



To: Safety and Facilities Services Committee

From: Adam Grant, Commissioner,

Safety and Facilities Services Department

Report Number: SF-25-01

Date of Report: January 15, 2025

Date of Meeting: January 20, 2025

Subject: Community Risk Reduction Plan

Ward: All Wards

File: 03-05

1.0 Purpose

The purpose of this Report is to provide Council with the Community Risk Reduction Plan (CRRP) for 2025.

This plan builds upon the findings of the Community Risk Assessment (CRA) presented in Report SF-24-50 and aligns with the Five E's framework to guide risk reduction strategies in the City of Oshawa:

- Education
- Enforcement
- Engineering
- Economic Incentives
- Emergency Response

Attachment 1 is the Community Risk Reduction Plan.

2.0 Recommendation

That the Safety and Facilities Services Committee recommend to City Council:

That based on Report SF-25-01 dated January 15, 2025, the Community Risk Reduction Plan be endorsed as set out in Attachment 1 to said Report.

3.0 Input From Other Sources

- Tayport Limited
- National Fire Protection Association (NFPA)
- Ontario Regulation 378/18

Report to Safety and Facilities Services Committee Meeting Date: January 20, 2025

4.0 Analysis

4.1 Background

The Community Risk Assessment (CRA) has been an essential tool for identifying and categorizing risks within the City of Oshawa since its inception in 2020. The CRA updates in 2022 and 2024, as summarized in Report SF-24-50, have provided critical insights into geographic, structural, and demographic risks. These assessments have formed the basis for the development of the Community Risk Reduction Plan (CRRP).

Item: SF-25-01

Page 2

The CRRP for 2025 is designed to address these identified risks comprehensively and ensure compliance with <u>O.Reg. 378/18</u>, which mandates the incorporation of risk reduction strategies into fire protection services planning.

The CRRP for 2025 categorizes risk reduction strategies under the Five E's framework:

Education

- Expanded public education campaigns targeting fire safety in high-risk residential areas, particularly homes with older housing stock and limited smoke alarm coverage.
- Focused outreach to seniors and vulnerable populations, leveraging partnerships with community organizations to deliver tailored programs.

Enforcement

- Enhanced inspection and enforcement efforts for compliance with fire safety regulations in older housing stock and high-rise buildings.
- Proactive enforcement initiatives for vulnerable occupancies, including long-term care facilities and group homes, ensuring alignment with Ontario Fire Code standards.

Engineering

- Implementation of modern fire safety infrastructure upgrades in large commercial and industrial properties to mitigate risks.
- Adoption of engineering solutions to address traffic congestion impacts on emergency response times and enhance high-rise building safety measures.

Economic Incentives

- Development of incentive programs, such as grants or rebates, to encourage fire safety improvements in older residential properties and vulnerable occupancies.
- Exploration of funding opportunities to support the Alarmed for Life program and similar initiatives.

Emergency Response

 Refinement of emergency response protocols for high-risk geographic areas such as downtown Oshawa and the Oshawa Executive Airport.

Item: SF-25-01

Page 3

Enhancement of vertical response capabilities in high-rise buildings.

The CRRP directly responds to the risks identified in the CRA, such as:

- **Smoke Alarms**: Focused efforts to increase the presence of working smoke alarms in older residential properties.
- **Changing Demographics**: Targeted education and safety initiatives addressing the growing senior population and their unique vulnerabilities.
- **Downtown Core Incidents**: Reduction of medical, fire, and false fire calls through tailored education and enforcement campaigns.
- **Vulnerable Occupancies**: Enhanced inspection cycles and educational outreach to protect residents in care or detention facilities.
- Large Buildings: Mitigation of fire risks in commercial and industrial properties exceeding 50,000 square feet.
- **High-Rise Buildings**: Annual inspection programs and enhanced pre-incident planning to minimize risks to occupants, particularly vulnerable groups.

By incorporating these findings into actionable strategies, the CRRP aims to enhance community safety and resilience while ensuring compliance with NFPA 1300 standards.

The Community Risk Reduction Plan will be available and published on the City of Oshawa's website.

5.0 Financial Implications

There are no financial implications directly related to this report.

