



2022 - 2023



Office of the Fire Marshal ANNUAL REPORT AND STATISTICS

SUMMARY

The Office of the Fire Marshal's (OFM) authorities and responsibilities are outlined 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 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 2022 through 31 March 2023.

Doug MacKenzie
Fire Marshal



INTRODUCTION

MUNICIPAL AFFAIRS AND HOUSING

From the period of 1 April 2022 to 31 March 2023, the Minister of Municipal Affairs and Housing was the Honourable John Lohr.

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

RESOURCES

In 2022-2023, the OFM consisted of nineteen (19) full time staff located throughout the province:

- Fire Marshal, Doug MacKenzie. Responsible for the overall direction and management of the OFM.
- Assistant Fire Marshal, Jamie Young. Manages the Operations team.

A total of ten (10) Deputy Fire Marshals, conduct inspections, investigations & education activities:

- | | |
|------------------|------------------------------|
| ■ Arden Weagle | ■ Derwin Swinemar |
| ■ Martyn Payge | ■ Ronald Thibeau |
| ■ Lynelle Vetsch | ■ Andrew Wentzell |
| ■ Scott Burgess | ■ Gary O'Brien (cover photo) |
| ■ Mark Jessome | ■ Tommy Simpson |

After a number of years, Ryan Thibeau left for training with the RCMP.

- Manager of Corporate Policy, Kirk Janes. Manages two groups.

Administration:

- Fire Service Coordinator, Vacant. Certification and awards support to fire services.
- Administrative Assistant, Sue Millington. Administrative support for the OFM.
- Research & Statistics Officer, Jonathan Gillies. Databases & statistical reporting.
- Summer Student, Lara Issa

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 2022-2023, the Office of the Fire Marshal has an annual budget of approximately \$2,572,000.

FLEET

The OFM fleet is complete with acquisition of the last four vehicles in 2023. These additions will support the mobility of our Deputy Fire Marshals, enhancing visibility and service.

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.

LOCATION

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



Above: OFM Staff Meeting October 2022

OFM ACTIVITIES

OVERVIEW

Over the course of 2022-2023, the Office of the Fire Marshal (OFM) accomplished the following activities:

- conducting fire inspections,
- performing fire investigations,
- maintaining a database of activities, including fire incident statistics & trends,
- providing advice and support to stakeholders,
- promoting building safety,
- reviewing building plans,
- providing resources to support fire services,
- licensing portable extinguisher service providers,
- providing fire safety education and training to the public, government and industry throughout the province.

COVID - 19 PANDEMIC

The Office of the Fire Marshal continued inspections and support of stakeholders respectful of COVID-19 protocols remaining in place, such as those for high-risk settings including long-term care, correctional facilities, shelters and transition houses. Measures included:

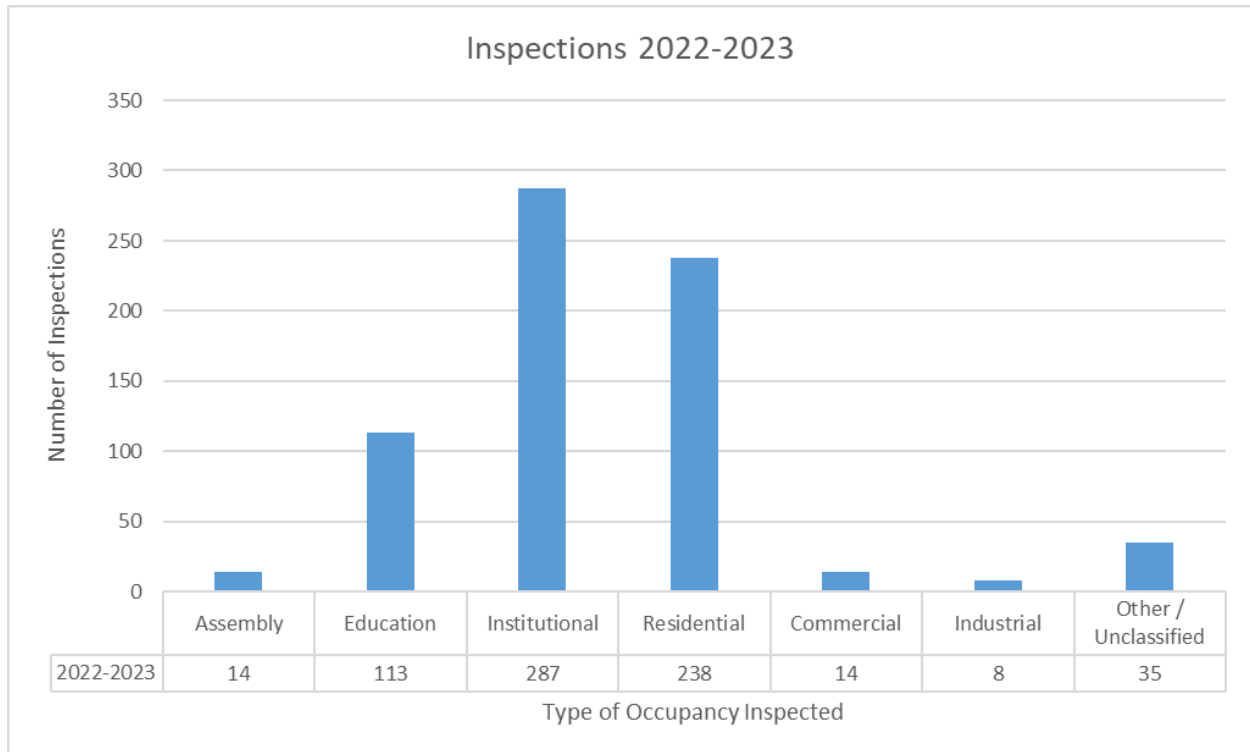
- the use of live video inspections or PPE, as well as mandatory vaccine or other requirements when entry to facilities was needed,
- providing advice and support to facilities management related to any changes in COVID-19 protocols or equipment that may affect fire and life safety.
- assisting fire services in obtaining supplies and navigating the impact of COVID-19 policy changes on fire/medical responses and training.

INSPECTIONS

The OFM conducted a total of 1412 activities at various buildings and properties which generated 709 inspection reports, 52 orders to take action, 2 appeals, 3 training events and 407 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. The OFM holds responsibility for inspections of all licensed

care facilities, group homes, hospitals including nursing homes, provincial buildings and all community colleges and universities. 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.



INVESTIGATIONS

The OFM 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 and municipal police services, NS Medical Examiner Service and the insurance industry.

