

Report to / Rapport au:

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

26 June 2017 / 26 juin 2017

Submitted by / Soumis par:

Chief of Police, Ottawa Police Service / Chef de police, Service de police d'Ottawa

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SUBJECT: IM/IT ROADMAP IMPLEMENTATION – BUNDLE 1

**OBJET: MISE EN ŒUVRE DE LA FEUILLE DE ROUTE POUR LA GI/TI:
ENSEMBLE 1**

REPORT RECOMMENDATIONS

That the Ottawa Police Services Board:

- 1. Approve the work plan for Bundle 1 as set out in the report;**
- 2. Approve the delegation of authority to the Chief of Police to execute and administer Bundle 1 in accordance with the Master Contract Agreement, to a maximum of \$14.7 million.**

RECOMMANDATIONS DU RAPPORT

Que la Commission de services policiers d'Ottawa :

- 1. Approuve le plan de travail pour l'ensemble 1, énoncé dans le présent rapport;**

- 2. Approuve la délégation au chef du Service de police du pouvoir d'exécuter et d'administrer l'ensemble 1, en conformité avec l'entente contractuelle cadre, pour un montant maximal de 14,7 millions de dollars.**

BACKGROUND / EXECUTIVE SUMMARY

Information technology (IT) is an essential tool for policing. Properly applied, these tools will help the Ottawa Police Service (OPS) meet the goals set out in its Business Plan and support organization-wide transformation work in an efficient and cost effective manner. Enhancing officer safety, reducing the administrative burden on front line personnel – both sworn and civilian - and providing increasingly improved service to the public are also benefits to be achieved.

Information management (IM) is also critical to the success of OPS. Policing now relies upon complex, often decentralized and rapidly increasing amounts of data, both for its operational and business functions. Effective police organizations must manage the timely input, reconciliation and flow of that data to perform critical analysis and even predict the likelihood of certain occurrences. Analytics are becoming the lifeblood of modern policing and are the expected way to deliver timely and accurate information to members and meet community service needs.

In April 2016 the Board adopted both the IM/IT Roadmap for OPS and an approach for its implementation (Document 1). The Roadmap sets out a vigorous and much needed 6 year modernization plan for the OPS IM/IT environment to ensure OPS has the infrastructure needed to meet current and future policing challenges, as well as to support the transformation of the organization.

As part of the implementation approach, at the same meeting the Board approved a contract with Gartner Consulting to provide program support to OPS. Their role is to help ensure we adhere to the Roadmap program plan, acquire products and services for the best value, and achieve the expected benefits. They have a key role in three aspects of the Roadmap: vendor selection, program monitoring and quality assurance, and organizational change management. They will also play a role in managing the risks of the project. Gartner will remain engaged with OPS for the duration of the Roadmap project

Given OPS's limited internal capacity, an experienced implementation partner is critical to the success of the Roadmap. In February 2017 the Board awarded that role to PricewaterhouseCoopers LLC (PwC) (Document 2). It was chosen through a rigorous, competitive City-led procurement process that began in April 2016. PwC will acquire the goods and services to implement the \$41.3 million IM/IT Roadmap, primarily through sub-contractors, and oversee the implementation of the work packages. There may be

some work packages for which PwC is the industry leader and for which they will provide the solution.

The Board and PwC entered into a master contract in April 2017 which specifies the manner in which competitive prices and solutions are to be sought for the IM/IT Roadmap. Generally, three solutions are to be brought forward for consideration, Once approval has been given through the internal governance process, Gartner will play an important role by monitoring the technical calibre of the solutions being proposed and the price points. They rely on the up-to-the-minute research carried out globally by analysts in their company to use as a basis to validate the proposals being tabled by PwC.

Implementing the IM/IT Roadmap will enable the OPS to boost productivity and leverage technical advances readily available in the marketplace and in use by leading police organizations; and keep OPS on the leading edge of police capabilities.

