



Hamilton

# HAMILTON FIRE DEPARTMENT COMMUNITY RISK ASSESSMENT

November 7, 2024

# Community Risk Assessment



## Table of Contents

### Section 1

Introduction and Purpose of Report - PG 3  
Message from the Fire Chief - PG 5  
Services provided by the Hamilton Fire Department - PG 6

### Section 2

How Risk is Measured & Determined - PG 6

### Section 3

Geographic Profile - PG 9  
Building Stock Profile - PG 12  
Economic Profile - PG 18  
Demographic Profile - PG 23

### Section 4

Past Loss Profile: - PG 27  
• Fires by Building Type, Causes, Deaths and Injuries, and Dollar Loss for 2019 – 2022 - PG 28  
• Combining Past Fire Loss with Geographic Areas of the City - PG 32  
• Non-Fire Calls by Response Type for 2019 – 2022 - PG 33  
• How Hamilton compares nationally - PG 34  
• Hazard Profile - PG 35

### Section 5

Critical Infrastructure Profile - PG 36  
Public Safety Response Profile - PG 37  
Community Services Profile - PG 37

### Section 6

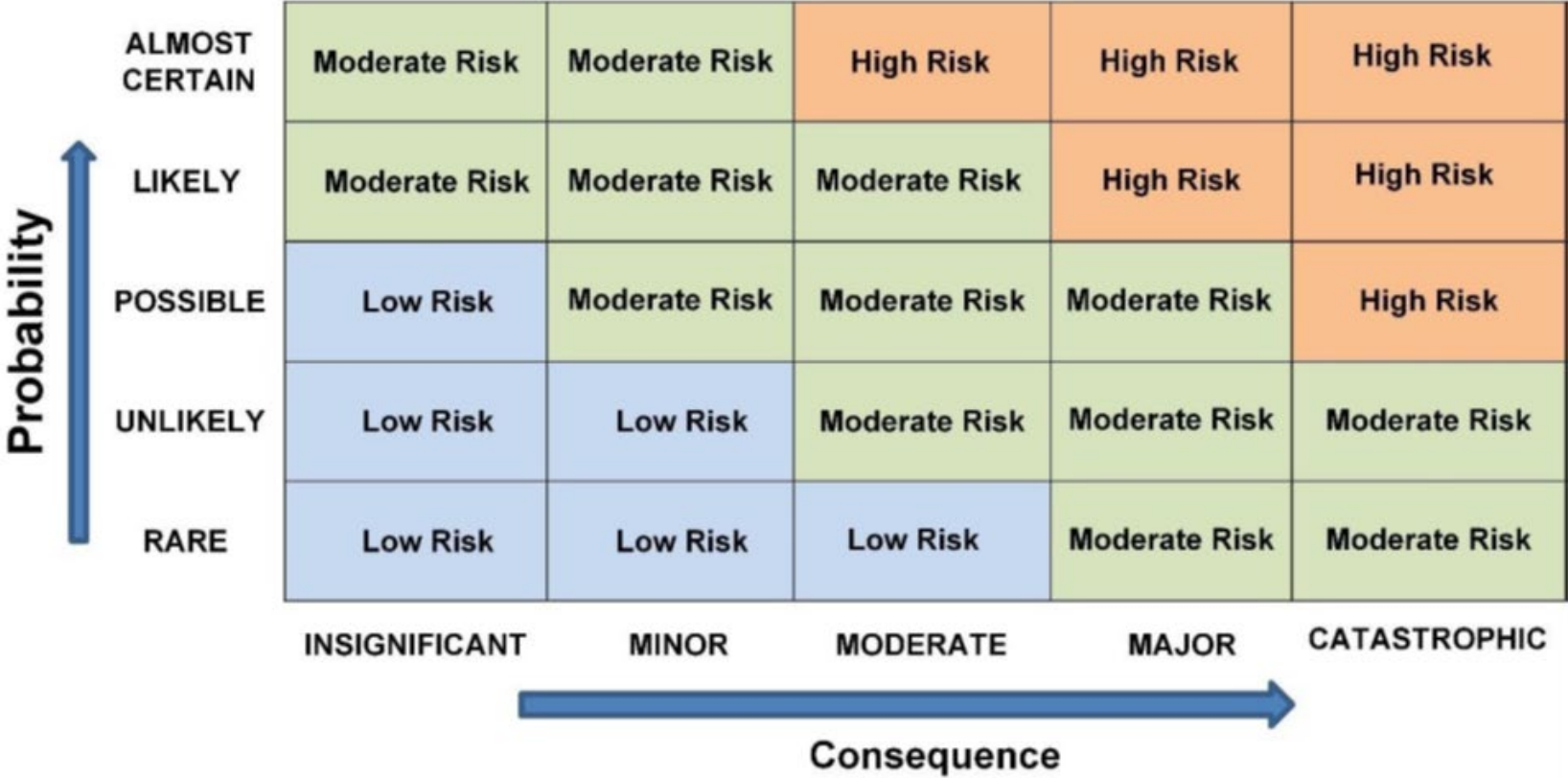
Moderate and High Risks in Hamilton - PG 38