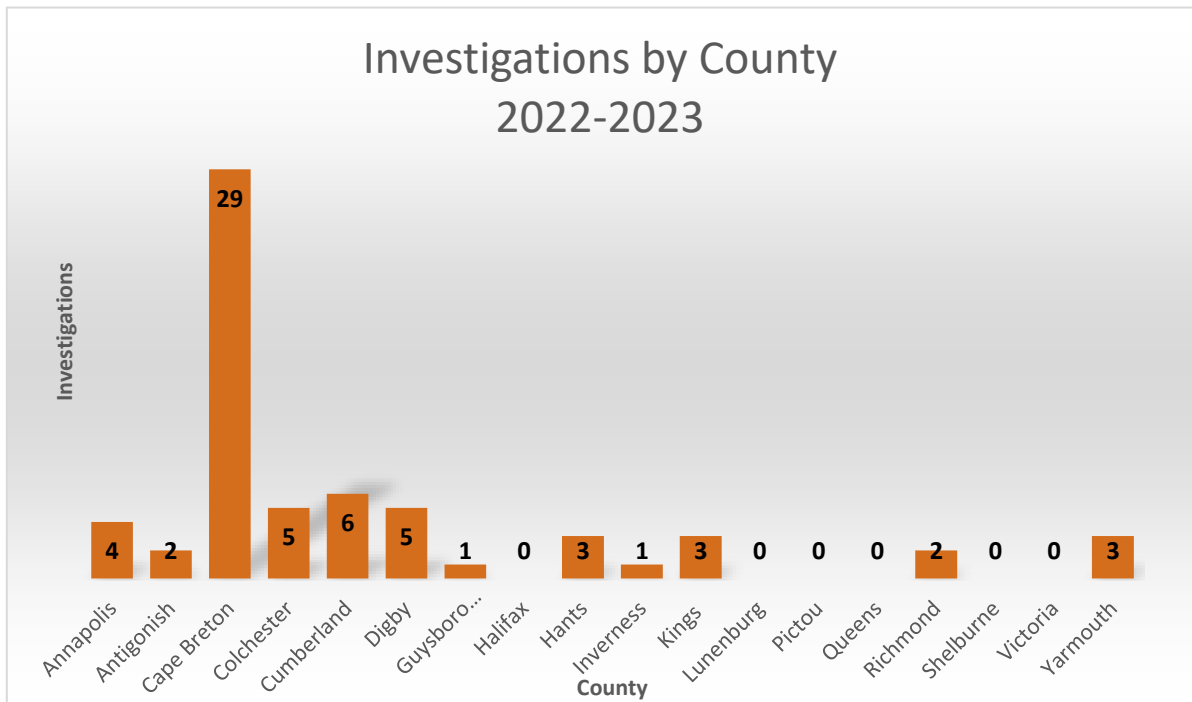
For service to the residents of Halifax Regional Municipality, a Memorandum of Understanding was signed in 2006. Halifax Fire Prevention Division carry out their own system of investigations, with assistance provided by the OFM if requested.



Above: Fire Marshal and Assistant Fire Marshal with Deputy Fire Marshals, May 2022

In 2022-2023, the OFM received 176 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 64 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,
- support public education and awareness,
- with recommendations for product recalls,
- with firefighting tactics and operations,
- with updates or modification of building requirements, among other things.



In May and October 2022, the Deputy Fire Marshals gathered for meetings and included all staff. At the October meeting, the OFM invited the Auditor General's office and all staff to witness burn tests and fire investigation skills training. Staff participated in training incorporating role playing scenarios with what may be encountered during an investigation.



Above: Setting up burn cell tests, training and testing fire blocking consumer product claims October 2022.



Figure 1: Sprinkler head blocked by plastic. Fire set.



Figure 2: Plastic melting as fire grows. Time marked.



Figure 3: Sprinkler activated. Time marked.



Figure 4: Fire extinguishing by sprinkler



Figure 1: Typical living room set up.



Figure 2: Fire set with method kept secret.



Figure 3: Fire extinguished.



Figure 4: Deputies investigate cause of the fire.

STATISTICS

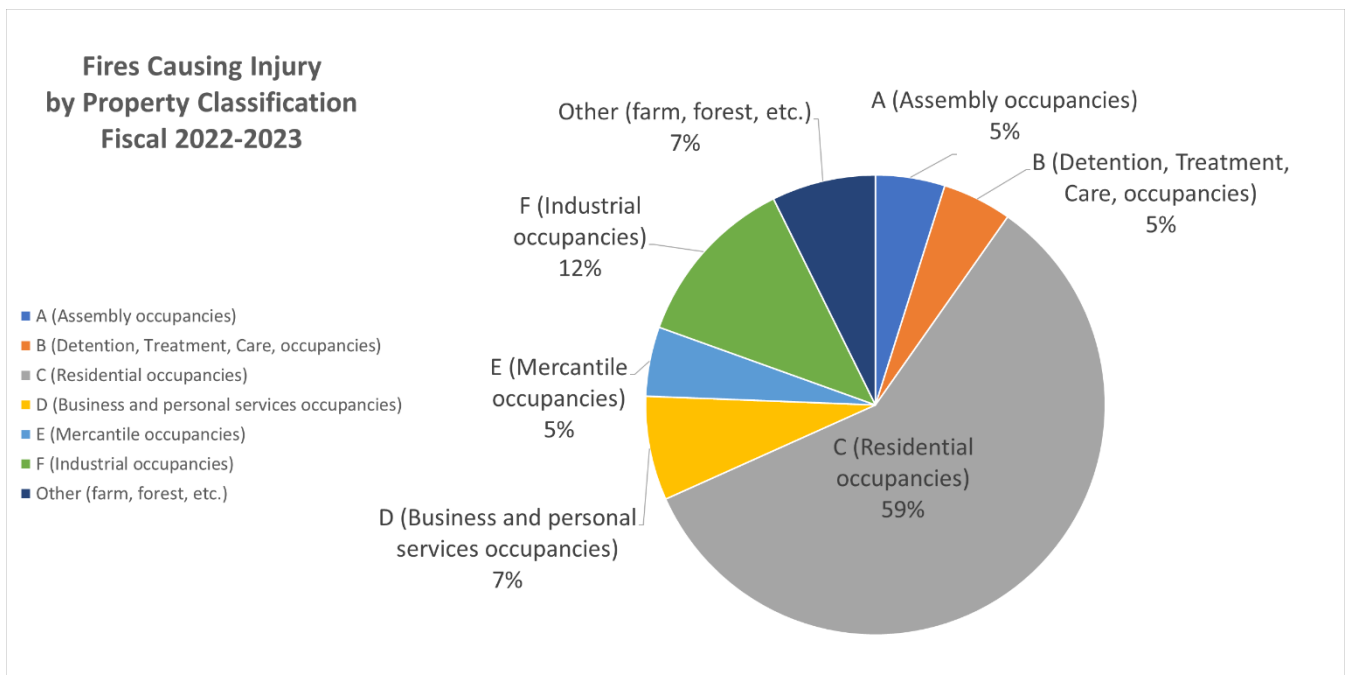
The OFM maintains a fire incident database with information submitted by the fire service, OFM staff and the insurance industry. With enhanced reporting capabilities in place, we are starting to see improvements in the data available. This data forms the basis of our statistical analysis and helps to support our understanding of fire trends in Nova Scotia. As adoption of reporting capabilities by fire services continue to expand, data quality and integrity will continue to improve.

In 2022-2023, there were 8580 fire service response events reported to the OFM of which 2678 were fire related incidents. There was a reported structure loss of \$20,456,466; a reported contents loss of \$16,913,502; for a total fire loss of \$37,369,968.

Reporting fire causes have been typically divided into four categories:

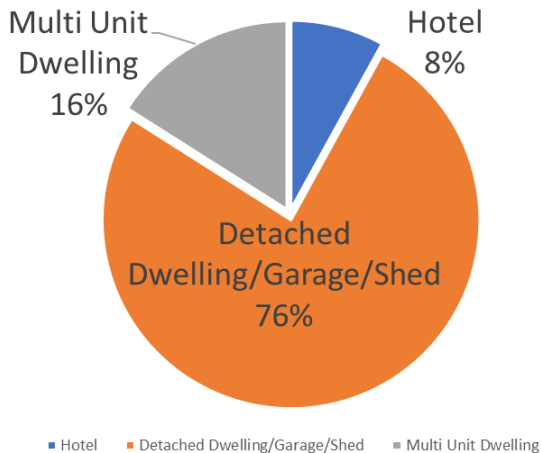
- Accidental fires are those for which the proven cause does not involve an intentional human act and include mechanical/electrical misuse and failure, construction/design deficiency and misuse of ignition sources or materials.
- Incendiary fires are fires that are deliberately set with the intent to 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.

In the 2022-2023 fiscal reporting period, a total of 645 of the reported fires were found to be Accidental. There were 98 Incendiary fires reported. Of all reported fires, a total of 30 were deemed to be of natural cause, 1092 undetermined / under investigation and 813 no cause reported*.



*No cause selected or reported at time of entry.

**Fires Causing Injury Residential Classification
Fiscal 2022-2023**



This fiscal period revealed the greatest number of fires reported that caused injuries by property type, as Residential occupancy.

