, growing multi-family residential developments, recreation facilities, and transportation/commercial corridors.

The following buildings and occupancies in Blackfalds would generally be considered higher fire risk or higher consequence properties from a Community Risk Assessment perspective due to occupancy load, life safety concerns, fuel load, operational complexity, or community impact:

- Eagle Builders Centre / Multiplex — large assembly occupancy with arenas, library space, public gathering areas, and sporting events involving high occupant loads.
- Abbey Centre — major recreational and aquatic complex with fitness facilities, indoor playgrounds, gymnasiums, pools, and seasonal outdoor operations creating complex evacuation and life-safety considerations.

Commercial/light industrial buildings in business and industrial parks, particularly:

- Warehouses
- Contractor shops
- Automotive facilities
- Manufacturing/storage buildings
- Buildings containing fuels, compressed gases, or chemicals

Municipal operations and public works facilities, where fuel storage, fleet maintenance, and equipment storage may increase fire load and hazardous materials exposure. In addition to ensuring compliance with the requirements of the NBC-AB and NFC, there are operational strategies that a fire service can implement to address fuel load concerns. These include regular fire inspection cycles and pre-planning of buildings of this nature to provide an operational advantage in the event of fire.

It is important to note that the increasing number of warehouses and industry that store flammable/combustible products is constantly increasing especially when it comes to the storage and use of lithium-ion battery devices, chargers etc.

Table 11 provides a list of buildings with Site Specific Fuel Load Concerns.

Table 11: Site Specific Fuel Load Concerns

Building Name	Address	Business Type
Hall Industrial Contracting	35-27123 HWY 597	Sandblasting/Painting/Coating
BiziSul	27-27123 HWY 597	Fertilizer Manufacturing
Iron Ridge Elementary	4710 Broadway Ave	Elementary School
QA Structures	17-27123 HWY 597	Building Pre-Fab
NovaMen	1-27123 HWY 597	Chemical Distribution and Manufacturing
Valley Ridge Condos	5465 Vista Trail	100-unit High Density Lot
Formula Powel LP	4300 South St	Industrial Storage and Transportation

Building Name	Address	Business Type
Contempo Kitchens	4602 East Railway St	Woodworking/Manufacturing
Parkwood Manor	4801 Parkwood Rd	3 Story, Type 5 Residential with underground parking.
Microtel	6021 Parkwood Rd	3 Story, Type 5, Hotel
Blackfalds Motor Inn	5021 Highway Ave	3 Story, Type 5 Hotel with 2 attached restaurants.
Home Hardware	4910 Broadway Ave	Mercantile
Make Space Self Storage	5025 B Duncan Ave	Self-Storage
A-1 Storage	5505 Broadway Ave	Self-Storage
Garage World	5217 Duncan Ave	Self-Storage
Stimwrx/PureChem Warehouse	27323 TWP 393	Chemical Storage

Table Source: Blackfalds Fire Department

3.6.2 Occupancies with Potential High-Fire Life Safety Risk

Fire risk affects individuals differently, and some people are more vulnerable to fire injury or fatality than others. Blackfalds is also seeing a minor increase in the number of multi-generational homes. Multi-generational homes often have vulnerable individuals who may be unable to self-evacuate during a fire or require assistance in their evacuation efforts. Identifying the location and number of vulnerable individuals or occupancies within the community offers insight into the magnitude of this demographic within a community.

3.6.3 Registered Vulnerable Occupancies

From an occupancy perspective, vulnerable occupancies house individuals who may require assistance to evacuate during an emergency due to cognitive or physical limitations, presenting a potential high-life safety risk.

These occupancies house individuals such as seniors or people requiring specialized care and include hospitals, certain group homes and seniors' residences and long-term care facilities. It is important to note, however, that not all vulnerable individuals live in vulnerable occupancies; for example, some seniors who are vulnerable due to physical limitation can live on their own or in subsidized housing, making them a key demographic to reach.

Blackfalds does not currently have a full-service hospital or a major long-term care (nursing home) facility within the town itself. Residents primarily rely on nearby regional hospitals in Red Deer and Lacombe for acute and emergency hospital services.

However, Blackfalds does have some senior-oriented housing and healthcare services, including:

- Tower Manor — an independent senior living / retirement residence operated by the Lacombe Foundation.
- Local medical clinics such as Apollo Health Centre, which provides family medicine and walk-in healthcare services.

For higher-level care such as:

- Long-term care
- Assisted living
- Memory care
- Hospital-based services

Residents typically access facilities in nearby communities including Red Deer, Lacombe, and surrounding central Alberta municipalities.

From a Community Risk Assessment perspective, this means Blackfalds has relatively limited institutional healthcare occupancy risk within town boundaries, though senior housing and medically vulnerable populations remain an important consideration.

3.6.4 Other High-Fire Life Safety Risk Occupancies

From a risk perspective, it is valuable for a fire service to identify additional potential high fire life-safety risk considerations. This includes day care facilities and schools, where children, due to their age and potential cognitive or physical limitations, may face challenges in self-evacuation during emergencies. For the purposes of this CRA, potential high life-safety risk occupancy considerations encompass schools and licensed day care facilities. It is worth noting that many schools also offer before and after-school childcare services for children aged 4-12, as well as childcare centers for infants to pre-school-aged children.

Table 12: Blackfalds Schools

Property Name	Occupancy Type	Location
Iron Ridge Elementary Campus	Pre-K to Grade 3	4710 Broadway Ave.
Iron Ridge Intermediate Campus	Grads 4 - 6	101 Cottonwood Dr.
Iron Ridge Junior Campus	Grads 7 - 8	5200 Leung Road
Iron Ridge Secondary Campus	Grades 9 – 12	5000 Leung Road
St. Gregory the Great Catholic School	Pre-K to Grade 9	105 Cottonwood Drive

Table Source: Wolf Creek Public School Board and Red Deer Catholic Regional Schools

In addition to the above, a new Catholic elementary K-5 school is currently under construction expected to open in 2027.

There are also eight registered licensed daycare/childcare providers in Blackfalds including:

- Aspen Lakes Discovery Center Ltd.
- Aspen Lakes Discovery Center West
- BGC Wolf Creek Blackfalds
- Kids 3 Blackfalds Daycare
- Kids Konnection Family Day Home Program Ltd.
- Little Soldiers Family Day Care Inc.
- Little Star Play School and Out of School Program
- Little Star Out of School Program

Conducting pre-planning activities for all occupancies with vulnerable occupants is beneficial for fire services. These activities increase fire service personnel's familiarity with buildings of special interest and help reduce the risk faced by vulnerable individuals or vulnerable occupancies. Fire services can perform regularly scheduled fire safety inspections, approve and witness fire drill scenarios, provide public education on fire safety issues, conduct pre-planning exercises to increase familiarity with facilities, review fire safety plans for accuracy, encourage facility owners to update facilities as needed, provide staff training, and conduct fire drills.

3.7 Historic or Culturally Significant Buildings

An understanding of the location of historic or culturally significant buildings or facilities is an important consideration within the building stock profile of a Community Risk Assessment. Such buildings or facilities may be keystone features of the community, providing a sense of heritage, place, and pride, and contributing to the overall importance of the community. Regular fire inspections of these buildings are essential, especially if they serve as tourism destinations, as fire incidents could have significant economic impacts.

Historic areas can present a high fire risk due to age, the materials used to construct the buildings, exposure cycles and strategies to enforce continued compliance with the NFC are considered as best practices to achieving the legislative responsibilities of the municipality and providing an effective fire protection program to address fuel load risks.

This register encompasses properties designated for preservation under Section 29, Part IV, as well as those recognized by the Council for their cultural heritage significance under Section 27, Part IV. Properties listed under Section 27 require Council approval prior to demolition.

Blackfalds has local historical significance, but there is no formally designated heritage buildings currently listed on Alberta’s or Canada’s historic place registries.

Searches of the Alberta Register of Historic Places and the Canadian Register of Historic Places do not show any municipally or provincially designated heritage buildings within Blackfalds itself.

The community does actively preserve and celebrate its history through the Blackfalds & Area Historical Society, which documents early settlers, veterans, schools, and local heritage projects.

Blackfalds originated as a small agricultural and railway settlement and has experienced the majority of its population and development growth within the past few decades. As a result, the community has fewer surviving historic structures than neighbouring communities such as Lacombe and Red Deer, where a greater concentration of heritage buildings has been preserved. For example, the City of Lacombe is home to several recognized heritage assets, including the Lacombe Blacksmith Shop Museum.

While Blackfalds does not currently contain any provincially or federally registered heritage buildings, it does have two locally recognized heritage structures, as identified in Table 13. One of these is the Wadey Centre, an original Eaton's catalogue home that was relocated and renovated for its current use. The building has served various community purposes over the years, including as an information centre and the original home of the Blackfalds Historical Society.

The second recognized heritage building, the Pioneer House, has also fulfilled a variety of community functions throughout its history. Today, it serves as a youth drop-in centre, continuing its role as a valued community gathering space. Together, these buildings represent important links to Blackfalds' early development and contribute to the preservation of the community's local history and identity.

Table 13: Blackfalds Heritage Buildings

Property Name	Location	Date of Construction
Wadey Centre	4400 South Street	1916
Pioneer Society	4911 Broadway Avenue	Early 1900s

3.8 Building Stock Profile – Identified Risks and Key Findings

Table 14: Building Stock Profile – Identified Risks and Key Findings

Identified Risk	Rationale
Older Residential Building Stock	Approximately 13.6% of Blackfalds' occupied dwellings were constructed prior to the adoption of modern Alberta building and fire codes in 1990–1992. Older construction methods may lack modern fire separation, alarm systems, and fire-resistant materials, increasing the potential for rapid fire spread and life safety concerns.
Lightweight Construction Collapse Risk	Most modern residential homes in Blackfalds are constructed using lightweight truss systems, which are susceptible to premature structural failure during fire conditions. This creates increased operational risk to firefighters and occupants during suppression activities.
Growing Building Density and Community Expansion	Rapid residential and commercial growth is increasing infrastructure demands and exposure risks. Higher-density developments, townhouses, and infill projects increase the likelihood of fire spreading between adjacent buildings and may complicate firefighting access.
High-risk Assembly and Institutional Occupancies	Facilities such as the Abbey Centre, Eagle Builders Centre/Multiplex, schools, and recreation complexes contain high occupant loads and complex evacuation requirements. Fires or emergencies in these occupancies could have significant life-safety impacts.
Industrial and Fuel Load Hazards	Blackfalds is expected to continue experiencing significant residential, commercial, and institutional growth over the next five years. This expansion will increase demands on emergency services, infrastructure, transportation systems, and fire prevention activities.
Key Finding	
Blackfalds' building stock is overwhelmingly residential, with single-detached homes representing approximately 71.8% of all dwellings. This indicates that residential fire prevention and public education should remain a primary focus for the fire service	
Blackfalds currently has no high-rise buildings and does not contain a full-service hospital or major long-term care facility, reducing some of the complex fire risks commonly found in larger municipalities.	
Blackfalds is expected to continue experiencing significant residential, commercial, and institutional growth over the next five years. This expansion will increase demands on emergency services, infrastructure, transportation systems, and fire prevention activities.	

SECTION 4
CRITICAL INFRASTRUCTURE PROFILE

Critical infrastructure refers to the systems, facilities, and assets crucial for the functioning of society and the economy. The following section considers these critical infrastructure characteristics within Blackfalds.

4.1 Critical Infrastructure in Blackfalds

Public Safety Canada identifies ten categories of critical infrastructure: energy and utilities, information and communications technology, finance, health, food, water, transportation, public safety, government, and manufacturing. The interconnectedness of these critical infrastructures further increases the risk. Infrastructure is a complex system of interconnected elements whereby failure of one could lead to the failure of others. The vulnerability of infrastructure is often connected to the degree to which one infrastructure component depends upon another. Therefore, it is critical that these elements be viewed in relation to one another and not in isolation. Infrastructure is a complex system of interconnected elements where the failure of one could lead to the failure of others. The vulnerability of infrastructure is often linked to the degree to which one infrastructure component depends upon another. Therefore, it is critical that these elements be viewed in relation to one another and not in isolation.

Blackfalds is supported by a well-developed network of municipal and regional infrastructure systems that enable continued residential, commercial, and industrial growth within the community. For the purposes of this CRA, Blackfalds-specific critical infrastructure concerns are described in greater detail below.

4.1.1 Water Servicing & Infrastructure

Water servicing is provided through a regional potable water system connected to the City of Red Deer's water supply network, ensuring reliable access to treated water for residents and businesses. Blackfalds operates an integrated distribution system consisting of reservoirs, pumping stations, water mains, and fire protection infrastructure that has been expanded incrementally to accommodate rapid population growth. Long-term infrastructure planning focuses on maintaining capacity for future development while ensuring system redundancy and reliability.

Water supply is a critical infrastructure essential for firefighting. Access to a reliable water delivery system is crucial for effective service delivery. Therefore, alternative water sources such as dry hydrants, tanks, reservoirs, rivers, and lake water must be preplanned.

4.1.2 Stormwater & Sanitary Servicing & Infrastructure

Blackfalds is designed to support both urban growth and environmental management objectives. The sanitary sewer network conveys wastewater to regional treatment facilities through a system of gravity mains, lift stations, and trunk infrastructure. Stormwater management is addressed through engineered drainage systems, storm ponds, overland drainage routes, and environmental reserve areas that help control runoff, reduce flood risk, and protect nearby natural watercourses. New developments are generally required to incorporate modern low-impact drainage practices and staged servicing expansions to align with municipal growth strategies.

4.1.3 Transportation Infrastructure

Transportation infrastructure encompasses highways, railways, airports, seaports, and public transit systems. It plays a crucial role in enabling economic activity, ensuring public safety, facilitating social mobility, and promoting environmental sustainability. Disruptions to transportation infrastructure can have significant impacts on the functioning of municipalities and the economy, underscoring the importance of protecting and maintaining it.

The following section offers an overview of Blackfalds's transportation infrastructure. Additional details on the transportation systems in Blackfalds are provided in the Geographic Profile.

4.1.3.1 Roads & Highways

Blackfalds benefits from a strong regional transportation network anchored by its proximity to Highway 2, Alberta’s primary north–south trade and commuter corridor connecting Calgary, Red Deer, Edmonton, and major provincial markets. Access to the community is primarily provided through Highway 2A, which functions as the main regional connector between Blackfalds, Lacombe, and Red Deer.

The Town’s internal transportation system includes a hierarchy of arterial roads, collector roads, local streets, and industrial access routes designed to support residential neighbourhoods, commercial areas, and employment lands. Recent and ongoing roadway expansions have focused on improving traffic flow, accommodating population growth, enhancing pedestrian and cyclist connectivity through multi-use trails, and supporting future industrial and commercial development.

The transportation network also plays an important role in regional emergency response and goods movement. BFD responded to 200 motor-vehicle related incidents between 2021 and 2025. This represents (16.61%) of all calls.

4.1.3.2 Rail

Rail infrastructure near Blackfalds is provided by the Canadian Pacific Kansas City (CPKC) rail corridor, which runs through the broader central Alberta region and supports freight transportation associated with agriculture, industrial operations, manufacturing, and regional supply chains. While Blackfalds itself does not operate a passenger rail station or major rail terminal, the proximity of freight rail infrastructure contributes to the Town's economic development potential by supporting industrial land uses and providing access to regional and national transportation networks. Rail connectivity remains particularly important for the movement of agricultural products, construction materials, and industrial goods throughout central Alberta and beyond.

4.1.3.3 Airports

There are no airports located in the Town of Blackfalds. Air transportation access for Blackfalds is primarily served by the Red Deer Regional Airport, located south of the community near Highway 2. The airport supports regional aviation services including corporate travel, charter operations, pilot training, emergency response, aerial services, and limited industrial aviation activity. Its location within the Calgary–Edmonton corridor enhances accessibility for businesses and economic development opportunities in Blackfalds and surrounding municipalities.

For broader domestic and international passenger travel, residents and businesses rely on Edmonton International Airport and Calgary International Airport, both of which are accessible via Highway 2 and provide extensive commercial flight connections, cargo handling, and logistics infrastructure.

In addition, the Lacombe Regional Airport is located in the northeast corner of the City of Lacombe, just north of Highway 12. It is the only public airport serving the City of Lacombe and the surrounding Lacombe County. Although the airport is outside of Blackfalds, it is only 10 km north of the community and is relevant to the CRA as it introduces potential risks such as aircraft accidents during takeoff and landing; fuel storage and handling; low level aircraft operations over surrounding area and increased traffic on Highway 2A. Blackfalds has responded to one plane incident/crash which occurred in town.

4.1.4 Energy and Communications Infrastructure

Energy and communication infrastructure in Blackfalds is supported through regional electrical transmission networks, natural gas distribution systems, and modern telecommunications services. Electrical power is supplied through Alberta's provincial grid, with utility infrastructure expanded to serve residential growth areas and industrial developments. Natural gas servicing is widely available throughout the community for residential heating and commercial operations.

Telecommunications infrastructure includes fibre-optic internet availability, wireless communication networks, and digital service infrastructure necessary for business development, emergency response, education, and remote work. Additional critical infrastructure considerations include emergency services facilities, schools, recreation infrastructure, environmental reserve systems, and regional intermunicipal servicing partnerships that collectively contribute to the long-term resilience, sustainability, and economic competitiveness of Blackfalds.

Communications infrastructure is also considered critical infrastructure because it provides essential connectivity. and communication services for daily life and the economy. This includes systems, facilities, and assets enabling the transmission and reception of voice, data, and video communications. In Blackfalds, the combined energy and communications infrastructure include power lines and towers, pipelines, transmission lines, communications fiber lines and towers. These components play vital roles in maintaining connectivity, facilitating communication, and supporting emergency response efforts within Blackfalds. The most pertinent risk arising from these utilities relates to fallen power lines which are reported as public hazard calls. Between 2021 and 2025 BFD responded to 25 public hazard calls.

4.1.5 Other Critical Infrastructure Considerations

General considerations and concerns related to each critical infrastructure sector as it pertains to the provision of fire protection services for other critical infrastructure sectors are included in Table 15.

Table 15: Other Critical Infrastructure Overview

Sector	Identified Critical Infrastructure	Issues / Concerns
Health	Regional healthcare access, emergency medical response infrastructure, local medical and wellness services, ambulance access routes.	• Limited local healthcare facilities; dependence on regional hospitals in Red Deer and Lacombe; increasing healthcare demand associated with population growth
Food	Agricultural lands, regional food distribution networks, transportation corridors supporting agricultural goods movement, utility servicing for food-related businesses.	• Dependence on regional supply chains; vulnerability to transportation disruptions; long-term protection of agricultural land and servicing capacity
Safety	Fire hall, RCMP policing services, emergency response systems, hydrant networks, emergency management infrastructure.	• Emergency response capacity pressures; staffing and equipment requirements; coordination during natural disasters, severe weather, or regional emergencies. Blackfalds has one fire station and no standalone paramedic stations. Blackfalds is served by the RCMP through the Blackfalds RCMP Detachment which operates as the local police service.
Government	Municipal administration facilities, public works operations, utility management systems, intermunicipal servicing partnerships.	• Infrastructure funding pressures; long-term asset management requirements; maintaining service levels during rapid growth
Manufacturing	Industrial lands, freight transportation networks, utility servicing, electrical and natural gas infrastructure, telecommunications systems.	• Need for expanded industrial servicing capacity; transportation access requirements; energy reliability; competition for industrial investment and labour availability

4.2 Critical Infrastructure – Identified Risks and Key Findings

Table 16: Critical Infrastructure – Identified Risks and Key Findings

Identified Risk	Rationale
Interdependency Failure of Critical Infrastructure Systems	Blackfalds relies heavily on interconnected regional infrastructure systems including water supply, wastewater treatment, power distribution, transportation corridors, and telecommunications. A disruption in one system (e.g., regional power outage or water supply interruption from Red Deer) could cascade into failures across multiple services, impacting emergency response, public safety, and municipal operations.
Transportation Disruptions and Emergency Response Constraints	The Town depends significantly on Highway 2 and Highway 2A for commuter traffic, goods movement, and emergency access. With 200 motor vehicle incidents between 2021 and 2025 representing 16.61% of all calls, roadway incidents already create operational pressures. Severe weather, major collisions, or hazardous material incidents could restrict access routes and delay emergency services.
Capacity Pressures Due to Rapid Population Growth	Ongoing residential, commercial, and industrial growth places increasing strain on water servicing, transportation infrastructure, emergency response resources, healthcare access, and utility systems. Existing infrastructure may face challenges maintaining service reliability, staffing levels, and long-term asset management without continued investment and expansion.
Key Finding	
Blackfalds benefits from well-developed regional infrastructure connections including potable water supplied through Red Deer, access to Highway 2, proximity to freight rail infrastructure, and regional airport access. These systems support economic development, mobility, and long-term community growth.	
Several essential services — including healthcare, water treatment, wastewater servicing, transportation, and policing — rely on regional partnerships and external service providers. This regional integration strengthens service access but also increases dependency on outside infrastructure and agencies.	
Blackfalds maintains key emergency infrastructure including a fire hall, hydrant systems, emergency management systems, and RCMP services. However, the community currently operates with one fire station and no standalone paramedic station, creating potential response capacity concerns during large-scale emergencies, severe weather events, or continued population growth.	

SECTION 5
DEMOGRAPHIC PROFILE

The demographic profile assessment includes an analysis of the composition of the community's population, respecting matters relevant to the community such as population size and dispersion, age, gender, cultural background, level of education, socioeconomic make-up, and transient population. The following sections consider these demographic characteristics within Blackfalds.

5.1 Population and Dispersion

Table 17 highlights the significant growth experienced by Blackfalds over a twenty-year period from 2001 to 2021, in both population and total private dwellings. The most substantial increases occurred between 2011 and 2016, with a change of 48% in population. The most substantial increase in private dwellings occurred between 2001 and 2006 with a 53% increase in total private dwellings.

Table 17: Historic Growth in Population and Households

Year	Population	% Change	Total Private Dwellings	% Change
2001	3,042		1,119	
2006	4,571	46.7%	1,716	53%
2011	6,300	36.4%	2,458	43.24%
2016	9,328	48.%	3,302	34.34%
2021	10,470	12.2	3,952	19.69%

Table Source: 2001 - 2021 Census, Statistics Canada

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.1.1 Population Age

Identifying a community's population by age category is a core component of developing the CRA and identifying specific measures to mitigate risks associated with a specific age group, such as seniors. The 2021 Census identifies a total population of 10,470 for Blackfalds. The age distributions of Blackfalds's population and Alberta's population are compared in Table 18.

Table 18: Population by Age Group – Blackfalds and Alberta

Age	Blackfalds Population	Blackfalds %	Alberta Population	Alberta %
0 to 4 years	940	9.0%	250,250	5.87
5 to 9 years	1,030	9.8%	278,810	6.54
10 to 14 years	820	7.8%	280,585	6.58
15 to 19 years	610	5.8%	249,765	5.86
20 to 24 years	505	4.8%	248,740	5.84
25 to 29 years	935	8.9%	275,465	6.46
30 to 34 years	1,135	10.8%	323,260	7.58
35 to 39 years	1,110	10.6%	338,945	7.95
40 to 44 years	795	7.6%	307,665	7.22
45 to 49 years	610	5.8%	277,770	6.52
50 to 54 years	475	4.5%	262,770	6.16
55 to 59 years	440	4.2%	274,150	6.43
60 to 64 years	420	4.0%	265,240	6.22
65 to 69 years	310	3.0%	217,270	5.10
70 to 74 years	180	1.7%	163,890	3.84
75 to 79 years	90	0.9%	105,520	2.48
80 to 84 years	45	0.4%	70,160	1.65
85 to 89 years	10	0.1%	44,670	1.05
90 to 94 years	5	0.0%	21,430	0.50
95 to 99 years	0	0.0%	5,480	0.13
100 +	0	0.0%	795	0.02
Total	10,470	100.00	4,262,630	100.00
Median Age of the Population	31.8		41.6	
Population aged 14 and under	5,575	53.25%	809,645	18.99
Population aged 65 and over	645	6.16%	629,215	14.76
Population aged 55 to 64	869	8.30%	539,390	12.65

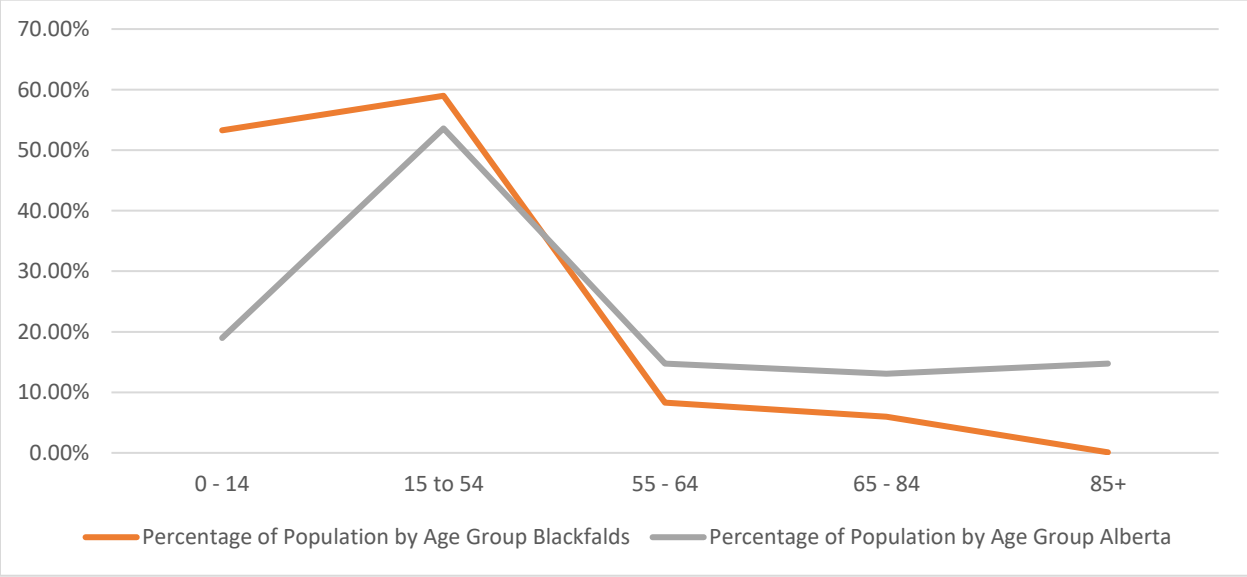
Table Source: 2021 Census, Statistics Canada

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

The youngest demographic, comprising individuals aged 14 years and under, accounts for 53.25% of Blackfalds's total population, significantly higher than the province's figure of 18.99%. Although they face a lower risk of fatality in residential occupancies compared to seniors or adults, youth in this age group remain an essential demographic for public education efforts. Therefore, directing public education and prevention programs toward this demographic holds significant value. Implementing structured education programs consistently for children and youth can effectively embed fire and life safety awareness and knowledge into future generations. It is noted that there is one public elementary school in Blackfalds and one secondary school. BFD should work with the school board to public education through the school network.

The percentage of the population aged 65 years and older in Blackfalds represents 6.16% of the total population, which is 7.31% lower then the province's rate of 14.76%. Additionally, 8.30% of Blackfalds's population falls between the ages of 55 and 64, gradually aging into the senior demographic of 65 years and older which is 4.35% lower than that of the province. This highlights the significance of implementing early intervention and prevention programs, to mitigate fire risks as this cohort transitions into the senior demographic. Based on historic residential fire fatality data, this population faces greater risks. These demographic trends emphasize the importance of developing informed, targeted public education programs and risk reduction strategies within the community.

Figure 4: Percent of Population by Age Group – Blackfalds and Alberta



A community's population by age is an important factor in identifying specific measures to mitigate risks associated with age groups, such as seniors. Canada's aging population has emerged as one of the most significant demographic trends. According to Statistics Canada, from 2011, Canada experienced a notable increase in the proportion of seniors since Confederation, primarily due to the baby boomer generation reaching the age of 65. In 2022, a record number of Canadians 18.8% of the population were 65 years or older, compared to children under the age of 14 making up only 15.6%. Children in this age group has been declining since 2016. There are more Canadians over the age of 65, accounting for 18.98% of the population, than there are children aged 14 years and younger, who make up 16.25%.

Seniors, defined as individuals aged 65 years and over, are regarded as one of the highest fire risk groups across the province, based on the residential fire death rate (fire deaths per million of population).

5.2 Gender

NFPA 1730: Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations (2019 Edition) integrates gender considerations into Community Risk Assessments, acknowledging historical data indicating a higher incidence of fire-related injuries or fatalities among males. In Blackfalds, Table 19 outlines the gender distribution by age, with males representing 50.10% and females 49.90%, closely aligning with the provincial gender ratio of 49.92% men and 50.08% women. These statistics generally reflect provincial trends, suggesting that gender-based refinements in public education programming in Blackfalds may not be necessary.

Table 19: Gender Distribution by Age Group – Blackfalds

Age Group	Population	Total %	Male	%	Female	%
0 to 4 years	940	9.0%	490	9.3%	450	8.6%
5 to 9 years	1,030	9.8%	490	9.3%	535	10.2%
10 to 14 years	820	7.8%	420	8.0%	400	7.7%
15 to 19 years	610	5.8%	320	6.1%	290	5.6%
20 to 24 years	505	4.8%	250	4.8%	255	4.9%
25 to 29 years	935	8.9%	455	8.7%	480	9.2%
30 to 34 years	1,135	10.8%	550	10.5%	580	11.1%
35 to 39 years	1,110	10.6%	545	10.4%	565	10.8%
40 to 44 years	795	7.6%	405	7.7%	390	7.5%
45 to 49 years	610	5.8%	320	6.1%	290	5.6%
50 to 54 years	475	4.5%	260	5.0%	215	4.1%
55 to 59 years	440	4.2%	225	4.3%	215	4.1%
60 to 64 years	420	4.0%	195	3.7%	225	4.3%
65 to 69 years	310	3.0%	150	2.9%	165	3.2%
70 to 74 years	180	1.7%	90	1.7%	95	1.8%
75 to 79 years	90	.9%	50	1.0%	40	0.8%
80 to 84 years	45	0.4%	20	0.4%	25	0.5%
85 to 89 years	10	0.1%	5	0.1%	5	0.1%
90 to 94 years	5	0.0%	5	0.1%	0	0.0%
95 to 99 years	0	0.0%	0	0.0%	0	0.0%
100 +	0	0.0%	0	0.0%	0	0.0%
Total	10,470	100	5,245	100	5,225	100

Table Source: 2021 Census, Statistics Canada

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.3 Socioeconomic Circumstances

Socioeconomic circumstances of a community are known to have a significant impact on fire risk. Socioeconomic status is reflected in an individual's economic and social standing and is measured in a variety of ways. These factors can be reflected in the analysis of socioeconomic indicators such as labour force status, educational attainment, and income as well as household tenure, occupancy, suitability, and cost.

Socioeconomic factors intersect in several ways and have direct and indirect impacts on fire risk. As one consideration, households with less disposable income may be less likely to purchase fire safety products (e.g., smoke alarms, fire extinguishers, etc.), which puts them at higher risk of experiencing consequences from a fire. Another consideration is that households living below the poverty line may have a higher number of persons per bedroom in a household, and/or children who are more likely to be at home alone. These circumstances would impact both the probability and consequence of a fire. While these complex relationships between socioeconomic circumstances and the probability/consequence of a fire are not well understood, this CRA seeks to explore these factors.

The factors reviewed at a high level have been selected based on the data available from Statistics Canada. Socioeconomic factors such as income decile group and median household income have been displayed spatially throughout this section. Factors that are highlighted in this section include:

- Labour force status
- Immigrant status
- Educational attainment
- Household tenure, occupancy, suitability, and cost

5.3.1 Labour Force Status

Those who are economically disadvantaged, including low-income families, the homeless and those living alone, may experience a higher fire risk. There are a number of reports that suggest there is a correlation between income levels and fire risk. The reports identify the following factors:

- The higher number of vacant buildings found in low-income neighborhoods attract the homeless. This introduces risks such as careless smoking, drinking, and unsafe heating practices.
- Building owners are less likely to repair building systems (electrical, mechanical, suppression) due to affordability, increasing fire risk from improper maintenance.

- Households with lower disposable income are less likely to purchase fire safety products (i.e., smoke alarms, extinguishers, cigarette ignition-resistant furniture, etc.) due to affordability.
- Households with lower disposable income are more likely to have utilities shut off due to non-payment, leading to increased risks related to unsafe heating, lighting, and cooking practices.
- Single-parent families are more economically challenged since there is only one income. These households also have fewer resources to arrange childcare, increasing the likelihood of fires caused by unsupervised children.
- The 1981 report, "Fire-Cause Patterns for Different Socioeconomic Neighborhoods in Toledo, Ohio," determined that the incendiary fire rate in low-income neighborhoods is 14.4 times higher compared to areas with the highest median income. Further, fires caused by smoking and children playing occurred at rates 8.5 and 14.2 times higher, respectively.
- Studies have shown that cigarette smoking is inversely related to income. In Canada, findings by the Centre for Chronic Disease Prevention and Control through the National Population Health Survey established that there were twice as many smokers in the lowest income group when compared against the highest (38% vs. 21% respectively).
- Those with low education and literacy levels are inhibited in their ability to read instruction manuals and warning labels and less likely to grasp fire safety messages.

Labour force status is an indicator of income levels which directly influence fire risk (e.g., lower income, increased fire risk). The participation rate (i.e., the proportion of residents in the labor force) can also be an indicator of income and can be considered alongside unemployment rates (e.g., lower participation rate and higher unemployment could mean lower income, higher fire risk).

Table 20 details the labor force statistics for Blackfalds compared to Alberta. Blackfalds had a slightly higher participation rate of 75.7% in Blackfalds and 68.01% provincially and shows a slightly higher employment rate of 66.0% compared to Alberta's 60.17%. Blackfalds has a slightly higher employment rate of 12.8% versus 11.53% in Alberta.

Table 20: Labour Force Status – Blackfalds and Alberta

Status	Blackfalds Population	Alberta Population
In the Labour Force*	5,810	2,295,380
Employed	5,070	2,030,730
Unemployed	745	264,650
Not in the Labour Force	1,870	1,079,750
Total	7,680	3,375,130
Participation Rate	75.7%	68.01%
Employment Rate	66.0%	60.17%
Unemployment Rate	12.8%	11.53%

Table Source: Statistics Canada,2021 Census

**Total - Population aged 15 years and over by labour force status*

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.3.2 Educational Attainment

The relationship between educational attainment and income is complex. An analysis conducted by Statistics Canada has found that high-income Canadians are more likely to be highly educated. Approximately two thirds (67.10%) of the top 1% had attained a university degree compared to 20.90% of all Canadians aged 15 and over.

Based on this national trend and for the purposes of this CRA, it is assumed that higher education leads to more disposable income and a lower fire risk. It is also assumed that households with higher disposable income are more likely to invest in fire life safety products such as fire extinguishers and smoke alarms, reducing the fire risk.

Table 21 compares educational attainment levels between Blackfalds and the Province of Alberta using 2021 Census data. The data indicates that Blackfalds residents have lower educational attainment compared to the provincial average. Blackfalds exhibits both a higher-than-average percentage of individuals without a certificate, diploma, or degree (15.22% compared to the provincial average of 11.33%) and a lower-than-average percentage of residents with a high school diploma. Blackfalds, however, has a significantly higher percentage than the province for those holding a postsecondary certificate, diploma, or degree, in comparison to provincial averages. This trend may suggest increased awareness of fire safety practices and potentially correlates with lower rates of accidental fires due to negligence.

Table 21: Educational Attainment – Blackfalds and Alberta

Educational Attainment	Blackfalds Total	Blackfalds %	Alberta Total	Alberta %
No Certificate / Diploma / Degree	1,170	15.22	595,665	11.33
High School Diploma or Equivalent	2,590	33.70	2,779,465	52.89
Postsecondary Certificate; Diploma or Degree	3,925	51.07	1,880,185	35.78
Total	7,685	100.00	5,255,315	100.00

Table Source: Statistics Canada, 2021 Census

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.3.3 Median Income

Table 22 presents median income statistics for Blackfalds in 2020, showing lower income levels compared to the Alberta averages. The median individual income in Blackfalds was $53,200, which reflects an 18.75% higher difference compared to Alberta's median individual income of $44,800. Similarly, the median household income in Blackfalds was $118,300, indicating a more significant 23.23% higher difference from Alberta's median household income of $96,000. Higher median incomes in Blackfalds may indicate a more affluent community with better-resourced households, potentially leading to improved fire prevention measures and safer living conditions. However, higher income levels can also correspond to larger, more valuable properties that may pose unique challenges for firefighting and rescue operations in the event of emergencies.

Table 22: Median Income of Blackfalds and Alberta - 2020

Geography	Median Income Individual	Median Income Household
Blackfalds	$53,200	$118,300
Alberta	$44,800	$96,000
% Difference	18.75%	23.23%

Table Source: Statistics Canada, 2021 Census

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.3.3.1 Income Decile Groups

Income can also be examined through the lens of income decile groups, which offer a rough ranking of an individual's economic status based on their relative position in the Canadian distribution of adjusted after-tax income of economic families, as defined by Statistics Canada.

Table 23 presents data on economic family income decile groups for the population in private households in Blackfalds compared to Alberta. In Blackfalds, 49.16% of the population falls within the bottom half of the income distribution, while 50.84% are in the top half. This distribution follows the same trend as Alberta, where a larger proportion (54.65%) is in the upper half of the income distribution, and 45.35% are in the bottom half. Blackfalds does however have a slightly lower percentage of the population among the top half of the distribution compared to that of the province. These statistics indicate a higher concentration of higher-income households in Blackfalds compared to the provincial average, which can influence the community's economic resilience and potentially impact fire risk and emergency preparedness. Understanding income distribution within the community is crucial for the fire department's risk assessment and resource allocation efforts.

Table 23: *Economic Family Income Decile Group for the Population in Private Households – Blackfalds and Alberta*

Decile Group	Blackfalds Total	Blackfalds %	Alberta Total	Alberta %
In the bottom half of the distribution	5,145	49.16	1,894,410	45.35
In the top half of the distribution	5,320	50.84	2,283,310	54.65
Total	10,465	100.00	4,177,720	100.00

Table Source: Statistics Canada, 2021 Census

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.3.4 Housing Tenure

Housing tenure, particularly the rate of homeownership, serves as a significant indicator of socioeconomic status within a community. A higher rate of homeownership often suggests greater wealth, stability, and higher incomes, whereas a higher rate of rental properties may reflect lower incomes and socioeconomic challenges.

Lower homeownership rates are associated with higher fire risk due to several factors. Homeowners typically invest in property maintenance and are more likely to have access to fire prevention resources and insurance. In contrast, rented properties may experience higher turnover rates, potentially leading to neglect of fire safety measures by tenants or landlords.

According to Table 24, in Blackfalds, the majority of households (77.78%) are owned, while only a small percentage (22.22%) are rented. This ownership trend is notably higher than the provincial average, where 70.87% of households are owned and 28.48% are rented. The high rate of homeownership in Blackfalds can significantly influence community stability and investment in property maintenance, indirectly impacting fire risk and emergency response dynamics.

Table 24: Household Tenure – Blackfalds and Alberta

Household Tenure	Blackfalds Total	Blackfalds %	Alberta Total	Alberta %
Owner	2,940	77.78%	1,157,495	70.87
Renter	840	22.22%	465,220	28.48
Provided by Government, First Nation, or Indian Band	0		10,505	0.64
Total	3,780	100.00	1,633,220	100.00

Table Source: Statistics Canada, 2021 Census

***Note:** Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.3.4.1 Occupancy

A higher proportion of multiple persons per household can contribute to increased fire risk and potential fire loss. As shown in Table 25, Blackfalds has a higher proportion of households with two or more occupants (82.01%) compared to the provincial rate (74.04%). This higher occupancy density within households can elevate the risk of fire incidents.

Table 25: Household Occupancy

Household Occupancy	Blackfalds Total	Blackfalds %	Alberta Total	Alberta %
1 Person	680	17.99%	424,055	25.96
2 Persons	1235	32.67%	551,420	33.76
3 Persons	735	19.44%	249,135	15.25
4 Persons	705	18.65%	243,400	14.90
5 Persons or more	430	11.38%	165,215	10.12
Total	3,780	100.00	1,633,225	100.00

Table Source: Statistics Canada, 2021 Census

***Note:** Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.3.4.2 Suitability

The 2021 Census data, as presented in Table 26, indicates that Blackfalds has a notably lower percentage of housing deemed unsuitable compared to Alberta as a whole. Specifically, only 2.51% of Blackfalds's housing is classified as not suitable, contrasting with 4.67% in the province. Housing suitability is determined based on whether the dwelling has adequate bedrooms relative to the ages and relationships among household members, according to the National Occupancy Standard. This discrepancy suggests that Blackfalds has a lower fire risk from the perspective of housing suitability compared to the province.

Table 26: Household Suitability – Blackfalds and Alberta

Housing Suitability	Blackfalds Total	Blackfalds %	Alberta Total	Alberta %
Suitable	3,685	97.49%	1,556,960	95.33
Not suitable	95	2.51%	76,260	4.67
Total	3,780	100.00	1,633,220	100.00

Table Source: Statistics Canada, 2021 Census

***Note:** Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.3.4.3 Housing Costs

The cost of housing often reflects a household's disposable income, which can influence their ability to invest in household fire safety measures. In Blackfalds, where fewer households (19.34%) spend 30% or more of their income on housing compared to Alberta (21.25%), as shown in Table 27, there may be more financial flexibility for fire safety investments.

Despite lower housing values in Blackfalds compared to Alberta, as referenced in Table 28, the median monthly shelter costs for rented dwellings and for owned dwellings are higher. This may prevent residents from allocating sufficient resources to fire safety measures, potentially lowering fire risk.

Table 27: Shelter Costs – Blackfalds and Alberta

Shelter Costs	Blackfalds Total	Blackfalds %	Alberta Total	Alberta %
Spending less than 30% of household total income on shelter costs	3,045	80.66%	1,251,370	78.75
Spending 30% or more of household total income on shelter costs	730	19.34%	337,585	21.25
Total	3,775	100.00	1,588,955	100.00

Table Source: Statistics Canada, 2021 Census

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

Table 28: Median Costs – Blackfalds and Alberta

Median Costs	Blackfalds	Alberta
Median value of dwellings	$332,000	$400,000
Median monthly shelter costs for owned dwellings	$1,860	$1,600
Median monthly shelter costs for rented dwellings	$1,550	$1,280

Table Source: Statistics Canada, 2021 Census

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.4 Cultural Background, Language Considerations

In Blackfalds, where the proportion of newcomers is significantly lower (6.6%) compared to Alberta (23.24%), cultural background and language considerations remain crucial factors for fire service providers when developing and delivering fire prevention and public education programs. While the immigrant population is smaller, communication barriers, including language proficiency and literacy levels, continue to be important to address. Even with a lower proportion of newcomers, there may still be familiarity challenges related to fire safety standards within immigrant populations. Therefore, targeted education initiatives are necessary to ensure that all residents, regardless of cultural background or language proficiency, have access to essential fire safety information and resources.

To analyze the data on immigration status for the CRA, we can consider several factors:

- **Population Composition:** The data provides insights into the immigration status of the population in Blackfalds. Most residents (92.7%) are non-immigrants, indicating a high proportion of individuals who were born in Canada or have Canadian citizenship.
- **Immigrant Population:** Although immigrants make up a small percentage (6.6%) of the population, their presence is notable. Understanding the characteristics and needs of immigrant communities is essential for assessing vulnerability and resilience to hazards, as these populations may have unique cultural, linguistic, and socioeconomic factors that influence their risk exposure and coping capacities.
- **Temporal Patterns:** Examining the temporal distribution of immigration reveals trends in population movement over time. While most immigrants arrived after 1980, there are is a small percentage that arrived prior to 1980, with a slight increase in immigration from 2001 to 2021. Understanding the timing of immigration can help identify potential cohorts of newcomers who may require targeted support in hazard preparedness and resilience-building efforts.
- **Permanent Residents:** The low presence of non-permanent residents (0.6%) suggests a small transient population within Blackfalds. These individuals may have different risk profiles and vulnerabilities compared to permanent residents, requiring tailored approaches to hazard risk assessment and mitigation.
- **Integration and Adaptation:** Assessing the integration and adaptation experiences of immigrant and non-permanent resident populations is crucial for understanding their capacity to cope with hazards. Factors such as language proficiency, access to social networks, and familiarity with local emergency response systems can influence their ability to effectively respond to and recover from disasters.

By understanding the diverse needs and characteristics of immigrant and non-permanent resident communities, emergency management agencies and local authorities can develop targeted strategies to enhance community resilience and ensure equitable access to hazard preparedness resources and support services. Table 29 summarizes the immigration status of Blackfalds's population.

Table 29: Immigration Status – Blackfalds and Alberta

Immigration Status	Blackfalds Total	Blackfalds %	Alberta Total	Alberta %
Non-immigrants	9,710	92.7%	3,141,915	75.21
Immigrants	695	6.6%	970,970	23.24
Before 1980	70	0.7%	127,275	3.0
1980 to 1990	50	0.5%	91,320	2.2
1991 to 2000	85	0.8%	126,605	3.0
2001 to 2010	180	1.7%	239,260	5.7
2011 to 2015	135	1.3%	193,335	4.6
2016 to 2021	175	1.7%	193,175	4.6
Non-permanent residents	65	0.6%	64,830	1.55
Total	10,470	100.00	4,177,715	100.00

Table Source: Statistics Canada, 2021 Census

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

Table 30 provides insights into language demographics in Blackfalds and Alberta based on the 2021 Census. In Blackfalds, 95.4% of the population knows only English, while only a small percentage (4.3%) are proficient in both English and French. Additionally, only 0.1% have no knowledge of English or French. However, an exploration into visible minorities reveals Blackfalds's diverse landscape.

Table 30: Knowledge of Official Language – Blackfalds and Alberta

Language	Blackfalds	Blackfalds%	Alberta	Alberta %
English Only	9,985	95.4	3,894,690	92.3
French Only	10	0.1	3,105	.1
English and French	455	4.3	258,330	6.1
Neither English nor French	25	0.2%	65,705	1.6
Total (non-institutional)	10,470	100.00	4,221,830	100.00

Table Source: Statistics Canada, 2021 Census

***Note:** Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

Figure 5 provides a breakdown on the different visible minorities within Blackfalds. The predominant minority group is Filipino, followed by Filipino, Latin American and Black. Beyond these top minority groups, there is a notable presence of others contributing to the diversity of Blackfalds. As Blackfalds grows, it is important to address potential ethnic or communication barriers arising from this diversity to ensure effective community engagement and emergency communication strategies.

Figure 5: Visible Minorities – Blackfalds

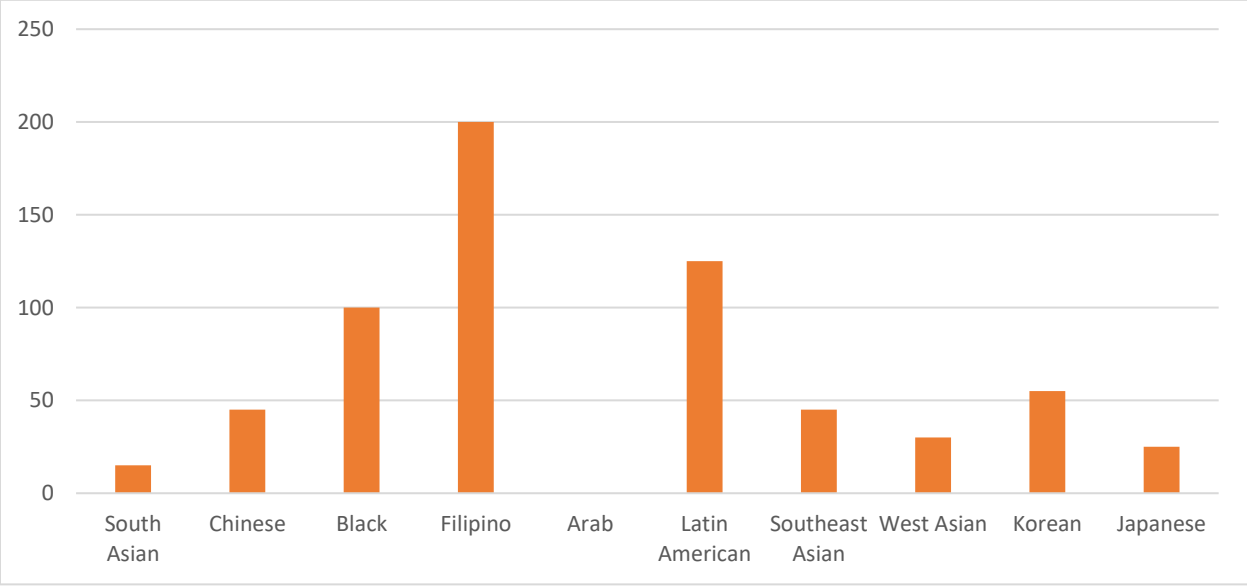


Table Source: Statistics Canada, 2021 Census

***Note:** Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.5 Transient Populations and Commuting

Transient populations refer to the concept of population shift where the population within a community can shift at various times during the day or week or throughout the year. Population shifts can stem from factors like employment, tourism, and education. In some municipalities, residents routinely leave for work, contributing to increased traffic and more motor vehicle collisions. Other communities may serve as major tourist destinations, leading to significant population fluctuations based on seasonal tourism activities. This can heighten the demand for fire protection services, especially concerning overnight tourism accommodations. Additionally, educational institutions can draw transient student populations who commute daily or reside in dormitories or student housing seasonally.

Student accommodations and short-term rental units present distinct fire safety challenges, often arising from the conversion of houses into boarding houses or rooming house accommodations that do not adhere to the National Building Code (NBC). Identifying these properties poses a challenge for fire prevention division staff tasked with enforcing fire codes.

5.5.1 Commuter Populations

Commuter populations represent a significant portion of Blackfalds's labour force. Table 31 shows the commuting destination trends for the residents of Blackfalds based on 2021 Census data. Among Blackfalds's labour force, 20.2% commute locally within their census subdivision (CSD) of residence, while 74.0% travel to nearby areas within the same Census Division (CD). Additionally, 5.0% of Blackfalds residents commute to other locations within the same province, a proportion that is slightly higher that Alberta's rate of 4.18%.

Table 31: Commuting Destinations – Blackfalds and Alberta Labour Force

Commuting Destination*	Blackfalds Labour Force	%	Alberta Labour Force	%
Commute within census subdivision (CSD) of residence	690	20.2	902,040	71.63
Commute to a different CSD within Census Division (CD) of residence	2,525	74.0	292,360	23.22
Commute to a different CSD and CD within province or territory of residence	170	5.0	52,590	4.18
Commute to a different province or territory	20	0.6	12,315	0.98
Total	3,410	100	1,259,305	100.00

Table Source: Statistics Canada, 2021 Census

**Commuting destination for the employed labour force aged 15 years and over in private households with a usual place of work - 25% sample data*

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

Table 32 provides insights into the timing of commutes to work among Blackfalds residents aged 15 years and over. The data reveals that most commuters leave for work during peak morning hours, with 51.1% departing between 6 AM and 7:59 AM. Additionally, a significant portion of commuters (28.0%) begin their journeys between 7 AM and 7:59 AM. These patterns emphasize the significance of understanding peak commuting times for emergency planning, particularly during periods of high travel activity when motor vehicle collision calls are more likely.

Table 32: Time of Commute to Work

Time Leaving for Work*	Labour Force	%
Between 5 AM and 5:59 AM	480	10.6
Between 6 AM and 6:59 AM	1,045	23.1
Between 7 AM and 7:59 AM	1,270	28.0
Between 8 AM and 8:59 AM	795	17.5
Between 9 AM and 11:59 AM	370	8.2
Between 12 PM and 4:59 AM	565	12.5
Total	4,530	100

Table Source: Statistics Canada, 2021 Census

**Total time leaving for work for the employed labour force aged 15 years and over with a usual place of work or no fixed workplace address - 25% sample data*

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.5.2 Tourism

An increase in tourism can lead to heightened demand for fire protection services, particularly with overnight accommodations. Blackfalds hosts several events and attractions annually, drawing both residents and non-residents. These events, which include annual festivals and gatherings, contribute to increased foot traffic and activity within the community.

5.5.3 Indigenous Population

Blackfalds has an Indigenous population (6.5%) that is consistent to Alberta's population of 6.81%. The majority of those identifying as Indigenous in Blackfalds report a single Indigenous identity, with 6.1% of these individuals having a single Indigenous response. Of these, the majority identify as Métis (4.2%) or First Nations (1.9%). Given these demographics, it is important to monitor these populations closely, especially with new Census data, to inform the planning of public education programs and materials that cater to the unique needs and perspectives of Indigenous communities in Blackfalds.

Table 33Table 33 provides insights into the Indigenous population within Blackfalds compared to the province.

Table 33: Indigenous Population – Blackfalds and Alberta

Indigenous Identity	Blackfalds Total	Blackfalds%	Alberta Total	Alberta %
Indigenous Identity	685	6.5	284,470	6.81
Single Indigenous Responses	635	6.1	276,060	6.6
First Nations	*200*	*1.9*	145,640	3.5
Métis	*435*	*4.2*	127,470	3.1
Inuk (Inuit)	*0*	*0.0*	2,945	.1
Multiple Indigenous Responses	40	0.4	4,785	.1
Indigenous Responses not specifically listed above	10	0.1	3,620	.1
Non-Indigenous Identity	9,785	93.5	3,893,245	93.4
Total	10,470	100	4,177,705	100
Registered or Treaty Indian	120	1.1	126,530	3.0
Not a Registered or Treaty Indian	10,350	98.9	4,051,185	97

Table Source: Statistics Canada, 2021 Census

Note: *Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

5.6 Demographic Profile – Identified Risks and Key Findings

Table 34: Demographic Profile – Identified Risks and Key Findings

Identified Risk	Rationale
Rapid growth increasing service demands	Population growth from 3,042 in 2001 to 10,470 in 2021 increases pressure on fire response, inspections, prevention programming, and municipal infrastructure.
High youth population requiring prevention focus	Blackfalds has a large proportion of children and youth, creating a need for sustained school-based fire and life safety education.
Future senior vulnerability	While the current senior population is lower than Alberta's average, the 55–64 age group will age into a higher-risk category for residential fire injury and fatality.
Commuter-related transportation risk	Most workers commute outside Blackfalds, with heavy peak-hour travel. This may increase motor vehicle collision risk and affect emergency response travel times.
Household cost and occupancy pressures	Some households face high shelter costs and larger household sizes, which may reduce fire safety investments and increase consequences during emergencies.
Key Finding	
Blackfalds is young and growing, with a median age of 31.8 and significant long-term population growth.	
Socioeconomic conditions are generally strong, including higher median household income and higher homeownership than Alberta.	
Most residents commute outside the community, making transportation planning and peak-hour response readiness important.	
Language barriers are limited but still present, with a small newcomer and non-official-language population requiring inclusive public education materials.	

SECTION 6
HAZARD PROFILE

6.1 Hazard Identification and Risk Assessment (HIRA)

The hazard profile assessment includes analysis of the hazards within the community, including natural hazards, hazards caused by humans, and technological hazards to which a fire service may be expected to respond, and that may have a significant impact on the community. This section considers these hazards within Blackfalds.

A hazard is defined as a phenomenon, substance, human activity, or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Hazards can be natural, human-caused, or technological. A Hazard Identification and Risk Assessment (HIRA) is a comprehensive process to assess risks based on potential consequences and frequencies. The outcome of the HIRA assists municipalities in prioritizing risks based on their likelihood and potential to cause an emergency. Appropriate measures can then be taken to mitigate, prepare for, and respond to the risks that pose the greatest threat to reduce future losses.

6.1.1 Blackfalds's Community Emergency Management Program

A Community Risk Assessment (CRA) provides an opportunity to examine the results of a community emergency management program (CEMP) risk assessment and the impact that these identified hazards would have on a fire service. For the purposes of this CRA, a 'fire protection services' lens will be applied to the top hazards as identified. As a component of the risk assessment and risk analysis process, the top hazards in the community were identified as a part of the risk assessment conducted by Blackfalds in 2024. Hazards were assigned a risk score and risk level ranking from extreme to very low, depending on their probability and consequence. As a result of this analysis, it shows the top hazards that were identified: (note some hazards were grouped together based on similar risks):

Extreme

- Hazmat (Transportation – Rail)
- Tornado

Very High

- Earthquake
- Forest Fire (Wildfire)
- Rail Accident
- Hail

High

- Human Health Emergency
- Blizzards
- Hazmat (Fixed Site) – Pipeline/Storage Facility
- Hazmat (Transportation) – Road
- Major Road Accident (Vehicular)
- Wind

To better understand the risks of hazards as they pertain to fire protection services, the top hazards have been assessed to identify impacts on fire protection services. Many of the potential impacts are not unique to a jurisdiction. The results of this review are presented in Table 35.

Table 35: Impacts of Hazards on Fire Protection Services

Hazard	Possible Impact
Hazmat (Transportation) - Rail	Overall Impact Potential for mass evacuation, environmental contamination, injuries/fatalities, disruption to transportation corridors, and long-term environmental and economic impacts. Fire Services Requires specialized hazardous materials response, incident command coordination, evacuation management, decontamination operations, and mutual aid support. May exceed local response capacity.
Tornado	Overall Impact Significant threat to life safety, widespread structural damage, infrastructure disruption, utility outages, and displacement of residents. Fire Services High demand for rescue operations, medical assistance, debris management, fire suppression, and prolonged emergency operations during and after the event.
Earthquake	Overall Impact Potential structural collapse, infrastructure damage, utility failure, transportation disruption, and community-wide emergency conditions. Fire Services Simultaneous multi-site incidents may overwhelm resources, requiring urban search and rescue, fire suppression, hazardous materials response, and regional mutual aid coordination.

Hazard	Possible Impact
Rail Accident	Overall Impact Possible injuries, fatalities, transportation disruption, and secondary hazards including fires or hazardous materials release. Fire Services Requires coordinated response involving fire suppression, rescue, incident stabilization, traffic control, and potentially hazardous materials operations.
Forest Fire (Wildfire)	Overall Impact Threat to homes, air quality, public health, infrastructure, and possible evacuations, particularly near grassland or naturalized areas. Fire Services Increased demand for wildland firefighting resources, mutual aid, evacuation support, structure protection, and extended operational periods during peak fire conditions.
Hail	Overall Impact Property damage to homes, vehicles, roofs, and infrastructure; potential injuries and insurance impacts. Fire Services Increased call volumes related to weather emergencies, alarms, downed utilities, and assistance requests, though typically limited suppression demands.
Human Health Emergency	Overall Impact Widespread illness, strain on healthcare systems, workforce disruption, and impacts to essential services and community operations. Fire Services Increased medical response demands, staffing shortages, PPE requirements, modified operational procedures, and continuity planning pressures.
Blizzards	Overall Impact Dangerous travel conditions, isolation of residents, utility disruptions, and increased risk of collisions and medical emergencies. Fire Services Increased demand for motor vehicle collision response, medical assistance, welfare checks, and operations under hazardous weather conditions.

Hazard	Possible Impact
Hazmat (Fixed Site) – Pipeline/Storage Facility	Overall Impact Risk of fire, explosion, toxic release, environmental damage, evacuations, and disruption to nearby businesses or residences. Fire Services Requires hazardous materials mitigation, fire suppression, evacuation coordination, air monitoring, and multi-agency response capability.
Hazmat (Transportation) – road	Overall Impact Potential injuries, roadway closures, environmental contamination, and disruption to transportation routes. Fire Services Requires scene isolation, hazardous materials identification, containment, decontamination, and coordination with specialized response agencies.
Major Road Accident (Vehicular)	Overall Impact Injuries, fatalities, traffic disruption, and secondary impacts to regional transportation and emergency access. Fire Services High frequency operational demand involving vehicle extrication, medical response, fire suppression, traffic management, and mutual aid support when required.
Wind	Overall Impact Damage to buildings, trees, utilities, and infrastructure; possible power outages and debris hazards. Fire Services Increased responses for downed power lines, damaged structures, alarms, and public safety hazards during severe wind events.

Table Source: Blackfalds, Community Emergency Management Program, 2024

6.2 Hazard Profile – Identified Risks and Key Findings

Table 36: Hazard Profile – Identified Risks and Key Findings

Identified Risk	Rationale
Transportation and Hazardous Materials Risk	Blackfalds faces elevated risk from major roadway collisions, rail accidents, and hazardous materials transportation incidents. These events may result in injuries, fatalities, environmental contamination, roadway or rail closures, and complex multi-agency emergency responses that could exceed local fire service capacity.
Wildfire and Grassfire Risk	Seasonal wildfire and grassfire conditions pose a threat to residential areas, infrastructure, and public health through fire spread, smoke exposure, and potential evacuation requirements. Prolonged wildfire events may also increase operational demands on fire services and mutual aid resources.
Sever Weather and Human Health Emergency	Severe weather events such as blizzards, tornadoes, windstorms, and hail can create dangerous travel conditions, infrastructure damage, and utility outages, while human health emergencies may significantly strain emergency response resources, staffing, and service delivery capabilities.
Key Finding	
Transportation-related incidents represent a major operational demand, particularly motor vehicle collisions, and the potential for hazardous materials incidents along transportation corridors.	
Seasonal and environmental hazards increase community vulnerability, particularly during wildfire season and severe weather periods that may disrupt infrastructure and emergency operations.	
Large-scale or prolonged emergencies may exceed local response capabilities, requiring regional mutual aid, specialized resources, and coordinated multi-agency emergency management responses.	

SECTION 7
PUBLIC SAFETY RESPONSE PROFILE

7.1 Public Safety Response Agencies in Blackfalds

Public safety and response agencies refer to agencies and organizations that respond to specific types of incidents within a community that provide trained personnel and resources critical to upholding public safety. These entities could include police, ambulance, fire, and other entities that may be tasked with or able to assist in some capacity the collective response to an emergency. The following sections consider these public safety response characteristics within Blackfalds.

Public safety and response agencies refer to agencies and organizations that respond to specific types of incidents within a community that provide trained personnel and resources critical to upholding public safety. Each of these entities offers specialized skill sets in support of front-line operations. The types of response services offered might include fire protection, medical attention, rescue operations, policing activities, or dangerous goods response. In addition to responding individually to certain types of incidents, these entities work closely with one another in the event of major emergencies through a structured standardized response approach to ensure effective coordination among all response agencies.

Table 37 lists the public safety response agencies who could be able to assist Blackfalds in a collective emergency response effort and may contribute to the minimization of risk within the community. Identifying the public safety response agencies within the community can help the fire service understand the agencies that may be able to assist in the response to an emergency.

Table 37: Public Safety Response Agencies

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
Blackfalds Fire & Rescue	Provides fire suppression, rescue operations, motor vehicle collision response, fire prevention, hazardous materials support, and emergency response within the Town and surrounding mutual-aid areas.	Acts as the primary on-scene emergency response agency for fires, rescues, hazardous materials incidents, motor vehicle collisions, and life safety operations. Provides incident command, fire suppression, evacuation support, technical rescue, and emergency scene stabilization.
Blackfalds RCMP Detachment	Provides policing services including law enforcement, public safety, criminal investigations, traffic enforcement, and emergency response coordination.	Maintains public safety and security during emergencies through traffic control, evacuation enforcement, site security, criminal investigations, crowd management, and coordination with other emergency agencies.
Alberta Fire Commissioner	Fire	Assistance with managing fire and obtaining resources beyond capability of county
Alberta Health Services EMS	Provides ambulance and paramedic services, medical emergency response, patient transport, and regional emergency medical coordination.	Provides emergency medical care, triage, patient stabilization, ambulance transport, casualty management, and coordination with hospitals and healthcare facilities during emergencies or mass casualty incidents.
Alberta Central Regional (AHNIT)	This is not a front-line emergency response Agency. Contributes to the community resilience by improving collaboration among regional partners during and after emergency events.	AHNIT helps strengthen regional preparedness, facilitates the sharing of hazard information and best practices, and supports coordinated responses to emergencies that cross municipal boundaries. It is not a front-line emergency response agency.
Town of Blackfalds' Emergency Management	Coordinates municipal emergency preparedness, disaster response, emergency planning, evacuation coordination, and recovery operations during large-scale incidents.	Coordinates overall municipal emergency response, activates the Emergency Coordination Centre (ECC), supports interagency coordination, manages public communication, oversees evacuation and recovery operations, and directs municipal resources during major incidents

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
Alberta Emergency Management Agency (AEMA)	Provincial agency supporting emergency preparedness, disaster coordination, recovery assistance, and municipal emergency management programs	Supports municipal emergency response through provincial coordination, resource deployment, emergency policy guidance, disaster recovery assistance, and provincial emergency declarations if required.
Red Deer Regional Emergency & Mutual Aid Partners	Regional municipalities and agencies provide mutual aid support for major emergencies, fires, infrastructure failures, and disaster response events.	Provide additional personnel, apparatus, equipment, and operational support during large-scale incidents that exceed local response capacity, including structural fires, wildfires, infrastructure failures, and regional disasters.
Lacombe Regional Emergency Management Partnership, (LREMP)	Large Scale Emergencies	Primary regional emergency management organization supporting Blackfalds and 12 other municipalities within Lacombe County. During large scale emergencies, the agency provides coordinated emergency operations, evacuation planning, resource sharing and public information, ensuring that Blackfalds can access additional personnel, equipment and expertise beyond its own municipal capabilities.
Alberta Transportation & Economic Corridors	Supports highway incident management, transportation emergencies, and provincial roadway coordination affecting Highway 2 and Highway 2A.	Coordinates response activities related to provincial highways, including road closures, detours, traffic management, highway maintenance support, and infrastructure damage assessment during emergencies.
CN Rail and Canadian Pacific Kansas City (CPKC)	Train derailments, dangerous goods releases, rail crossing collision, and temporary road closures affecting emergency response	The active railway through Blackfalds is operated by CPKC, rather than CN Rail but railway companies play important roles in regional emergency management because they transport freight, including hazardous materials, throughout Central Alberta. Railway operators work closely with municipalities, fire departments, emergency management organizations, police, and provincial agencies by providing emergency contact services, incident response resources, technical expertise.

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
Utility Providers (Electric, Gas, Telecommunications)	Respond to infrastructure outages, utility emergencies, hazardous incidents, and service restoration during emergencies.	Respond to utility outages, infrastructure failures, hazardous utility incidents, and service disruptions; isolate damaged systems; restore critical services; and support emergency operations continuity.
Public Works and Municipal Operations	Responsible for snow clearing, flood response support, barricading, infrastructure repair, storm response, and operational continuity during emergencies.	Supports emergency response through debris removal, barricading, flood mitigation, snow clearing, infrastructure repair, heavy equipment deployment, and maintaining essential municipal services during emergencies.
Alberta Wildfire	Wildfires, grassfires, interface fires threatening residential areas, drought-related fire conditions, smoke events, mutual aid wildfire deployments, large-scale evacuations related to fire hazards.	Assists with wildfire prevention, monitoring, suppression, evacuation coordination, and wildfire resource deployment during grassfire or wildfire events affecting the region.
Canadian Red Cross	Large-scale evacuations, residential fires, natural disasters, severe weather events, flooding, extended utility outages, mass displacement incidents, reception centre operations, humanitarian assistance, and recovery support.	Provides emergency social services including temporary lodging, reception centres, food, clothing, family reunification, and disaster recovery assistance for displaced residents.
School Divisions and Educational Facilities	Community evacuations, emergency shelter or reception centre operations, severe weather events, public health emergencies, hazardous material incidents near schools, lockdowns or security incidents, community disaster response support	May serve as emergency reception centres, evacuation locations, public information sites, or temporary shelters during community emergencies.
Regional Healthcare Facilities	Mass casualty incidents, pandemics or infectious disease outbreaks, hazardous materials exposures, transportation accidents, industrial incidents, severe weather emergencies, public health emergencies, wildfire smoke events	Receive and treat injured persons, support medical surge capacity, coordinate healthcare continuity, and provide specialized medical care during major emergencies.

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
CP Rail Police	• Rail emergencies (on and off board) • Rail security incidents on and offboard. • Promote rail safety. • Protect infrastructure	• Oversee response to all rail emergencies. • Consult with and support municipal or provincial fire and emergency services as needed for large incidents

7.1.1 Fire Protection Services Agreements and Plans

Large emergency events can quickly overwhelm the response capacity of most community fire departments in Alberta. As a result, mutual aid and automatic aid agreements are a necessary component in adding response capacity for these low frequencies but potentially high or extreme consequence events. Blackfalds has a formal Fire Service Agreements with Lacombe County as well as a Mutual Aid Agreement with the City of Lacombe.

There are current discussions regarding an agreement between Blackfalds and Red Deer County. The City of Red Deer is in the process of updating their agreement with Blackfalds.

The principal purpose for entering into these agreements is to promote and ensure that adequate and coordinated resources are made available when requested from, or by a neighbouring County to minimize the loss of human life and property and damage to the environment in the event of an emergency that requires such additional resources.

All inter-municipal agreements should be reviewed regularly and adjusted as required. This provides for the updating and clarification of agreements and consideration of adjustments. It may also lead to discussions regarding localized fire service response agreements and considerations about whether automatic aid in defined circumstances might be of additional value.

SECTION 8
COMMUNITY SERVICES PROFILE

The community services profile assessment includes analysis of the types of services provided by other entities in the community, and those entities' service capabilities. This includes the presence or absence and potential abilities of other agencies, organizations, or associations to provide services that may assist in mitigating the impacts of emergencies to which the fire department responds. The following sections consider these community service characteristics within Blackfalds.

8.1 Community Services

Fires and other emergency events can have devastating effects on a community and at times can overwhelm public safety and security agencies' capacity to respond. In an emergency event, community-based agencies, organizations, and associations can provide surge capacity to the response and recovery efforts of first responders and a useful resource to call upon if integrated into the emergency management framework early on. These types of affiliations can contribute a variety of capabilities essential to response and recovery efforts, including support in the areas of communications, health care, logistics, shelter, food and water supply, emergency clothing, and more specialized skill sets.

Table 38 lists the community agencies and non-government organizations (NGOs) available to Blackfalds.

Table 38: Community Service Agencies

Community Service Agency	Type of Assistance Provided
Schools and Educational Facilities	May serve as evacuation centres, reception centres, temporary shelters, family reunification locations, or emergency coordination facilities.
Canadian Red Cross	Provides emergency lodging, food, clothing, personal care items, reception centre support, family reunification services, and disaster recovery assistance for displaced residents.
Blackfalds FCSS (Family and Community Support Service)	Provides social support coordination, referrals to community resources, mental health and wellness support, vulnerable population assistance, volunteer coordination, and recovery support services.
Town of Blackfalds Emergency Management	Coordinates public information, evacuation support, emergency social services, reception centres, and overall community recovery operations.
Lacombe Regional Emergency Management Partnership, (LREMP)	Primary regional emergency management organization supporting Blackfalds and 12 other municipalities within Lacombe County. During large scale emergencies, the agency provides coordinated emergency operations, evacuation planning, resource sharing and public information, ensuring that Blackfalds can access additional personnel, equipment and expertise beyond its own municipal capabilities.
Blackfalds Food Bank/Regional Food Support Organizations	Assists residents with emergency food hampers, short-term food security support, and distribution of essential supplies during disasters or prolonged emergencies.
Local Churches and Faith-based Organizations	May provide temporary shelter, volunteer support, food services, emotional support, donations management, and community outreach during emergencies.
Healthcare & Mental Health Service Providers	Provide medical care, psychological support, crisis counselling, public health coordination, and support for vulnerable populations during emergencies.
Victim Services Organizations	Provide emotional support, crisis intervention, referrals, and assistance for individuals impacted by traumatic events, fires, accidents, or criminal incidents.
Volunteer Organizations & Community Groups	Assist with donations management, wellness checks, transportation support, debris cleanup, emergency staffing assistance, and support for vulnerable residents.
Utility Providers	Support restoration of electricity, natural gas, water, and telecommunications services during infrastructure disruptions or disasters.

Community Service Agency	Type of Assistance Provided
Animal rescue & Veterinary Services	Assist with emergency animal sheltering, pet evacuation support, livestock coordination, and animal welfare during evacuations or disasters.
Regional Municipal Partners	Provide mutual aid support, equipment, personnel, emergency coordination assistance, and additional resources during large-scale incidents.

SECTION 9
ECONOMIC PROFILE

An economic profile assessment includes analysis of the economic sectors affecting the community that are critical to its financial sustainability. This involves economic drivers in the community that have a significant influence on the ability of the community to provide or maintain service levels. The following sections consider these economic characteristics within Blackfalds.

9.1 Economic Sectors and Employers in Blackfalds

The top industries that contribute to the economic base of Blackfalds are summarized in Figure 6. According to the Statistics Canada 2021 Census, Trades, Sales and Services and Business, finance and administration occupations are the top contributing industries to Blackfalds's economic base.

Figure 6: Blackfalds Top Industries

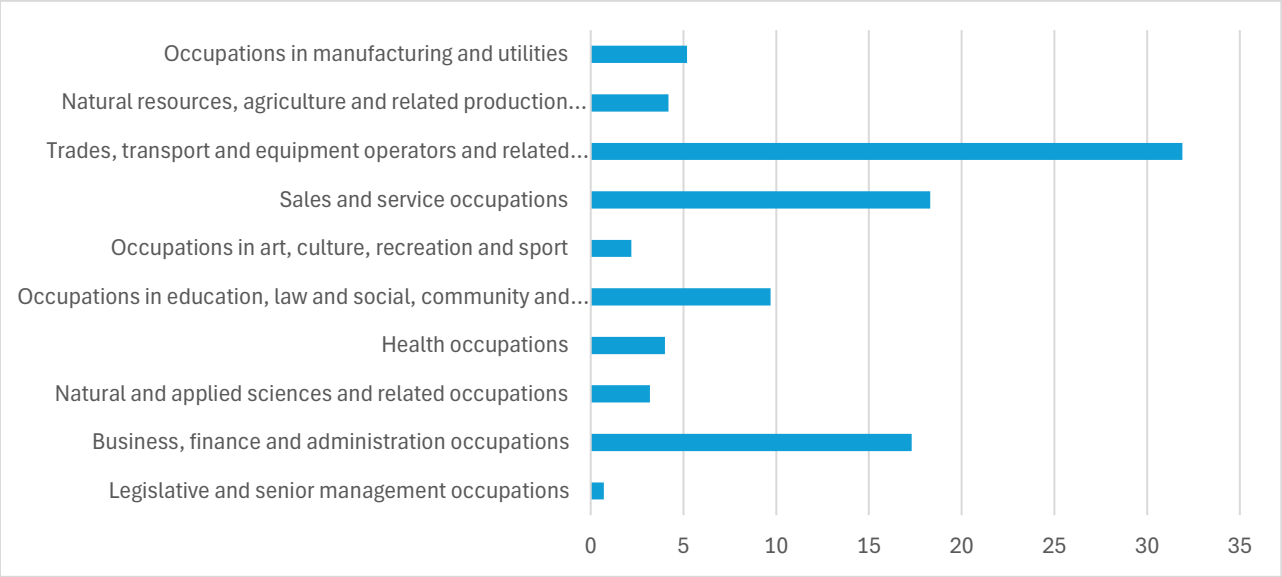


Table Source: Statistics Canada, 2021 Census

***Note:** Census data information in this assessment is sourced from Statistics Canada Census data. Despite efforts to ensure accuracy, minor discrepancies may occur due to rounding, suppression, methodology, aggregation, or updates. Figures represent the best available estimates and may not align in all totals or sub-totals exactly.*

Certain industries, employers and events contribute to the financial sustainability and economic vitality of a community. A fire or other emergency at key sectors and employment facilities within a community could have significant impacts on the local economy and employment.

Blackfalds does not have a single dominant industrial employer base, but rather a diversified economy consisting of municipal services, construction, manufacturing, retail, logistics, education, and regional service-sector employment. Many residents also commute to Red Deer and surrounding Central Alberta communities for work due to Blackfalds' location within the Highway 2 corridor.

Blackfalds's major employers are shown below in Table 39. Certain industrial operations may have increased fuel loads and conduct higher risk activities. Proactive inspections should target these facilities to ensure compliance with codes, maintenance, and emergency planning requirements.

Table 39: Major Employers in Blackfalds

Employer	Sector	Local Operations / Notes
Hall Industrial Contracting	Industrial / Oilfield/Construction	Construction and Fabrication
Enlyn Process Systems	Industrial / Oilfield/Construction	Oil and Gas Processing Equipment
Central Alberta Pumpjack Services	Industrial / Oilfield/Construction	Oilfield Services
Casper Oilfield Services	Industrial / Oilfield/Construction	Fabrication and Welding
Moonlight Welding Ltd.	Industrial / Oilfield/Construction	Fabrication and Welding
Tryson Energy Services Inc.	Industrial / Oilfield/Construction	Energy Sector Support
Mustang Helicopters Inc.	Transportation / Heavy Equipment / Aviation	Rotary Aviation Support
Central Alberta Heavy Duty Repair	Transportation / Heavy Equipment / Aviation	Fleet / Industrial Repair
Spectrum Industrial Automatics Ltd.	Industrial Support / Specialized Services	Industrial Automation
A-1 / Castle Guard Storage	Industrial Support / Specialized Services	Industrial Storage / Logistics

9.2 Economic Profile – Identified Risks and Key Findings

Table 40: Economic Profile – Identified Risks and Key Findings

Identified Risk	Rationale
Industrial and commercial occupancy fire risk	Construction, manufacturing, logistics, and commercial operations may contain higher fuel loads, industrial equipment, and hazardous materials that increase the potential severity and complexity of fire incidents.
Economic disruption from infrastructure or employer incident	Fires, hazardous material events, or transportation disruptions affecting key employers or regional transportation corridors could negatively impact local employment, supply chains, and business continuity within Blackfalds.
Key Finding	
Blackfalds maintains a diversified local economy, with employment distributed across municipal services, construction, manufacturing, retail, logistics, education, and regional service sectors.	
Trades, sales and services, and business administration occupations represent the largest employment sectors contributing to the community's economic base.	
The Highway 2 corridor plays a critical economic role, supporting regional commuting patterns, goods movement, and access to employment opportunities in Red Deer and surrounding Central Alberta communities.	

SECTION 10
PAST LOSS & EVENT HISTORY PROFILE

The past loss and event history profile assessment includes analysis of the community's past emergency response experience, including an analysis of the number and types of emergency responses, injuries, deaths, and dollar losses, and a comparison of the community's fire loss statistics with provincial fire loss statistics. Evaluation of previous response data will inform decisions on fire protection services delivery, including public fire safety education and inspection programs. The following sections consider these past loss and event history characteristics within Blackfalds.

10.1 Past Loss

Analysis of historical data provides valuable insight into understanding the specific trends within a community. Assessing the key factors of life safety risk and fire risk in relation to provincial statistics provides a foundation for evaluating where specific programs or services may be necessary. The analysis within this section is based on data provided by Blackfalds Fire Department (2021 – 2025) data and the Office of the Fire Commissioner's 10-year statistical report for Blackfalds from 2014 - 2023.

10.1.1 Total Fire Loss

The analysis of total fire loss in Blackfalds over the ten-year period from 2014 to 2023 highlights total fires and fire loss in that ten-year period. Two primary types of fires were structure fires and vehicle fires. On average, based on that ten-year period, Blackfalds experienced 6 fires per year and incurred approximately $948,247 in property loss annually.

Table 41: Total Fire Loss – Blackfalds

Year	Fires	Loss ($)	Alberta Fires	Loss ($)
2014	10	$570,000	5161	$443,890,046
2015	6	$47,180	5556	$626,060,251
2016	32	$3,367,547	16310	$2,252,942,351
2017	10	$1,167,209	4526	$526,602,022
2018	6	$46,515	3541	$378,166,306
2019	10	$783,273	3426	$347,570,637
2020	14	$1,410,200	3412	$465,615,727
2021	12	$576,328	4686	$540,089,298
2022	8	$173,076	3621	$508,262,041
2023	11	$1,341,142	3968	574,797,411
Total	119	$9,482,470	54,207	$6,663,996,090
% of All Fires Alberta	.0022%	14.23%		
Average per year	11.9	$948,247	5420	$6,639,960

Table Source: Alberta Fire Commission 10 – year loss by Municipality: 2014 – 2023

Table 42: Number of Fires and Fire Loss (2021 – 2025)

Year	# Structure Fires	Loss ($)	# Vehicle Fires	Vehicle Loss ($)
2021	3	$106,360	6	$176,356
2022	11	$646,200	7	$139,000
2023	9	$595,700	4	$25,000
2024	3	$86,500	6	$61,500
2025	6	$130,000	7	$101,500

Table Source: Blackfalds' Fire Department data (2021 – 2025)

10.1.2 Fires by Occupancy Type

This section examines structure fires occurring from January 1st, 2014, to December 31st, 2023, categorized by occupancy type. Over this period, Blackfalds experienced a total of 119 structure fires. Notably, 57.98% (67) of these fires occurred in Group C-Residential Occupancies. It is important to note that there were 6 fire in Mobile Homes resulting in one fatality and two of the 11 injuries sustained in fires.

Table 43: Fires by Major Occupancy Type – 2021-2025

Group	Occupancy Classification	# of Fires	Blackfalds % of Structure Fires	Blackfalds Structure Fire Loss	Blackfalds % of Structure Fire Loss
A	Assembly	2	6.25	$2,500	.16
B	Care & Detention	0	0.00	0	0.00
C	Residential	28	87.50	$1,557,060	99.52
D	Business & Personal Services	1	3.13	$5,000	3.19
E	Mercantile	1	3.13	$200	.01
F	Industrial	0	0.00	0	0.00
Other	Not Classified in NBC	0	0.00	0	0.00
Farm	Classified in the NBC	0	0.00	0	0.00
	Total	32	100%	1,564,560	100.00

Table Source: Alberta Fire Commissioner Fire Loss 2014 - 2023[2]

10.1.3 Civilian Fatalities and Injuries

As shown in Table 44, according to data from the Fire Commissioner, spanning from January 1st, 2014, to December 31st, 2023, there was one reported fatality and 11 injuries within Blackfalds. Notably, these numbers are considered low to the total identified by the provincial statistics. The Alberta Fire Commission records showed that the fatality occurred in a Mobile Home. One injury was sustained in a storage fire and two in residential dwelling units.

[2] *Ibid*

Table 44: Civilian Fire Fatalities and Injuries Blackfalds and Alberta

Year	Blackfalds Fires	Blackfalds Deaths	Blackfalds Injuries	Alberta Fires	Alberta Deaths	Alberta Injuries
2014	10	1	0	5161	40	180
2015	6	0	0	5556	38	163
2016	32	0	0	16310	35	165
2017	10	0	2	4526	35	173
2018	6	0	0	3541	32	124
2019	10	0	3	3426	26	76
2020	14	0	4	3412	11	99
2021	12	0	1	4686	38	125
2022	8	0	1	3621	44	102
2023	11	0	0	3968	25	67
Total	119	1	11	54,207	324	1274
% of Alberta Fires	.0022%	.31%	.86%			

Table Source: Alberta Fire Commission 10 – year loss by Municipality: 2014 - 2023

Table 45: Blackfalds Injury and Fatalities (2021-2025)

Year	# Civilian Injuries	# Civilian Fatalities
2021	1	0
2022	0	0
2023	0	0
2024	0	0
2025	0	0

Table Source: Blackfalds Fire Department data (2021- 2025)

***Note:** Blackfalds' statistics are slightly different from the Alberta Fire Commission but not significantly enough to affect the analysis.*

10.1.4 Reported Fire Cause

The NFPA defines fire cause as “the circumstances, conditions, or agencies that bring together a fuel, ignition source, and oxidizer (such as air or oxygen) resulting in a fire or a combustion explosion.” Assessing the possible cause of the fires reported is an important factor in identifying potential trends or areas that may be considered for introducing additional public education or fire prevention initiatives. Within NBC fire loss reporting, there are four categories of cause used to classify the cause of a fire. These include intentional, unintentional, other, and undetermined. Table 46 presents the reported fire causes for Blackfalds from January 1, 2021, to December 31, 2025.

The analysis of fire causes in Blackfalds, reveals various factors contributing to fires over the period examined. The cause of almost 44% of fires were found to be miscellaneous act or omission. Determining the cause of fires can assist fire services in developing public education programs to reduce or prevent future incidents. It could also help identify trends that may indicate a need for targeted enforcement.

The "intentional" category includes fires started for a specific reason, typically classified as arson, acts of vandalism, or for personal gain through insurance claims. According to the data, Blackfalds had 4 (6.35%) intentional fire being arson/set fires or acts of vandalism, during this five-year period

The "unintentional" category represents common causes of fires, including human behavioral causes (e.g., misuse of ignition sources) and equipment failures (e.g., mechanical failure). Unintentional fire causes represented 93.65% of all reported fires in Blackfalds during this period. The leading causes of unintentional fires in Blackfalds were mechanical/electrical failure/malfunction

Table 46: Reported Home Fire Cause – Blackfalds 2021 - 2025

Fire Cause Blackfalds	Blackfalds #	Blackfalds %
Appliance/Equipment Related		
Arson/Set Fire	4	6.35
Candle (accident)		
Child Fire-play		
Clothes Dryer		
Cooking		
Construction Design or Installation Deficiency	1	1.59
Electrical Distribution Equipment		
Exposure Fire		
Flammable Gas Ignition		
Flammable/Comb. Liquid Ignition		
Heating Equip related		
Human Failing	4	6.35
Inadequate Control of Open Fire		
Light/Fluorescent Bulb		
Match/Lighter not used from Smoking		
Mechanical/Electrical Failure/Malfunction	11	17.46
Misuse of Equipment	2	3.17
Misuse of Ignition Source	8	12.70
Misuse of Material Ignited	5	7.94
Miscellaneous Act or Omission	28	44.44
Other Causes/Unknown		
Smoking		
Vehicle Accident		
Welding/Torch Too Close		
Total	63	100%

Table Source: Blackfalds Fire Department data (2021 – 2025)

10.1.5 Ignition Source

According to the 2019 NFPA Glossary of Terms, ignition source is defined as "any item or substance capable of an energy release of type and magnitude sufficient to ignite any flammable mixture of gases or vapors that could occur at the site or onboard the vehicle." Table 47 provides fire loss by source of ignition for Blackfalds and the province. Exposure, Structure Detached was the highest ignition source being 10.08%. In this context, 'exposure 'refers to fires that ignite due to contact with an ignition source within the same building, for example, a toaster catching fire and subsequently igniting nearby kitchen cupboards.

Determining source can assist fire services in the development of public education program to reduce or prevent future events. It could also lead to trends that may indicate greater targeted enforcement needs or identify concerns to the Alberta Fire Commissioner for review by their Technical Services section.