Report to Safety and Facilities Services Committee Meeting Date: January 20, 2025

6.0 Relationship to the Oshawa Strategic Plan

This report responds to the Oshawa Strategic Plan Priority Area "Care: Safe and Sustainable Environment" with the goal to enhance emergency preparedness and response, including preparing for potential climate emergencies and significant weather events.

Item: SF-25-01

Page 4

Stephen Barkwell, Fire Chief,

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Fire Services

Adam Grant, Commissioner,

Safety and Facilities Services Department

	SF-25-01 Attachment 1
OSHAWA FIRE SERVICES - COMMUNITY RISK REDUCTION PLAN (CRRP) 2025	
Oshawa Fire Services	

Oshawa Fire Services COMMUNITY RISK REDUCTION PLAN (CRRP)

2025 OSHAWA

Report Background

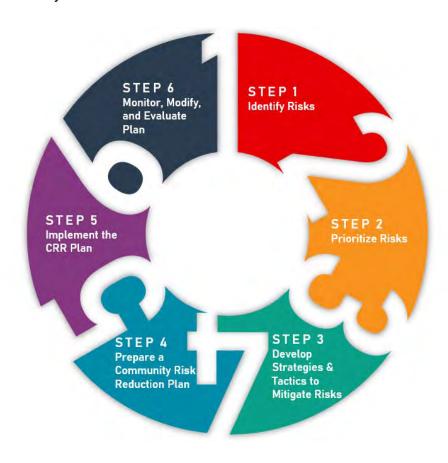
In 2020, Oshawa Fire Services (OFS) completed its first Community Risk Assessment (CRA) as mandated by Ontario Regulation 378/18 under the Fire Protection and Prevention Act. The CRA is a strategic process that enables fire departments to gather and analyze community data to establish organizational priorities, including Operations, Fire Prevention, and Administration.

The CRA includes a comprehensive analysis of nine key profiles: Geographic Profile, Building Stock Profile, Critical Infrastructure Profile, Demographic Profile, Public Safety and Response Profile, Community Services Profile, Hazard Profile, Economic Profile, and Past Loss and Event History Profile. These profiles are developed using a variety of information sources, including data from the City of Oshawa, five years of emergency call data from Oshawa Fire Services, Statistics Canada (covering age, gender, socioeconomic circumstances, and income), the Office of the Fire Marshal (OFM), and desktop research.

The Community Risk Assessment has been updated twice since its initial creation, first in 2022 and again in 2024.

After a CRA is completed, the next phase in the formal process of Community Risk Reduction Planning is to develop strategies and tactics to mitigate risks and prepare the Community Risk Reduction Plan (CRRP), per the National Fire Protection Association (NFPA). This type of plan helps to more effectively target a fire department's limited resources - funding, personnel, time, and partnerships - where and when they are most needed.

Six steps of the Community Risk Reduction Process:



This CRRP will prioritize OFS work across all divisions through the year.

Both mid-range and long-range outcome measures were determined for each goal in this CRRP. These benchmarks will enable OFS to evaluate the mid-range progress when the next CRA is available, as well as the long-range progress several years later.

A process for regularly reviewing and updating the plan to ensure it remains effective and relevant.

Navigating the CRRP

NFPA promotes the use of the Five "E" to reduce community risks: **education**, **engineering**, **economic incentives**, **enforcement**, and **emergency response**. In this plan, the OFS has incorporated at least two of these methods in each goal.



The "Five Es" of Community Risk Reduction

In 2020, NFPA published its first official guidance on writing a CRRP, known as NFPA 1300: Standard on Community Risk Assessment and Community Risk Reduction Plan Development. While there were no sample plans available to study from other fire services in Ontario utilizing the new standard, OFS strived to follow NFPA 1300 as closely as possible. Each goal in this plan includes the following components:

- Risk Statement What's the current risk? According to what data?
- Goal Statement What's the broad vision on addressing the problem (reducing the risk)?
- **Objectives** How will that goal generally be reached, whether through enforcement, education, engineering, emergency response, economic incentive, or a combination of these methods?
- Strategies and Activities What are the essential steps and tasks to fulfill the objectives?
- Internal Participants Which fire department personnel/officials will be needed?
- Strategic Partners Which external individuals or community groups will be needed?
- Resources Required What resources will be needed, such as funding, staff time, equipment/gear, educational materials, or written policies and processes?
- Communication and Marketing Methods How will OFS inform the effected persons or increase their participation?

