Government of
Northwest Territories

2017 Annual Report

Office of the Fire Marshal

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Message from the Fire Marshal

The Office of the Fire Marshal (OFM) Annual Report is an opportunity to reflect upon the current status and response activities of community fire departments and the OFM over the calendar year. In addition, the report helps identify trends which highlight challenges and assist in the formation of fire prevention and protection programming designed to protect Northwest Territories (NWT) residents and property from the threat of fire.

Community fire prevention and protection has evolved substantially over the last two decades. Changes in construction materials, technology, industry best practices, safety requirements, training, and regulatory responsibilities add to the complexity of the fire service and have placed additional responsibilities on those who deliver and oversee the fire services. NWT communities and their leaders recognize this trend and are adapting to the ever-evolving world of delivering fire services.

In 2017, in an effort to support and guide community efforts in their fire protection and prevention efforts, the OFM has taken steps to engage community leaders, assess local fire services, and work with NWT communities in establishing community action plans that better align with today's fire service.

In the NWT, all community fire departments rely on volunteers who are responsible for supporting community fire protection in addition to balancing work and family commitments. The dedication of these individuals, who train and respond to community emergencies, often under difficult and harsh conditions, cannot be over-emphasized.

Respectfully Submitted,

Chucker Dewar
Northwest Territories Fire Marshal

Office of the Fire Marshal

Mandate

To work with partners to minimize the risk of fire and any related property damage, injury, or loss of life through prevention, investigation and code compliance.

Duties and Responsibilities

The responsibilities of the OFM are established in the Northwest Territories *Fire Prevention Act* which requires the OFM to perform the following duties:

- Keep a record of fires reported
    - Disseminate information and advice about fire prevention and fire protection by means of public meetings, press articles, exhibitions, radio, television or other publicity campaigns
- Review plans for the construction, alteration, and repair of structures for compliance with adopted codes and standards, and with a view to determining that proper precautions are taken against fire and the spread of fire
- Conduct fire prevention inspections from time to time to determine if precautions against fire and the spread of fire are adequate and satisfactorily maintained
- Conduct fire investigations to determine the cause, origin, and circumstances of fires
- Contribute to the development of community fire departments through identification of training programs and courses and the provision of guidance to meet industry standards and best practices
- Submit an annual report to the Minister setting out causes and origins of fires, information on fatalities or injuries inflicted by fire, investigations and any necessary inquiries of fires, prosecutions for arson or attempted arson, a summary of OFM administration of fire prevention and community fire protection activity, together with any other information that the Minister may request

- Advise and make recommendations to the Minister with respect to:
  - The establishment of fire departments, the necessary organization and equipment of fire departments and the establishment of training programs for firefighters
  - The provision of adequate water supply for fire-fighting purposes
  - The installation and maintenance of fire-alarm systems and fire extinguishing equipment
  - The storage, use, sale or disposal of combustibles, explosives or other flammable material
  - The construction and maintenance of fire-escapes and other exit facilities in the event of fire or the alarm of fire
  - The types and adequacy of fire-alarms in communities and, in or on any building or property

Staff

In 2017, the OFM consisted of eight staff members who filled the following positions:

- Fire Marshal
- Chief Code Compliance Engineer (plan review)
- Senior Policy Advisor
- Assistant Fire Marshal, Sahtu Region
- Assistant Fire Marshal, Inuvik Region
- Assistant Fire Marshal, North Slave Region
- Assistant Fire Marshal, Dehcho Region
- Assistant Fire Marshal, South Slave Region

Partnerships

The OFM works with a variety of territorial organizations and groups on issues associated with fire safety. They are as follows:

- NWT Community Governments
- NWT Association of Communities (NWTAC)
- Local Government Administrators of the NWT (LGANT)
- Northwest Territories Fire Chief's Association (NWTFCA)
- Workers Safety and Compensation Commission (WSCC)

The OFM also works with a variety of other national organizations and groups on issues associated with fire safety. They are as follows:

- Council of Canadian Fire Marshal and Fire Commissioners (CCFMFC)
- Canadian Fire Safety Advisory Council (CFSAC)
- Canadian Commission on Building and Fire Codes (CCBFC)
- National Research Council of Canada (NRCC)
- Provincial / Territorial Policy Advisory Committee on Codes (PTPACC)

Current Initiatives

Workers' Safety and Compensation Commission - Fire Fighter Code of Practice

In 2017, the OFM worked with the Workers Safety and Compensation Commission (WSCC) in an advisory capacity to develop a Fire Fighters Code of Practice, which was formally released by WSCC in December 2017. WSCC Codes of Practice provide practical guidance to achieve the safety requirements of the Northwest Territories and Nunavut *Safety Acts* and related *Regulations*.

