



INTERNAL AUDIT DEPARTMENT

Audit of the Modified Physical Inventory

Fiscal Year 2021

**March 2022
Performance Audit**

Audit of the FY 2021 Modified Physical Inventory

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EXECUTIVE SUMMARY

INTRODUCTION

Port Authority internal auditors observed the fiscal year (FY) 2021 Modified Physical Inventory (Modified Inventory). In previous years, all items with an average unit price of at least \$2.00 are counted as part of the annual physical inventory. Due to the COVID-19 pandemic, Procurement opted to conduct a modified inventory for the FY 2021. This modified approach resulted in counting 15% of the individual locations inventory with an average unit price of at least \$2.00 in value. The purpose of the Modified Inventory is to ensure that the on-hand quantity for a sample of the overall inventory is accurately recorded in the PeopleSoft financial system so that transit operations are supported by having materials and supplies available when needed. For FY 2021 through period 12, material and supply expenditures were approximately \$20.5 million (per the final audited financial statements as of June 30, 2021).

OBJECTIVES, SCOPE AND METHODOLOGY

The audit objectives were to determine the adequacy of internal controls for the Inventory and to determine if items were accurately counted, and that variances and adjustments were recorded correctly in PeopleSoft. The scope of the audit was the FY 2021 Inventory and the full methodology used to accomplish the audit objectives is shown in Attachment A.

For additional information related to Port Authority's Inventory Business Process refer to Attachment B.

We observed the employees as they counted the inventory items and we independently tested a sample of the inventory counts.

STATEMENT OF OPINION

In our opinion, in general, the FY 2021 Modified Inventory was conducted in a manner that provides reasonable assurance that inventory items were accurately counted, and adjustments to on-hand quantities were recorded correctly in PeopleSoft. Note that the FY 2021 Modified Physical Inventory audit resulted in no observations.

STRENGTHS NOTED DURING THE AUDIT

- 1) Appropriate safety precautions were determined and followed in order to ensure the safety of the employees performing the Modified Inventory during the COVID-19 Pandemic.
- 2) Individual counts were completed by counters accurately with a 94.5% accurate rate.

RESULTS OF TEST COUNTS

Based on our statistically valid sample and a margin of error of plus or minus 5%, we are 90% confident that the true accuracy rate of item counts in the population is between 89.5% and 99.5%.

FOLLOW UP ON OUTSTANDING RECOMMENDATIONS FROM PREVIOUS AUDITS

There were no observations/recommendations during the previous audit.

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INTRODUCTION

Port Authority internal auditors observed the fiscal year (FY) 2021 Modified Physical Inventory (Modified Inventory). In previous years, all items with an average unit price of at least \$2.00 are counted as part of the annual physical inventory. Due to the COVID-19 pandemic, Procurement opted to conduct a modified inventory for the FY 2021. This modified approach resulted in counting 15% of the individual locations inventory with an average unit price of at least \$2.00 in value. The purpose of the Modified Inventory is to ensure that the on-hand quantity for a sample of the overall inventory is accurately recorded in the PeopleSoft financial system so that transit operations are supported by having materials and supplies available when needed. For FY 2021 through period 12, material and supply expenditures were approximately \$20.5 million (per the final audited financial statements as of June 30, 2021).

OBJECTIVES, SCOPE AND METHODOLOGY

The audit objectives were to determine the adequacy of internal controls for the Inventory and to determine if:

- Items were accurately counted, and
- Adjustments to on-hand quantities were properly recorded in PeopleSoft.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We observed the employees as they counted the inventory items, and we tested inventory counts at the Manchester, South Hills Village, South Hills Junction and the Auto Shop locations. In addition, at the West Mifflin and Ross operating locations, we tested the accuracy of on-hand quantities recorded by the employees conducting the Inventory by independently counting a sample of inventory items and comparing our counts with the counts on the count sheets.

The scope of the audit was the FY 2021 Modified Inventory and the full methodology used to accomplish the audit objectives is shown in Attachment A.

For additional information related to Port Authority's Inventory Business Process refer to Attachment B.

STATEMENT OF OPINION

In our opinion, in general, the FY 2021 Modified Inventory was conducted in a manner that provides reasonable assurance that inventory items were accurately counted and adjustments to on-hand quantities were recorded correctly in PeopleSoft. Note that the FY 2021 Modified Physical Inventory audit resulted in no observations.

