



Emergency Management in Mississauga 2020 Report



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At the beginning of 2020, it was difficult to foresee the events that unfolded over the course of the coming year due to the novel coronavirus (COVID-19). The virus would become a pandemic, an unprecedented event that changed how people lived, connected and worked. It had an impact on life, health, businesses, the economy and the mental well-being of people everywhere. However, 2020 demonstrated a determination, compassion and resilience found at the core of residents and businesses in Mississauga.

As we continue to live with the impacts of the COVID-19 pandemic, we must ensure our City operations are building back better. In 2020, there were many challenges; however, they helped us strengthen the City's emergency management and business continuity programs. City divisions have already started to implement improvements identified through an initial review of the City's COVID-19 response. These improvements ensure that the City is prepared to respond to future disasters and business disruptions.

The 2020 Office of Emergency Management's (OEM) Annual Report, provides a summary of the City's emergency management activities, including the COVID-19 response - the longest emergency declaration in the City's history.

OEM oversees the emergency management and business continuity management programs that foster resilience throughout the City, which continually meet and exceed provincial legislative requirements. Whether it's responding to emergencies or preparing the organization through the development and delivery of training and exercises, OEM is fortunate to partner with staff from across the City and partner agencies to help deliver critical elements of our programs.

OEM will continue to serve the City of Mississauga, its residents and businesses through the identification and analysis of risk, delivery of training opportunities for staff and stakeholders, implementation of business continuity management programs and public education and outreach programs. Over the course of 2021, OEM will continue to work toward making Mississauga a disaster-resilient community and establish Mississauga as a place where people choose to be.

Thank you to City staff, partner agencies, residents and businesses for their continued efforts and support of emergency preparedness within the Mississauga community.



Nancy Macdonald-Duncan
Acting Fire Chief & Director
of Emergency Management



Tim Lindsay
Manager, Office of
Emergency Management

Office of Emergency Management

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Office of Emergency Management



An incident like a house fire, can sometimes develop into an emergency that requires immediate response from the community’s first responders – fire, paramedics or police. Emergencies are events that pose a greater risk to people, property and/or the environment. They require a greater degree of community resource co-ordination to respond.

Disasters occur when an incident’s impact exceeds the community’s ability to respond, creating the need to call on both City and external resources. Disasters are occurring more frequently, with severe impacts, both across Canada and around the world.

The City’s OEM works in five overlapping portfolios, sharing the same objective of preventing, mitigating, preparing for, responding to and recovering from emergencies and disasters affecting the City.

Emergency Management is not only the responsibility of OEM. The OEM collaborates with all City departments and divisions, external organizations, businesses, community groups and residents to establish a comprehensive emergency management program that promotes resilience throughout the city.

OEM uses both an all-hazards and risk-based approach. The team works to ensure resilience through the effective organization of people, resources and systems all working together to minimize any impacts experienced both during and after a disaster.



Emergency Management Program Committee

The Emergency Management Program Committee (EMPC) determines program goals and objectives, identifies gaps in capabilities and recommends approaches to fill the gaps; The OEM team implements the Emergency Management Program.

The EMPC met in early 2020 to discuss preparedness activities for the emerging COVID-19 epidemic. Representatives from the EMPC met regularly throughout the year to provide guidance throughout the response and recovery phases of the pandemic. The Committee also reviewed and discussed other elements of the City's Emergency Management Program to meet provincial compliance. They also ensured the City remains resilient against any additional incidents that may occur beyond the COVID-19 pandemic.

COVID-19 in Mississauga

On January 23, 2020, OEM moved to “enhanced monitoring” of the COVID-19 pandemic. After the first confirmed COVID-19 case in Ontario, the City held its first internal meeting to discuss preliminary planning requirements related to this new emerging virus. OEM and City staff continued to monitor the situation and prepare for the potential escalation of the incident over the next month. On March 11, the World Health Organization declared COVID-19 as a pandemic and OEM escalated to a Level 2 Activation of the City’s Incident Management Team (IMT).

The City’s IMT worked efficiently to organize resources, and make decisions that would safeguard the life, health and safety of Mississauga residents and City staff. These actions included closing all City of Mississauga facilities, public counters and park amenities to the public, and cancelling all City programs and activities. The team ensured that essential services would continue to be delivered to the community. City staff worked collaboratively to transition many services online, to minimize service disruptions to residents and businesses.

