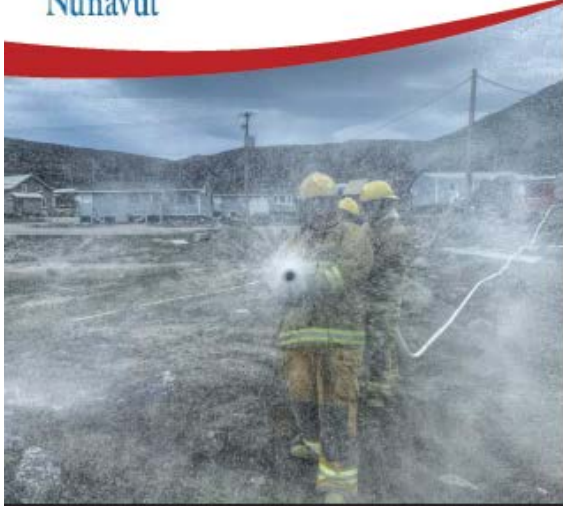




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Building *Nunavut* Together  
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Bâitir le *Nunavut* ensemble



DEPARTMENT OF COMMUNITY AND GOVERNMENT SERVICES

# NUNAVUT FIRE MARSHAL'S OFFICE 2020 ANNUAL REPORT



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## Message from the Minister



As the Minister responsible for the Department of Community and Government Services, I am pleased to present the Nunavut Fire Marshal's 2020 Annual Report.

The management and direction of the Nunavut Fire Marshal's Office is in line with our Government's mandate – Turaaqtavut. To meet our priorities in Turaaqtavut, we continue to build fire safety capacity at the community level.

Equipment and fire trucks are being upgraded or replaced as needed. We will continue our efforts to increase support to municipalities for fire prevention education.

The prevention and suppression of fires is critical in avoiding loss of life, injury, and damage in our communities. These losses place a burden on

communities, families, and government, and are often preventable. We are working to help provide firefighters with training, tools, and resources to effectively respond to fire emergencies.

Public awareness and education initiatives are key to ensuring that Nunavummiut have the right tools to make fire-safe choices in their homes, schools, and workplaces.

I would like to thank our Nunavut firefighters for the service they have given our communities over this past year, as their dedication has helped keep Nunavummiut safe.

Jeannie Ehaloak

Minister, Community and Government Services

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## Message from the Fire Marshal

The Nunavut Fire Marshal's Office's 2020 Annual Report provides fire-related statistics for Nunavummiut and updated information on the Nunavut Fire Protection Strategy. Statistics such as estimates of fire loss damages and value at-risk amounts are used to compare past performance in reducing fire losses and guiding the development of fire prevention and public education programs that help address fire safety issues.

The Nunavut Fire Marshal's Office helps provide a safe environment for Nunavummiut through firefighter training, fire investigations, fire and life safety inspections, public education for fire prevention, and construction plan reviews. Funding is provided to acquire and maintain the critical equipment and supplies for our Hamlet and City fire departments.

Firefighting and fire prevention activities continue to be the priority of local fire departments across Nunavut. Firefighters play an important role in keeping their communities as safe as possible, but we all share the responsibility to support their efforts.

We are committed to continuing our fire prevention efforts with a focus on reducing deaths, injuries and property losses caused by fire.

I ask all residents of Nunavut to practise fire safety in their communities. This will help eliminate fire and life safety hazards to all Nunavummiut.

Ted Clouter, CD, CFEI  
Nunavut Fire Marshal



## 2020 Annual Report Highlights of the Nunavut Fire Marshal's Office

# 2020 ANNUAL REPORT | HIGHLIGHTS OF THE NUNAVUT FIRE MARSHAL'S OFFICE

551

Fire and Life Safety Inspections completed



131

Fires reported in Nunavut

18

Firefighter training courses



150

Firefighters received training throughout Nunavut

41%

Decrease in reported fires in the past decade



64%

Decrease in fire related injuries in the last decade

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## 1.0 COVID-19 Operational Implications

The Covid-19 pandemic had significant human and financial impacts globally. Throughout 2020, under Covid-19 considerations, the Nunavut Fire Marshal's Office (NFMO) continued to provide services such as critical fire and life safety inspections, fire investigations, and firefighter training. The pandemic did have an impact to the services provided by the NFMO; a priority approach was taken to ensure the safety of Nunavummiut. For example, fire and life safety inspections focused first on critical infrastructure and buildings remaining open to serve the public throughout the pandemic. Planning continues for the priority approach into 2021.

Training, inspections, and investigations were completed ensuring that all personnel maintained the safety guidelines outlined as per the Covid-19 restrictions implemented by the Department of Health and the Workers' Safety and Compensation Commission (WSCC).

## 2.0 Overview of the Nunavut Fire Marshal's Office

The Nunavut Fire Marshal's Office (NFMO) operates under the authority of the *Fire Safety Act*. The NFMO's mission is to provide expertise, leadership, and guidance in the preservation of life and property, and the reduction and elimination of hazards contributing to fire loss damage as well as helping to provide a safe environment for Nunavummiut.

The NFMO works closely with multiple groups, continuously building partnerships among stakeholders at the community, territorial, national, and international levels. These relationships foster an environment for the NFMO to give advice and guidance to organizations regarding the facilitation of fire and life safety within the territory of Nunavut.

Throughout 2020, the NFMO performed fire and life safety inspections, conducted firefighter training, delivered and distributed fire prevention public education resources, and provided advice and guidance to stakeholders. It also provided resources to support fire services, supported and conducted fire investigations, and maintained fire incident statistics and trends.

## 3.0 Fire and Life Safety Inspections

In the past year, 551 fire and life safety inspections were completed throughout Nunavut. Reports were issued to the owners of the buildings, reporting deficiencies which required correction to adhere to the National Fire Code of Canada. Fire and life safety inspections were conducted on buildings in the territory, with priority given to buildings which pose a high risk to life safety, as well as critical infrastructure. The statistics pertaining to the types of inspections conducted are illustrated in Figure 1:

Figure 1– Fire and Life Safety Inspections by Building Type

Fire and Life Safety Inspections by Building Type	
Building Type	Percentage of Inspections (551 total)
<b>Assembly</b> (schools, day-cares, community halls)	26%
<b>Institutional</b> (health centres, care facilities, jails)	6%
<b>Residential</b> (apartment building common areas)	9%
<b>Business and Personal Services</b> (offices)	11%
<b>Mercantile</b> (stores, retail outlets)	23%
<b>Industrial</b> (manufacturing, gas bar, power plants)	25%
<b>Total</b>	<b>100%</b>

## 4.0 Stakeholder Collaboration

One of the key activities of the Nunavut Fire Marshal’s Office (NFMO) is to act as a resource for its partners and stakeholders with whom it interacts. Staff at all levels within the NFMO provide information, interpretation of codes, and both advice and guidance regarding all aspects of building and fire and life safety.