### Section 7

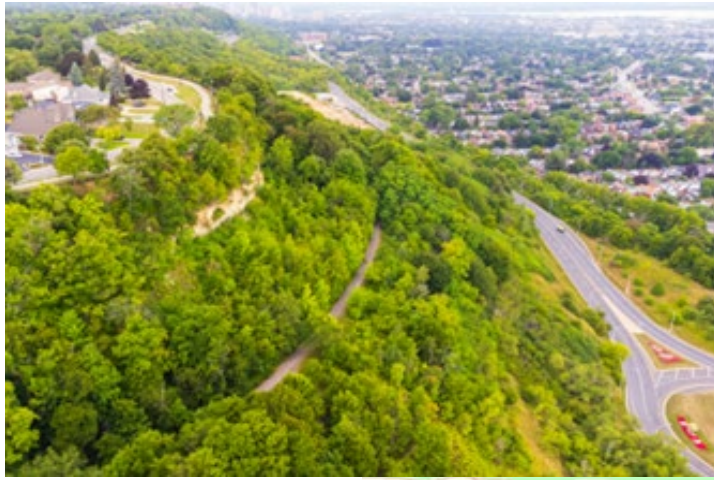
Appendices - PG 41

# Determining Risk

Risk Level Matrix

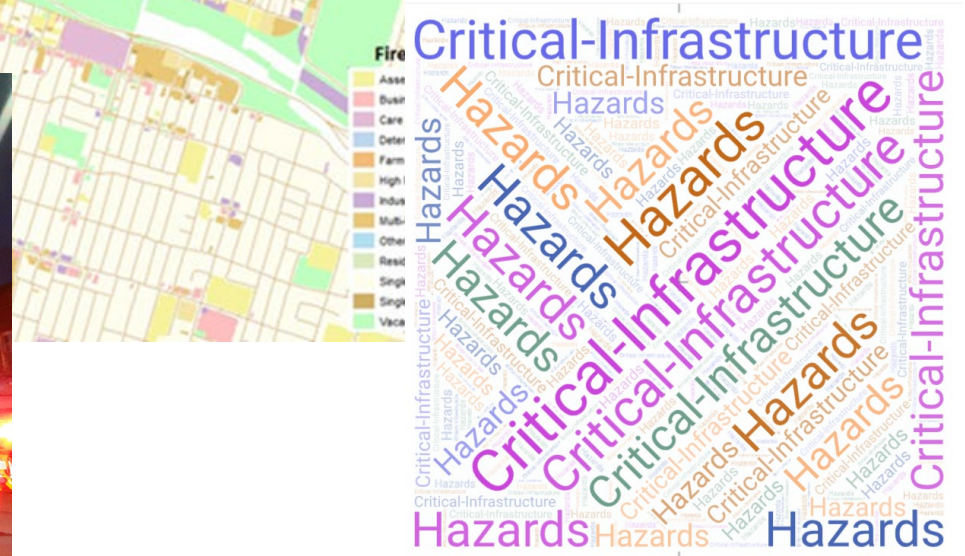
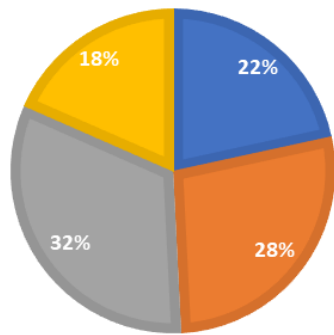


# HAMILTON: One of the most Diverse and Complex Risk profiles in the Country



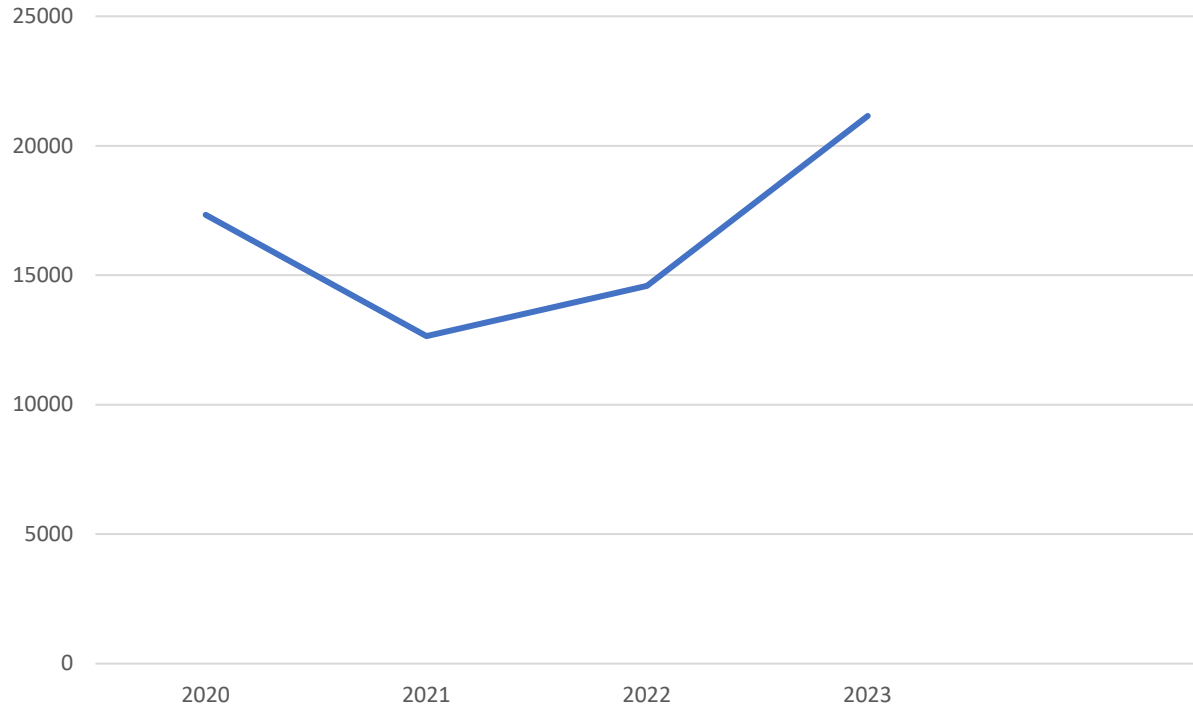
**Hamilton's Population by Age**  
(reference: Statistics Canada 2021)