It will also help to create the new workplace which OPS is committed to providing for its employees. As outlined in Goal S2 of the 2016-2018 Business Plan, OPS wants to put in place a new and integrated approach to work life that reflects a changing workforce supported by workplace innovation and technology. It is a challenging and necessary goal that will bring together three streams of work: creating a modernized workplace through the Facility Strategic Plan, providing access to leading technology through the IM/IT Roadmap, and supporting flexible and mobile work options through a new strategy for workforce operations.

Implementation activities began in March 2017 with Bundle 0, as set out in the contract with PwC, following the Board's approval. Bundle 0 consisted of foundational streams for specific strategies to address information management, security architecture, and enterprise architecture. The projects for these initiatives are on track and the final deliverables are due by mid July 2017.

To ensure transparency of this process, earlier this year, the Board's Finance and Audit Committee directed that all spending made under this contract be brought forward in bundles for final approval by the Board.

In alignment with that direction, the purpose of this report is to gain approval to implement the next bundle of work - Bundle 1 - which involves projects estimated at \$14.7 million over an 18 month period in five [5] categories:

- IT Foundation: Security & Privacy; Enterprise Content Management; Business Intelligence - \$8.7 million
- Human Resources: including Pay and Scheduling - \$2 million
- Collaboration - Video Management, Operations Centre Tools, Office 365 - \$2 million

- Optimization: Enterprise Equipment and Asset Management - \$1 million
- Police Operations Innovation: Creative Policing Solutions; to be defined with operations- \$1 million

Approval is also being sought for the Chief to proceed with these implementation activities under delegated authority from the Board. This approach ensures that solutions can be acquired in an agile and timely way. A competitive process for procurement has been agreed to in the Master Contract and staff will be reporting regularly to the Finance and Audit Committee (FAC) and the Board on the use of the delegated authority.

Funding is available to support the delegated approval. The Board commenced pay-as-you-go contributions for the IM/IT Roadmap in 2015 and as a result currently has just over \$19.9 million in funds on hand to cover these costs.

The financial benefits are low in this phase of the Roadmap, given the high expenditure on foundational items, and are expected to be \$0.05 million.

DISCUSSION

Workplan for Bundle 1

PwC staff has been conducting an assessment of the OPS environment and meeting with OPS staff to determine the recommendations for Bundle 1. The goal is to build on the strategic directions established in Bundle 0, implement foundation items which can be capitalized on in future bundles, address high priority items and introduce some transformative and innovative police operational solutions that will demonstrate the change in the workplace that will take place through the IM/IT Roadmap implementation.

Five key areas have been chosen for Bundle 1 investment. From an expenditure perspective, the most significant investment will be made in the IT foundation - \$8.7 million of the total \$14.7 million for Bundle 1. The rationale and spending allocation for each one is summarized below.

IT Foundation - \$8.7 million: These purchases are meant to address key gaps identified in current technologies operated by OPS, as highlighted in the IT Roadmap. This includes foundational purchases in the areas of security architecture, information management strategy and enterprise architecture designed to enable future capability with respect to business operations and technology. Currently, security, information management and wider BIS capabilities function effectively through the dedication of individuals within the team. However there is low resilience and ability to adapt to change. The level of change expected through the ITSMP requires foundational elements to be completed to enable the group to adopt and manage new technologies

effectively, as well as business solutions for the wider organization. (Document 3 provides more detail).

Human Resources - \$2.0 million – The HR team is defined and delivers HR capabilities, but are not enabled by technology and have no integrated system. Information is poorly distributed amongst the group and within the organization, and processes are not documented to allow them to be repeatable. Some spot solutions exist for recruitment and performance management, but they are not integrated and producing meaningful management information is manual and time consuming. (Document 4 provides more detail).

Collaboration – \$2.0 million - OPS has no supporting capabilities to enable further collaboration beyond what is mandated (such as through PowerCase for major cases). There is limited capability for groups such as the OPSOC to provide collaboration to frontline officers, and minimal enabling technologies to deliver collaboration at either the case level (collaboration between officers) or at executive level (to collaborate on initiatives and documents in a strategic context). (Document 5 provides more detail).

