

# 2021 - 2022



# Office of the Fire Marshal



# SUMMARY

The Office of the Fire Marshal's (OFM) authorities and responsibilities are contained in the *Fire Safety Act*. The OFM has a mission to promote, coordinate, and facilitate fire and building safety in Nova Scotia. Our vision is that all Nova Scotians will accept their personal responsibility for building and fire safety.

One of the many strengths within the functions of the OFM is fostering successful partnerships. The Office continues to build strong relationships with our key stakeholders, including the fire service, our municipal partners, and other provincial departments. The OFM provides advice and recommendations to persons and/or organizations regarding the principles and practices of fire suppression, fire prevention, fire safety education, safe building code practices, emergency services and related communications systems.

This Annual Report is a compilation of the activities and data collected from our records for the fiscal year 1 April 2021 through 31 March 2022.

Doug MacKenzie Fire Marshal



# INTRODUCTION

# MUNICIPAL AFFAIRS AND HOUSING

From the period of 1 April 2021 to 31 August 2021, the Minister of Municipal Affairs, was the Honourable Brendan Maguire. The department returned to Municipal Affairs and Housing with the Honourable John Lohr leading as Minister for the period from 31 August 2021 to 31 March 2022.

Strategically situated within this department, the OFM is well positioned to work closely with the Emergency Management Office, Municipal Services, and other key members of the Municipal Affairs team. Our mandate is closely linked with municipalities, and this connection continues to prove invaluable.

# RESOURCES

In 2021-2022, the OFM consisted of nineteen (19) staff located throughout the province:

- Acting Fire Marshal, Doug MacKenzie. Director responsible for the overall direction and management of the OFM.
- Acting Assistant Fire Marshal, Jamie Young. Manages the Operations team.
   A total of ten (10) Deputy Fire Marshals, conduct inspections, investigations & education activities:
  - Arden Weagle
  - Martyn Payge
  - Rick Smith
  - Lynelle Vetsch
  - Ryan Thibeau
- Derwin Swinemar
- Ronald Thibeau
- Andrew Wentzell
- Gary O'Brien
- --
- Manager of Corporate Policy, Kirk Janes. Manages two groups.
   Administration:
  - Fire Service Coordinator, Sheila Harvey. Provides certification and awards support to fire services.
  - Administrative Assistant, Becky Wilson. Provides administrative support for the OFM.
  - Research & Statistics Officer, Jonathan Gillies. Maintains databases, provides statistical reporting. Codes Team:
    - Fire Code Coordinator, Lorelei Atkinson. Leads policy and administration related to fire code. Conducts plan reviews, provides technical support.
    - Building Code Coordinator, Joe Rogers. Leads policy and administration related to building codes. Provides technical support.
    - Assistant Code Coordinator, Lisa Cadger Burgess. Building and Fire Code Coordinator support.

## FINANCE

For the fiscal period 2021-2022, the Office of the Fire Marshal has an annual budget of approximately \$2,508,000 for 2021-22.

# INTEGRATION

From within Department of Municipal Affairs and Housing, and through other branches of government, the Office of the Fire Marshal is provided with Human Resources, Information Technology, Payroll, Financial, Procurement, Legal and Information Access. These key services play an important role working with the Office of the Fire Marshal.

MAR

## LOCATION

The Office of the Fire Marshal head office is centrally located in at Baker Drive in Dartmouth. Field offices are located throughout Nova Scotia, in Yarmouth, Kentville, Bible Hill, New Glasgow and Sydney.



# OFM ACTIVITIES

# ΟVERVIEW

Over the course of 2021-2022, the Office of the Fire Marshal (OFM):

- conducted fire inspections;
- performed fire investigations;
- maintained a database of activities, including fire incident statistics & trends;
- provided advice and support to stakeholders;
- promoted building safety;
- reviewed building plans;
- provided resources to support fire services;
- licensed portable extinguisher service providers; and
- provided fire safety education and training to the general public, government and industry throughout the province.

Previously, the Office of the Fire Marshal administered the Emergency Services Provider Fund. However, in 2021, the Department of Municipal Affairs and Housing consolidated all grant programs within one division. The \$1M ESPF budget was moved to the Municipal Sustainability Group.

# COVID-19 PANDEMIC

In March of 2021, the general public was given the opportunity to book a vaccination appointment. As part of the government's phased approach, restrictions and guidelines were lifted, which was almost two years after Nova Scotia first declared a state of emergency. By the end of March 2022, cases rose with a spike before restrictions were lifted.

Throughout the year, the Office of the Fire Marshal continued inspections and support of stakeholders with many precautions and modifications, some of which included:

- Staff continued with adapted ways of ensuring safety in the buildings for which they are responsible. This included the use of live video for inspection of facilities so they would not have to make entry into the buildings and put the occupants at risk. When having to enter facilities to verify deficiencies, Deputies carefully adhered to each facility's, and provincial requirements, for proper PPE.
- Providing daily support to facilities management to approve or deny changes that would affect fire and life safety while working with our stakeholders to provide the best possible medical care.

- Working closely with our partners in Health, Corrections, Small Options & Housing to answer their concerns around fire safety, as new equipment and protocols were put into place.
- Assist the fire service of Nova Scotia in obtaining supplies and navigating the changing policies on fire/medical responses and training.
- Assisted in fulfilling the National Fire Protection Agency (NFPA) requirement that fire apparatus must be driven from the manufacturer to the fire department of purchaser, by coordinating the in-person delivery of fire trucks at the provincial border.

### Distribution of Donated Clorox<sup>®</sup> Disinfecting Wipes

In March 2022, the OFM qualified for a donation of Clorox<sup>®</sup> Disinfecting Wipes from Clorox Canada and CanOps (Canadian Public Safety Operations Organization) to distribute to all the fire departments in Nova Scotia and organizations in need. Drop points at fire stations in every county were set up for the delivery of 1.5 tractor trailer loads of wipes and were distributed with our partners at Transportation, Infrastructure and Renewal.

