

Quartermaster Review 2021

Executive Summary of Recommendations

Final Version - Fall 2021



OTTAWA POLICE SERVICE
SERVICE DE POLICE D'OTTAWA

*The Trusted Leader in Policing
Le chef de file de confiance dans la police*



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Important Note: *This executive summary document draws on a variety of work products produced throughout the Quartermaster Review 2021 Project. Material produced by PwC, in collaboration with the OPS, totalled in excess of 250 pages of material. This material is structured 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.

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1 Background

The Quartermaster function of the OPS is responsible for the sourcing, storage and distribution of a variety of policing equipment throughout the service. This mission critical capability ensures members are well uniformed, and properly kitted out for service to the public. Without an effective, and efficient Quartermaster function, the service risks delays in uniformed members receiving proper kit in a timely manner, receiving sub-standard uniform items, financial loss due to poor handling of goods, and increased spending due to unnecessary sunk costs.

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 Quartermaster 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***
 - Analysis of organization's current operating model
 - Current good practices that can be reused, as well as pain points and areas of improvement
 - Assessment against benchmarking and/or best practices; and/or
 - Additional potential opportunities
- ***Target Operating Model Design (TOM) & TOM Document***
 - The TOM Design Document provides a view of how the organization will operate in the future
 - 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 will outline the strengths, weaknesses, threats, and opportunities that exist within Ottawa Police Service (OPS). The focus of this document will be Quartermaster functions and Asset Management 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 QM and Asset Management functions within OPS.

The purpose of this document is to provide a diagnostic assessment for the Ottawa Police Service (OPS) Asset Management and Quartermaster functions 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 and Quartermaster functions, 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 Quartermaster 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.

High Level of Initiative from Quartermaster Personnel

- Quartermasters are proactive and forward thinking:

- o QMs have created “recruit boxes” with standardized items required for officers new to the service. Having standard items already picked and packaged frees up time for the QMs to complete other important tasks
- o QMs pride themselves on their fast turnaround times for asset requests. Time from request to fulfilment is both timely and accurate, leading to a high level satisfaction for the end user.
- Quartermasters operate with a great deal of care and detail in the tasks they perform:
 - o QMs complete manual quality checks when receiving product to ensure that assets are safe and up to code for the officers using them. Officer safety and asset quality is a core value shared by QM.

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.

Quartermaster Processes

The state of the QMU technology and infrastructure increases the level of effort needed for Quartermasters to perform their tasks. The QMU lack an Asset Management or effective Inventory Management platform (OSL is a modified HR/finance tool), training documentation for new QM resources, and a facility that fits their current asset portfolio needs. It was reported in 2019 that Quartermasters were understaffed; a large part of that may be due to the inefficiencies related to the factors aforementioned, and not just a resourcing issue.

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 Quartermaster Target Operating Model (TOM)

