



Town of Crossfield
AGENDA
Regular Council Meeting
Tuesday, October 07, 2025 07:00 PM

1. CALL TO ORDER

2. AGENDA

2.1 October 7, 2025 Agenda

3. MINUTES

3.1 September 16, 2025 meeting minutes Page 3

4. PUBLIC HEARING

4.1 Bylaw 2025-13 - Direct Control District (DC-2) Amendments Page 7

5. DELEGATION

5.1 Fire Services - Community Risk Assessment Presentation Page 31
Isaac Comandante - BEHR Integrated Solutions
Nancy Duncan & Tim Beckett (via Zoom)

6. ACTIONS AND DECISIONS

6.1 Franchise Fees Page 208

6.2 Offsite Levy Reallocation Page 211

6.3 Crossfield Recreation Board Re-appointment Page 214

6.4 Municipal Enforcement Unit Policy, Bylaw & Plans Summary Page 216

6.5 Snow and Ice Control - Comparator Survey Results and Program Changes

Page 220

7. COUNCILLOR'S BUSINESS

8. ADMINISTRATIVE UPDATE

8.1 Monthly Administrative Update

Page 232

8.2 Outstanding Items List

Page 237

9. ADJOURN

3. MINUTES

3.1 September 2, 2025 meeting minutes

216-2025

MOVED by Councillor Vang that the September 2, 2025 regular council meeting minutes be accepted as presented.

CARRIED

4. DELEGATION

4.1 RCMP Quarterly Update - Sgt. Ian Patey

217-2025

MOVED by Deputy Mayor Brennan that Council accept the RCMP Q1 update for information.

CARRIED

5. SUBDIVISION

5.1 Application 2024-7000100-PH5 - Vista Crossing Phase 5

218-2025

MOVED by Deputy Mayor Brennan that the Vista Crossing Phase 5 Subdivision Application be approved with the conditions noted in Attachment 'A'.

CARRIED

6. ACTIONS AND DECISIONS

6.1 Letters of Support for the Whoo's Crew Parent Society

219-2025

MOVED by Councillor Fox that Council signs the letters of support for the Whoo's Crew Parent Society for their playground replacement project at the Crossfield Elementary School.

CARRIED

6.2 Wastewater Treatment Master Plan - Treated Effluent Disposal Options

220-2025

MOVED by Councillor Fox that Council direct Administration to initiate the next steps for implementing a polishing treatment wetland system, including:

- **Conduct geotechnical assessment and groundwater monitoring in Fall 2025 using the remaining 2025 funds from the Interim Effluent Disposal Study;**
- **Submission of grant applications to secure funding;**
- **Engagement with neighbouring municipalities and the Nose Creek Watershed Partnership;**
- **Submission of a pilot discharge application to Alberta Environment and Protect Areas; and,**
- **Inclusion of the environment assessments, design and construction of a polishing treatment wetland system in the 2026 budget to be considered by Council.**

For (6): Mayor Harris, Deputy Mayor Brennan, Councillor Fox, Councillor Gustafson, Councillor Lambert, and Councillor Vang

Against (1): Councillor Knight

MOTION CARRIED (6 to 1)

6.3 National Depression Screening Day - Oct. 9 Proclamation

221-2025

MOVED by Mayor Harris that the Town of Crossfield Proclaim October 9, 2025 as National Depression Screen Day in Crossfield.

CARRIED

6.4 Special Ballots - 2025 Municipal Election

222-2025

MOVED by Councillor Knight that the Town of Crossfield provide for special ballots for the 2025 Municipal Elections for those Electors, who are unable to vote at the advance vote or at the voting station on election day, and application of Special Ballots will be received from Nomination Day until 4 p.m. on October 17, 2025, and must include the information outlined in Section 77.1 (2.4) of the Local Authorities Election Act, and that the application for special ballots be made in any one or more of the following methods:

- a. in writing delivered to the Town Office;
- b. in person at the Town Office during regular business hours;
- c. by telephone at 403-946-5565 or
- d. by e-mail at town@crossfieldalberta.com

and

Completed special ballots must be received by the Returning Officer no later than 4:00 p.m. on Election Day in order to be counted. The Returning Officer shall ensure that application for special ballots complies with sections 77.1, 77.2, 77.21, & 77.3 of the Local Authorities Election Act.

CARRIED

7. COUNCILLOR'S BUSINESS

Mayor Harris

- Continue to meet with the CAO weekly
- Attended 3 Mid-Sized Town's Mayors Caucus meetings over the last few week
- September 7 – Attended Crossfield Wellness Day
- September 9 – Attended a Mid-Sized Town's Mayors Caucus meeting in Ponoka to review funding
- September 9 – Participated in the Crossfield Community Fest with Administration
- September 12 – Participated in the Chamber of Commerce Golf Tournament
- September 15 – Attended the Town Hall with Premier Danielle Smtih

Deputy Mayor Brennan

- September 9 – Participated in the Crossfield Community Fest with Administration

Councillor Fox – nothing further to report

Councillor Gustafson

Upcoming meeting

- September 17 – Rocky View Foundation meeting

Councillor Knight

- September 10 – Mountain View Regional Water Services Commission monthly meeting – reviewed draft budget

Councillor Lambert – nothing further to report.

Councillor Vang – nothing further to report.

223-2025

MOVED by Councillor Knight that Councillor's Business be accepted as presented.

CARRIED

8. ADMINISTRATIVE UPDATE

8.1 Outstanding Items List

224-2025

MOVED by Councillor Lambert that the Outstanding Items list be accepted as presented.

CARRIED

9. CORRESPONDENCE

9.1 Marigold Library Board Update - August 2025

225-2025

MOVED by Councillor Fox that the items under correspondence be filed for information.

CARRIED

10. ADJOURN

226-2025

MOVED by Councillor Vang that the Council meeting adjourn at 8:40 p.m.

CARRIED

Mayor Harris

Kinza Barney, Chief Administrative Officer

Report to Council



Meeting Date: 2025-10-07
Meeting Type: Council Meeting
Prepared By: Steve Altena, Director of Infrastructure and Community Growth
Presented By: Steve Altena
Subject: **Public Hearing and 1st, 2nd and 3rd Readings – Direct Control District (DC-2) Bylaw Amendment – 1321 Laut Avenue**
Department: Planning & Development
File No: 2025-760200-R

REPORT PURPOSE:

The purpose of this report is for Council to assess Bylaw 2025-13 which concerns the amendment of Direct Control District (DC-2) Bylaw 2018-05 to add support for the development and operations of plant production, including produce, flowers, specialty plants, decorative plants, indoor plants, ornamental plants, herbs, vegetables, fruits, air-purifying plants and aquatic plants while keep the original medical marihuana production facility use as a potential use.

RECOMMENDATION:

Administration recommends:

- THAT Bylaw 2025-13 be given first reading.
- THAT Bylaw 2025-13 be given second reading.
- THAT Bylaw 2025-13 be given consideration for third reading.
- THAT Bylaw 2025-13 be given third and final reading.

BACKGROUND:

Location

The subject lands are located at 1321 Laut Avenue just north of the Town's rodeo grounds.



Site Context

DC-2 Bylaw 2018-05 was approved for the site and adjacent parcels on May 15, 2018 to support the development of a medical marijuana production facility. A facility for this use was constructed on the site in 2018, however, the company has since gone out of business and the facility has remained empty until its recent purchase in August 2025. The adjacent parcels immediately east and west have since been re-designated to Industrial Light (I-1).

Agency Circulation

The application was circulated from August 11, 2025 to September 10, 2025 to several agencies including Rocky View Schools, ATCO, Fortis and Telus, as well as internal Town departments.

The circulation comments received by the Town for both circulations periods are presented in Attachment 'A'.

Landowner Circulation

The application was circulated to adjacent landowners during the same time periods as above, in accordance with the *Municipal Government Act*. No responses were received during this circulation period.

Development Proposal

The current DC-2 Bylaw restricts use of the site to the production of medical marihuana. The new owner intends to develop the site for plant production, including produce, flowers, specialty plants, decorative plants, indoor plants, ornamental plants, herbs, vegetables, fruits, air-purifying plants and aquatic plants, but wish to retain the option to produce medical marihuana. The proposed DC-2 Bylaw amendments to support the additional use are set out in Attachment 'B' and shown in redline in Attachment 'C'.

The new owner has discussed expansion of the existing production area and the inclusion of co-generation with Administration. Further planning will be required to support these initiatives and the proposed DC-2 Bylaw amendments are intended to be an interim measure to allow for production to start.

ANALYSIS:

Strategic Alignment

This report is a statutory obligation under the *Municipal Government Act*.

Relevant Statutes / Master Plans / Town Documents

The proposed development must conform with the following statutory plans and bylaws:

- Town of Crossfield Municipal Development Plan (MDP)
- Land Use Bylaw (LUB)

Policy Analysis

The proposed redesignation aligns with the policies of the Town MDP and Town LUB as detailed in Attachment 'C'. Policy areas to note for Council are:

- Section 8.11.4 of the Land Use Bylaw 2018-04 states that medical marihuana productions facilities shall not operate in conjunction with another approved use. Administration has interpreted this as this use shall not occur in the same building as other uses due to security and other impacts. Section 7.3 of the proposed DC-2 Bylaw amendment requires that medical marihuana production facilities not operate within the same building as other uses.
- Section 8.11.4 of the Land Use Bylaw 2018-04 states that medical marihuana productions facilities must not be within 74.98 m (246.00 ft.) of a residential or a public institutional district. The existing building is within approximately 60 m of a public institutional district (the rodeo grounds) and previously operated as a medical marihuana productions facility. Section 7.2 instead prescribes the setback distances to align with the previously approved facility's location.

Technical Studies

Administration did not require new or updated technical studies at this time due to the minor nature of the amendment in which a similar use is being added. Technical studies may be required at development permit stage or for a proposed expansion of the facility.

COMMUNICATIONS AND ENGAGEMENT:

The application was circulated from August 11, 2025 to September 10, 2025 to relevant agencies and adjacent landowners in accordance with the *Municipal Government Act*.

FINANCIAL IMPLICATIONS:

No financial implications have been identified at this time.

ALTERNATIVES/IMPLICATIONS:

Administration does not propose an alternative direction for Council.

ATTACHMENTS:

- Attachment 'A' – Circulation comments
- Attachment 'B' – Bylaw 2025-13
- Attachment 'C' – Redline Bylaw 2018-05
- Attachment 'D' – Policy Analysis

CIRCULATION COMMENTS 1321 Laut Ave. LUB Amendment – 2025-760200-R:

The application was circulated to all relevant external agencies and adjacent landowners for commenting. Responses are summarized below.

Please note: *It is the responsibility of the applicant to review and meet all requirements or conditions from agencies.*

ATCO Pipelines:	<ul style="list-style-type: none"> No comments received
ATCO Gas:	<ul style="list-style-type: none"> Right-of-ways will be required for the gas mains within the property. See attached for details.
Rogers:	<ul style="list-style-type: none"> No concerns with the plan
TELUS:	<ul style="list-style-type: none"> No concerns with the plan
Fortis:	<ul style="list-style-type: none"> No concerns with the plan. Please contact 310-wire for electrical services.
Alberta Health Services:	<ul style="list-style-type: none"> While AHS do not have specific requirements for water intended solely for agricultural purposes without expected public use, it would be expected that water used for crops grown be suitably sourced as defined by requirements under relevant Alberta Agriculture and Irrigation and/or Alberta Environment and Protected Areas regulation(s). Water and sewage systems intended for use by workers onsite must be constructed as required under Alberta Occupational Health and Safety Code requirements. Ensure the properties and development are designed and maintained in accordance with the Alberta Public Health Act, Nuisance and General Sanitation Regulation which stipulates: “No person shall create, commit or maintain a nuisance. A person who creates, commits or maintains and condition that is or might become injurious or dangerous to the public health or that might hinder in any manner the prevention or suppression of disease is deemed to have created, committed or maintained a nuisance.” If there is any evidence of contamination, a public health nuisance, or other issues of public health concern identified onsite, AHS wishes to be notified.
Urban Systems, Planning:	<ul style="list-style-type: none"> According to the municipal Land Use Zoning Map provided on the Town website, Lot 20 does not appear to be zoned DC-2 district. According to the map, Lot 20 is located within the I-1 District (Light Industrial and Commercial District) (Figure 2). However, at the September 2, 2025, meeting, Town staff indicated that the Land Use Zoning Map might be incorrect, and Lot 20 might be located within the DC-2 district. Town staff confirmed that they will review internal documents to determine whether Lot 20 is or is not located within the DC-2 district. If the applicant choses to amend the DC-2, we suggest the proposed land use term to be added to the permitted list of uses within the DC-2 district be revised to Horticulture Nurseries and Greenhouse Operations as this is a defined term in the LUB. We also note that the LUB regulation 8.11.4 states that Medical Marihuana Production Facility cannot operate in conjunction

	<p>with another approved use. If the applicant is seeking to accommodate both the Medical Marihuana Production Facility and Horticulture Nurseries and Greenhouse Operations on the same legal parcel, this would not be supported from a LUB perspective.</p> <ul style="list-style-type: none"> • Through preliminary research into clause 8.11.4, it is our understanding that the decision to prohibit all other uses on the same site where the marihuana production facility is, is a municipal decision (and not regulated through federal or provincial legislation). There are a number of reasons why this clause may exist, including <ul style="list-style-type: none"> ○ Security concerns – the production facilities are required to meet strict enclosure, security and monitoring guidelines, mixing uses could compromise the ability to meet these standards ○ Impacts of the medical marihuana production facility, including noise and odor that may negatively impact other uses on site ○ Compatibility of uses—especially commercial or public-facing ones—might conflict with the industrial nature of cannabis production. Prohibiting other uses helps to mitigate against land use conflicts and simplifies enforcement
MPE Engineering:	<ul style="list-style-type: none"> • The applicant/developer is responsible to follow the recommendations of all relevant reports, standards, codes, and statutory document. • The proposed land use does not indicate any undue impact on existing Town infrastructure; however, details of service requirements, fire protection, transportation volume, character estimations, and site plan indicating a stormwater management strategy will be required upon development application. Constraints on existing service capacities may impact the timing and scale of the proposed development. • Any reconfiguration of the existing legal lots may cause existing service locations to be unsuitable to service proposed buildings. This may necessitate the abandonment of existing service connections for replacement with new connections to the existing service mains. The developer will be responsible to detail the connection details as well as the size, material and routing of the proposed services. • The proposed parking, noted as one space per 37.16 m², does not appear to conform to the required parking for horticultural nurseries and greenhouse operations at one space per 92.91 m².
Alberta Environment	<ul style="list-style-type: none"> • No comments received
Adjacent Landowners	<ul style="list-style-type: none"> • No comments received

**TOWN OF CROSSFIELD
BEING AN AMENDING BYLAW TO THE
DIRECT CONTROL DISTRICT (DC-2) BYLAW NO. 2018-05
BYLAW NO. 2025-13**

Being a bylaw of the Town of Crossfield to amend Bylaw No. 2018-05, being the Direct Control District Bylaw (DC-2).

WHEREAS the Municipal Government Act, RSA, 2000, c. M-26, authorizes a municipality to adopt and amend a land use bylaw to establish districts, land uses and standards for each district, and a system for issuing development permits;

AND WHEREAS pursuant to the *Municipal Government Act*, the Council of the Town of Crossfield deems it appropriate to amend Direct Control Bylaw No. 2018-05 as set out in Schedule "A", and

NOW THEREFORE The Municipal Council of the Town of Crossfield, in the Province of Alberta, duly assembled in accordance with the Municipal Government Act, R.S.A. 2000, c. M-26, and amendments thereto, enacts the amendments to the Direct Control (DC-2) Bylaw 2018-05 as follows:

1. To amend legal land descriptions and the map to reflect previous Land Use Bylaw amendments (Bylaws 2022-08) and subdivision to show the Direct Control District (DC-2) lands comprising of Lot 21, Block 1, Plan 2211881 and a portion of Lot 9PUL, Block 1, Plan 1113414.
2. To amend the regulations of the Direct Control District (DC-2) as described.
2. That this Bylaw shall come into effect upon the third and final reading.

Read a first time this __ day of _____, 2025

Mayor Kim Harris

Chief Administrative Officer
Kinza Barney

Public hearing held this __ day of _____ 2025

Read a second time this __ day of _____ 2025

Read a third and final time this __ day of _____ 2025

Mayor Kim Harris

Chief Administrative Officer
Kinza Barney

**BYLAW 2025-13
SCHEDULE 'A'**

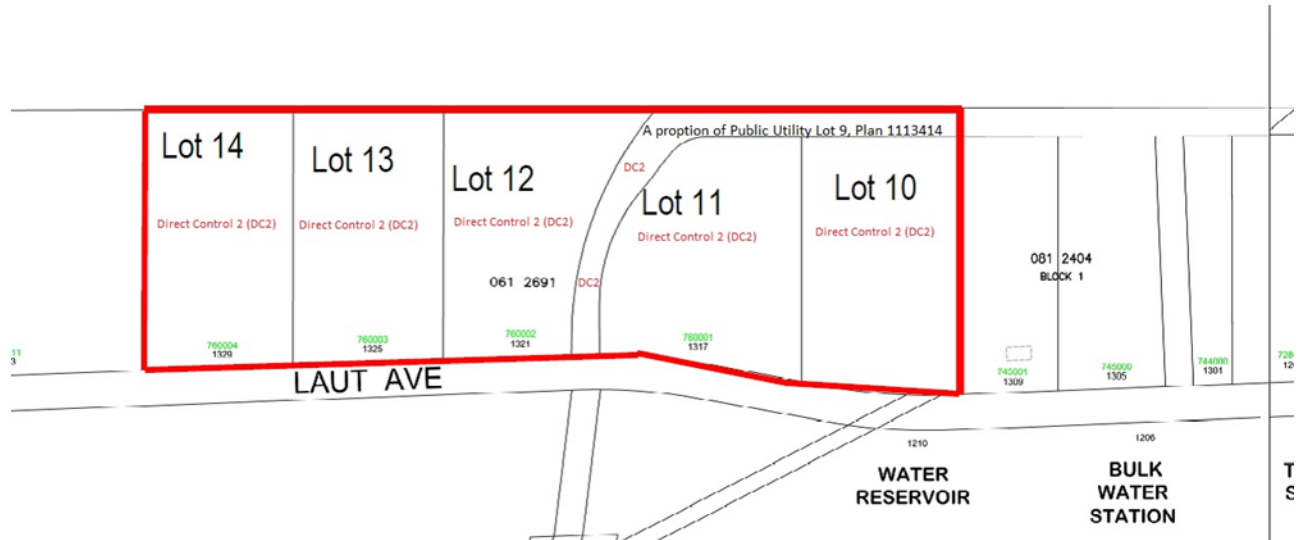
1. Amend Part 2(b) legal land description:

From: Lots 10, 11, 12, 13 and 14, Block 1, Plan 1113727; AND a portion of Public Utility Lot 9, Plan 1113414 as shown on the sketch below, is designated Direct Control 2 (DC-2)

To: Lot 21, Block 1, Plan 2211881 and a portion of Lot 9PUL, Block 1, Plan 1113414 as shown on the sketch below, is designated Direct Control 2 (DC-2)

2. Amend Part 2(b) map:

From:



To:



3. Amend Part 2(c) legal land description:

From: That the Land Use District Map being Schedule B of Land Use Bylaw No. 2011-05 be amended to change the designation of Lot 10, 11, 12, 13 and 14, Block 1, Plan 1113727 from Light From Light Industrial & Commercial District (I-1) TO Direct Control 2 (DC-2), and that a portion of PUL 9, Plan 1113414 as shown above be amended from Public Utility Lot to Direct Control 2 (DC2)

To: That the Land Use District Map being Schedule B of Land Use Bylaw No. 2011-05 be amended to change the designation of Lot 21, Block 1, Plan 2211881 from Light Industrial & Commercial District (I-1) TO Direct Control 2 (DC-2), and that a portion of PUL 9, Plan 1113414 as shown above be amended from Public Utility Lot to Direct Control 2 (DC2)

4. Amend footnote legal land description:

From: Bylaw 2018-05
LUB 2011-05 Textual Amendment
DC 2 – Lot 10 - 14 Block 1, Plan 1113727

To: Bylaw 2018-05
LUB 2011-05 Textual Amendment
DC 2 – Lot 21, Block 1, Plan 2211881

5. Amend legal land description in the Regulations title:

From: Direct Control District 2 (DC-2) – Lots 10, 11, 12, 13, 14, Block 1, Plan 1113727, Lot 14 Block 1, Plan 1113727 and Lots 20, 21 Block 1, Plan 2211881 and a portion of PUL 9, Plan 1113414

To: Direct Control District 2 (DC-2) – Lot 21, Block 1, Plan 2211881 and a portion of Lot 9PUL, Block 1, Plan 1113414

6. Amend the General Purpose of the Regulations:

From: To provide an area and development regulations specifically for the development and operations of medical marihuana production facility.

To: To provide an area and development regulations specifically for the development and operations of plant production, including produce, flowers, specialty plants, decorative plants, indoor plants, ornamental plants, herbs, vegetables, fruits, air-purifying plants, aquatic plants and medical marihuana production facility.

7. Amend Section 1.0 of the Regulations:

From:

1.1 Town Council shall be the Development Authority for the lands subject to this Bylaw, unless otherwise stated and shall be responsible for the consideration and approval of all Development Permit(s), unless otherwise stated.

To:

- 1.1 Town Council shall be the Development Authority for the Medical Marihuana Production Facility use and shall be responsible for the consideration and approval of any associated Development Permit(s), unless otherwise stated.
- 1.2 Town Administration shall be the Development Authority for uses listed in Section 2.1 other than Medical Marihuana Production Facility and shall be responsible for the consideration and approval of any associated Development Permit(s), unless otherwise stated.
- 1.3 Parts 1 to 9 inclusive, Subpart 13.1.8 (b) to (l), and Part 16 of the Land Use Bylaw 2018-14 shall apply unless otherwise specified in this Bylaw.

8. Amend Section 2.0 of the Regulations:

From: The following regulations apply to the development and operations of a Medical Marihuana Production Facility.

To: The following regulations apply to the development and operations of a Medical Marihuana Production Facility and Horticultural Nurseries and Greenhouse Operations.

9. Amend Section 2.0 of the Regulations:

From:

The following regulations apply to the development and operations of a Medical Marihuana Production Facility:

2.1 USES:

- Medical Marihuana Production Facility
- Custodial Quarters
- Accessory Buildings

2.2 All Medical Marijuana Production Facilities shall comply with all setback regulations as required by the following entities:

- a. Health Canada,
- b. other government agencies and
- c. Town of Crossfield Development Authority (Town Council).

To:

The following regulations apply to the development and operations of a Medical Marihuana Production Facility and Horticultural Nurseries and Greenhouse Operations:

2.1 USES

Medical Marihuana Production Facility
Horticultural Nurseries and Greenhouse Operations
On-site Residential Accommodations
Accessory Buildings

2.2 Medical Marihuana Production Facilities and Horticultural Nurseries and Greenhouse Operations are considered primary uses. Other uses listed in Section 2.1 are considered Ancillary.

2.3 All Medical Marihuana Production Facilities and Horticultural Nurseries and Greenhouse Operations shall comply with all setback regulations as required by the following entities:

- a. Health Canada
- b. Other government agencies and
- c. Town of Crossfield Development Authority (Town Council or Development Officer)

10. Amend Subsections 3.0 (b) to (d) of the Regulation:

From:

b) Minimum Side yard:

- (i) 3 m (9.84 ft.) from any property line shared or adjacent to an industrial district.
- (ii) 75.0 m (246 ft) from any property line shared or adjacent to any other district.

c) Minimum Rear Yard: 25 m (82 ft)

d) Maximum Height of Building: 48.0 m (157.5 ft)

To:

b) Minimum Side Yard:

- (i) 3 m (9.84 ft) from any property line shared or adjacent to an industrial district for all uses listed in Section 2.1.
- (ii) 75.0 m (246 ft) from any property line shared or adjacent to any non-industrial district for a Medical Marihuana Production Facility.
- (iii) 6.0 m (19.69 ft) from any property line shared or adjacent to any non-industrial district for other uses listed in Section 2.1.

c) Minimum Rear Yard:

- (i) 25 m (82.02 ft) for a Medical Marihuana Production Facility.
- (ii) 6 m (19.69 ft) for other uses listed in Section 2.1.

d) Maximum Height of Building: 20.0 m (65.62 ft)

11. Amend Subsections 4.2 to 4.4 of the Regulations:

From:

4.2 Grow Area: 1.0 spaces per 100 m² (1076 ft²)

4.3 Loading: 1.0 spaces per 1858 m² (20,000 ft²) with minimum one loading space required;

4.4 Plus must provide a minimum of 5 Barrier Free parking spaces.

To:

4.2 Grow and Operational Areas: Parking and loading requirements shall be determined through a parking study that reviews the parking and loading needs of similar developments, to the Development Authority's satisfaction. Parking and loading for the development shall not occur on the public roadway.

4.3 Plus must provide a minimum of 5 Barrier Free parking spaces.

4.4 Any building that could be adapted for uses other than the uses listed in Section 2.1 shall demonstrate that 1.0 parking space per 100 m² (1,076 ft²) and 1.0 loading space per 1,858 m² (20,000 ft²) can be accommodated on-site for future development.

12. Amend Subsections 7.2 and 7.3 of the Regulations:

From:

- 7.2 Be located outside of a 100 m radius (determined by proposed building foundation) from a property that has any of the following attributes:
- a. Location of an existing religious assembly use;
 - b. Location of any existing public schools;
 - c. Location of any existing child care facility;
 - d. Location of any community center;
 - e. Location of any existing park space.
- 7.3 Be the only primary use permitted on a parcel, with the allowance for ancillary uses on the parcel;

To:

- 7.2 In place of Subpart 8.11.7 of the Land Use Bylaw 2018-14, be located outside of a radius (determined by proposed building foundation) from properties with certain attributes as specified below:

100 m Radius

- a. Location of an existing religious assembly use;
- b. Location of any existing public schools;
- c. Location of any existing child care facility;
- d. Location of any community center;

70 m Radius

- e. Location of any existing park space.

- 7.3 Further to Subpart 8.11.4 of the Land Use Bylaw 2018-14, not operate in conjunction with another approved primary use within the same building, except for ancillary uses as identified in Section 2.2;

13. Amend numbering for Section 9.0 and Subsection 9.1 of the Regulations:

From: 9.0, 9.1

To: 8.0, 8.1

TOWN OF CROSSFIELD
A TEXTUAL AMENDMENT TO THE TOWN OF CROSSFIELD LAND USE
BYLAW 2011-05 WITH RESPECT TO DESIGNATION OF
DIRECT CONTROL DISTRICT (DC-2)
BY-LAW NO. 2018-05

Being a Bylaw of the Town of Crossfield in the Province of Alberta, for pursuant to provisions of the Municipal Government Act, being Chapter M-26 of the revised statutes of Alberta 2000 and amendments thereto,

WHEREAS the Municipal Government Act, revised statutes of Alberta 2000 and amendments thereto, permit a Council by bylaw to amend the Land Use Bylaw,

AND WHEREAS the Council of the Town of Crossfield deems it necessary and expedient to amend the Land Use Bylaw No. 2011-05.

AND WHEREAS, Notice of the intention of Council to pass a bylaw has been published in the Rocky View Weekly on April 9, 2018 and April 16, 2018 in accordance with section 606 of the Municipal Government Act, and

WHEREAS, a Public Hearing was held on Thursday April 19th, 2018 to allow the general public to provide input into the proposed bylaw amendments;

NOW THEREFORE The Municipal Council of the Town of Crossfield, in the Province of Alberta, duly assembled in accordance with the Municipal Government Act, R.S.A. 2000, c M-26, and amendments thereto, enacts the amendments to the Town of Crossfield Land Use Bylaw as follows:

1. This Bylaw may be cited as the Land Use Amending Bylaw 2018-05, to provide an area and development regulations specifically for the development of a Medical Marihuana Production Facility(ies).
2. Bylaw 2011-05, being the Town of Crossfield's Land Use Bylaw, is hereby amended
 - a. In Part One Section 1.7 Definitions by **ADDING** the following definitions:

"Medical Marihuana" means a substance used for medical purposes authorized by a license issued under the federal government's *Access to Cannabis for Medical Purposes Regulations* or any subsequent legislation which may be enacted in substitution. This excludes marihuana in any form that is non-medicinal.