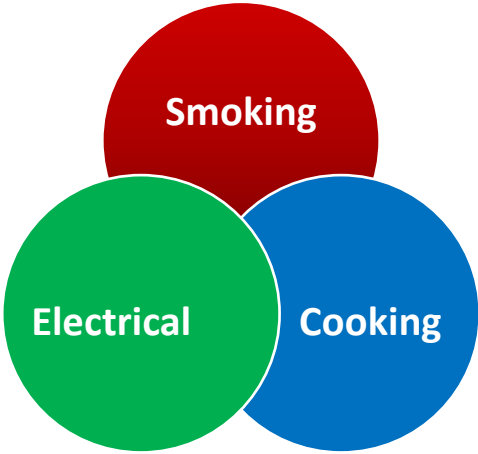
Other types of reported fire call incidents during the 2022-23 period, there were 1192 Vehicle Accidents, 1908 Medical Calls, 674 Accidental Alarms, and 607 Malfunctioning Alarms.

During this period, there were 11 reported fire related fatalities and 41 fire related injuries reported, including 11 cases of firefighter injury. There were also 105 cases of arson and 27 suspicious fires. There were also 142 accidental fire incidents caused by unattended cooking reported. There were 572 Single Dwelling Fires and 220 Semi Detached / Town House / Multi Unit Dwelling Fires. A complete outline of fire incident data for 2022-2023 is illustrated in Appendices A-1 to A-5.

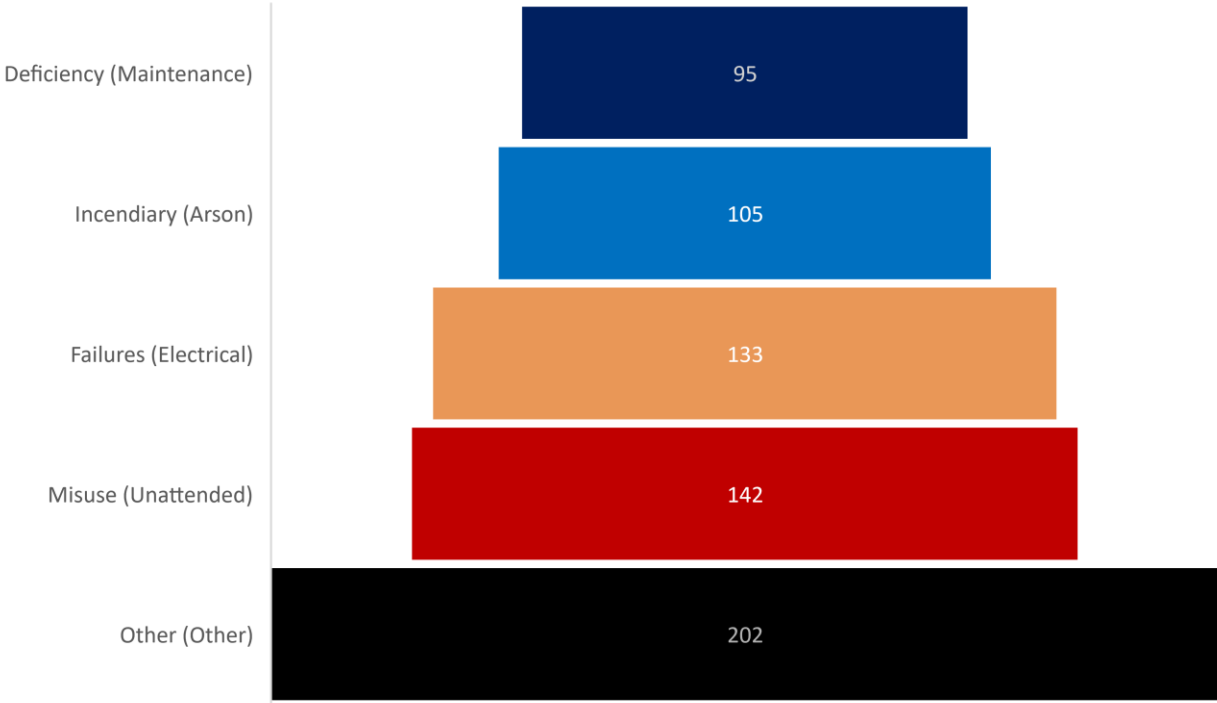
For closer examination and preparation of a new five year-over-year comparison, the Office of the Fire Marshal is moving forward with a review of fire divided into the following definition categories:

- **Incendiary** – Fires that are deliberately set with the intent to cause a fire to occur in an area where the fire should not be such as arson, vandalism, suspicious.
- **Accidental** – Fires are those for which the proven cause does not involve an intentional human act such as children playing, vehicle accident/collision.
- **Misuse** – Includes fires such as improperly discarded ignition sources or materials, unattended, creosote buildup, improper handling/storage.
- **Failures** – Fires involving mechanical/electrical failure, short circuit.
- **Deficiency** – Includes fires such as design deficiency, construction, installation, maintenance.
- **Other / Undetermined** – Those fires where the cause cannot be proven to an acceptable level of certainty. It includes those fires caused without direct human intervention or action and include fires resulting from lightning, earthquake, wind and flood. This category can also include fires that are Under Investigation, where additional evidence may change the cause determination.

**Top 3 Identified Causes
of Fatal Fires Fiscal 2022-2023**



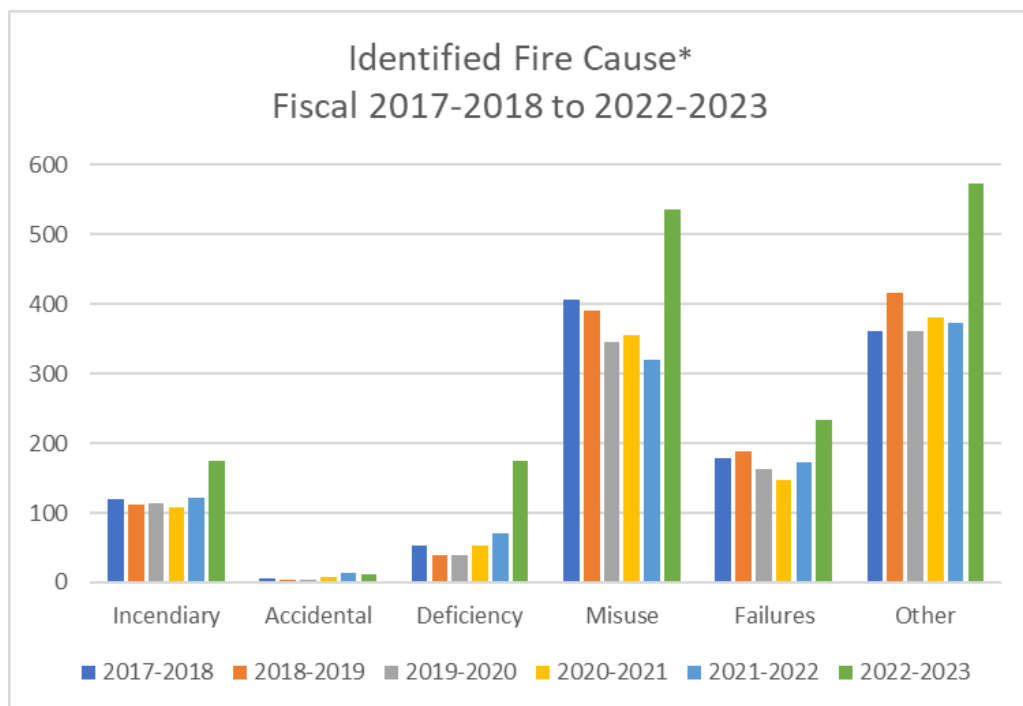
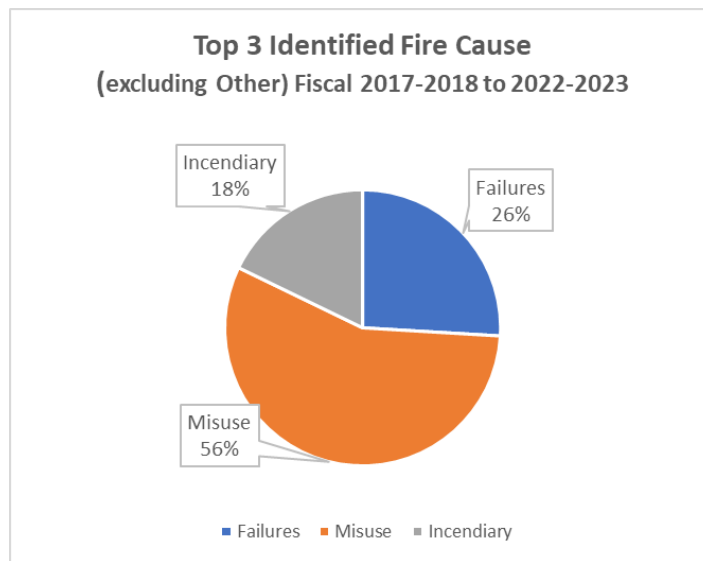
**Top 5 Identified Fire Causes - Appendix A-4
Fiscal 2022-2023**



