Asset Management Review 2021

Executive Summary of Recommendations

Final Version - Fall 2021



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Important Note: This executive summary document draws on a variety of work products produced throughout the Asset Management Review 2021 Project. Material produced by PwC, in collaboration with the OPS, totalled in excess of 250 pages of material. This material is structed in a practical manner for the benefit of the OPS, and is not compiled as a formal audit report. For further detail on items such as the Current State Assessment, Target Operating Model (TOM), Gap Analysis and Roadmap, please consult the respective documentation.

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addressing the OPS' needs and making decisions regarding whether to proceed with recommendations. The OPS is also responsible for the results achieved from using the Services or deliverables.

Table of Contents

1	BACKGRO	OUND	4
2	Approac	сн	4
3	3 SUMMARY OF CURRENT STATE FINDINGS		5
	3.1 Curr	rent State SWOT Summary	5
	3.1.1	Strengths	5
	3.1.2	Weaknesses & Opportunities (Focus Areas)	7
	3.1.3	Threats	8
	3.2 Resources Consulted to Inform the Current State Analysis		8
	3.2.1	List of Persons or Teams Consulted	8
	3.2.2	Documentation collected and analyzed	9
4	Asset N	Anagement Target Operating Model (TOM)	9
5	Summary of Recommendations		

1 Background

As it pertains to policing equipment, the Asset Management function within the OPS is responsible for the acquisition, storage, distribution, maintenance, disposal, and overall management of intervention equipment, and non-uniform policing "kit" (not including facilities and fleet assets). This fundamental capability of the Service enables it's sworn officers to deliver on their core mandate, protecting and serving the people of Ottawa. Asset Management fulfils a critical operational, financial and regulatory role within the Service that cannot be overlooked, or downplayed.

In the spring of 2021, the OPS looked to conduct a review of their Quartermaster and Assessment Management functions with the help of third party advisors (PwC). This review was conducted to identify current state areas of improvement, and strengths that can be leveraged to gain efficiencies. This review project also contained a future-state design component in the form of a Target Operating Model (TOM), which is the focus of this document. By analyzing the current state of operations for the OPS' Quartermaster function, the project team was able to glean detailed insights that have informed an improved target state. A focus was placed on near, and immediate term process and org structure improvements within the TOM, however key technology components were addressed to ensure stable, long term benefits were realized in terms of efficiency of operations, and cost effectiveness. This improved target state is outlined within this TOM Design Document, including recommended process changes and initiatives that will lead the OPS from the current state, to the improved target state over the next 3 to 5 years.

In order to achieve this target state, the OPS should formally take ownership of the TOM design document, and implementation roadmap. A modernization program should be established around this core set of documentation, in order to clearly establish roles within the organization to begin detailed planning of implementation activities (process changes, training, and technology implementations), using the implementation roadmap as a future state guide.

2 Approach

The Asset Management Review 2021 project utilized a 3 phased approach to gain a detailed understanding of the current state, to map out the desired target state, and to plan for how the organization can transition to that target state.

- Current State Assessment & Outcomes Document
 - o Analysis of organization's current operating model
 - o Current good practices that can be reused, as well as pain points and areas of improvement
 - o Assessment against benchmarking and/or best practices; and/or
 - o Additional potential opportunities
- Target Operating Model Design (TOM) & TOM Document
 - o The TOM Design Document provides a view of how the organization will operate in the future
 - o It provides a means through which the organization can be engaged regarding the strategic path and direction of the change initiative
- Gap Analysis & Recommendations

- o Analyzing the differences between Current State and Target State to define strategic organizational changes and quick wins
- o An actionable roadmap to the target state will be a key component for this work product

3 Summary of Current State Findings

This Current State Assessment document outlines the strengths, weaknesses, threats, and opportunities that exist within Ottawa Police Service (OPS). The focus of this document will be on the Asset Management function within the service. Information gathered from stakeholder interviews, past projects, reports, and other documents provided by the OPS has allowed our team to form a holistic understanding of this organization. Insights gathered from this document will support the creation of a Target Operating Model (TOM) for the Asset Management function within OPS.