The top ten sources of ignition are listed in Table 47. Efforts to enhance data collection and investigation methods could help reduce the number of undetermined cases, providing valuable insights for fire prevention and safety initiatives.

Table 47: Top Ten Sources of Ignition – Blackfalds – 2014-2023

Reported Ignition Source	Blackfalds # of Fires	Blackfalds % of Fires	Blackfalds $ loss
Exposure, Structure Detached	12	10.08%	$1,474,400
Exposure, Vehicle	11	9.24%	$594,700
Exposure, Structure	8	6.72%	$365,284
Smokers Materials – Cigarette	6	5.04%	$687,001
Smokers Materials – Ashtray	5	4.20%	$811,541
Appliances and Equipment – Unclassified or unknown	4	3.36%	$368,000
Permanent Electrical Wiring, Cable – Includes junction box, power line	3	2.52%	$163,687
Oven or Stove, Range	3	2.52%	$362,000
Extension Cord	3	2.52%	$498,979
Stove, Range, Top	2	1.68%	$85,000
Total	57	47.90%	$5,410,592

Table Source: Alberta Fire Commissioner – Fire Causes 2014 – 2023

Table 48: Reported Ignition Sources (2021 – 2025)

Reported Ignition Source	Total # of Fires					
	2021	2022	2023	2024	2025	Fires %
Cooking Equipment	0	2	1	1	0	6.35
Heating Equipment	0	1	0	2	0	4.75
Electrical Distribution Equipment	0	0	0	0	0	0.00
Appliances & Equipment	0	1	2	0	1	6.35
Electrical Distribution Equipment	0	1	0	0	1	3.17
Other Electrical Equipment	0	1	0	0	0	1.59
Smokers Material and "Open" Flame	3	1	3	0	1	12.70%
Exposure	4	5	3	0	6	28.75%
Miscellaneous	3	6	4	6	4	36.51%

Table Source: Blackfalds Fire Department data (2021 – 2025)

Note: *Based on the data received from Blackfalds for the last five years, exposure fires have remained the top ignition source and has increased significantly during the last five years being 28.57% of all fires. Smokers' materials and open flame have also increased slightly in the last five years. Exposure fires, in this context refers to a fire originating outside a building, such as neighbouring structure, that subsequently causes ignition of the building in question.*

10.1.6 Smoke Alarm Status

In the Province of Alberta, smoke alarms serve as crucial safety measures, mandated on every level of residential dwellings to act as the first line of defense against fires. Therefore, smoke alarm programs and compliance initiatives are integral components of public education and fire prevention efforts led by municipal fire services. Data regarding smoke alarm status during fire incidents is collected and reported by municipalities to the province, with information publicly available for analysis. Table 49 shows that over a five-year period from January 1st, 2018, to December 31st, 2022, in Group C - Residential occupancies, Alberta reported that in 78% of fires responded to, there was no smoke alarm present.

Blackfalds data for the past five years shows that smoke alarms were not present in 28.57% of the residential fires. This is significantly less than the provincial average.

Table 49: Home Fires by Smoke Alarm Activation Alberta– 2018-2022

Smoke Alarm Installation	# of Fires	% of Fires	Deaths	% of Deaths	Injuries	% of Injuries	$ Losses	% of Losses
Installed	1724	21	44	36	169	45	292,563,872.00	22
Not installed	6268	78	75	63	202	54	492,563,872.00	77
Total	7992	99	119	99	371	99	785,127,744.00	99
Smoke Alarm Activation	**# of Fires**	**% of Fires**	**Deaths**	**% of Deaths**	**Injuries**	**% of Injuries**	**$ Losses**	**% of Losses**
Activated	662	38	8	18	91	53	101,241,905.00	34
Activation- Unknown	600	34	26	59	45	26	152,643,296.00	52
Not Activated	462	26	10	22	33	19	38,678,671.00	13
Total	1724	98	44	99	169	98	292,563,872.00	99
Alarm Assistance to Occupants	**# of Fires**	**% of Fires**	**Deaths**	**% of Deaths**	**Injuries**	**% of Injuries**	**$ Losses**	**% of Losses**
Alarm assisted evacuation	457	69	1	12	71	71	80,560,690.00	79
Alarm did not assist occupants to evacuate	53	8	2	25	10	10	693,530.00	0
Not applicable/no occupants	113	17	5	0	4	4	15,490,612.00	15
Occupant evacuation unknown	39	5	0	62	6	6	4,497,073.00	4
Total	662	99	8	99	91	91	101,241,905.00	98
Reasons Alarms Did Not Assist	**# of Fires**	**% of Fires**	**Deaths**	**% of Deaths**	**Injuries**	**% of Injuries**	**$ Losses**	**% of Losses**
Alarm inaudible	2	3	0	0	0	0	51,500.00	7
Physical/mental challenge	3	5	1	50	0	0	118,040.00	17
Unable to evacuate (age-related)	1	1	0	0	0	0	100.00	0
Under influence of drugs/alcohol	16	30	1	50	6	60	335,090.00	48
Unnecessary to evacuate	31	58	0	0	4	40	188,800.00	27
Total	53	97	2	100	10	100	693,530.00	99
Reasons Alarms Not Activated	**# of Fires**	**% of Fires**	**Deaths**	**% of Deaths**	**Injuries**	**% of Injuries**	**$ Losses**	**% of Losses**

AC not connected/disabled	35	7	0	0	6	18	5,252,335.00	13
Dead battery	23	4	2	20	3	9	4,493,101.00	11
Mechanical failure	39	8	5	50	3	9	6,319,915.00	16
No battery	31	6	2	20	3	9	3,102,211.00	8
Not enough smoke	325	70	1	10	18	54	18,620,085.00	48
Unsuitable location	9	1	0	0	0	0	891,024.00	2
Total	462	96	10	100	33	99	38,678,671.00	98

Table Source: Alberta Fire Commissioner – Home Fires by Smoke Alarm Operation 2018-2022

Table 50: Smoke Alarm Performance – Blackfalds (2021 – 2025)

Smoke Alarm Performance	Total # of Fires						
	2021	2022	2023	2024	2025	Total	Residential Fires % (28)
No Smoke Alarm	1	1	2	2	2	8	28.57
Alarm in Room of Origin - Activated	0	0	2	1	1	4	14.29
Alarm Not in Room of Origin - Activated	0	1	3	0	0	4	14.29
Alarm in Room of Origin – Not Activated	0	0	0	0	0	0	0.00
Alarm Not in Room of Origin – Not Activated	2	2	0	0	1	5	17.86
Smoke Alarm Activation - Unknown	0	7	2	0	2	11	39.29

Table Source: Blackfalds Fire Department data (2021 – 2025)

10.2 Event History

Event history seeks to apply BFD historic emergency call data to develop an understanding of community risks. This section provides a statistical assessment of historic emergency call volumes for Blackfalds. The analysis included within this section also provides a detailed breakdown of calls by response type. The data used in this analysis was for all fire incident calls for the period from January 1st, 2014, to December 31st, 2023, report to the Albert Fire Commission. This section provides a statistical assessment of historic emergency call volumes for Blackfalds. The volume and frequency of historic calls inform the understanding of response probability. The types of calls inform the potential consequences of BFD responses and calls for service. The combined consideration of these elements provides an understanding of community risk, based on past calls for service.

10.2.1 Emergency Call Volume

This section illustrates the historical emergency call volume by year, month, day of week, and time of day for all types of incidents responded to by BFD for the time from January 1st, 2021, to December 31st, 2025.

10.2.1.1 Annual Call Volume – All Incident Types

The analysis of annual emergency call volume can be beneficial in understanding evolving trends or changes in emergency response demand. A summary of the total number of emergency calls for the period from January 1st, 2021, to December 31st, 2025, is shown in Table 51. Figure 7 shows the call volume for this time period based on monthly response data.

This analysis shows an increase in call volume from July to November of each year. Emergency call volume in Blackfalds likely increases from July to November due to higher summer travel, agricultural and harvest activity, back-to-school traffic, and the onset of colder weather, all of which contribute to more vehicle collisions, medical emergencies, and fire-related incidents. This analysis also identifies an increase in the total emergency call volume within Blackfalds over this period from 184 calls in 2021 to 255 calls in 2025. The increase between 2021 and 2025 represents a total increase of 27.84% over this five-year period with an average of 241 calls per year.

Table 51: Total Incident Call Volume – (2021 – 2025)

Incident Category	2021	2022	2023	2024	2025	Total	Total %
Alarms	67	103	119	118	128	535	44.44
Fires	22	41	26	50	31	170	14.12
Hazmat	8	9	9	13	15	54	4.49
Medical	27	30	31	26	23	137	11.38
Mutual Aid	14	12	12	9	11	58	4.82
MVC	36	39	41	45	40	200	16.61
Other	5	7	3	4	3	22	1.83
Public Hazard/Assist	4	4	6	6	4	24	1.99
Rescue	1	0	1	1	0	3	0.25
Totals	184	245	248	272	255	1204	100

Table Source – Blackfalds Fire Department data (2021 – 2025)

Table 52: Unique Response types (2021 – 2025)

Incident Subcategory	2021	2022	2023	2024	2025	5-yr. Total	Total %
Alarms	69	105	119	120	131	544	45.18%
Animal Rescue	0	1	2	0	0	3	0.25%
CO Alarms	5	4	3	7	5	24	1.99%
Fire Grass / Brush	7	9	7	16	9	48	3.99%
Fire Outside	3	7	5	10	6	31	2.57%
Fire Rubbish	1	4		2	4	11	0.91%
Fire Structure	5	10	0	7	6	28	2.33%
Fire Vehicle	5	9	4	6	5	29	2.41%
Gas Leak	2	1	2	2	2	9	0.75%
Haz-Mat	1	2	2	3	4	12	1.00%
High Angle Rescue	0	0	1	0	0	1	0.08%
Illegal Burn	0	1	1	5	0	7	0.58%
Investigation Fire	1	3	1	5	1	11	0.91%
Investigation Odor	1	1	1	1	1	5	0.42%
Investigation Smoke	4	4	0	0	1	9	0.75%
Medical	25	30	30	25	26	136	11.30%
Motor Vehicle Incident	36	39	40	47	40	202	16.78%
Mutual Aid	14	11	14	9	11	59	4.90%
Public Hazard	5	4	6	7	3	25	2.08%
Rail Incident	0	0	1	0	0	1	0.08%
Total	184	245	248	272	255	1204	

Table Source: Blackfalds Fire Department data (2021 – 2025)

Figure 7: Total Fire Call Volume – Fire Incidents January 1st, 2021, to December 31st, 2025

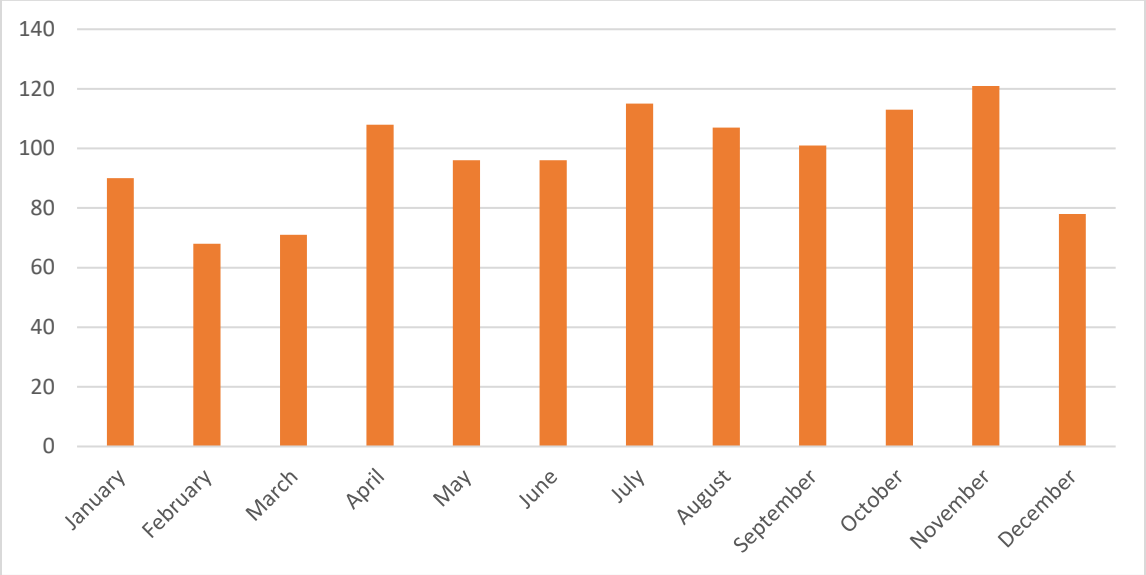


Figure Source: Blackfalds Fire Department data (2021 – 2025)[3]

10.2.1.2 Daily Emergency Call Volume – Fire Incidents Only

For the period from January 1st, 2021, to December 31st, 2025, emergency call volume typically increases between 10:00 AM and 8:00 PM, reaching its peak at 12:00 PM (See Figure 10). There is a slight drop each day between 1 PM and 2 PM. The lowest percentage of emergency calls typically occurs between 12:00 AM and 6:00 AM. Blackfalds commuter traffic is highest between 6 AM and 9 AM where call volume does begin to rise each day. Blackfalds, however, had a significant number of occupied private dwelling calls between 02:00 AM and 04:00 a.m. which is not typical with trends observed during commuting hours and reduced activity when most of the population is asleep.

[3] *Ibid*

Figure 10 – Incident by Time of Day (2021 – 2025)

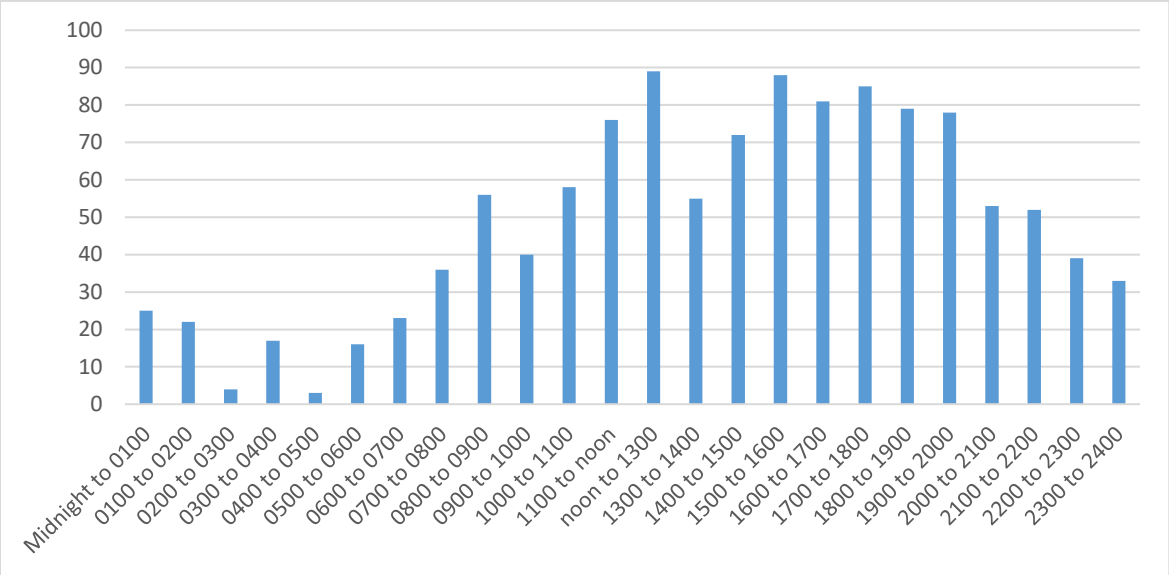


Figure Source: Dashboard Fire data from Blackfalds[4]

An analysis of the call volume by day of the week reveals a consistent frequency of incidents, with increases noted on Mondays and Wednesdays. Midweek (Wednesday and Thursday) shows slightly elevated activity, suggesting higher incident frequency during core business days. Monday also presents a higher call volume, likely reflecting carryover activity from the weekend and the resumption of normal work routines.

Figure 8: Total Call Volume Day, Night Weekend – 2021 - 2025

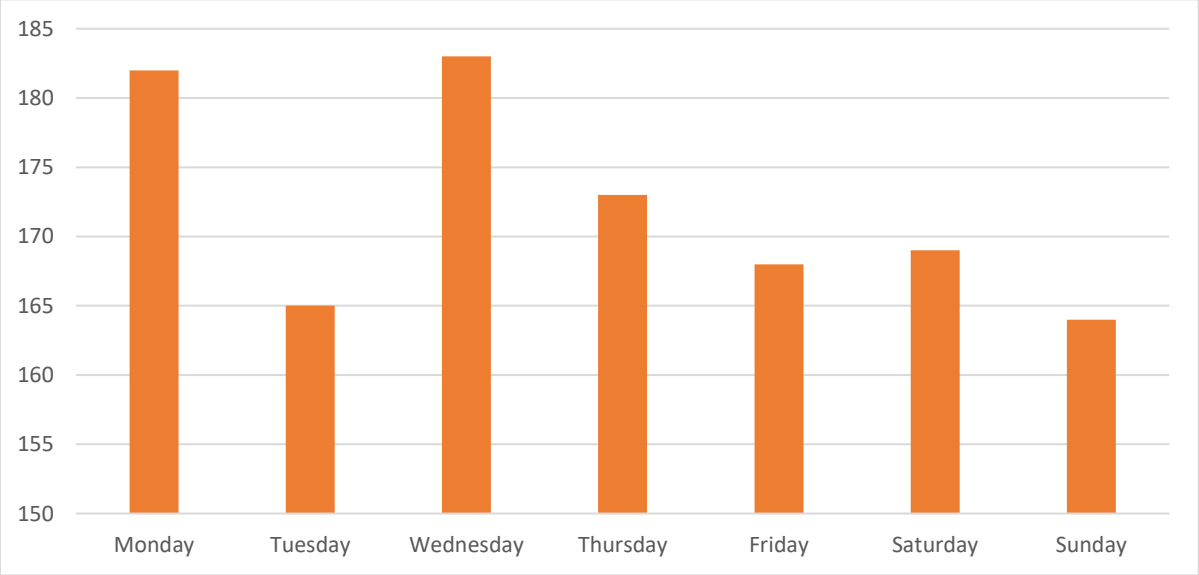


Figure Source: Dashboard data from Blackfalds for 2025

[4] *Ibid*

10.2.1.3 Call Type – All Incident Types

This section analyzes all emergency call volume for the period from January 1st, 2021, to December 31st, 2025. Table 53 illustrates that during this period 15.86% of the total emergency calls that BFD responded to were motor vehicle incidents. The second highest rate of responses were to medical calls being 10.78%. 11.38% of all responses by BFD were the result of fire incidents. This includes structure fires, outdoor fires, smoke investigations and controlled burning. During this five-year period, only 3.61% of emergency calls were categorized as Hazardous Materials. The number of False Alarms reported over this 5-year period was 544 which is 42.70% of the total calls.

Table 53: Total Number of Incidents – Summary - January 1st, 2021, to December 31st, 2025.

Type*	Amount					
	2021	2022	2023	2024	2025	Total
Structural Fires	5	10	9	7	6	37
FMR Pre-Hospital Care/Medical Calls	25	30	30	25	26	136
Vehicle Fires	5	9	4	6	5	29
Wildland Fires	10	16	12	26	15	79
Rescue	0	1	3	0	0	4
MVC	36	39	40	47	40	202
Hazmat	8	7	8	12	11	46
Mutual Aid	14	11	14	9	11	59
False Alarms	69	105	119	120	131	544
Inspections	7	4	9	24	26	70
Public Assistance	5	4	6	7	3	25
Other	7	13	3	13	7	43
Total	191	249	257	296	281	1274

Table Source: Blackfalds Fire Department data (2021 – 2025)

10.3 Past Loss & Event History Profile – Identified Risks and Key Findings

Table 54: Past Loss & Event History Profile – Identified Risks and Key Findings

Identified Risk	Rationale
Increasing Emergency Call Volume	Emergency calls increased from 184 calls in 2021 to 255 calls in 2025, representing a 27.84% increase over five years. This trend indicates growing demand on fire and emergency services resources, staffing, and response capacity.
High Frequency or Motor Vehicle collisions (MVCs)	MVCs accounted for approximately 16.78% of all emergency incidents (2021–2025), making them one of the leading response categories. Seasonal increases from July to November suggest elevated risks associated with travel, agricultural activity, and winter driving conditions.
Residential Fire Risk	Residential occupancies represented nearly 58% of all fires and accounted for over 99% of structure fire losses. This indicates that residential fires pose the greatest life safety and property risk within the community.
False alarm and alarm System Demand	False alarms accounted for approximately 42–45% of total incidents over the five-year period. This creates operational strain by diverting resources from higher-priority emergencies and increasing unnecessary apparatus utilization.
Smoke alarm deficiencies in Residential Fires	Smoke alarms were absent in 28.57% of residential fire incidents, and activation status was unknown in many cases. This increases the risk of delayed occupant notification, injury, and property loss during residential fires.
Key Finding	
Emergency response demand is steadily increasing, with total incident volume rising significantly between 2021 and 2025.	
Residential fires are the primary contributor to fire loss, accounting for the majority of structure fires and nearly all associated property damage.	
Motor vehicle collisions and false alarms represent the largest categories of emergency responses, together accounting for a substantial portion of operational workload.	
Most fires were determined to be unintentional, with mechanical/electrical failures and miscellaneous acts or omissions identified as the leading contributing causes, highlighting opportunities for targeted public education and prevention initiative.	

SECTION 11
IDENTIFIED RISKS AND RISK TREATMENTS

The purpose of a CRA is to identify risks that are then used to inform decision-making regarding the provision of fire protection services. The analysis throughout this CRA identifies 'Key Findings' and 'Identified Risks' to be considered. This section takes the identified risk conclusions (both the key findings and the identified risks) through a risk assignment process to assist in the prioritization of risks, as well as a risk treatment process. This section of the CRA brings together all the key findings and identified risks. They are taken through a risk treatment process and aligned with the "Five E's" of Community Risk Reduction and three lines of defence to inform the analysis and recommendations for within a Fire Services Master Plan or other strategic document as shown in Figure 9.

Figure 9: Risk Conclusions Application Process: Risk Conclusions Application Process

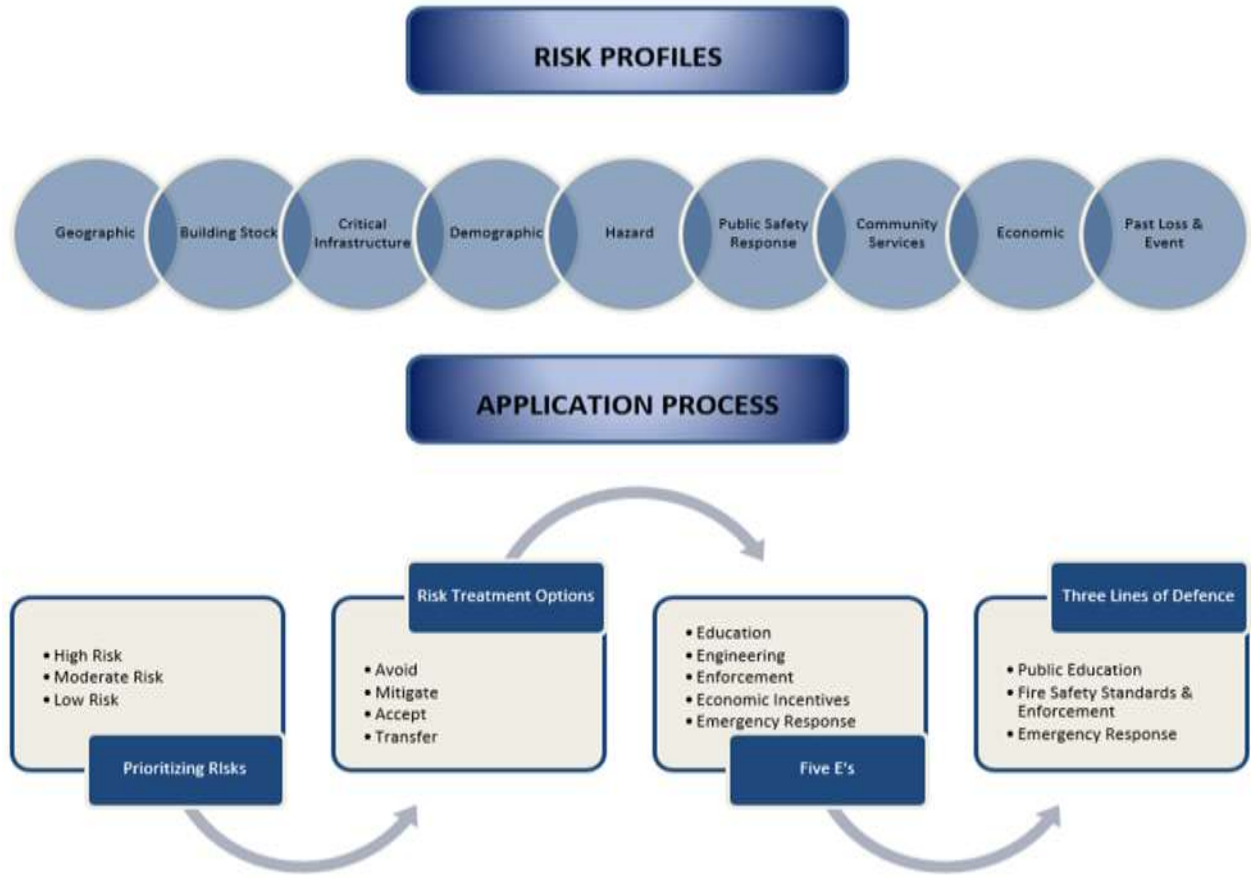


Figure Source: Adapted from NFPA 1300[5]

[5] *Office of the Fire Marshal (Ontario), Community Risk Assessment Technical Guideline TG 02-2019, Section 6, Pg 16 & NFPA 1300, 2020 Edition, Annex A.6.3.3.2(4)*

11.1 Prioritizing Risk

Following the probability and consequence levels described in the subsections below, the risk assignment process considers the probability and consequence of each identified risk. This will result in each risk having a risk level (e.g., low, moderate, or high) assigned. These risk levels will then be used to assist in the prioritization of risks as part of a Fire Services Master Plan.

11.1.1 Risk assignment Process Overview

There are three steps included in the risk assignment exercise used for this CRA:

1. **Determine a probability level:** The probability of a fire or emergency event occurring can be estimated in part based on historical experience of the community and that of the province. Table 55 presents the probability levels and the adjusted descriptions.

Table 55: Probability Level

Likelihood Category	Numerical Value[6]	Description
Rare	1	• May occur in exceptional circumstances • No incidents in the past 15 years
Unlikely	10	• Could occur at some time, especially if circumstances change • 5 to 15 years since last incident
Possible	100	• Might occur under certain circumstances • 1 incident in the past 5 years
Likely	1,000	• Will occur at some time under current circumstances • Multiple or recurring incidents in the past 5 years
Almost Certain	10,000	• Expected to occur unless circumstances change • Multiple or recurring incidents in the past year

Table Source: Ontario OFM TG 02-2019[7]

[6] *Numeric scales are taken from Dillon Consulting, The Corporation of the City of Mississauga Community Risk Identification: Introduction and Methodology, July 2017*

[7] *Office of the Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Section 4.1, Pg 13*

2. **Determine a consequence level:** The consequences of an emergency event relate to the potential losses or negative outcomes associated with the incident. There are four components that should be evaluated in terms of assessing consequence. These include:
    a) **Life Safety:** Injuries or loss of life due to occupant and firefighter exposure to life threatening fire or other situations.
    b) **Property Loss:** Monetary losses relating to private and public buildings, property content, irreplaceable assets, significant historic/symbolic landmarks, and critical infrastructure due to fire.
    c) **Economic Impact:** Monetary losses associated with property income, business closures, downturn in tourism, tax assessment value and employment layoffs due to fire.
    d) **Environmental Impact:** Harm to human and non-human (e.g., wildlife, fish, and vegetation) species of life and general decline in quality of life within the community due to air/water/soil contamination because of fire or fire suppression activities. Table 56 presents the consequence levels.

Table 56: Consequence Levels

Likelihood Category	Numerical Value[8]	Description
Insignificant	1	• No life safety issue. • Limited value or no property loss. • No impact on local economy. • No effect of general living conditions.
Minor	10	• Potential risk to life safety of occupants. • Minor property loss. • Minimal disruption to business activity and/or Minimal impact on general living conditions.
Moderate	100	• Threat to life safety of occupants. • Moderate property loss. • Poses threat to small local businesses. • Could pose threat to quality of the environment.
Major	1,000	• Potential for large loss of life. • Result in significant property damage. • Significant threat to businesses, local economy, and tourism. • Impact on the environment would result in a short term, partial evacuation of local residents and businesses.
Catastrophic	10,000	• Significant loss of life. • Multiple property damage to a significant portion of Blackfalds. • Long term disruption of businesses, local employment, tourism, and/or Environmental damage that would result in long-term evacuation of local residents and businesses.

Table Source: OFM TG 02-2019[9]

[8] *Numeric scales are taken from Dillon Consulting, The Corporation of the City of Mississauga Community Risk Identification: Introduction and Methodology, July 2017*

[9] *Office of the Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Section 4.2 pg. 14*

3. **Establish the risk level:** (i.e., low, moderate, or high) for each risk based on the identified probability and consequence for each event. Once probability and consequence are determined the level of risk is calculated by multiplying the numerical values[10] for probability and consequence. The relationship between probability and consequence as it pertains to risk levels can be illustrated in a risk matrix. In a risk matrix, probability and consequence are defined on separate scales with varying descriptors providing directions on how to assign the probability and consequence of an event. Table 57 shows the risk matrix for this CRA.

Table 57: Probability & Consequence Risk Matrix

Probability/ Consequence	Insignificant 1	Minor 10	Moderate 100	Major 1,000	Catastrophic 10,000
Almost Certain 10,000	Moderate	Moderate	High	High	High
Likely 1,000	Moderate	Moderate	Moderate	High	High
Possible 100	Low	Moderate	Moderate	Moderate	High
Unlikely 10	Low	Low	Moderate	Moderate	Moderate
Rare 1	Low	Low	Low	Moderate	Moderate

Table Source: Ontario OFM TG 02-2019[11]

11.1.2 Assigned Risk Levels

The purpose of assigning a risk level is to assist in the prioritization of the range of risks that were identified as part of this CRA. The results of the risk assignment process are presented in Table 58. Where possible, quantitative data was used to inform the risk assignment as described in the rationale in the table.

[10] *Numeric scales are taken from Dillon Consulting, The Corporation of the City of Mississauga Community Risk Identification: Introduction and Methodology, July 2017*

[11] *Office of the Ontario Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Appendix B Pg B1*

Table 58: Risk Assignment

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Geographic	Transportation and Road Incidents	Likely	High traffic volumes and frequent commercial transportation activity create regular exposure to roadway incidents	Major	Incidents may involve fatalities, hazardous materials releases, major traffic disruption, and delayed emergency response	High
Geographic	Railway and Dangerous Goods Risks	Possible	Rail incidents are infrequent, but ongoing rail operations create continual exposure potential	Catastrophic	A derailment involving dangerous goods could result in large evacuations, environmental contamination, and regional impacts	High
Geographic	Flooding and Drainage Infrastructure Failures	Possible	Seasonal melt and heavy rainfall periodically stress stormwater infrastructure	Moderate	Localized flooding may damage roads, infrastructure, and restrict emergency access	Moderate
Geographic	Wildland and Grass Fire Exposure	Likely	Seasonal dry conditions and surrounding natural areas create recurring wildfire exposure	Moderate	Wildfire smoke, fire spread, and evacuation requirements could significantly affect public safety and operations	Moderate
Building Stock	Older Residential Building Stock	Possible	Older housing stock represents an ongoing but limited portion of the community	Moderate	Older construction may increase fire spread, life safety risk, and property loss	Moderate
Building Stock	Lightweight Construction Collapse Risk	Likely	Lightweight engineered construction is common in modern residential development	Major	Structural collapse during fires creates serious firefighter and occupant safety risks	Moderate
Building Stock	Growing Building Density and Community Expansion	Likely	Residential and commercial densification is continuing throughout the community	Moderate	Increased fire spread potential and infrastructure demand may complicate emergency operations	Moderate to High

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Building Stock	High-Risk Assembly and Institutional Occupancies	Possible	Large public occupancies are used regularly but major emergencies remain less frequent	Catastrophic	Fires or emergencies involving large occupant loads could result in mass casualty or evacuation events	High
Building Stock	Industrial and Fuel Load Hazards	Possible	Commercial and industrial occupancies regularly contain fuels and hazardous materials	Major	Industrial fires or hazardous materials incidents may escalate rapidly and require specialized response resources	High
Critical Infrastructure	Interdependency Failure of Critical Infrastructure Systems	Possible	Large scale infrastructure failures are infrequent but remain plausible	Catastrophic	Failure of water, power, or telecommunications systems could severely impact municipal operations and emergency response	High
Critical Infrastructure	Transportation Disruptions and Emergency Response Constraints	Likely	Highway incidents and severe weather regularly affect transportation corridors	Major	Delayed emergency response and restricted access routes could significantly affect public safety outcomes	High
Critical Infrastructure	Capacity Pressures Due to Rapid Population Growth	Likely	Continued growth is steadily increasing service demand and infrastructure pressures	Moderate	Resource limitations may reduce service reliability and operational resilience over time	Moderate to High
Demographic	Rapid growth increasing service demand	Almost Certain	Population growth and increasing call volumes are already occurring consistently	Moderate	Increased demand may strain staffing, inspections, prevention programs, and emergency response capacity	High
Demographic	High Youth Population Requiring Prevention Focus	Likely	A significant youth population creates ongoing prevention and education demands	Minor	Insufficient prevention education could contribute to increased residential fire risk	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Demographic	Future Senior Vulnerability	Possible	The aging population trend will gradually increase over time	Moderate	Older adults face increased vulnerability during fires and medical emergencies	Moderate
Demographic	Commuter-Related Transportation Risk	Likely	Heavy commuter traffic occurs daily along regional transportation routes	Moderate	Increased collision risk and congestion may impact roadway safety and emergency response	Moderate to High
Demographic	Household Cost and Occupancy Pressures	Possible	Economic and housing pressures affect portions of the community	Moderate	Higher occupancy levels and reduced fire safety investment may increase emergency consequences	Moderate
Hazard	Transportation and Hazardous Materials Risk	Likely	Dangerous goods movement along highways and rail corridors occurs continuously	Major	Hazardous materials incidents may result in injuries, evacuations, environmental impacts, and complex emergency response	High
Hazard	Wildfire and Grassfire Risk	Likely	Seasonal wildfire conditions occur regularly during hot and dry periods	Moderate	Wildfire events may threaten structures, air quality, and require evacuations or mutual aid support	Moderate to High
Hazard	Sever Weather and Human Health Emergency	Likely	Severe weather and health emergencies occur periodically across Alberta	Major	These events may create widespread service disruption, infrastructure damage, and staffing pressures	High
Economic	Industrial and commercial occupancy fire risk	Possible	Industrial and commercial occupancies maintain ongoing ignition and fuel hazards	Major	Fires may involve significant property loss, hazardous materials, and operational complexity	High

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Economic	Economic Disruption from Infrastructure or Employer Incident	Possible	Major economic disruptions are less frequent but remain plausible	Major	Significant incidents may affect employment, supply chains, and business continuity	Moderate to high
Past Loss and Event History	Increasing Emergency Call Volume	Almost Certain	Historical data demonstrates a sustained increased in emergency incidents	Moderate	Growing demand may strain staffing levels, apparatus availability, and response capacity	High
Past Loss and Event History	High Frequency of Motor Vehicle Collisions (MVCs)	Likely	MVCs constantly represent one of the highest incident categories	Major	Serious collisions may involve fatalities, entrapment, roadway closures, and hazardous materials exposures	High
Past Loss and Event History	Residential Fire Risk	Possible	Residential fires occur regularly within the community	Major	Residential fires represent the largest source of structure fire loss and life safety risk	High
Past Loss and Event History	False alarm and Alarm System Demand	Almost Certain	False alarms occur frequently and consistently throughout the year	Minor	Frequent false alarms reduce operational efficiency and divert resources from higher priority incidents	Moderate
Past Loss and Event History	Smoke Alarm Deficiencies in Residential Fires	Possible	Smoke Alarm deficiencies occur in a notable percentage of residential fires	Major	Lack of early warning significantly increased injury, fatality, and property loss risk	High

11.2 Risk Treatment

Risk treatment applies the process of identifying a risk treatment option for an identified risk for the purpose of establishing goals, objectives, strategies, and programs for further proposed fire protection services to be provided/examined or explored through the development of a FSMP or community risk reduction plan. The risk treatment options include avoidance, mitigation, acceptance, and transfer. *(See Table 59)*

Table 59: Risk Treatment Options

Treatment Option	Description
Avoid	Implementing programs and initiatives to prevent a fire or emergency from happening.
Mitigate	Implementing programs and initiatives to reduce the probability and/or consequence of a fire or emergency.
Accept	After identifying and prioritizing a risk, the fire service determines that no specific programs or initiatives will be implemented to address this risk.
Transfer	The fire service transfers the impact and/or management of the risk to another organization or body. (i.e. fire protection agreements, automatic aid).

Table Source: Ontario OFM TG 02-2019[12]

Recommendations of a Fire Services Master Plan should focus on ways to proactively reduce risk through education, prevention, and enforcement with fire suppression as the fail-safe.

The Five Es is a framework outlined in NFPA 1300, and the Institution of Fire Engineers' Vision 20/20 National Strategy for Fire Loss Prevention, is a tool that helps to provide a lens through which identified risks can be reviewed to inform and support the Fire Services Master Plan. Table 60 identifies and describes each of the 5 Es of risk mitigation.

[12] *Office of the Ontario Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Section 6 pg. 16*

Table 60: 5 Es of Risk Mitigation

Mitigation Type	Description
Education	Aims to provide information that creates awareness and knowledge and subsequently changes behaviour.
Enforcement	Intended to correct negative human behaviour through legislation such as the National Building Code and the National Fire Code.
Engineering	When education does not change an individual's behavior, this component removes the human factor and introduces technology to improve safety such as smoke alarms.
Economic Incentives	Provided to reinforce positive impacts (e.g., insurance discounts or tax levy reductions) and discourage negative impacts (e.g., fines and charges)
Emergency Response	Necessary only if the first 4 Es are unsuccessful, and a fire incident occurs. The level of service for a community is determined by Council based on the needs and circumstances identified locally.

Source: Adapted from NFPA 1300 & Vision 20/20[13]

Table 61 summarizes the identified risks and presents ways in which the risks can be addressed by BFD and considered within the Fire Services Master Plan analysis and recommendations.

[13] *NFPA 1300, 2020 Edition, Annex A.6.3.3.2(4)*

Table 61: Identified Risk Treatment

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Geographic	Transportation and Road Incidents	High	Accept	No	Yes	No	No	Yes
Geographic	Railway and Dangerous Goods Risk	High	Accept	No	Yes	No	No	Yes
Geographic	Flooding and Drainage Infrastructure Failure	Moderate	Transfer	No	No	No	No	Yes
Geographic	Wildland and Grass Fire Exposure	Moderate	Mitigate	No	Yes	No	No	Yes
Building Stock	Older Residential Building Stock	Moderate	Mitigate	Yes	Yes	Yes	No	Yes
Building Stock	Lightweight Construction Collapse Risk	Moderate	Mitigate	Yes	Yes	No	No	Yes
Building Stock	Growing Building Density and Community Expansion	Moderate to High	Mitigate	Yes	No	Yes	No	Yes
Building Stock	High-Risk Assembly and Institutional Occupancies	High	Mitigate	Yes	Yes	Yes	No	Yes
Building Stock	Industrial and Fuel Load Hazards	High	Mitigate	Yes	Yes	Yes	No	Yes
Critical Infrastructure	Interdependency Failure of Critical Infrastructure Systems	High	Transfer	No	No	No	No	Yes
Critical Infrastructure	Transportation Disruptions and Emergency Response Constraints	High	Mitigate	Yes	No	No	No	Yes
Critical Infrastructure	Capacity Pressures Due to Rapid Population Growth	Moderate to High	Mitigate	No	No	No	No	Yes
Demographic	Rapid growth increasing service demand	High	Accept	No	No	N	No	Yes
Demographic	High Youth Population Requiring Prevention Focus	High	Mitigate	Yes	Yes	No	No	Yes

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Demographic	Future Senior Vulnerability	Moderate	Mitigate	Yes	No	No	No	Yes
Demographic	Commuter-Related Transportation Risk	Moderate to High	Mitigate	Yes	Yes	No	No	Yes
Demographic	Household Cost and Occupancy Pressures	Moderate	Accept	Yes	Yes	No	No	Yes
Hazard	Transportation and Hazardous Materials Risk	High	Mitigate	Yes	Yes	No	No	Yes
Hazard	Wildfire and Grass Fire Risk	High	Mitigate	Yes	Yes	No	No	Yes
Hazard	Sever Weather and Human Health Emergency	High	Accept	Yes	No	No	No	Yes
Economic	Industrial and commercial occupancy fire risk	High	Accept	Yes	Yes	No	No	Yes
Economic	Economic Disruption from Infrastructure or Employer Incident	Moderate to High	Accept	Yes	Yes	No	No	Yes
Past Loss & Event History	Increasing Emergency Call Volume	Moderate to High	Mitigate	No	No	No	No	Yes
Past Loss & Event History	High Frequency of Motor Vehicle Collisions (MVCs)	High	Mitigate	Yes	Yes	No	No	Yes
Past Loss & Event History	Residential Fire Risk	High	Mitigate	Yes	Yes	No	No	Yes
Past Loss & Event History	False Alarm and Alarm System Demand	Moderate	Mitigate	Yes	Yes	No	Yes	Yes
Past Loss & Event History	Smoke Alarm Deficiencies in Residential Fires	High	Mitigate	Yes	Yes	No	No	Yes

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Town of Blackfalds

FIRE SERVICE MASTER PLAN

Final Report, October 28, 2026



Prepared by:

Behr Integrated Solutions Inc.
Suite 750, 600 – 6 Avenue SW
Calgary AB T2P 0S5
www.behrintegrated.com

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Preface

This Fire Service Master Plan has been developed to provide the Town of Blackfalds with a comprehensive, forward-looking framework to guide the delivery of fire and emergency services. It establishes a strategic roadmap that aligns service levels with community risk, growth projections, public safety priorities, and Council-approved financial parameters.

It reflects a commitment to protecting life, property, and the environment through a balanced approach that integrates operational effectiveness, firefighter safety, and fiscal responsibility.

Acknowledgements

Behr would like to acknowledge the leadership, professionalism, and commitment to continuous improvement demonstrated by Fire Chief Robert Cote and his staff. Their proactive approach and dedication to enhancing both departmental performance and community safety are evident throughout the organization. The leadership team and firefighters of the department consistently demonstrate a high level of engagement, accountability, and service excellence. Their strong connection to the community, combined with a clear sense of pride in their work, reflects a culture focused on protecting residents and continuously strengthening the services they provide.

ACRONYMS

ABC	Alberta Building Code
AEMA	Alberta Emergency Management Agency
AHJ	Authority Having Jurisdiction
AOHS	Alberta Occupational Health and Safety
BFD	Blackfalds Fire Department
CRA	Community Risk Assessment
CSA	Canadian Standards Association
EMS	Emergency Medical Services
ERF	Effective Response Force
EVT	Emergency Vehicle Technician
FF	Firefighter
FSMP	Fire Services Master Plan
FT	Full-time
FTE	Fulltime Equivalent
FUS	Fire Underwriters Survey
GPM	Gallons Per Minute
JPR	Job Performance Requirements
KPI	Key Performance Indicators
KSA	Knowledge, Skills, Abilities
MVC	Motor Vehicle Collisions
MDS	Minimum Duty Strength
NBC	National Building Code of Canada
NFPA	National Fire Protection Associations
OHS	Occupational Health & Safety
POC	Paid On-Call
PPE	Personal Protective Equipment
PSAP	Public Safety Answering Point
PT	Part-time
QMP	Quality Management Plan
RMS	Records Management System
SCO	Safety Codes Officer
SOC	Standards Of Cover
SOG	Standard Operating Guidelines
SOP	Standard Operating Procedures
WCB	Workers' Compensation Board
WUI	Wildland Urban Interface

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EXECUTIVE SUMMARY

Introduction

Fire and emergency services are continuously evolving to meet the demands of a rapidly changing environment. Departments face persistent challenges such as budget limitations, population growth, rising call volumes, and increasingly complex and unconventional risks, all while being expected to deliver more with fewer resources. These pressures have expanded the scope of emergency response and management, prompting a shift in roles and the diversification of services.

To manage these demands effectively, emergency services leadership must possess a clear understanding of community risk and the capacity to implement appropriate mitigation strategies. Failure to recognize and address these challenges can leave both the community and its responders exposed and vulnerable.

Modern fire, rescue, and emergency services have become an essential part of a community's social safety net. While early fire departments were primarily focused on combating structure fires, today's services respond to a wide array of incidents including medical emergencies, technical rescues, motor vehicle collisions, hazardous materials releases, wildland fires, and natural disasters. This expanded mandate requires departments to be properly resourced, trained, and equipped to deliver services safely, efficiently, and competently.

The purpose of a Fire Services Master Plan (FSMP) is to establish a strategic framework for the future of fire services. It offers a comprehensive and systematic approach to evaluating current capabilities through a community risk assessment, identifying areas for improvement, and guiding risk mitigation efforts. An FSMP also supports the development and communication of strategic priorities, while identifying opportunities to enhance service delivery.

Additionally, an FSMP serves as a communication tool for the public, municipal staff, and council, clarifying the municipality's approach to fire and emergency service planning, service delivery models, policy development, and long-term investment.

This plan will define options for an optimal service delivery model and act as a blueprint for building more effective and efficient fire and emergency services that are resilient to both current and future challenges.

Strategic Goals and Objectives

The information and outcomes from analyzing community risks and identifying service gaps was used to inform the development of this plan. Recommendations are presented to mitigate and overcome perceived risks and guide the directions of the Blackfalds Fire Department (BFD).

This FSMP utilized information in the 2026 Community Risk Assessment (CRA) to identify the fire safety risks within the Town of Blackfalds to inform the development of goals and objectives for the delivery of fire protection and emergency response services. Optimizing the methodology of the three lines of defense - Public Education, Fire Prevention and Code Enforcement, and Emergency Response will allow BFD to provide a comprehensive fire protection program.

The following strategic objectives inform the recommendations within the FSMP:

Strategic Objective # 1: Administration

Strengthen administrative systems and operational efficiency to ensure sustainability of program initiatives. Ensure the continuity of essential operations, deliver relevant performance monitoring data, and manage necessary resources to effectively support identified programs.

Strategic Objective #2: Public Fire Safety Education

Enhance public fire safety education campaigns that target risks identified in the CRA to raise awareness about fire prevention, the importance of fire safety practices, and what to do in an emergency. BFD will expand existing engagement efforts to reach vulnerable populations including children and seniors, and the increasingly diverse community, reinforcing a shared culture of safety and community resilience.

Strategic Objective #3: Fire Prevention and Fire Safety Codes Alignment Enforcement

Advance a proactive fire safety inspection and engagement program with a continued focus on high-risk occupancies and vulnerable populations. By emphasizing education, consistency, and collaboration, BFD will build positive relationships that support improved life safety, reduced community risk, and mutual understanding of fire safety expectations.

Strategic Objective #4: Emergency Management

Strengthen BFD's capacity to prepare for, respond to, and recover from all types of emergencies. Through coordinated planning, training, and inter-agency collaboration, the service will enhance community resilience, safeguard life and property, and support continuity of operations across a broad range of hazards.

Strategic Objective #5: Emergency Response and Operations

Provide emergency response services that reflect the community's identified risks, growth projections, and operational realities. Ongoing efforts will focus on optimizing deployment, staffing, and equipment to meet community growth while safeguarding life, property, and firefighter safety. Services will be delivered with a focus on a commitment to efficiency, effectiveness, and long-term value for the community.

Strategic Objective #6: Training and Professional Development

Deliver a progressive and sustainable training program aligned with the services authorized in its Fire Service Bylaw. The program will integrate current firefighting practices, safety standards, and emerging technologies to ensure personnel are equipped with the competencies needed to respond safely and effectively to evolving risks and service demands.

Strategic Objective #7: Capital Assets

Ensure that apparatus and equipment are available in the appropriate quantity, maintained in a ready and reliable state, which align with operational requirements. Through robust preventative maintenance and asset management practices, the Service will support safe, effective, and efficient emergency response across the community.

Strategic Objective #8: Communications and Technology

Staying current with advances in communication and technology offers fire departments clear operational advantages. By adopting industry-leading practices, scalable technologies, and robust dispatch protocols, BFD will ensure timely, accurate, and resilient emergency communications that enhance firefighter safety and improve overall service delivery.

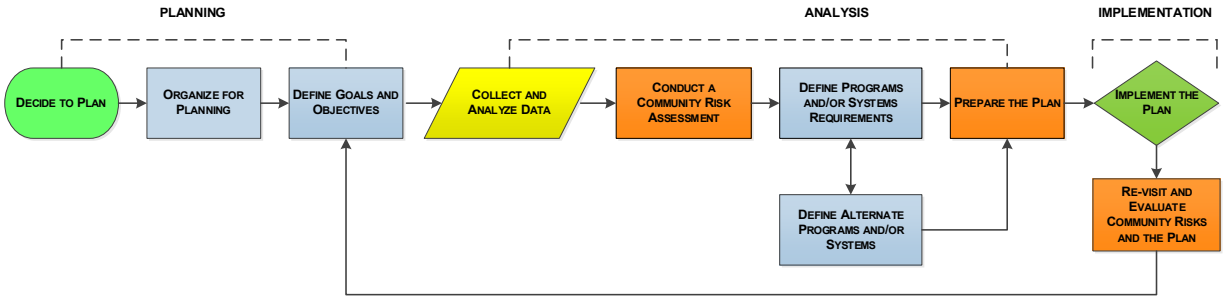
Fire Services Master Plan Process

The diagram below illustrates the methodology used to develop this plan. A Fire Service Master Plan often described as a "road map" for the future provides strategic direction for current and future departmental leaders and decision-makers.

As highlighted in the implementation section, the plan should be reviewed and assessed at least annually. Regular evaluation ensures it remains aligned with evolving community needs, especially during periods of population growth or expanding residential and industrial development, all of which can significantly influence community risk.

When possible, a third-party review is recommended at the five-year mark. An independent evaluation introduces an unbiased perspective, strengthens the credibility of the process, and helps ensure the plan continues to reflect best practices and operational realities.

Figure 1: Fire Services Master Plan Process



Project Approach and Consultative Processes

Along with risks identified in the CRA, this plan also considers applicable includes legislation, industry-leading best practices, and standards to provide unbiased analysis and evidence-based recommendations. Targeted interviews and an online survey were also used to collect data and information. This process was used to promote an open discussion about the community, risks, general concerns related to the community and municipal operations.

Three key aspects in the development of this FSMP included a community and station tour, targeted interviews, and an online firefighter survey. The community tour focused on the overall footprint, topography, transportation infrastructure of the municipality and the various response zones for the current fire station. Visiting the fire station provided an opportunity to assess the general condition and operational functionality. To obtain balanced input, we also utilized a firefighter online survey.

Note: *Online survey results can be found in Section 1.6.3 and Appendix D*

Municipal Comparative Analysis

A community comparative analysis[1] of BFD was conducted as a method of benchmarking the performance of departments to similar municipalities. These benchmarks include budgets, performance, operations, and infrastructure.

The communities included in the comparative analysis include:

- Town of Sylvan Lake
- City of Lacombe
- Town of Olds
- Town of Innisfail
- Town of Whitecourt

Comparing the Blackfalds Fire Department to that of similar municipalities is a good way to identify relative service levels, costs, and trends. It must be noted that all communities have different attributes, such as risk factors, historical decisions, and community profiles. For this reason, the comparative community analysis should be used as a base reference, not a suggestion or intention of something to be replicated in Blackfalds. These benchmarks include budgets, service areas, service levels, and staffing levels.

For the purposes of this municipal comparator review, we used 2021-2025 information to obtain common information from each community. Although fire and emergency services have the same goal of protecting life and property, each community has its unique features in how to accomplish those goals. Therefore, there are no ideal or identical comparators for BFD.

The Blackfalds Fire Department (BFD) operates with one of the leanest service delivery models among comparable municipalities, maintaining a primarily Paid-On-Call (POC) workforce supported by only three career staff members. With 25 POC firefighters operating from a single station and a leadership team consisting of a Fire Chief and two Deputy Chiefs, BFD's staffing levels are below those of similar composite departments. While this model has supported efficient service delivery and cost control, it may create capacity challenges as community growth, service expectations, and risk exposure continue to increase.

[1] *Please refer to Section 1.6.5, Municipal Comparative Analysis, Page 9*

From a financial perspective, BFD delivers fire services at a comparatively low cost. The Town of Blackfalds has the third-lowest municipal operating budget among the municipalities reviewed, and BFD's 2025 operating budget of $958,818 is the lowest among comparator fire departments. Fire services account for only 2.61% of the Town's total operating budget, the second-lowest proportion among comparison communities. At approximately $78 per resident, BFD also maintains the second lowest per-capita fire service cost, demonstrating a high degree of fiscal efficiency and value for taxpayers.

Service demand has increased steadily over the past five years. Total call volume rose from 184 incidents in 2021 to 255 incidents in 2025, representing a 43.8% increase. Despite this growth, Blackfalds continues to record the lowest call volume among comparable municipalities with similar populations. The department's incident profile is also distinctive, with nearly 90% of calls being fire-related, significantly higher than many comparable communities where emergency medical responses account for a larger share of activity.

Emergency medical service (EMS) responses remain limited, with BFD attending 26 EMS-related incidents in 2025. This is lower than comparable municipalities such as Sylvan Lake and Innisfail and is consistent with Blackfalds' historical average of 25-30 EMS calls annually. The lower EMS call volume may reflect differences in medical first response programming, dispatch protocols, or incident classification practices rather than reduced community need.

Overall, the comparative analysis indicates that BFD provides a cost-effective and efficient service with lower staffing levels, the lowest operating budget among its peers, and a growing but comparatively modest call volume. However, continued population growth and increasing service demands may require ongoing evaluation of staffing, operational capacity, and service delivery models to ensure sustainable response capabilities in the future.

Community Overview

The Town of Blackfalds is a rapidly growing community in central Alberta, strategically located along the Highway 2 corridor between Red Deer and Lacombe. This location provides strong connectivity to regional employment centres and transportation networks, making Blackfalds an attractive option for residents seeking a small-town environment with access to urban amenities.

Over the past decade, Blackfalds has experienced sustained population growth, increasing from approximately 10,470 residents in 2021 to over 12,000 by 2025. This trajectory reflects continued residential development and regional economic influences, driving increased demand for municipal infrastructure, community services, and fire and emergency response capabilities.

Growth has led to the expansion of new neighbourhoods, greater housing diversity, and enhanced recreational and community amenities. The built environment now includes a mix of established residential areas, newer subdivisions, and expanding commercial and light industrial zones. While supporting economic activity, these developments contribute to a more complex and varied community risk profile.

Blackfalds' proximity to Highway 2 and regional transportation corridors introduces elevated transportation-related risks, including high traffic volumes, commercial transport activity, and motor vehicle incidents. Surrounding rural and agricultural lands further influence the risk environment, with seasonal hazards such as grass fires and wildland-urban interface incidents.

Demographically, the community has a younger-than-average population with a high proportion of families, creating strong demand for public education, prevention programs, and community-based fire safety initiatives. This profile necessitates adaptable emergency service delivery capable of addressing a broad spectrum of incident types.

Given ongoing growth, evolving land use patterns, and regional connectivity, it is critical that fire and emergency services remain scalable, risk-informed, and aligned with future development. Proactive planning, appropriate resourcing, and specialized training will be essential to maintaining community safety, meeting service expectations, and supporting sustainable long-term service delivery.

Community Risk Assessment

Every municipality has unique challenges and characteristics contributing to the overall risk profile of the community. An evaluation of potential risks and vulnerabilities within a specific community is a vital process designed to identify, assess, and prioritize various risks, such as natural disasters, industrial accidents, public health emergencies, and other hazards that impact the safety and well-being of the community residents.

A Community Risk Assessment (CRA) was conducted by Behr Integrated in 2026 and is presented in a separate report.

> *Based on the NFPA 1300: Standard on Community Risk Assessment and Community Risk Reduction Plans principles, a Community Risk Assessment (CRA) is a comprehensive evaluation of potential risks and vulnerabilities within a specific community. It is a professional consensus standard that provides a structured framework for communities particularly fire departments and municipalities to:*
>
> - *Systematically identify community risks*
> - *Prioritize those risks based on likelihood and consequence*
> - *Develop, implement, and evaluate Community Risk Reduction (CRR) plans*
> - *Align prevention, preparedness, response, and mitigation activities with identified risks*
>
> *It is a vital process designed to identify, assess, and prioritize various risks, such as natural disasters, industrial accidents, public health emergencies, and other hazards that impact the safety and well-being of the community.*

Community Risk Assessments allow fire departments to make informed decisions about the types and levels of fire protection services provided based on identified risks. Specifically, the following nine (9) profiles will be reviewed:

1. Geographic profile
2. Building stock profile
3. Critical infrastructure profile
4. Demographic profile
5. Hazard profile
6. Public safety response profile
7. Community services profile
8. Economic profile
9. Past loss and event history profile

Risks can be managed by either accepting the risk, insuring against damages, or investing in risk prevention and mitigation strategies. Local governments typically employ a combination of these approaches. In general, the risks and management strategies of a community are relative to a municipality's financial capacity, geography, population demographics, fixed assets, and critical infrastructure, as well as overall service delivery.

Risks were identified using historical response data, the community emergency management program risk assessment, and information from our interviews to develop a risk profile for the community. The evaluation of fire and rescue risks considers both the probability and consequence of emergency event types. The probability of an event is quantified by analyzing historical, current, and projected data. The consequence of the event type or risk is based on an informed assessment of the potential impact on a community should the event occur.

The Town of Blackfalds faces a diverse range of moderate to high risks driven by its geography, infrastructure, building stock, demographics, and historical emergency data. Key concerns include:

- Transportation-related incidents such as motor vehicle collisions, hazardous goods transport on highways and railways, and response delays caused by gravel roads, rail crossings, and wildfire exposure at the urban interface.
- Residential fire risk is elevated due to new light weight construction, combined with growing urban development, industrial and high fuel load properties, and the presence of high-risk assembly and institutional occupancies, all of which elevate the potential for fire incidents, firefighter risk, and life safety impacts.
- Critical infrastructure vulnerabilities, particularly around firefighting water supply and interdependency on interconnected regional infrastructure systems. Ongoing residential, commercial, and industrial growth places increasing strain on water servicing, transportation infrastructure and emergency response resources.
- Demographic shifts, including a rapidly growing and aging population driving increased service demand and heightened fire safety concerns elevating fire risk and potential future fire fatalities.
- Historic data highlights increasing emergency call volume combined with gaps in data collection on critical life safety measures, such as working smoke alarms, which may impact prevention and response effectiveness. Residential fires are the primary contributor of structure fires and property loss.

In addition to the overall highest risks to the community, certain events pose an increased risk specific to firefighting. To better understand the risks of hazards as they pertain to fire protection services, the hazards have been assessed within the community risk assessment to identify impacts on fire protection services. Many of the potential impacts are not unique to a jurisdiction. The results of this review as they pertain to the top hazards in the community are the same as listed above.

Department Overview

BFD have a longstanding history as a volunteer-based service typical of small Alberta town fire departments. BFD operates from a single fire hall located at 4401 South Street, providing a wide range of emergency services to Blackfalds, as well as contracted and mutual aid support to surrounding communities within Lacombe and Red Deer Counties.

In addition to emergency response, BFD performs essential day-to-day non-emergency functions, including:

- Fire safety education
- Fire Inspections
- Pre-incident planning
- District familiarization
- Preventive maintenance inspections and testing of vehicles, apparatus, and equipment
- Ongoing skills maintenance, practice, and training
- Fire hall upkeep and preventive facility maintenance

Overview of Recommendations

The following recommendations are drawn from findings presented throughout the report. They are grouped into categories according to priorities: critical, short term, intermediate and long term.

A timeframe has been assigned to each recommendation, with the understanding that the start and completion of any recommendation is based on the criticality of the recommendation combined with staff capacity, annual corporate priorities, and Council-approved budget allocations.

Some recommendations presented in this report are achievable using existing staff or members' time and will therefore not pose any additional costs to the community. Other recommendations regarding staffing, equipment and infrastructure will have associated costs. Costs are based on order of magnitude estimates only and will require further investigation. Cost 'neutral' refers to the use of internal staff through a normal work schedule. Undertaking of these cost neutral recommendations are also contingent upon staff availability.

A timeframe within 1 – 60 months (1 – 5 years) has been assigned to each recommendation, recognizing that the start and completion of any recommendation is based on annual corporate priorities and council approved budget allocations.

Level	Timeline	Meaning
Critical	0–12 months	Immediate safety/compliance/operational risk; must act fast.
Intermediate	12–48 months	Important improvements: delay increases exposure.
Long-Term	48–60 months	Enhances performance; flexible timing.

Note: *Recommendations are numbered based on how they appear in the report.*

Recommendation #1a: The Town of Blackfalds should establish Council-approved fire service levels and response performance expectations that reflect community risk, growth projections, legislative requirements, and the realities of a paid-on-call model. Guided by NFPA 1720, the Town should define measurable service objectives, including response targets, minimum staffing, core service responsibilities, and key performance indicators for ongoing monitoring and reporting.

Suggested completion: 1-6 months, ongoing thereafter

Recommendation #1b: The Town of Blackfalds should update its Fire Services Bylaw and supporting governance policies to clearly define Council-authorized service scope, establish performance reporting requirements, and implement a formal continuous improvement program. This program should include regular evaluation of operations, community risk trends, staffing capacity, training, apparatus readiness, and service demand, with periodic reporting to Council on performance results, service gaps, emerging risks, and future operational and capital needs.

Suggested completion: 6 12 months

Strategic Objective: #1 Administration

Suggested completion: 1-12 months, ongoing thereafter

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.2 Governance, Page 42)

Recommendation #2: BFD should develop a distinct Vision and set of Values that complement and support its Mission Statement.

Suggested completion: 6–12 months

Strategic Objective: #1 Administration

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.3.1 Mission, Vision, and Values Framework, Page 45)

Recommendation #3: It is recommended BFD redesigns the current organizational chart to show clear hierarchy, defined reporting relationships, visual structure, and role clarity.

Suggested completion: 1–6 months

Strategic Objective: #1 Administration, #5 Emergency Response and Operations

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.3.4.1 Organizational Structure, Page 54)

Recommendation #4: BFD should implement a dedicated administrative assistant position to support all departmental operations.

Suggested completion: 12-24 months

Strategic Objective: #1 Administration

Cost: Approximately $60,000 plus benefits

(Reference: Section 3.3.5 Administrative Support, Page 56)

Recommendation #5: BFD should enhance its retention strategy by developing a structured employee-recognition and engagement program. This may include formal acknowledgments, public recognition events, certificates of appreciation, or partnership initiatives that highlight the essential role employers play in supporting community emergency response.

Suggested Completion: 1-12 months, ongoing thereafter

Strategic Objective: #5 Emergency Response and Operations

Cost: TBD, dependant on program details

(Reference: Section 3.3.8 Retention, Page 61)

Recommendation #6: Implement a comprehensive fire officer development and leadership training program that identifies potential future officers early in their careers, provides mentorship, and prepares them for supervisory and management responsibilities. This program should incorporate career pathing, targeted training, leadership shadowing, and secondment opportunities aligned with the Fire Master Plan implementation schedule and operational growth triggers.

Suggested completion: 24-48 months, with ongoing continuation thereafter

Strategic Objective: #1 Administration; #5 Emergency Response and Operations

Cost: TBD, based on training requirements

(Reference: Section 3.3.10 Promotions and Advancement, Page 64)

Recommendation #7: Implement a formal succession planning and leadership development program that identifies, mentors, and prepares future leaders. This program should incorporate career pathing, targeted training, leadership shadowing, and structured development opportunities aligned with the Fire Master Plan implementation timeline and operational growth triggers.

Suggested completion: 12-24 months, ongoing thereafter

Strategic Objective: #1 Administration

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.3.11 Succession Planning, Page 66)

Recommendation #8: Establish an annual or bi-annual process to review and update all standard operating guidelines, policies, and directives governing emergency response and operational activities. This process should ensure alignment with NFPA standards, provincial OHS legislation, and recognized industry best practices.

Suggested completion: 1–24 months, with ongoing updates thereafter

Strategic Objective: #5 Emergency Response and Operations

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.3.13.3 Standard Operating Guidelines, Page 71)

Recommendation #9: BFD should develop an annual Community Risk Reduction and Public Education Plan that identifies target audiences, key messages, delivery methods, responsibilities, and performance measures.

Suggested completion: 12–24 months

Strategic Objective: #2 Public Fire Safety Education / #3 Fire Prevention and Fire Safety Code Alignment

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.4 Public Fire Safety Education, Page 72)

Recommendation #10: Develop and implement a formal structured public education program focused on residential fire safety. This program should include designated content themes such as fire prevention tips, smoke and CO detector maintenance messaging, and other risk reduction information tailored to local community needs.

Suggested completion: 12-24 months

Strategic Objective: # 2 Public Fire Safety Education

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.4 Public Fire Safety Education, Page 72)

Recommendation #11: The Town of Blackfalds should complete a review of its Fire QMP to ensure it reflects current legislation, community growth, staffing capacity, risk-based inspection priorities, documentation practices, and performance measurement expectations.

Suggested completion: 6–12 months

Strategic Objective: #3 Fire Prevention and Fire Safety Code Alignment

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.5.1.1 Fire Quality Management Plan, Page 77)

Recommendation #12: The Town of Blackfalds should explore opportunities with Lacombe County to coordinate fire prevention information sharing, pre-incident planning, and Fire Safety Codes inspection collaboration for high-risk occupancies within BFD response areas.

Suggested completion: 1–24 months

Strategic Objective: #3 Fire Prevention and Fire Safety Code Alignment

Cost: Neutral, No additional budget required, subject to available staff capacity unless expanded service delivery is negotiated

(Reference: Section 3.5.1.2 Regional Fire Prevention and Lacombe County Coordination, Page 78)

Recommendation #13: BFD should develop and implement a risk-based fire inspection program that establishes inspection priorities and suggested inspection frequencies based on occupancy type, life safety risk, fire protection systems, building complexity, fire history, and consequence of loss.

Suggested completion: 12–24 months

Strategic Objective: #3 Fire Prevention and Fire Safety Code Alignment

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.5.2 Fire Safety Codes Inspection Program, Page 80)

Recommendation #14: As part of future budget planning, the Town should monitor Fire Safety Codes and fire prevention workload to determine whether additional administrative support, SCO training, or dedicated prevention capacity will be required.

Suggested completion: 1 - 12 months, Ongoing, with annual review

Strategic Objective: #3 Fire Prevention and Fire Safety Code Alignment, #1 Administration

Cost: Neutral. No additional budget required, subject to available staff capacity. Future cost may arise dependent on service level.

(Reference: Section 3.5.2 Fire Safety Codes Inspection Program, Page 80)

Recommendation #15: The Town should formalize BFD and Fire Safety Codes involvement in the review of Municipal Development Plan updates, Area Structure Plans, subdivision applications, engineering reviews, and major development proposals.

Suggested completion: 6–12 months

Strategic Objective: #3 Fire Prevention and Fire Safety Code Alignment

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.5.3 New Development Plans Review, Page 82)

Recommendation #16: BFD should acquire a suitably sized aerial device, such as a mid-mount or rear-mount aerial ladder or platform, designed to operate effectively within the community's existing and planned built environment. The apparatus selection should be based on local road geometry, target hazards, staffing levels, mutual aid considerations, and anticipated future development patterns.

Additionally, BFD should undertake a collaborative assessment with the City of Lacombe, Lacombe County, and the Town of Blackfalds to explore the feasibility and benefits of a tri-lateral aerial apparatus purchasing and deployment agreement. As part of this assessment, the participating municipalities should evaluate opportunities for shared procurement and cost-sharing, coordinated deployment, training, maintenance, and long-term lifecycle management of an aerial device.

Suggested completion: 24-36 months, subject to capital budget approval, procurement processes, apparatus construction schedules, and manufacturer delivery timelines.

Strategic Objective: #5 Emergency Response and Operations

Cost: Approximately $2.5 million to $4.0 million, depending on apparatus configuration, aerial device type, pumping and waterway capabilities, market conditions, and procurement timing.

(Reference: Section 3.7.1 Structural Firefighting, Page 89)

Recommendation #17: Based on the Town of Blackfalds' identified risk profile, the Town should formally define, adopt, and publish its technical and specialized rescue levels of service for each discipline.

Suggested completion: 12 -24 months

Strategic Objective: # 5 Emergency Response and Operations

Cost: TBD, dependent on the level of service selected for each technical rescue discipline.

(Reference: Section 3.7.5 Technical Rescue Services, Page 95)

Recommendation #18: BFD should formally develop, implement, and document a structured pre-incident planning program focused on the high-risk occupancies identified in the CRA. This program should include standardized data collection templates, scheduled site visits, digital storage, and accessibility of pre plans, and regular updates to reflect changes in building layout, occupancy, or hazards. Priority should be given to occupancies with elevated life safety risk, complex building systems, limited access, or significant fire load potential.

Suggested completion: 24-60 months, ongoing thereafter

Strategic Objective: #5 Emergency Response and Operations

Cost: Based on cost of First Due software module in-vehicle computer requirements and staff time.

(Reference: Section 3.7.6 Pre-Emergency Planning, Page 97)

Recommendation #19: Develop a Strategic Fire Service Information Management Framework that establishes standardized performance indicators, reporting requirements, and analytical processes utilizing the existing First Due platform. The framework should support annual reporting to senior administration and Council regarding operational performance, community risk trends, workforce sustainability, training compliance, prevention activities, and asset management.

Strategic Objective: #1 Administration, #5 Emergency Response and Operations

Suggested Completion: 24–48 months

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 3.10.1 Strategic Fire Services Information Management, Page 124)

Recommendation #20: Implement a standardized process to accurately record the number of firefighters responding on each apparatus for every incident. This should be integrated into the records management system (RMS) and/or CAD system.

Suggested completion: 12-24 months

Strategic Objective: #5 Emergency Response and Operations

Cost: CAD/ RMS configuration is dependent on ability through current dispatch providers current capabilities

(Reference: Section 4.2 Effective Response Force, Page 127)

Recommendation #21: Implement processes and systems to capture incident start time as a standard data point within the response time continuum and collaborate with the dispatch service provider to establish clear, measurable performance objectives aligned with industry best practices. This should include the development of service level agreements (SLAs), regular performance monitoring, and continuous improvement initiatives focused on optimizing call handling and dispatch timelines.

Suggested completion: 12-24 months

Strategic Objection: #5 Emergency Response and Operations

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 4.6.1 Alarm Handling, Page 151)

Recommendation #22: Develop SOGs to provide direction to staff for completion of critical tasks, and the need to update existing mutual aid agreements for additional support when necessary to meet ERF requirements.

Suggested completion: 12-60 months

Strategic Objective: #5 Emergency Response and Operations

Cost: Neutral. No additional budget required, subject to available staff capacity.

(Reference: Section 4.8 Critical Task Analysis, Page 172)

Summary of Recommendations

Collectively, these recommendations provide a roadmap to strengthen governance, improve organizational capacity, enhance community risk reduction, and fire prevention programs, support sustainable emergency response service delivery, and ensure the Blackfalds Fire Department remains aligned with community growth, changing risks, and evolving legislative requirements.

1. **Governance, Service Levels, and Accountability**
   Recommendations 1a and 1b focus on strengthening governance, accountability, and service delivery oversight. The Town of Blackfalds should establish Council-approved fire service levels and response performance expectations based on community risk, growth projections, legislative requirements, and the realities of a paid-on-call service model. Guided by NFPA 1720, measurable performance objectives should be established and regularly reported to Council. The Fire Services Bylaw and supporting governance policies should be updated to clearly define the department's authorized scope of service, reporting requirements, and a continuous improvement framework to support ongoing evaluation of service effectiveness, emerging risks, and future resource needs.

2. **Administration, Leadership, and Organizational Effectiveness**
   Recommendations 2 through 7 focus on strengthening organizational capacity, administrative support, leadership development, employee engagement, and long-term workforce sustainability. These recommendations include developing a formal Vision and Values framework, redesigning the organizational structure to improve role clarity, and reporting relationships, establishing a dedicated administrative support position, implementing firefighter recognition and retention initiatives, developing structured fire officer development and leadership training programs, and implementing a formal succession planning process to prepare future leaders and ensure organizational continuity.

3. **Emergency Response Policies, Procedures, and Operational Effectiveness**
   Recommendations 8, 20, 21, and 22 focus on enhancing operational effectiveness, performance measurement, and emergency response accountability. These recommendations include implementing a structured process for regularly reviewing and updating Standard Operating Guidelines, improving response data collection through CAD and records management systems, establishing dispatch performance expectations and service level agreements, and developing operational procedures that define critical task resource requirements and when mutual aid or additional resources are needed to achieve effective response force objectives.

4. **Community Risk Reduction, Public Education, and Fire Prevention**
   Recommendations 9 through 15 focus on strengthening community risk reduction, public fire safety education, fire prevention, and Fire Safety Codes compliance. Key initiatives include developing annual Community Risk Reduction and Public Education Plans, implementing structured residential fire safety education programs, updating the Fire Quality Management Plan, establishing a risk-based inspection program, increasing collaboration with Lacombe County on prevention and inspection activities, monitoring future prevention workload demands, and formalizing fire department involvement in municipal planning and development review processes. Together, these initiatives will help ensure fire prevention activities remain proactive, risk-based, and aligned with future growth.

5. **Emergency Response Capabilities and Specialized Services**
   Recommendations 16, 17, and 18 focus on strengthening emergency response capabilities and preparing the department to address increasingly complex incidents. These recommendations include acquiring an appropriately sized aerial apparatus to support both current and future development, formally defining and publishing technical rescue levels of service based on community risks and implementing a comprehensive pre-incident planning program for high-risk occupancies. Together, these initiatives will enhance firefighter safety, operational effectiveness, and the department's ability to manage significant emergency events.

6. **Data Management, Performance Measurement, and Analytics**
   Recommendations 19, 20, and 21 support the development of a data-driven decision-making framework for the Blackfalds Fire Department. These recommendations include establishing a Strategic Fire Service Information Management Framework using the existing First Due platform, improving the collection and accuracy of response performance data, and implementing consistent reporting processes to support performance measurement and strategic planning. The framework will provide Administration and Council with meaningful information regarding operational performance, community risk trends, workforce sustainability, training compliance, prevention activities, and asset management.

7. **Capital Planning, Apparatus, and Future Resource Requirements**
   Recommendations 4, 14, and 16 have significant implications for future staffing, capital, and resource planning. These recommendations include the addition of dedicated administrative support, ongoing evaluation of fire prevention and Fire Safety Codes staffing requirements, and acquisition of an aerial apparatus estimated to cost between $2.5 million and $4.0 million. Together, these recommendations establish a framework for ensuring staffing, equipment, technology, and infrastructure investments remain aligned with service demands, community growth, and evolving risks.

8. **Long-Term Organizational Sustainability and Continuous Improvement**
   A central theme throughout all recommendations is the creation of a sustainable, adaptable, and continuously improving fire service. Through enhanced governance, clear service level expectations, improved leadership development, strengthened community risk reduction programs, data-driven performance management, enhanced operational effectiveness, and strategic investment in people and infrastructure, the Blackfalds Fire Department will be better positioned to deliver efficient, effective, and accountable fire and emergency services while adapting to future growth and changing community risks over the next decade.

Implementation Schedule

Recommendations		Months						
		1	6	12	24	36	48	60
1a	The Town of Blackfalds should establish Council-approved fire service levels and response performance expectations that reflect community risk, growth projections, legislative requirements, and the realities of a paid-on-call model. Guided by NFPA 1720, the Town should define measurable service objectives, including response targets, minimum staffing, core service responsibilities, and key performance indicators for ongoing monitoring and reporting.							
1b	The Town of Blackfalds should update its Fire Services Bylaw and supporting governance policies to clearly define Council-authorized service scope, establish performance reporting requirements, and implement a formal continuous improvement program. This program should include regular evaluation of operations, community risk trends, staffing capacity, training, apparatus readiness, and service demand, with periodic reporting to Council on performance results, service gaps, emerging risks, and future operational and capital needs.							
2	BFD should develop a distinct Vision and set of Values that complement and support its Mission Statement.							
3	It is recommended BFD redesigns the current organizational chart to show clear hierarchy, defined reporting relationships, visual structure, and role clarity.							
4	BFD should implement a dedicated administrative assistant position to support all departmental operations.							
5	BFD should enhance its retention strategy by developing a structured employee-recognition and engagement program. This may include formal acknowledgments, public recognition events, certificates of appreciation, or partnership initiatives that highlight the essential role employers play in supporting community emergency response.							

Recommendations		Months						
		1	6	12	24	36	48	60
6	Implement a comprehensive fire officer development and leadership training program that identifies potential future officers early in their careers, provides mentorship, and prepares them for supervisory and management responsibilities. This program should incorporate career pathing, targeted training, leadership shadowing, and secondment opportunities aligned with the Fire Master Plan implementation schedule and operational growth triggers.							
7	Implement a formal succession planning and leadership development program that identifies, mentors, and prepares future leaders. This program should incorporate career pathing, targeted training, leadership shadowing, and structured development opportunities aligned with the Fire Master Plan implementation timeline and operational growth triggers.							
8	Establish an annual or bi-annual process to review and update all standard operating guidelines, policies, and directives governing emergency response and operational activities. This process should ensure alignment with NFPA standards, provincial OHS legislation, and recognized industry best practices.							
9	BFD should develop an annual Community Risk Reduction and Public Education Plan that identifies target audiences, key messages, delivery methods, responsibilities, and performance measures.							
10	Develop and implement a formal structured public education program focused on residential fire safety. This program should include designated content themes such as fire prevention tips, smoke and CO detector maintenance messaging, and other risk reduction information tailored to local community needs.							
11	The Town of Blackfalds should complete a review of its Fire QMP to ensure it reflects current legislation, community growth, staffing capacity, risk-based inspection priorities, documentation practices, and performance measurement expectations.							

Recommendations		Months						
		1	6	12	24	36	48	60
12	The Town of Blackfalds should explore opportunities with Lacombe County to coordinate fire prevention information sharing, pre-incident planning, and Fire Safety Codes inspection collaboration for high-risk occupancies within BFD response areas.							
13	BFD should develop and implement a risk-based fire inspection program that establishes inspection priorities and suggested inspection frequencies based on occupancy type, life safety risk, fire protection systems, building complexity, fire history, and consequence of loss.							
14	As part of future budget planning, the Town should monitor Fire Safety Codes and fire prevention workload to determine whether additional administrative support, SCO training, or dedicated prevention capacity will be required.							
15	The Town should formalize BFD and Fire Safety Codes involvement in the review of Municipal Development Plan updates, Area Structure Plans, subdivision applications, engineering reviews, and major development proposals.							
16	BFD should acquire a suitably sized aerial device such as a mid mount or rear mount aerial ladder or platform designed to operate effectively within the community's current and planned built environment. The apparatus should be selected based on local road geometry, target hazards, staffing levels, and anticipated future development patterns.							
17	Based on the Town of Blackfalds' identified risk profile, the Town should formally define, adopt, and publish its technical and specialized rescue levels of service for each discipline.							
18	BFD should formally develop, implement, and document a structured pre-incident planning program focused on the high-risk occupancies identified in the CRA. This program should include standardized data collection templates, scheduled site visits, digital storage, and accessibility of pre plans, and regular updates to reflect changes in building layout, occupancy, or hazards. Priority should be given to occupancies with elevated life safety risk, complex building systems, limited access, or significant fire load potential.							

Recommendations		Months						
		1	6	12	24	36	48	60
19	Develop a Strategic Fire Service Information Management Framework that establishes standardized performance indicators, reporting requirements, and analytical processes utilizing the existing First Due platform. The framework should support annual reporting to senior administration and Council regarding operational performance, community risk trends, workforce sustainability, training compliance, prevention activities, and asset management.							
20	Implement a standardized process to accurately record the number of firefighters responding on each apparatus for every incident. This should be integrated into the records management system (RMS) and/or CAD system.							
21	Implement processes and systems to capture incident start time as a standard data point within the response time continuum and collaborate with the dispatch service provider to establish clear, measurable performance objectives aligned with industry best practices. This should include the development of service level agreements (SLAs), regular performance monitoring, and continuous improvement initiatives focused on optimizing call handling and dispatch timelines.							
22	Develop SOGs to provide direction to staff for completion of critical tasks, and the need to update existing mutual aid agreements for additional support when necessary to meet ERF requirements.							

Implementation Plan

Short-Term Priorities (1-12 Months)

Initial efforts should focus on establishing the governance, policy, and organizational foundations necessary to support long-term service delivery. Priority actions include defining Council-approved service levels and performance expectations, updating the Fire Services Bylaw and governance framework, developing departmental Vision and Values statements, clarifying organizational roles and reporting relationships, reviewing and updating the Fire Quality Management Plan, formalizing fire department participation in development review processes, implementing firefighter recognition and retention initiatives, and establishing a structured performance reporting and continuous improvement process.

Medium-Term Priorities (12-24 Months)

As these foundational elements are established, attention should shift toward strengthening community risk reduction, prevention, leadership development, and operational accountability. Key initiatives include implementing annual Community Risk Reduction and Public Education Plans, establishing a risk-based fire inspection program, enhancing response performance measurement and records management practices, improving dispatch and response data collection, implementing succession planning and leadership development programs, formally defining technical rescue service levels, and assessing future Fire Safety Codes and prevention resource requirements.

Long-Term Priorities (24-60 Months)

Longer-term priorities focus on enhancing response capabilities, strengthening data-driven decision-making, and building sustainable service capacity. Major initiatives include acquiring an aerial apparatus to address current and future community risks, implementing a comprehensive pre-incident planning program for high-risk occupancies, expanding strategic information management and analytical reporting capabilities through the First Due platform, advancing officer development programs, and continuing to build the operational, prevention, and administrative capacity required to support future growth and increasingly complex service demands.

Financial Considerations

Many of the recommendations involve governance enhancements, policy development, process improvements, and performance management initiatives that can be implemented with limited direct financial impact, subject to available staff capacity. However, several recommendations will require future investment, including a dedicated administrative support position, leadership and specialized training programs, potential expansion of prevention and Fire Safety Codes resources, technology enhancements associated with First Due and mobile data access, and the acquisition of an aerial apparatus. The aerial device represents the most significant capital investment, with an estimated cost of $2.5 million to $4.0 million**,** excluding associated training, maintenance, inspection, and lifecycle replacement costs. Together, these investments will help ensure that BFD remains capable of meeting future risks and service demands while maintaining an effective, sustainable, and accountable level of service for the community.

Conclusion

This Fire Services Master Plan establishes a strategic framework to guide the continued evolution of the Blackfalds Fire Department (BFD) over the five years and beyond. Informed by a Community Risk Assessment and a comprehensive review of governance, administration, staffing, emergency response operations, prevention programs, infrastructure, and service delivery, the Plan adopts a risk-based approach to ensuring that fire and emergency services remain aligned with community needs, legislative requirements, municipal priorities, and anticipated growth.

The assessment confirms that BFD is a capable, professional, and community-focused organization that provides an effective level of fire protection and emergency response service to residents, businesses, and visitors. The Department has demonstrated a strong commitment to public safety, operational professionalism, and continuous improvement while successfully adapting to the demands of a growing and increasingly complex community.

Looking forward, continued residential, commercial, and industrial development, increasing service demands, evolving public expectations, and the growing complexity of emergency incidents will present both challenges and opportunities. To remain effective and sustainable, the Department will need to continue strengthening governance, leadership development, workforce recruitment and retention, community risk reduction initiatives, operational readiness, specialized response capabilities, information management, and long-term capital planning.

The recommendations contained within this Plan provide a practical and prioritized roadmap for addressing identified gaps, managing emerging risks, and positioning the Department for future success. Their implementation will improve accountability, strengthen performance measurement and reporting, enhance fire prevention and public education programs, support sustainable workforce development, and expand operational capabilities. Collectively, these initiatives will help ensure that service delivery remains aligned with community risk, municipal expectations, and recognized industry best practices.

Successful implementation will require ongoing collaboration among Town Council, Administration, and Fire Department leadership. Equally important will be a commitment to evidence-based decision-making, continuous performance monitoring, and regular evaluation of service outcomes. As community conditions evolve, the Department must remain flexible and prepared to adjust priorities, resources, and service delivery strategies to meet changing demands.

Although implementation timelines have been identified, this Master Plan should be viewed as a living document. Regular progress reviews, annual reporting, and periodic updates will be necessary to ensure the recommendations remain relevant, achievable, and responsive to changing community needs, operational realities, and emerging risks.

This Plan positions the Town of Blackfalds and BFD to proactively manage growth, address future challenges, and maintain a high standard of public safety. Through strong governance, strategic investment, proactive community risk reduction, and a continued commitment to firefighter development and operational excellence, BFD will be well positioned to deliver safe, effective, sustainable, and fiscally responsible fire and emergency services for years to come. The professionalism, dedication, and commitment demonstrated by the members of BFD provide a solid foundation for achieving the vision, objectives, and long-term outcomes set out in this Master Plan.

SECTION 1
INTRODUCTION

1.1 Background and Significance

Across Canada, community leaders continue to pursue innovative approaches to improve the delivery of public safety services. **Central to these efforts is the balance between effectiveness and efficiency in service delivery.** Effectiveness refers to the ability to achieve desired outcomes, while efficiency focuses on maximizing the use of available resources such as time, money, or effort. In practical terms, efficiency is often described as 'doing more with less' or delivering 'value for money.'

Elected officials, Chief Administrative Officers (CAOs), city managers, and departmental leaders are consistently challenged to design service delivery models that balance operational effectiveness with fiscal responsibility. Public safety remains a top priority for municipalities, yet it also represents a significant portion of overall expenditures. Essential services including police, fire, emergency medical services, and emergency management form the backbone of a community's safety and resilience, making their performance critical.

At the same time, maintaining financial sustainability requires ongoing evaluation and continuous improvement. Municipal leaders must adopt forward-looking, evidence-based approaches that align service levels with available resources. The goal is to ensure that residents receive reliable, high-quality services that are both responsive and cost-effective, delivering strong value for public investment.