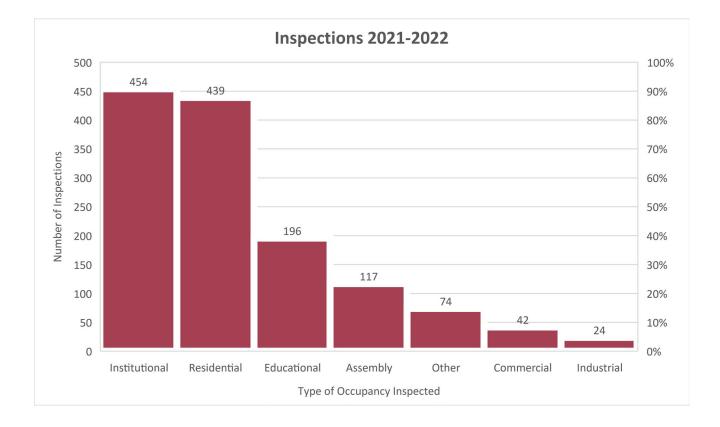


# INSPECTIONS

Throughout the fiscal year, the OFM conducted a total of 1349 activities at various buildings and properties which generated 898 inspection reports, 34 orders to take action, 3 appeals, 2 training events and 303 other-event correspondence.

Many of the inspections undertaken were in concert with our provincial partners in the Departments of Health & Wellness, Community Services, Education & Early Childhood Development and the Department of Service Nova Scotia and Internal Services.

During the year, we visited numerous nursing homes, group and small option homes, schools, hospitals, and public venues. The numbers and types of inspections undertaken are illustrated below:



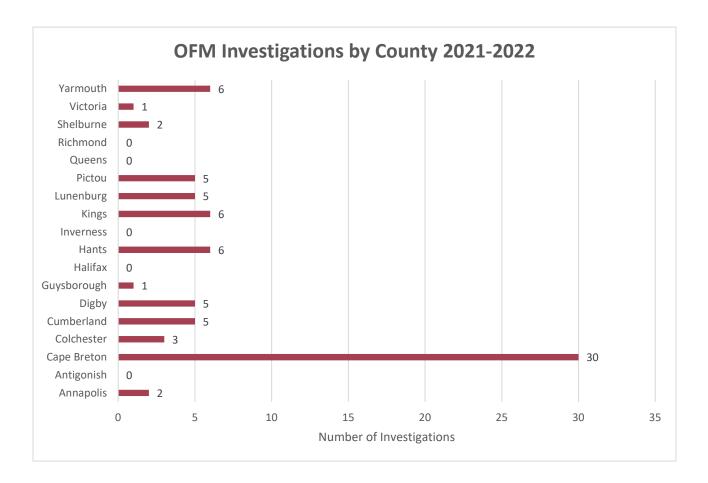
Institutional occupancies (i.e., jails, nursing homes, hospitals, etc.) Residential occupancies (i.e., rest & group homes, etc.) Educational (i.e., schools, universities, etc.) Assembly occupancies (i.e., theatres, daycares, schools, etc.) Other (unclassified / in-progress) Commercial (i.e., office, stores, retail, etc.) Industrial (i.e., gas bars, manufacturing, etc.)

# INVESTIGATIONS

The Office of the Fire Marshal provided support to Local Assistants (Fire Chiefs) in determining the cause and origin of fires. An on-call Duty Deputy Fire Marshal monitored a 24-hour call in number available to fire services. Deputy Fire Marshals are available to respond throughout the province around the clock when requested to conduct fire investigations.

During the investigation process, the OFM collaborates closely with Fire Services, Provincial Police Services, NS Medical Examiners Service and the Insurance Industry. The OFM hold responsibility for inspections of all licensed care facilities, group homes, hospitals including nursing homes, provincial buildings and all community colleges and universities. For service to the residents of Halifax Regional Municipality, a formal agreement for prevention of a duplication of service and definition of jurisdictional boundaries was established in 2010. Halifax Fire Prevention Division carry out their own system of investigations, with assistance provided by the OFM if requested.

In 2021-2022, the OFM received 195 requests from local assistants and policing services. Through consultations with our on-duty Deputy Fire Marshals, the Local Assistants were guided through the process to determine the cause of the fire or to make the determination if it was safe for Deputy Fire Marshals to attend the scene, resulting in 77 investigations being performed by the OFM.



The purposes of a fire investigation are many but primarily it is used to determine how the fire started and why the fire behaved the way it did. The information collected can help:

- determine if the fire was accidental or deliberate
- prevent or reduce similar types of fires
- provide public education and awareness
- recommendation for recall of products
- assist with firefighting tactics and operations
- modification of requirements for buildings
- and more

In the spring of 2021, the Deputy Fire Marshals performed burn tests and tested various consumer products for flammability.

The Office of the Fire Marshal incorporates ongoing fire investigation skills training regularly.







# STATISTICS

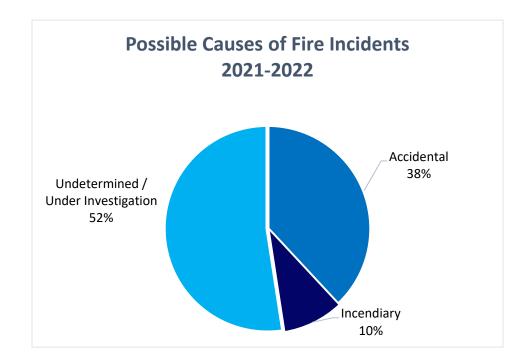
The Office of the Fire Marshal maintains a fire incident database from information submitted by the fire service, OFM staff and the insurance industry. This data forms the basis of the analysis of statistics and trends of fires in Nova Scotia which assists in the development of fire safety education programming.

In 2021-2022, there were 2994 fire service response events reported to the OFM of which 1417 were fire related incidents. There was a reported structure loss of \$15,512,854; a reported contents loss of \$9,728,903; for a total fire loss of \$25,241,757.

Fire causes are divided into four categories:

- Accidental fires are those for which the proven cause does not involve an intentional human act and include mechanical/electrical misuse and failure, construction/design deficiency and misuse of ignition sources or materials.
- Incendiary fires are fires that are deliberately set with the intent to cause a fire to occur in an area where the fire should not be.
- Natural fires are those fires caused without direct human intervention or action and include fires resulting from lightning, earthquake, wind and flood.
- Undetermined fires are those fires where the cause cannot be proven to an acceptable level of certainty and include fires that are under investigation, where additional evidence may change the cause determination.

A total of 485 of the reported fires were found to be Accidental. There were 121 Incendiary fires reported. Of all reported fires, a total of 668 were deemed to be undetermined / under investigation.



In 2021-2022, there were 25 reported fire related fatalities and 48 fire related injuries reported, including 5 cases of firefighter injury.

