

City of Mississauga Corporate Report



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| Date: February 11, 2025 To: Chair and Members of General Committee | Originator's files: |
| From: Jodi Robillos, Commissioner of Community Services | Meeting date: March 5, 2025 |

Subject

Joint Fire Communication Centre – Next Generation 911 (NG9-1-1) Launch

Recommendation

That the Corporate Report titled “Joint Fire Communication Centre – Next Generation 9-1-1 (NG9-1-1)” dated February 11, 2025, from the Commissioner of Community Services be received for information.

Executive Summary

- Canadian 9-1-1 services have not kept up with technological developments and wireless communications.
- Next Generation 9-1-1 (NG9-1-1) is a new system that will replace the current 9-1-1 infrastructure to address the changing needs of emergency communications and service delivery.
- It will enable digital information, such as text, videos and photos, to be sent from the public to the 9-1-1 communication centre in the future phases.
- The new system will provide dispatchers more accurate data to help determine the caller's location and phone number.
- Mississauga Fire and Emergency Services (MFES), in collaboration with Brampton Fire and Emergency Services, is set to transition the Joint Fire Communication Centre with a Go Live date of March 5th at 3:00 a.m.
- This initiative aligns with the national mandate for Next Generation 9-1-1 (NG9-1-1), ensuring improved emergency response capabilities, enhanced interoperability, and compliance with evolving public safety communication standards.
- The transition represents a modernization of the fire communication infrastructure, improving geographic accuracy, reducing call processing times, and increasing situational awareness for emergency responders.

Background

The existing Enhanced 9-1-1 (E9-1-1) system is being phased out in accordance with the Canadian Radio-television and Telecommunications Commission (CRTC) mandate, which requires Public Safety Answering Points (PSAPs) to transition to NG9-1-1 services. NG9-1-1 replaces traditional voice-based emergency communication systems with a fully digital, IP-based network capable of handling voice, text, images, and video in a phased approach.

MFES, along with partner agencies, has been working towards readiness for NG9-1-1, including upgrading Geographic Information Systems (GIS) data, refining operational protocols, and investing in new dispatch technologies. The Joint Fire Communication Centre will serve as the hub for Mississauga Fire communication call answering and dispatch services, centralizing operations and enhancing coordination with regional emergency services.

Comments

Next Generation 9-1-1 (NG9-1-1) is a new system that will replace the current 9-1-1 infrastructure to address the changing needs of emergency communications and service delivery. Those using 9-1-1 services will not see any changes to the way they communicate with emergency services today, however, the transition to NG9-1-1 will enable digital information, such as text, videos and photos, to be sent from the public to the 9-1-1 communication centre in future phases. Some of the advantages of this system will be:

- **Enhanced Call Routing & Accuracy:** NG9-1-1 utilizes geodetic call routing, leveraging GIS technology to ensure calls are accurately routed to the appropriate emergency services. Improved call handling and transferring between agencies minimizes call processing times. Improved response times by providing more accurate locational data which will improve emergency responders' ability to locate incidents.
- **Interoperability:** The transition improves call handling between emergency service providers, reducing delays in transferring critical information.
- **Modernized Infrastructure:** The new system enables the reception and transmission of multimedia, providing first responders with real-time images or videos that enhance situational awareness.

The CRTC's Emergency Services Working Group (ESWG) is composed of Telecommunication Service Providers, Public Safety Answering Points (PSAPs), and 9-1-1 Industry specialists. The Working Group addresses issues that relate to the provisioning of 9-1-1 services. This includes the technical and operational implementation of 9-1-1 services as assigned by the CRTC or as requested by stakeholders.

Each of the agencies ensure their technology and processes are compatible with the standardized NG9-1-1 framework.

MFES have ensured that all new technologies being procured and implemented are NG9-1-1 compliant including our Computer Aided Dispatch (CAD) System.

MFES has demonstrated a strong commitment to ensuring operational readiness for the Joint Fire Communication Centre's transition to NG9-1-1. System testing and quality assurance have been a key focus, with multiple testing phases, successfully validating system reliability and accuracy. Our investment in technology has resulted in a modernized infrastructure designed for high reliability and redundancy, ensuring seamless integration with regional emergency services and efficient information flow.

While significant progress has been made, there are areas where continued focus will be required to further strengthen our readiness. One key area for improvement is refining interoperability with regional partners. Although we have engaged in regular coordination meetings with Peel Regional Police and Mississauga Central Ambulance Communications Centre (Mississauga CACC), ongoing efforts will be necessary to ensure seamless communication and data sharing. Another priority will be enhancing our risk management and contingency planning, particularly in developing robust backup communication protocols and alternative routing solutions to mitigate potential system disruptions. Additionally, while we have made strides in educating staff and stakeholders on NG9-1-1, continued public awareness initiatives will be critical in ensuring the community understands and benefits from the new system's capabilities in the future. By addressing these areas and building upon our strengths, MFES and the JFCC will be well-positioned to lead a smooth and effective transition to NG9-1-1.

Financial Impact

There is no financial impact resulting from this report, as the transition to NG9-1-1 compliance has been incorporated into the City's capital and operating budgets. Costs associated with technology upgrades, training, and infrastructure enhancements have been planned and partially offset through provincial grant funding opportunities where applicable. Ongoing operational costs will be managed within the approved budget framework.

Conclusion

The scheduled Go Live date of March 5th marks a critical milestone in the evolution of Mississauga's emergency communication services. Through proactive planning and collaboration, the City is well-positioned to meet the NG9-1-1 requirements while improving emergency response efficiency and public safety outcomes.



Jodi Robillos, Commissioner of Community Services

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