- Evaluation Measures What will OFS assess to determine program productivity and results? Each goal will include three measures:
 - "Process" Outputs Measures that don't indicate impact, usually in the form of tallies such as the number of inspections completed or the number of participants
 - "Impact" Outputs Comparative measures that indicate initial impact, such as improved inspection compliance or the percentage increase in participant knowledge
 - "Outcomes" Measures that account for all of the work done in pursuit of a goal, such as zero fire deaths over a 5-year period or percentage reduction of a particular call type
- **Flowchart** This CRRP is structured to first provide a detailed explanation of each goal, followed by a 1-page flowchart as a summary snapshot of that goal.

Goals

While OFS will continue to provide valuable programs and services on other risks not specifically listed below, the following issues were prioritized within this CRRP (in no particular order):

- Smoke Alarms Reduce life safety risks through the increased presence of working smoke alarms in single family homes.
- 2. **Changing Demographics** Reduce the occurrence of fire incidents involving the growing population of seniors in the community.
- 3. **Downtown Core Incidents** Minimize the impact of medical, fire and false fire calls in the downtown core.
- 4. **Vulnerable Occupancies** Reduce the risk of fire incidents occurring in vulnerable occupancies and minimize the impact (civilian and first responder) if one occurs.
- 5. Large Buildings (exceeding 50,000 sq./ft.) Reduce the risk of fires in these types of occupancies as there are high volumes of combustibles stored in these facilities.
- 6. **High-rise Buildings** Minimize the impact to vulnerable individuals (seniors and youth) and the potential need for vertical response.

Data Collection

In order to effectively measure progress toward the outcomes laid out in this Plan, several areas of data collection are being improved within OFS Operations and Administration, including:

- 1. Smoke Alarms: Successful functionality of alarms during residential calls
- 2. **Seniors in the Community:** Comprehensive senior's public education programs utilizing community partners
- 3. Downtown Core:
 - a) On all residential calls, Identification/documentation of homes at high risk of experiencing a fire
 - b) On all other calls, identification/documentation of the primary factor(s)

- 4. Vulnerable Occupancies: Track deficiencies to identify trends, to help mitigate risk
- 5. Large Buildings (exceeding 50,000 sq./ft.): Identification/documentation of hazardous materials within industrial, large and special purpose facilities
- 6. **High-rise Buildings:** Identification/documentation of the status of fire protection systems throughout the cities High-rise property stock

Identified Risk: Smoke Alarms

(Risk Level: High)

Building Stock Profile: Group C – Residential Occupancies represent 92.28% (54,360) of the City's existing property stock. The 2021 Census data indicates that 58.58% (39,030) of the City's Residential building stock was built prior to the introduction of the 1981 Ontario Fire Code and Ontario Building Code compared to 49.23% of residential building stock in the remainder of the Province.

Structure fires within the City over the five-year period were associated with 84.8% (279) of the total fires. The risk could pose a threat to the life safety of occupants, to small local businesses, to the quality of the environment, and could result in moderate property loss.

The risks are compounded by their relative lack of working alarms compared to other building stock types. Of the fire loss incidents in residential occupancies within the City, only 54.9% of incidents had a smoke alarm present and operating. 15.2 % of incidents did not have a smoke alarm present.

Goal

Reduce life safety risks through the increased presence of working smoke alarms in single-family homes.

Develop Strategies & Tactics to Mitigate Risks

Objectives:

- Educate residents about the importance of smoke alarms
- Reduce life safety risks through home safety visits

- **Education:** make the residents aware of risks and educate them how to test and maintain smoke alarms
- Engineering: test and install smoke alarms
- Economic Incentives: offer free smoke alarms, free batteries for smoke alarms, and/or physical assistance to qualifying residents
- Enforcement: Ontario Regulation 213/07 by law, every home in Ontario must have a working smoke alarm on every story and outside all sleeping areas
- Emergency Response: collect vital pre-plan information

Community Risk Reduction Planning

Participants and Partners:

- Internal: all OFS personnel led by Fire Prevention and Public Education Division
- External: grant providers and potential community partners for Alarmed for Life program and events