On March 23, 2020, the City of Mississauga issued an emergency declaration in response to the evolving pandemic.

The City’s IMT was activated for 72 days. The team stood down on May 21 when the activation level was de-escalated to “enhanced monitoring.” Since that time, the Policy Group, Mayor and Council continued to meet regularly to examine the City’s ongoing response and recovery to the pandemic. City staff continued to work diligently to provide City services during the pandemic and plan for the City’s recovery.

Over the last several months, City staff implemented the City’s four recovery plan pillars: Community, Economic, Financial and Corporate. All pillars consider fundamental principles that are applied throughout the City’s recovery. These principles are:

- **Protect the health and safety of the public and employees**
- **Phased approach** – recovery and reopening activities are implemented in incremental phases
- **Mental wellness and psychosocial support** – recovery activities will consider the mental well-being of City employees, residents, and community partners
- **Building back better** – recovery actions will ensure the City is able to prosper well into the future
- **Whole community approach** – recovery activities will require the participation and collaboration of all City of Mississauga community members



Other Activations in 2020

In addition to COVID-19, the City responded to many other emergencies and disasters in 2020. OEM engaged in emergency activations and enhanced monitoring for the following emergencies:

January Severe Winter Weather Event

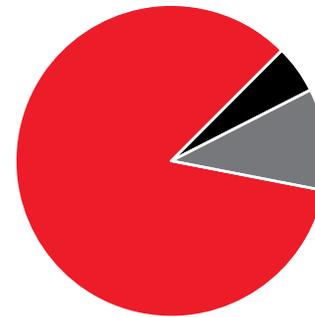
The City partially activated the Emergency Operations Centre in January 2020 when forecasts called for heavy precipitation, freezing rain, strong winds, potential flooding and ice jams. To mitigate the impacts of these hazardous conditions, the IMT worked together with partners to activate the City's Severe Winter Weather Plan. Resources were co-ordinated to respond to reports of flooding in Mississauga. City crews monitored and worked to mitigate potential damage to buildings and infrastructure.

Spring Flooding

The IMT was partially activated in spring 2020 to respond to forecasts calling for heavy rainfall, strong winds and flooding conditions. Due to the physical distancing restrictions of COVID-19, the IMT met virtually to co-ordinate response activities. The IMT was able to mobilize all the resources required to ensure an effective response. Fortunately, the weather system dissipated before reaching, or adversely affecting the city.

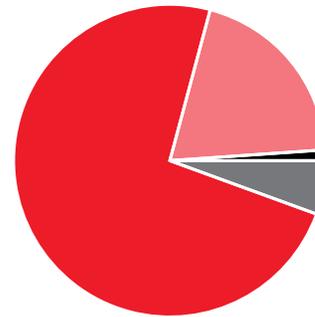
Enhanced Monitoring

OEM elevated to Enhanced Monitoring in preparation for a number of events. The team carefully monitored the potential development of hazards that could escalate and cause adverse impacts affecting the City.



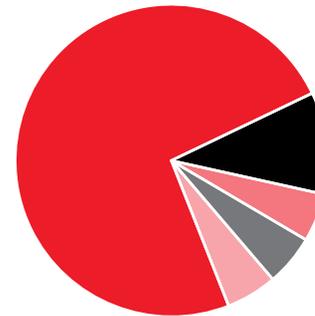
Activation & Enhanced Monitoring Events

- Full Activation - 1
- Partial Activation - 2
- Enhanced Monitoring - 16



Days Spent in Each Activation Level

- Full Activation - 72 days
- Partial Activation - 5 days
- Enhanced Monitoring - 269 days
- Routine Monitoring - 20 days

