THE ENGLISH VERSION IS THE AUTHORITATIVE VERSION OF THIS REPORT



NUNAVUT FIRE MARSHAL'S OFFICE Annual Report

2022







Table of Contents Item	Page #
Message from the Honorable Minister David Joanasie	3
Message from the Nunavut Fire Marshal	4
1.0 COVID-19 Operational Implications	5
2.0 Overview of the Nunavut Fire Marshal's Office	5
3.0 Fire Code Inspections	6
4.0 Fire Origin, Cause and Circumstance Investigations	6
5.0 Fire Prevention and Public Education	6
6.0 Territorial Fire Loss for 2022	7
7.0 Fire Truck Replacement Program	7
8.0 Firefighter Training	9
9.0 Closing	9
10.0 Glossary	10



Message from the Honorable Minister David Joanasie



As the Minister responsible for the Department of Community and Government Services, I am pleased to present the Nunavut Fire Marshal's Annual Report for 2022.

The Nunavut Fire Marshal's Office holds a pivotal role in advancing fire safety and strengthening community resilience. Through training, tools, and resources, the Office supports firefighters' capacity building to respond effectively to fire emergencies. Upgrading and replacing equipment and providing fire trucks are part of our ongoing efforts. The Office also supports communities with fire prevention education to raise awareness about fire safety.

To ensure the safety of Nunavummiut in their homes, schools, and workplaces, public awareness and educational initiatives are prioritized to provide residents with information about firesafe choices.

I extend my heartfelt gratitude to all our firefighters and first responders for their remarkable dedication, especially during the challenges posed by the pandemic and their unwavering commitment to keep Nunavummiut safe.

David Joanasie

Minister, Community and Government Services



Message from the Nunavut Fire Marshal

I am pleased to release the Nunavut Fire Marshal's Office Annual Report for 2022, which includes valuable fire-related data for Nunavummiut. The report includes fire loss data from the past year which assists our Office in assessing and determining future strategies and goals in fire loss reduction as well as guiding the development of fire prevention and public education program initiatives locally, regionally and territory-wide.

This document is reporting on the calendar year — January 1, 2022 to December 31, 2022. Local Fire Departments across Nunavut prioritize firefighting and fire prevention activities, with firefighters serving key roles in ensuring a safer community. However, the responsibility to support their efforts is a shared one, and we must all actively participate.

Our commitment remains constant in ensuring fire prevention strategies are ongoing in our communities, with a specific focus on reducing fire-related fatalities, injuries, property losses and environmental impact. I encourage to all Nunavummiut to take an active role in making their homes, businesses, and communities safer by practicing fire safety in its various ways. This collective effort will help make a significant and positive impact on our daily lives where we live, work and play.



We would like to acknowledge former Fire Marshal Ted Clouter, CD, CFEI, and thank him for his years of service. We wish him well in his retirement.

R.A. John McDermott, IAAI-FIT®, CCFI-B, MIAAI®

Fire Marshal

Nunavut Emergency Management | Nunavut Fire Marshal's Office





1.0 COVID-19 Operational Implications

The Covid-19 pandemic had significant human and financial impacts globally. Throughout 2022, 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 had an impact on the services provided by the NFMO; a priority approach was taken to ensure the safety of Nunavummiut. For example, Fire Code Inspections focused first on critical infrastructure and buildings remaining open to serve the public throughout the pandemic. Planning continued for the priority approach into 2023. Staff capacity was also a key concern in the NFMO's ability to deliver these services.

Training, inspections, and investigations were completed ensuring that all personnel maintained the safety guidelines outlined per the Covid-19 restrictions implemented by the Department of Health and the Workers' Safety & 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 advice and guidance through leadership and expertise 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 plays a vital role in ensuring the safety of Nunavummiut by offering various services including conducting Fire Code inspections based on request, complaint or on a regular schedule, fire origin and cause investigations, fire prevention public education as well as access to Firefighter training. The NFMO also provides access to funding to municipal Fire Departments so they can acquire, maintain, or replace essential protective gear, tools or equipment needed to protect their communities throughout the year.

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 NMFO to give advice and guidance to organizations regarding the facilitation of fire and life safety within the territory of Nunavut.