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STRENGTHS NOTED DURING THE AUDIT

Strengths noted during the audit included the following:

- 1) Appropriate precautions were determined and followed in order to ensure the safety of the employees performing the Modified Inventory due to the COVID-19 Pandemic.
- 2) Individual counts were completed by counters accurately with a 94.5% accurate rate.

RESULTS OF TEST COUNTS

Based on our statistically valid sample and a margin of error of plus or minus 5%, we are 90% confident that the true accuracy rate of item counts in the population is between 89.5% and 99.5%.

Using attribute sampling for a population size of 2,019 (15% of 13,460) items with an average cost of at least \$2.00, a statistically valid sample of 254 items was selected for testing. Internal Audit Department personnel counted each item in the sample and compared our count to the count recorded on the count sheets. Any discrepancies were resolved by having storeroom personnel recount item count discrepancies. We noted 14 errors (an overall accuracy rate of 94.5%). In addition to the systematically selected test counts from our sample, 80 judgmentally selected test counts were performed by Internal Audit Department personnel at the Ross and West Mifflin garage locations during the Inventory. Of these 80 counts, 77 counts were determined to be correct and 3 counts were incorrect (an overall accuracy rate of 96.3%). The tables below summarize the results of the testing.

SUMMARY OF SYSTEMATICALLY SELECTED TEST COUNTS

Location	15% of Inventory at or above \$2.00	Number of Test Counts	Number of Count Discrepancies	Number of Accurate Counts	Percentage of Accurate Counts
Manchester	1,425	178	11	167	94%
South Hills Village	300	38	1	37	97%
South Hills Junction	269	34	2	32	94%
Auto Shop	25	4	0	4	100%
Totals	<u>2,019</u>	<u>254</u>	<u>14</u>	<u>240</u>	<u>94.5%</u>

Of these 254 test counts, 232 items had a unit of measure of “each” and 22 items had a unit of measure of something other than “each” such as “case” or “set”. For the 22 items with a unit of measure of something other than “each” such as “case” or “set”, we determined that 3 of the items were incorrectly counted by the inventory count crews (an accuracy rate of 86%). For the 232

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items with a unit of measure of “each”, we determined that 11 of the items were incorrectly counted by the inventory count crews (an accuracy rate of 95%).

SUMMARY OF JUDGMENTALLY SELECTED TEST COUNTS

Count of Each and Other than Each	Number of Test Counts	Number of Count Discrepancies	Number of Accurate Counts	Percentage of Accurate Counts
Ross	40	0	40	100%
West Mifflin	40	3	37	92.5%
Total Count of Each and Other than Each	80	3	77	96.3%

Of these 80 judgmental test counts, all 80 items had a unit of measure of “each”. For these 80 items with a unit of measure of “each”, we determined that 3 of the items were incorrectly counted by the inventory count crews (an accuracy rate of 96%).

Note that the accuracy rates discussed above estimate the accuracy of the counts that are made by the inventory count crews. This accuracy rate should not be compared with the Purchasing and Materials Management Department’s estimate of the accuracy rate at which the on-hand quantities of inventory items are maintained in PeopleSoft’s records.¹

FOLLOW UP ON OUTSTANDING RECOMMENDATIONS FROM PREVIOUS AUDITS

There were no observations/recommendations during the previous audit.

¹ For the FY 2021 Modified Physical Inventory, Purchasing and Materials Management Department staff calculates their accuracy rate, which is reported on the Recap of Inventory Results – Inventory Accuracy report, for items with an average cost of at least \$2.00 by dividing the number of items with no variances by 15% of the total number of items with an average cost of at least \$2.00.

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ACKNOWLEDGEMENTS

Members of the Internal Audit Department thank Tony Trona, Director of Purchasing and Materials Management, Justin Cava, Manager of Purchasing Materials, Mike Musillo, Manager of Inventory Operations and Distribution, Scott Katonka, Assistant Manager, Inventory, Tom Kaczmariski, Stores Supervisor, Tim Bell, Stores Supervisor, inventory counters and data entry clerks for their cooperation and assistance during this audit.

Participating auditors were Hadiza Buhari, Neil Caponi, Glenn Meister, Austin Hamm, and Monika Todd.



Hadiza Buhari, Director, Internal Audit Department



Date

Disclaimer:

This report is intended solely for the information and use of Port Authority management for decision making purposes. It is not intended for use by any other party.