1.2 Project Scope

This Fire Services Master Plan (FSMP) establishes a comprehensive, strategic framework to guide the delivery and future development of fire and emergency services over the next five to ten years. Its primary purpose is to reduce community risk and enhance public safety by aligning service delivery with evolving risk profiles, projected growth, legislative obligations, and recognized industry best practices.

The Plan is informed by a thorough assessment of current response capabilities and system performance, drawing on findings from the Community Risk Assessment (CRA). It evaluates the department's capacity to meet both current and future service demands through analysis of historical response data, performance trends, and compliance with applicable standards. This evidence-based approach ensures that service delivery remains not only responsive, but also proactive in mitigating risk and protecting life, property, and the environment.

Often described as a roadmap, the FSMP serves as a foundational tool for Council and senior leadership, supporting informed decision-making and the prioritization of strategic investments. The Plan outlines a series of key components, including:

- **Comprehensive Community Risk Assessment:** Identification and analysis of risks to inform service level requirements.
- **Demand Zone Analysis:** Evaluation of service coverage, response performance, and geographic demand to identify gaps and optimize deployment.
- **Service and Program Review:** Assessment of effectiveness and efficiency across all divisions, including operations, fire prevention, public education, training, and administration.
- **Staffing Model Evaluation:** Review of staffing levels and deployment strategies to ensure safe, effective, and sustainable 24/7 coverage.
- **Resource Alignment:** Identification of opportunities to better align personnel, apparatus, and facilities with service demands.
- **Cost Efficiency and Avoidance Measures:** Exploration of strategies to manage operating costs and defer capital expenditures while maintaining service quality.
- **Strategic Investment Planning:** Support for long-term capital and operating planning through prioritized service improvements.
- **Governance and Policy Alignment:** Ensuring consistency with legislative requirements, municipal priorities, and long-range planning frameworks.
- **Evidence-Based Recommendations:** Development of actionable recommendations grounded in data, standards, and best practices.

Together, these elements provide a structured and sustainable approach to strengthening fire and emergency services, ensuring continued protection of the community both now and into the future.

1.3 Strategic Goals and Objectives

This FSMP establishes a strategic framework to enhance the efficiency, effectiveness, and overall capability of fire and emergency response services in the Town of Blackfalds. It is informed by a comprehensive CRA and a detailed evaluation of current fire service operations, ensuring alignment with the municipality's evolving risk profile and service demands.

The FSMP adopts a structured, data-driven approach to evaluate response readiness, identify, and mitigate risks, and support informed, evidence-based decision-making. It identifies opportunities to strengthen operational performance, improve service delivery, and optimize the use of available resources.

Central to this framework is the optimization of the **three lines of defence**, which collectively support a comprehensive fire protection program:

1. **Public Safety Education**
   The first and most proactive line of defence focuses on educating the public about fire risks, safe behaviours, and prevention strategies. This includes school programs, community outreach initiatives, smoke alarm campaigns, and targeted public safety messaging.
2. **Fire Prevention and Code Enforcement**
   The second line of defence ensures compliance with fire codes, standards, and regulatory requirements. Through inspections, permitting, enforcement, and ongoing monitoring, this function works to identify and reduce hazards before incidents occur.
3. **Emergency Response**
   The third line of defence represents the reactive component of fire protection, including fire suppression, technical rescue, medical response, and other emergency services. When prevention measures are insufficient or incidents occur, trained personnel respond to protect life, property, and the environment.

The following strategic priorities are intended to align fire protection services with community risk, support long-term sustainability, and maximize public value:

- **Risk-Informed Service Delivery**
  Continue to apply and update the Community Risk Assessment to identify and evaluate fire and life safety risks. This information will guide the development of service levels, priorities, and programs that reflect community needs and legislative requirements.
- **Strengthening the First Two Lines of Defence**
  Enhance public education and fire prevention efforts, supported by effective enforcement of fire codes and standards. These proactive measures are critical to reducing incident frequency and building a more resilient community.

- **Sustainable and Value-Driven Service Delivery**
  Promote strategies that ensure the long-term sustainability of fire and emergency services. This includes delivering efficient and effective services that balance operational performance with fiscal responsibility, ensuring strong value for the community.

1.3.1 Strategic Objectives

This plan is grounded in a detailed risk assessment and supports a 5–10-year strategic outlook, guiding future investments, priorities, and organizational development. This plan serves as a blueprint for continuous improvement, enhancing the efficiency, effectiveness, and resilience of emergency service delivery to ensure the Town of Blackfalds remains safe, responsive, and well-prepared for both current and emerging challenges.

The following strategic objectives are the foundational principles that will inform future resource allocations, policy development and operational enhancements:

Strategic Objective # 1: Administration

Strengthen administrative systems and operational efficiency to ensure sustainability of program initiatives. Ensure the continuity of essential operations, deliver relevant performance monitoring data, and manage necessary resources to effectively support identified programs.

Strategic Objective #2: Public Fire Safety Education

Enhance public fire safety education campaigns that target risks identified in the CRA to raise awareness about fire prevention, the importance of fire safety practices, and what to do in an emergency. BFD will expand existing engagement efforts to reach vulnerable populations including children and seniors, and the increasingly diverse community, reinforcing a shared culture of safety and community resilience.

Strategic Objective #3: Fire Prevention and Fire Safety Codes Alignment Enforcement

Advance a proactive fire safety inspection and engagement program with a continued focus on high-risk occupancies and vulnerable populations. By emphasizing education, consistency, and collaboration, BFD will build positive relationships that support improved life safety, reduced community risk, and mutual understanding of fire safety expectations.

Strategic Objective #4: Emergency Management

Strengthen BFD's capacity to prepare for, respond to, and recover from all types of emergencies. Through coordinated planning, training, and inter-agency collaboration, the service will enhance community resilience, safeguard life and property, and support continuity of operations across a broad range of hazards.

Strategic Objective #5: Emergency Response and Operations

Provide emergency response services that reflect the community's identified risks, growth projections, and operational realities. Ongoing efforts will focus on optimizing deployment, staffing, and equipment to meet community growth while safeguarding life, property, and firefighter safety. Services will be delivered with a focus on a commitment to efficiency, effectiveness, and long-term value for the community.

Strategic Objective #6: Training and Professional Development

Deliver a progressive and sustainable training program aligned with the services authorized in its Fire Service Bylaw. The program will integrate current firefighting practices, safety standards, and emerging technologies to ensure personnel are equipped with the competencies needed to respond safely and effectively to evolving risks and service demands.

Strategic Objective #7: Capital Assets

Ensure that apparatus and equipment are available in the appropriate quantity, maintained in a ready and reliable state, which align with operational requirements. Through robust preventative maintenance and asset management practices, the Service will support safe, effective, and efficient emergency response across the community.

Strategic Objective #8: Communications and Technology

Staying current with advances in communication and technology offers fire departments clear operational advantages. By adopting industry-leading practices, scalable technologies, and robust dispatch protocols, BFD will ensure timely, accurate, and resilient emergency communications that enhance firefighter safety and improve overall service delivery.

1.4 Standards and References

This plan considers the following references and standards:

- Alberta Occupational Health and Safety, Guide for Firefighting, 2019
- Municipal Government Act, September 1,2020
- Alberta Building Code Limiting Distance and Fire Response Requirements
- National Building Code – NBC Alberta Edition (AE) 2023
- National Fire Code – NFC Alberta Edition (AE) 2023
- Commission on Fire Accreditation International
- Canadian Standards Association (CSA)
- Fire Underwriters Survey (FUS)
- National Fire Protection Association (NFPA)
- Underwriters Laboratories (UL/ULC)

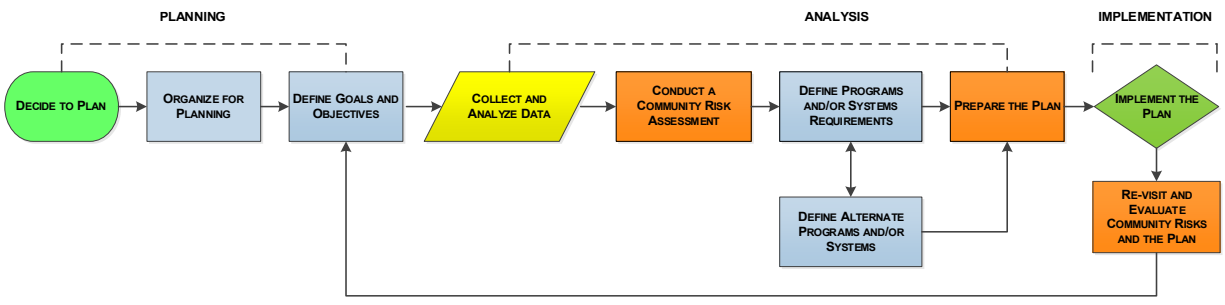
1.5 Fire Service Master Plan Process

The diagram below outlines the methodology used to develop this FSMP. Often described as a "roadmap," the plan provides clear, strategic direction to support current and future leadership in making informed decisions regarding fire and emergency service delivery.

As detailed in the implementation section, the Plan should be reviewed and evaluated on an annual basis to ensure it remains current and responsive to changing conditions. Regular review is critical to maintaining alignment with evolving community needs, particularly during periods of population growth, land-use change, or increased residential and industrial development, all of which can influence community risk.

In addition, it is recommended that an independent third-party review be conducted at the five-year mark. This external assessment provides an objective perspective, enhances the credibility of the process, and helps ensure the Plan continues to reflect leading practices, industry standards, and operational realities.

Figure 2: Fire Services Master Plan Process



1.6 Project Approach and Key Processes

1.6.1 Community and Fire Station Tour

The community and station tour focused on the overall footprint, topography, transportation infrastructure of the municipality and the various response zones. Touring the fire station provided an opportunity to conduct a general condition and operational functionality assessment.

1.6.2 Targeted Interviews

Targeted interviews were part of the data and information collection process. Participants were asked questions related to their areas of purview and expertise. The interview itself was used to promote an open discussion about the community, risks, general concerns related to the community and municipal operations.

Table 1: Targeted Interview List

No.	Name	Job Title
1	Robert Cote	Fire Chief
2	Kim Izaak	CAO
3	Ken Morrison	Director of Emergency Management and Protective Services
4	Mike Elder	Deputy Fire Chief
5	Trevor Wilton	Deputy Fire Chief
6	Peter McGee	Economic Development
7	Kurtis Kenway	Captain
8	Brad Brown	Captain
9	Jolene Tejkl	Planning and Development Manager
10	Dave Bain	Fire Chief, Lacombe County

1.6.3 Online Firefighter Survey

To obtain balanced and comprehensive input, an online survey was distributed to firefighters. This approach provides several advantages. It enables feedback to be collected from the entire group rather than relying on a limited number of perspectives.

Invitations to participate in the survey were emailed to 21 staff members, and 11 participated in the survey, which represents 52.38% of staff. All of the survey respondents (100%) agreed that the community received adequate fire protection. All respondents agreed that the demand for fire and emergency services would increase in the future, however, 72.73% agreed that currently the response model is adequately staffed, while 27.27% were neutral.

Of the respondents 90.91% were neutral or agreed that the current level of live fire and specialty team training was adequate, while 9.09% disagreed. Furthermore, 90.91% felt the amount of leadership training was adequate, and 9.09% were neutral.

Under half of the staff (18.18%) agree that the station is currently located to provide adequate coverage, while 45.45% disagreed. More than half of the staff (63.64%) agree the functionality of the station meets operational needs. A majority of staff (81.82%) agree that small equipment is adequate, and 90.91% agree that the equipment and apparatus are well maintained.

Note: *Online survey results can be found in Appendix D*

1.6.4 Community Risk Assessment (CRA)

A CRA was conducted by Behr Integrated in 2026 and is presented in a separate report. An evaluation of potential risks and vulnerabilities within the community is a vital process designed to identify, assess, and prioritize various risks, such as natural disasters, industrial accidents, public health emergencies, and other hazards that impact the safety and well-being of the community residents.

Based on the *NFPA 1300: Standard on Community Risk Assessment and Community Risk Reduction Plan Development (2026)*, a CRA is a comprehensive evaluation of potential risks and vulnerabilities within a specific community. It is a professional consensus standard that provides a structured framework for communities particularly fire departments and municipalities to:

- Systematically identify community risks
- Prioritize those risks based on likelihood and consequence
- Develop, implement, and evaluate Community Risk Reduction (CRR) plans
- Align prevention, preparedness, response, and mitigation activities with identified risks

It is a vital process designed to identify, assess, and prioritize various risks, such as natural disasters, industrial accidents, public health emergencies, and other hazards that impact the safety and well-being of the community. CRAs allow fire departments to make informed decisions about the types and levels of fire protection services provided based on identified risks.

Risks were identified using historical response data, the community emergency management program risk assessment, and information from our interviews to develop a risk profile for the community. The evaluation of fire and rescue risks considers both the probability and consequence of emergency event types. The probability of an event was quantified by analyzing historical, current, and projected data. The consequence of the event type or risk is based on an informed assessment of the potential impact on a community should the event occur.

1.6.5 Municipal Comparative Analysis

An industry comparative analysis was conducted as a method of benchmarking the performance of departments to similar municipalities. These benchmarks include budgets, performance, effectiveness, and efficiencies. Although fire and emergency services have the same goal of protecting life and property, each community has its unique features in how to accomplish their goals. Our main criteria for the comparative analysis are indicators of effectiveness and efficiencies amongst the communities for risk and mitigation.

The following municipalities were identified as comparators:

- Town of Sylvan Lake
- City of Lacombe
- Town of Olds
- Town of Innisfail
- Town of Whitecourt

Comparing the Blackfalds Fire Department to that of similar municipalities is a good way to identify relative service levels, costs, and trends. It must be noted that all communities have different attributes, such as risk factors, historical decisions, and community profiles. For this reason, the comparative community analysis should be used as a base reference, not a suggestion or intention of something to be replicated in Blackfalds. These benchmarks include budgets, service areas, service levels, and staffing levels.

For the purposes of this municipal comparator review, we used 2021-2025 information to obtain common information from each community. Although fire and emergency services have the same goal of protecting life and property, each community has its unique features in how to accomplish those goals. Therefore, there are no ideal or identical comparators for BFD. Our main criteria for collecting information were:

- Population – Utilizing 2025 Census data for consistency
- Budgets – 2025 reported budgets from each municipality
- Department size- as reported by the fire department
- Type of staffing (full-time, part-time or combination)-as reported by the fire department
- Department staffing – as reported by the fire department

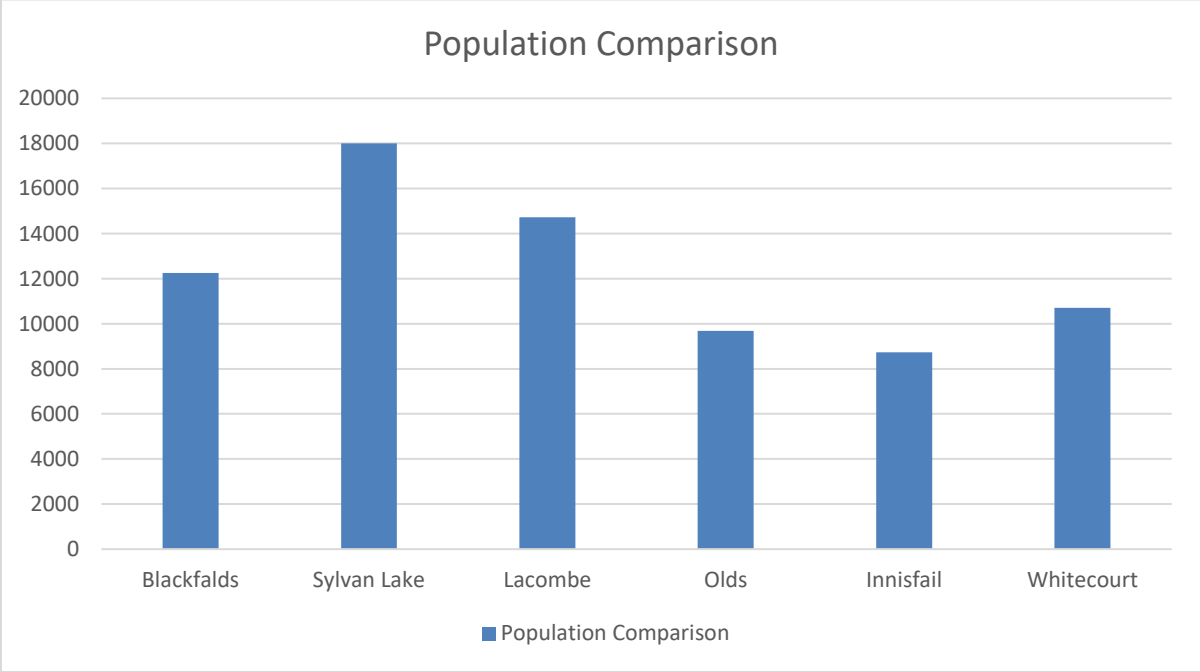
Additional information for evaluation was:

- Number of fire stations- as reported by the fire department
- Call volume - as reported by the fire department
- Call types – as reported by the fire department

Table 2: Participating Community Comparatives (2024 Census Data)

Community	Population	Land Area (km^2)	Area of Response (km^2)
Blackfalds	12,258	16.58 km	54.2 km
Sylvan Lake	18,000	23.10 km	466 km
Lacombe	14,730	20.6 km	663 km
Olds	10,100	14.92 km	780 km
Innisfail	9,530	19.40 km	751 km
Whitecourt	10,500	29.51	3100 km

Figure 3: Population Comparison



1.6.5.1 Community Comparative Analysis Summary

Staffing Model and Operational Capacity

BFD operates with a below-average career staffing model related to comparison departments, however, POC staffing for suppression and prevention services is the lowest in contrast. The department includes:

- 25 POC suppression staff operating from 1 fire station
- 3 Career staff (1 Fire Chief, 2 Deputy Chiefs)

In contrast, composite departments such as the Town of Olds employ 1 full-time Fire Chief, 2 FT Deputy Fire Chief, 2 FT Support Staff, and 45 POC firefighters.

Blackfalds' staffing approach emphasizes efficiency but may face constraints in sustaining service levels as community demands and risk profiles evolve.

Operating Budget

In 2025, the five municipalities included in the community comparison had reported operating budgets ranging from $26.68M to $53.48M. The Town of Blackfalds ranks among the three lowest, (third out of six), in terms of annual operating budget at $36.79M. The annual operating budget for the Blackfalds Fire Department is the lowest among the municipalities included in the comparison.

Fire Department Operating Budgets range from $958,818 to $5.05M, with BFD operating at $958,818. In 2025, the operational costs of BFD represented 2.61% of municipality's total operating budget. This is the second lowest among the comparable municipalities. BFD's operational budget also translates into the second lowest cost per capital among the included municipalities at $78.22 per person.

Again, it must be noted that the Operating Budget for Sylvan Lake include all municipal Protective Services, and not just Fire Services.

Call-Volume and Service Capacity

Blackfalds Fire Department's total call volume has increased from 184 in 2021 to 255 in 2025. This marks a 43.75% rise in total call volume over five years. Despite this growth, Blackfalds' call volume remains the lowest among the compared municipalities. While the population of these communities is similar, Blackfalds' total call volume is the lowest (255 total calls in 2025), with Whitecourt reporting the second lowest call volume (433 in 2025). Historically, (2021-2025), Blackfalds' call volume has been below the average of comparison municipalities, consistently reporting the lowest volume of calls.

Notably, 89.8% of Blackfalds' calls in 2025 were fire related. This matches the average of the municipalities included in this study but remains high when compared to other municipalities where EMS calls typically dominate (40-50% of total volume). This discrepancy may be attributed to differences in MFR program participation, tiered medical response protocols, or incident classification practices.

Blackfalds responded to 26 EMS-related calls in 2025, compared to Sylvan Lake (172) and Innisfail (136).

This is the lowest among comparison municipalities, however, remains the norm for Blackfalds, as this average is historically 25-30 calls per year.

Comparative Limitations

There is no standard for categorizing incidents so it must be understood that these statistics are broadly based and are only general reference when comparing fire departments. The community comparative analysis can only be interpreted from an indirect basic level due to the disparity from each of the surveyed communities' organizational structure, core services and levels, emergency response categorization, and financial systems. Direct comparison is strongly discouraged.

1.7 Study Considerations

The following factors that affected both the assessment and effective mitigation of risk were considered and assessed:

Community-Specific Considerations

- Geographic and physical boundaries for response
- Population and future growth
- Community risk factors
- Community demographic information
- Multi-jurisdictional requirements and cooperation
- Current and future development impact on risks and response
- Financial resources and constraints
- Impacts of government legislation
- Bylaws affecting the emergency services
- Economic factors
- Tourism
- Construction
- Industrial activity
- Retail businesses and other services
- Agriculture

Department-Specific Considerations

- Levels of service and service delivery models
- Budgets
- Fire station location and other infrastructure
- Support services
- Department structure
- Apparatus and equipment inventory
- Operation and administrative staffing and qualifications
- Bylaw, policies, and procedures
- Fire prevention & public education
- Emergency core service response
- Health and wellness
- Training and recruitment records and standards
- Succession planning
- Prevention programs - inspections, education, and enforcement
- Records and data management
- Emergency services standard operating guidelines and procedures

SECTION 2
COMMUNITY PROFILE

2.1 Community Overview

The Town of Blackfalds is a rapidly growing community located within central Alberta, positioned along the Highway 2 corridor between the Cities of Red Deer and Lacombe. Its strategic location provides residents with convenient access to major regional employment centres, transportation routes, and economic hubs, making it an increasingly attractive option for commuters seeking a small-town lifestyle with proximity to urban amenities.

Blackfalds has experienced sustained population growth over the past decade. The community had a population of approximately 10,470 residents in 2021, increasing to about 11,415 in 2024, with more recent estimates indicating continued growth to over 12,000 residents in 2025. This steady growth reflects ongoing residential development and regional economic influences, and continues to drive demand for municipal infrastructure, community services, and emergency response capabilities

Blackfalds has experienced sustained and significant population growth over the past decade, driven by regional economic activity and continued residential development. This growth trajectory has resulted in the expansion of new neighbourhoods, increased housing diversity, and the development of recreational and community amenities. Ongoing growth pressures continue to shape municipal infrastructure requirements and elevate demand for fire and emergency services.

The community's-built environment is characterized by a mix of established residential areas, newer subdivisions, and supporting commercial developments. Blackfalds also includes light industrial and commercial zones that support local business activity, contributing to a varied risk profile. While not heavily industrialized, these areas introduce hazards associated with commercial operations, vehicle traffic, construction activity, and service-based industries.

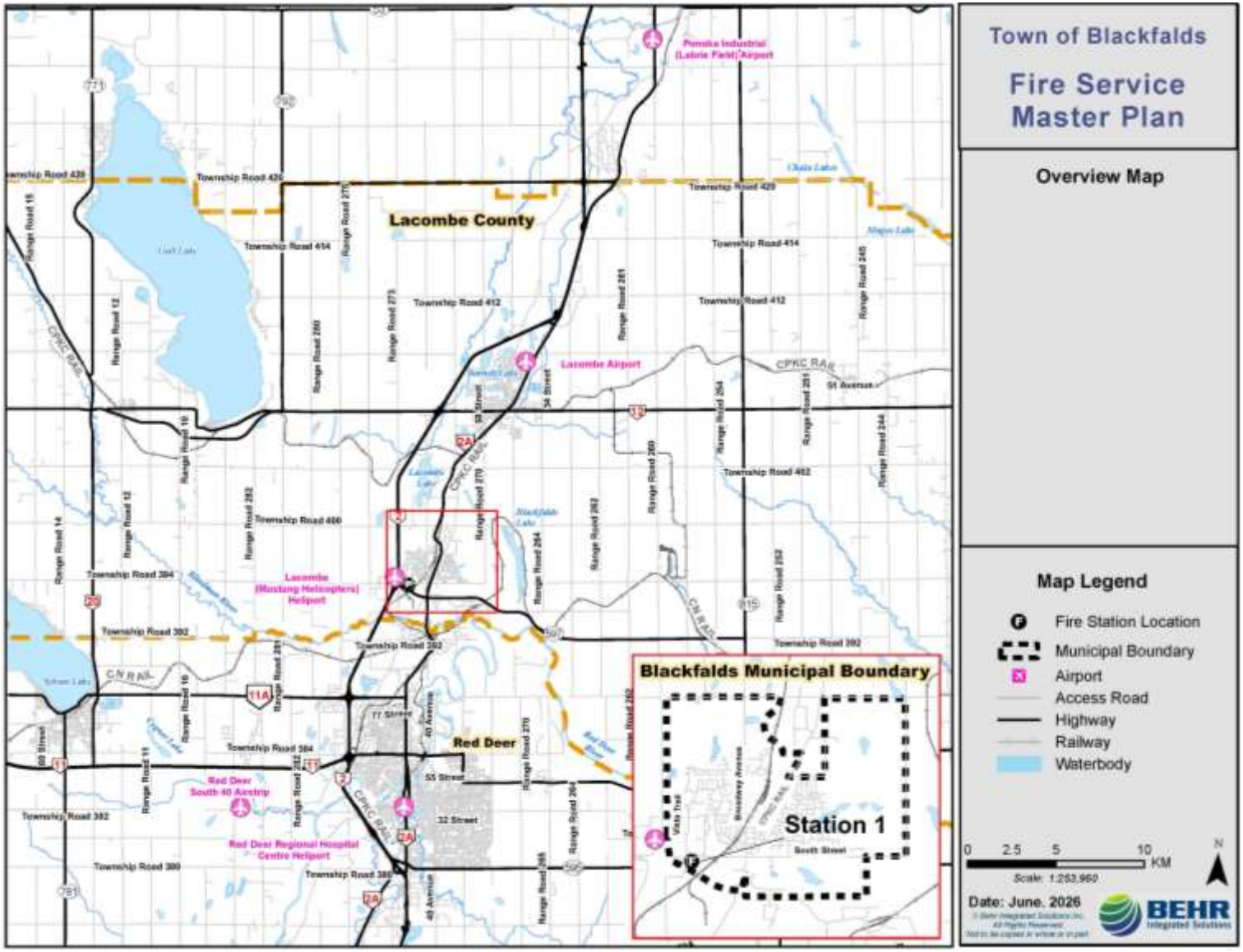
Blackfalds' proximity to Highway 2 and other regional roadways contributes to increased transportation-related risk, including higher traffic volumes, commercial transport activity, and potential for motor vehicle collisions. In addition, the surrounding rural and agricultural lands influence the community's risk environment, introducing considerations such as grass fires, interface incidents, and seasonal hazards.

Demographically, Blackfalds is known for having a younger-than-average population, with a high proportion of families and children. This demographic profile supports strong demand for public education, prevention programs, and community-based fire safety initiatives. It also requires adaptable emergency service delivery capable of addressing a broad range of risks, from residential incidents to transportation-related emergencies.

From a planning perspective, Blackfalds' continued growth, evolving land use patterns, and regional connectivity underscore the importance of a fire service that is scalable, risk-informed, and aligned with future development. Ensuring that fire and emergency services keep pace with expansion will be critical to maintaining community safety, meeting performance expectations, and supporting sustainable long-term service delivery.

These features support economic activity and industrial logistics but also contribute to increased exposure to transportation-related emergencies, including motor-vehicle incidents involving local, commuter, and regional through-traffic. Emergency response planning must therefore account for roadway and rail-related risks, appropriate staffing, and specialized training and equipment needs.

Map 1: Town of Blackfalds Overview Map



2.2 Economic Indicators

The Town of Blackfalds functions as a rapidly expanding community within central Alberta, supported by strong regional connectivity and a growing, diversified economic base. Strategically located along the Highway 2 corridor between Red Deer and Lacombe, Blackfalds benefits from access to major transportation routes and nearby employment centres. The Town's population has grown from approximately 10,470 residents in 2021 to over 11,400 by 2024, reflecting sustained annual growth and reinforcing its position as one of the faster-growing mid-sized communities in the region. This growth is driven by both local development and its attractiveness as a residential community for commuters working within the Red Deer region.

Overall, Blackfalds' economic and population growth, combined with its regional connectivity and evolving land use patterns, reinforce the need for a fire service that is adaptable, scalable, and aligned with both current and future community risk.

2.2.1 Housing and Development Activity

Blackfalds continues to experience strong residential growth, supported by ongoing subdivision development and sustained demand for housing. The Town's population increase has resulted in consistent building activity, including new single-family homes, multi-unit housing, and supporting infrastructure.

Rapid development has expanded the community's footprint, with new neighbourhoods contributing to increased service demands across municipal departments, including fire and emergency services. Construction activity, changing land use patterns, and increasing population density all contribute to an evolving risk environment.

Planning implication: Continued residential growth drives increased demand for emergency response capacity, fire prevention inspections, and public education programs, while also influencing station coverage and deployment strategies.

2.2.2 Industrial and Commercial Investment

Blackfalds maintains a developing commercial and light industrial sector that supports local economic activity and complements the broader regional economy. Commercial growth is concentrated along key corridors and within designated business areas, while light industrial development includes service-based industries, trades, warehousing, and small-scale manufacturing.

Although the Town does not have a heavy industrial base, its proximity to regional industrial activity and the Highway 2 corridor introduces exposure to transportation-related risks, commercial occupancies, and mixed-use developments. These conditions contribute to a diverse and evolving emergency response profile.

In addition, surrounding agricultural and rural lands continue to influence the local economy, supporting agri-business activities and contributing to seasonal hazards such as grass fires and interface incidents.

Planning implication: Growth in commercial and light industrial activity increases demand for fire prevention services, inspection programs, and specialized response capabilities.

2.2.3 Labour Force and Employment Conditions

Blackfalds' labour force is shaped by a combination of local employment opportunities and strong regional commuting patterns, particularly to Red Deer and surrounding areas. Key employment sectors include:

- **Construction and Trades:** Reflecting ongoing residential and commercial development
- **Retail and Service Industries:** Supporting the needs of a growing population
- **Public Sector and Community Services:** Including education, recreation, and municipal services
- **Transportation and Logistics:** Influenced by proximity to major highway infrastructure
- **Regional Industrial Employment:** With many residents commuting to nearby industrial employers

Blackfalds has a young population, with a median age in the low 30s, contributing to an active and growing workforce. The community's demographic profile supports continued economic growth but also influences daytime population patterns due to commuting.

These patterns can affect emergency response dynamics, including daytime staffing availability, response demand distribution, and inspection scheduling.

Planning implication: Workforce trends and commuting patterns should be considered in staffing models, deployment strategies, and risk-based planning to ensure effective service coverage throughout all times of day.

Table 3: Blackfalds Major Industrial Employers

Employer	Sector	Local Operations / Notes
Hall Industrial Contracting	Industrial / Oilfield/Construction	Construction and Fabrication
Enlyn Process Systems	Industrial / Oilfield/Construction	Oil and Gas Processing Equipment
Central Alberta Pumpjack Services	Industrial / Oilfield/Construction	Oilfield Services
Casper Oilfield Services	Industrial / Oilfield/Construction	Fabrication and Welding
Moonlight Welding Ltd.	Industrial / Oilfield/Construction	Fabrication and Welding
Tryson Energy Services Inc.	Industrial / Oilfield/Construction	Energy Sector Support
Mustang Helicopters Inc.	Transportation / Heavy Equipment / Aviation	Rotary Aviation Support
Central Alberta Heavy Duty Repair	Transportation / Heavy Equipment / Aviation	Fleet / Industrial Repair
Spectrum Industrial Automatics Ltd.	Industrial Support / Specialized Services	Industrial Automation
A-1 / Castle Guard Storage	Industrial Support / Specialized Services	Industrial Storage / Logistics

The concentration of large industrial employers supports:

- Enhanced industrial fire-risk management and inspection programs
- Pre-incident planning for complex occupancies
- Apparatus and staffing considerations aligned with industrial response capability
- Regional workforce-driven daytime demand patterns

2.2.4 Overall Economic Outlook

Blackfalds' economic indicators reflect a community experiencing sustained population growth, continued residential expansion, and steady commercial and light industrial development. These factors contribute to a stable and growing local economy while increasing demands on municipal services, infrastructure, emergency response capacity, and long-term operational readiness.

From a fire services planning perspective, Blackfalds' economic profile highlights the need for:

- **Risk-based service planning** aligned with residential growth, transportation exposure, and mixed-use development patterns.

- **Scalable staffing and deployment models** that can adapt to increasing service demand and expanding geographic coverage.
- **Enhanced fire prevention, inspection, and public education capacity** to proactively manage emerging risks.
- **Strengthened pre-incident planning**, particularly for commercial and multi-family developments.
- **Alignment between service levels and municipal fiscal capacity** to ensure sustainable growth and service delivery.

Development and risk implications include:

- Increasing density and complexity of residential occupancies, including multi-family housing.
- Growth in commercial and light industrial buildings requiring regular inspection and compliance monitoring.
- Potential for longer and more complex incident durations as the built environment expands.
- Increased demand for technical competency across a range of emergency response scenarios, including fire suppression, rescue, and motor vehicle collisions.

Fire Service Planning Implications

- Continued residential growth and a younger population profile require enhanced fire prevention programming, public education, and community risk reduction initiatives.
- Proximity to the Highway 2 corridor and regional road networks emphasizes the importance of strong roadway incident response capability and readiness for transportation-related emergencies.
- Expansion of commercial and light industrial areas introduces additional inspection demands and the need for targeted pre-incident planning for higher-risk occupancies.
- Increasing density in residential neighbourhoods, including multi-family developments, creates greater complexity in fire suppression and life safety operations.
- Mixed residential-commercial growth patterns reinforce the need for scalable staffing models and risk-informed deployment strategies aligned with NFPA 1300 community risk assessment and risk reduction best practices.

2.3 Population and Growth Projections

Over the past two decades, the Town of Blackfalds has experienced significant and sustained population growth, transitioning from a small community of approximately 3,042 residents in 2001 to 10,627 residents in the 2021 Census. This growth represents more than a threefold increase over a 20-year period and reflects one of the most rapid expansion rates among comparable mid-sized municipalities in Alberta.

Growth has been especially pronounced in recent census periods. Between 2011 and 2016, the population increased from 6,300 to 9,328 (a gain of 48.1%), followed by continued growth of 12.2% between 2016 and 2021. More recent provincial estimates indicate that this upward trajectory has continued, with Blackfalds reaching approximately 12,258 residents by 2025, demonstrating ongoing annual growth and strong residential demand.

Parallel to population growth, the Town has experienced substantial increases in housing development and private dwellings. In 2021, Blackfalds recorded approximately 3,780 occupied private dwellings, reflecting steady expansion in residential capacity to accommodate population growth. The predominance of single-detached housing (over 70%) illustrates a community primarily characterized by low-density residential development, although more recent trends indicate gradual diversification into multi-unit housing forms.

Blackfalds' demographic profile is notable for its relatively young population. The median age is approximately 31.8 years, significantly lower than provincial and national averages, and over 26% of residents are under the age of 15. This age distribution reflects a strong presence of young families and contributes to sustained population growth through both migration and natural increase.

From a planning perspective, Blackfalds' sustained growth characterized by rapid expansion between 2001 and 2016 and continued upward momentum through 2025—translates into increasing demand for municipal infrastructure, inspection capacity, and emergency and protective services. With population now exceeding 12,000 and development activity remaining active, the Town must continue to align fire service delivery, staffing models, and capital planning with growth-driven workloads, geographic expansion, and evolving community risk.

Table 4: Population and Private Dwellings Change (2001 to 2021)

Year	Population	% Change	Total Private Dwellings	% Change
2001	3,042	-	-	-
2006	4,571	+50.3	-	-
2011	6,300	+37.8	-	-
2016	9,328	+48.1	3,522	-
2021	10,627	+13.9	4,010	+12.9

Table Source: Statistics Canada Census 2001–2021; Government of Alberta Municipal Affairs Population List (2025); Town of Blackfalds Planning Data

Table 5: Average and Median Age (2021)

Age Range	Total (%)
0 to 14 Years	26.6
15 to 64 Years	67.5
65+ Years	6.0

Table Source: Statistics Canada Census 2001–2021; Government of Alberta Municipal Affairs Population List (2025); Town of Blackfalds Planning Data

Planning Implications: Blackfalds' growth trajectory characterized by rapid historical expansion and continued upward population trends presents several key implications for fire service planning:

- Increased demand for emergency response capacity and geographic coverage
- Greater need for fire prevention, inspection, and public education programs, particularly given the high proportion of young families
- Expansion of residential subdivisions**,** influencing station location, response times, and deployment models
- Continued pressure on infrastructure and capital planning, including apparatus and facility requirements
- The need for scalable service delivery models that align with ongoing growth and evolving community risk

Overall, the Town's sustained growth and youthful demographic profile reinforce the importance of proactive, data-driven planning to ensure fire and emergency services remain effective, responsive, and aligned with future community needs.

2.4 Community Planning and Development

The Town of Blackfalds continues to experience strong residential growth and steady commercial development, influenced by its strategic location along the Highway 2 corridor and its proximity to Red Deer and Lacombe. As the municipality continues to grow through greenfield development and expansion into previously undeveloped areas, BFD should adapt its service delivery model to support the Town's long-term planning objectives and future service demands.

Integrating fire protection considerations early in the planning and development process is essential to ensuring that growth remains safe, sustainable, and supported by effective emergency response capabilities. Blackfalds' development pattern is characterized by expanding residential neighbourhoods, growing commercial corridors, and emerging service-industrial areas that collectively shape the community's evolving risk profile.

2.4.1 Growth Trends and Development Patterns

Blackfalds has experienced significant residential expansion over the past decade, with ongoing subdivision development contributing to population growth and increased service demand. The Town's development pattern reflects a combination of established neighbourhoods, continued greenfield growth, and expanding commercial and service-based lands.

Looking ahead over the next 10–20 years, several key growth drivers will influence fire service demand:

- **New residential neighbourhoods**, increasing call volumes and requiring road networks that support efficient and unobstructed emergency access.
- **Expansion of commercial development along key corridors**, introducing higher occupancy loads, mixed-use buildings, and increased inspection and enforcement requirements.
- **Growth in light industrial and service-commercial areas**, requiring enhanced pre-incident planning, inspection programs, and operational readiness.
- **Incremental infill and multi-family development**, leading to increased density and more complex fireground operations.

As development intensifies, BFD must remain proactively engaged with Planning and Development to monitor growth impacts and ensure fire protection requirements are incorporated into the approval process.

2.4.2 Land-Use Planning Integration

Effective community planning requires the integration of fire protection considerations into subdivision design, development approvals, and permitting processes. To support safe and resilient growth, BFD should continue to actively participate in land-use planning through:

- **Development and subdivision reviews**, providing technical input on roadway widths, turning radii, hydrant placement, fire flow requirements, and emergency access provisions.
- **Alignment with Municipal Development Plans (MDP) and Area Structure Plans (ASP)** to ensure growth areas can be serviced within acceptable response time and operational parameters.
- **Verification of Alberta Building and Fire Code compliance**, particularly in higher-density developments, multi-family housing, and specialized occupancies.
- **Risk-informed land-use assessment**, identifying developments that may require enhanced fire protection measures such as sprinkler systems, specialized inspections, or pre-incident plans.

A structured and consistent review process ensures that operational requirements are incorporated into planning decisions and that new developments support safe and effective emergency response.

2.4.3 Emergency Response Coverage and Station Planning

As Blackfalds continues to expand geographically, changing land-use patterns will influence response times, coverage areas, and operational requirements. Maintaining consistent response performance during periods of rapid growth is essential to ensuring public safety and operational effectiveness. To maintain effective service delivery, BFD should:

- **Monitor response performance** in new and developing neighbourhoods to ensure service levels are maintained.
- **Identify coverage gaps** through spatial analysis and Community Risk Assessment data.
- **Evaluate future staffing, apparatus, and deployment needs** in response to growth and increasing service demand.
- **Assess long-term station requirements**, including the potential need for additional or relocated facilities as the community expands.

- **Review roadway design, traffic patterns, and connectivity** to ensure efficient emergency vehicle movement

2.4.4 Collaboration and Future Outlook

Ongoing collaboration between BFD, Planning and Development, Engineering, and municipal leadership will be critical as Blackfalds continues to grow. Early and consistent involvement in development planning allows the fire service to anticipate service impacts, identify emerging risks, and provide informed technical input.

A proactive and integrated planning approach will support:

- A safe and resilient built environment
- Reliable and efficient emergency response coverage
- Sustainable, well-managed community growth
- Reduced fire risk, property loss, and service disruption

This coordinated approach will ensure that Blackfalds' continued development is supported by a fire service that is adaptable, forward-looking, and capable of meeting the community's evolving needs.

2.5 Community Risk Assessment

Risk can be managed by either accepting the risk, insuring against damages, or investing in risk prevention and mitigation strategies. Local governments typically employ a combination of these approaches. In general, the risks and management strategies of a community are relative to a municipality's financial capacity, geography, population demographics, fixed assets, critical infrastructure, and overall service delivery.

Conducting a risk assessment is the first step towards establishing a strategic plan to manage community risks based upon local fire department response capabilities. The results are used to assist the municipality in making informed decisions regarding the allocation of limited fire prevention and fire response resources.

Community Risk Assessments, based on *NFPA 1300 Standard on Community Risk Assessment and Community Risk Reduction Plan Development (2026)* are recommended to allow fire departments to make informed decisions about the types and levels of fire protection services provided based on identified risks.

Specifically, the following nine (9) profiles were reviewed:

1. Geographic profile
2. Building stock profile
3. Critical infrastructure profile
4. Demographic profile
5. Hazard profile
6. Public safety response profile
7. Community services profile
8. Economic profile
9. Past loss and event history profile

The information and data gathered to address each of the profiles will assist in determining and prioritizing risks to public safety in the community and determining the fire protection services to be provided by municipalities to address those risks.

Risks were identified using historical response data, hazard risk vulnerability assessments and information from our interviews to develop a risk profile for the community. The evaluation of fire and rescue risks considers both the probability and consequence of emergency event types. The probability of an event is quantified by analyzing historical, current, and projected data. The consequence of the event type or risk is based on an informed assessment of the potential impact on a community should the event occur.

2.5.1 Factors Contributing to Risk

As mentioned, every municipality has unique challenges and characteristics contributing to the overall risk profile of the community. Examples of community risks include:

- Fire/rescue service model and response capacity
- Population and demographics
- Population growth rate
- Industry types
- Economy
- Rate of development
- Transportation corridor types
- Typography
- Weather
- Historical response data

2.5.2 Risk Management

Image 1: Risk Management Cycle Process



All communities require a process to identify and actively manage high-priority risks. The focus of this report is to identify and discuss specific risks and unique community characteristics that contribute to risk, typically managed through fire prevention or fire department response. Image 1 describes the risk management cycle.

The first step in the risk management process includes the assessment of the probability and consequence of specific risks. The next step is the assessment to identify key risks, which are then evaluated against the current prevention or response strategy to identify potential service gaps. The third step in this cycle includes adjusting fire prevention and response service levels to manage the resources necessary to pre-emptively mitigate or respond as determined by approved service levels. The last step in the cycle is to measure, and report results to key policymakers. This cycle should be repeated periodically to address changes in the risk profile and make thoughtful and informed decisions regarding strategies to manage any changes.

In Canada, local governments are charged with delivering fire and rescue response services for their citizens. Elected officials are the 'Authority Having Jurisdiction' (AHJ), who determine the level of service required to manage fire and rescue risks to an acceptable level. The challenge for elected officials lies in determining the best balance between investing in adequate emergency services and accepting a certain level of risk.

2.5.3 Risk Evaluation vs. Service Levels

The evaluation of fire or rescue risks considers both the probability and consequence of emergency event types. The probability of an event is quantified by analyzing historical, current, and projected data. The consequence of the event type or risk is based on an informed assessment of the potential impact on a community should the event occur.

Probability – The probability of a risk, or event type, is the determined likelihood that an event will occur within a given time. The probability is quantified by considering the frequency of event type data. An event that occurs daily is highly probable and, therefore, higher risk. An event that occurs only once in a century is assessed as a lower risk as it may never occur.

Consequence – There are three types of consequences when considering fire/rescue response requirements:

- Life safety impact: Life safety risk for victims and responding emergency personnel are the highest order of consequence when considering the risk associated with specific event types. Events with a high likelihood of injury/death occurring and even a moderate probability of occurring require close examination to ensure adequate resources required to safely rescue or protect the lives of occupants from life-threatening are accessible to respond. Incidents that risk life safety include motor vehicle accidents, extreme weather, flooding, fire, release of hazardous materials, medical emergencies, and all types of rescue situations.
- Economic impact: Events with high negative impacts on the local economy are devastating to a municipality. For example, recovering from the fire loss of a large employer's property or key public infrastructure in smaller municipalities can be difficult. Therefore, providing adequate response capacity necessary to manage these types of events must be considered.
- Environmental impact: Negative environmental consequences resulting in irreversible or long-term damage to the environment must also be considered in the analysis. Events with risk of negatively impacting water, soil and air quality are also likely to impact life safety as well as the economy and therefore must be considered.

Social and cultural impacts, as experienced with the loss of historic buildings, recreation facilities or non-critical community infrastructure, are considered but do not typically affect how fire department resources are deployed.

As discussed, the risk evaluation process is used to identify high-priority risks and the appropriate risk management strategy. Where a fire department response is determined to be the most appropriate management strategy, the appropriate services and service levels should be established to manage the risks safely.

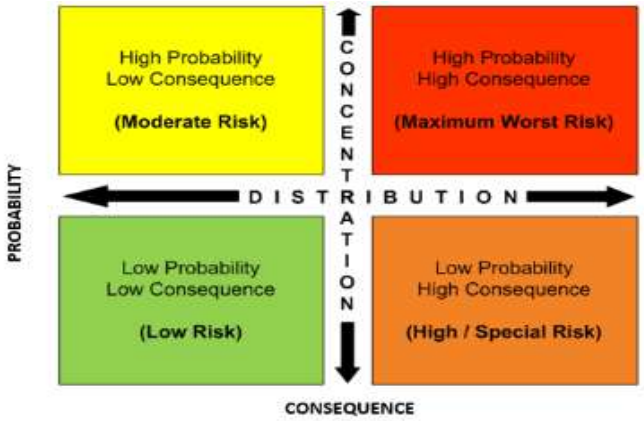
Elected officials are responsible for determining which services are delivered and setting service level goals. The service level goals determine the necessary concentration and distribution of either fire prevention or emergency response resources to manage the identified risks.

> ***Distribution*** *refers to the number of fixed resources, such as fire stations, and where they are placed throughout the community. Distribution varies depending on factors related to the number of incidents and types of calls for service in the defined area.*

Concentration *refers to the assembling of resources, such as a specialized workforce and equipment, needed to effectively respond to an incident in each area within the community. It must also identify the availability of additional response resources, including the reliability and time of arrival of a secondary responding unit.*

The risk evaluation matrix can be divided into four levels of risk based on the probability and consequence, each with specific implications for the concentration and distribution of resources. It is provided as a reference and context to quantify fire response risks in any municipality. Different quadrants of the risk matrix need different response requirements, which offers examples of categories of types of structural fires and general hazards commonly found in communities.

Figure 4: Risk Evaluation Matrix



As described above, these risks are categorized by considering the probability and consequence of the fire or hazard. This qualitative analysis is based on experience and expertise and should be completed with input from fire, building and emergency management officials. Every community will have a unique risk inventory contributing to its risk profile.

2.5.4 Assigning Risk Level

Once probability and consequence are determined, the level of risk is calculated by multiplying the numerical values for probability and consequence. The relationship between probability and consequence as it pertains to risk levels can be illustrated in a risk matrix (below). In a risk matrix, probability and consequence are defined on separate scales with varying descriptors providing direction on how to assign the probability and consequence of an event.

Figure 5 shows the risk matrix utilized in the CRA. The purpose of assigning a risk level is to assist in the prioritization of the range of risks that are identified in the CRA.

Figure 5: Risk Matrix Template

Probability/ Consequence	Insignificant 1	Minor 10	Moderate 100	Major 1,000	Catastrophic 10,000
Almost Certain 10,000	Moderate	Moderate	High	High	High
Likely 1,000	Moderate	Moderate	Moderate	High	High
Possible 100	Low	Moderate	Moderate	Moderate	High
Unlikely 10	Low	Low	Moderate	Moderate	Moderate
Rare 1	Low	Low	Low	Moderate	Moderate

Where possible, quantitative data was used to inform the risk assignment as described in the rationale in the table. It is important to recognize that with the availability of new or updated data, the probability levels could change or be refined. The rationale provided for both probability and consequence consider information from the CRA's nine profiles, to inform decision-making about the provision of fire protection services in the specific municipality/community.

2.5.5 Structural Fire Risk Analysis

It is critical to use careful planning and consider alternative solutions when managing risk because the ability to increase the distribution of resources and add capacity is always limited. Spending substantial amounts of time and resources to manage a risk with low frequency/low consequences will have limited impact and make a minimal improvement to community safety. When planning for fire department response, the planning process includes a detailed review of the frequency of events and their potential consequence(s) to ensure prevention and response efforts maximize life safety and minimize negative consequences for high-priority events.

2.5.6 Existing Major Building Classification Summary

Analysis of Blackfalds' major building occupancy types was conducted using data obtained from the 2021 Census data provided by Blackfalds. Table 6 provides a summary of Blackfalds' existing major building occupancy classifications. The majority of Blackfalds' existing property stock is comprised of Group C - Residential Occupancies and 13.6% of all private dwellings were constructed prior to 1990 preceding the adoption of the 1992 National Fire Code.

Going forward, Blackfalds should consider keeping records of all building classifications as this data can assist the fire department when preplanning, inspections, and enforcement to ensure compliance with applicable building and fire codes.

Blackfalds' historical data indicates that during the 2014 and 2023-year period, Group C - Residential Occupancies represent the most prominent type of building occupancy type relating to fire incidents being 87.50%. All other fire incidents relating to Assembly, Business & Personal Services and Mercantile are relatively equal and minor in structural fire loss.

Table 6: Existing Major Building NBC Classification Summary

NBC Occupancy Classification	Major Building Classifications	Number of Occupancies
Group A	Assembly Occupancies	33
Group B	Care or Detention Occupancies	Unavailable
Group C	Residential Occupancies – Total	4,507
Group C	Residential Occupancies – Single Detached	3,326
Group C	Residential Occupancies – multi-unit	1054
Group C	Other single-attached house	0
Group C	Hotel/Motel	2
Group C	Mobile Homes / Trailers	125
Groups D & E	Commercial	67
Group F (all Divisions combined)	Low-Hazard Industrial	*14*
	Medium-Hazard Industrial	*87*
	High-Hazard Industrial	*4*

Table Source: Blackfalds Fire Department

Note: *The ability to conduct a comprehensive risk analysis based on building classification is currently constrained by the limited availability of detailed occupancy data. To enhance future risk assessment capabilities, it is recommended that the Blackfalds Fire Service collaborates with the Town's Building and Taxation Departments. This partnership would facilitate improved access to accurate and up-to-date information regarding the number, type, and classification of occupancies within the municipality. Establishing this data foundation is essential for refining community risk profiles and supporting evidence-based planning and resource allocation.*

2.5.7 Potential High-Fire Risk Occupancies

Potential high fire risk occupancy is another factor for consideration within a community's building stock. High fire risk can be linked to a combination of factors such as building density (exposures), building age, and construction. Fuel load typically refers to the amount and nature of combustible content and materials within a building. This can include combustible contents, interior finishes as well as structural materials. Combustible content tends to create the greatest potential fire loss risk.

Higher fuel loads result in increased fire loss risk due to increased opportunity for ignition and increased fire severity. In many communities, large amounts of fuel load can be contained within a single occupancy, such as a building supply business, within a large multi-unit residential building, or within a historic downtown core.

2.5.7.1 Fuel Load Concerns

The review has identified four buildings with potential fuel load concerns. These include buildings involved in storage, general warehousing, and a fuel facility. The buildings may utilize materials such as oxidizers and flammable and combustible liquids and chemicals.

In addition to ensuring compliance with the requirements of the NBC-AB and NFC, there are operational strategies that a fire service can implement to address fuel load concerns. These include regular fire inspection cycles and pre-planning of buildings of this nature to provide an operational advantage in the event of fire.

It is important to note that the number of warehouses and industry that store flammable/combustible products is constantly increasing especially when it comes to the storage and use of lithium-ion battery devices, chargers etc.

Consistent with most other municipalities in Canada, Group C - Residential Occupancies represent the most prominent type of building occupancy type. Standard incident reporting from the Alberta Fire Commission indicates that 87.50% of structure fires loss over the ten-year period from January 1, 2014, to December 31, 2023, occurred within Group C - Residential Occupancies.

2.5.7.2 Occupancies with Potential High Fire Life-Safety Risk

Fire risk does not affect all people equally. Those who are at an increased risk of fire injury or fatality are known as vulnerable individuals. In the event of a fire, these individuals may be unable to self-evacuate and/or require assistance in their evacuation efforts. Identifying the location and number of vulnerable individuals or occupancies within the community provides insight into the magnitude of this demographic within a community.

2.5.7.3 Registered Vulnerable Occupancies

From an occupancy perspective, vulnerable occupancies contain vulnerable individuals who may require assistance to evacuate in the event of an emergency due to cognitive or physical limitations, representing a potential high-life safety risk. These occupancies house individuals such as seniors or people requiring specialized care. It is important to note, however, that not all vulnerable individuals live in vulnerable occupancies; for example, some seniors who are vulnerable due to physical limitations can live on their own or in subsidized housing, making them a key demographic to reach.

Blackfalds does not currently have a full-service hospital or a major long-term care (nursing home) facility within the town itself. Residents primarily rely on nearby regional hospitals in Red Deer and Lacombe for acute and emergency hospital services.

However, Blackfalds does have some senior-oriented housing and healthcare services, including:

- Tower Manor - an independent senior living / retirement residence operated by the Lacombe Foundation.
- Local medical clinics such as Apollo Health Centre, which provides family medicine and walk-in healthcare services.

For higher-level care such as:

- Long-term care
- Assisted living
- Memory care,
- Hospital-based services

Residents typically access facilities in nearby communities including Red Deer, Lacombe, and surrounding central Alberta municipalities. From a CRA perspective, this means Blackfalds has relatively limited institutional healthcare occupancy risk within town boundaries, though senior housing and medically vulnerable populations remain an important consideration.

2.5.7.4 Other High-Fire Life Safety Risk Occupancies

From a risk perspective, it is valuable for a fire service to identify additional potential high fire life-safety risk considerations. This includes day care facilities and schools, where children, due to their age and potential cognitive or physical limitations, may face challenges in self-evacuation during emergencies.

For the purposes of this CRA, potential high life-safety risk occupancy considerations encompass schools and licensed day care facilities.

It is worth noting that many schools also offer before and after-school childcare services for children aged 4-12, as well as eight registered licensed childcare centres.

Table 7: Blackfalds Schools

Property Name	Occupancy Type	Location
Iron Ridge Elementary Campus	Pre-K to Grade 3	4710 Broadway Avenue
Iron Ridge Intermediate Campus	Grades 4 – 6	101 Cottonwood Dr.
Iron Ridge Junior Campus	Grades 7 – 8	5200 Leung Road
Iron Ridge Secondary Campus	Grades 9 – 12	5000 Leung Road
St. Gregory the Great Catholic School	Pre-K to Grade 9	105 Cottonwood Drive

Table Source: Wolf Creek Public Schools and Red Deer Catholic Regional Schools

In addition to the above, a new Catholic elementary K-5 school is currently under construction expected to open in 2027. There are also eight registered licensed daycare/childcare providers in Blackfalds including:

- Aspen Lakes Discovery Center Ltd.
- Aspen Lakes Discovery Center West
- BGC Wolf Creek Blackfalds
- Kids 3 Blackfalds Daycare
- Kids Konnection Family Day Home Program Ltd.
- Little Soldiers Family Day Care Inc.
- Little Star Play School and Out of School Program
- Little Star Out of School Program

2.5.8 Community Risk Analysis Overview

Blackfalds' community emergency management program (CEMP) risk assessment was reviewed and updated in 2024, indicating that Blackfalds has complied with its legislative requirements. As a component of the risk assessment and risk analysis process, the top risks in Blackfalds were identified. The Hazard Identification Risk Assessment (HIRA) assigned likelihood and consequence levels to a list of hazards based on the potential for impacts to people, property, and the environment. As a result of this analysis, the top hazards in the town include the following:

- Hazmat (Transportation-Rail)
- Tornado
- Earthquake
- Rail Accident
- Forest Fire (Wildfire)
- Hail
- Human Health Emergency
- Blizzards
- Hazmat (Fixed Site) – Pipeline Storage facility
- Major Road Accident (Vehicular)
- Wind

In addition to the overall highest risks to the community, certain events pose an increased risk specific to firefighting. The risk to firefighting responders to the most hazardous events are identified below, as well as the most hazardous events they may encounter that pose a specific risk to them and their ability to respond.

2.5.9 Summary of Identified Risks and Key Findings

The CRA summarizes 26 identified risks which are categorized as:

- 3 - Low
- 0 - Low to Moderate
- 15- Moderate
- 1 - Moderate to High
- 4- High

The CRA further identifies 23 key findings that are potential risks or areas that the Town of Blackfalds is currently managing and do not represent a current risk. BFD should continue to monitor these key findings in the future and address appropriate should they become identified risks.

2.5.10 Impacts of Hazards on Fire Protection Services

To better understand the risks of hazards as they pertain to fire protection services, the hazards have been assessed to identify possible impacts on fire protection services (excluding fire/explosion). Many of the potential impacts are not unique to a jurisdiction. The results of this review, as they pertain to the hazards in Blackfalds, are presented in the following table.

Table 8: Impacts of Hazards on Fire Protection Services

Hazard	Possible Impact
Hazmat (Transportation) - Rail	Overall Impact Potential for mass evacuation, environmental contamination, injuries/fatalities, disruption to transportation corridors, and long-term environmental and economic impacts. Fire Services Requires specialized hazardous materials response, incident command coordination, evacuation management, decontamination operations, and mutual aid support. May exceed local response capacity.
Tornado	Overall Impact Significant threat to life safety, widespread structural damage, infrastructure disruption, utility outages, and displacement of residents. Fire Services High demand for rescue operations, medical assistance, debris management, fire suppression, and prolonged emergency operations during and after the event.
Earthquake	Overall Impact Potential structural collapse, infrastructure damage, utility failure, transportation disruption, and community-wide emergency conditions. Fire Services Simultaneous multi-site incidents may overwhelm resources, requiring urban search and rescue, fire suppression, hazardous materials response, and regional mutual aid coordination.

Hazard	Possible Impact
Rail Accident	Overall Impact Possible injuries, fatalities, transportation disruption, and secondary hazards including fires or hazardous materials release. Fire Services Requires coordinated response involving fire suppression, rescue, incident stabilization, traffic control, and potentially hazardous materials operations.
Forest Fire (Wildfire)	Overall Impact Threat to homes, air quality, public health, infrastructure, and possible evacuations, particularly near grassland or naturalized areas. Fire Services Increased demand for wildland firefighting resources, mutual aid, evacuation support, structure protection, and extended operational periods during peak fire conditions.
Hail	Overall Impact Property damage to homes, vehicles, roofs, and infrastructure; potential injuries and insurance impacts. Fire Services Increased call volumes related to weather emergencies, alarms, downed utilities, and assistance requests, though typically limited suppression demands.
Human Health Emergency	Overall Impact Widespread illness, strain on healthcare systems, workforce disruption, and impacts to essential services and community operations. Fire Services Increased medical response demands, staffing shortages, PPE requirements, modified operational procedures, and continuity planning pressures.
Blizzards	Overall Impact Dangerous travel conditions, isolation of residents, utility disruptions, and increased risk of collisions and medical emergencies. Fire Services Increased demand for motor vehicle collision response, medical assistance, welfare checks, and operations under hazardous weather conditions.

Hazard	Possible Impact
Hazmat (Fixed Site) – Pipeline/Storage Facility	Overall Impact Risk of fire, explosion, toxic release, environmental damage, evacuations, and disruption to nearby businesses or residences. Fire Services Requires hazardous materials mitigation, fire suppression, evacuation coordination, air monitoring, and multi-agency response capability.
Hazmat (Transportation) – road	Overall Impact Potential injuries, roadway closures, environmental contamination, and disruption to transportation routes. Fire Services Requires scene isolation, hazardous materials identification, containment, decontamination, and coordination with specialized response agencies.
Major Road Accident (Vehicular)	Overall Impact Injuries, fatalities, traffic disruption, and secondary impacts to regional transportation and emergency access. Fire Services High frequency operational demand involving vehicle extrication, medical response, fire suppression, traffic management, and mutual aid support when required.
Wind	Overall Impact Damage to buildings, trees, utilities, and infrastructure; possible power outages and debris hazards. Fire Services Increased responses for downed power lines, damaged structures, alarms, and public safety hazards during severe wind events.

Table Source: Blackfalds, Community Emergency Management Program, 2024

2.6 Water Infrastructure

Water supply is a critical component of firefighting operations and a fundamental element of the Town of Blackfalds' emergency service delivery system. Access to a reliable, pressurized water distribution network is essential to ensuring effective and efficient fire suppression operations across the community.

The Town of Blackfalds receives treated potable water from the North Red Deer River Water Services Commission (NRDRWSC), which supplies water to several municipalities in the central Alberta region. This regional system provides a dependable, high-quality water source that supports both domestic consumption and fire protection needs. As the community continues to grow, maintaining adequate system capacity and fire flow performance remains a key priority.

2.6.1 Fire Hydrants and Fire Protection Provision

The municipal water distribution system must continue to evolve alongside Blackfalds' growth to ensure sufficient fire flow capacity and system reliability across all neighbourhoods. Key considerations include:

- **Hydrant spacing, distribution, and accessibility** are designed to meet established guidelines and support effective fire suppression throughout developed areas
- **Fire flow capacity in new subdivisions** must align with anticipated building types, densities, and risk profiles
- **Identification of low-flow or higher-risk areas**, including commercial and light industrial zones, where supplemental water supply strategies or operational adjustments may be required
- **Coordination with Engineering Services** on water main sizing, looping, redundancy, and long-term infrastructure planning to ensure consistent and reliable water delivery

Close collaboration between BFD and municipal engineering is essential to align water infrastructure with current and future fire protection requirements. Fire hydrants connected to the municipal potable water system serve as the primary source of firefighting water within Town limits.

Key system characteristics include:

- Hydrants are integrated into a pressurized, treated-water distribution network, enabling immediate, on-demand water supply during emergency incidents
- System design considerations include:
  - Watermain sizing and network configuration
  - System storage capacity and pumping capability
  - Regional supply availability through NRDRWSC
- The pressurized system ensures:
  - Consistent water quality
  - Reliable flow and pressure across developed areas
- Firefighting demand is prioritized under municipal water use and restriction bylaws, ensuring emergency operations are maintained even during periods of water conservation
- The Town implements ongoing hydrant inspection, maintenance, and replacement programs to:
  - Ensure operational reliability during emergency incidents
  - Maintain system integrity and flow performance
  - Allow isolation of infrastructure issues without compromising firefighting coverage

As Blackfalds continues to expand, maintaining a resilient and well-planned water distribution system will be essential to supporting fire suppression capabilities, protecting property, and ensuring community safety.

SECTION 3
DEPARTMENT PROFILE

3.1 Introduction

Modern fire departments have evolved into a critical component of a community's social safety net. Whereas early fire departments were historically established specifically to combat structure fires that, at the time, were often devastating. Today, fire departments are also called upon to respond to medical emergencies, technical rescues, and dangerous goods releases, often working together with other response agencies. Fire services also provide fire safety education programs and ensure fire codes are complied with to reduce risks. As a result, fire departments must be properly structured, adequately resourced and equipped to deliver these services safely and competently.

3.2 Governance

Fire protection services are delivered through a POC staffing model, and the NFPA 1720: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2020) provides an appropriate and recognized framework to guide the evaluation and continuous improvement of emergency response performance. This standard is examined in greater detail within this section.

Under the Municipal Government Act, Council is responsible for establishing the level of fire protection service to be provided within the municipality. This responsibility is formalized through the Town of Blackfalds Bylaw 1312.24. This Bylaw outlines expectations and responsibilities of both the fire department and the public including:

- The overall purpose of the Fire Department
- The authority granted to the Town of Blackfalds, their Fire Chief and designates
- Responsibilities of owners and other persons including offenses and penalties under the Bylaw regarding authorized and unauthorized fires

BFD has an opportunity to build upon this foundation by incorporating clear service level standards, defined incident response expectations, and measurable performance targets that support accountability and continuous improvement. Establishing these elements would enhance clarity for Council, administration, and the public, while supporting the department in aligning resources with community risk and operational demands.

The introduction of formalized response performance benchmarks**,** aligned with *NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2020)*, would provide clear and measurable objectives for BFD. This approach supports informed decision-making, reinforces accountability, and promotes a culture of continuous improvement. Over time, progress toward these benchmarks can be tracked, enabling the department to demonstrate ongoing enhancements in service delivery and community safety.

Observation
Observation # 1: Under the Municipal Government Act, Council is responsible for establishing the level of fire protection service to be provided within the municipality. While the Town of Blackfalds Fire Services Bylaw provides the legislative authority and governance framework for the delivery of fire protection services, there is an opportunity to further strengthen the Town's fire service governance model by establishing Council-approved service levels, response performance expectations, and measurable service objectives.

Recommendation

Recommendation #1a: The Town of Blackfalds should establish Council-approved fire service levels and response performance expectations that reflect community risk, growth projections, legislative requirements, and the realities of a paid-on-call model. Guided by NFPA 1720, the Town should define measurable service objectives, including response targets, minimum staffing, core service responsibilities, and key performance indicators for ongoing monitoring and reporting.

Suggested completion: 1-6 months, ongoing thereafter

Recommendation #1b: The Town of Blackfalds should update its Fire Services Bylaw and supporting governance policies to clearly define Council-authorized service scope, establish performance reporting requirements, and implement a formal continuous improvement program. This program should include regular evaluation of operations, community risk trends, staffing capacity, training, apparatus readiness, and service demand, with periodic reporting to Council on performance results, service gaps, emerging risks, and future operational and capital needs.

Suggested completion: 6 – 12 months

Strategic Objective: #1 Administration

Suggested completion: 1-12 months, ongoing thereafter

Cost: Neutral. No additional budget required, subject to available staff capacity.

Rationale: *The absence of clearly defined performance expectations limits the Town's ability to consistently evaluate service delivery, identify emerging risks and operational trends, and determine whether staffing, training, apparatus, facilities, and financial resources remain aligned with community risk and service demands.*

Establishing Council-approved service levels and measurable performance expectations would strengthen governance by defining the level of service the community can expect, and the resources required to deliver it. This approach enhances accountability, supports transparent and evidence-based decision-making, and enables objective evaluation of service delivery against community risk and operational demands.

A structured performance and governance framework, supported by regular monitoring and reporting, would allow the Town to assess operational gaps, track evolving risks, and ensure resources remain aligned with approved service levels. This approach supports continuous improvement, responsible resource allocation, long-term sustainability, and positions the Blackfalds Fire Department to adapt to growth, changing risks, and evolving community expectations while maintaining safe and effective emergency services.

3.3 Department Overview

BFD have a longstanding history as a volunteer-based service typical of small Alberta town fire departments. BFD operates from a single fire hall located at 4401 South Street, providing a wide range of emergency services to Blackfalds, as well as contracted and mutual aid support to surrounding communities within Lacombe and Red Deer Counties.

In addition to emergency response, BFD performs essential day-to-day non-emergency functions, including:

- Fire safety education
- Fire Inspections
- Pre-incident planning
- District familiarization
- Preventive maintenance inspections and testing of vehicles, apparatus, and equipment
- Ongoing skills maintenance, practice, and training
- Fire hall upkeep and preventive facility maintenance

3.3.1 Mission, Vision, and Values Framework

An **MVV Framework (Mission, Vision, and Values framework)** is a foundational model that defines an organization's **purpose, direction, and guiding principles**. It serves as a strategic anchor for decision-making, culture, and long-term planning.

Mission Statements outlines the organizations core purpose and primary functions. Why the organization exists, who it serves, and what it seeks to accomplish.

Vision Statements describe the desired future state of the organization that motivates members, guides strategic priorities, and assists with long-term planning.

Values represent the principals and standards that guide behaviour, decision making and interactions within the organization and within the community.

Clear Mission, Vision, and Values statements articulate the organization's purpose, long-term direction, and expectations for conduct and service. These statements help ensure that all members administration, staff, stakeholders, and the public understand what the organization stands for and where it is heading. Developing unique, department-specific statements will strengthen organizational identity, support consistent decision-making and reinforce a unified culture across BFD.

The Town of Blackfalds's MVV Framework are expressed as follows:

Vision Statement: *"Blackfalds is an active family community full of pride, commitment and opportunities reflecting an economically sustainable, self-sufficient, and safe living environment, with a balanced range of municipal services provided through innovation and proactive community partnerships."*

Mission Statement: *"To provide excellence in the area of Municipal Service to make available the highest possible quality of life to the residents of Blackfalds."*

Values: *The Town has not adopted specific values, however their strategic and governance documents emphasis the following principles.*

- *Innovation – encouraging proactive, modern approaches to municipal service delivery*
- *Community partnership- working collaboratively with residents, agencies, and regional partners*
- *Safety- Maintaining a secure and resilient environment for families and businesses*
- *Sustainability- Support long-term economic and community growth*
- *Service Excellence- Providing high-quality, responsive municipal services*

Many fire departments will adopt their own MVV framework that are consistent with the corporation's mission, vision and or values. BFD has adopted the following specific Mission Statement:

"To provide excellence in the area of Fire/Rescue by protecting life, property, and the environment to make available the highest possible quality of life to the residents of Blackfalds. We never close."

Vision or Values statements, however, are informally adopted through their:

- Service mandate
- Operational objectives
- Training and response standards
- Community safety priorities

BFD themes highlight:

- Public safety and community protection
- Professionalism and training excellence
- Rapid, effective emergency response
- Regional cooperation and mutual aid
- Fire prevention and public education

A fire department benefits from creating its own Mission, Vision, and Values because these elements define its identity and purpose. They give firefighters and leaders a shared understanding of what the department stands for, how it serves the community, and what behaviors and priorities matter most. This clarity strengthens culture, improves morale, and guides decisions during both routine operations and high-pressure emergencies.

These statements also build trust with the public by demonstrating transparency and professionalism. They help the department plan for the future, justify resources, and adapt to changing community needs. A well-crafted mission, vision, and set of values provide direction, accountability, and unity, ensuring the department grows intentionally rather than by accident.

Observation
Observation #2: BFD does not currently have its own MVV framework.
Recommendation
Recommendation #2: BFD should develop a distinct Vision and set of Values that complement and support its Mission Statement.
Suggested completion: 6–12 months
Strategic Objective: #1 Administration
Cost: Neutral
Rationale: *BFD has opportunity to enhance organizational alignment and identity by developing its own MVV framework. When a department defines its own Mission, Vision, and Values, it establishes a strategic foundation that guides culture, decision making, and public trust. These statements communicate who the department is, what it stands for, and how it intends to serve the community, strengthening both internal alignment and external confidence.*

3.3.2 Human Resources

Human resources are far more than an administrative function; it is a strategic pillar that directly shapes organizational performance, culture, and sustainability. Effective HR management ensures that an organization has the right people, with the right skills, in the right roles, supported by systems that promote safety, accountability and growth.

Emergency services are often delivered under difficult and stressful circumstances, with little room for error.

Fire departments must be adequately resourced with staff, equipment, and training to be effective in delivering highly technical services to achieve service excellence. As a result, considerable effort is warranted to ensure that only highly committed, team-oriented, and physically able employees are recruited, trained, retained, and supported.

In the fire service a strong human relations structure is championed by the fire chief that filters throughout the organization, supported by an effective rank structure. The human relations need of the fire service is often supported by human relations (HR) professionals within the municipal corporation. Whether in emergency or non-emergency situations a clear chain-of command is more than a structural preference, it is a critical safety system and leadership model that must be understood and followed to provide clear communication, effective span-of-control, and accountability for all staff.

Whether full-time (career), POC, volunteer, or a combination, a fire department's employees are its most valued asset. Emergency services are often delivered under difficult and stressful circumstances, with little room for error. Fire departments must be adequately resourced with staff, equipment, and training to effectively deliver highly technical services and achieve service excellence. As a result, considerable effort is warranted to ensure that only highly committed, team-oriented, and physically able employees are recruited, trained, and retained.

BFD is currently funded to employ the following positions:

- 1 Full-time Fire Chief
- 2 Full-time Deputy Chiefs
- 3 Paid on-call Captains
- 3 Paid on-call Lieutenants
- 21 Paid on-call firefighters

Note: *BFD staffing levels of paid on-call firefighters vary depending on recruitment and retention.*

The current organizational structure reflects the department's long-standing volunteer/paid-on-call model. As service demands have increased and the complexity of fire service operations has grown, new positions have been added and traditional roles have evolved. Regardless of whether these positions are full-time or paid-on-call, their functions must align with a logical and clearly defined chain of command.

3.3.3 Administration

Strategic Objective #1: Administration

Strengthen administrative systems and operational efficiency to ensure sustainability of program initiatives. Ensure the continuity of essential operations, deliver relevant performance monitoring data, and manage necessary resources to effectively support identified programs.

BFD's fire chief is primarily responsible for the fire department human resources (HR) administration and oversight, supported by the municipality, as necessary. HR functions typically include:

- Employee & Labour Relations
- Recruitment
- Disability Management
- Training & Development
- Employee & Family Assistance Program
- Compensation & Benefits
- Health and Safety and Wellness
- Return to Work Program

Corporate Human Resources (HR) staff play a vital role in facilitating ongoing communication among departments, ensuring that all policies, procedures, and compliance standards are not only met, but also clearly understood across the organization. This collaborative approach fosters an environment where staff at every level are empowered to work safely and productively, with a strong emphasis on mutual respect and support.

In addition to these core responsibilities, the Human Resources (HR) staff play a vital role in facilitating ongoing communication among departments, ensuring that all policies, procedures, and compliance standards are not only met, but also clearly understood across the organization.

Impacts of corporate policies and labour decisions on all departments should be considered, including the fire services. This collaborative approach fosters an environment where staff at every level are empowered to work safely and productively, with a strong emphasis on mutual respect and support. Human Resources could further support BFD by assisting with succession planning initiatives, which is important for department growth and promoting internal candidates to supervisory and management roles.

3.3.3.1 Fire Department Leadership and Management

Across most North American fire services, a consistent hierarchy exists. Depending on the complexity of the community and fire service, positions are in place to assist with effective span of control. In support of the fire chief, one or more chief officers are in place to provide department-wide oversight and act on behalf of the fire chief when required. These chief officers typically oversee specific divisions or functional areas such as Operations, Training, or Fire Prevention. While chief officer roles are essential, they may differ significantly in scope, authority, and organizational impact. Together, they form a balanced leadership structure that supports operational readiness, accountability, and effective service delivery.

BFD administrative responsibilities, management and senior leadership are provided by the Fire Chief and two Deputy Fire Chiefs. The fire chief and two deputy fire chiefs all work a normal Monday to Friday work week and are on-call on a weekly rotating basis, while all are expected to respond as necessary outside of their normal work schedule.

A clear understanding and acceptance of each position's role in leadership, along with effective management, is key to a safe and effective fire service. Leadership, done in a consistent and professional manner, transcends the entire organization. This creates a cohesive, resilient, value-based organization that embraces change as part of day-to-day work.

Effective leadership and management start at the top of an organization to guide it towards success. With increasing pressure to find value for money, elected officials are relentlessly looking for ways to increase the value for money proposition for their citizens. Department managers are challenged to maintain or increase services while avoiding service cost increases. This environment generates the need for communities to adopt more business-like approaches for delivering public safety services.

In some cases, this requires a shift from the historical approach of a focus on day-to-day service delivery to scanning the future and moving towards a department that is responsive to change, sustainable and efficient.

Fire department leaders must also adopt a business-like approach to leading and managing their departments. Along with their municipality's senior administration, they need to be proactive and examine all aspects of their service delivery systems to look for innovation in efficiency and effectiveness.

The following theoretical figure suggests how to allocate leadership time to effectively operate a fire department, scan for improvement opportunities and implement system improvements.

Figure 6: Fire Service Time Management Examples

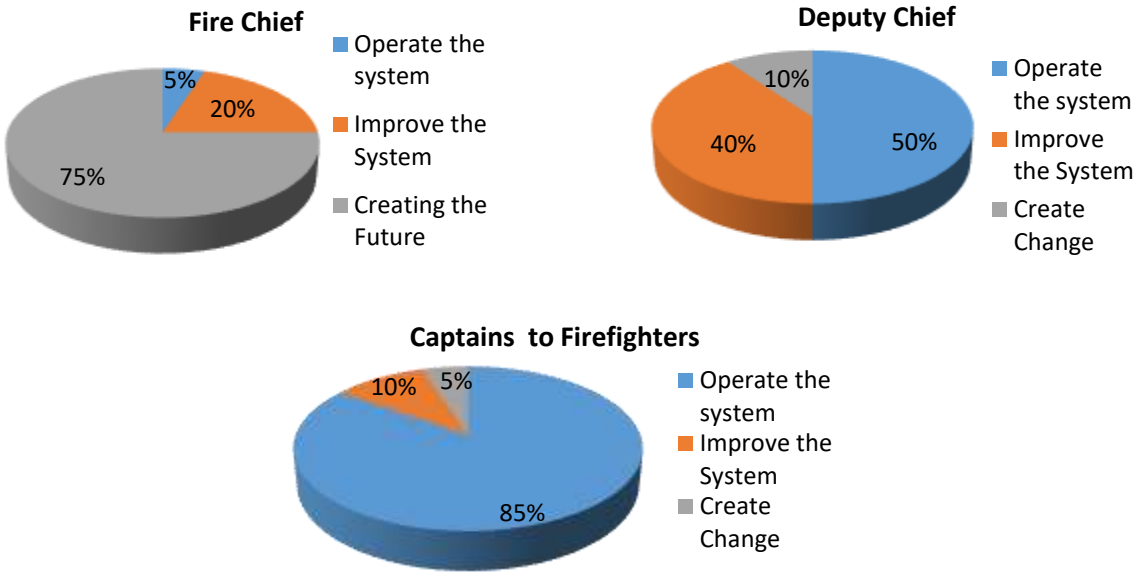


Figure 6 illustrates two important points:

1. The amount of time allocated to operating, improving, and identifying strategy varies at different levels in the organization.
2. Senior leadership positions in BFD must retain the capacity to identify and implement change.

The fire chief is responsible for the overall management and leadership of BFD in accordance with Town of Blackfalds Bylaw 1312.24. Key responsibilities include:

- Reporting through the Director of Emergency Management and Protective Services to ensure proper administration and operation of the department
- Preparing and presenting the annual operating and capital budget for approval
- Preparing and delivering an annual report to the CAO and Council
- Appointing qualified individuals as members of the department
- Developing and implementing policies, procedures, rules, and regulations to support effective and efficient department operations
- Administering and enforcing the Fire Services Bylaw and other corporate bylaws related to fire protection services

- Administering and enforcing all departmental orders, policies, procedures, rules, and regulations
- Liaising with the Fire Commissioner's Office and other agencies as directed by Council
- Developing and maintaining mutual aid, automatic aid, and fire protection agreements or response plans with partner emergency agencies
- Overseeing the activities of all divisions within the department
- Responding in support of BFD personnel to emergency incidents within or beyond municipal boundaries, as appropriate and within approved guidelines

The fire chief delegates specific duties and/or portfolios to each deputy chief to support efficient and effective departmental operations. Well defined roles, steady professional leadership, and strong administrative practices help build a cohesive, resilient, values-driven organization that embraces change as part of everyday work.

The core functions of the BFD administrative team include:

- Policy, Governance & Compliance: Upholding municipal bylaws, policies, and operational guidelines
- Financial Stewardship: Managing operating budgets, capital planning, and long-term asset lifecycles
- Human Resources: Overseeing recruitment, retention, succession planning, performance management, employee wellness, and safe work environments
- Training & Professional Development: Ensuring training programs meet recognized standards and support growth and leadership development
- Operational Readiness: Maintaining apparatus, equipment, and facilities to ensure reliability and availability
- Communications & Public Relations: Supporting clear, two-way communication that builds trust with Council, administration, and the public
- Interagency Coordination: Managing mutual aid agreements and regional partnerships
- Accountability & Performance: Using data to measure outcomes, improve operations, justify budgets, and guide strategic planning
- Culture & Ethics: Modeling safety, teamwork, respect, and integrity to sustain organizational health

While job descriptions outline core responsibilities, increasing legislative requirements, 24/7 operational demands, community growth, and rising emergency call volumes have placed additional pressure on the entire team. A high-functioning organization depends on leadership capacity, current, accurate job descriptions, and a shared understanding of roles, enabling collaborative progress toward the department's vision, mission, and goals.

BFD maintains a respected chain of command that is understood and respected by all members of the department. The chief officers coordinating together with the captains provide oversight of scheduling, training, supervision, and daily operations, and all play a critical role in emergency response. To maintain effectiveness as demands increase, all positions must have clearly defined responsibilities and complementary expectations.

Because fire officers and firefighters often work separately from administrative staff, frequent communication among chiefs and officers is essential to close perceived gaps and reinforce commitment to mission and service excellence. Maintaining high hiring standards and training levels for all positions is vital to continuing excellence in service delivery.

A unified fire service with well-defined roles, current job descriptions, and strong internal communication will sustain operational performance, support organizational growth, and strengthen public trust.

Traits of a high-performing team include:

- Strong communication
- Transparency
- Collaboration
- Support
- Clarity
- Adaptability
- Reflection

3.3.4 Command Structure

Effective emergency services operations rely on a clearly defined command structure to ensure safe, coordinated, and efficient incident management. A recognized incident command system supports the following outcomes:

- Clear identification of the lead agency (fire, police, EMS, or other)
- Maintenance of appropriate span-of-control over all resources
- Interoperability with allied and responding agencies
- Defined tactical objectives and operational benchmarks
- Standardized communication protocols
- Enhanced situational awareness and overall scene safety

All BFD officers and firefighters are trained in incident command, which provides a scalable and adaptable approach for managing all-hazards emergency responses. Incident command principals are applied at every incident, enabling seamless expansion or contraction of command roles based on the size, complexity, and risk profile of the event.

BFD utilizes the industry-recognized "Blue Card" incident command framework, which aligns with *NFPA 1561: Standard on Emergency Services Incident Management System and Command Safety*. This framework establishes the required structure and operational principles for incident management systems used across emergency services.

For multi-jurisdictional incidents, BFD transitions to the provincial Incident Command System (ICS) model to ensure compatibility with unified command structures. This alignment supports effective coordination and integration with external emergency management agencies when required.

3.3.4.1 Organizational Structure

An effective fire department organizational chart should be a clear, visual representation of command, control, and accountability—designed to support both daily operations and emergency incident management. The chart must show a single, unbroken line of authority from top leadership down to frontline personnel.

A strong org chart mirrors how the department operates during emergencies.

- The Fire Chief aligns with Incident Commander (strategic level)
- Deputy Chiefs align with Sections (Operations, Planning, Logistics, Admin)
- Company Officers (Captains/Lieutenants) align with tactical supervision

Figure 7: Blackfalds Fire Department Organization Chart (2026)

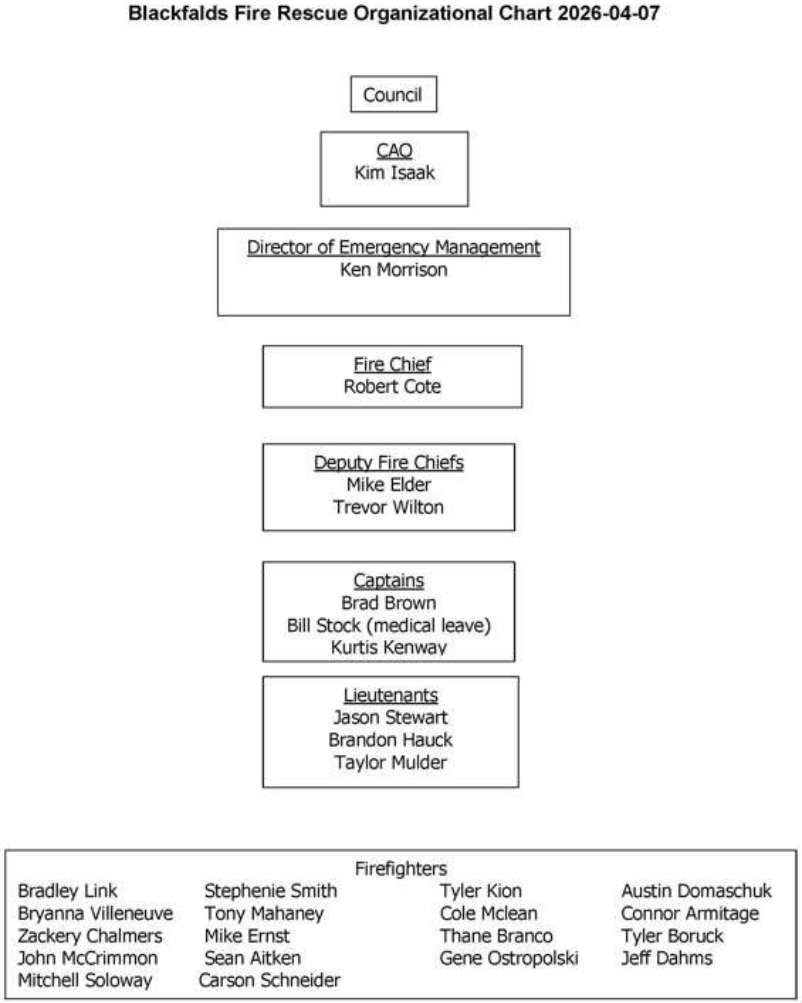
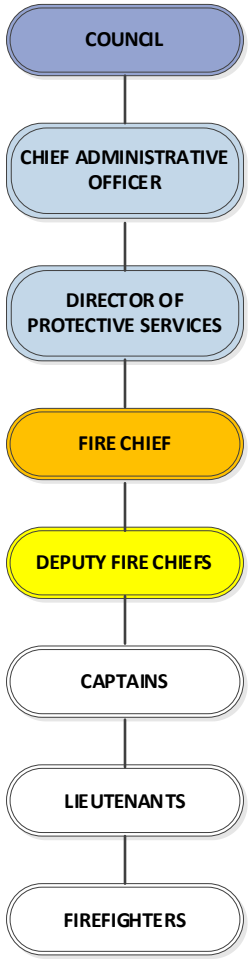


Figure 8: Typical Organizational Structure



Observation
Observation #3: The current 2026 organizational chart appears to show an unclear and reporting structure below the deputy chief level. There are missing connector lines or explanations showing who reports to whom. In regard to span of control, an effective structure suggests: **Fire Chief → Deputy Chiefs → Captains → Lieutenants → Firefighters** Also, the number of personnel at each level is not clearly aligned or grouped. It is not obvious which firefighters report to which officers.
Recommendation
Recommendation #3: It is recommended BFD redesigns the current organizational chart to show clear hierarchy, defined reporting relationships, visual structure, and role clarity. **Suggested completion:** 1–6 months **Strategic Objective:** #1 Administration, #5 Emergency Response and Operations **Cost:** Neutral (Administrative) ***Rationale:*** *In redesigning the organizational chart, it would show the following benefits:* • *Clear everyone knows who reports to whom* • *True span of control* • *Functional organized by responsibility* • *Operationally aligned matches emergency command structure* • *Professional suitable for manuals and presentations*

3.3.5 Administrative Support

An administrative assistant is a major force multiplier for a fire department. They free up chiefs, officers, and firefighters to focus on emergency response, training, and public safety by taking on the complex administrative, financial, and organizational work that keeps the department running.