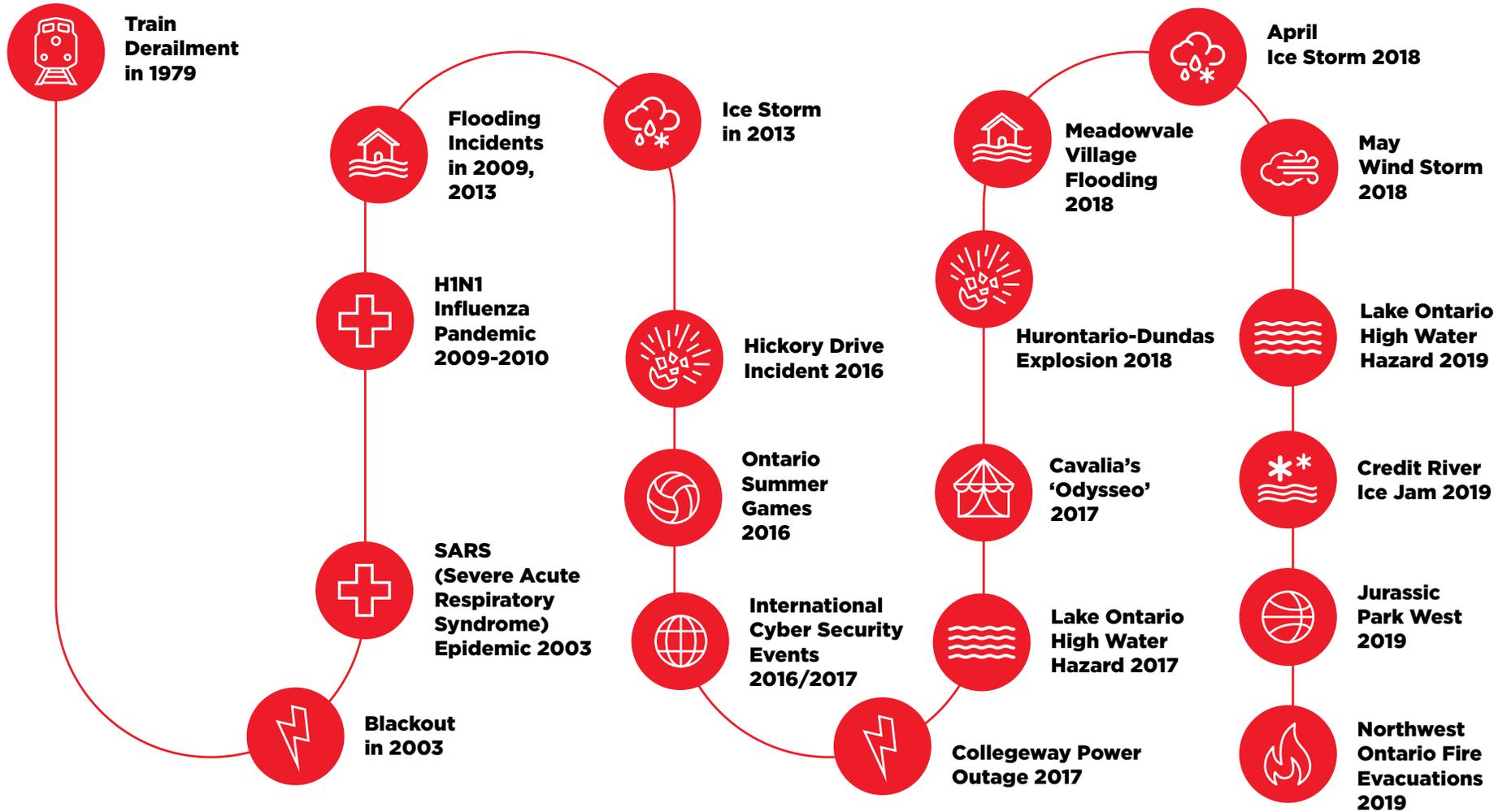


Hazard Type

- Winter Weather - 2
- Cyber - 1
- Flood - 14
- Thunderstorm - 1
- Infectious Disease - 1

Past Emergencies and Significant Events

As mentioned previously, disasters are occurring more frequently and they are bringing more severe impacts. To respond to these events, we are required to activate our EOC more often than ever before. The OEM also increasingly recognizes the importance of activating the EOC to engage in enhanced monitoring activities. This allows us to prevent routine incidents or emergencies from escalating into disasters.