Optimization - \$1.0 million: Enterprise asset management is the focus of optimization activities for Bundle 1. OPS has no enterprise-wide tools or processes that deal consistently with asset and equipment tracking, life cycle management, reporting and analytics. While capabilities exist (e.g. fleet), processes are not consistent and often managed through manual spreadsheets which prevents effective lifecycle management and preventative maintenance to extend the effectiveness and lifespan of assets within the organization. (Document 6 provides more detail).

Police Operations Innovation - \$1.0 million: Currently, there is no defined capability for innovation, or innovative solutions, to be piloted in the organization. Potential solutions may be piloted on a small scale (such as tablet replacements for MDTs to Officers using bicycles or on foot patrol) but most solutions are implemented without a pilot phase. Innovation is limited by the lack of integrated tools and data across the organization (which will be addressed through the IT Foundation and Optimization envelopes). This allocation will enable OPS to introduce some creative solutions in a rigorous and repeatable way. (Document 7 provides more detail).

Benefits

Over the life of the program the IM/IT Roadmap will deliver financial benefits in the range of \$8.1 million and non-financial benefits of \$20.2 million. The latter will take the form of 250,000 hours of freed up sworn officer time and 75,000 hours of civilian time. As previously discussed, year 1 of the Roadmap was designed to be foundational and to address key gaps. As such, benefits were predicted to be minimal, given the focus on

foundational activities, and are estimated to be \$0.05 million in the financial category in year 2.

CONSULTATION

Consultation occurred during the creation of Bundle 1 with the following groups:

- IM/IT Roadmap Program Steering Committee – internal and external members to OPS
- Senior Leadership Team – for operational direction and input
- Gartner Consulting– for independent oversight and advice throughout the process
- Several OPS front line members - who work in the category areas identified

LEGAL IMPLICATIONS

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

RISK MANAGEMENT IMPLICATIONS

Program Level - one potential risk that could impact timelines at the program level would be if one or more unplanned major events were to occur in the City requiring extensive deployment of OPS resources that would take implementation resources away from the team for an extended period. Language has been included in the Master Services Agreement to allow for suspension of work up to 180 days if required. It is anticipated that given the length of the term, timeline risks can be managed within the program envelope.

Project Level - risks at the project level are expected to be identified and managed at the team level within each Statement of Work should a risk materialize into an actual issue. The program will mitigate and address risks that arise above the level of an individual project.

FINANCIAL IMPLICATIONS

Bundle 1 is estimated to cost \$14.7 million. Funding is on-hand in the 3 capital projects listed below to cover these costs, as identified below. Beginning in the 2015 budget the Board began making pay-as-you-go contributions for the IM/IT Roadmap and re-directed existing IT capital project funding and as a result has approximately \$19.9 million of funding on-hand for this purpose.

	Project 907924	Project 908263	Project 908689	Total
Project Budget:	\$ 4,425,000	\$ 8,715,000	\$ 6,830,000	\$ 19,970,000

Expenditures to Date:	\$ 59,887	\$ 0	\$ 0	\$ 59,887
Available Budget:	\$ 4,365,113	\$ 8,715,000	\$ 6,830,000	\$ 19,910,113
Bundle 1 Request:	\$ 4,365,113	\$ 8,715,000	\$ 1,619,887	\$ 14,700,000
Remaining Budget:	\$ 0	\$ 0	\$ 5,210,113	\$ 5,210,113

Approval is being sought for the Chief to proceed with these implementation activities under delegated authority from the Board. This approach ensures that solutions can be acquired in an agile and timely way. A competitive process for procurement 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.

In general the Contract requires that three solutions be presented through an internal governance review process before solution acquisition occurs. Gartner will play an important role by monitoring the technical calibre of the solutions being proposed and the price points. They rely on the up-to-the-minute research carried out globally by analysts in their company to use as a basis to validate the proposals being tabled by PwC.