The Firefighter Code of Practice provides information to employers and workers on requirements that ensure procedures are in place to safeguard the health and safety of firefighters and the public. The Code outlines hazard assessments, standard operating procedures, standard operating guidelines, policies, training, supervision, joint occupational health and safety committees, and equipment.

The Firefighter Code of Practice will be applied as a basis for all guidance and support provided by the OFM to community governments concerning fire department operations. All OFM templates and published materials developed will be consistent with the Code of Practice.

Complimentary to the Firefighter Code of Practice is the Fire Department Internal Compliance Checklist also published by WSCC, which identifies standard operating procedures a fire department should have at a minimum.

Update - Office of the Auditor General (OAG) Action Plan

In 2017, the OAG completed a Performance Audit of the Department of Municipal and Community Affairs (MACA) focusing on areas involving health and safety. Stemming from this work, 13 recommendations were made by the OAG for MACA to improve support for community governments, including immediate actions to reassess whether communities with fire departments meet requirements under the *Safety Act*. For those fire departments that do not, the OAG recommended MACA work with the community government to establish a plan to assist them in meeting requirements. For community governments without fire departments, the OAG recommended the Department should work with them to develop a strategy for fire safety.

In response to the OAG's recommendations, the OFM implemented tools and actions in 2017 to strengthen community fire protection services for NWT communities, including a community fire protection presentation to educate community governments on roles, responsibilities, and key elements of their fire service; a community fire department assessment to provide an efficient means to determine the operational status of fire departments; and a planning tool to help community governments identify priority activities and monitor progress. A key benchmark for the assessment is the WSCC's Firefighter Code of Practice.

Since implementing the assessment tool in 2017, sixteen (16) community fire departments have been reviewed and action plans have been developed for twelve (12). Results from the assessments indicate a need for trained volunteers, standard operating procedures, and maintenance programs. In response, the OFM is currently developing templates to ensure these important key foundational elements are addressed.

Work continues in 2018 to complete assessments for the remaining communities and help community governments implement corresponding action plans.

Standard Equipment Guide

A standard equipment guide was developed in 2017 to help community fire departments identify the minimum equipment required for a defensive level fire department, which is what small fire departments in the NWT strive for.

The Guide references industry standards, which helps to clarify minimum requirements for the following:

1. Protection for firefighting personnel;
2. Protective Firefighting Ensembles;
3. An Initial Attack Fire Apparatus;
4. A Pumper Fire Apparatus; and
5. A Mobile Water Supply Apparatus.

The OFM works with community fire departments to develop a program in compliance with NWT safety legislation and recognized standards for the selection, care, use and maintenance of protective firefighting ensembles, fire apparatus, and support equipment.

Community Fire Protection Bylaw

In 2017, the OFM worked closely with the Northwest Territories Association of Communities (NWTAC) on the development of a community fire protection bylaw template for communities. The purpose is to help guide community government officials through the process of updating or developing a suitable fire protection bylaw, which is an integral part for all community fire protection services.

A fire protection bylaw provides the necessary legal authority for a community to perform services, enforce requirements and assign responsibility.

Update - *Fire Prevention Act* Review

Municipal and Community Affairs (MACA) continued work on the *Fire Prevention Act* (*FPA*) and *Regulations* in 2017. Information received through public and stakeholder consultation confirmed the plan review function requires a focused dialogue to help determine future changes to the *FPA* and *Regulations*.

In 2018-2019, MACA will re-engage residents, elected officials and stakeholders on how other jurisdictions in Canada manage code compliance, with a view to determining what approach is most suitable for the NWT; and how to effectively harmonize code review activities with other related territorial and community regulatory functions.