The NFMO regularly collaborates with territorial counterparts from the Departments of Justice, Health, Education, Family Services, as well as the Nunavut Housing Corporation, the Royal Canadian Mounted Police (RCMP) and Nunavut hamlets. The partnership with each of these organizations plays a crucial role on the success of the NFMO mission. The NFMO continues to foster and develop relationships with the fire departments within Nunavut through territorial and community-based training courses facilitated by the Nunavut Municipal Training Organization.

## 5.0 Associations and Partnerships

The Nunavut Fire Marshal’s Office (NFMO) is an active member of several associations which enable the territory to remain at the forefront of *fire protection*, keeping abreast with current information and training through multiple platforms. These associations are further explained below:

### 5.1 Council of Canadian Fire Marshals and Fire Commissioners

The Council of Canadian Fire Marshals and Fire Commissioners (CCFMFC) is a recognized and trusted source of national leadership and knowledge for fire safety issues and in support of emergency resilience across Canada. The council applies a cohesive and consistent national approach to fire services issues and concerns. It is comprised of representatives from each of the provinces, territories, and the Department of National Defence.

### 5.2 National Fire Protection Association

The National Fire Protection Association (NFPA) is a global self-funded non-profit organization, established in 1896, devoted to eliminating death, injury, property, and economic loss due to fire hazards. Their mission is to help save lives and reduce loss with information, knowledge, and passion. The NFPA delivers information and knowledge through more than 300 consensus codes and standards, research, training, education, outreach, and advocacy; and by partnering with others who share an interest in furthering their mission.



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### 5.3 Canadian Fire Safety Association

The Canadian Fire Safety Association (CFSA) is a non-profit organization established in 1971, to promote fire safety using seminars, safety training courses, informative newsletters, and scholarships.

The CFSA is organized to promote the science and improve the methods of fire protection and prevention, to obtain and circulate information on these subjects, and to secure the understanding and cooperation of the Canadian public in establishing proper safeguards against loss of life and property by fire.

### 5.4 Aboriginal Firefighters Association of Canada

The Aboriginal Firefighters Association of Canada (AFAC) was founded in 1991 as a united body of regional Indigenous emergency and fire service organizations from across Canada. The Association was established to assist in the exchange of information and support the implementation of services; promote national standards in fire prevention suppression, and education within Indigenous communities in Canada.

### 5.5 Canadian Association of Fire Chiefs

Founded in 1909, the Canadian Association of Fire Chiefs (CAFC) is an independent, non-profit organization with a voluntary membership representing fire departments across the country. CAFC's mission is to connect Canada's provincial, territorial, and allied associations and external stakeholders for the advancement of public and firefighter safety.

## 6.0 Fire Protection Strategy

Members of the Nunavut Fire Marshal's Office (NFMO) completed fire department equipment audits. This was completed in addition to receiving and verifying monthly reports from fire departments to inventory and record the condition of the equipment that the department has received. The funding for equipment provided was obtained through the Public Fire Safety and Community Fire Department Contribution Policy. Audits and reports also documented fire hall and fire truck conditions which aided in determining the overall status and operational readiness of fire departments and whether additional equipment was required. The following are examples of the types of equipment provided:



- Replacement of worn/damaged firefighter protective clothing (bunker gear, gloves, boots, helmets, etc.)



- Replacement of worn/damaged firefighter equipment (hoses, gated wyes, ladders, valves, axes, and nozzles, etc.)

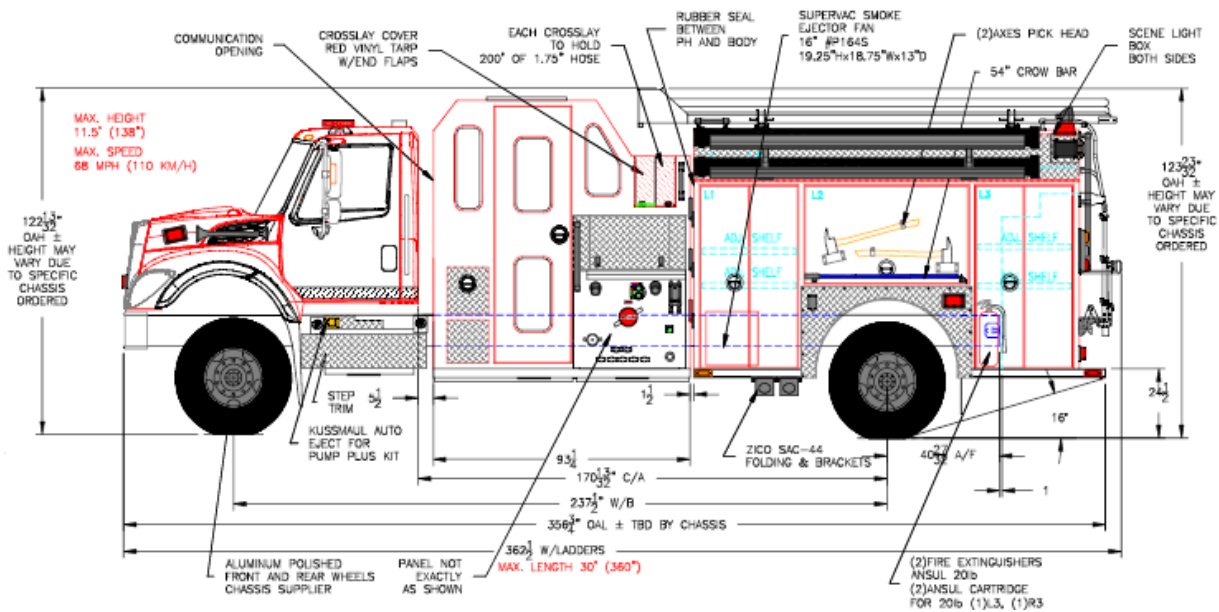


- Replacement of damaged/unserviceable radios, pagers, and flashlights
- Replacement and service maintenance of compressor systems

## 6.1 Fire Truck Replacement

The NFMO supported the Territory’s Fire Truck Replacement Program. The annual capital budget for the truck replacement is currently \$500,000.00 per apparatus. Fire trucks in Nunavut are certified to Underwriter Laboratories of Canada Standard S-515 with an expected life span of 20 years. In 2020, fire trucks were purchased for the communities of Naujaat and Gjoa Haven.

Figure 2– Fire Truck Replacement Specifications



Pictured Above: The Hamlet of Gjoa Haven Fire Truck received in 2020

## 6.2 Fire Truck Replacement Schedule

A replacement schedule through 2028 has been developed by Community and Government Services for all community fire trucks based primarily on age and condition. A preview of this schedule can be seen in Figure 3:

*Figure 3– Fire Truck Replacement Schedule Preview*

Community	Year
Kugaaruk	2021
Coral Harbour	2021
Sanikiluaq	2022
Igloolik	2022
Resolute Bay	2023
Clyde River	2023
Qikiqtarjuaq	2024
Arctic Bay	2024
Sanirajak	2025
Taloyoak	2025
Chesterfield Inlet	2026
Whale Cove	2026
Grise Fiord	2027
Pond Inlet	2027
Iqaluit	2028
Kimmirut	2028

## 7.0 Firefighter Training

There were 18 territorial and community-based fire service training courses provided in 2020. Territorial courses allow for trainees to register from across the territory, while community-based courses are specific to each hamlet fire department. The combination of these course styles allows for firefighters to train with their counterparts from across Nunavut and develop skills within their own fire department using their own equipment.

