

# Sault Ste. Marie Community Risk Assessment

Presentation to Council

May 12, 2025

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# Community Risk Assessment (CRA)

## Ontario Regulation 378/18: Community Risk Assessments

- Came into effect **July 1, 2019**
- Compliance by **July 1, 2024**

**All municipalities** in Ontario shall:

- Develop **Community Risk Assessment**
- Use the CRA to “**inform decisions about the provision of fire protection services**”
- **Review annually** and formally **update every 5 years**



# Methodology

- Office of the Fire Marshal (OFM) **Technical Guideline-02-2019**
- Also informed by:
  - **NFPA 1300**
  - **NFPA 1730**
  - **Vision 20/20 Resources**
  - **OFM Comprehensive Fire Safety Effectiveness Model**

OFMEM-TG-02-2019

## Community Risk Assessment Guideline

Office of the Fire Marshal and  
Emergency Management



# Risk Assessment Approach & Process

## 9 Profiles - Risk Outcomes

-  Geographic
-  Building Stock
-  Critical Infrastructure
-  Demographic
-  Hazard
-  Public Safety Response
-  Community Services
-  Economic
-  Past Loss Event History

## Prioritizing Risks

High Risk

Moderate Risk

Low Risk

## Risk Treatment Options

1. Avoid
2. Mitigate
3. Accept
4. Transfer

## Five Es

1. Education
2. Engineering
3. Enforcement
4. Economic Incentives
5. Emergency Response

## Application of Ontario "Three Lines of Defence" Model

1. Public Education and Prevention
2. Fire Safety Standards and Enforcement
3. Emergency Response



# Identified High Risks

- Motor Vehicle-related incidents (collisions/extrications) represent 69.3% of all rescue responses (622 calls / 4.6% total calls) responded to by SSMFS.
  - Group C - Residential Occupancies represent 95.25% of City's existing building stock, and from 2017 to 2023, Group C occupancies were associated with 76.8% of the structure fires in SSM.
  - Between April 2020 and September 2024, SSMFS identified 34 fire incidents in vacant properties.
  - Based on the City's parcel data, 69.4% of the building stock was built prior to the introduction of the 1981 Ontario Fire Code. Census data from 2021 indicates that 73.4% of occupied private dwellings were constructed prior to the Ontario Fire Code.
  - CRA identified 51 buildings defined by the OBC as high-rise buildings with a floor level 18 metres (59 feet) above grade, or six storeys or more (mostly clustered in the downtown)
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# Identified High Risks (cont'd)