YEAR-OVER-YEAR COMPARISONS

With the enhanced online reporting tool now available to the fire service, we are starting to see an increase in reporting of data. We foresee an increasing trend for reporting over the next number of years. In this year’s report, we look to begin reporting year-over-year comparisons based on the data that has been reported. Such comparisons will enable the Office of the Fire Marshal to examine the data submitted for further trends, education requirements, enforcement requirements and more.

A review from 2017-2018 to 2022-2023, shows the fires reported as Accidental 1%, Deficiency 6%, Incendiary 10%, Failures 15%, Misuse 33% and Other 35%.



*Definitions Pg.10

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; Environment and Climate Change; 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 2022-2023, the OFM Building Safety team supported our partners, the Nova Scotia Building Officials Association, in their delivery of 12 Building Code Courses provided to Municipal Building Officials and others.

In July 2022, Joe Rogers and Lorelei Atkinson, traveled to Ottawa for the wood building fire testing at the Canadian Explosive Research laboratory. The Canadian Wood Council hosted a full-scale fire test at the Canadian Explosives Research Lab in Ottawa, with more than 150 experts present to learn about the behavior of mass timber construction exposed to fire. Joe Rogers also attended the Pan Canadian Accessibility Forum on behalf of the department.

Code presentations for stakeholders were suspended during the pandemic and recently resumed. The OFM presented 1 Code presentation to the NS Home and Building Designers Association and 1 Code presentation on the reworded Nova Scotia Regulations to the Nova Scotia Building Officials Association.

Jonathan Mullin, representing the Construction Association of Nova Scotia, continued to act as the Chair of the Nova Scotia Building Advisory Committee (NSBAC). With the 2020 National Codes being published in March of 2022, the Committee spent much of its time reviewing and making recommendations

regarding adoption of the Codes. The Accessibility Working Group also reviewed recommendations from the Built Environment Standard Committee for inclusion in the NS Building Code Regulations. The NSBAC was comprised of 12 members who represent building construction stakeholders and include members from the design, construction, and regulatory fields.

Throughout the year, the NSBAC scheduled and held 14 meetings that transitioned from virtual to in person with the option for virtual attendance during the year. The NSBAC also received 5 Tribunal Applications and 4 Hearings (1 was resolved before hearing) to resolve conflicts in interpretation of the NBC, and the NS Building Code Regulations. During this period, 6 members of the NSBAC took in a Session on Administrative Law for Adjudicative Tribunals.

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 m², 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.

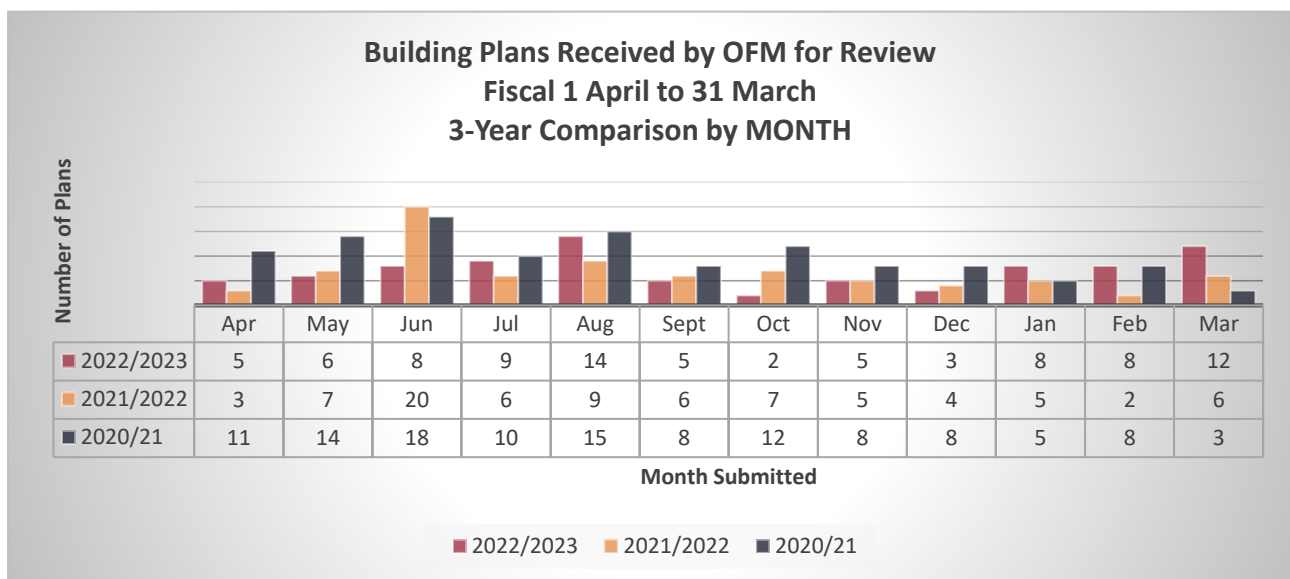
If a plan review is required, once it is complete, correspondence is sent out identifying compliance or deficiencies and advising if, or when, inspections by a Deputy Fire Marshal are required.

BUILDING PLANS REVIEW SUMMARY

In this fiscal period, the average turn-around time from when a set of building plans were received by the OFM to the time the review was carried out and comments sent out was 16 working days. The time required to review a set of plans depends on several factors and whether the submission is complete, i.e. sealed, ready for construction and containing all necessary information. The timeline is also affected by things such as if there are multiple plans submitted at or around the same time and the plan examiners' availability. In all cases, correspondence is provided to all those submitting plans for review.

A total of 85 projects submitted plans for review. Of those plans received, 8 plans did not require review as the construction or alterations contained a class of occupancy that was not within the scope of Section 12 of the Nova Scotia Fire Safety Regulations. There were 77 plans reviewed providing the OFM an opportunity to advise of a contravention of the Fire Safety Act, the regulations, or the Fire Code [s.18, NS Fire Safety Act]. There was a noticeable increase in plans submitted for B3 (care) occupancies projects from throughout the Province of Nova Scotia compared to the previous year (small option homes and day cares with infants).

There were 12 alternative solution proposals submitted for review. The proposals are usually submitted as part of the plan review process and involve hours of careful review time. 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 in the areas defined by the objectives and functional statements attributed to the applicable acceptable solutions. It 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. Alternative solutions must be prepared and bear the seal of an architect or engineer licensed to practice in the Province of Nova Scotia who demonstrates, to the satisfaction of the Office of the Fire Marshal, they have the qualifications, experience, and background for the proposed design.



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

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 2022-2023, the OFM issued:

- NS Long Service Medal – 25 Years: 45
- NS Long Service Bar – 35 Years: 34
- NS Long Service Bar – 45 Years: 17

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 2022-2023, the Fire Marshal recommended to the Minister of Municipal Affairs and Housing the awarding of 45 Nova Scotia Long Service Medals (25 years of Service) and 34 Nova Scotia Long Service Bars (35 years of service) and 17 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 2022-2023, the OFM recommended to the Governor General the awarding of:

- Fire Service Exemplary Service Medal – 20 Years: 24
- Fire Service Exemplary Service Bar – 30 Years: 19; 40 Years: 9; 50 Years: 7

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.