Throughout the territory, 150 firefighters received training, increasing their skills, knowledge, and abilities in various firefighting tactics.



Pictured Above: Firefighters work together to extinguish a vehicle fire during a training exercise.

## 7.1 Firefighter Training Courses

Firefighter training courses were offered by the Nunavut Fire Marshal’s Office (NFMO) in partnership with the Nunavut Municipal Training Organization. A breakdown of the course type as well as the number of students receiving training throughout the territory in 2020, is shown in Figure 4.

*Figure 4– Combined Territorial and Community-Based Training*

Combined Territorial and Community-Based Firefighter Training		
Course Type	Number of Courses	Number of Firefighters
Territorial Training Courses	10	86
Community-Based Training Courses	8	64
<b>Total</b>	<b>18</b>	<b>150</b>

Figure 5 gives a detailed breakdown of the territorial training courses, location, and number of firefighters offered by the NFMO.

*Figure 5– Territorial Training Courses*

Territorial Training Courses		
Course	Location	Number of Firefighters
Fire Service Instructor	Iqaluit	5
Firefighter Level 1	Cambridge Bay	10
Fire Pump Operations A	Pangnirtung	5
Firefighter Level 1	Iqaluit	9
Firefighter Level 2	Iqaluit	9
Firefighter Level 2	Pond Inlet	9
Fire Officer Level 1	Iqaluit	10
Fire Life Safety Educator	Baker Lake	6
Fire Life Safety Educator	Igloolik	8
Fire Officer Workshop	Iqaluit	15
<b>Total</b>		<b>86</b>



*Pictured Left: A Fire Department Pump Operator demonstrating drafting techniques to effectively supply the fire truck with water.*

The following Figure 6 gives a detailed breakdown on the location of community-based courses offered by the NFMO, and the number of students receiving training, as mentioned in Figure 4.

*Figure 6– Community-Based Training Courses*

Community-Based Training Courses	
Location	Number of Firefighters
Gjoa Haven	9
Igloolik	6
Kimmirut	11
Kugluktuk	5
Pangnirtung	8
Pond Inlet	11
Qikiqtarjuaq	7
Taloyoak	7
<b>Total</b>	<b>64</b>



*Pictured Above: A Nunavut firefighter practising the use of a portable fire extinguisher during a training course.*

## 7.2 Aboriginal Firefighters Association of Canada National Aboriginal Firefighting Competition

Due to the impact of COVID-19, the Aboriginal Firefighters Association of Canada’s National Aboriginal Firefighting Competition scheduled to be held in Quebec was cancelled.

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## 8.0 Plan Reviews

The Government of Nunavut adopted the *Building Code Act* in September of 2018, with enforcement of building safety codes (including fire code requirements for new construction and renovation projects) moving from the Nunavut Fire Marshal's Office (NFMO) to the Office of the Chief Building Official. Construction plans (drawings and specifications) are reviewed for conformance to respective national safety codes and to determine that the proper precautions are taken to prevent fire incidents. Through this transition, plan reviews beginning prior to the implementation of the *Building Code Act* in September 2018 are considered legacy and remain with the NFMO until completion of the construction project.

## 9.0 Fire Prevention and Public Education

The Nunavut Fire Marshal's Office (NFMO) supports fire departments with presentation materials to aid them in the delivery of fire prevention and public education seminars in the communities. The funding for the resources provided was through the Public Fire Safety and Community Fire Department Contribution Policy.

### 9.1 Nunavut Youth Fire-setter and Arson Prevention Program

The NFMO continues to identify, interview, assess, and intervene with youth referred into its Nunavut Youth Fire-setter and Arson Prevention (NYFSAP) program. The NYFSAP program is aimed towards the prevention of fire-setting behaviour in children and youth. Components explored consisted of identifying children and youth involved in fire-setting, interviewing youth fire-setters and family members, using assessment tools to aid in determining the level of risk for future fire-setting, and providing effective intervention. The first of three annual training courses were scheduled for the fall of 2020 but was postponed due to COVID-19. The course was rescheduled for the first quarter of calendar year 2021.

### 9.2 Remembering When

The NFMO continues to develop and adapt its 'Remembering When' program, which focuses on fire safety messages targeted towards elders in our communities. This program is a fire safety prevention program provided to local fire departments, caregivers, and other stakeholders interested in seniors' safety. The program provides local individuals with the training and skills to take the 'Remembering When' program out to seniors within their own communities.

### 9.3 Fire Prevention and Public Education

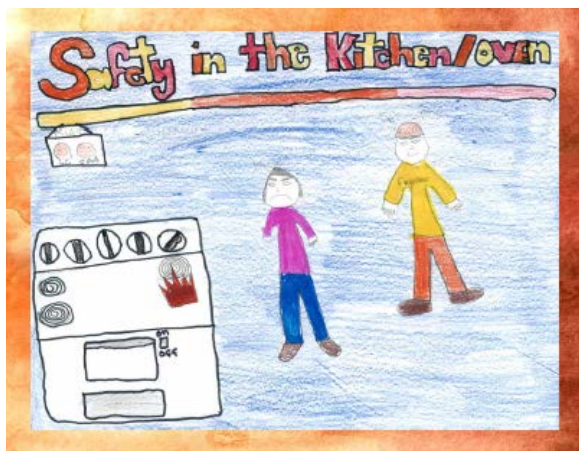
Public education seminars were held by fire prevention and public education teams throughout the territory. Participants learned a variety of fire safety skills which they in turn implemented in their homes, schools, and communities. The NFMO supported these efforts with Fire and Life Safety Educator course training and providing fire prevention materials, resources, and funding to the fire departments.



*Pictured Above: Two firefighters conducting a fire safety presentation during a public education seminar.*

#### 9.4 Fire Prevention Colouring Contest and Calendar

Students from across Nunavut took part in the Annual Fire Prevention Colouring Contest. Drawings were chosen and paired with monthly fire prevention safety tips to create the following year's Nunavut Fire Prevention Calendar. Each year, the calendar is distributed across the territory with the support of the hamlet fire departments.



*Pictured left: A winning photo chosen to be placed in the 2020 Nunavut Fire Prevention Calendar. The caption reads 'Safety in the Kitchen/oven'.*

#### 9.5 Fire Prevention Week

Fire Prevention Week was held between October 4- 10, 2020 with the campaign "Serve Up Fire Safety in the Kitchen!". The theme works to educate everyone about the simple but important actions they can take to keep themselves, and those around them, safe in the kitchen. Fire departments provided fire



prevention activities in their communities such as: fire hall tours, fire prevention sessions in schools, and fire department recruitment open houses. Fire prevention educational kits were provided to fire departments with the support of NFMO for Fire Prevention Week.



Pictured Above: The 2020 Fire Prevention Week banner which reads “Serve Up Fire Safety in the Kitchen!”

