Report to / Rapport au:

OTTAWA POLICE SERVICES BOARD LA COMMISSION DE SERVICES POLICIERS D'OTTAWA

25 June 2018 / 25 juin 2018

Submitted by / Soumis par: Chief of Police, Ottawa Police Service / Chef de police, Service de police d'Ottawa

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SUBJECT: MODERNIZATION ROADMAP UPDATE AND BUNDLE 2A REQUEST

OBJET: MISE EN ŒUVRE DE LA FEUILLE DE ROUTE DE LA MODERNISATION - REGROUPEMENT 2A

REPORT RECOMMENDATIONS

That the Ottawa Police Services Board:

- 1. Receive the Modernization Roadmap update for information;
- 2. Approve the work plan for Bundle 2A as set out in the report;
- 3. Approve the delegation of authority to the Chief of Police to execute and administer Bundle 2A in accordance with the Master Contract Agreement, to a maximum of \$9.9 million;
- 4. Approve a 5 year lease, commencing 1 August 2018, with Metcalfe Realty Company Limited for 3,034 sq. ft. of space at 150 Isabella Street for an annual net rental amount of \$27,306 and annual estimated operating costs of \$48,600.

RECOMMANDATIONS DU RAPPORT

Que la Commission de services policiers d'Ottawa:

1. Reçoive, à titre d'information, la mise à jour sur la Feuille de route de la modernisation;

2. Approuve le plan de travail du Regroupement 2A, tel qu'énoncé au sein du rapport;

3. Approuve la délégation de pouvoir au chef de police pour la mise en œuvre et l'administration du Regroupement 2A conformément au contrat-cadre, à concurrence de 9,9M\$;

4. Approuve un bail de cinq ans, débutant le 1er août 2018, auprès de la *Metcalfe Realty Company Limited* pour un espace de 925 m² (3034 pi²) situé au 150, rue Isabella, pour un loyer annuel net de 27 306\$ et des coûts d'exploitation annuels estimatifs de 48 600\$.

BACKGROUND

In April 2016 the Ottawa Police Services Board (the Board) approved the Information Management / Information Technology Roadmap (the IM/IT Roadmap) for the Ottawa Police Service. The IM/IT Roadmap set out a path for OPS to boost productivity and leverage technical advances readily available in the marketplace and in use by leading police organizations, with the goal of putting and keeping OPS on the leading edge of police capabilities.

Staff had worked with IBM for more than a year to develop the IM/IT Roadmap, which was planned as a 6 year initiative costing \$41.3 million to be funded through pay-asyou-go contributions. It is expected to yield financial benefits of \$8.1 million that will be used to offset the majority of operating costs for the new IM/IT environment, estimated to be \$9.8 million. The project will also generate non-financial benefits valued at \$13.6 million. This translates into 250,000 freed-up hours of sworn officer time and 75,000 hours of civilian time.

The Roadmap is expected to generate two types of benefits: financial benefits of \$8.1 million that can be used to help offset costs and budget pressures, and non-financial benefits of \$13.6 million that can be used to enhance service levels. Financial benefits primarily arise from the introduction of new ways of doing work in civilian areas of OPS which are very labour intensive, resulting in fewer positions. Non-Financial benefits are created when new ways of doing work free-up time for both sworn officers and civilians, which can be channelled into new or better service offerings. This translates into 250,000 freed-up hours of sworn officer time and 75,000 hours of civilian time.

In April 2016 the Board also gave permission to retain Gartner Consulting to provide program support for the duration of the IM/IT Roadmap implementation to help ensure the product being delivered meets expectations. Gartner is an independent information

technology research and advisory company with proven experience in supporting the delivery of complex IM/IT projects. The contract with Gartner is for \$4.5 million and runs until 2021.

City Procurement and Gartner supported the OPS team during the selection of the prime contractor, the company which would be the key implementation partner for the \$41.3 million IM/IT Roadmap. Given the limited internal capacity of OPS, selecting an accomplished prime contractor that demonstrated the experience and capabilities required to execute the IM/IT Roadmap was key to successfully implementing it.

