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Building *Nunavut* Together
Nunavut iuqatigiingniq
Bâtir le *Nunavut* ensemble



DEPARTMENT OF COMMUNITY AND
GOVERNMENT SERVICES

NUNAVUT FIRE MARSHAL'S OFFICE 2019 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 2019 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.

Lorne Kusugak

Minister, Community and Government Services

Message from the Fire Marshal



The Nunavut Fire Marshal's Office's 2019 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 construction plan reviews, fire and life safety inspections, fire prevention public education, firefighter training, and fire investigations. 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

2019 ANNUAL REPORT | HIGHLIGHTS OF THE NUNAVUT FIRE MARSHAL'S OFFICE

1027

Fire and Life Safety Inspections completed



73

Fires reported in Nunavut

23

Firefighter training courses



199

Firefighters received training throughout Nunavut

27%

Decrease in reported fires in the past decade



33%

Decrease in fire related injuries in the last decade

NUNAVUT FIRE MARSHAL'S OFFICE 2019 ANNUAL REPORT

1.0 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 level. 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 2019, the NFMO performed fire and life safety inspections, conducted firefighter training, delivered and distributed 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.

2.0 Fire and Life Safety Inspections

In the past year, 1027 Fire and Life Safety Inspections were completed throughout Nunavut. Reports were issued to the building’s owner, highlighting deficiencies which required attention 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 (1027 total)
Assembly (schools, day-cares, community halls)	27%
Institutional (health centres, care facilities, jails)	3%
Residential (apartment building common areas)	4%
Business and Personal Services (offices)	17%
Mercantile (stores, retail outlets)	27%
Industrial (manufacturing, gas bar, power plants)	22%
Total	100%

3.0 Stakeholder Collaboration

One of the key activities of the Nunavut Fire Marshal’s Office 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 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.

4.0 Associations and Partnerships

The 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:

4.1 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.

4.2 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.

4.3 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.

4.4 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.

4.5 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.

5.0 Fire Protection Strategy

Members of the 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.)

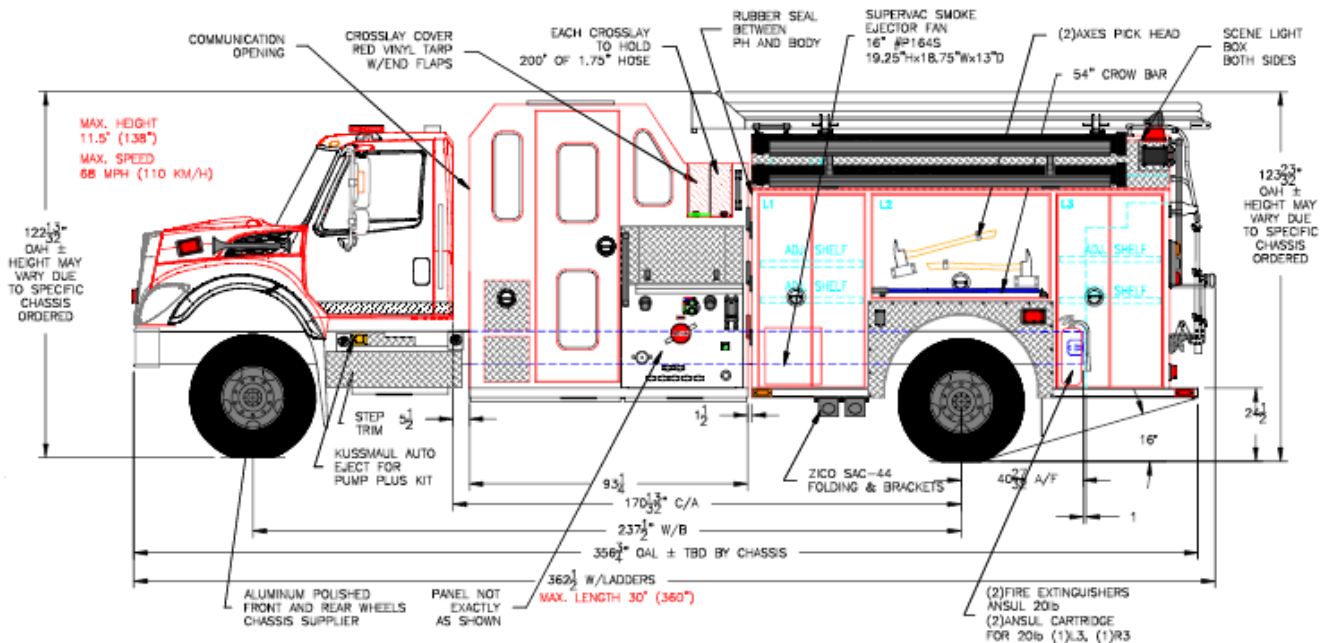


- Replacement of damaged/unserviceable radios, pagers, and flashlights
- Replacement and service maintenance of compressor systems

5.1 Fire Truck Replacement

The NFMO supported the Territories 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 2019, fire trucks were purchased for the communities of Baker Lake and Kugluktuk.