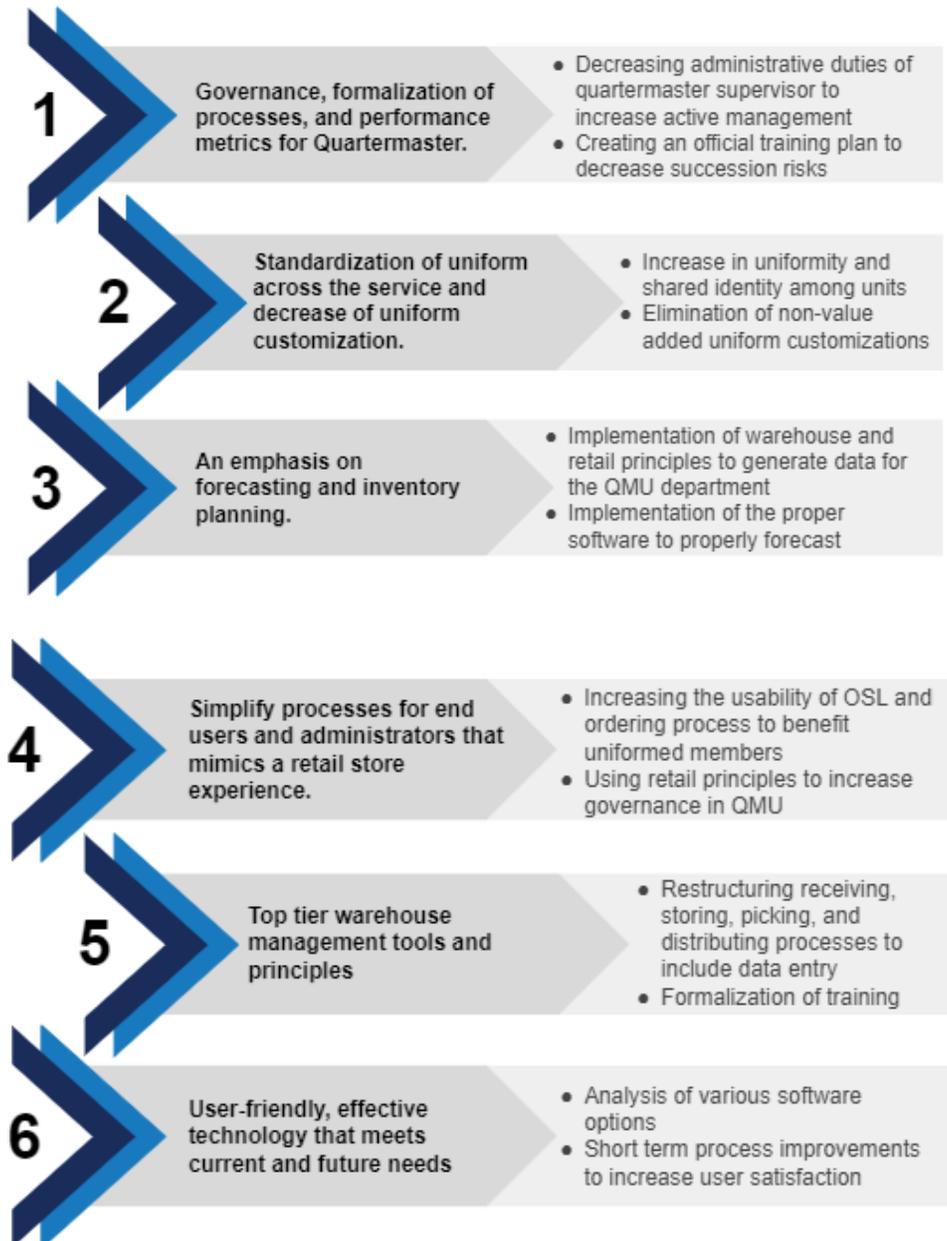
This Target Operating Model (TOM) Design Document aims to outline the desired future state of operations for the Quartermaster capability within the Ottawa Police Service (OPS).