There were also 78 confirmed cases of arson and 25 suspicious fires.

Throughout this year 44 accidental fire incidents caused by unattended cooking were reported. There were 386 Single Dwelling Fire and 38 Single Detached / Town House / Multi Unit Dwelling Fires. A complete outline of fire incident data for 2021-2022 is illustrated in Appendices A-1 to A-5. Of note: Regarding other types of fire call incidents during the 2021-22 period, there were 346 Vehicle Accidents, 501 Medical Calls, 148 Accidental Alarms, and 119 Malfunctioning Alarms.

# CONSULTING WITH STAKEHOLDERS

One of the key activities for staff from the Office of the Fire Marshal is to act as a resource for the many partners and stakeholders with whom we interact. OFM staff at all levels provide information, advice and recommendations regarding numerous aspects of building and fire safety as well as fire service delivery. This includes support for municipal building and fire inspectors, architects, engineers, and other consultants as well as private citizens.

The OFM collaborates regularly with many provincial counterparts from the Departments of Justice; Health and Wellness; Education and Early Childhood Development; Communities, Culture, Tourism and Heritage; Natural Resources and Renewables; Labour Skills and Immigration; and Public Works. Office of the Fire Marshal staff conduct numerous inspections for provincial licensing and provide advice and recommendations relating to fire and building safety for all provincially owned properties.

The Office of the Fire Marshal continues to foster and develop relationships with fire services in Nova Scotia. The OFM provides information and often works closely with fire services as a bridge to other Provincial departments, the Association of Municipal Administrators, and the Nova Scotia Federation of Municipalities (NSFM) for a variety of subjects such as: dispatching; wildfire management; motor vehicle concerns; training standards; occupational health and safety; procedure advice on bylaws; authority under the Municipal Government Act and the Fire Safety Act.

# BUILDING SAFETY

With regard to Building Safety, the OFM establishes policies, regulations and programs for the regulation of construction for all buildings in Nova Scotia. OFM staff develop education materials, deliver training, and provide stakeholders with sound technical advice on construction codes.

In 2021-2022, the OFM Building Safety team supported our partners, the Nova Scotia Building Officials Association, in their delivery of 11 Building Code Courses provided to Municipal Building Officials and others.

Normally, code presentations would be given to stakeholders such as the Nova Scotia Architects Association, Nova Scotia Building Officials Association, Bright Business Conference and Nova Scotia

Community Colleges. However, with the pandemic most of this activity was required to be suspended. The OFM did present two 2015 Code Courses, one in person and one virtually for the New Brunswick Building Officials as they adopted the 2015 National Building Code.

Jonathan Mullin, representing the Construction Association of Nova Scotia, began to act as the Chair of the Nova Scotia Building Advisory Committee (NSBAC) following Heather Corrigan's retirement from the NSBAC in 2021. The Committee is currently comprised of 12 members who represent building construction stakeholders and include members from the design, construction, and regulatory fields. Throughout the year, this committee scheduled and held 9 virtual meetings. The NSBAC also received, reviewed, and actioned 6 appeals regarding the application of the Nova Scotia Building Code.

# **BUILDING PLAN REVIEW PROCESS**

The Office of the Fire Marshal is required by the Fire Safety Act to carry out plan reviews for certain occupancies before the commencement of construction, in order to provide the opportunity to advise an owner and building official of apparent contraventions to the Act, the regulations and Fire Code. These occupancies include:

- Assembly occupancy (Group A) that are more than 3 stories high including the stories below grade, or have an area greater than 600 m<sup>2</sup>, or non-residential buildings used for a school, college or university and that has an occupant load of more than 40 persons;
- Care or Detention occupancy (Group B);
- Residential occupancy (Group C) that is licensed or regulated under the Homes for Special Care
   Act; and
- High hazard Industrial occupancies (Group F1) more than 2 stories high or has an area greater than 600 m2.

The OFM also conducts fire and life safety plan reviews for Nova Scotia Government projects that do not fall within the scope of the occupancies noted in the Fire Safety Regulations when requested.

The Office of the Fire Marshal employs a full-time Fire Code Coordinator to lead policy and administration related to fire code and to fill the need for full time plans review. Construction ready plans submitted to the OFM are reviewed to ensure conformance to the Fire Code for fire and life safety requirements, to ensure safety to occupants. The OFM responds to all plans received with recognition of receipt of plans. If a plan review is required, once it is complete correspondence is sent out identifying compliance or deficiencies and advising if, or when, inspections by a Deputy Fire Marshal are required.

# **BUILDING PLANS REVIEW SUMMARY**

In this fiscal period, the average time for plans review was 9 working days; including from when plans were received by the OFM, the review carried out and comments sent to the owner. The time required to review a set of plans is dependent on several factors and whether the submission contains all the

necessary information. The size and complexity of the building affects the amount of time it takes to complete a review. In some cases, the time of year can also affect the timeline due to multiple projects ready to go at one time. In all cases, this is communicated to those submitting plans.

80 separate building plans were received.

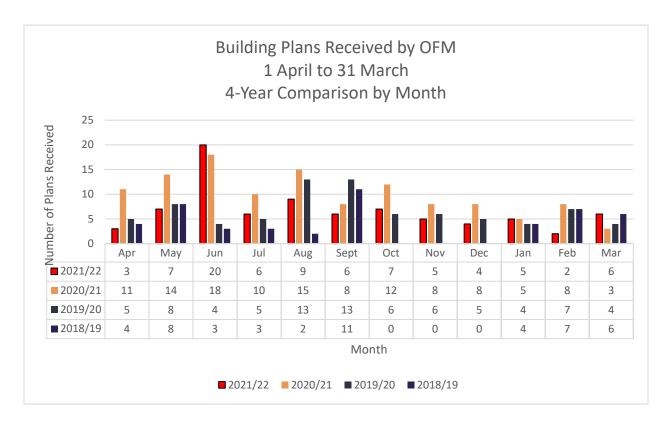
71 were reviewed to ensure compliance with the requirements of the Fire Safety Act and the Nova Scotia Building Code Regulations.

9 plans did not require review due to the scope of the project and applicants were notified.