Our Approach

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Legislative Framework and Strategic Partnerships

OEM is required under the Emergency Management and Civil Protection Act (R.S.O. 1990) to include certain public safety components in the Emergency Management program. Legislative requirements include:

- An Emergency Plan
- An Emergency Management Program Committee
- Annual emergency training and exercises
- Annual public education
- An annual review of the City's top hazards and risks
- Identifying Critical Infrastructure

OEM takes a collaborative approach to emergency management, building strategic partnerships locally and across the province in both the public and private sector. The City's community approach to emergency management allows the OEM team to consider and meet the public safety needs of residents, businesses and organizations throughout Mississauga.



An Environmental Scan

OEM continuously monitors economic, political, technological, environmental and social trends happening around the world.

By working with various partners, the team determines the potential for an emergency or disaster to impact Mississauga. In 2020, this was demonstrated when OEM began monitoring for COVID-19 and its impacts in countries around the world. This was done well before the virus began affecting Mississauga directly.



Hazard Identification and Risk Assessment (HIRA)

The foundation of the City’s Emergency Management Program is the Hazard Identification & Risk Assessment (HIRA). OEM reviews and ranks hazards based on their likelihood of occurrence and the severity of their consequences every year. Through regular review and updating of the HIRA, OEM is able to identify top risks to the City, as well as track emerging risks. This allows the team to prioritize plan development, training, exercises and public education programming to ensure the City and its residents are prepared for the most likely hazards.

Top natural hazards for Mississauga



Flood



High Wind



Winter Weather



Erosion



Critical Infrastructure Assurance Program (CIAP)

Critical Infrastructure (CI) is any asset or service that is essential to the safety or economic well-being of Mississauga residents and government. OEM's reliance on this infrastructure is greater now than ever before. The team recognizes the importance of protecting these key assets and services.

The Critical Infrastructure Assurance Program (CIAP), launched in fall 2017, helps the team assess all City-owned CI and identify opportunities to reduce or eliminate risks to strengthen the resilience of the City's CI. The program aligns with programs in place at both the Government of Ontario and Government of Canada.

The program focuses on reviewing City-owned infrastructure to prioritize CI in regards to risk and criticality (i.e. most at risk and/or most critical to operations). This is achieved through detailed risk assessments done by staff with input from stakeholders. Assessments will continue over the next several years, at which point the program may be expanded to include external partners who wish to participate.



Business Continuity Management

The Business Continuity Management (BCM) program in the City has continued to move forward in 2020. Business Continuity is the program that prepares all parts of the City Corporation for unexpected disruptions that cause services to slow or stop. Business Units use their own knowledge and abilities to create the capability that allows the City to continue delivering services through almost any disruption.

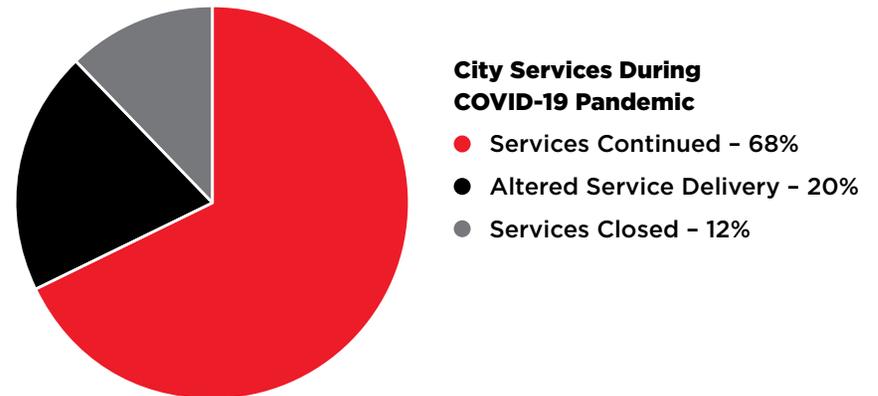
The City has moved to the final stages of Program Initiation. This is where basic documentation and planning steps are compiled. City business units in the Corporate Services, Transportation & Works and Planning & Building departments have completed their initial documentation and are progressing with program improvements.