SUPPORTING DOCUMENTATION

[Document 1 – Link to April 2016 Board Report](#)

[Document 2 – Link to Feb 2017 Board Report](#)

Document 3 – IT Foundation

Document 4 - HR, Workforce Management, Learning Management & Scheduling Implementation

Document 5 – Collaboration Tools and Video

Document 6 – Optimization – Enterprise Equipment/Asset Management

Document 7 – Police Operations Innovation

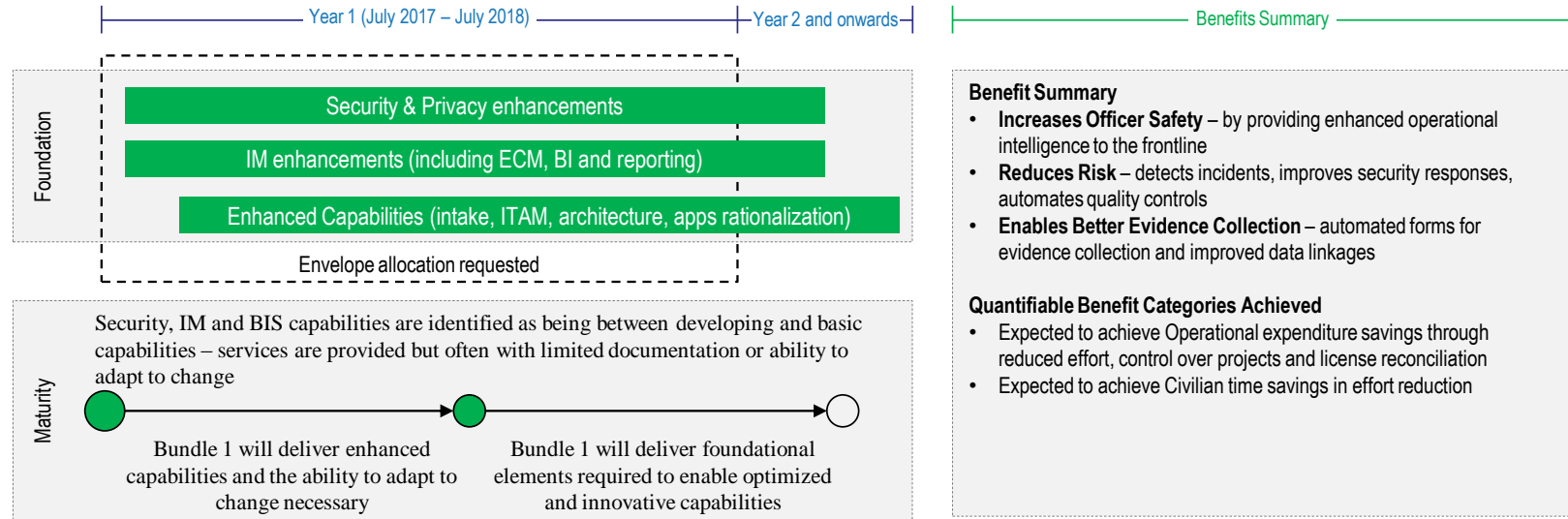
CONCLUSION







Bundle 1 is the beginning of the implementation at OPS of meaningful automated solutions toolsets that will greatly enhance the ability of the organization make work easier for our members, improve service delivery and meet business objectives. Staff will be reporting regularly to the Finance and Audit Committee on the progress of the IM/IT Roadmap implementation work. Within 12 months staff will table a report with the Board requesting permission to proceed with implementation of Bundle 2.