Throughout 2022, the NFMO performed Fire Code Inspections, conducted firefighter training, delivered, distributed fire prevention public education resources, and provided advice and guidance to stakeholders. The Office also provided resources to support fire services, supported and conducted fire investigations, maintained fire data collection.

3.0 Fire Code Inspections

246 Fire Code inspections were completed throughout Nunavut in 2022. Reports were issued to the buildings' owners, reporting deficiencies which required correction to adhere to the National Fire Code of Canada. Fire Code 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. Due to NFMO staffing capacity, the number of inspections was down from 2021, which saw a total of 756 Fire Code Inspections completed throughout the Territory.

4.0 Fire Origin, Cause and Circumstance Investigations

Reported fires in Nunavut are investigated by origin, cause, and circumstance. These fires are investigated either by a Local Assistant to the Fire Marshal (LAFM) located in the community, NFMO staff, or the local Royal Canadian Mounted Police (RCMP). Fire causes fall within four accepted classifications: incendiary, accidental, natural, and undetermined. The NFMO proactively uses specific identified causes within the classifications to develop/identify fire prevention programs tailored to the local, regional, or territorial needs.

5.0 Fire Prevention and Public Education

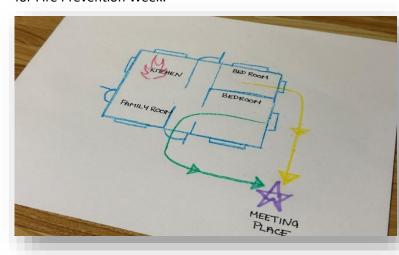
The NFMO provides support throughout Nunavut by providing various programs available to communities each year. Public Education Seminars were held by fire prevention and public education teams throughout the territory. Participants learned a variety of fire safety skills, which they consequently implemented in their homes, schools, and communities. The NFMO supported these

efforts and provided fire prevention materials, resources, and funding to the fire departments.

In 2022, 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 Nunavut Fire Prevention Calendar. Each year, that calendar is distributed across the territory with the support hamlet fire departments.

Fire Prevention Week was held from October 9-15, 2022, with the campaign "Fire Won't wait. Plan your escape.".

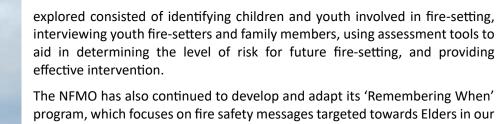
Fire Departments educated the public about the different sounds smoke alarms and carbon monoxide alarms make and what action should be taken if an alarm sounds. During Fire Prevention Week, children, adults, and teachers learned how to stay safe in case of a fire. Firefighters provided lifesaving public education to drastically decrease casualties caused by fires. 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 supplied to fire departments with the support of NFMO for Fire Prevention Week.



Pictured above: a home escape plan.

The NFMO continues to identify, interview, assess, and intervene with youth referred into its Nunavut Youth Firesetter and Arson Prevention (NYFSAP) program. The NYFSAP program is aimed towards the prevention of firesetting behaviour in children and youth. Components





communities. This program is a fire safety prevention program provided to local fire departments, caregivers, and other stakeholders with a vested interested in the safety of our Elders across Nunavut. The program provides local individuals with the training and skills to take the 'Remembering When' program out to seniors within their own communities.

6.0 Territorial Fire Loss for 2022

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 (CCFMC), who provide the Canadian Code Structure on Fire Loss Statistics. In 2022, a total of 88 fires with no injuries or fatalities were reported. This number is down from 2021, where 120 fires were reported to the NFMO with no injuries or fatalities. Figures 1-3 give a more detailed account of fire loss details reported to the NFMO in Nunavut during 2022.

7.0 Fire Truck Replacement Program

The NFMO supported the Territory's Fire Truck Replacement Program. The 2022-2023 fiscal year capital budget for the truck replacement is \$637,189 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 2022, fire trucks were purchased for the communities of Clyde River, Igloolik, Resolute Bay, and Sanikiluag with scheduled delivery to each community by October 2023. See figure 4 for the Community Fire Truck Replacement Program schedule.

Pictured below: Fire trucks designed to be placed in communities.