Figure 2– Fire Truck Replacement Specifications





Pictured Above: The Hamlet of Baker Lake Fire Truck received in 2019

5.2 Fire Truck Replacement Schedule

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

Figure 3– Fire Truck Replacement Schedule Preview

Community	Year
Naujaat	2020
Gjoa Haven	2020
Kugaaruk	2021
Coral Harbour	2021
Sanikiluaq	2022
Igloolik	2022
Resolute Bay	2023
Clyde River	2023
Qikiqtarjuaq	2024
Arctic Bay	2024
Hall Beach	2025
Taloyoak	2025
Chesterfield Inlet	2026
Whale Cove	2026
Grise Fiord	2027
Pond Inlet	2027
Iqaluit	2028
Kimmirut	2028

6.0 Firefighter Training

There were 23 territorial and community-based fire service training courses provided in 2019. Territorial courses allow for students 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.



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

Throughout the territory, 199 firefighters received training, increasing their skills, knowledge, and abilities in various firefighting tactics. Updated training manuals and videos from the International Fire Service Training Association (IFSTA) were sent to fire departments, and lesson plans were also made available for firefighters to conduct training in their own communities. These training videos and manuals were provided through the Public Fire Safety and Community Fire Department Contribution Policy.

6.1 Firefighter Training Courses

Firefighter training courses were offered by the Nunavut Fire Marshal's Office in partnership with the Nunavut Municipal Training Organization (MTO). A breakdown of the course type as well as the number of students receiving training throughout the territory in 2019, is shown in Figure 4.

Included in these training courses listed in Figure 4 is the Aboriginal Firefighters Association of Canada (AFAC) National Firefighting Competition.

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	9	102
Community-Based Training Courses	14	97
Total	23	199

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 Officer/Prevention Workshop	Rankin Inlet	18
NFPA 1035 Fire and Life Safety Educator	Cambridge Bay	14
Fire Service Instructor	Iqaluit	4
Fire Pump Operations A	Pangnirtung	6
Firefighter Level 1 (1 st course)	Iqaluit	12
Firefighter Level 1 (2 nd course)	Iqaluit	10
Firefighter Level 2	Rankin Inlet	15
NFPA 921 Fire and Explosion Investigator	Rankin Inlet	16
AFAC National Firefighting Competition	Iqaluit/Nova Scotia	7
Total		102



Pictured Above: A Fire Department Training Officer 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
Arviat	10
Cape Dorset	8
Clyde River	7
Coral Harbour	3
Gjoa Haven	7
Hall Beach	5
Igloolik	7
Kugaaruk	7
Kugluktuk	5
Pangnirtung	9
Pond Inlet	7
Qikiqtarjuaq	9
Sanikiluaq	8
Taloyoak	5
Total	97



Pictured Above: Two Nunavut firefighters practising the use of a portable fire extinguisher

6.2 Aboriginal Firefighters Association of Canada National Aboriginal Firefighting Competition

Seven (7) firefighters from across the territory were selected to represent Team Nunavut at the 30th annual National Aboriginal Firefighter Competition, held in Eskasoni First Nations, Nova Scotia. Prior to the competition, the firefighters practiced as a team in Iqaluit, completing training in practical evolutions, skills exercises, and time trials that simulate the actual tasks which they may encounter at a fire. As this was the competitions' 30th anniversary, the AFAC decided that all competing teams were considered 'Champions'. Thus, speaking to 2019's slogan highlighting the 'Dedication, Commitment, and Sacrifice – Because We Choose Too'.



Members of Team Nunavut are as follows:

Britany Aggark – Ranking Inlet –Coach
Jollie Enoogoo – Pond Inlet –Captain
Vincent Inukpak – Baker Lake
Robert Kunilusee – Qikiqtarjuaq
Silasie Nauyuq – Pangnirtung
Joanathon Ningark – Kugaaruk
Bryan Ukuqtunnuaq – Taloyoak

7.0 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 Office of the Fire Marshal 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 Nunavut Fire Marshal's Office until completion of the construction project.