"Medical Marihuana Production Facility (MMPF)" means any building in which an activity authorized by the access to *Cannabis for Medical Purposes Regulations* (SOR/2016-230) or any successor or replacement legislation or regulation, is or may be

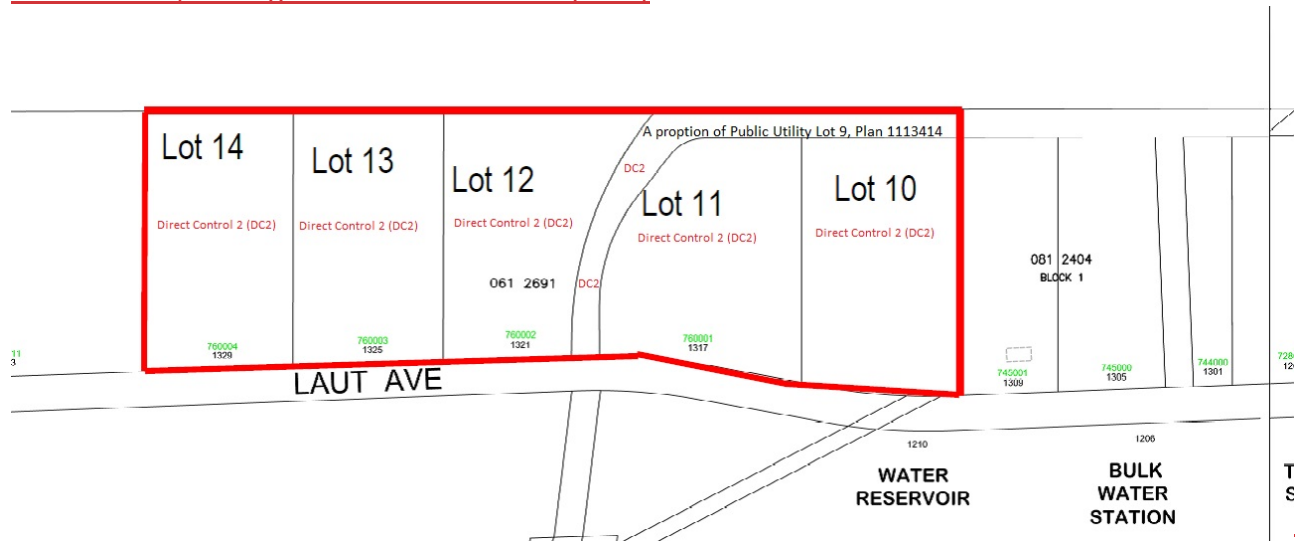
conducted including such activities as growing, processing, testing, destroying, storing, loading, labeling and packaging, sorting and transporting of marihuana. **This does not include the retail sales of marihuana in any form for medicinal or non-medicinal purposes.** This may include rooms for administrative functions of the use.

b. That Land Use Map be amended to include Direct Control District 2 (DC-2) as follows:

DIRECT CONTROL DISTRICT 2 (DC-2)

~~Lots 10, 11, 12, 13 and 14, Block 1, Plan 1113727; AND a portion of Public Utility Lot 9, Plan 1113414 as shown on the sketch below, is designated Direct Control 2 (DC-2)~~

Lot 21, Block 1, Plan 2211881 and a portion of Lot 9PUL, Block 1, Plan 1113414 as shown on the sketch below, is designated Direct Control 2 (DC-2)



~~c. That the Land Use District Map being Schedule B of Land Use Bylaw No. 2011-05 be amended to change the designation of Lot 10, 11, 12, 13 and 14, Block 1, Plan 1113727 from Light From Light Industrial & Commercial District (I-1) TO Direct Control 2 (DC-2),~~

~~and that a portion of PUL 9, Plan 1113414 as shown above be amended from Public Utility Lot to Direct Control 2 (DC2)~~

c. That the Land Use District Map being Schedule B of Land Use Bylaw No. 2011-05 be amended to change the designation of Lot 21, Block 1, Plan 2211881 from Light Industrial & Commercial District (I-1) TO Direct Control 2 (DC-2), and that a portion of PUL 9, Plan 1113414 as shown above be amended from Public Utility Lot to Direct Control 2 (DC2)

3. That this Bylaw shall come into effect upon the third and final reading.

Given first reading this 3rd day of April 2018.

Mayor Jo Tennant

Chief Administrative Officer Ken Bosman

Given second reading this 15th day of May, 2018.

Mayor Jo Tennant

Chief Administrative Officer Ken Bosman

Given third reading and passed this 15th day of May, 2018.

Mayor Jo Tennant

Chief Administrative Officer Ken Bosman

~~Direct Control District 2 (DC-2) – Lots 10, 11, 12, 13, 14, Block 1, Plan 1113727,
and a portion of PUL 9, Plan 1113414~~

Direct Control District 2 (DC-2) – Lot 21, Block 1, Plan 2211881 and a portion of Lot 9PUL,
Block 1, Plan 1113414

General Purposes: ~~To provide an area and development regulations specifically for the
development and operations of a medical marihuana production
facility.~~

To provide an area and development regulations specifically for the
development and operations of plant production, including produce,
flowers, specialty plants, decorative plants, indoor plants,
ornamental plants, herbs, vegetables, fruits, air-purifying plants,
aquatic plants and medical marihuana production facility.

1.0 GENERAL REGULATIONS

~~1.1 Town Council shall be the Development Authority for the lands subject to this Bylaw,
unless otherwise stated and shall be responsible for the consideration and approval of
all Development Permit(s), unless otherwise stated.~~

1.1 Town Council shall be the Development Authority for the Medical Marihuana
Production Facility use and shall be responsible for the consideration and approval of
any associated Development Permit(s), unless otherwise stated.

1.2 Town Administration shall be the Development Authority for uses listed in Section 2.1
other than Medical Marihuana Production Facility and shall be responsible for the
consideration and approval of any associated Development Permit(s), unless otherwise
stated.

1.3 Parts 1 to 9 inclusive, Subpart 13.1.8 (b) to (l), and Part 16 of the Land Use Bylaw 2018-
14 shall apply unless otherwise specified in this Bylaw.

2.0 LAND USE REGULATIONS:

~~The following regulations apply to the development and operations of a Medical Marihuana
Production Facility:~~

~~2.1 USES:~~

- ~~— Medical Marihuana Production Facility~~
- ~~— Custodial Quarters~~
- ~~— Accessory Buildings~~

~~2.2 — All Medical Marijuana Production Facilities shall comply with all setback regulations as required by the following entities:~~

- ~~a. Health Canada,~~
- ~~b. other government agencies and~~
- ~~c. Town of Crossfield Development Authority (Town Council).~~

The following regulations apply to the development and operations of a Medical Marihuana Production Facility and Horticultural Nurseries and Greenhouse Operations:

2.1 USES

Medical Marihuana Production Facility
Horticultural Nurseries and Greenhouse Operations
On-site Residential Accommodations
Accessory Buildings

2.2 Medical Marihuana Production Facilities and Horticultural Nurseries and Greenhouse Operations are considered primary uses. Other uses listed in Section 2.1 are considered Ancillary.

2.3 All Medical Marihuana Production Facilities and Horticultural Nurseries and Greenhouse Operations shall comply with all setback regulations as required by the following entities:

- a. Health Canada
- b. Other government agencies and
- c. Town of Crossfield Development Authority (Town Council or Development Officer)

3.0 SETBACKS:

a) Minimum Front Yard: 3.0 m (9.84 ft.)

b) Minimum Side Yard:

- (i) 3 m (9.84 ft) from any property line shared or adjacent to an industrial district for all uses listed in Section 2.1.
- (ii) 75.0 m (246 ft) from any property line shared or adjacent to any non-industrial district for a Medical Marihuana Production Facility.
- (iii) 6.0 m (19.69 ft) from any property line shared or adjacent to any non-industrial district for other uses listed in Section 2.1.

c) Minimum Rear Yard:

- (i) 25 m (82.02 ft) for a Medical Marihuana Production Facility.
- (ii) 6 m (19.69 ft) for other uses listed in Section 2.1.

d) Maximum Height of Building: 20.0 m (65.62 ft)

~~b) Minimum Side Yard: —~~

- ~~(i) 3 m (9.84 ft.) from any property line shared or adjacent to an industrial district~~
- ~~(ii) 75.0 m (246 ft.) from any property line shared or adjacent to any other district~~

~~c) Minimum Rear Yard: — 25 m (82 ft)~~

~~d) Maximum Height of Building: — 48.0 m (157.5 ft.) —~~

e) Maximum Parcel Coverage: 80%

f) Accessory Buildings:

- (i) All accessory buildings shall be located at least 1.52 m (5.0 ft.) from any principal building.
- (ii) Cannot exceed the height of 24.0m (78.7 ft.)

4.0 PARKING:

4.1 Office Area: 1.0 spaces per 37.16m² (400 ft²);

~~4.2 Grow Area: 1.0 space per 100 m² (1,076 ft²);~~

~~4.3 Loading: 1.0 space per 1,858 m² (20,000 ft²) with minimum one loading space required;~~

~~4.4 Plus must provide a minimum of 5 Barrier Free parking spaces.~~

4.2 Grow and Operational Areas: In place of Subpart 8.11.9 of the Land Use Bylaw 2018-14, parking and loading requirements shall be determined through a parking study that reviews the parking and loading needs of similar developments, to the Development Authority's satisfaction. Parking and loading for the development shall not occur on the public roadway.

4.3 Plus must provide a minimum of 5 Barrier Free parking spaces.

4.4 Any building that could be adapted for uses other than the uses listed in Section 2.1 shall demonstrate that 1.0 parking space per 100 m² (1,076 ft²) and 1.0 loading space per 1,858 m² (20,000 ft²) can be accommodated on-site for future development.

5.0 LANDSCAPING:

- 5.1 All areas between any buildings and the property line shared with any non-industrial or Direct Control district shall be landscaped to the satisfaction of the development authority
- 5.2 Minimum number of trees on a lot shall be 1 per 46.45m² (500 ft²) of landscaped area provided;
- 5.3 Minimum number of shrubs required on a lot shall be 1 per 46.45 m² (500.00 ft²).

6.0 FENCING:

- 6.1 The Maximum fence height shall be 2 m (6.5 ft.)
- 6.2 The style, materials, and optical transmission properties of the fencing shall be to the satisfaction of the Development Authority

7.0 MEDICAL MARIHUANA PRODUCTION FACILITIES SHALL:

- 7.1 Be contained in a fully enclosed stand-alone building, excepting loading stalls and docks which may, at the discretion of the Development Authority, be a detached on ancillary structures of an annex.

~~7.2 Be located outside of a 100 m radius (determined by proposed building foundation) from a property that has any of the following attributes:~~

- ~~a. Location of an existing religious assembly use;~~
- ~~b. Location of any existing public schools;~~
- ~~c. Location of any existing child care facility;~~
- ~~d. Location of any community center;~~
- ~~e. Location of any existing park space.~~

~~7.3 Be the only primary use permitted on a parcel, with the allowance for ancillary uses on the parcel;~~

7.2 In place of Subpart 8.11.7 of the Land Use Bylaw 2018-14, be located outside of a radius (determined by proposed building foundation) from properties with certain attributes as specified below:

100 m Radius

- a. Location of an existing religious assembly use;
- b. Location of any existing public schools;
- c. Location of any existing child care facility;
- d. Location of any community center;

70 m Radius

- e. Location of any existing park space.

7.3 Further to Subpart 8.11.4 of the Land Use Bylaw 2018-14, not operate in conjunction with another approved primary use within the same building, except for ancillary uses as identified in Section 2.2;

- 7.4 Not have any outdoor area for garbage or waste materials, storage of goods, materials, and supplies;
- 7.5 Provide equipment used to remove odors and by-products from discharged air;
- 7.6 Not create dangerous conditions or nuisances beyond the building that contains it.

98.0 SPECIAL CONSIDERATIONS

- 98.1** Consolidation of parcels noted within this bylaw will give the Development Authority (Council) the ability to modify and determine the appropriate setbacks while considering Health Authority and other government agency requirements.

2025-760200-R – DC-2 Bylaw Amendment - Policy Review

Definitions		
Compliant	Generally Compliant	Not Compliant
Clearly meets the relevant requirements and intent of the policy.	Meets the overall intent of the policy but there may be minor areas of misalignment with policy that are not critical to the implementation of an appropriate development.	Clear misalignment with the relevant policy that may create planning, technical or other challenges.

Compliance	Policy Number	Policy	Comments
Municipal Development Plan (MDP)			
N/A	Figure 4	Policy Area Map	The proposed redesignation falls under the Employment Centre Policy Area.
Compliant	4.8.13 (Employment Centre Policy Area)	The primary uses developed should be comprised of light-industrial to heavy industrial, with secondary uses including commercial-retail, commercial-office, and parks and open spaces.	Uses similar to supported uses under the Town’s industrial district are proposed for the portion of subject land within the Employment Centre Policy Area.
Compliant	6.1.1 Strategic Direction	Enhance business retention, attraction, and expansion efforts to maximize the availability of local jobs.	The DC-2 amendment will allow the new owner to start operations on lands that have sat vacant for several years.

Land Use Bylaw (LUB)			
Section 8.11 Medical Marihuana Production Facility			
N/A	8.11.1	The applicant must provide, as a condition of development permit approval, a copy of the current license for all activities associated with medical marihuana production as issued by Health Canada.	This will be addressed at development permit stage should the owner choose to pursue medical marihuana production use.
N/A	8.11.2	The applicant must obtain any other approval, permit, authorization consent or license that may be required to ensure compliance with applicable federal, provincial or other municipal legislation.	This will be addressed at the development permit stage and is required should the owner choose to pursue medical marihuana production use.
N/A	8.11.3	The development must be done in a manner where all of the processes and functions are fully enclosed within a stand-alone building including all loading stalls and docks, and garbage containers and waste material.	The current facility is constructed as a stand-alone facility should the owner choose to pursue medical marihuana production use.
Compliant	8.11.4	The development shall not operate in conjunction with another approved use.	Section 7.3 of the proposed DC-2 Bylaw amendments requires that medical marihuana production facilities not operate within the same building as other uses.
N/A	8.11.5	The development shall not include an outdoor area for storage of goods, materials or supplies.	This will be addressed at development permit stage should the owner choose to

			pursue medical marihuana production use.
N/A	8.11.6	The development must include equipment designed and intended to remove odours from the air where it is discharged from the building as part of a ventilation system.	The current building is built with these systems to support medical marihuana production. Additions or new buildings will be assessed at the development permit stage.
Compliant	8.11.7	The development must not be within 74.98 m (246.00 ft.) of a residential or a public institutional district, measured from the building foundation containing the use to the nearest property line of a parcel designated as a residential or a public institutional district.	Section 7.2 of the proposed DC-2 Bylaw amendment prescribes the setback distances as the current facility does not conform to this policy.
N/A	8.11.8	The Development Authority may require, as a condition of a development permit, a Public Utility and Waste Management Plan, completed by a qualified professional, that includes detail on: a) The incineration of waste products and airborne emissions, including smell; b) The quantity and characteristics of liquid and waste material discharged by the facility; c) The method and location of collection and disposal of liquid and waste material.	This will be addressed at development permit stage should the owner choose to pursue medical marihuana production use.
Compliant	8.11.9	The minimum number of vehicle parking stalls shall be based on the parking requirements of a manufacturing plant as noted in Part 10, Parking and Loading Regulations.	Section 4.0 of the proposed DC-2 Bylaw amendment prescribes the setback distances as the current facility does not conform to this policy.

Report to Council



Meeting Date: 2025-10-07
Meeting Type: Council Meeting
Prepared By: Russ Nash, Director of Community & Protective Services
Presented By: Russ Nash, Director of Community & Protective Services
Subject: Community Risk Assessment
Department: Fire

REPORT PURPOSE:

The purpose of this report is to present the completed Community Risk Assessment to Council as information.

RECOMMENDATION:

THAT Council accept the Community Risk Assessment for information, as presented.

PREVIOUS COUNCIL DIRECTION:

This assessment was approved by Council in the 2025 capital budget.

BACKGROUND:

In the 2025 capital budget, Council approved a 2-phase project over a 2-year period (2025 and 2026) for the Fire Department to develop a Fire Services Master Plan.

Through an open Request for Proposal (RFP) process completed in April 2025, BEHR Integrated Solutions was engaged to complete this valuable planning project for the Town of Crossfield's Fire Department.

The first phase of this project was a Community Risk Assessment (CRA) to be completed in 2025. This assessment identifies, evaluates and prioritizes potential risks and hazards within the Town as they relate to fire protection and public safety.

This CRA will provide a foundational element on which the Fire Services Master Plan will be developed in 2026. In addition, it will be used for municipal emergency management planning to help minimize the potential for, and impact of future emergencies.

In attendance is Isaac Comandante with BEHR Integrated Solutions to present the Community Risk Assessment to Council.

ANALYSIS:

Strategic Alignment

- Sustainable Community Growth
- Town Infrastructure
- Parks, Recreation & Beautification
- Social Development & Emergency Services
- Communications & Public Relations

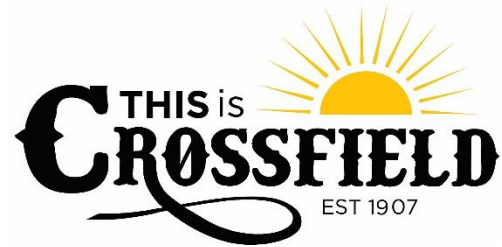
FINANCIAL IMPLICATIONS:

Funding for this project was approved in the 2025 capital budget.

ATTACHMENTS:

Community Risk Assessment Presentation – BEHR Integrated Solutions

Town of Crossfield Community Risk Assessment – Final Report (September 16, 2025)



Community Risk Assessment



October 7, 2025



Tim Beckett

Nancy Macdonald-Duncan

Isaac Comandante

1. To develop a Community Risk Assessment for Crossfield 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 Crossfield.
3. The CRA will be used to inform the development of the Fire Services Master Plan

The Community Risk Assessment will identify the fire safety risks to inform the development of goals and objectives for the delivery of fire protection and emergency response.

Optimizing the methodology of the three lines of defense will allow the Town of Crossfield and the Crossfield Fire Department to provide a comprehensive fire protection program.

- Public Education
- Fire Prevention and Code Enforcement
- Emergency Response

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

- 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 in 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.

Identified risks are factors which may highlight a need for future consideration. The CRA identified twenty-three (23) risks within the town ranging from low to high risk.

Key findings may be noted as strengths in the community's current response model and/or trends to be monitored. Twenty-five (25) key findings were noted in the CRA.

Risk Summary



Geographic

- The road network is a contributor to emergency call volume due to motor vehicle collisions and vehicle fires.
- Crossfield Fire Department (CFD) provides emergency response services on provincial highways for the provincial highway moderator (Alberta Transportation). Additionally, CFD is contracted by Rocky View County to respond to incidents on county roads, including those within the town of Crossfield.
- There is an elevated risk of major spills and dangerous goods incident along Hwy 2/2A

Geographic, cont.

- During peak commuting times, the highest risk of motor vehicle collisions is likely to occur.
- CPKC rail lines operate a track that runs north south and parallel with Hwy 2A, that presents a risk related primarily to the movement of dangerous goods
- At-grade level rail crossings have the potential to create a physical barrier to connectivity to the roadway network, causing delays in response time.
- There is a considerable risk of wildland fires in areas of urban interface.

Building Stock

- Residential buildings account for the majority of building stock in Crossfield, and are the most common building involved in structural fires and attribute to the most fatalities and injuries provincially
- 40.22% of Crossfield's private dwelling occupancies were built prior to 1990, preceding the adoption of the National Building Code (Alberta).

Building Stock, cont.

- New homes being built with lightweight construction
- Several properties within Crossfield identified having a potentially high fuel load
- Two (2) registered vulnerable occupancies

Critical Infrastructure

The Mountain View Regional Water Services Commission (MVRWSC) provides water services to residents of Crossfield. Crossfield makes sure that the reservoirs are topped up so they can maintain residential water usage and firefighting water needs.

Demographic

- The population of Crossfield has steadily increased with continued anticipated growth
- Of Crossfield's population, 13.47% fall into the age range of 55 to 64, representing a potential future increase as this cohort will age towards 65+..
- Crossfield has a percentage of newcomers/immigrants of 7.4%

Economic

The risk of a single fire or emergency event having a significant impact on the community is moderate risk.

Past Lost and Event History

- Currently information regarding working smoke alarms is not being captured by CFD
- Emergency calls responded to by CFD have steadily increased until 2024
- There was a notable decrease in fire calls in 2024 which is directly related to the Level of Service change made by council to remove Alpha, Bravo and minor Charlie medical responses.

THANK YOU

For more information contact:

Behr Integrated Solutions

Phone: 403-999-9211

www.behrintegrated.com



Town of Crossfield COMMUNITY RISK ASSESSMENT

Final Report
September 16, 2025



Prepared for:



Prepared by:

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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 Crossfield to address the strengths, threats and vulnerabilities that are unique to Crossfield, to protect lives, the environment and property.

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ACRONYMS

Acronym	Definition
CEMP	Community Emergency Management Program
CFD	Crossfield Fire Department
CPKC	Canadian Pacific Kansas City
CPR	Canadian Pacific Railway
CRA	Community Risk Assessment
FSMP	Fire Service Master Plan
HIRA	Hazard Identification and Risk Assessment
MVC	Motor Vehicle Collision
NBC	National Building Code
NFC	National Fire Code
NFPA	National Fire Protection Association
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, 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 Crossfield’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	The majority of roads in the Town of Crossfield are paved although roads leading to residential properties are largely graveled in rural areas. Although roads are well maintained, gravel roads may slow response times and present challenges for apparatus during a response, including the threat of damage or accidents. Maintenance of gravel roads in winter months can also be challenging and slow response times and increase risks.	Moderate	<ul style="list-style-type: none"> • 42.25 km. of roads of which the majority are paved • Gravel roads consist of Range Road 12, portion of Western Drive/township road 284 and west boundary to just east of the golf course, Laut Crescent • Area experiences annual winter weather including ice and snow • Potential risk to life safety • Possible minor property loss
2	Geographic	The road network is a contributor to emergency call volume due to motor vehicle collisions and vehicle fires.	Moderate	<ul style="list-style-type: none"> • CFD responded to 429 motor-vehicle related incidents between 2020 and 2024. This represents (17.05%) of all calls. Crossfield Fire Department (CFD) provides emergency response services on provincial highways for the provincial highway moderator (Alberta Transportation). Additionally, CFD contracted by Rocky View county to respond to incidents on county roads including those within the Town of Crossfield.

No.	Profile	Identified Risk	Risk Level	Rationale
3	Geographic	There is an elevated risk of major spills and dangerous goods incident along Hwy 2/2A which serves as the primary route, north/south through Crossfield	Moderate	<ul style="list-style-type: none"> No major releases reported in Crossfield, however, dangerous goods releases on highways occur annually. Report (2018) from Statistics Canada indicates there were 464 incidents involving dangerous goods in Canada, 48.5% of which occurred in Alberta. Over half of all dangerous goods release incidents occurred on roadways. Threat to life safety, moderate property, and environmental damages
4	Geographic	The transportation of agricultural chemicals along roadways may pose the risk of an environmental spill.	Low	<ul style="list-style-type: none"> No major releases reported in the Town, however, provincially, dangerous goods releases on highways occur annually Report (2018) from Statistics Canada indicates there were 464 incidents involving dangerous goods in Canada, 48.5% of which occurred in Alberta¹ Over half of all dangerous goods release incidents occurred on roadways. Over half of all dangerous goods release incidents occurred on roadways Minor to moderate property, and environmental damage
5	Geographic	During peak commuting times, the highest risk of motor vehicle collisions is likely to occur.	Moderate	<ul style="list-style-type: none"> MVCs occur annually throughout the Town From January 1, 2020, to December 31, 2024, there were 429 motor vehicle collisions Potential threat to life safety Minor property loss

¹ As retrieved from *Dangerous goods incidents in Canada, 2018 (statcan.gc.ca)*

No.	Profile	Identified Risk	Risk Level	Rationale
6	Geographic	<p>CPKC rail lines operate a track that runs north south and parallel with Hwy 2A, that presents a risk related primarily to the movement of dangerous goods.</p> <p>At-grade level rail crossings have the potential to create a physical barrier to connectivity to the roadway network, causing delays in response time.</p>	High	<ul style="list-style-type: none"> • There is a major railway line that runs parallel with Hwy. 2A and has one uncontrolled at-grade crossing and two at-grade controlled crossings with the local road networks. • Delays in response time could have impact on response outcomes
7	Geographic	Uncontrolled at-grade rail crossings pose an increased threat of a motor vehicle collision	Moderate	<ul style="list-style-type: none"> • There have been nine reportable (to transport Canada) crossing collisions in Canada since 2018 • Five reports of train and vehicle collisions in 2023 • Two fatal collisions in Alberta in 2021 • Threat to life safety
8	Geographic	There is a high degree of risk to the public and the environment associated with train derailment; with or without the release of dangerous goods	Low	<ul style="list-style-type: none"> • Crossfield has had no incidents related to train derailments. • In comparison to the number of trains travelling across the province, there is a reduced probability of a train derailment in Crossfield.
9	Geographic	There is a considerable risk of wildland fires in areas of urban interface. The landscape surrounding the town is primarily agricultural, and increasing development in natural areas increases the threat of wildfire impinging on the town.	High	<ul style="list-style-type: none"> • No major losses to date. • Resources may be unavailable to assist during busy seasons. • From January 1, 2020, and December 31, 2024, CFD responded to grass fires.

No.	Profile	Identified Risk	Risk Level	Rationale
10	Building Stock	<p>As with most jurisdictions, residential buildings account for the majority of building stock in Crossfield, and are the most common building involved in structural fires and attribute to the most fatalities and injuries</p> <p>To meet the projected housing demands associated with the population growth in the town, increased fire-risk potential will also increase in those areas.</p>	High	<ul style="list-style-type: none"> Residential fires occur annually in Crossfield. Crossfield is growing at an annual rate of 4 to 5% totaling a 23.16% five-year growth rate. Exposure fires are common in residential areas, While Crossfield has not yet experienced any exposure fires, the risk is expected to increase as urban infill and higher residential densities continue to accommodate a growing population. Potential for large loss of life and significant property damage including businesses in medium density areas
11	Building Stock	<p>Data provided by the 2021 census indicates that 40.22% of Crossfield’s private dwelling occupancies were built prior to 1990, preceding the adoption of the National Building Code (Alberta). This represents a significant fire risk within the community.</p>	High	<ul style="list-style-type: none"> 40.22% of Crossfield’s private dwelling building stock was built prior to 1990. No data on number of fires as related to building age however residential fires account for most fires in Crossfield and assumption can be made that at least one fire has occurred in these identified buildings. The increase in both housing and commercial properties will increase service demand levels Potential for loss of life Potential for moderate property damage and loss of business In Alberta, there were 1724 incidents where a smoke alarm was present but in 1062 of those incidents, the smoke alarm did not operate.

No.	Profile	Identified Risk	Risk Level	Rationale
12	Building Stock	The number of new homes being built with lightweight construction poses a risk to firefighter safety and can hinder the ability for occupants to safely evacuate in a timely fashion.	Moderate	<ul style="list-style-type: none"> No data on the number of homes being built with lightweight construction but this is recognized to be on the increase since implementation in the current building code. Potential for loss of life Increased property loss with a high-density residential fire.
13	Building Stock	There are several properties within Crossfield that have a potentially high fuel load and therefore an increased high fire risk. Agricultural, manufacturing and storage operations contribute to this risk.	Moderate	<ul style="list-style-type: none"> Between January 1, 2013, and December 31, 2022, CFD responded to 44 structure fires which included responses to industrial occupancies. A large industrial fire could result in large losses Potential for large loss of life
14	Building Stock	Crossfield currently has two (2) registered vulnerable occupancies	Moderate	<ul style="list-style-type: none"> No reported fire in a care facility between 2018 and 2022. Increased risk due to mobility and communication challenges. There is a potential for high loss of life if a fire were to occur in one of these occupancies.
15	Critical Infrastructure Profile	The Mountain View Regional Water Services commission (MVRWSC) provides water services to residents of Crossfield. Crossfield makes sure that the reservoirs are topped up so they can maintain residential water usage and firefighting water needs. The fire service must be reliant on alternate water sources and have a water servicing strategy in place.	Moderate to High	<ul style="list-style-type: none"> Water shortages can occur during summer months and elevated temperatures MVRWSC closely monitors the levels, but should they become critically low, MVRWSC will notify their partners for implementing water restrictions. Increased development within Crossfield will increase strain on water resources Water shortage threatens firefighting operations and could have significant consequences for property and life

No.	Profile	Identified Risk	Risk Level	Rationale
16	Demographic Profile	The population of Crossfield has steadily increased with continued anticipated growth. Rapid changes in population and development can contribute to increased risk and potential increase in call volume and service level demands.	Moderate	<ul style="list-style-type: none"> • Crossfield anticipated considerable population growth within the next ten years • Any growth and new development could change service level demands • Threat to life safety and potential for moderate loss
17	Demographic Profile	Crossfield has 13.3% of the population aged 65+ compared to 14.76% for Alberta. Seniors are considered to represent one of the highest fire risk groups across the province based on residential fire death rate.	Low	<ul style="list-style-type: none"> • The majority of seniors reside in developed areas within Crossfield • Historically across the province this group represents the highest fire fatalities • Seniors are more likely to live in high density housing • Threat to life safety and potential for moderate loss.
18	Demographic Profile	Of Crossfield’s population, 13.47% fall into the age range of 55 to 64, representing a potential future increase as this cohort will age towards 65+. Based on historic residential fire fatality data, this population will become great fire fatality risk.	Moderate	<ul style="list-style-type: none"> • Town’s population will increasingly age • Historically across the province this group represents the highest fire fatality • With increasing number of seniors, the threat of an injury or fatality due to fire increases • Seniors more likely to live in high density housing • Threat to life safety and potential for moderate loss

No.	Profile	Identified Risk	Risk Level	Rationale
19	Demographic Profile	Crossfield has lower proportion of newcomers/immigrants (7.4%) when compared to Alberta (23.24%)	Moderate	<ul style="list-style-type: none"> • Crossfield has a lower proportion of newcomers/immigrants (7.4%) when compared to Alberta (23.24%) • Communication barriers, in terms of language and the ability to read written material, may have an impact on the success of these programs • A high proportion of immigrants could demonstrate a large population that has a potential for unfamiliarity with local fire life safety practices and/or may experience possible language barriers
20	Demographic Profile	Nearly (6.3%) of the population commutes to a different census division within the province. This is (2.12%) more than that of the provincial commuters (4.18%)	Moderate	<ul style="list-style-type: none"> • (6.3%) of the population commutes to a different census division) • (67.6%) of the labour force begins their commute between the hours of 6 and 9 a.m., and therefore the risk of motor vehicle collision (MVC) calls is likely to be greatest during this time

No.	Profile	Identified Risk	Risk Level	Rationale
21	Economic Profile	The risk of a single fire or emergency event having a significant impact on the community is moderate risk.	Moderate	<ul style="list-style-type: none"> • Downturns in agriculture have happened • Significant threat to businesses, local economy, employment • Processing and other activities that involve various ignition sources often occur in manufacturing occupancies. Manufacturing facilities constitute a special fire hazard due to elevated levels of combustible, flammable or explosive content and the possible presence of oxidizing chemicals and gases. • With the increased use and storage of devices which utilize lithium-ion batteries, there is an increased risk that a fire involving these batteries could exhaust the water and human resources of CFD. • A single train derailment and major traffic disruptions may have a significant impact on the Town’s economic stability. • A disruption in the agriculture or oil and gas industry may not have large implications on the economic wellbeing of the region itself, however, disruptions could result in secondary issues often associated with the loss of an economy such as homelessness, addiction, mental health, and medical emergencies. As previously discussed, the economic wellbeing of a community also has a correlated effect on fire
22	Past Loss and Event History	Currently information regarding working smoke alarms is not being captured by CFD	Moderate	<ul style="list-style-type: none"> • This type of data assists in recognizing whether the community is aware of the importance of smoke alarms, are actively checking smoke alarms to ensure they are working and replacing non-working smoke alarms. • Data can assist with public education programming to address issues identified with respect to compliance.