There were 8 plans accompanied by alternative solution proposals. These proposals are submitted as part of the plan review process and involve hours of careful review time to ensure compliance with the Code. Compliance with the Codes can be achieved using alternative solutions provided the solution will achieve at least the minimum level of performance required by Division B of the Code, in the areas defined by the objectives and functional statements attributed to the applicable code requirement. An alternative solution is a method of compliance with the Code, such as an innovative idea. It is not a method to avoid compliance with requirement(s) of the Code. Proposals are required to include adequate technical analysis and sufficient evidence to justify and validate achievement of the minimum level of performance required by the Code.

In addition to numerous other teleconferences, phone calls, and correspondence via email, 143 formal preliminary architecture reviews / building plan review responses relating to plan reviews were mailed out (not including emails) from April 1, 2021 to March 31, 2022.

See Appendix B for more information illustrated on Building Plans Submitted to the OFM for Review for 2021-2022.





Life safety within our health care facilities is critical at every stage – from plans review prior to construction, inspections at various stages, to completion of construction.

OFM staff participated in an early morning demonstration at completion of construction. The contractor prepares an "Integrated Systems Testing of Fire Protection and Life Safety Systems – CAN/ULC S1001" report for the building.

# SUPPORT TO NOVA SCOTIA FIRE SERVICES

As part of our continuing commitment to the fire services in Nova Scotia, the Office of the Fire Marshal employs a full-time Fire Service Coordinator to administer several programs to support these first responders.

#### Nova Scotia Fire Services Long Service Medal

First awarded in 1980, "The Fire Services Long Service Medal" is an expression of public appreciation for the dedication and hard work of Nova Scotia firefighters. It is officially recognized by the province and is included in the *Fire Safety Act, 2003*. Both career and volunteer firefighters can qualify for the medal.

The long service medal is available to those who have achieved a minimum of 25-years in the fire service. In 2015, 35-year, and 45-year service bars were made available. Service bars are only available to recipients who achieved their 35-years of service on or after 31 December 2007 and 45-years of service on or after 31 December 2017. The Office of the Fire Marshal

- During the fiscal year 2021-2022, the OFM issued:
  - NS Long Service Medal 25 Years: 72
  - NS Long Service Medal 35 Years: 62
  - NS Long Service Medal 45 Years: 29

The OFM provides support to the Nova Scotia Fire Service as the administrator of long Service Medal review and approval process. During the fiscal year 2021-2022, the Fire Marshal recommended to the Minister of Municipal Affairs and Housing the awarding of 29 Nova Scotia Long Service Medals (25 years of Service) and 31 Nova Scotia Long Service Bars (35 years of service) and 25 Nova Scotia Long Service Bars (45 years of service).

#### **Governor General's Fire Services Exemplary Service Medal**

The Governor General presents honours and awards on behalf of all Canadians to recognize those people who have demonstrated excellence, courage or exceptional dedication to service in ways that bring special credit to this country.

The Fire Services Exemplary Service Medal, created on August 29, 1985, honours members of a recognized Canadian fire service who have completed 20 years of service, ten years of which have been served in the performance of duties involving potential risks, and were employed on or after the date of creation of the Medal. Recognized fire services include Canadian fire departments, fire marshals' offices, fire commissioners' offices and the Canadian Forces fire services. Exemplary service is characterized by good conduct, industry and efficiency.

The Office of the Fire Marshal has been established as the provincial awards committee whose primary function is to make recommendations to the Governor General for the medal or bar.

During the fiscal year 2021-2022, the OFM recommended to the Governor General the awarding of:

- Fire Service Exemplary Service Medal 20 Years: 42
- Fire Service Exemplary Service Bar 30 Years: 29; 40 Years: 14; 50 Years: 5

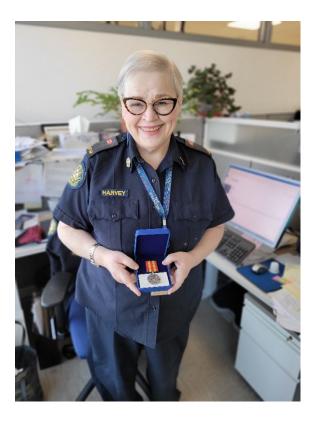
#### Nova Scotia Fire Service Professional Qualifications Board

The Nova Scotia Fire Service Professional Qualifications Board (NSFSPQB) was formed in 1997 under the auspices of the Registry of Joint Stocks and is governed by and reports to the Office of the Fire Marshal. The Board consists of members from stakeholder groups that are involved in fire service training. The OFM has a permanent seat on the Board which is held by the Fire Marshal.

It is the objective of the NSFSPQB to provide a forum for firefighters to access a provincial firefighter certification program. It is the goal of the NSFSPQB that the combined efforts of the member entities will provide for an effective, efficient and cost-effective certification program.

The NSFSPQB provides a mechanism for the establishment of uniformity in fire service training and testing and promotes safety for firefighters and civilians through certification. The certification process offered by the NSFSPQB is accredited through both the ProBoard Fire Service Professional Qualifications System and the International Fire Service Accreditation Congress and is accepted worldwide in the fire service community.

As part of the Secretariat support provided by the OFM to the NSFSPQB, the Fire Service Coordinator prepared and graded examinations, providing certifications and distributed them to the partners of the Nova Scotia Fire Service Professional Qualifications Board. 2021-22 saw substantial changes to the Secretariat as the NSFSPQB and its main training entity made a significant investment in new software to enhance the student experience, allow for online testing, prompter testing results and certification. The investment in the new software made hosting the Secretariat at the training entity more practical and the responsibility was transferred to them in June of 2021.



After 45 years of providing consistent and reliable service to Nova Scotians, Fire Service **Coordinator Sheila Harvey** retired. During her time with the Office of the Fire Marshal, Sheila worked with most of the provincial Fire Marshals that have been appointed in the Province of Nova Scotia. Sheila's work truly produced an everlasting impact, and one that has changed the community for the better in so many ways. Congratulations on your retirement Sheila and all the best.

# LICENSING OF PORTABLE EXTINGUISHER SERVICE PROVIDERS

Under the Fire Safety Act, agencies that sell and service portable extinguishers are required to be licensed by the Province of Nova Scotia on an annual basis. The OFM administers this licensing process and during the 2021-2022 fiscal year, 43 licenses were issued.