The purpose of this document is to provide a diagnostic assessment for the Ottawa Police Service (OPS) Asset Management function through 5 unique lenses:

- Organizational Strategy
- Processes
- Governance
- People
- IT Systems and Information

The report will use a SWOT Analysis (Strengths, Weaknesses, Opportunities, and Threats) to highlight areas of focus within the organization. The report does not intend to present a view on what must change within the organization. It focuses on highlighting the current state of the Asset Management function, the challenges and areas of opportunity.

Areas of opportunity assessed during the interview phase of the Current State Assessment.

- Purchasing Governance and Infrastructure Creating a culture of accountability for uniform, equipment and policing assets spending within OPS.
- Quartermaster Processes Formalizing existing processes within the QMU and supporting existing initiatives.
- Asset Management Technology Consolidating multiple databases, processes, and applications across OPS to create synergies.
- Asset Tracking Installing robust processes to make units and individuals responsible for equipment they use.

Throughout the service, it is apparent that there is a strong desire for change. Some key principles that change was centered around were:

- Standardization of uniform across the service.
- Right resources for the right job
- User-friendly, effective technology that meets current and future needs
- Synergy and homogeneity across technology platforms
- Focus on financial planning and education

3.1 Current State SWOT Summary

3.1.1 Strengths

Throughout the current state assessment of the Asset Management function of the OPS, we uncovered a number of organizational strengths that stood out. At a high-level, many of these strengths are tied to the dedicated individuals who comprise the OPS. These individuals understand their organizational mandates, have a desire to learn and innovate, care about the people that they serve, and understand the challenges and constraints that face the service.

Strong Chain of Command

- Clearly defined responsibilities for roles throughout the organization. Members are actively supported from Chief to Constable, and from C-Suite to Analyst.
- Chief supported creation of the Company Sergeant Major (CSM) position to standardize the uniform and create stricter guidelines for OPS personnel pertaining to dress and deportment. The organization recognizes this as a priority, and change is in motion.

Experienced Resources in Administration Management Positions

• Experienced, qualified and, capable resources recruited and promoted into key administrative roles, such as the Director, Material Management (a technical position).

Management Prioritizing Infrastructure Investment

- South facility being constructed to centralize command and advance real property capacity.
- Quartermaster, Fleet, and Evidence Control may be co-locating to another facility; enabling improvements to inventory storage and capacity.

Existing Continuous Improvement Initiatives

- RFID pilot project is under way for asset tracking, and has already demonstrated significant value to participants and personnel impacted. This further demonstrates the organization's ability to implement a rather complex project pertaining to physical asset management that can drive organizational value.
- Implementation of SAP Ariba has been identified as a possible project starting 2022. This would be a transformative initiative with the potential to drastically improve asset management and quartermaster functions within the OPS.

3.1.2 Weaknesses & Opportunities (Focus Areas)

Purchasing Governance & Infrastructure

The purchasing function at the OPS has been identified as an area requiring further improvement. Currently, a combination of "not fit for purpose" software applications, a lack of documented processes, and limited organizational guidance on purchasing compromises the end-to-end purchasing process. As the purchasing process is difficult and time consuming for non-QM resources ordering material, standard procedures are sometimes being bypassed, using OPS issued credit cards to make convenient buys. With organizational units having purchasing autonomy, some purchases are contrary to OPS' interests (eg. non-standard uniform items). The purchasing process and tools currently in place does not allow for the tracking of purchases. This problem is highlighted by the number of purchases made with credit cards outside of the formal channels of QM and City purchasing. This results in a very challenging and labour-intensive process for the analysis and reconciliation of purchases.

Asset Management Technology

A cohesive asset management tool does not currently exist within OPS. Multiple specialized applications are being employed in Fleet, Quartermaster, Facilities, and PDC to meet similar requirements. Critical serialized assets are being tracked and lifecycled in Excel, OSL, PMXpert, M5, and AssetWorks. Most of those applications are configured as stand alone apps and don't allow for information flow between them. In some cases, their age and the way they were deployed is not user-friendly and requires dedicated department specialists to operate them. In the event of succession through promotions or retirements, critical capabilities may be lost.

Asset Tracking

The tracking of different asset classes across the OPS is inconsistent and incomplete for many assets. There is very little to no lifecycle tracking of assets. When an asset is purchased, only the original purchase price is documented. There is a requirement at the OPS for a centralized asset lifecycle tracking process. This includes tracking of maintenance, condition, location, expected use vs actual use, and disposal. Specifically in regards to location, there is a need for better location tracking of in-vehicle assets such as shield caps. It is the officer's responsibility to check that items are complete and replenished when used, yet no formal process exists to encourage or enforce such standards.