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

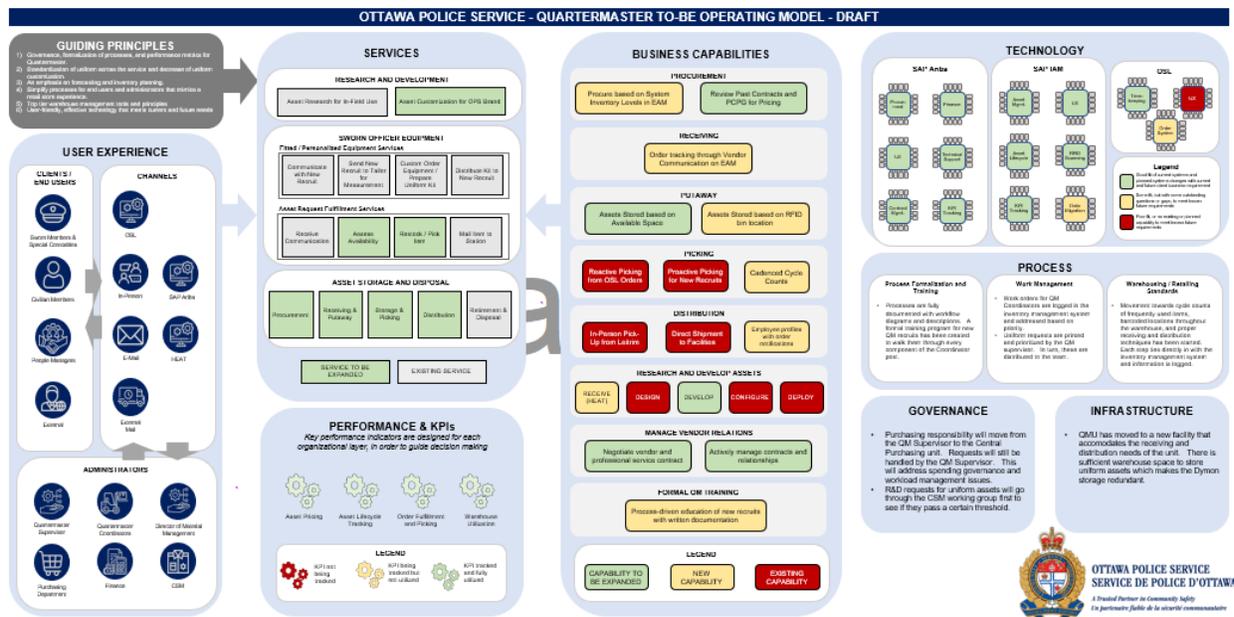
Guiding Principles were workshopped in collaboration with OPS' leadership in order to determine the focus for the Quartermaster TOM. The following list appears in order of priority for the service:



The Target Operating Model (TOM) is a framework for how the Quartermaster 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.

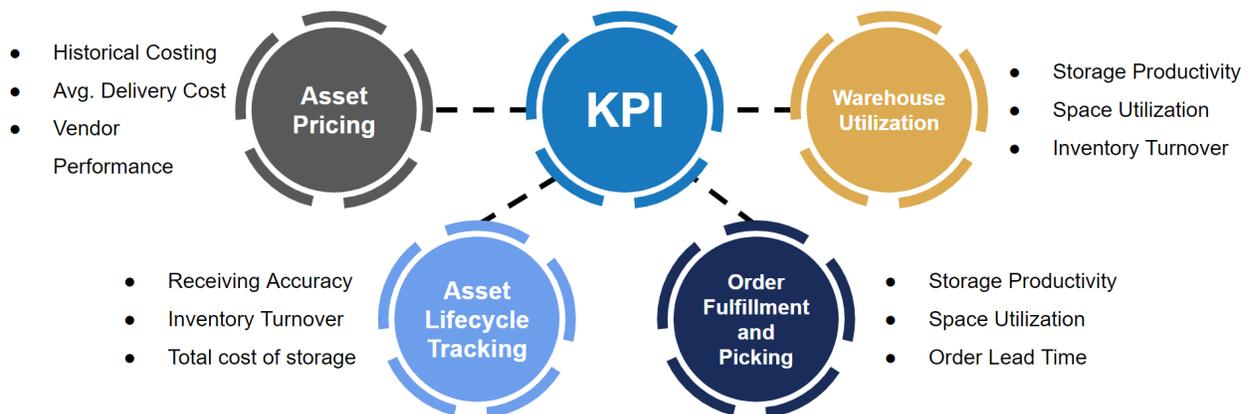
Opportunities for improvement that are recognized throughout the TOM will follow the “crawl, walk, run” approach. “Crawl” opportunities consist of quick process wins that will provide immediate value to the OPS. Walk and run opportunities focus more on larger scale initiatives, and technology enablement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