A current list of licensed service providers is maintained on the OFM webpage as a resource for the general public and other regulatory authorities: <u>https://beta.novascotia.ca/documents/licensed-fire-extinguisher-maintenance-companies-and-individuals</u>

# PUBLIC EDUCATION

As part of the OFM's continued commitment to Fire Prevention and Public Education, one Deputy Fire Marshal coordinates fire prevention and education programming. Due to the Covid-19 pandemic, many trade shows and conferences were cancelled. This is reflected in the reporting numbers during this period.

The Office of the Fire Marshal completed a total of 52 sessions with 714 people trained in fire and life safety programs. We are pleased to continue the fire and life safety education initiatives during 2021-2022, including the following:

#### Fire and Life Safety Program – Long Term Care

The OFM completed 36 sessions (403 people) of the 6-hour Fire and Life Safety program that is facilitated to all long-term care facilities including nursing homes, residential care facilities, group homes, and others who provide or teach care to the residents of these facilities. These seminars provide caregivers with information on how to select and use a portable fire extinguisher, their duties when the fire alarm sounds, and how they can control a fire until the fire department arrives.

#### Fire Equipment and Evacuation Training (FEET)

The OFM conducts Fire Equipment and Evacuation Training (FEET) session throughout the year. This twoday program is directed toward correctional officers within secure facilities, facility management personnel and focusses on a more in depth look at fire protection systems and evacuation planning.

#### **Roles and Responsibilities of the Local Assistants**

The OFM provided 5 sessions (111 people) of the Roles and Responsibilities of the Local Assistants Course for local fire chiefs or other local assistants to the Fire Marshal. The program outlines the expectations for this position, legislative responsibilities and provides insight on how the role can be better fulfilled.

#### **Remembering When**

The Remembering When program is an internationally acclaimed fire safety and falls prevention program provided to local fire service, caregivers, and other stakeholders interested in seniors' 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. This year, 2 seminars were conducted.

#### Arson Prevention Program for Children: TAPP-C

The Arson Prevention Program for Children, known as TAPP-C, is aimed at children and youth with some potential interest or risk for fire setting. The program provides participants with information on the consequences of fires to themselves, family, friends, and property. TAPP-C consists of three one-hour sessions, for all age groups. The first session begins at the family home or place of residence. The other two are held at the local fire station. It has been very successful and those who participate have learned that fire is good when used in an acceptable manner. This year, 1 youth program (3 sessions) was conducted with the Program Administrator.

#### Portable Fire Extinguishers / Floor Warden / Fire Warden

A total of 4 fire extinguisher training programs (168 people) with the Bullex digital system were held. Fire Warden / Floor Warden training involved 4 sessions (32 people).

#### **Fire Prevention Week**

National Fire Prevention Week is observed in the United States and Canada, during the week (from Sunday to Saturday) in which October 9 falls. The National Fire Protection Association (NFPA) continues to be the international sponsor of the week. In 2022, the Fire Prevention Week theme was:

#### Fire won't wait. Plan your escape.<sup>™</sup>



From October 9-15, 2022, the campaign, Fire won't wait. Plan your escape.<sup>™</sup> worked to educate everyone about the simple but important actions they can take to keep themselves, and those around them, safe. From our partners at the National Fire Protection Association

The National Fire Protection Association (NFPA) announced "Fire Won't Wait. Plan Your Escape" as the theme for this year's Fire Prevention Week. Fire Prevention Week, the longest-running US public health observance on record, will celebrate its 100th anniversary Oct. 9-15 reinforcing the critical importance of developing a home escape plan with all members of the household and practicing it regularly. In addition, this October represents the 100th anniversary of Fire Prevention Week, the nation's longestrunning public health observance on record.

https://www.reflector.com/duplin/news/local/nfpa-announces-theme-for-2022-fire-preventionweek/article\_05cc99f2-5fbe-5e1a-80af-8976884c22d2.html

The following are key messages:

- Make sure your home escape plan meets the needs of all your family members, including those with sensory or physical disabilities.
- Smoke alarms should be installed inside every sleeping room, outside each separate sleeping area, and on every level of your home. Smoke alarms should be interconnected so when one sounds, they all sound.
- Know at least two ways out of every room, if possible. Make sure all doors and windows open easily.
- Have an outside meeting place a safe distance from your home where everyone should meet.
- Practice your home fire drill at least twice a year with everyone in the household, including guests. Practice at least once during the day and at night.
- To learn more about Fire Prevention Week, visit <u>www.nfpa.org/fpw</u>.

#### **Conferences, Displays and Tradeshows**

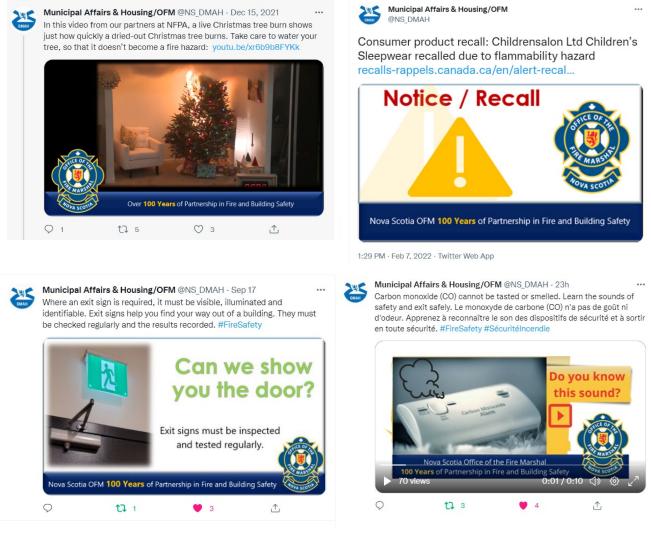
Due to the Covid-19 pandemic during this time period, many conferences and tradeshows were cancelled or held virtually.

# COMMUNICATIONS

New public education materials and methods were explored and went into development:

Messaging

The OFM team worked to create and highlight many public education messages encouraging fire and building safety to be shared through the Municipal Affairs & Housing Twitter account. This year we were able to incorporate sound and video into messaging.



Presentations

Several presentations were created utilizing Power Point and others were refurbished with current information as they are used throughout OFM presentations, training, education and other activities.

Banners

Work on completion of the final two banners of a complimentary series was met with further delay due to COVID-19. The remaining two banners ("Inspection & Enforcement" and "Codes and Construction Practices") are anticipated to be completed this year.