Despite public facilities being closed to both residents and non-essential City employees during the lock down periods of COVID-19, the City was still responsible for providing many services that our residents rely on. The City's BCM program and the innovative efforts of City employees allowed the City to continue delivering services that residents both need and want, often times

through adapted and virtual means. Many City employees were able to use various means of technology to transition into working virtually. However, there were many essential frontline employees, such as staff from Mississauga Fire & Emergency Services, MiWay, Parks, Forestry & Environment, Information Technology and Works Operations & Maintenance who could not make this transition. Through altered practices and procedures, these employees continued providing essential services to Mississauga residents.

The COVID-19 pandemic is a real-world examination of business continuity in practice. The event highlighted the importance of a having a robust BCM program that increases resilience and mitigates the impacts of a disruption across the organization. The BCM program continues to grow and improve, as more City divisions continue to develop and enhance their business continuity plans and procedures. The BCM program is in the process of acquiring a software solution that will greatly improve the City's ability to respond to disruptions in the future.

Business Continuity Management Covid Stats



DisasterLAN (DLAN)

The City's DisasterLAN (DLAN) virtual emergency operations centre system is continuously improved upon to enhance situational awareness before, during and after incidents.

OEM capitalized on several features contained within DLAN in 2020. One of the features was the "Duty Officer Form" that allows staff on duty to quickly upload information to the system regarding anticipated or actual incidents. The team also began connecting the system to the City's GIS software, ArcGIS. This software allowed the team to develop dashboards to track various statistics related to emergencies and disasters, public engagement and staff work plans.

DLAN was used to support several activations in 2020 including the pandemic, the January severe winter weather event and the spring flooding event. DLAN served as a central system used to store incident materials and documents. It also provided situational awareness to both OEM and IMT members.



Training & Exercises

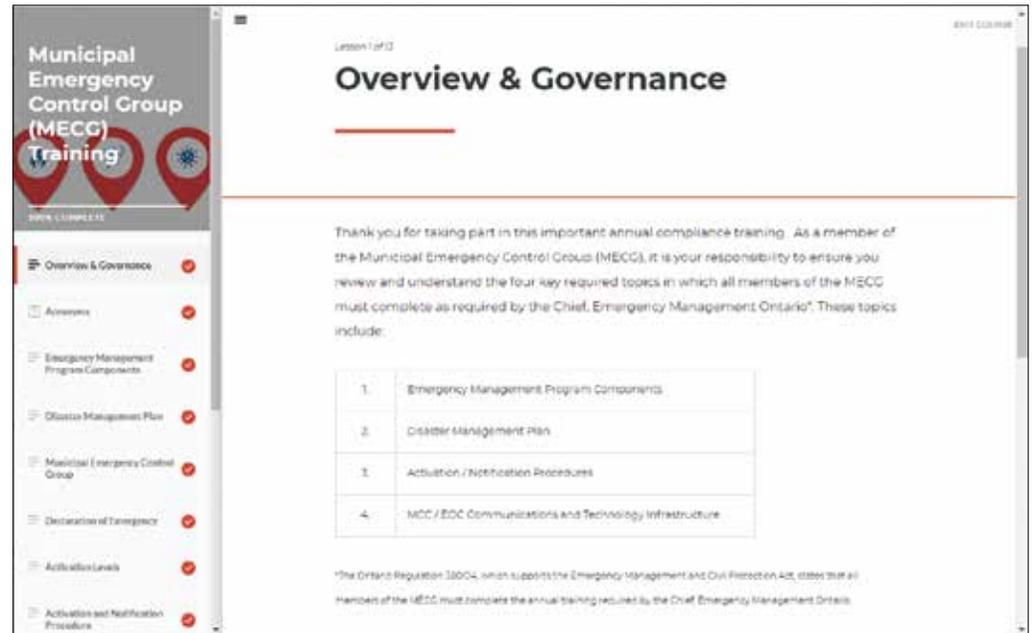
2020 was an unusual year as OEM was unable to deliver in-person training for most of the year due to the COVID-19 response and physical distancing restrictions. Delivering emergency management training and exercises is crucial to the operational readiness of the City, and is also required under the Emergency Management and Civil Protection Act (R.S.O. 1990). As such, it was important for OEM to continue providing these services to City employees. As with many other City divisions, OEM turned to adapted, virtual methods to provide training and exercises to EOC team members.