8.0 Fire Prevention and Public Education

The Nunavut Fire Marshal's Office 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.

8.1 Nunavut Fire Prevention Officer

In July 2019, the NFMO successfully staffed the newly created Fire Prevention Officer position. This important position is responsible for facilitating the effective implementation of fire safety and fire prevention messaging, as well as supporting the delivery of fire prevention programs to Nunavummiut throughout the territory.

The NFMO has been developing the Nunavut Youth Fire-setter and Arson Prevention Program (NYFSAP) 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 program has begun with complete implementation of the program anticipated in 2021.

The NFMO began developing and adapting the '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 senior's safety. The intent of this program is to provide local individuals with the training and skills to take the 'Remembering When' program out to seniors within their own communities. The program has begun with complete implementation of the program anticipated in 2021.

8.2 Fire Prevention and Public Education

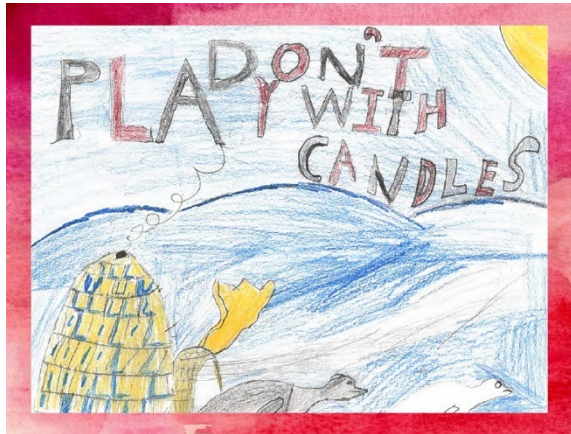


Seminars were held by hamlet fire departments' fire prevention and public education teams throughout the territory. Students of these seminars learned a variety of fire safety techniques which they in turn implemented in their homes, schools, and communities. The NFMO supported these efforts by providing training such as Fire Prevention Workshops, Fire and Life Safety Educator courses, materials and resources, and funding to the fire departments.

Pictured Left: Two firefighters speaking to students about fire safety during a public education seminar.

8.4 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 years 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 'Don't Play with Candles'.

8.5 Fire Prevention Week

Fire Prevention Week was held from October 6th- 12th, 2019 with the theme, “Not every hero wears a cape, plan and practise your escape!”. The theme recognizes families who motivate their households to develop and practice home fire escape plans. 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 2019 Fire Prevention Week banner which reads “Not every hero wears a cape, plans and practise your escape!”

9.0 Canadian Fallen Firefighter Foundation

The Canadian Fallen Firefighter Foundation (CFFF) was created to honour and remember firefighters who have died in the line of duty and to provide support to the affected families. September of 2019 saw the remembrance of Captain Lutie Macpa from Pond Inlet, who was honoured at the CFFF Memorial Ceremony in Ottawa. On July 23, 2018, Captain Macpa responded to a fire in Pond Inlet and while on duty, collapsed and later passed away. Captain Macpa was the first firefighter from Nunavut to be honoured in the national ceremony. The Minister of Community and Government Services (CGS) attended along with the Nunavut Fire Marshal other CGS staff. CFFF representatives included the Honourable Catherine McKenna, Canada's Minister of the Environment and Climate Change, and David Sheen, President of the CFFF.



Pictured Above: Symbolic firefighter helmets presented to family members of the fallen.



Pictured Above: Captain Macpa's name engraved on Canadian Fallen Firefighter Memorial Wall (top tame).



Pictured Above: Sheba Macpa, the wife of fallen Captain Lutie Macpa, accompanied by Pond Inlet Fire Chief Jollie Enoogoo and firefighter Elisha Kasarnak, receives a symbolic memorial firefighting helmet from representatives of the Canadian Fallen Firefighters Foundation.

10.0 Territorial Fire Loss for 2019

In 2019, 73 fires were reported throughout the territory of Nunavut. The reported *dollar loss* value of fires throughout the territory was \$7,373,765, with the reported total *value at risk* being \$131,799,100.