L I C E N S I N G O F P O R T A B L E E X T I N G U I S H E R S E R V I C E P R O V I D E R S

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 2022-2023 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: <https://beta.novascotia.ca/documents/licensed-fire-extinguisher-maintenance-companies-and-individuals>

P U B L I C E D U C A T I O N

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 but this year there is a reflection of reopening in the reporting numbers during this period.

The Office of the Fire Marshal completed a total of 89 sessions with over 1037 people trained in fire and life safety programs. We were pleased to continue the fire and life safety education initiatives during 2022-2023, which included the following:

Fire and Life Safety Program – Long Term Care

The OFM completed 72 sessions (728 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 two-day 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. This period, 64 Correctional Officers were trained over 3 two-day programs.

Roles and Responsibilities of the Local Assistants

The OFM provided 4 sessions (73 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. These are conducted by the Deputy Fire Marshals in their respective territories.

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, 1 seminar was 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, we are pleased to report no requirement for youth programs to be conducted by the Program Administrator.

Portable Fire Extinguishers / Floor Warden / Fire Warden

A total of 7 two-hour fire extinguisher training programs (166 people) with the Bullex digital system were held. Fire Warden / Floor Warden training involved 2 four-hour sessions (6 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 and releases the year's theme typically in early June.

The origin of Fire Prevention week originates from the great fire in the city of Chicago. The fire started on October 8, 1871, and continued through to October 11, 1871. The fire caused over 300 fatalities, left 10,000 displaced people and destroyed over 17,400 structures. There are several theories on how the fire started. A video documentary of the story can be found on YouTube: <https://youtu.be/tl-AtGkvT4>

Since 1922, the NFPA has sponsored the public observance of Fire Prevention Week. In 1925, President Calvin Coolidge proclaimed Fire Prevention Week a national observance. The theme for Fire Prevention Week is a closely guarded secret by the National Fire Protection Association (NFPA) and is always released during the Conference & Expo, typically held in June in Las Vegas, NV. Stay tuned for this year's national message. <https://www.nfpa.org/Events/Events/Fire-Prevention-Week>

Conferences, Displays and Tradeshow

During this period 5 events were attended, including the National Fire Prevention Association Conference and Expo.

COMMUNICATIONS

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

- **Banners**
The final two banners of a complimentary series of five were completed this year.



New 2023



New 2023



- Messaging

The OFM team worked to create and highlight many public education messages encouraging fire and building safety. In partnership with Nova Scotia Natural Resources and Renewables, a camping safety pamphlet was created to be distributed throughout Nova Scotia campgrounds.



- Bilingual messages in support of this focus and other safety messages were prepared ready to be shared through the Municipal Affairs & Housing Twitter account.



- Presentations

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

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.

The Office of the Fire Marshal continued to provide technical expertise and support to the program manager as the Municipal Sustainability Group of the Department of Municipal Affairs provides administration of this very important funding source to our first responder organizations.

PARTNERSHIPS

In 2022-2023 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, including in part:

- Council of Canadian Fire Marshals & Fire Commissioners
- Underwriters Laboratories of Canada National Advisory Council
- National Fire Protection Association (NFPA) – Fire & Life Safety / Public Education Committee
- Federal Provincial Territorial Energy Codes Implementation Group
- Canadian Commission on Building and Fire Codes

Provincial: As part of our ongoing responsibility to provide advice to the Minister of Municipal Affairs and Housing, staff from the OFM participate in and support many Provincial Agencies, Boards, Commissions, and key stakeholder organizations, including in part:

- Nova Scotia Building Advisory Committee
- Fire Service Association of NS
- Nova Scotia School Fire Safety Committee
- Nova Scotia Emergency Planning Committee
- Nova Scotia Fire Service Professional Qualifications Board
- Nova Scotia Firefighter School Board of Directors
- Built environment Standards Development Committee
- Nova Scotia Building Code Training and Certification Board
- Nova Scotia Building Code Training and Certification Board
- Fire Service Association of Nova Scotia Board of Directors
- Fire Inspectors Association of Nova Scotia
- Nova Scotia Building Officials Association
- Nova Scotia Firefighters School



LOOKING FORWARD

ENHANCED REPORTING

Significant upgrades to our database system were completed in 2021, including adoption of the fire incident reporting system, which now enables enhanced reporting of legislated information requirements by fire services across the province. We are already seeing improvements in the amount and quality of data being recorded. This enhanced reporting information will start to be reflected in annual reports, and will support ongoing understanding of risks, as well as potential educational opportunities in the future.

2020 NATIONAL MODEL BUILDING CODES

The Office of the Fire Marshal continues to work with its various stakeholders in adoption of the delayed 2020 National Model Building Codes, released by the National Research Council of Canada (NRC) in March 2022. The new Codes offer some of the most significant changes seen in many years and much work is being done to ensure a measured approach in their adoption, anticipated to begin in 2024.

AUDIT

During this period, the Office of the Fire Marshal underwent an audit by the Office of the Auditor General of Nova Scotia. We respect the findings of the Auditor General and accept the recommendations provided. The report identified some gaps in our internal processes. I am pleased to say that most recommendations are complete or almost complete, and work on the remaining items is well underway.

IN CLOSING

The Office of the Fire Marshal roles and responsibilities has expanded greatly to include fire and building safety. The office also develops policies, regulations, and programs to promote, enforces the principles and practices of fire safety, and provides advice on initiatives and issues concerning building and fire safety. Responsibilities also include promoting and enforcing building and fire safety, conducting Fire Investigations throughout the province, advising various levels of government on building and fire-related matters, including fire protection, working with fire services partners throughout the province, leading, coordinating and providing government departments, municipalities, and the public with effective approaches for building and fire.

The value of organized fire protection in communities and our own personal role of fire safety responsibility, must continue to be emphasized.

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.

We look forward to improving our public safety messaging so all Nova Scotians and newcomers to our province receive proper messaging and can make their homes and workplaces as safe as possible. We look forward to being a partner in ensuring the new generational builds for Health Care meet the fire safety needs of Nova Scotians.

The OFM continues to work hard and to consistently adapt to continue our work and carry on enhancing the safety of all Nova Scotians.



Sincerely,
Doug MacKenzie
Fire Marshal

Prepared by:
Lisa Cadger Burgess
Jonathan Gillies

APPENDIX A: 2022-2023 FIRE INCIDENT STATISTICS

Appendix A-1

Fatalities From Fire 2022—2023

Property Classification	Igniting Object	Possible Cause	Male Adult Fatality	Male Child Fatality	Male FF Fatality	Female Adult Fatality	Female Child Fatality	Female FF Fatality	Civilian / Not Specified
301 Detached Dwelling	99 Undetermined	69 Under Investigation	2						
340 Attached Dwel/Apt below grd	71 Smokers Articles(cigars,pipes	31 Improperly Discarded	1						
301 Detached Dwelling	99 Undetermined	68 Undetermined				1			
335 Detached Dwel/Apt above grd	N/A	68 Undetermined							1
311 Rooming/Boarding/Lodging	99 Undetermined	68 Undetermined	1						
301 Detached Dwelling	49 Other Appliances	52 Electrical Failure				1			
301 Detached Dwelling	71 Smokers Articles(cigars,pipes	31 Improperly Discarded							1
942 Industrial	99 Undetermined	68 Undetermined	1						
323 Multi-Unit Dwelling 13 plus	11 Stove Range-top Burner	42 Improper Handling				1			
301 Detached Dwelling	98 Other	69 Under Investigation	1						
Subtotals:			6	0	0	3	0	0	2