No.	Profile	Identified Risk	Risk Level	Rationale
23	Past Loss and Event History	Over the period from January 1 st , 2020, to December 31 st , 2024, the volume of emergency calls responded to by CFD has steadily increased until 2024 where there was a noticeable decrease.	Moderate	<ul style="list-style-type: none"> • The call volume has steadily increased • Anticipated growth in the community will lead to an increase in call volume • If service levels do not keep pace with development, there is an increased risk to property losses and life safety • The decrease in fire calls in 2024 is directly related to the Level of Service change made by council to remove Alpha, Bravo and minor Charlie medical responses as the reason.

Table 3 Summary of Key Findings

No.	Key Finding
Geographic Profile	
1	The Town currently does not have a Transportation Master Plan which would be an invaluable tool in aiding community risk assessments to maintain an awareness of road conditions throughout the Town and how they may impact response times and service levels.
2	With Highway 2A being a direct route from Crossfield to Calgary, there is an elevated risk of a dangerous goods release that could impact the public and environment.
4	There are risks associated with the potential for interactions between rail traffic and vehicular traffic or pedestrian traffic within Crossfield.
5	Grade level rail crossings could create a physical barrier to the connectivity of Crossfield’s road network that can potentially result in delays in emergency response times
Building Stock Profile	
6	The Town’s fire services should be aware of the presence of lightweight construction and informed of the dangers. This should be built into the fire service pre-planning program. The Town of Crossfield has an aging housing stock (pre-1990 build) that is outside 2008 Safety Code Standards for fire alarms, basement windows and electrical wiring.
7	Crossfield is expected to see a five-year population growth of 23.16%
8	There are one designated heritage building within Crossfield.
9	With the anticipated population growth of Crossfield, there will be increasing demands in both residential and commercial growth. A high-density housing and infill construction increases the Town’s fire risk.
10	In addition to registered vulnerable occupancies Crossfield there are two schools.

No.	Key Finding
	Critical Infrastructure
11	The most pertinent risk arising from utilities relates to fallen power lines. These types of calls are recorded as public hazard calls. Between 2020 and December 31, 2024, CFD responded to 50 public hazard calls.
	Demographic Profile
12	The 2021 Census data indicates that children aged 14 and under represent 15.6% of Crossfield’s total population. This represents an important demographic for the purposes of public education. There is value in targeting public education and prevention programs to this demographic
13	The population of adults over the age of 65 in Crossfield represents 13.3% of the total population. There is 13.47% of adults between the 55 and 64 age group. There is value in targeting public education and prevention to this demographic.
14	In Crossfield, 95.7% of the population knows only English, while only a small percentage (4.2%) are proficient in both English and French.
15	The majority of the Indigenous population reported as single Indigenous identify as either First Nations, Metis, or Inuk (Inuit). Of the Indigenous population in Crossfield, 3.6% were Metis and 1.9% were First Nations. These populations should be monitored as new Census data becomes available for consideration when planning public education programs and materials.
16	The low proportion of immigrants in the area, and statistics regarding spoken languages, suggest that there are no concerns with cultural and language barriers in understanding fire safety messages, warnings, practices, etc.
17	The Town’s commuter population presents a factor that may impact on traffic congestion, and the potential occurrence of motor vehicle accidents with the Town on major routes.
18	Crossfield has lower proportion of newcomers/immigrants (7.4%) when compared to Alberta (23.24%)

No.	Key Finding
Hazard Profile	
19	<p>Crossfield’s 2021 Hazard Identification and Risk Assessment (HIRA) identifies the top hazards as listed below that could impact the ability of CFD to deliver fire protection services:</p> <ul style="list-style-type: none"> • Blizzards • Tornado • Wind • Chemical, Biological, Radiological, Nuclear Event • Drought
Economic Profile	
20	<p>Crossfield has identified top employers that contribute to the economic vitality of the community. The majority of these are industrial type manufacturing plants. If a fire were to occur at one of these facilities it could have a negative impact on the financial well-being the community. Consideration should be given to proactive industrial fire safety programming.</p>
Past Loss & Event History Profile	
21	<p>Between January 1, 2020, and December 31, 2023, the number of fires within Crossfield remained consistent year over year with a slight increase yearly until 2024 were there was a notable decrease. The decrease in fire call responses is directly related to the level of service change made by Council to remove Alpha, Bravo and minor Charlie medical responses.</p>
22	<p>Over the period from 2013 to 2022, the highest number of fires were exposure fires.</p>
23	<p>Over the five-year period from January 1, 2020, and December 31, 2024, (17.05% of the total emergency calls that CFD responded to were motor vehicle incidents.</p>
24	<p>The peak call time in Crossfield with respect to structure fires is between the hours of 10 a.m. and 1 p.m., however, records indicate that fires have occurred during the off-hours and in particular 2 a.m. appears to have a consistent number of structure fires occurring.</p>
25	<p>Fire Loss and injury/death data when compared to the provincial averages, would suggest that Crossfield may experiences a lower rate of injuries associated with fire, however, further analysis using statistics from a comparable municipality to that of Crossfield would provide more conclusive results.</p>

SECTION 1 INTRODUCTION

1.1 Background

This Community Risk Assessment (CRA) has been developed for the Town of Crossfield (Crossfield) as a foundational document to inform the Fire Service Master Plan (FSMP) being developed and any other future programs and standards being developed for Crossfield, 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 Crossfield 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 Crossfield.

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 Crossfield, Crossfield 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
<ul style="list-style-type: none"> Road network Bridges Railways Airport Natural features and landforms Wildland Urban Interface 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Food and water Oil and natural gas Electricity Telecommunications Public safety and security Continuity of government Transportation Health Financial institutions 	<ul style="list-style-type: none"> Population and dispersion Age Gender Socioeconomic circumstances Ethnic and cultural considerations Transient populations 	<ul style="list-style-type: none"> Hazard Identification and Risk Assessment (HIRA) 	<ul style="list-style-type: none"> Public safety response agencies within the community 	<ul style="list-style-type: none"> Community service agencies, organizations, and associations 	<ul style="list-style-type: none"> Major employers and economic sectors 	<ul style="list-style-type: none"> 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 Crossfield 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.

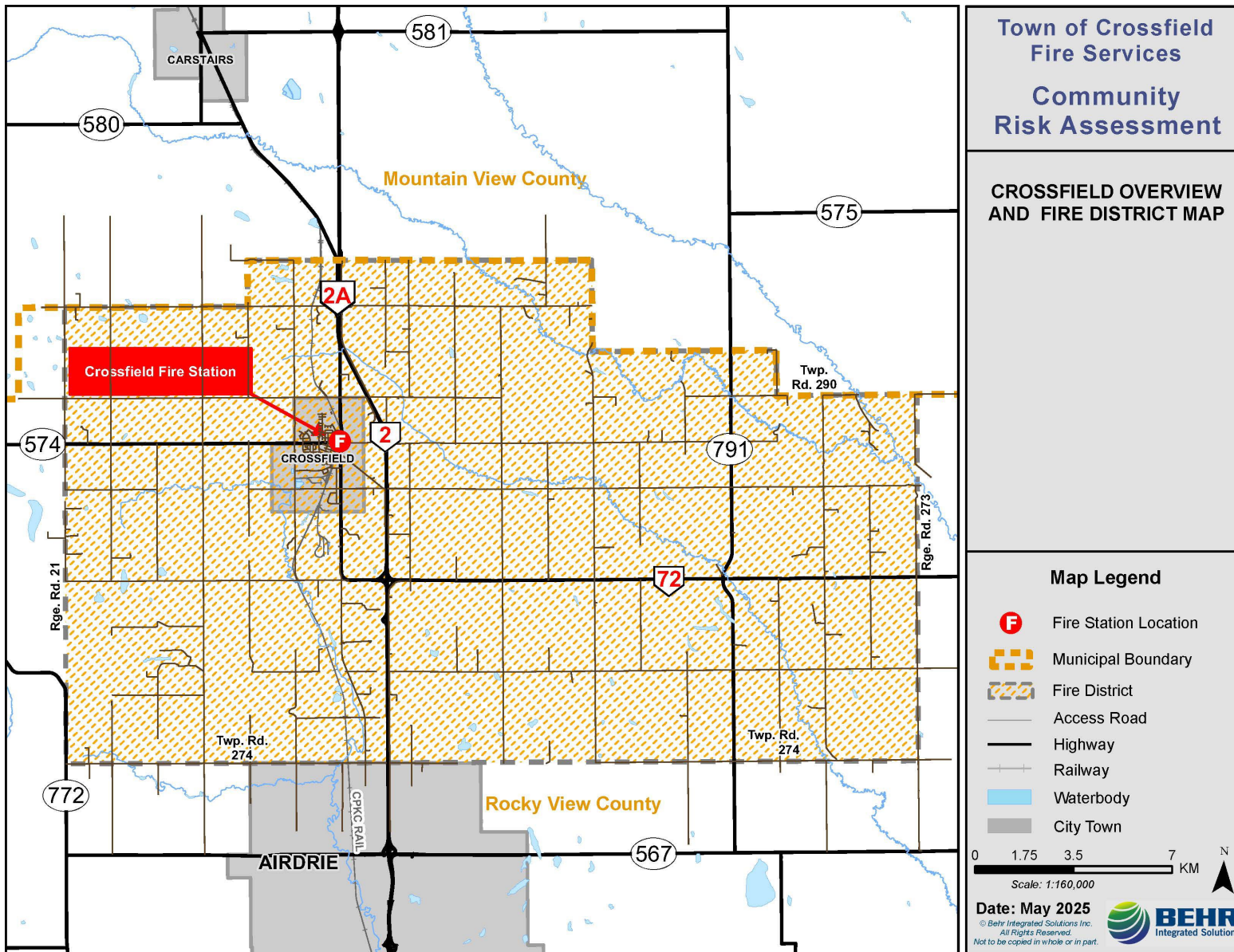
2.1 Geographic Overview

Crossfield is a small town located in southern Alberta and is surrounded by Rocky View County. Crossfield has a land area of 11.89 sq.km (4.59 sq. mi) that is a predominantly agriculture, agricultural services, and natural gas processing with a population of about 3,599 residents, according to the 2021 Census.

Crossfield's population in 2024 had grown to 4,045 which is a 2.74% year-over-year increase resulting in a 22.8% increase in the last five years. Crossfield has a population density of 302.7/km (784.0 sq. mi.). Crossfield has a strong industrial base and transportation infrastructure. In terms of proximity to major cities, Crossfield benefits from being in the Calgary-Edmonton Corridor and is growing as a result.

Crossfield is north of the city of Airdrie and south of the town of Olds. It is located 43 km (27 mi) north of the City of Calgary within sight of the CANAMEX/North-South Trade Corridor on Hwy. 2 which serves as a critical route for both commuters and commercial traffic. Transportation through Crossfield is facilitated by two major highways: Hwy. 2A and 574.

Map 1: Crossfield 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, Crossfield's transportation planning processes should include CFD 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.

Roads are also important from a risk and emergency response perspective because motor vehicle-related incidents are often a common source of emergency call volume within a municipality. Crossfield oversees a network of local roads totaling 42.25 kilometers, comprising of asphalt and gravel road surfaces. Of this total, the majority is paved. Gravel roads consist of Range Road 12, portion of Western Drive/Township Road 284 and west boundary to just east of the golf course, Laut Crescent. Crossfield has responsibility for Range Roads, Town Roads, and some Subdivision Roads. The province oversees the maintenance and construction of Highways within Crossfield.

The network of provincial highways and county roads link Crossfield to neighboring municipal districts, Airdrie, Olds, and Calgary. Highway 2/2A serves as the primary route, north/south through Crossfield, and is supported by Highway 574 that runs east/west out of its jurisdiction. Since all provincial highways are designated dangerous goods routes, traffic carrying various hazardous materials passes through Crossfield regularly, highlighting the importance of safe transportation. Although unlikely, an incident involving a dangerous goods release is possible along these Bridges and Culverts.

Note: CFD provides emergency response services on provincial highways for the provincial highway moderator (Alberta Transportation). Additionally, CFD is contracted by Rocky View County to respond to incidents on county roads, including those within the Town of Crossfield.

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. Crossfield has one small bridge crossing a creek that is dry much of the year. There are 2 culverts that are considered bridges according to Alberta Transportation.

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.

Canadian Pacific Railway (now known as Canadian Pacific Kansas City) runs north south and parallel with Hwy 2A through the entirety of Crossfield. Crossfield had a rail station on the Calgary to Edmonton Line. The line primarily traverses along Highway 2A, intersecting with the local road networks. There is one uncontrolled at-grade crossing and two controlled at-grade crossings.

This railway is used to transport industrial products such as grain, plastics, lumber, and oil and gas products. Railways can transport large containers of dangerous goods. Although the likelihood of a derailment and subsequent release of hazardous materials is low, such an incident could have significant repercussions, necessitating a specialized emergency response.

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

Nose Creek runs through a small part of the town and the golf course but would not be considered a major waterway. Additionally, there are fishponds on the west end of Town along with a few storm water ponds and wetlands around Town. Waterways typically present natural hazards such as flooding, ice jams, and erosion, necessitating swift evacuations and rescue responses. Responders require specialized technical rescue training and equipment to handle emergencies, especially in water bodies used for recreational activities, which see heightened activity during the summer season. Crossfield contains one small trout pond but no waterways, lakes, or ponds where the community participates in recreational activities which would include boating and swimming. There have been no recent ice/water rescues.

2.4 Geographic Profile – Identified Risks and Key Findings

Table 4: Geographic Profile - Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	Roads leading to residential properties are largely graveled in rural areas. Although roads in the Town are well maintained, gravel roads may slow response times and present challenges for apparatus during a response, including the threat of damage or accidents. Maintenance of gravel roads in winter months can also be challenging and slow response times and increase risks.
Identified Risk	The road network is a contributor to emergency call volume due to motor vehicle collisions and vehicle fires.
Identified Risk	There is an elevated risk of a major spills and dangerous goods incident along Hwy 2 and 2A being the main highway linking Crossfield and Calgary
Identified Risk	The transportation of agricultural chemicals along roadways may pose the risk of an environmental spill.
Identified Risk	During peak commuting times, the highest risk of motor vehicle collisions is likely to occur.
Identified Risk	CPR (now known as Canadian Pacific Kansas Line) rail operates a track that runs from Calgary extending north through Crossfield on the Calgary – Edmonton line parallel with Hwy. 2A that presents a risk related primarily to the movement of dangerous goods. At grade level rail crossings have the potential to create a physical barrier to connectivity to the roadway network, causing delays in response time.
Identified Risk	Crossfield has one uncontrolled at-grade rail crossing that poses an increased threat of a motor vehicle collision.

Identified Risk / Key Finding	Rationale
Identified Risk	There is a high degree of risk to the public and the environment associated with train derailment; with or without the release of dangerous goods
Identified Risk	There is a considerable risk of grass/wildland fires in areas of urban interface. The landscape surrounding the town is primarily agricultural, and increasing development in natural areas increases the threat of wildfire impinging on the town.
Key Finding	With Highway 2A being a direct route from Calgary to Crossfield, there is an elevated risk of a dangerous goods release that could impact the public and environment.
Key Finding	Bridges, with restrictions or closures for repairs, have the potential to create physical barriers to emergency response times and reduce the connectivity of Crossfield’s road network resulting in the potential for delays in emergency response times.
Key Finding	There are risks associated with the potential for interactions between rail traffic and vehicular traffic or pedestrian traffic within Crossfield.
Key Finding	Grade level rail crossings could create a physical barrier to the connectivity of Crossfield’s Road network that can potentially result in delays in emergency response times. There are two controlled at-grade crossings and one uncontrolled at-grade crossing.

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 are 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 Crossfield.

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 Crossfield, 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 - 2019 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 – 2019 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.

The following table 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.	<ul style="list-style-type: none"> • 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	<p>A care or detention occupancy means the occupancy or use of a building or part thereof by people who:</p> <p>Are dependent on others to release security devices to permit egress. Receive special care and treatment; or receive supervisory care.</p>	<p>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.</p>	<ul style="list-style-type: none"> • 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	<p>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.</p>	<p>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.</p>	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.

NBC Occupancy Classification	NBC Major Building Classifications	Definitions	Fire Related Risks	Proactive Measures for Reducing Risk
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.	<ul style="list-style-type: none"> • 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	<p>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:</p> <ol style="list-style-type: none"> 1. low hazard (F3) 2. medium hazard (F2) <ul style="list-style-type: none"> • high hazard (F1) 	<p>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).</p>	<ul style="list-style-type: none"> • 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 Crossfield Existing Major Building Stock Classification Summary

Analysis of Crossfield's major building occupancy types was conducted using data provided by the municipal assessment of Crossfield, municipal development plans, and data from the 2021 census². Table 7 provides a summary of Crossfield's existing major building occupancy classifications.

Visual observations of Crossfield’s building stock indicate that the majority of Crossfield’s existing property stock is comprised of Group C - Residential Occupancies totally 1,330 private dwellings with 40.22% 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	Unavailable
Group B	Care or Detention Occupancies	Unavailable
Group C	Residential Occupancies - Total	1,330
Group C	Residential Occupancies – Single Detached	1,040
Group C	Residential Occupancies – Semi-Detached House	135
Group C	Residential Occupancies – Row House	10
Group C	Residential Occupancies – fewer than five storeys	60
Group C	Residential Occupancies – five or more storeys	0
Group C	Other single-attached house	0
Group C	Mobile Homes / Trailers	75
Groups D & E	Commercial	Unavailable
Group F (all Divisions combined)	Industrial Occupancies	Unavailable

**Source for breakdown is data provided by 2021 Census. Crossfield currently does not collect this data.*

² Government of Canada, Statistics Canada. (2023, November 15). Profile table, Census Profile, 2021 Census of Population - Crossfield, County (TP) [Census subdivision], Alberta.

NOTE: Data Limitations and Risk Classification

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 Crossfield 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 40.22% of all private dwellings were constructed prior to 1990. 29% of fires responded to by CFD were in single family 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

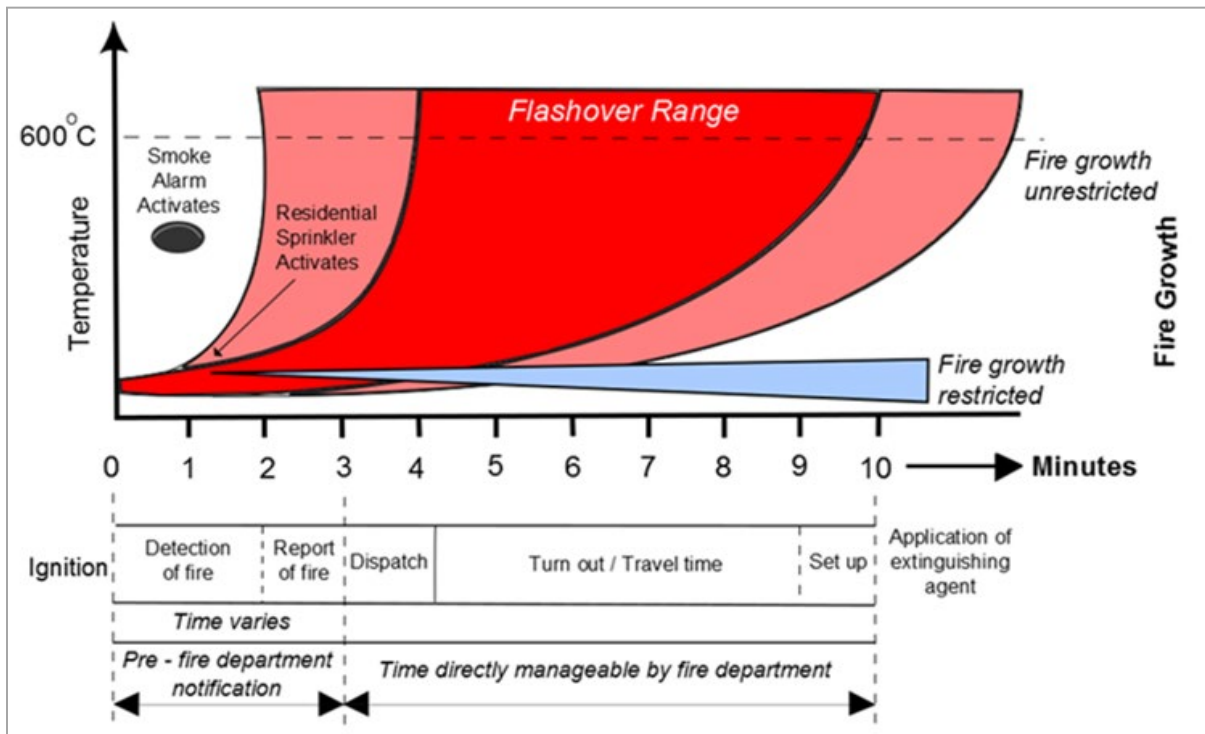


Figure Source: Fire Underwriters Survey “Alternative Water Supplies for Public Fire Protection: An informative Reference Guide for Use in Fire Insurance Grading” (May 2009) and NFPA “Fire Protection Handbook” (2001)

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 Crossfield prior to the adoption of the Alberta building and fire codes. This analysis suggests that 18.8% of Crossfield's building stock was constructed between 1961 and 1981, preceding the adoption of the 1984 fire code. This represents a significant fire risk within the community.

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

Period of Construction	Crossfield Dwellings	Crossfield % of Dwellings	Alberta Total Number of Dwellings	Alberta % of Dwellings
Prior to 1960	95	7.1	168,925	10.34
1961-1980	250	18.8	428,655	26.25
1981-1990	190	14.3	188,550	11.54
Total prior to 1991	535	40.22	786,130	48.13
1991-2000	235	17.7	224,315	13.73
2001-2005	140	10.5	152,840	9.36
2006-2010	100	7.5	168,905	10.34
2011-2015	70	5.3	161,095	9.86
2016-2021	250	18.8	139,935	8.57
Total 1991-2021	795	59.77	847,090	51.87
Total Dwellings*	1,330	100.00	1,633,220	100.00
<i>*Total occupied private dwellings 25% sample data</i>				

Table Source: 2021 Census

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. Crossfield should ensure identification of all buildings with lightweight construction, primarily those constructed using wood framing. It is anticipated that Crossfield 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 CFD will integrate this information into their pre-planning program.

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 Edition) 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 Crossfield is composed of single-detached dwellings (78.2%). Crossfield has a population density of 302.7 per square kilometre. Crossfield has had a steady population growth since 2016. 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 Crossfield'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	Crossfield	%	Alberta	%
Single Detached	1,040	78.2	994,565	60.90
Semi-Detached	135	10.2	98,740	6.05
Row House	10	0.8	127,735	7.82
Apartment or flat in a duplex	5	0.4	43,730	2.68
Apartment < 5 Storeys	60	4.5	247,030	15.13
Apartment > 5 Storeys	0	0.00	74,880	4.58
Other single-attached house	0	0	1,215	0.07
Moveable dwelling	75	5.6	45,325	2.78
Total	1,330	100.00	1,633,220	100.00

Table Source: 2021 Census, Statistics Canada

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

3.4 Building Growth

Crossfield currently has three approved Area Structure Plans, which will add 2,000 more units to the housing stock. Crossfield's Community Profile 2020 indicates that it has three approved Area Structure Plans, which will add 2,000 more units to the housing stock. This additional growth does not appear significant enough to impact the overall community risk to Crossfield.

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 Crossfield 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.)
- Crossfield 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.

Table 11: Potential High Fire Risk Occupancies

Company/Facility Name	Location	Risk Description
Viterra	29340 Highway 2A	Operates an industry-leading network of grain elevators, special crops facilities, processing plants and port terminals across Canada and parts of the US. These types of processing facilities can have their own unique fire risks.
Trigger Industries	810 McCool Street	Engineering automotive and motorsport products.
Compressco Canada Inc.	717 McCool Street	Production enhancement optimizes oil and gas reservoir production.
GNP Industries	629 McCool Street	Internal lining, vessels, trailers, structural, fleet work.
ArkTon Steel Inc.	50 McCool Crescent	Projects include storage facilities, agricultural, commercial, and industrial buildings, aircraft hangars, riding arenas
Alberta AG Center	46 McCool Crescent	High-performance machinery storage

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.

3.6.2 Occupancies with Potential High-Fire Safety Risk

Fire risk affects individuals differently, and some people are more vulnerable to fire injury or fatality than others. Crossfield 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.

It is essential to note that not all vulnerable individuals reside in vulnerable occupancies. For example, some seniors who are vulnerable due to physical limitations may live independently or in subsidized housing, making them a key demographic to reach.

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. Currently Crossfield has two registered Vulnerable Occupancies. With growth and an aging population, continual inflation increases and the lack of already established Registered Vulnerable Occupancies, Crossfield can anticipate more residents requiring assistance to evacuate during an emergency. A list of vulnerable occupancies is presented in Table 12.

Table 12: Vulnerable Occupancies

Property Name	Occupancy Type	Location
Rocky View Lodge	Senior Independent Living	1220 Hammond Ave.
Rocky View Foundation	Retirement Home	1237 Osler Ave.

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 13: Schools

Property Name	Occupancy Type	Location
Crossfield Elementary	K – 5	1120 Mountain Ave
W. G. Murdoch High School	9 - 12	1020 Mountain Ave.
Crossfield Montessori Childcare	K – 9	901 Mountain Ave.
Crossfield Playschool	3 – 4 years	1120 Mountain Ave

Table source: Crossfield School website

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. Crossfield has one property designated as heritage through its municipal Building Stock Profile – Identified Risks and Key Findings.

Table 14: Heritage Buildings – Crossfield

Property Name	Location	Date of Construction
Town of Crossfield Municipal Building	1005 Ross Street	1924

3.8 Building Stock Profile – Identified Risks and Key Findings

Table 15: Building Stock Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	Residential buildings account for the majority of building stock in Crossfield and are the most common building involved in structural fires and attribute to the most fatalities and injuries
Identified Risk	Data provided by the 2021 census, indicates that 40.22% of Crossfield’s private dwelling building stock was built prior to 1990, preceding the 1992 adoption of the National Fire Code – Alberta Edition. This represents a significant fire risk within the community.
Identified Risk	The number of new homes being built with lightweight construction poses a risk to firefighter safety and can hinder the ability for occupants to safely evacuate in a timely fashion.
Identified Risk	There are several properties within Crossfield that have a potentially high fuel load and therefore an increased high fire risk. Agricultural, industrial, and manufacturing operations contribute to this risk.
Key Findings	
Key Finding	Crossfield currently has one (2) registered vulnerable occupancies
Key Finding	In addition to registered vulnerable occupancies Crossfield has 3 schools K – up and one Secondary School.
Key Finding	Data indicates that 69.78% of residential dwellings were constructed post 1990, which increase the possibility of light weight truss construction in these homes.

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 Crossfield.

4.1 Critical Infrastructure in Crossfield

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.

For the purposes of this CRA, Crossfield-specific critical infrastructure concerns are described in greater detail below.

4.1.1 Water Servicing & Infrastructure

The Town of Crossfield receives water from the Mountain View Regional Water Services Commission (MVRWSC). The MVRWSC may impose water restrictions on its member communities at its own discretion. The commission reviews these restrictions with the member communities annually. There are four Water Restriction levels:

- **Level 1** - Restrict outside watering (lawn, garden, car washing at home, etc.) to even-numbered addresses on even calendar days, and odd-numbered addresses on odd calendar days.
- **Level 2** - Ban all outside watering and limit the sale of bulk water at the discretion of the Town (if applicable). Industrial users are requested to limit their consumption where possible until further notice.
- **Level 3** - Ban all outside watering and discontinue sales of bulk water (if applicable). Water use by industrial users and commercial establishments such as car washes is also banned.
- **Level 4** - Ban all water use except for essential services (e.g. firefighting, medical).