ECM = Enterprise Content Management
 ITAM = IT Asset Management
 BI = Business Intelligence

Foundation

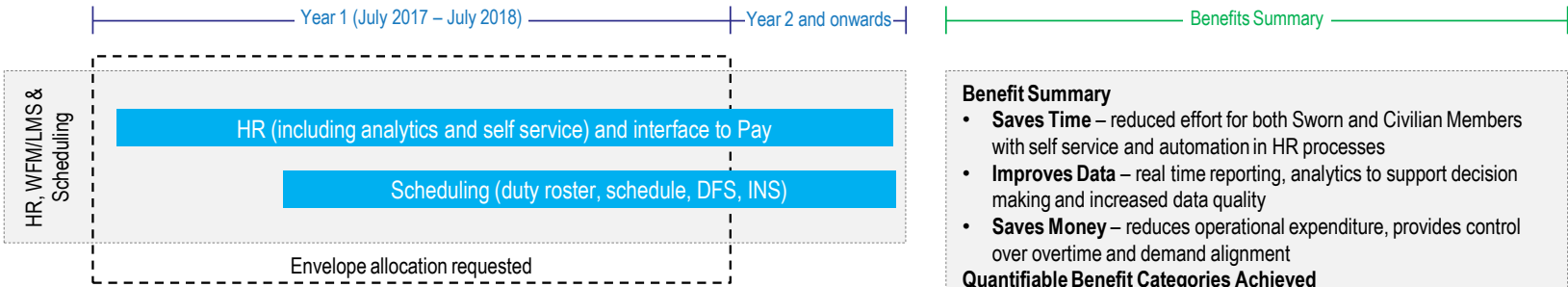
Envelope Ceiling July 2017 to July 2018 - **\$8,700,000**
 (the foundational delivery and implementation to enable OPS technology modernization in Security & Privacy, Information Management, Information sharing & Enterprise Content Management, and support to BIS to enable new capabilities in delivering projects, tools and capabilities to the whole of OPS)



					
Patrol Officer	Sergeant in Guns and Gangs	Inspector	Deputy Chief	Civilian Member	Citizen
<ul style="list-style-type: none"> Improved digital evidence collection including automated easy to use forms 	<ul style="list-style-type: none"> Significant time reductions in administrative tasks and case creation 	<ul style="list-style-type: none"> Improved understanding and support in commissioning IT projects 	<ul style="list-style-type: none"> Improved and enhanced evidence based decision making process through access to relevant information. 	<ul style="list-style-type: none"> Enhanced understanding of where to go for information and improved access to data 	<ul style="list-style-type: none"> Improved awareness of the Police's enhanced capabilities, improved perception of personal security

HR, Workforce Management, Learning Management & Scheduling Document 4

Envelope Ceiling July 2017 to July 2018 - **\$2,000,000**
 (the assessment, evaluation, selection and implementation of a system or solution to enable streamlined, simple self service HR processes, integrated scheduling for Sworn and Civilian members and real time links to the city's payroll function)

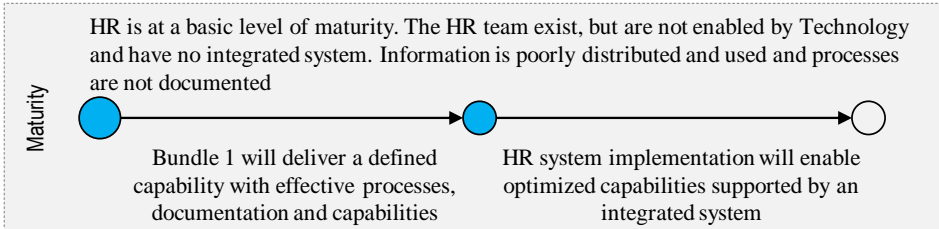








Benefit Summary

- **Saves Time** – reduced effort for both Sworn and Civilian Members with self service and automation in HR processes
- **Improves Data** – real time reporting, analytics to support decision making and increased data quality
- **Saves Money** – reduces operational expenditure, provides control over overtime and demand alignment