Regional Statistical Summaries

South Slave

	Fires as Reported by Communities	False Alarms[1]	Fire Investigations Conducted by OFM	Fire Inspections
Enterprise	3	3	0	1
Fort Resolution	0	0	0	6
Fort Smith	12	7	1	42
Hay River	14	24	2	64
Fort Providence	3	0	1	6
Kátł'odeeche First Nation	1	0	1	0
Kakisa	0	0	0	2
Hinterland	0	0	0	0
TOTAL	**33**	**34**	**5**	**121**

Fires that caused over $100,000 in damage

Community	Building Name / Street Address	Dollar Loss
Hay River	23-104 Street	$300,000
Kátł'odeeche First Nation	218 Wolfe Drive	$225,000
Hay River	Mackenzie Electric	$1,000,000
Fort Providence	Housing materials shop	$150,000
Fort Smith	6 Caribou Crescent	$225,000
	TOTAL	**$1,900,000**

Fire Loss by Act or Omission (OFM investigations)

Accidental	3
Natural	0
Incendiary	0
Undetermined	2

[1] *False alarm data is typically only reported by larger communities.*

Regional Statistical Summaries

Dehcho

	Fires as Reported by Communities	False Alarms[1]	Fire Investigations Conducted by OFM	Fire Inspections
Fort Liard	0	0	0	1
Fort Simpson	4	2	0	24
Jean Marie River	0	0	0	1
Nahanni Butte	0	0	0	1
Sambaa K'e	0	0	0	2
Wrigley	0	0	0	1
Hinterland	0	0	0	1
TOTAL	**4**	**2**	**0**	**31**

Fires that caused over $100,000 in damage

There were no losses due to fire that exceeded $100,000 in damages.

Fire Loss by Act or Omission (OFM investigations)

Accidental	0
Natural	0
Incendiary	0
Undetermined	0

[1] *False alarm data is typically only reported by larger communities.*

Regional Statistical Summaries

Sahtu

	Fires as Reported by Communities	False Alarms[1]	Fire Investigations Conducted by OFM	Fire Inspections
Colville Lake	0	0	0	2
Délı̨nę	0	0	0	7
Fort Good Hope	1			0
Norman Wells	3	0	2	0
Tulita	0	0	0	7
Hinterland	0	0	0	0
TOTAL	**4**	**0**	**2**	**16**

Fires that caused over $100,000 in damage

Community	Building Name / Street Address	Dollar Loss
Norman Wells	11 Woodland	$1,000,000
Norman Wells	#2 Falcon Crescent	$100,000
	TOTAL	**$1,100,000**

Fire Loss by Act or Omission (OFM investigations)

Accidental	0
Natural	0
Incendiary	0
Undetermined	2

[1] *False alarm data is typically only reported by larger communities.*

Regional Statistical Summaries

Beaufort Delta

	Fires as Reported by Communities	False Alarms[1]	Fire Investigations Conducted by OFM	Fire Inspections
Aklavik	0	0	0	5
Fort McPherson	0	0	0	6
Inuvik	26	90	1	14
Paulatuk	0	0	0	6
Sachs Harbour	0	0	0	5
Tsiigehtchic	0	0	0	4
Tuktoyaktuk	3	0	2	7
Ulukhaktok	0	0	0	6
Hinterland	0	0	0	0
TOTAL	**29**	**90**	**3**	**53**

Fires that caused over $100,000 in damage

Community	Building Name / Street Address	Dollar Loss
Inuvik	Harder Home	$160,000
Tuktoyaktuk	Housing Duplex	$600,000
	TOTAL	**$760,000**

Fire Loss by Act or Omission (OFM investigations)

Accidental	1
Natural	0
Incendiary	1
Undetermined	1

[1] *False alarm data is typically only reported by larger communities.*

Regional Statistical Summaries

North Slave

	Fires as Reported by Communities	False Alarms[1]	Fire Investigations Conducted by OFM	Fire Inspections
Detah	0	0	0	1
Behchokǫ̀	3	0	0	7
Gamètì	0	0	0	5
Łutselk'e	0	0	0	6
Ndılǫ	1	0	1	1
Wekweètì	1	0	0	0
Whatì	2	0	1	7
Yellowknife	202	169	10	*267
Hinterland	0	0	2	1
TOTAL	**209**	**169**	**14**	**295**