■ 0 - 19 ■ 20 - 39 ■ 40 - 64 ■ 65+

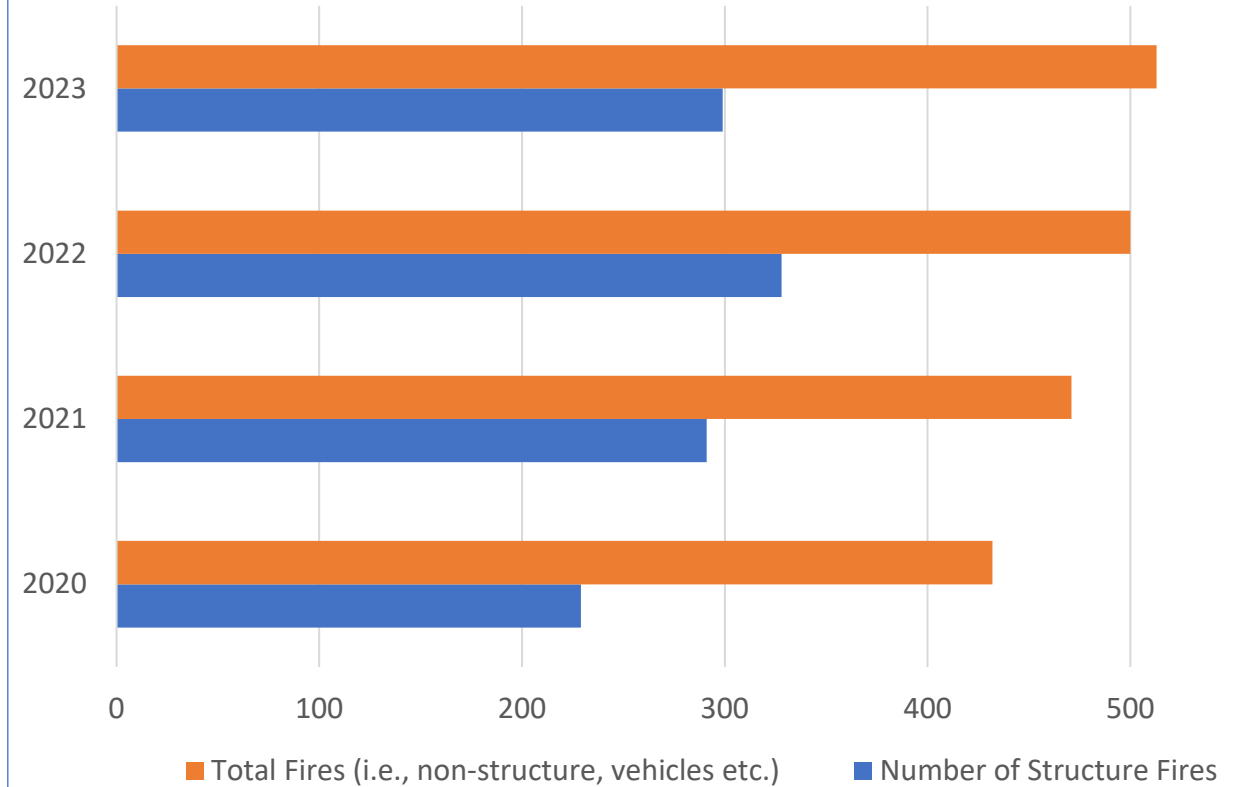


# Annual Trends

### Annual Calls/Incidents from 2020 -2023

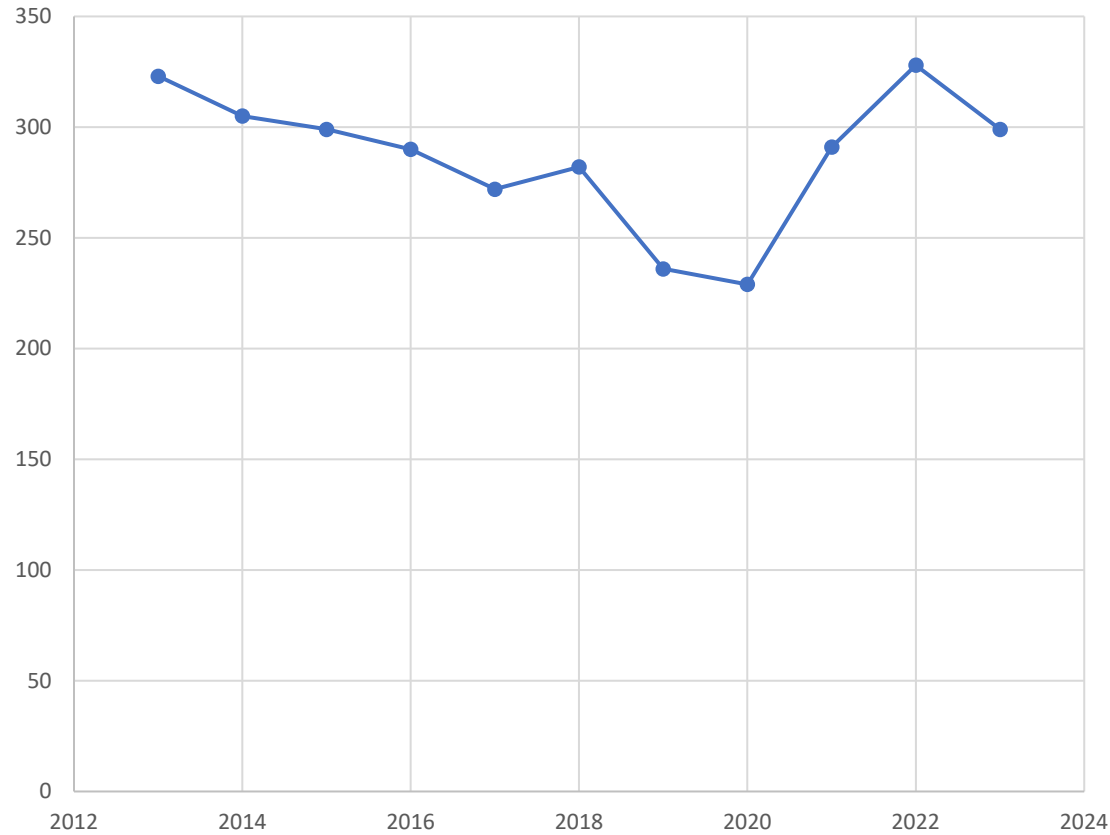


### Total Fires & Structure Fires in Hamilton from 2020 - 2023

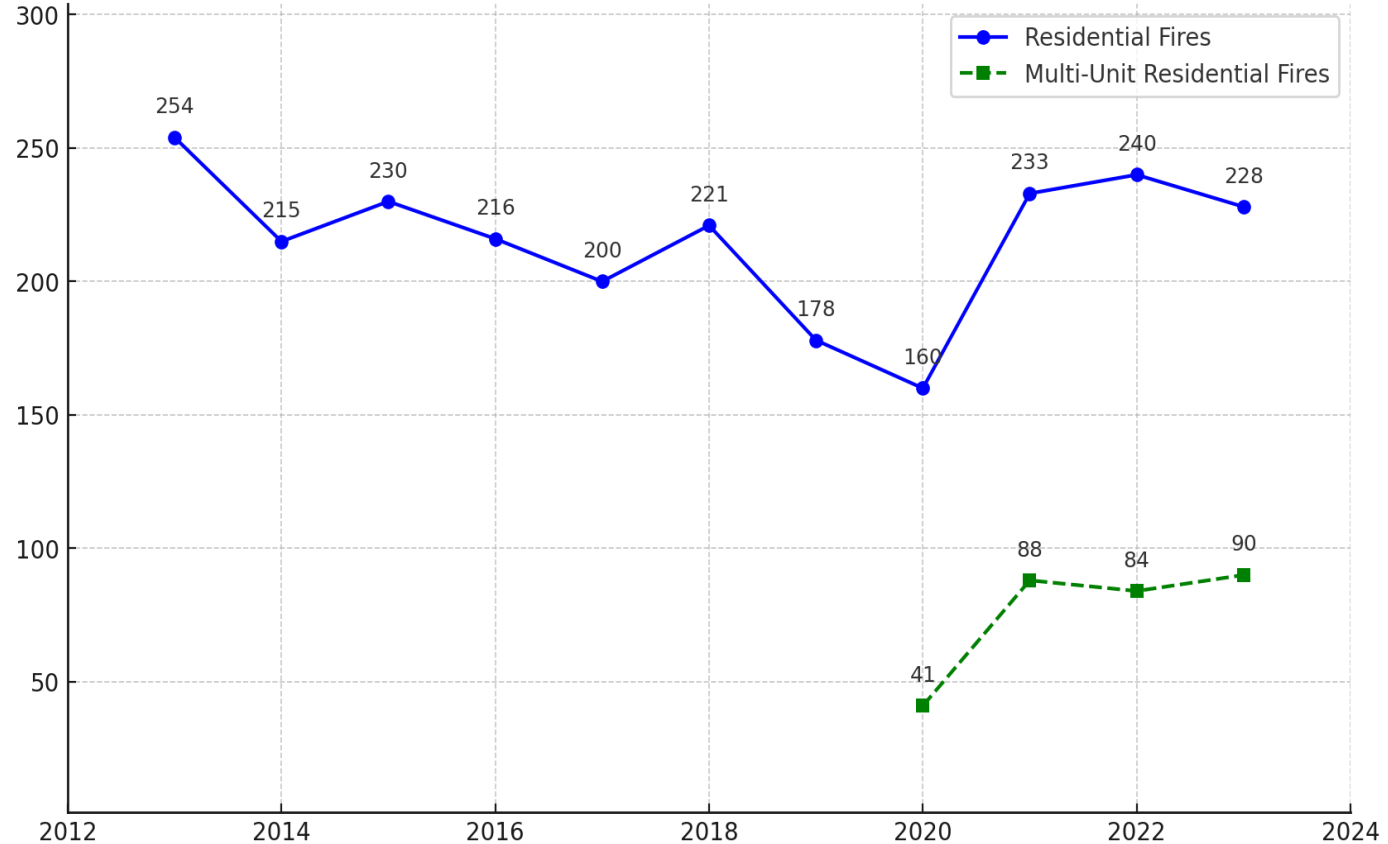


# Historical Fire Trends: 2013 - 2023

### Total Number of Structure Fires from 2013 - 2023

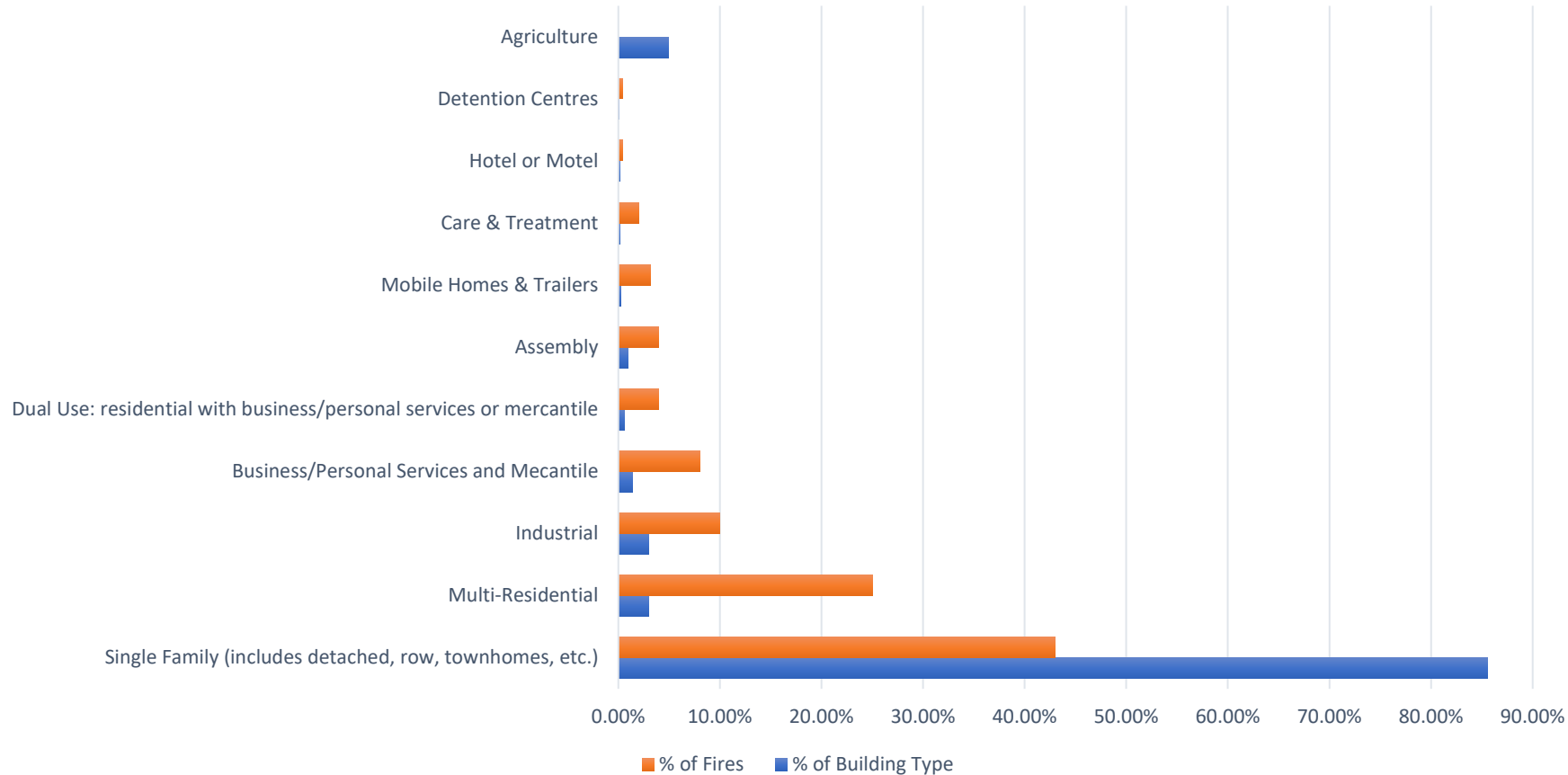