3.1.3 Threats

Along the change journey the OPS may encounter threats that can hinder progress and improvement. Throughout the current state assessment, we have identified 5 major threats that may impact operations and/or transformation within the OPS. During the TOM design phase, these threats will be analyzed in accordance to future state recommendations. Strategies will be put in place to mitigate these threats.

Application changes require City of Ottawa approval

- Ideal system changes or application purchases must integrate with City run programs
- Goals and objectives of system functionality must be in line with those of the City

Resource constrictions

- Certain operating units within the OPS are understaffed
- Members are working at capacity and cannot take on additional responsibility for change initiatives (both process and system changes)

Stakeholder buy-in

- Transfer of buying power within operating units may cause discontentment
- Formalization of purchasing, uniform and equipment standards may be seen negatively by various members of the OPS and their Association

Budget constraints

• Budget allocation provided by the city is expected to tighten within upcoming years

Operational Expenditure

• Operational mindset for units opposes the financial mandates of the OPS

3.2 Resources Consulted to Inform the Current State Analysis

Our current state analysis was driven by an analysis of relevant documentation provided to the project team by the OPS, and by conducting over a dozen interviews with stakeholders. Lists of persons consulted and documents analyzed is provided below.

3.2.1 List of Persons or Teams Consulted

- Cyril Rogers Chief Financial Officer
- Jonathan Sweet Manager, Financial Planning
- Jason Renaud Director, Material Management
- Steve Boucher Corps Sergeant Major
- Jeff Leblanc A/Inspector (PDC)
- Adam Payne A/Staff Sergeant (PDC)
- Chris Hunter Manager (BIS)
- Andre DeGagne Manager (ITS & Telecommunications)
- Melanie Butler QM Supervisor
- Malcolm Tardieu QM Coordinator
- Eric Thorpe QM Coordinator
- Drew Clark QM Coordinator

• Site visit conducted by PwC to Leitrim QM Facility on Jul 21

3.2.2 Documentation collected and analyzed

- EAM Org Model Options Preliminary ppt (Work-In-Progress)
- Audit of Quartermaster (July 15, 2019)
- 2020 Annual Reports
- Asset Evergreen spreadsheet
- S/Sgt Sean McDades Materiel Management
- 20210615 OPS Quartermaster and Asset Management Meeting Notes
- Current State View of Asset Management
- Tips for Evaluating Law Enforcement Asset Tracking Software
- City of Ottawa State of the Asset Report 2017
- Organizational Chart (undated)
- City of Ottawa Asset Management Plan Framework (dated: 20200626)
- OPS Bicycle Equipment and Use (amended: 20170123)
- City of Ottawa Comprehensive Asset Management Policy (approved by Council: 20210526)
- OPS Equipment Usage (amended: 20170123)
- City of Ottawa Gen Nielsen, Manager Asset Management Branch at CoO Experience
- PwC IT Improvements PwC (of OPS, 2018)
- FCM How to develop an asset management policy, strategy, and governance framework (2018)
- OPS IT Improvements New World working with the Old World (Information Technology and Hard Copies (June 2021)
- OPS Quartermaster Staffing Organization Chart
- OPS Uniforms / Personal Appearance (amended 20200826)
- OPS Multiple Sets of Meeting Minutes with PwC determining organizational business capabilities (2017)

4 Asset Management Target Operating Model (TOM)

This Target Operating Model (TOM) Design Document aims to outline the desired future state of operations for the Asset Management (for policing equipment) capability within the Ottawa Police Service (OPS).

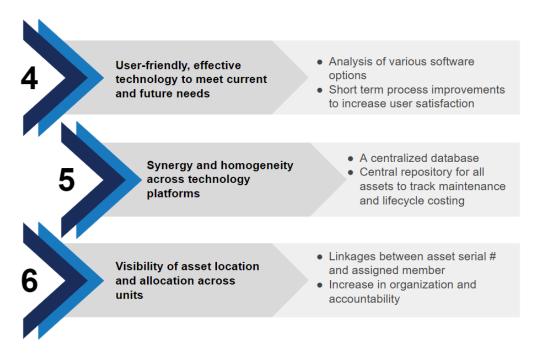
This document bridges the gap between strategic vision, and target state operations. The TOM itself is aspirational, and can be achieved if the organization implements the key initiatives required for transformation over the next 3 to 5 years. An implementation timeline will also be generated as part of this project to lay out the path of implementing recommended initiatives that will lead to the realization of the target state designed within this document.