ATTACHMENT A – SAMPLING METHODOLOGY AND CRITERIA

To accomplish the audit objectives, Internal Audit Department personnel (IA) determined the population, developed sampling methodology and performed statistical and judgmental test counts as follows:

Statistical Test Counts and PeopleSoft Queries

- 1) Received from Mike Musillo, Manager of Inventory Operations and Distribution, the entire population of inventory items to be counted for Manchester, SHJ, Auto Shop and SHV.
- 2) Utilized a sample size calculator to define the sample size with a confidence level of 90% and a precision percentage of plus or minus 5% to determine the total number of statistical test counts to be performed for Manchester, SHJ, Auto Shop and SHV.
 - a) Note that the footnote in the audit report describes how the Purchasing and Materials Management Department personnel calculate their accuracy rate and define variances. Also, Purchasing and Materials Management Department personnel report the inventory count accuracy rates in the Recap of Inventory Results – Inventory Accuracy Report. Internal Audit's accuracy rates discussed in the audit report should not be compared with the Purchasing and Materials Management Department's estimate of the accuracy rate at which the on-hand quantities of inventory items are maintained in PeopleSoft's records.
- 3) Calculated a uniform interval by dividing the number of inventory items in the population by the total sample size for Manchester, SHV, SHJ and the Auto Shop. Inventory items were selected systematically throughout the population at the uniform interval.
- 4) Calculated the percentage of the number of items to be sampled to the total number of items in the population by dividing the total number of items to sample by the total number of items with unit prices of at least \$2.00 at four of the inventory locations (Manchester, SHV, SHJ, and Auto Shop).
- 5) Calculated the number of separate test counts for Manchester, SHJ, Auto Shop and SHV by multiplying the percentage to total number of items calculated for each location by the total number of items with a unit price of at least \$2.00 at the four inventory locations.
- 6) Systematically selected test counts by using the first item as a starting point for Manchester, SHJ, SHV and the Auto Shop locations at every nth interval (as calculated in 5 above). The interval represents the nth item that will be selected for our sample.
- 7) No statistical test counts were performed at the 2 garage locations (Ross and West Mifflin).

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Judgmental Test Counts

- 1) Completed Inventory Checking Reports (aka Judgmental Test Count Sheets) when observing the modified physical inventory. IA judgmentally selected inventory items to trace from the item bin locations to the crews' count sheets (Ross and West Mifflin).
 - a) The Inventory Checking Report was used to document selected inventory items from item bin locations to the crews' count sheets and verify the accuracy of the item counted. Internal Audit judgmentally selects 40 items each at the 2 garage locations (Ross and West Mifflin).
- 2) Judgmentally counted a sample of inventory items at Ross and West Mifflin to determine if these items appeared on the count sheets and determined the accuracy of the counts.
- 3) Internal Audit considered inventory items with larger quantities and items that were physically difficult to access (i.e., heavy items, hard-to-reach items).
- 4) If errors/discrepancies were detected, Internal Audit requested management confirm the accuracy of the item count. If a significant number of errors were noted, Internal Audit would discuss the number of errors with applicable management personnel and determine if recounts of items and/or sections of the storeroom or additional judgmental test counting would be performed.
- 5) If inventory items counted by Internal Audit did not appear on the count sheets, Internal Audit determined and documented the reason(s) for these items not appearing on the count sheets. In addition, if necessary, Internal Audit performed additional testing to determine if inventory items were properly included on the count sheets.
- 6) Determined if inventory item count corrections were reported to appropriate personnel so that the most accurate count was entered into the PeopleSoft inventory system.
- 7) The results of judgmental test counts were not extrapolated over the entire population of inventory items with unit prices of at least \$2.00 as this sampling method is a purposeful method where no randomization is used to eliminate any bias and inventory items in the population did not have an equal opportunity of being selected.

ATTACHMENT B – BUSINESS PROCESS

Note: This narrative includes the process for a typical annual inventory. Any changes to the process for the Modified Inventory are identified.

PHYSICAL INVENTORY PROCESS

In previous years, Physical inventories are performed at all inventory locations on an annual basis. Items with an average unit price of at least \$2.00 are counted as part of the annual physical inventory. For the Modified Inventory FY 2021, the process was changed to count 15% of the individual locations inventory above \$2.00 in value as compared to all items with an average unit price of at least \$2.00.