Resources Needed:

- Financial resources for smoke alarms, batteries, installation tools, personnel time at events, printed materials, marketing signage, and video production for public education
- Devices (tablets), software (e.g. CAD system and GIS application), and forms for record tracking
- Public Education plans customized to target audiences

Marketing Methods:

- Assorted media and websites
- Flyers and/or brochures
- Community partnerships
- Billboards private and city owned

Activities:

- Operate an Alarmed for Life program to increase presence of working smoke alarms in residential homes
- Develop and practice a home fire escape plan during home safety visits
- Distribute public education messages and videos about smoke alarm maintenance via social media sites
- Post fire home safety visits through "It Happened on Your Street"
- Provide physical assistance with alarms to qualifying residents, through OFS personnel
- Targeted community fire safety events (residential complexes and townhouses)
- Provide flyers and/or brochures

Evaluate the CRRP

Process Measures:

- Number of residents directly reached by public education (events, flyers, video, etc.)
- Number of homes visited
- Number of smoke alarms installed
- Number of video views

- Knowledge levels pre- and post-incident maintenance education, when assessment is possible
- Number of alarms working before vs. after home visits
- Mid-range outcome: for at least the first two years after OFS completes a home visit, the alarms in that home successfully alert occupants of a fire.
- Long-range outcome: reduction in residential fires per 1,000 citizens in 10-year period

Identified Risk: Changing Demographics

(Risk Level: High)

Demographic Profile: Seniors (those 65 years and over) are considered to represent one of the highest fire risk groups across the Province based on residential fire death rate. According to the 2021 Census, seniors represent one of the most vulnerable demographics and are 16.7% (29,325) of the City's total population.

Of the City's total population, 24.77% (45,445) fall into the age range of 45 to 64, representing a cohort aging towards the senior demographic of 65 years or older.

Seniors may be at an increased risk of fire because they may have mobility limitations that make it harder to move around the occupancy or they may have cognitive limitations that affect their ability to pay attention to what they are doing.

The risk could pose a threat to the life safety of occupants and result in moderate property loss. According to the past (years 2018-2022) loss record, all of the reported fire-related civilian injuries (43) and fatalities (10) occurred in residential occupancies. Potential for exposure risk depending on dwelling type and building age and the presence and maintenance of fire protection equipment.

Goal

Reduce the occurrence of fire incidents involving the growing population of seniors in the community.

Develop Strategies & Tactics to Mitigate Risks

Objectives:

- Identify residents with the highest needs for resources that reduce life safety risks
- Develop public education seminars and programs for the target age group

- Education: provide education and information to seniors about fire safety and how to prevent fires
- Engineering: test and install smoke alarms
- **Economic Incentives:** offer free smoke alarms, free batteries for smoke alarms, and/or physical assistance to qualifying residents
- Enforcement: Enforce the Ontario Fire Code where violations exist
- **Emergency Response:** offer follow up inspections/education visits conducted by a Fire Prevention Inspector when attending incidents involving seniors in the community

Community Risk Reduction Planning

Participants and Partners:

- Internal: all OFS personnel led by Fire Prevention and Public Education Division
- External: Partners with local organizations, such as Oshawa Senior Community Centres, community centres, Region of Durham Paramedic Services, Durham Social Services, grant providers, Home and Community Care Support Services, and potential community partners for public education programs and events

Resources Needed:

- Financial resources for educational items including teaching tools and printed materials and fire safety equipment such as smoke alarms
- Devices, computer system, and forms for record tracking
- Public Education plans customized to target audiences

Marketing Methods:

- Public service announcements on television, radio, and online
- Social media platforms such as Twitter and Facebook
- Posters, flyers and/or brochures
- Community partnerships

Activities:

- Conduct "Remembering When: A Fire and Fall Prevention Program for Older Adults" presentations with community partners
- Conduct home safety visits
- Test and/or install smoke alarms for residents to increase presence of smoke alarms in the residence
- Educate residents on fire prevention measures, such as keeping flammable materials away from heat sources and never leave cooking unattended
- Assist with developing and practicing a home escape plan with seniors
- Provide educational flyers and/or brochures

Evaluate the CRRP

Process Measures:

- Number of residents directly reached by public education (events, flyers, video, etc.)
- Number of homes visited
- Number of posts viewed on social media platforms

- Knowledge levels pre- and post- public education programs, when assessment is possible
- Mid-range outcome: increase safety and improve emergency preparedness for the seniors and reduce damage and losses in the event that a fire does occur
- Long-range outcome: help to improve the safety and well-being of seniors and protect them from the dangers of fire

Identified Risk: Downtown Core Incidents

(Risk Level: High)

Past Loss and Event History Profile: For the period from January 1st, 2014 to December 31st, 2023 there is a higher concentration of medical/resuscitator, false fire and fire/explosion incidents in the areas south east and west of Fire Station 1 representing a portion of the downtown core of the City.

In 2023, false fires represent 12.2% of total emergency call volume, medical/resuscitator calls represent 36.6% and fire/explosion calls represent 3.6%. A higher concentration of medical, fire, and false fire calls are expected to occur in portions of the downtown core area, which is the most densely populated area of the City.

The risk could pose a threat to the life safety of occupants, to small local businesses, to the quality of the environment, and could result in moderate property loss.

Goal

Minimize the impact of medical, fire and false fire calls in the downtown core.

Develop Strategies & Tactics to Mitigate Risks

Objectives:

- Reduce emergency call volume in the downtown core of the City
- Maintain a safe and vibrant downtown core that is able to withstand the threat of fire and continue to thrive as a vital economic and culture hub for the City

- Education: introduce educational campaigns for the downtown core of the City to raise awareness about fire safety and the importance of following fire prevention and emergency evacuation procedures
- Engineering: N/A
- Economic Incentives: offer free smoke alarms, free batteries for smoke alarms, and/or physical assistance to qualifying residents
- Enforcement: Enforce the Ontario Fire Code where violations exist
- **Emergency Response:** Identify the hazards at risk during calls and follow up with risk reduction education for identified occupants or landlords

Community Risk Reduction Planning

Participants and Partners:

- Internal: all OFS personnel led by Fire Prevention and Public Education Division, City of Oshawa Economic Development Services
- External: Partners with local organizations, such as community centres, grant providers, and potential community partners for public education events and programs such as Alarmed for Life Program

Resources Needed:

- Financial resources for educational items including teaching tools and printed materials and fire safety equipment such as smoke alarms
- Devices, software (Environics), and forms for record tracking
- Public Education plans customized to target audiences

Marketing Methods:

- Assorted media and websites
- Flyers and/or brochures
- Community partnerships

Activities:

- Conduct home safety visits, business licence inspections and inspect all other occupancies as identified in the 2020 Fire Master Plan
- Develop a consistent and comprehensive inspection cycle
- Distribute Public Education messages through a wide range of media outlets
- Provide education in a timely manner when requested
- Provide occupancy relevant information flyers and/or brochures

Evaluate the CRRP

Process Measures:

- Number of residents directly reached by public education (events, flyers, video, etc.)
- Number of business licence inspections completed
- Number of other occupancy inspections completed
- Number of media interactions
- Number of education requests

- Knowledge levels pre- and post- incident maintenance education, when assessment is possible
- Mid-range outcome: increase safety and improve emergency preparedness for the downtown core reducing false alarm calls, damage and losses in the event that a fire does occur
- Long-range outcome: help to improve the safety and well-being of residents and businesses in the downtown core adding additional protection from the dangers of fire through education and enforcement programs

Identified Risk: Vulnerable Occupancies

(Risk Level: High)

Building Stock Profile: Group B – Care or Detention. The City of Oshawa currently has 34 registered vulnerable occupancies. These occupancies represent 0.04% of the City's existing property stock. 279 fires (84.8%) over the five year period occurred in Group C – Residential and no fire (0.0%) fire occurred in Group B – Care or Detention.

In addition to the presence of vulnerable occupants, these occupancies may contain quantities of various flammable/combustible liquids and gases, oxidizers and combustible furnishings that will impact the intensity of the fire if one should occur. The evacuation or relocation of patients to an area of refuge during an emergency poses additional challenges in these facilities. It is essential to ensure that properly trained staff is available and prepared to quickly respond according to the facility's approved fire safety plan.