A structured change management and transformation support approach should be leveraged to assist with the implementation of these initiatives along the way to ensure stable, enduring success.

Guiding Principles

Guiding Principles were workshopped in collaboration with OPS' leadership in order to determine the focus for the Asset Management TOM. The following list appears in order of priority for the service:

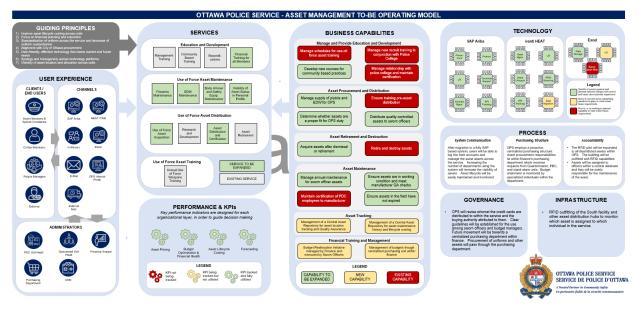




The Target Operating Model (TOM) is a framework for how the Asset Management function of the Ottawa Police Service (OPS) will operate in the future.

Guiding principles will be used to govern the TOM design by driving the changes in the TOM's eight different components.

Opportunities for improvement that are recognized throughout the TOM will follow the "crawl, walk, run" approach. "Crawl" opportunities consist of quick process wins that will provide immediate value to the OPS. Walk and run opportunities focus more on larger scale initiatives, and technology enablement that can to significantly improve asset management capabilities.



For full resolution view and further details, please refer to the Asset Management TOM Document 2021

Performance & KPIs

With the utilization of an Enterprise Asset Management (EAM) system, KPIs can be created, easily managed, and analyzed in order to monitor performance and make strategic decisions. New processes serve as a source of information that is used as an input in the creation of these KPIs.

Asset Pricing

- Analysis of alternatives to ensure that assets being purchased are feasible and well priced. (looking at pre-approved vendors).
- Analysis of "fitness for use" (could a different asset do a better job?)

Forecasting

- Ability to forecast assets that are approaching their end of life and plan for large expenses years in advance
- Ability to assess the overall cost of assets required for new recruits and ensure optimal inventory is purchased

Budget Optimization & Financial Health

- Comparison of spending between operating units
- Creation of redistribution strategies in order to optimize budget allocations

Asset Lifecycle Costing

• Analysis of asset performance to determine value vs cost over the assets expected life

5 Summary of Recommendations and Potential Cost Impacts

Below is a table outlining key recommendations generated as a result of the Asset Management Review 2021.

Recommendation	Operational Impact	Potential Cost Impact
Implement a Formal Checklist for In-Vehicle Assets Using a hard-copy, or digital (CAD) checklist to (a) confirm the completeness of a police vehicle's stock of equipment, and (b) to confirm the condition and state of repair of said equipment.	The OPS has observed notable issues with missing, or damaged equipment that belongs within their police vehicles. Instituting a simple check and balance to add accountability to the user to keep track of their assigned in-vehicle equipment, and to maintain it, or report its state of disrepair as soon as possible.	Minor impact on cost due to the reduction of missing in-vehicle assets.
<i>Finance 101 Course for Credit Card</i> <i>Usage</i> Develop an internal finance course that aims to educate OPS credit card users on policies for use, expense approvals process, and expense reconciliation.	By better educating credit card users within the OPS (which is a key source of asset acquisition), the Service can have an immediate impact on improper, duplicitous spending habits.	Potential for minor to moderate impact on cost due to a reduction in spending.
Finance 201 Course for Budget Managers Develop an internal finance course that aims to educate OPS budget managers on budget management skills, proper approvals processes, how to curb spending, and general financial hygiene for their units.	By better educating budget managers within the OPS, the Service will realize a higher standard of budget management, forecasting and planning, while also tightening up on spending, and ensuring expenditure policies are better adhered to.	Potential for minor to moderate impact on cost due to a reduction in spending.
Implement a Central Asset Repository Implement a central asset repository to conduct more sophisticated asset lifecycle tracking and asset management, including items such as:	Currently, the OPS utilizes a multitude of tools, both digital and paper based, to track policing assets such as intervention equipment (firearms etc.). This creates a number of complexities in terms of asset management due to the lack of shared data across platforms, and the inability to	 Potential for moderate impact to cost due to the following reasons: Better understanding of maintenance trends and costs that can result in lower carrying costs, and