The process to choose the prime contractor began in May 2016 and concluded in February 2017 with the award by the Board of the contract to PricewaterhouseCoopers (PwC) accompanied by a Master Contract. PwC began work immediately. A first key deliverable was the workplan for Bundle 1 activities, set out as a 12 to 18 month initiative with five streams and a cost of \$14.7 million. The Board approved the Bundle 1 Workplan in June 2017 and delegated authority of \$14.7 million to the Chief of Police to ensure an agile approach to implementation.

The purpose of this report is to provide the Board with an update on Bundle 1 activities and accomplishments and request approval for delegated authority to proceed with Bundle 2A

DISCUSSION

Now that the IM/IT Roadmap is launched, it has been given an updated name – the "Modernization Roadmap" (MR) Program to - reflect the transformative nature of this work for policing operations. It combines 7 critical streams of work and hence is considered a Program, in accordance with project management methodologies.

Design - Plan - Implement

The first 15 months of the Program have focused on the design of the solutions for each of the 7 streams of work and planning for their implementation. The streams of work include:

- 1. Member Information System (MIS)
- 2. Enterprise Asset Management (EAM)
- 3. Frontline Mobility (FLM)
- 4. Member Information System (MIS)
- 5. Enterprise Asset Management (EAM)
- 6. Frontline Mobility (FLM)

7. Collaboration

In Bundle 0, which was completed in July 2017, roadmaps for 2 streams - Information Management and Enterprise Architecture - were created as well as a roadmap for the overall MR Program itself.

Bundle 1 built on Bundle 0 and continued the foundational and design/planning work required to meet the MR Program strategic objectives. Over twenty-five (25) individual projects have been undertaken to date to achieve Bundle 1 goals.

Bundle 2A will focus on the implementation of these plans for the five operational streams – Frontline Mobility through to Foundation and Security. The planned work is outlined in this report.

Bundle 2B will be presented to the Board for consideration in the fall. It includes the Member Information System and Enterprise Asset Management streams of work, which are back office in nature. These streams will rely primarily on the City's SAP system as their backbone. The City has developed a roadmap which lays out the planned work to upgrade SAP over the coming years. OPS staff will be meeting with their City counterparts over the summer to maximize the alignment between the City and OPS roadmaps. Bundle 2B can then be finalized and presented to the Board.

Program Design Principles

Staff have developed a set three principles to help guide the MR Program, to ensure that team members and decision makers have clear reference points on how they are expected to carry out the work: 1) "Cop Centric", 2) Partner First and 3) Continuous Optimization. Together these principles will ensure that the MR Program places police operations at the forefront, maximizes opportunities with the City and continually works to improve service to all clients.

- "Cop Centric" means fully integrating sworn members into the selection and implementation of the new solutions to ensure an operational focus.
- "Partner First" means working with the City of Ottawa to maximize alignment through sharing common resources, solutions and services to deliver benefits to OPS, the City and Ottawa taxpayers.
- "Continuous Optimization" means working to improve OPS functions that are not in the Roadmap to deliver better service to clients.

Cloud

Information technology and the security that comes with it are the unseen backbone of the MR Program. The strategic work completed in these areas points to the need for the

OPS to move from a self- managed "on-premise" computing environment to a "cloud" based one. In this way OPS has the flexibility to quickly offer new services to its members and clients and can quickly adapt to ever increasing data storage needs.

The roadmaps for the Foundation and Security Stream have been created with this goal in mind, recognizing that the change will not occur overnight and must take into account the relationships with our partners. For example, the MIS and EAM streams which will use the City's SAP systems as their backbone, will remain as an on-premise solution for the foreseeable future.

Critical "Sweet Spot"

Three streams of work have been identified as critical to the success of the Program and its support of police operations. When operational members joined in the sessions in which future solutions were demonstrated they quickly identified that successful operational deployment means: 1) having accurate, real time information on their personnel, 2) knowing the fleet and equipment (assets) that are available to assign to their personnel for each shift and 3) having all relevant information available on a mobile device so that it can be accessed and shared, bringing mobility to all aspects of police operations. The MR Program is working to ensure these key streams are aligned and are the first group to be deployed, once the supporting foundation and security projects are completed.