## 10.0 Territorial Fire Losses for 2020

In 2020, 131 fires were reported throughout the territory of Nunavut. The reported *dollar loss* value of fires throughout the territory was \$5,739,995 with the reported total *value at risk* being \$579,385,503.

This is an increase from last year’s number of reported fires and is slightly higher than the annual average of 127 fires over the past decade. In the previous decade, the number of reported fires has been within the range of 71 to 161 per year. Details pertaining to fire statistics over the last ten years can be seen in Figure 7 below:

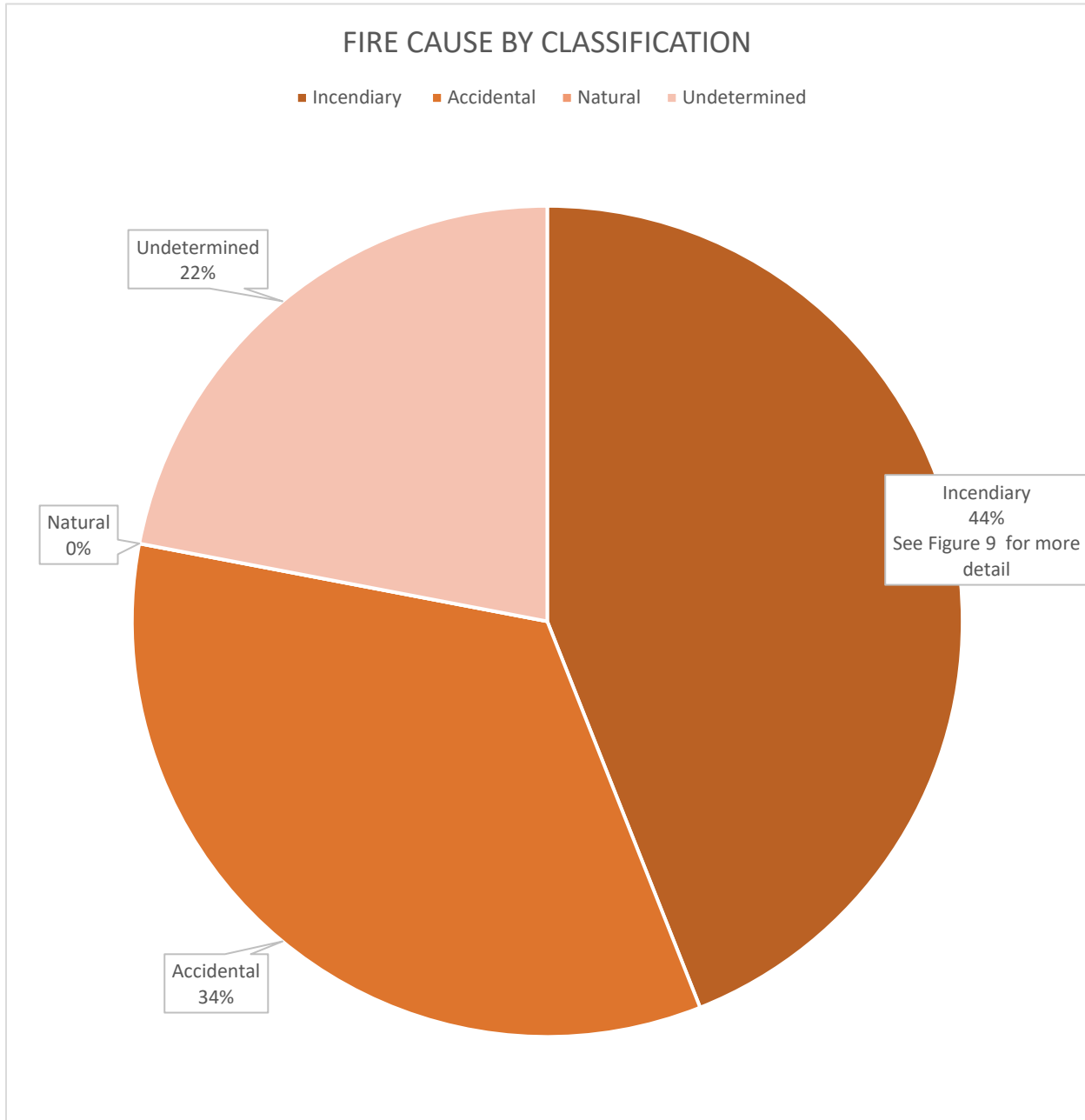
Figure 7– Combined Territorial Statistics from 2011-2020

Combined Territorial Statistics from 2011-2020					
Years	Number of Fires	Number of Deaths	Number of Injuries	Dollar Loss Value	Dollar Value at Risk
2020	131	2	6	\$ 5,739,955	\$ 579,385,503
2019	73	0	6	\$ 7,373,765	\$ 131,799,100
2018	71	1	8	\$ 26,034,464	\$ 306,796,623
2017	135	4	15	\$ 41,781,679	\$ 406,295,719
2016	115	0	15	\$ 2,928,623	\$ 416,894,831
2015	141	5	18	\$ 44,560,547	\$ 622,154,289
2014	134	1	8	\$ 5,415,166	\$ 403,155,161
2013	161	1	13	\$ 4,386,188	\$ 532,470,260
2012	157	6	20	\$ 16,816,160	\$ 512,205,110
2011	150	0	13	\$ 53,635,747	\$ 502,251,792

## 10.1 Fire Cause Statistics

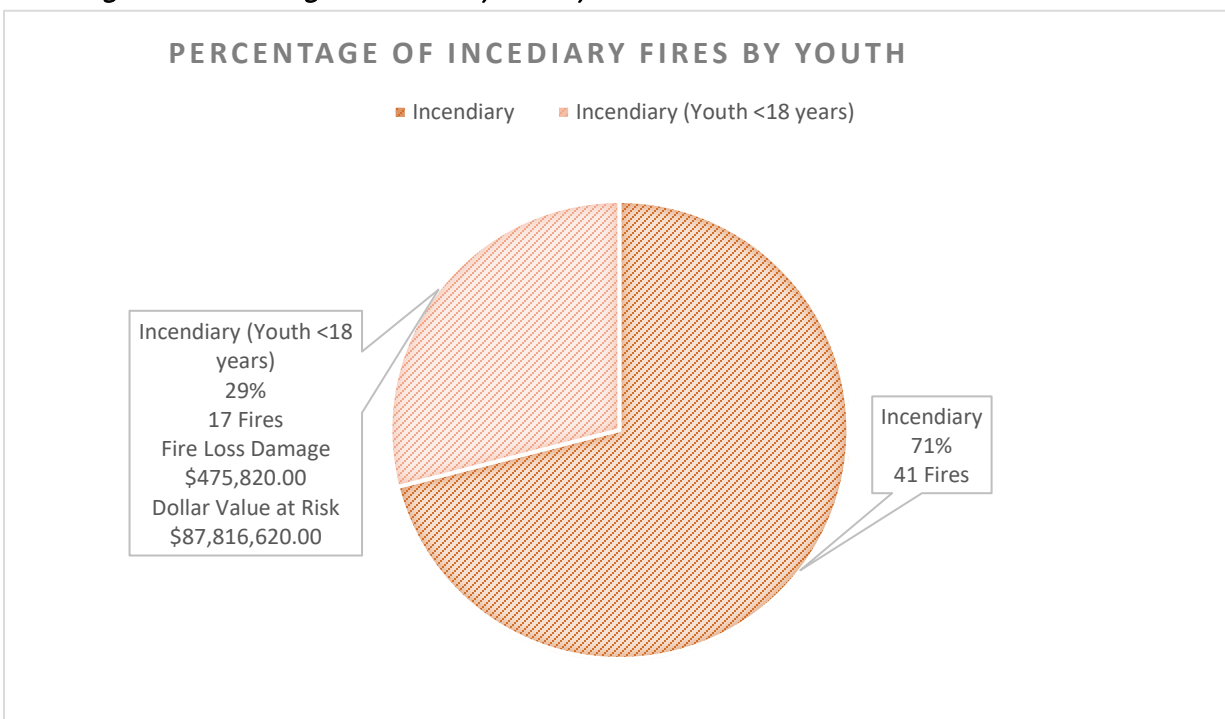
Fire statistics are broken down into the following four major categories: *accidental fire*, *incendiary fire*, *natural fire*, and *undetermined fire*. Category terminology and coding has been standardized across Canada from the Council of Canadian Fire Marshals and Fire Commissioners, who provide the Canadian Code Structure on Fire Loss Statistics. Refer to Figure 8 and Figure 9 for more details.