The core benefits of utilizing an administrative assistant include:

- Scheduling and meeting coordination
- Correspondence and document preparation
- Record keeping
- Process and manage invoices for payables and receivables
- Typically, the first point of contact for the public whether in person or by phone

- Assist with payroll, benefits administration, and maintaining personnel records
- Aid with logistics, documentation, and communication during major events
- Protect confidential and sensitive information

Administrative support is a critical requirement for the fire chief and deputy chiefs, as it enables them to dedicate their time and expertise to strategic leadership, emergency readiness, and operational decision-making rather than being burdened by routine administrative duties. Modern fire services manage a wide range of complex responsibilities, including budgeting, training documentation, regulatory compliance, personnel scheduling, procurement, community risk-reduction initiatives, and interagency coordination, all of which demand consistent, detail-oriented administrative oversight.

Inadequate administrative support can reduce departmental efficiency and force senior officers to divert time from their core strategic responsibilities and may delay program implementation, reduce internal responsiveness, and challenge the service's ability to meet evolving service and compliance requirements.

Observation
Observation #4: BFD does not have an administrative assistant position but rather relies on their chief officers to complete all administrative support functions.
Recommendation
Recommendation #4: BFD should implement a dedicated administrative assistant position to support all departmental operations.
Suggested completion: 12-24 months
Strategic Objective: #1 Administration
Cost: Approximately $60,000 plus benefits
Rationale: *The administrative workload within BFD requires sufficient capacity to sustain a safe, effective, and forward-looking fire department. A dedicated administrative assistant will provide essential support to the fire chief and deputy chiefs by managing ongoing administrative and operational tasks, ensuring the department can meet its current and future organizational demands. A dedicated administrative support position ensures accuracy, continuity, and efficiency across these functions, reducing the likelihood of errors and allowing command staff to remain focused on high level priorities such as incident management, long term planning, and organizational leadership.*

3.3.6 Non-Administrative Staff

ALL BFD staff provide emergency critical services to the community, contracted areas, and mutual aid partners, with a focus on minimizing or preventing loss of life and property through emergency response, public education, and fire prevention activities. All personnel are key to the development of relationships internally and externally in order to optimize service to the community.

3.3.6.1 Captain

BFD has three captains, each with primary responsibilities for coordinating and managing emergency response, training, and communication. One of these captain positions is currently on approved leave. The captain position is responsible to support the chief officer's in maintaining operational readiness and supervision through the leadership and management of their assigned firefighters.

Job Performance Requirements (JPR) for this position reflect the expectations found in *NFPA 1021 Fire Officer Professional Qualifications*, *NFPA 1561Emergency Services Incident Management System*, *NFPA 1500 Fire Department Occupational Safety and Health Program*, and general industry best practices, including:

- Leadership and supervision
- Incident command and scene management
- Safety and Risk management
- Administrative and organizational responsibilities
- Training and competency development
- Operational readiness and equipment management
- Community interaction and professional conduct
- Policy compliance and ethical standards
- Post incident analysis and continuous improvement

3.3.6.2 Lieutenant

The lieutenant position is meant to support a path of succession toward the operational and leadership aspects of the Fire Department. The lieutenants provide additional leadership, oversight, and scene management in support of the captain.

BFD maintains three senior lieutenants. JPR's for this position reflects expectations of an experienced, informal leader who sets the tone for the crew and supports company-level operations, including skills from NFPA 1001 (Firefighter Professional Qualifications), NFPA 1021 (leadership elements), NFPA 1500 (safety), and general industry best practice.

- Fire ground operations and technical competency
- Leadership, mentoring and crew support
- Safety, risk awareness and compliance
- Apparatus, equipment, and station readiness
- Training, skill development and professional growth
- Documentation, reporting and administrative support
- Customer serviced and community interaction
- Teamwork, conduct and organizational culture
- Ethical behaviour and professional integrity

3.3.6.3 Firefighter

The firefighter position performs a variety of technical work within the paid on-call fire department to provide emergency response services to the community with a focus on minimizing or preventing loss of life and property. All firefighters are expected to actively participate in training, emergency response, and other duties as required.

JPR's for this position reflect expectations from *NFPA 1001 Firefighter Professional Qualifications, NFPA 1500 Standard on Fire Department Occupational Safety, Health, and Wellness Program, and* general fire-service best practices.

- Fireground operations and tactical performance
- Safety, PPE use and risk management
- Equipment, apparatus, and station readiness
- EMS response and patient care
- Training participation and skill development
- Documentation, reporting and administrative tasks
- Teamwork, conduct and crew integration
- Community interaction and customer service
- Ethical conduct and professional integrity

3.3.7 Recruitment

Recruitment is a critical aspect for emergency services. Communities place significant trust in their fire department, relying on the appropriate number of trained personnel to deliver the highest level of service during their most vulnerable moments. For this reason, the selection process for new members must be thorough and well-designed.

Experience across the emergency services sector shows that maintaining high entry standards improves recruitment outcomes and departments are most successful when they actively encourage qualified applicants to apply. Effective recruitment typically includes targeted advertising and promotional efforts that highlight the benefits and personal fulfillment associated with serving in the fire service.

Existing staff are often the best recruitment ambassadors and should be engaged to support recruitment efforts. Prospective firefighters must be prepared to commit to regular practices, ongoing training, and emergency callouts. Maintaining a high level of physical fitness and mental resilience is essential. All required training and equipment are provided upon acceptance into the department.

Firefighter opportunities are posted on the Town of Blackfalds's web site. Application packages, including the application form, physical declaration, and respirator forms can be downloaded and submitted to the fire chief for review.

Ideal firefighter recruits for a paid-on-call fire department come from within the community, where the ability to respond quickly is necessary when an emergency call comes in. Most POC fire departments have residency within the community as a basic requirement. As a component of the eligibility criteria to become a BFD firefighter is to live in the Blackfalds fire district.

BFD's recruitment process is well established and supported through social media, community networks, word-of-mouth referrals, and engagement at community events. All firefighters and their families are members of the Blackfalds Firefighters Association which organizes a number of social events each year, participates in various community activities in support of the Town of Blackfalds and local organizations.

The basic eligibility to become a member of the BFD includes:

- Minimum of 18 years of age
- Live in the Blackfalds Fire District
- Valid class 5 driver's license
- English language proficiency
- Physically fit
- Possess standard first aid and CPR – level C
- Police security check

Accepted firefighter recruits are included in the regular Wednesday night training nights where they commence their training to the recognized NFPA standards along with the other BFD firefighters. All recruits are assigned to a mentor (existing firefighter) and follow a firefighter training checklist and serve a 6-month probationary period. Upon successful completion of all requirements, they are promoted to the position of firefighter.

Feedback from interviews and surveys indicates that BFD's recruitment efforts have been effective in attracting high-quality applicants. BFD trains, equips, and maintains its firefighters to recognized NFPA standards, requiring substantial financial and resource investment. As such, the selection of recruits must be carefully managed.

3.3.8 Retention

Like many fire services that rely volunteer or on paid-on-call firefighters, BFD is vulnerable to the operational impacts that occur when trained and experienced personnel resign or retire. These departures can create immediate gaps in response capability, institutional knowledge, and leadership depth.

Because the pool of qualified replacements is often limited due to preferred qualifications, residency expectations, and the training and certification requirements associated with NFPA-aligned service delivery, the department must be proactive in retaining its existing members. By prioritizing retention and investing in the long-term satisfaction and development of its paid-on-call workforce, BFD can maintain a stable, experienced, and capable roster, supporting both operational effectiveness and the department's ability to meet community expectations well into the future.

A significant challenge for the retention of volunteer or POC firefighters is the demand for career firefighters, particularly from larger metro fire departments. This pressure is expected to continue into the future, as there is a continuous demand for career firefighters throughout the province and within Canada. This will undoubtedly result in an increase in resignations in the future. Anticipating vacancies as much as possible, assist with maintaining the ideal roster strength of trained firefighters.

Common factors contributing to resignations, reduced interest in rural firefighting roles, or broader retention challenges include:

- Retirement
- Increased demands of department obligations
- Low call volume
- Family obligations
- Primary work obligations
- Relocating away from the community
- Increased training demands
- Occupational health and safety requirements
- Full-time/career firefighter opportunities
- Low compensation

Paid on-call firefighters represent a significant investment in time, training, equipment, and mentorship. When these members leave, the department must not only recruit new candidates but also commit substantial resources to bring them to the same level of competency and confidence.

Retention of volunteer or paid on-call firefighters has become a significant issue for many fire departments throughout North America, with many provincial and state fire chief organizations pursuing initiatives to address these challenges. To mitigate potential future retention challenges, BFD should explore a range of retention-focused initiatives.

These may include strengthening existing recognition and appreciation programs, improving communication and engagement between leadership and members, offering flexible training and participation models, and ensuring that expectations around availability, training, and operational commitments are reasonable and clearly communicated. Additionally, reviewing compensation, benefits, and incentive structures may help ensure that the department remains competitive with neighbouring jurisdictions and attractive to members balancing work, family, and community obligations.

Many departments are responding by adopting innovative retention strategies and learning from one another's successes. Some fire departments have tried, with minimal success, to initiate a "training bond" on new firefighters that require a defined commitment of service to the department in exchange for providing NFPA level training. Given the current climate to attract firefighters into smaller paid on-call fire departments, this is not an advisable approach.

Alberta Fire Chiefs Association has promoted potential approaches including enhanced compensation models, tax credits, benefit packages, and structured recognition programs that reinforce the value of POC service. Community-based recognition and employer-focused incentives, such as tax considerations or public acknowledgment for supportive workplaces can further strengthen retention by reinforcing the shared responsibility of sustaining local emergency services.

Observation

Observation #5: While overall firefighter retention is not currently an issue within BFD, the leadership is aware of increasing pressures affecting the retention of highly trained firefighters in paid-on-call (POC) fire departments. Increased training requirements, growing call volumes, and the competing demands of personal and full-time employment place significant strain on POC members. BFD, together with the Association have taken meaningful steps to support and recognize its firefighters such as long-service recognition and awards, retirement acknowledgements, mental-health initiatives, internal promotional opportunities which provide a solid foundation for member engagement and well-being. However, firefighter availability can be influenced by the policies and flexibility of local employers. While BFD benefits from strong internal recognition practices, there is limited formal recognition or engagement directed toward employers who support POC firefighters by allowing them to respond during work hours.

Recommendation

Recommendation #5: BFD should enhance its retention strategy by developing a structured employee-recognition and engagement program. This may include formal acknowledgments, public recognition events, certificates of appreciation, or partnership initiatives that highlight the essential role employers play in supporting community emergency response.

Suggested Completion: 1-12 months, ongoing thereafter

Strategic Objective: #5 Emergency Response and Operations

Cost: TBD, dependant on program details

Rationale: *Employer support is a key factor influencing POC firefighter availability, especially during weekday daytime hours. Strengthening relationships with local employers and recognizing their contributions can improve response capacity and encourage continued participation. This approach complements firefighter-focused initiatives by addressing a major external constraint on availability. Establishing a structured recognition program helps reinforce these partnerships, promote supportive practices, and enhance long-term retention and operational reliability.*

3.3.9 Remuneration

BFD's Fire Chief and two Deputy Chiefs receive compensation and benefits as established by the Town of Blackfalds. POC firefighters are classified as part-time employees and are compensated hourly for emergency responses and training activities. Their compensation structure aligns with industry practices in Alberta and is based on position level, completed training and certifications, operational experience, and ongoing active participation.

As noted earlier, compensation is not the primary factor influencing the recruitment or retention of POC firefighters. However, it remains important to ensure that pay for both emergency response and training remain consistent with provincial averages.

To remain competitive with comparable fire departments, the Town of Blackfalds should regularly review POC compensation rates and benefits across Alberta and adjust, as necessary.

3.3.10 Promotions and Advancement

Promotions within BFD occur when vacancies arise due to resignation, retirement, or organizational restructuring. The fire chief holds the authority to make promotional decisions within the department, ensuring that leadership roles are filled by individuals who demonstrate the competencies, commitment, and professionalism required to support safe and effective operations.

Promotional decisions are typically based on a balanced assessment of several key factors, including formal training and certification levels, years of operational experience, consistent participation in emergency responses and scheduled practices, and a demonstrated willingness to assume additional responsibilities. These criteria help ensure that officers possess both the technical skills and leadership attributes necessary to guide crews, support incident command, and uphold departmental standards.

A healthy promotional system depends on members being both willing and prepared to compete for advancement opportunities. This requires a culture that encourages professional development, mentorship, and continuous learning. When firefighters understand the pathway to promotion and feel supported in pursuing it, the department benefits from stronger leadership depth, improved succession planning, and greater organizational resilience.

To strengthen this process, BFD has formalized elements of its promotional framework, such as establishing clear competency profiles for each rank, offering officer development programs, and providing structured feedback to members interested in advancement. These initiatives help ensure that promotions are transparent, merit-based, and aligned with the long-term needs of the organization.

Observation
Observation #6: BFD administration has recognized the importance of proactively preparing personnel for advancement and promotion as vacancies arise. To support this goal, BFD has begun formalizing key components of its promotional framework, including the development of clear competency profiles for each rank, the delivery of officer development opportunities, and the provision of structured feedback for members interested in career progression. These efforts contribute to a promotional system that is transparent, merit based and aligned with the long - term operational and leadership needs of the organization.

Recommendation

Recommendation #6: Implement a comprehensive fire officer development and leadership training program that identifies potential future officers early in their careers, provides mentorship, and prepares them for supervisory and management responsibilities. This program should incorporate career pathing, targeted training, leadership shadowing, and secondment opportunities aligned with the Fire Master Plan implementation schedule and operational growth triggers.

Suggested completion: 24-48 months, with ongoing continuation thereafter

Strategic Objective: #1 Administration; #5 Emergency Response and Operations

Cost: TBD, based on training requirements

Rationale: *Ensuring that qualified individuals are ready to step into officer and chief officer roles is essential for organizational stability and continuity. A structured succession and officer development program will equip BFD with the tools needed to maintain consistent leadership as the department grows.*

By preparing internal candidates in advance, the organization can reduce the disruption associated with reactive promotions, support smoother leadership transitions, and reinforce confidence among both operational staff and senior management. This approach also strengthens workplace culture by increasing transparency in career progression and helping personnel understand the competencies and expectations required for advancement.

Fire officer training and certification pathways often span a year or more, making early identification and mentorship critical. Establishing a formal program that develops, trains, and supports prospective officers will create a strong pool of qualified internal candidates ready to compete for supervisory and management positions. This proactive strategy enhances succession planning, supports organizational resilience, and ensures promotional processes remain fair, efficient, and aligned with NFPA standards and municipal expectations.

3.3.11 Succession Planning

BFD is proactively positioning itself to meet emerging service demands by investing in its people and strengthening leadership capacity. Current supervisory and management roles have been filled through a competitive process, underscoring the department's commitment to maintaining a high standard of public safety.

Officer positions have also been successfully filled through internal promotions, reflecting the dedication and community-focused commitment of BFD members. This organic approach provides a strong foundation upon which to build a more structured and forward-thinking succession planning program, one that ensures leadership continuity, enhances operational readiness, and supports a positive workplace culture. As these future leaders transition into new roles, the need for intentional leadership development and mentorship becomes more apparent.

Formal succession planning offers an opportunity to strengthen the leadership pipeline by equipping future leaders with the tools, confidence, and competencies required for success. With strong public support, a collaborative internal culture, and a motivated workforce, BFD is well-positioned to introduce a tailored leadership development framework that is both motivated and achievable.

A formal succession program is essential in the fire service because it ensures leadership continuity, operational stability, and the long-term sustainability of the organization. Fire departments rely on experienced officers who possess not only technical skills but also judgment, decision-making ability, and a deep understanding of local risks and operational expectations. As retirements, resignations, and promotions occur, as they inevitably do, these competencies cannot be replaced informally or on short notice.

A structured succession program identifies future leaders early, provides them with the training, mentorship, and experience needed to assume greater responsibility, and ensures that the department maintains a strong bench of qualified officers. This reduces operational risk, supports safe incident command, and prevents leadership gaps that can compromise response effectiveness, morale, and organizational culture.

The education, certification, and time commitments required to meet officer-level standards can be significant barriers for potential candidates especially when expectations are unclear and no defined, achievable pathway exists. This uncertainty leaves members unsure of how to prepare for advancement, increases the likelihood of inconsistent readiness for supervisory roles, and may delay the ability to fill vacancies with qualified personnel.

The absence of a clear and accessible advancement process can also affect morale and discourage long-term professional development, particularly among paid-on-call members who must balance fire service responsibilities with work and family obligations. Succession planning also strengthens recruitment and retention by demonstrating that the department invests in its people and provides clear pathways for advancement.

A formal succession program protects the department's institutional knowledge, enhances readiness, and ensures that the fire service can continue meeting community expectations with professionalism and confidence. In smaller or hybrid departments, where officer training and leadership depth may be limited, a formal succession program is especially critical to maintaining continuity during periods of transition.

Observation

Observation #7: BFD does not currently have a formal, department wide succession pathway to prepare members for upcoming officer varies. While fire administration provides informal exposure to interested officers and firefighters by offering higher levels of training and involving them in additional responsibilities across various roles, this approach lacks the structure and predictability needed to support long term leadership development.

Recommendation

Recommendation #7: Implement a formal succession planning and leadership development program that identifies, mentors, and prepares future leaders. This program should incorporate career pathing, targeted training, leadership shadowing, and structured development opportunities aligned with the Fire Master Plan implementation timeline and operational growth triggers.

Suggested completion: 12-24 months, ongoing thereafter

Strategic Objective: #1 Administration

Cost: Neutral. No additional budget required, subject to available staff capacity.

Rationale: *A formal succession program reinforces a culture of merit-based advancement by replacing informal or last-minute decisions with clear expectations, competencies, and pathways for leadership progression. This clarity improves morale, supports professional development, and enhances retention, especially in paid-on-call environments where members balance competing commitments. Operationally, it ensures a steady pipeline of qualified officers to maintain service delivery, supervise incidents, support training, manage administration, and meet NFPA and municipal requirements. Structured succession planning strengthens resilience, reduces risk, and ensures BFD can consistently meet community expectations with professionalism and confidence.*

3.3.12 Health and Wellness

The active pursuit of employee health and wellness is essential to the success and sustainability of an organization. A strong wellness culture can yield numerous benefits, including:

- Early recognition and treatment of illness
- Reduction in absenteeism due to short/long-term illness
- Decreased injuries during normal duties
- Decreased workers' compensation board (WCB) premiums
- Increased employee career longevity
- Improved work/life balance

BFD demonstrates its commitment to firefighter health and wellness through continuous station safety enhancements, consistent personal protective equipment (PPE) maintenance and replacement, and strict enforcement of safety standards in both training and on the emergency ground. All members are expected to meet established fitness requirements, supported by on-site fitness equipment available in the fire station as well as membership to the municipal recreation centre.

Proper PPE usage and functional fitness activities are routinely incorporated into training nights to promote operational readiness. Training props are constructed to accurately simulate emergency situations in a realistic but controlled manner. Mental health and overall wellness are also strongly supported, with access to professional mental-health resources and critical-incident debriefings provided whenever requested.

3.3.12.1 Rehabilitation and Decontamination

During and after an emergency event that involves significant physical effort and exposure to potentially harmful toxins, a protocol to ensure proper medical monitoring, rest and decontamination is critical to the health and welfare of the firefighters. Areas away from the immediate danger zone that provides shelter and amenities to accomplish these goals can be achieved by utilizing nearby physical structures where available. Other times suitable facilities are not available. The utilization of a dedicated rehab vehicle provides multi-functional capacity that can be added to the inventory.

BFD currently has a rehab and decontamination trailer along the necessary SOG and SOP to properly safely operate in these types of environments.

3.3.13 Policies, Procedures, and Guidelines

A critical tool in the employer's scope of responsibility is the establishment of approved policies, procedures, and guidelines. All these documents must be appropriate for the situation, vetted, approved, and documented. It is the employer's responsibility to develop, institute and establish compliance. The employees have a right to know about potential hazards in the workplace, a right to participate, and in certain circumstances, a right of refusal.

Emergency response is dynamic, where split-second decisions are made to protect the lives of the public and their fellow responders. Therefore, the safe and effective operation of the fire service must have an industry-specific set of policies, procedures, and guidelines. Policies will outline expectations, while procedures are the accepted ways of adhering to these policies.

Fire department policies along with standard operating guidelines (SOG's) and standard operating procedures (SOP's) are essential components of a fire department. Formal, written policies and procedures establish consistent expectations and practices focusing on safety and effectiveness throughout the organization. Policies, procedures, and guidelines are often tied to the department or municipal mission or vision statements.

All approved policies, procedures and guidelines should be contained in a single fire department manual and/or available online that is easily accessible to all members of the organization with accountability checks in place, regularly scheduled review and update to policies, procedures and guidelines should be a common practice in an organization.

3.3.13.1 Policies

Fire department policies are guiding principals that set expectations and provide guidance to all members of the organization. They represent the philosophy and conduct standards to be adhered to. Typical policies include "all members shall" or "shall not," that clearly define expectations and provide consistency in practice.

3.3.13.2 Standard Operating Procedures

Fire department standard operating procedures (SOP) assist all members to know how to act and re-act in day-to-day situations. Polices are not meant to limit the ability of on-scene personnel to make decisions but rather allow a degree of flexibility in their decision-making process. When every firefighter is following the same SOP's, they can communicate effectively and work efficiently as a team. This improves accountability and safety of the public and responders.

3.3.13.3 Standard Operating Guidelines

Fire department standard operating guidelines (SOG) provide a foundation of best practices and are subject to situational interpretation based on approved policies and procedures. Guidelines allow for flexibility of application of a procedure as the situation dictates, while staying consistent with policy or procedure.

Observation
Observation #8: BFD maintains a solid inventory of policies and procedures that address the specialized, high risk, and technically complex nature of modern fire service operations. While these documents are updated as issues arise or practices change, the department does not currently follow a formal review schedule.
Recommendation
Recommendation #8: Establish an annual or bi-annual process to review and update all standard operating guidelines, policies, and directives governing emergency response and operational activities. This process should ensure alignment with NFPA standards, provincial OHS legislation, and recognized industry best practices.
Suggested completion: 1–24 months, with ongoing updates thereafter
Strategic Objective: #5 Emergency Response and Operations
Cost: Neutral. No additional budget required, subject to available staff capacity.
Rationale: *Fire and emergency response operations involve high risk; technically demanding tasks performed in environments that are immediately dangerous to life and health. These conditions evolve rapidly and require precise, consistent, and legally defensible response protocols.*
Without a structured review cycle, it becomes challenging to ensure consistent, safe, and compliant practices across all operational activities. Maintaining up-to-date policies and guidelines that reflect current expectations for all BFD personnel is essential to supporting safe, effective, and compliant operational practices. A comprehensive and current suite of fire-service-specific operational policies will enhance safety, standardize procedures, strengthen training, and improve overall organizational performance.

3.4 Public Fire Safety Education

Strategic Objective #2: Public Fire Safety Education

Enhance public fire safety education programs that reflect Blackfalds' diverse community profile and identified risk areas. BFD will expand its outreach and engagement efforts to further promote fire prevention, life safety, and emergency preparedness, reinforcing a shared culture of safety and community resilience.

Public education programs and active involvement in the community are important efforts that inform and engage citizens to think about fire safety and risk reduction. BFD is very active in their community particularly through their firefighter association and conducts a number of activities to support fire safety education and other charity events in the community.

Public education is an essential part of fire prevention. BFD is active in the community and participates in fire safety education and community events. These efforts should continue and be further aligned with the CRA.

The current risk profile indicates the need for targeted residential fire safety programming. Residential occupancies represent a major portion of the Town's building stock, and older homes, lightweight construction, smoke alarm maintenance, carbon monoxide alarms, home escape planning, and cooking-related fires should remain priority education themes.

Public education should be planned annually and linked to local risk. This may include:

- Smoke alarm and carbon monoxide alarm campaigns
- Residential fire safety visits
- School and daycare programs
- Senior and vulnerable population fire safety programs
- Cooking safety messaging
- Garage, battery charging, and home workshop safety
- Seasonal fire safety campaigns
- FireSmart and wildland-urban interface awareness where applicable
- False alarm reduction education
- Social media and website-based prevention messaging

A formal public education plan does not need to be complex, but it should identify target audiences, key messages, timing, responsibilities, and how success will be measured.

Observation
Observation #9: BFD is active in community fire safety education, and the CRA, identifies opportunities to focus public education on residential fire safety, smoke alarms, carbon monoxide alarms, escape planning, and vulnerable populations.
Recommendation
Recommendation #9: BFD should develop an annual Community Risk Reduction and Public Education Plan that identifies target audiences, key messages, delivery methods, responsibilities, and performance measures. **Suggested completion:** 12–24 months **Strategic Objective:** #2 Public Fire Safety Education / #3 Fire Prevention and Fire Safety Code Alignment **Cost:** Neutral. No additional budget required, subject to available staff capacity. ***Rationale:*** *Public education reduces emergencies before they occur. A structured annual plan ensures education efforts are targeted, measurable, and aligned with local risk rather than delivered only through general community events.*

The current CRA identified 26 low to high levels risks and 23 key findings. By proactively addressing these findings and risks, BFD can structure and prioritize public education programs on the risks identified. There are opportunities to target smoke alarm safety in all residential homes, but with an enhanced focus on risks with older as well as newer lightweight construction residential occupancies based on the findings in the CRA. The 2021 census indicated there were 4507 residential occupancies.

- 3326 are single detached
- 1054 are multi-unit
- 125 mobile homes

13.6 % of the Town's residential building stock was built prior to the introduction of the 1990 preceding the adoption of the National Building Code – NBC Alberta Edition (AE) 2023. Older construction methods may lack modern fire separation, alarm systems, and fire-resistant materials, increasing the potential for rapid fire spread. The majority of residential structures constructed since early 1980 were built with lightweight construction materials which are susceptible to premature structural failure during fire conditions.

The Town of Blackfalds should promote functioning smoke and CO alarms for all residential occupancies with a concentrated focus on older residential properties as well as ensure identification of all buildings with lightweight construction, primarily those constructed using wood framing. It is anticipated that Blackfalds will collect and document information on buildings with lightweight construction to update the CRA during the annual review and updating process. Furthermore, it is expected that the BFD will integrate this information into their pre-planning program.

Blackfalds has five schools, plus one new Red Deer Catholic K-5 school currently under construction. There are also eight registered licensed daycare/childcare providers in Blackfalds including:

- Aspen Lakes Discovery Center Ltd.
- Aspen Lakes Discovery Center West
- BGC Wolf Creek Blackfalds
- Kids 3 Blackfalds Daycare
- Kids Konnection Family Day Home Program Ltd.
- Little Soldiers Family Day Care Inc.
- Little Star Play School and Out of School Program
- Little Star Out of School Program

There is opportunity to partner with these organizations to promote fire safety with respect to smoke alarms, escape planning and the most reported ignition sources within the town. Robust public-education programs also reinforce the fire service's role as proactive leaders in safety—not solely responders to emergencies.

Observation
Observation #10: Population demographics and building profiles within the Town of Blackfalds indicate a clear need for BFD to prioritize fire safety programming for residential properties. Targeted public education efforts—delivered through a combination of in person home safety visits and a purpose-built social media strategy—should emphasize fire prevention practices and the importance of properly installed and functioning smoke and carbon monoxide detectors.

Recommendation

Recommendation #10: Develop and implement a formal structured public education program focused on residential fire safety. This program should include designated content themes such as fire prevention tips, smoke and CO detector maintenance messaging, and other risk reduction information tailored to local community needs.

Suggested completion: 12-24 months

Strategic Objective: # 2 Public Fire Safety Education

Cost: Neutral. No additional budget required, subject to available staff capacity.

Rationale: *Public education is a cornerstone of effective fire service operations because it helps prevent emergencies before they occur. By teaching residents about fire prevention, emergency preparedness, and safe behaviors, fire departments can reduce incident rates, protect vulnerable populations, and strengthen community trust. When individuals understand how to prevent fires, respond appropriately to alarms, and maintain safer home environments, firefighters encounter fewer hazardous situations, and the community becomes more resilient.*

3.4.1 Social Media

Social media has become an essential operational and public-engagement tool for modern fire services. When used strategically, it enhances community safety, strengthens public trust, and supports organizational effectiveness across multiple domains. Social media allows a fire department to deliver timely, targeted safety messaging directly to the community.

Social media messaging can include:

- Public education and risk reduction messaging
- Real-time emergency communication
- An avenue to strengthening community trust, transparency, and engagement
- Assist with recruitment and retention

In today's digital age, social media is one of the most powerful tools for delivering that education quickly and effectively. Platforms like Facebook, Instagram, TikTok, and X allow fire departments to reach thousands of residents instantly with fire prevention tips, weather-related warnings, real-time incident information, and community engagement messages. Short videos, infographics, and behind-the-scenes content help humanize the fire service and make safety messages more relatable.

Social media also allows two-way communication, enabling departments to answer questions, correct misinformation, and engage directly with the public. When used strategically, it amplifies the impact of public education and strengthens the connection between the community and its fire service.

Blackfalds maintains an active social media presence that includes fire safety and public education messaging. BFD page explicitly directs residents to follow the Blackfalds Fire Department on Facebook. The department regularly promotes community engagement and recruitment through Facebook posts. Local news coverage also references information posted by the Blackfalds Fire Department Facebook page**,** including public fire safety events and Fire Prevention Week activities.

3.5 Fire Prevention and Fire Safety Codes Alignment

Strategic Objective #3: Fire Prevention and Fire Safey Code Alignment

Strengthen fire prevention, Fire Safety Codes, inspection, public education, and community risk reduction programs to reduce fire risk, improve life safety, and support safe community growth. By emphasizing education, consistency, and collaboration, BFD will build positive relationships that support improved life safety, reduced community risk, and mutual understanding of fire safety expectations.

3.5.1 Fire Prevention Services Overview

Fire prevention is a core component of an effective fire protection system. While emergency response remains essential, the most effective way to protect life, property, critical infrastructure, and firefighters is to prevent fires and life-safety hazards before they occur. Fire prevention includes public education, fire inspections, Fire Safety Codes compliance, development review, fire investigations, pre-incident planning, and the use of risk information to guide municipal decisions.

BFD provides fire prevention and life safety services as part of its broader service delivery model. These services support the Town's responsibility to protect residents, businesses, visitors, and responding firefighters. Fire prevention also supports operational readiness by ensuring firefighters are familiar with higher-risk occupancies, fire protection systems, access routes, water supply, building layouts, and hazards that may be encountered during emergency incidents.

The Town of Blackfalds has an approved Fire Quality Management Plan (QMP) for the fire discipline. The Fire Chief and both Deputy Fire Chief are qualified Fire Safety Codes Officers along with one Captain (Group A designation), providing the Town with internal capacity to administer Fire Safety Codes services and support fire prevention activities. There are also an additional five members that are in the process of completing their courses. This is a positive foundation for the community and provides greater local control, consistency, and operational awareness than relying entirely on external inspection services.

3.5.1.1 Fire Quality Management Plan

A Fire QMP establishes the framework for how accredited Fire Safety Codes services are delivered. It defines the municipality's responsibilities, inspection practices, documentation requirements, enforcement process, staff qualifications, records management expectations, and quality assurance measures.

For Blackfalds, the QMP should function as more than a compliance document. It should be used as an active management tool to guide inspection priorities, ensure consistency, support performance reporting, and align fire prevention activities with community risk. As the community continues to grow, the QMP should be reviewed regularly to ensure it reflects current development patterns, risk profiles, staffing capacity, and service expectations.

Important elements of an effective Fire QMP include:

- Clear authority and responsibility for Fire Safety Codes service delivery
- Defined roles for Fire Safety Codes Officers
- Inspection priorities and service expectations
- Documentation and file management requirements
- Enforcement processes and escalation steps
- Permit and plan review coordination
- Fire investigation reporting requirements
- Quality assurance and internal review processes
- Training and certification requirements
- Annual reporting and performance measurement

The QMP must remain current, understood by staff, and integrated with fire prevention work plans, development review processes, pre-incident planning, and annual reporting to Council.

Observation
Observation #11: Blackfalds has an approved Fire QMP and internal Fire Safety Codes Officer capacity. However, the QMP should be reviewed and used as an active management tool to guide inspection priorities, records management, quality assurance, development review, and annual performance reporting.
Recommendation
Recommendation #11: The Town of Blackfalds should complete a review of its Fire QMP to ensure it reflects current legislation, community growth, staffing capacity, risk-based inspection priorities, documentation practices, and performance measurement expectations. **Suggested completion:** 6–12 months **Strategic Objective:** #3 Fire Prevention and Fire Safety Code Alignment **Cost:** Neutral. No additional budget required, subject to available staff capacity. ***Rationale:*** *A current and operationally integrated Fire QMP supports consistent Fire Safety Codes service delivery, improves accountability, strengthens compliance, and ensures the Town's fire prevention activities are aligned with current and future community risk.*

3.5.1.2 Regional Fire Prevention and Lacombe County Coordination

BFD responds to areas outside the Town through regional agreements, including areas within Lacombe County. Where Blackfalds firefighters are expected to respond to industrial, commercial, agricultural, or higher-risk occupancies in the County, there is value in improving coordination between emergency response, fire prevention, and pre-incident planning.

This does not mean the Town should assume unfunded inspection responsibilities for another municipality or negotiate a service fee for inspections. However, there is strategic value in exploring coordinated fire prevention and information-sharing processes with Lacombe County where BFD is the responding fire service.

This may include:

- Sharing inspection-related risk information for high-risk occupancies
- Joint pre-incident planning of industrial and commercial properties
- Coordinated review of developments that may rely on BFD response
- Shared understanding of fire access, water supply, and site hazards
- Consistent fire safety expectations in shared response areas
- Cost-recovery options for inspection or pre-planning services
- Joint training related to high-risk industrial or commercial sites

This approach would improve responder safety, increase operational familiarity, and support consistent regional community risk reduction.

Observation
Observation #12: BFD provides emergency response into areas of Lacombe County where industrial, commercial, and other higher-risk developments may create operational risk for Blackfalds responders.
Recommendation
Recommendation #12: The Town of Blackfalds should explore opportunities with Lacombe County to coordinate fire prevention information sharing, pre-incident planning, and Fire Safety Codes inspection collaboration for high-risk occupancies within BFD response areas. **Suggested completion:** 1–24 months **Strategic Objective:** #3 Fire Prevention and Fire Safety Code Alignment **Cost:** Neutral, No additional budget required, subject to available staff capacity unless expanded service delivery is negotiated ***Rationale:*** *Coordinating prevention and inspection information in shared response areas improves responder safety, strengthens pre-incident planning, supports consistent fire safety expectations, and ensures BFD has current information about hazards in the areas it may be required to protect.*

3.5.2 Fire Safety Codes Inspection Program

Fire inspections are an important risk reduction tool. They help identify hazards, maintain life safety systems, confirm fire protection systems are operational, support occupant safety, and reduce the likelihood of fire loss. Inspections also provide an opportunity to educate owners and occupants on their responsibilities under applicable legislation and codes.

The National Fire Code 2023 Alberta Edition applies to the use, operation, and maintenance of buildings and facilities. It includes requirements related to fire alarm systems, sprinkler systems, emergency lighting, fire safety plans, means of egress, storage, hazardous processes, and other fire and life safety matters. Although owners are responsible for maintaining compliance, the municipality has an important role in monitoring compliance and taking appropriate action when hazards are identified.

Blackfalds should continue moving toward a risk-based inspection model. This means inspection frequency should be guided by occupancy risk, life safety concerns, fire history, vulnerable populations, building complexity, and the potential consequence of fire. A risk-based model allows the Town to focus available resources where they provide the greatest public safety benefit.

Higher-priority occupancies should include:

- Schools and daycares
- Assembly occupancies
- Multi-unit residential buildings
- Senior's housing and care facilities
- Buildings with vulnerable occupants
- Industrial and commercial occupancies
- Buildings with hazardous materials or high fuel loads
- Buildings with complex fire protection systems
- Properties with repeated fire code concerns or false alarms

Lower-risk occupancies may be inspected less frequently or through request, complaint, business licensing, permit, or targeted campaign processes.

Observation
Observation #13: BFD conducts fire prevention and inspection activities; however, the Town would benefit from a formal risk-based inspection model that prioritizes higher-risk occupancies and vulnerable populations.
Recommendation
Recommendation #13: BFD should develop and implement a risk-based fire inspection program that establishes inspection priorities and suggested inspection frequencies based on occupancy type, life safety risk, fire protection systems, building complexity, fire history, and consequence of loss. **Suggested completion:** 12–24 months **Strategic Objective:** #3 Fire Prevention and Fire Safety Code Alignment **Cost:** Neutral. No additional budget required, subject to available staff capacity. ***Rationale:*** *A risk-based inspection program allows available Fire Safety Codes resources to be focused where they provide the greatest public safety benefit. It also supports consistency, transparency, and defensible service delivery.*

Observation
Observation #14: Fire prevention, Fire Safety Codes, investigations, public education, development review, and pre-incident planning create increasing administrative and technical workload for the Fire Chief and Deputy Chiefs.
Recommendation
Recommendation #14: As part of future budget planning, the Town should monitor Fire Safety Codes and fire prevention workload to determine whether additional administrative support, SCO training, or dedicated prevention capacity will be required. **Suggested completion:** 1 – 12 months, Ongoing, with annual review **Strategic Objective:** #3 Fire Prevention and Fire Safety Code Alignment, #1 Administration **Cost:** Neutral. No additional budget required, subject to available staff capacity. Future cost may arise dependent on service level. ***Rationale:*** *Growth in residential, commercial, and industrial development will increase inspection, review, documentation, and public education demands. Monitoring workload will allow the Town to make timely and evidence-based staffing decisions.*

3.5.3 New Development Plans Review

Fire prevention should be integrated into the earliest stages of municipal planning and development. Many fire protection challenges are created during the planning, subdivision, and engineering stages of development. Once development is built, issues such as road width, hydrant spacing, fire flow, access routes, turning radius, building separation, dangerous goods exposure, and secondary emergency access can be difficult and expensive to correct.

BFD and the Fire Safety Codes staff should be formally engaged in the review of:

- Municipal Development Plan updates
- Area Structure Plans
- Neighbourhood Structure Plans
- Outline plans
- Subdivision applications
- Development permit referrals
- Major commercial and industrial developments that require specialized fire response or training of risk

- Multi-unit residential developments
- Fire access route designs
- Water supply and fire flow reviews
- Developments involving hazardous materials or special fire risks

This approach supports risk reduction through design and engineering. It ensures fire protection considerations are addressed before development approval, rather than after construction or occupancy.

Early fire service involvement should focus on:

- Fire department access
- Apparatus turning movements
- Hydrant spacing and fire flow
- Secondary access and emergency egress
- Fire protection system requirements
- Fire lane design and enforcement
- Addressing and wayfinding
- Building separation and exposure protection
- Industrial buffering and hazardous materials considerations
- Pre-incident planning requirements
- Future service demand and response coverage impacts

Formalizing this role will support safer development, reduce long-term operational risk, and improve coordination between Planning, Engineering, Development, and Fire Services.

Observation
Observation #15: Fire Safety Codes and fire prevention input is most effective when incorporated early in municipal planning and development processes. Without early involvement, fire protection deficiencies may be identified only after development has occurred.
Recommendation
Recommendation #15: The Town should formalize BFD and Fire Safety Codes involvement in the review of Municipal Development Plan updates, Area Structure Plans, subdivision applications, engineering reviews, and major development proposals.
Suggested completion: 6–12 months
Strategic Objective: #3 Fire Prevention and Fire Safety Code Alignment
Cost: Neutral. No additional budget required, subject to available staff capacity.
Rationale: *Early fire service involvement supports risk reduction through design and engineering. It improves fire department access, water supply, fire flow, hydrant placement, emergency egress, industrial risk separation, and long-term operational sustainability.*

3.5.4 Fire Investigations

Fire investigation is an important part of the fire prevention system. Fire investigations identify origin and cause, support provincial reporting requirements, identify trends, and provide information that can guide public education, enforcement, product safety, and future prevention efforts.

BFD currently has chief officer capacity to complete fire investigations. This capacity should be maintained and supported through ongoing training and expansion into POC officer roles, reporting consistency, and integration with the Fire QMP. Investigation findings should be reviewed annually to identify local trends and opportunities for targeted risk reduction.

3.5.5 Records Management and Performance Measurement

Fire prevention records should be accurate, accessible, and useful for decision-making. Inspection files, orders, deficiencies, fire safety plans, investigation reports, occupancy information, pre-incident plans, and public education activities should be managed in a consistent digital system where possible.

Blackfalds should establish annual fire prevention performance measures. These may include:

- Number of inspections completed
- Number of re-inspections completed
- Number and type of violations identified
- Compliance timelines
- Fire safety plans reviewed
- Development referrals reviewed
- Public education events delivered
- Residents or students reached through education programs
- Fire investigations completed
- False alarm trends
- High-risk occupancies pre-planned
- Fire loss trends
- QMP review activities completed

Performance reporting will help Council and administration understand fire prevention workload, community risk, and future resource requirements.

3.6 Emergency Management

Strategic Objective #4: Emergency Management

Strengthen Blackfalds's capacity to prepare for, respond to, and recover from all types of emergencies. Through coordinated planning, training, and inter-agency collaboration, BFD will enhance community resilience, safeguard life and property, and support continuity of operations across a broad range of hazards.

The Alberta Emergency Management Agency (AEMA), under the authority of the *Emergency Management Act* and the *Local Authority Emergency Management Regulation* (AR 203/2018), requires every Alberta municipality to maintain a complete and functional emergency management program. This program must include:

- A municipal emergency management bylaw
- An Emergency Advisory Committee
- An Emergency Management Agency
- A trained Director of Emergency Management (DEM)
- A Municipal Emergency Plan (MEP)\
- Annual reviews
- Mandatory training requirements

The Town of Blackfalds' Emergency Management Program is structured around Municipal Emergency Management Bylaw 1252.20 and its participation in the Lacombe Regional Emergency Management Partnership (LREMP). Together, these frameworks outline how the Town prepares for, responds to, and recovers from emergencies.

Under this bylaw, the Town of Blackfalds is required to:

- Maintain a municipal emergency management agency
- Appoint an Emergency Advisory Committee to provide oversight and strategic direction
- Ensure compliance with Alberta's *Emergency Management Act*

The bylaw also recognizes that emergencies may exceed local capacity and therefore supports regional cooperation through the LREMP, which includes 11 municipalities. The Town's designated Emergency Coordination Centre (ECC) is located in the training room at Fire Headquarters. Because this space is not a dedicated ECC, it must be re-configuring each time it is activated.

As an active fire station, the facility may experience significant operational activity during emergencies and has limitations in amenities, such as washrooms and breakout areas that are typically required for effective ECC operations. Parking capacity is sufficient for an activation. A formal backup ECC has not been designated within the Town, the Town of Lacombe's ECC has noted to the location to serve as the secondary or back-up ECC location.

The emergency management program operates under the provincial Incident Management System (IMS). The Director of Emergency Management (DEM) and Protective Services serve as the DEM, with additional key IMS roles assigned to municipal staff across the organization.

As required by legislation:

- All elected officials must complete basic emergency management training
- The DEM and designated municipal staff must complete Incident Command System (ICS) training and other AEMA-approved courses, including at least one tabletop exercise every four years
- Training records must be maintained

BFD's role within the ECC will vary depending on the nature of the emergency, with the fire department assuming operational command when appropriate.

3.7 Emergency Response and Operations

Strategic Objective #5: Emergency Response and Operations

Provide emergency response services that reflect the community's identified risks, growth projections, and operational realities. Ongoing efforts will focus on optimizing deployment, staffing, and equipment to meet community growth while safeguarding life, property, and firefighter safety. Services will be delivered with a focus on a commitment to efficiency, effectiveness, and long-term value for the community.

A review of BFD call volume indicates total call volumes increasing year to year for the 2021 to 2025 period as indicated in the following table.

Table 9: BFD Incident Call Volumes (2021-2025)

Incident Subcategory	2021	2022	2023	2024	2025	Total 5-year	Total %
Alarms	69	105	119	120	131	544	45.18%
Animal Rescue	0	1	2	0	0	3	0.25%
CO Alarms	5	4	3	7	5	24	1.99%
Fire Grass / Brush	7	9	7	16	9	48	3.99%
Fire Outside	3	7	5	10	6	31	2.57%
Fire Rubbish	1	4		2	4	11	0.91%
Fire Structure	5	10	0	7	6	28	2.33%
Fire Vehicle	5	9	4	6	5	29	2.41%
Gas Leak	2	1	2	2	2	9	0.75%
Haz-Mat	1	2	2	3	4	12	1.00%
High Angle Rescue	0	0	1	0	0	1	0.08%
Illegal Burn	0	1	1	5	0	7	0.58%
Investigation Fire	1	3	1	5	1	11	0.91%
Investigation Odor	1	1	1	1	1	5	0.42%
Investigation Smoke	4	4	0	0	1	9	0.75%
Medical	25	30	30	25	26	136	11.30%
Motor Vehicle Incident	36	39	40	47	40	202	16.78%
Mutual Aid	14	11	14	9	11	59	4.90%
Public Hazard	5	4	6	7	3	25	2.08%
Rail Incident	0	0	1	0	0	1	0.08%
	184	245	239	272	255	1195	

3.7.1 Structural Firefighting

Fire department resources should be adequate to manage the most probable risks. Structural fire suppression encompasses a wide range of tactics for the control and extinguishment of fires originating from several sources. Single-family dwellings are the most prevalent building type in most communities. As a result, these types of structure fires are typically the most probable but only rated as a low to moderate risk as the consequences are limited to one or two properties. Residential fires are a leading cause of fire-related death, injuries, and property loss in Canada.

While in many communities, structure fires are not the most frequent emergency response request, they require a significant investment in resources (equipment and staffing), training and coordination to manage safely and effectively. Having enough firefighters on scene, supported by the right apparatus and equipment, is the backbone of an effective structure-fire response. Structure fires are dynamic, high-heat, rapidly evolving events that demand multiple tasks to happen at once: fire attack, search and rescue, ventilation, water supply, exposure protection, and incident command. Each of these tasks may require one or more companies of firefighters to accomplish them safely and effectively. Without sufficient personnel, these critical functions get delayed or omitted, which increases risk to trapped occupants, responding crews, and nearby structures.

Firefighters also work in extremely hazardous environments, high temperatures, toxic smoke, collapsing materials, so having enough trained people ensures safe rotation, rapid intervention capability, and the ability to maintain accountability and situational awareness.

Proper apparatus and equipment are equally essential because even a well-staffed crew cannot perform effectively without the tools designed for modern fire behavior. Engines with adequate pumping capacity, aerial devices for upper-floor access, thermal imaging cameras, SCBA, forcible-entry tools, and reliable communication systems all directly influence how quickly a fire can be contained and how safely firefighters can operate.

When the right equipment is available and functioning, crews can attack the fire more efficiently, locate victims faster, and prevent small fires from escalating into catastrophic losses. In short, adequate staffing and proper apparatus are not luxuries, they are fundamental requirements for protecting lives, property, and the firefighters themselves.

For BFD, the industry practice for response and operations are outlined in the *NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2020)* standard for fire suppression operations. These standards are further covered in Section 4. BFD trains and maintains its firefighters to the *NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) Level I and II standard*.

Structure fires are a low frequency type of incident encountered by BFD (2.33%) within the 2021- 2025 period, however, has a large degree of life safety and property risk to both the public and the firefighters, where time and resources are paramount considerations for safe and effective resolution of the emergency. Consistent with many fire departments that rely on volunteer, part-time, or paid-on-call firefighters, BFD would require assistance from one or more mutual-aid partners for structure fires that exceed its internal response capacity.

Interview and survey participants consistently noted that BFD personnel are well trained and perform effectively during routine fire incidents. However, many also expressed concerns about the department's ability to assemble a timely and adequately staffed Effective Response Force (ERF) during higher-risk or labour-intensive events. These types of incidents require greater staffing levels, coordinated operations, and sustained effort, demands that participants felt may exceed the department's current capacity.

Participants further highlighted that modern residential development trends in Blackfalds, particularly higher-density neighbourhoods and planned vertical growth, introduce new operational challenges. Without an aerial or ladder apparatus in the BFD fleet, firefighters have limited ability to safely access upper floors, perform elevated rescues, or conduct effective fire attack and ventilation in multi-storey structures. This equipment gap reduces operational flexibility and increases risk as the community continues to grow upward.

Observation
Observation #16: The department currently does not operate a dedicated aerial apparatus, creating a gap in its ability to safely and effectively access upper floors, conduct elevated rescues, perform vertical ventilation, and provide elevated master stream operations during structure fires. As the community's-built environment continues to evolve toward greater building height and density, this capability gap will become increasingly significant and may impact both firefighter safety and operational effectiveness during complex incidents.

Recommendation

Recommendation #16: BFD should acquire a suitably sized aerial device, such as a mid-mount or rear-mount aerial ladder or platform, designed to operate effectively within the community's existing and planned built environment. The apparatus selection should be based on local road geometry, target hazards, staffing levels, mutual aid considerations, and anticipated future development patterns.

Additionally, BFD should undertake a collaborative assessment with the City of Lacombe, Lacombe County, and the Town of Blackfalds to explore the feasibility and benefits of a tri-lateral aerial apparatus purchasing and deployment agreement. As part of this assessment, the participating municipalities should evaluate opportunities for shared procurement and cost-sharing, coordinated deployment, training, maintenance, and long-term lifecycle management of an aerial device.

Suggested completion: 24-36 months, subject to capital budget approval, procurement processes, apparatus construction schedules, and manufacturer delivery timelines.

Strategic Objective: #5 Emergency Response and Operations

Cost: Approximately $2.5 million to $4.0 million[1], depending on apparatus configuration, aerial device type, pumping and waterway capabilities, market conditions, and procurement timing.

Rationale: *As Blackfalds continues to build upward, the ability to reach upper floors, perform elevated rescues, and apply water from height becomes essential for both firefighter and public safety, an aerial apparatus significantly enhances operational capability in communities with growing vertical and high-density development.*

An aerial device also supports critical functions such as roof ventilation, rapid access to balconies, and protection of exposures in tightly spaced residential areas. Without this capability, BFD faces increased operational risk, longer fire growth periods, and reduced effectiveness during complex incidents. Investing in an aerial apparatus aligns the department's resources with the community's evolving risk profile and strengthens its ability to deliver safe, timely, and effective fire suppression in multi-storey environments.

The approach to undertaking a collaborative assessment allows the participating municipalities to evaluate whether a regional aerial service delivery model can provide an effective and financially sustainable solution while maintaining appropriate emergency response capabilities across the region.

[1] *Source: Commercial Emergency Equipment Co. (Pierce Manufacturing)*

3.7.2 Medical Assist

Medical assist is a valuable core service provided by BFD. The number of medical responses requested amounts to 11.3 % of the total call volume for the 2021-2025 period. The location and distribution of fire department resources often exceed that of ambulance resources, and as a result, firefighters are often able to arrive to medical emergencies faster, due to the response deployment model, and in support of ambulance services.

BFD has established a tiered medical agreement with Alberta Health Services that outlines the medical criteria and the medical incidents that fire will respond to. BFD operates under the authority of the provincial MFR program to assist in the delegation of protocols such as defib and naloxone administration.

Maintaining dialogue and utilizing expert medical opinion through Alberta Health Services will ensure call-out to BFD POC firefighters will be medically necessary and continue to meet the level of service expected and directed by Council.

3.7.3 Motor Vehicle Collisions, Vehicle Extrication

Motor vehicle collisions (MVCs) with or without trapped persons can pose unique hazards to both the victims and responders. Vehicle extrication requires specialized training and equipment. Close coordination with police and ambulance services is necessary for the safety of both victims and responders. Weather conditions also contribute significantly to both the severity of the incident and the effectiveness of the response.

Many of modern vehicles have added risks to firefighters, such as airbag deployment and hybrid vehicles containing fuel cells or batteries. Vehicle collisions or events involving transport vehicles often pose the additional challenge of involving dangerous goods or requiring heavy equipment to manage.

The Town of Blackfalds faces several major transportation related risks, primarily due to its location along QEII (Highway 2), Alberta's busiest highway corridor that experiences high-volume commuter and commercial trucking traffic and highway 2A which serves as the primary north-south routes between Lacombe, Blackfalds, and Red Deer. The close proximity of Blackfalds to Lacombe and Red Deer has a high proportion of residents commuting particularly during peak-hour congestion.

Alberta collision statistics show that high-speed rural highways have disproportionately high fatal collision rates. These types of incidences may require the resources and expertise of BFD staff including:

- Scene Safety
- Fire Suppression
- Extrication
- Stabilization
- Medical First Aid
- Dangerous Goods Control
- Special Rescue

BFD is trained and equipped to manage vehicle collision and extrication incidents (services provided to the *NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019)* and *NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications (2021)*. Depending on the nature of the incident, the rescue, engine and or tender may also be deployed to these events. During the 2021-2025 period, BFD responded to 202 MVCs and make up 16.78% of the total call volume.

3.7.4 Hazardous Materials/Dangerous Goods Response

Response capabilities should align with service levels defined in the *NFPA 1072 Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)* service level matrix. It requires departments without advanced hazmat (dangerous goods) training to take only a limited role in hazardous materials (dangerous goods) response. There are three dangerous goods response service levels.

The first level of service is the awareness level. This level is the most basic and is for persons who could be the first on the scene of an emergency involving dangerous goods. Responders at the awareness level are expected to recognize the presence of hazardous materials, protect themselves, call for trained personnel and secure the area to the best of their abilities. It does not involve donning protective suits to enter the contaminated zone to stop the flow of hazardous materials or conducting decontamination.

The second level of response is the operations service level. Responders are trained to be part of the initial response and control the impact of the release in a defensive fashion. Crews are expected to take a more hands-on approach than considered at the awareness level. They will use absorption, damming and diking to stop or redirect the flow of the hazardous material. Firefighters are trained to don protective suits, enter the hot zone to conduct rescue activities and control the product release. They must also establish a decontamination zone for responders and equipment. Crews also lead the evacuation in the hot zone.

The third level of response is the technician level. Technical-level responders must be certified hazmat technicians trained in the use of specialized chemical protective clothing and control equipment. Responders at this level take offensive action in responding to releases or potential releases of dangerous goods. Given the required training, cost of equipment and limited community need, this level of service is normally provided by larger communities or private companies through contract.

BFD personnel are trained to the *NFPA 1072 Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications (2017)*, operations level and serve as the primary first responders for all dangerous goods incidents within the Town of Blackfalds and the designated response zone in Lacombe County. The department does not maintain a dedicated hazardous materials response unit; therefore, additional resources and technical support are requested as needed from the City of Red Deer or Nova Chemicals located in Joffre.

Additional support can be provided through the Alberta Emergency Management Agency (AEMA), Alberta Transportation, RCMP, EMS and/or industry specific emergency response teams. These agencies will operate within a tiered, multi-agency response framework coordinated through the Town of Blackfalds's Emergency Coordination Centre (ECC).

Canadian Pacific Kansas City Railway (CPKC) runs through a Calgary to Edmonton corridor (Lacombe Subdivision) that includes a line that runs directly through Blackfalds. Canadian National Railway (CNR) while not running directly through Blackfalds, operates within 10-12 KM east of the town, and connects industrial hubs in the region. Rail incidents involving dangerous goods automatically trigger activation of the railway's dangerous goods response team and may involve local emergency resources for extended periods of time.

Although dangerous goods events are infrequent, a total of 12, or 1.00% of total call volume for the 2021-2025 period, they carry the potential for severe environmental impact and life-safety consequences. Many other incident types may, and do contain a degree of dangerous goods mitigation, such as motor vehicle incidents. This underscores the importance of robust pre-incident planning, clear communication protocols, and regular multi-agency training and exercises.

3.7.5 Technical Rescue Services

Rescue operations are often unique situations that require specialized equipment and training to ensure the responders maintain the competencies to execute the rescue safely. The challenge in maintaining these skills is the low frequency of the events. As a result, fire departments offering technical rescue services must provide adequate and consistent training to maintain competencies and equipment.

BFD, like many fire services, are relied upon to provide a wide range of rescues within their community. The low frequency combined with the complexity and training required to safely and effectively manage these incidents provides unique challenges to a fire service. There are recognized training, certification and equipment required for many of these types of incidents, while unique rescues may rely on one or more skills and equipment to perform safely.

BFD provides a focused set of technical rescue services aligned with the community's risk profile, staffing model, and available resources. The department's capabilities emphasize high-frequency, moderate-risk rescue types, particularly motor-vehicle extrication, while relying on regional partners for low-frequency, high-complexity specialty rescue disciplines. This tiered approach is consistent with provincial norms for paid-on-call departments and supports safe, effective, and fiscally responsible service delivery. There may be other agencies within the municipality or region that provide specialty rescues. Close coordination and understanding of the roles and responsibilities of each agency will alleviate conflict and provide clarity of responsibilities on the scene of an emergency.

BFD has specialty trained firefighters within their complement that are equipped, trained, and certified to provide and maintain competencies for:

- Motor Vehicle Extrication- under *NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) Level I and II*
- Ice Rescue Technician (Land-Based)
- Water Rescue Technician (Land-Based)
- Farm/Machinery Rescue – basic

The majority of rescue incidents are managed by BFD within the training, certification, and equipment available to their staff. With an increase in growth in the industrial, commercial, and farming sector there is a greater risk for entrapment or injury within machinery or confined spaces. These types of rescues require specialized training and certification by responding firefighters.

The training required to meet the certification requirements is labour intensive and requires planning, equipment, qualified instructors, and the need to maintain skills on an annual basis. Each program typically requires a minimum of 40 hrs of practical training followed by certification examinations.

BFD must consider the risk within the community, the vulnerability of the department to respond and management of the workload of the firefighters and costs to the municipality. A phased-in approach is the best practice to ensure that effectiveness and efficiencies are observed.

Observation
Observation #17: The Town of Blackfalds and its contracted service areas face several risk factors that create demand for technical rescue services, many of which involve significant operational complexity. As in most jurisdictions, BFD's technical and specialized rescue programs operate under the expectation that the fire department will serve as the initial responder and therefore maintain, at minimum, awareness level training to identify hazards, conduct effective size ups, and request appropriate resources. BFD has equipped and trained all personnel to at least the awareness level, with many members trained to the operations level across the technical rescue disciplines identified in the CRA. Blackfalds' proximity to the City of Red Deer also provides access to timely external support when higher level technical rescue capabilities are required.

Recommendation

Recommendation #17: Based on the Town of Blackfalds' identified risk profile, the Town should formally define, adopt, and publish its technical and specialized rescue levels of service for each discipline.

Suggested completion: 12 -24 months

Strategic Objective: # 5 Emergency Response and Operations

Cost: TBD, dependent on the level of service selected for each technical rescue discipline.

Rationale: *Formally establishing levels of service ensures clarity for responders, municipal leadership, and the public, while aligning training, equipment, and operational expectations with the community's actual risk environment. Operations level capability is warranted for technical rescue disciplines where incident frequency, likelihood, or the time sensitive nature of patient access, combined with the potential for delayed response from external agencies requires BFD firefighters to perform beyond the awareness level.*

In disciplines where the CRA identifies frequent or time-critical events (e.g., motor-vehicle collisions with entrapment, common machinery entanglements), BFD should formally declare an operations-level service and train and equip members to meet the relevant JPRs outlined in NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications (2021). This should be supported by the organizational requirements contained in NFPA 2500: Standard for Operations and Training for Technical Search and Rescue Incidents and Life Safety Rope and Equipment for Emergency Services (2022).

3.7.6 Pre-Emergency Planning

Pre-emergency (pre-incident) plans are developed to provide emergency responders with advance knowledge of a building, property, or site, enabling a safer and more effective response during emergencies. These plans typically document key operational information, including construction type, occupancy, building status, emergency contacts, utility shutoff locations, fire protection and detection systems, exposure hazards, water supply availability, site access constraints, and other significant risks. Unlike formal fire inspections, pre-incident plans focus on response-related information gathered during site visits and may include hazards or operational considerations that fall outside the scope of the inspection program.

Currently, BFD has a limited number of pre-emergency plans. Historically, these plans have been developed on an informal basis, often in response to a specific request or following a significant incident. The development and maintenance of accurate pre-plans are labour-intensive activities that require ongoing commitment from fire department personnel to ensure information remains current and reliable.

The Town of Blackfalds requires all construction or demolition projects valued at more than $5,000 to submit a Fire Safety Plan for review and approval by BFD. This requirement creates an opportunity for proactive pre-planning, allowing firefighters to assess site-specific risks, identify access challenges, determine resource requirements, and obtain key contact information before an emergency occurs.

The department's recent transition to the First Due records management system provides an opportunity to standardize and expand the pre-planning process. The department is in the process of capturing all existing and future pre-incident plans into the First Due pre-planning module allowing vital information to be documented, maintained, and made readily accessible to responding personnel when needed.

Advancements in mobile technology further support this initiative by enabling pre-emergency plans to be accessed directly through the Computer-Aided Dispatch (CAD) system on mobile devices within responding apparatus. Providing crews with real-time access to critical site information will improve situational awareness, support informed decision-making, and enhance operational effectiveness during emergency responses.

Observation
Observation #18: BFD is currently transitioning existing pre-emergency plans into their current records management program, most of which were created reactively following incidents or upon specific request. The CRA identifies several high-risk occupancies such as multi-residential buildings, industrial sites, vulnerable-population facilities, and large commercial structures that present elevated life-safety, property-loss, and operational challenges. Despite these risks, BFD has not yet formalized their systematic pre-incident planning program to capture critical operational information for these occupancies. While the Town's requirement for Fire Safety Plans on construction and demolition projects provides some pre-planning insight, it does not address the broader range of high-risk buildings already present or emerging within the community.

Recommendation

Recommendation #18: BFD should formally develop, implement, and document a structured pre-incident planning program focused on the high-risk occupancies identified in the CRA. This program should include standardized data collection templates, scheduled site visits, digital storage, and accessibility of pre plans, and regular updates to reflect changes in building layout, occupancy, or hazards. Priority should be given to occupancies with elevated life safety risk, complex building systems, limited access, or significant fire load potential.

Suggested completion: 24-60 months, ongoing thereafter

Strategic Objective: #5 Emergency Response and Operations

Cost: Based on cost of First Due software module in-vehicle computer requirements and staff time.

Rationale: *A formal pre incident planning program enhances firefighter safety, improves tactical decision making, and reduces response time during complex or high-risk incidents. High risk occupancies often contain unique hazards such as vulnerable populations, dangerous goods, complex suppression systems, or challenging access that cannot be effectively managed without prior knowledge. Pre incident plans provide responders with critical information on construction features, fire protection systems, utility shutoffs, access points, water supply, and potential operational challenges.*

As Blackfalds continues to grow in density and complexity, a structured pre-planning program ensures that BFD is prepared to respond effectively to incidents in the community's most demanding environments. This proactive approach aligns operational readiness with the community's evolving risk profile and supports safer, more efficient emergency operations.

3.7.7 911 and Fire Dispatch

9-1-1 and Fire dispatch services for the Town of Blackfalds are provided by the City of Red Deer 9-1-1 Emergency Communications Centre that delivers call-taking, 911 transfer, fire dispatching, and radio communications support for the City of Red Deer and several surrounding municipalities Alberta fire departments, including Blackfalds. This regional model provides standardized call-processing protocols, trained emergency communications personnel, and interoperability across municipal boundaries.

The Red Deer 9-1-1 Communications Centre has completed their transition to NG 9-1-1 network, moving from the legacy analog system to the new IP-based national standard which provides opportunity to support enhanced capabilities as they are rolled out throughout Canada.

BFD has recently updated their radios and are currently on the Alberta First Responder Radio Communications System (AFFRRCS) which is a provincial-wide open-standards, two-way radio network. This system is intended to improve:

- Provincial wide coverage, even in remote areas
- Compatibility and communication between different agencies and equipment
- Encryption to protect sensitive operational communications
- Centralized support and governance

3.7.8 Mutual Aid and Other Service Agreements

3.7.8.1 Mutual Aid

Large-scale emergency events can quickly exceed the response capacity of most municipal fire departments, particularly smaller services with limited staffing and resources. As a result, mutual aid and automatic aid agreements are essential for augmenting response capability during low-frequency but high, or extreme-consequence incidents.

Mutual aid agreements allow fire departments to assist one another across jurisdictional boundaries when local resources are overwhelmed. These agreements may include fire suppression, rescue, and specialized services such as technical rescue or dangerous goods response. Activation occurs only when requested by the incident commander, and the assisting agency responds based on availability.

Automatic aid agreements, by contrast, provide predetermined initial or supplemental response when a neighbouring fire department can arrive more quickly or provide needed capabilities that the requesting department cannot immediately supply. BFD participates in a regional network of mutual aid partnerships that enhance operational capacity, strengthen response resilience, and ensure access to specialized resources during complex or high-demand incidents. Mutual aid is particularly critical for a paid-on-call department, providing depth of staffing, apparatus support, and incident-management capability when local resources are insufficient or committed to concurrent events.

The Town of Blackfalds mutual aid agreement explicitly states that the Town of Blackfalds both receives and provides mutual aid support to both Lacombe County and Red Deer County during incidents that exceed a single department' resources. Mutual aid is typically activated through the City of Red Deer 9-1-1 Communications Centre, with deployment expectations, command structure, and resource commitments are defined within the formal agreements. The Town of Blackfalds (BFD) maintains formal Mutual Aid Agreements with:

- Lacome County
- Red Deer County

In the case of wildfires, Alberta Wildfire can provide additional support when the wildfire grows beyond the capacity of BFD and mutual aid partners.

3.8 Training & Professional Development

Strategic Objective #6: Training and Professional Development

Provide emergency response services that reflect the community's identified risks, growth projections, and operational realities. Ongoing efforts will focus on optimizing deployment, staffing, and equipment to meet community growth while safeguarding life, property, and firefighter safety. Services will be delivered with a focus on a commitment to efficiency, effectiveness, and long-term value for the community.

3.8.1 Training Overview

Training and competency development are essential and ongoing activities for all contemporary fire departments. A prepared and competent workforce reduces risk and safely optimizes service delivery. An effective workforce training program aligns the growth and development of personnel to the organization's mission and goals.

Alberta legislation requires that employers ensure workers are competent to perform their duties safely and must receive appropriate training and supervision for the hazards they face. This applies directly to all firefighting operations, including interior attack, apparatus operation, rescue, and dangerous goods response.

Alberta does not legislate specific NFPA certifications, however most Alberta fire departments adopt NFPA standards as the benchmark for demonstrating competency required under the legislation.

BFD maintains a yearly comprehensive and progressive training calendar designed to ensure that all members possess the knowledge, skills, and competencies required to safely and effectively perform their duties. As a paid on-call department responding to approximately 250 incidents annually, BFD relies on a structured training framework that aligns with NFPA standards, provincial best practices, and the operational needs identified in the CRA.

BFD's training program utilizes curriculum and educational resources developed by the International Fire Service Training Association (IFSTA). These materials are widely used throughout Canada and are designed to support compliance with applicable National Fire Protection Association (NFPA) professional qualification and response standards. The curriculum also aligns with the certification pathways established by the International Fire Service Accreditation Congress (IFSAC) and Pro Board, which are recognized by most Canadian fire services.

BFD regularly conducts individual skills assessments to verify firefighter competency and proficiency. These assessments are based on recognized IFSTA performance objectives and are used to evaluate the knowledge, skills, and abilities required to safely deliver the services identified through the community's risk profile and operational needs.

Training and education program activities are identified by assessing the Knowledge, Skills, and Abilities (KSAs) needed for the firefighters to perform their duties as outlined in the department's SOGs and procedures. When firefighters are competently trained and possess the KSAs for the services they are expected to provide, they reduce risk and increase their safety and the safety of the public they serve. All training programs should be measured against, tailored to the core services, and identified risk assessments for the community.

BFD schedules regular training nights available for all members to attend. These training sessions are facilitated typically by a chief officer, captain or lieutenant with specific knowledge and skill set for the topics being discussed. These sessions are a combination of theoretical and practical instruction, as necessary.

3.8.2 Industry Recommended Qualifications

The Office of the Fire Commissioner (OFC) in Alberta serves as the province's central authority for fire and emergency management oversight. Its role is defined through provincial mandate and government policy, and while individual documents vary in focus, the OFC consistently functions as Alberta's coordinating body for fire protection, public safety, and emergency response support. There role is advisory, rather than regulatory.

Among other responsibilities the OFC provides guidance on firefighter expectations, supports departments in understanding OHS competency requirements and can assist with aligning municipal training programs with recognized standards and best practices. NFPA certification standards represent industry best practices. Position profiles and associated KSAs should prepare staff to competently provide the services necessary to address the risks in their community.

Further, organizational size and structure will often change the breadth of tasks and competencies required by specific positions. For example, large career fire departments tend to have a higher degree of specialization for senior positions and less need for senior officers to be directly involved in fire suppression or rescue operations. In contrast, smaller volunteer POC or paid-per-call volunteer department senior officers will lead or be directly involved in fire suppression and rescue operations.

The following NFPA standards offered as a general guideline for NFPA training standards aligned with most fire department positions:

Fire Chief, Deputy Chiefs, Assistant Chiefs

- NFPA 472 Dangerous Goods Operations
- NFPA 1001, Standard for Fire Fighter Professional Qualifications (2019) (Level 2)
- NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NPFA 1021 Standard for Fire Officer Professional Qualifications (2020) (Level 2)
- NFPA 1041 Standard for Fire and Emergency Services Instructor Professional Qualifications (2019) (Level 1)
- NFPA 1403 Standard on Live Fire Training Evolutions
- NFPA 1521 Standard for Fire Department Safety Officer Professional Qualifications (2020)

Captains and Lieutenants

- NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (2018)
- NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) (Level 2)
- NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NPFA 1021 Standard for Fire Officer Professional Qualifications (2020) (Level 1)

- NFPA 1041 Standard for Fire and Emergency Services Instructor Professional Qualifications (2019) (Level 1)
- NFPA 1403 Standard on Live Fire Training Evolutions (2018)
- NFPA 1521 Incident Safety Officer

Safety Officer

- NFPA 1521 Standard for Fire Department Safety Officer Professional Qualifications (2020)

Firefighter

- NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (2018)
- NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) (Level 1)
- NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications (2021) (Level 1)

Pump Operator

- NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (2018)
- NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) (Level 1)
- NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications (2021) (Level 1)

Training Officer

- NFPA 1041 Standard for Fire and Emergency Services Instructor Professional Qualifications (2019) (Level 1)
- NFPA 1403 Standard on Live Fire Training Evolutions (2018)

Fire Inspector/Fire Investigator

- NFPA 1031 Standard for Professional Qualifications for Fire Inspector and Plan Examiner (2014)
- NFPA 1033 Standard for Professional Qualifications for Fire Investigator (2022)
- NFPA 1035 Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist, and Youth Firesetter Program Manager Professional Qualifications (2015)

3.8.3 Practical Training

Practical training for firefighting and other emergency management is essential because it transforms a firefighter's theoretical knowledge into real-world capability. Classroom learning provides the foundation, fire behavior, building construction, hazardous materials awareness, medical protocols, etc., but these concepts only become meaningful when firefighters can apply them under realistic conditions.

Fireground and emergency scene environments are chaotic, high-stress, and physically demanding. Practical training exposes firefighters to heat, smoke, limited visibility, confined spaces, ladders, hose handling, and rescue scenarios so they can build the muscle memory, confidence, and situational awareness needed to operate safely and effectively. Without hands-on repetition, even well-understood theory can break down under pressure.

Equally important, practical training allows firefighters to work as a coordinated team. Tasks such as advancing a charged hose line, performing a primary search, forcing entry, or conducting ventilation require synchronized movement, communication, and trust, skills that cannot be developed in a classroom alone. Live-fire evolutions, scenario-based drills, and multi-company exercises help firefighters understand how their individual actions fit into the broader incident strategy. This integration of theory and practice ensures that when a real emergency occurs, firefighters can make rapid, informed decisions and execute them with precision, improving safety for both responders and the public.

BFD is fortunate to have a dedicated practical training site within the town limits, providing all firefighters with the opportunity to practice core competencies and new techniques in a safe, controlled environment. The facility includes an adaptable C-can structure capable of simulating both residential and commercial layouts, as well as a separate burn building designed to replicate realistic fire and smoke conditions. A designated training pad equipped with a nearby hydrant supports vehicle-extrication scenarios and pump-operations training.

In addition, a stand-alone storage building is used year-round for interior training, offering configurable room layouts, firefighter survival props, and a small group learning area.

A wide range of scenarios have been developed that mirror tasks performed on the emergency scene, ensuring firefighters can apply their skills under realistic conditions and close supervision. Through the ongoing dedication of BFD staff, the training facility continues to evolve, with continuous improvements aimed at providing firefighters with a safe, effective, and cost-efficient environment to maintain and enhance their operational readiness.

3.9 Capital Assets

Strategic Objective #7: Capital Assets

Maintain modern, safe, and fully capable facilities, fleet, and equipment that support firefighter safety and effective emergency response. Proactive lifecycle planning, alignment with community growth, and sound asset management practices will ensure long-term operational readiness and sustainability.

3.9.1 Fire Station

Fire stations have a long history going back to the late 17th century when organized fire services were first organized. Typically, early fire stations housed simple fire pumps, facilities for the horses that pulled the fire pumps and living quarters for firefighters. Today's fire stations are typically used to store modern firefighting apparatus and equipment and some cases living quarters for firefighters and in many cases for 24 hours a day, 7 days a week.

Modern fire stations are designed with functionality, efficiency, and health and safety in mind. These facilities are strategically located to ensure optimal emergency response times and are built to accommodate larger and heavier fire apparatus.

In addition to operational needs, contemporary fire stations integrate environmental and occupational health considerations into their design, including dedicated decontamination areas, separate zones for contaminated gear (hot zones) and clean areas (cold zones), proper ventilation systems, and wellness amenities to support firefighter health and resilience.

3.9.1.1 Fire Station Overview and Assessment

BFD provides fire and emergency response services, along with administration, fire prevention, and public education, to the Town of Blackfalds and its contracted service area from a single fire station located at 4401 South Street in the south end of the municipality. From this location, BFD is able to place its first-arriving apparatus on scene in under 10 minutes during normal response conditions. A detailed analysis of BFD's response performance is presented in Section 4.

The following section provides an overview and functional assessment of the existing fire station, evaluated against the requirements and best practices associated with a modern, fully functional fire-rescue facility.

Note: *This assessment is intended to provide a high-level evaluation of the facility and is not a substitute for a detailed engineering, architectural, or building condition assessment conducted by qualified professionals.*

Blackfalds Fire Department	
Address:	4401 South Street, Blackfalds, Alberta T0M 0J0
Year Built:	2011
Use:	Administration, Training, Fire Operations
Bays:	3 bays, tandem drive-thru
Response Units:	14



Blackfalds Fire Department



Table 10: Station Assessment

Item	Description	Yes	No	Comments
1	Site security	✓		Restricted access between fire station and RCMP detachment
2	Adequate parking for staff and visitors	✓		Visitor in front of station. Employee and overflow visitor in rear of station
3	Internet and intranet connectivity	✓		
4	Adequate space for training – training props, hydrant	✓		Training classroom available. Practical training on apparatus floor and outside on bay ramps. Training props on apparatus floor. Offsite training grounds with search and live burn buildings. Vehicle extrication area.
5	Back-up power supply	✓		
6	Fire Chiefs' office	✓		
7	Deputy's Chief's office	✓		One is cubicle style located in hallway with no security or privacy
8	Emergency management office	✓		Through Director of Protective Services
9	Administrative support office/space		✓	
10	Training room / meeting room	✓		Room also utilized as the primary EOC
11	Office security	✓		One DC office has no security
12	Dorm rooms		✓	
13	Day use area	✓		
14	Kitchen	✓		
15	Fitness / wellness area	✓		
16	Firefighter male and female bathrooms and showers	✓		Only one male and one female washroom
17	Space to safely garage and do minor maintenance on vehicles	✓		
18	Hose drying area	✓		Hose drying racks on apparatus floor
19	Small equipment storage and maintenance room	✓		
20	Air filling station room complete with proper ventilation	✓		
21	Industrial washer and dryer	✓		On apparatus floor

Item	Description	Yes	No	Comments
22	Bunker gear storage room complete with proper drying and ventilation	✓		Proper ventilation issue identified
23	Consumables storage room	✓		
24	Sufficient workstations	✓		
25	Sufficient supervisor space	✓		
26	Breakout or quiet room		✓	
27	Public and Staff Washrooms	✓		No designated public. Only one small washroom for male and female
28	Locker room	✓		Combined with male and female washrooms
29	Proper interior Lighting	✓		

3.9.1.2 Operational Analysis of Fire Station

BFD operates one single fire station, located at 4401 South Street, within the Town of Blackfalds serves as the community's primary emergency-response facility and houses all apparatus, training space, and administrative functions. Overall, the station network is well distributed and functional.

This fire station provides good emergency response to most areas within the Town of Blackfalds and the contracted area in the Lacombe County. Response can be significantly delayed when their primary response route is blocked by a passing train.

Key operational pressures include:

- The fire station's location adjacent to the rail tracks presents potential challenges, including delayed response times and limited ability for personnel to remain in the facility during nearby rail incidents.
- Space limitations for administrative staff and support functions
- Apparatus bay at capacity.
- Primary location of the emergency operations centre (EOC) would require the use of fire use areas.
- Lack of sufficient washroom facilities based on current and future needs

3.9.2 Offsite Training Facility

BFD utilizes and maintains their own offsite training facility. This facility utilizes c-cans configured to replicate various interior structure scenarios for limited live-fire burns and structure search and rescue. A separate area within the facility is used to train for motor vehicle incident scenarios and apparatus training

Note: *The BFD training facility is secured within the municipal yards*






3.9.3 Apparatus and Emergency Vehicles

Fire apparatus and emergency vehicles are typically the largest asset expenditures for any fire department. Purchasing and managing these assets requires strong fiscal responsibility to endure public and local government scrutiny. Currently, BFD has considerable monies invested in vehicles and equipment. The lifespan of apparatus varies depending on its type and use, along with regular maintenance and testing standards.

Fire services typically designate a lifecycle to each piece of apparatus and other emergency vehicles and contribute to a capital reserve fund to ensure enough funds are available when the replacement is needed. All BFD apparatus and light duty vehicles is housed in the BFD fire station. The Town of Blackfalds owns and maintains all six apparatus that are used for response.

BFD inventory of apparatus and equipment is well maintained by a combination of mechanical persons from within the Town and third-party service providers. A detailed table of the current apparatus fleet is in the following table.

The current inventory of fire apparatus, light vehicles, and support units is adequate for meeting the immediate needs of the Town of Blackfalds and its contracted service area. However, with anticipated residential growth that includes increased multi-family development and multi-storey residential structures, the acquisition of an appropriate aerial or ladder apparatus should be considered a priority to ensure future operational capability.

Table 11: BFD Apparatus and Light-Duty Vehicles

No.	Unit number and Type	Year Built	Est replacement year
1	Engine 1	2023	2043
2	Engine 2	1999	2019
3	Engine 3	2018	2038
4	Rescue	2012	2032
5	Tender	2007	2027
6	Bush Truck	2025	2045
7	Side by Side	2019	As required
8	Charlie 1 (Command Truck)	2011	2026
9	Charlie 2 (Command Truck)	2021	2036
10	Charlie 3 (Command Truck)	2025	2040
11	Ice Rescue Trailer	2005	As required
12	UTV and Trailer	2021	As required
13	Enclosed Trailer	2018	As required
14	Wildland Trailer	N/A	As required
15	Skid Trailer	N/A	As required

3.9.3.1 NFPA Standards for Fire Apparatus

NFPA has developed standards to assist a fire service with the design, maintenance, inspection, testing, life cycling, and dispersal for their fire apparatus. Fire departments may choose to adopt these standards or utilize them as a reference in their own standards and practices.

NFPA 1901: Standard for Automotive Fire Apparatus (2016)

The NFPA 1901 standard defines the requirements for new automotive fire apparatus and trailers designed to be used under emergency conditions to transport personnel and equipment and to support the suppression of fires and mitigation of hazardous conditions. This standard recommends that fire apparatus should respond to first alarms for the first 15 years of service, with the expectation that they perform as designed 95% of the time. For the next five years, it should be held in reserve for use at large fires or used as a temporary replacement for-of-service first line apparatus.

NFPA 1911: Standard for the Inspection, Maintenance, Testing and Retirement of In-Service Emergency Vehicles

The NFPA 1911 standard defines the minimum requirements for establishing an inspection, maintenance, and testing program. Also included are guidelines for emergency vehicle refurbishment and retirement.

The Underwriters Laboratory of Canada utilizes many of the provisions within these NFPA standards which are referenced by Fire Underwriters Survey (FUS) for determining fire insurance ratings for a community. For example, it follows the life cycle program with the exception that it may award full credit for a fire apparatus older than 15 years, but not more than 20 years, in remote locations only if the piece of equipment is deemed in excellent condition and all necessary upgrades are done. The value of the additional credit in this case, which is only a portion of the total grading for a final FUS rating, may well be overshadowed by the cost of maintaining an older unit. In addition, the NFPA 1901: Standard for Automotive Fire Apparatus recommends the following:

D.1 General

To maximize firefighter capabilities and minimize the risk of injuries, it is important that fire apparatuses be equipped with the latest safety features and operating capabilities.

In the last 10 to 15 years, much progress has been made in upgrading functional capabilities and improving the safety features of fire apparatus. Apparatuses more than 15 years old might include only a few of the safety upgrades required by the recent editions of the NFPA fire department apparatus standards or the equivalent Underwriters Laboratories of Canada (ULC) standards.

Because the changes, upgrades, and fine-tuning to NFPA 1901 have been truly significant, especially in safety, fire departments should seriously consider the value (or risk) to firefighters of keeping fire apparatus more than 15 years old in first line service.

It is recommended that apparatus more than 15 years old that have been properly maintained and that are still in serviceable condition be placed in reserve status; be upgraded in accordance with NFPA 1912; and incorporate as many features as possible of the current fire apparatus standard (See Section D3 of Standard). This will ensure that, while the apparatus might not totally comply with the current editions of the automotive fire apparatus standards, many of the improvements and upgrades required by the current editions of the standards are available to the firefighters who use the apparatus. Apparatuses that were not manufactured to the applicable NFPA fire apparatus standards or that are over 25 years old should be replaced.

3.9.3.2 Underwriters Laboratories of Canada

Current Underwriters Laboratories of Canada (ULC[2]) and NFPA 1901: Standard for Automobile Firefighting Apparatus Standards recommend using apparatus on the front line for up to 15 years, then as a backup for another four to five years. Of course, this timeline is dependent on the frequency of use, scheduled maintenance, and budgets. As indicated in the following table, some emergency vehicles' life cycles can be extended due to low usage or serviceable condition. A leading practice is to have a complete condition survey conducted to determine if there is usable life cycle remaining. This condition survey must consider the NPFA and FUS standards along with the maintenance and cost records of the respective vehicle.

[2] *Underwriters Laboratories of Canada (ULC) is an independent product safety testing, certification, and inspection organization. www.canada.ul.com*

Table 12: Fire Apparatus Service Schedule (Fire Insurance Grading)

Apparatus Age (Yrs.)	Major Cities [3]	Medium Sized Cities [4]	Small Communities[5] and Rural Centres
0 – 15	First Line Duty	First Line Duty	First Line Duty
16-20	Reserve	2nd Line Duty	First Line Duty
20-25[1]	No Credit in Grading	No Credit in Grading or Reserve[2]	No Credit in Grading or 2nd Line Duty[2]
26-29[1]	No Credit in Grading	No Credit in Grading or Reserve[2]	No Credit in Grading or Reserve[2]
30+	No Credit in Grading	No Credit in Grading	No Credit in Grading
[1]All listed fire apparatus 20 years of age and older are required to be service tested by recognized testing agency on an annual basis to be eligible for grading recognition (NFPA 1071, Standard for Emergency Vehicle Technician Professional Qualifications (2020)).			
[2]Exceptions to age status may be considered in a small to medium sized communities and rural centres conditionally, when apparatus condition is acceptable, and apparatus successfully passes required testing.			
[3]Major Cities are defined as an incorporated or unincorporated community that has: a populated area (or multiple areas) with a density of at least 400 people per square kilometer; AND a total population of 100,000 or greater.			
[4]Medium Communities are defined as an incorporated or unincorporated community that has: a populated area (or multiple areas) with a density of at least 200 people per square kilometer; and/or a total population of 1,000 or greater.			
[5]Small Communities are defined as an incorporated or unincorporated community that has: no populated areas with densities that exceed 200 people per square kilometer; AND does not have a total population of more than 1,000.			

3.9.3.3 Fire Apparatus Design and Procurement

Fire apparatus is designed and tendered based on the unique requirements of the fire service and the community needs that it serves. With the design, tender and procurement processes typically taking two to three years or longer as well as with the expected life cycles of these apparatus of 15-20 years or more, it is important that decisions accurately reflect the immediate needs and those in the future.

3.9.3.4 Fire Apparatus Maintenance and Repair

In Alberta, all fire apparatus with a gross weight, registered gross weight, or manufacturers gross vehicle weight rating exceeding 4500 kilograms must be inspected on an annual basis in accordance with regulations made under the Highway Traffic Act. These vehicles are required to display an inspection sticker as evidence of compliance with this requirement.

Daily driver inspections for commercial vehicles are a requirement under the Act and most heavy fire apparatus vehicles are included in this requirement that require daily inspections either at the beginning of a shift or post-trip. Inspections are completed in alignment with the Alberta Transportation Commercial Vehicle Safety Regulation AR 121/2009.