 Asset maintenance schedules Manage asset condition Manage asset retirement Build dataset for lifecycle costing 	execute many foundational asset management activities. By implementing one central asset repository, even in the form of a simple database, the OPS will be able to develop a more sophisticated asset management function, thus realizing more of the expressed benefits therein.	 replacement costs for thousands of assets currently within the OPS' portfolio Reduced level of effort for human resources working on asset management tasking due to a much more efficient and sophisticated asset tracking system Potential for cost avoidance associated with lawsuits and reputational harm due to asset malfunction (firearms, less-lethal, body armour etc.)
Implement Budgetary Review by a Financial Analyst Increase the scrutiny and regularity applied by the Finance department to unit budgets around the OPS.	By having more frequent and detailed reviews and touchpoints with budget managers, the finance department will be able to better curtail ineffective spending.	Potential for minor impact on cost due to a reduction in spending.
CSM Approval of Novel Purchases (Uniform Customization & Add-ons) Increase the participation of the Corps Sergeant Major (CSM) in the purchase approvals process such that all novel purchases and customizations over a certain dollar value must be approved by the CSM.	By adding this approval, the CSM will be able to cut-down on unnecessary uniform and equipment customizations (non-medical reasons) that add unneeded costs to the OPS.	Minor impact on cost due to a reduction in spending on uniform and equipment customizations.
Centralized Procurement Office (or Officer) Establish a centralized procurement office or officer that will execute all procurement transactions over a set dollar value	 By establishing a central function to conduct all procurement transactions, as opposed to the current, semi-decentralized procurement function, the OPS can anticipate: More capacity within the QMU Increased budget and spending oversight Unbiased, central function that can ensure all purchases are in-line with policy 	Minor to moderate impact on cost due to relieved capacity within QMU and a reduction in spending.

Budget Reallocation Initiative Establishes processes through which budget managers are able to adjust their in-year budget requirements (i.e. re-assign budget to another unit that has an explicit need).	 By establishing a budget reallocation initiative, and consequent processes, the service will experience: Budget optimization between units Creates savings for future expenditures Decrease in overall spending 	Potential for minor impact on cost due to a reduction in spending.
Implement Heat ITAM for Enterprise Asset Management (EAM) Building off of an established central asset repository, implementing a true, Enterprise Asset Management tool will only elevate the benefits of that previously mentioned recommendation.	Enhancing the asset management toolkit that the OPS utilizes will greatly increase the ability of the Service to better lifecycle and manage their assets, reducing cost of carry, cost of replacement, and potential legal and reputational harm due to asset failure or malfunction.	As noted in central asset repository recommendation. Moderate impact on cost.
Implement RFID for in-vehicle assets The OPS has implemented an RFID system at one of its stations. This technology could be expanded to cover in-vehicle assets, enhancing the previously noted recommendation.	Enhancing RFID driven in-vehicle asset tracking will make it very difficult to circumvent a checklist-style system. RFID tracking for in-vehicle assets will all but eliminate "missing" equipment from vehicles, and further enhance accountability for maintenance and care for assets.	Minor impact on cost due to the reduction of missing in-vehicle assets.
Implement RFID for Communal Assets Implement RFID for the tracking of all communal assets across the Service, namely items such as radios.	By expanding the RFID tracking presence across the Service, and applying it to communal assets such as radios, the service will realize a significant reduction in lost or damaged assets due to the increased visibility on asset location and state of repair, as well as the increase in user accountability.	Minor to moderate impact on cost due to a reduction in missing or damaged communal assets.

Cost Saving Impacts Summarized

The Asset Management review has a total specialized equipment budget of approximately \$2.7 million dollars. Based on the above recommendations, it is estimated that OPS can save between 10% to as much as 25% of it's specialized equipment budgets when the larger enterprise wide solutions are implemented, such as RFID.