Bundle 1 Update and Bundle 2A Request

Significant progress has been made on the projects approved in Bundle 1. But equally important is the change that is beginning to occur within OPS. It is moving toward a strategic posture in dealing with technology adoption and adherence, and away from siloed and transactional technology approaches.

Successfully transforming into this new strategic approach requires an overarching framework consisting of cultural change, strong governance and an effective change management practice. A governance structure has been established that engages and holds accountable all levels of the organization. It is overseen by a partnership of the Director General and the Deputy Chief Bell. Supporting this, efforts have been made to encourage a 'one team' collaborative approach among members of OPS and PwC. An effective change practice has been working with the MR at all levels to ensure success. The MR's underlying philosophy is 'change is made with members of OPS not to OPS members' A benefits realization approach has been developed and is being finalized to identify and track financial and non-financial benefits associated with the MR.

The MR program has succeeded, to date, as a result of the enthusiastic and committed participation of Frontline Operations staff. They have been involved in requirements gathering, planning and design workshops, vendor demonstrations, solution selection sessions and governance committees. They are the key driving force behind the Innovation Council. This participation will continue to be encouraged and supported.

Bundle 1 of the MR Program called for \$14.7 million of funding and was designed to be foundational and to address key gaps. Accordingly half of the funding was allocated to two streams: Information Management and Foundation & Security. To date, \$8.1 million has been spent on Bundle 1 which is approximately 70% complete. (See document 6)

Staff are requesting \$9.9 million for Bundle 2A which sees the implementation of the 5 streams of work which are critical to OPS operations and not reliant on the City's SAP system. This work will take roughly 18 months to complete.

The request for Bundle 2B will be presented in the fall following collaborative work with City staff to maximize the use of the existing SAP functionality. It involves two back office streams - Member Information System and Enterprise Asset Management – and is estimated to cost \$4.8 million.

Bundle 3 has been estimated at \$8.1 million and work will continue to refine this number.

Table 1

Stream	Bundle1	Bundle	Bundle 2B	Bundle 3	Total
		2A	(Estimated)	(Estimated)	
		(Seeking Approval)			
Member Information System (MIS)	2.0	-	2.6	1.6	6.2
Enterprise Asset Management (EAM)	1.0	-	2.2	1.2	4.4
Frontline Mobility (FLM)	0.4	1.7		1.5	3.6
Collaboration	1.8	1.0		0.2	3.0
Innovation	1.0	0.9		0.4	2.3

Information Management (IM)	1.6	1.6		0.5	3.7
Foundation and Security	6.0	3.8		2.3	12.1
Program Expenses	0.5	0.9		0.4	1.8
Total	\$14.7	\$9.9	\$4.8	\$8.1	\$37.5

Bundle 1 Results and Bundle 2A Workplan

The Modernization Roadmap was broken down into five streams when Bundle 1 was presented to the Board in the June 28, 2017 report. Two additional streams - Frontline Mobility and Information Management - have been separated out in Bundle 2A, emphasizing the critical nature of mobility and the use of data to support police operations. The focus of Bundle 2A is implementation of the solutions and approaches identified in Bundle 1 which are operational in nature.

The work achieved in Bundle 1, the goals of Bundle 2 and the expected cost for each stream of work is summarized below.

Frontline Mobility (FLM) (Refer to Document 1 for more details)		
Bundle 1 Work Completed & Planned	ted & recommended the replacement of existing mobile workstations with current generation tablets, piloting of the devices with revised in car technology and improving	
Bundle 2A Proposed	New mobile workstations & smart phones to be deployed to Frontline members enhancing communications and enabling future enhancements. The new mobile workstations will have improved mounting & ergonomics. Capability enhancements	\$1.74 million

	on the devices will be explored and delivered for efficiencies and officer safety.	
Bundle 3	Continued delivery of efficiency improvements and officer safety improvements. Investigation into improvements for demand for service, incident notification, emergency management system, electronic ticketing and communications systems.	\$1.50 Million To be confirmed
	Total Frontline Mobility Cost	\$3.73 Million
Collaboration (Refer to Docum	Collaboration (Refer to Document 2 for more details)	
Bundle 1 Work Completed & Planned	Bundle 1 Work on the planning of the implementation of a modern digital work environment based on the Microsoft Office 365 product is complete. Members will be able to share, store, soarch and work together on documents	