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

Performance & KPIs

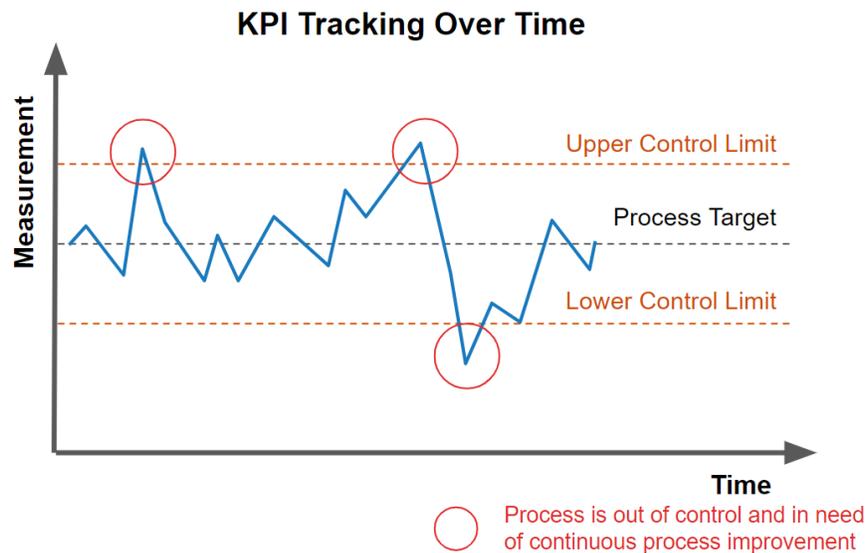
Currently at OPS, KPIs are not being tracked. This is due to current systems which lack advanced functionality. Additions of the following KPIs after system implementation will allow for the Quartermaster Supervisor to make better use of their time and ensure that processes are being executed with high performance.



Control limits are benchmarks for performance. KPIs determine acceptable deviation from control limits in order to enforce standards. Analysis of KPIs over time allows management to identify processes acting out of their control limits in order for the appropriate remediation actions to be taken.

Some examples of KPIs that will help supervisors maintain existing processes and perform continuous process improvement are the following:

- **Minimum Order Quantities** - Set targets for when procurement needs to take place for a specific asset. If the order arrives after the inventory has been depleted, then the target needs to be revised.
- **Inventory Turnover** - If it is too low, it affects our warehouse utilization.
- **Stock-Outs** - Order quantities are too low and inventory depletes before orders are delivered.



Currently within the Leitrim Quartermaster Warehouse, there are several gaps in warehousing standards that make it difficult to generate advanced KPIs. Since receiving, storing, and distributing data is not being captured at key intersections, asset data cannot be generated. There are several key processes must be implemented in order for the QMU to be able to track KPIs.

- **Cycle Counts** - For inventory volume confirmation and minimum inventory level generation
- **Data Entry Upon Asset Movement** - Will enable users to ABC the inventory and determine high-moving inventory
- **Formal Receiving Process** - To ensure proper data entry and P/O reconsolidation
- **Location Scanning** - Automate receiving process by scanning items into stock. Automatically updates system with inventory and order information.

- **Evaluation of Warehouse Configuration / Slotting** - To decrease the amount of movement while order picking and confirm item placement.

An executive dashboard will be used to summarize the KPIs generated in the QM warehouse and benchmark them against control limits. This will aid the Director of Material Management and Quartermaster Supervisor in actively managing the day-to-day activities within the unit. The shift from reactionary to preventative decision making will decrease backlog and increase overall efficiency.

Data visualization is another benefit of dashboards as it allows for visual indicators. For example, a dashboard is able to flag overspending and delays so that corrective action can be taken immediately. Additional tie-ins with SAP Ariba will add transparency into the supply chain as information will be updated in real-time throughout the entire procurement process.

Since the Quartermaster unit behaves and acts in the same manner as a retail store (all Uniformed Members being the clients to the supply chain), retailing standards will have a net positive effect on governance. Some standards that will be of use:

- **Daily Huddles** - To set daily goals and to determine workflow management. This will include daily assignment of work to Quartermaster Coordinators.
- **Formalization of Opening and Closing Tasks** - To ensure the warehouse is prepped and organized for each day. Formalizing tasks ensures structure for new hires.
- **Daily Performance Tracking and Reporting** - To ensure the warehouse is operating effectively, and to support continuous improvement.