The Town of Crossfield has adopted the Mountain View Regional Water Services Commission level one (1) water restrictions to outside watering (lawn, garden, car washing at home, etc.) to even-numbered addresses on even calendar days and odd-numbered addresses on odd calendar days from May 1 to October 31 of each calendar year, as outlined under the Water Restrictions in the Town of Crossfield’s Waterworks Bylaw.

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

Stormwater facilities are engineered to gather and regulate runoff from precipitation, including rain and snowmelt, thereby reducing the risk of flooding, erosion, and damage to property and infrastructure. Storm sewers, which are underground pipelines, are designed to collect and transport stormwater runoff to nearby water bodies such as rivers and lakes. By preventing stormwater from flooding streets and buildings, storm sewers help manage water quality and quantity in natural water bodies.

Stormwater services play a critical role in managing and controlling the flow of stormwater runoff during precipitation events, mitigating challenges and impacts associated with flooding. This becomes especially relevant when considering the effects of climate change.

According to the 2020 Stormwater Master Plan, the Town’s stormwater system consists of both major and minor drainage systems. The system is comprised of a series of overland drainage routes that convey stormwater to either Crossfield Creek or Nose Creek, and two drainage basins that convey stormwater to Nose Creek. Crossfield Creek is within the Red Deer Watershed, while Nose Creek is in the Bow River Watershed. There are six notable wet/dry ponds in the Town and two notable wetlands,

The minor system is comprised of gravity sewers, manholes, catch basins, catch basin leads, and outfalls, with the majority of this infrastructure located in newer areas of the Town. This plan was driven by the need to determine deficiencies in the drainage system and provide a guiding document to the Town for strategic implementation. The stormwater management has changed as technology has improved, and the environment has become a larger concern to the community.

Any disruption to the operation of stormwater facilities and storm sewers can have significant impacts on public safety, property, and the environment. For instance, malfunctioning storm sewers can lead to flooding, property damage, and health hazards such as waterborne diseases. Therefore, stormwater infrastructure is classified as critical and requires protection and maintenance to ensure proper functioning during extreme weather events.

Crossfield sells access to its wastewater as an alternative financial resource, but not fresh water. This strategy is intended to help the region manage the supply of water when supplies are low.

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 Crossfield's transportation infrastructure. Additional details on the transportation systems in Crossfield are provided in the Geographic Profile.

4.1.3.1 Roads & Highways

As described in the Geographic Profile, Crossfield has a network of interconnected local roads that intersect with essential highways linking it to neighboring regions, including Ardie, Olds, and Calgary. Highway 2A serves as a primary route, supported by Highway 2 and Highway 574, as well as major County-level roads. Major highways and roads are of concern from the perspective of fire protection services due to the following factors:

- Incidents involving hazardous materials transport
- Motor vehicle collisions driving fire department and ambulance call volume
- Multi-lane and vehicle collisions can obstruct lane access for responding apparatus
- Traffic hazards (distracted drivers, high-speed movement) present safety considerations for responding crews.

CFD responded to 429 motor-vehicle related incidents between 2020 and 2024. This represents (17.05%) of all calls.

Crossfield Fire Department (CFD) provides emergency response services on provincial highways for the provincial highway moderator (Alberta Transportation). Additionally, CFD is contracted by Rocky View County to respond to incidents on county roads, including those within the Town of Crossfield.

4.1.3.2 Rail

Canadian Pacific Kansas City (CPKC) Railway runs north south and parallel with high 2A through the entirety of Crossfield. Crossfield is a rail station on the Calgary to Edmonton Line. This line primarily traverses along Highway 2A, intersecting with the local road networks at one uncontrolled at-grade crossing and two controlled at-grade crossings. This railway is used to transport industrial products such as grain, plastics, lumber, and oil and gas products. Railways can transport large containers of dangerous goods. Although the likelihood of a derailment and subsequent release of hazardous materials is low, such an incident could have significant repercussions, necessitating a specialized emergency response.

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.

Rail lines and operations are of concern from the perspective of fire protection services due to the following factors:

- Accidents involving transportation of hazardous cargo, could result in release of hazardous material requiring hazardous materials response.
- Potential for explosions, fires, and destabilization of surrounding structures.
- For passenger train derailments or collisions, passenger and rail employee extrication and technical rescue may be required.
- Difficulty accessing scene.
- Major incidents resulting in long term recovery could delay daily shipment of goods and services, with potential negative affects to local economy.
- Potential risk for grass and brush fires along the track areas and threat to adjacent residential properties

4.1.3.3 Airports

There are no airports located in the Town of Crossfield. The nearest airport is the Airdrie Air Park and Flying Club 23.6 km away.- In addition, the Calgary International Airport is located approximately 40 km away. . Airports and their operations are of concern from the perspective of fire protection services due to the following factors:

- Accidents involving planes during landing and takeoff.
- Difficulty in locating and accessing scenes.
- Requirement for technical rescues of passengers.
- Potential for fire or destabilization of structures if impacted by a plane.

4.1.4 Energy and Communications Infrastructure

Energy infrastructure comprises the systems, facilities, and assets involved in generating, transmitting, and distributing electricity, and gas within the municipality. Energy and utility infrastructure are significant considerations for fire protection services due to several reasons:

- The natural gas subsector poses operational hazards to first responders, including leaks, personal injury, and exposure to toxic or hazardous materials.
- CFD would have a limited role in oil/gas sector responses as these facilities have their own response plans and technical support.
- There is potential for explosion and/or fire within these facilities.
- Emergency incidents could result in limited gas supply across Crossfield.
- Firefighter safety is a concern when responding to fires at electrical substations, which may involve high-voltage electrical hazards, and the presence of chemicals used to cool electrical conductors.
- Disruptions to the electrical distribution system could affect emergency communication systems and municipal power supply, leading to various public health and safety concerns requiring fire department assistance.

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.

Alta Link’s Western Transmission Line, Alberta’s first-in-service direct current (DC) line, transmits 500KV electricity on the provincial power grid from Genesee substation west of Edmonton and the Langdon substation east of Calgary. The lines run less than one kilometre (km) north of Crossfield’s municipal board. Also, two kms south of Crossfield in Rocky View County is the ENMAX Crossfield Energy Centre – a 120-megawatt natural gas power generation plant.

In Crossfield, the combined energy and communications infrastructure includes 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 Crossfield. The most pertinent risk arising from these utilities relates to fallen power lines which are reported as public hazard calls. Between 2020 and 2024 CFD responded to 50 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 16.

Table 16: Other Critical Infrastructure Overview

Sector	Identified Critical Infrastructure	Issues / Concerns
Health	Long-Term Care	<ul style="list-style-type: none"> Disrupting large numbers of people with mobility issues. Potential communication issues. Need for specialized medical equipment. There are two (2) vulnerable occupancies in Crossfield.
Health	Outbreak/Illness	<ul style="list-style-type: none"> A major outbreak or illness can create unexpected shortages in the workforce. Reduced staffing can result in an inability to run an apparatus, as well as affect ambulance and police services for widespread illnesses. Illnesses and outbreaks can also increase medical calls in Crossfield and have an increased cost in replenishing medical PPE.
Health	Health Centres	<ul style="list-style-type: none"> The nearest major hospital is located in Calgary. There is a medical center located in Crossfield (Crossfield Clinic).
Food	Food Supply and Demand	<ul style="list-style-type: none"> Food related infrastructure can include agriculture, major distribution centers or grocery stores. Grocery stores and food distribution centers typically contain large amounts of ammonia used as a component of refrigeration systems. Fire responders should be aware of dangers related to ammonia release and response protocols.
Safety	Fire and Emergency Services	<ul style="list-style-type: none"> There is one (1) fire station in Crossfield. Frequent or extreme emergency events could increase demand for emergency response services affecting the response capacity of the fire department.
Government	Municipal Government	<ul style="list-style-type: none"> Municipal government closed due to extreme weather, cyber-attack, health emergencies, location, civil disruption causes disruption to decision making, financial support, declaration of emergencies, etc. Business Continuity Plan are essential during these incidents as municipal services are often interconnected, therefore the failure of one may lead to the failure or damage to other services or loss of continuity of operations.

Sector	Identified Critical Infrastructure	Issues / Concerns
Manufacturing	Supply Chain Disruption	<ul style="list-style-type: none"> • Prolonged disruptions to supply chains can impact apparatus replacement due to manufacturing delays (resulting in them going over lifetime). • Supply disruptions also have an unforeseeable but potentially impactful financial impact on running apparatus, as well as the ability to obtain/replenish PPE.
Manufacturing	Industrial Sites	<ul style="list-style-type: none"> • According to the 2021 Statistics Canada Census, manufacturing in Crossfield accounts for a small amount in local industry. However, storage facilities, processing and other activities that involve various ignition sources often occur in these types of occupancies. Manufacturing facilities constitute a special fire hazard due to elevated levels of combustible, flammable or explosive content and the possible presence of oxidizing chemicals and gases. The increased use of Lithium-ion battery operated devices, and storage also poses a special fire hazard due to the difficulty in controlling these types of fires. A large loss fire in these types of occupancies can also affect employment stability and economic loss to the Town.

4.2 Critical Infrastructure – Identified Risks and Key Findings

Table 17: Critical Infrastructure – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	The Capital Regional Crossfield Water Services Commission, through EPCOR, provides water services to residents of Crossfield. Crossfield makes sure that the reservoirs are topped up so they can maintain residential water usage and firefighting water needs. The fire service must be reliant on alternate water sources and have a water servicing strategy in place.
Identified Risk	CPR runs through Crossfield parallel to Hwy 2A.
Key Finding	Between 2020 and 2024 CFD responded to 50 public hazard calls.
Key Finding	<ul style="list-style-type: none"> • The Town of Crossfield receives water from the Mountain View Regional Water Services Commission (MVRWSC). • The MVRWSC may impose water restrictions on its member communities at its own discretion. The commission reviews these restrictions with the member communities annually.

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 Crossfield.

5.1 Population and Dispersion

Table 18 highlights the significant growth experienced by Crossfield over a twenty-year period from 2001 to 2021, in both population and total private dwellings. The most substantial increases occurred between 2016 and 2021, with a change of 20.7% in population and 15.42% in total private dwellings.

Table 18: Historic Growth in Population and Households

Year	Population	% Change	Total Private Dwellings	% Change
2001	2,399		823	
2006	2,648	10.4	960	14.27
2011	2,853	6.9	1,090	11.92
2016	2,983	4.6	1,168	6.67
2021	3,599	20.7	1,381	15.42

Table Source: 2001-2021 Census, Statistics Canada

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 3,599 for Crossfield. The age distributions of Crossfield’s population and Alberta’s population are compared in Table 19.

Table 19: Population by Age Group – Crossfield and Alberta

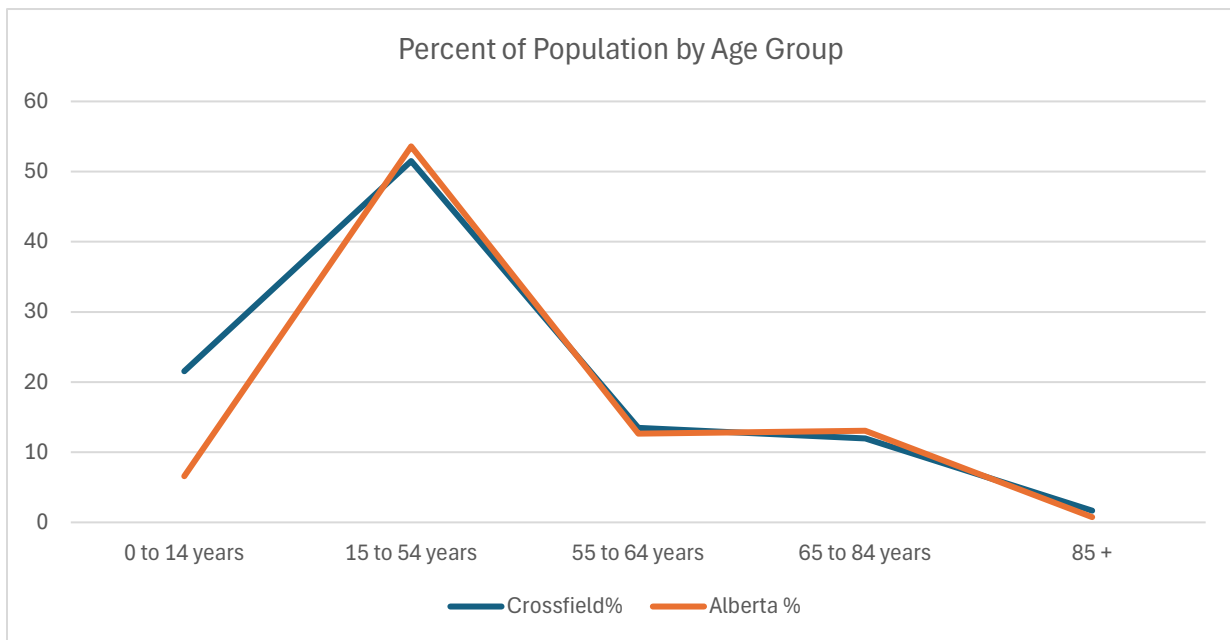
Age	Crossfield Population	Crossfield %	Alberta Population	Alberta %
0 to 4 years	250	6.9	250,250	5.87
5 to 9 years	255	7.1	278,810	6.54
10 to 14 years	270	7.5	280,585	6.58
15 to 19 years	220	6.1	249,765	5.86
20 to 24 years	140	3.9	248,740	5.84
25 to 29 years	225	6.3	275,465	6.46
30 to 34 years	265	7.4	323,260	7.58
35 to 39 years	265	7.4	338,945	7.95
40 to 44 years	285	7.9	307,665	7.22
45 to 49 years	225	6.3	277,770	6.52
50 to 54 years	230	6.4	262,770	6.16
55 to 59 years	240	6.7	274,150	6.43
60 to 64 years	245	6.8	265,240	6.22
65 to 69 years	205	5.7	217,270	5.10
70 to 74 years	115	3.2	163,890	3.84
75 to 79 years	75	2.1	105,520	2.48
80 to 84 years	35	1.	70,160	1.65
85 to 89 years	30	.8	44,670	1.05
90 to 94 years	20	.6	21,430	0.50
95 to 99 years	10	.3	5,480	0.13
100 +	0	0.00	795	0.02
Total	3,599	100.00	4,262,630	100.00
Median Age of the Population	38.4		41.6	
Population aged 14 and under	775	21.7	809,645	18.99
Population aged 65 and over	735	20.4	629,215	14.76
Population aged 55 to 64	485	13.47	539,390	12.65

Table Source: 2021 Census, Statistics Canada

The youngest demographic, comprising individuals aged 14 years and under, accounts for 21.7% of Crossfield’s total population, slightly 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 Crossfield and one secondary school. CFD should work with the school board to public education through the school network.

The percentage of the population aged 65 years and older in Crossfield represents 13.3% of the total population, which is 1.46% lower than the province's rate of 14.76%. Additionally, 13.47% of Crossfield’s population falls between the ages of 55 and 64, gradually aging into the senior demographic of 65 years and older which is .82% higher 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 – Crossfield 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). Figure 5 *Population Distribution* illustrates the number of fire deaths in Alberta, between 2011 and 2020, and combining these sets of information assists in highlighting seniors' increased vulnerability to fatality in residential occupancies compared to other age groups.

5.1.2 Population Age by Dissemination Area

Further analysis of age-based population distribution is illustrated in Figure 5 and Figure 6, portraying the distribution across dissemination areas.

Figure 5: Population Distribution Ages 0-14



Figure Source: 2021 Census, Statistics Canada

Figure 6: Population Distribution Age 65 and Over

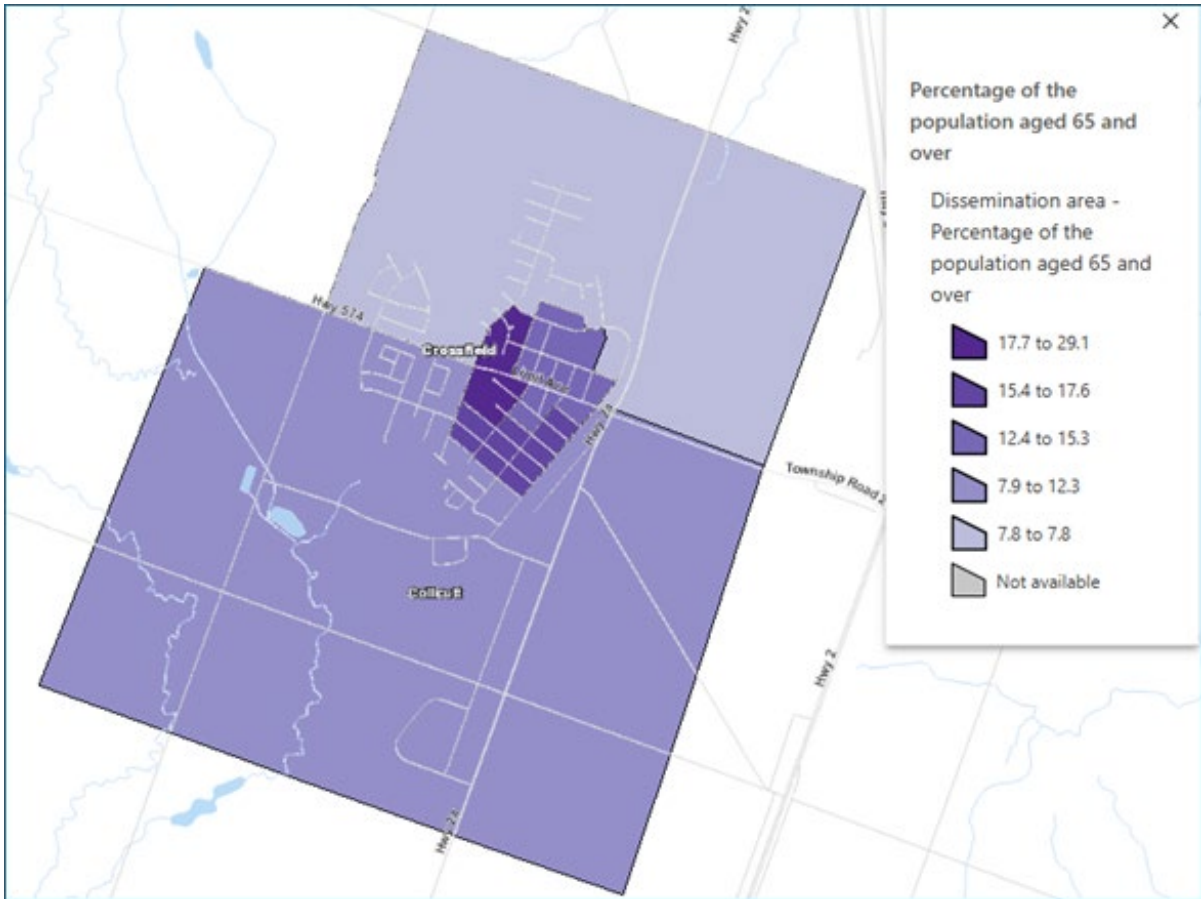


Figure Source: 2021 Census, Statistics Canada

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 Crossfield, Table 20 outlines the gender distribution by age, with males representing 51.26% and females 48.76%, 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 Crossfield may not be necessary.

Table 20: Gender Distribution by Age Group – Crossfield

Age Group	Population	Total %	Male	%	Female	%
0 to 4 years	250	6.9	145	7.9	110	6.3
5 to 9 years	255	7.1	130	7.0	120	6.8
10 to 14 years	270	7.5	135	7.3	140	8.0
15 to 19 years	220	6.1	115	6.2	110	6.3
20 to 24 years	140	3.9	80	4.3	60	3.4
25 to 29 years	225	6.3	110	6.0	110	6.3
30 to 34 years	265	7.4	135	7.3	130	7.4
35 to 39 years	265	7.4	130	7.0	135	7.7
40 to 44 years	285	7.9	140	7.6	140	8.0
45 to 49 years	225	6.3	120	6.5	105	6.0
50 to 54 years	250	6.4	120	6.5	105	6.0
55 to 59 years	240	6.7	110	6.0	125	7.1
60 to 64 years	245	6.8	125	6.8	120	6.8
65 to 69 years	205	5.7	110	6.0	95	5.4
70 to 74 years	115	3.2	60	3.3	50	2.8
75 to 79 years	75	2.1	40	2.2	35	2.0
80 to 84 years	35	1.0	20	1.1	15	0.9
85 to 89 years	55	1.5	20	1.1	35	2.0
90 to 94 years	20	0.6	5	0.3	15	0.9
95 to 99 years	10	0.3	0	0.0	5	0.3
100 +	0	0.00	0	0.00	0	0.00
Total	3,599	100	1,845	51.26	1,755	48.76

Table Source: 2021 Census, Statistics Canada

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 21 details the labor force statistics for Crossfield compared to Alberta. Crossfield had a slightly higher participation rate of 71.9% in Crossfield and 68.01% provincially and shows a slightly higher employment rate of 64.1% compared to Alberta's 60.17%, along with a lower unemployment rate of 10.6% versus 11.53% in Alberta.

Table 21: Labour Force Status – Crossfield and Alberta

Status	Crossfield Population	Alberta Population
In the Labour Force*	2,810	2,295,380
Employed	2,020	2,030,730
Unemployed	215	264,650
Not in the Labour Force	790	1,079,750
Total	2,810	3,375,130
Participation Rate	71.9	68.01
Employment Rate	64.1	60.17
Unemployment Rate	10.6	11.53

Table Source: 2021 Census, Statistics Canada

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

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 Community Risk Assessment, 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 22 compares educational attainment levels between Crossfield and the Province of Alberta using 2021 Census data. The data indicates that Crossfield residents have lower educational attainment compared to the provincial average. Crossfield exhibits both a higher-than-average percentage of individuals without a certificate, diploma, or degree (16.5% compared to the provincial average of 11.33%) and a lower-than-average percentage of residents with a high school diploma. Crossfield, however, has a slightly higher percentage than the province as 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 22: Educational Attainment – Crossfield and Alberta

Educational Attainment	Crossfield Total	Crossfield %	Alberta Total	Alberta %
No Certificate / Diploma / Degree	465	16.5	595,665	11.33
High School Diploma or Equivalent	960	34.2	2,779,465	52.89
Postsecondary Certificate; Diploma or Degree	1,305	49.6	1,880,185	35.78
Total	2,810	100.00	5,255,315	100.00

Table Source: 2021 Census, Statistics Canada

5.3.3 Median Income

Table 23 presents median income statistics for Crossfield in 2020, showing higher income levels compared to the Alberta averages. The median individual income in Crossfield was \$65,500, which reflects an 5.84% difference compared to Alberta's median individual income of \$44,800. Similarly, the median household income in Crossfield was \$104,000, indicating a more significant 9.23% difference from Alberta's median household income of \$96,000. Higher median incomes in Crossfield 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 23: Median Income of Crossfield and Alberta - 2020

Geography	Median Income Individual	Median Income Household
Crossfield	\$65,500	\$104,000
Alberta	\$44,800	\$96,000
% Difference	6.84%	9.23%

Table Source: 2021 Census, Statistics Canada

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 24 presents data on economic family income decile groups for the population in private households in Crossfield compared to Alberta. In Crossfield, 44.4% of the population falls within the bottom half of the income distribution, while 55.6% 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. Crossfield does however have a slightly higher 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 Crossfield 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 24: Economic Family Income Decile Group for the Population in Private Households – Crossfield and Alberta

Decile Group	Crossfield Total	Crossfield %	Alberta Total	Alberta %
In the bottom half of the distribution	1,570	44.4	1,894,410	45.35
In the top half of the distribution	1,965	55.6	2,283,310	54.65
Total	3,535	100.00	4,177,720	100.00

Table Source: 2021 Census, Statistics Canada

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 25, in Crossfield, the majority of households (83.1%) are owned, while only a small percentage (16.5%) 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 Crossfield can significantly influence community stability and investment in property maintenance, indirectly impacting fire risk and emergency response dynamics.

Table 25: Household Tenure – Crossfield and Alberta

Household Tenure	Crossfield Total	Crossfield %	Alberta Total	Alberta %
Owner	1,105	83.1	1,157,495	70.87
Renter	220	16.5	465,220	28.48
Provided by Government, First Nation, or Indian Band	0	0.00	10,505	0.64
Total	1,330	100.00	1,633,220	100.00

Table Source: 2021 Census, Statistics Canada

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 26, Crossfield has a higher proportion of households with two or more occupants (81.89%) compared to the provincial rate (74.04%). This higher occupancy density within households can elevate the risk of fire incidents.

Table 26: Household Occupancy

Household Occupancy	Crossfield Total	Crossfield %	Alberta Total	Alberta %
1 Person	245	18.5	424,055	25.96
2 Persons	485	36.6	551,420	33.76
3 Persons	255	19.2	249,135	15.25
4 Persons	215	16.2	243,400	14.90
5 Persons or more	130	9.8	165,215	10.12
Total	1,325	100.00	1,633,225	100.00

Table Source: 2021 Census, Statistics Canada

5.3.4.2 Suitability

The 2021 Census data, as presented in Table 27, indicates that Crossfield has a notably lower percentage of housing deemed unsuitable compared to Alberta as a whole. Specifically, only 1.5% of Crossfield'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 Crossfield has a lower fire risk from the perspective of housing suitability compared to the province.

Table 27: Household Suitability – Crossfield and Alberta

Housing Suitability	Crossfield Total	Crossfield %	Alberta Total	Alberta %
Suitable	1305	98.1	1,556,960	95.33
Not suitable	20	1.5	76,260	4.67
Total	1,330	100.00	1,633,220	100.00

Table Source: 2021 Census, Statistics Canada

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 Crossfield, where fewer households (15.2%) spend 30% or more of their income on housing compared to Alberta (21.25%), as shown in Table 28, there may be more financial flexibility for fire safety investments.

Despite lower housing values in Crossfield compared to Alberta, as referenced in Table 29, the median monthly shelter costs for rented dwellings are higher, while for owned dwellings, Crossfield's costs are comparable. This affordability may allow residents to allocate more resources to fire safety measures, potentially lowering fire risk.

Table 28: Shelter Costs – Crossfield and Alberta

Shelter Costs	Crossfield Total	Crossfield %	Alberta Total	Alberta %
Spending less than 30% of household total income on shelter costs	1,120	84.8	1,251,370	78.75
Spending 30% or more of household total income on shelter costs	200	15.2	337,585	21.25
Total	1,320	100.00	1,588,955	100.00

Table Source: 2021 Census, Statistics Canada

Table 29: Median Costs – Crossfield and Alberta

Median Costs	Crossfield	Alberta
Median value of dwellings	\$380,000	\$400,000
Median monthly shelter costs for owned dwellings	\$1,628	\$1,600
Median monthly shelter costs for rented dwellings	\$1,450	\$1,280

Table Source: 2021 Census, Statistics Canada

5.4 Cultural Background, Language Considerations

In Crossfield, where the proportion of newcomers is significantly lower (7.4%) 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 Crossfield. Most residents (92.6%) 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 (7.4%) 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 before 1980, there are smaller cohorts who arrived in subsequent decades, with a slight increase in immigration from 2001 to 2010. 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 (0.19%) suggests a small transient population within the city. 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 30 summarizes the immigration status of Crossfield’s population.

Table 30: Immigration Status – Crossfield and Alberta

Immigration Status	Crossfield Total	Crossfield %	Alberta Total	Alberta %
Non-immigrants	3,335	92.6	3,141,915	75.21
Immigrants	265	7.4	970,970	23.24
<i>Before 1980</i>	60	1.7	127,275	3.0
<i>1980 to 1990</i>	15	0.4	91,320	2.2
<i>1991 to 2000</i>	30	0.8	126,605	3.0
<i>2001 to 2010</i>	45	1.3	239,260	5.7
<i>2011 to 2015</i>	115	3.2	193,335	4.6
<i>2016 to 2021</i>	50	1.4	193,175	4.6
Non-permanent residents	0	0	64,830	1.55
Total	3,600	100.00	4,177,715	100.00

Table Source: 2021 Census, Statistics Canada

Table 31 provides insights into language demographics in Crossfield and Alberta based on the 2021 Census. In Crossfield, 95.7% of the population knows only English, while only a small percentage (4.2%) 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 Crossfield’s diverse landscape.