Ontario Regulation 150/13 requires fire departments to perform annual inspections and approve and witness fire drill scenarios.

Goal

Reduce the risk of fire incidents occurring in vulnerable occupancies, and minimize the impact (civilian and first responder) if one occurs.

Develop Strategies & Tactics to Mitigate Risks

Objectives:

- Reduce life safety risks by conducting regular fire prevention inspection cycles
- Protect the safety and well-being of occupants and minimize disruption to operations

- Education: provide fire safety education to residents and staff of vulnerable occupancies
- **Engineering:** inspect fire safety of the vulnerable occupancies including fire alarm systems, fire alarm systems emergency lighting, smoke alarms, sprinkler systems, self-closing devices etc.
- Economic Incentives: investigate possible economic incentives, such as grants or rebates, to encourage the implementation of fire prevention measures in vulnerable occupancies
- Enforcement: Ontario Regulation 213/07. Ensure that the building is in compliance with fire codes

 Emergency Response: Identify the hazards at risk during calls and follow up with risk reduction education

Community Risk Reduction Planning

Participants and Partners:

- Internal: Fire personnel led by Fire Prevention and Public Education Division
- External: Partner with the operators providing fire safety education opportunities to staff when requested.

Resources Needed:

- Financial resources for Fire Prevention Inspectors to conduct inspections and educational presentations
- Devices, software, and forms for record keeping and tracking
- Public Education plans customized to target audiences

Marketing Methods:

- Assorted media and websites
- Flyers and/or brochures
- Community partnerships

Activities:

- Conduct fire safety inspection every 12 months
- Observe fire drill
- Provide training to facility staff
- Provide educational flyers and/or brochures

Evaluate the CRRP

Process Measures:

- Number of inspections conducted
- Number of calls received to the occupancy type
- Number of educational presentations requested

- Knowledge levels of facility staff and operators, when assessment is possible
- Number of education presentations and inspections
- Mid-range outcome: Ensure all inspections are being completed each cycle
- Long-range outcome: Reduction of fire calls to zero in these occupancies

Identified Risk: Large Buildings (exceeding 50,000 sq./ft.)

(Risk Level: High)

Building Stock Profile: The City has 92 buildings with a total building area that exceed 50,000 square feet. These buildings are predominantly located in the commercial and industrial land use areas such as the area south of Highway 401 and along Taunton Road.

Over the five year period, Group D – Business, Group E – Mercantile, and Group F – Industrial or a mix of uses were associated with 27 (8.1%) of the structure fires within the City.

Due to the potential for these buildings to contain large volumes of combustible materials, as well as horizontal travel distances for fire suppression activities, an incident occurring could result in a large loss of life, significant property damage, significant threat to large business and local economy (some of the identified occupancies may play a role in the economic well-being of the City), and impact to the environment.

<u>Goal</u>

Reduce the risk of fires in these types of occupancies, as there are high volumes of combustibles stored in these facilities.

Develop Strategies & Tactics to Mitigate Risks

Objectives:

Conduct regular fire prevention inspection cycles (5 year cycle) to maintain OFC compliance

- **Education:** implement a fire safety education program to provide occupants with information on how to prevent fires and what to do in the event of a fire
- **Engineering:** inspect fire safety of the buildings including the use of fire-resistant construction materials, the maintenance of fire safety equipment such as fire alarm systems, emergency lighting, smoke alarms, sprinkler systems, self-closing devices etc.
- **Economic Incentives:** investigate possible economic incentives, such as grants or rebates, to encourage the implementation of fire prevention measures that reduce fire loss and false alarm calls in these occupancies
- **Enforcement:** Ontario Fire Code during fire scene attendance, a post fire building inspection will take place. If deficiencies to the Fire Code are found, Part III charges will result.
- Emergency Response: Identify the hazards at risk during calls and follow up with risk reduction education

Community Risk Reduction Planning

Participants and Partners:

- Internal: Fire personnel from the Fire Suppression Division and the Fire Prevention and Public Education Division
- External: Building owners and management, community organizations, and community partners

Resources Needed:

- Financial resources for implementing fire safety programs to the target audiences
- Information about the building, including building size, layout, construction materials, and any special features or hazards
- Devices, software, and forms for record tracking