BFD has been completing the vehicle equipment checks on Wednesday evening training sessions which is approved under the Traffic Safety Act exemption permit. The tracking of the vehicle checks is documented in the First Due records management system.

A sound and reliable preventative maintenance program is a vital component of the overall fleet management process, ensuring each piece operates reliably, safely, and effectively while assisting in making it to the anticipated life cycle. Poor maintenance scheduling or neglect of required checks and repairs can lead to accidents, breakdowns, and life safety issues. A fire apparatus pre-maintenance program should consist of the following components:

- Trip inspections (daily, pre-trip, post-trip)
- Regular preventative maintenance scheduling
- Annual preventative maintenance comprehensive check

The maintenance, repair, testing and certification of all BFD heavy emergency vehicles is handled by independent contractors from the municipality and certified emergency vehicle technicians (EVT's) contractors. Weekly vehicle inspections are completed and are logged into the First due application. Pre-trip and/or post-trip inspections are expected and completed based on firefighter availability, but in some cases have not been completed. These inspections are a requirement under the National Safety Code Standard 13 and Alberta's Commercial Vehicle Safety Regulations (AR 121/2009) which requires daily trip inspections and annual CVIP inspections for commercial vehicles. Most Alberta fire departments use a combination of pre-trip inspections, post-trip inspections and daily checks.

It is acknowledged that many POC fire departments are unable to complete pre-trip inspections of apparatus without extending response times and has been accepted to complete post-trip and weekly vehicle checks at the minimum. The Fire Chief coordinate recommended service schedules, testing and certifications to ensure compliance with as little disruption to service as possible.

Table 13: Fire Apparatus Life Cycle Cost Projection (Example)

Period	Year	*Replacement cost	Estimated Inflation %	Diff. between original vs replacement	Depreciated value
0	2021	$642,619.79		$0.00	$642,619.79
1	2022	$706,881.77	10.0%	$64,261.98	$514,095.84
2	2023	$770,501.13	9.0%	$127,881.34	$411,276.67
3	2024	$832,141.22	8.0%	$189,521.43	$329,021.33
4	2025	$890,391.11	7.0%	$247,771.32	$263,217.07
5	2026	$948,266.53	6.5%	$305,646.74	$210,573.65
6	2027	$1,009,903.86	6.5%	$367,284.06	$168,458.92
7	2028	$1,075,547.61	6.5%	$432,927.81	$134,767.14
8	2029	$1,145,458.20	6.5%	$502,838.41	$107,813.71
9	2030	$1,219,912.99	6.5%	$577,293.19	$86,250.97
10	2031	$1,299,207.33	6.5%	$656,587.53	$69,000.78
11	2032	$1,383,655.81	6.5%	$741,036.01	$55,200.62
12	2033	$1,473,593.43	6.5%	$830,973.64	$44,160.50
13	2034	$1,569,377.01	6.5%	$926,757.21	$35,328.40
14	2035	$1,671,386.51	6.5%	$1,028,766.72	$28,262.72
15	2036	$1,780,026.63	6.5%	$1,137,406.84	$22,610.17
16	2037	$1,895,728.37	6.5%	$1,253,108.57	$18,088.14
17	2038	$2,018,950.71	6.5%	$1,376,330.92	$14,470.51
18	2039	$2,150,182.51	6.5%	$1,507,562.71	$11,576.41
19	2040	$2,289,944.37	6.5%	$1,647,324.57	$10,000.00
20	2041	$2,438,790.75	6.5%	$1,796,170.96	$10,000.00

*Estimated average cost for a custom municipal pumper

Table Source: Rocky Mountain Phoenix (Red Deer, Alberta)

Figure 9: Fire Apparatus Life Cycle Cost Projection Example

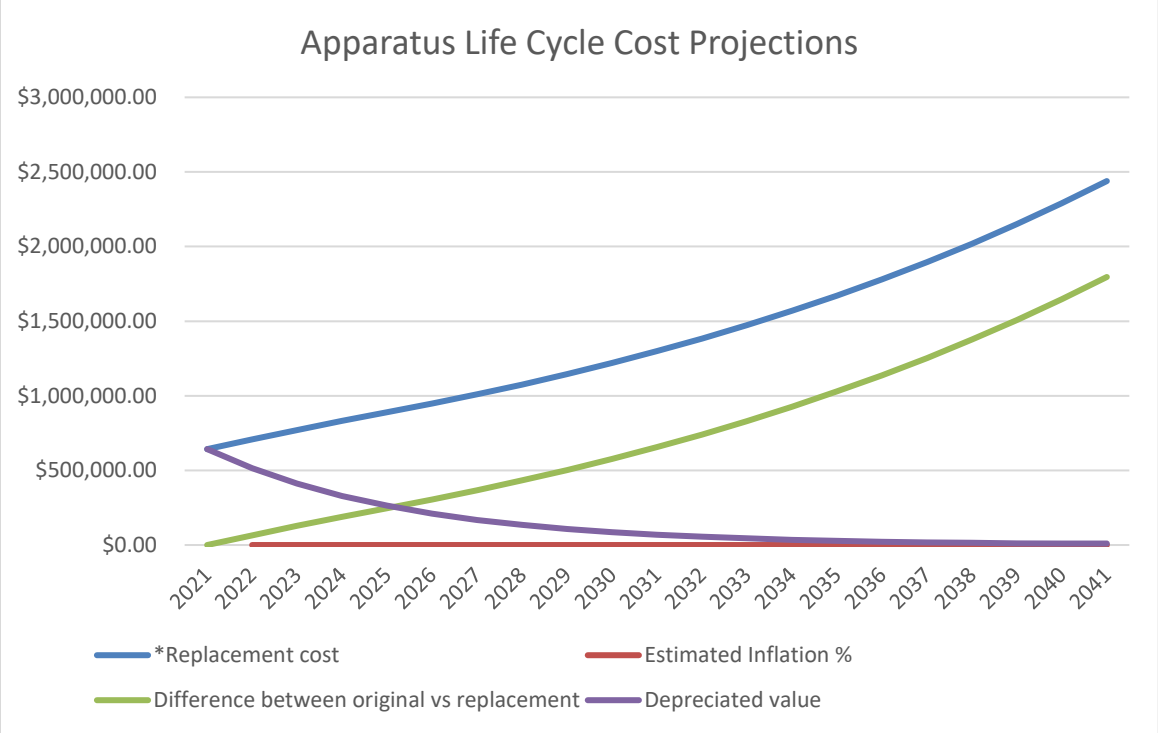


Table 13 and Figure 9 illustrate the increasing replacement costs and decreasing value of a new pumper vehicle purchased in 2021, over a 20-year period. As depicted, the five-year increase in the projected replacement cost is $658,764.12 for apparatus aged 15 to 20 years, which is also the time period when escalating maintenance costs can be expected, suggesting earlier replacement should be considered. Analyzing local operating conditions when determining the optimal replacement timing for each major piece of apparatus will help ensure that sufficient funds are available when replacements are required.

3.9.4 Ancillary Equipment

BFD's field response equipment, including vehicle extrication tools, hand tools, blowers, and other operational gear is current and appropriate for the department's service needs. This ancillary equipment is selected and maintained to support BFD's core services, goals, and operational objectives. Replacement cycles vary by equipment type, with most emergency response equipment funded through the established annual operating or capital budgets.

As community needs evolve and response demands increase, additional or upgraded equipment may be required to ensure service levels remain aligned with operational expectations.

3.9.5 Specialized Operations Equipment

While it is impossible for a fire service to anticipate every type of emergency response, having appropriate equipment and training to provide the level of service safely and effectively within their defined scope of duties is what should be considered as the minimum.

Effective and efficient incident response depends on equipment tailored to specific operational demands. BFD maintains a comprehensive inventory of specialized apparatus and tools to support motor vehicle incidents, dangerous goods, static water and ice, wildfire responses and other technical rescue incidents. These resources are strategically stored on frontline units or within the fire hall to ensure immediate readiness based on the known risks in each response zone.

BFD has a broad range of expectations defined within their scope of work. The equipment required to provide these services safely and effectively is routinely maintained, tested, certified, and replaced as needed. Overall, the department's equipment inventory is well aligned with its current goals, service levels, and operational objectives.

An ongoing review of necessary equipment for expected service levels will assist the fire chief in requesting any equipment needs through the appropriate budget process.

3.9.5.1 Rescue Tools

Rescue tools may be required at any incident BFD responds to, ranging from simple hand tools such as crowbars to heavy rescue equipment including hydraulic cutters, spreaders, and lift bags. Motor vehicle incidents often require close coordination for effective extrication and having this equipment immediately accessible and functioning properly can quite literally be a matter of life and death.

Each pumper and the rescue truck carry a variety of hand and a set of hydraulic tools, and the current complement appears sufficient to meet the department's immediate operational needs.

3.9.5.2 Wildland Firefighting

Fire departments face a range of significant challenges when responding to wildland fires. These incidents often occur in areas with rugged terrain, limited road access, and little to no available water supply. Ensuring that equipment, personnel, and a reliable water source can be brought as close to the fire as possible is essential for an effective response.

To support these operations, BFD deploys its water tender truck, which carries 13,248 litres of water and can maintain a steady water supply through tanker shuttle operations. Wildland firefighting equipment is designed to be lighter and more portable than structural gear, including hose packs, water packs, and other light-duty tools. These are stored on the bush truck and Engine 2, the primary units assigned to wildland fire response.

A side-by-side ATV is available and transported by trailer to remote sites to assist with moving personnel and equipment. In addition, a skid package stored in the outbuilding can be loaded into a pickup truck and includes a 757-litre tank and portable fire pump. A dedicated wildland trailer is housed in the out-building behind the fire station. Outfitted with two portable fire pumps, a porta-tank, forestry hose, and small hand tools, it can be deployed to support larger wildfire incidents.

Overall, BFD's wildland equipment appears suitable and sufficient for its immediate operational needs. Additional resources can be accessed through mutual aid when required.

3.9.5.3 Water Rescue

There are no large water bodies of water with the BFD response area, however there is an operational need to maintain sufficient ice rescue equipment intended for shore-based response. An ice rescue trailer is maintained and stored in the out-building behind the fire station. This trailer carries one light rescue inflatable boat, ice rescue suits, ropes and equipment that can be towed to the scene, as necessary.

BFD's water rescue equipment appears suitable and sufficient for the level of water rescue services delivered.

3.9.5.4 Ice Rescue

Ice rescue incidents are extremely risky to responders. The thickness of ice may or may not support the body of a rescuer. Similar to the equipment required for shore-based water rescue, BFD will deploy their ice rescue trailer to the scene and deploy their inflatable rescue boat and rescue equipment as required. Specialized techniques and training are required for any ice rescue incident.

BFD's ice rescue equipment appears suitable and sufficient for the level of water rescue services delivered.

3.9.5.5 Dangerous Goods Response

BFD is trained and equipped to manage dangerous goods incidents at the operations level. The equipment that is typically required for this level of dangerous goods response includes air monitoring equipment, diking, patching and absorbent material, and propane flaring burner. BFD maintains sufficient equipment for the majority of dangerous good incidents they would encounter. Larger incidents would require additional resources through automatic or mutual aid agreements currently in place.

3.9.5.6 Low-Angle Rescue

Low-angle rescue situations typically require specialized equipment designed for difficult retrievals. Typical tools are a rescue basket and appropriate rope with a type of haul system for both the patient and the rescuers.

BFD has the minimal equipment and training to provide low angle rescues safely and effectively.

3.9.6 Personal Protective Equipment

BFD personnel are equipped with NFPA, NIOSH, and CSA-approved PPE, including turnout gear, gloves, helmets, boots, and specialized equipment required for specific rescue or EMS operations. Routine cleaning and maintenance are completed in-house using commercial extractors and dryers, while major repairs, advanced decontamination, and required testing are performed by a certified vendor in accordance with *NFPA 1971: Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting (2018)*.

The PPE issued to BFD members is current, appropriate, and aligned with the department's safety objectives, service levels, and operational requirements.

3.9.7 Self-Contained Breathing Apparatus

Self-Contained Breathing Apparatus (SCBA) are essential pieces of firefighting equipment that allow firefighters to operate safely in environments that would otherwise be uninhabitable. An SCBA consists of a harness, regulator, facepiece, and a down-person alerting system, along with interchangeable air cylinders that typically provide 30 to 45 minutes of breathing air.

All SCBA components must be properly tested and maintained, and accurate records of in-service dates, testing, maintenance, and repairs must be kept. While firefighters can perform basic maintenance, more complex repairs and all certifications must be completed by a qualified SCBA technician.

BFD contracts an external company to conduct required testing and major repairs. The department has a sufficient number of SCBA units to support safe and effective operations. The inventory of air cylinders is adequate for most incidents; however, during larger or prolonged events, not every firefighter may have access to an SCBA, and filled cylinders may become limited. BFD maintains its own certified air-bottle filling station at the fire hall to refill cylinders as needed.

The department has established a 15-year life-cycle replacement schedule for SCBA packs and components. Currently, 8 to 9 air bottles, packs, and masks are replaced on a rotating basis throughout the cycle

3.9.8 Asset Management

Asset management processes are fundamental to a modern, high-performing fire department because they directly influence operational readiness, financial sustainability, firefighter safety, and public confidence. At their core, these processes ensure that every apparatus, facility, tool, and piece of equipment remains safe, compliant, reliable, and cost-effective throughout its lifecycle.

An effective fire service asset management system includes:

- Asset inventory and classification for apparatus, facilities, PPE, SCBA, radios, tools, IT systems, and specialty equipment
- Lifecycle tracking for age, condition, usage hours, mileage, service history, and NFPA-mandated retirement timelines
- Preventive maintenance schedules that are aligned with manufacturer guidance and applicable NFPA standards
- Work order and inspection management able to provide digital tracking of repairs, deficiencies, and technician notes
- Risk-based prioritization used for identifying critical assets whose failure would significantly impact operations
- Capital replacement planning to provide multi-year forecasting with cost escalation and lifecycle modeling
- Governance and documentation that capture policies, SOPs, and reporting structures to ensure consistency and accountability

Like many municipalities, the Town of Blackfalds manages a substantial inventory of assets that require careful oversight. BFD currently uses First Due for asset management capable of meeting their current fire service needs, with the flexibility to expand its scope as operational requirements evolve.

3.10 Communications and Technology

Strategic Objective #8: Communications and Technology

Staying current with advances in communication and technology offers fire departments clear operational advantages. By adopting industry-leading practices, scalable technologies, and robust dispatch protocols, BFD will ensure timely, accurate, and resilient emergency communications that enhance firefighter safety and improve overall service delivery.

Modern communication tools, such as improved radio systems, digital incident-management platforms, and real-time data sharing allow crews to coordinate more effectively during fast-moving events. When information flows quickly and accurately between dispatch, command, and firefighters on the ground, decisions can be made with greater confidence, hazards can be identified earlier, and resources can be deployed more efficiently. This level of situational awareness is especially valuable during complex or multi-agency incidents where seamless interoperability is essential.

Keeping pace with technological advancements also strengthens overall preparedness and long-term resilience. Tools such as GPS mapping, drone imagery, automated alerting systems, and enhanced training simulations give departments the ability to plan more strategically, assess risks more accurately, and respond with greater precision. Technology also supports firefighter safety by improving accountability systems, monitoring environmental conditions, and reducing exposure to dangerous environments. By embracing modern communication and technology solutions, a fire department positions itself to deliver faster, safer, and more effective service to the community it protects.

BFD actively pursues technology advances where improvements to safety and service delivery is demonstrated. Examples of improvement include but not limited to newer radios that take advantage of the provincial AFFRCS radio system, CAD improvements, and engaging the First Due Fire Service Information Management (SFSIM modules to enhance operational readiness, safety, and administrative efficiency).

3.10.1 Strategic Fire Services Information Management

Fire departments generate significant volumes of information through emergency response activities, firefighter training, prevention programs, inspections, apparatus maintenance, workforce management, and community risk reduction initiatives. Historically, this information has often been viewed primarily as a record-keeping requirement to support legislative compliance, incident documentation, and administrative reporting. While these remain important functions, the strategic value of operational information extends far beyond compliance and historical record management.

Leading fire services increasingly recognize information as a critical organizational asset that supports evidence-based decision making, operational planning, resource allocation, performance measurement, and long-term sustainability. The ability to collect, organize, analyze, and interpret operational data allows fire service leaders to identify emerging risks, evaluate service effectiveness, forecast future demands, and proactively adapt programs and resources to meet changing community needs.

Strategic Fire Service Information Management (SFSIM) is the process of transforming operational information into actionable intelligence. This approach supports the continuous evaluation of organizational performance and allows leadership to make informed decisions based on measurable outcomes rather than assumptions or anecdotal observations. Information management also supports transparency and accountability by providing meaningful performance indicators that can be communicated to senior administration, Council, firefighters, and the community.

The BFD currently has purchased the First Due Fire SFSIM platform. providing capabilities that extend beyond incident reporting and records management, including firefighter training and certification management, personnel records, prevention and inspection activities, apparatus and asset management, workforce scheduling, reporting dashboards, and performance analytics.

As the community continues to grow and emergency service demands evolve, there is an opportunity to further leverage these capabilities to support strategic planning and organizational performance measurement. The effective use of operational data can assist the department in identifying trends related to emergency response demand, firefighter recruitment and retention, training compliance, apparatus utilization, prevention activities, and emerging community risks.

The ability to analyze historical information and forecast future requirements will become increasingly important as the department seeks to align service levels, staffing, training programs, capital investments, and community risk reduction initiatives with future operational needs. The SFSIM should therefore be viewed as an organizational capability that supports all aspects of fire service delivery and contributes to informed, transparent, and sustainable decision making.

Observation

Observation #19: BFD recently moved to a comprehensive fire service information management software program that consolidates multiple critical functions for fire departments into one platform. Opportunities exist to further utilize community and internal reporting, analytics, and performance measurement capabilities to support strategic planning and organizational decision making.

Recommendation

Recommendation #19: Develop a Strategic Fire Service Information Management Framework that establishes standardized performance indicators, reporting requirements, and analytical processes utilizing the existing First Due platform. The framework should support annual reporting to senior administration and Council regarding operational performance, community risk trends, workforce sustainability, training compliance, prevention activities, and asset management.

Strategic Objective: #1 Administration, #5 Emergency Response and Operations

Suggested Completion: 24–48 months

Cost: Neutral. No additional budget required, subject to available staff capacity.

Rationale: *Reliable information is essential to effective decision making. Establishing a formal framework for collecting, analyzing, and reporting operational information will improve organizational accountability, support evidence-based planning, and assist leadership in evaluating the effectiveness of programs and services. Regular reporting will also improve transparency and provide decision makers with meaningful information to support future policy, budget, and service delivery decisions.*

SECTION 4
RESPONSE PERFORMANCE AND CAPABILITIES

4.1 Response Performance

BFD provides emergency response services within a community that includes a defined residential urban area, expanding residential and commercial growth corridors, and surrounding rural and agricultural lands. Variations in land use, building density, transportation networks, and overall risk profile across these areas necessitate a balanced, risk-informed approach to response performance, rather than the application of a single uniform standard.

Fire service response performance is typically measured across three primary components: dispatch processing time, turnout (crew assembly) time, and travel time to the incident location. BFD's ability to meet established performance benchmarks is influenced by several local factors, including fire station location, railway crossings, road network design and connectivity, traffic volumes and patterns, staffing levels and response model, apparatus availability, and water supply systems. These factors can vary significantly between Blackfalds' established residential neighbourhoods, newly developing areas, and the surrounding rural response zones, including areas where mutual aid is either provided or received.

Given these operational considerations, BFD must adopt response performance targets that are practical, scalable, and aligned with the Town's specific risk profile. Performance expectations within the urban residential core should reflect recognized fire service best practices, while remaining achievable within the department's current and planned resources, staffing model, and infrastructure capacity.

This section outlines applicable fire service response performance guidance, including relevant provincial legislation and industry standards in Alberta, and considers how these frameworks inform service delivery within Blackfalds. It also examines local incident response data, highlighting how call types, geographic distribution, and incident frequency influence response performance and support future planning, deployment strategies, and resource allocation decisions.

4.2 Effective Response Force

Effective Response Force (ERF) concepts are based on fire service research conducted by organizations such as the NFPA and the National Institute of Standards and Technology (NIST). These studies identified the critical fireground tasks required to safely and effectively control a typical residential structure fire. NIST research has identified more than 20 essential fireground tasks that must be completed during a typical single-family dwelling fire incident. These tasks require multiple firefighters working simultaneously in order to control the incident while maintaining firefighter safety.

NFPA Standard 1720 *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2020)* provides guidance for volunteer and composite fire departments by identifying minimum staffing levels and response time objectives based on population density and community characteristics. For areas classified as urban, NFPA 1720 identifies an objective of assembling 15 firefighters on scene within 9 minutes total response time for 90 percent of incidents. For areas classified as rural, the standard identifies an objective of assembling 6 firefighters on scene within 14 minutes total response time for 80 percent of incidents.

At present, BFD has not formally established an Effective Response Force objective. However, the NFPA 1720 benchmarks provide a useful planning reference for evaluating the department's ability to assemble sufficient personnel and apparatus to manage emergency incidents safely and effectively. These benchmarks can be used as a comparative measure when reviewing response capacity and may assist BFD in establishing future performance objectives as part of ongoing service level planning.

The following table summarizes the median number of firefighters that responded to different incident types.

Table 14: 5-Year Median Number of Personnel on Scene by Incident Type

Incident Type	2021	2022	2023	2024	2025	5-Year Total
Alarms	1	4	4	1	1	3
Hazmat	5	6	5	5	6	5.5
Medical	4	5	5	5	5	5
Mutual Aid	6	7	6.5	n/a	5	6
MVC	8	8	7	6	8	7
Other	5	2	7	0.5	2	2
Outside Fire	8	4.5	7	6	6	6
Public Hazard/ Assist	6.5	5	7	5.5	3.5	6
Rescue	7	n/a	10	15	n/a	10
Rubbish Fire	n/a	5	n/a	n/a	8	7
Structure Fire	9	11.5	12	12	8.5	11
Vehicle Fire	9	8	10	8	9	8
All Incidents Median	5	5	5	4	4	5

Observation of effective response force related staffing medians:

- Stable overall staffing levels across incidents: The median staffing for all incidents remains consistent at 4–5 personnel over the five-year period, indicating a stable response model for typical calls.
- Higher staffing levels for fire-related incidents: Structure fires (median of 11) and vehicle fires (median of 8) consistently require greater personnel, reflecting the need to assemble an effective response force for fire suppression operations.
- Moderate staffing for MVCs and rescues: Motor vehicle collisions (median of 7) and rescue incidents (median of 10, though limited data) show elevated staffing compared to routine calls, aligning with the complexity and resource needs of these incident types.
- Lower staffing levels for alarms and minor incidents: Alarm calls (median of 3) and “Other” incident types (median of 2) typically involve fewer personnel, suggesting these calls are managed with minimal resource deployment.

Table 15 presents the five-year median number of personnel on scene by incident type, segmented by jurisdiction (Blackfalds, County and Other response areas). This analysis provides insight into how staffing levels vary based on incident type and geographic area, reflecting differences in response requirements, travel distance, and available resources. Variations between jurisdictions may also be influenced by automatic aid agreements, apparatus availability, and the scale or complexity of incidents encountered outside the primary service area.

Table 15: Median Number of Personnel on Scene by Incident Type – 5 years

Incident Type	Blackfalds	County	Others
Alarms	3	1	n/a
Hazmat	6	4	n/a
Medical	5	2.5	n/a
Mutual Aid	n/a	5	n/a
MVC	7	7	6
Other	4	1	n/a
Outside Fire	6	6	n/a
Public Hazard/ Assist	6	9.5	n/a
Rescue	7	12.5	n/a
Rubbish Fire	7.5	5	n/a
Structure Fire	12	7	n/a
Vehicle Fire	9.5	8	n/a
Total - All Incidents	4	6	6

Observation of effective response force related staffing medians by the 5-year trend by jurisdictions:

- Higher staffing in Blackfalds for structure fire response: Structure fires within Blackfalds show a median staffing of 12 personnel compared to 7 in the County, suggesting stronger alignment with ERF objectives within the urban service area.
- Selective increases in County staffing for complex incidents: Certain incident types, including public hazard/assist (9.5 personnel) and rescue (12.5 personnel), demonstrate higher staffing levels in the County, reflecting the need for additional resources due to travel distance, rural conditions, or incident complexity.
- Comparable staffing for some incident types across jurisdictions: Motor vehicle collisions (7 personnel) and outside fires (6 personnel) show consistent staffing between Blackfalds and the County, indicating a standardized approach to these incident types regardless of location.

Observation
Observation #20: The current dataset does not capture the actual number of firefighters responding on each apparatus, requiring the use of minimum staffing assumptions. While this provides a consistent baseline, it underrepresents the true ERF at incidents and limits the accuracy of performance analysis, staffing evaluations, and resource deployment assessments.
Recommendation
Recommendation #20: Implement a standardized process to accurately record the number of firefighters responding on each apparatus for every incident. This should be integrated into the records management system (RMS) and/or CAD system.
Suggested completion: 12-24 months
Strategic Objective: #5 Emergency Response and Operations
Cost: CAD/ RMS configuration is dependent on ability through current dispatch providers current capabilities
Rationale: *Accurate personnel tracking will provide a more precise understanding of actual response capacity and ERF achievement, enabling better evaluation of compliance with NFPA standards and internal service level objectives. It will also support more informed decision-making related to staffing models, deployment strategies, and future resource planning, while improving the overall reliability and defensibility of analytical reporting.*

4.3 Industry Leading Practices and Standards

While communities in Alberta are not required to provide fire protection services, most municipalities provide fire and rescue services directly or through contracted services. This section provides an overview of the GOA regulatory framework and NFPA service standards used to inform the development of fire department response performance and service levels.

In Canada, and in particular Alberta, leading practices and standards considered by the fire service industry when planning effective and efficient service delivery include the following sources:

- Alberta Occupational Health and Safety, Guide for Firefighting, 2019
- Municipal Government Act, September 1,2020
- Alberta Building Code Limiting Distance and Fire Response Requirements
- Alberta Safety Codes Act, July 23, 2020
- National Building Code – NBC Alberta Edition (AE) 2023
- National Fire Code – NFC Alberta Edition (AE) 2023
- Commission on Fire Accreditation International
- Canadian Standards Association (CSA)
- Fire Underwriters Survey (FUS)
- National Fire Protection Association (NFPA)
- Underwriters Laboratories (UL/ULC)

The most widely accepted standards for the fire service are developed by the NFPA. Several decades of research have resulted in the NFPA establishing industry benchmarks for operation and firefighter safety. The use of industry standards such as those offered by the NFPA does not limit a local government's flexibility to develop levels of service based upon local conditions and economic realities.

4.3.1 Suburban Response Performance Standards

BFD utilizes a response model that reflects the community's evolving small-town to mid-sized growth context, combination staffing approach, and available firefighting resources, aligned with the intent of NFPA 1720: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments. While Blackfalds continues to experience residential and commercial growth, BFD's response performance must balance the need for timely emergency intervention with the operational realities of a combination staffing model, station location, and the potential for overlapping or concurrent incidents.

Developed areas within Blackfalds benefit from efficient travel distances, an increasingly connected road network, and a municipal hydrant system servicing the majority of residential, commercial, and institutional properties. These areas represent the highest concentration of population, development intensity, and life-safety risk within the community, where rapid response is critical for incidents such as structure fires, medical emergencies, motor vehicle collisions, and fire alarm activations in multi-unit residential and commercial occupancies.

Continued growth in new subdivisions and commercial areas will incrementally increase service demand and place additional importance on maintaining consistent response performance. In alignment with NFPA 1720, BFD should establish response performance objectives that emphasize total response time and the timely assembly of an Effective Response Force (ERF), rather than evaluating turnout or travel time in isolation. Performance should be measured using a percentile-based approach (e.g., 80th or 90th percentile), ensuring that targets reflect reliable and consistent service delivery across the majority of incidents, not solely best-case scenarios.

Within Blackfalds' primary service area, BFD should aim to deploy an initial full alarm assignment within timeframes appropriate for a combination fire service, while maintaining the capability to assemble an ERF sufficient to initiate and sustain fire suppression operations. Ongoing monitoring of dispatch processing times, turnout performance, travel time distribution, staffing availability, and apparatus readiness, supported by continued improvements in pre-incident planning, training, and dispatch coordination, will be critical to sustaining an effective and adaptable response model as the community grows.

Suggested Urban Response Performance Targets (NFPA 1720–Informed):

- Effective Response Force (ERF): Minimum of 10–12 firefighters
- Travel Time Objective: 8–10 minutes within developed areas
- Performance Measure: 80th percentile compliance
- Incident Types: Structure fires and other incidents requiring sustained fire suppression and coordinated operations

4.3.2 Alberta Occupational Health and Safety Guide for Firefighting

In March of 2019, Alberta Occupational Health, and Safety (OHS) released a new bulletin the "Occupational health and safety (OHS) guide for firefighting". This bulletin replaced the former Code of Practice for Firefighters 2007. The bulletin describes the minimum standards a fire service must achieve to be compliant with OHS legislation. The document is intended to be a guide to assist in developing standard operating procedures and guidelines meeting NFPA standards and industry best practices.

It states the guidelines and policies developed should include, as per National Fire Protection Association (NFPA) standards:

- Services to be offered, including functions that must be performed simultaneously
- The minimum number of firefighters required to safely perform each identified firefighting function or evolution
- The specific worker safety rules, procedures, first aid and medical attention services for firefighters to be followed at each type of incident
- The number and types of firefighting vehicles, equipment and firefighters required for the initial response to each type of emergency to which firefighters might be expected to respond
- This includes policies or procedures to be followed when minimum staffing or equipment levels cannot be met
- Guideline or policy on the minimum amount of training and experience a firefighter must be given before being considered competent to perform certain emergency operation functions
- detailed description of the incident management system to be followed at an emergency incident; and a detailed description of the personnel accountability system to be used at each incident

The guideline provides the requirements for managing hazardous materials, working in confined spaces, general safety requirements, emergency preparedness, fall protection, PPE and additional elements of hazards found in the firefighting environment. A detailed description of the OHS requirements is outlined in this document to ensure safe work practices are in place for all firefighters, including their physical and mental health.

4.3.3 Alberta Building Code Limiting Distance and Fire Department Response Requirements

The National Building Code-2019 Alberta Edition, NBC(AE) defines the relationship between fire department response time and limiting distance as follows:

9.10.15.3 Limiting Distance and Fire Department Response

1) *Except for the purpose of applying Sentences 9.10.15.2.(2), 9.10.15.4.(3) and 9.10.15.5.(13), a limiting distance equal to half the actual limiting distance shall be used as input to the requirements of this Subsection, where*

1. *a) the time from receipt of notification of a fire by the fire department until the first fire department vehicle capable of beginning suppression activities arrives at the building exceeds 10 min in 10% or more of all calls to the building, and*
2. *b) any storey in the building is not sprinklered.*

A-3.2.3.1. (8) Intervention Time and Limiting Distance. *The total time from the start of a fire until fire suppression by the fire department depends on the time taken for a series of actions. Sentence 3.2.3.1.(8) is only concerned with the time from receipt of notification of a fire by the fire department until the first fire department vehicle capable of beginning suppression activities arrives at the building. It specifies a 10-min time limit which must be met in more than 90% of the calls to the building served by the fire department. The standard requires that the fire department establish a "performance objective" of not less than 90% for each response time objective."*

A 2009 Code interpretation provided by the National Building Code-2019 Alberta Edition, NBC(AE) and standards in Standata 06-BCI-025 defines the response time as,

The terminology as noted in Sentences 3.2.3.1.(8), 9.10.14.3.(1) and 9.10.15.3.(1) is interpreted to have the following meanings:

"Receipt of notification of a fire" - means the point in time that the fire dispatcher (who may or may not also be the 911 call taker) first receives the request for fire suppression assistance. The fire dispatcher is the person who directly notifies fire crews of the need to respond and whose actions are within the control of the fire department through direct employment, a shared services agreement or contract.

Note: *This timeframe does not include any call handling or call transfer time by 911 operators or alarm monitoring company personnel.*

"Arrives at the building" – means the point in time that a rated fire department engine (i.e., pumper) capable of beginning exterior exposure protection and suppression activities arrives at the scene of the fire staffed with a crew of firefighters in accordance with local municipal policy.

4.3.4 National Fire Protection Association (NFPA) Standards

The most widely recognized and utilized standards within the fire service are developed by the National Fire Protection Association (NFPA). Established in 1896, the NFPA is a self-funded, non-profit organization dedicated to reducing death, injury, property damage, and economic loss caused by fire, electrical, and related hazards (NFPA, 2021). The organization has developed more than 300 consensus-based codes and standards intended to enhance fire department effectiveness, operational consistency, and firefighter safety. These standards are widely referenced in Canadian regulatory frameworks, including the National Building Code – 2019 Alberta Edition (NBC(AE)) and Alberta Occupational Health and Safety (OHS) guidelines for firefighting.

NFPA standards are grounded in extensive research and are designed to prioritize life safety for both responders and the public. In Alberta, they are frequently referenced to inform safe work practices, operational procedures, and performance expectations within fire departments. For communities such as Blackfalds, where fire protection services are delivered through a Paid-On-Call (POC) model, NFPA 1720: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments provides the primary framework for establishing response performance objectives and service level expectations.

In addition, *NFPA 1225: Standard for Emergency Services Communications* is referenced to evaluate alarm handling and dispatch performance, while *NFPA 1201: Standard for Providing Emergency Services to the Public* outlines leading practices related to governance, organizational structure, strategic planning, and the effective deployment of fire service resources. The level of alignment with these standards will be assessed in Section 4.4, Emergency Response Performance.

As BFD operates exclusively with a Paid-On-Call (POC) staffing model and does not have career suppression staff, NFPA 1720 is the appropriate and primary standard for this analysis. References to *NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* may be included for comparative context where relevant, particularly in relation to emerging community growth and future service considerations.

4.3.4.1 NFPA 1720

NFPA 1720 Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2020), response standards provide a basis to evaluate the BFD's response performance. The response standards outlined in NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2020) are based on a low to medium risk typical single-family dwelling of 2000 ft_2 (186 m_2) without a basement and with no exposures. Alarm answering should be completed within 15 seconds 90% of the time. Alarm processing should be completed within 64 seconds 90% of the time.

Table 16: NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2020) Staffing and Response Time Standards illustrates how NFPA acknowledges the relationship between population density, travel distances and fire department service levels. As density and distance increase, so does the prescribed service level.

Table 16: NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2020) Staffing and Response Time Standards

Demand Zone[a]	Demographics	Minimum staff to respond [b]	Response time (minutes)	Meets Objective (%)
Urban area	>1000 people/2.6km^2	15	9	90
Suburban area	500-1000 people/2.6 km^2	10	10	80
Rural area	<500 people/2.6 km^2	6	14	80
Remote area	Travel distance ≥ 12.87 km	4	Directly dependent on travel distance	90
Special risks	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90

[a] *A jurisdiction can have more than one demand zone.*
[b] *Minimum staffing includes members responding from the AHJs department and automatic aid*
[c] *Response time begins upon completion of the dispatch notification and ends at the time interval shown in the table.*

4.3.4.2 National Institute of Standards and Technology (NIST)

The NIST Fire Research Division is a U.S. physical science laboratory that through its programs in measurement, prediction, systems integration, and the dynamics of fire and its interactions with the built and natural environment. NIST provides leadership for advancing the theory and practice of fire safety engineering, firefighting, fire investigation, fire testing, fire data management, and intentional burning.

NIST developed a comprehensive report that identifies the optimum number of members for a fire company necessary for the most effective completion of the over 22 essential fire ground tasks at a typical single-family house fire. On average, a four-member crew operating on a structure fire completed all the tasks on the fire ground seven minutes faster (30%) than the two-person crews. The four-person crews completed the same number of fire ground tasks 5.1 minutes faster on average (25%) than the three-person crews.

4.3.5 Fire Underwriters Survey

The Fire Underwriters Survey (FUS) provides data, underwriting, risk management and legal/regulatory services focusing on community fire-protection and fire prevention systems in Canada. FUS publishes the Canadian Fire Insurance Grading Index which is utilized by the property casualty insurers. This grading will establish the basis for insurance companies in determining fire insurance premium rates. FUS provides the following assessments the following:

- Fire department response - includes apparatus, distribution of companies, staffing, training, maintenance, pre-incident planning, etc.
- Fire safety control - includes review of all fire prevention and public education activities. The overall needs of these programs are determined with the aim of reducing the number of fires within the community. All activities should be measured for their effectiveness.
- Municipal building stock - includes details such as size, construction, exposures, occupancy types, and fire protection systems. These lay the foundation of a municipal risk assessment and assist to determine a community's fire station, apparatus, and staffing needs.
- Water system capacity and distribution for public fire protection - includes an emphasis on the system's ability to reliably deliver adequate water to control major fires throughout the municipality. The amount of water is available to the fire department is the critical test in the evaluation.

FUS provides an overall 'point in time' assessment of the community's fire service capabilities. Improving FUS ratings may reduce residential, commercial, and industrial fire insurance premiums. Our research suggests FUS ratings have a greater impact on insurance premiums for industrial occupancies. The impact on insurance premiums must be carefully evaluated as the industry is very competitive and premiums can be adjusted regardless of the fire department's capabilities and FUS ratings.

4.4 Incident Types and Frequency Analysis

Fire and rescue services typically have access to large amounts of incident and response data. Incident data can be used and reported for several purposes. Incident type and frequency data are used to analyze department activity levels and identify trends in demand for fire services. The range of services provided by the modern fire service is often surprising. Fire departments have evolved from responding primarily to fires to responding to a broad range of public service and emergency incidents and becoming a critical component of public safety services.

Incident data is typically categorized and used to identify trends in services provided in a community. For example, fire incidents may be categorized into specific fire types such as brush, chimney, garbage dumpster, cooking, or vehicle fires. This level of detail is useful to a fire chief in analyzing community risk and service requirements. It may also be useful in identifying specific fire prevention and public education opportunities.

Incident data may also be summarized into broader categories to provide a more general report on activities undertaken by the fire department. For example, all types of fires may also be combined in a single category along with other broad categories such as rescue, motor vehicle and medical incidents to provide a general report of fire department activity to the public or elected officials.

4.4.1 Unique Incidents

Table 17 identifies all unique incidents that occurred within the municipal boundary, categorized by Response Type. This analysis provides an overview of the types of emergencies that the fire department responded to, along with the reported incident types and their respective frequencies.

Table 17: Unique Response Types (2021 to 2025)

Incident Subcategory	2021	2022	2023	2024	2025	5-Year Total	Total %
Alarms	69	105	119	120	131	544	45.18%
Animal Rescue	0	1	2	0	0	3	0.25%
CO Alarms	5	4	3	7	5	24	1.99%
Fire Grass / Brush	7	9	7	16	9	48	3.99%
Fire Outside	3	7	5	10	6	31	2.57%
Fire Rubbish	1	4		2	4	11	0.91%
Fire Structure	5	10	0	7	6	28	2.33%
Fire Vehicle	5	9	4	6	5	29	2.41%
Gas Leak	2	1	2	2	2	9	0.75%
Haz-Mat	1	2	2	3	4	12	1.00%
High Angle Rescue	0	0	1	0	0	1	0.08%
Illegal Burn	0	1	1	5	0	7	0.58%
Investigation Fire	1	3	1	5	1	11	0.91%
Investigation Odor	1	1	1	1	1	5	0.42%
Investigation Smoke	4	4	0	0	1	9	0.75%
Medical	25	30	30	25	26	136	11.30%
Motor Vehicle Incident	36	39	40	47	40	202	16.78%
Mutual Aid	14	11	14	9	11	59	4.90%
Public Hazard	5	4	6	7	3	25	2.08%
Rail Incident	0	0	1	0	0	1	0.08%
Total	184	245	239	272	255	1195	

The following observations regarding unique incident types were noted:

1. Overall Call Volume Growth - Total incidents increased from 184 (2021) to a peak of 272 (2024), representing a 48% increase over the period.
    - A slight decline to 255 incidents in 2025 suggests stabilization rather than a reduction in demand.
    - Growth is consistent with population increase, development, and rising service expectations.

2. Alarm Calls Dominate Response Profile (45.18%) - Alarms account for 544 incidents, half of all responses.
    - Steady annual increase indicates a persistent and growing demand driver.
    - Primarily low-risk, high-frequency calls that impact operational efficiency.
    - Opportunity exists for alarm reduction strategies, including public education and bylaw enforcement.
3. Motor Vehicle Incidents (16.78%) – Total of 202 incidents, consistently ranging between 36–47 annually.
    - Represents the most significant high-risk, high-complexity incident type.
    - Reflects the impact of traffic volumes and transportation corridors within the community.
    - Supports the need for extrication capability, training, and appropriate staffing levels.
4. Medical Responses (11.30%) – Total of 136 incidents, with consistent yearly volumes.
    - Indicates ongoing expectation for medical first response support.
    - May contribute to resource strain if not aligned with EMS response models.
    - Opportunity to review tiered response agreements and deployment practices.
5. Fire Incidents –Combined fire-related incidents (structure, vehicle, grass/brush, outside, rubbish) represent a moderate portion of total calls.
    - Structure fires remain low at 28 incidents (2.33%) but carry significant life safety risk.
    - Grass/brush fires (48 incidents) show year-to-year variability, with a notable spike in 2024.
    - Fire risk is influenced by seasonal and environmental conditions.
    - Continued investment in suppression capability and training remains essential.

6. Mutual Aid Activity (4.90%) - Total of 59 incidents, indicating regular regional response integration.
    - Reflects both support provided to and reliance on neighbouring departments.
    - May impact local service levels during concurrent incidents.
    - Reinforces the importance of regional coordination and interoperability.
7. Low-Frequency, High-Risk Incidents - Includes Haz-Mat (12), Gas Leaks (9), High Angle Rescue (1), and Rail Incidents (1).
    - These incidents are rare but potentially high consequence.
    - Best addressed through specialized training and regional response partnerships rather than full local resourcing.
8. Investigations and Public Hazard Calls - Consistent, low-level demand across investigation and hazard categories.
    - Indicates ongoing need for fire prevention, inspections, and public safety education.
    - Supports proactive risk reduction strategies within the community.

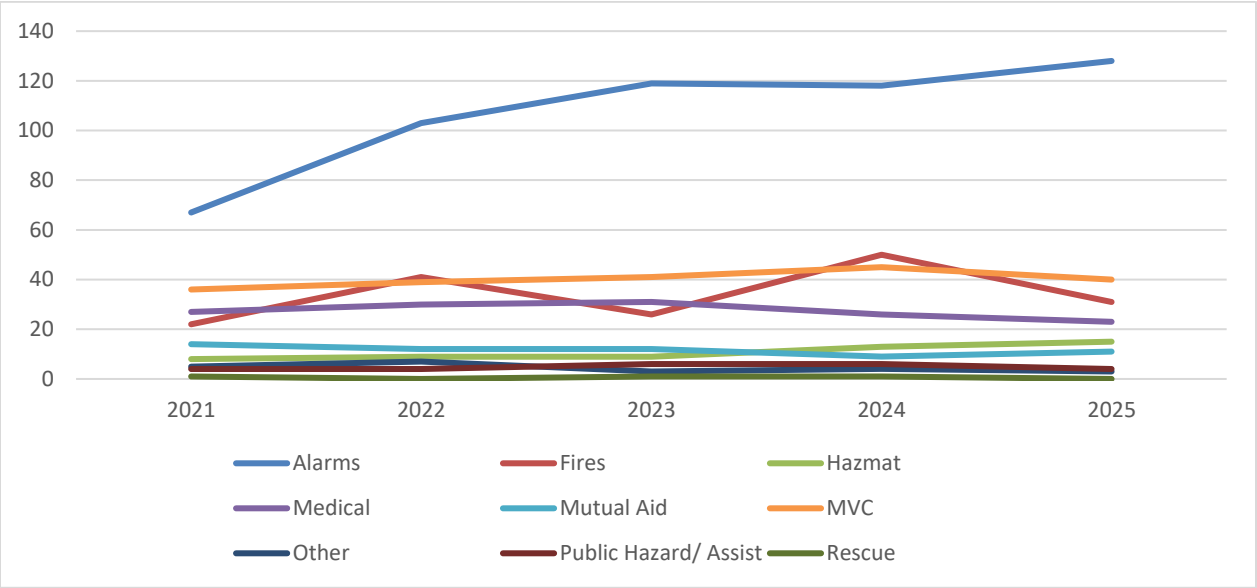
The incident subcategories identified in table 18 below, can re rolled up into a broader incident category that will be utilized to identify the BFD's response performance. These broader incident categories are outlined below.

Table 18: Incident responses (2021-2025)

Incident Category	2021	2022	2023	2024	2025	5-Year Total	Total %
Alarms	67	103	119	118	128	535	44.44%
Fires	22	41	26	50	31	170	14.12%
Hazmat	8	9	9	13	15	54	4.49%
Medical	27	30	31	26	23	137	11.38%
Mutual Aid	14	12	12	9	11	58	4.82%
MVC	36	39	41	45	40	201	16.61%
Other	5	7	3	4	3	22	1.83%
Public Hazard/ Assist	4	4	6	6	4	24	1.99%
Rescue	1	0	1	1	0	3	0.25%
Totals	184	245	248	272	255	1204	100%

Figure 10 illustrates the general trends seen in the broad categories of incidents occurring in Blackfalds during this period. This analysis is intended to draw attention to the incident categories that are changing rapidly. A positive trend (increasing) may forecast a future need for additional resources to respond to these incidents or new mitigation strategies to address this type of community risk. A negative trend (decreasing) may indicate successful mitigation efforts or a decreasing risk resulting from other changes in the community risk profile.

Figure 10: Unique Incidents by Incident Type (2021to 2025)



The following general trends regarding dispatched event types within Blackfalds were noted:

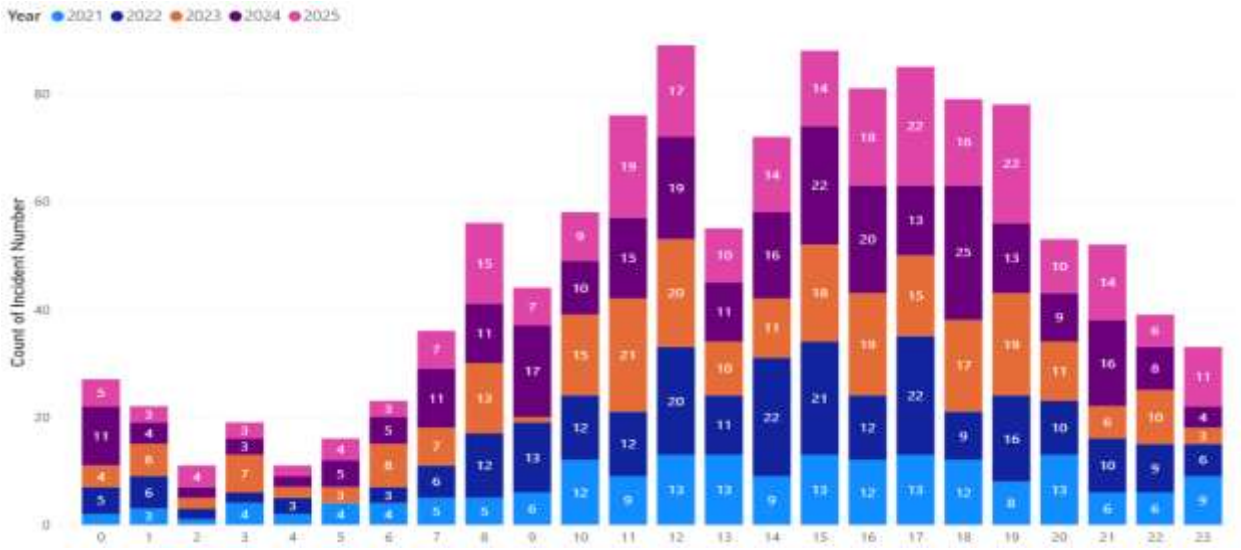
- Alarms dominate call volume and continue to rise, accounting for 44.4% of all incidents, with a steady increase from 67 calls in 2021 to 128 in 2025, indicating a growing demand tied to system activations, nuisance alarms, or increased development.
- Motor vehicle collisions (MVCs) represent the second largest and consistently high call type, comprising 16.6% of incidents and remaining stable year-over-year, suggesting sustained roadway risk and ongoing demand for technical rescue and medical response.
- Fire-related incidents show variability rather than a clear trend, with a notable spike in 2024 followed by a decrease in 2025, indicating fluctuating fire risk that may be influenced by environmental conditions or prevention efforts.

- Hazmat and medical calls demonstrate gradual upward or stable trends, particularly hazmat incidents increasing from 8 to 15 annually, while medical responses remain consistent, highlighting a steady need for specialized response capabilities and medical support services.

4.4.2 Incidents by Time of Day

The time incidents occur is useful in identifying periods of peak and lower demand for services. Typically, demand for emergency services is lowest in the early hours of the morning. The horizontal axis in Figure 11 begins with 0 hours (12 a.m. – 1 a.m.) and ends at 23 hours (11 p.m. to 12 p.m.).

Figure 11: 2021-2025 Incidents by Time of Day



The following observations regarding the time incidents occurred were noted:

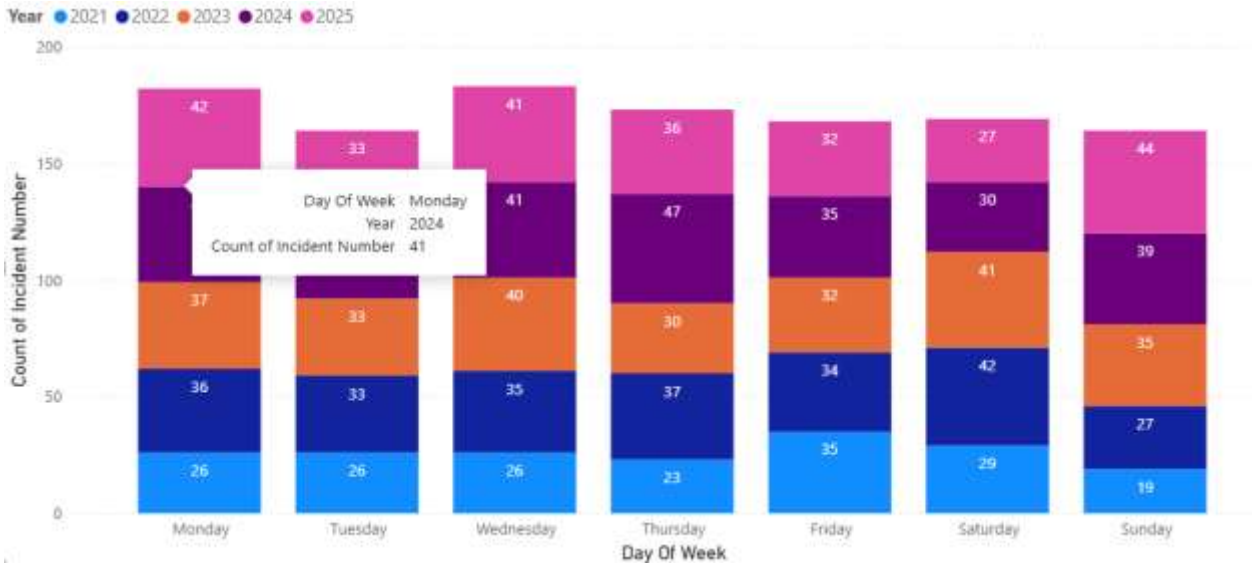
- Peak incident activity occurs during midday to early evening (10:00–18:00), with the highest concentrations consistently observed between approximately 11:00 and 16:00 across all years.
- The single highest demand period appears around noon (12:00), indicating this is the most resource-intensive time of day for dispatch and response.
- Overnight hours (00:00–06:00) show significantly lower call volumes, reflecting reduced activity and lower incident risk during these periods.
- A steady ramp-up in incidents begins in the early morning (06:00–09:00), aligning with increased community activity such as commuting and business operations.
- Evening hours (17:00–20:00) remain elevated but begin to decline, suggesting sustained but tapering demand after the daytime peak.

- Late evening (21:00–23:00) shows a noticeable drop-off, returning toward lower overnight call volumes, though still higher than early morning lows.

4.4.3 Incidents by Day of the Week

Analyzing the frequency of incidents on different days can reveal patterns that may indicate periods of increased demand or potential strain. Figure 12 presents the incident data from 2021to 2025.

Figure 12: 2021-2025 Incidents by Day of the Week



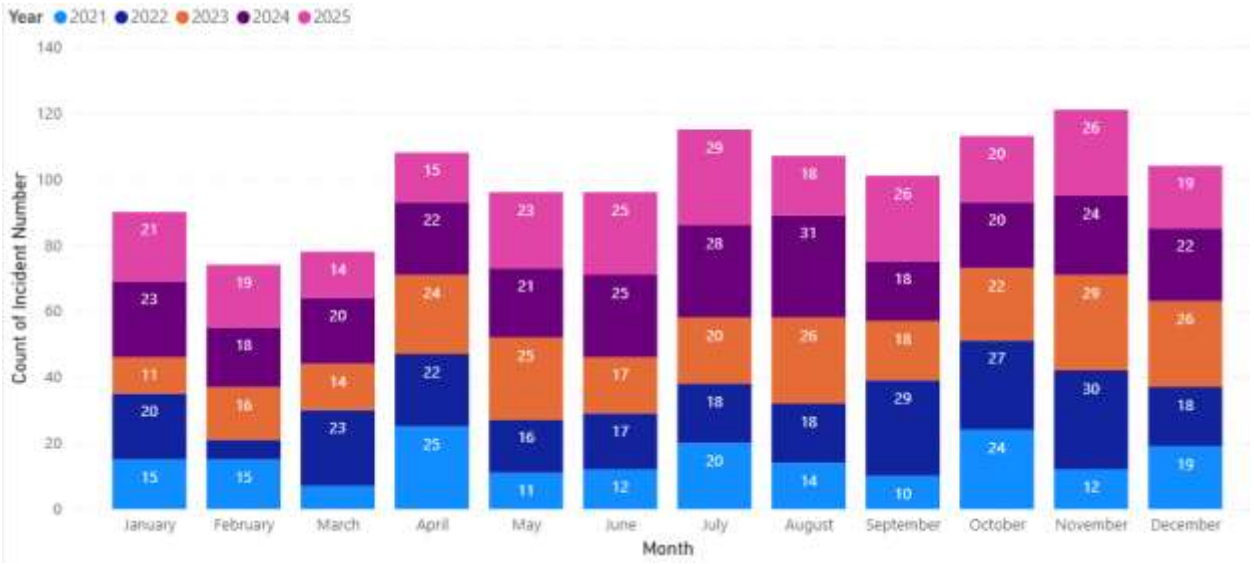
The following observations were noted in service demands for different days of the week:

- Incident volumes are consistent throughout the week, with no extreme spikes, indicating a steady demand for service across all days.
- Midweek (Wednesday and Thursday) shows slightly elevated activity, suggesting higher incident frequency during core business days.
- Monday also presents a higher call volume, reflecting carryover activity from the weekend and the resumption of normal work routines.
- Weekend patterns are mixed, with Saturday maintaining higher incident levels (driven by increased activity and mobility), while Sunday shows more variability but can be among the higher-volume days overall.
- Tuesday and Friday tend to be slightly lower or moderate, representing more stable periods without significant peaks.
- Overall, there is no clear “low demand” day, reinforcing the need for consistent staffing and resource availability throughout the entire week.

4.4.4 Incidents by Month of the Year

Understanding which months see higher or lower incident volumes can help optimize resource allocation and preparedness. Figure 13 presents the incident data from 2021 to 2025.

Figure 13: 2021-2025 Incidents by Month of the Year



The following observations were noted in service demands for different months of the year:

- Incident volumes increase from winter into late spring and summer, with a noticeable rise beginning in April and peaking through July and August.
- July represents one of the highest-demand months, indicating elevated seasonal risk associated with outdoor activity, travel, and environmental factors.
- A secondary peak occurs in the fall (October–November), with November showing the highest overall totals, suggesting increased incidents related to weather changes, heating, and road conditions.
- Winter months (January–March) tend to have lower to moderate call volumes, though January remains active compared to February and March.
- Late summer (August–September) shows a slight dip following the July peak, but volumes remain higher than early-year levels, indicating sustained seasonal demand.
- Overall, the data demonstrates clear seasonal variability, with higher incident frequency in summer and late fall, reinforcing the need for seasonal resource planning and targeted risk mitigation strategies.

4.5 Response Performance

The following sections provide an analysis of the response performance of BFD. The response performance goals applied in the analysis are identified in the NFPA 1720 standard. Five-years of consistent response data provided by BFD were analyzed, covering all incidents from January 2021 to December 2025.

4.5.1 Intervention Time

Total intervention time is the elapsed time between the incident occurring and when incident management begins. This includes the discovery of the incident and the initiation of the emergency response system, typically by calling 911. From a community perspective, this time segment can be partially managed by implementing cyclical life-safety system inspections and promoting residential fire alarms and sprinkler systems.

Once the 911 call is made, the emergency response system is engaged to manage the incident and minimize its impact. Simplified, the system is composed of an emergency dispatching centre and the first responding agency. Although many of the requests for service may not require urgent intervention, when it does, the main purpose of this system is to respond and manage the incident as quickly and safely as possible. As a result, the time taken to gather relevant caller and incident information (alarm processing time), notify first responders, prepare them for response (assembly time), and drive to the incident (travel time) are all critical elements of an effective response. These time segments are the focus of this section and are key indicators of total response time performance.

Total response time is the best indicator of how the entire system is functioning. It also reflects the experience of the person making the 911 call. System performance can be managed and improved by implementing best practices and supporting technologies. As a result, total response time performance should be monitored and reported to the authority having jurisdiction (AHJ) regularly.

The causes of significant changes in response time performance should be identified and discussed with the AHJ. Incident management time is variable and depends on the type of incident and the resources required to manage it safely.

Fire department resource availability is determined by the concentration (how many and what types of resources there are in one station) and distribution (where those resources are located relative to the incident) of fire department equipment and firefighters. Resource requirements are based on community risks. An adequately resourced response system should provide an effective response force (ERF) to safely manage commonly known risks as effectively and efficiently as possible.

Figure 14 provides an overview of the incident intervention timeline from NFPA. The definitions and descriptions of the actions taken in each time segment are provided below.

Figure 14: Incident Intervention Continuum

Notification	Intervention Time				
Incident Discovery and 911 Call	Alarm Answering	Alarm Processing	Assembly / Chute Time	Travel Time	Set-up
Time unknown (Time varies with every incident)	15 seconds	64 Seconds	80 Seconds Fire 60 seconds medical	240 Seconds	May vary by event
Time indirectly manageable	*Time directly manageable*				
← ***Time Values*** →					

Discovery: The time between the start of the emergency incident and when a person or an engineered system detects the incident.

Emergency 911 Call: The time taken to dial 911 and notify the 911 call centre of the need for emergency services.

Alarm Answering: This time segment begins when the 911 call is dialed and ends when the call is answered by the 911 call centre.

Alarm Processing: This time segment begins when the 911 call is answered and ends with the notification of firefighters. It is the time taken to extract the necessary information from the 911 caller to allow the proper response to be initiated.

Assembly Time: This time segment begins when dispatch notifies the firefighters and ends when the vehicle leaves the station for response. Time is required for firefighters to dress in proper personal protective equipment (PPE) and safely egress the station.

Travel Time: This time segment begins when an apparatus leaves the station or otherwise begins the response to the scene of the emergency and ends when the assigned vehicle arrives on scene and is a function of distance and the speed traveled.

Total Response Time (Common Definition): This time segment begins when the 911 call is answered and ends when the first apparatus capable of commencing incident management arrives.

Setup Time: The time it takes (on-site) to evaluate the necessary actions, position the required resources, and commence the intervention. In the case of a fire, completing size-up, assigning the necessary tasks, and deploying resources can provide delays on the scene. A well-trained crew can minimize these delays while providing a safe, successful response.

4.5.2 NFPA 1720 Performance Standards

Recognizing that Composite and POC/volunteer fire departments serve a variety of community types with varying population densities and geography, NFPA developed response time and staffing standards relative to regional and individual demand zone conditions. NFPA 1720 response standards are lowered as population density decreases, and travel distances increase within a demand zone increase. For example, the response goal for urban areas is to respond within nine minutes 90% of the time with 15 firefighters whereas the rural response standard is within 14 minutes 80% of the time with six firefighters.

It is important to note that depending on the geography of a fire department's total response area and demand zone(s), levels of service may vary across demand zones for a fire department. Additionally, the response standards identified in NFPA 1720 are based on a structure fire of a single residence and are considered a leading practice and not a legislated requirement.

Table 19: NFPA 1720 Staffing and Response Time Standards

Demand Zone	Demographics	Minimum Staff to Respond	Response Time (minutes)[c]	Meets (%) Objective
Urban area	>1000 people/2.6 km^2	15	9	90
Suburban area	500-1000 people/2.6 km^2	10	10	80
Rural area	<500 people/2.6 km^2	6	14	80
Remote area	Travel distance ≥ 12.87 km	4	Directly dependent on travel distance	90
Special risks	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90

[a] *A jurisdiction can have more than one demand zone.*
[b] *Minimum staffing includes members responding from the AHJs department and automatic aid*
[c] *Response time begins upon completion of the dispatch notification and ends at the time interval shown in the table.*

Based on NFPA 1720 demand zone definitions, the Town of Blackfalds most appropriately aligns with an Urban demand zone for the majority of its developed area. According to the 2021 Census of Population, Blackfalds has a population of 11,015 and a land area of approximately 19.89 km^2, resulting in an average population density of approximately 554 persons per km^2. When converted to the NFPA 1720 standard unit of measure, this equates to approximately 1,440 persons per 2.6 km^2, which exceeds the NFPA 1720 threshold of greater than 1,000 persons per 2.6 km^2 required for an urban classification.

In addition to meeting this quantitative density criterion, Blackfalds exhibits several qualitative characteristics consistent with an urban demand zone. These include compact and contiguous residential subdivisions, an expanding commercial and mixed-use corridor, and the presence of institutional occupancies such as schools, recreation facilities, and municipal buildings. The community is supported by an interconnected roadway network and a hydrant-serviced water distribution system, both of which facilitate efficient apparatus deployment and effective fire suppression operations. Collectively, these characteristics support shorter travel distances and reinforce the need for rapid intervention in life-safety–driven incidents, including structure fires, medical emergencies, and alarm activations in higher-occupancy or mixed-use buildings.

While the majority of incident response within Blackfalds aligns with an Urban demand zone, it is recognized that responses extending beyond the municipal boundary into Lacombe County or other surrounding areas are subject to Rural demand zone characteristics as defined by NFPA 1720. These areas typically exhibit significantly lower population densities (less than 500 persons per 2.6 km^2), greater travel distances, limited or non-hydranted water supply, and reduced infrastructure connectivity.

As such, emergency response in these areas is appropriately measured against NFPA 1720 rural response objectives, which include longer travel time allowances and reduced ERF expectations reflective of dispersed development patterns and access constraints. This distinction ensures that performance evaluation remains realistic and context-sensitive, while still supporting effective service delivery through automatic aid and mutual aid agreements with neighbouring jurisdictions.

4.6 Emergency Response Performance Analysis

The time segments identified in Section 4.5.1 are recorded by BFD, capturing individual response timestamps throughout an incident. The timestamps are recorded by the dispatching agency and used to compile a complete history for all incidents.

Examples of typical incident timestamps include:

- Station or firefighter notification
- Apparatus responding
- Apparatus arrived
- Loss stopped
- Leaving scene
- Returned to station

The response performance analysis for BFD focuses on emergency responses from 2021to 2025. The timestamps are used to calculate assembly time, travel time, and total response time. Emergency response performance information can be used by the fire chief and senior administration for several purposes, including but not limited to:

- Monitoring response efficiency and effectiveness
- Reporting response performance to the community and elected officials
- Evaluating effectiveness and compliance with national and provincial codes
- Evaluating effectiveness and compliance with council policies and local bylaws
- Identifying improvement strategies
- Developing or modifying service level standards
- Planning for future resource needs (operational and capital)

Historically, fire departments typically reported their average performance. Average performance can be misleading as it is only achieved approximately 50% of the time but can be skewed in small data sets with large outliers. Contemporary fire and emergency services report 80th or 90th percentile performance times to provide a more precise representation of response reliability depending on whether they are a volunteer or career fire department.

Emergency response time analyses typically begin with the timestamp identifying the point at which the 911 call is answered by the primary service answering point (PSAP) which is the City of Red Deer. All requests for service provided by BFD are dispatched by the communications team within the Red Deer dispatch centre.

4.6.1 Alarm Handling

Alarm processing time typically begins when the call is answered and call evaluation starts, ending when the fire department is dispatched. NFPA 1710 states that alarm answering should be completed within 15 seconds and alarm processing within 64 seconds, both 90% of the time, for the highest priority events where there is a significant risk to life or property.

Alarm handling performance is manageable through the implementation of best-practice processes, supporting technologies, and continuous quality improvement programs. Monitoring this benchmark is important to ensure that alarm handling remains as efficient as possible in supporting optimal total response time performance. However, factors such as non-emergency requests for service, challenges in identifying rural addressing or remote locations, and callers requiring language translation, TTY, or Text-to-911 services can extend call interrogation times as additional information must be gathered for responders.

NFPA recognizes these complexities and allows for additional time, establishing a 90-second processing target for such scenarios. However, no data was available within this analysis to specifically identify or isolate these types of calls.

It should also be noted that call start time (i.e., the point at which the call is initially received by dispatch) was not included in the dataset provided. As a result, a complete and accurate calculation of alarm handling performance, including both call answering and processing components, could not be completed. Accordingly, alarm handling performance metrics have not been calculated or evaluated in this analysis.

Table 20: Alarm Processing Times (90th percentile) Blackfalds' jurisdiction (SAMPLE ONLY)

Alarm Processing*	2021	2022	2023	2024	2025	5-Year
Alarms	123	81	350	177	464	302
Fires	308	533	737	662	877	754
Other Responses	602	481	1137	97	1813	771
Public Hazards	162	118	456	257	343	320
Medical	234	101	87	116	105	167
MVC	340	477	426	291	589	491
All Incidents (90th percentile)	273	344	440	388	548	393
NFPA 64 sec 90th compliance for fire /explosion calls	21%	33%	7%	22%	3%	16%
NFPA 64 sec 90th compliance for all incidents	70%	70%	61%	58%	54%	64%

Observation
Observation #21: BFD does not currently capture the incident start time (i.e., the time the call is initially answered by the Public Safety Answering Point), which limits the ability to accurately measure and evaluate dispatch call processing performance. As a result, total response time analysis is currently limited to turnout and travel components, and gaps remain in understanding the full timeline from call receipt to apparatus arrival.
Recommendation
Recommendation #21: Implement processes and systems to capture incident start time as a standard data point within the response time continuum and collaborate with the dispatch service provider to establish clear, measurable performance objectives aligned with industry best practices. This should include the development of service level agreements (SLAs), regular performance monitoring, and continuous improvement initiatives focused on optimizing call handling and dispatch timelines. **Suggested completion:** 12-24 months **Strategic Objection:** #5 Emergency Response and Operations **Cost:** Neutral. No additional budget required, subject to available staff capacity. ***Rationale:*** *Collectively, these measures will enable BFD to accurately measure call processing intervals, better understand total response performance, and strengthen accountability for dispatch service delivery. Capturing incident start time is foundational to accurately measuring total response time and identifying opportunities for improvement within the dispatch process. Establishing formal performance expectations in collaboration with the dispatch provider will improve accountability, enhance data-driven decision-making, and support continuous improvement. Aligning with recognized best practices, including those outlined in NFPA 1225, will strengthen overall system performance, and ensure dispatch services effectively support BFD's operational requirements and community needs.*

4.6.2 Assembly Time

Assembly time, as defined within the context of NFPA 1720, is measured from the point of dispatch notification until the first fire department apparatus begins responding to the incident. In POC or volunteer departments, assembly time is typically longer and more variable than in fully career stations, as it includes the time required for members to receive the alert, travel from their location to the station, don personal protective equipment, and staff an apparatus.

Because assembly time is one of the most influential components of total response time in a NFPA 1720 environment, performance should be actively monitored, analyzed, and communicated to members on a regular basis. NFPA 1720 does not prescribe a single turnout or chute time benchmark comparable to the 80-second 90th percentile standard in NFPA 1710; instead, it emphasizes overall response time and ERF assembly appropriate to the department's demand zone and staffing model.

Improving assembly time under NFPA 1720 relies on a combination of member availability, alerting and notification systems, station location, apparatus staffing expectations, and clear response protocols. Strategies such as enhanced paging or mobile alerting technology, standardized riding assignments, targeted recruitment within close proximity to the station, and clear response expectations can significantly improve turnout reliability. Attention to these factors supports BFD's ability to meet NFPA 1720 response objectives at the 90th or 80th percentile, depending on demand zone classification, and enhances overall response effectiveness despite the inherent variability of a POC/volunteer response model.

Table 21 identifies 80th percentile assembly times for incident types. This analysis is for the first unit enroute to the incident only.

Table 21: Assembly Performance by Incident Type 80th percentile (in seconds)

Incident Type	2021	2022	2023	2024	2025	5-Year
Alarms	511	527	547	575	614	558
Fires	481	315	450	257	348	405
Hazmat	619	474	573	590	602	600
Medical	450	452	476	571	593	530
Mutual Aid	499	585	686	620	875	668
MVC	504	225	308	350	288	353
Other	533	260	292	237	539	452
Public Hazard/ Assist	464	281	599	647	423	586
Rescue	477	n/a	426	271	n/a	457
All Incidents (80th percentile)	487	504	531	546	587	529

The following key observations regarding 80th percentile assembly time were noted:

- Overall assembly times have increased over the five-year period – The 80th percentile for all incidents rose from 487 seconds in 2021 to 587 seconds in 2025, with a five-year average of 529 seconds, indicating a sustained decline in turnout performance.
- 2025 represents the most significant performance challenge – Assembly times reached their highest levels in 2025 across several categories, including Alarms (614 seconds), Medical (593 seconds), and Mutual Aid (875 seconds), suggesting increasing system pressures.
- Mutual Aid and Hazmat incidents have the longest assembly times – These categories show the highest five-year averages (668 seconds and 600 seconds respectively), indicating longer turnout durations related to incident complexity, staffing models, or response expectations.
- Alarm and Medical calls show a steady upward trend – Both categories demonstrate consistent increases over time, with Alarms rising from 511 to 614 seconds and Medical from 450 to 593 seconds, suggesting growing demand and/or turnout challenges for routine call types.
- Fire and MVC assembly times show variability but no sustained improvement – Fire responses fluctuate significantly, while MVCs remain inconsistent, indicating instability in turnout performance rather than a clear improving trend.
- Early-year data should be interpreted with caution due to COVID-19 impacts – The 2021 and 2022 timeframes occurred during the COVID-19 pandemic, which may have influenced turnout performance through altered staffing practices, health protocols, and response procedures. As such, variations observed in these years may not reflect typical operating conditions.
- Significant variability across incident types highlights inconsistent turnout performance – The wide range in five-year averages (e.g., 353 seconds for MVCs vs. 668 seconds for Mutual Aid) suggests that turnout efficiency varies depending on incident type and operational conditions.

4.6.3 Travel Time Performance

Travel time, as defined under NFPA 1720, represents the period from when an apparatus begins responding to when it arrives on scene. For BFD, travel time performance is strongly influenced by the department's single-station deployment model, the compact nature of the urban area, and the extended distances associated with responses into Lacombe County.

Analysis of the data indicates a clear and consistent distinction between in-town (urban) travel times and those associated with county responses. Within the Town of Blackfalds, travel times remain stable and predictable. The 5-year average for all incidents at the 80th percentile is 297 seconds, while the 90th percentile increases modestly to 352 seconds, reflecting typical variability in travel due to traffic, call location, and time of day. This narrow spread between the 80th and 90th percentile (approximately 55 seconds) demonstrates a consistent and reliable response performance within the urban service area, supported by shorter travel distances, established road networks, and proximity to the station.

In contrast, travel times for incidents occurring in the County are significantly longer and more variable. The 5-year average 80th percentile travel time for all county incidents is 596 seconds, which is double the in-town travel time. Annual results further demonstrate volatility, with travel times ranging from 470 seconds to as high as 735 seconds at the 80th percentile. This reflects the inherent challenges of servicing a larger geographic area with lower road density, increased travel distances, and limited alternate routing options.

When comparing overall system performance, the combined “All Incidents” 80th percentile travel time of 343 seconds sits between the in-town and county values, illustrating how rural responses disproportionately influence overall performance metrics. This reinforces the importance of analyzing travel time by demand zone rather than relying solely on aggregate results.

The data also highlights the operational significance of percentile-based analysis. Within the Town, the increase from the 80th percentile (297 seconds) to the 90th percentile (352 seconds) reflects the impact of less frequent but more challenging responses, such as those on the periphery of town or during peak traffic conditions. However, this increase remains moderate compared to the substantial escalation observed in county responses, where extended travel distances are the primary driver rather than situational variability.

Consistent with NFPA 1720, travel time for BFD should be interpreted as a contributing component of total response time and ERF assembly rather than as a standalone metric. The observed differences between urban and rural travel times are expected and align with demand zone classifications.

However, the magnitude of the gap underscores key strategic considerations for BFD, including:

- The continued ability to meet urban response objectives within the Town boundary under current deployment
- The operational and performance impacts of providing service into surrounding county areas
- The influence of future growth and annexation on travel time performance, particularly in developing fringe areas
- The potential need for long-term planning considerations such as station relocation, additional apparatus, or enhanced mutual aid agreements to manage extended travel distances

Ongoing monitoring of travel time trends, particularly separating Town and County responses and tracking both 80th and 90th percentile performance, will be critical to ensuring that BFD can continue to align with NFPA 1720 objectives as service demands evolve.

Table 22: All incidents Travel Performance by incident type at 80th percentile (in seconds)

Incident Type	2021	2022	2023	2024	2025	5-Year
Alarms	251	343	323	321	295	317
Fires	259	368	379	336	31	341
Hazmat	303	274	252	317	262	301
Medical	251	271	253	304	217	271
Mutual Aid	736	912	725	1409	1078	868
MVC	367	369	513	274	397	386
Other	316	421	207	253	410	318
Public Hazard/ Assist	394	517	588	351	283	410
Rescue	270		275	370	332	
All Incidents (80th percentile)	331	382	366	320	337	343

The following observations regarding travel times were noted:

- Overall travel times remain stable over the 5-year period, averaging 343 seconds, with a slight improvement observed in 2024 before increasing again in 2025.
- Mutual aid incidents consistently experience the longest travel times, significantly exceeding all other incident types and heavily influencing overall performance.

- Fire and MVC responses show moderate variability year-over-year, suggesting sensitivity to incident location and external factors such as traffic or growth patterns.
- Public hazard/assist incidents trend higher than most other call types, indicating these events may be more likely to occur in less accessible or peripheral areas.

Table 23: Town Incidents Travel Performance by incident type at 90th percentile (in seconds)

Incident Type	2021	2022	2023	2024	2025	5-Year
Alarms	250	403	375	353	351	376
Fires	229	382	322	318	364	348
Hazmat	325	281	288	326	281	317
Medical	274	345	259	308	330	304
Mutual Aid						
MVC	343	200	340	296	383	335
Other		318	215	260	205	316
Public Hazard/ Assist	327	680	503	280	310	411
Rescue	270					270
All Incidents (90th percentile)	305	393	335	327	351	352

The following observations regarding travel times were noted:

- The 90th percentile average of 352 seconds indicates consistent performance, with only moderate increases compared to 80th percentile results.
- A noticeable spike in 2022 (393 seconds) suggests occasional periods of increased travel time, potentially linked to growth, traffic, or construction impacts.
- Public hazard/assist incidents show significant variability, including a high value in 2022, indicating these calls may occur in less accessible locations within town.
- The narrow range across most incident types demonstrates stable and predictable response performance for the majority of urban calls.

Table 24: Town Incidents Travel Performance by incident type at 80th percentile (in seconds)

Incident Type	2021	2022	2023	2024	2025	5-Year
Alarms	247	339	303	315	294	312
Fires	217	329	271	293	313	293
Hazmat	303	274	252	318	256	301
Medical	250	267	253	299	217	258
Mutual Aid						
MVC	307	190	296	261	282	275
Other		317	207	253	205	276
Public Hazard/ Assist	291	517	405	270	297	337
Rescue	270					270
All Incidents (80th percentile)	251	323	287	303	292	297

The following observations regarding travel times were noted:

- Travel times are the lowest and most consistent across all datasets, with a 5-year average of 297 seconds, reflecting efficient coverage within the Town.
- A gradual improvement trend is observed from 2022 to 2025, suggesting stable or slightly improving response performance despite growth.
- Fire, medical, and alarm calls remain tightly grouped, indicating consistent accessibility and similar spatial distribution within the urban area.
- Variability in MVC and public hazard/assist incidents suggests these events may occur on higher-speed roadways or at the edges of the service area, slightly increasing travel times.

Table 25: County Incidents Travel Performance by incident type at 80th percentile (in seconds)

Incident Type	2021	2022	2023	2024	2025	5-Year
Alarms	470	358	453	458	320	458
Fires	384	452	562	431	313	466
Hazmat	291			205	397	333
Medical	367	1283		392		927
Mutual Aid	752	912	764	1425	1078	920
MVC	453	512	634	316	485	515
Other	316	501			438	520
Public Hazard/ Assist	441		588	597	165	592
Rescue			275	370		351
All Incidents (80th percentile)	470	600	663	512	735	596

The following observations regarding travel times were noted:

- County travel times are higher than overall and in-town responses, with a 5-year average of 596 seconds, reflecting extended travel distances and rural conditions.
- Significant year-over-year variability is present, including a peak in 2025 (735 seconds), indicating inconsistent travel conditions and geographic dispersion of incidents.
- Medical and mutual aid incidents show particularly elevated travel times, suggesting these calls frequently occur in remote or hard-to-access areas.
- The wide range across incident types highlights the impact of limited road networks and longer travel distances typical of rural service areas.

Overall, the data confirms that extended response requirements outside of Blackfalds' primary urban service area have a significant impact on travel time performance at the 80th percentile. County responses, characterized by longer travel distances and rural road networks, increase overall response time metrics when aggregated with in-town incidents. When evaluating system performance, it is therefore important to distinguish between Town and County responses to ensure that service levels within Blackfalds are accurately represented and not disproportionately influenced by external service demands.

4.6.4 Total Response Time

Total response time, consistent with the intent of NFPA 1720, is measured from the moment the emergency call is answered by the Public Safety Answering Point (PSAP) until the first fire suppression apparatus arrives on scene. For the purposes of this analysis, total response time is defined as the combination of turnout (assembly) time and travel time, representing the most meaningful indicator of how quickly fire service intervention begins once personnel are notified.

Unlike NFPA 1710, which establishes a prescriptive first-arriving apparatus response time benchmark for career fire departments, NFPA 1720 does not define a single universal total response time target. Instead, it establishes response time objectives tied to demand zone classification, population density, and staffing model, with performance measured at the 80th or 90th percentile, depending on the applicable zone. These objectives are based on the time required to deliver an ERF capable of initiating sustained fire suppression operations at a single-family residential structure fire.

For BFD, total response time must be evaluated in the context of its composite / paid-on-call staffing model, single-station deployment, and the Town's primarily urban demand zone classification. While the community exhibits characteristics consistent with an urban response environment, the reliance on off-station personnel introduces variability in turnout times that directly influences overall response performance. In addition, responses to areas outside the Town boundary, including portions of Lacombe County, may result in extended travel distances and corresponding increases in total response time.

To provide a comprehensive assessment of system performance, multiple response time measures have been evaluated. These include County response performance measured at the 80th percentile, Blackfalds urban area response performance assessed at both the 80th and 90th percentiles, and overall system performance with all incidents combined (rolled up) at the 80th percentile. This multi-faceted approach ensures that performance is appropriately contextualized based on jurisdictional differences, demand zone expectations, and NFPA 1720 measurement practices.

Monitoring these total response time trends over time enables BFD to assess whether current staffing levels, response reliability, and deployment practices are sufficient to meet NFPA 1720 performance objectives, while also identifying where service level adjustments or mitigation strategies may be required.

Table 26 identifies total response time by incident category for in town responses, incorporating turnout and travel time components at both 80th and 90th percentile. Compliance with response objectives is evaluated using the applicable percentile measures for each response area and dataset.

Table 26: 80th & 90th Percentile Response Performance (in seconds)

Incident Type	2021		2022		2023		2024		2025		5-Year	
	90th	80th	90th	80th	90th	80th	90th	80th	90th	80th	90th	80th
Alarms	746	705	914	843	873	806	938	844	949	863	915	821
Fires	696	673	683	573	732	603	719	537	760	665	742	636
Hazmat	926	899	714	681	861	804	911	869	868	855	912	855
Medical	724	704	820	716	755	724	905	815	848	804	825	747
MVC	678	661	462	387	643	527	692	574	735	596	685	608
Other			819	665	486	472	512	490	367	367	577	507
Public Hazard/ Assist	905	801	958	805	880	861	903	834	739	700	980	870
Rescue	747	747									747	
All Incidents (90th percentile)	755		868		855		917		883		869	
600 second compliance -All Incidents	52%		52%		40%		54%		48%		49%	
600 second compliance -Fire Incidents	58%		80%		76%		88%		74%		78%	
840 second compliance - All Incidents	94%		87%		88%		83%		83%		87%	
840 second compliance - Fire Incidents	100%		96%		88%		97%		100%		96%	

The following observations regarding BFD in town emergency response performance were noted:

- 90th percentile response times exceed typical urban targets: Over the five-year period, the 90th percentile total response time for all incidents remains above 600 seconds, indicating that upper-range response performance within the Town does not consistently align with commonly referenced NFPA 1720 urban benchmarks.
- 80th percentile performance demonstrates moderate alignment with expectations: Fire incident compliance at 600 seconds ranges from 74% to 88%, with a five-year average of 78%, suggesting that a majority of fire responses are occurring within expected timeframes, though not uniformly.
- Strong performance against extended response thresholds: Compliance with the 840-second threshold is consistently high for both all incidents (83%–94%) and fire incidents (88%–100%), indicating that response times fall within a broader acceptable range for effective intervention.
- Differences in response times by incident type: Higher percentile response times for incident types such as alarms, hazmat, and public assist calls contribute to overall performance levels, while fire and MVC incidents tend to reflect comparatively lower response times.
- Annual variability reflects fluctuations in response conditions: Year-over-year changes in both percentile performance and compliance rates suggest some variability in response times, which may be influenced by factors such as staffing availability, call volume, and operational conditions within the Town.

In addition to providing service within the Town of Blackfalds, BFD operates under response agreements with Lacombe County and participates in mutual aid responses beyond its primary jurisdiction. These external responses inherently involve longer travel distances and differing operational conditions, which contribute to increased total response times.

To ensure an accurate assessment of core service levels, responses occurring outside the Town have been separated from in-town incidents and are evaluated independently. County and mutual aid responses are measured at the 80th percentile, consistent with NFPA 1720 practices for lower-density or extended response areas.

Table 28 presents the 80th percentile total response times by jurisdiction, highlighting the distinction between incidents occurring within the Town of Blackfalds and those in Lacombe County and other mutual aid areas.

Table 27: County total response performance 80th percentile

Incident Type	2021	2022	2023	2024	2025	5-Year
Alarms	996	838	1057	1095	919	1057
Fires	846	857	976	916	781	884
Hazmat	651	n/a	n/a	460	860	756
Medical	698	1703	n/a	991	n/a	1418
Mutual Aid	1177	1375	1447	2015	2034	1604
MVC	811	798	885	698	738	881
Other	849	704	n/a	n/a	919	857
Public Hazard/ Assist	762	n/a	804	777	184	788
Rescue	n/a	n/a	701	641	n/a	689
All Incidents (80th percentile)	983	966	1102	981	1059	1013
600 second compliance -All Incidents	27%	44%	28%	47%	41%	37%
600 second compliance -Fire Incidents	38%	64%	22%	64%	64%	54%
840 second compliance - All Incidents	68%	67%	66%	71%	64%	67%
840 second compliance - Fire Incidents	75%	79%	78%	71%	82%	77%

The following observations regarding BFD County emergency response performance were noted:

- **Extended response times reflect travel distance to County areas:** The 5-year 80th percentile total response time for all incidents (1,013 seconds) is notably higher than typical urban benchmarks, reflecting the increased travel distances and rural road conditions associated with County responses.
- **Mutual aid and County-related incidents significantly elevate averages:** Mutual aid responses show the highest response times (5-year average of 1,604 seconds), with a clear increasing trend over time, indicating that these longer-distance calls are a primary driver of overall County response performance.
- **Lower compliance with 600-second benchmark is expected in rural context:** Compliance for all incidents at 600 seconds averages 37%, and 54% for fire incidents, which is consistent with the challenges of meeting shorter response targets in geographically dispersed areas.

- **Improved alignment with extended (840-second) performance range:** Compliance at 840 seconds is more consistent, with a 5-year average of 67% for all incidents and 77% for fire incidents, indicating that responses more frequently align with extended time expectations for rural or County environments.
- **Variability across years and incident types:** Response times fluctuate year-to-year, particularly for medical and hazmat incidents where data gaps and spikes (e.g., 2022 medical at 1,703 seconds) suggest the influence of specific incidents, call distribution, and operational factors impacting County response performance.

Overall, the data reinforces that total response time performance is heavily influenced by jurisdictional coverage and distance. While BFD maintains comparatively lower response times within Blackfalds, responses to Lacombe County, significantly increase overall performance metrics. This distinction is important when evaluating service levels, as aggregated response time statistics may not fully reflect the department's performance within its core service area.

4.7 Response Coverage Mapping

This section provides mapping of the response coverage for BFD. The theoretical travel time and road network travel speed data were applied to generate the response in the geographic information system (GIS) mapping program.

The following maps indicate incident density (heat map), current response performance, and options for consideration when developing response time performance. An incident heat map provides valuable insight into the historical occurrence of incidents, offering a visual representation of zones with higher demand for services. When combined with response coverage mapping, these maps help ensure that areas of highest demand are, whenever possible, situated closest to a fire station.

The following maps offer a comprehensive overview of responses within BFD response area.