*Figure 8- Fire Cause by Classification*



## 10.2 Percentage of Incendiary Fires by Youth

Figure 9 - Percentage of Incendiary Fires by Youth



## 10.3 Combined Fire Loss by Property Classification

Figure 10, as seen below, provides an overview of the reported fire property classification, including a detailed breakdown of the dollar loss, dollar value at risk, and insurance coverage totals per classification type.

Figure 10– Combined Fire Loss by Property Classification

Combined Fire Loss by Property Classification				
Property Classification	Number of Fires	Dollar Loss	Dollar Value at Risk	Insurance Coverage
Assembly	5	\$ 125,200	\$ 84,595,000	\$ 84,050,000
Institutional	11	\$ 322,205	\$ 318,028,218	\$ 293,966,381
Residential	57	\$ 2,974,280	\$ 47,991,900	\$ 4,550,000
Business and Personal Services	0	\$ 0	\$ 0	\$ 0
Mercantile	3	\$ 41,000	\$ 4,570,000	\$ 4,065,000
Industrial	2	\$ 1,980,000	\$ 2,474,465	\$ 852,000
Storage Property	31	\$ 106,170	\$ 111,381,120	\$ 40,000
Special Property & Transport Equipment	22	\$ 191,100	\$ 10,344,800	\$ 5,476,942
<b>Total</b>	<b>131</b>	<b>\$ 5,739,955</b>	<b>\$ 579,385,503</b>	<b>\$ 393,000,323.00</b>

Note: Some government facilities are self-insured thus explaining the difference between the dollar value at risk and the insurance coverage amount reported.

## 10.4 Combined Fire Loss by Igniting Object

Figure 11, as seen below, provides an overview of the reported igniting object, including a detailed breakdown of the dollar loss, dollar value at risk, and insurance coverage totals per ignition source type.

*Figure 11– Combined Fire Loss Igniting Object*

Combined Fire Loss by Igniting Object				
Igniting Object	Number of Fires	Dollar Loss	Dollar Value at Risk	Insurance Coverage
Cooking Equipment	10	\$ 386,530	\$ 7,072,465	\$ 302,000
Heating Equipment	13	\$ 283,200	\$ 62,109,737	\$ 36,775,000
Appliances and Equipment	1	\$ 3,000	\$ 29,966,381	\$ 29,966,381
Electrical Distribution Equipment	4	\$ 28,500	\$ 588,000	\$ 0
Other Electrical Equipment	3	\$ 25,300	\$ 115,041,300	\$ 4,041,300
Smokers Material and Open Flame	66	\$ 3,766,225	\$ 343,946,620	\$ 316,400,000
Exposure	0	\$ 0	\$ 0	\$ 0
Miscellaneous/undetermined	34	\$ 1,247,200	\$ 20,661,000	\$ 5,515,642
<b>Total</b>	<b>131</b>	<b>\$ 5,739,955.00</b>	<b>\$ 579,385,503.00</b>	<b>\$ 393,000,323.00</b>

Note: Some government facilities are self-insured thus explaining the difference between the dollar value at risk and the insurance coverage amount reported.

## 10.5 Combined Fire Loss by Act or Omission

Figure 12, as seen below, provides an overview of the reported act or omission, including a detailed breakdown of the dollar loss, dollar value at risk, and insurance coverage totals per the act or omission type.

*Figure 12– Combined Fire Loss by Act or Omission*

Combined Fire Loss by Act or Omission				
Act or Omission	Number of Fires	Dollar Loss	Dollar Value at Risk	Insurance Coverage
Incendiary	41	\$ 883,755	\$ 183,391,000	\$ 165,550,000
Incendiary (Youth <18 years)	17	\$ 475,820	\$ 87,816,620	\$ 80,850,000
Accidental	45	\$ 3,319,230	\$ 286,946,733	\$ 137,778,381
Natural	0	\$ 0	\$ 0	\$ 0
Undetermined	28	\$ 1,061,150	\$ 21,231,150	\$ 8,821,942
<b>Total</b>	<b>131</b>	<b>\$ 5,739,955.00</b>	<b>\$ 579,385,503.00</b>	<b>\$ 393,000,323.00</b>

Note: Some government facilities are self-insured thus explaining the difference between the dollar value at risk and the insurance coverage amount reported.

## 10.6 Fire Related Fatalities

Figure 13, as seen below, shows the specific fire incident breakdown of the property classification, igniting object, and fire cause, which resulted in a fire related fatality, as well as the type of victim.

*Figure 13– Fire Related Fatalities*

Fire Related Fatalities								
Incident	Property Classification	Igniting Object	Fire Cause	Male Adult Fatalities	Male Child Fatalities	Female Adult Fatalities	Female Child Fatalities	Total
1	Unclassified	Smokers' Material & Open Flame	Accidental	1	0	0	0	1
2	Residential	Smoker's Material & Open Flame	Accidental	1	0	0	0	1
<b>Total</b>				<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>

## 10.7 Fire Related Injuries

Figure 14, as seen below, shows the specific fire incident breakdown of the property classification, igniting object, and fire cause, which resulted in a fire related injury, as well as the type of victim.