Bundle 2A Proposed	Full roll out of the new digital work environment. The lesions learned in the pilot projects will help ensure a smooth implementation across OPS transforming the way business is done and enhancing the way members work and communicate.	\$0.95 Million
Bundle 3 Preliminary Estimate	To be re-evaluated	\$0.20 Million
	Total Collaboration Cost	\$3.08 Million
Innovation (Refer to Document 3 for more details)		Expected Costs
Bundle 1 Work Completed & Planned	A widely supported Innovation Council is operational - over 90 Frontline Operations members volunteered. Initially, three projects have been identified and are in various stages of pilot implementation. These projects are related to mobile device application, mental health assessment and data analytics.	\$1.00 Million
Bundle 2A Proposed	The Innovation Council continues to identify and select innovative initiatives for trialing. Frontline Operations driven innovation, tested through pilots, will be recommended for deployment into the live environments, making real impact on the ability of officers to complete their roles.	\$0.90 Million
Bundle 3 Preliminary Estimate	Continuation of the Innovation process.	\$0.40 million
	Total Innovation	\$2.30 million

Information Management (Refer to Document 4 for more details)		
Bundle 1 Work Completed & Planned	key information gaps: a modern 'data hub' is being implemented providing the ability to manage traditional structured data and unstructured data such as video	
	Improving data quality, timeliness and accuracy will increase its usefulness and relevance. This increases the opportunities and value of future analytics to support policing. A data quality and governance project is scheduled to begin shortly.	
	OPS needs to efficiently or effectively manage and exploit unstructured data such as knowledge, documents, records, digital assets including text, images, voice and video recordings (inclusive of both digital evidence and other digital assets). Valuable policing insights can be gained through the analysis of these types of information improving OPS' ability to solve crimes and improve public safety. This part of the Enterprise Content Management work stream, intends to identify the needs, priorities and solution needed by OPS and prepare an implementation plan.	
Bundle 2A Proposed	Building on the work in Bundle 1, these projects will continue OPS' transformation into an information driven organization. Enhanced efficiencies and effectiveness are to be achieved through the deployment of analytics and leading solutions for evidence based decision making.	\$1.58 Million
	In addition, projects to enhance efficiencies and effectiveness through the deployment of analytics, and leading solutions for evidence based decision making are planned.	
Bundle 3 Preliminary Estimate	To be re-evaluated	\$0.45

	Total Information Management Cost	\$3.68 Million
Foundation and (Refer to Docum	I Security ent for more details)	Expected Costs
Bundle 1 Work Completed & Planned	The MR is underway and progressing in delivering value to OPS. This has been supported by PwC filling key gaps in program execution and management, change management, enterprise and security architecture capabilities and capacity. Maintaining this core set of people and skills ensures an efficient and uninterrupted flow for the program aiding OPS through this transition, OPS' cyber security posture, specifically relating to the protection of data and controlling access to its systems, has been and will continue to be improved through the Security & Privacy Roadmap. Foundational purchases have been made, improving the cyber security posture specifically protecting its data and controlling access to its systems.	\$6.04 million
Bundle 2A Proposed	PwC will continue to provide program execution and management, change management, enterprise and security architecture support for the MR program. Projects to further strengthened OPS' cyber security posture will continue. These projects will provide technologies, processes and practices designed to protect networks, physical technologies, programs and data from attack, damage or unauthorized access to be undertaken. These will deal with data loss prevention, threat & vulnerability management, identity & access management and security incident & event management.	\$3.80 million
Bundle 3 Preliminary Estimate	Program execution and management, change management, enterprise and security architecture supports. Projects to continue security work to strengthen OPS cyber security posture.	\$2.33 million

	Total Foundation and Security Cost	\$12.17 Million
Program and OPS Project Costs		Expected Costs
Bundle 1 Work Completed & Planned	Travel and accommodation expenses	\$0.50 Million
Bundle 2A Proposed	Travel, accommodation and facility costs.	\$0.89 Million
Bundle 3 Preliminary Estimate	Travel, accommodation and facility costs.	\$0.38 Million
	Total Other Project Related Expenses	\$1.77 Million

Quality Assurance and Risk Management of the Program

Gartner Consulting continues to provide program support to OPS ensuring: adherence to the MR program plan, acquisition of products and services for the best value, achievement of expected benefits, program monitoring and quality assurance, organizational change management and program risk management. Gartner will remain engaged with OPS for the duration of the Modernization Roadmap.