TOTAL Fatalities from Fire 2022-2023: 11

Adult = 18+ Years FF = Firefighter

153 Church, Other Place of Worship	88 Mult Ignition Source (? Arson)	01 Arson			1				
901 Automobile	99 Undetermined	68 Undetermined	1						
365 Detached Garage	99 Undetermined	68 Undetermined			1				
365 Detached Garage	82 Vehicle - Mechanical	51 Mechanical Failure		1					
323 Multi-Unit Dwelling 13 plus	11 Stove Range-top Burner	42 Improper Handling	1						
502 Supermarket, Grocery Store	N/A	N/A			1				
502 Supermarket, Grocery Store	73 Blow Torch/Bunsen Burner	N/A							1
126 Non Residential Club	99 Undetermined	68 Undetermined				1			
301 Detached Dwelling	79 Other Open Flame Tools/Smoker	01 Arson			1				
301 Detached Dwelling	11 Stove Range-top Burner	32 Unattended	1						
301 Detached Dwelling	99 Undetermined	68 Undetermined	1						
365 Detached Garage	98 Other	49 Other	1						
862 Forest, Standing Timber	76 Lighters (open flame)	33 Used/Placed Too Close/Combust			1				
301 Detached Dwelling	30 Other Electrical Distribn lte	52 Electrical Failure	1						
301 Detached Dwelling	30 Other Electrical Distribn lte	52 Electrical Failure	1						
301 Detached Dwelling	30 Other Electrical Distribn lte	52 Electrical Failure	1						
301 Detached Dwelling	30 Other Electrical Distribn lte	52 Electrical Failure				1			
837 Vehicles or Vehicle Parts	99 Undetermined	68 Undetermined	1						
301 Detached Dwelling	99 Undetermined	68 Undetermined			1				
301 Detached Dwelling	99 Undetermined	68 Undetermined				1			
299 Other Institutional	99 Undetermined	67 Other				1			
865 Barn, Fowl/Animal Shelter	99 Undetermined	68 Undetermined	1						
		Subtotals:	18	1	11	7	0	0	4

Total Injuries from Fire 2022-2023: 41

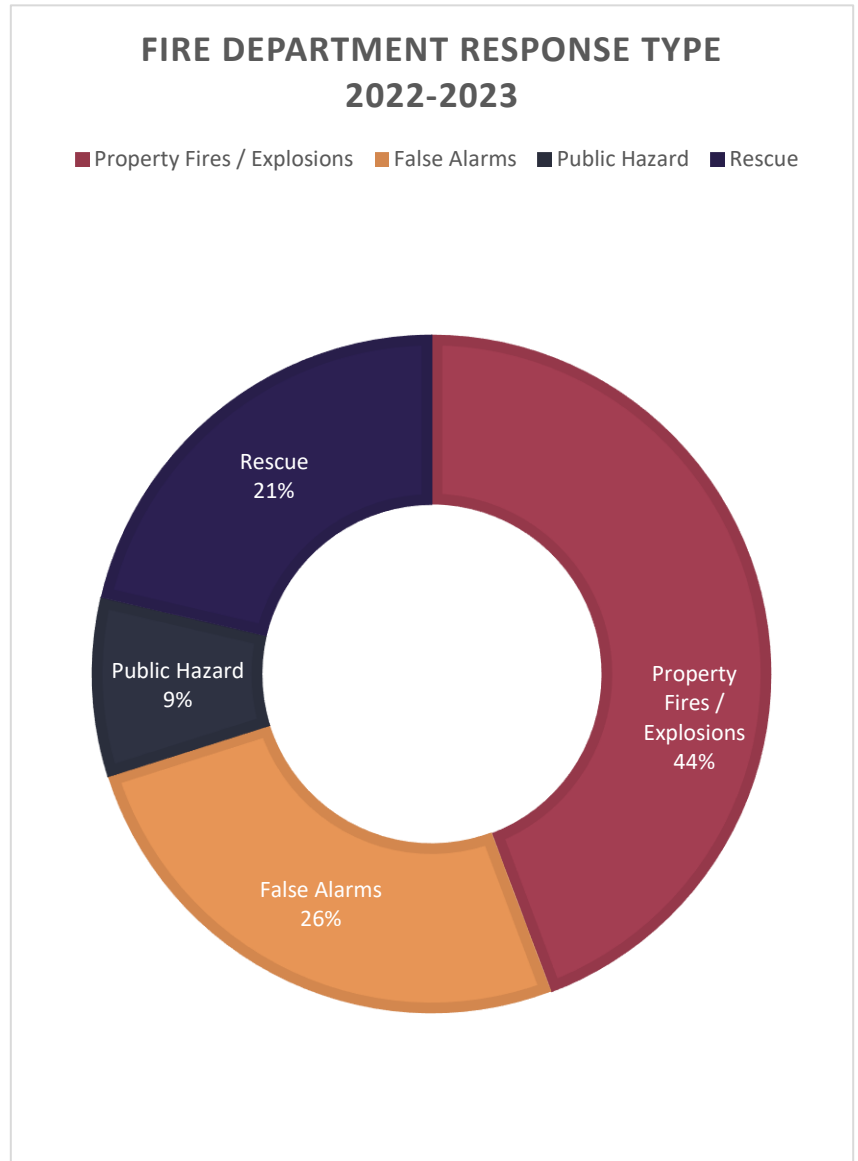
Adult = 18+ Years FF = Firefighter

Appendix A-3

Fire Department Response Type 2022—2023

Response Type 2022-2023

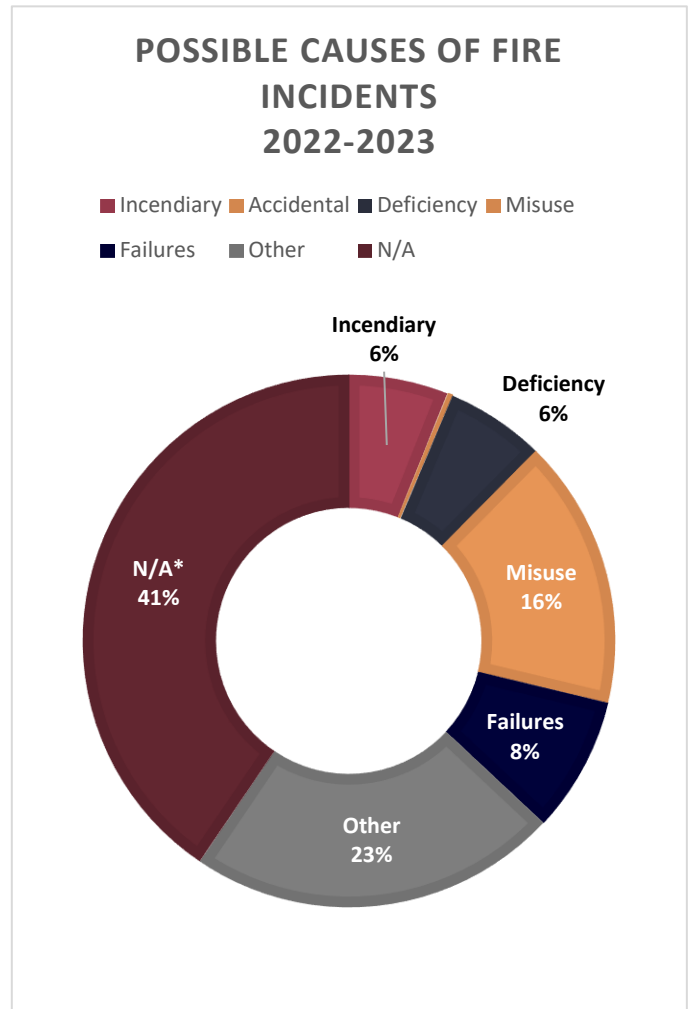
Property Fires / Explosions	
Fire	2678
Combustion Explosion	0
False Alarms	
Alarm Malfunction	607
Alarm Accidental	674
Malicious	19
Human-Perceived Emergency	124
Human - Accidental	27
Other False Fire Calls	112
Public Hazard	
Gas Leak- Natural Gas	1
Gas Leak - Propane	22
Gas Leak - Refrigeration	3
Gas Leak- Miscellaneous	12
Spill - Gasoline or Fuel	21
Spill - Toxic Chemical	6
Spill - Miscellaneous	4
Radio Active Material Problem	0
Ruptured Water, Steam Pipe	19
Down Powerlines	374
Other Public Hazards	55
Rescue	
Vehicle Extraction	81
Vehicle Accident	1192
Commercial/Industrial Accident	2
Home Accident	5
Person in Elevator	11
Total	6049