Inventory items are identified with a six-digit inventory number, a description, a unit of measure, and a specific bin location. Counts of inventory items with an average unit price less than \$2.00 are only performed if the inventory quantities in stock obviously differ from the inventory quantities in PeopleSoft as noted on the count sheets. Inventory items that have not moved for an extended period of time are sometimes pre-counted. Inventory count sheets are assigned to count crews or individual counters and Purchasing and Materials Management Department personnel verify that, upon completion, these sheets are accounted for and that counts are present for all items that require them. The count information is entered into PeopleSoft, and a report of all significant inventory variances is generated. For the Modified Inventory FY 2021, individual counters were assigned approximately 50 items from a query (named PAG_PARTROOM_ACTIVE) that was downloaded to an excel spreadsheet. The query was sorted by bin location after all items with a value under \$2.00 were removed. After individual counters have completed their assigned counts, their spreadsheets were returned to the appropriate Purchasing and Materials Management Department manager/supervisor to review and compare the counts to the Master Sheet and the actual quantities on hand as identified in PeopleSoft. In the event of any discrepancies, both the counter and manager/supervisor go to the items location to verify the correct count. If the count is incorrect on the Master Sheet and in PeopleSoft, the manager/supervisor identified the correct amount on the Master Sheet and made the change in PeopleSoft.

Significant variances (greater than 10% in quantity or more than \$250.00 (\$150.00 at the garage inventory locations)) are recounted for accuracy, and adjustments to the original count are processed in PeopleSoft. Inventory items, which have not been counted, appear on the Missing Tag ID report, and all items on this report require that an item count be entered into the PeopleSoft in order to clear the item from the report. For the Modified Inventory FY 2021, no variance reports were run. Any variances between the count sheet and the Master Sheet/PeopleSoft were identified and resolved as they were discovered.

The Manager of Purchasing Materials and the Manager, Inventory Operations & Distribution oversee the physical inventory to verify procedures are properly followed, material is properly counted, and questions related to specific items are resolved. At PAAC's inventory locations, the Manager, Inventory Operations & Distribution and Foremen/Supervisors review the inventory

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procedures and instructions with the inventory counters prior to the start of the actual annual physical inventory. Designated employees input the item counts into PeopleSoft.

The Internal Audit Department personnel review the inventory documentation (requisitions, receipts, emergency requisitions, count sheets, etc.) to determine if cut-off procedures have been followed, determine if inventory procedures are followed, and perform test counts based on both a statistically valid sample of inventory items and judgmentally selected inventory items to determine if counts on the inventory sheets are accurate. Internal Audit's identified test count differences are recounted by Internal Audit and appropriate personnel and the correct item count confirmed. Adjustments are recorded on IA's Inventory Checking Reports (aka Judgmental Test Count Sheets) or Statistical Count Sheet and the corrected counts are entered into PeopleSoft. For the Modified Inventory FY 2021, there were no cut-off procedures to review. Internal Audit performed test counts based on a statistically valid sample at the Manchester, South Hills Village, South Hills Junction and the Auto Shop locations. Internal Audit judgmentally selected inventory items to count at the Ross and West Mifflin garages. Any variances between Internal Audits counts, the count sheets, and the Master Sheet/PeopleSoft were identified and resolved as they were discovered.

PUTAWAY PROCESS

When an inventory item arrives at the receiving dock, the receiver takes possession of it and enters the item information (item description, vendor, quantity, stock #, etc.) into PeopleSoft, which then stages the batch of items that are to be placed into the inventory. The stockperson then places the items into the correct bin in inventory. At the Manchester and SHJ locations, the Storeroom Supervisor runs a process called "Complete Putaway" which increases the on-hand quantities for all items that are in the staged batch status. At the SHJ location, the "Complete Putaway" process is done at the time of receiving the item. At the SHV location, the "Complete Putaway" process is run automatically as part of the receiving process.

DEPLETION PROCESS

When an item needs to be removed from inventory, the employee who needs the item initiates the process by submitting a material stock requested in PeopleSoft. PeopleSoft includes this item on its pick list, which is generated nightly. After the item has been picked from the shelf, the Storeroom Supervisor/Garage Foreman/Receiver provides feedback to PeopleSoft to update the system that the item is no longer in inventory. At SHV, a batch process runs every half hour to look for new material stock requests, and a Pick Sheet prints at the stockperson's printer. The stockperson then fulfills the order and closes the order in the system by performing the "Material Picking Feedback" process, which confirms, ships and depletes the items that have been fulfilled. At all locations, the depletion process is run nightly to automatically reduce on-hand quantities for which feedback has been entered into PeopleSoft.

WORK ORDER SYSTEM

Port Authority has an operational work order system. The documentation obtained from the current work order system is based on the information entered into the Work Order System by appropriate PAAC personnel.

DOCUMENTATION OF PROCESS FOR RECORDING INVENTORY ADJUSTMENTS

Inventory adjustments are recorded based on the results of annual physical inventories (including the modified inventory) and periodic cycle counts. In addition, if inventory items are determined to be obsolete, the obsolete inventory is sold or scrapped and the inventory quantities are reduced within the system.