Table 31: Knowledge of Official Language – Crossfield and Alberta

Language	Crossfield Total	Crossfield%	Alberta Total	Alberta %
English Only	3,445	95.7	3,894,690	92.3
French Only	0	0	3,105	.1
English and French	150	4.2	258,330	6.1
Neither English nor French	5	0.1	65,705	1.6
Total (non-institutional)	3,600	100.00	4,221,830	100.00

Table Source: 2021 Census, Statistics Canada

Figure 7 provides a breakdown on the different visible minorities within Crossfield. The predominant minority group is Japanese, followed by Filipino, Black and Latin American. Beyond these top minority groups, there is a notable presence of others contributing to the diversity of Crossfield. As Crossfield 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 7: Visible Minorities – Crossfield

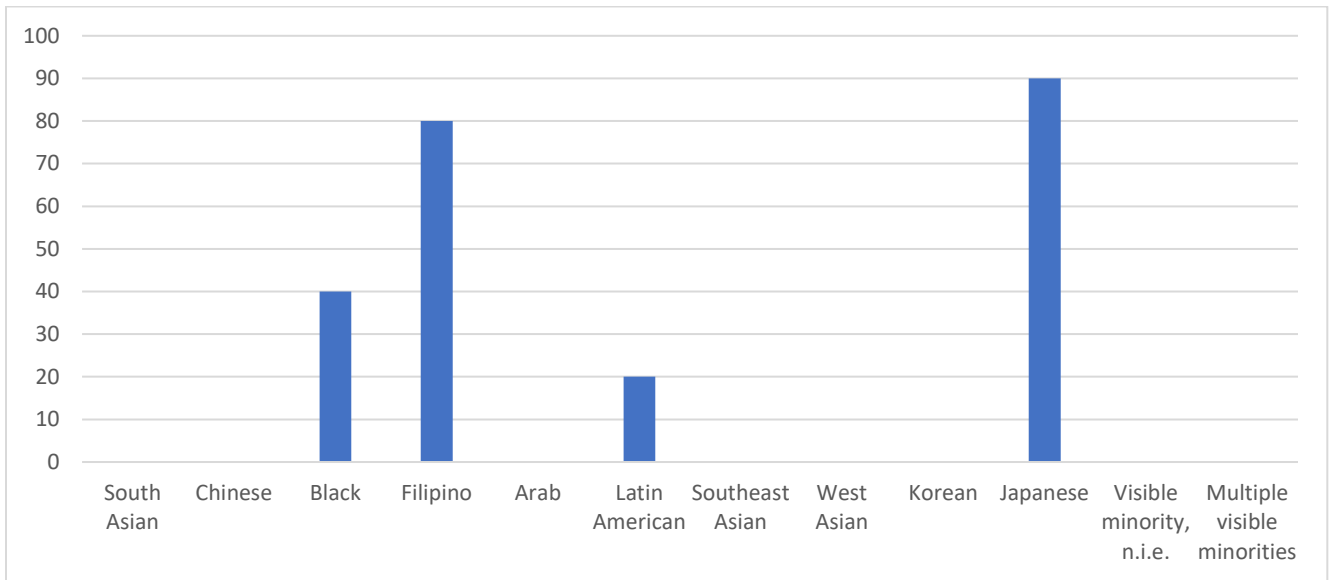


Table Source: 2021 Census, Statistics Canada

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 Crossfield’s labour force. Table 32 shows the commuting destination trends for the residents of Crossfield based on 2021 Census data. Among Crossfield's labour force, 19.4% commute locally within their census subdivision (CSD) of residence, while 75.3% travel to nearby areas within the same Census Division (CD). Additionally, 6.3% of Crossfield residents commute to other locations within the same province, a proportion that is slightly higher than Alberta's rate of 4.18%.

Table 32: Commuting Destinations – Crossfield and Alberta

Commuting Destination*	Crossfield Labour Force	%	Alberta Labour Force	%
Commute within census subdivision (CSD) of residence	200	19.4	902,040	71.63
Commute to a different CSD within Census Division (CD) of residence	765	74.3	292,360	23.22
Commute to a different CSD and CD within province or territory of residence	65	6.3	52,590	4.18
Commute to a different province or territory	0	0.0	12,315	0.98
Total	1,030	100.0	1,259,305	100.00

Table Source: 2021 Census, Statistics Canada

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

Table 33 provides insights into the timing of commutes to work among Crossfield residents aged 15 years and over. The data reveals that most commuters leave for work during peak morning hours, with 27.8% departing between 6 AM and 7:59 AM. Additionally, a significant portion of commuters (24.7%) 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 33: Time of Commute to Work

Time Leaving for Work*	Labour Force	%
Between 5 AM and 5:59 AM	135	9.0
Between 6 AM and 6:59 AM	415	27.8
Between 7 AM and 7:59 AM	370	24.7
Between 8 AM and 8:59 AM	225	15.1
Between 9 AM and 11:59 AM	120	8.0
Between 12 PM and 4:59 AM	220	8.0
Total	1,495	100.00

Table Source: 2021 Census, Statistics Canada

*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

5.5.2 Tourism

An increase in tourism can lead to heightened demand for fire protection services, particularly with overnight accommodations. Crossfield 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

Crossfield has an Indigenous population (6.1%) that is consistent to Alberta's population of 6.81%. The majority of those identifying as Indigenous in Crossfield report a single Indigenous identity, with 5.7% of these individuals having a single Indigenous response. Of these, the majority identify as Métis (3.6%) 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 Crossfield.

Table 34 provides insights into the Indigenous population within Crossfield compared to the province.

Table 34: Indigenous Population – Crossfield and Alberta

Indigenous Identity	Crossfield Total	Crossfield %	Alberta Total	Alberta %
Indigenous Identity	220	6.1	284,470	6.81
Single Indigenous Responses	205	5.7	276,060	6.6

Indigenous Identity	Crossfield Total	Crossfield %	Alberta Total	Alberta %
<i>First Nations</i>	70	1.9	145,640	3.5
<i>Métis</i>	130	3.6	127,470	3.1
<i>Inuk (Inuit)</i>	0	0	2,945	.1
Multiple Indigenous Responses	10	0.3	4,785	.1
Indigenous Responses not specifically listed above	0	0	3,620	.1
Non-Indigenous Identity	3,385	93.9	3,893,245	93.4
Total	3,605	100	4,177,705	100
Registered or Treaty Indian	10	0.3	126,530	3.0
Not a Registered or Treaty Indian	3,590	99.6	4,051,185	97

Table Source: 2021 Census, Statistics Canada

5.6 Demographic Profile – Identified Risks and Key Findings

Table 35: Demographic Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	The population of Crossfield has steadily increased with continued anticipated growth. Rapid changes in population and development can contribute to increased risk and potential increase in call volume and service level demands.
Identified Risk	Crossfield has 13.3% of the population aged 65+ compared to 14.76% for Alberta. Seniors are considered to represent one of the highest fire risk groups across the province based on residential fire death rate
Identified Risk	Of Crossfield’s population, 13.47% fall into the age range of 55 to 64, representing a potential future increase as this cohort will age towards 65+. Based on historic residential fire fatality data, this population will become great fire fatality risk.
Identified Risk	Nearly (6.3%) of the population commutes to a different census division within the province. This is 2.12% more than that of the provincial commuters (4.18%)
Key Finding	Crossfield has lower proportion of newcomers/immigrants (7.4%) when compared to Alberta (23.24%)
Key Finding	The population of the Town has increased with continued anticipated growth. Rapid changes in population and development can affect the service level needs of the Town.

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 Crossfield.

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 Crossfield'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 Crossfield 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):

- Blizzards
- Tornado
- Wind
- Chemical, Biological, Radiological, Nuclear Event
- Drought

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 36.

Table 36: Impacts of Hazards on Fire Protection Services

Hazard	Possible Impact
Blizzards	<p><u>Overall Impact</u> Above ground power lines could be impacted along with road treatments, debris clearing, salt gravel or other road treatment supplies. Increase in call volume due to vehicular incidents, rescues. May require short-term shelters for residents</p> <p><u>Fire Services</u> Depending on the severity of the debris on roads and downed power lines, access to various sections of the road network could be limited to fire service response delaying emergency response times. Interruptions to communication towers could impact fire service communications. Continued coordination of emergency response and operations plans among governmental units and first responders. Multiple locations may be requiring additional resources simultaneously.</p>
Tornado High Wind	<p><u>Overall Impact</u> Above ground power lines could impact buildings or roads and winds could take down communication towers. Life safety risk, in particular to vulnerable population. Multiple areas of damage</p> <p><u>Fire Services</u> Depending on the severity of the debris on roads and downed power lines, access to various sections of the road network could be limited to fire service response delaying emergency response times. Interruptions to communication towers could impact fire service communications. Continued coordination of emergency response and operations plans among governmental units and first responders. Multiple locations requiring additional resources and the necessity for unified command and inter-agency collaboration</p>
Chemical, Biological, Radiological, Nuclear Event	<p><u>Overall Impact</u> Serious Injury or fatality. Could require small or large-scale evacuation of homes, business, schools etc. Could result in transportation disruption and road closures and required detours.</p> <p><u>Fire Services</u> Depending on the severity and scale of fire incident, could pose secondary risk to firefighters on-scene. Must have extensive CBRNE response training. Must maintain mutual aid agreements with neighbouring response agencies and Alberta CBRNE teams. Must maintain contract agreements with specialized response services such as helicopter, sprinkler, and pumping services.</p>

Hazard	Possible Impact
Drought	<p><u>Overall Impact</u> Could cause disruptions to critical infrastructure. Could cause environmental damage, affecting agricultural industry and water required for critical infrastructure.</p> <p><u>Fire Services</u> Depending on the severity and type of incident, could result in water shortages for fire fighting purposes causing risk to persons and property. May require additional support from mutual aid partners. May require co-ordination of emergency response plans among governmental units, businesses and first responders.</p>

Table Source: Crossfield, Community Emergency Management Program, 2024

6.2 Hazard Profile – Identified Risks and Key Findings

Table 37: Hazard Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Key Finding	<p>Crossfield’s 2024 Community Emergency Management Program (Risk Assessment for Community) AKA Hazard Identification and Risk Assessment (HIRA) identifies the top hazards listed below that could impact the ability of CFD to deliver fire protection services:</p> <ul style="list-style-type: none"> • Blizzards • Tornados • Wind • Chemical, Biological, Nuclear Event • Drought

SECTION 7

PUBLIC SAFETY RESPONSE PROFILE

7.1 Public Safety Response Agencies in Crossfield

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 Crossfield.

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 38 lists the public safety response agencies who could be able to assist Crossfield 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 38: Public Safety Response Agencies

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
Crossfield Fire Department	<ul style="list-style-type: none"> • Fire Suppression • Medical response • Rescue (MVC) • Inspections • Investigations 	<ul style="list-style-type: none"> • Firefighting • Typically, fires on scene medical response • Rescue/vehicle extrication
Crossfield Municipal Enforcement Services	<ul style="list-style-type: none"> • Animal Protection Act • Dangerous Dog Act • Environmental Protection and Enhancement Act • Fuel Tax Act • Gaming, Liquor and Cannabis Act • Highways Development and Protection Act • Line Fence Act • Petty Trespass Act • Provincial Offences Procedure Act • Tobacco and Smoking Reduction Act • Stray Animals Act • Traffic Safety Act • Trespass to Premises Act • Town By-laws 	<ul style="list-style-type: none"> • Protecting Town road infrastructure • Enforcing traffic infractions on Town roads • Providing information on legislation and Town bylaws to industry, as well as the general public. • Inspecting properties for the Town of Crossfield • Aiding the RCMP, Sheriff and Conservation Officer's, and Fish & Wildlife

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
Royal Canadian Mounted Police (RCMP)	<ul style="list-style-type: none"> • Federal provincial and municipal law infractions • Traffic calls, emergency calls, crowd control, public assistance • Major crimes i.e., homicide, kidnapping, organized crime • Investigations • complaints 	<ul style="list-style-type: none"> • Enforcing Criminal Code • Enforcing Municipal By-laws • Investigating cross-jurisdictional and major crimes • Offender transport
Alberta Fire Commissioner	<ul style="list-style-type: none"> • Fire 	<ul style="list-style-type: none"> • Assistance with managing fire and obtaining resources beyond capability of Town
Alberta Health Services EMS	<ul style="list-style-type: none"> • Advanced EMT pre-hospital care • Mass casualty incidents • Evacuation of health facilities (hospital, nursing homes, etc.) • Disease related emergencies 	<ul style="list-style-type: none"> • Ensuring provision of paramedic services at the site of the emergency • Ensuring continuity of paramedic services coverage is maintained throughout the remainder of the community/Town • Liaise with the Medical Officer of Health to help facilitate medical services
Alberta Health Services (Calgary Zone)	<ul style="list-style-type: none"> • Communicable Diseases • Health Inspection Services • Advice on Medical Services • Public Health Advisory • Consult with long-term care facilities, hospitals, retirement homes, and other vulnerable populations as required • Kids Help Line • Distress Center 	<ul style="list-style-type: none"> • Provide information and instructions to the population on matters concerning public health • Protect the health of the community from inherent health threats by enforcing the applicable legislation. • Continued delivery of established programs to ensure continuity of care and general health protection

Public Safety Response Agency	Types of Incidents they Respond to	Agency Role in Incident
Airdrie and District Victim Services Society	<ul style="list-style-type: none"> • Serious assault • Domestic violence • Sexual assault • Stalking • Violent Crimes 	<ul style="list-style-type: none"> • Immediate crisis response • Victim assistance • Victim support and needs assessment
Environmental 360 Solutions Crossfield	<ul style="list-style-type: none"> • Hazardous spills/emissions 	<ul style="list-style-type: none"> • Product information • Safe handling information • emergency actions
Ministry of Environment and Protected Areas	<ul style="list-style-type: none"> • Spills • Environmental disasters 	<ul style="list-style-type: none"> • Provide personnel and equipment for cleanup and remediation
Ministry of Jobs, Economy, and Trade	<ul style="list-style-type: none"> • Industrial accidents • Workplace critical injuries and deaths 	<ul style="list-style-type: none"> • Investigate worker injury or death
Ministry of Forestry and Parks	<ul style="list-style-type: none"> • Large wildland fires 	<ul style="list-style-type: none"> • Assist in mitigating and combating wildland fires
Ministry of Transportation and Economic Corridors	<ul style="list-style-type: none"> • Major/large vehicle incidents on King’s Highways 	<ul style="list-style-type: none"> • Traffic control • Assist with repair and cleanup
Alberta Emergency Management Agency	<ul style="list-style-type: none"> • Large-scale emergencies requiring declaration of state of local emergency 	<ul style="list-style-type: none"> • Provincial level support • Communication
CN Rail Police	<ul style="list-style-type: none"> • Rail emergencies (on and off board) • Rail security incidents on and offboard • Promote rail safety • Protect infrastructure 	<ul style="list-style-type: none"> • Oversee response to all rail emergencies. • Consult with and support municipal or provincial fire and emergency services as needed for large incidents
Alberta Seniors, Community and Social Services	<ul style="list-style-type: none"> • Attend incidents involving the displacement of people 	<ul style="list-style-type: none"> • Provide temporary emergency shelter • Warming/ cooling centres • Long-term evacuation accommodations • Address food, clothing needs and personal services.

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.

Crossfield has formal Fire Service Agreements with:

- Rocky View County (Regional Fire Service Agreement)
- Town of Carstairs (Mutual Aid Agreement)
- City of Airdrie (Fire Inspection & Investigation Agreement) (Mutual Aid Agreement -expired)
- Village of Beiseker (Fire Service Agreement)

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 Crossfield.

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 39 lists the community agencies and non-government organizations (NGOs) available to Crossfield.

Table 39: Community Service Agencies

Community Service Agency	Type of Assistance Provided
<p>Schools within Crossfield: Crossfield Elementary W. G. Murdoch</p>	<p>The 2021 Census data indicates that children aged 14 and under represent 21/7% of Crossfield’s total population. The proportion of children in Crossfield should be considered as an opportunity for public education. These numbers support the development of enhanced public education programming that targets children/youth of all ages. Partnering with school boards and other agencies that work with children can provide opportunity for fire and life safety education.</p>
<p>Salvation Army – Calgary</p>	<p>The Salvation Army can provide both immediate and long-term recovery assistance in cooperation with Fire and Police Services. The Salvation Army also provides information and referral to other agencies, camps, disaster services and counselling.</p>
<p>Calgary Paramedic Services</p>	<p>Provides basic and advance medical care for first aid emergencies at public events. They are also able to provide volunteer support in the event of emergency situations such natural or human disasters.</p>
<p>Big Brothers & Sisters, Calgary</p>	<p>Provides various mentoring programs for youth.</p>
<p>Crossfield Family and Community Support Services (FCSS)</p>	<p>Helps youth, seniors and families adopt healthy lifestyles and improve quality of Life.</p>
<p>Crossfield Madden Food Bank</p>	<p>Exists to provide emergency food assistance to those living in the Town of Crossfield</p>
<p>Local community faith-based organizations</p>	<p>Public fire safety messaging does not always reach community’s most vulnerable populations. Partnering with local faith-based organizations can provide CFD with the opportunity to improve its public education program as a method of information sharing to a wider audience within Crossfield. This type of opportunity could involve distributing printed materials with fire safety messaging and smoke alarm installation information among the congregation, or faith-based leaders may allow representatives from CFD to address congregations at faith-based events with fire safety messaging in person. These organizations may also be able to identify residents within the community who are at great risk of fire danger due to substandard housing or hoarding.</p>

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 Crossfield.

9.1 Economic Sectors and Employers in Crossfield

The top industries that contribute to the economic base of Crossfield are summarized in Figure 8. According to the Statistics Canada 2021 Census, Trades, Sales and Services and Business, finance and administration occupations are the top contributing industries to Crossfield’s economic base.

Figure 8: Crossfield Top Industries

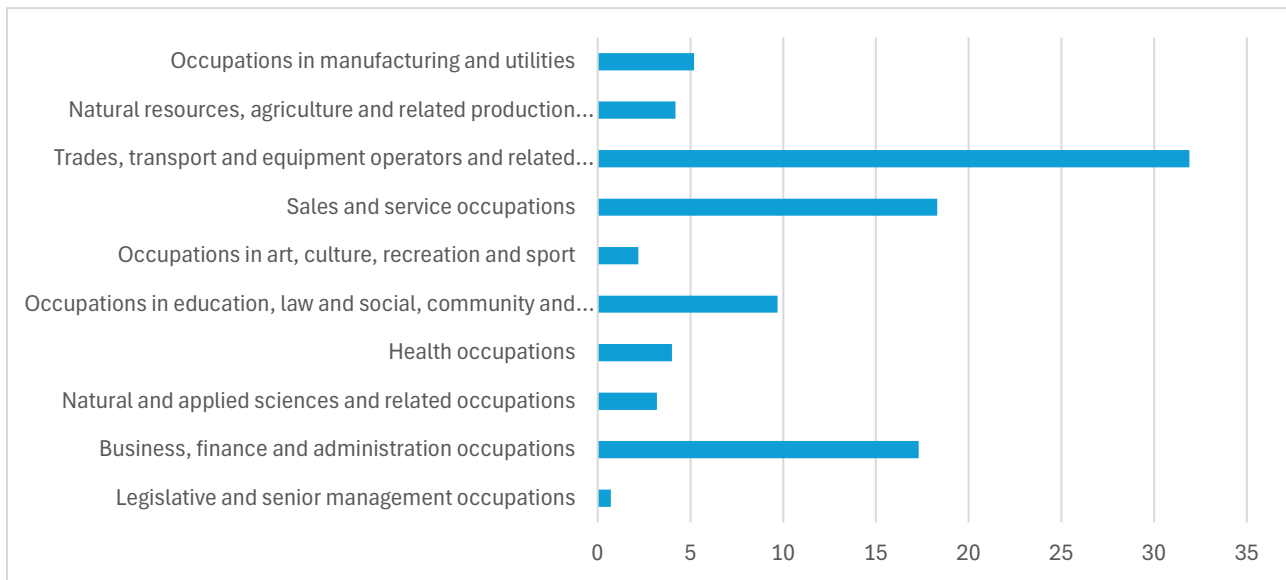


Figure Source: 2021 Census, Statistics Canada

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.

Crossfield has identified the following major employers as shown below in Table 40. 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 40: Major Employers in Crossfield

Company	Service/Product	Address
Modus Structures	Modular construction	34 McCool Crescent
Strike Group	<ul style="list-style-type: none"> Upstream Oil & Gas Midstream & Transportation Downstream & Petrochemical Power & Utility Industrial & Commercial Renewables & Environmental Mining & Agriculture 	1027 Western Dr.
Plasti-Fab	Leading provider of EPS insulation products	718 McCool Street
CRM	Recycled Tires	1030 Western Dr.
Maxfield	Leading manufacturer of high-quality pressure vessel storage and transportation equipment for the compressed gas	1026 Western Dr.
ArkTon Steel	Leading provider of conventional and pre-engineered steel buildings	50 McCool Crescent
Dicks Lumber	Lumber and building supplies	16 McCool Crescent
CORE Linepipe	Pipe supplier	10 McCool Crescent
Tyalta Industries	Parts and service	613 McCool Crescent
Demon Oilfield	Oil and gas field equipment & services	812 Laut Ave.
Co-op Propane	Propane Distributor	1309 Laut Ave.

9.2 Economic Profile – Identified Risks and Key Findings

Table 41: Economic Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	The risk of a single fire or emergency event having a significant impact on the community is a moderate risk.

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 Crossfield.

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 Crossfield Fire Department and the Office of the Fire Commissioner's 10-year statistical report for Crossfield from 2013-2022.

10.1.1 Total Fire Loss

The analysis of total fire loss in Crossfield over the ten-year period from 2013 to 2022 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, Crossfield experienced 5.5 fires per year and incurred approximately \$366,502.66 in property loss annually.

Table 42: Total Fire Loss – Crossfield

Year	Fires	Loss (\$)	Alberta Fires	Loss (\$)
2013	1	\$2	5212	\$498,389,983
2014	3	\$258,000	5161	\$443,890,046
2015	4	\$646,873	5556	\$626,060,251
2016	4	\$80,462	16310	\$2,252,942,351
2017	5	\$120,679	4526	\$526,602,022
2018	2	\$20,419	3541	\$378,166,306
2019	8	\$219,824	3425	\$347,107,617
2020	4	\$869,685	3412	\$465,615,727
2021			4682	\$539,910,146
2022	13	\$1,082,580	3618	\$506,628,112
Total	44	\$3,298,524	55,447	\$6,585,312,561
% of All Fires Alberta	.0079%	.05%		
Average per year	5.5	\$366,502.66	5544	\$658,531,256

Table Source: Alberta Fire Commission 10 – year loss by Municipality: 2013 – 2022

Note: Number of fires and property loss for Crossfield in 2021 was not included in Report from the Fire Commission.

10.1.2 Fires by Occupancy Type

This section examines structure fires occurring from January 1st, 2013, to December 31st, 2022, categorized by occupancy type. Over this period, Crossfield experienced a total of 44 structure fires. Notably, 36.36% (16) of these fires occurred in Group C-Residential Occupancies.

Table 43: Fires by Major Occupancy Type – 2013-2022

Group	Occupancy Classification	# of Fires	Crossfield % of Structure Fires	Crossfield Structure Fire Loss	Crossfield % of Structure Fire Loss
A	Assembly	1	2	\$5,000	.0015
B	Care & Detention	0	0.00	\$0	0.00
C	Residential	16	38	\$1,946,327	59.0
D	Business & Personal Services	1	2.0	\$5	.00015
E	Mercantile	0	0.00	\$0	0.00
F	Industrial	4	9.09	\$33,052	1.00
Other	Not Classified in NBC	22	50%	\$1,314,140	38.32%
Farm	Classified in the NBC	0	0.00	\$0	0%
Total		44	100%	\$3,298,524	100.00

Table Source: Alberta Fire Commissioner Fire Loss 2013 - 2022³

10.1.3 Civilian Fatalities and Injuries

As shown in Table 44, according to data from the Fire Commissioner, spanning from January 1st, 2013, to December 31st, 2022, there were no reported fatalities but 3 injuries within Crossfield. Notably, these numbers are considered low to the total identified by the provincial statistics. The Alberta Fire Commission records showed that one injury was sustained in a storage fire and two in residential dwelling units.

³ Ibid

Table 44: Civilian Fire Fatalities and Injuries Crossfield and Alberta

Year	Crossfield Fires	Crossfield Deaths	Crossfield Injuries	Alberta Fires	Alberta Deaths	Alberta Injuries
2013	1	0	0	5212	20	184
2014	3	0	0	5161	40	180
2015	4	0	1	5556	38	163
2016	4	0	0	16310	35	165
2017	5	0	1	4526	35	173
2018	2	0	0	3541	32	124
2019	8	0	0	3425	26	76
2020	4	0	0	3412	11	99
2021	Missing	Missing	Missing	4686	38	125
2022	13	0	1	3618	44	102
Total	44	0	3	55447	319	1391
% of Alberta Fires	.0079%	.00%	.22%			

Table Source: Alberta Fire Commission 10 – year loss by Municipality: 2013 - 2022

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 45 presents the reported fire causes for Crossfield compared to the province over the five-year period from January 1st, 2013, to December 31st, 2022.

The analysis of fire causes in Crossfield, as detailed in Table 45, reveals various factors contributing to fires over the period examined. The cause of almost 43% of fires were found to be undetermined/unknown. This rate of undetermined causes is 16% higher than the provincial average. 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, Crossfield had 1 (6%) intentional fire being arson/set fires or acts of vandalism, during this ten-year period. In contrast, the provincial total for intentional fires was 7%. This indicates that Crossfield has a lower rate of intentional fires compared to the province, or the higher number of undetermined fires might have obscured these intentional fires.

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% of all reported fires in Crossfield during this period which equalled the province. The leading causes of unintentional fires in Crossfield were Heating Equipment (12%), Electrical Distribution Equipment (12%), and Cooking (12%) compared to 4%, 7% and 13%, respectively, in the province. Crossfield has not experienced any fires resulting from exposure, which in this context refers to a fire originating outside a building, such as neighbouring structure, that subsequently causes ignition of the building in question.

Table 45: Reported Home Fire Cause – Crossfield and Alberta – 2013-2022

Fire Cause Crossfield	Crossfield #	Crossfield %	Alberta #	Alberta %
Appliance/Equipment Related	3	6%	354	1%
Arson/Set Fire	1	6%	1851	7%
Candle (accident)	1	6%	269	1%
Child Fire-play	0	0%	78	0%
Clothes Dryer	0	0%	274	1%
Cooking	2	12%	3261	13%
Electrical Distribution Equipment	2	12%	1785	7%
Exposure Fire	0	0%	4939	21%
Flammable Gas Ignition	0	0%	88	0%
Flammable/Comb. Liquid Ignition	0	0%	150	0%
Heating Equip related	2	12%	1071	4%
Inadequate Control of Open Fire	0	0%	44	0%
Light/Fluorescent Bulb	0	0%	185	0%
Match/Lighter not used from Smoking	0	0%	126	0%
Other Causes/Unknown	7	43%	6522	27%
Smoking	1	6%	2276	9%
Welding/Torch Too Close	0	0%	78	0%
Total	16	100%	23,271	100%

Table 45 Source: Alberta Fire Commission 10 – year loss by Municipality: 2013 - 2022

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 46 provides fire loss by source of ignition for Crossfield and the province. Exposure, Structure Detached was the highest ignition source being 15%. 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 46. 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 46: Top Ten Sources of Ignition – Crossfield – 2013-2022

Reported Ignition Source	Crossfield # of Fires	Crossfield % of Fires	Crossfield \$ loss
Exposure, Structure Detached	7	15	\$537,580.00
Igniting Object – Cannot be Determined	6	13	\$409,962.00
Exposure, Vehicle	5	11	\$130,672.00
Appliances and Equipment – unclassified or unknown	3	6	\$592,276.00
Electrical Distribution Equipment – unclassified or unknown	2	4	\$80,000.00
Exposure – unclassified or unknown	2	4	\$53,000.00
Fireplace	2	4	\$851,087.00
Stove, range, top burner area – involving other circumstances	2	4	\$40,500.00
Unknown	2	4	\$0.00
Total	44	100.00	\$3,298,524.00

Table Source: Alberta Fire Commissioner – Fire Causes 2013 - 2022

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 47 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.

As Crossfield was unable to provide this detailed data, full analysis of this information cannot be completed. 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: 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

10.2 Event History

Event history seeks to apply CFD historic emergency call data to develop an understanding of community risks. This section provides a statistical assessment of historic emergency call volumes for Crossfield. 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 historical calls for the f-year period from January 1st, 2020, to December 31st, 2023. This section provides a statistical assessment of historic emergency call volumes for Crossfield. The volume and frequency of historic calls informs the understanding of response probability. The types of calls inform the potential consequences of CFD 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 CFD for the time from January 1st, 2020, to December 31st, 2024.

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, 2020, to December 31st, 2023, is shown in Figure 9. This analysis identifies an increase in the total emergency call volume within Crossfield over this period from 457 calls in 2020 to 527 calls in 2023. There was a decrease in fire calls directly related to the Level of Service change made by council to remove Alpha, Bravo, and minor Charlie medical responses.

The increase between 2020 and 2023 represents a total increase of 13.28% over this four-year period with an average of 532 calls per year. There was a 26.37% decrease in the call volume from 2023 - 2024. These appears to be the result of a decrease in motor vehicle incidents and should be monitored year by year to evaluate further increases/ decreases.