Prior to COVID-19, OEM began the process of converting the annual, legislatively mandated training of the Municipal Emergency Control Group members into a virtual and self-paced format. Observing the success of this new virtual format, and taking the City's recovery strategy of "Building Back Better," OEM began to look for other opportunities to embrace virtual training and exercises. This resulted in several innovative ventures that replaced in-person activities including:

- Two virtual exercises of the City's Works Risk-Based IMT
- A self-paced online instructional seminar for the City's Risk-Based plans

Many of these virtual training and exercise sessions will likely become permanent solutions that will provide easier access to training and exercises to City employees.

OEM was also able to provide several in-person training sessions to EOC team members. These included training in the Incident Management System and DLAN.



Public Education and Engagement

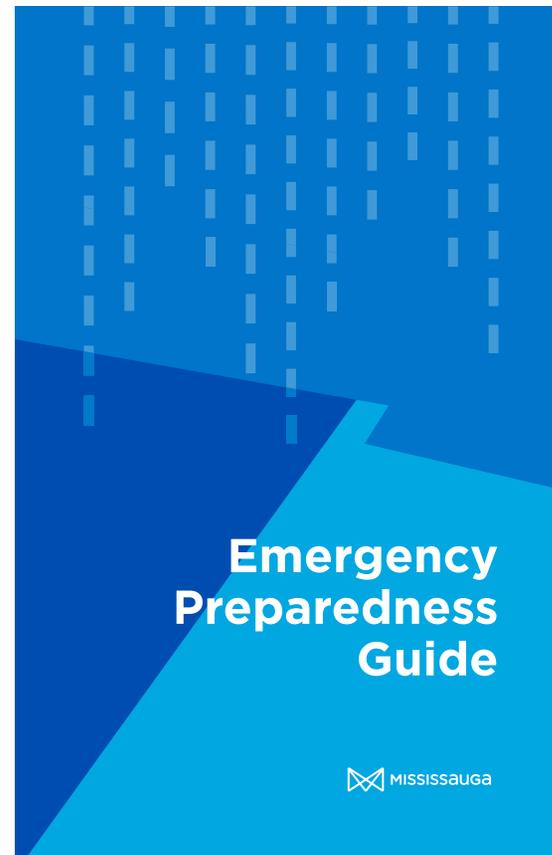
Prior to COVID-19, OEM was able to engage in various in-person public education events at the beginning of 2020. These events included an open house information session regarding flood preparedness hosted by the Toronto and Region Conservation Authority, and various general emergency preparedness information sessions with Mississauga community groups.

However, due to COVID-19 physical distancing requirements and the cancellation of public and community events across the City, OEM was forced to reduce its in-person public engagement. Two public education and engagement events were postponed including First Responders Day hosted by Erin Mills Town Centre and Fire Prevention Week with partners from Mississauga Fire & Emergency Services.

All in-person Emergency Preparedness (EP) Week events for 2020 were also cancelled. Instead, the Emergency Preparedness Week campaign was rolled out online. Information was provided to residents through the City's social media channels, and public engagement took place through an online emergency preparedness survey.

In 2020, OEM developed a brand-new Emergency Preparedness Guide. This guide provides general emergency preparedness information, empowering residents to better prepare themselves for emergencies and disasters. It was developed in a risk-perspective specific to Mississauga. The Emergency Preparedness Guide also serves as the cornerstone of the City's public education and engagement program, and will be distributed to residents throughout Mississauga.

In 2020, OEM focused public education campaigns on general emergency preparedness, insurance and flood preparedness. The team will continue to modify these campaigns moving forward to meet the evolving needs of the community and the risks they are exposed to.



The Future

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Action Plan 2021-2022

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The Emergency Management Program Committee, through the Office of Emergency Management, will continue to improve municipal emergency management and business continuity programs through:

- An evidence-based approach
- Implementation of lessons learned from critical events locally and around the world
- Training and exercises based on probable hazards in Mississauga
- Risk-based plan development
- Ongoing working groups
- Stakeholder engagement where there's an opportunity to collaborate with partners

Some of the key action items for OEM are:

- Acquisition and implementation of new business continuity management software
- Promoting disaster literacy among residents through a public education and engagement program that is based on evidence and input from community members
- Development of Incident Management System training that is position-specific
- Implementation of a BCM Governance Model to support the continued growth and maintenance of City-wide business continuity programs