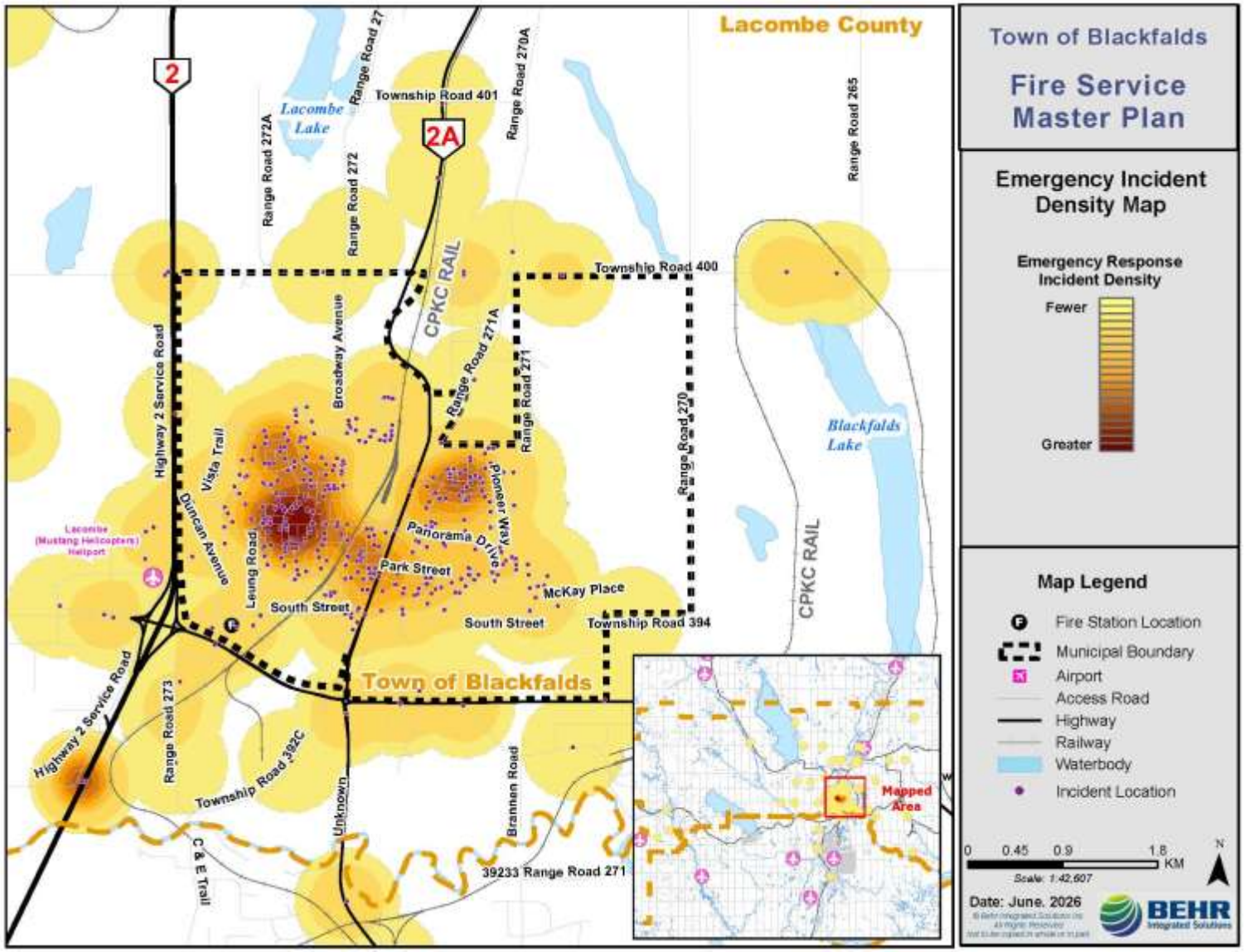
Map 2: Emergency Call Density Map – Visualizes the density of past incidents[3].

Map 3: Response Coverage (5 min, 6 min and 8 min travel times)

Map 4: Response Coverage (10 min, 12 min and 15 min travel times)

[3] *The data utilized was taken from available information from 2020-2022 and 2025. This will provide a reasonable indication of incident density*

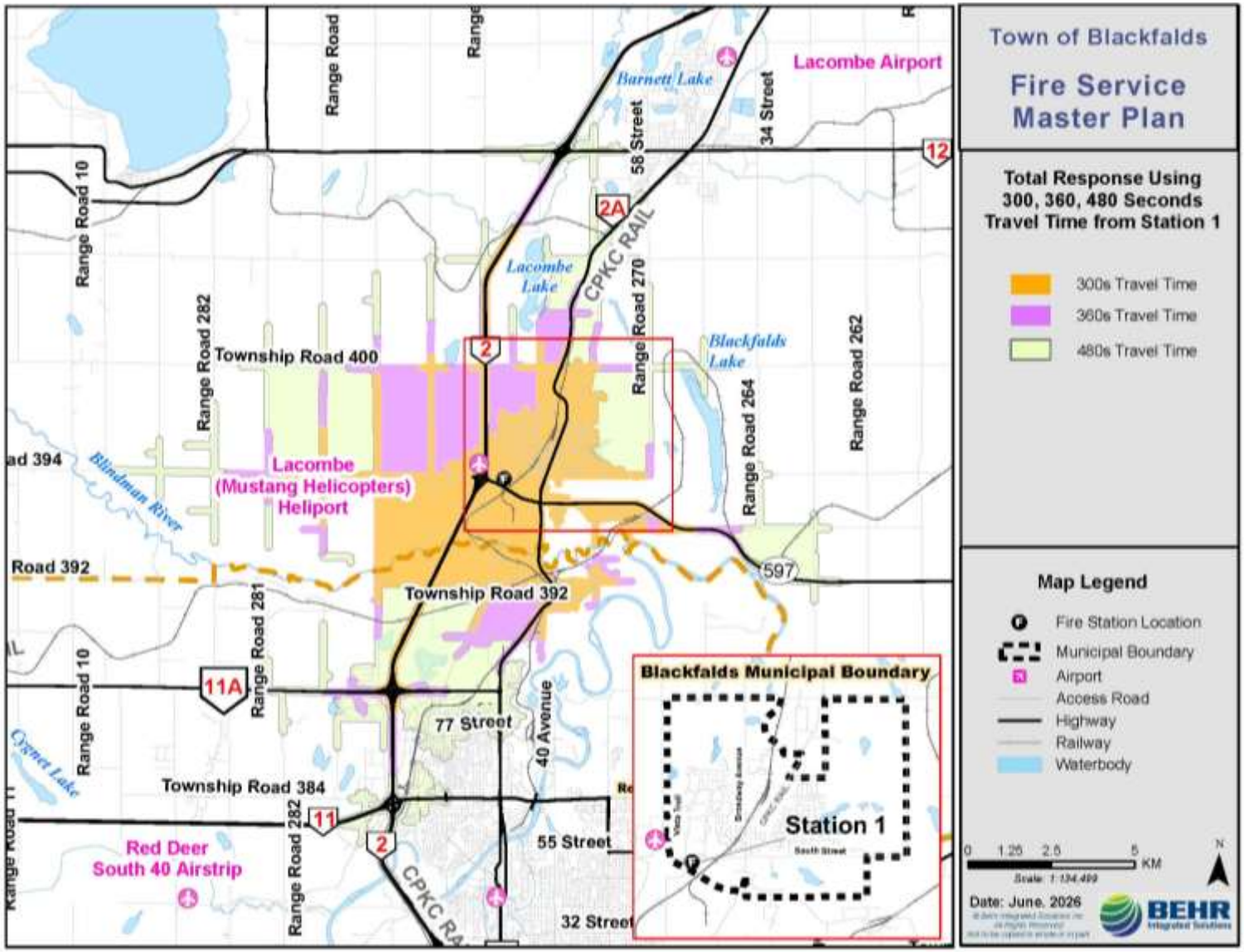
Map 2: Emergency Incident Density Map



The incident density map for BFD indicates the following observations:

- Incidents are heavily concentrated within the Town of Blackfalds urban area, with the highest-density cluster occurring in the central and north-central developed portions of the community. This suggests that most response demand is generated by the established residential, commercial, and institutional areas within the municipal boundary.
- The strongest hotspot appears near the core developed area around Highway 2A / Broadway Avenue and adjacent neighbourhoods, indicating that the combination of population density, traffic movement, commercial activity, and built-up land uses is a primary driver of incident volume.
- A secondary concentration is visible in the eastern residential growth areas, where multiple overlapping incident points suggest increasing response demand as development expands eastward. This should be monitored as future growth may continue to shift demand away from the historic core.
- Incidents extend southward along Highway 2A toward the Red Deer Junction area, although at a lower density than the main urban cluster. These incidents reflect a combination of roadway-related responses, peripheral development, and responses near the southern access corridor.
- Lower density but notable incident activity is present along major transportation corridors, including Highway 2, Highway 2A, Highway 597, and Township Road 40-0. These dispersed points suggest that MVCs, public hazards, and roadside assistance calls contribute to BFD's broader geographic response demand outside the main urban area.
- Outlying incidents are scattered across the surrounding rural service area, including areas east toward Blackfalds Lake and along Highway 597. While these do not form major clusters, they can increase travel times and should be considered separately from urban-area performance when evaluating response reliability, station location, and NFPA 1720 demand zone expectations.

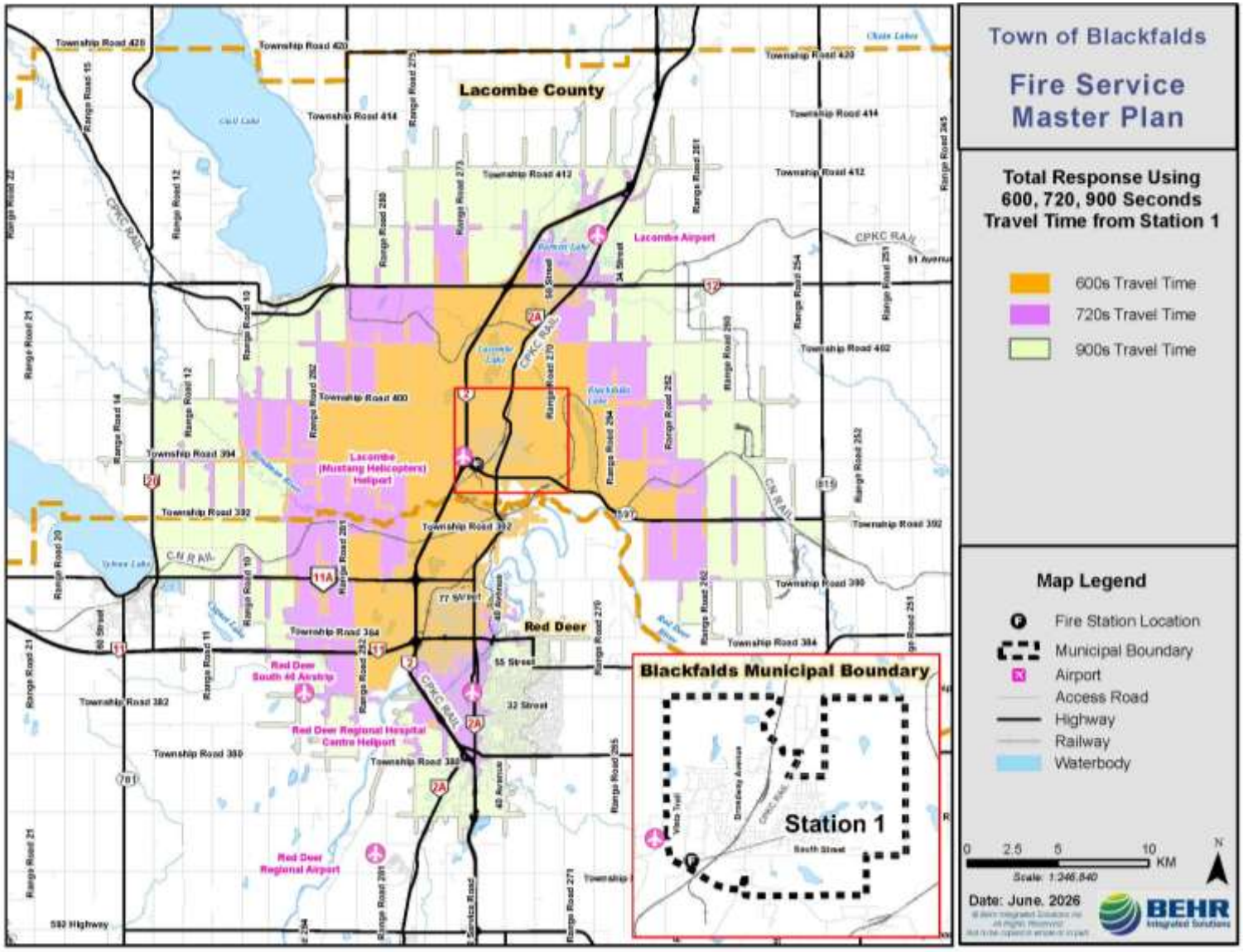
Map 3: Response Coverage Based Upon 5 minutes, 6-Minute, 8-Minute Travel Time



The BFD travel time map indicates the following observations for the 300-second, 360-second, and 480-second travel time areas:

- The 300-second travel time area provides strong coverage of the core urban area of Blackfalds, including the central developed area surrounding the fire station and much of the established residential and commercial area. This indicates that the current station location is well positioned for rapid access to the highest-density portion of the community.
- The 360-second travel time area expands coverage across most of the developed municipal area, including additional residential neighbourhoods to the north, east, and west of the core. This suggests that a six-minute travel time captures the majority of current urban response demand within Blackfalds.
- The 480-second travel time area extends coverage to the outer edges of Blackfalds and portions of the surrounding road network, including peripheral development areas and some rural road corridors. This broader coverage area is important for assessing responses outside the compact urban core.
- Travel time coverage follows the structure of the road network rather than forming a uniform radius around the station. Coverage extends farther along direct arterial and collector routes, while areas with less connected road access or indirect routing show reduced coverage despite being geographically close.
- Area's south and southeast of the community appear more dependent on longer travel times, particularly where access is influenced by Highway 2A, Highway 11A, and the Blindman River corridor. These areas may require additional consideration when evaluating response performance for annexed lands, future growth areas, or rural service obligations.
- The current station location appears effective for existing urban response demand, but future growth at the outer edges of the community may place increasing pressure on the 300- and 360-second travel time objectives. As development expands north, east, west, or south of the current built-up area, BFD should continue to monitor whether new growth remains within acceptable travel time coverage.

Map 4: Response Coverage Based Upon 10-minute, 12 minute and 15-minute Travel Time



The BFD travel time map indicates the following observations for the 600-second, 720-second, and 900-second travel time areas:

- The 600-second travel time area provides broad coverage beyond the Town of Blackfalds, extending well into surrounding rural areas and capturing key road corridors toward Lacombe, Red Deer, Highway 2, Highway 2A, and Highway 11A. This indicates that within 10 minutes of travel, BFD can reach a substantial portion of its regional response area.
- The 720-second travel time area further expands coverage to include a wider rural response envelope, particularly to the north, west, and east of Blackfalds. This travel time range captures many of the dispersed rural properties, agricultural lands, and roadway corridors that fall outside the core urban response area.
- The 900-second travel time area provides the broadest coverage shown and reaches toward neighbouring communities and regional boundaries, including areas near Lacombe, Gull Lake, Sylvan Lake, Red Deer, and Joffre. While this demonstrates significant geographic reach, responses at this range would be expected to involve longer travel times and reduced alignment with urban response expectations.
- Coverage is strongest along major transportation corridors, including Highway 2, Highway 2A, Highway 11A, and Highway 597/595 corridors. The shape of the travel time zones confirms that BFD's extended response capability is strongly influenced by arterial highway access rather than straight-line distance from the station.
- Peripheral and rural areas remain more dependent on the 720- and 900-second travel time zones, especially where road connectivity is limited, indirect, or constrained by waterways and rural grid spacing. These areas should be evaluated separately from the urban Blackfalds response area when assessing response performance and service level expectations.
- The extended travel time coverage supports BFD's role in regional and mutual aid response, but it also highlights the importance of distinguishing between urban, rural, highway, and mutual aid demand. Incidents occurring within the 600- to 900-second areas can materially influence overall response time performance and should not be interpreted the same way as incidents within the primary urban service area.

4.8 Critical Task Analysis

A critical task analysis for common incident types illustrates the resources required to achieve tactical objectives based on resource availability. The rationale for completing a critical task analysis is to identify whether response policies and guidelines align with available resources. In other words, are enough firefighters typically responding to complete the critical tasks on emergency scenes in a safe and timely manner?

However, the optimal number of firefighters is not always available. Response policies and guidelines should identify critical task assignments and tactical objectives based on available resources. The optimal number of firefighters to manage larger and more complex incidents may not be dispatched initially due to the availability of firefighters. As a result, tactical objectives should be scaled to reflect these limitations. For example, an interior fire attack or rescue may not be possible with a single engine company and a limited water supply. Response policies or guidelines should also identify a contingency plan to call in off-duty firefighters or initiate mutual aid/automatic aid for larger or more complex incidents.

The following tables provide examples of critical task analyses that should be embedded in fire department standard operating guidelines or policies. The purpose of completing a critical task analysis is to establish the ERF response requirements and embed task assignments in standard operating guidelines. The examples provided are intended to illustrate leading practices with respect to the ERF required to safely manage commonly occurring emergency incidents. They are provided as a guide and are not intended to specifically represent BFD response capacity or apparatus.

Table 28: Low Risk: Small Fire (No Exposures): Garbage, Vehicle – Private, Grass, Investigate (External), Monitoring Alarm (W/O Confirmation), Medical

Low Risk Incident	
Command and Safety	1
Driver/ Pump Operator	1
Incident responders	2
Total Personnel	4

Table 29: Moderate Risk: Attached Garage, Single Family Residential (Detached/Duplex)

Moderate Risk Incident	
Command	1
Safety	1
Pump Operator	1
attack line/ search and rescue	6
Water supply	1
Rapid Intervention Crew	3
Ventilation/ Utilities	2
EMS	2
Total Personnel	17

Table 30: Moderate Risk: Motor Vehicle Crash (1-3 Private Vehicles)

MVC	
Command and Safety	1
Driver/ Pump Operator	1
Incident responders	5
Blocker vehicle driver	1
Total Personnel	8

Table 31: Moderate Risk: Technical Rescue

Technical Rescue	
Command	1
Safety	1
Rescue Sector Officer	1
Rescue specialists	7
Support	3
EMS	2
Total Personnel	15

Table 32: High Risk: Commercial, Seniors' Home, Industrial, Strip Mall, Mid-Rise Residential

High Risk Incident	
Command	1
Safety	1
Pump Operator	1
Initial Attack Line	2
Back up line	2
Search and rescue	4
Water supply	1
Rapid Intervention Crew	4
Suppression Support	6
EMS	2
Ventilation/ Utilities	4
Total Personnel	28

Observation
Observation #22: BFD standard operating guidelines do not identify the number of firefighters and resources required to complete tactical or critical tasks. Critical task analyses will clarify incident resource requirements and identify the critical tasks to clarify firefighter tasks and manage an incident efficiently and safely.
Recommendation
Recommendation #22: Develop SOGs to provide direction to staff for completion of critical tasks, and the need to update existing mutual aid agreements for additional support when necessary to meet ERF requirements.
Suggested completion: 12-60 months
Strategic Objective: #5 Emergency Response and Operations
Cost: Neutral. No additional budget required, subject to available staff capacity.
Rationale: *Critical task analyses should be used to identify operational limitations in policy to clarify incident command objectives and maintain safe operations. As described above, low to medium incidents will often require more than 10 firefighters to complete concurrent critical tasks safely and minimize intervention time. The most common number of initial responders for BFD fire incidents is 11. As a result, critical task analysis will identify incident types where tactical firefighting objectives may require modification and immediate call back or mutual aid requests can be automated.*

APPENDICES

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Appendix A: Glossary of Terms

Apparatus	Any vehicle provided with machinery, devices, equipment, or materials of the Fire department for firefighting as well as equipment used to transport firefighters or supplies.
Assembly Time	The time the notification sounds in the fire station until the first vehicle leaves the station. In a full-time department this is expected to be within 80 seconds but for volunteer departments the time to collect a response crew can vary widely depending on location and time of emergency as well as all the factors that impact travel time.
Chute Time	See Assembly Time
Dangerous Goods	This term is synonymous with the terms hazardous materials and restricted articles. The term is used internationally in the transportation industry and includes explosives, and any other article defined as a combustible liquid, corrosive material, infectious substances, flammable compressed gases, oxidizing materials, poisonous articles, radioactive materials, and other restrictive articles.
Discovery	Time between the start of the emergency and when someone or an engineered system has detected the incident.
Dispatch Time	Time required to extract the necessary information from the caller to allow the proper response to be initiated. The dispatcher identifies the correct fire location and initiates the dispatch by paging the appropriate fire station.
Emergency Call	The period between discovery and the actual notification of emergency services.
Emergency Communications Centre (ECC)	A facility dedicated to emergency services to receives calls, processes them, and then dispatches emergency units to the correct location in the appropriate time period.
Emergency Operations Centre (EOC)	The protected sites from which civil officials coordinate, monitor, and direct emergency response activities during an emergency or disaster.
Emergency	Any occasion or instance that warrants action to save lives and to protect property, public health, and safety. A situation is larger in scope and more severe in terms of actual or potential effects.
Fire Suppression	The application of an extinguishing agent to a fire at a level such that an open flame is arrested; however, a deep-seated fire will require additional steps to assure total extinguishment.

Hazard Analysis	A document, which identifies the local hazards that have caused, or possess the potential to adversely affect public health and safety, public and private property, or the environment.
Impact	The effect that each hazard will have on people such as injury and loss, adverse effects on health, property, the environment, and the economy.
Incident	A situation that is limited in scope and potential effects.
Intervention Time	The time from fire reporting to the point where the first arriving pumper, or other apparatus providing comparable functions, arrives at the fire scene and directs an extinguishing agent on the fire.
Mutual Aid Agreement	An agreement between jurisdictions to assist each other during emergencies by responding with available manpower and apparatus.
National Fire Protection Association	The National Fire Protection Association (NFPA) is an internationally recognized trade association established in 1896 that creates and maintains standards and codes for usage and adoption by local governments to reduce the worldwide burden of fire and other hazards. This includes standards and guidelines to which many fire departments utilize to carry on day-today operations.
Response	Those measures undertaken immediately after an emergency has occurred, primarily to save human life, treat the injured, and prevent further injury and losses. They include response plan activation, opening and staffing the EOC, mobilization of resources, issuance of warnings and direction, provision of aid, and may include the declaration of a State of Local Emergency.
Risk	The chance or likelihood of an occurrence based on the vulnerability and known circumstances of a community.
Setup Time	This is the time necessary on site to evaluate the necessary actions, position the required resources and commence the intervention. In the case of a fire, completing size-up, assigning the necessary tasks, and deploying resources can provide delays on scene. A well-trained crew can minimize these delays while providing a safe, successful response.
Standard Operating Guidelines (SOG)	A written organizational directive that establishes or prescribes specific operational or administrative methods to be followed routinely, which can be varied due to operational need in the performance of designated operations or actions.
Standard Operating Procedures (SOP)	A written organizational directive that establishes or prescribes specific operational or administrative methods to be followed routinely for the performance of designated operations or actions.

Travel Time	Time period from when the apparatus leaves the station to when it arrives on scene. Factors to consider for travel time are driver skill, weather, traffic, topography, road conditions and vehicle capabilities.

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Appendix C: Response Mapping Methodology

Response travel times are directly influenced by station location and can be varied based upon a cost/risk analysis and the development of performance targets.

Base Data Layers Requested

- Hydrology
- Single Line Road/Transportation Network
- Railways
- Municipal Boundaries
- Parks
- Projection File
- Orthophoto (GeoTIFF, Mr.SID), if available
- Emergency Services Locations

Data Formats

- Preference of ESRI Shapefiles

Purpose of Files

A. Hydrology
   i. Identify needs for response to water locations (if dependent on a water response unit)
   ii. Can be identified and analyzed with the rail network to locate spill contaminations, as well as containment for overland flow & flooding to water spills
   iii. Locations of bridge crossings which can convert to varying incidents, as MVC/MVA, spill contaminants, etc.
   iv. Assists in the definition of the map for locational awareness by others
   v. Completes the map

B. Single Line Road/Transportation Network
   i. Used to determine response times from emergency locations to determine a network based on road speeds
   ii. Roads are created into a network for response

C. Railways
   i. Identified risk areas for impeding response time when crossing a roadway or proximity to municipal areas will also determine the response and apparatus

used for a derailment response or other rail emergency or risks, such as chemical spill evacuations.

D. Municipal Boundaries

i. Identifies the limits to response for mutual aid and responsibilities when overlaps occur within a response area. Also identifies sub areas for specific mapping and identification of municipal and regional response zones. Provides information for gap analysis for future state locations or refinement of locations.

E. Parks

i. Identifies the potential risk areas due to accessibility issues for tracts of land, as well as constraints and opportunities for new locational analysis for or against new stations within a municipality. Ability to determine development of new locations due to proximity. Parks are identified as local, regional, provincial, and national.

F. Projection File

i. To ensure that we have the same data set up as being used by the Municipality or Client, measurements (both distance and time) and spatial location are correct when determining analysis.

G. Orthophoto (GeoTIFF, Mr.SID), if available

i. We typically do not use the ortho on the output maps, but the analysis sometimes needs clarification of what is on the ground, and we use it to quickly ground truth locations and information needed prior to asking clients for clarification or to substantiate clarification of an area.

ii. Is a nice to have, yet hard to use, as it takes up a lot of memory/space and is difficult to ship/transfer.

H. Emergency Services Locations

i. Identify the actual location rather than a theoretical location based on an address match to ensure that the data location is as correct as possible, and no mis-locations are identified on the initial running of the theoretical response times.

ii. Locations may be moved from within a parcel to the front of the parcel, whereby it touches the road network. Ensures the response from the station is captured. There are no corrections made to the movement of the station to time, as it is typically within 50 metres.

Response Zone

A. Assumptions

i. Weather is average – no storms, rain, snow etc.

ii. Roadway segments contain a node/junction at intersections

- If not available, road network needs to be cleaned and fixed

iii. Roadways need to sometimes extend beyond some municipalities

iv. Emergency responders are trained on response vehicles

v. Response vehicles are in good condition

vi. Roads are dry and in good condition

vii. Left turns are not reduced by a time %

viii. Road speeds are provided by client, if not

- Road class table used to populate speeds based on road classification
- Road speeds are reduced from the posted sign, typically no more than 5%

ix. Traffic volume is average; there is no congestion or there is a free-flowing lane to be used

x. Rail crossings are free to cross and do not impede response

xi. Time of day is based on an average time from 9 am – 9 pm

xii. Opticoms (or similar product for traffic light manipulation) are present to allow for free moving response

xiii. Intersections of roads are not reduced (the roads are reduced from other project limits and averaged over time for generality of best fit)

xiv. School zones are not adjusted unless identified, then changes to road net are made

B. Response Time

i. Customized response based on Emergency Services Input

ii. Response time includes 80% of all calls for service

iii. Total drive time along roads (determined above by road speeds)

iv. Variances are identified and are tweaked based on known data or other trends

C. Response Polygons

i. Identify general area of response from the outer most limits driven

ii. Also identify response zones for mutual aid

iii. Identify gaps in response

iv. Aid in the development of Fire Zones for response
v. Assist in the identification of new stations
vi. Also identifies needs to move stations to another location, as required

Additional Analysis

A. Out of Scope Analysis (needs further discussion with client)
   i. Transition from project to operationally based:
      - Specific distance and travel
      - Based on time of day
      - Based on time of year
      - Call volume
      - Call types
      - Modeling
      - Scripting for batch work

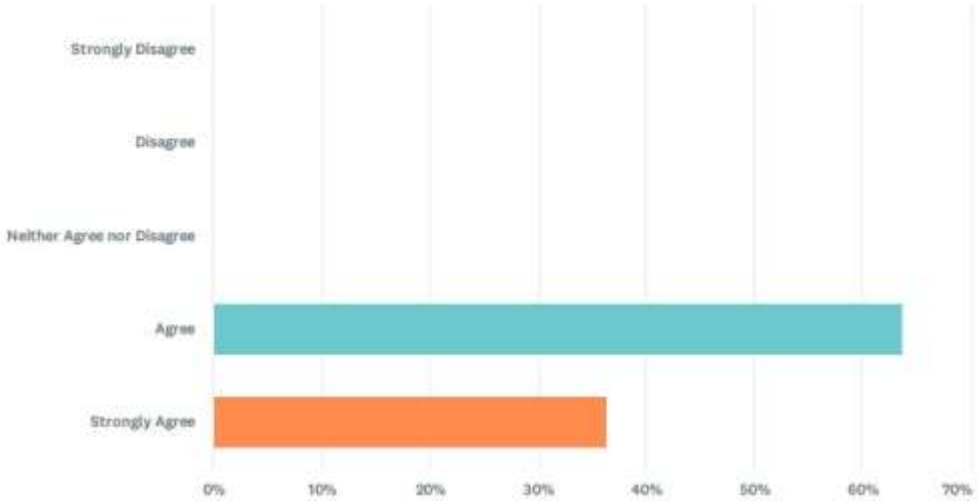
B. Data Availability
   i. When data available from clients is detailed enough, it is used
   ii. Not all data is detailed enough, and assumptions are made

C. Analysis
   i. Additional analysis can be performed (as reduction of road speeds to an intersection)
      - For the above example, identification of intersections can be complex, and data is not always available:
         - Stop Sign
         - 3-Way Stop
         - Yield
         - Lights
         - Flashing Light
   ii. Tends to be time consuming
         - Clients not willing to engage in the cost of this project
         - Levels of data may not be accessible
         - Missing detail
         - Usually, it is a one-off project, and new data is typically not leveraged

Appendix D: Firefighter Online Survey

Q1 11 responses

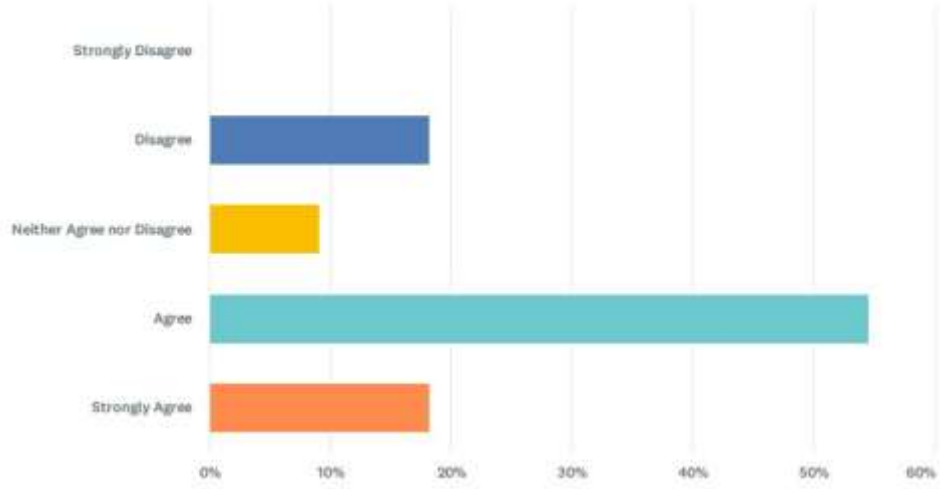
The public feels they are getting good value for their tax dollars for fire services.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	0.00% 0	63.64% 7	36.36% 4	11	0.00

Q2 11 responses

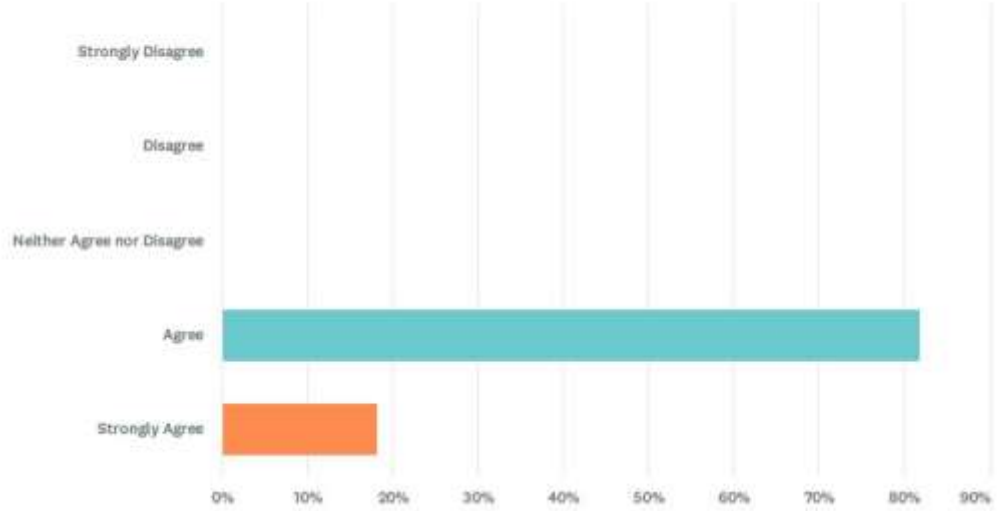
The public has a good understanding of the fire service and its capabilities.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	18.18% 2	9.09% 1	54.55% 6	18.18% 2	11	0.00

Q3 11 responses

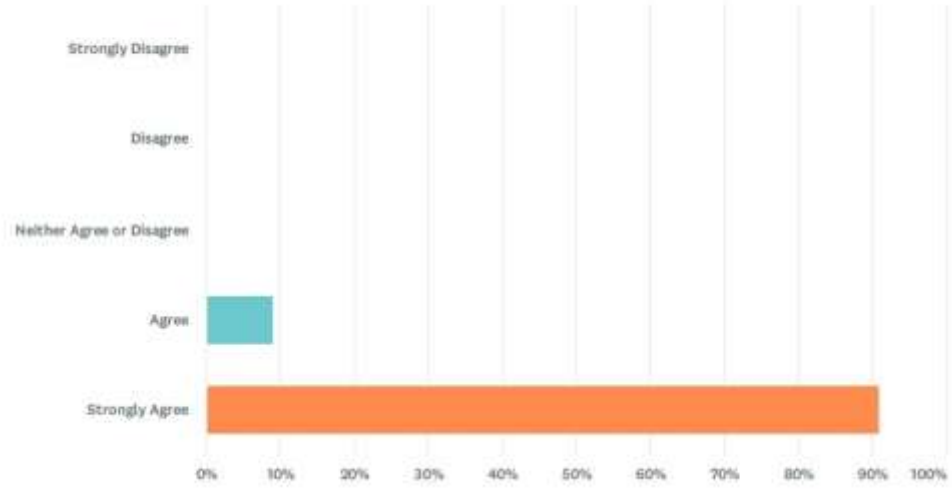
Your community receives adequate fire/rescue protection.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	0.00% 0	81.82% 9	18.18% 2	11	0.00

Q4 11 responses

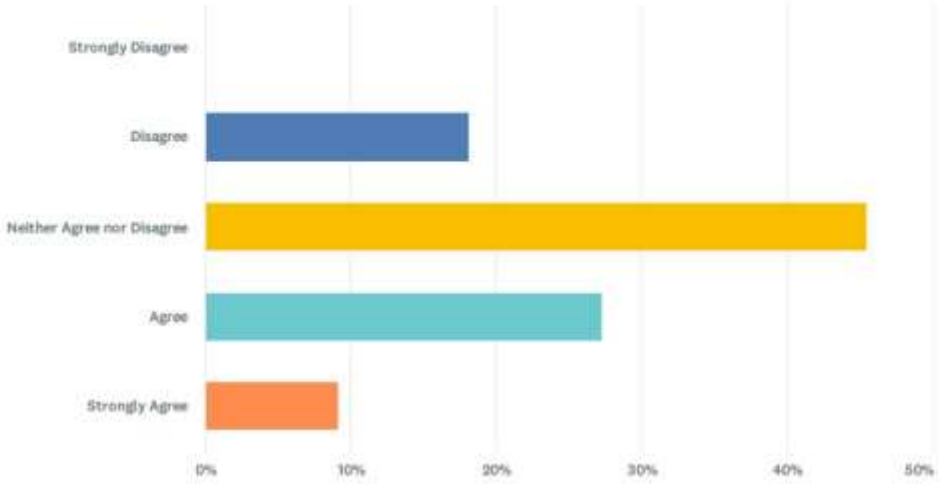
Based on the rate of community and economic growth, fire service demands will increase in the future.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE OR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	0.00% 0	9.09% 1	90.91% 10	11	0.00

Q5 11 responses

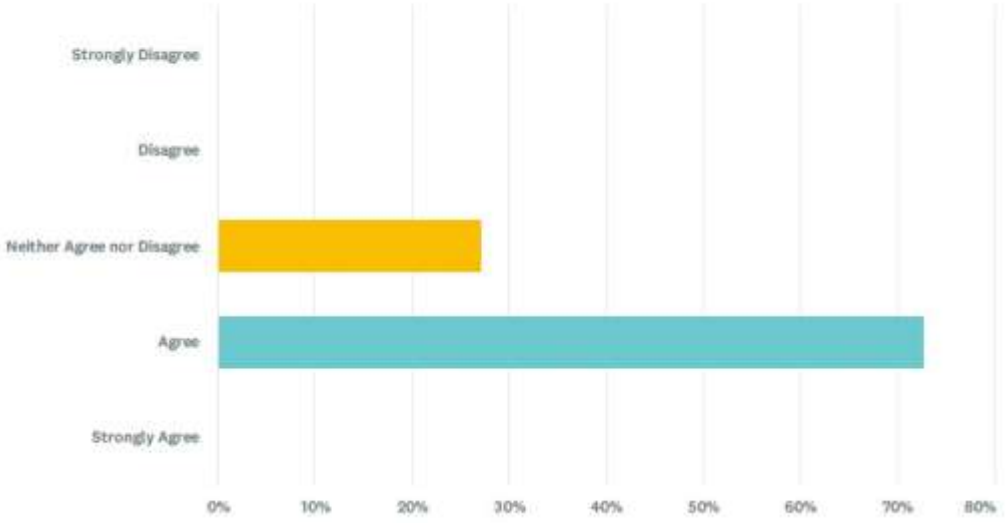
The community has adequate alternate fire risk reduction strategies (e.g. residential sprinklers, FireSmart program, public education).



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	18.18% 2	45.45% 5	27.27% 3	9.09% 1	11	0.00

Q6 11 responses

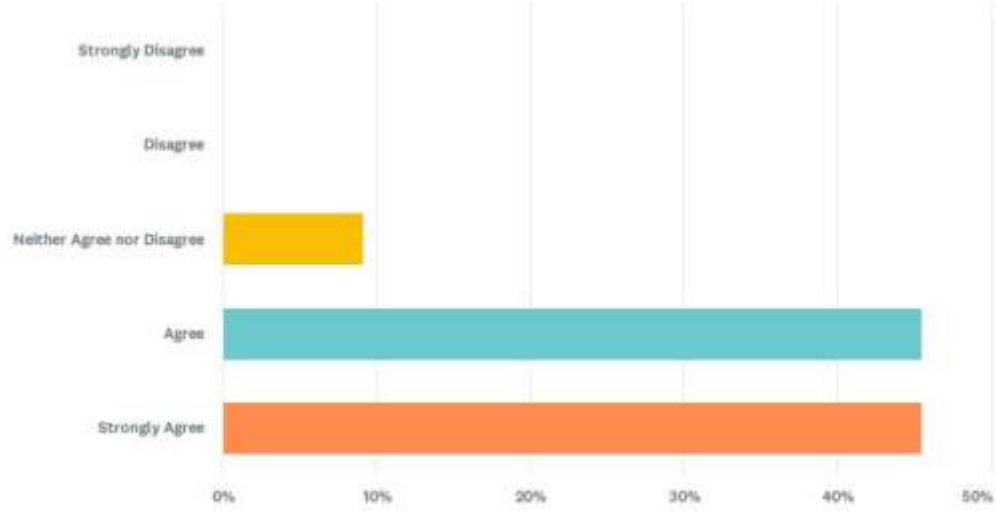
The fire service's current response model is adequately staffed for fire response.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	27.27% 3	72.73% 8	0.00% 0	11	0.00

Q7 11 responses

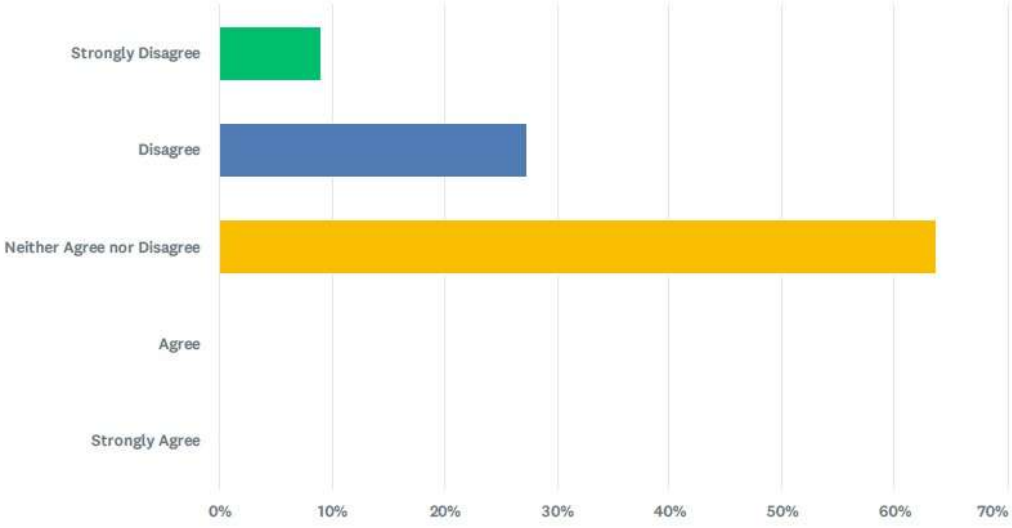
The fire service's policies/procedures reflect fire/rescue industry best practices.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	9.09% 1	45.45% 5	45.45% 5	11	0.00

Q8 11 responses

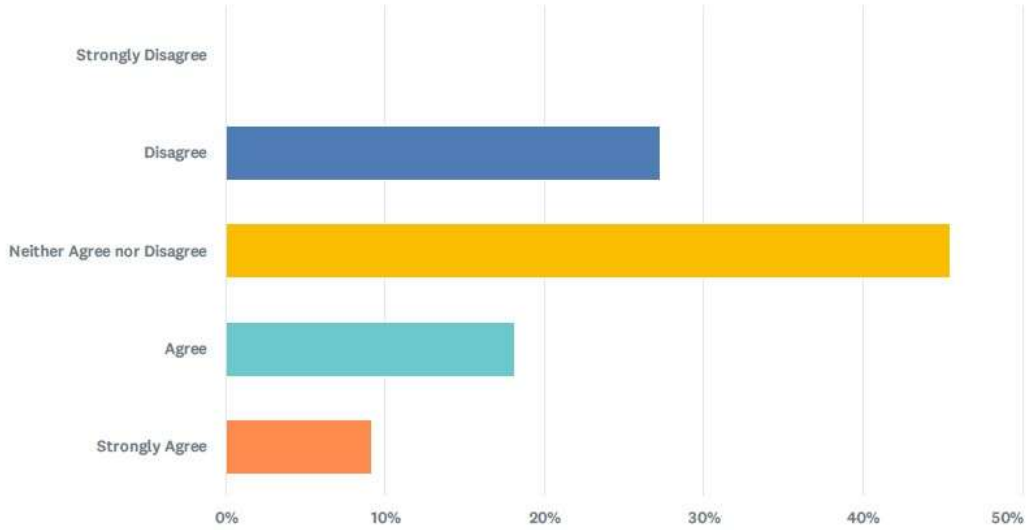
Medical responses are over tasking the service's response capacity.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	9.09% 1	27.27% 3	63.64% 7	0.00% 0	0.00% 0	11	0.00

Q9 11 responses

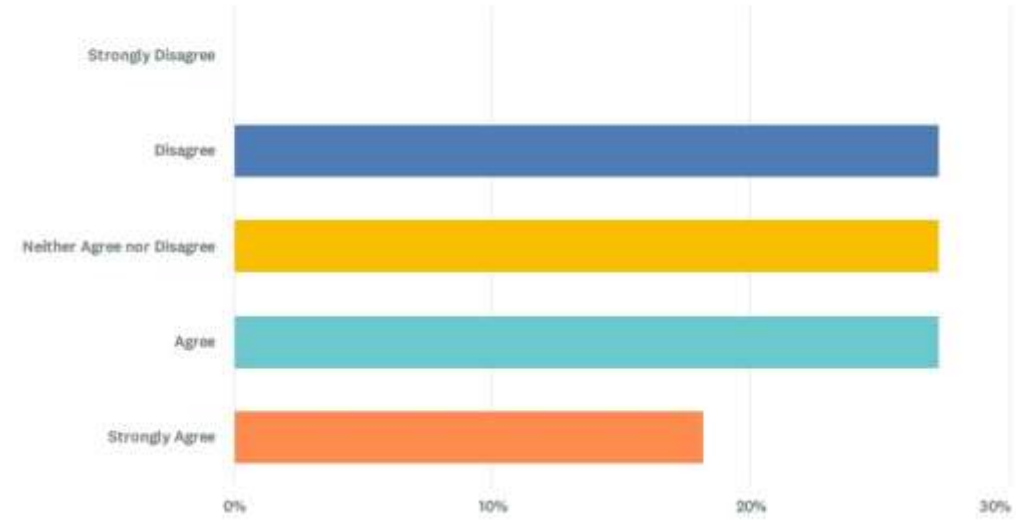
Your fire service experiences a high rate of turnover.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	27.27% 3	45.45% 5	18.18% 2	9.09% 1	11	0.00

Q10 11 responses

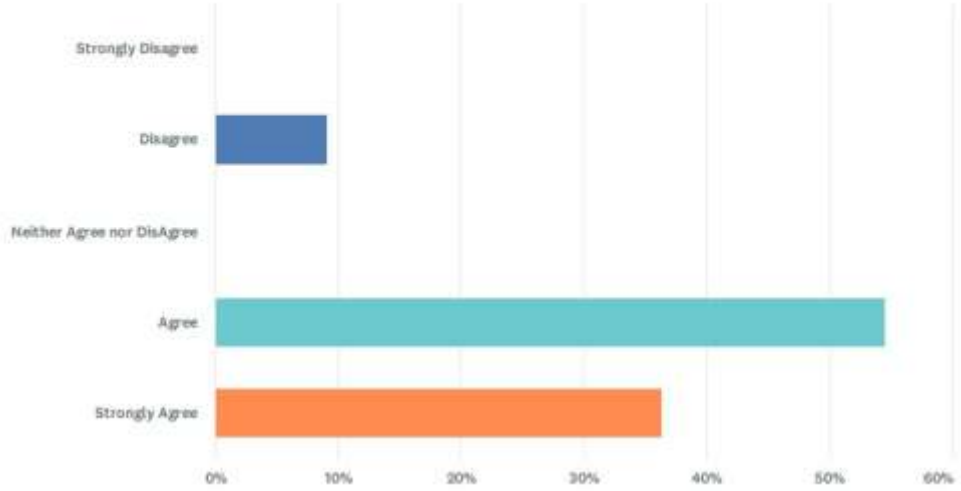
Your current recruiting program is effective.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	27.27% 3	27.27% 3	27.27% 3	18.18% 2	11	0.00

Q11 11 responses

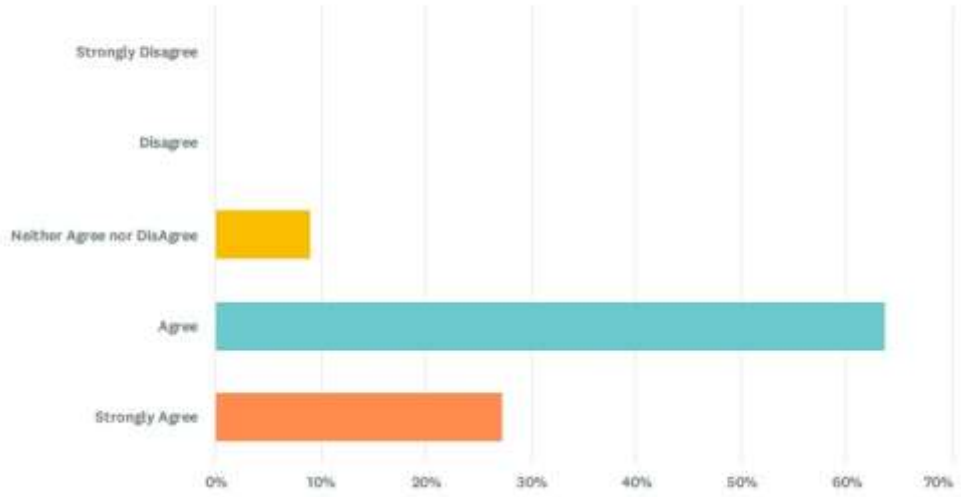
The current level of live-fire and specialty team training is adequate for the services provided.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	9.09% 1	0.00% 0	54.55% 6	36.36% 4	11	0.00

Q12 11 responses

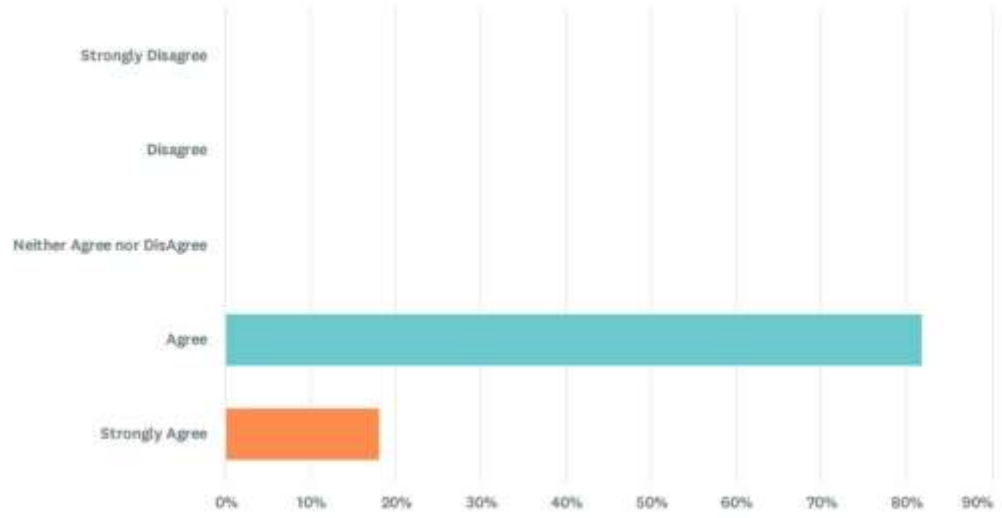
The current level of theoretical fire/rescue or leadership training you receive is adequate.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	9.09% 1	63.64% 7	27.27% 3	11	0.00

Q13 11 responses

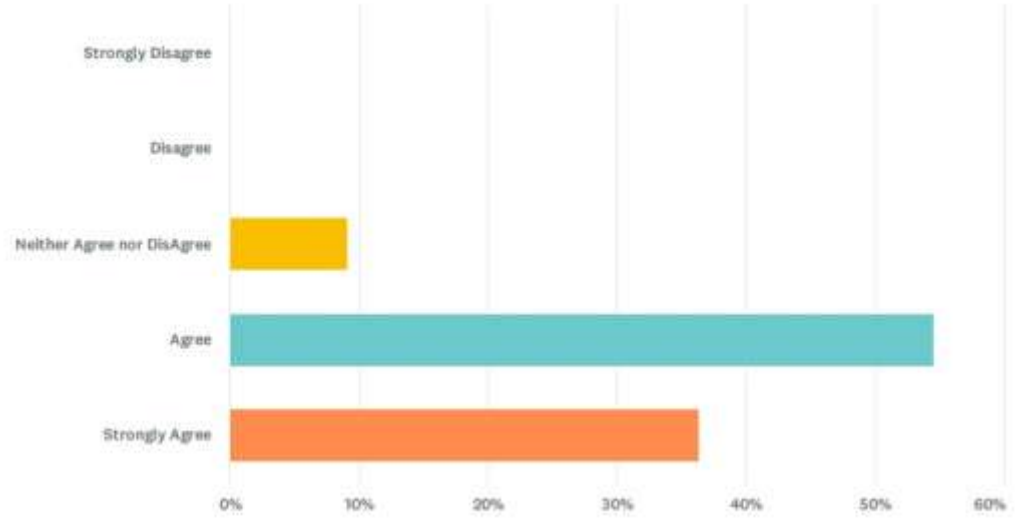
You receive adequate training to maintain competencies and certifications.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	0.00% 0	81.82% 9	18.18% 2	11	0.00

Q14 11 responses

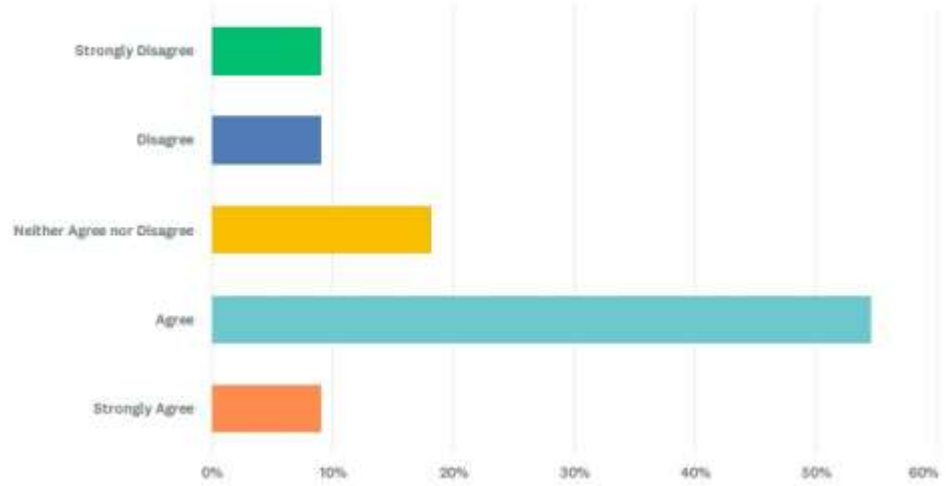
Recruits are adequately trained before they are assigned to full duty.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	9.09% 1	54.55% 6	36.36% 4	11	0.00

Q15 11 responses

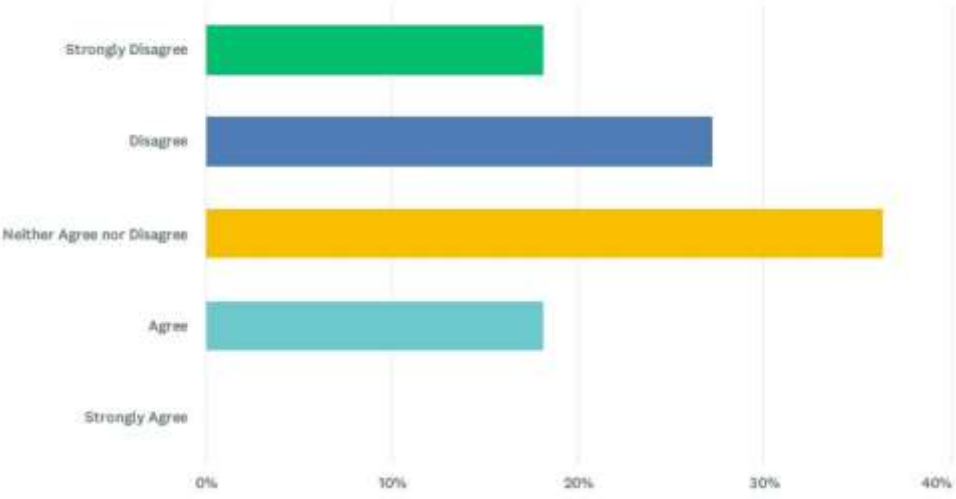
The current fire station(s) is functional and meet the operational requirements of the department.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	9.09% 1	9.09% 1	18.18% 2	54.55% 6	9.09% 1	11	0.00

Q16 11 responses

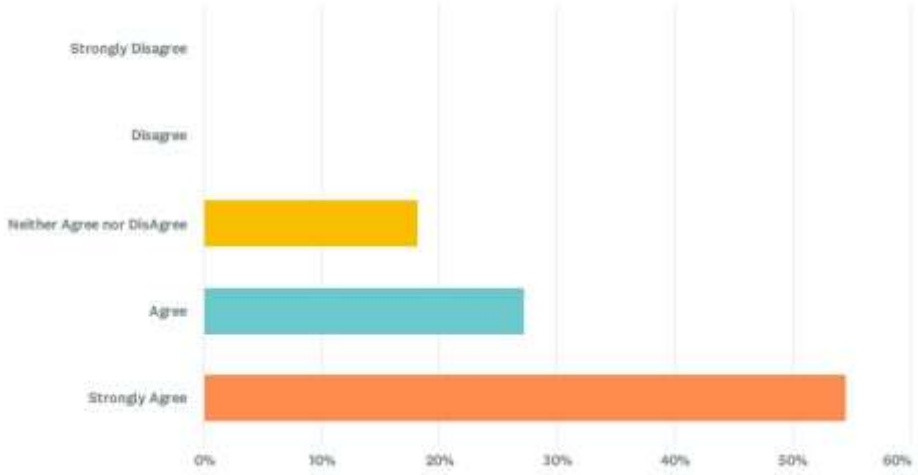
The current fire station(s) is strategically located for adequate geographic coverage.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	18.18% 2	27.27% 3	36.36% 4	18.18% 2	0.00% 0	11	0.00

Q17 11 responses

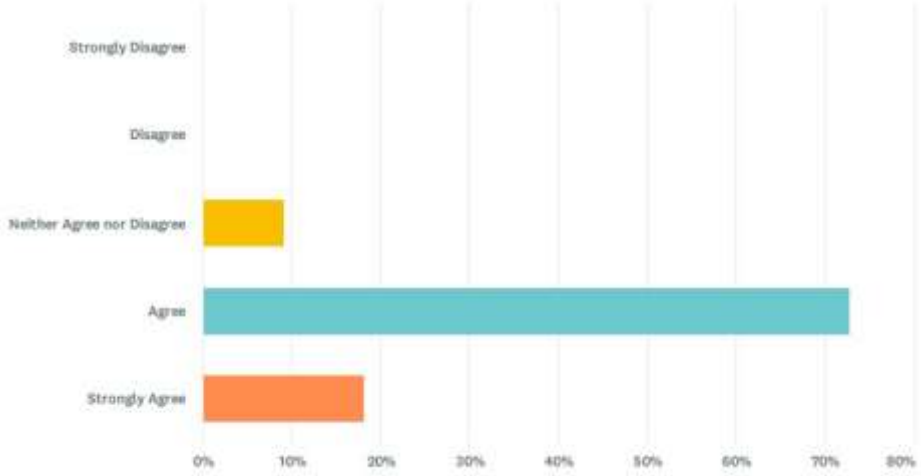
The service is adequately resourced with small equipment (i.e. SCBA, light duty vehicles, loose equipment and consumables).



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	18.18% 2	27.27% 3	54.55% 6	11	0.00

Q18 11 responses

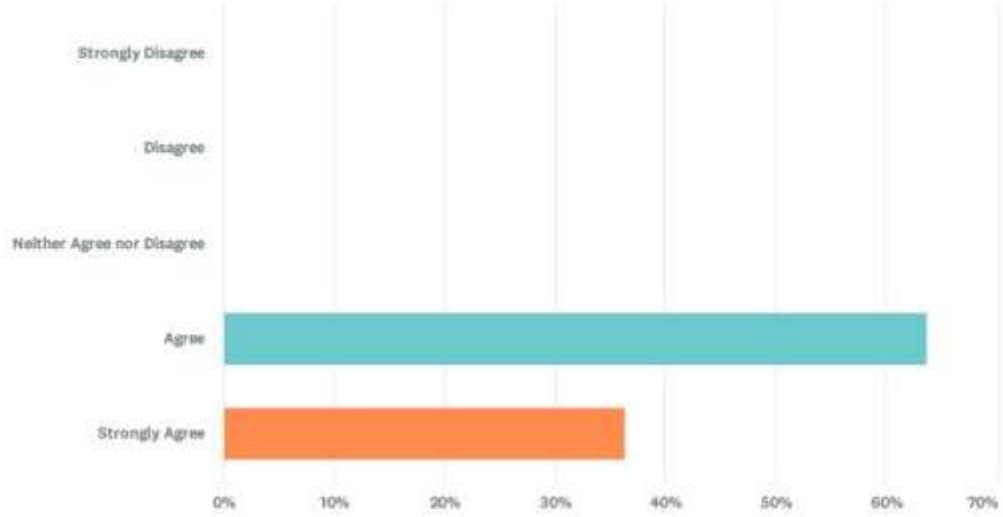
The current vehicle fleet of fire apparatus provides the capacity/capability necessary to meet the demands and types of responses.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	9.09% 1	72.73% 8	18.18% 2	11	0.00

Q19 11 responses

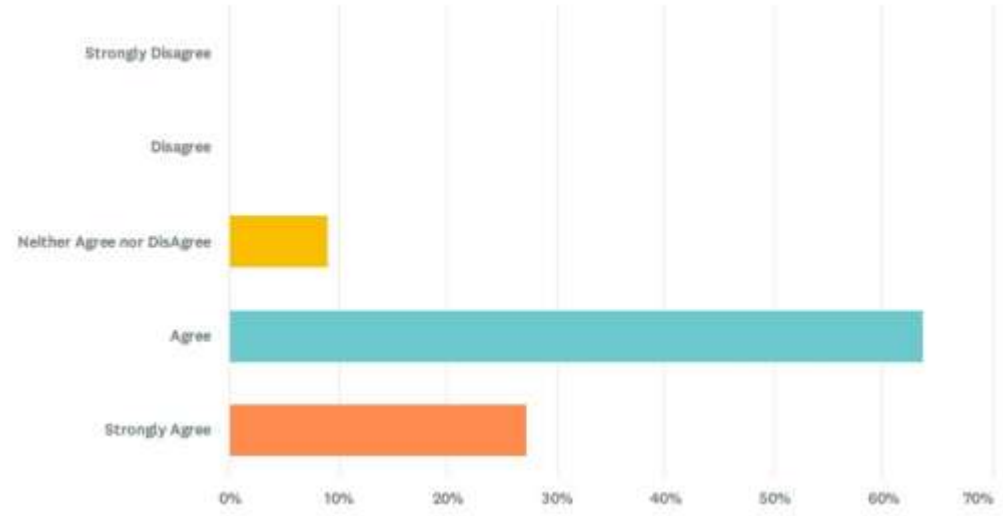
Fire apparatus are appropriately life-cycled.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	0.00% 0	63.64% 7	36.36% 4	11	0.00

Q20 11 responses

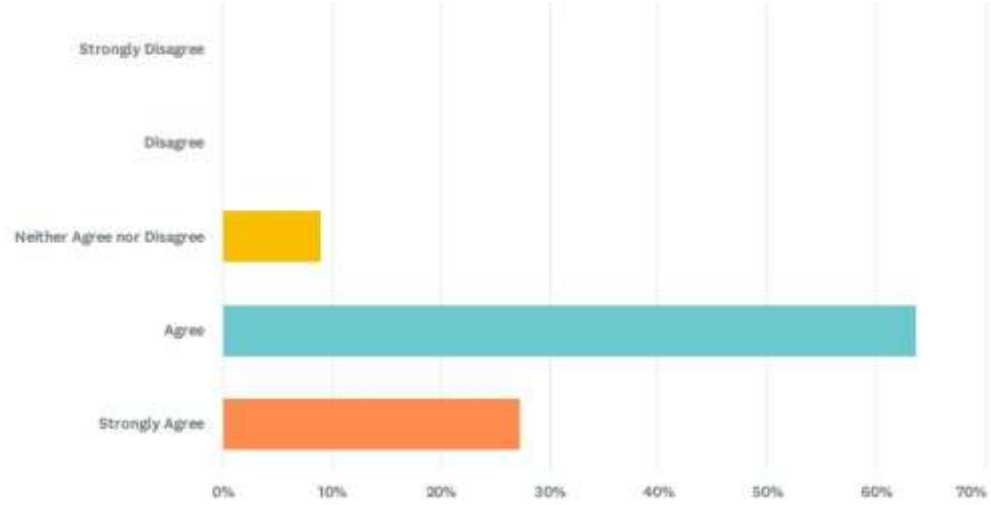
The maintenance of fire apparatus is adequate.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	9.09% 1	63.64% 7	27.27% 3	11	0.00

Q21 11 responses

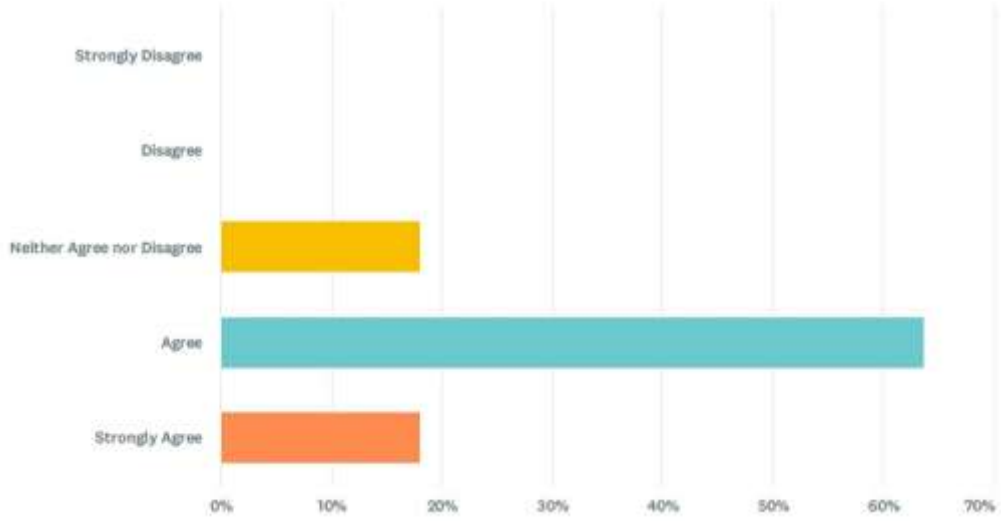
The service keeps pace with technology in communications systems.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	9.09% 1	63.64% 7	27.27% 3	11	0.00

Q22 11 responses

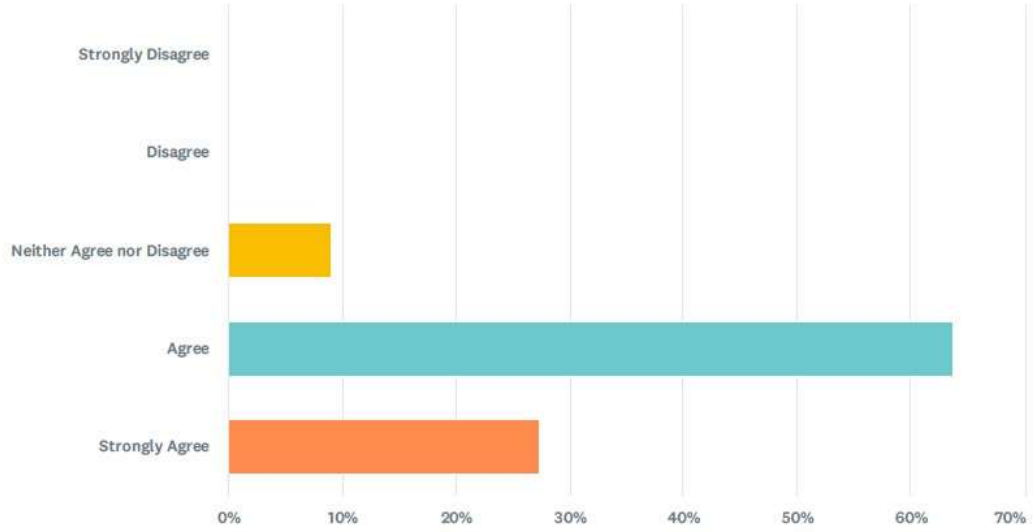
The service keeps pace with technology in records management system and mobile CAD systems.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	18.18% 2	63.64% 7	18.18% 2	11	0.00

Q23 11 responses

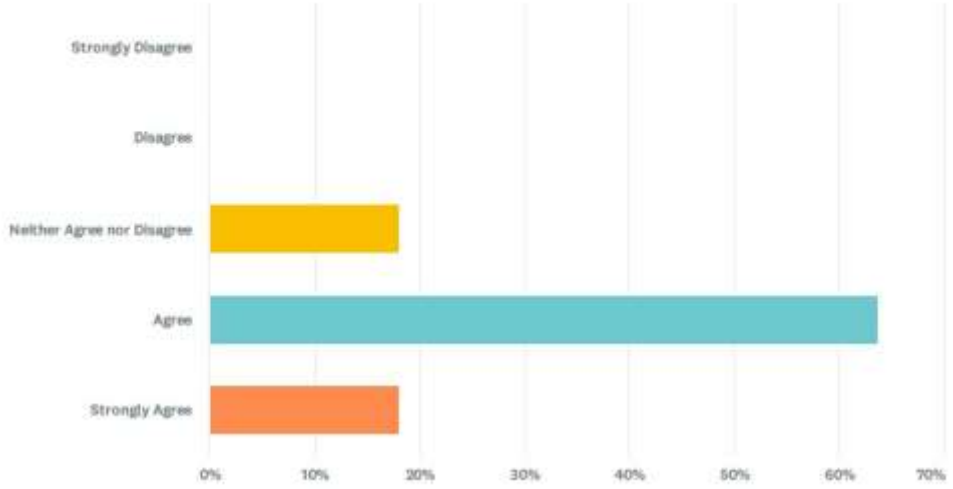
The service keeps pace with technology in station alerting and pre-alerting.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	9.09% 1	63.64% 7	27.27% 3	11	0.00

Q24 11 responses

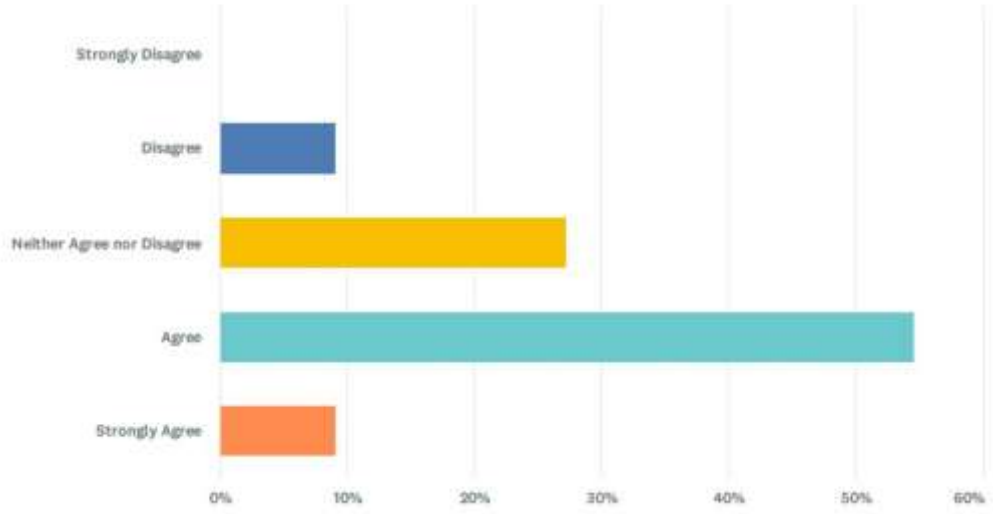
The service keeps pace with technology in records management and fire reporting systems.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	18.18% 2	63.64% 7	18.18% 2	11	0.00

Q25 11 responses

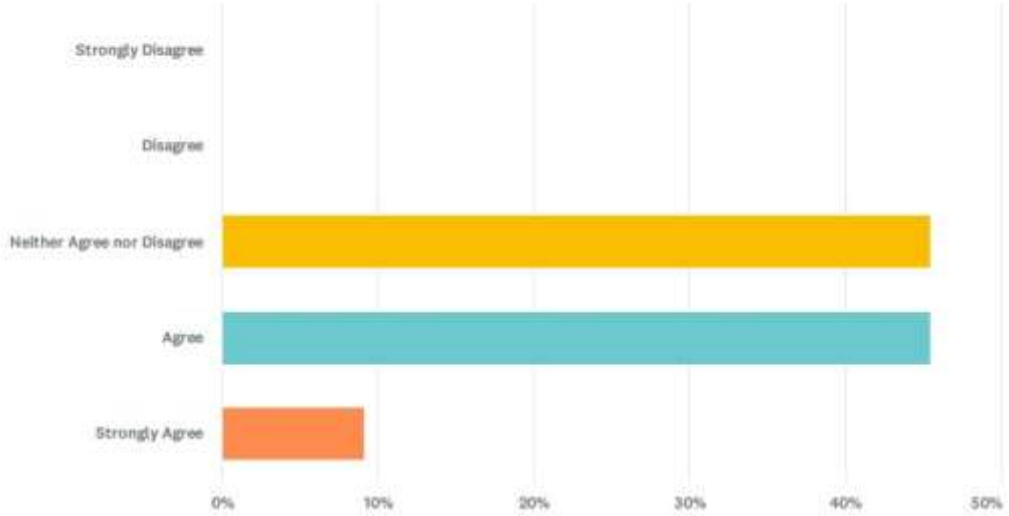
The service keeps pace with technology in online learning management systems (LMS).



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	9.09% 1	27.27% 3	54.55% 6	9.09% 1	11	0.00

Q26 11 responses

The service keeps pace with technology for the traffic pre-emption system.



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	0.00% 0	45.45% 5	45.45% 5	9.09% 1	11	0.00

Appendix E: Community Comparative Analysis Results

Budgets

Department budgets are of particular importance for most communities. In some instances, fire and emergency services are a considerable portion of a municipality's operating budget. This information was obtained using the reported 2025 budgets.

It must be noted that the Operating Budget for Sylvan Lake include all municipal Protective Services, and not just Fire Services.

Table 33: Community Comparative Budget Ranking

Community	Municipal Budget 2025	Fire Dept. Operating Budget	% of Municipal Budget	Cost Per Capita
Blackfalds	$36.79M	$958.818	2.61%	$78.22
Sylvan Lake	$50.48M	$5.05M	10%	$280.56
Lacombe	$49.4M	$1.0M	2.02%	$67.87
Olds	$26.68M	$1.49M	5.58%	$153.99
Innisfail	$28.52M	$1.33M	4.67%	$139.56
Whitecourt	$53.48M	$2.78M	5.2%	$264.76

Image 2: Fire Department 2025 Budget Comparison

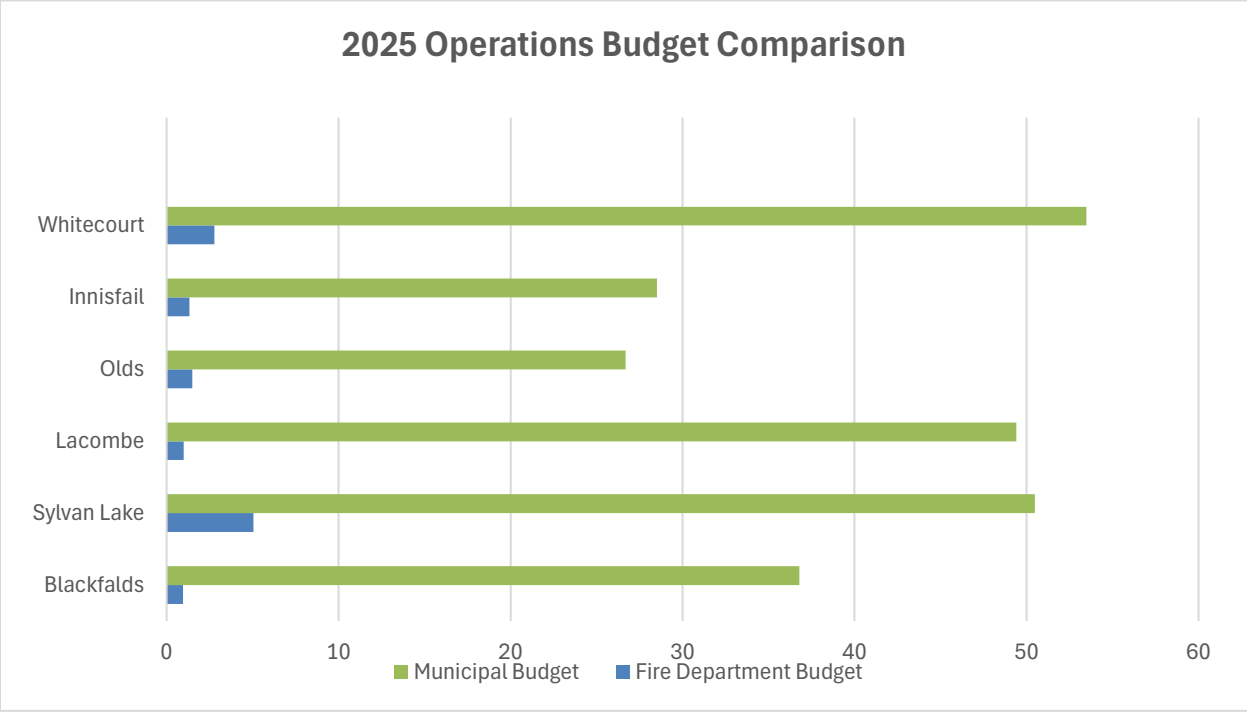


Image 3: Fire Department Budget as Percentage of Municipal Budget (2025)

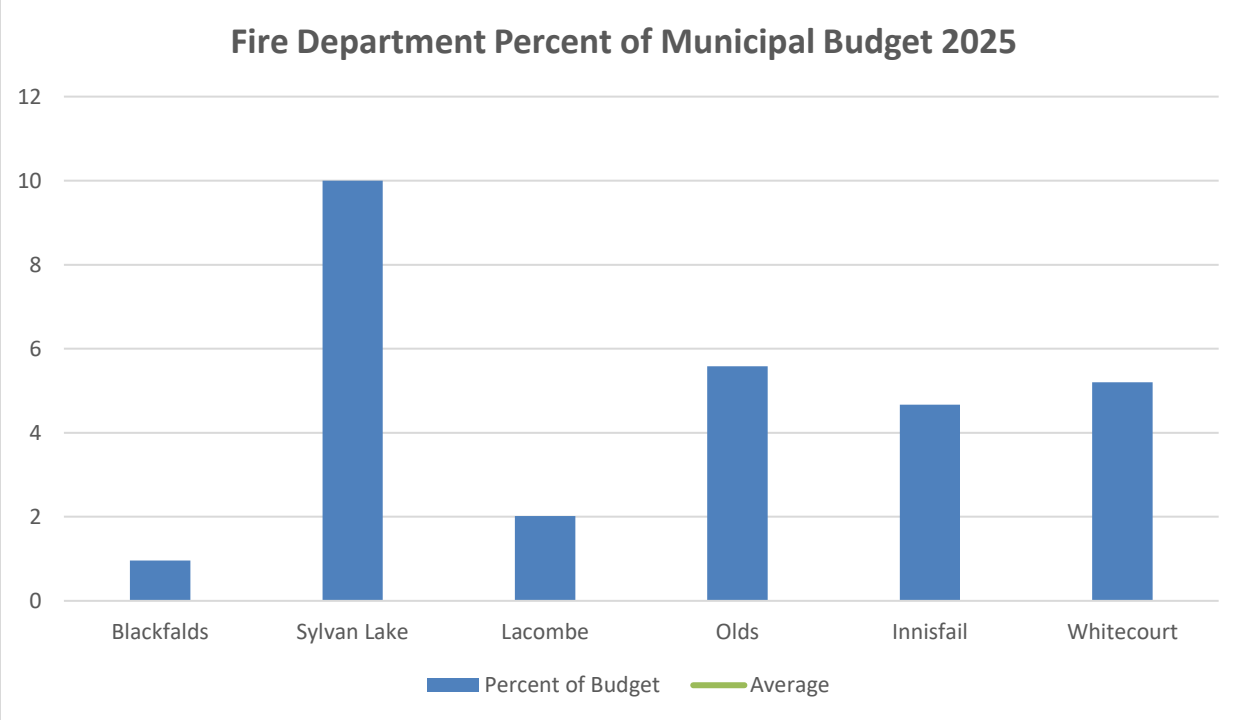
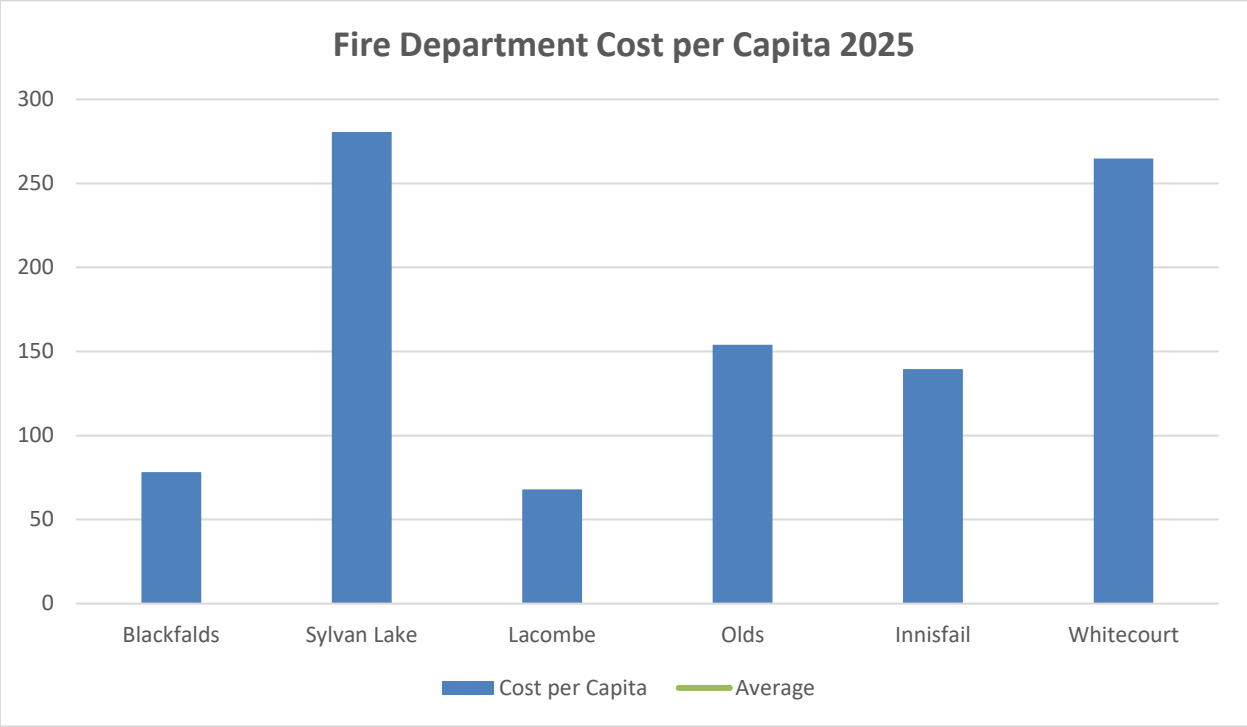


Image 4: Cost Per Capita Comparison (2025)



Department Profile

Department profiles, staffing models and levels of service are based on community risk, risk tolerance and the ability of a community to pay for and sustain desired service levels.