Quantifiable Benefit Categories Achieved

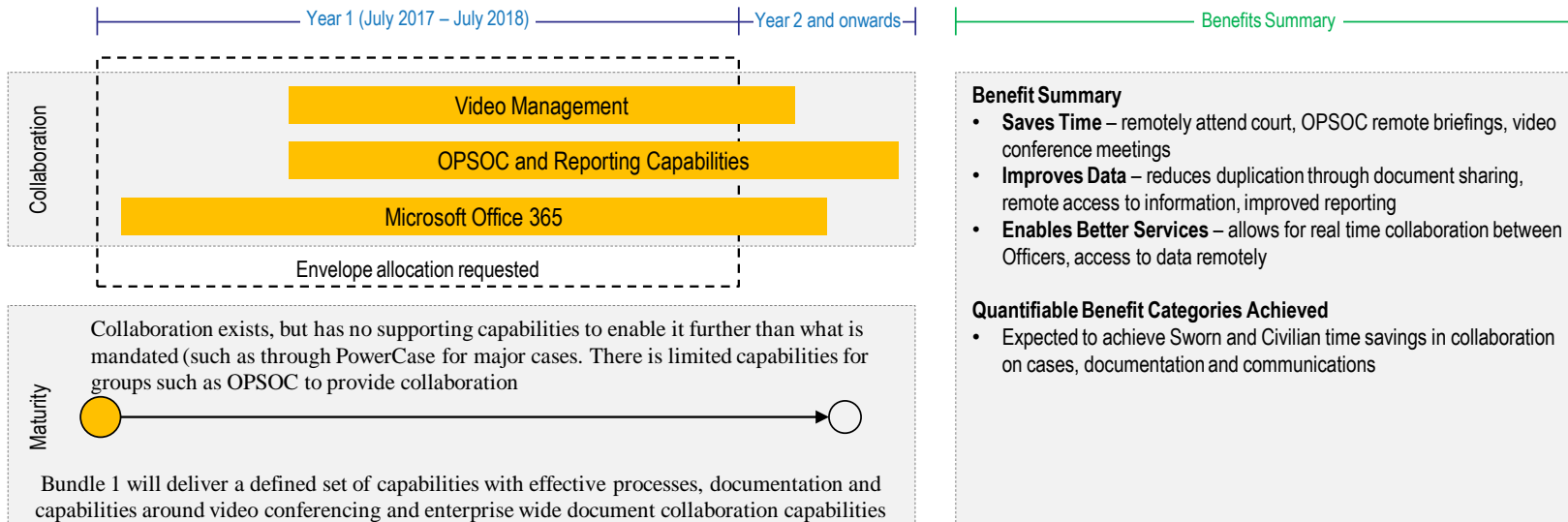
- Expected to achieve Operational expenditure savings through reduced effort, control over workforce management and improved interfaces between scheduling and pay
- Expected to achieve Sworn and Civilian time savings in scheduling and manual process reduction









					
Patrol Officer	Sergeant in Guns and Gangs	Inspector	Deputy Chief	Civilian Member	Citizen
<ul style="list-style-type: none"> • Paid correctly • Improved access through self service for HR and Pay 	<ul style="list-style-type: none"> • Significant reduction in manual time sheet entry • Improved knowledge of team availability 	<ul style="list-style-type: none"> • Full and accurate view of Officers assignments and availability at all times • Demand is quantified 	<ul style="list-style-type: none"> • Improved access to automated reports on HR and scheduling in real time 	<ul style="list-style-type: none"> • Improved payment calculations including LTD and benefit payments after sickness or changed working hours 	<ul style="list-style-type: none"> • Improved visibility to officer presence on the streets