### Number of Residential and Multi-Unit Residential Fires from 2013 to 2023



# Hamilton's Building Stock & Fires by Building Type

Hamilton's Building Stock by Type and  
Percentage of Fires by Building Type (Structure fire data: 2020-2022)



# Fire Causes: Ten Year Trends

## 2013-2018 Causes

	Fire Cause	% of Cause
Intentional	Arson	11.70%
Top Three (3) Causes	Careless Smoking	12.10%
	Electrical	11.80%
	Unattended Cooking	11.60%
Other Unintentional	Other Causes	32.90%
Undetermined	Undetermined	19.60%

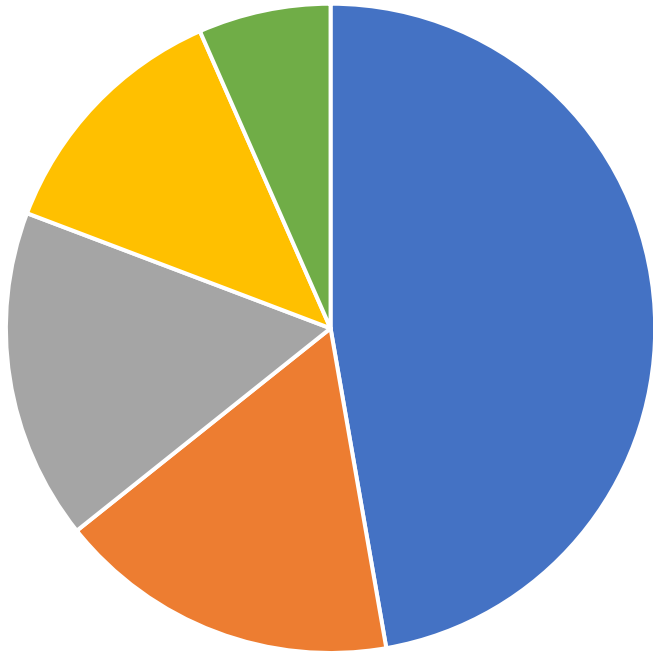
## 2020-2022 Causes

	Fire Cause	% of Cause
Intentional	Arson	15.40%
Top Three (3) Causes	Electrical	17.10%
	Careless Smoking	10%
	Unattended Cooking	7%
Other Unintentional	Other Causes	29.50%
Undetermined	Undetermined	21%