*Figure 14– Fire Related Injuries*

Fire Related Injuries								
Incident	Property Classification	Igniting Object	Fire Cause	Male Adult Injuries	Male Child Injuries	Female Adult Injuries	Female Child Injuries	Total
1	Residential	Smokers' Material & Open Flame	Incendiary	1*	0	0	0	1
2	Residential	Miscellaneous	Accidental	1	0	0	0	1
3	Residential	Smokers' Material & Open Flame	Accidental	0	0	1	0	1
4	Unclassified	Miscellaneous	Accidental	0	0	1	0	1
5	Residential	Smokers' Material & Open Flame	Incendiary	1	0	0	0	1
6	Unclassified	Miscellaneous	Accidental	1	0	0	0	1
<b>Total</b>				<b>4</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>6</b>

\* firefighter injury

# 11.0 Fire Trends in the Past Decade

Analysing fire statistics and trends allows the Nunavut Fire Marshal’s Office (NFMO) to provide a safer environment for Nunavummiut by providing expertise, leadership, and guidance in the reduction and elimination of hazards contributing to fire loss damage.

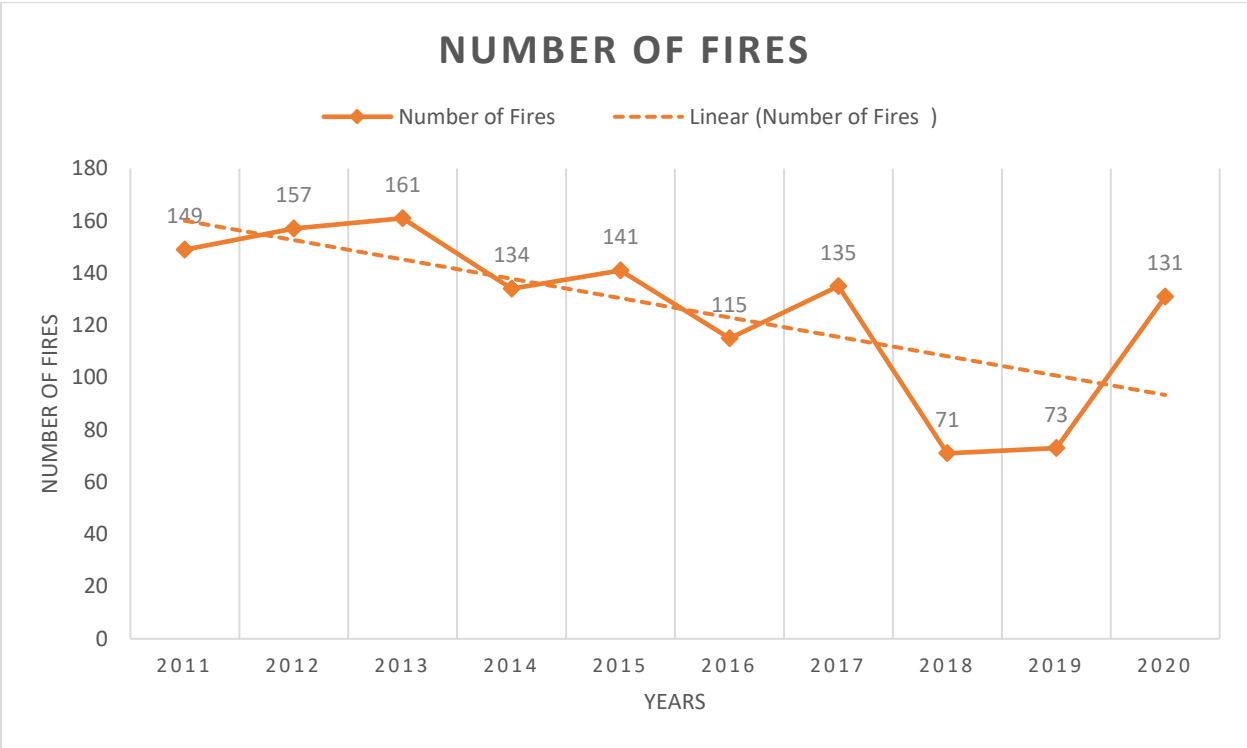
In 2020, the fires reported to the NFMO increased, however the trendline over the past 10 years has decreased. This can be attributed to items such as technological advancements in building design, fire prevention activities, public education, and increased fire department training.

Although 2020 saw a decrease in reported dollar loss, there was an increase in the dollar loss at risk. The trendline over the past 10 years, however, shows a decrease in dollar loss and dollar loss at risk. The increase in dollar loss at risk in 2020 speaks to the larger type of buildings occupancies, such as schools, where fire incidents have taken place. Understanding and interpreting fire statistic trends helps the NFMO allocate its focus and tailor future fire prevention activities.

## 11.1 Number of Fires

Figure 15, as seen below, shows the total number of reported fires over the past decade, including a trendline (linear) for the data shown.

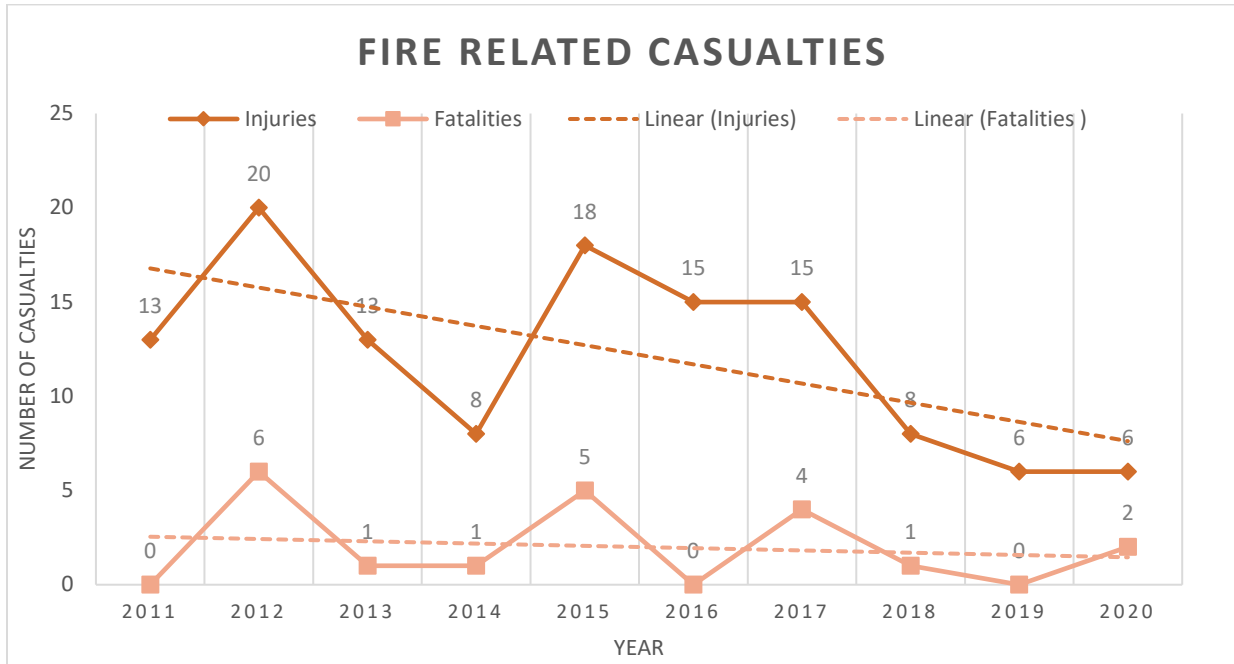
Figure 15– Number of Fires



## 11.2 Fire Related Casualties

Figure 16, as seen below, shows the total number of fire related casualties, both injuries and fatalities, over the past decade, including trendlines (linear) for both groups of data shown.