** 201 of the 267 inspections listed in Yellowknife were conducted by the OFM. The remaining 66 were conducted by the Yellowknife Fire Department.*

Fires that caused over $100,000 in damage

Community	Building Name / Street Address	Dollar Loss
Yellowknife	663 Williams Avenue	$250,000
Yellowknife	#23, 21, 19, 17 Ward Crescent	$2,500,000
Yellowknife	#441 & 439 Norseman Drive	$300,000
Yellowknife	2002 Sissons Court	$308,000
Yellowknife	174 Jeske Crescent	$800,000
Yellowknife	Explorer Hotel	$750,000
Hinterland	#5 Prelude Main	$625,000
Whatì	4 Bay Garage	$800,000
Ndılǫ	107 Sikyea Tili	$350,000
	TOTAL	**$6,683,000**

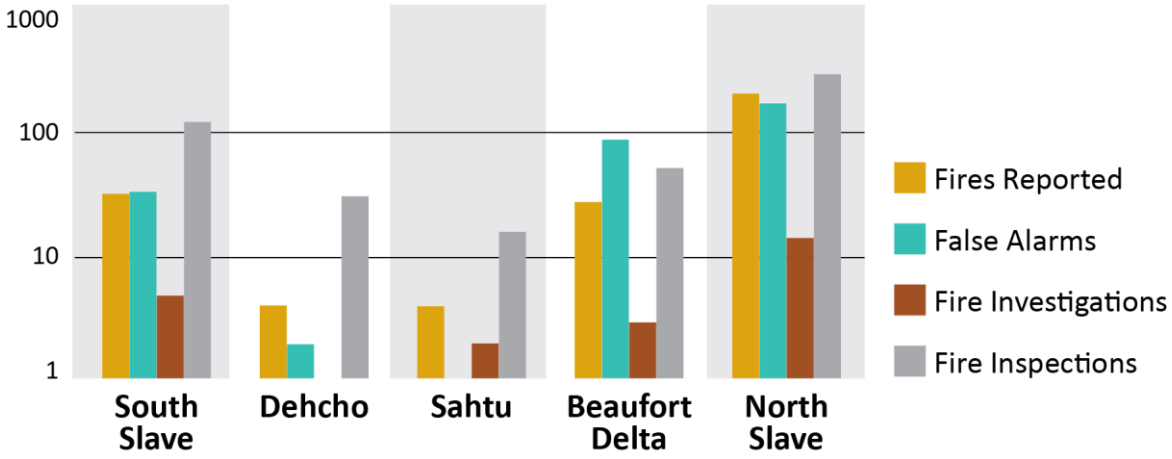
Fire Loss by Act or Omission (OFM investigations)

Accidental	9
Natural	0
Incendiary	2
Undetermined	3

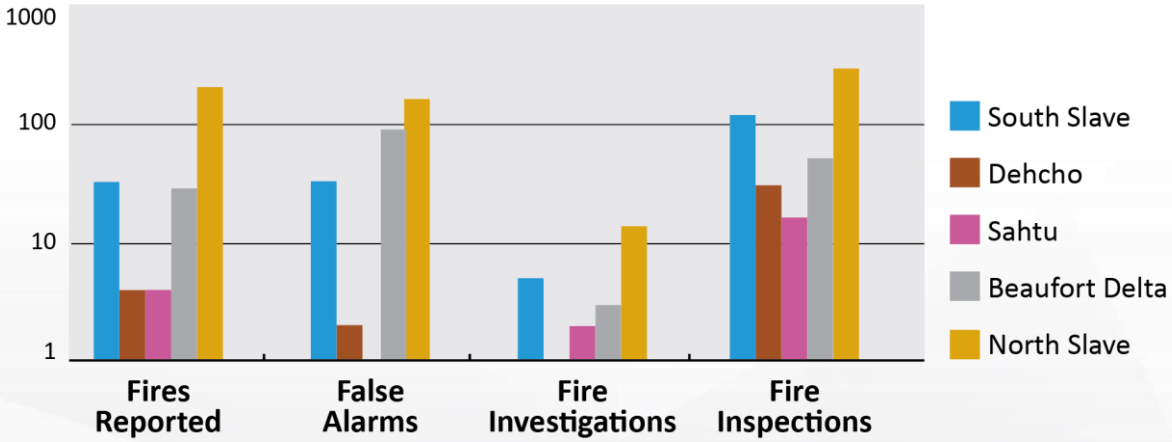
[1] *False alarm data is typically only reported by larger communities.*