Marketing Methods:

- Direct mail and/or email to the target audiences
- Multiple forms of media, ads through social media and other online platforms
- Flyers and/or brochures

Activities:

- Perform regular inspections by reviewing and verifying inspection logs, fire safety plans and life safety systems
- Identify all potential fire hazards in the building, establish evacuation procedures, and train occupants on how to respond in the event of a fire
- Developing and practicing a fire emergency plan will result in Identifying all potential fire hazards in the building, establishing evacuation procedures, and training of occupants on how to respond in the event of a fire
- Ensure flammable materials are properly stored and handled in accordance with regulations
- Ensure all electrical systems inspections are up to date and in good order
- Provide flyers and/or brochures

Evaluate the CRRP

Process Measures:

- Number of building owners directly reached by Fire Prevention and Public Education Division
- Number of inspections completed
- Number of calls related to fires in these occupancies

- Knowledge levels pre- and post- incident maintenance education, when assessment is possible
- Number of calls related to fires in these occupancies, any reduction or increase to re-establish or modify the current program
- Mid-range outcome: Ensure all inspections are being completed each cycle
- Long-range outcome: Reduction of fire calls in these occupancies and eliminate fire risk to occupants

Identified Risk: High-Rise Buildings

(Risk Level: High)

Building Stock Profile: The City currently has 52 buildings defined by the Ontario Building Code as high-rise buildings with a floor level of 18 meters (59 feet) above grade, or 6 storeys. These buildings are distributed within the urban area with several located in the downtown area.

Recognizing the high number of Group C – Residential occupancies, it is assumed that some of the high-rise buildings are Group C – Residential.

The risks including a potential for vulnerable individuals (seniors and youth) and a potential of need for vertical response.

Due to the number of occupants in high-rise buildings, an incident occurring could result in a large loss of life, significant property damage, impact to the environment or result in a short term, partial evacuation of local residents and businesses.

<u>Goal</u>

Minimize the impact to vulnerable individuals (seniors and youth) and the potential need for vertical response.

Develop Strategies & Tactics to Mitigate Risks

Objectives:

 Reduce life safety risks by developing an annual inspection program of high-rise buildings

- **Education:** implement a fire safety education program to provide occupants with information on how to prevent fires and what to do in the event of a fire
- Engineering: inspect fire safety of the buildings including the use of fire-resistant
 construction materials, the maintenance of fire safety equipment such as fire alarm
 systems fire alarm systems, emergency lighting, smoke alarms, sprinkler systems, selfclosing devices etc.
- Economic Incentives: investigate possible economic incentives, such as grants or rebates, to encourage the implementation of fire prevention measures that reduce fire loss and false alarm calls in these occupancies
- Enforcement: Ontario Fire Code
- Emergency Response: Identify the hazards at risk during calls and follow up with risk reduction education

Community Risk Reduction Planning

Participants and Partners:

- Internal: Fire personnel from the Fire Suppression Division and the Fire Prevention and Public Education Division
- External: Building owners, property managers, on-site building superintendents and fire protection companies

Resources Needed:

- Financial resources for Community Risk Reduction Programs supporting Fire Prevention Inspectors
- Devices, software, and forms for record keeping and tracking
- Public Education plans customized to target audiences

Marketing Methods:

- Assorted media and websites
- Flyers and/or brochures
- Community partnerships

Activities:

- Offer workshops to building owners, property management companies and fire protection companies
- Develop an annual inspection program including suppression division crews for building familiarization
- Distribute building pre-plans to be used in pre-incident planning and response resources
- Provide feedback and education on high-rise fire risks to building owners, property owners and fire protection companies based on risks identified through prior incident data
- Provide information brochures to residents, building owners, property managers and on-site superintendents

Evaluate the CRRP

Process Measures:

- Number of residents directly reached by public education (events, flyers, video, etc.)
- Number of completed inspections
- Number of deficiencies found by type
- Number of workshop attendees

- Knowledge levels pre- and post- incident maintenance education, when assessment is possible
- Number of incidents requiring the third line of defense, suppression activities
- Mid-range outcome: Reduction in fire related damage and losses
- Long-range outcome: A sustained reduction in fire related damage and losses including reduced displacement of residents if a fire does occur