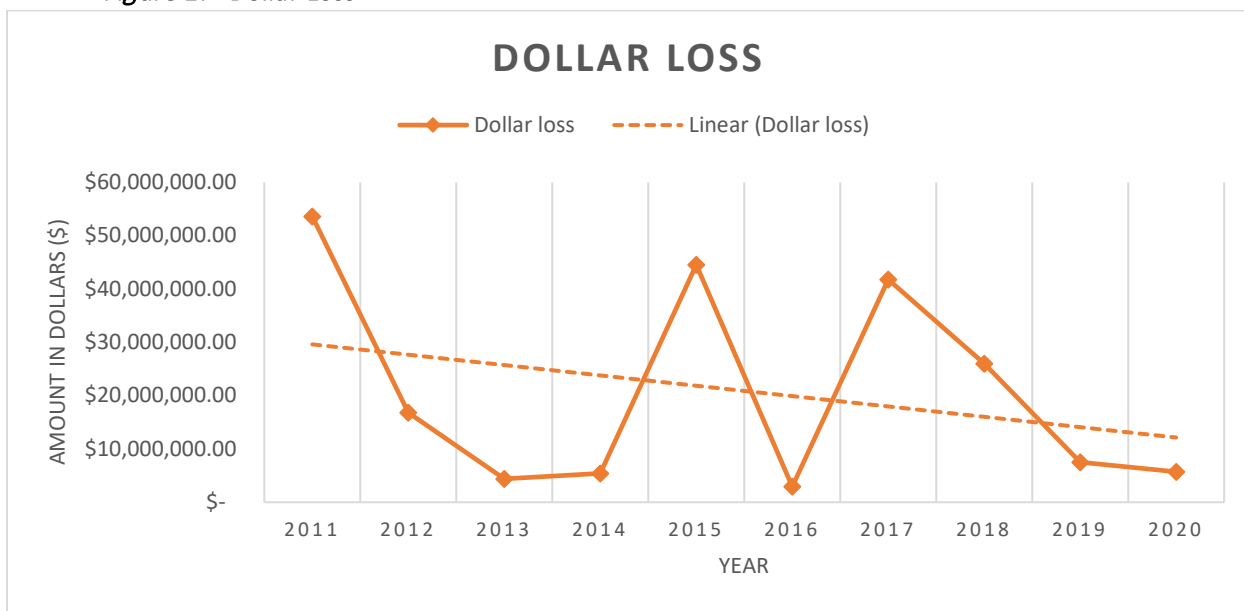
Figure 16– Fire Related Casualties



## 11.3 Dollar Loss

Figure 17, as seen below, shows the reported dollar loss of the previous decade, including a trendline (linear) for the data shown.

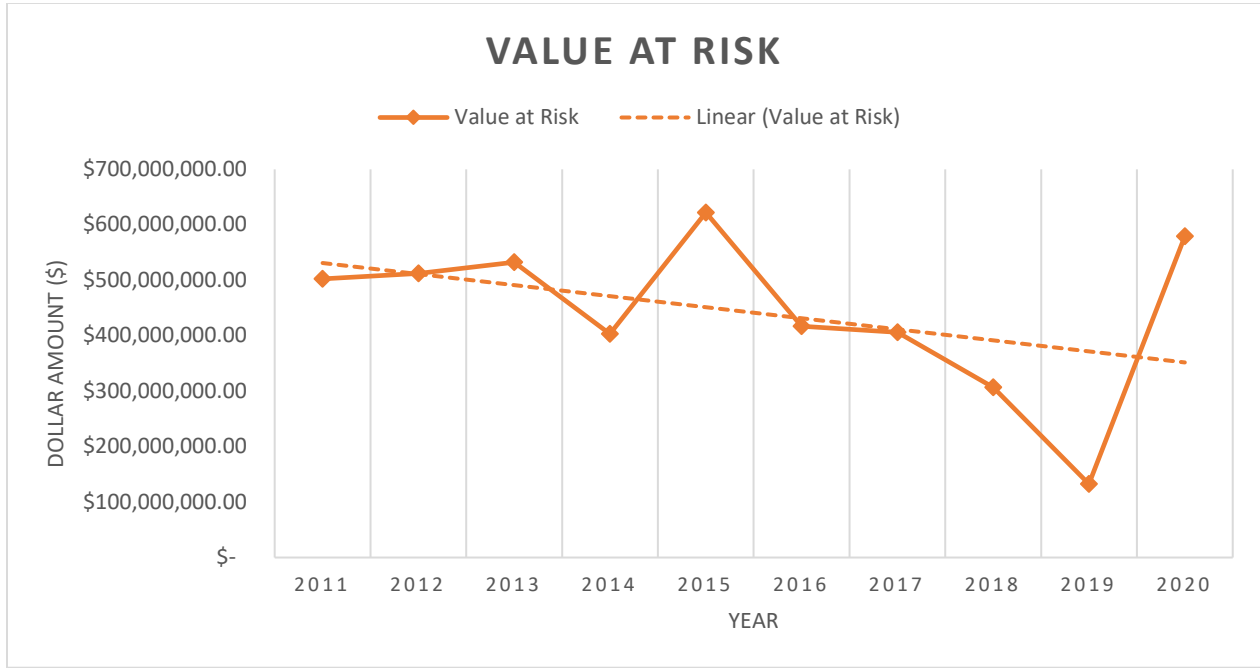
Figure 17- Dollar Loss



## 11.4 Value at Risk

Figure 18, as seen below, shows the reported dollar value at risk of the previous decade, including a trendline (linear) for the data shown.