This is a slight increase from last year's number of reported fires but is lower than the average of 125 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:

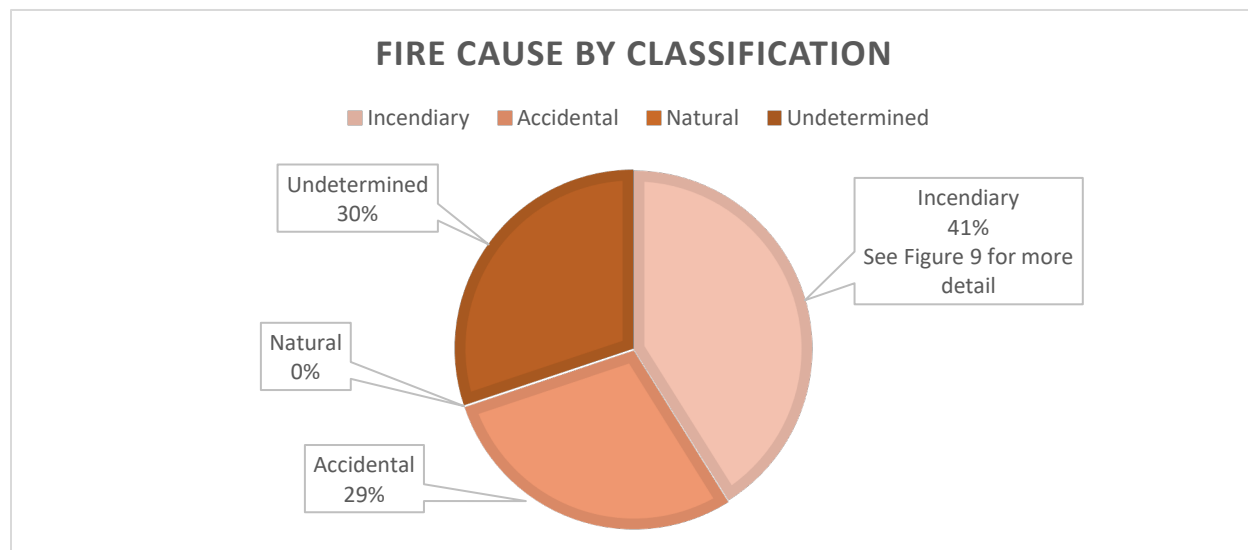
Figure 7– Combined Territorial Statistics from 2010-2019

Combined Territorial Statistics from 2010-2019					
Years	Number of Fires	Number of Deaths	Number of Injuries	Dollar Loss Value	Dollar Value at Risk
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
2010	121	0	8	\$ 4,018,161	\$ 113,088,910

10.1 Fire Cause Statistics

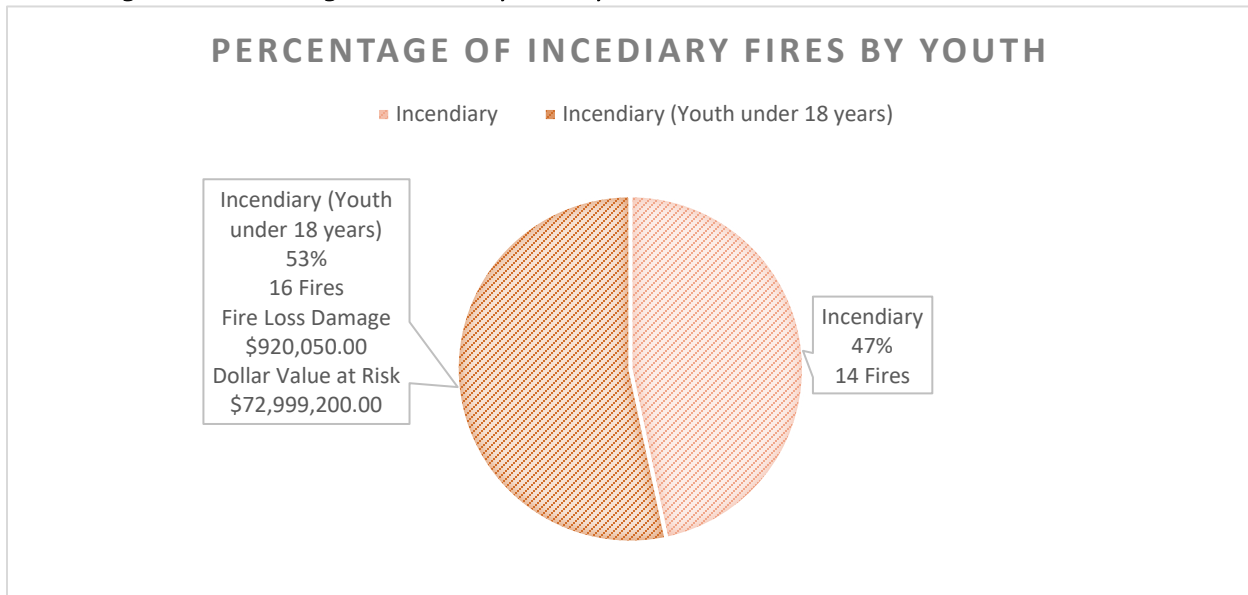
Fire statistics are broken down into the following four major categories: *accidental fire*, *incendiary fire*, *natural fire*, and *undetermined fire*. Category terminology and coding has been standardized across Canada from the Council of Canadian Fire Marshals and Fire Commissioners, who provide the 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	\$ 756,000	\$ 116,130,000	\$ 95,600,000
Institutional	0	\$ 0	\$ 0	\$ 0
Residential	24	\$ 3,009,265	\$ 10,340,200	\$ 780,000
Business and Personal Services	0	\$ 0	\$ 0	\$ 0
Mercantile	0	\$ 0	\$ 0	\$ 0
Industrial	0	\$ 0	\$ 0	\$ 0
Storage Property	21	\$ 3,231,200	\$ 4,517,400	\$ 2,850,000
Special Property & Transport Equipment	23	\$ 377,300	\$ 811,500	\$ 263,000
Total	73	\$ 7,373,765	\$ 131,799,100	\$ 99,493,000