Territorial Response Statistics

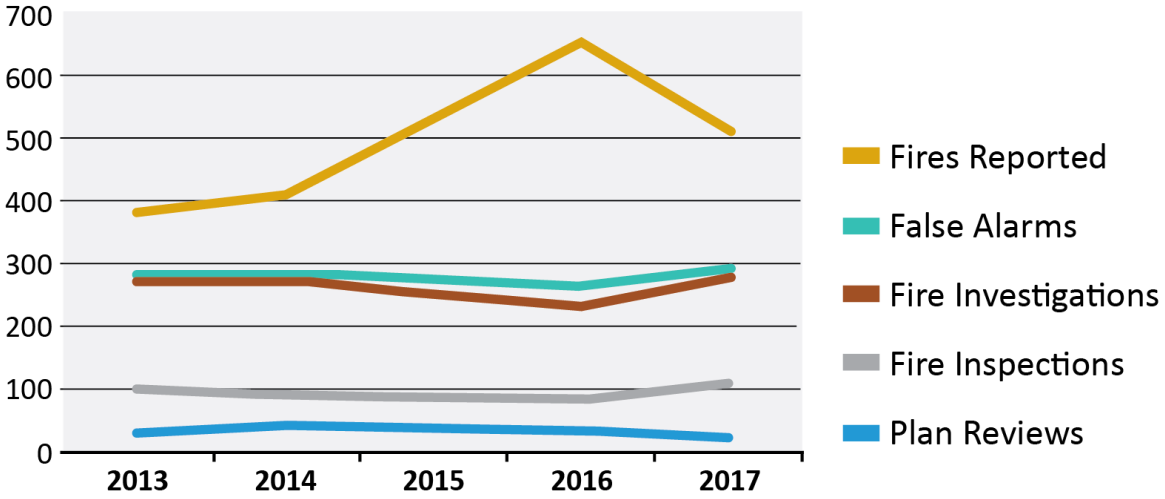
Summary by Region 2017



Summary by Response Type 2017



Territorial 5-Year Comparative Summary



Incendiary Fire Occurrences (Arson)

An incendiary fire, or arson fire, is the criminal act of deliberately setting fire to property. Arson fires occur every year in the NWT and continue to be of concern to the OFM. When a fire occurs with criminal intent, the Royal Canadian Mounted Police (RCMP) are the lead investigative agency with the OFM providing fire investigation expertise and support as needed. In 2017, there were 34 arson investigations, a 1 percent increase from the previous year.

Arson investigation outcomes were as follows:

*Arson Investigations Summary

Cleared of charge	2
Cleared (under 12 yrs)	5
Cleared (diversion program)	1
Unsolved	23
Unfounded	2
Remain under investigation	1
TOTAL	**34**

** RCMP maintain independent statistics on arson related fires and provide to OFM annually.*

Injury and Cost Analysis

The following is a summary of population, fire and cost statistics for the five regions of the NWT in 2017.