- SSM has 65 buildings with a total building area greater than 50,000 square feet (4,655 m<sup>2</sup>), mostly located in industrial area west of downtown. Other large buildings exist in the downtown, and in commercial /industrial areas on Arterial Roads.
  - SSM currently has 40 registered vulnerable occupancies.
  - Seniors (65 years and over) represent one of the highest fire risk groups in Ontario based on the residential fire death rate. According to 2021 Census, seniors represent 24.9% of the City's total population, significantly higher than the Province at 18.5%.
  - 62.2% of rescue calls are vehicle collisions (2018 to 2023). Average 93.2 calls per year.
  - Vehicle extrication was the most common type of technical rescue response, accounting for 7.0% of all rescue calls and averaging 10.5 calls per year.
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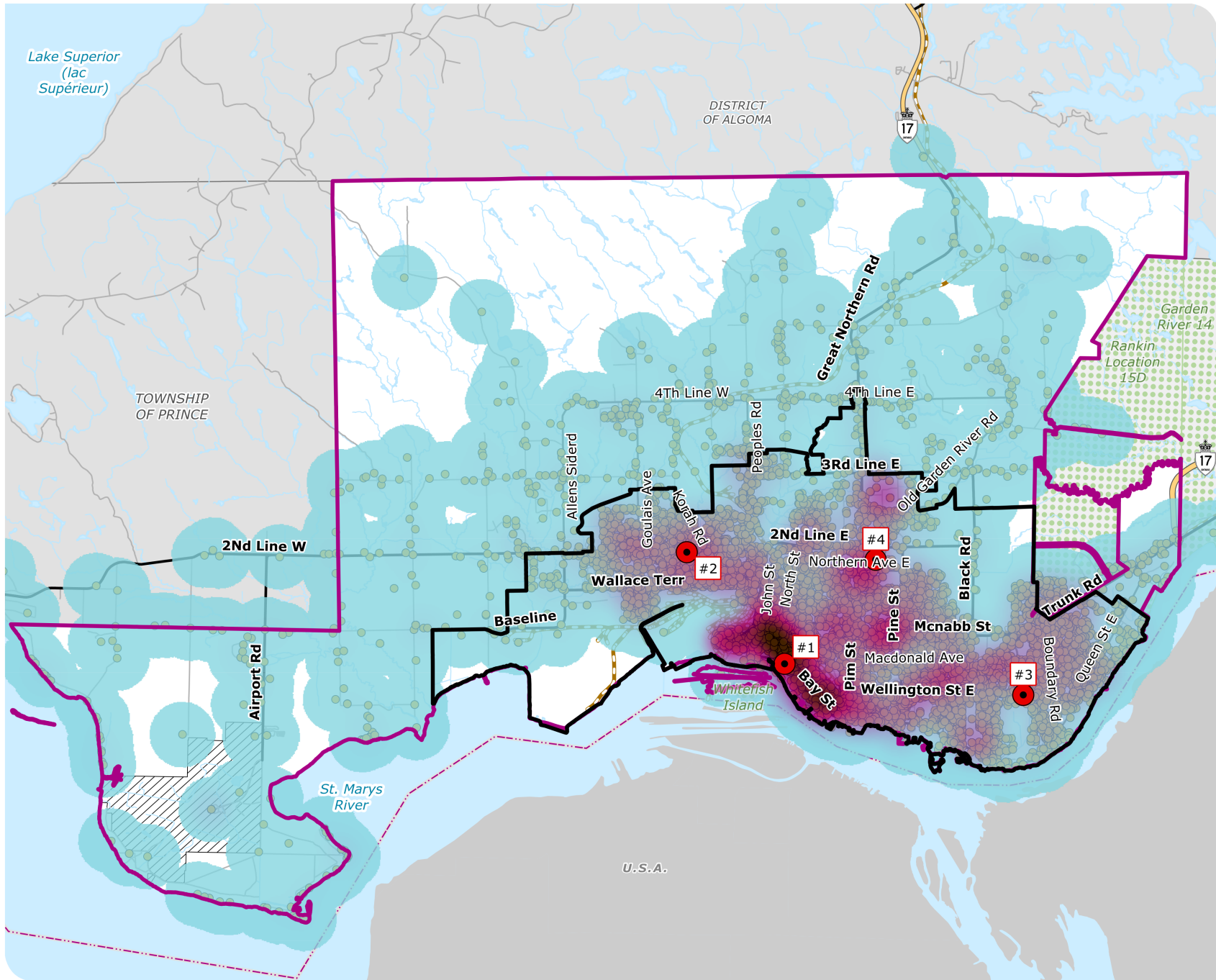
# Identified Moderate Risks

- Risk of a rail-based transport incident, such as a derailment or accident, including the potential of hazardous materials.
  - SSM Airport presents unique fire-related risks associated with aircraft, supporting infrastructure, and the transportation of potentially dangerous goods.
  - 94.9% of the buildings have a footprint of 2,500 sq. ft. or less (consistent with residential property stock - Group C – Residential occupancies.)
  - Waterways within the City, including St. Marys River, create risk for water-based incidents.
  - Water rescue calls are the second most common type of specialized rescue calls, totaling six calls over the six-year period from 2018 to 2023 (average 1 call annually).
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Lake Superior  
(lac Supérieur)

DISTRICT  
OF ALGOMA

TOWNSHIP  
OF PRINCE



# CITY OF SAULT STE MARIE COMMUNITY RISK ASSESSMENT

## ALL EMERGENCY INCIDENTS FROM JANUARY 1, 2017 TO DECEMBER 31ST, 2023

- Existing Fire Station
- Urban Settlement Boundary
- Emergency Incident (2017 to 2023)

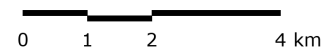
### Density of Calls



Base Data

- City Boundary
- Expressway / Highway
- Arterial Road
- Collector Road
- Local Road
- Railway
- Airport
- Water Feature
- First Nation Reserve
- International Boundary

SCALE 1:80,000



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MMRS, CITY OF SAULT STE MARIE,  
ACORN INFORMATION SOLUTIONS

MAP CREATED BY: LK, Dillon Consulting Limited  
MAP CHECKED BY: SCD, Tayport Limited  
MAP PROJECTION: NAD 1983 UTM Zone 16N

PROJECT: 23-6393 STATUS: DRAFT

DATE: 2024-06-04



# Questions/Discussion