Table 34: Community Comparative Departments' Profile

Community	Town of Blackfalds	Town of Sylvan Lake	City of Lacombe	Town of Olds	Town of Innisfail
Department Type	Paid-On-Call	Paid-On-Call	Composite	Paid-On-Call	Composite
No. of Stations	1	1	1	1	1
Total Staff	28	33	40	50	37.5
Fire Chief (FT/PT)	1 FT	1 FT	1 FT	1	1 FT
Total Deputy Chief (PT/FT) Total Assistant Deputy Chief (ADC)	2 FT	2 FT	1 FT DC 1 FT ADC	2 FT	1 FT
Total Support Staff (PT/FT)	0	1 FT	1 FT	2 FT	1.5FTE
Total Suppression Staff (PT/FT) (WEP – Work Experience Program)	25 POC	30 POC	36 POC	45 POC	34 POC
Total Fire Prevention Staff (PT/FT)	0	0	1	0	0
Total Training Staff (PT / FT)	0	0	2	0	0
Total Dispatch Staff (PT / FT)	0	0	0	0	0
Mechanical	0	0	0	0.25	0.5
Other	NA	NA	NA	NA	1 Admin. Support

Table 35: Examples of Incident Types for Statistical Analysis

INCIDENTS BY TYPE		
EMS Related Calls		
Call Types	Pre-Hospital Care: Alpha, Bravo Charlie Delta Echo	
	Lift Assist	
	False Alarms	
Fire-Related Calls		
Fire Emergency	Alarm Burning Complaint Structure Fire Minor Fire Smoke	Car Fire Re-check Wildfire – Grass, Brush, Outdoor Oven/Pot on Stove Explosion
MVI (Motor Vehicle Incident), aka MVC (Motor Vehicle Collision)	Extrication	No Extrication
Rescue	Stand Elevator Lake/Marine Rescue High Angle	Swift Water Building Collapse Ice
Hazmat/Dangerous Good	Highway Incident Rail Incident	Industrial Incident Resident Incident
Non-Emergency	Carbon Monoxide Gas/Oil Smell/Spill Power/Telephone/Cable Line Down Natural Gas Leak	Aircraft Standby Incident Bomb Threat Hazardous Materials Propane Leak/Smell
Other	Inspection Burning Pile Inspection Assist Other Agency Public Service	Needle Pick-up Flood Assessment Water Problem (in structure)

Note: *Description and category names may not be common terminology in all jurisdictions.*

SAMPLE

Table 36: Municipal Comparative Response Call Volume 2021-2025)

Community		Blackfalds	Sylvan Lake	Lacombe	Olds	Innisfail
Total Call Volume	2021	184	426	327	393	323
	2022	245	560	367	435	378
	2023	248	558	390	464	449
	2024	275	588	426	395	448
	2025	255	665	463	474	500
Fire Related Calls	2021	159	298	327	252	164
	2022	215	387	337	320	182
	2023	218	413	375	336	234
	2024	250	471	381	303	223
	2025	229	493	441	370	364
EMS Related Calls	2021	25	128	NA	141	64
	2022	30	173	30	115	84
	2023	30	145	25	128	95
	2024	25	117	45	92	125
	2025	26	172	21	104	136

Image 5: Municipal Comparative Response Call Volume (2021 - 2025)

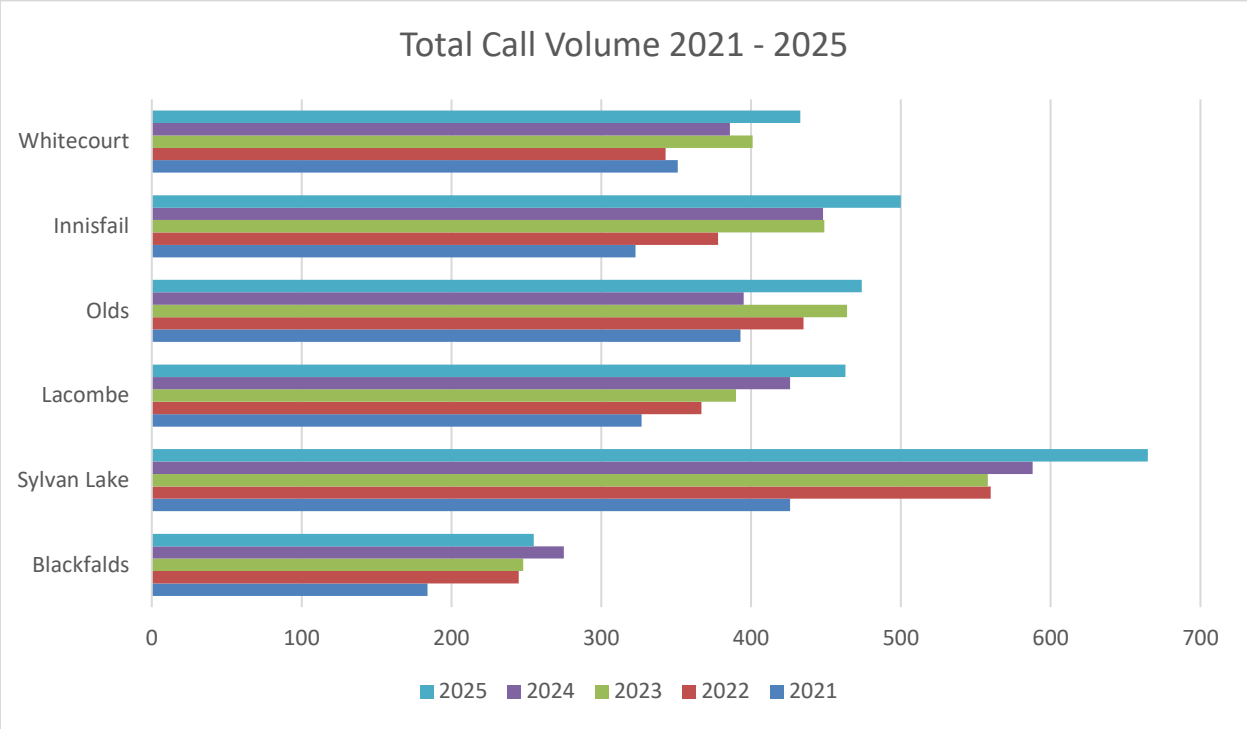
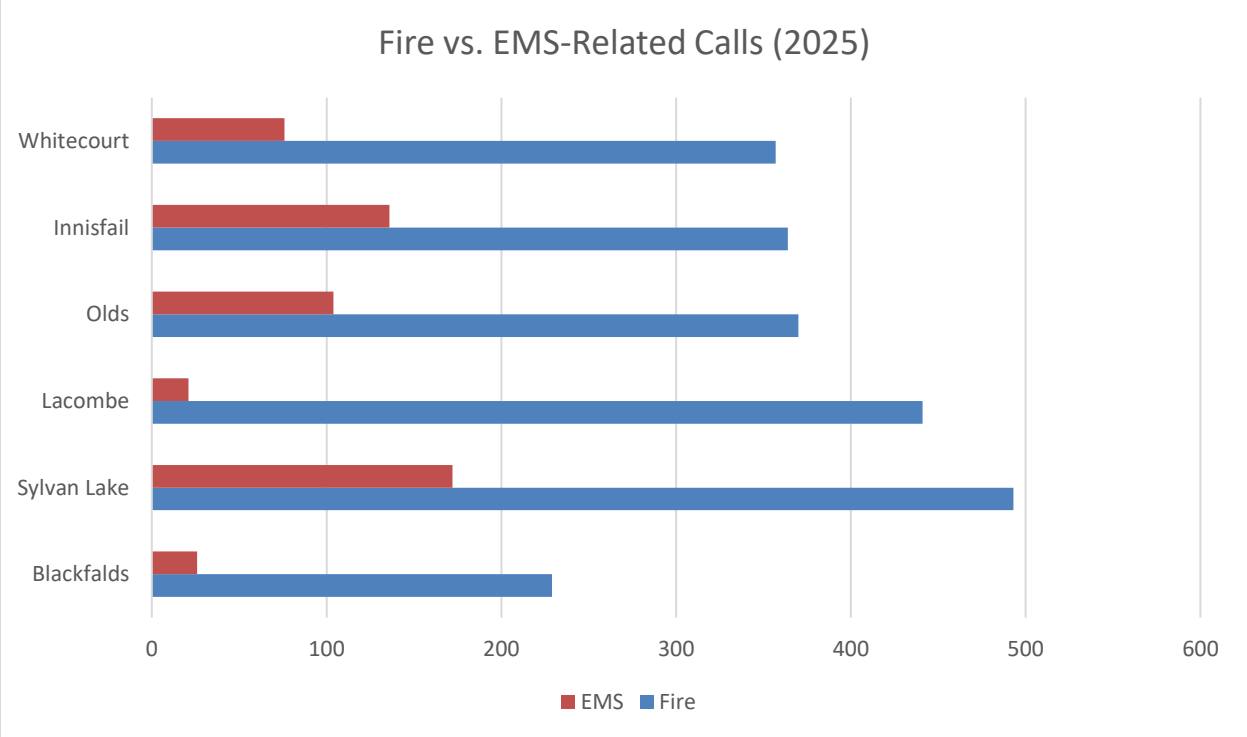


Image 6: Municipal Comparative Fire vs. EMS-related Response Call Volume (2025)



Appendix F: Apparatus and Emergency Vehicle Inventory





Unit Number:	C3	Unit Number:	C2
Year/Make:	**2025 Chev Z71**	Year/Make:	**2021 F150**
Type:	Crew cab 1500 pick up	Type:	Crew cab ½ ton pick up
Odometer (kms.):	NA	Odometer (kms.):	NA
Pump Capacity:	NA	Pump Capacity:	NA
Water Capacity:	NA	Water Capacity:	NA
Foam Capacity:	NA	Foam Capacity:	NA
Delivery Method:	NA	Delivery Method:	NA
Usage:	Command/ Chief Vehicle	Usage:	Command / Chief Vehicle
Comments:	NA	Comments:	Speed traffic sign mounted in topper

			
Unit Number:	C1	Unit Number:	Tender
Year/Make:	**2011 F150**	Year/Make:	**2007 Freightliner**
Type:	Crew cab ½ ton pick up	Type:	Rosenbauer Tender
Odometer (kms.):	NA	Odometer (kms.):	NA
Pump Capacity:	NA	Pump Capacity:	2000 l/m
Water Capacity:	NA	Water Capacity:	13248 L water
Foam Capacity:	NA	Foam Capacity:	NA
Delivery Method:	NA	Delivery Method:	NA
Usage:	Command / Chief Vehicle	Usage:	Water Supply with capabilities of pumping
Comments:	NA	Comments:	Used for water supply, has a porta-tank on the roof, booster reel located in the rear with hi-pressure nozzle.





Unit Number:	Rescue	Unit Number:	Engine 2
Year/Make:	**2012 Freightliner**	Year/Make:	**1999 Freightliner**
Type:	Med Rescue Rosenbauer	Type:	Superior Crown Enclosed midship
Odometer (kms.):	NA	Odometer (kms.):	NA
Pump Capacity:	NA	Pump Capacity:	5000 lpm
Water Capacity:	NA	Water Capacity:	3785 L (Water)
Foam Capacity:	NA	Foam Capacity:	
Delivery Method:	NA	Delivery Method:	Internal Eductor
Usage:	Rescue/Rehab/Command Center, rear walk in	Usage:	Wildland and second line pumper, back up E1 and E3
Comments:	30kw PTO driven generator. 15,000-watt command tower light. 12,000lb winch. Set of E-Draulic rescue tools. Misc. power tools. Seats 8, 6 SCBA with 15 spare bottles	Comments:	Gas powered fire pump for pump and roll capabilities. Power Inverter and scene lighting. 4 – SCBA with a spare bottle for each.

			
Unit Number:	Engine 3	Unit Number:	Engine 1
Year/Make:	**2018 Freightliner M2**	Year/Make:	**2023 Freightliner M2**
Type:	Maxi-metal midship crown enclosed	Type:	Fort Gary midship Crown Enclosed
Odometer (kms.):	NA	Odometer (kms.):	NA
Pump Capacity:	6000 lpm	Pump Capacity:	6000 lpm
Water Capacity:	4518 L (Water)	Water Capacity:	4550 L (Water)
Foam Capacity:	113 L foam	Foam Capacity:	113 L Foam
Delivery Method:	Direct Injection	Delivery Method:	Direct Injection
Usage:	Front line pump	Usage:	Front line pump
Comments:	Main engine for rural calls and MVCs, 2nd unit for urban calls, seats 6, 4 SCBA with 2 spare bottles for each, LED command light, equipped with E-draulic rescue tools, mutual aid pump	Comments:	Main Engine for urban calls, 2nd unit for rural calls, seats 6, 4 SCBA with 2 spare bottles for each. LED command light, equipped with E-draulic rescue tools, mainly in town/immediate response area





Unit Number:	Brush	Unit Number:	Side x Side
Year/Make:	**2025 F440**	Year/Make:	**2019 CAT UTV**
Type:	Type 6 Brush Unit	Type:	CAT CUV102D - UTV
Odometer (kms.):	NA	Odometer (kms.):	NA
Pump Capacity:	454 L/M	Pump Capacity:	475 L/M
Water Capacity:	1135 L water	Water Capacity:	190 L water
Foam Capacity:	38 L foam	Foam Capacity:	20 L pail of Foam
Delivery Method:	Scotty Around the pump	Delivery Method:	Scotty Around the pump
Usage:	Wild land fires, towing trailer	Usage:	Wildland and off-road rescues
Comments:	NA	Comments:	NA

			
Unit Number:	UTV Trailer	Unit Number:	Enclosed Trailer
Year/Make:	**2021 UT714-7K**	Year/Make:	**2018 Halmark**
Type:	CANTRA	Type:	Enclosed Trailer
Odometer (kms.):	NA	Odometer (kms.):	NA
Pump Capacity:	NA	Pump Capacity:	NA
Water Capacity:	NA	Water Capacity:	NA
Foam Capacity:	NA	Foam Capacity:	NA
Delivery Method:	NA	Delivery Method:	NA
Usage:	Trailer to Haul CAT UTV	Usage:	Rehab
Comments:	NA	Comments:	NA

			
Unit Number:	Wildland trailer	Unit Number:	Skid Package
Year/Make:	NA	Year/Make:	**2018 Kimtek**
Type:	NA	Type:	Firelite Transport Deluxe Skid Unit FDHP-303-200
Odometer (kms.):	NA	Odometer (kms.):	NA
Pump Capacity:	NA	Pump Capacity:	454 L/M
Water Capacity:	NA	Water Capacity:	757 L of water
Foam Capacity:	NA	Foam Capacity:	20-liter pail
Delivery Method:	NA	Delivery Method:	Scotty Around The Pump
Usage:	Trailer used for extra wildland equipment	Usage:	Wildland
Comments:	NA	Comments:	Skid package is to be placed in the back of a pick up and used to help with wildland fires



Unit Number:	Ice Rescue Trailer
Year/Make:	**2005 D-Line**
Type:	Flat Deck
Odometer (kms.):	NA
Pump Capacity:	NA
Water Capacity:	NA
Foam Capacity:	NA
Delivery Method:	NA
Usage:	Ice/water Rescue
Comments:	Single axle flat deck trailer with storage trunks holding equipment, ice rescue suits, recue boat, etc.

BLACKFALDS
ALBERTA

TOWN OF BLACKFALDS
STANDING COMMITTEE OF COUNCIL
REQUEST FOR DIRECTION

MEETING DATE: November 16, 2026

PREPARED BY: Preston Weran, Director of Infrastructure and Planning Services

PRESENTED BY: Preston Weran, Director of Infrastructure and Planning Services

SUBJECT: **Proposed Transportation Revisions to OSL Bylaw 1357.26 - 2nd Reading**

BACKGROUND

The Town's Off-Site Levy ("**OSL**") Bylaw 1190/15 requires an update.

At the June 9th, 2026 Meeting, Council gave First Reading to Bylaw 1357.26 - Off-Site Levy Bylaw, as presented. Stakeholder engagement was completed in July. Engagement included the creation of a project website, a survey and an open house on July 23rd. There were also email responses received and one in-person meeting held in August.

At the September 15th Standing Committee meeting the following motion was passed based upon the updated levies for each area and the reduction of facility Levies by 25% to account for existing residential tax cost sharing:

100/26 Councillor Hoyte moved That Standing Committee of Council recommend that Administration revise the Off-Site Levies report's average rate to $131,439.79/Ha, to be used for Second Reading of the Off-site Levy Bylaw.

CARRIED

DISCUSSION

Through the final review of the OSL report, we noted two errors in the Transportation Levy spreadsheet; the $14.625M Highway 2A improvement and the $7.8M QEII and Twp Rd. 40-0 Right-in/Right-out Connection was inadvertently included in this last update presented to Standing Committee. We had been sheltering the developers from any improvements on Highway 2A and continued that practice in this new update, so these projects were removed.

As a result of saving fund from the errors, we were able to add a new funding model to pave the two gravel sections of Broadway and South Street and adjusted the percentage funded on South Street East of Highway 2A 4 lane project. These updates better represent future improvement requirements. Administration recommends the replacement of the table in the final report with the updated table below:

Arterial Roadway	Classification	Length (m)	Unit Rate ($/m)	Administration, Professional Services, and Contingency	% Levy Funded	Levy Amount ($)
Vista Trail	4-Lane UAU	1,300	2,300	30%	75.0%	$ 2,915,250
Broadway Avenue - Womacks Road to Aspen Lakes Boulevard	4-Lane UAU	900	2,300	30%	75.0%	$ 2,018,250
Cottonwood Drive Extension to Rge Rd 270	4-Lane UAU	1,300	2,300	30%	75.0%	$ 2,915,250
Future East Four Lane Undivided from South Street to Twp Rd 400	4-Lane UAU	3,400	2,300	30%	75.0%	$ 7,624,500
Paving of Existing Gravel Roads	**2-Lane UCU**	**4,500**	**2,300**	**30%**	**75.0%**	**$ 10,091,250**
Broadway Avenue - Aspen Lakes Boulevard to Twp Rd. 40-0	4-Lane UCU	1,500	5,000	30%	50.0%	$ 4,875,000
East Railway Street Upgrades	4-Lane UCU	1,100	5,000	30%	50.0%	$ 3,575,000
South Street Upgrades East of Highway 2A	4-Lane UCU	2,250	5,000	30%	**75.0%**	**$ 10,968,750**
Womacks Road & CPR Crossing (Including Future Upgrade)	4-Lane UAD	500	13,615	30%	75.0%	$ 6,600,000
				Total		**$ 51,583,250**

Page 1

Previous Table from the last report:

Arterial Roadway	Classification	Length (m)	Unit Rate ($/m)	Administration, Professional Services, and Contingency	% Levy Funded	Levy Amount ($)
Vista Trail	4-Lane UAU	1,300	2,300	30%	75.0%	$ 2,915,250
Broadway Avenue - Womacks Road to Aspen Lakes Boulevard	4-Lane UAU	900	2,300	30%	75.0%	$ 2,018,250
Cottonwood Drive Extension to Rge Rd 270	4-Lane UAU	1,300	2,300	30%	75.0%	$ 2,915,250
Future East Four Lane Undivided from South Street to Twp Rd 400	4-Lane UAU	3,400	2,300	30%	75.0%	$ 7,624,500
Broadway Avenue - Aspen Lakes Boulevard to Twp Rd. 40-0	4-Lane UCU	1,500	5,000	30%	50.0%	$ 4,875,000
East Railway Street Upgrades	4-Lane UCU	1,100	5,000	30%	50.0%	$ 3,575,000
QEII and Twp Rd. 40-0 Right-in/Right-Out Connection	Arterial	1,600	5,000	30%	75.0%	$ 7,800,000
South Street Upgrades East of Highway 2A	4-Lane UCU	2,250	5,000	30%	50.0%	$ 7,312,500
Womacks Road & CPR Crossing (Including Future Upgrade)	4-Lane UAD	500	13,615	30%	75.0%	$ 6,600,000
Upgrade Highway 2A	4-Lane UAD	2,000	7,500	30%	75.0%	$ 14,625,000
				Total		**$ 60,260,750**

STRATEGIC PLAN ALIGNMENT / OTHER MASTER PLAN ALIGNMENT



This amendment to the Bylaw directly supports the Town of Blackfalds Strategic Plan by sustaining long-term service reliability, stewarding financial and physical resources to support long-term sustainability. By fairly recovering these costs as revised, we are also encouraging economic vitality and community prosperity.

FINANCIAL IMPLICATIONS

Average OSL Rate passed by Standing Committee for 2nd Reading at the September 15th, 2026 meeting was: $131,439.79/Ha.

Average OSL Rate proposed for this Standing Committee for 2nd Reading is $125,985.82/Ha.

COMMUNICATION / ENGAGEMENT CONSIDERATIONS

If the Bylaw revisions proposed are supported by Standing Committee, Administration will make the applicable amendments to the Bylaw and bring it forward for second reading on November 24th. An updated rate will be reflected on the project website and the Developers who provided specific feedback will be advised of the revised rate.

ADMINISTRATIVE RECOMMENDATION

That Standing Committee of Council consider the following motion:

1. That Standing Committee of Council recommend that Administration revise the Off-Site Levies report's average rate to $125,985.82/Ha, to be used for Second Reading of the Offsite Levy Bylaw, at a future Regular Meeting of Council.

ALTERNATIVES

a) That Standing Committee refer the report to set the rates for the Off-Site Levy Bylaw 1357.26 back to Administration.

ATTACHMENTS

None

APPROVALS

Kim Isaak,
Chief Administrative Officer

Department Director/Author

MEETING DATE: November 16th, 2026

PREPARED BY: Ken Morrison, Director of Emergency Management & Protective Services

PRESENTED BY: Ken Morrison, Director of Emergency Management & Protective Services

SUBJECT: **Enforcement and regulations relating to Prohibited Miniature Vehicles, in Alberta**

BACKGROUND

During July 14, 2026, Regular Council Meeting:

Mayor Svab moved: "That Council direct Administration to conduct research regarding the enforcement and banning of Prohibited Miniature Vehicles, such as electric scooters, electric bikes, go-karts and golf carts in other municipalities and bring forward a Report to the Standing Committee of Council with recommendations.

The use of electric scooters (e-scooters), golf carts, electric bikes (e-bikes, go-karts and electric skateboards have increased significantly throughout Alberta over the last several years. These devices provide affordable and environmentally friendly transportation options also create concerns related to safety, enforcement, liability, infrastructure, and injury prevention.

Currently, Alberta Traffic Safety Act (TSA) generally prohibits **privately** owned e-scooters, e-skateboards, and golf carts (Personal Micromobility Devices) from operating on public roads, sidewalks, and pathways unless specifically authorized through provincial exemptions or pilot projects. **The TSA has not kept pace with the rapid increase in Alberta residents purchasing and utilizing these as a form of transportation within municipalities.**

Rental e-scooter (Such as "Lime" in Blackfalds) programs operating in municipalities such as (Such as "Lime" in Blackfalds), Edmonton, Calgary, Red Deer and other locations are permitted under special provincial approvals. Golf cart use has recently become permissible under Alberta's 2024 Golf Cart Pilot Project Regulation, provided municipalities participate in the provincial program and adopt approved, bylaws.

With the surge in the numbers of micromobility devices being purchased and used privately within municipalities, Emergency Departments have seen an increase in e-scooter injuries year after year across Alberta, in 2022 approximately 1,860 injuries and over 3,000 injuries in the current year. The town of Blackfalds has continued to see an increase in these devices on the roadways, sidewalks, paths and parks throughout the town. Since 2024 Blackfalds Municipal Enforcement has had over 30 complaints made to the department, with many more having been observed in the Blackfalds Opinion Post. These reports have consisted of near collisions, speeding, stunting, failing to obey traffic control devices, no helmets, doubling and other various complaints. These complaints have included complaints specific to the Rental E-Scooter program as well.

In 2023, Alberta municipalities moved forward a Resolution to the province which was sponsored by cities of Calgary and Edmonton advocating the province adjust the Traffic Safety Act to allow the use of e-scooters. The Alberta government has advised they are currently considering legislation that would allow municipalities to regulate e-scooters and similar personal micromobility devices, while

creating common provincial rules for their use across the province. This is expected to come before the Legislature during the fall 2026 session.

E-Scooters

Under the current Traffic Safety Act (TSA) framework, **privately** owned e-scooters are classified as prohibited miniature vehicles and are not permitted on highways, roads, or sidewalks. The use of e-scooters is restricted to private property, unless a specific provincial exemption has been granted.

Attachment 1: Owning and Operating a Small Vehicle Brochure
Attachment 2: Rules and Regulations Applying to Small Vehicles.

Several municipalities within the province operate **shared e-scooter programs** under ministerial approvals granted by the province, this exemption does not grant privately owned e-scooters the same rights. Along with Edmonton and Calgary, communities within Central Alberta such as Lacombe, Red Deer, Blackfalds, Sylvan Lake have supported the shared e-scooter program through independent companies.

Electric Skateboards

Electric skateboards fall into a similar category to other miniature vehicles and current legislation was brought into effect before the widespread use of these micromobility devices.

- Not eligible for registration.
- Not insurable as motor vehicles.
- Not permitted on public roadways.
- Restricted to private property.

Electric Bikes (E-Bikes)

An e-bike that meets Alberta's definition of a power bicycle:

- May be operated without a driver's license, registration, or motor vehicle insurance.
- It must have an electric motor rated at no more than 500 watts and a motor-assisted top speed of no more than 32 km/h.
- The operator must be at least 12 years old and must wear an approved helmet.
- Must have **fully operational pedals that can propel the bicycle using muscular power alone.**
- E-bikes are subject to the rules of the road applicable to bicycles and other road users.
- Municipal bylaws may further regulate bicycle and pathway use, provided they do not conflict with provincial law.
- A device marketed as an e-bike is not necessarily a legal power bicycle if it exceeds the prescribed power or speed limits or does not meet the applicable equipment definition.

E-bikes that exceed these specifications may fall into another vehicle class and be subject to licensing, registration, insurance, and equipment requirements.

Golf Carts

Golf carts have for the most part always been prohibited on Alberta roads. A pilot project was introduced in 2024, which allowed participating municipalities to authorize use on designated roadways. Under this pilot project participating municipalities must:

- Pass a golf cart bylaw.
- Obtain Registrar approval.
- Designate eligible roadways.
- Implement permit requirements.
- Set operational rules and crossing locations.

This regulation limits golf cart use, primarily to low-speed roadways and requires municipalities to monitor and report impacts.

Go-Karts

Go-Karts are generally treated as prohibited miniature vehicles under the TSA framework.

- They are not permitted on a highway, which includes public streets, roads, and sidewalks along a roadway.
- They cannot ordinarily be registered or insured for public-road use.
- Operation is generally limited to private property with the property owner's permission.
- A municipal bylaw cannot make a conventional go-kart legal for general operation on public roads.
- The provincial golf Cart Pilot Project applies to qualifying golf carts, not recreational go-karts.

Town of Blackfalds:

The town of Blackfalds has been working on updating the current traffic bylaw, with the intent of implementing rules and regulations to work with the most current TSA regulations. Keeping in mind the province is in the middle of updating the regulations which are currently in place for E-bikes, E-scooters and other micromobility devices.

Currently enforcement officers have been providing an extensive education period to operators of E-scooters, E-bikes, and other micromobility devices. On the advice of the Traffic Crown attorney, officers when necessary have been utilizing the TSA to ensure traffic safety within the town including e-scooters and other devices. Examples of enforcement, are Failing to obey a traffic control device, speeding etc, which are currently enforceable. The Municipal Enforcement 2026 Summer Bylaw officer worked at providing informational pamphlets to the youth about the legality of these devices as governed by the TSA as well as reinforcing this in conversation with the youth throughout the summer.

Throughout the summer of 2026, the inappropriate use of personal micromobility devices, such as e-scooters, hover boards, e-skate boards and such continued.

The Policing Committee along with the RCMP and Municipal Enforcement designed and distributed a pamphlet which provided current provincial regulations related to these devices. This brochure was provided as an educational tool for the public to be aware that under the current provincial regulations these devices are prohibited.

Attachment 3: Police Committee Brochure

Shared E-Scooters:

The contracted e-scooters operating in Blackfalds (Lime) have received authorization through a Provincial exemption/pilot framework that permits their operation with designated areas of the community.

- Appropriate insurance and Operating restrictions.
- One rider per scooter.
- Don't drink and Drive.
- Park in the designated parking zones.
- Operators must be 16 +.

Private/Personal E-Scooters

The town currently follows the TSA, in which e-scooters are defined as prohibited Miniature Vehicles. As noted, we have been actively providing education and when warranted using the TSA for enforcement.

Private E-Bikes

Town Enforcement officers have been following the regulations in place through the province for Power bicycles and following similar enforcement educational initiatives as with e-scooters.

- Have fully operational pedals that can propel the bike
- Have an electric motor of 500 watts or less.
- Stop providing electric assistance at 32 km/h.
- Meet applicable provincial equipment requirements (brakes, lights, reflectors, etc.)
- Minimum age of 12 years old.
- An approved Helmet is required.
- Permitted on Public roads, and designated pathways.
- Must follow the rules of the Traffic Safety Act, obey stop signs, obey traffic lights, follow posted speed limits, ride according to the rules of the road.

What other Municipalities are Doing:

Calgary:

Calgary operates a provincially authorized **shared e-scooter program** which includes:

- Maximum operating speeds.
- Designated slow-speed zones.

- Geofencing technology.
- Restriction on sidewalk riding in many areas.
- Data sharing requirements with operators.

Calgary has also advocated a province-wide framework for personal e-scooter

Private e-scooters:

As of September 2026, Calgary has taken a limited-use approach to privately owned e-scooters:

- Permitted on marked City pathways with a maximum speed of 20 km/h or the lower posted limit.
- Not permitted on public roads, sidewalks, unmarked park trails, or other public green spaces.
- Riders must yield to pedestrians, slow down when passing and ride on person per scooter.
- Riders 16 and under must wear a helmet, with recommendation of helmet use for everyone.
- Unsafe riding and repeated conflict locations can be reported.

Private E-Bikes

In Calgary, legal e-bikes have rules around speed, equipment, and where they can be used:

- Not permitted on sidewalks.
- Permitted on Pathways with a speed limit of 20 km/h.
- E-bikes must be limited to a maximum speed of 32 km/h.
- They must have operational pedals.
- Helmets are required for all e-bike riders.
- Permitted on roadways.
- Riders who ignore the rules can face fines.

Edmonton:

Shared E-Scooters:

Edmonton currently has one of the largest **Shared E-Scooter** programs, allowing operation on:

- Shared-use pathways.
- Bicycle facilities.
- Lower-speed roads.

Edmonton continues to monitor and collect collision and injury data in partnership with healthcare researchers studying e-scooter injuries.

Private E-Scooters:

Edmonton states that the TSA does not authorize private e-scooters or similar electric devices, such as one-wheels. They are **prohibited** on:

- Public streets and roads.
- Bike lanes

- Shared use pathways
- Sidewalks
- Other city property.
- Generally, to be used only on private property with the owner's permission.

Private E-Bikes

Edmonton rules on Personally owned E-Bikes come from the TSA and City of Edmonton Bylaws. Generally, they can be ridden on roads, bike lanes, and on shared pathways.

- Over the age of 17 should not ride on a sidewalk, may face a fine of $250.00.
- Trail specific rules apply, for example in some natural surface trails and parks.
- Maximum speed of 32 km/h.
- Working Pedals
- Must wear a helmet.
- Minimum age of 12.

Red Deer:

Red Deer currently operates a shared e-scooter program and privately owned e-scooters remain illegal on roads and pathways throughout the city. E-scooters are only legal when rented through a licensed operator participating in the City's approved shared mobility program. Red Deer is calling for standardized provincial legislation due to enforcement and safety concerns.

Shared E-Scooters:

- Insured through the operator.
- Speed-limited (Red Deer states a maximum of 24 km/h).
- They are subject to provincial and municipal operating requirements.
- Permitted on sidewalks.
- Permitted on designated pathways.
- Must comply with applicable Traffic Regulations.

Private E-Bikes:

The city of Red Deer generally follows Alberta's provincial rules for "power bicycles" with a few local regulations.

- Have fully operational pedals that can propel the bike
- Have an electric motor of 500 watts or less.
- Stop providing electric assistance at 32 km/h.
- Meet applicable provincial equipment requirements (brakes, lights, reflectors, etc.)
- Minimum age of 12 years old.
- An approved Helmet is required.
- Permitted on Public roads, and designated pathways.
- Must follow the rules of the Traffic Safety Act, obey stop signs, obey traffic lights, follow posted speed limits, ride according to the rules of the road.

Town of Carstairs:

The town of Carstairs updated its traffic bylaw No. 1062 in 2026 to specifically address e-scooters and other micromobility devices. Privately owned E-Scooters are permitted in Carstairs

Attachment 4: Carstairs Bylaw

Private E-Scooters: Under the Town's Bylaw No 1026-Amended

E-scooters may be operated on:

- Sidewalks
- Pathways
- Roadways with speed limits of 40 km/h or less within town limits.
- When riding on a sidewalk or pathway maximum speed is 15 km/h.
- Yield to slower-moving pedestrians.
- Warn others before overtaking, by using a bell.
- Pass safely and with reasonable care.
- Travel at a reasonable speed based on conditions and pedestrian traffic.
- All operators and passengers must wear a helmet, regardless of age.

Private E-Bikes:

The town of Carstairs requires you to follow both Alberta's e-bike regulations and the town's bylaw.

- Have fully operational pedals
- Maximum motor output of 500 watts.
- Provide motor assistance only up to 32 km/h
- Meet Alberta's equipment requirement, including brakes and required lighting/reflectors.
- May operate on sidewalks, pathways, and roadways within town limits with a posted speed limit of 40 km/h or less.
- When riding on a sidewalk or pathway, it has a maximum speed of 15 km/h.
- Must be 12 years old or older.
- Riders under 16 years old may not carry passengers.
- All operators and passengers must wear a helmet regardless of age.

Town of Sylvan Lake:

Shared E-Scooters:

Sylvan Lake allows e-scooters through an approved shared micromobility program allowing the operators to provide e-scooters for rent through a provincial exemption.

- Must follow the rules built into the program.
- Geofencing technology may restrict where you can ride, park and how fast you travel in certain areas.
- Riders are encouraged to wear a helmet.

- Riders should remain alert, sober, and watch for pedestrians and other users.

Private/Personal E-Scooters

Private e-scooters are not permitted as Alberta's TSA does not currently allow them on public roads and pathways.

Private E-Bikes:

For e-bike use you must follow both Alberta's provincial e-bike laws and the town's pathway rules.

- Must have working pedals.
- Motor rated at 500 watts or less.
- Stop providing electric assistance at 32 km/h.
- Pathway speed limit is 20 km/h.
- Yield to pedestrians.
- Keep to the right side of the pathway, except when passing or turning left.
- All bicycles must have a bell.
- All bicycles must have working Brakes.
- Helmet required.
- Minimum age of 12.

Golf Carts:

Sylvan Lake has a specific Golf Cart Bylaw and participates in the Government of Alberta's five-year pilot project that allows golf carts on certain municipal streets.

Attachment # 5: Sylvan Lake Golf Cart Bylaw

- Do not operate a golf cart in a manner contrary to the Bylaw or the Act.
- Golf carts may only be operated within the Town unless travelling on a Municipal Roadway.
- Do not operate golf carts on sidewalks, walking trails, or ditches.
- Do not operate golf carts on municipal reserves, parks, green spaces, cemeteries, or playgrounds.
- Yield to pedestrians and avoid creating hazards.
- Travel in the same direction as vehicle traffic on the roadway.
- Travel in single file.
- Only carry as many passengers as there are functioning manufacturer-installed seatbelts.
- Ensure the golf cart is equipped with functioning headlamps, tail lamps, brake lights, and signal lights.
- Display a valid Town registration permit and license plate.

City of Lacombe:

City of Lacombe allows e-scooters under the City's micromobility program **(Shared E-Scooter Program),** and they are governed accordingly as "Leisure Vehicles" under the City of Lacombe Traffic Bylaw.

Shared E-Scooters:

- Ride on sidewalks whenever one is available.
- Yield right of way to pedestrians.
- Follow all posted signs and traffic controls.
- They are permitted on Sidewalks, Bike Lanes, Multi-use trails and pathways.
- Streets with speed limits of 50 km/h or less.
- Riders under age 18 must wear a Canadian Standards-approved helmet.
- Helmet use is strongly encouraged by all riders.
- Must be at least 16 years old to operate.
- Speed limit of 20 km/h.

Private/Personal E-Scooters

Privately owned e-scooters remain subject to provincial restrictions.

Private E-Bikes:

City of Lacombe Traffic Bylaw defines a bicycle as a cycle propelled by human and/or electric power assistance, meaning provincially compliant e-bikes are generally treated similarly to bicycles.

Alberta requirements that apply:

- Have fully operational pedals.
- Have a motor rated at 500 watts or less.
- Stop providing electric assistance at 32 km/h
- Be equipped with required safety equipment such as brakes, lights, reflectors, and a bell.
- Minimum age 12 years old.
- Helmet required for all e-bike riders regardless of age.
- As e-bikes are treated like bicycles they may ride where bicycles are permitted, including roads, bikes lanes and multi-use trails and pathways, subject to local signage and pathway rules.

Town of Okotoks:

Shared E-Scooters:

- Recommend the use of a helmet.
- Only one rider per e-scooter.
- Can be operated on sidewalks, pathways, bicycle lanes, and lower classification roadways without road markings.
- Maximum speed of 20 km/h

Private/Personal E-Scooters

Okotoks has permitted the use of private E-scooters on pathways within town limits. They are not permitted on the roadways.

- Can operate on pathways within the town.
- Must follow the speed limit of 20 km/h.
- Have a Bell or horn.
- Yield to pedestrians.

Private E-Bikes:

Alberta requirements that apply:

- Have fully operational pedals.
- Have a motor rated at 500 watts or less.
- Stop providing electric assistance at 32 km/h
- Be equipped with required safety equipment such as brakes, lights, reflectors, and a bell.
- Minimum age 12 years old.
- Helmet required for all e-bike riders regardless of age.
- As e-bikes are treated like bicycles they may ride where bicycles are permitted, including roads, bikes lanes and multi-use trails and pathways, subject to local signage and pathway rules.

DISCUSSION

The popularity of e-scooters, e-skateboards, e-bikes and golf carts continues to grow across the province of Alberta. These devices provide mobility, accessibility, and environmental benefits. Current evidence demonstrates a measurable increase in serious injuries and significant uncertainty surrounding regulation and enforcement. Alberta has been addressing golf cart use through a provincial pilot project, but personal e-scooters and e-skateboards remain largely prohibited on public infrastructure.

Under Alberta's Traffic Safety Act as outlined e-scooters are generally classified as prohibited miniature vehicles and are not permitted on public roadways, sidewalks, or highways. The chart below demonstrates what some municipalities are currently doing.

Key considerations related to e-scooters:

- No provincial framework currently exists for routine personal e-scooter use.
- Municipalities cannot independently legalize private e-scooters.
- Shared rental programs require provincial authorization.
- Municipalities may regulate approved rental programs through bylaws and operating agreements.

Municipality	E-Bikes	Private E-Scooters	Shared E-Scooters
Edmonton	Permitted where bicycles are permitted	Prohibited on city property.	Permitted through approved operators Shared devices on pathways, bike lanes, roads <=50 km/h; not sidewalks

Calgary	Permitted as bicycles	Permitted on city pathways only, speed limit of 20km/h, and not allowed on roadways, sidewalks, or bike lanes.	Permitted through approved operators, Shared scooters on pathways, bike lanes and some low-speed roads
Red Deer	Permitted on roads and designated paths	Not permitted on public roads or pathways	Permitted through shared program Rental scooters insured and speed-limited
Lacombe	Treated like bicycles.	Not permitted	Shared program active Use sidewalks where available; yield to pedestrians
Sylvan Lake	Permitted; pathway speed limit 20 km/h	Not permitted	Shared program active 20 km/h pathway speed limit
Okotoks	Permitted	Permitted on sidewalks/pathways; not roads, 20km/h	Bird Canada program 20 km/h pathway and sidewalk limit
Carstairs	Permitted on sidewalks, pathways and roads <=40 km/h	Permitted Local bylaw covers operation 15 km/h limit on sidewalks/pathways	Not required local bylaw covers operation.
Blackfalds	Provincial rules apply	Following provincial TSA regulations.	Shared scooter Programs scooters Permitted in community

Public Safety

The increasing use of e-scooters, e-skateboards, e-bikes and golf carts present several public safety concerns:

- Conflicts between riders and pedestrians,
- Collisions involving motor vehicles,
- Head and orthopedic injuries,
- Speed differentials on pathways,
- Underage operators,
- Multiple riders on devices designed for one person,
- Impaired operation.

Alberta statistics show that in 2022 there were 1,860 injury visits reported, in 2023 there were 2,245 reported and in 2025 there were 3,049 injury visits reported associated with e-scooters. With a steady increase yearly in injuries being reported resulting from the use of these devices and with their popularity this will only continue to rise, without stricter regulations and broader education being put in place.

Enforcement

Current enforcement is challenging due to:

- Limited provincial legislation addressing personal devices,
- Public misunderstanding of legal requirements,
- Growing availability of privately owned devices and
- Inconsistent regulations across municipalities.

If the town chooses to allow the operation of some of these micromobility devices within the municipality, a clearly written bylaw would be required. The difficulty with this is it would contradict the current provincial regulations in place, by allowing the use of these devices. A bylaw would provide Municipal Enforcement and RCMP members with:

- Defined operating standards.
- Clear offence provisions.
- Consistent educational messaging.
- Improved compliance mechanisms.

Without municipal standards in place, enforcement is difficult and public expectations remain unclear.

Liability

As stated, personal e-scooters and e-skateboards are not currently registered or insured under Alberta's registrations system, creating potential liability concerns when collisions occur involving pedestrians, cyclists, or vehicles.

Municipalities owe a duty of care with respect to public infrastructure and public safety. Without a clear operational standard in relation to these Micromobility devices, it may increase the town's exposure to liability claims, make it difficult to defend enforcement actions, and public uncertainty regarding permitted usage. By establishing clear rules and enforcement authorities, council will demonstrate proactive risk management and due diligence.

As a result of Alberta Municipalities resolution put forward in 2023 and 2026, the provincial government is currently reviewing the TSA and how it is applied to Personal micromobility devices such as e-scooters and e-skateboards. Government officials have stated this will be coming forward during the fall session of parliament in 2026. With a proper provincial framework in place this will allow for municipalities to develop regulations unique to the municipality. Without knowing the actual regulations, the province is going to put in place, it would be difficult to create a specific Bylaw. The Town of Carstairs has added a section within their Traffic Bylaw dealing specifically with Electric Bikes and Scooters. In this they address items such as Age, Maximum speed, Helmets and other requirements for the lawful use of these devices within their municipality.

Attachment 6: AB Munis Resolution 2023
Attachment 7: AB Munis Resolution 2026

The Town of Blackfalds may wish to wait until the provincial government publishes the TSA changes with reference to PMD's, prior to developing either a section within an updated Traffic Bylaw or a sperate Bylaw specifically for PMD's.

STRATEGIC PLAN ALIGNMENT / OTHER MASTER PLAN ALIGNMENT



This initiative supports a safe, inclusive, and connected community by balancing mobility choice with clear safety standards that protect all users of public spaces.

This initiative supports Council's Leadership, Engagement and Advocacy goals by providing proactive governance, fostering stakeholder engagement, and positioning the municipality as a leader in addressing emerging transportation and public safety challenges.

This initiative supports Sustainable Services and Infrastructure by protecting municipal assets, promoting the safe and efficient use of transportation networks, and ensuring the municipality is prepared to manage emerging mobility technologies in a sustainable and responsible manner

FINANCIAL IMPLICATIONS

Initial costs are expected to be limited and may include bylaw drafting, public consultation, signage updates, public education materials, enforcement officer training. Future enforcement and educations cost would be incorporated into existing operating budgets whenever possible.

COMMUNICATION / ENGAGEMENT CONSIDERATIONS

Administration recommends a comprehensive communication and engagement strategy that includes stakeholder consultation, public education, accessibility considerations, and a phased implementation approach. Emphasis should be placed on promoting awareness, compliance, and shared responsibility to ensure the safe integration of micromobility devices within the community while maintaining accessible and inclusive public spaces.

ADMINISTRATIVE RECOMMENDATION

That Standing Committee of Council consider the following motion(s):

That Standing Committee of Council recommend THAT Council direct Administration, upon receiving provincial legislative changes specifically relating to Personal Micromobility Devices, to prepare a section within the Traffic Bylaw regulating Personal Micromobility Devices and bring it forward at a future Regular Meeting of Council.

ALTERNATIVES

a) That Standing Committee of Council ask for further information.

ATTACHMENTS

- Attachment 1: Owning and Operating a Small Vehicle Brochure
- Attachment 2: Rules and Regulations Applying to Small Vehicles
- Attachment 3: Police Committee Brochure
- Attachment 4: Carstairs Bylaw
- Attachment 5: Sylvan Lake Golf Cart Bylaw
- Attachment 6: AB Munis Resolution 2023
- Attachment 7: AB Munis Resolution 2026

APPROVALS

Kim Isaak,
Chief Administrative Officer

Ken Morrison
Director of Emergency Management &
Protective Services



Owning and Operating a Small Vehicle in Alberta

Rules and regulations applying to power bicycles, mopeds, off-highway vehicles, motorcycles, mobility aids and prohibited miniature vehicles

Operating a small vehicle is a high-risk activity. These vehicles are lighter, less stable, and more vulnerable in a crash than other vehicles on the road. New riders are at the greatest risk of having a collision because they are unfamiliar with the controls and handling characteristics of small vehicles.

This fact sheet highlights the rules and regulations applying to small vehicles - power bicycles, mopeds, off-highway vehicles, motorcycles, mobility aids and prohibited miniature vehicles. In Alberta, the rules of the road are contained in the *Traffic Safety Act (TSA)* and regulations under the Act such as the *Use of Highway and Rules of the Road Regulation (UHRRR)*. Licensing requirements are contained in the *Operator Licensing and Vehicle Control Regulation*. Driver guides and additional information on road safety and low risk driving can be found online at: http://www.transportation.alberta.ca/DriversVehicles.htm or at any Alberta Registry Agent office.

SMALL VEHICLE DEFINITIONS

Mobility Aid: a device used to facilitate the transport, in a normal seated orientation, of a person with a physical disability.
***Moped:** includes a vehicle with an electric motor or one that is propelled by an engine that has a displacement of not more than 50 cc. It has a top speed of 70 km/h and no weight restrictions.
Motorcycle: a motor vehicle, other than a moped, that is mounted on two or three wheels and includes those motor vehicles known in the automotive trade as motorcycles and scooters.
Off-Highway Vehicle: any motorized mode of transportation built for cross-country travel on land, water, snow, ice, marsh or swamp lands, or on other natural terrain.
***Power Bicycle:** has an electric motor with a maximum power of 500 watts, a top speed of 32 km/h, and no weight restriction or allowance to be engine-driven.

Prohibited Miniature Vehicles: motor vehicles as defined in the *Traffic Safety Act*, but are considered "miniature vehicles", which are not permitted on a highway in Alberta, including sidewalks along the roadway. They may only be operated on private property.

The definitions of a moped and a power bicycle have been updated within the *UHRRR* to be consistent with federal regulations that define them as a limited speed motorcycle and a power-assisted bicycle (however, they will still be called mopeds and power bicycles in Alberta). The updated regulation came into effect on **July 1, 2009**.

REFERENCE GUIDE FOR SMALL VEHICLES

Small Vehicle	Driver's Licence Required	Minimum Driving Age	Registration Required	Insurance Required	Helmet Required
Power Bicycles	No	12	No	No	Yes
Mopeds	Minimum Class 7	14	Yes	Yes	Yes
Motorcycles	Class 6	16	Yes	Yes	Yes
Mobility Aids	No	N/A	No	No	No
Off-Highway Vehicles	Yes/No (Off-Highway)	14	Yes	Yes	No
Prohibited Miniature Vehicles	IT IS PROHIBITED TO OPERATE THESE VEHICLES ON ROADWAYS OR SIDEWALKS				

OPERATING SMALL VEHICLES

Power Bicycles & Mopeds:



- You must ride on the far right side of a road, unless making a left-hand turn.
- When riding on a one-way street in an urban area, you may operate as near as possible to either curb or edge of the road.
- If you are under the age of 16, you are prohibited from carrying any passengers on a power bicycle or moped.
- A power bicycle or moped must be equipped with the following gear: headlamp, tail lamp, brake lamp, reflectors, brakes, horn, muffler, and mirror.
- Please also see Owning and Operating a Power Bicycle or Moped in Alberta.

Mobility Aids:



- A mobility aid user is, by definition, considered a pedestrian.
- All rules that apply to pedestrians also apply To individuals operating a mobility aid.
- It is recommended that a mobility aid be operated on sidewalks or pathways, not a roadway.

Prohibited Miniature Vehicles:



- These vehicles are motor vehicles as defined in the *Traffic Safety Act*, however they also meet the definition of "miniature vehicles" which **are not permitted on a highway in Alberta**, including sidewalks alongside the roadway.
- Miniature vehicles may only be operated on private property.
- The only exception to this prohibition is a special permit granting authority to operate on a highway.
- In law, these vehicles meet the definition of a motor vehicle, but they do not fit the definitions of mobility aid, motorcycle, or pedestrian.
- While many of these motorized vehicles will be used in a pedestrian-like manner, the operators of these vehicles do not meet the legal definition of "pedestrian".
- Prohibited miniature vehicles include: personal transporter, pocket bikes, go carts, electric scooters and golf carts.

Motorcycles:



- You may only carry as many passengers as the motorcycle is designed for.
- Passengers must ride on the seat designed for passengers and use foot rests.
- A motorcycle is not permitted to ride beside another cycle in the same lane, except when passing. Motorcycles can't be operated adjacent to another cycle travelling in the same direction.
- Motorcycles must meet the requirements of the *Vehicle Equipment Regulation*.

Off-Highway Vehicles:



- Off-highway vehicles include: 4-wheel drive vehicles, low pressure tire vehicles, motorcycles and related 2-wheel vehicles, amphibious vehicles, all-terrain vehicles, miniature motor vehicles, snow vehicles, minibikes, and any other means of transportation that is propelled by any power other than muscular power or wind (but does not include motorboats).
- An off-highway vehicle may not be operated on a highway, a road or in a ditch unless permission has been expressly granted.
- Off-highway vehicles must be equipped with a headlamp, tail lamp, and muffler.

Helmets:



- Motorcycle helmets are required by riders of power bicycles, mopeds, and motorcycles.
- The rider and passenger must wear an approved motorcycle safety helmet. Helmets must have the mark or label stating it meets one of the following standards: CSA, DOT, BSI or the Snell Memorial Foundation M2000.
- No person shall buy, sell or offer for sale a safety helmet intended for the use of operators or passengers of cycles unless it complies with one of the standards.

Resources for Safely Operating Small Vehicles

- *Traffic Safety Act:* http://www.transportation.alberta.ca/525.htm
- Driver's Guide to Operation, Safety and Licensing: http://www.transportation.alberta.ca/531.htm
- Rider's Guide to Operation, Safety and Licensing: http://www.transportation.alberta.ca/531.htm
- Traffic Safety in Alberta web site: www.saferoads.com

Rules & Regulations Applying to Small Vehicles



Updated November 2018



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Introduction

Operating a small vehicle is a high risk activity. These vehicles are lighter, less stable, and more vulnerable in a crash than other vehicles on the road. New riders are at the greatest risk of having a collision because they are unfamiliar with the controls and handling characteristics of small vehicles.

Even if you are an experienced automobile driver, when learning to ride a small vehicle, be aware that you are once again a beginner. Always ride with a safe attitude. Try to anticipate and avoid dangerous situations by riding safely. Being involved in a crash can mean a loss of income, health and possibly a life.

This handbook is a good source in understanding the rules and regulations applying to small vehicles. For other driver handbooks and to understand more about road safety and low risk driving pick up a Basic, Motorcycle and/or Professional Driver's Handbook at an Alberta Registry Agent office or on http://www.transportation.alberta.ca/DriversVehicles.htm

Although efforts have been made to reflect the current state of the legislation and regulations at the time of its original publishing, this publication has no legislative sanction and is not intended to take the place of the *Traffic Safety Act* and Regulations or other legislation from which in part it is derived. The user is encouraged to refer to the source legislation at: http://www.transportation.alberta.ca/525.htm for purposes of interpreting and applying the law. Any reliance on the information contained herein is done so at the reader's sole risk.

A message from Alberta Transportation

October 2017

Common Definitions

Important common definitions that may apply to more than one of the vehicles listed in this guide:

1. Cycle – "cycle" means a bicycle, power bicycle, motorcycle or moped. *(Traffic Safety Act, Section 1)*

2. Motorcycle – "motorcycle" means a motor vehicle, other than a moped, that is mounted on 2 or 3 wheels and includes those motor vehicles known in the automotive trade as motorcycles and scooters. *(Traffic Safety Act, Section 1)*

3. Motor vehicle – "motor vehicle" means (i) a vehicle propelled by any power other than muscular power, or (ii) a moped, but does not include a bicycle, power bicycle, an aircraft, an implement of husbandry or a motor vehicle that runs only on rails. *(Traffic Safety Act, Section 1)*

4. Vehicle – "vehicle", other than in Part 6, means a device in, on or by which a person or thing may be transported or drawn on a highway and includes a combination of vehicles but does not include a mobility aid. *(Traffic Safety Act, Section 1)*

5. Highway – "highway" means any thoroughfare, street, road, trail, avenue, parkway, driveway, viaduct, lane, alley, square, bridge, causeway, trestleway or other place or any part of any of them, whether publicly or privately owned, that the public is ordinarily entitled or permitted to use for the passage or parking of vehicles and includes:

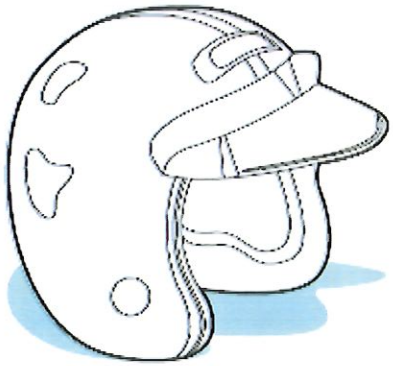
    i. A sidewalk, including a boulevard adjacent to the sidewalk
    ii. If a ditch lies adjacent to and parallel with the roadway, the ditch, and
    iii. If a highway right of way is contained between fences or between a fence and one side of the roadway, all the land between the fences, or all the land between the fence and the edge of the roadway as the case may be, but does not include a place declared by regulation not to be a highway.

    (Traffic Safety Act, Section 1)

Quick Reference Guide

	Driver's Licence Required	Minimum Driving Age	Registration Required	Insurance Required	Helmet Required
power bicycles	NO	12	NO	NO	YES
mopeds	CLASS 7	14	YES	YES	YES
motorcycles	CLASS 6	16	YES	YES	YES
mobility aids	NO	N/A	NO	NO	NO
off-highway vehicles	YES + NO	14	YES	YES	YES
prohibited miniature vehicles	It is prohibited to operate these vehicles on roadways or sidewalks.				

Motorcycle Helmets



Motorcycle helmets are worn by riders of:

1. Power Bicycles (A rider may also wear an approved bicycle helmet)
2. Mopeds
3. Motorcycles
4. Most Off-Highway Vehicles

Approved Helmet Standards: Motorcycle Helmets must have the mark or label stating it meets one of the following standards: CSA, DOT (Standard 218), BSI, the applicable Snell Memorial Foundation standard, or the ECE.

The following are adopted and apply to safety helmets in accordance with subsection (1):

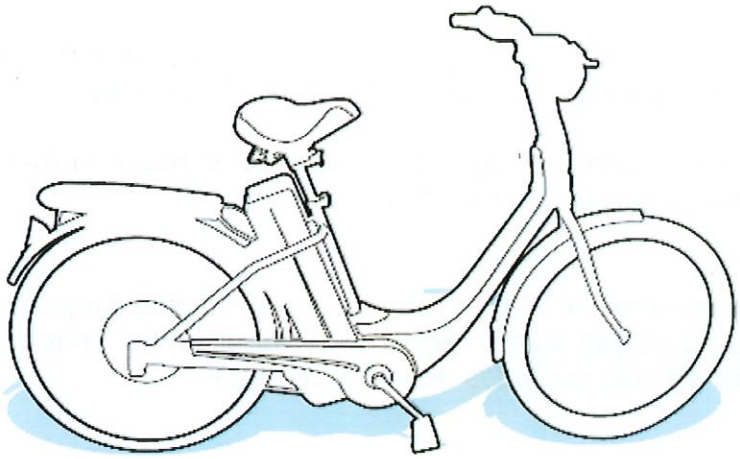
a) CSA Standard CAN3-D230-M85;
b) DOT Standard 218 under part 571.218 of the code of Federal Regulations (United States), Title 49;
c) British Standards Institute Standard BS 6658 – 1985;
d) Snell Memorial Foundation Standard M2000;
e) Snell Memorial Foundation Standard M2005;
f) Snell Memorial Foundation 2010 Standard For Protective Headgear;
g) United Nations Economic Commission for Europe Regulation 22-05.

No person shall buy, sell or offer for sale a safety helmet intended for the use of operators or passengers of cycles, and off-highway vehicles, unless it complies with the standard.

To ensure your personal safety, maintain your helmet in good condition and replace it in accordance with its manufacturer's recommendations.

Note: New helmets are not being manufactured and certified to the CSA, BSI, and older Snell Memorial Foundation Standards. These standards are included as some older helmets may still be in use on Alberta's roadways.

Power Bicycles



Definition according to: USE OF HIGHWAY AND RULES OF THE ROAD REGULATION

1(1)(o) "power bicycle" means a vehicle that is a power-assisted bicycle under the Motor Vehicle Safety Regulations (Canada) (C.R.C., c. 1038);

Motor Vehicle Safety Regulations (Canada) (C.R.C., c. 1038):
Interpretation 2.(1)
"power-assisted bicycle" means a vehicle that:
(a) has steering handlebars and is equipped with pedals,
(b) is designed to travel on not more than three wheels in contact with the ground,
(c) is capable of being propelled by muscular power,
(d) has one or more electric motors that have, singly or in combination, the following characteristics:
  (i) it has a total continuous power output rating, measured at the shaft of each motor, of 500 W or less,
  (ii) if it is engaged by the use of muscular power, power assistance immediately ceases when the muscular power ceases,
  (iii) if it is engaged by the use of an accelerator controller, power assistance immediately ceases when the brakes are applied, and
  (iv) it is incapable of providing further assistance when the bicycle attains a speed of 32 km/h on level ground,
(e) bears a label that is permanently affixed by the manufacturer and appears in a conspicuous location stating, in both official languages, that the vehicle is a power-assisted bicycle as defined in this subsection, and
(f) has one of the following safety features,
  (i) an enabling mechanism to turn the electric motor on and off that is separate from the accelerator controller and fitted in such a manner that it is operable by the driver, or
  (ii) a mechanism that prevents the motor from being engaged before the bicycle attains a speed of 3 km/h;



Operator's licence: You are not required to hold an operators licence when operating a power bicycle.
(*Traffic Safety Act, Section 51(a)* states licence required for 'motor vehicles'. Definition of motor vehicle in *Traffic Safety Act, Section 1*, excludes power bicycles.)



Minimum driving age: The minimum driving age to operate a power bicycle is 12 years. You must also have written consent from a parent or legal guardian.
(Operator Licensing and Vehicle Control Regulation. Parental consent in form approved by Registrar or holds a valid licence, *Section 9*)



Registration: You are not required to obtain registration on power bicycles.
(*Traffic Safety Act*, Section 52 (1)(a) states registration required for 'motor vehicle'. Definition of motor vehicle excludes power bicycles.)



Insurance: You are not required to obtain insurance for power bicycles.
(Traffic Safety Act, Section 54(1)(a) states insurance required for 'motor vehicle'. Definition of motor vehicle excludes power bicycles.)



Helmet: You must wear either an approved motorcycle helmet (Vehicle Equipment Regulation, Section 108).
Or, an approved bicycle helmet (Vehicle Equipment Regulation, Section 112), as allowed by this Registrar's Exemption dated November 20, 2018:
http://www.transportation.alberta.ca/Content/docType41/production/powerbicycleexemption.pdf

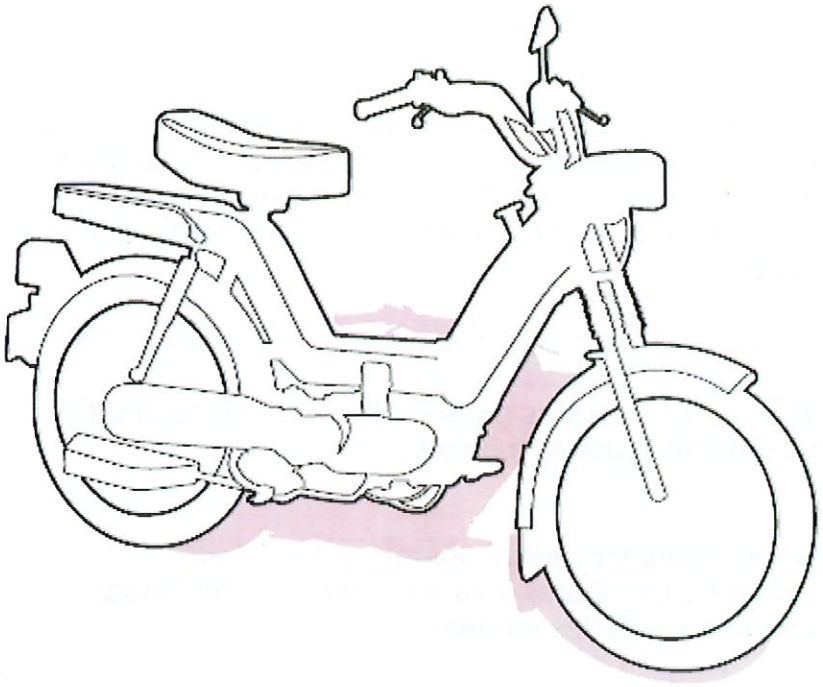
Special laws:

a) You must ride as far to the right side of a highway as practicable to the curb or edge of the roadway unless making a left hand turn. When riding on a one way street in an urban area you may operate as near as practicable to either curb or edge of the roadway.
(Use of Highway and Rules of the Road Regulation, Section 77.)

b) If you are under the age of 16 years, you are prohibited from carrying any passengers on a power bicycle.

Equipment: You must be equipped with the following gear when riding a power bicycle: headlamp, tail lamp, reflectors, brakes, and a horn.
(Vehicle Equipment Regulation, Sections: 10, 13, 50, 54, and 60.) Note that power bicycles no longer require a brake lamp or a side mirror. For more details see this Registrar's Exemption dated November 20, 2018:
http://www.transportation.alberta.ca/Content/docType41/production/powerbicyclebrakelameexemption.pdf

Mopeds



Definition according to: **USE OF HIGHWAY AND RULES OF THE ROAD REGULATION**
1(1)(i) "moped" means a vehicle that
(i) is propelled by an electric motor or an engine that has a displacement of not more than 50 cubic centimetres, and
(ii) is a limited-speed motorcycle under the Motor Vehicle Safety Regulations (Canada) (C.R.C., c. 1038);

Motor Vehicle Safety Regulations (Canada) (C.R.C., c. 1038):
Interpretation 2.(1)
"limited-speed motorcycle" means a motorcycle that
(a) has steering handlebars that are completely constrained from rotating in relation to the axle of only one wheel in contact with the ground,
(b) has a maximum speed of 70 km/h or less,
(c) has a minimum seat height, when the vehicle is unladen, of 650 mm, and
(d) does not have a structure partially or fully enclosing the driver and passenger, other than that part of the vehicle forward of the driver's torso and the seat backrest.

NOTE: Some vehicles may appear to be "mopeds", however, if they exceed the engine size of 50 cc, or have a top speed of more than 70 km/h, then they do not fall into the moped classification and are, instead, considered motorcycles.



Operator's licence: The minimum requirement for operating a moped is a Class 7 licence.
(Traffic Safety Act, Section 51(a) states licence required for 'motor vehicles'. Motor vehicle definition above includes mopeds.)



Minimum driving age: The minimum age for operating a moped is 14 years. (Operator Licensing and Vehicle Control Regulation, Section 28(2) states the age for issuing of a Learner's Licence. Section 32(2)(a) states that Class 7 learner's licence is not considered a learner's licence when operating a moped – supervision is not required.)



Registration: You are required to obtain registration before you operate a moped.
(Traffic Safety Act, Section 52(1)(a) states registration required for 'motor vehicles'. Motor vehicle definition includes mopeds.)



Insurance: You must obtain insurance before operating a moped.
(Traffic Safety Act, Section 54(1)(a) states insurance required for 'motor vehicle'. Motor vehicle definition includes mopeds.)



Helmet: You must wear an approved motorcycle helmet when operating a moped.
(Vehicle Equipment Regulation, Section 93)

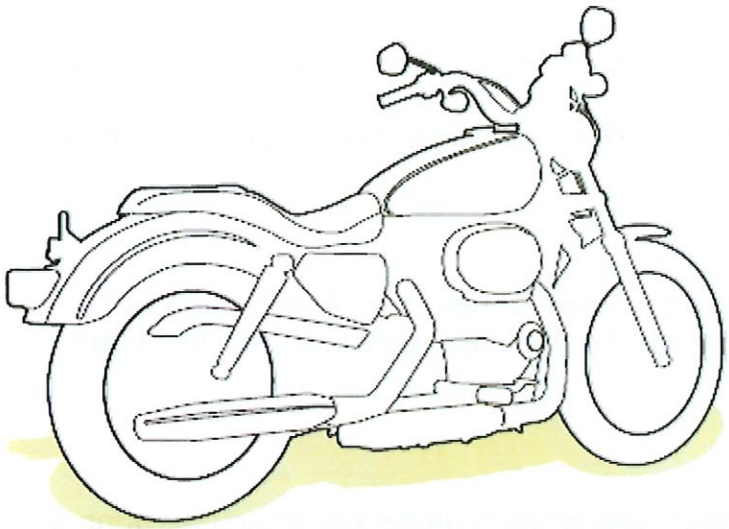
Special laws:

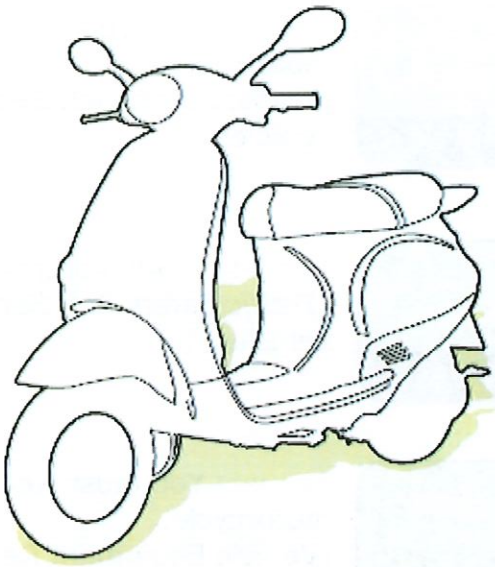
a) You must ride as far to the right side of a highway as practicable to the curb or edge of the roadway unless making a left hand turn. When riding on a one-way road in an urban area you may operate as near as practicable to either curb or edge of the roadway.
(Use of Highway and Rules of the Road Regulation, Section 77.)

b) If you are under the age of 16 years, you are prohibited from carrying any passengers on a moped.
(Use of Highway and Rules of the Road Regulation, Section 76.)

Equipment: Your moped must be equipped with: headlamp, tail lamp, brake lamp, reflectors, brakes, horn, muffler, and mirror.
(Vehicle Equipment Regulation, Sections: 10, 13, 18, 19, 50, 54, 60, 61, and 110.)

Motorcycles





Definition according to: ***TRAFFIC SAFETY ACT***

1(w): "motorcycle" means a motor vehicle, other then a moped that is mounted on 2 or 3 wheels and includes those motor vehicles known in the automotive trade as motorcycles and scooters.

Operator's Licence Required
Class 6

Operator's licence: You are required to have a Class 6 licence in order to operate a motorcycle.
(Operator Licensing and Vehicle Control Regulation, Section 26.)

Minimum Driving Age
16

Minimum driving age: You must be 16 years of age in order to operate a motorcycle.
(Operator Licensing and Vehicle Control Regulation, Section 26) Applies to either learner or operator. (Operator Licensing and Vehicle Control Regulation, Section 28 – must be minimum 16 years for operating motorcycle with Class 7.)

Learning to operate: You must be 16 years of age before you begin to learn how to operate a motorcycle. A learner must hold a Class 7, 5, 4, 3, 2, or 1 licence.
(Operator Licensing and Vehicle Control Regulation, Section 29(4).) Learner must be supervised by someone 18 years or older (Operator Licensing and Vehicle Control Regulation, Section 29(3)), who holds a Class 6 licence that is not a Graduated Driver Licence (GDL). Supervisor must either be on the bike

with the learner or in or on another motor vehicle in close proximity. *(Traffic Safety Act, Section 51(f), (f.1) & (f.2).)* If learner has a Class 7 learner's licence, then learner may not operate a motorcycle during night time which is defined as one hour after sunset to one hour before next sunrise (Operator Licensing and Vehicle Control Regulation, Section 32(6)).



Registration: You are required to obtain registration before you operate a motorcycle.
(Traffic Safety Act, Section 52(1)(a) states registration required for 'motor vehicles'.)



Insurance: All motorcycles must be insured before they are operated.
(Traffic Safety Act, Section 54(1)(a) states insurance required for 'motor vehicles'.)



Helmet: You must wear an approved motorcycle helmet when operating a motorcycle.
(Vehicle Equipment Regulation, Section 108). Standards are also covered in this section.)

Special laws:

a) You may only carry as many passengers as the motorcycle is designed for.
(Use of Highway and Rules of the Road Regulation, Section 77.)

b) Passengers must ride on the seat designed for passengers and use the foot rests.
(Use of Highway and Rules of the Road Regulation, Section 77.)

c) Not permitted to ride beside another cycle in the same lane except when passing.

d) Shall not operate the cycle adjacent to another cycle travelling in the same direction.
(Use of Highway and Rules of the Road Regulation, Section 78)

Equipment: You must meet the requirements of the Vehicle Equipment Regulation.

Mobility Aids

(electric scooters/wheelchair)





Definition According to: ***Traffic Safety Act***

1(v): "Mobility aid" means a device used to facilitate the transport, in a normal seated orientation, of a person with a physical disability.

1(gg): "pedestrian" means
- i) a person on foot, or
- ii) a person in or on a mobility aid

1(ww): "vehicle", other than in Part 6, means a device in, on or by which a person or thing may be transported or drawn on a highway and includes a combination of vehicles but does not include a mobility aid.



Operator's Licence: You are not required to hold a licence in order to operate a mobility aid.



Minimum driving age: There is no minimum age requirement. Anyone is able to operate a mobility aid.



Registration: You are not required to obtain registration for mobility aids.



Insurance: Insurance is not a requirement for mobility aid users.



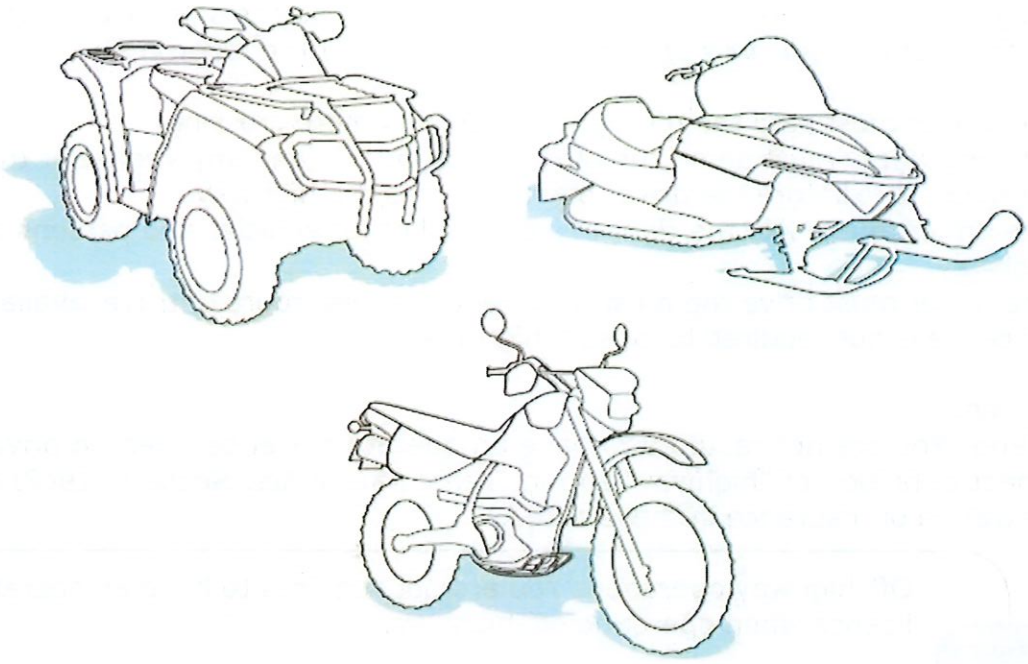
Helmet: You are not required to wear a helmet when operating a mobility aid. However, it is recommended especially when operating on uneven surfaces. (Vehicle Equipment Regulation, Section 112.)

Special laws: A mobility aid user is by definition considered a pedestrian. All rules that apply to pedestrians also apply to individuals operating a mobility aid.
(*Traffic Safety Act, Section 1*, definition of "pedestrian")

Equipment: No special equipment is required to operate a mobility aid.

Off-highway Vehicles

(ATV, snowmobile, trail bike)



Definition according to: ***TRAFFIC SAFETY ACT***

117(a): "off-highway vehicle" means any motorized mode of transportation built for cross-country travel on land, water, snow, ice or marsh or swamp land or on other natural terrain and, without limiting the generality of the foregoing, includes, when specifically designed for such travel,

a) 4-wheel drive vehicles
b) low pressure tire vehicles
c) motorcycles and related 2-wheel vehicles
d) amphibious vehicles
e) all-terrain vehicles
f) miniature motor vehicles
g) snow vehicles
h) minibikes, and
i) any other means of transportation that is propelled by any power other then muscular or wind (but does not include motor boats)

Note: For definition and restrictions that apply to miniature vehicles and minibikes, see the prohibited miniature vehicles section.

Prohibited Operation: An off-highway vehicle may not be operated on any highway, road or ditch unless permission has been expressly granted. In the case of a provincial highway, the Minister may by "order" or "permit" authorize such vehicles along any portion of a highway *(Traffic Safety Act, Section 120(4)(a)(i) & (ii))*. In the case of a municipality, the council of a municipality may, through bylaw, authorize such vehicles along any portion of a highway *(Traffic Safety Act, Section 120(4)(b))*.
Note: Definition of "highway" includes the ditches alongside the roadway.

Crossing a highway: An off-highway vehicle may be driven across a highway, including the roadway, parking lane or sidewalk portion of the highway, if the following occurs:

- The driver must stop the off-highway vehicle before crossing.
- All passengers must be off the off-highway vehicle and any vehicle or thing attached to it before the driver starts to cross the highway.
- The driver must yield the right of way to all other vehicles and persons on the highway.
- The driver must drive the most direct and shortest route of travel available.
- A licence is not required to cross a highway.

Operator's Licence:
On private land: You are not required to have an operators licence when on private land. (Does not meet definition of "highway" and in *Traffic Safety Act, Section 119(2)* does not require registration or insurance in these cases.)



Off-highway operation*:* You are not required to have an operator's licence when operating off-highway.

(*Traffic Safety Act*, Section 51(a) states that you shall not"*...drive a motor vehicle on a highway unless that person is the holder of a subsisting operator's licence."* Since these are "off-highway" vehicles, this requirement does not apply.)



On-highway operation: You are required to have an operator's licence when operating on-highway.

(*Traffic Safety Act*, Section 120(2)(b) & (4) allow operation on a highway if authorized by minister or municipality. Operator Licensing and Vehicle Control Regulation, Section 26(1) allows a Class 6 licence to be used for this. Section 32(2) allows Class 7 to be used this way. Any class of licence may be used from 1 through 7.) No licence required if just crossing a highway.



Minimum driving age: The minimum age for operating off-highway vehicles on public land or highways is 14 years where permitted. If you are younger than 14 years, you may operate on public land with supervision by someone 18 years of age or older who is either on the same off-highway vehicle or in close proximity.
(Off-Highway Vehicle Regulation, Section 2.) If operating on private property, no age restriction applies.

Alberta Transportation recommends compliance with a manufacturer's recommendations and warnings, especially in accordance with minimum age, and seating capacity. If the manufacturer recommends no passengers for a vehicle, or designed the vehicle to have no passengers, then Alberta Transportation strongly recommends you not carry any passengers. Also, passengers should only be carried if they can properly use the passenger hand rails and footrests.

The ATV Safety Alert of the Canadian and Alberta Safety Council's ATV Rider Courses state: "Never carry a passenger on a single-rider ATV. Carrying a passenger may upset the balance of the ATV and may cause it to go out of control". The Alberta Center for Injury Control and Research started an ATV working group and this group cautions against a passenger less than 12 years old or anyone who can't reach the hand rails or footrests.

- Many young children lack the appropriate motor skills and ability to maneuver an off highway vehicle (OHV) such as an OHV, particularly when operating an adult size OHV.
- Each year, many children and youth are seriously injured or even killed while riding an OHV.
- In Canada, nearly 25% of OHV related deaths are among children under 15 years old.
- More than one third of serious injuries from OHV crashes are among children under 15 years old.



Registration: Off-highway vehicles must be registered before they are allowed on Alberta's roads. This applies only to public land and highways. (*Traffic Safety Act*, Section 119.) No registration required if on private property.)



Insurance: All off-highway vehicles must be insured if you plan to operate them on public land or highways where permitted. (*Traffic Safety Act*, Section 119.) No insurance required if on private property.



Helmet: Helmets are required for anyone driving, operating, riding in or on, or being towed by, an OHV on public land.

You are not required to wear a helmet when using an OHV:

- on your own property,
- on private property with permission of the owner,
- on First Nations Reserve or Metis Settlement lands, unless they have a law requiring it;
- that has safe, manufacturer installed rollover protective structures and seat belts, which have not been modified and are being properly worn;
- that meets the standards for a motor vehicle designed for use on a roadway, has seat belt assemblies maintained in compliance with the Vehicle Equipment Regulation, and that person is wearing a seat belt (e.g. unmodified 4x4 trucks, sport utility vehicles, and jeeps);

- if you are a bona fide member of the Sikh religion who wears a turban;
- during the performance of farming or ranching operations exempt from Alberta's occupational health and safety laws; and
- during the performance of work where Alberta's occupational health and safety laws have exempted OHV helmet use.

OHV helmet use is recommended for all OHV users, even if they are exempt.

For more information on helmet exemptions, please see the *Traffic Safety Act sections 128.1 and 129,* and Off-Highway Vehicle Regulation section 9.1.

Special Laws: Please check the *Traffic Safety Act* for special laws.
(*Traffic Safety Act*, Section 117 to 129 and Off-Highway Vehicle Regulation.)

Vehicle Equipment: Off-highway vehicles must be equipped with the following equipment: a headlamp, tail lamp, and a muffler.
(Off-Highway Vehicle Regulation, Sections: 5, 6, and 8.)

Accessing Trails: Off-highway operators have access to thousands of kilometres of trails in a variety of landscapes. However, not all areas are open to off-highway vehicles. Operators must ensure they are aware of restrictions and guidelines in the areas where they plan to ride.

- Permission must be obtained before riding on private property and most public lands leased for agriculture.
- Off-highway vehicles are generally prohibited from parks, protected areas and natural areas.

Shared use and respect: Many areas are shared with other recreational and industrial land users. Off-highway vehicle operators can promote respect and reduce conflict with others with simple practices.

- Yield the trail to non-motorized traffic (such as horses, hikers, cyclists, skiers).
- Keep engine volume and vehicle speed low when near other users.
- Respect soil and vegetation reclamation efforts.
- Pack out all trash and litter.

Environment: Off-highway vehicles are capable of causing long-term disturbance to soil, water, vegetation, fish and wildlife. Wet and alpine areas are particularly at risk. Help reduce damage by doing the following.

- Ride on existing trails. Whenever possible, ride when the trails are dry.
- Stay out of streams and wetlands.
- Steer clear of wildlife and sensitive habitats.
- Keep skidding and spinning to a minimum.
- Keep machines clean to reduce weed transfer and prevent overheating which can lead to a fire.

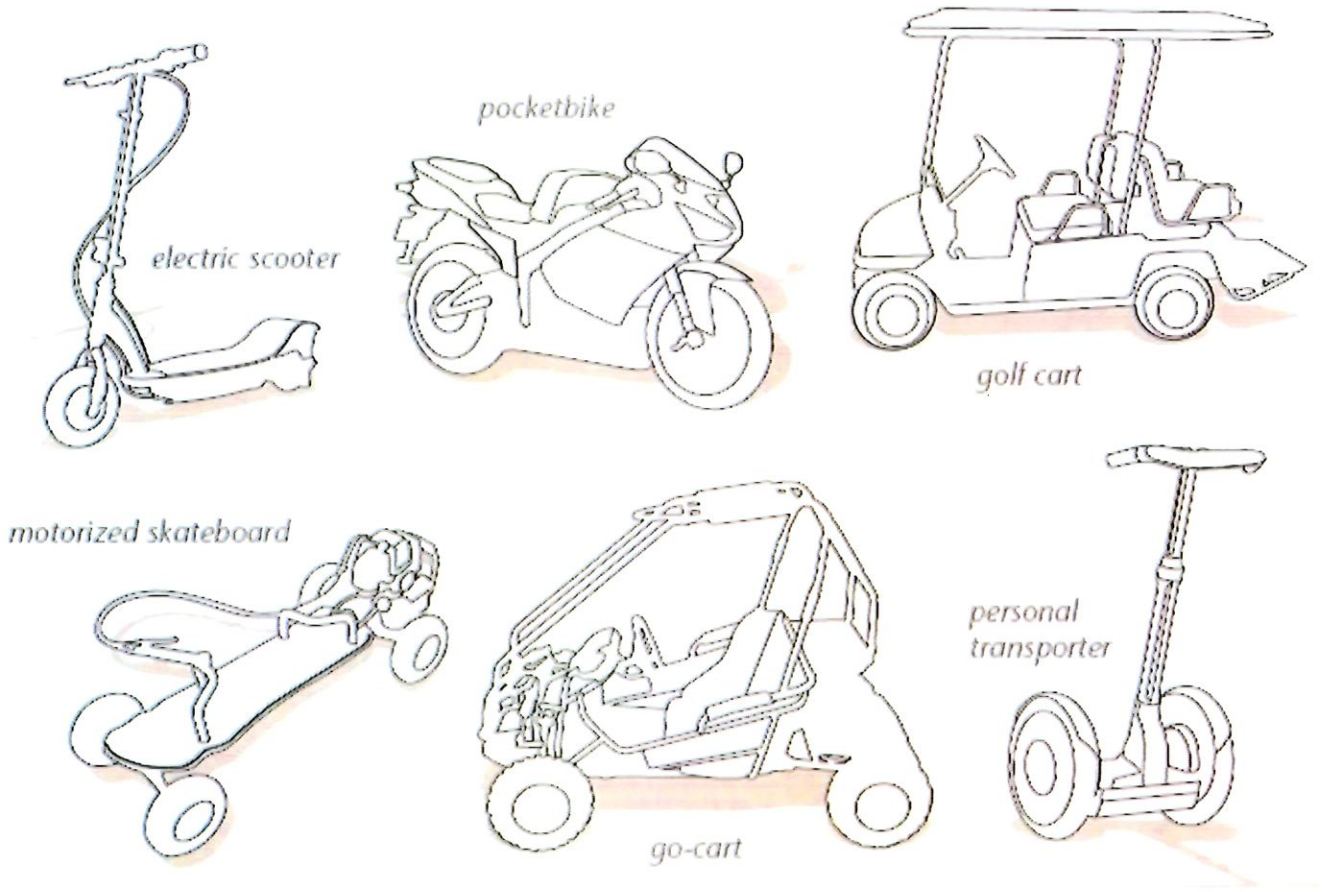
Safety: Mud, water, slick surfaces, and rough terrain increase the chance of a crash. Emergency response time may be longer in remote areas.

- Tell someone where you are going and check in with them on your return.
- Ride within your abilities.
- Ride with others.
- Use safety equipment. Carry emergency tools and supplies.
- Keep your machine in good repair.
- Travel responsibly and share the trail.

For information on responsible recreation on public land, please view Environment and Parks web page at this link:

http://aep.alberta.ca/recreation-public-use/recreation-on-public-land/default.aspx

Prohibited Miniature Vehicles



Prohibited Operation: These vehicles are motor vehicles, as defined in the *Traffic Safety Act*; however, they also meet the definition of "miniature vehicles" which are not permitted on a highway in Alberta, including sidewalks alongside the roadway. While many of these motorized vehicles will be used in a pedestrian-like manner, the operators of these vehicles do not meet the legal definition of "pedestrian"

Permitted Operation: Miniature vehicles may not be operated on a highway in Alberta; they may only be operated on private property. The definition of "highway" on page 4 of this document includes privately owned places that the public is ordinarily entitled or permitted to use for the passage or parking of vehicles, for example shopping mall parking lots.

In law, these vehicles meet the definition of a motor vehicle; however they do not fit the definitions of mobility aid, motorcycle, or pedestrian.

TRAFFIC SAFETY ACT
Section 1(x): "motor vehicle" means

(i) a vehicle propelled by any power other than muscular power, or
(ii) *a moped but does not include a bicycle, a power bicycle, an aircraft, an implement of husbandry or a motor vehicle that runs on rails.*

Section 1(v): "mobility aid" means a device used to facilitate the transport, in a normal seated orientation, of a person with a physical disability.

Section 1(w): "motorcycle" means a motor vehicle, other than a moped, that is mounted on 2 or 3 wheels and includes those motor vehicles known in the automotive trade as motorcycles and scooters.

Section 1(gg): "pedestrian" means

(i) a person on foot
(ii) a person in or on a mobility aid and includes those persons designated by regulation as pedestrians.

Section 52(1): Except as otherwise permitted under this Act, a person shall not operate a motor vehicle or trailer on a highway unless there is a subsisting certificate of registration issued in respect of that vehicle.

Miniature Vehicle definition according to:
OPERATOR LICENSING AND VEHICLE CONTROL REGULATION

59(1) A miniature vehicle must not be registered as a motor vehicle.

(2) In this section, "miniature vehicle" means a go cart, a 3 or 4-wheeled vehicle of less than standard size, a golf cart, a 3 or 4-wheeled vehicle that the registrar considers would present a hazard to other highway users because of its novel size or operating characteristics or a vehicle referred to in subsection (3) or (4).

(3) An off highway vehicle is a miniature vehicle if it has 3 or 4 wheels and is less than standard size.

(4) A motorcycle or moped that has the following is a miniature vehicle:

(a) a seat height of less than 70 centimetres when there is no load
(b) a wheel rim diameter less then 25 centimetres
(c) a wheel base of less than 100 centimetres when measured from the centre of one axle to the centre of the other axle.



Alberta Transportation
780-427-8901
Toll Free 310-0000

Alberta

www.saferoads.com

PUBLIC NOTICE
PERSONAL ELECTRONIC SCOOTERS

Privately owned electric scooters (e-scooters) are not permitted on public streets or sidewalks within the Town of Blackfalds.

We encourage residents and parents to understand the rules before purchasing or allowing the use of a personal e-scooter.

Under current provincial legislation, personal e-scooters **are not** authorized to operate on public roadways in the same way as the approved shared e-scooter program operating in Blackfalds (Lime).



☒ **PERSONAL E-SCOOTERS**

Privately owned e-scooters may not be operated on Town streets or sidewalks. Individuals who operate a personal e-scooter in areas where use is prohibited may be subject to enforcement, including fines, and/or seizure of the e-scooter, as permitted by law.

☑ WHAT YOU CAN USE: APPROVED E-SCOOTER PROGRAM

WHY ARE TOWN-APPROVED E-SCOOTERS DIFFERENT?

The contracted e-scooters operating in Blackfalds (Lime) have received authorization through a Provincial exemption/pilot framework that permits their operation within designated areas of the community.

These e-scooters operate under specific requirements, including appropriate insurance and operating restrictions.

LIME E-SCOOTER RULES

One rider per scooter!

Double riding is strictly prohibited.

Don't Drink & Drive

Preventative measures are in place to ensure that only sober drivers may operate a scooter.

Park in the designated parking zones!

Do not block pedestrian zones on sidewalks or park in front of businesses.

The Lime app will issue a warning when it has detected that a scooter has been parked incorrectly!

16+

You must be 16 years of age or older to ride.

BLACKFALDS ALBERTA

FOR MORE INFORMATION ABOUT OUR SHARED MOBILITY PROGRAM, PLEASE VISIT WWW.BLACKFALDS.CA/E-SCOOTERS

Bylaw No. 1062-Amended

BEING a Bylaw of the Town of Carstairs in the Province of Alberta, the purpose of this Bylaw is to regulate traffic, parking and the use of any highway within the boundaries of the municipality.

WHEREAS Section 7. (a) of the Municipal Government Act, R.S.A. 2000, Ch. M-26 amended; A Council may pass bylaws for municipal purposes respecting the following matter of the safety, health and welfare of people and the protection of people and property;

WHEREAS Section 7. (d) of the Municipal Government Act, R.S.A. 2000, Ch. M-26 amended; A Council may pass bylaws for municipal purposes respecting the following matter of transport and transportation systems;

WHEREAS Section 18. (2) of the Municipal Government Act, R.S.A. 2000, Ch. M-26 amended; Subject to this or any other Act, a municipal district also has the direction, control, and management of roads and road diversions surveyed for the purpose of opening a road allowance as a diversion from the road allowance on the south or west boundary of the district although the roads or road diversions are outside the boundaries of the municipal district;

WHEREAS Section 108(1)(c) of the Traffic Safety Act, in accordance with the following, a road authority may prescribe speed limits that are different from the speed limits established under sections 106 or 107: in the case of a highway or any portion of a highway under the direction, control and management of a council of an urban area, the council may prescribe a maximum speed limit that is higher or lower than 50 kilometers per hour;

NOW THEREFORE, the Municipal Council of the Town of Carstairs in the province of Alberta, duly assembled in Council, enacts as follows:

1. This Bylaw may be referred to as the **"Traffic Bylaw."**

2. For the purposes of interpretation, this bylaw accepts and encompasses all definitions as set forth in the 'Traffic Safety Act' and amendments thereto in its entirety and shall be enforceable as empowered by such Act and this Bylaw'.

