



TO:	GENERAL COMMITTEE
SUBJECT:	NEXT GENERATION 9-1-1 (NG9-1-1) GRANT RECEIPT AND COMPUTER AIDED DISPATCH (CAD) REPLACEMENT
WARD:	ALL
PREPARED BY AND KEY CONTACT:	R. NOLAN, DIRECTOR OF INFORMATION TECHNOLOGY EXT 4373
SUBMITTED BY:	R. NOLAN, DIRECTOR OF INFORMATION TECHNOLOGY C. MAINPRIZE, DIRECTOR OF EMERGENCY SERVICES – FIRE CHIEF
GENERAL MANAGER APPROVAL:	R JAMES-REID, GENERAL MANAGER OF ACCESS BARRIE D. MCALPINE, GENERAL MANAGER OF COMMUNITY AND CORPORATE SERVICES
CHIEF ADMINISTRATIVE OFFICER APPROVAL:	M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That the budget for project IT1050 BFES Next Generation 9-1-1 Phone System be increased by \$1,392,359, funded by provincial grant funding for Next Generation 9-1-1 Transition Funding.
2. That the scope of the approved IT1050 BFES Next Generation 9-1-1 Phones System include replacing the Computer Aided Dispatch (CAD) system with an additional \$1,085,000 budget request, to be funded by the Tax Capital Reserve, as this system is not eligible for provincial grant funding.

PURPOSE & BACKGROUND

3. The purpose of this staff report is to seek an increase to the funding for the Barrie Fire and Emergency Service's Next Generation 9-1-1 Phone system to address the evolving implementation requirements and allow for an increase in the scope of the project to address the replacement of the existing 23-year-old Computer Aided Dispatch system. The increase is offset in part by grant funding the Province has provided specifically associated with the costs to transition to Next Generation 9-1-1.

ANALYSIS

4. IT project IT1050 – BFES Next Generation 9-1-1 (NG9-1-1) Phone System was approved with \$1,920,000 to procure an NG9-1-1 compliant call handling phone system to support the Canadian transition to NG9-1-1 as mandated by the CRTC. In addition, several departments including Barrie Fire and Emergency Service (BFES), Information Technology (IT) and Corporate Facilities included funds in their operating budgets for related implementation costs.

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5. This extremely complex project has been ongoing since 2021 and it is currently in the implementation phase. Over the past several years, the requirements and standards for NG9-1-1 in Canada have been constantly evolving.
 6. The Province of Ontario announced Next Generation 9-1-1 Transition Funding support to municipalities in 2022 over a 3-year period for both capital and operating costs. In 2022, the City of Barrie was provided with a \$1.2 million grant towards this project. A further \$1,392,359.00 in grant funding was approved by the Province on November 29th, 2023. 2024 funding will be announced mid-2024. This grant funding directly offsets the costs of this project.
 7. The original scope and financials were based on pre-covid, and early estimations made by industry experts including the National Emergency Number Association (NENA). Technology costs have increased since the pandemic, and the scope of the NG9-1-1 project has been continuously evolving as the implementation across the country continues and standards are finalized.
 8. As such, the NG9-1-1 project required a holistic approach to ensure all dispatch centre systems are NG9-1-1 compliant to work seamlessly together along with modernizing IT systems, facilities, and security. This holistic approach identified that the budgeted operational funds should be identified within the capital project rather than in individual department operating budgets. This has resulted in the recommendation to add \$1,392,360 to the total capital project budget. As the Province of Ontario's intent has been to provide funding to support transition costs, this change to the project budget is offset 100% through the funding provided by the Province.
 9. In addition, a risk has been identified regarding the current BFES Computer Aided Dispatch (CAD) program's compatibility with NG9-1-1. The current CAD was originally procured in 2001. The CAD system was intended to be replaced as a separate capital project in future capital plans given its age and functional limitations.
 10. A modern CAD system is used within a 9-1-1 communications centre to manage and document incidents, track responder statuses, provide mapping and is the tool that dispatchers rely on to quickly dispatch emergency services. Due to the nature of these functions, compatibility with the Next Generation 9-1-1 system is essential. RTT (Realtime Text), picture and video message storage, customized modern workflows and features that meet all current industry standards and best practices are also a requirement for Next Generation 9-1-1. These features do not exist and could not be supported with the current CAD system. The age of the CAD system and its limited functionality has been identified as a risk by the City's contracted service provider. It is recommended that the CAD system be replaced as part of the project rather than incurring additional implementation costs at a later phase or attempting to continue to use the CAD system that is not compliant and may risk future grant funding opportunities for the overall project.
 11. The total cost to replace CAD is \$1.7M, of which \$615K can be accommodated by the existing project, leaving an additional \$1.085M budget requirement. Although this is expanding the total project scope and budget, with the provincial grants received/approved to date, the City's contribution from Tax Capital Reserve has gone down from the originally approved \$1.92M to \$1.805M with potential for further reduction in Tax Capital Reserve contributions pending the 2024 provincial grant process.

12. The following chart outlines the approved and recommended changes for the capital project:

Year	Description	Tax Capital Reserve	Grant Funding	Total Budget
2023	Approved Capital Budget	1,920,000		1,920,000
	Amended Capital Budget – Grant Funding		1,200,000	
	Amended Budget – TCR	(1,200,000)		1,920,000
2024	Paragraph 1 of recommended motion – Grant Funding/Operating expenditures recognition		1,392,359	3,312,359
	Paragraph 2 of recommended motion – CAD system replacement	1,085,000		4,397,359
Total Costs		1,805,000	2,592,359	4,397,359

After including the CAD system in scope, project costs are \$4.397M (\$2.6M Grant + \$1.8M Tax Capital Reserve).

ENVIRONMENTAL AND CLIMATE CHANGE IMPACT MATTERS

13. There are no environmental and climate change impact matters related to the recommendation.

ALTERNATIVES

14. The following alternative is available for consideration by General Committee:

Alternative #1

General Committee could increase the project budget only by the amount of the additional grant funding of \$1,392,359, and not expand the project scope to include the \$1,085,000 budget increase for replacement of the Computer Aided Dispatch (CAD) system, funded by the Tax Capital Reserve.

This alternative is not recommended as the current CAD system has been in place since 2001. The Fire Communication Centre has substantially grown since then and requires a modern, efficient CAD system that also meets all NG9-1-1 requirements such as RTT (Realtime Text), picture and video message storage, customized modern workflows and features that meet all current industry standards and best practices.

FINANCIAL

15. The financial impacts of the changes to the allocation of funding and increase in scope to include the CAD replacement are addressed in the analysis section of this report.

LINKAGE TO 2022–2026 STRATEGIC PLAN

16. The recommendation(s) included in this Staff Report support the following goals identified in the 2022-2026 Strategic Plan:

☒ Responsible Governance

Aligning with Council's Strategic Priority of Responsible Governance and goals to *support the services our community needs*, Barrie Fire and Emergency Service, in working with Information Technology and other departments, will be implementing a NG9-1-1 complaint call handling and dispatching system.