Each quarter Gartner assesses the Modernization Roadmap against a risk framework of 28 quality standards. It considers program management controls and performance against industry standards and best practices with the objective of providing the Board and OPS with a holistic, comprehensive risk profile for the program.

As of April 1st, 2018, the Modernization Roadmap was rated at "medium risk." This is the third risk report since the program commenced Bundle 1 operations and it has trended from "moderate" to "medium" risk over this period. This change is due to several indicators moving from low to medium, and others moving for medium to high.

Gartner provides advice on how to mitigate these risks and the 8 key recommendations are outlined below. Staff will be acting on all of them with the goal of moving the risk of the program towards "low" to help support its success.

- Program Management Role. Re-evaluate and structure the OPS Program Manager (or Director) role such that it meets the level of influence, capability, and responsibility required to enable leadership and oversight of all aspects of the Modernization Program. Clearly distinguish accountabilities of OPS vs. PwC Program Manager roles. Clearly define other OPS program management roles.
 - OPS will create a new role of Program Director to be the single focal point and hold the appropriate level of influence, capability, and responsibility required to lead all aspects of the Modernization Roadmap program.
- 2. Partner-First Strategy. Adopt a framework for analysis and decision making to identify existing applications that the City of Ottawa has already invested in as a starting point for considering IT solutions that are required in the Modernization Roadmap.
 - OPS leaders will work collaboratively with their City of Ottawa counterparts to jointly plan where teams can work together on common solutions for a range of corporate services such as IT, Fleet, HR, Finance, etc.
 - OPS will use the City's SAP solutions for MIS and EAM streams.
 - Payroll services will remain with the City of Ottawa.
- Benefits Realization and Budget. Obtain alignment on expected program benefits. Identify who/how benefit realization will be tracked in order to drive accountability. Monitor program spending rate and budget, and gain further visibility on downstream program and operational costs, to determine if program is financially on track.
 - The Program Office monitors the current invoicing and spending monthly.
 - Financial Services will provide monthly updates on the MR to the Steering Committee and the Program Office.
 - PwC continues to revise the Benefits Realization map for the Program and will table regular updates to the Steering Committee once we move into Implementation mode.
- More Detailed Visibility. It is recommended that PwC provide OPS with a 6-12 month rolling window of concept visibility for planned projects (i.e. PID presentations). This will improve expectation alignment on planned

accomplishments and benefits, and assist with capacity and operational planning.

- PwC has created a program level view showing a projected timeline for all initiatives anticipated for delivery. The detailed views of those initiatives will be presented to the Business Owners and their teams as they are developed.
- 5. Timely Delivery. Identify the top opportunities that will address future schedule delays, report schedule status according to SoW timeframes, and plan future projects considering OPS realities that cannot be changed or improved. Delayed projects are commonly a symptom of lack of capacity. Capacity analysis should be performed to determine BIS and operational capacity. The MR program needs capacity analysis / management support.
 - The Program Office has created a resource capacity spreadsheet of existing projects. While it is recognized this is a snapshot in time, the Program Office will continue to evolve the resource capacity model as new initiatives are proposed by PwC.
 - The Steering Committee has recognized the need to support the capacity requirements of the Program and will be re-deploying existing financial resources to support them.
- 6. Plan for Change. Launch the Resource Impact Committee and Business Advisory Committee to support the MR change management work. Assess gap between target and current state skills and develop plans to address. Coordinate communication, engagement, and change activities in 2018/2019 for projects that have parallel implementation timeframes.
 - The Resource Impact Committee has been identified as part of the Modernization Roadmap Governance document and will convene to assess resource impact issues.
- Collaboration and Open Communication. Foster a culture of communication and teamwork between PwC and OPS, as well among OPS leaders to ensure alignment and a common direction with regards to technology planning and implementation.
 - This effort is on-going and issues are being addressed proactively on a case-by-case basis both within the Steering Committee and individually by the Co-Chairs of the Committee as required.