Figure 9: Annual Call Volume – All Incidents January 1st, 2020, to December 31st, 2023

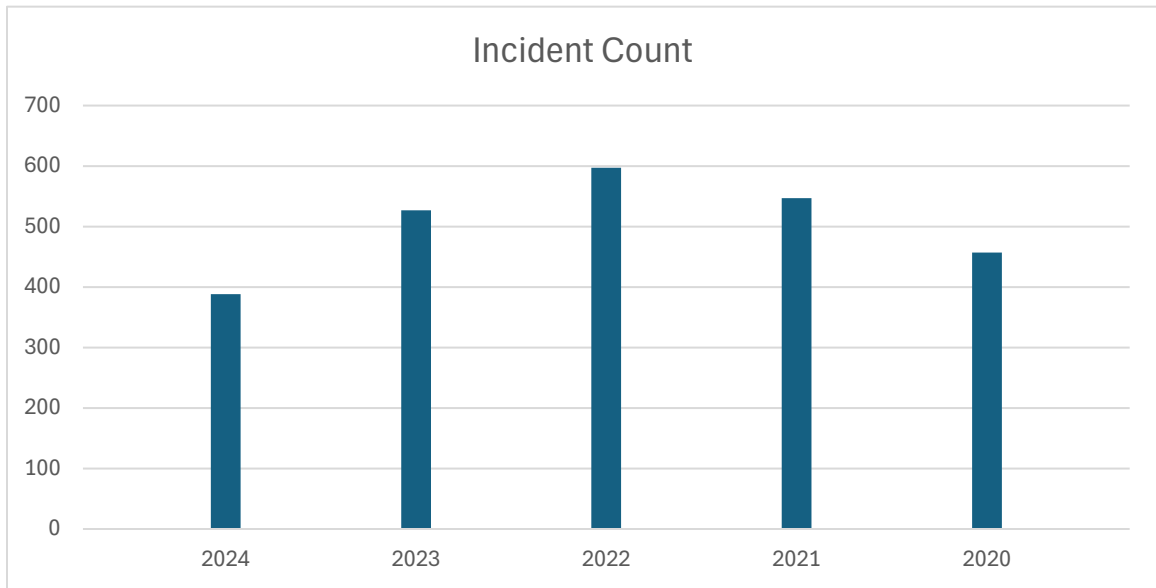


Figure Source: Dashboard data for Crossfield⁴

10.2.1.2 Daily Emergency Call Volume – Fire Incidents Only

For the period from January 1st, 2013, to December 31st, 2022, emergency call volume typically increases between 6:00 AM and 11:00 PM, reaching its peak at 5:00 PM (See Figure 10). The lowest percentage of emergency calls typically occurs between 12:00 AM and 6:00 AM. Crossfield, however, had a significant number of occupied private dwelling calls between 12:00 AM and 03:00 a.m. which is not typical with trends observed during commuting hours and reduced activity when most of the population is asleep.

⁴ Ibid

Figure 10: Total Call Volume – January 1st, 2020, to December 31st, 2023

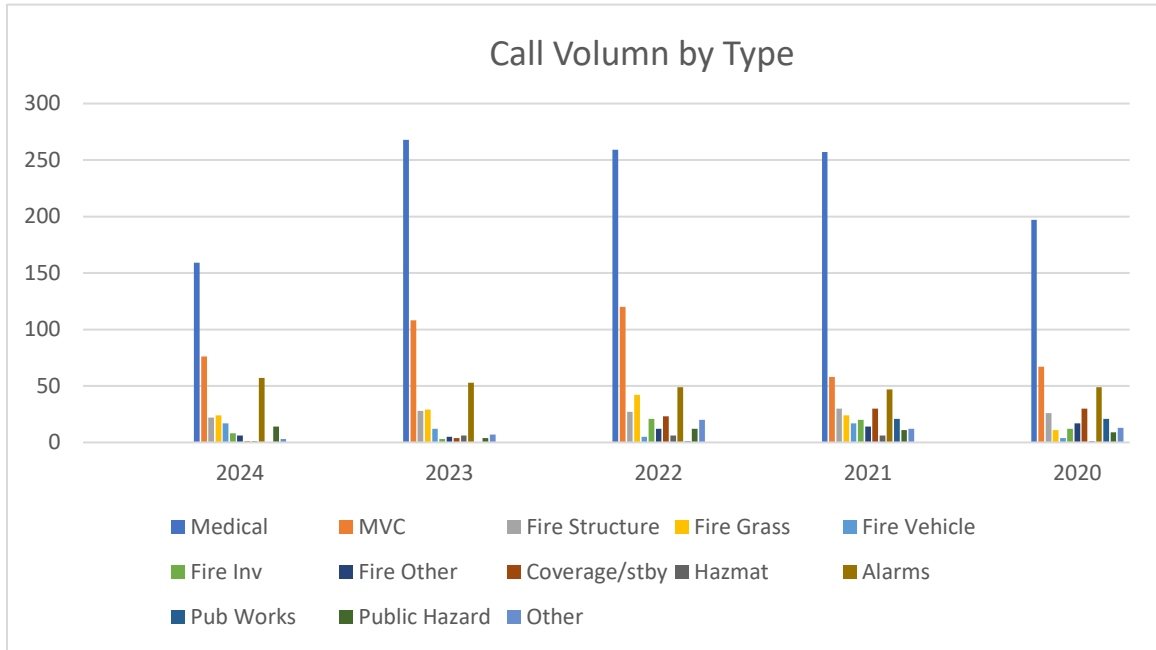


Figure Source: *Dashboard data from Crossfield*⁵

An analysis of the call volume by day of the week reveals a consistent frequency of incidents, with slight increases noted on Tuesdays and Saturdays. These trends are anticipated for Saturday, reflecting heightened recreational activities and increased traffic throughout Crossfield.

⁵ Ibid

Figure 11: Total Call Volume Day, Night Weekend - 2024

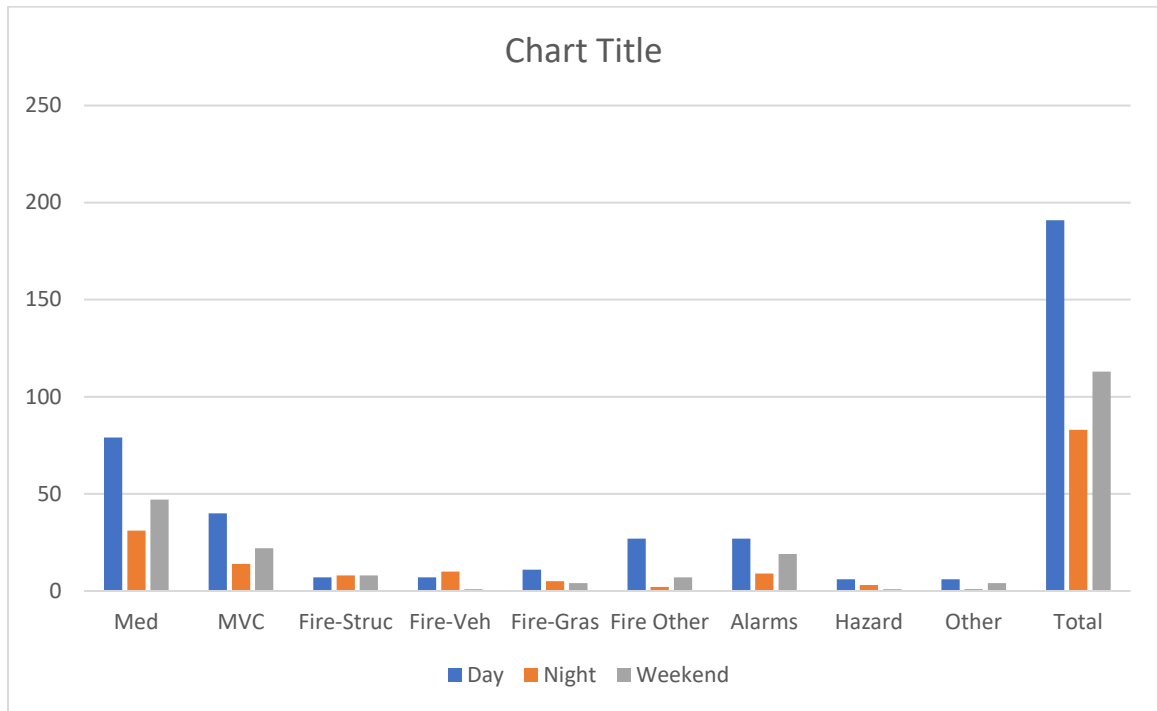


Figure source – Dashboard data from Crossfield for 2024

10.2.1.3 Call Type – All Incident Types

This section analyzes all emergency call volume for the period from January 1st, 2020, to December 31st, 2024. Table 48 illustrates that during this period 56.1% of the total emergency calls that CFD responded to were medical incidents. The second highest rate of responses were to Motor Vehicle collision being 21.11%. 18.67% of all responses by CFD were the result of fire incidents. This includes structure fires, outdoor fires, smoke investigations and controlled burning. During this five-year period, only .8% of emergency calls were categorized as Hazardous Materials. The number of False Alarms reported over this 5-year period was 255 which is 10.92% of the total calls.

Table 48: Total Number of Incidents – Summary - January 1st, 2020, to December 31st, 2024.

Incident Type	2020	2021	2022	2023	2024	5-year
Motor Vehicle	67	58	120	108	76	429
False Alarm	49	47	49	53	57	255
Fire	70	105	107	77	77	436
Hazardous material	1	6	6	6	1	20
Medical	197	257	259	268	159	1140
Other	13	12	20	7	3	55
Total	397	485	561	519	373	2335

Table Source: Alberta Fire Commissioner and Crossfield data

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

Table 49: Past Loss & Event History Profile – Identified Risks and Key Findings

Identified Risk / Key Finding	Rationale
Identified Risk	Over the five-year period from January 1, 2020, and December 31, 2024, the most reported ignition sources within Crossfield were related to undetermined igniting object.
Identified Risk	40.22% of private dwellings were built prior to the adoption of the National Building Code and National Fire Code. No data has been captured to reflect compliance within the community. There is a risk of high non-compliance not being captured.
Key Finding	Over the period from January 1 st , 2020, to December 31 st , 2023, the volume of emergency calls responded to continue to increase on year with a decrease in 2024 which appeared to be a reduction of both medical calls and motor vehicle incidents.
Key Finding	There has been a steady increase in call volume from 2020 to 2024 which primarily relates to vehicle collisions, medical calls, and actual fire incidents. This trend should be monitored.
Key Finding	Provincial statistics indicate that smoke alarms are present and active in only 38% of residential fires. Crossfield does not currently collect this data. Understanding compliance by the community in this area could assist with identifying the need for more targeted public education programs.
Key Finding	Over the five-year period from January 1 st , 2013, to December 31 st , 2022, 43% of the reported fires had an undetermined cause of fire.

Table Source: Response data from Crossfield, Alberta Fire Commissioner – 2013 - 2022

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 12.

Figure 12: Risk Conclusions Application Process: Risk Conclusions Application Process

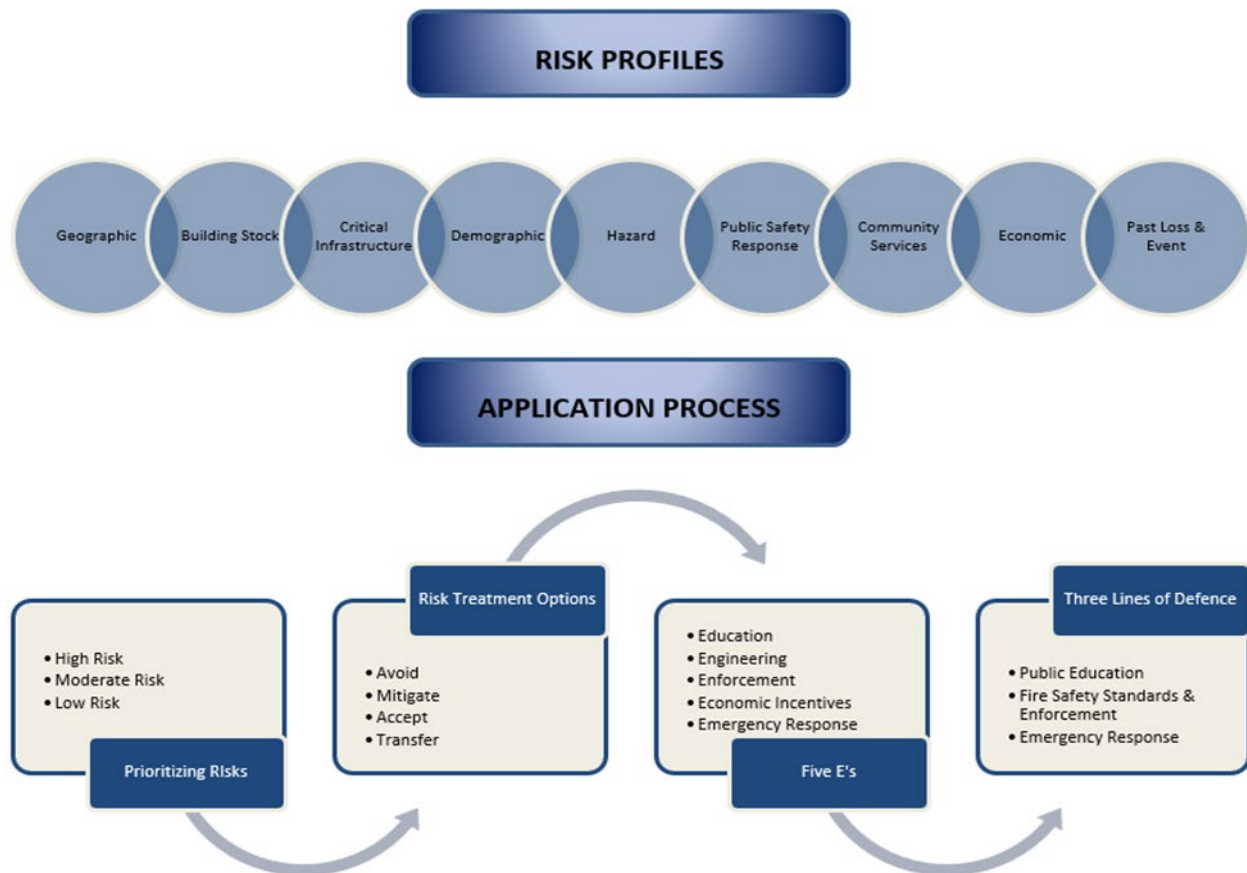


Figure Source: Adapted from NFPA 1300⁶

⁶ Office of the Fire Marshal, 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 50 presents the probability levels and the adjusted descriptions.

Table 50: Probability Level

Likelihood Category	Numerical Value ⁷	Description
Rare	1	<ul style="list-style-type: none"> May occur in exceptional circumstances No incidents in the past 15 years
Unlikely	10	<ul style="list-style-type: none"> Could occur at some time, especially if circumstances change 5 to 15 years since last incident
Possible	100	<ul style="list-style-type: none"> Might occur under certain circumstances 1 incident in the past 5 years
Likely	1,000	<ul style="list-style-type: none"> Will occur at some time under current circumstances Multiple or recurring incidents in the past 5 years
Almost Certain	10,000	<ul style="list-style-type: none"> Expected to occur unless circumstances change Multiple or recurring incidents in the past year

Table Source: OFM TG 02-2019⁸

⁷ Numeric scales are taken from Dillon Consulting, *The Corporation of the City of Mississauga Community Risk Identification: Introduction and Methodology*, July 2017

⁸ 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 51 presents the consequence levels.

Table 51: Consequence Levels

Likelihood Category	Numerical Value ⁹	Description
Insignificant	1	<ul style="list-style-type: none"> No life safety issue. Limited value or no property loss. No impact on local economy. No effect of general living conditions.
Minor	10	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Significant loss of life. Multiple property damage to a significant portion of Crossfield. 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 02-2019¹⁰

⁹ Numeric scales are taken from Dillon Consulting, *The Corporation of the City of Mississauga Community Risk Identification: Introduction and Methodology*, July 2017

¹⁰ 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 values¹¹ 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 52 shows the risk matrix for this CRA.

Table 52: 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 02-2019¹²

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 53. Where possible, quantitative data was used to inform the risk assignment as described in the rationale in the table.

¹¹ Numeric scales are taken from Dillon Consulting, *The Corporation of the City of Mississauga Community Risk Identification: Introduction and Methodology*, July 2017

¹² Office of the Ontario Fire Marshal, *Community Risk Assessment Technical Guideline TG 02-2019, Appendix B Pg B1*

Table 53: Risk Assignment

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Geographic	The majority of roads in the Town of Crossfield are paved although roads leading to residential properties are largely graveled in rural areas. Although roads are well maintained, gravel roads may slow response times and present challenges for apparatus during a response, including the threat of damage or accidents. Maintenance of gravel roads in winter months can also be challenging and slow response times and increase risks.	Moderate	<ul style="list-style-type: none"> 42.25 km. of roads of which the majority are paved Gravel roads consist of Range Road 12, portion of Western Drive/township road 284 and west boundary to just east of the golf course, Laut Crescent Area experiences annual winter weather including ice and snow 	Moderate	<ul style="list-style-type: none"> Potential for risk to life safety of occupants of motor vehicles Potential risk for property loss Could pose a threat to small local business Could pose a threat to the quality of the environment Consequence level could be impacted by the magnitude of a hazard event 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Geographic	The road network is a contributor to emergency call volume due to motor vehicle collisions and vehicle fires.	Possible	<ul style="list-style-type: none"> CFD responded to 429 motor-vehicle related incidents between 2020 – 2024. This represents (17.05%) of all calls. Crossfield Fire Department (CFD) provides emergency response services on provincial highways for the provincial highway moderator (Alberta Transportation). Additionally, CFD is contracted by Rocky View County to respond to incidents on county roads, including those within the Town of Crossfield. 	Major	<ul style="list-style-type: none"> Potential for risk to life safety of occupants of motor vehicles Potential risk for property loss Could pose a threat to small local business Could pose a threat to the quality of the environment Consequence level could be impacted by the magnitude of a hazard event 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Geographic	There is an elevated risk of a major spill and dangerous goods incident along Hwy 2A which serves as the primary route, north and south through Crossfield	Possible	<ul style="list-style-type: none"> No major releases reported in Crossfield, however, dangerous goods releases on highways occur annually. 	Moderate	<ul style="list-style-type: none"> Report (2018) from Statistics Canada indicates there were 464 incidents involving dangerous goods in Canada, 48.5% of which occurred in Alberta. Over half of all dangerous goods release incidents occurred on roadways. Threat to life safety, moderate property, and environmental damages 	Moderate
Geographic	The transportation of agricultural chemicals along roadways may pose the risk of an environmental spill.	Possible	<ul style="list-style-type: none"> No major releases reported in Crossfield, however, dangerous goods releases on highways occur annually. 	Moderate	<ul style="list-style-type: none"> Report (2018) from Statistics Canada indicates there were 464 incidents involving dangerous goods in Canada, 48.5% of which occurred in Alberta. Over half of all dangerous goods release incidents occurred on roadways. Threat to life safety, moderate property, and environmental damages 	Low

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Geographic	During Peak commuting times, the highest risk of motor vehicle collisions is likely to occur	Almost Certain	<ul style="list-style-type: none"> Motor vehicle collisions occur annually throughout the Town of Crossfield and surrounding areas 	Moderate	<ul style="list-style-type: none"> From January 1, 2020, to December 31, 2024, there were 429 motor vehicle collisions Potential threat to life safety Minor property loss 	Moderate
Geographic	CPKC rail lines operate a track that runs north south and parallel with Hwy. 2A that presents a risk related primarily to the movement of dangerous goods. At-grade level rail crossings have the potential to create a physical barrier to connectivity to the roadway network, causing delays in response time.	Possible	<ul style="list-style-type: none"> There is a major railway line that runs parallel with Hwy 2A and has one uncontrolled at-grade crossings and two controlled at-grade crossings with the local road networks Delays in response time could have impact on response outcomes 	Moderate	<ul style="list-style-type: none"> From January 1, 2020, to December 31, 2024, there have been no rail collisions 	Low
Geographic	Uncontrolled at grade, rail crossings pose an increased threat of a motor vehicle collision	Possible	<ul style="list-style-type: none"> There have been nine reportable (to transport Canada) crossing collisions in Canada since 2018 	Moderate	<ul style="list-style-type: none"> Two fatal collisions in Alberta in 2021 Threat to life safety 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Geographic	There is a high degree of risk to the public and the environment associated with train derailment; with or without the release of dangerous goods	Possible	<ul style="list-style-type: none"> Crossfield has experienced no train derailments. 	Moderate	<ul style="list-style-type: none"> There is potential loss of life and major property and environmental damages 	Low
Geographic	There is a considerable risk of wildland fires in areas of urban interface. The landscape surrounding the town is primarily agricultural, and increasing development in natural areas increases the threat of wildfire impinging on the town.	Possible	<ul style="list-style-type: none"> The province has experienced drier summer months over the past years that have resulted in drought conditions Crossfield has not experienced any major losses to date. Railways travelling through the municipality has caused several grass and brush fires along the rail tracks 	Moderate	<ul style="list-style-type: none"> Could result in moderate loss of property to adjacent properties Could pose a threat to the life safety of occupants Could pose a threat to small local businesses, and/or pose a threat to the quality of the environment No major losses to date Resources may be unavailable to assist during busy seasons. 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Building Stock and Past Loss and Event History	<p>As with most jurisdictions, residential buildings account for the majority of building stock in Crossfield and are the most common building involved in structural fires. To date, Crossfield has not experienced a high injury or death loss due to fire.</p> <p>To meet the projected housing demands associated with the population growth in the town, increased fire-risk potentials will also increase in those areas.</p>	Almost Certain	<ul style="list-style-type: none"> The majority of Crossfield’s existing property stock is comprised of single detached Group C - Residential Occupancies In Alberta, a high majority of fire deaths and injuries occur in Group C residential occupancies 	Moderate	<ul style="list-style-type: none"> Residential fires occur annually in Crossfield. Crossfield is growing at an annual rate of 4 to 5% totaling a 23.16% five-year growth rate. Exposure fires are common in residential areas While Crossfield has not yet experienced any exposure fires, the risk is expected to increase as urban infill and higher residential densities continue to accommodate a growing population. Potential for large loss of life and significant property damage including businesses in medium density areas 	High

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Building Stock	This analysis suggests that 40.22% of Crossfield's building stock was constructed before 1990, preceding the adoption of the 1992 Alberta Edition - National Fire Code. This represents a significant fire risk within the community, as it is comparatively greater than the provincial average of 26.45%.	Almost Certain	<ul style="list-style-type: none"> Alberta Fire Commissioner statistics indicate that smoke alarms were present and activated in 38% of residential fires. 	Moderate	<ul style="list-style-type: none"> No data on number of fires as related to building age however residential fires account for most fires in Crossfield and assumption can be made that at least one fire has occurred in these identified buildings. The increase in both housing and commercial properties will increase service demand levels Potential for loss of life Potential for moderate property damage and loss of business In Alberta, there were 1724 incidents where a smoke alarm was present but in 1062 of those incidents, the smoke alarm did not operate. 	High

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Building Stock	The number of new homes being built with lightweight construction poses a risk to firefighter safety and can hinder the ability for occupants to safely evacuate in a timely fashion.	Possible	<ul style="list-style-type: none"> No data on the number of homes being built with lightweight construction, but this is recognized to be on the increase since implementation in the current building code. 	Moderate	<ul style="list-style-type: none"> Potential for loss of life Increased property loss with a high-density residential fire. 	Moderate
Building Stock	There are several properties within Crossfield that have a potentially high fuel load and therefore an increased high fire risk. Agricultural, industrial and storage operations contribute to this risk	Possible	<ul style="list-style-type: none"> Although industrial fires are rare, the impact and outcome of a fire is high. 	Major	<ul style="list-style-type: none"> Significant threat to businesses, local economy, and tourism Impact on the environment could result in a short term, partial evacuation of residents and businesses Prolonged disruptions to supply chains 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Building Stock	Crossfield currently has (2) one registered vulnerable occupancy.	Possible	<ul style="list-style-type: none"> Vulnerable occupancies require regular inspections to ensure that compliance with the Alberta Fire Code is maintained Vulnerable occupancies may house individuals with various mobility issues requiring detailed plans in the event of a fire in the building 	Moderate	<ul style="list-style-type: none"> No reported fire in a care facility between 2018 and 2022. Increased risk due to mobility and communication challenges. There is a potential for high loss of life if a fire were to occur in one of these occupancies. 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Critical Infrastructure	The Mountain View Regional Water Services Commission (MVRWSC) provides water services to residents of Crossfield. Crossfield makes sure that the reservoirs are topped up so they can maintain residential water usage and firefighting water needs. The fire service must be reliant on alternate water sources and have a water servicing strategy in place.	Almost Certain	<ul style="list-style-type: none"> Water supply is essential for fire suppression operations No municipal water infrastructure requires alternative sources including tanker shuttles and water bodies such as reservoirs, rivers, and lakes 	Moderate	<ul style="list-style-type: none"> Water shortages can occur during summer months and elevated temperatures MVRWSC closely monitors the river runoff levels but should they become critically low, MVRWSC will notify their partners for implementing water restrictions. Increased development within Crossfield will increase strain on water resources Water shortage threatens firefighting operations and could have significant consequences for property and life 	Moderate to High

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Demographic Profile	The population of Crossfield has steadily increased with continued anticipated growth. Rapid changes in population and development can contribute to increased risk and potential increase in call volume and service level demands.	Possible	<ul style="list-style-type: none"> Crossfield anticipates considerable population growth within the next ten years 	Low	<ul style="list-style-type: none"> Any growth and new development could change service level demands Threat to life safety and potential for moderate loss 	Moderate
Demographic	Crossfield has 13.3% of the population aged 65+ compared to 14.76% for Alberta. Seniors are considered to represent one of the highest fire risk groups across the province based on residential fire death rate.	Almost Certain	<ul style="list-style-type: none"> Canada's aging population has been recognized as one of the most significant demographic trends. The majority of seniors reside in hamlets and developed areas within Crossfield. Historically across the province this group represents the highest fire fatalities Seniors are more likely to live in high density housing 	Moderate	<ul style="list-style-type: none"> Could pose a threat to the life safety of occupants Could result in moderate property loss Potential for exposure risk depending on dwelling type and building age Potential presence and maintenance of fire protection equipment would influence consequence level 	Low

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Demographic	Of Crossfield’s population, 13.47% fall into the age range of 55 to 64, representing a potential future increase as this cohort will age towards 65+. Based on historic residential fire fatality data, this population will become great fire fatality risk.	Likely	<ul style="list-style-type: none"> Town’s population will increasingly age Historically across the province this group represents the highest fire fatality With increasing number of seniors, the threat of an injury or fatality due to fire increases Seniors more likely to live in high density housing 	Moderate	<ul style="list-style-type: none"> Threat to life safety and potential for moderate loss 	Moderate
Demographic	Crossfield has lower proportion of newcomers/immigrants (7.4%) when compared to Alberta (23.24%)	Possible	<ul style="list-style-type: none"> Crossfield has a lower proportion of newcomers/immigrants (7.4%) when compared to Alberta (23.24%) Communication barriers, in terms of language and the ability to read written material, may have an impact on the success of these programs 	Moderate	<ul style="list-style-type: none"> A high proportion of immigrants could demonstrate a large population that has a potential for unfamiliarity with local fire life safety practices and/or may experience possible language barriers 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Demographic	Nearly (6.3%) of the population commutes to a different census division within the province. This is 2.12% more than that of the provincial commuters (4.18%)	Likely	<ul style="list-style-type: none"> (6.3%) of the population commutes to a different census division 	Moderate	<ul style="list-style-type: none"> (67.6%) of the labour force begins their commute between the hours of 6 and 9 a.m., and therefore the risk of motor vehicle collision (MVC) calls is likely to be greatest during this time 	Moderate
Economic Profile	The risk of a single fire or emergency event having a significant impact on the community is moderate risk.	Possible	<ul style="list-style-type: none"> Downturns in agriculture have happened Significant threat to businesses, local economy, employment 	Moderate	<ul style="list-style-type: none"> With the increased use and storage of devices which utilize lithium-ion batteries, there is an increased risk that a fire involving these batteries could exhaust the water and human resources of CFD. A single train derailment and major traffic disruptions may have a significant impact on the Town's economic stability 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
		Possible	<ul style="list-style-type: none"> Processing and other activities that involve various ignition sources often occur in manufacturing occupancies. Manufacturing facilities constitute a special fire hazard due to elevated levels of combustible, flammable or explosive content and the possible presence of oxidizing chemicals and gases. 	Moderate	<ul style="list-style-type: none"> A disruption in the agriculture or oil and gas industry may not have large implications on the economic wellbeing of the town itself, however, disruptions could result in secondary issues often associated with the loss of an economy such as homelessness, addiction, mental health, and medical emergencies. As previously discussed, the economic wellbeing of a community also has a correlated effect on fire 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Past Loss and Event History	Over the five-year period from January 1, 2018, and December 31, 2022, the most reported ignition sources within Crossfield were related to exposure and ignition sources that could not be identified	Almost Certain	<ul style="list-style-type: none"> Provincially, civilian fire related injuries, and civilian fire related fatalities occurred in residential occupancies. Between January 1, 2019, and December 31, 2023, there were 84 fires related to Electrical Hazards. Fires caused by electrical distribution equipment reported annually As ignition source for a large number of fires could not be determined, it is difficult to fully analyze the information in this regard, however, the increased use of lithium-ion batteries in addition to electrical fires caused by overcharging and heating, increased data collection would be valuable for future analysis. 	Moderate to Major	<ul style="list-style-type: none"> Could pose a threat to the life safety of occupants Could result in moderate property loss Potential for exposure risk depending on dwelling type and building age Potential presence and maintenance of fire protection equipment would influence consequence level Depending on occupancy type could have a moderate or major impact to life safety and property loss. 	Moderate

Profile	Identified Risk	Probability Level	Rationale	Consequence Level	Rationale	Risk Level
Past Loss and Event History	As data regarding compliance with regard to smoke alarms is not being collected currently, there is a risk that the community is not complying and there is a lack of early detection in homes.	Likely	<ul style="list-style-type: none"> Alberta statistics indicate that there were 6268 fire incidents where there were no smoke alarms installed and only 1724 incidents where smoke alarms were installed, smoke alarm was present but did not operate or it could not be confirmed that it operated. There were no smoke alarms present in 6248 incidents. Only 662 incidents were reported to have smoke alarms present and activated. 	Moderate	<ul style="list-style-type: none"> Potential presence and maintenance of smoke alarms would influence consequence level potential for large loss of life, significant property damage, 	Moderate
Past Loss and Event History	Over the period from January 1 st , 2019 to December 31 st , 2023, the volume of emergency calls responded to by CFD has continued to increase, however, there was a notable decrease in 2024 relating to MVCs.	Almost Certain	<ul style="list-style-type: none"> The call volume has steadily increased Anticipated growth in the community will lead to an increase in call volume 	Moderate	<ul style="list-style-type: none"> If service levels do not keep pace with development, there is an increased risk to property losses and life safety 	Moderate

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 54)

Table 54: 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 02-2019¹³

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 55 identifies and describes each of the 5 Es of risk mitigation.