Cycle counts are periodically performed by receivers at the operating locations. At the bus garage operating locations, if the cycle count is greater than the quantity in the system, an inventory adjustment is processed. Conversely, if the cycle count is less than the quantity in PeopleSoft, a requisition is completed for the missing item(s) and the quantity difference is charged to the applicable garage and classified as inventory usage or consumption. Logs are maintained at each of the operating locations to record items removed from parts rooms if receivers are not on duty.

The Manager of Purchasing Materials, the Manager of Inventory Operations & Distribution, the Assistant Manager – Inventory and appropriate Storeroom Supervisors/Garage Foreman have access to inventory item information, inventory reports, and to the history of inventory purchases, consumption and adjustments.

SCRAP PROCESS AND METHOD UTILIZED TO IDENTIFY, CHARGE-OFF AND DISPOSE OF SCRAP

PAAC implemented the following Materials Scrap Process:

- Fleet Approaching Retirement
 - Min/Max Adjusted at Division Parts Rooms and Central Stores (140CS)
 - Excess sent back (Pink Slipped) to Central Stores (140CS)
- Bus Fleet Retired
 - Fleet no longer in Revenue Service off property
- Identify Obsolete Parts
 - Determine if parts from retired fleet can be used on other existing Port Authority fleets
 - Return items to Vendors, if possible
 - Try to sell to other Transit Agencies and through an Auction Site
- Finalize Obsolete List
 - Manager Purchasing Materials compiles and approves final list of items to be scrapped
 - Items set to No-Replenish
 - Comments updated
 - Scrap List sent to Central Stores Supervisor and Assistant Manager of Inventory
 - Items are to be physically removed from Bin

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- Bin label is removed
- Bin quantity is depleted in PeopleSoft
- Item Bin Location is transferred in PeopleSoft to the NONE Bin
- Once process is complete, Storeroom personnel are to notify the Manager of Purchasing Materials

- Scrap Process Completed at Warehouse/Parts Rooms
 - Manager of Purchasing verifies the following:
 - Items Quantity has been depleted
 - Item is in the NONE Bin

- Inactivation Process
 - Manager of Purchasing Materials or Inventory Analyst will make items inactive in PeopleSoft.
 - Inactive Part at Business Unit (Ex. 140CS, 010RO)
 - Inactive Part at Global Level

 - *Inactive Item Status = Item can no longer be requested through replenishment or manual parts requests (MSR).

 - Run Change Item Status Report and check for errors.

EMPLOYEE ACCESS IN PEOPLESOFT TO ADD, DELETE AND MODIFY INVENTORY INFORMATION

Access to add, delete and modify inventory information in PeopleSoft is available to the Manager of Purchasing Materials, the Assistant Manager – Inventory, the Manager, Inventory Operations & Distribution, and the Storeroom Foremen/Garage Foreman. The Manager of Purchasing Materials, the Assistant Manager – Inventory and the Manager, Inventory Operations & Distribution currently have the ability to adjust inventory quantities and/or adjust unit prices of items in inventory.

All authorizations for access to PeopleSoft must be approved by the manager of the applicable department and must be processed by the security administrator. The security features are role-based and define a role, which is tied to the job title. Prior to utilizing PeopleSoft to add, delete or modify data, users must attend the required PeopleSoft training.

REPORTS TO MONITOR, PROCESS AND ACCOUNT FOR INVENTORY USAGE & ADJUSTMENTS

Reports are available to monitor the inventory process and to account for inventory usage/adjustments, which include Daily Activity Report (INP7050), Inventory Activity Report (INP7051), Missing Tag ID reports, Physical Account Reconciliation Reports, requisition and receipts reports and other reports that provide inventory statistics, values, and adjustment

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histories. For the Modified Inventory FY 2021, a query named "PAG_PARTROOM_ACTIVE" was run for every Warehouse and Parts Room to obtain each locations' total inventory.

POLICIES AND PROCEDURES

Policies and procedures related to conducting the annual physical inventory exist (written and verbal). There is currently a procedure related to proper segregation of duties. Generally, this procedure provides that the purchaser cannot enter receiving data or enter new vendors in PeopleSoft; however, there are some limited exceptions to this for employees in the Purchasing and Materials Management Department. A training manual is available to guide employees on using PeopleSoft to complete inventory transactions such as receiving and issuing stock items, creating bin locations, and transferring items between locations.