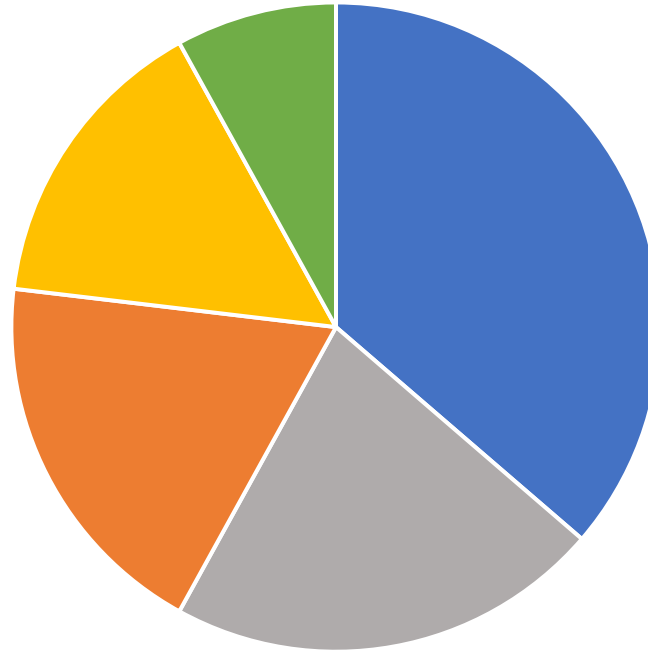


# Fire Causes: Behavioural Trends 2020 - 2022

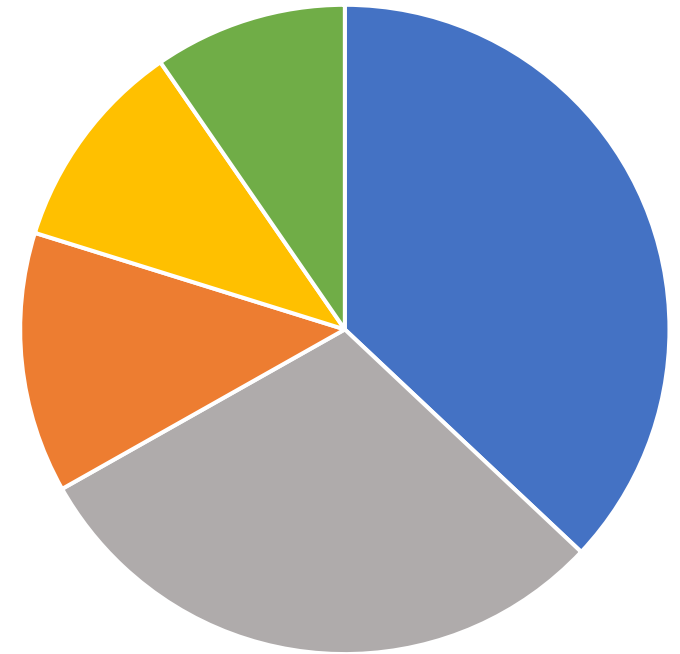
Behavioural Fire Causes in 2020



Behavioural Fire Causes in 2021



Behavioural Fire Causes in 2022

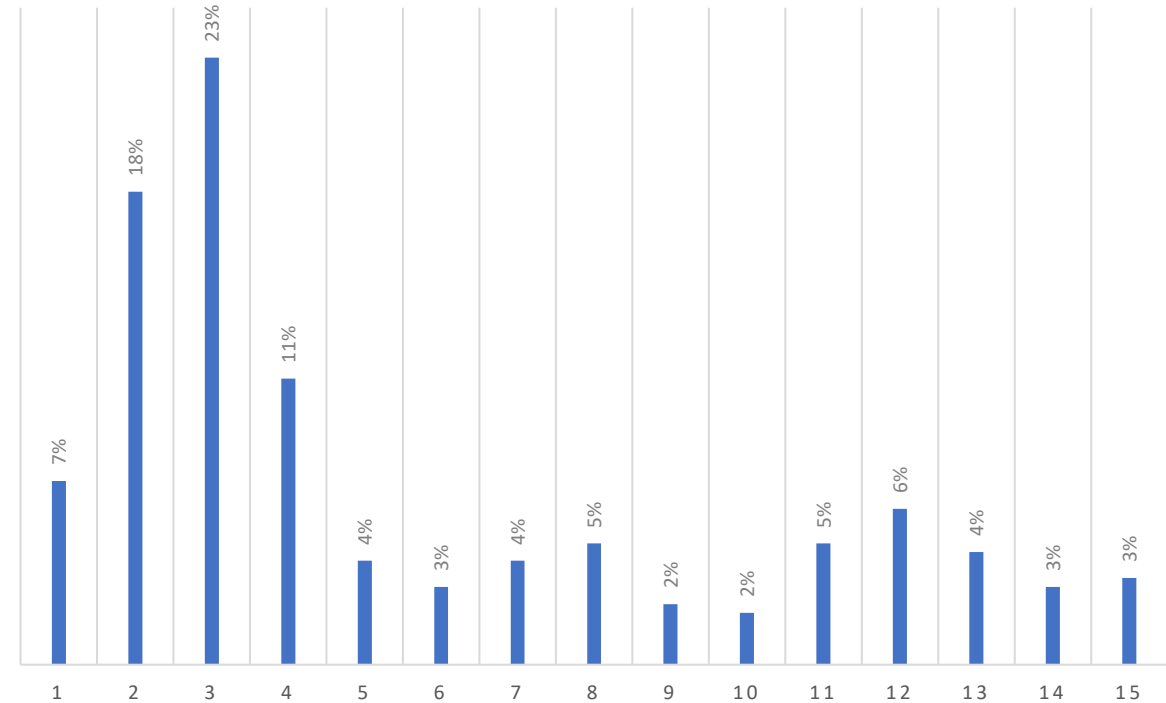


■ Electrical/Mechanical ■ Unattended Cooking ■ Careless Smoking ■ Misuse of Ignition Source ■ Misuse of Materials Ignited

# How Hamilton Compares Nationally & Ward Trends

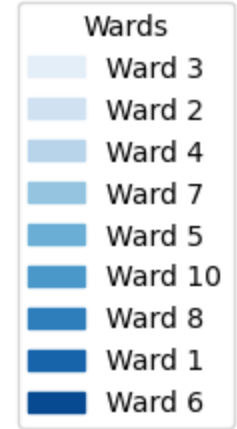
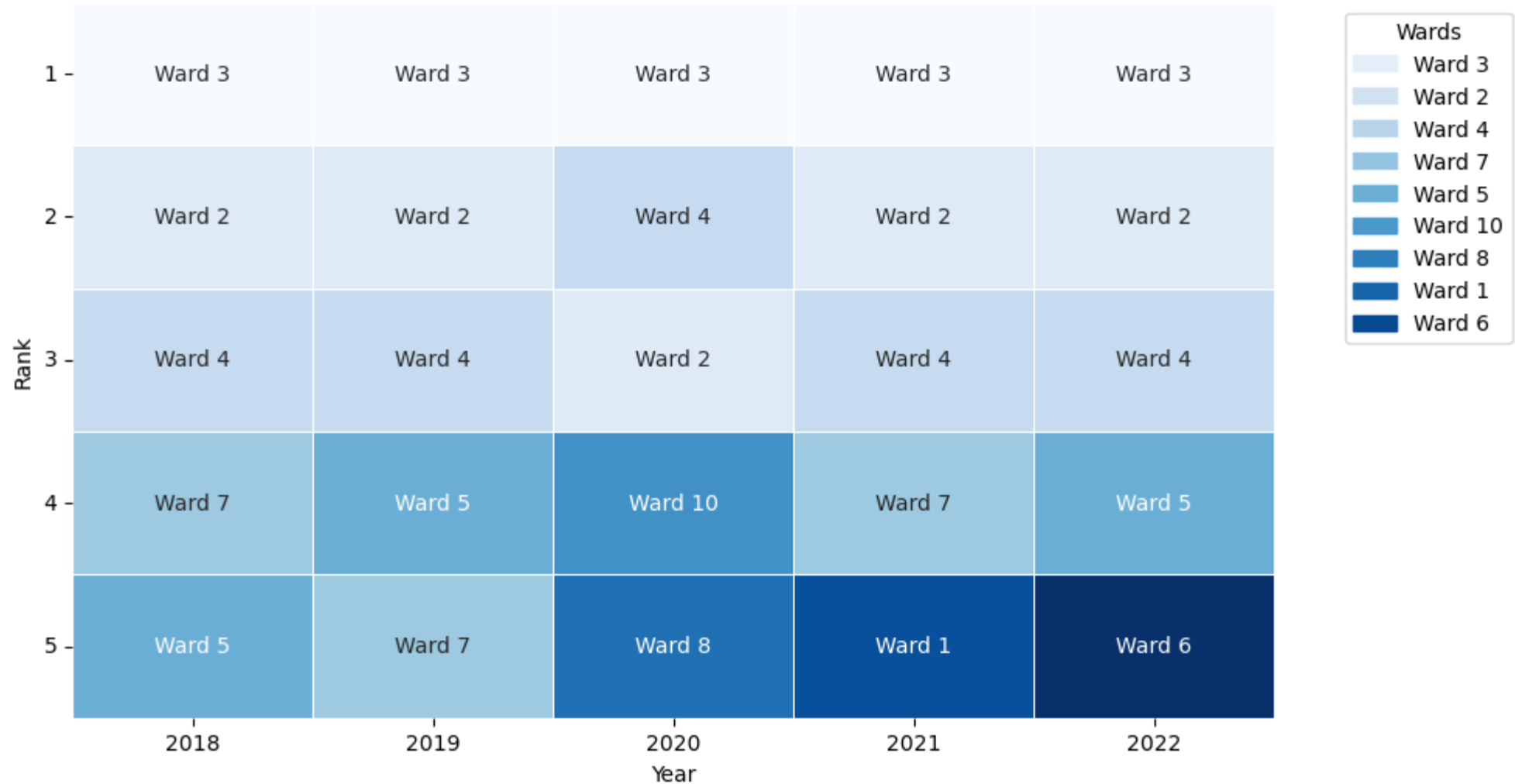