Appendix A-4

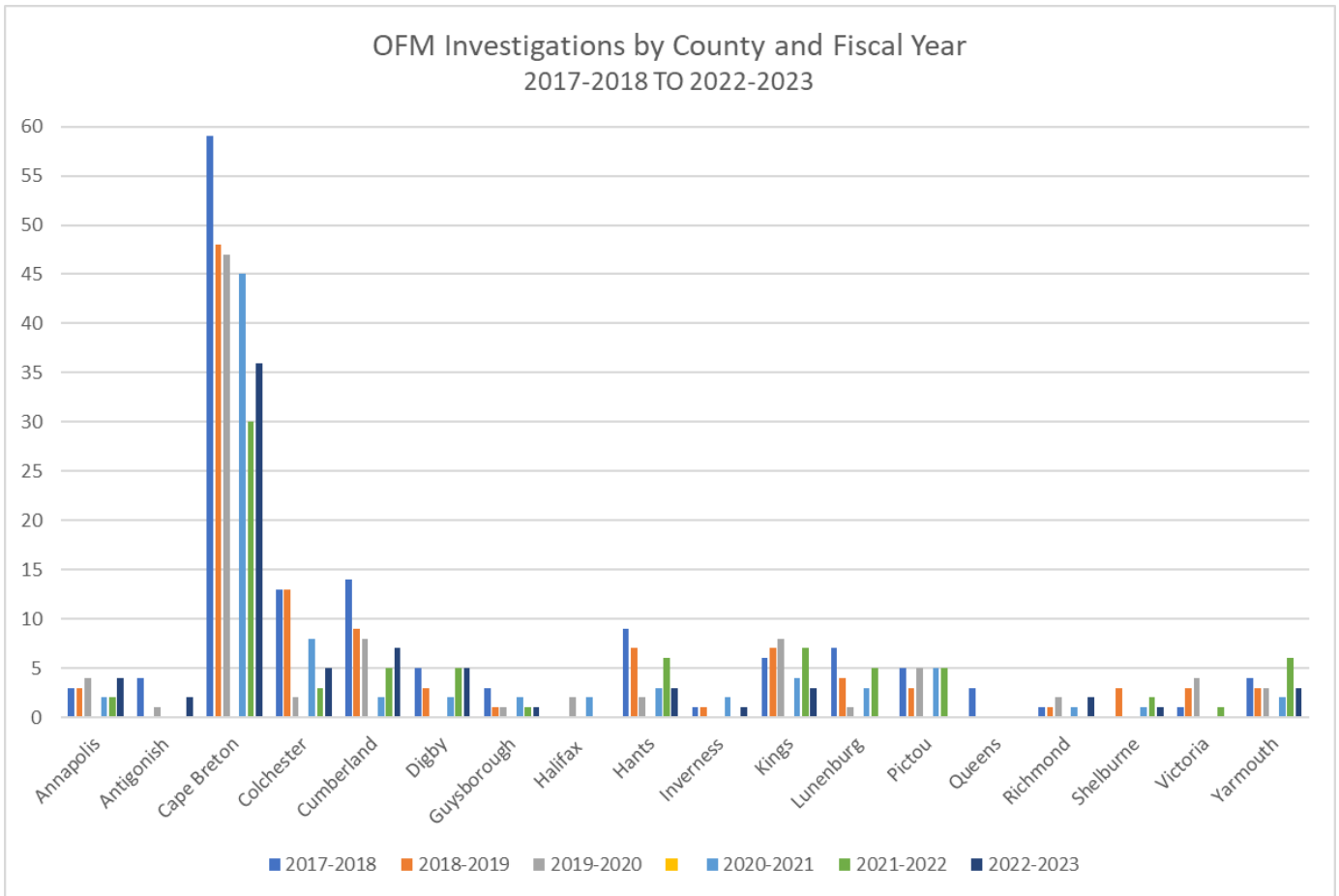
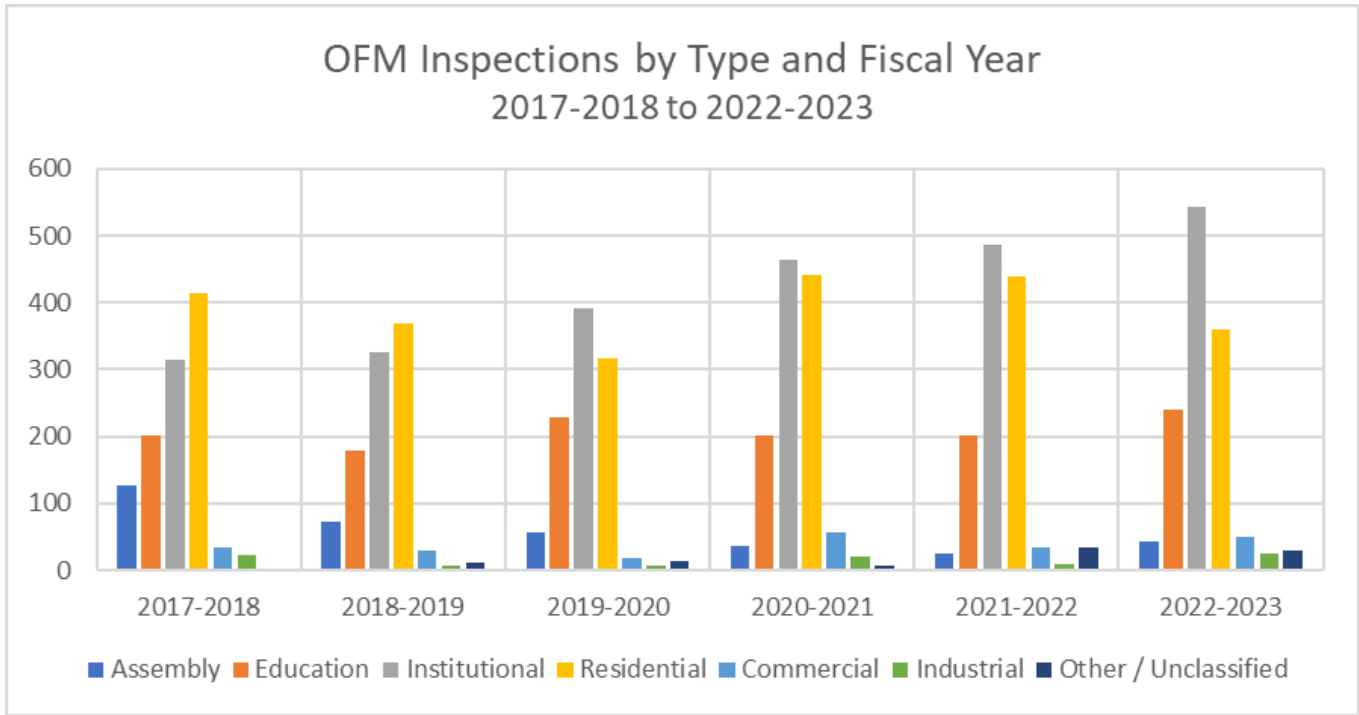
Possible Causes of Fire Incidents 2022—2023