Collaboration Tools and Video

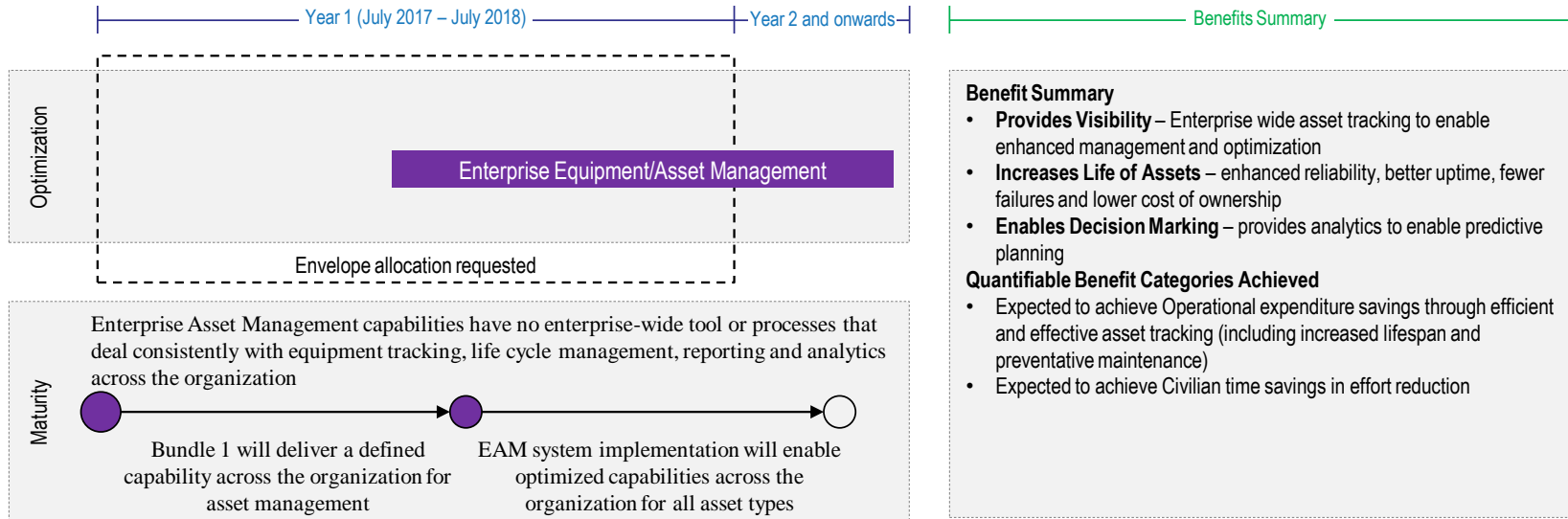
Envelope Ceiling July 2017 to July 2018 - **\$2,000,000**
 (depending on the outcome of the Office 365 evaluation currently being completed, the assessment, evaluation and implementation of systems or solutions that enable collaboration between Officers, civilians and the public, including new capabilities for OPSOC, video conferencing and document sharing capabilities)









					
Patrol Officer	Sergeant in Guns and Gangs	Inspector	Deputy Chief	Civilian Member	Citizen
<ul style="list-style-type: none"> • Improved access to information while on patrol, has better intelligence and better decision making 	<ul style="list-style-type: none"> • Easily collaborates with team members remotely through secure mechanisms 	<ul style="list-style-type: none"> • Improved data sharing and collaboration with partner organizations, such as the RCMP, seamlessly 	<ul style="list-style-type: none"> • Improved communication through video updates from any secure location directly to parades 	<ul style="list-style-type: none"> • Improved access to digital documents and multi-media files, even if filed incorrectly 	<ul style="list-style-type: none"> • Enhanced ability to provide information to the Police omni-channel and/or preferred channel of communication