Accommodation Requirements

Staff are also requesting permission to rent space at 150 Isabella Street to provide the necessary accommodations for the OPS and PwC staff working on the program. For the past 16 months there has been a temporary solution at Elgin Street. With the start

of the "Elgin A" project, which sees the fit-up of this space for the Criminal Investigative Directorate (CID) as part of the goal of consolidating CID operations at Elgin, this option is no longer viable.

The rental of space at 150 Isabella Street is the recommended 5 year accommodation solution for the MR Program. The space will provide the flexibility needed as the MR Program moves from planning to execution stage, when more teams become involved. Under the proposed lease, OPS will rent 3,034 of space for an annual net rental amount of \$27,306. Annual operating costs will add \$48,600 to the annual accommodation costs. One-time fit-up costs are expected to be \$110,000. All costs will be covered under the \$41.3 million funding envelope provided for the MR Program.

LEGAL IMPLICATIONS

This process follows the Master Contract Agreement with PwC and adheres to the Board's Financial Accountability Procedures (FAP) Manual.

FINANCIAL IMPLICATIONS

Bundle 2A is estimated to cost \$ 9.9 million. Funding is on-hand to cover these costs in the 2017 and 2018 capital projects for the Modernization Roadmap shown below.

The plan to fund the Roadmap is in its fourth year. Beginning in the 2015 budget the Board began making pay-as-you-go contributions for the Modernization Roadmap and re-directed existing IT capital project funding. As a result, the Board has accumulated \$29.4 million of funding over this 4 year span. Bundle 1 for the Modernization Roadmap required an envelope of \$14.7M. The required funding of \$9.9M for Bundle 2A is on-hand.

Remaining Budget:	\$0	\$0	\$0	\$4,895,000	\$4,4895,000
Bundle 2 Request:	\$0	\$0	\$5,270,000	\$4,590,000	\$9,860,000
Available Budget:	\$0	\$0	\$5,270,000	\$9,485,000	\$14,755,000
Bundle 1 Request:	\$4,425,000	\$8,715,00 0	\$1,560,000	\$0	\$14,700,000
Project Budget:	\$4,425,000	\$8,715,00 0	\$6,830,000	\$9,485,000	\$29,455,000
Capital Project Number	907924 (2015)	908263 (2016)	908689 (2017)	909144 (2018)	Total

Approval is being sought for the Chief to proceed with the implementation activities for Bundle 2A under delegated authority from the Board. This approach was adopted for Bundle 1 and has proven to align with the way in which a complex program of this type unfolds. It ensures that solutions can be acquired in an agile and timely way. A competitive process for procurement of applications and solutions has been agreed to in the Master Contract approved by the Board in April 2016 and staff will be reporting regularly to the Finance and Audit Committee (FAC) and the Board on the use of the delegated authority.

SUPPORTING DOCUMENTATION

Document 1 - Frontline Mobility

Document 2 - Collaboration

Document 3 - Innovation

Document 4 - Information Management

Document 5 - Foundation

Document 6 - Bundle Summary by Category

CONCLUSION

The Modernization Roadmap Program is well underway. Through the approval last June of Bundle 1, an important program foundation has been put in place, along with key aspects of the information technology backbone which supports the entire program. Design and planning of other key areas is close to completion. Staff are gaining experience with managing a transformation program of this scope and magnitude and are actively working to manage the risks on the program.

Approval of Bundle 2A and the associated delegated authority will enable OPS to move to the implementation stage for all streams of work. Staff will report to the Finance and Audit Committee on the use of the delegated authority and the results achieved by the MR Program.

Staff are collaborating with City staff to finalize Bundle 2B, which will be brought forward in the fall. It will focus on maximizing the use of the City's SAP functionality to bring new tools to the OPS back office.