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	\$ 632,440	\$ 27,898,400	\$ 15,000,000
Heating Equipment	2	\$ 7,500	\$ 7,500	\$ 0
Appliances and Equipment	4	\$ 213,500	\$ 1,074,000	\$ 0
Electrical Distribution Equipment	2	\$ 8,025	\$ 1,100,000	\$ 250,000
Other Electrical Equipment	0	\$ 0	\$ 0	\$ 0
Smokers Material and Open Flame	33	\$ 1,987,850	\$ 76,217,200	\$ 60,780,000
Exposure	0	\$ 0	\$ 0	\$ 0
Miscellaneous/undetermined	22	\$ 4,524,450	\$ 25,502,000	\$ 23,463,000
Total	73	\$ 7,373,765	\$ 131,799,100	\$ 99,493,000

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	14	\$ 395,600	\$ 26,183,300	\$ 15,000,000
Incendiary (Youth <18 years)	16	\$ 920,050	\$ 72,999,200	\$ 60,000,000
Accidental	21	\$ 1,656,190	\$ 5,891,100	\$ 780,000
Natural	0	\$ 0	\$ 0	\$ 0
Undetermined	22	\$ 4,401,925	\$ 26,725,500	\$ 23,713,000
Total	73	\$ 7,373,765	\$ 131,799,100	\$ 99,493,000

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									
Property Classification	Igniting Object	Fire Cause	Male Adult Fatalities	Male Child Fatalities	Male Firefighter Fatalities	Female Adult Fatalities	Female Child Fatalities	Female Firefighter Fatalities	Total
Nil	Nil	Nil	0	0	0	0	0	0	0
Total			0	0	0	0	0	0	0

10.7 Fire Related Injuries in 2019

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 in 2019

Fire Related Injuries									
Property Classification	Igniting Object	Fire Cause	Male Adult Injuries	Male Child Injuries	Male Firefighter Injuries	Female Adult Injuries	Female Child Injuries	Female Firefighter Injuries	Total
Residential	Cooking equipment	Human Failure	1	0	0	1	0	0	2
Residential	Cooking equipment	Human Failure	3	0	0	0	0	0	3
Storage Property	Undetermined	Undetermined	0	0	1	0	0	0	1
Total			4	0	1	1	0	0	6

11.0 Fire Trends in the Past Decade

Analysing fire statistics and trends allows the 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.