# EMERGENCY SERVICES PROVIDER FUND

The Emergency Services Provider Fund (ESPF) is intended to assist first responder organizations in Nova Scotia with the purchase of equipment used directly in response to fire or emergency situations. Fire departments, hazardous materials (HazMat) organizations, and ground search & rescue groups may apply for funding for personal protective equipment (PPE) AND Self-Contained Breathing Apparatus (SCBA), Communications, Miscellaneous Fire Fighting Equipment, Rescue Equipment, HazMat Equipment, Water Supply Suppression Equipment AND Emergency Power for Building.

The program pays 75% of the total eligible costs, up to a maximum grant of \$20,000.

2021-2022 marked the first full year that the ESPF with a budget of \$1M and program responsibility, was administered through the Municipal Sustainability Group of the Department of Municipal Affairs and later Municipal Affairs and Housing. The Office of the Fire Marshal continued to provide technical expertise and support to the program manager as they provided this very important funding source to our first responder organizations.

# PARTNERSHIPS

In 2021-2022 the Office of the Fire Marshal continued to build on its positive working relationships with many partners, including in part:

- Federal Staff from the OFM participate in many Federal Provincial/Territorial Advisory Councils and Committees on behalf of the Province of Nova Scotia;
- Provincial As part of our ongoing responsibility to provide advice to the Minister of Municipal Affairs, staff from the OFM participate in many Provincial Agencies, Boards, and Commissions;
- OFM staff also support a number of other key stakeholder organizations which support municipalities.



# LOOKING FORWARD

# COVID-19 PANDEMIC

As we move forward with living with COVID -19 and the Province slowly begins to ease restrictions, the Office of the Fire Marshal will continue to take precautions to ensure the health and safety of our employees and that of our clients, the citizens of Nova Scotia.

The Office of the Fire Marshal will continue to work with our partners to ensure that we respect any remaining restrictions as we enter hospitals, long-term care facilities, public schools, day cares, correctional facilities, stores, offices, bars and restaurants in the performance of our duties. As we ease restrictions, the Office of the Fire Marshal will continue their responsibilities to promote and enforce building and fire safety and advise various levels of government on building and fire-related matters, including fire protection. The OFM will continue working with fire services partners throughout the province and continued leading, coordinating, and providing government departments, municipalities, and the public with effective approaches for building and fire safety.

# UPGRADES TO DATABASE SYSTEM

Significant upgrades to our database system were completed and have been put into service, including the new fire incident reporting system to better enable our Fire Services to report their legislated information. We are already seeing a significant increase to the data points we collect, which will enhance our future planning for fire prevention programing in the years to come. The OFM looks forward to the greatly enhanced information gathering capabilities and opportunities to acquire information in areas not previously captured This will allow us to identify specific risks to Nova Scotians and respond accordingly.

# ADOPTION OF THE 2020 NATIONAL MODEL BUILDING CODES

In March of 2022, the National Research Council of Canada (NRC) released the pandemic delayed 2020 National Model building Codes, which includes the National Building Code, the National Fire Code, the National Plumbing Code and the National Energy Code. Over the next 24 months the Office of the Fire Marshal will work with its various stakeholders to determine the best path forward to adopt these codes within the Province. The 2020 Codes will see significant changes in how we can construct and maintain buildings within the Provinces and the OFM needs to ensure we take a measured approach in their adoption to mitigate the impact on our citizens.

# IN CLOSING

The Office of the Fire Marshal continues to promote and develop building and fire safety in Nova Scotia. As we carry out our daily tasks and activities, we will take advantage of opportunities to improve upon our effectiveness and efficiency. We have learned a great deal from the perspective the past year has provided. We have gained knowledge and focus, despite the intense challenges. The OFM continues to work hard and consistently adapt to continue our work and carry on enhancing the safety of all

Sincerely, Doug MacKenzie Fire Marshal

Prepared by: Lisa Cadger Burgess and Jonathan Gillies



# **APPENDIX A: 2021-2022 FIRE INCIDENT STATISTICS**

### Appendix A-1 Fatalities From Fire 2021—2022

Property Classification	Igniting Object	Possible Cause	Male Adult Fatality	Male Child Fatality	Male FF Fatality	Female Adult Fatality	Female Child Fatality	Female FF Fatality	Not Specified
301 Detached Dwelling	99 Undetermined	68 Undetermined		2		1	1		
301 Detached Dwelling	99 Undetermined	69 Under Investigation		2		1	1		
342 Mobile Home	332 Wood Stove	N/A	1						
301 Detached Dwelling	99 Undetermined	05 Suspicious Fire	1						
342 Mobile Home	99 Undetermined	69 Under Investigation							1
365 Detached Garage	79 Other Open Flame Tools/Smoker	68 Undetermined		1					
321 Multi-Unit Dwelling 2- 6 Unit	98 Other	33 Used/Placed Too Close/Combust	1						
301 Detached Dwelling	99 Undetermined	68 Undetermined							1
862 Forest, Standing Timber	99 Undetermined	68 Undetermined							1
321 Multi-Unit Dwelling 2-6 Unit	83 Other Electrical	52 Electrical Failure				2			
368 Residential Camp	99 Undetermined	68 Undetermined	1						
341 Motor Home, Camper, Trailer	99 Undetermined	68 Undetermined	1	3		1	1		
321 Multi-Unit Dwelling 2- 6 Unit	99 Undetermined	68 Undetermined	1						
		Fatalities from Fire 2021-2022:	6	8	0	5	3	0	3
Т	TOTAL Fatalities from Fire 2021-2022: 25								