Possible Fire Causes	
Incendiary	
Arson	105
Vandalism	19
Youth Vandalism	10
Suspicious	27
Accidental	
Children Playing	3
Vehicle Accident	6
Deficiency	
Design Deficiency	12
Construction Deficiency	9
Installation Deficiency	13
Maintenance Deficiency	95
Other Deficiency	33
Misuse	
Improperly Discarded	80
Unattended	142
Used to Close to Combustible	42
Used for Purpose not Intended	13
Creosote Buildup	90
Other Misuse	31
Improper Storage	14
Improper Handling	26
Failures	
Mechanical	57
Electrical	133
Short Circuit	30
Other	
Other	202
Undetermined	367
Under Investigation	34
*No Data Provided	1085
TOTAL	2678



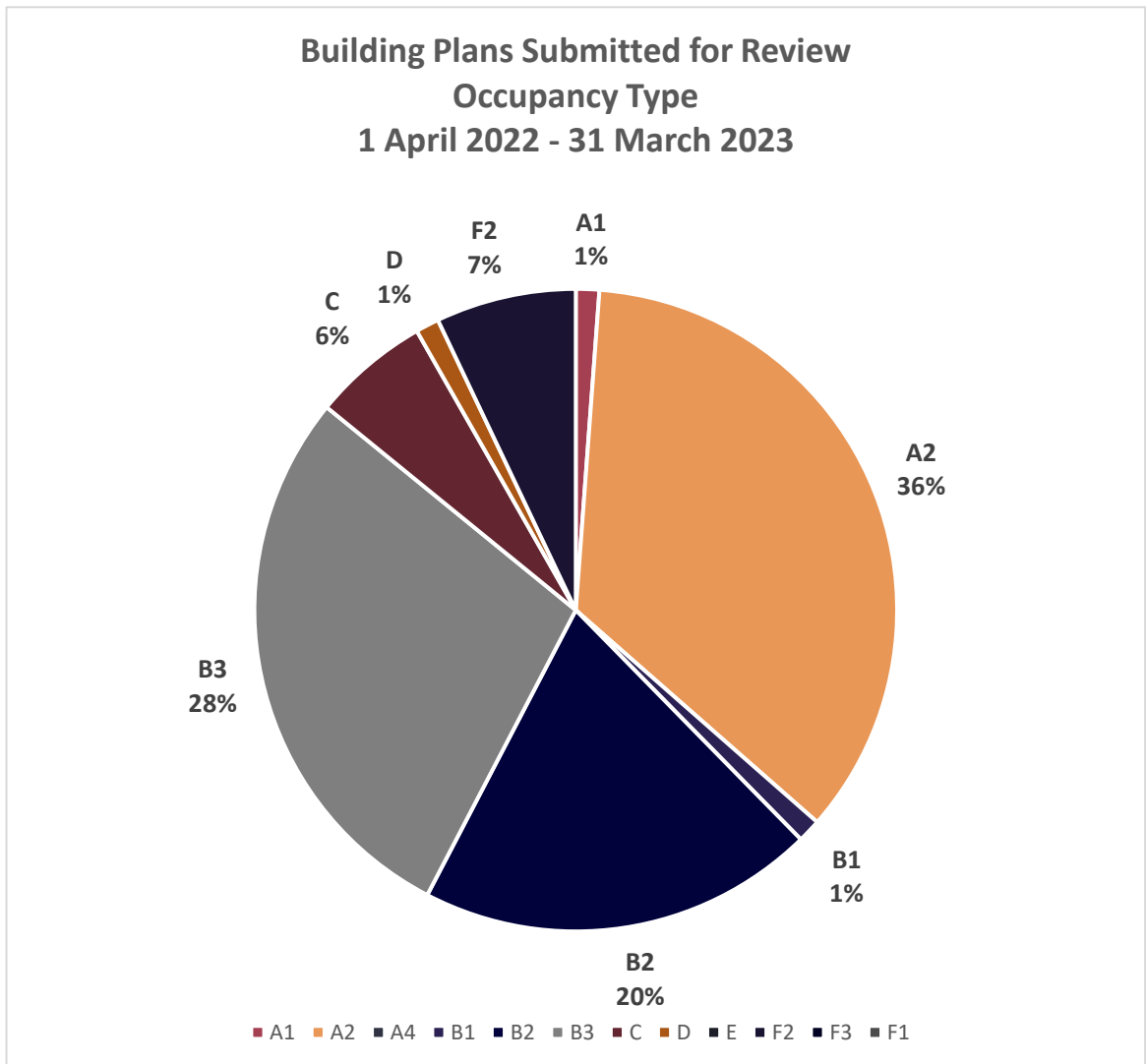
*Category not selected by fire department when reporting.

Appendix A-5



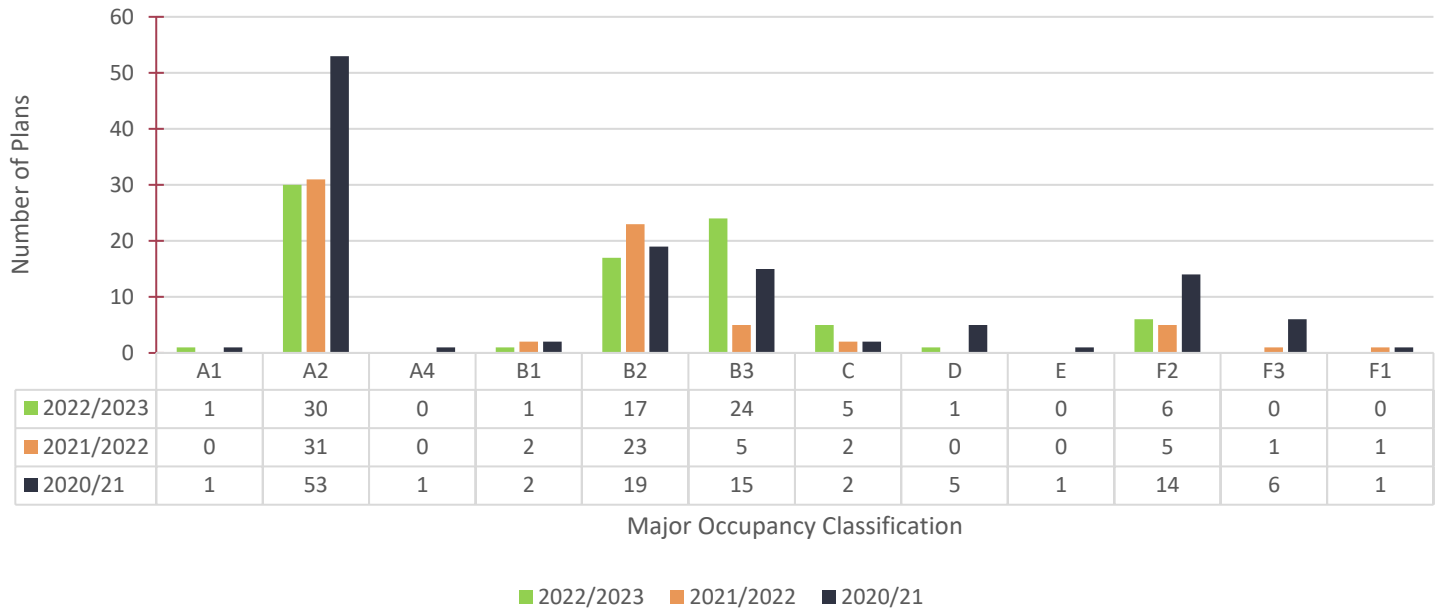
Note: Covid Pandemic began in NS on 15 March 2020; HRM perform own investigations with assistance as required.

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



- 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.)
- A3 – Assembly occupancies of the arena type (Indoor swimming pools, rinks, etc.)
- A4 – Assembly occupancies in which occupants are gathered in the open air (amusement park structures, bleachers, grandstands, 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.)

Building Plans Received by OFM for Review
1 April to 31 March
3-Year Comparison
by Major Occupancy Classification



- 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.)
- A3 – Assembly occupancies of the arena type (Indoor swimming pools, rinks, etc.)
- A4 – Assembly occupancies in which occupants are gathered in the open air (amusement park structures, bleachers, grandstands, 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.)