5 Summary of Recommendations and Potential Cost Impacts

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

Recommendation	Operational Impact	Potential Cost Impact
<p>Creation of an OSL FAQ</p> <p>Create an FAQ or job-aid for end-users to use the OSL ordering system for Quartermaster stores.</p>	<p>Users have noted that the OSL system is clunky and difficult to use, often resulting in requests being incomplete or incorrect, leading to QM related headaches and inefficiencies. By developing and distributing a simple OSL FAQ/job aid, many of these common systems issues can be avoided.</p>	<p>Potential for minor impact on cost, due to more accurate orders, less customization and returns/obsolete stock.</p>
<p>Implementation of SAP Ariba</p>	<p>Implementing an enterprise-wide IT system that manages inventory, facilitates the supply chain and procurement processes, and</p>	<p>Significant impact on cost due to increased capacity within the QMU, more proactive</p>

<p>Implement a top-tier, enterprise-wide procurement and supply chain technology solution.</p>	<p>integrates seamlessly with the financial and asset management systems will solve many short, and long term issues that the QMU is experiencing.</p>	<p>procurement processes and better vendor relationship management (among other benefits, such as operationalization of warehousing and retail standards and KPIs)</p>
<p>Implementation of Retail Standards within the QMU</p> <p>Develop and implement a set of standards for purchasing, inventory management and distribution based on retail industry best practices.</p>	<p>By implementing retail industry standards within the QMU, the OPS will realize some of the following benefits:</p> <ul style="list-style-type: none"> ● Reduced minimum inventory levels ● Improved inventory accuracy ● Improved purchase forecasting ● Reduced lead-time ● Reduced supply chain transactional costs ● Reduced Economic Order Quantity (EOQ) 	<p>Moderate impact on cost due to the benefits noted in the operational impact column</p>
<p>Implement Excel Based Inventory Management System</p> <p>Establish a simple MS Excel spreadsheet to manage QMU inventory.</p>	<p>Utilizing a simple Excel sheet to a manage QMU inventory allows for Quartermaster Coordinators to start tracking advanced inventory KPIs and tracking asset movement.</p> <p>Quick solution with fast turnover for implementation.</p>	<p>Potential for minor impact on cost, as this sheet could free up QMU capacity, and could help facilitate the implementation of standards and metrics.</p>
<p>Implement Warehousing Standards</p> <p>Develop and implement warehousing standards within the QMU.</p>	<p>Implementing more rigorous warehousing standards within the QMU would result in increased warehouse space, process efficiency due to use of Lean concepts and distribution efficiency due to slotting. Other benefits are noted within the QM TOM Design Document.</p>	<p>Minor impact to cost due to warehouse space savings, and increased capacity creation within the QMU.</p>
<p>Implement HEAT ITAM for Enterprise Asset and Inventory Management</p> <p>Implement a sophisticated inventory management solution within the QMU.</p>	<p>The IVANTI ITAM tool currently exists within the OPS IT landscape, and is used primarily for IT asset management. That said, upon conducting a high-level functional analysis, the IVANTI tool can be used for QMU inventory management, enhancing the benefits realized by implementing the simple MS Excel recommendation previously noted.</p>	<p>Potential for minor to moderate impact on cost, as this tool would free up QMU capacity, and would greatly help facilitate the implementation of standards and metrics.</p>

<p><i>Replace OSL with HEAT for Uniform & Equipment Requirements</i></p> <p>Replace the somewhat problematic OSL system, with another in-house system that is better suited to the business requirements.</p>	<p>By replacing the OSL system with the HEAT portal, currently used throughout the enterprise for Service Management, the OPS could alleviate the issues noted in the first recommendation within this report, and realize other process benefits, and integration options.</p>	<p>Potential for minor cost impacts due to a more efficient and effective “customer facing” system to facilitate interaction with the QMU.</p>
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Cost Saving Impacts Summarized

The Quartermaster section has a total uniform and supplies budget of approximately \$1.8 million dollars as well as a budget for staff totalling approximately \$0.4 million dollars. Based on the above recommendations, it is estimated that OPS can save between 10% to as much as 20% of it’s uniform and supplies budgets when the larger enterprise wide solutions are implemented.