Adult = 18+ Years FF = Firefighter

### Appendix A-2 Injuries From Fire 2021—2022

Property Classification	Igniting Object	Possible Cause	Male Adult Injury	Male Child Injury	Male FF Injury	Female Adult Injury	Female Child Injury	Female FF Injury	N/A
301 Detached Dwelling	N/A	N/A				1			
301 Detached Dwelling	99 Undetermined	68 Undetermined		2		1	2		1
932 Commercial	82 Vehicle - Mechanical	21 Design Deficiency	1						
368 Residential Camp	14 Open Fired Barbeque /Fix/Port	32 Unattended	1						
342 Mobile Home	40 Flue Pipe	34 Used for Purpose Not Intended	1						
399 Other Residential	14 Open Fired Barbeque /Fix/Port	01 Arson				1			
399 Other Residential	41 Other Heating Equipment	34 Used for Purpose Not Intended				1			
901 Automobile	82 Vehicle - Mechanical	67 Other				1			
342 Mobile Home	99 Undetermined	69 Under Investigation							1
332 Detached Dwelling with Busine	82 Vehicle - Mechanical	51 Mechanical Failure	2		1	2			
303 Attached Dwelling-Town house	16 Deep Fat Fryer	42 Improper Handling				1			
N/A	N/A	N/A			1				
301 Detached Dwelling	30 Other Electrical Distribn Ite	33 Used/Placed Too Close/Combust	3						
303 Attached Dwelling-Town house	49 Other Appliances	52 Electrical Failure	1			2			
301 Detached Dwelling	79 Other Open Flame Tools/Smoker	01 Arson			1				
365 Detached Garage	29 Extension Cord/Temp Wiring	N/A	1						
301 Detached Dwelling	99 Undetermined	67 Other	1						
301 Detached Dwelling	99 Undetermined	05 Suspicious Fire	1						
321 Multi-Unit Dwelling 2- 6 Unit	98 Other	33 Used/Placed Too Close/Combust	3						
Continued									

Property Classification	Igniting Object	Possible Cause	Male Adult	Male Child	Male FF	Female Adult	Female Child	Female FF	N/A
			Injury	Injury	Injury	Injury	Injury	Injury	
301 Detached Dwelling	99 Undetermined	68 Undetermined	3						
342 Mobile Home	83 Other Electrical	52 Electrical Failure				1			
679 Other Metal/Elec/Misc Product	N/A	N/A	2						
323 Multi-Unit Dwelling 13 plus	16 Deep Fat Fryer	68 Undetermined							1
791 Recycling Facility	21 Transformer	39 Other Misuse			1				
301 Detached Dwelling	33.2 Woodstove	39 Other Misuse							1
301 Detached Dwelling	99 Undetermined	32 Unattended							1
899 Other Misc Structure/Property	21 Transformer	68 Undetermined							1
301 Detached Dwelling	47 Refrigerator, Freezer, etc.	52 Electrical Failure							1
833 Flammable/Combust/Liquid/Gas	77 Matches/Lighter (not known)	42 Improper Handling							1
322 Multi-Unit Dwelling 7-12 Unit	33 Space Heater - Fixed	52 Electrical Failure	1						
799 Other Industrial	N/A	05 Suspicious Fire						1	
		Injuries from Fire	21	1	4	11	2	1	9
TOTAL Interview for a fine 2024 2022									

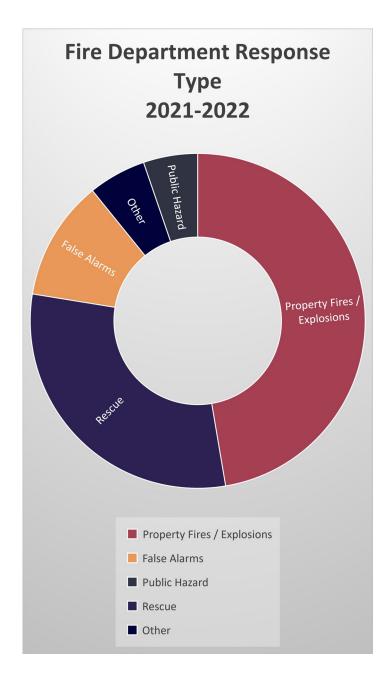
TOTAL Injuries from Fire 2021-2022

48

Adult = 18+ Years FF = Firefighter

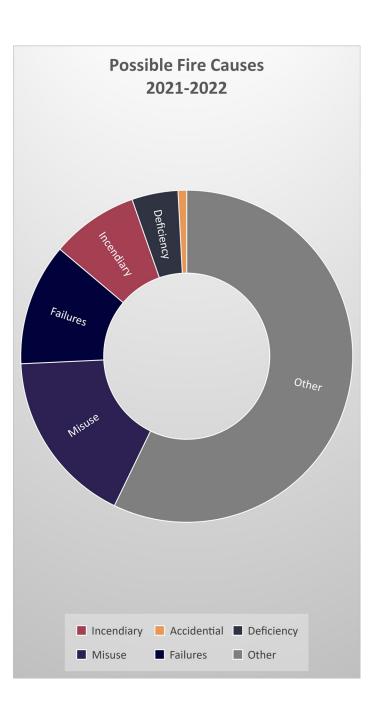
# Fire Department Response Type 2021-2022

Property Fires / Explosions	
Fire	1422
Combustion Explosion	4
False Alarms	
Alarm Malfunction	119
Alarm Accidental	152
Malicious	6
Human-Perceived Emergency	34
Human - Accidental	11
Other False Fire Calls	28
Public Hazard	
Gas Leak - Propane	11
Gas Leak - Refrigeration	1
Gas Leak- Miscellaneous	5
Spill - Gasoline or Fuel	5
Spill - Miscellaneous	2
Radio Active Material Problem	1
Ruptured Water, Steam Pipe	5
Down Powerlines	110
Other Public Hazards	18
Rescue	
Vehicle Extraction	14
Vehicle Accident	355
Commercial/Industrial Accident	1
Home Accident	1
Person in Elevator	3
Water Rescue	15
Water/Ice Rescue	11
Other Rescue	10
Medical	501
Other	
Other Public Service	66
Other Response	102
Total	3013