Percentage of Fires by Ward  
(2020-2022 data)

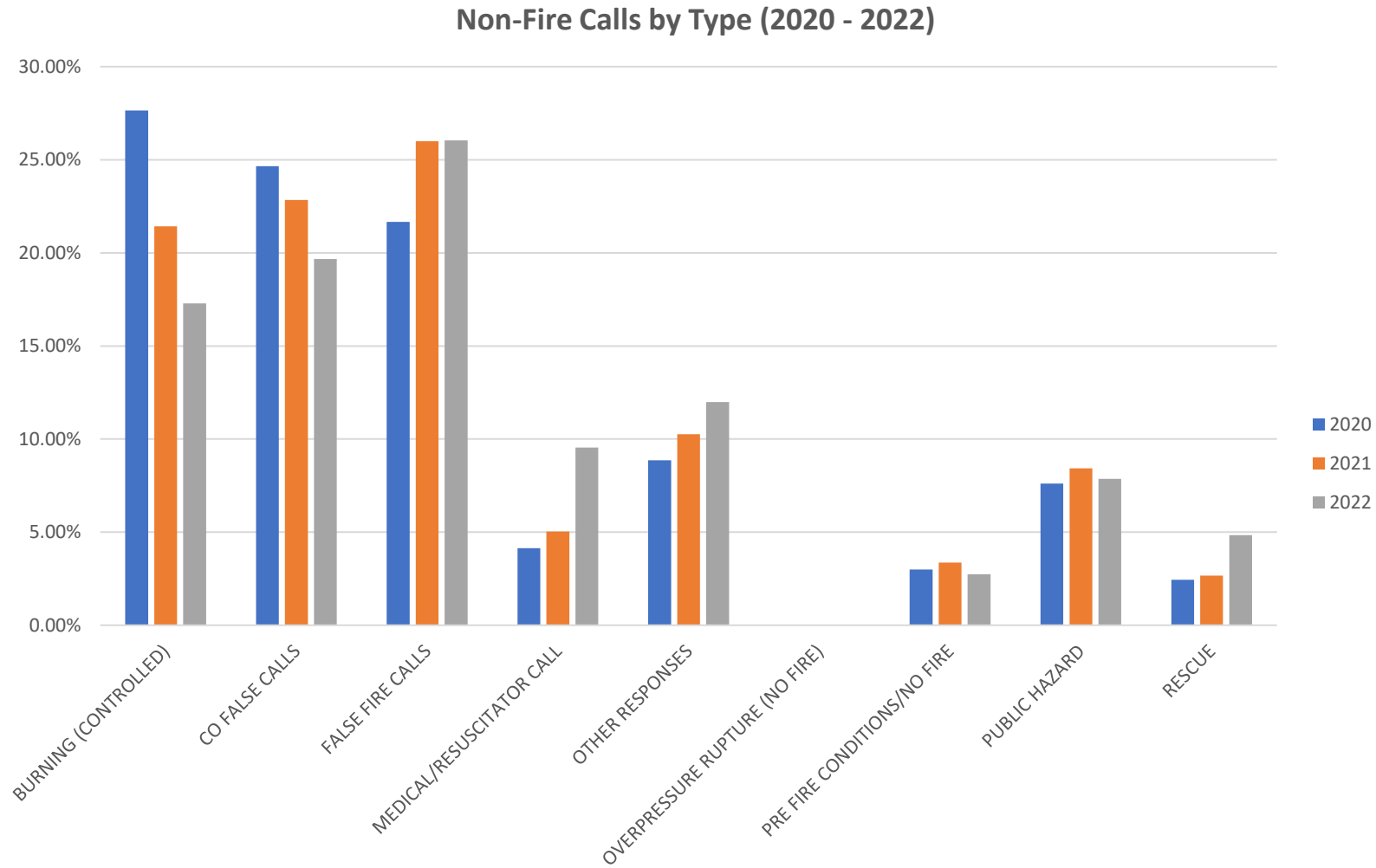


# Ward Trends: Top Five Wards over last five years

Top 5 Ward Rankings for Structure Fires (2018-2022)



# Non-Fire Incidents by Type



# Changes to Hamilton's Profile

## Risk Levels as Assessed in 2023

(current Community Risk Assessment)