¹³ Office of the Ontario Fire Marshal, Community Risk Assessment Technical Guideline TG 02-2019, Section 6 pg. 16

Table 55: 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 20/20¹⁴

Table 56 summarizes the identified risks and presents ways in which the risks can be addressed by CFD and considered within the Fire Services Master Plan analysis and recommendations.

¹⁴ NFPA 1300, 2020 Edition, Annex A.6.3.3.2(4)

Table 56: Identified Risk Treatment

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Geographic	The majority of roads in the Town of Crossfield are paved although roads leading to residential properties are largely graveled in rural areas. Although roads are well maintained, gravel roads may slow response times and present challenges for apparatus during a response, including the threat of damage or accidents. Maintenance of gravel roads in winter months can also be challenging and slow response times and increase risks.	Moderate	Accept	No	No	No	No	Yes
Geographic	The road network is a contributor to emergency call volume due to motor vehicle collisions and vehicle fires.	Moderate	Accept	No	No	No	No	Yes
Geographic	There is an elevated risk of a major spills and dangerous goods incident along Hwy 2/2A being the primary route, north/south through Crossfield	Moderate	Accept	No	No	No	No	Yes
Geographic	The transportation of agricultural chemicals along roadways may pose the risk of an environmental spill.	Low	Accept	No	No	No	No	Yes
Geographic	During peak commuting times, the highest risk of motor vehicle collisions is likely to occur.	Moderate	Accept	No	No	No	No	Yes

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Geographic	CPR rail lines operate a track that runs north south and parallel with Hwy. 2A that presents a risk related primarily to the movement of dangerous goods. At-grade level rail crossings have the potential to create a physical barrier to connectivity to the roadway network, causing delays in response time.	High	Accept	No	No	No	No	Yes
Geographic	Uncontrolled at grade rail crossings pose an increased threat of a motor vehicle collision	Moderate	Mitigate	Yes	No	Yes	No	Yes
Geographic	There is a high degree of risk to the public and the environment associated with train derailment; with or without the release of dangerous goods	High	Mitigate	Yes	No	No	No	Yes
Geographic	There is a considerable risk of wildland fires in areas of urban interface. The landscape surrounding the town is primarily agricultural, and increasing development in natural areas increases the threat of wildfire impinging on the town. CFD responded to 130 grass fires between 2020 and 2024	High	Mitigate	Yes	Yes	No	No	Yes
Building Stock	As with most jurisdictions, residential buildings account for the majority of building stock in Crossfield and are the most common building involved in structural fires and are attributed to the most fatalities and injuries	High	Mitigate	Yes	Yes	Yes	No	Yes

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
	To meet the projected housing demands associated with the population growth in the town, increased fire-risk potential will also increase in those areas.							
Building Stock	Data provided by the 2021 census indicates that 40.22% of Crossfield’s building stock was built prior to the adoption of the 1990 National Building Code and the 1992 National Fire Code. This represents a significant fire risk within the community.	High	Mitigate	Yes	Yes	No	No	Yes
Building Stock	The number of new homes being built with lightweight construction poses a risk to firefighter safety and can hinder the ability for occupants to safely evacuate in a timely fashion. Crossfield should collect data on this type of building construction if available as of 2025 and going forward	Moderate	Mitigate	Yes	Yes	Yes	No	Yes
Building Stock	There are several properties within Crossfield that have a potentially high fuel load and therefore an increased high fire risk.	Moderate	Mitigate	Yes	Yes	Yes	No	Yes
Building Stock	Crossfield currently has (2) registered vulnerable occupancy.	Moderate	Mitigate	Yes	Yes	Yes	Yes	Yes

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Critical Infrastructure	The Mountain View Regional Water Services commission (MVRWSC) provides water services to residents of Crossfield. Crossfield makes sure that the reservoirs are topped up so they can maintain residential water usage and firefighting water needs. The fire service must be reliant on alternate water sources and have a water servicing strategy in place.	Moderate to High	Mitigate	No	No	No	No	Yes
Demographic	The population of Crossfield has steadily increased with continued anticipated growth. Rapid changes in population and development can contribute to increased risk and potential increase in call volume and service level demands.	Moderate	Mitigate	Yes	Yes	Yes	No	Yes
Demographic	Crossfield has 13.3% of the population aged 65+ compared to 14.76% for Alberta. Seniors are considered to represent one of the highest fire risk groups across the province based on residential fire death rate.	Low	Mitigate	Yes	Yes	Yes	No	Yes
Demographic	Of Crossfield's population, 13.47% fall into the age range of 55 to 64, representing a potential future increase as this cohort will age towards 65+. Based on historic residential fire fatality data, this population will become greater fatality risk.	Moderate	Accept	Yes	No	No	No	Yes

Profile	Identified Risk	Risk Level	Risk Treatment Option	Education	Enforcement	Engineering	Economic Incentives	Emergency Response
Demographic	Crossfield has lower proportion of newcomers/immigrants (7.4%) when compared to Alberta (23.24%)	Moderate	Accept	Yes	Yes	No	No	Yes
Demographic	Nearly (6.3%) of the population commutes to a different census division within the province. This is 2.12% more than that of the provincial commuters (4.18%)	Moderate	Accept	No	Yes	No	No	Yes
Economic	The risk of a single fire or emergency event having a significant impact on the community is moderate, risk	Moderate	Accept	No	No	No	No	Yes
Past Loss & Event History	Currently information regarding working smoke alarms is not being captured by CFD	Moderate	Mitigate	Yes	Yes	Yes	Yes	Yes
Past Loss & Event History	Over the period from January 1 st , 2020, to December 31 st , 2024, the volume of emergency calls responded to by CFD has steadily increased until 2024 where there was a noticeable decrease. There was nothing occurring in 2024 which could justify this decrease.	Moderate	Mitigate	Yes	Yes	Yes	Yes	Yes



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Report to Council



Meeting Date: October 7, 2025
Meeting Type: Regular Council Meeting
Prepared By: Amber Ouellette, CFO
Presented By: Amber Ouellette, CFO
Subject: Franchise Fees
Department: Finance

REPORT PURPOSE:

To provide Council with information pertaining to a proposed natural gas franchise fee increase in Crossfield. Franchise fees are a reliable source of non-property tax revenue used to fund municipal operations.

RECOMMENDATION:

That the Town of Crossfield increase the natural gas franchise fee from 20% to 25% effective January 1, 2026.

That notice be given to ATCO Gas and Pipeline Ltd. no later than November 1, 2025.

That Administration execute and complete all required documentation and advertising requirements to enable consideration of approval by the Alberta Utilities Commission (AUC).

PREVIOUS COUNCIL DIRECTIONS:

Council approved a natural gas franchise fee increase from, 17% to 20%, effective January 1, 2024.

BACKGROUND:

Under Section 45 of the *Municipal Government Act* (MGA), the Town has granted exclusive rights to:

- FortisAlberta Inc. (“Fortis”) – Electricity distribution
- ATCO Gas and Pipelines Ltd. (“ATCO”) – Natural gas distribution

These agreements allow the companies to use utility rights-of-way and access municipal lands to deliver services to their customers.

In exchange, the Town charges each company a franchise fee, calculated as a percentage of distribution charges. These fees:

- Appear as a separate line on customer bills
- Are regulated by the Alberta Utilities Commission (AUC)
- Require AUC approval for any rate changes

Under AUC Rule 29, municipalities may amend franchise fees annually by applying to the AUC and advertising the change at least 45 days prior to implementation. The AUC caps franchise fees at 20% for electricity and 35% for natural gas.

Rationale:

Franchise fees ensure that all properties benefiting from utility distribution systems contribute to the costs of providing municipal services. This is especially important for tax-exempt properties, which do not contribute through property taxes.

The AUC has confirmed that franchise fees are user fees rather than taxes. Many Alberta municipalities use them to diversify revenue sources and reduce reliance on property taxes, supporting equity and fairness in cost distribution.

Regional Comparators:

Most municipalities in Alberta charge both electricity and natural gas franchise fees, with rates varying according to local needs.

- Average natural gas franchise fee: 25%
- Average electricity franchise fee: 13%

2025 Franchise Fees	2025 ATCO Franchise Fee	2025 Fortis Franchise fee
<i>Maximum Franchise Fee:</i>	35%	20%
City of Airdrie	29.6	20
Town of Banff	35	7
Town of Beiseker	16	3.5
Town of Bowden	22	15
Town of Carstairs	25	10
Town of Cremona	23	10
Town of Didsbury	25	17
Town of Innisfail	28	17
Town of Irricana	14.2	8
Town of Olds	30	17
Town of Penhold	25	19
Town of Rocky Mtn House	30	15.3
Average Regional	25	13
Town of Crossfield	20	17

Administration recommends increasing the natural gas franchise fee from 20% to 25%. This adjustment aligns the Town with regional averages. There is no proposed change to the electricity franchise fee, which will remain at 17%.

ANALYSIS:

Strategic Alignment

- Sustainable Community Growth
- Town Infrastructure
- Parks, Recreation & Beautification
- Social Development & Emergency Services

- Communications & Public Relations

Relevant Statutes / Master Plans / Town Documents

Bylaw 2020-05 Natural Gas Distribution System Bylaw

COMMUNICATIONS AND ENGAGEMENT:

If Council chooses to adjust the franchise fee rates, the Town will need to advise ATCO of the new rate on or before October 15th to take effect in the next calendar year.

FINANCIAL IMPLICATIONS:

Increasing the ATCO natural gas franchise fee rate from 20% to 25% will increase franchise fee revenue by an estimate of \$69,300, equivalent to a 1.3% property tax revenue increase. The estimated annual impact for an average residential home is an additional \$30/year, or \$2.51 monthly.

ALTERNATIVES/IMPLICATIONS:

Council may propose an alternate franchise fee rate.



Report to Council

Meeting Date: October 7, 2025
Meeting Type: Regular Council Meeting
Prepared By: Amber Ouellette, CFO
Presented By: Amber Ouellette, CFO
Subject: Offsite Levy Reallocation
Department: Finance

REPORT PURPOSE:

The purpose of this report is to request Council's approval to reallocate Offsite Levy balances to deferred revenue. This adjustment will better align the Town's reserve reporting with the requirements of the PS3400 Revenue accounting standard.

RECOMMENDATION:

THAT Council approve the reallocation of \$1,626,899.21 Offsite Levy balance to deferred revenue to align the Town's reserve reporting with the PS3400 Revenue accounting standard; and,

THAT Council approve the reallocation of \$990,776.33 Offsite Levy balance to the Capital Project – New Capital Reserve.

PREVIOUS COUNCIL DIRECTIONS:

On July 15, 2025, Council approved Reserve Policy C-304-25. At that time, Administration noted that \$2,617,676 in restricted surplus dedicated to Offsite Levies would require a more detailed analysis before any reallocations could be considered.

BACKGROUND:

During the 2024 year-end financial audit, the Town's auditors identified that the accounting treatment of Offsite Levy (OSL) funds was not in alignment with the PS3400 Revenue accounting standard. As part of their audit findings, the auditors tasked Administration with completing further analysis of the OSL balances over the course of 2025.

In response, Administration conducted a detailed review of OSL projects to determine completion status and engaged BDO Canada LLP, the Town's appointed auditors, for technical guidance. Under PS3400, OSL contributions cannot be recognized as revenue until the related projects have been initiated. Accordingly, the balances previously recorded in OSL reserves required reassessment to ensure compliance.

Administration's analysis determined that OSL funds earmarked for projects still to be undertaken should be reclassified and applied to deferred revenue. Remaining funds, which are no longer restricted for OSL purposes, will be derecognized as Offsite Levies and transferred into a capital reserve, making them available to support future capital infrastructure priorities.

ANALYSIS:

Strategic Alignment

- Sustainable Community Growth
- Town Infrastructure
- Parks, Recreation & Beautification
- Social Development & Emergency Services
- Communications & Public Relations

Economic Impact

Effective reserve management contributes to fiscal stability, supports cash flow management, debt minimization and flexibility for emergent economic needs.

Relevant Statutes / Master Plans / Town Documents

MGA Section 276(1); Reserve Policy C304-25; Annual Budget Policy 2023-06

COMMUNICATIONS AND ENGAGEMENT:

Administration has worked closely with BDO Canada LLP throughout this process to ensure the accurate accounting of restricted surplus and to verify the balances of existing Offsite Levies recorded as deferred revenue. All adjusting transactions will be reviewed and approved by BDO Canada LLP prior to being entered into the Town's financial system.

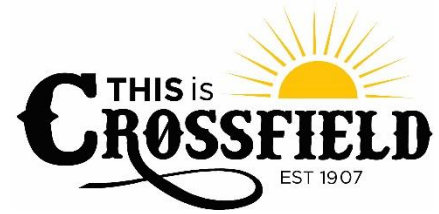
FINANCIAL IMPLICATIONS:

As of December 31, 2024, the Town's restricted surplus included \$2,617,676 dedicated to Offsite Levies. Based on the analysis completed in consultation with BDO Canada LLP, a portion of these funds will be reclassified to deferred revenue to reflect amounts collected for projects still to be undertaken.

The remaining balance, representing funds that can no longer be recognized as Offsite Levy contributions under PS3400, will be derecognized and transferred into a capital reserve. This transfer

will ensure that the funds remain available to support future capital infrastructure priorities, while bringing the Town's financial reporting into alignment with PS3400.

Report to Council



Meeting Date: 2025-10-07
Meeting Type: Council Meeting
Prepared By: Eris Latham
Presented By: Russ Nash, Director of Community & Protective services
Subject: Crossfield & District Recreation Board Member Reappointment
Department: Community Service

REPORT PURPOSE:

For council to consider the re-appointment of current Crossfield Recreation Board member Breanna Dunlop whose term came up earlier in 2025.

RECOMMENDATION:

That council reappoint Breanna to the Crossfield & District Recreation Board for a 3-year term, expiring October 2028.

BACKGROUND:

Breanna Dunlop is a current member of the Crossfield & District Recreation Board, and she has requested to be re-appointed to the board as a member at large from the Town of Crossfield. Her term expired in April 2025.

Per the current Rec Board Policy, Section 6.1 states:

“All Recreation Board members shall be appointed for a three-year term.”

Section 6.4 states:

“New appointments and reappointments for members at large may be made at any time throughout the year as necessary to fill vacant Board positions.”

Breanna has been a valuable member at large from the Town of Crossfield since April 2022. She has requested to remain on the board to continue contributing as a volunteer of the Crossfield & District Recreation Board.

ANALYSIS:

Strategic Alignment

- Sustainable Community Growth

- Town Infrastructure
- Parks, Recreation & Beautification
- Social Development & Emergency Services
- Communications & Public Relations

Social Impact

A robust Rec Board allows for diversified perspectives and judgements.

Report to Council



Meeting Date: 2025-10-07
Meeting Type: Council Meeting
Prepared By: Russ Nash, Director of Community & Protective Services
Presented By: Russ Nash, Director of Community & Protective Services
Subject: Review of Municipal Enforcement Bylaws, Policies and Plans
Department: Bylaw Enforcement

REPORT PURPOSE:

The purpose of this report is to provide Council with information regarding the bylaws, policies and plans that guide the duties and responsibilities of the Community Peace Officers and Bylaw Enforcement Officers who are employed by the Town of Crossfield.

RECOMMENDATION:

THAT Council accept the summary of municipal enforcement bylaws, policies and plans as information.

BACKGROUND:

While Community Peace Officers (CPO) and Bylaw Enforcement Officers provide similar services related to local/municipal enforcement, there are some differences with their scope and authority. The following table illustrates these differences:

	Community Peace Officer (CPO)	Bylaw Enforcement Officer
Authority	Appointed through the provincial Solicitor General under the Alberta Peace Officer Act	Appointed by the municipality under the Municipal Government Act (MGA)
Scope	Can enforce both provincial statutes (as permitted in their appointment) and municipal bylaws Cannot deal with criminal code matters	Can only enforce municipal bylaws
Training	Must complete provincially approved training and meet standards set by Alberta Justice and Solicitor General	Training varies by municipality – there is no province-wide standard
Oversight	Governed and monitored by the Solicitor General. Supervised by the municipality	Managed only by the municipality that employs them

Typical Duties	Traffic enforcement, dangerous goods enforcement, animal control, liquor/tobacco enforcement, municipal bylaw enforcement	Parking enforcement, property/community standards enforcement, noise complaints, animal bylaw enforcement
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The Town of Crossfield currently employs one (1) Community Peace Officer to respond to public complaints and questions, as well as provide education and enforcement of provincial statutes and municipal bylaws. In the past, the Town has also hired a seasonal Bylaw Enforcement Officer to assist with municipal bylaw matters during the summer months.

Crossfield also has an Enhanced RCMP position provided through the Airdrie Provincial RCMP Detachment. Among several other duties, this position assists with community policing initiatives (e.g. engagement with youth, seniors, businesses, etc.), as well as traffic enforcement and investigation of criminal matters.

Administration recently undertook a review of the bylaws, policies and plans that direct the various duties, processes and procedures of the Town's Community Peace Officers and Bylaw Enforcement Officers. The following table summarizes these documents:

Document Name	Purpose	Required
Bylaws		
Appointment of a Contract Bylaw Enforcement Officer (2014-01)	Provide guidelines regarding the employment of contract Bylaw Enforcement Officers (e.g. powers, duties, supervision, conduct, department, disciplinary procedures, complaint investigation, etc.)	Yes – MGA This bylaw is required if bylaw enforcement services are contracted by the Town. This is currently not applicable.
Bylaw Enforcement Bylaw (2015-10)	Provide guidelines regarding the employment of Bylaw Enforcement Officers (e.g. powers, duties, supervision, conduct, department, disciplinary procedures, complaint investigation, etc.)	Yes - MGA
Community Peace Officer Bylaw (2020-08)	Provide guidelines regarding the employment of Community Peace Officers (e.g. powers, duties, supervision, uniform and department, code of conduct, disciplinary procedures, complaint investigation, etc.)	No - however, this bylaw includes information that is not found in the other policies, but is required by the Peace Officer Program (e.g. duties, responsibilities, uniform and department, code of conduct, etc.)
Policies		
Body Worn and Dash Camera Policy (2016-03)	Provide guidelines for Peace Officer and Bylaw Enforcement Officer use of body worn and dash cameras	Yes – Peace Officer Program

Shotgun Policy (2016-06)	Provide guidelines on the procedures and approved uses of the Town-issued shotgun by Community Peace Officers	Yes – Peace Officer Program
Municipal Enforcement Unit Use of Force Policy (2020-06)	Provide guidelines for the escalation and de-escalation of force in performing Peace Officer duties	Yes – Peace Officer Program
Peace Officer Public Complaints Policy (2020-07)	Provide guidelines and process for the receipt and investigation of public complaints made against Peace Officers employed by the Town	Yes – Peace Officer Program
Weapons Policy and Procedure (Pepper Ball TCP Devices) – May 2022	Provide guidelines on the procedures and approved uses of the Town-issued pepper ball device by Community Peace Officers	Yes – Peace Officer Program
Peace Officer Notebook Policy (2023-05)	Provide a process for the use, storage and retention of notebooks used by Peace Officers and Bylaw Enforcement Officers employed by the Town	Yes – Peace Officer Program
Plans		
Traffic Safety Plan (2020)	Identify strategies and initiatives to improve traffic safety within the Town of Crossfield, including identifying priority areas, educating the public (including youth), enforcement, CPO training, joint operations with partner agencies (e.g. RCMP), etc.	Yes – Peace Officer Program

The Town of Crossfield’s Peace Officer Program was audited by Alberta Justice and Solicitor General in 2020, the conclusion of which determined the Town was in full compliance with the Peace Officer Act, Peace Officer (Ministerial) Regulation, Peace Officer Regulation, and the Peace Officer Program Policy and Procedures Manual.

Administration notes that many of the enforcement-related bylaws, policies and plans will require updating to ensure they remain current.

ANALYSIS:

Strategic Alignment

- Sustainable Community Growth
- Town Infrastructure
- Parks, Recreation & Beautification
- Social Development & Emergency Services
- Communications & Public Relations

Relevant Statutes / Master Plans / Town Documents

Alberta Municipal Government Act, Revised Statutes of Alberta 2000, Chapter M-26 (Current as of June 11, 2025)

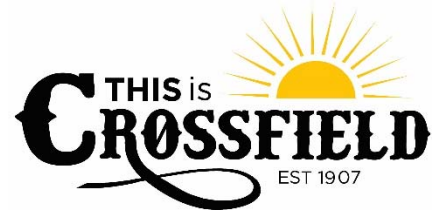
Alberta Peace Officer Act, Statutes of Alberta 2006, Chapter P-3.5 (Current as of November 16, 2022)

Alberta Peace Officer Regulation 291/2006 (Current as of December 8, 2021)

Alberta Peace Officer (Ministerial) Regulation 312/2006 (Current as of July 25, 2025)

Public Security Peace Officer Program: Policy and Procedures Manual (October 2023)

Report to Council



Meeting Date: 2025-10-07
Meeting Type: Council Meeting
Prepared By: Steve Altena, Director of Infrastructure and Community Growth
Presented By: Steve Altena
Subject: Snow and Ice Control - Comparator Survey Results and Program Changes
Department: Operations

REPORT PURPOSE:

The purpose of this report is to present Council with the findings of a Snow and Ice Control Comparator Survey conducted by Administration and to provide program change recommendations to expedite snow removal following a snow event.

Administration sent the survey to five (5) similarly sized municipalities: Didsbury, Carstairs, Redwater, Penhold and Pincher Creek. The survey was open from August 29 to September 23, 2025 and three (3) municipalities responded in full and one (1) municipality responded partially. A summary of the survey results is set out in Attachment A.

The survey results show that municipalities with more staff complete snow clearing and removal activities in shorter timeframes than Crossfield. To expedite the Town's snow removal, Administration proposes to increase Operations staffing to 10 hours per day for 5 days a week following a snow event and to hire an additional truck to haul snow. The survey also showed that other municipalities use sand/salt mixtures at a greater rate than Crossfield. To improve ice control, Administration proposes to increase usage of sand/salt mixture.

RECOMMENDATION:

THAT Council accept the Snow and Ice Control Comparator Survey for information and that Council direct Administration to include the following in the 2026 budget for further deliberation to improve snow and ice control operations:

- Staff Operations for 10 hours per day and 5 days a week following a snow event and hire an additional driver and truck to expedite snow removal.
- Increase usage of sand/salt mixture to improve ice control.

PREVIOUS COUNCIL DIRECTIONS:

Administration was directed to review the Snow and Ice Control Program on February 20, 2024. A workshop presentation was provided to Council on January 7, 2025 where Council indicated to Administration a preference to continue with full street width snow removal at an expedited rate.

BACKGROUND:

To support the review of Crossfield’s Snow and Ice Control Program, Administration prepared a survey to gather data on snow removal practices of other comparable municipalities. The survey was sent to five (5) other municipalities: Didsbury, Carstairs, Redwater, Penhold and Pincher Creek. The survey was open from August 29 to September 23, 2025 with Carstairs, Redwater and Penhold providing full responses and Didsbury providing a partial response. Pincher Creek did not provide any response. The information presented below reflects the data gathered from the municipalities that fully completed the survey, data from Didsbury is not included as it was largely incomplete.

A summary of the survey highlights is below, compared to Crossfield:

Item	Survey Results	Crossfield
Population	Carstairs: 5,000 Penhold: 3,900 Redwater: 2,500	4,211 (2024)
Sand/Salt Mix Usage	Carstairs: 112 tonnes Penhold: 110 tonnes Redwater: 250 tonnes + 50 tonnes of salt	73 tonnes (2024)
Full-time Staff for Snow and Ice Control Activities	Carstairs: 10 Penhold: 12 Redwater: 8	7 (includes 2 Parks staff)
Total Snow Clearing Times for Roads	Carstairs: 12 days Penhold: 15 days Redwater: 4 days*	21 days
Total Snow Clearing Times for Sidewalks and Pathways	Carstairs: 2 days Penhold: 3 days Redwater: 1 day	2 days

* May be lower due to use of plowing vs. removal.

Carstairs and Penhold prioritize snow removal, while Redwater appears to use plowing with snow removal on an as needed basis. Penhold appears to require more time for snow removal despite having the most staff, however this may be due to Penhold’s policy of initiating snow clearing activities after a heavy snowfall of 15 cm or more, whereas the other municipalities, including Crossfield, begin these activities after 5 cm of snowfall.

During the Snow and Ice Control workshop with Council on January 7, 2025, Council indicated to Administration a preference to continue with full street width snow removal but at an expedited rate. Considering this and the results of the snow survey, Administration recommends that more staffing hours and more equipment resources are needed to expedite snow removal activities.

ANALYSIS:

Strategic Alignment

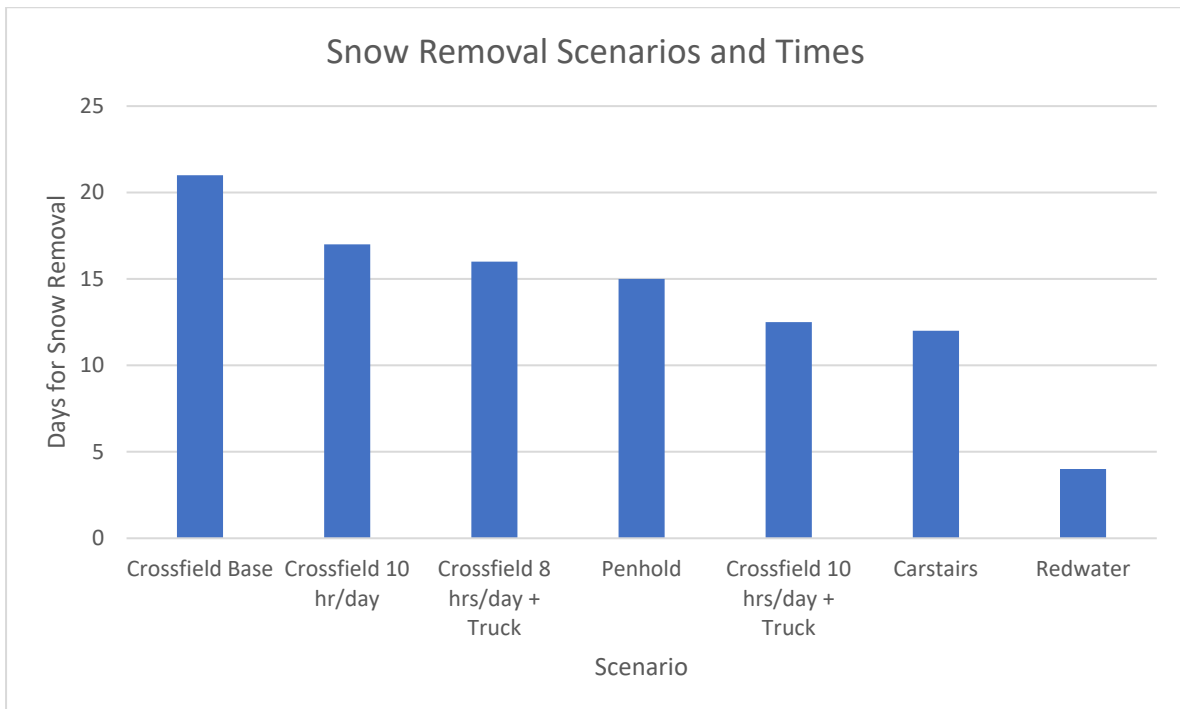
- Sustainable Community Growth
- Town Infrastructure
- Parks, Recreation & Beautification
- Social Development & Emergency Services
- Communications & Public Relations

Program Changes

Administration explored three (3) scenarios to expedite snow removal activities for roadways:

1. Staff Operations for 10 hours a day and 5 days per week.
2. Staff Operations for 8 hours a day and 5 days per week plus hire an additional driver and truck to haul snow.
3. Staff Operations for 10 hours a day and 5 days per week plus hire an additional driver and truck to haul snow.