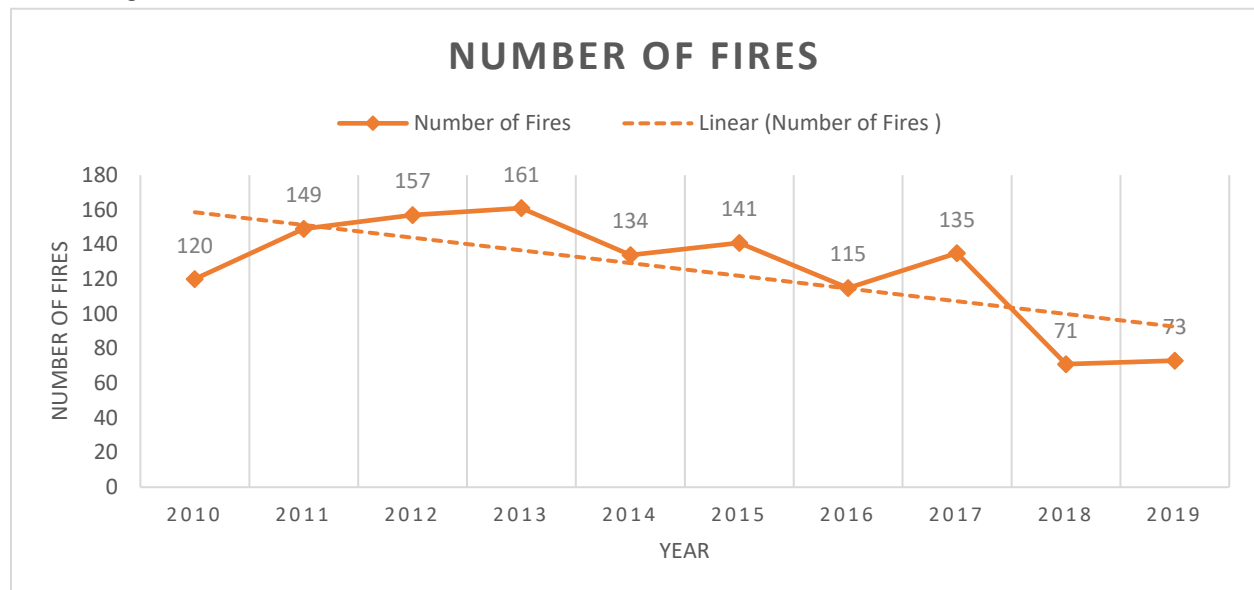
The number of reported fires over the past 10 years has decreased by 27%, which can be attributed to items such as technological advancements in building design, fire prevention activities, public education, and increased fire department training.

Although 2019 saw a decrease of dollar loss and value at risk reported, the average dollar loss over the past decade has remained consistent, even though the numbers of reported fires have decreased. This speaks to the larger type of building occupancies, such as schools, where fire incidents have been taking 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.

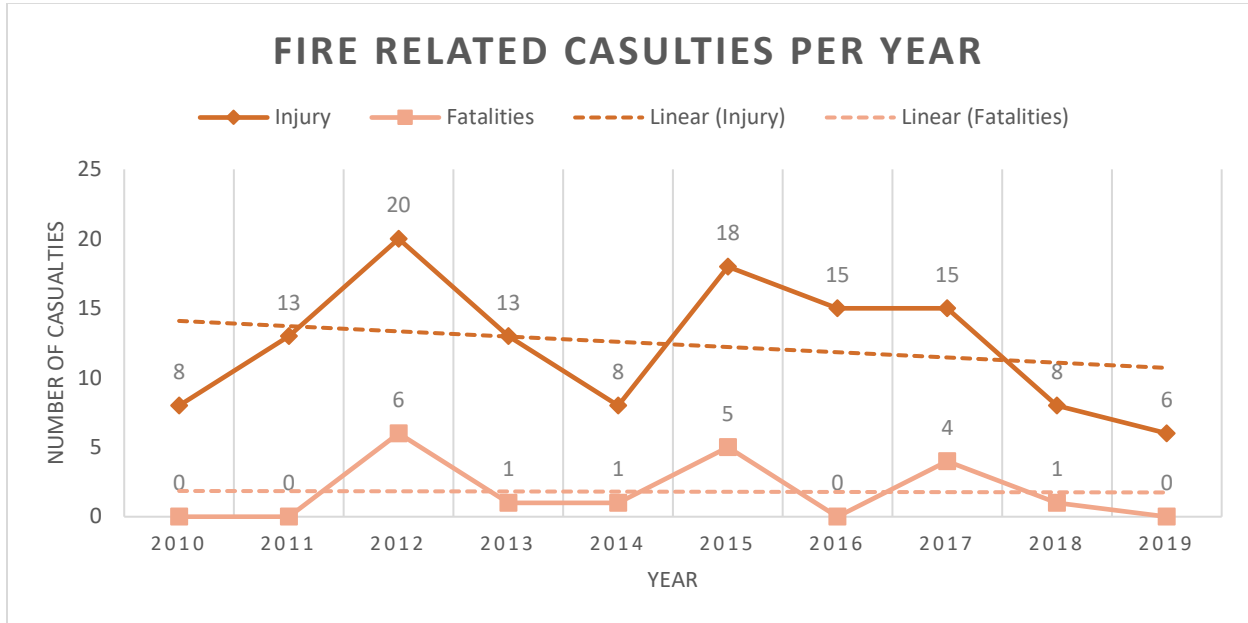
Figure 15– Number of Fires



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.