Building Type	Assigned Risk Level
<i>Residential: Single-detached house</i>	<b>High Risk</b>
<i>Residential: Multi-Unit Residential: buildings with two or more units with two (2) – six (6) floors</i>	<b>High Risk</b>
<i>Residential: High-Rise Residential: buildings with seven (7) or more floors</i>	<b>High Risk</b>
<i>Residential: Semi-detached/Row/Townhouse/Duplex</i>	<b>High Risk</b>
<i>Residential: Mobile Home and/or Trailers</i>	Moderate Risk to Low Risk
<i>Business/Personal Service or Mercantile</i>	Moderate to High Risk
<i>Industrial</i>	Moderate to High Risk
<i>Assembly</i>	Moderate Risk
<i>Institutional</i>	Moderate Risk
<i>Dual Use (residential with business/personal service or mercantile)</i>	Moderate Risk
<i>Agricultural</i>	Low Risk

## Risk Levels as Assessed in 2018

(previous Community Risk Assessment)

Building Type	Assigned Risk Level
<i>Residential</i>	Moderate Risk
<i>Business/Personal Service or Mercantile</i>	Low Risk
<i>Industrial</i>	Moderate Risk
<i>Assembly</i>	Moderate Risk
<i>Institutional</i>	<b>High Risk</b>
<i>Farms</i>	Low Risk

# Trends & Concerns



**Increase in persons unhoused and less availability of housing stock**



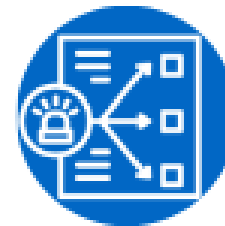
**Residential fires, deaths and injuries**



**Non-working smoke alarms**



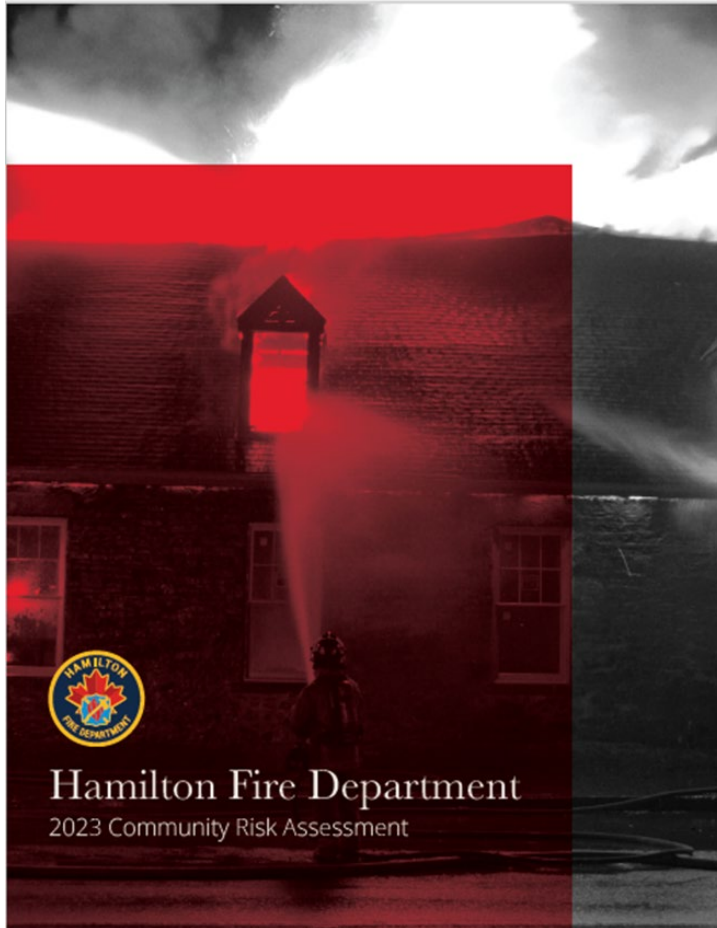
**Increase in calls and incidents year over year**



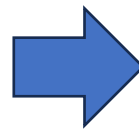
**Increased risk of wildland fires**



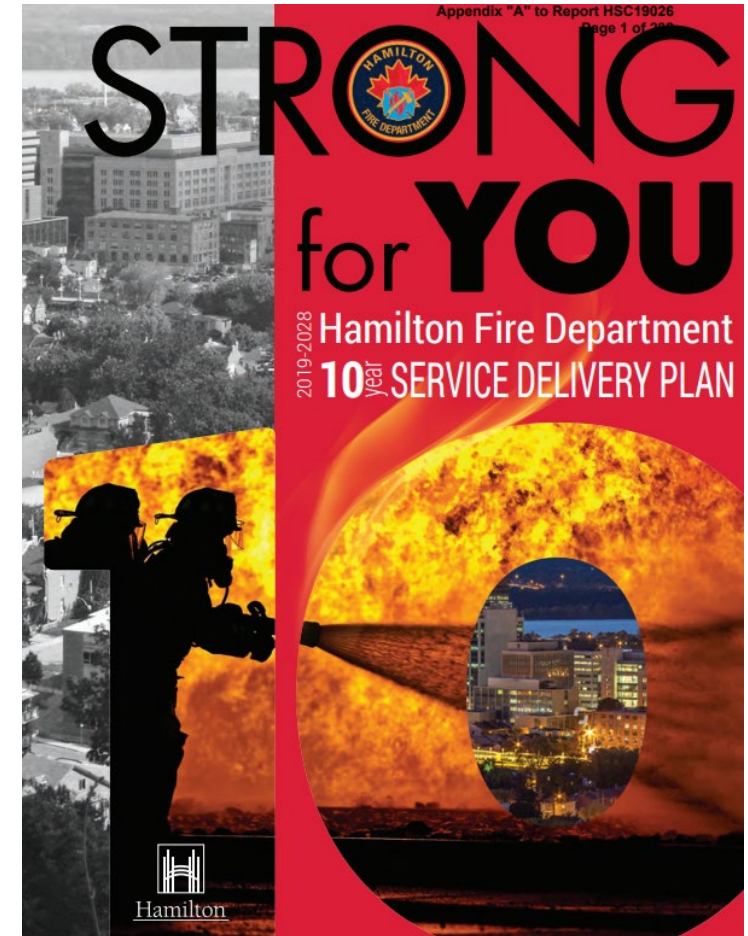
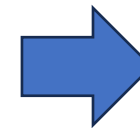
# Next Steps



**Informs**  
**Supports**  
**Impacts**



**Future:**  
✓ **Programs**  
✓ **Business Cases**  
✓ **Plans**





Hamilton

THANK YOU