Administration has identified that an important limiting factor for snow removal is hauling capacity. The Town operates two (2) trucks to haul snow, each which is loaded with snow in approximately 2 minutes and then travels to the snow dump. The roundtrip travel time to the snow dump and back when snow activities are on the north end of town is approximately 18 minutes, which reduces the per hour snow hauling capacity. An additional truck would substantially improve hauling capacity by an estimated 50%. Administration's estimated time to remove snow from the town's roads under these scenarios, compared to the existing operation and other municipalities is show below:



Administration notes that the other municipalities use significantly more sand/salt mix for ice control than Crossfield currently does, with an average usage of 157 tonnes compared to Crossfield’s 73 tonnes used in 2024.

Social Impact

Implementing the changes as recommended will result in expedited snow removal from streets within the town, thereby, offering a higher level of service to residents.

Relevant Statutes / Master Plans / Town Documents

- Road & Sidewalk Snow Clearing & Removal Policy

COMMUNICATIONS AND ENGAGEMENT:

Snow events and snow removal activities would continue to be communicated to residents as normal.

FINANCIAL IMPLICATIONS:

The three (3) scenarios explored above increase the costs of snow and ice control for the Town. The Town usually experiences around three (3) snow events per year, with each year being different. In 2024 the Town experienced only one (1) snow event where accumulation was 5 cm or more. The estimated costing differences for staffing and the additional truck are shown in the table below:

Number of Events	Costs - Staff Wages + Additional Truck			
	Base Case	10 hrs/day	8hrs/day + Truck	10hrs/day + Truck
1	\$ 30,500.00	\$ 33,900.00	\$ 45,800.00	\$ 47,900.00
2	\$ 60,900.00	\$ 67,800.00	\$ 91,500.00	\$ 95,900.00
3	\$ 91,400.00	\$ 101,800.00	\$ 137,300.00	\$ 143,800.00
4	\$ 121,900.00	\$ 135,700.00	\$ 183,100.00	\$ 191,800.00

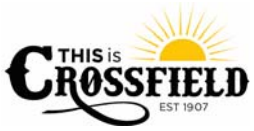
Each snow event would cost the Town approximately \$17,500 to implement 10 hour per day staffing at 5 days a week plus hire an additional driver and truck to haul snow. Increasing the usage of sand/salt mixture to 110 tonnes, similar to Carstairs, is a cost increase of approximately \$2,000 in material purchasing costs.

ALTERNATIVES/IMPLICATIONS:

Council may wish to consider other scenarios presented in this report or other scenarios that Administration has not presented.

ATTACHMENTS:

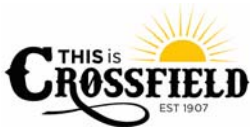
Attachment A: Snow Survey Results



Snow Survey Results

The survey was distributed to five towns, with four towns responding. Of those, three completed the survey in full, while one provided partial responses, answering only 10 of the 30 questions. Two towns also supplied additional information, including related policies and priority maps.

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Overview

Crossfield statistics included for comparison purposes.

	Population	Name of Department Responsible for Snow/Ice Removal	Service Delivery Model	Comments
Didsbury	5200	Operations	Hybrid	In-House + contract trucking services
Carstairs	5000	Operational Services	Fully In-house	
Penhold	3900	Operations	Fully In-house	
Redwater	2500	Public Works	Fully In-house	May contract extra third-party hauling trucks when there is a larger than average snow event, but this is rare.
Crossfield	4211	Operations	Fully In-House	

Materials for Ice Treatment

	Materials	Volume
Didsbury	<ul style="list-style-type: none"> Salt/Sand Mixture 	No response
Carstairs	<ul style="list-style-type: none"> Salt/Sand Mixture 	112 Tonnes
Penhold	<ul style="list-style-type: none"> Salt/Sand Mixture Sand 	110 tonnes
Redwater	<ul style="list-style-type: none"> Salt/Sand Mixture Sand Salt (Sodium Chloride) 	<ul style="list-style-type: none"> 250 Tonnes (Salt & Sand) 100 Tonnes (Sand) 50 Tonnes(Salt-Sodium Chloride)
Crossfield	<ul style="list-style-type: none"> Salt/Sand Mixture 	73 tonnes

Staffing Levels

	# of Full-Time Staff for snow/ice removal activities	# of Staff Deployed per Snow Event	Length of Shift per Snow Event	# of Days Worked in a row to clear snow/ice
Didsbury	3	1-5	Less than 8 hours	5-6 days
Carstairs	10	1-5	8-10 hours	7+ days
Penhold	12	1-5	Less than 8 hours	1-2 days
Redwater	8	1-5	Less than 8 hours	5-6 days
Crossfield	7	7	Less than 8 hours	5 days



Budget & Resources

	Annual Budget (wages and salary costs)
Didsbury	No response
Carstairs	\$200,000 - \$250,000
Penhold	Less than \$200,000
Redwater	Less than \$200,000
Crossfield	Less than \$200,000

Equipment

	Road Clearing	Pathway/Sidewalk Clearing
Didsbury	No response	No Response
Carstairs	<ul style="list-style-type: none"> • 1 Grader • 1 Snowplow • 3 gravel trucks • 1 Small loader • 1 Big loader 	<ul style="list-style-type: none"> • 2 Front mount “mower” with blade • 1 Tool cat/UTV with blade
Penhold	1 Grader 1 Sanding Unit	<ul style="list-style-type: none"> • 2 Skid steer (with angle broom, blade and bucket attachments) • Pickup trucks • 12 Snow Shovels • Gas powered blowers (1 handheld, 1 backpack)
Redwater	<ul style="list-style-type: none"> • 1 Grader (used only when accumulation is packed and Tractor w/ blower isn’t being effective) • 1 Tractor with a front mounted snow blower (*Said this is very effective) • 1 Snowplow • 2 Sanding Units 	<ul style="list-style-type: none"> • 1 Skid steer (with plow and sweeper attachment) • 1 Tool cat with salt/sand spreader (also has a plow and sweeper attachment)
Crossfield	<ul style="list-style-type: none"> • 1 grader • 1 loader + snowblower • 1 backhoe • 1 bobcat • 2 tandems + 1 1-ton truck 	<ul style="list-style-type: none"> • 3 backpack snowblowers • 1 walk behind snow blower • 1 stand on blower • 2 RTVs • 1 toolcat • 1 front mount tractor mower

Road Clearing

	Total Length of Roads	Total length of Priority Routes	Total length of Collector Routes	Total Length of Residential Routes	Clearing Methods	Conditions for Offsite Snow Disposal	Typical Road Width Cleared
Didsbury	No Response	No Response	No Response	No Response	No Response	No Response	No Response
Carstairs	30 – 40 kms	35-40 kms	10 – 15kms	20 – 30 kms	<ul style="list-style-type: none"> • Snow blowing • Snow loading & hauling • Scraping/Grading 	<ul style="list-style-type: none"> • Space is already limited 	<ul style="list-style-type: none"> • Full width (curb-to-curb)
Penhold	20 – 30 kms	10-15 kms	10-15 kms	Less than 20 kms	<ul style="list-style-type: none"> • Snow blowing • Snow loading & hauling • Scraping/Grading 	<ul style="list-style-type: none"> • Space is already limited • Specific Policy/Service Level • Melt mgmt. to prevent drainage issues 	<ul style="list-style-type: none"> • Full width (curb-to-curb)
Redwater	20 – 30 kms	10 – 15 kms	10 – 15 kms	Less than 20 kms	<ul style="list-style-type: none"> • Plowing • Snow blowing • Snow loading & hauling • Scraping/Grading 	<ul style="list-style-type: none"> • Safety Concerns (when snow accumulation affects sightlines/lane width) • After repeated snowfalls (making further plowing ineffective) • Event Prep • Melt mgmt. to prevent drainage issues • Resident complaints/requests 	<ul style="list-style-type: none"> • Depends on severity and is based on snowfall amount
Crossfield	31	2.5 km	11.6 km	16.9 km	<ul style="list-style-type: none"> • Plowing • Snow loading & hauling • Scraping/Grading 	<ul style="list-style-type: none"> • Space is already limited on roads hauled for off-site removal 	<ul style="list-style-type: none"> • Full width (curb-to-curb)

Sidewalks & Pathway Clearing

	Sidewalk Clearing Responsibility	Total length of Sidewalks under Town responsibility	Total length of Pathways under Town responsibility	Sidewalk/Pathway Equipment
Didsbury	No Response	No Response	No Response	No Response
Carstairs	<ul style="list-style-type: none"> Town - clears main street and school route sidewalks 	2-5 kms	7-10 kms	<ul style="list-style-type: none"> Small blade machine UTVs with blades
Penhold	<ul style="list-style-type: none"> Town - clears sidewalks along parks and Town properties Residents - clear sidewalks adjacent to their properties 	1-2 kms	7-10 kms	<ul style="list-style-type: none"> 2 Skid steer (with angle broom, blade and bucket attachments) Pickup trucks 12 Snow Shovels 2 Gas powered blowers (1 handheld, 1 backpack)
Redwater	<ul style="list-style-type: none"> Town – clears major sidewalks downtown Residents – clear boulevards/sidewalks, shopfronts 	2 – 5 kms	2 – 5 kms	<ul style="list-style-type: none"> 1 Skid steer (with plow and sweeper attachments) 1 Tool cat (with salt/sand spreader, plow and sweeper attachments)
Crossfield	<ul style="list-style-type: none"> Town – clears sidewalks along parks, Town properties and bulbs downtown Residents/businesses – clear in front of own premises 	1 km	5.2 kms	<ul style="list-style-type: none"> 3 backpack snowblowers 1 walk behind snow blower 1 stand on blower 2 RTVs 1 toolcat 1 front mount tractor mower

Snow Clearing Timelines (Days to Complete)

	Priority Routes	Collector Routes	Residential Routes	Sidewalks & Pathways
Didsbury	No Response	No Response	No Response	No Response
Carstairs	2	4	6	2
Penhold	5	5	5	3
Redwater	1	1	2	1
Crossfield	4	8	9	2



Program Performance

	Challenges faced in 2024/2025 season	Effective Program Elements/Best Practices	Were Resident Satisfaction Surveys completed?
Didsbury	No Response	No Response	No Response
Carstairs	Equipment breakdowns	Clearing snow regardless of how much volume to ensure roads stay as clear as possible	No
Penhold	<ul style="list-style-type: none"> Minimal large snow events- but proactive snow removal started earlier than planned Unexpected maintenance and repair costs 	<ul style="list-style-type: none"> Quick response: Residents noticed and praised how fast the team clears pathways. Prioritization of safety: The team scrapes key intersections at stop signs before plowing full roadways, which improves safety and accessibility even in early stages of a snow event. 	No
Redwater	<ul style="list-style-type: none"> Staffing shortages continue to be a major pinch point Severe storm events put added pressure on operations Aging equipment fleet remains ongoing challenge. 	<ul style="list-style-type: none"> Trialed curb-to-curb clearing and hauling (for 70% of the season) which resulted in much higher resident satisfaction. The tractor with the snow blower increased efficiency, reduced noise disturbance for residents, and generated more positive community feedback. 	Yes (Results of trial of curb-to curb and hauling, new machine efficiency poll)
Crossfield	<ul style="list-style-type: none"> Only 1 snow event in 2024/2025, no significant challenges. 	<ul style="list-style-type: none"> Stand-on blower for Railway Street has greatly improved efficiency requiring just 1 staff hour to clear the Town's sidewalks/bulbs instead of 6 staff hours. 	No

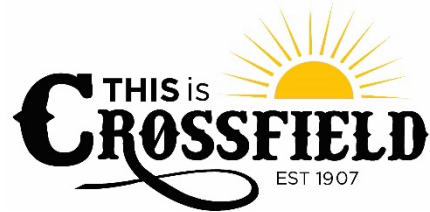


Additional/Supporting Documentation

	Documents/Information Provided	Highlighted Observations
Didsbury	No Response	N/A
Carstairs	Our process includes removing snow from all roadways. We start with our priority one routes like Main St, school routs and emergency routes, then move to priority two routes, like downtowns and collectors. Then move to priority three routes. These are the residential roads. We start at one end and work our way through town, then the next snow fall we start where we ended, so no one is “always last”. Last we do priority four which are cul-de-sacs. If it happens to snow again, we always go back to one. After roads are cleared, we add sand as well as sanding all major intersections before removal. We clear parking lots as well, like the town office, fire hall, emergency services, arena, community hall and any town owned buildings. The town does advertise snow removal on our social media pages as well as the website, but do not put signage out, as we found it is not as effective and is extremely time consuming.	
Penhold	<ul style="list-style-type: none"> • Snow and Ice Control Policy • Snow Removal Route • Snow Route Record Checklist (tracking the date, time and employee who plowed and removed snow/ice) • Images of the equipment 	Public Works Staff use a Snow Operations log to help ensure accountability, support operational planning, provide evident for reporting, etc.
Redwater	Snow Clearing Policy <ul style="list-style-type: none"> • Schedule A – Map of Priority Routes • Schedule B – Map of Haul Routes and Snow Cleared to Blvd./Ditches • Schedule C – Map of Sidewalks and Pathway Clearing Routes 	

Monthly Administrative Update

September 2025



Public Works & Infrastructure

Monthly Update:

- Town staff detected a substantial water leak at the Town shop service connection in August 2025. When excavated for repairs on September 11, the service connection valve separated and the water main was breached. The separation occurred because the valve was not properly secured when installed decades ago. The result was a pressure drop throughout the water system and residents and businesses lost water for a short time. The break was quickly contained by on-site crews and water service was restored within 10 minutes but with reduced capacity. The Town moved to Level 3 water restrictions and out of an abundance of caution, issued a boil water advisory. The boil water advisory was deemed prudent as the water supply had been exposed to the ground at the site of the break and the loss of pressure throughout the system may have permitted backflow from buildings. The watermain was repaired by September 12 allowing water restrictions to be lifted. The boil water advisory was lifted on September 14 after AHS tested water samples taken by the Town shortly after the break on September 11 showed no water quality concerns.
 - Town staff thanked residents and businesses for their patience and understanding during this time. We would also like to extend our appreciation to the City of Airdrie for providing a potable water trailer for residents along with other equipment and to the Town of Carstairs for providing staff and equipment in support of Crossfield.
- The Athabasca Crescent sewer main replacement project is underway and scheduled to complete later in October.
- A contractor has been selected to complete the replacement of 2 fire hydrants and 6 watermain valves that are not operational. This work will start in mid-October and should be completed within 10 to 14 days.
- The Town has engaged an engineer to complete preliminary engineering for the replacement of Bridge File 75095, a bridge-sized culvert on Western Drive adjacent to the golf course. The culvert was inspected this year and is in immediate need of replacement and will be included in the capital budget for Council's consideration this fall.
- A lagoon survey was completed with the results showing appreciable sludge accumulation in the first anaerobic cell, moderate accumulation in the aerobic cell and minor accumulation in the treated effluent storage cell. Costs for desludging will be presented to Council in the fall budget.
- The Wastewater Treatment Master Plan was presented to Council on September 16. Council directed Administration to pursue a pilot project for a polishing wetland.

Upcoming:

- Discharge of the treated effluent storage cell is planned to start mid to late October.
- The design for the sewer and watermain replacement along Laut Avenue will be completed this fall and the budget presented for Council's consideration with the intent to tender the project early in 2026.
- Grants will be submitted this fall for the Alberta Municipal Wastewater Program (AMWWP) for the effluent project and the Strategic Transportation Infrastructure Program (STIP) for the bridge-sized culvert replacement project.
- Administration will be working with Magna Engineering Services to secure a Letter of Authorization (LOA) from the province for the effluent project along with conducting intermunicipal engagement with regional partners.

Planning & Development

Monthly Update:

- Vista Crossing Phase 5 was approved by the Subdivision Authority on September 16, 2025. Town staff are working with the developer to finalize the Development Agreement and other details for construction to kick-off in October (some stripping and grading is underway currently).
- The Town has received the following planning and development applications in 2025:
 - 3 redesignation applications and 1 subdivision application
 - 110 development permit applications, including 60 applications for new homes.
 - 16 home occupation permits and 9 sign permits

Upcoming:

- Land Use Bylaw updates are still slated for Council's consideration this fall, with a major overhaul of the LUB planned for 2026.

Public Safety

Monthly Update:

- Municipal Enforcement has been dealing with a lot of bylaw concerns and complaints over the past month. Most issues have been related to unsightly properties and dog control.
- Peace Officer Arndt has spent a lot of time patrolling and supervising the school zones, especially in front of the schools along Mountain Avenue, as youth returned to school in September.
- The new Fire Engine was officially put into service on September 2. The old engine (E155) has been removed from service and is being sold on GovDeals.
- The Fire Department has been performing extensive training on new extinguishment and rescue procedures to provide a faster and safer method to reach, extinguish and rescue. This training is scheduled to be completed October 30.
- The breathing apparatus bottle fill station at the Fire Hall has been upgraded to reduce wear on the compressor and improve fill-time.

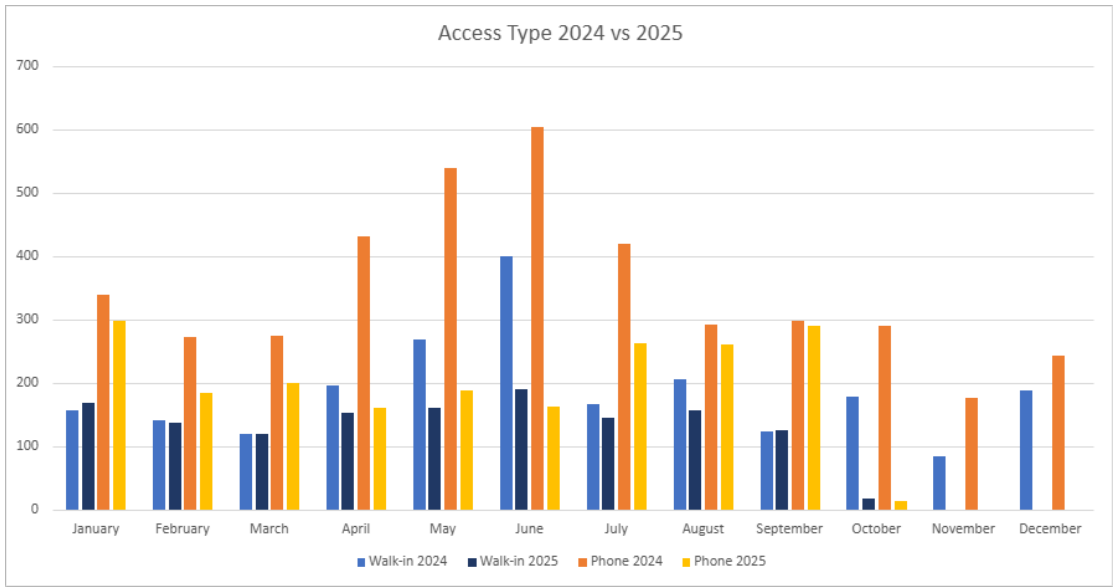
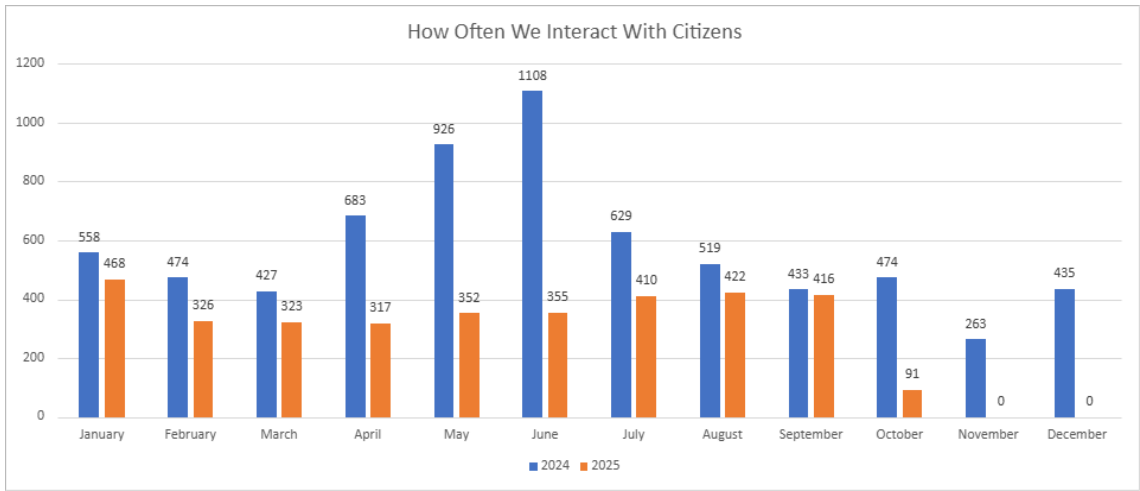
Upcoming:

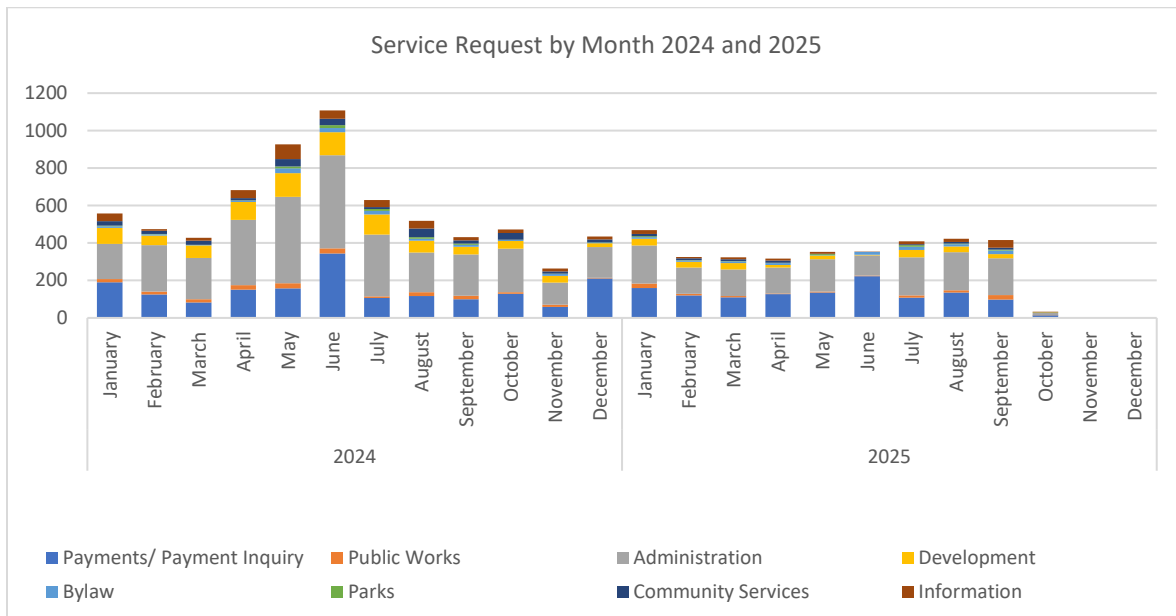
- Municipal Enforcement will be working to get agreements in place with the local dog rescue and boarding business to assist in dealing with dogs running at large.

Customer Service/ Community Engagement

Monthly Update:

- Administration recorded 416 customer interactions in September, compared to 422 in August. The majority of these interactions involved Administration as well as payment and payment inquiries.





- Crossfield Connect (E-Gov) is now live. We currently have 28 residents registered. Crossfield Connect information was put out within the September utility bills, and again in the October newsletter.
- Administration continues to work on a new website platform. The new platform will refresh the Town of Crossfield’s website, creating a user-focused experience that enhances accessibility, usability, and communication for both residents and businesses.
- On September 9, Administration participated in Community Fest along with Mayor Harris and Deputy Mayor Brennan.
- Following the recent water incident, Administration included guidance in the September utility bill on what to do and what to expect during an emergency, as well as how emergency communications are handled. This information was also shared in the October newsletter.

Upcoming:

- Oct. 9 – Advance Poll at Community Center
- Oct. 20 – Election Day at the Community Center

Community Services (Parks, Facilities, Programming & Events)

Monthly Update:

- FCSS applications for 2026 funding have been received and are being reviewed in preparation for recommendations to Council later this fall.
- Several grants have been applied for, including:
 - UFA Rural Communities Grant for lobby washroom upgrades at the Arena
 - New Horizons for Seniors Grant for senior’s programming
 - AB Blue Cross Built Together Grant for the pump track
 - Alberta Fire Services Training Grant for Fire Department training initiatives
 - Rocky View County Community Recreation Capital Grant for the pump track

- The splash park has been winterized and plants around town are being cut down in preparation for winter.
- Various sections of pathway have been replaced as part of the annual replacement program approved in the 2025 capital budget/plan. These sections included: along Western Drive near the dog park (damaged by tree roots), along Range Road 12 where it goes around the CPKC right of way, and the pathway leading from Limit Ave into Sunset Ridge.
- Bike Track Ltd. has been chosen to design and build our pump track. Among numerous other projects, this company designed and built the pump tracks in the Lanark and Bayside developments in Airdrie. Administration toured these facilities and believe a similar layout will work very well for Crossfield. A design will be completed over the next 4 to 6 weeks with construction expected to begin in 2026.
- The Arena opened for the 2025-26 winter season on September 3. Through the month of September, we were able to accommodate additional bookings for Airdrie and Cremona minor hockey groups as both communities have experienced delays with their arenas starting up for the season. However, this will not be available after September 29 as our regular user groups begin their regular seasons, filling our schedule.

Upcoming:

- Fall programming is underway, including the annual Pumpkin Hunt, TGIFF activities and Youth Pop-Up Nights
- The Crossfield Recreation Board's fall funding meeting is coming up in early November. Applications have been received and are being reviewed by Administration in preparation for the funding meeting.

Administrative Services

Monthly Update:

- Administration is finalizing the Town's 5 Acres land lease agreement and continues work on agreements with the Crossfield Library Board and the Crossfield and Madden Food Bank.
- September 22 was Nomination Day. The Town of Crossfield has 14 candidates running in the 2025 municipal election, including 3 for Mayor and 11 for Councillor.
- Administration hosted two candidate forums: the Mayoral and School Trustee forum on Sept. 30, and the Councillor forum on Oct. 1.
- Administration continues preparing for the Oct. 20 Election Day, including the hiring of all required election workers.
- Administration continues to prepare of Council Orientation and yearly Organizational Meeting on Oct. 28.
- The permanent part-time Communication Coordinator position closed on Oct. 3. Administration is currently reviewing resumes and preparing for interviews.
- 2026 Operating and Capital budget preparations are underway.
- The Financial Investment Services RFP closed on September 29th, and submissions are being reviewed.

Upcoming:

- Oct. 15 – Election workers training
- Oct. 28 & 29 – New Council Orientation

Outstanding Action List

#	Meeting Date	Motion #	Topic / Direction	Assigned To	Due Date	Status	Status Details
072							
071							
070							
069	Sept. 16	220-2025	Wastewater Treatment Master Plan – Treated Effluent Disposal Options Next steps for implementing a polishing treatment wetland system, including: <ul style="list-style-type: none"> • Conduct geotechnical assessment and groundwater monitoring in Fall 2025 using the remaining 2025 funds from the Interim Effluent Disposal Study; • Submission of grant applications to secure funding; • Engagement with neighbouring municipalities and the Nose Creek Watershed Partnership; • Submission of a pilot discharge application to Alberta Environment and Protect Areas; and, • Inclusion of the environment assessments, design and construction of a polishing treatment wetland system in the 2026 budget to be considered by Council 	Steve Altena	Q4-2026	IN PROGRESS	Administration is working to develop a workplan and costing for the next steps for implementing a polishing treatment wetland system.
061	May 6, 2025	111-2025	Bike Skills Park and Pump Track	Kimber Olsen Russ Nash	Q2-2026	IN PROGRESS	Administration is working with a proponent to finalize a contract. Design work will begin in fall 2025.
041	Dec 3, 2024	No Motion	Limit Ave Speed Change – change speed limit from 50 km/h to 30 km/h.	Lindsey Nash	Q3 2025	IN PROGRESS	Administration has followed up with Alberta Transportation and are looking to meet with the minister at AB Munis convention or a separate meeting – just waiting for confirmation from the Ministers office.
034	July 2, 2024	134-2024	Offer to Purchase – Additional information required with respect to the Offer to Purchase	Steven Altena Lindsey Nash	Q4 2025	IN PROGRESS	Administration to follow with Environmental company to interpret all environmental reports recorded on file to have a clear understanding of data. A report will be brought forward to a future council meeting in Q4 during the Land inventory discussion in December.
026	Feb 20, 2024	028-2024	Snow Removal & Ice Control Program – program review	Steve Altena/ Murray Pollock	Q4 2025	IN PROGRESS	Administration has completed a survey with similar municipalities and will bring forward proposed updates to a meeting in Dec with proposed recommendations.
004	April 4, 2023	No Motion	Town-Owned Lands – Discussion on future use - Administration to prepare a list of town lands and provide options for what those lands could be used for. The intent being to review town owned lands that are not currently active properties and come up with a plan.	Lindsey Nash	Q4 2025	IN PROGRESS	A detailed list of town owned land/properties has been completed and presented to Council. Administration will bring forward an updated Land Inventory outlining appraised costs on Town lands for Council's consideration on future plans for the properties. .
002	April 19, 2022	129-2022	Town Office Development – Exploration of potential options for a Town Administrative Building	Kinza Barney/ Sub-committee	Q3 2026	IN PROGRESS	A sub-committee has been formed appointing the CAO, Russ Nash. Exploration of further options and required funding strategies to be identified in 2024.