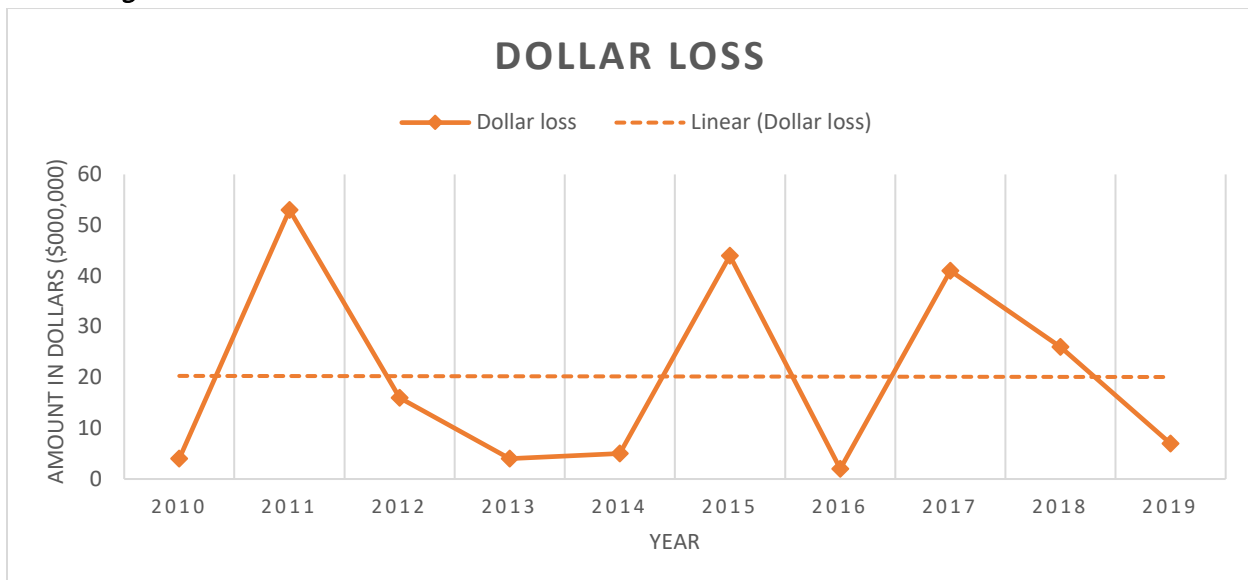
Figure 16– Fire Related Casualties



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.

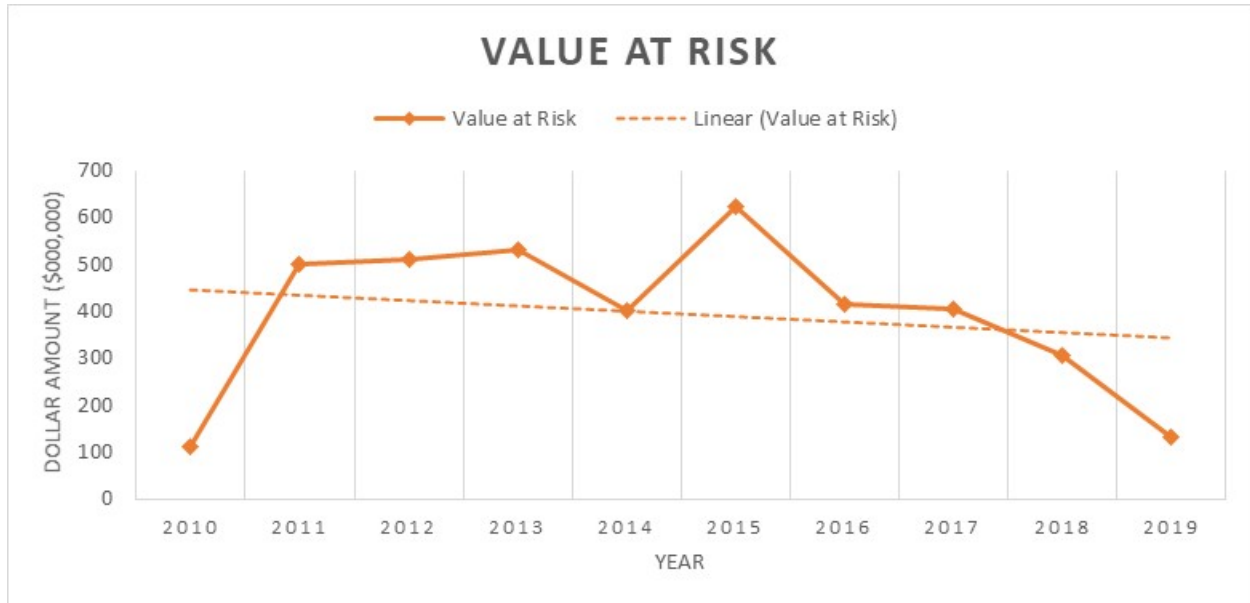
Figure 17- Dollar Loss



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.