	South Slave	Dehcho	Sahtu	Beaufort Delta	North Slave	Northwest Territories Totals
Population	7,325	3,428	2,545	6,673	24,549	44,520
Fires Reported	33	4	4	29	209	279
Dollar loss (000)	**$1,900**	**$0**	**$1,100**	**$760**	**$6,683**	**$10,218**
$$ loss per Capita	$259	$0	$432	$119	$272	$230
Fatalities	1	0	0	0	0	1
Injuries	0	0	0	1	0	1

General Observations

- Fires classified as accidental continue to impact the NWT residents. This signals a necessity for the OFM to continue to work closely with community fire services personnel and residents to bring a greater awareness to fire prevention measures i.e. Public Education and Fire Prevention Inspections.
- Community reporting of fires to the OFM remains challenging in the NWT. This is a trend across Canada and demonstrates the need for the OFM to educate communities of the necessity and importance of reporting and to simplify fire reporting process to the extent possible. Fire reporting contributes to identification for fire prevention programming in the NWT and the tracking of territorial statistics. The OFM is seeking opportunities to improve data-capture for smaller communities by simplifying procedures.
- The data shows a decline in fire safety inspections over the period. This trend is due to a decrease in inspections performed by larger community governments, likely due to competing priorities. This signifies a need to assess safety risks and ensure adequate resources are assigned. The OFM is engaging community government authorities to better understand the scope of their involvement in this activity.
- The majority of regulatory activity (inspections and investigations) continues to occur in the North Slave. Of the reported 516 inspections conducted for NWT in 2017, 295 or 57 percent occurred in the North Slave Region. These activities continue to trend upwards due to population and infrastructure growth in the region. The OFM is currently assessing its operating model with a view to identifying ways to improve resource allocation.
- Per capita dollar loss increased for the Territory by 1.2% from 2016 statistical data. This increase is attributed to several high dollar loss fires occurring in all regions, with the Dehcho Region being the exception.
- Twenty-four (24) fires were investigated by the OFM in 2017 compared to thirty-five (35) the previous year. This may be the result of fewer fires being reported to the OFM by communities, as is required by the *Fire Prevention Act.* The OFM continues to work with communities to encourage them to report incidents, and to arrange investigations when appropriate. Fire investigations are critical in helping prevent future injuries and death.
- The data continues to show a significant volume of arson investigations. This emphasizes a need to continue efforts to educate residents on fire prevention. The OFM is currently working to improve public education and fire prevention resources with key stakeholders, including a central fire prevention resource website.

On-Going Activities

Fire Prevention Week

Each year, the OFM looks to Fire Prevention Week (FPW) to educate residents and promote fire safety awareness initiatives in line with the national theme. In 2017, FPW occurred October 8th through 14th, and the theme was *"EVERY SECOND COUNTS – Plan 2 Ways Out!"* NWT fire and life safety educators helped to raise awareness on having a home fire escape plan and practicing it regularly.

The OFM targets three main audiences during Fire Prevention Week:

Residents

General fire safety information is shared with NWT residents to help understand and better prepare for the dangers of fire. In 2017, the following materials were shared with residents:

- Home fire escape planning tip sheet;
- How to make a home fire escape plan;
- Smoke alarm safety tips; and
- A Home Fire Safety Contest.

As part of the Home Fire Safety Contest, NWT residents and their children who completed the fire safety checklist were entered into MACA's online contest to win 1 of 5 regional prize kits. The prize kits included: combination smoke/carbon monoxide detectors, a 2-storey escape ladder, and a fire station LEGO kit.

Schools

Schools have an important role in helping to educate children and their families on the importance of fire safety. Fire department members may also be invited to participate in a school presentation, activity, or sharing fire safety tips. This year the following materials were shared with schools:

- A principal and teacher letter describing the FPW campaign and encouraging participation;
- *Fire Safety Starts With You* student activity booklets with puzzles, games, quizzes, and general fire safety information;
- A teacher lesson plan with suggested activities on how to make effective use of the activity booklets; and
- A family letter and home fire safety inspection checklist encouraging parents to review the *Fire Safety Starts With You* activity booklet with their children and inspect their home for fire safety.

Community Fire Departments

Program materials and guidance information is provided to assist community fire departments with maximizing the effectiveness of FPW activities. This year the following materials were shared with fire departments:

- A letter to fire departments encouraging their participation in FPW;
- General tips for promoting FPW; and
- A community smoke alarm program guide.

Training Initiatives

MACA's School of Community Government (SCG) provides community governments with accredited and non-accredited fire training through a variety of delivery methods i.e. in-community (face to face) and online delivery methods. Using Territorial and College of the Rockies certified fire training instructors, these individuals provide evaluation of firefighters in the form of written and practical testing that meets industry standards.