Optimization – Enterprise Equipment/Asset Management Document 6

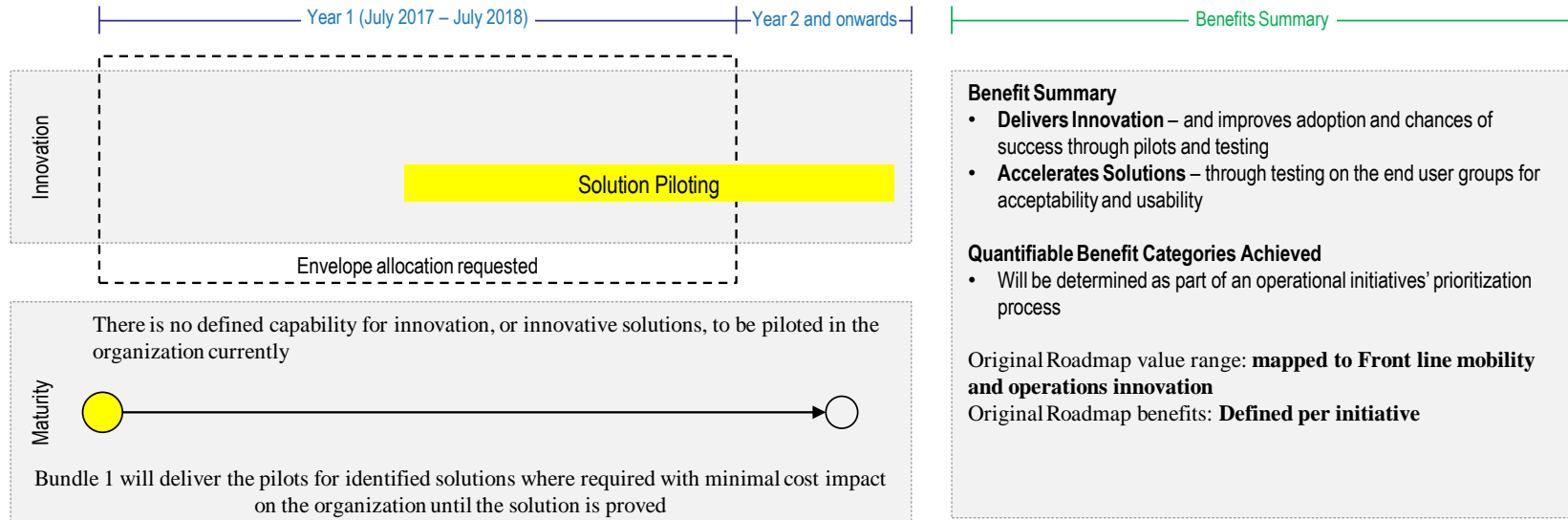
Envelope Ceiling July 2017 to July 2018 - **\$1,000,000**
 (the optimization of systems, processes and tools, as well as the implementation of new systems and tools, such as Enterprise Asset Management, that enable OPS to fully integrate, control and monitor their delivery of services to citizens and members. EAM will delivery enterprise wide asset tracking capabilities)









					
Patrol Officer	Sergeant in Guns and Gangs	Inspector	Deputy Chief	Civilian Member	Citizen
<ul style="list-style-type: none"> • Always has operational and fully functioning equipment as requested and when needed 	<ul style="list-style-type: none"> • Enhanced asset maintenance to proactively notify when vehicles or equipment will be out of service 	<ul style="list-style-type: none"> • Improved deployment of available assets and improved usage through analytics 	<ul style="list-style-type: none"> • Enriched knowledge of all assets (radios, firearms etc.) in real time for all officers 	<ul style="list-style-type: none"> • Significant reduction in effort to track assets in catalogues and can quickly identify /locate potentially missing items 	<ul style="list-style-type: none"> • Improved communication on updates on any crime that she has reported or is connected to

Police Operations Innovation

Envelope Ceiling July 2017 to July 2018 - **\$1,000,000**
 (the identification, assessment, testing and piloting of potential innovative solutions that bring significant enhancements to the OPS. Successful pilots will be implemented for the whole organization to bring the benefits from small user groups to the whole population)



					
Patrol Officer	Sergeant in Guns and Gangs	Inspector	Deputy Chief	Civilian Member	Citizen
<ul style="list-style-type: none"> • Access to pilot and test innovative technical solutions 	<ul style="list-style-type: none"> • Access to pilot and test innovative technical solutions 	<ul style="list-style-type: none"> • Improved understanding and access to innovative technology 	<ul style="list-style-type: none"> • Improved alignment of priorities to innovative technology 	<ul style="list-style-type: none"> • Improved adoption and advancements with innovative technology 	<ul style="list-style-type: none"> • Better understanding of innovation available to police services to serve and protect the public