Figure 1 - NFMO Statistics		
Туре	2021	2022
Reported Fires	120	88
Fire Deaths	0	0
Fire Injuries	0	0
Fire Code Inspections	756	246
Fire Fighter Training Courses	37	30
Fire Fighter Successful in Training	256	181

Figure 2 - Fire Loss Classification	Number	Number of Fires	
Cause	2021	2022	
Cooking Equipment	40	8	
Heating Equipment	7	3	
Appliances and Equipment	4	3	
Electrical Distribution Equipment	4	2	
Other Electrical Equipment	1	9	
Smokers Material and Open Flame Devices	31	13	
Exposure	0	0	
Miscellaneous/Undetermined	33	50	
Total	120	88	
Property Classification			
Assembly	1	6	
Institutional	7	1	
Residential	64	26	
Business and Personal Services	0	0	
Mercantile	2	8	
Industrial	0	6	
Storage Property	26	9	
Special Property & Transport Equipment	20	32	
Total	120	88	
Fire Classification			
Incendiary	26	16	
Accidental	61	36	
Natural	0	0	
Undetermined	33	36	
Total	120	88	

Figure 3 - Fires/Community		
Community	2021	2022
Arctic Bay	5	1
Arviat	4	1
Baker Lake	10	10
Cambridge Bay	4	2
Chesterfield Inlet	1	0
Clyde River	1	1
Coral Harbour	6	6
Gjoa Haven	3	7
Grise Fiord	0	0
Igloolik	4	3
Iqaluit	53	28
Kimmirut	1	1
Kinngait	4	1
Kugaaruk	1	1
Kugluktuk	4	3
Naujaat	3	2
Pangnirtung	2	5
Pond Inlet	1	1
Qikiqtarjuaq	2	0
Rankin Inlet	9	10
Resolute Bay	1	0
Sanikiluaq	1	2
Sanirajak	0	2
Taloyoak	0	1
Whale Cove	0	0
Total	120	88



8.0 Firefighter Training

There were 30 territorial, community-based fire service training, and breathing apparatus training courses provided during 2022-2023 training period. Territorial courses allow for students to register from across the territory, while community-based courses, and self-contained breathing apparatus training (SCBA) are specific to each hamlet fire department. The combination of these course styles allows for firefighters to train with fellow firefighters from across Nunavut and develop skills within their own fire department using their own equipment.

Throughout the territory, 181 firefighters received training, increasing their skills, knowledge, and abilities in various firefighting tactics. Firefighter training courses were offered by the NFMO in partnership with the Nunavut Municipal Training Organization (NMTO). Course offered across the Territory in 2022 included Community-Based Training, Self-Contained Breathing Apparatus (SCBA) Training, Fire & Life Safety Educator, Fire Officer Level 1, Fire Service Instructor, Firefighter Level 1, Firefighter Level 2, Pump Operations and the Annual Fire Officer Workshop. In total, 181 Firefighters from across Nunavut successfully attended these courses.

9.0 Closing

The NFMO promotes and develops, building and life safety initiatives throughout 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 in order to continue to provide safer communities for Nunavummiut.

Top Left: Instructor teaching the firefighters on procedures to provide water supply from an alternative water source at a fill site during a firefighter course in Rankin Inlet. Top Right: An Assistant Fire Marshal teaching donning and doffing of Personal Protective Equipment (PPE) during a Community Based Training class in Sanirajak. Bottom Left: Firefighters learning how to operate a ground monitor during a fire training exercise. Bottom Right: Students during vehicle fire extinguishment training exercise during the Fire Fighter Level II training in Igaluit.









Figure 4- Truck Replacement Schedule			
Community	Year		
Kugaaruk	2021		
Coral Harbour	2021		
Sanikiluaq	2023		
Igloolik	2023		
Resolute Bay	2023		
Clyde River	2023		
Qikiqtarjuaq	2024		
Arctic Bay	2024		
Sanirajak	2025		
Taloyoak	2025		
Chesterfield Inlet	2026		
Whale Cove	2027		
Grise Fiord	2027		
Iqaluit	2028		
Kimmirut	2028		



10.0 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, licenses beverage establishments, restaurants, cafes, schools, arenas, and gyms.

Business / 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.

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 wastepaper 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.

Local Assistant to the Fire Marshal: 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. 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 lighting, 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 may still be under investigation where the cause may be determined later with the introduction or discovery of new information or evidence.