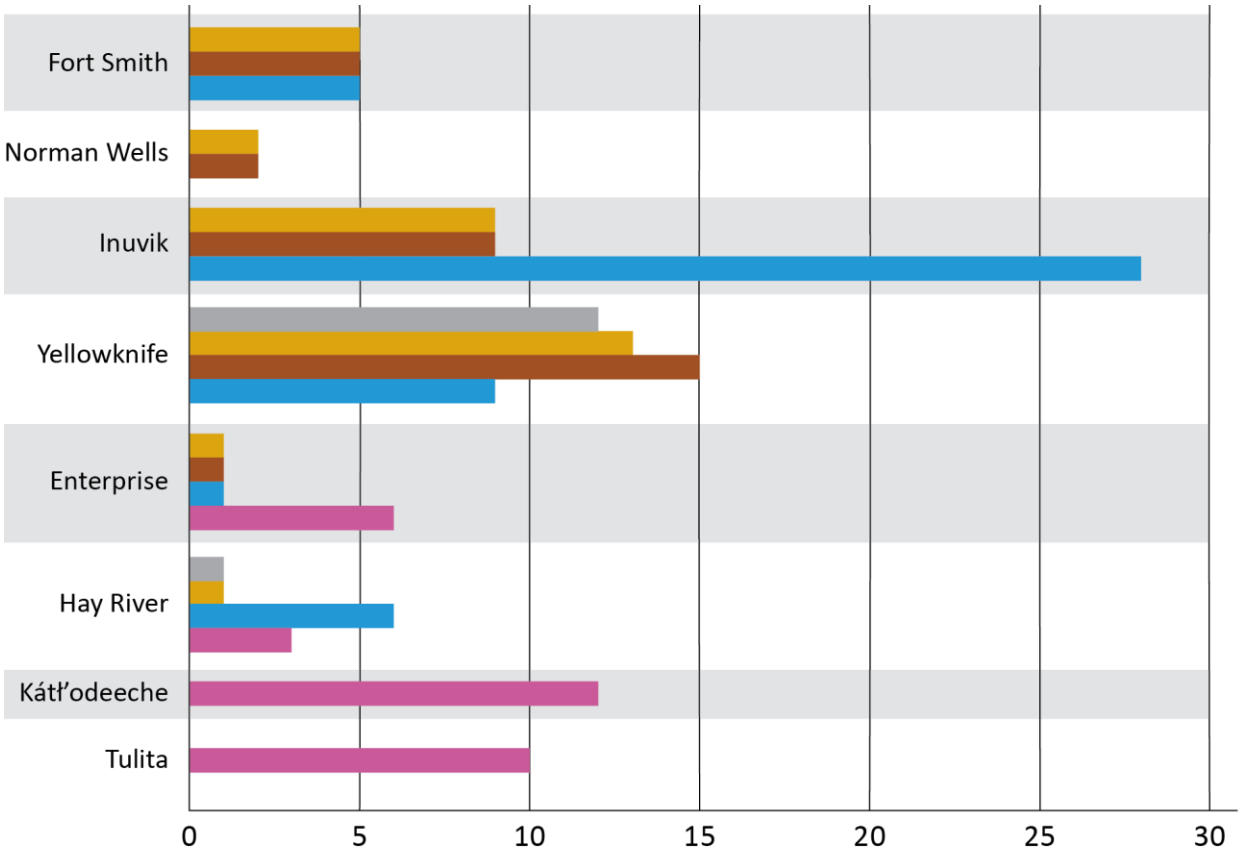
Customized fire training programs allows flexible and community-driven initiatives to enhance community protection and preparedness. Accreditation by the College of the Rockies allows participants to hold certification under recognized Fire Fighting standards and enhances personal development as well as generates a set base of volunteers making those skills applicable anywhere in the NWT or Canada.

Communities can request training from a Basic level (prevention based) up to a Professional level - National Fire Protection Association (NFPA 1001) depending on community objectives, available resources, needs and capacity. Additional training options are also available i.e. – Fire Inspection training (NFPA 1031) / Fire Investigator (NFPA 1033) / Fire Officer (NFPA 1021) for community application.