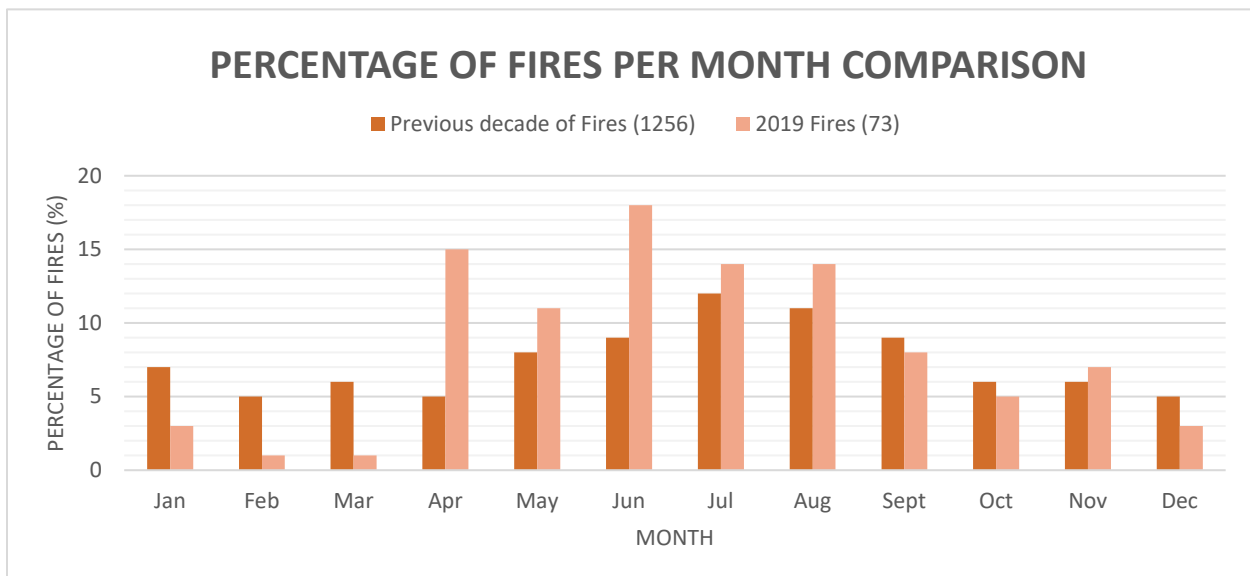
Figure 18– Value at Risk



11.5 Fires by Month Past Decade and 2019

Figure 19 as seen below, shows the reported percentage of fires over the past decade, including a comparison of the percentage of fires reported in 2019.

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 2019, Assistant Fire Marshals either responded to or aided in the investigations of the 73 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	1
Arviat	4
Baker Lake	6
Cape Dorset	1
Cambridge Bay	1
Chesterfield Inlet	0
Clyde River	0
Coral Harbour	2
Gjoa Haven	4
Grise Fiord	0
Hall Beach	2
Igloolik	11
Iqaluit	20
Kimmirut	0
Kugaaruk	2
Kugluktuk	2
Nauyasat	0
Pangnirtung	4
Pond Inlet	8
Qikitarjuaq	0
Rankin Inlet	3
Resolute Bay	0
Sanikiluaq	0
Taloyoak	2
Whale Cove	0
Total	73

13.0 Closing

The Nunavut Fire Marshal's Office 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.



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 like purposes, or for the consumption of food or drink. Some examples are: theatres, churches, community halls, libraries, license 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. Some examples are; 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. Some examples are; bulk plants for flammable liquids, bulk storage warehouses for hazardous substances, distilleries, flour mills, grain elevators, spray painting operations, and waste paper processing plants.

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/m² or 1200 MJ/m² of floor area and not classified as high hazard industrial occupancy. Some examples are: 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/m² or 1200 MJ/m² of floor area. Some examples are; 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. Some examples are; nursing homes, penitentiaries, prisons, hospitals and care homes with sleeping accommodations for more than ten persons.

Mercantile Occupancy

A building, or part thereof, used for the displaying or selling of retail goods, wares or merchandise. Some examples are: 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. Some examples are: 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.