3. By Authority of the Traffic Safety Act of Alberta, the Council of the Town of Carstairs may authorize the placing, erecting or marking of a Traffic Control device at such locations as they may deem fit and may, from time to time, alter the locations of such traffic devices.

4. In this Bylaw:

   a. **"Alley"** means a narrow highway intended chiefly to give access to the rear of buildings and parcels of land;

   b. **"CAO"** means the appointed Chief Administrative Officer for the Town of Carstairs, or a person designated to act on behalf of the Chief Administrative Officer for the Town of Carstairs;

   c. **"Commercial Vehicle"** means a vehicle operated on a highway by or on behalf of a person for the purpose of providing transportation but does not include a private passenger vehicle;

   d. **"Dangerous Goods"** means any product, substance or organism included by its nature or by the regulations to the Dangerous Goods Transportation and Handling Act in any of the classes listed in Schedule to the Dangerous Goods Transportation and Handling Act;

   e. **"Emergency Service"** means:

      i. An organization which is recognized by the Province of Alberta as a firefighting service, emergency medical service, or a police or peace officer agency;
      ii. The Town of Carstairs Emergency Services;
      iii. The Town of Carstairs Emergency Management Agency.

   f. "**E-Bike "power bicycle"** means a pedal-powered bicycle with an electric motor (<= 500W) that assists pedaling up to 32 km/h, requires a helmet and must have a manufacturer's label, operating like a vehicle but needing no license, registration, or insurance.

   g. **"Highway"** means, as defined in the Traffic Safety Act, any thoroughfare, street, road, trail, avenue, parkway, driveway, viaduct, lane, alley, square, bridge, causeway, trestleway or other place or any part of any of them, whether publicly or privately owned, that the public is ordinarily entitled or permitted to use for the passage or parking of vehicles and includes

      i. a sidewalk, including a boulevard adjacent to the sidewalk,

ii. if a ditch lies adjacent to and parallel with the roadway, the ditch, and
iii. if a highway right of way is contained between fences or between a fence and one side of the roadway, all the land between the fences, or all the land between the fence and the edge of the roadway, as the case may be,
iv. but does not include a place declared by regulation not to be a highway;

h. **"Motor Vehicle"** Means:

i. a vehicle propelled by any power other than muscular power, or
ii. a moped

i. **"Mobility Aid"** means a device used to facilitate the transport, in a normal seated orientation, of a person with physical disability.

j. **"Off-Highway Vehicle"** means any motorized mode of transportation built for cross-country travel on land, water, snow, ice or marsh or swamp land or on other natural terrain and, without limiting the generality of the foregoing, includes, when specifically designed for such travel as defined in the Traffic Safety Act;

i. 4-wheel drive vehicles
ii. low pressure tire vehicles
iii. motorcycles and related 2-wheel vehicles
iv. amphibious vehicles
v. all-terrain vehicles
vi. miniature motor vehicles
vii. snow vehicles
viii. mini bikes
ix. any other means of transportation that is propelled by any Power other than muscular power or wind,

But does not include

i. motor boats
ii. any other vehicle exempted from being an off-highway By regulation
iii. a Mobility Aid

k. **"Operable/Inoperable"** is a vehicle that is self-propelled, the engine starts and runs, allowing the vehicle to move forward and in reverse. The steering controls are functioning and the brakes are fully operational. The vehicle has all essential parts (wheels, engine, etc.) and is not in a wrecked, dismantled, or abandoned state. A vehicle that is unable to do one or more of these functions is deemed inoperable.

l. **"Park" Or "Parking"** means allowing a vehicle to remain stationary in one place except:

i. while actually engaged in loading or unloading passengers or;

ii. when complying with a direction given by a peace officer or traffic control device.

m. **"Peace Officer"** means a Bylaw Officer who is appointed by the Town of Carstairs, a Peace Officer appointed by the Province of Alberta, a member of the Royal Canadian Mounted Police or any other local policing authority.

n. **"Recreational Vehicle"** means a vehicle designed to provide temporary living accommodation for travel, vacation, or recreational use, and to be driven towed or transported;

o. **"Salvage Trailer"** is a trailer (RV, cargo, utility) that has been written off as a total loss by an insurance company due to severe damage from accidents, floods, fire, or theft.

p. **"Stop" Or "Stopping"** means:

i. when required, a complete cessation from vehicular movement, and

ii. when prohibited, any halting even momentarily of a vehicle, whether occupied or not, except when necessary to avoid conflict with other traffic or in compliance with a direction given by a peace officer or traffic control device;

q. **"Traffic Control Device"** means any sign, signal, marking or device placed, marked or erected under this authority for the purpose of regulating, warning or guiding traffic;

r. **"Traffic Control Signal"** means a traffic control device, whether manually, electrically or mechanically operated, by which traffic is directed to stop and to proceed;

s. **"Trailer"** means a vehicle so designed that it may be attached to or drawn by a motor vehicle; and intended to transport property or persons, but does not include machinery or equipment used in the construction or maintenance of highways;

t. **"Vehicle"**, means a device in, on or by which a person or thing may be transported or drawn on a highway and includes a combination of vehicles but does not include a mobility aid or an off-highway vehicle.

PARKING AND MOVING OFFENCES

5. The Provisions of the Traffic Safety Act shall apply to any highway:

   a. No person shall violate any provision of the Traffic Safety Act or regulations there under within the Town of Carstairs.

6. A vehicle parked on a highway shall be parked:

   a. with:

      i. the sides of the vehicle parallel to the curb or edge of the roadway, and

      ii. the right wheels of the vehicle not more than 500 millimeters from the right curb or edge of the roadway, or

   b. in the case of a one-way highway where parking on either side is permitted, with:

      i. the sides of the vehicle parallel to the curb or edge of the roadway,

      ii. the wheels that are the closest to a curb or edge of the roadway not more than 500 millimeters from that curb or edge, and

      iii. the vehicle facing in the direction of travel authorized for the highway;

7. Notwithstanding Section 6, a motorcycle may be parked:

   a. at an angle, other than perpendicular, to the curb or edge of the roadway, and

   b. with:

      i. a wheel of the motorcycle not more than 500 millimeters from the curb or edge of the roadway, and

      ii. the motorcycle angled in the direction of travel authorized for the traffic lane that is adjacent to the lane on which the motorcycle is parked.

8. Section 6 does not apply where angle parking is permitted or required.

9. Angle parking is permitted when:

   a. a sign indicates that angle parking is permitted or required, and

   b. parking guidelines are visible on the roadway, a vehicle shall be parked with the vehicle's sides between and parallel to any two of the guidelines, and

   c. in the case of a vehicle other than a motorcycle, with one front wheel not more than 500 millimeters from the curb or edge of the roadway, or

   d. in the case of a motorcycle, with:

      i. a wheel of the motorcycle not more than 500 millimeters from the curb or edge of the roadway, and

      ii. the motorcycle angled in the direction of travel authorized for the traffic lane that is adjacent to the lane on which the motorcycle is parked;

10. When a sign indicates that angle parking is permitted or required, and no parking guidelines are visible on the roadway, a vehicle shall be parked:

    a. with the vehicle's sides at an angle of between 30 and 60 degrees to the curb or edge of the roadway and

    b. in the case of a vehicle other than a motorcycle, with one front wheel not more than 500 millimeters from the curb or edge of the roadway, or

c. in the case of a motorcycle with:

i. a wheel of the motorcycle not more than 500 millimeters from the curb or edge of the roadway, and

ii. the motorcycle angled in the direction of travel authorized for the traffic lane that is adjacent to the lane on which the motorcycle is parked;

11. A vehicle with a total length exceeding 5.8 meters shall not be parked at an angle on a highway unless:

a. a sign specifically permits such parking; or

b. the vehicle displays a permit authorizing such parking issued by the Town of Carstairs.

12. Unless a traffic control device permits or requires, a vehicle shall not be parked on the roadway side of a vehicle that is parked at the curb or edge of the roadway.

13. A vehicle shall not be parked within 1.5 meters of an access to a garage, private road or driveway or a vehicle crossway over a sidewalk.

14. Unless a traffic control device permits or requires, a vehicle shall not be parked:

a. on a crosswalk or any part of a crosswalk; or

b. within 5 meters of the near side of a marked crosswalk.

15. Unless a traffic control device permits or requires, a vehicle shall not be parked at an intersection within 5 meters of the projection of the curb or edge of the roadway

16. A vehicle shall not be parked or stopped on a highway within 5 meters of a fire hydrant or, when the hydrant is not located at the curb, within 5 meters from the point on the curb nearest the fire hydrant.

17. A vehicle shall not be parked on a highway in any location where parking is prohibited by a sign.

18. A vehicle shall not be stopped on a highway in any location where stopping is prohibited by a sign.

19. No vehicle shall be left unregistered, uninsured on any highway if not being driven. Any vehicle parked on a highway must have valid insurance and registration.

20. Notwithstanding any other provision of this Bylaw, a vehicle shall not be parked on a highway in contravention of any specific restrictions on parking identified for the location.

21. A vehicle that is left standing in one location on a highway for more than 72 consecutive hours is deemed to have been abandoned at that location.

22. Vehicles that are inoperable, or missing license plates are prohibited from being parked on highway.

23. A vehicle shall not be operated so as to cross a sidewalk or boulevard except at a crossing authorized by the Town of Carstairs.

24. No vehicle shall be displayed for sale, lease, or rent on land owned or leased by the Town of Carstairs unless permission has been granted by the CAO.

25. A trailer shall not be parked on a highway unless the trailer is attached to a vehicle by which it may be drawn unless the trailer has been issued with a permit by the CAO, allowing the trailer to remain on the roadway detached from a vehicle.

26. A person shall not operate a motor vehicle on any part of a highway other than a roadway.

a. Nothing in this section prohibits a motor vehicle from crossing a part of a highway other than a roadway to enter or exit from adjacent driveways or intersecting roadways.

b. This section does not apply to a mobility aid used by a person requiring such an aid.

c. An exemption to this section may be given in writing from the CAO.

27. A vehicle shall not be parked in an alley unless:

    a. a traffic control device permits such parking; or

    b. the vehicle is a commercial vehicle with hazard warning lights alight and in the process of loading or unloading goods.

28. Notwithstanding Section 25(b), a commercial vehicle shall not be parked in an alley for more than 30 minutes.

29. Nothing in Section 25 permits a person to park a vehicle in an alley in a manner that blocks or obstructs the movement of traffic.

30. No vehicle shall be allowed to be parked in contravention of any Traffic Control Device or Traffic Control Signal.

31. No vehicle shall be allowed to park on any land owned by the Town of Carstairs except where designated for parking.

32. A vehicle, or a vehicle with a trailer attached, that is registered for a weight exceeding 11,794 kilograms, or that weighs more than 11,794 kilograms, shall not be parked on a highway in a location adjoining residential property at any time.

33. A vehicle, or a vehicle with a trailer attached, that is registered for a weight exceeding 11,794 kilograms, or that weighs more than 11,794 kilograms, shall not have its engine running at any time after 11:00 p.m. (2300 Hours) and before 7:00 a.m. (0700 Hours).

34. Section 30 does not apply if the vehicle:

    a. is a recreational vehicle; or

    b. is a commercial vehicle with the hazard warning lamps alight and in the process of loading or unloading goods.

35. A vehicle shall not be parked on a highway in a manner that blocks or obstructs:

    a. the movement of traffic on the highway;

    b. a doorway to a building;

    c. the approach to any fire station, police station, hospital or other place where emergency vehicles require regular access; or

    d. any building in course of erection, demolition, alteration or repair, when such parking will impede or obstruct access to such buildings by persons working or vehicles being used in connection with such erection, demolition, alteration or repair.

36. Yellow paint applied to the curb is hereby declared as an official sign indicating parking is prohibited where the curb is so marked.

37. A vehicle shall not be parked and left unattended on a highway if:

    a. the vehicle is on a jack or a similar device, and

    b. one or more wheels have been removed from the vehicle or part of the vehicle is raised.

38. A vehicle shall not be parked on a roadway which cannot be propelled under its own power.

39. No person shall park or permit to be parked, a vehicle, trailer or boat which cannot be completely parked within the confines of the person's driveway space.

40. No person shall drain lubricating oils or any fluids or allow fluids to drain associated with the operation of a motor vehicle upon a roadway.

41. A vehicle shall not be parked on a highway in any location identified by sign, curb painting, or pavement painting which indicates the parking spot as being for the use of persons with disabilities unless the vehicle:

    a. displays a valid disabled placard or license plate issued or recognized by the Registrar; and

    b. is being used for the transportation of a person with a disability.

42. A person shall not place, cause to be placed, or permit to be placed, an obstruction of any kind on a highway unless a permit authorizing placement of the obstruction has been issued by the Town of Carstairs.

43. No person shall drive, propel, or move on any roadway, any vehicle having metal spikes, lugs, cleats, or bands projecting from the surface of the wheel (or tire of such vehicle), unless the vehicle had been issued with a special permit by the CAO.

44. No person shall operate engine retarder brakes within the Town of Carstairs limits, except in case of emergency.

SPEED LIMITS

45. A Unless otherwise posted, by a traffic control device a vehicle shall not be:

    a. Driven at a speed in excess of forty (40) kilometers per hour on any highway within the Town of Carstairs;

    b. Driven through a school zone, when the school zone is in effect, or playground zone in excess of thirty (30) kilometers per hour within the Town of Carstairs;

    c. Driven on a highway that meets the definition of an alley/alleyway at a speed in excess of twenty (20) kilometers per hour within the Town of Carstairs; or

    d. Driven in a parking lot at a speed in excess of fifteen (15) kilometers per hour within the Town of Carstairs.

BICYCLES, MOTORCYCLES, AND OFF-HIGHWAY VEHICLES

46. No person shall ride a bicycle on any sidewalk or boulevard.

47. No person shall park a bicycle in such a manner as to obstruct the use of a sidewalk by pedestrians.

48. No person shall ride a motorcycle on any sidewalk or boulevard.

49. No person shall park a motorcycle or off-highway vehicle in such a manner as to obstruct the use of a sidewalk by pedestrians.

50. Bicycles being operated by a person under the age of eighteen years old may be operated on the sidewalk provided due consideration is given for other users of the sidewalk.

51. No person shall operate an off-highway vehicle within the Town of Carstairs except by written permission of the CAO.

52. No person shall operate an unregistered vehicle within the Town of Carstairs.

TEMPORARY CLOSING OF ROADS

53. When by reason of accident, emergency, or other special circumstance, in the interest of public safety, the CAO, Peace Officers, Emergency Services, or the Carstairs Fire Department may:

    a. Temporarily close off an area of roadway, in whole or in part to traffic;

    b. Temporarily close off an area of sidewalk or pathway, in whole or in part to users of the sidewalk or pathway.

    c. Temporarily suspend parking access along a roadway.

    d. Temporarily place vehicles, barricade, or any other object to block access to the roadway, sidewalk, or pathway.

EMERGENCY VEHICLES

54. No vehicle may follow within thirty (30) meters of an emergency vehicle on which emergency lights, siren, or both are in operation.

    a. This section does not apply to other emergency vehicles.

55. No person shall park or stop a vehicle within thirty (30) meters of an emergency vehicle with its emergency lights activated, unless directed to by a member of an emergency service.

56. No person shall use a motor vehicle, off-highway vehicle, motorcycle, bicycle, or other form of vehicular transportation in a manner which will interfere with a member of an emergency service's ability to respond to an emergency.

57. No person shall drive or park a motor vehicle, off-highway vehicle, motorcycle, bicycle, or other form of vehicular transportation in a manner which may interfere with emergency vehicles or emergency personnel at an emergency scene.

58. No person shall interfere or tamper with any equipment operated by emergency services.

PARADES AND PROCESSIONS

59. A permit from the Town of Carstairs must be obtained to hold a parade or procession on a roadway or highway within the Town of Carstairs.

60. Any person/organization desiring to hold A parade or procession within the Town of Carstairs shall, at least forty-eight (48) hours prior to the start time of the desired to hold the event, make application in writing to the CAO for the event. In such application, the following information shall be given:

    a. Name and address of the applicant, and if such application is from an organization, the names, addresses, and occupations of the executive;

    b. The nature and object of the parade or procession;

    c. The date and hours the parade or procession would be held;

    d. The intended route;

    e. The approximate number of participants in the parade or procession;

    f. The approximate size, number and nature of flags, banners, or similar items to be carried. Particulars on signs, inscriptions, and wording to be exhibited;

    g. Applications shall bear the signature and address of the person or persons who will be in control of the parade or procession.

PEDESTRIANS, SIDEWALKS, AND BOULEVARDS

61. No person shall interfere with the normal flow of traffic. No parent of a minor shall permit such interference.

62. No group of more than three (3) people shall congregate so near to each other on any highway, crosswalk, or sidewalk so as to obstruct the entrance to any building or to obstruct or prevent other persons from using said roadway or sidewalk.

63. No person shall climb on any railing, fence, tree, post pole, or structure erected on a highway, unless they have authority to do so.

64. No person shall sell anything by auction on a highway without prior authority.

65. No person shall place articles, goods, or merchandise upon a highway or sidewalk, or place any articles, goods, or merchandise on the outside of any building so as to interfere with the use of any highway or sidewalk without prior written permission for the CAO.

66. No person shall leave, store or deposit any article or item that may be dangerous or interfere with free flow of vehicle or pedestrian traffic on a highway, sidewalk, or pathway.

67. No person shall use a winter recreational device on any highway, pathway, or sidewalk without due consideration for other users of the highway, pathway, or sidewalk.

68. No person shall stand, sit, or lie on any roadway highway in such a manner as to obstruct vehicular vehicle or pedestrian traffic, or as to disrupt any other person lawfully upon the highway.

69. No person shall stand upon or walk along a highway for the purpose of soliciting a ride from the driver of any vehicle within the municipality.

70. No person shall place or leave on or across any part of a highway, sidewalk, or alley, a cord or cable that is capable of transmitting electrical energy from a property to any part of a highway where a vehicle may park.

71. No person shall enter into an emergency scene, which is being attended to by an emergency service;

    a. Where the person have been otherwise directed to leave or not enter; or

    b. If otherwise directed to leave an area by an emergency service.

72. No person shall interfere with emergency services personnel at any emergency scene, traffic stop, or any other circumstance where the personnel on scene lawfully require bystanders to relocate from the area.

ELECTRIC BIKES AND SCOOTERS

73. Are only permitted and shall be driven on sidewalks, pathways, and roadways with speed limits of 40 km/h or less within town limits. When being driven on a pathway or sidewalk, maximum speed allowed is 15 km/h.

74. Riders must be at least 12 years old to operate an e-bike.

75. Drivers under the age of 16 may not carry passengers.

76. Maximum assisted speed of 32 km/h.

77. A person riding an e-scooter on a sidewalk or pathway must:

    a. yield the right of way to slower moving persons;
    b. alert a person about to be overtaken by sounding a bell with a reasonable amount of time before overtaking;
    c. use reasonable care when overtaking another person or passing on the left; and
    d. travel under control and at a reasonable rate of speed having regard to the nature, condition and use of the sidewalk or pathway including the amount of pedestrian traffic

78. E-bikes must adhere to provincial regulations, including a maximum power output of 500W.

79. All operators and passengers shall wear a helmet regardless of age. Helmets must meet CSA, DOT, Snell or BSI standards.

80. Has one or more of the following safety features:

    a. an enabling mechanism to turn the electric motor on and off that is separate from the accelerator controller and fitted in such a manner that it is operable by the driver, or
    b. a mechanism that prevents the motor from being engaged before the bicycle attains a speed of 3 km/h
    c. E Bikes shall have fully operable pedals.
    d. Maintain and not modify manufactured head/tail lamps, reflectors, brakes
    e. A horn or bell is required

81. Prohibited Miniature Vehicles and OHVs

These vehicles are motor vehicles, as defined in the Traffic Safety Act; however, they also meet the definition of 'miniature vehicles' which are not permitted on a highway in Alberta, including sidewalks alongside the roadway. Examples include:

    a. Pocketbike,
    b. Golf cart
    c. Motorized skateboard
    d. Go-kart
    e. Personal transporter
    f. 4-wheel drive vehicles
    g. Low pressure tire vehicles
    h. Amphibious vehicles
    i. All-terrain vehicles
    j. Snow vehicles
    k. Minibikes, and
    l. any other means of transportation that is propelled by any power other than muscular or wind (but does not include motor boats).

While many of these motorized vehicles will be used in a pedestrian-like manner, the operators of these vehicles do not meet the legal definition of 'pedestrian'.

See Schedule "A" and " B" for reference

PENALTIES AND FINES

82. A Person who is guilty of an offence is liable upon summary conviction to a fine in an amount:

    a. not less than the specified penalty established in the Rates and Fees Bylaw;

    b. and not exceeding $10,000.00.

    c. any Person who commits a second or subsequent offence under this Bylaw, within one (1) year of conviction of a first offence under this Bylaw, is liable on summary conviction to a fine not less than the increased amount set out in the Rates and Fees Bylaw.

MUNICIPAL TAG

83. A Peace Officer may issue and serve a municipal tag on any person the officer has reasonable and probable grounds to believe has contravened a provision of this bylaw by:

    a. Personally, serving the municipal tag on the person; or

    b. Mailing a copy of the municipal tag by pre-paid post to the address provided by a person on a permit application, or a person's last known postal address

84. A municipal tag shall be in a form approved by the Chief Administration Officer and shall state:

    a. The name of the person to whom the municipal tag is issued

    b. The particulars of the contravention of the bylaw;

    c. The specified penalty for the offence as set out in the Rates and Fees Bylaw;

    d. That the specified penalty shall be paid in (30) days of the issuance of the municipal tag order to avoid prosecution; and

    e. Any other information as may be required by the CAO.

VIOLATION TICKET

85. If a municipal tag has been issued and the specified penalty on the municipal tag has not been paid within the prescribed time, a Peace Officer may issue a violation ticket to the person to whom the municipal tag was issued.

86. A Peace Officer may, in the sole discretion, elect to issue and serve a violation ticket without first issuing a municipal tag.

87. A Peace Officer is authorized to issue a violation ticket, to any person the peace officer believes, on reasonable and probable grounds, has committed and offence under this bylaw, under Part 2 or Part 3 of the Provincial Offences and Procedure Act.

88. If a violation ticket is issued it must be in the prescribed form and must:

89. state the specified penalty for the offence as set out in the Rates and Fees Bylaw; or

90. require the person to appear in Provincial Court with or without the alternative of making a voluntary payment.

GENERAL PROVISIONS

91. The Town is not required to enforce every breach or contravention of this Bylaw. In deciding whether or not to enforce the Bylaw, the Town may take into account any practical concerns or considerations, including but not limited to the nature and extent of the breach or contravention, any financial or budgetary considerations and the availability of personnel or human resources.

92. Nothing in this Bylaw relieves a Person from complying with any provision of any federal or provincial law or regulation, other bylaw or any requirement of any lawful.

SEVERABILITY

93. It is the intention of the Council of the Town of Carstairs that each provision of this Bylaw should be considered as being separate and severable from all other provisions. Should any section or provision of this Bylaw be found to have been improperly enacted, then such section or provision shall be regarded as being severable from the rest of this Bylaw and that the Bylaw remaining after such severance shall remain effective and enforceable.

94. Bylaw No. 1061 is repealed on the date of the third and final reading of this Bylaw.

95. This Bylaw comes into full force and effect on the date of third and final reading of this Bylaw.

READ A FIRST TIME THIS 23RD DAY OF FEBRUARY A.D., 2026

READ A SECOND TIME THIS 23RD DAY OF FEBRUARY A.D., 2026

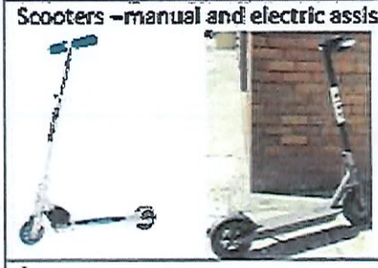
UNANIMOUS CONSENT GIVEN TO PRESENT FOR THIRD READING ON THIS 23RD DAY OF FEBRUARY A.D., 2026

READ A THIRD AND FINAL TIME THIS 23RD DAY OF FEBRUARY A.D., 2026

Dean Allan, Mayor

Rick Blair, CAO

Schedule "A"

ALLOWED VEHICLES	
Bicycles – manual and electric assisted 	Skateboards – manual and electric assisted 
Scooters –manual and electric assisted 	Inline skates or Rollerblades 
Segway 	Electric Unicycle 
Hoverboards 	Mobility Devices – Wheelchairs and Scooters 

Schedule "B"

PROHIBITED VEHICLES (with examples)	
All electric motorcycles	Juiced Scrambler 
	CSC City Slicker 
	Vespa Style Scooter or genZe Scooter 
Any gas powered vehicle	Gas Assisted Bicycles and Scooters  

RECEIVED
MAR 2 5 2026
Town of Sylvan Lake

BYLAW NO.1931I2025
OFTHE
TOWN OF SYLVAN LAKE

PILOT PROJECT (GOLF CARTS) BYLAW

BEING A BYLAW OF THE TOWN OF SYLVAN LAKE, IN THE PROVINCE OF ALBERTA, AUTHORIZING THE OPERATION, REGULATION AND CONTROL OF GOLF CARTS ON SELECT PUBLIC ROADS

WHEREAS pursuant to the *Traffic Safety Act,* RS.A. 2000 c. T-6. as amended, Council may, by bylaw, authorize the use of Golf Carts on Highways under its direction, control and management subject to the conditions outlined in the Pilot Project (Golf Carts) Regulations; and

AND WHEREAS pursuant to the provisions of the *Municipal Government Act,* Council may pass bylaws for municipal purposes respecting the safety, health and welfare of people and the protection of people and property; people, activities and things in, on or near a public place or place that is open to the public; and, the enforcement of bylaws;

AND WHEREAS Council has deemed it necessary that a Bylaw be passed to authorize, regulate and control the operation of golf carts pursuant to the powers granted to municipalities under the Traffic Safety Act;

NOW THEREFORE, Council of the Town of Sylvan Lake, in the Province of Alberta, duly assembled, enacts as follows:

TITLE

1. This bylaw may be cited as the "Pilot Project (Golf Carts) Bylaw"

DEFINITIONS

2. In this Bylaw:

a) "Act" means the *Traffic Safety Act,* RSA 2000, T-6 as amended, and any regulation made under the Act;

b) "CAO" means the Chief Administrative Officer of the Town of Sylvan Lake, or designate;

c) "Council" refers to the Council of Sylvan Lake, and as defined in the *Municipal Government Act, RSA 2000, M-26;*

d) "golf cart" means a 4-wheel motor vehicle that

a. (i) is designed by a manufacturer primarily for use on golf courses or paved surfaces,

b. (ii) cannot attain a speed of more than 40 km/h on a paved level surface,

c. (iii) has a structure that (A) partially or fully encloses its operator and passengers, and (B) is not less than 1.2 m above the ground, and

d. (iv) has a gross vehicle weight rating of less than 1361 kg;

e) "Municipal Roadway" means a highway as defined in the Traffic Safety Act RS.A. 2000, c. T-6, the Traffic Safety Bylaw 1896-2024 and as amended from time to time, and as identified by the Town and approved by the Registrar as a highway that golf carts may operate on;

f) "Night" shall mean the hours ½ hour prior to sunset to ½ hour after sunrise, as per the Government of Canada Weather Canada app;

g) "Owner" has the same meaning within the Act and further includes a person who is identified in a Permit issued under Section 13 of this bylaw;

h) "Peace Officer" means:

a. a Police Officer,

b. a person appointed as a Peace Officer pursuant to the *Peace Officer Act,* S.A.2006, c. P-3.5, or

c. a person appointed as a Bylaw Enforcement Officer pursuant to the *Municipal Government Act, RSA 2000, M-2*

i) "Permit" means a permit issued in accordance with this Bylaw under Section 13

j) "Town" means the municipal corporation of the Town of Sylvan Lake, or the area contained within the corporate boundaries of the Town, as the context requires;

k) "Violation Tag" means a tag or similar documents issued by the Municipality pursuant to the Municipal Government Act, RS.A. 2000, c M-26, and amendments thereto;

l) "Violation Ticket" means a violation ticket under Part 2 or Part 3 of the Provincial *Offences Procedure Act,* RS.A 2000, c. P-34, as amended, as applicable.

APPLICATION

3. This Bylaw shall apply to all golf carts operated on Municipal Roadways within the Town of Sylvan Lake.

OPERATING RESTRICTIONS FOR GOLF CARTS

4. No person shall:

a) Operate a golf cart in a manner contrary to this Bylaw or the Act, and its regulations.

b) Operate a golf cart within the Town unless they are on a Municipal Roadway.

c) Operate a golf cart unless they are at least sixteen years of age and the holder of a valid Operator's License (Class 1-6).

d) Operate a golf cart on a Municipal Roadway unless they are in possession of a subsisting permit issued in respect of that golf cart.

e) Operate a golf cart on a Municipal Roadway unless they are in compliance with the terms and conditions specified in a permit.

f) Park a golf cart on a Municipal Roadway in a manner contrary to the Town of Sylvan Lake Traffic Safety Bylaw.

g) No person shall operate a golf cart on any municipal designated sidewalk, walking trail, or in any area that is ditched or designed to provide drainage unless such operation is permitted by posted signage.

h) No person shall operate a golf cart on any Municipal Reserve, Park, Green Space, Cemetery, or Playground unless such operation is permitted by postage signage.

i) Operate a golf cart on a Municipal Roadway with a rate of speed exceeding 40 Km/h.

j) Operate a golf cart at Night, as specified in this Bylaw;

k) Operate a golf cart:

i) Without exercising due care and attention,

ii) Without reasonable consideration for other persons in the area or who might reasonably be expected to be in the area,

iii) With more passengers than the designated number of seats as per the manufacturer specifications,

iv) With any person being towed on, or

v) With any type of equipment or trailer attached to the golf cart.

vi) Which has not been maintained as prescribed by the manufacturer or has faulty or inoperable equipment.

vii) Which has been home built.

OPERATOR RESPONSIBILITIES FOR GOLF CARTS

5. Every operator of a golf cart shall:

a) ensure the golf cart is equipped with functioning headlamps, tail lamps, brake lights, and signal lights,

b) ensure the golf cart is equipped with functioning seat belts,

c) Travel in the same direction as vehicles travelling on the roadway,

d) Travel in a single file,

e) Travel at a maximum speed of Forty (40) kilometers per hour.

f) Display a valid Town registration permit properly affixed to the golf cart, and

6. Notwithstanding Section 5 of this Bylaw, no person shall operate a golf cart on any portion of a Municipal Roadway at any rate of speed that is unreasonable having regard to all the circumstances, including without restriction the generality of the foregoing, the following:

a) The nature, condition and use of the Municipal Roadway or Permitted Area;
b) The atmospheric, weather or other conditions that might affect the visibility of the driver or the control of the golf cart;
c) The amount of traffic that is or that might reasonably be expected to be on the Municipal Roadway;
d) The mechanical condition of the golf cart or any equipment on the golf cart.

7. No person shall operate a golf cart without all riders in the golf cart properly using a functioning seat belt.

8. No person shall permit another person who does not meet the requirements of Section 4(c) of this Bylaw to operate a golf cart on any portion of a Municipal Roadway, as per the provisions of the Traffic Safety Act, R.S.A. 2000 c. T-6. as amended.

9. No person shall Operate or be a passenger on a golf cart where the number of persons on the golf cart exceeds the manufacturer's specifications.

10. No person shall Operate a golf cart in a manner that constitutes a nuisance or a danger to public safety.

11. No person shall operate a golf cart between October 1 and April 14 of each calendar year, exception being October 31st each year until 9:00pm.

MUNICIPAL ROADWAYS

12. Council hereby designates those Municipal Roadways included in Schedule A as Municipal Roadways for the purposes of this bylaw.

a) Any changes to Municipal Roadways shall be submitted to the Registrar for approval.

b) Municipal Roadways shall be posted at a speed of no more than 40km/h.

c) The CAO shall ensure signs are erected on Municipal Roadways as identified in Schedule C (signage designs).

PERMITS

13. Council hereby authorizes the CAO to issue permits, attach conditions, to charge a fee to regulate and control, and to revoke permits for golf carts within the Town. Only residents of the Town of Sylvan Lake are eligible to receive a permit to operate a golf cart within the Town of Sylvan Lake.

a) Permits at a minimum shall include:

i) The owners name and operator's license information,

ii) Proof of liability insurance in the amount of $2,000,000,

iii) Make, model, serial number of golf cart,

iv) Conditions and responsibilities of golf cart operators and owners, and

v) Any other information as required by the Registrar.

b) Permits shall only be valid from January 1 - December 31 of any one calendar year.

c) Permits shall be attached to the golf cart and clearly visible. OR Permits issued will include a numbered Registration Sticker which must be affixed to the golf cart

location designated in the permit.

d) Permit fees are identified in the Town's Fees and Charges Bylaw, as amended.

e) Permits may be revoked at any time by the CAO, at the CAO's discretion.

f) Permit applicants acknowledge that all information collected in connection with the permit/registration may be shared with the Registrar in accordance with the Municipality's reporting responsibilities as required by the Pilot Project (Golf Carts) Regulation.

COLLISION REPORTS

14. Collision Reports:

a) Subject to subsection (b), if

i. a golf cart is involved in a collision on a Municipal Roadway, and
ii. the golf cart has a subsisting golf cart permit from the participating municipality,

the golf cart Operator shall provide a report of the collision forthwith to the Sylvan Lake RCMP in the form and manner specified by the participating municipality.

b) Subsection (a) does not apply if

i. no one is injured or dies as a result of the collision, and
ii. there is no property damage cause by the collision.

c) If the operator is incapable of making the report required by subsection (a) and there is a passenger of the golf cart capable of making the report, the passenger shall make the report forthwith.

d) If a report has not been made under subsection (a) or (c) and the operator or passenger is not the owner of the golf cart, the owner shall make the report forthwith after learning of the collision.

COMPLIANCE & ENFORCEMENT

15. Stopping for Peace Officer:

a) Failure to comply with this Bylaw may result in penalties, including but not limited to, fines, suspension of golf cart privileges, or other sanctions as deemed appropriate by the Town.

b) For the purposes of administering and enforcing this bylaw, a Peace Officer may:

i) Signal or direct a driver of a golf cart to stop the vehicle, and

ii) Request information from the driver on the golf cart and any passengers on or in the vehicle.

c) When signaled or directed to stop by a Peace Officer, a driver of a golf cart shall:

i) Forthwith bring the vehicle to a stop,

ii) Forthwith furnish to the Peace Officer;
(1) Their operator's license issued pursuant to the Act,
(2) Any permit issued pursuant to this bylaw, and
(3) Any other information respecting the driver or the vehicle that the Peace Officer requires, and

iii) Remain stopped until permitted by the Peace Officer to leave

OFFENCES

16. The operator of a golf cart that is involved in a contravention of this bylaw is guilty of an offence and liable upon summary conviction to a fine specified in Schedule A of this bylaw.

17. The owner of a golf cart involved in a contravention of this bylaw is guilty of an offence and liable upon summary conviction to a fine specified in Schedule A of this bylaw.

REMOVAL AND IMPOUNDMENT OF GOLF CARTS

18. A Peace Officer is hereby authorized to remove or cause to be removed any golf cart:

a. operated or parked in contravention of this bylaw; or

b. where emergency conditions may require such removal from a Municipal Roadway.

19. Such golf cart may be removed to a place designated by the CAO, where it will remain until claimed by the owner or his agent.

20. No impounded golf cart shall be released to its owner or his agent until the impounding charge and removal charge on the golf cart has been paid, such charges shall be in addition to any fine or penalty imposed in respect of any violation of this bylaw, or to any payment made in lieu of prosecution as hereinafter provided. The Town is not responsible for any towing, removal or impounding charges.

VIOLATION TAG

21. A Peace Officer is hereby authorized and empowered to issue a Violation Tag to any person who the Peace Officer has reasonable and probable grounds to believe has contravened any provision of this bylaw.

VIOLATION TICKET

22. A Peace Officer is hereby authorized and empowered to issue a violation ticket, pursuant to Part II of the Provincial Offences Procedure Act (Alberta), to any person who the Peace Officer has reasonable and probable grounds to believe has contravened any provision of this bylaw.

SEVERABILITY

23. Should any section or part of this bylaw be found to have been improperly enacted, such section shall be deemed to be severable from all other sections of this Bylaw.

GENERAL

24. This bylaw shall be in effect on:

a) The date of the final passing thereof, and

b) Upon the approval of the Registrar.

25. This bylaw shall expire on June 14, 2029

26. This Bylaw takes effect upon being passed.

Read a first time this 29th day of July, 2025.

Read a second time this 23rd day of September, 2025.

Read a third time this 14th day of October, 2025.

Mayor

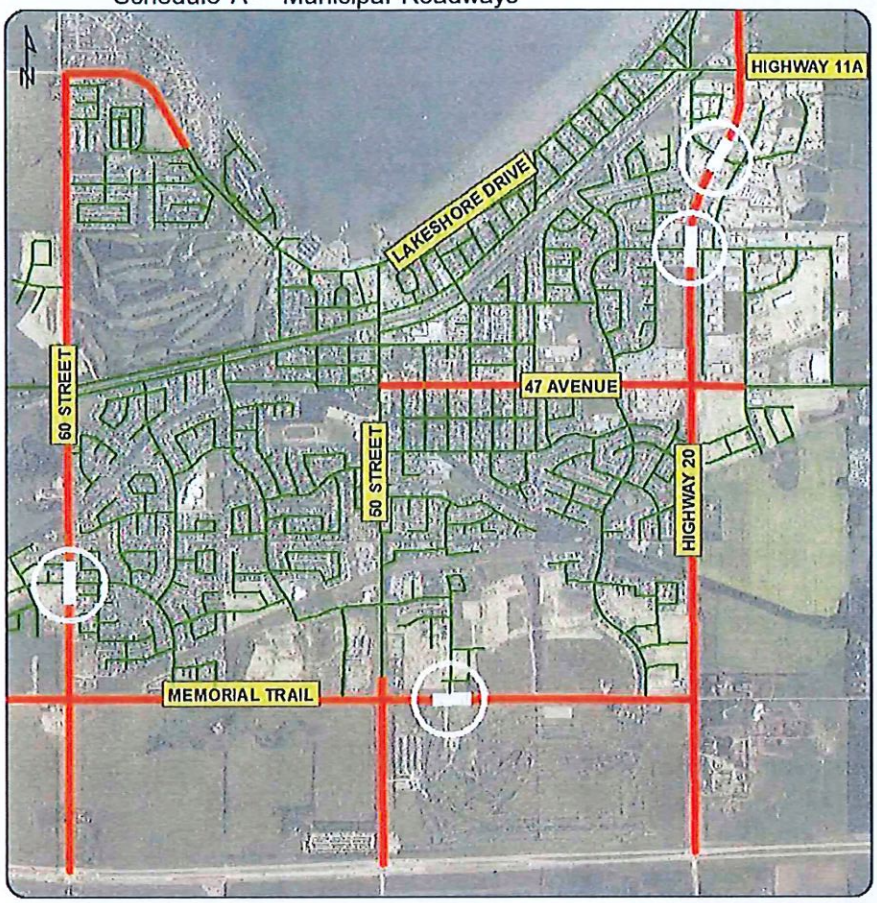
Province of ALBERTA

Chief Administrative Officer

APPROVED BY THE *[the Minister responsible for Alberta Transportation and Economics Corridors, or delegated representative]*
THIS 16th DAY OF March, 20 26.

(Signature)

Schedule A - Municipal Roadways



Municipal Roadway (Streets)

- Municipal roadways and alleys within the Town of Sylvan Lake

Except for: (Identified in red)

- 47th Avenue (from 50th Street to Thevenaz Industrial Trail)
- 60th Street
- 50th Street (Hwy 11 to Memorial Trail portion)
- Memorial Trail
- Hwy 20

NOTE: Hwy 11 and Hwy 11A east of Hwy 20 are NOT approved roadways and golf cart usage is prohibited.

Accepted Crossing Locations Identified in White

- Lakeway Blvd - Springfield Blvd
- Crestview Blvd - Meadowlands Golf Course
- Herder Drive - Cuendet Industrial Drive
- Erickson Drive - Erickson Drive

Schedule B - Specified Penalties (in dollars)

Registration Fee - $100 per golf cart			
Offence Description	**Section**	**Specified Penalty for Municipal Tag**	**Specified Penalty for Violation Ticket**
Operate a golf cart in a manner contrary to this Bylaw or the Act, and its regulations	4(a)	$500	$750
Operate a golf cart within the Town unless they are on a Municipal Roadway	4(b)	$500	$750
Operate a golf cart unless they are at least sixteen years of age and the holder of a valid Operator's License (Class 1-6).	4(c)	$500	$750
Operate a golf cart on a Municipal Roadway unless they are in possession of a subsisting permit issued in respect of that golf cart.	4(d)	$500	$750
Operate a golf cart on a Municipal Roadway unless they are in compliance with the terms and conditions specified in a permit.	4(e)	$500	$750
Park a golf cart on a Municipal Roadway in a manner contrary to the Town of Sylvan Lake Traffic Safety Bylaw	4(f)	$500	$750
No person shall operate a golf cart on any municipal designated sidewalk, walking trail, or in any area that is ditched or designed to provide drainage unless such operation is permitted by posted signage	4(g)	$500	$750
No person shall operate a golf cart on any Municipal Reserve, Park, Green Space, Cemetery, or Playground unless such operation is permitted by postage signage	4(h)	$500	$750
Operate a golf cart on a Municipal Roadway with a rate speed exceeding 40 Km/h	4(i)	$500	$750
Operate a golf cart at Night, as specified in this Bylaw	4U)	$500	$750
Operate a golf cart without exercising due care and attention	4(k)i	$500	$750
Operate a golf cart with more passengers than the designated number of seats as per the manufacturer specifications	4(k)iii	$500	$750
Operate a golf cart with any person being towed on	4(k)iv	$500	$750

Operate a golf cart with any type of equipment or trailer attached to the golf cart	4(k)v	$500	$750
Operate a golf cart which has not been maintained as prescribed by the manufacturer or has faulty or inoperable equipment	4(k)vi	$500	$750
Operate a golf cart which has been home built or modified	4(k)vii	$500	$750
Operate a golf cart that is not equipped with headlamps, tail lamps, brake lights, and signal lights	5(a)	$500	$750
Operate a golf cart which does not travel in the same direction as vehicles travelling on the roadway	5(c)	$500	$750
Operate a golf cart which does not travel in a single file	5(d)	$500	$750
Operate a golf cart which does not display a valid Town registration permit properly affixed to the golf cart	5(f)	$500	$750
Operate a golf cart on Municipal Roadway at an unreasonable rate of speed	6	$500	$750
Operate or is a passenger on a golf cart where the number of persons on the golf cart exceeds the manufacturer's specifications	9	$500	$750
Operate a golf cart between October 1 and April 14 of each calendar year	11	$500	$750

Schedule C – Designated Signs











Guidelines for the approval of municipal bylaws

Related to the Pilot Project (Golf Carts) Regulation

Alberta

Classification: Public

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Guidelines of the Approval of Municipal Bylaws Related to the Pilot Project (Golf Carts) Regulation | Transportation and Economic Corridors

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Classification: Public

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Introduction

Alberta has created a five-year pilot project regulation to allow interested municipalities to pilot the use of golf carts on select public roads. The Pilot Project (Golf Carts) Regulation (the Regulation) exempts golf carts and their operators from certain requirements under the *Traffic Safety Act* and its regulations that ordinarily make the operation of golf carts on public roadways illegal. These exemptions only apply when municipal bylaws, as approved by the Registrar of Motor Vehicle Services (Registrar), are in place. For bylaws to be approved they must include minimum requirements and limitations as outlined in the Regulation and identify proposed routes. Municipalities may include additional safety requirements, based on what is best for their communities, so long as they do not conflict with the Regulation.

The Regulation will expire on June 14, 2029, at which time municipal bylaws made under this authority will no longer be valid.

Alberta will collect and analyze data throughout the pilot project and will communicate with municipalities regarding next steps prior to the expiry of the Regulation.

Provincial Requirements

The Regulation outlines minimum requirements and limitations for golf carts to be legally allowed on public roads. The Regulation also states requirements for municipal bylaws to be approved.

The Regulation authorizes the Registrar to add additional requirements to the golf cart pilot project. In this event, municipalities will be notified and must amend their bylaws within 60 days to adopt a Registrar-added requirement, in accordance with section 11 of the Regulation.

Minimum Requirements and Limitations

- operators must be 14 years of age or older
- may not be operated during nighttime
- the number of passengers is limited to the number of seats as provided by the manufacturer
- operators must carry at all times and show proof of municipal authorization for the golf cart upon request of any bylaw, peace or police officer
- operation of golf carts is only allowed on roads within a municipality:
    - that have been identified in a municipal bylaw
    - where the maximum speed limit is 50 km/h or less
    - that cross a road with a speed limit over 50 km/h only at points that have been specified in municipal bylaw
    - in communities that have erected signage as specified in municipal bylaw
- maintained as prescribed by the manufacturer, i.e., golf carts:
    - must be in good working order
    - may not be home-built or modified
- no towing of vehicles or equipment is allowed
- operators must follow all rules of the road unless otherwise included in above operating parameters
- commercial vehicles (i.e., golf carts that aren't private passenger vehicles under the *Traffic Safety Act*) aren't eligible for use in this pilot project, unless owned by a municipality and used by a municipal employee in the course of their employment
- unless specified in the Regulation, golf carts are subject to all other rules, terms and conditions as if they were a motor vehicle, and must be operated as such

Municipal Requirements

Municipal bylaws must:

- note coming into force and expiry date
- include any operating parameters that exceed the requirements and limitations in the Regulation
- specify the form, process and fees for operators to obtain proof of municipal authorization (i.e., permit or registration)
- clearly designate routes and include a map of such routes
    - when submitting proposed bylaws and routes, municipalities also include a document that explains why the routes (highways) were selected, and demonstrates consideration of:

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    - collision statistics for the routes
    - traffic volume for the routes
    - whether the routes are primarily used for local or recreational traffic
- indicate that data will be collected and reported as required by the Registrar
- specify that operators must report any collision resulting in property damage, of any amount, injury or death directly to the municipality and outline the form and manner in which that information must be reported
- be amended within 60 days, in accordance with the Regulation, to include any terms added by the Registrar

Additional Considerations for Municipalities

Operating Parameters

The provincial requirements and limitations are intended to provide a base level of safety. Municipalities may want to consider additional requirements or limitations that could improve safety depending on the needs of their communities. For example, prohibiting use seasonally, requiring reflectors on the golf cart, having an operator age minimum higher than 14 years of age, or adding a requirement for all passengers to be seated upright in their own seat.

Route Selection

The Regulation requires that bylaws clearly designate routes and include a map of the routes. A document that explains why proposed designated routes (highways) were selected must be provided along with the application/municipal bylaws submitted for approval. This document should demonstrate consideration of:

- collision statistics for the routes;
- traffic volume for the routes;
- whether the routes are primarily used for local or recreational traffic; and
- surrounding environment (i.e., proximity to schools, hospitals, or other infrastructure).

If proposed designated routes will cross a highway with a speed limit over 50 km/h, municipalities should also consider the conditions at these crossing points (e.g., surrounding environment/community, visibility, existing traffic control devices and if additional signage should be posted at crossing locations).

Signage

The Regulation requires that municipalities erect signage at their cost. The intent is to warn regular motor vehicle traffic that they may encounter golf carts. Signage could also be a tool to let golf cart operators know where they are permitted within a community. Municipalities are best positioned to consider the type, number and location for these signs as appropriate for their communities. Municipalities can decide if it is more appropriate to include signs only at community entrance points and at points where routes may intersect with higher speed traffic routes, and/or if they should they be placed at regular intervals along designated routes.

Parking

In addition to restricting where golf carts may operate, municipalities may further restrict where they are allowed to park. Similar to motor vehicle parking, municipalities may want to consider:

- The penalty structure that should apply if a golf cart is not parked in a designated location (e.g., ticket, tow, impound).
- Whether additional signage required in certain locations.

Municipal Authorization

The Regulation requires that golf carts must be authorized by the participating municipality, but does not prescribe the form of proof (which must be carried by operators at all times) or process of this authorization. The Regulation also gives municipalities the ability to charge a fee for a "permit", but does not prescribe the amount of the fee. These details must be outlined in bylaws.

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Municipalities should consider how they will invite golf cart owners to apply. This requirement is an opportunity to educate owners and operators about the pilot project, the requirements and limitations, general safety and any other considerations. It can also be used to collect some of the data that must be reported to the Registrar, such as:

- Golf cart make, model, number of seats, fuel/power source, and vehicle equipment such as headlamps, signal and brake lights
- Number and age of operators
- Intended frequency of use

Alberta recommends that permits be issued annually or per operating season for better tracking of pilot project uptake.

Offences and Penalties

Unless otherwise stated in the Regulation, golf carts are required to follow the rules of the road and will be subject to penalties for violations of the *Traffic Safety Act* and its regulations the same as a motor vehicle.

Additionally, municipalities may create offences and set penalties for any violations of their bylaws. Should they choose to do so, these must be specified within municipal bylaws. The province recommends that municipal bylaws, at minimum, include a provision that makes it an offence to contravene any of the provisions in the Regulation and set a penalty so that municipal bylaw officers may issue tickets for these offences (see Appendix A, provision 16).

Duty to Report Collisions

Like all drivers, golf cart operators must report collisions to police when damage is above the $5,000 threshold, or there are injuries or fatalities.

Under the Regulation, golf cart operators have an additional reporting requirement. Collisions resulting in property damage of any amount, or injury or death must be promptly reported to the municipality.

Municipalities may wish to consider provincial reporting requirements and forms when deciding how golf cart operators should be required to report collisions to them.

Data Collection and Reporting

Municipalities are required to collect and report data as requested by the Registrar. Reporting requirements include:

- Major Incidents: Notify the Registrar within 24 hours
  - Collisions resulting in damage over $5,000
  - Injuries requiring medical care
  - Fatalities
- Quarterly on January 31, April 30, July 31 and October 31
  - Number of permits issued
  - All collisions, regardless of damage thresholds
- On November 30 of each year
  - Pilot project report that provides details on golf carts, users, resident feedback, and other municipal issues and concerns

Reporting templates and further information on data collection will be provided upon approval. Additional questions or concerns regarding data collection can be emailed to tec.permitprojects@gov.ab.ca

Submitting Bylaws for Approval

Ensure you have the following:

- Application
- Draft Bylaws
- Route list and map
- Explanation of selected routes

Classification: Public

Please email the above documents to: Permitting and Exemption – tec.permitprojects@gov.ab.ca

Post Bylaw Approval

Communication

Municipalities are responsible for ensuring that any changes to bylaws are communicated to golf cart owners, operators and the general public as needed. This includes both municipally initiated changes as well as any new required provisions added by the province as may be required throughout the pilot project (see sections 6 and 11 of the Regulation).

Amendments

Depending on the nature of an amendment, municipalities will need to either notify the Registrar, or submit amendments to the Registrar for approval.

- Municipalities must submit amendments to the Registrar for changes such as:
  - Adding any new routes
  - Withdrawing a requirement or limitation (provided it is not in conflict with the Regulation)
  - Adding a new requirement or limitation
  - Incorporating a new provision as required by the Registrar under section 11 of the Regulation* (municipalities must submit their bylaw for approval within 60 days in such cases)
- Municipalities must notify the Registrar within 30 days (no approval required) when:
  - Removing the designation of a highway from the list of approved routes
  - Repealing a golf cart bylaw, and not replacing it with a new bylaw

NOTE - If the Registrar only removes a provision as a requirement, municipalities do not need to notify or submit the amended bylaws to the Registrar for approval.

Data Collection & Reporting

In addition to reporting requirements and deadlines outlined above, municipalities are encouraged to document feedback from residents to share any concerns with the Registrar on an ongoing basis.

To submit data collection templates and reports, to share additional feedback or for more information, municipalities can contact: Permitting and Exemptions – tec.permitprojects@gov.ab.ca

Classification: Public

Appendix A – Sample Bylaw Provisions

The sample provisions in this Appendix are provided for illustration only. This is not a template. Municipalities are encouraged to consult with their legal counsel in development of this bylaw.

The following provisions have been taken from various sources, including other jurisdictions, and adapted for illustration only. They are intended to provide examples of how various provisions might be written.

Please see the Provincial Requirements section of this document for items that must be included in bylaws. Municipalities are responsible to ensure their bylaws do not conflict with the Pilot Project (Golf Carts) Regulation and *Traffic Safety Act* and its regulations, regardless of the example provisions provided below.

City / Town of _____

Province of ALBERTA

Number _____

A BYLAW OF THE CITY / TOWN OF _____, IN THE PROVINCE OF ALBERTA TO

REGULATE THE PILOT TESTING OF GOLF CARTS ON SELECT PUBLIC ROADS

WHEREAS, the Council of the City/Town of _____, duly assembled, deems it advisable to set forth the terms and conditions to regulate the pilot testing of golf carts on select public roads in and through the City/Town of _____.

NOW THEREFORE, the Council of the City/Town of _____, under the authority vested in it by the Pilot Project (Golf Carts) Regulation under the *Traffic Safety Act*, R.S.A. 2000, c. T-6 as well as its general bylaw-making powers under the *Municipal Government Act*, R.S.A. 2000, c. M-26 and the *Traffic Safety Act*, R.S.A. 2000 c. T-6, hereby enacts as follows:

1. This Bylaw may be cited as the "Golf Cart Pilot Project Bylaw".
2. The purpose of the Bylaw is to regulate the operation of golf carts pursuant to the Pilot Project (Golf Carts) Regulation, the *Traffic Safety Act* and its regulations.
3. Definitions in the Pilot Project (Golf Carts) Regulation, and definitions in the *Traffic Safety Act* and its regulations, as applicable, are adopted for the purposes of the interpretation and the application of this Bylaw.

[OPERATING PARAMETERS]

4. All persons operating Golf Carts in accordance with the provisions of this Bylaw shall conform in all respects to the requirements of the Pilot Project (Golf Carts) Regulation, as amended from time to time, a copy of which is attached as Schedule "A" hereto.
5. It shall be unlawful to operate a golf cart on any roadways with a posted speed greater than 50km/h and the travelled portion of Provincial Highways [#X], within the Municipality of _____, except for the purpose of crossing the highway [at a specified location, or unless such operation is permitted by posted signage].
6. No person shall operate a golf cart on any designated walking or ski trail, or on any area that is ditched or designed to provide drainage unless such operation is permitted by posted signage.
7. No person shall operate a golf cart on any Municipal Reserve, Park, Green Space, Cemetery, or Playground unless such operation is permitted by posted signage.

8. No person shall operate a golf cart:
    a) Without exercising due care and attention,
    b) Without reasonable consideration for other persons in the area or who might reasonably be expected to be in the area,
    c) With more seated passengers than the design of the golf cart can safely handle,
    d) With a person being towed on any type of equipment attached to the golf cart, or
9. Every operator of a golf cart shall:
    a) When approaching an oncoming vehicle, pass the vehicle on the right,
    b) Yield the right of way to vehicles approaching from their right,
    c) When overtaking another vehicle, pass that vehicle on the left,
    d) Yield the right of way to all pedestrians that are approaching so close as to present a hazard,
    e) Except when overtaking another vehicle, maintain a safe following distance behind any other vehicle, and

10. A person shall, when requested by a Peace Officer, produce for the Officer's inspection
    a) Proof of Municipal authorization (permit/registration) as required by Section "X" of this Bylaw.

[ROUTES/SIGNAGE]

11. No person shall operate a golf cart on a public road within the corporate limits of the City/Town of _____, unless
    a) The road is an approved routes as list/shown on the map in Schedule "X", attached to and forming part of the Bylaw; and
    b) The road is identified by such signs, as shall be posted, set out in Schedule "X", attached to and forming part of this Bylaw.

[PARKING]

12. Golf carts may be parked along any route approved for golf cart operation according to the terms and conditions of municipal parking bylaw [insert bylaw number and/or section numbers] unless specifically prohibited by posted signage as set out in Schedule "X".

    OR

    Golf carts may not be parked on any public roadway unless specifically permitted by posted signage as set out in Schedule "X".

[REPORTING AND PERMITS]

13. Persons shall register their golf cart using the form shown in Schedule "X" of this Bylaw by:
    a) confirming that the golf cart has, and while registered/permitted will continue to have, the features required by the Pilot Project (Golf Carts) Regulation and Section "X" of this Bylaw;
    b) acknowledging understanding of all terms and conditions related to the operation of golf carts as required by the *Traffic Safety Act* and its regulations, the Pilot Project (Golf Carts) Regulation and this Bylaw;
    c) acknowledging that all information collected in connection with the permit/registration may be shared with the Registrar in accordance with the Municipality's reporting responsibilities as required by the Pilot Project (Golf Carts) Regulation; and noted in Section 13 of this Bylaw; and
14. A person operating a golf cart shall forthwith report to the Municipality a collision resulting in property damage of any amount, or an injury or fatality.

[OFFENCES AND PENALTIES]

15. A person who contravenes any provision of this bylaw may have their municipal registration/permit for their golf cart seized by a bylaw enforcement officer or revoked by the municipality.

16. A person who contravenes any provision of this bylaw is guilty of an offence.

17. [A Municipality may insert enforcement and penalty provisions of the type typically used by the Municipality for enforcement of their municipal bylaws]

[COMING INTO FORCE]

18. This Bylaw comes into force on XXX date, subject to the Bylaw's approval on or before that date by the Registrar of Motor Vehicle Services and the installation of signs as required by section 13 of the Regulation on or before the Bylaw's coming into force date.

READ A FIRST TIME IN COUNCIL

THIS _____ DAY OF _____, 20_____.

READ A SECOND TIME IN COUNCIL

THIS _____ DAY OF _____, 20_____.

APPROVED BY THE [*the Minister responsible for Alberta Transportation and Economic Corridors, or delegated representative*]

THIS _____ DAY OF _____, 20_____.

_____
(Signature)

READ A THIRD AND FINAL TIME IN COUNCIL

THIS _____ DAY OF _____, 20_____.

_____ _____
(Mayor) (Secretary)

E-SCOOTERS AND MODERNIZING THE ALBERTA TRAFFIC SAFETY ACT FOR PERSONAL USE

← Resolutions Library

Subject
Infrastructure

Year
2023

Status

Sponsor - Seconder

Edmonton, City of

Active Clauses

IT IS THEREFORE RESOLVED THAT Alberta Municipalities advocate for the Government of Alberta to amend the Traffic Safety Act to accommodate the daily use of e-Scooters Alberta wide, for rental and personal use.

Whereas Clauses

WHEREAS e-Scooters are now readily available for sale on the private market;

WHEREAS the Government of Alberta's Traffic Safety Act does not currently provide a legal framework for personal use of e-scooters beyond private property;

WHEREAS without a legal framework personal choice and freedom of mobility to meet needs and lifestyles is limited;

WHEREAS in Alberta a municipality cannot create bylaws to regulate the use of personal e-Scooters;

WHEREAS the Cities of Calgary and Edmonton have had to obtain special Alberta Transportation ministerial permissions to be allowed to authorize and regulate the use of rental e-Scooters under a pilot project;

WHEREAS if this process was replicated for dozens, or hundreds, of municipalities it would create needless red tape for both municipalities and Alberta Transportation and still not address the issue of e-Scooters for personal use; and

WHEREAS all Albertans should be able to legally use micromobility options that help connect travelers to local destinations.

operating at speeds typically below 25 km/h (15 mph) and driven by users personally. Micromobility devices include bicycles, electric bicycles (e-Bikes), electric scooters (e-Scooters), electric skateboards, shared bicycle fleets, and electric pedal assisted (pedelec) bicycles. Shared e-Scooters are a great way for a resident or visitor to travel throughout a community. Since 2019, many Alberta municipalities have issued permits to companies, with the approval of the Government of Alberta through Alberta Transportation and Trade Corridors (Alberta Transportation), to provide rental access to new, safe, and sustainable methods of transportation. Users can ride a shared e-Scooter municipality-wide on bicycle lanes, pathways, empty sidewalks and roadways with lower speed limits and lower traffic volumes. E-Scooters are not permitted on busier roadways, like Macleod Trail or Gateway Boulevard. Information on the types of vehicles allowed on pathways can be found on the following site -
https://www.calgary.ca/roads/safety/bike-laws.html

Benefits of shared micromobility programs
Data from other North American cities have demonstrated a wide range of benefits of shared micromobility programs including:

- Filling in the gap for the vital first/last mile by encouraging people to walk, cycle and take public transit more often.
- Saving time on short trips.
- Providing access to various transportation options for all demographics.
- Improving people's physical health by providing transportation options that encourage citizens to be more physically active.

Personal e-Scooter use not allowed in Alberta
Currently, personal e-Scooters are not allowed to operate on public sidewalks or roadways as they do not have provincial approval to operate beyond private property. For a private citizen to operate their own e-Scooter legally on a municipal roadway or sidewalk, they would also require a provincial exemption. No municipality has the authority to issue a vehicle exemption for public roadways. For personal e-Scooters, the devices do not have the same level of

of Calgary would currently recommend that personal e-Scooters be treated the same as bicycles and travel on roadways, bike lanes and pathways.

Personal e-Scooters are a growing regulatory gap that the Government of Alberta needs to address and allow for it.

Shared E-Scooter Operations and Restrictions

Shared e-Scooters have a number of restrictions on them to receive an exemption from the Government of Alberta including restrictions of top speed (maximum of 20 km/hour), insurance requirements (which in the case of Calgary is $10 million in Corporate General Liability Insurance), reporting requirements and geofenced areas that the devices slow down and/or cannot operate in. Currently, shared e-Scooters are allowed to operate on roads without lane markings (lower volume roadways), bike lanes, pathways, and sidewalks (as long as they do not interfere with pedestrians).

E-Scooter and Micro-mobility in Alberta

Alberta's municipalities currently do not have the authority to create their own bylaws that allow for and regulate the operations of e-Scooters on sidewalks or roadways within our communities. The Government of Alberta through Alberta Transportation and the Traffic Safety Act has jurisdiction over what types of vehicles are allowed on roadways, cycle tracks and sidewalks within a municipality. Under the current provincial law, motorized scooters (both electric and gas powered) are considered prohibited miniature vehicles. Alberta Transportation can authorize exemptions and allow their use under the Traffic Safety Act, and it is this legislated procedure municipalities that wish to undertake an e-Scooter pilot program must comply with.

In 2018, the City of Calgary and the City of Edmonton received permission and permits from the Government of Alberta to be able to conduct pilot projects in 2019 (and subsequently 2021, 2022 and 2023) that allowed e-Scooter and e-Bike companies to operate within these municipalities, such as Bird, Spin and Lime, in Edmonton and Neuron and Bird in Calgary. Once permission was

the course of their shared e-Scooter and e-Bike pilot and the City of Edmonton updated their Traffic Bylaw, including specifically prohibiting e-scooters riding on sidewalks, through the course of their pilot.

The Calgary and Edmonton 2019 e-Scooter pilots were successful and subsequently in 2021, 2022 and in 2023 more of Alberta's municipalities applied to Alberta Transportation for their own e-Scooter pilots. In 2023, authorized e-Scooter pilot projects are in effect in the cities of Calgary, Edmonton, Red Deer, Lethbridge, Airdrie, Medicine Hat, St. Albert, Leduc and in the towns of Okotoks, Cochrane, Lacombe, and Blackfalds, among others.

With Alberta having 344 municipalities, municipal e-Scooter and e-Bike pilot programs becoming more common province-wide, and successful e-Scooter pilot programs transitioning to permanent programs, Alberta Transportation should reduce the burden of red tape on itself and municipalities by formalizing shared e-Scooter use and personal e-Scooter use within the Traffic Safety Act and permitting municipalities to draft their own bylaws to regulate the use and operations of e-Scooter within their municipality.

City of Calgary 2022 Micromobility Trip data.

City of Calgary 2022 Micromobility Operators fleet numbers.

Government Response

In December 2023, the Minister of Transportation and Economic Corridors communicated that his department was reviewing the results of the e-scooter pilot programs that were held in Airdrie, Lethbridge, Medicine Hat, Okotoks, Red Deer, Leduc, Edmonton, and Calgary. The Minister communicated that his ministry would share the results of the evaluation in fall 2024.

Relevant files

Ltr fr Min Transportation re Response to letter about 2023

The following information is accurate as of August 2026.

ABmunis' Rating of the Government's Response

Intent Partially Met – further action will be taken at a medium level of engagement.

ABmunis' Notes and Actions

The provincial government has engaged stakeholders, including ABmunis, on personal micromobility devices. Alberta Municipalities will continue working with Alberta Transportation and Economic Corridors to ensure any new rules genuinely improve safety while respecting municipal autonomy. We anticipate legislation to be introduced in fall 2026.

Contact us: Advocacy

EMAIL US

CONTACT US

780.433.4431

PRINT THIS PAGE

C1: Regulation of Personal Micromobility Devices (i.e. e-scooters) through the Alberta Traffic Safety Act

Moved by:	**City of Spruce Grove**
Seconded by:	**Village of Irma**
Category:	**C – Other issues of potential interest to Alberta municipalities**
Subject:	**Infrastructure**
Status:	Adopted - Active

WHEREAS the *Alberta Traffic Safety Act* provides the legislative and regulatory framework governing the use of motorized vehicles on roadways, sidewalks, and pathways in Alberta;

WHEREAS personal micromobility devices, including e-scooters, electronic skateboards, hoverboards, e-bikes, and segways, are increasingly used as a mode of transportation within municipalities;

WHEREAS the Province of Alberta has enabled the operation of commercial/rental e-scooter share programs through regulatory exemptions, and several municipalities have implemented pilot programs to authorize and manage their use;

WHEREAS the *Traffic Safety Act* does not currently establish a clear legal framework for the operation of privately owned micromobility devices on public infrastructure, limiting municipalities' ability to effectively regulate their use;

WHEREAS the Government of Alberta has the authority to establish regulations under the *Traffic Safety Act* and has undertaken consultation regarding the regulation of personal micromobility devices; and

WHEREAS the absence of a defined provincial framework creates challenges related to enforcement, public understanding, and safety, including concerns related to speed limits, age restrictions, mandatory helmet use, particularly for youth, and clear definitions of where devices can operate.

IT IS THEREFORE RESOLVED THAT Alberta Municipalities advocate to the Government of Alberta to amend the *Traffic Safety Act* and its associated regulations to establish a clear and consistent provincial framework for the operation and use of personal micromobility devices, while providing municipalities with autonomy for bylaw enforcement within their jurisdiction as needed.

BACKGROUND:

The *Traffic Safety Act* establishes the legislative framework governing the use of vehicles on roadways, sidewalks, and pathways across Alberta. However, the Act has not kept pace with the rapid emergence and adoption of personal micromobility devices (PMDs), such as e-scooters, e-bikes, hoverboards, and other small electric mobility options.

Municipalities across Alberta have participated in provincially authorized pilot programs for shared e-scooter services. Through these pilots, municipalities have developed a range of approaches to managing these programs, including designated parking areas, speed restrictions, operating zones, and safety requirements, reflecting local priorities and infrastructure considerations. While these programs have demonstrated the benefits of micromobility, they have also highlighted gaps in the current legislative framework, particularly with respect to privately owned devices.

As personal micromobility devices become more widely available for individual purchase, safety and enforcement challenges are increasing. Key considerations include how to regulate speed, ensure helmet use, and clearly define where PMDs are permitted to operate. While shared fleet operators have the ability to implement technological controls such as speed limiting and geofencing, no comparable mechanisms exist for privately owned devices. This creates inconsistent enforcement environments and increases the risk of unsafe or non-compliant use.

The absence of a clear, province-wide regulatory framework has also resulted in varied approaches across municipalities. While this reflects local flexibility, it may also contribute to confusion among users regarding acceptable practices and expectations as they move between communities.

The Government of Alberta has been engaging stakeholders on the regulation of personal micromobility devices, beginning late-2025. This work is expected to inform potential amendments to the *Traffic Safety Act* and associated regulations, with legislation anticipated as early as fall 2026. As a participant in this process, Alberta Municipalities has expressed support for enabling PMDs (based on the existing resolution from the City of Calgary that expires in fall 2026) and emphasized the importance of ensuring that any new regulatory framework both enhances safety and respects municipal autonomy.

As part of this work, there is an opportunity for the province to provide greater clarity while maintaining local flexibility. The development of a provincial best-practices guide could support municipalities in implementing consistent and effective approaches to PMD regulation. Such a guide could outline recommended speed limits, helmet requirements, and appropriate riding zones, enabling municipalities to adopt approaches suited to their local context while promoting safe and consistent use across Alberta.

A coordinated provincial framework, supported by best practices and developed in collaboration with municipalities, would help ensure that PMDs are used safely, consistently, and in alignment with local needs and priorities.

ALBERTA MUNICIPALITIES COMMENTS:
As noted above, ABmunis has previously provided feedback to the Province on stakeholder engagement related to this issue and has emphasized the importance of clear regulatory frameworks that enable municipalities to determine whether and how PMDs operate within their communities. This resolution aligns with the advocacy advanced through the City of Calgary's resolution, which is set to expire in 2026, and would support the continuation of that work. While the issue does not currently align with ABmunis priority strategic initiatives, it is consistent with ABmunis' support for municipal autonomy, local decision-making, and the ability of municipalities to address community needs through appropriate regulatory tools.

If this resolution is passed, it will be forwarded to the Government of Alberta for response. Further advocacy would be recommended to the ABmunis' Board by the relevant policy committee(s) within the context of related priorities and positions.

MEETING DATE: November 16, 2026

PREPARED BY: Danielle Nealon, Senior Legislative Advisor

PRESENTED BY: Kim Isaak, Chief Administrative Officer

SUBJECT: **Council Policy – Flags**

BACKGROUND

The current Flag Policy 159.22 was adopted in 2022 and provides direction for the display of flags on municipal sites, including flag precedence and half-masting protocols.

Administration has completed a review of the Policy and proposes a new Council Policy for Flags that aligns with the Town's current governance practices. The proposed Policy maintains many of the existing flag protocols while providing clearer direction regarding display requirements, Council and Administration responsibilities, and half-masting procedures. As the Town only has three flagpoles and does not have a dedicated community or commemorative flagpole, requests for community recognition will be addressed through the process established in the Town's Proclamation Policy rather than through commemorative flag raisings.

DISCUSSION

The proposed Council Policy - Flags modernizes and consolidates the Town's approach to the display and recognition of flags at municipal sites.

Key updates in the proposed Policy include:

- Clarifying the purpose, scope, and responsibilities related to the display of flags at municipal facilities.
- Establishing clear roles and responsibilities for Council and Administration regarding the display and management of municipal flags.
- Removing provisions related to commemorative flag raisings, recognizing that the Town has only three permanent flagpoles and no dedicated community flagpole. Community recognition requests will instead be considered through the process outlined in the Town's Proclamation Policy.
- Expanding and updating the half-masting provisions, including the addition of Schedule "A" outlining commemorative dates and occasions when flags will be flown at half-mast.
- Clarifying procedures for the maintenance, replacement, and respectful disposal of flags.

Administration believes the proposed Policy provides greater clarity, consistency, and transparency while continuing to recognize significant events, causes, and commemorative occasions that are meaningful to the Blackfalds community.

STRATEGIC PLAN ALIGNMENT / OTHER MASTER PLAN ALIGNMENT



Economic Vitality and Community Prosperity



Community Life, Safety, and Inclusion



Leadership, Engagement and Advocacy



Sustainable Services and Infrastructure

This Policy supports effective leadership governance by providing a clear, transparent, and consistent approach regarding flags displayed on municipal sites.

FINANCIAL IMPLICATIONS

There are no financial implications to the adoption of the Council Policy for Flags.

COMMUNICATION / ENGAGEMENT CONSIDERATIONS

No public engagement is required. The Policy provides administrative and governance direction for the display of flags on municipal sites. Requests for community recognition will be addressed through the process outlined in the Town's Proclamation Policy.

ADMINISTRATIVE RECOMMENDATION

That Standing Committee of Council consider the following motion(s):

1. That the Standing Committee of Council recommend that Council adopt the Council Policy - Flags at a future Regular Meeting of Council and rescind Flag Policy 159.22 at the same time.

ALTERNATIVES

a) That Standing Committee of Council recommends amendments to the Council Policy – Flags.

b) That Standing Committee of Council refer the Council Policy – Flags back to Administration for more information.

ATTACHMENTS

- *Draft Council Policy – Flags*
- *Flag Policy 159.22*

APPROVALS

Kim Isaak,
Chief Administrative Officer

Department Director/Author

FLAGS

POLICY NO	CP
DIVISION DEPARTMENT	Administration/Legislative Services
REVIEW PERIOD	Every 4 Years, Upon Legislative Change or As Required

1. POLICY PURPOSE

1.1 The purpose of this Policy is to establish a consistent and transparent framework for the display of Flags on Municipal Sites, including protocols for Flag precedence and disposal, Half-masting notices, while ensuring respectful and non-partisan use of municipal facilities.

2. POLICY STATEMENT

2.1 The Town recognizes that Flags are important symbols of identity, heritage, and civic pride. This Policy provides consistent and transparent direction for the display of Flags on Municipal Sites.

3. DEFINITIONS

3.1 **"Chief Administrative Officer"** (CAO) means the Chief Administrative Officer of the Town of Blackfalds, appointed by Council as per the *Municipal Government Act.*

3.2 **"Council"** means all Elected Officials of the Town of Blackfalds

3.3 "**Flag**" means a piece of cloth bearing a pattern that represents a government, nation or organization.

3.4 "**Half-mast**" means the position of a flag being flown approximately halfway down a flagpole, as a symbol of respect, commemoration or collective mourning.

3.5 **"Municipal Sites**" means the facilities, properties, buildings and parks managed or owned by the Town of Blackfalds.

3.6 "**Order of Precedence**" means the positioning of flags in priority of importance, order or rank as per protocol established by the Government of Canada and the Province of Alberta; and

3.7 **"Town**" means the municipality of the Town of Blackfalds.

4. SCOPE

4.1 This Policy is applicable to all Flags located and displayed on Town Municipal Sites, including the maintenance and disposal of Flags at all Town Municipal Sites.

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5. AUTHORITY AND RESPONSIBILITIES

5.1 Council to:

5.1.1 Adopt and support this Policy by resolution.

5.1.2 Consider the allocation of resources for the successful implementation of this Policy in the annual budget process.

5.2 Chief Administrative Officer to:

5.2.1 Advise Council on the development and implementation of this Policy.

5.2.2 Ensure Policy review occurs and verify the implementation of this Policy.

5.2.3 Review and approve Administrative Policies or Procedures related to this Policy.

5.3 Legislative Services to:

5.3.1 Review Half-masting notices and determine Half-masting eligibility.

6. POLICY

6.1 The Town recognizes that Flags are important symbols of honour and pride for nations, communities and groups of people. Flags located on Town Municipal Sites must be treated with respect and in a consistent manner.

6.2 Council supports public awareness campaigns, charitable causes, arts and cultural celebrations and significant events. Requests for recognition of a cause, organization, event, or commemorative occasion may be submitted through the process established in the Town's Proclamation Policy.

6.3 The Town flies and displays Flags permanently and are flown and displayed in the Order of Precedence and according to federal and provincial protocols, where applicable.

6.4 The CAO may direct the display of Flags at an official municipal event.

General

6.5 Displaying the Flag

6.5.1 Flags shall be flown on separate poles.
6.5.2 Flags shall be flown at the same height.
6.5.3 Flags flown in a group shall all be the same size.
6.5.4 Flags may be flown at night.

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6.6 Precedence

6.6.1 The Town, at all Municipal Sites, follows the Order of Precedence established by Canadian Heritage.

6.7 Flags flown Permanently at the Municipal Sites

6.7.1 Canada
6.7.2 Alberta
6.7.3 Town of Blackfalds

6.8 Municipal Sites

6.8.1 The Canada, Alberta and Town of Blackfalds Flags shall be in the Council Chamber, along with any other flags approved by Council.

Half-Masting Flags

6.9 The Town flies Flags at Half-mast:

6.9.1 when a Province of Alberta's Half-masting notice applies to all Government of Alberta buildings across Alberta;

6.9.2 when a Government of Canada's Half-masting notice applies to all Government of Canada buildings across Canada;

6.9.3 on the dates listed in Schedule "A" of this Policy;

6.9.4 by resolution of Council; and

6.9.5 at the discretion of the CAO in the event of the death of a dignitary or Town Employee.

6.10 When the Town follows a Half-Mast notification issued by the Government of Alberta or by the Government of Canada, the Town adheres to the stated protocol and the designated times in that notification.

6.11 The Town of Blackfalds Fire Department may decide to Half-mast the Flags flown at the Town's fire station, to honour the line of duty death of a firefighter, based on the guidelines in the Canadian Association of Fire Chiefs Redbook on Flag Protocol. The Fire Department Fire Chief shall notify Legislative Services, as soon as reasonably possible, once it decides to Half-mast Flags for this reason.

Disposal of Flags

6.12 A Flag is considered to be worn when the colour has faded, it has developed a hole or the outermost seam (fly) of the Flag has become frayed. When a Flag becomes tattered

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and is no longer in a suitable condition for use, it should be disposed of in a dignified manner.

6.13 The disposal of a Flag may be handled in the following manner:

6.13.1 Flags made of natural fibres (wool, cotton, linen) should be burned in a dignified manner, privately, without ceremony or public attention being drawn to the destruction of the material.

6.13.2 Flags made of synthetic material (nylon or polyester) should not be burned due to environmental damage and potential fire hazard. They should be respectfully torn into strips, with each element of the Flag reduced to a single colour, so that the remaining pieces do not resemble a Flag. The individual pieces should then be placed in a bag for disposal and the shreds of fabric should not be reused or fashioned into anything.

7. EXCLUSIONS

7.1. Notwithstanding this Policy, Council may, by resolution, make any other decision it deems necessary in relation to Flags flown or displayed on Town Municipal Sites.

8. SPECIAL SITUATIONS

8.1. In accordance with the rules established by the Government of Canada, if the Canada Flag is Half-mast anywhere in the Town, it must be flown at full mast on Victoria Day and Canada Day, which are holidays under the *Holiday Act.*

9. RELATED DOCUMENTS

9.1. Government of Canada - Order of precedence for flags — Quick Reference
9.2. Government of Alberta – Protocol for Flag Displays
9.3. Government of Alberta – Flag Etiquette
9.4. Governance - Framework

10. END OF POLICY

Mayor	Chief Administrative Officer
Date	Date

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POLICY RECORD HISTORY

	Resolution No:	Date
Policy Adopted		
Policy Reviewed		
Policy Revised		

ADMINISTRATIVE REVISIONS

Date	Description

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SCHEDULE "A"
HALF-MASTING FLAGS AT MUNICIPAL SITES

1. Flags are flown at Half-mast, at Municipal Sites determined by the CAO, from the time of notification of death until sunset the day of the funeral or the memorial service for the following individuals:

    i) the Sovereign;
    ii) a Member of the immediate Royal Family;
    iii) current or former Governor General of Canada;
    iv) current or former Prime Minister of Canada;
    v) current or former Lieutenant Governor of Alberta;
    vi) current or former Premier of Alberta; and
    vii) current Town Mayor and Councillors.

2. If the Town is notified of the death of the people listed below, Flags are flown at Half-mast at Municipal Sites on the day of the funeral or the memorial service for a:

    i) former Town Mayor; and
    ii) former Town Councillor.

3. The Town flies Flags at Half-mast at Municipal Sites to commemorate the occasions listed in Table 1.

TABLE 1

	Date	**Occasion**
i)	April 9	National Day of Remembrance of the Battle of Vimy Ridge
ii)	April 28	Day of Mourning for Persons Killed or Injured in the Workplace (also known as National Day of Mourning)
iii)	June 23	National Day of Remembrance for Victims of Terrorism
iv)	Second Sunday in September	Firefighters' National Memorial Day
v)	Last Sunday in September	Police and Peace Officers' National Memorial Day
vi)	September 30	National Day of Truth and Reconciliation
vii)	November 11	Remembrance Day
viii)	December 6	National Day of Remembrance and Action on Violence Against Women

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Policy No.: 159.22 **Policy Title: Flag Policy** **Department: Administration** **Effective Date:** **Revised:** **Supersedes Policy/Bylaw: Flag Policy (2007)** **Review Date:**	**Resolution No. 027/22** **Date: January 25, 2022**

Policy Statement

This Policy is to ensure that all Flags at municipal facilities are flown and displayed in a consistent and appropriate manner in accordance with accepted national and provincial Flag protocols and guidelines. Flags will be flown on a permanent, as well as on a temporary basis, to raise awareness of significant causes or events that benefit, enrich, or honour the community, province or country.

1. Reason for Policy

1.1 To ensure all Flags at municipal sites and facilities are displayed in a respectful, consistent and appropriate manner.

2. Definitions

2.1 **"Municipal Sites"** means the facilities, properties, buildings and parks managed or owned by the Town of Blackfalds.

2.2 **"Flag"** means a piece of cloth (usually rectangular) of distinctive colour, design, emblem or symbol to represent nations, provinces, states or municipalities. "Flag" is also used to describe a banner: which looks like a Flag, bearing a symbol, logo, slogan or other message to represent charitable or non-profit organizations but does not have Flag status.

2.3 **"Half-mast"** means the position of a Flag, approximately halfway up the mast or pole. Flying Flags at half-mast is a symbol of respect or mourning.

3. Responsibilities

3.1 Municipal staff to:

3.1.1 Ensure Flags are in good condition.

3.1.2 Ensure the Flagpoles and equipment at municipal sites are in good operating condition.

3.1.3 Implement this policy at municipal sites.

3.2 Chief Administrative Officer to:

3.2.1 Review and determine the eligibility of lowering Flags to half-mast and the raising of community Flags;

3.2.2 Implement this policy and approve procedures.

3.2.3 Ensure policy and procedure reviews occur and verify the implementation of policies and procedures.

3.3 Municipal Council to:

3.3.1 Approve by resolution this policy, procedure and any amendments.

4. End of Policy

PROCEDURE

Policy No.: 159.22 **Policy Title:** Flag Policy **Department:** Administration	

1. Preamble

1.1 All Flags, including the national Flag of Canada, the Flag of Alberta, the municipal Flag, the Treaty Six Flag, are symbols of honour and pride, and will be treated with respect and dignity.

2. General

2.1 The following Flags must be flown from flagpoles in the order of precedence, which is as follows:

i. Canada

ii. Alberta

iii. Blackfalds

iv. Treaty Six

2.2 The Town, at all Town sites, will follow the order of precedence established by Canadian Heritage.

2.3 The Town of Blackfalds Flag takes precedence over all charitable and non-profit organization Flags unless overwise established by Canadian Heritage.

2.4 Displaying the Flag:

i. Flags shall be flown on separate poles.

ii. Flags shall be flown at the same height.

iii. Flags flown in a group shall all be the same size.

iv. Flags may be flown at night.

3. Flags of Organizations, Sports Teams, and Dignitaries

3.1 The Town may fly the Flag of a charitable or non-profit organization, sports team, or visiting dignitary to celebrate a special occasion or achievement in Blackfalds.

i. It is the responsibility of the requesting organization or sports team to submit a written or phone request for the Office of the CAO for a Flag to be flown, as well as supplying the Flag to represent the organization or event.

ii. If a Flag raising is requested as part of a larger ceremony, applicants must make appropriate arrangements with Administration.

4. Flags at Half-mast

4.1 The lowering of Flags at half-mast is at the directive of the:

i. Prime Minister’s office acting through Canadian Heritage;

ii. Premier’s Office acting through the Alberta Protocol Office; or

iii. Mayor's Office acting through the CAO's Office.

4.2 Flags will be Lowered at Half-mast for:

i. All occasions prescribed by Canadian Heritage or Alberta Protocol Office; or,

ii. A solemn occasion for the community, applicable only to the lowering of the municipal Flag or the Treaty Six Flag.

5. Special Days

5.1 The Flag will be flown at half-mast at all municipal sites from sunrise to sunset on the following days:

i. Workers' Mourning Day (April 28)

ii. Remembrance Day (November 11)

iii. Police and Peace Officers' National Memorial Day (Last Sunday in September)

iv. National Day of Remembrance and Action on Violence Against Women (December 6)

v. Orange Shirt Day (September 30)

6. Dignitaries (Death)

6.1 Flags will be flown at half-mast at all Town sites from the time of notification of death until sunset the day of the funeral or the memorial service for the following individuals:

i. The Sovereign,

ii. Member of the immediate Royal Family,

iii. Current or former Governor General of Canada,

iv. Current or former Prime Minister of Canada,

v. Current or former Lieutenant Governor of Alberta,

vi. Current or former Premier of Alberta, or

vii. Current Mayor and Councillors.

6.2 Flags will be flown at half-mast at Town sites on the day of the funeral or the memorial service for the following individuals:

i. Federal Cabinet Minister from the constituency currently encompassing the Town of Blackfalds,

ii. Member of Parliament from the constituency encompassing the Town of Blackfalds,

iii. Member of the Legislative Assembly from the constituency encompassing the Town of Blackfalds

iv. Current Treaty Six Chief, or

v. Former Mayors and Councillors.

7. Solemn Occasions

7.1 Solemn occasions may arise not covered within this Council policy. In those cases, Protocol will liaise with the Mayor's Office, CAO's Office, Alberta Protocol, and Canadian Heritage as required. Protocol will recommend whether a half-mast or

another form of recognition is appropriate.

8. Requests to Display Flags or Lower Flags to Half-mast

8.1 All requests to temporarily display a Flag or lower the Flags at half-mast for circumstances outside those prescribed by Canadian Heritage or the Alberta Protocol Office must be sent to the CAO's Office via email or by phone.

8.2 The CAO or designate will review and approve requests to lower Flags at half-mast and for displaying community Flags on Town sites.

8.3 When possible, all requests should be submitted two weeks in advance of the proposed date or event.

9. When a Flag is To Be Lowered

9.1 The Flag shall never touch the ground;

9.2 The Flag shall be folded in accordance with the standard prescribed by Canadian Heritage.

10. Care and Disposal of Flags

10.1 When a Flag becomes worn, noticeably faded or unfit for service it must be disposed of in a respectful manner as prescribed by Canadian Heritage.

11. End of Procedure