The following chart identifies fire training that was provided in the NWT for 2017 based on the type of training received.

2017 Fire Protection Training

(Number of participants)



	Tulita	Kátł'odeeche	Hay River	Enterprise	Yellowknife	Inuvik	Norman Wells	Fort Smith
Pump Operations	0	0	1	0	12	0	0	0
NFPA 472 Hazmat Operations	0	0	1	1	13	9	2	5
NFPA 472 Hazmat Awareness	0	0	0	1	15	9	2	5
NFPA 1001 Professional Firefighter	0	0	6	1	9	28	0	5
Level 2 - Defensive	10	12	3	6	0	0	0	0

Plan Review

The OFM is responsible for reviewing plans of all construction excluding single family dwellings and ancillary structures for single family dwellings.

With the exception of The City of Yellowknife, there is no regulatory authority in the NWT to ensure a building is safe for public occupancy in relation to adopted codes and standards, beyond the fire safety requirements identified by the *Fire Prevention Act*. Plans and specifications are reviewed by the OFM to determine whether they meet the fire safety requirements adopted by the *Fire Prevention Regulations*, and developers are responsible to ensure all statutory requirements are met and construction is completed in a manner consistent with the OFM plan review assessment.

The OFM also participates as a member of the Canadian Commission on Building and Fire Codes, and the Provincial/Territorial Policy Advisory Committee on Codes. These committees coordinate the development and revision of the codes adopted through the *Fire Prevention Act* that govern all construction and renovation in the NWT.

The plan review activity involves a wide variety of construction projects including multi-residential, commercial, resource development, fuel storage and dispensing, mining, oil and gas, water supply, etc. Plan review is conducted on a fee for service basis.

In 2017, the OFM reviewed 110 plans for construction of new buildings and/or alterations of existing buildings.

Fire Service Merit Awards

Community firefighters and fire departments play a critical role in safeguarding residents and communities of the NWT. Firefighters are relied upon to provide an essential service that protects the lives and property of all NWT residents. MACA acknowledges the vital contributions made by fire fighters and fire departments through the Fire Service Merit Awards Program (FSMA).

All community fire departments, volunteer, and paid fire fighters in the NWT are eligible to receive a FSMA. Nominees are considered for awards based on their contribution to the NWT fire service and/or community fire protection.

This contribution may include:

- An outstanding achievement in fire protection;
- An innovative idea or solution to a fire related issue;
- A high degree of personal commitment;
- A demonstrated improvement over the past year (including training achievements);
- The impact of achievements on the community and/or the territory.

Community fire service awards are presented to recognize outstanding efforts to the NWT fire service made by a community. Only those communities that have shown a marked enhancement of emergency service to the community, measured against a formal assessment by the OFM, will be considered in a given year. A selection committee chooses award recipients from among all nominations received by the public.

FSMA may be presented to recipients at a public awards ceremony to be held each year to coincide with FPW (the week containing October 9th of each year). Awards are presented regionally.

In 2017, the following nominee's received a FSMA:

Individual

Captain Terance Fischer – Hay River Fire Department

Captain Fischer was recognized for his bravery, dedication and contributions as a mentor.

Fire Department(s)

Hay River Fire Department

The Hay River Fire Department was recognized for their commitment and dedication to the residents of Hay River through their fire department programming and services that they provide residents and support to fire departments throughout the South Slave Region.

Length of Service Awards

MACA recognizes volunteer and paid firefighters who have served for lengths of 2, 5, 10, 15, 20, 25, 30 and 35 years with length of service pins, medals, or a commemorative clasp and service bar for each period.

All volunteer and paid firefighters are eligible to receive length of service awards. As MACA does not keep records on community firefighters, the Department issues a call annually to fire departments and community governments for applications for each level of award as firefighters become eligible. Length of service are verified by the community Senior Administrative Officer or Fire Chief.

The OFM issues length of service awards as nominations are received and verified. Awards are typically presented at a community organized event. OFM may attend at the request of the community.

In 2017, ceremonies took place in the South Slave and Beaufort regions to recognize NWT volunteer firefighters.

Contact Information

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