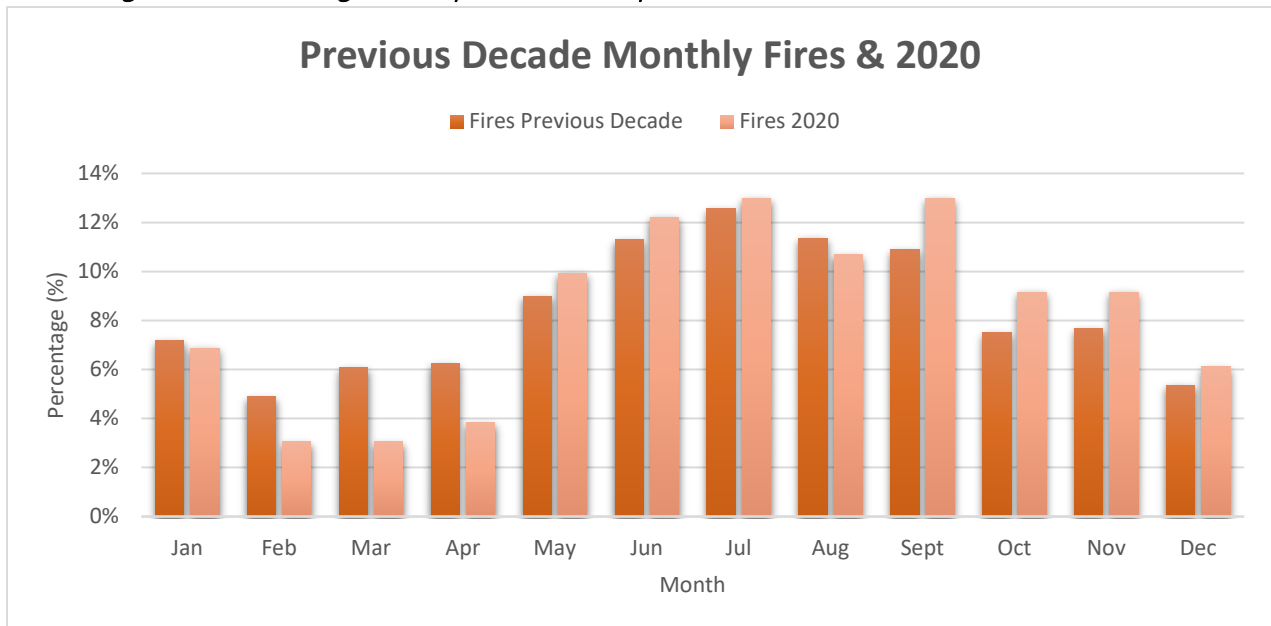
*Figure 18– Value at Risk*



## 11.5 Fires by Month Past Decade and 2020

Figure 19, as seen below, shows the reported percentage of fires over the past decade (1267), including a comparison of the percentage of fires reported in 2020 (131).

*Figure 19– Percentage of Fire per Month Comparison*





## 12.0 Fires per Community



All fires are investigated by the Nunavut Fire Marshal's Office directly or with the support of *Local Assistants*. This includes fire department personnel and the Royal Canadian Mounted Police who also assist in determining the cause and origin of fires. Throughout 2020, Assistant Fire Marshals either responded to or aided in the investigations of the 131 fires reported across the territory of Nunavut, as shown in Figure 20.

*Pictured Left: Two firefighters conducting fire suppression activities during a training course.*

*Figure 20– Fires per Community*

Fires per Community	
City/Town Hamlet	Number of Fires
Arctic Bay	3
Arviat	7
Baker Lake	8
Cambridge Bay	9
Chesterfield Inlet	2
Clyde River	1
Coral Harbour	2
Gjoa Haven	4
Grise Fiord	0
Igloolik	14
Iqaluit	32
Kimmirut	2
Kinngait	1
Kugaaruk	1
Kugluktuk	2
Nauyasat	1
Pangnirtung	6
Pond Inlet	7
Qikitarjuaq	2
Rankin Inlet	11
Resolute Bay	1
Sanikiluaq	8
Sanirajak	1
Taloyoak	6
Whale Cove	0
<b>Total</b>	<b>131</b>

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## 13.0 Closing

The Nunavut Fire Marshal's Office (NFMO) promotes and develops building and life safety throughout the Territory of Nunavut. Dedicated staff maintain a high level of professionalism each day, as they work with partners to support the many initiatives and programs that the office is involved with. The NFMO strives to consistently improve the effectiveness and efficiency of its daily tasks and activities so it can continue to provide a safer environment for Nunavummiut.



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## 14.0 Glossary

### **Accidental Fire**

Accidental fires involve all those for which the proven cause does not involve an intentional human act to ignite or spread fire into an area where a fire should not be. When the intent of a person's action cannot be determined or proven to an acceptable level of certainty, the correct classification is undetermined.

### **Assembly Occupancy**

A building, or part thereof, used for the gathering of persons for civic, political, travel, religious, social, educational, recreational or similar purposes, or for the consumption of food or drink, such as: theatres, churches, community halls, libraries, licensed beverage establishments, restaurants, cafes, schools, arenas, and gyms.

### **Business and Personal Services Occupancy**

A building, or part thereof, used for the transaction of business or the rendering or receiving of professional or personal services, such as: banks, hairdressing shops, dental offices, medical offices, offices, and police stations.

### **Dollar Loss Value**

The total value of damage, measured in dollars, resulting from a fire incident.

### **Dollar Value at Risk**

The total value at risk, measured in dollars, including the *dollar loss value* and the value of the entire property classification.

### **Fire Protection**

Fire protection means the protection of the life and safety of persons and property from fire, including its engineering, prevention, public education, suppression, and investigation.

### **Incendiary Fire**

A fire that is intentionally ignited in an area or under circumstances where and when there should not be a fire.

### **Industrial Occupancy (High Hazard)**

A building used for the assembling, fabricating, manufacturing, processing, repairing or storing of goods and materials and which contains sufficient quantities of highly combustible and flammable or explosive materials that, because of their inherent characteristics, constitute a special fire hazard, such as: bulk plants for flammable liquids, bulk storage warehouses for hazardous substances, distilleries, flour mills, grain elevators, spray painting operations, and wastepaper processing plants.

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### **Industrial Occupancy (Medium hazard)**

A building, or part thereof, used for the assembling, fabricating, manufacturing, processing, repairing, or storing of goods and materials in which the combustible content is more than 50 kg/m<sup>2</sup> or 1200 MJ/m<sup>2</sup> of floor area and not classified as high hazard industrial occupancy, such as: cold storage plants, factories, laboratories, repair garages, service stations, warehouses, and woodworking factories.

### **Industrial Occupancy (Low hazard)**

A building used for the assembling, fabricating, manufacturing, processing, repairing or storing of goods and materials in which the combustible content is less than 50 kg/m<sup>2</sup> or 1200 MJ/m<sup>2</sup> of floor area, such as: factories, laboratories, storage garages, warehouses, and workshops.

### **Institutional Occupancy**

A building, or part thereof, used by persons who require special care or treatment because of cognitive or physical limitations or by persons who are restrained from, or are incapable of self-preservation because of security measures not under their control, Such as: nursing homes, penitentiaries, prisons, hospitals, and care homes with sleeping accommodations for more than ten persons.

### **Local Assistants**

A person appointed as a Local Assistant to the Fire Marshal subject to the direction of the Fire Marshal, shall perform the duties imposed and may exercise the powers conferred on a Local Assistant defined in the Fire Safety Act and Regulations.

### **Mercantile Occupancy**

A building, or part thereof, used for the displaying or selling of retail goods, wares or merchandise, Such as: departments stores, exhibition malls, markets, shops, stores, and supermarkets.

### **Natural Fire**

Natural fires are fires caused without direct human intervention or action, such as fires resulting from lightning, earthquake, wind, and flood.

### **Residential Occupancy**

A building, or part thereof, used by persons for whom sleeping accommodation is provided but who are not harboured for the purpose of receiving care or treatment or are not involuntarily detained, such as: apartments, dormitories, hotels, houses, and motels.

### **Undetermined Fire**

Undetermined fires are fires that have not yet been investigated or those that have been investigated, or are under investigation, and have insufficient information to classify further. The fire might still be under investigation and the cause may be determined later with the introduction or discovery of new information.