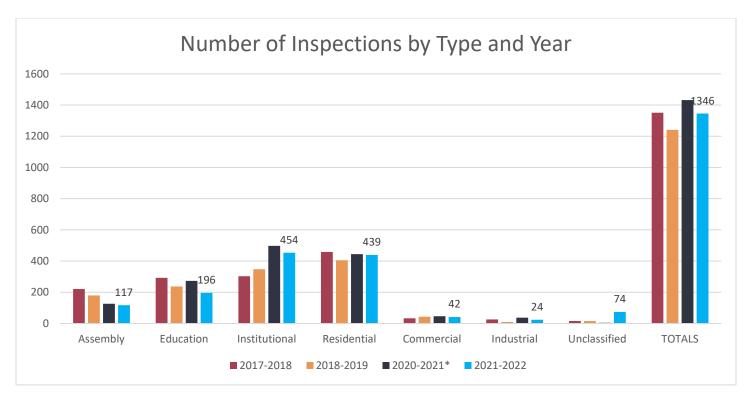


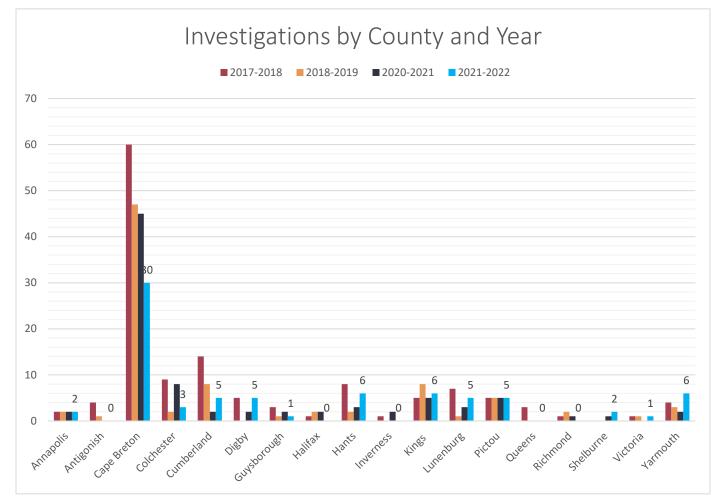
# **Possible Fire Causes** 2021-2022

Incendiary	
Arson	78
Vandalism	10
Youth Vandalism	8
Suspicious	25
Accidental	
Children Playing	3
Vehicle Accident	9
Deficiency	
Design Deficiency	1
Construction Deficiency	3
Installation Deficiency	12
Maintenance Deficiency	38
Other Deficiency	10
Misuse	
Improperly Discarded	43
Unattended	73
Used to Close to Combustible	18
Used for Purpose not Intended	9
Creosote Buildup	51
Other Misuse	14
Improper Storage	10
Improper Handling	25
Failures	
Mechanical	30
Electrical	116
Short Circuit	23
Other	
Other	140
Undetermined	265
Under Investigation	30
No Data Provided	378
Total	1422



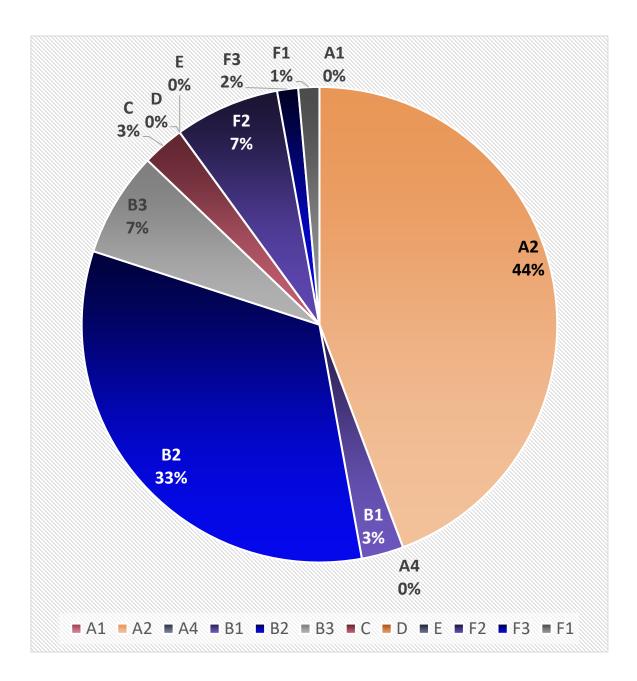
# **Appendix A-5**



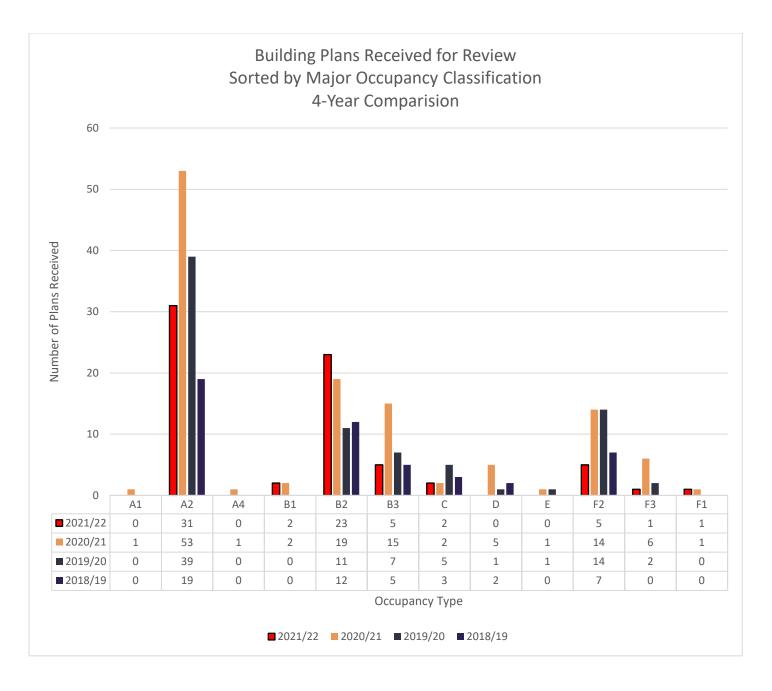


Note: Covid Pandemic began in Nova Scotia on 15 March 2020; HRM Performs Own Investigations

### Appendix B-1: SUMMARY OF BUILDING PLANS SUBMITTED TO OFM FOR REVIEW



#### Occupancy Type of Plans Submitted to OFM for Review 1 April 2021 to 31 March 2022



- A1 Assembly occupancies intended for the production and viewing of the performing arts
- A2 Assembly occupancies not elsewhere classified in Group A (schools, churches, clubs, etc.)
- A2 Assembly occupancies of the arena type (Indoor swimming pools, rinks, etc.)
- B1 Detention occupancies (jails, police stations with detention quarters, etc.)
- B2- Treatment occupancies (hospitals, long term care homes with treatment, etc.)
- B3- Care occupancies (day cares with infants, long term care homes without treatment, group homes, etc.)
- C Residential occupancies (apartments, boarding houses, hotels, etc.)
- D Business and personal services occupancies (offices, banks, beauty parlours, etc.)
- E Mercantile occupancies (shops, malls, supermarkets, etc.)
- F1 High hazard industrial occupancies (bulk fuel plants, distilleries, spray paint operations, etc.)
- F2 Medium hazard industrial occupancies (repair garage, cold storage plants, etc.)
- F3 Low hazard industrial occupancies (warehouse, storage garage, etc.)



