AUDIT OF ACCOUNTS PAYABLE PROCESS

FEBRUARY 27, 2019

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INSPECTOR GENERAL
A. Objective / Scope / Methodology

The Office of the Inspector General (OIG) conducted an audit of the Delaware River Port Authority’s (DRPA) and the Port Authority Transit Corporation (PATCO), collectively referred to as the Authority, accounts payable (AP) process. The audit was performed by Mark Zitzler, Auditor, and Ron McReynolds, IT Auditor. The audit objectives included:

- evaluating the effectiveness and efficiency of the AP process and compliance with established policies, procedures, and guidelines;
- assuring invoiced disbursements are accurate, approved, and paid / accounted for correctly and in a timely manner;
- reviewing outstanding payments / checks and associated unclaimed property / escheat law compliance;
- evaluating transactions for potential fraud, waste and abuse;
- assuring supporting documentation (i.e. invoices, approvals, etc.) is properly maintained and retained;
- assuring appropriate segregation of duties exist within the process environment;
- assessing the maintenance and controls associated with the Vendor Master File;
- assessing any changes to the AP process and control environment resulting from the SAP ERP system implementation; and,
- evaluating the AP process for any observable operational improvement opportunities.

The scope of analysis and testing focused on AP activity from 2017 as well as transactions from January - July 2018.

To assist in the evaluation of the AP process, OIG was provided access to requested information and documentation, including:

- current policies / procedures related to the AP process;
- ”read only” access in SAP, which included access to vendor detail, vendor reports, transaction processor and approver time stamped audit trails, invoices and supporting documentation, purchase order detail, receiving detail, outstanding check reports, outstanding check detail, check payment detail, and general ledger detail; and,
- a record of issued checks from before 12/31/2017 that were outstanding as of June 2018.
In addition to being provided the documentation noted, OIG met with the Chief Financial Officer (CFO), Directors of Finance for both the Delaware River Port Authority (DRPA) and the Port Authority Transit Corporation (PATCO), Manager of Accounting, Accounting staff, and AP staff.

During the course of the audit, OIG met with the Director of Information Services, Manager of ERP and Applications, to address issues related to system controls including roles and access for individuals involved in the AP process. The Director of Procurement, Manager of Procurement and Storage, and Procurement staff for both DRPA and PATCO were interviewed to address issues related to contracts and procurement controls.

B. Background

The primary objective of an AP function is to ensure that vendor payments are made accurately, completely and in a timely manner to the right vendors and only for the goods / services received.

The AP function falls under the responsibility of the Authority’s CFO, J. White, and has personnel located at both the Authority’s headquarters (One Port Center, Camden, NJ) and PATCO headquarters (Lindenwold, NJ) responsible for AP processing.
As part of the Authority’s implemented ERP software (SAP), the AP module and process were upgraded in January 2016 to replace the existing legacy systems. Previously, Banner software was used by the DRPA for AP processing and an internally developed system (Unisys) was used by PATCO. Per the DRPA Manager of Accounting, some of the key changes from the upgrade related to AP include:

- DRPA and PATCO are on the same databases and financial structures which make it easier to share data and provide consolidated reporting related to AP;
- the AP approval process now occurs through a common system-based workflow process within SAP;
- scanned invoices and other supporting documentation can now be attached to the transaction in SAP;
- SAP has an effective audit trail / user history which will show when a transaction occurred and who processed / approved the transaction;
- the SAP system’s functionality provides user role-based controls allowing management to assign transaction restrictions and permissions, as well as systematically assuring appropriate segregation of duties are in place as it relates to each individual user and based on their position / responsibilities; and,
- SAP users receive system notifications to approve transactions; however, only one notification is sent, which may cause delays in the transaction getting posted if a user misses the notification or if it goes to junk mail.

Below are the annual totals of invoices processed through the AP function and their associated value for the years 2016, 2017, and 2018 (from January through July):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Invoice Value ($) *</td>
<td># of Invoices*</td>
<td>Invoice Value ($) *</td>
</tr>
<tr>
<td>DRPA</td>
<td>$ 98,223,167</td>
<td>4,768</td>
<td>$154,739,896</td>
</tr>
<tr>
<td>PATCO</td>
<td>$ 16,002,003</td>
<td>3,534</td>
<td>$ 29,154,247</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$114,225,170</td>
<td>8,302</td>
<td>$183,894,143</td>
</tr>
</tbody>
</table>

*Excludes wire transfers and ACH payments.

On average over the past 3 years the AP transactions associated with DRPA (non-PATCO transactions) represented approximately 85% of the total value and 60% of total transaction activity, as compared to PATCO transactions (15% total value and 40% transaction activity).

OIG used Audit Command Language (ACL) to assist with the data analysis during the Audit of AP. ACL is a privately owned software company that provides an enterprise software-as-a-service (SaaS) platform that converges governance, risk management, and compliance (GRC), corporate performance management (CPM), and data automation. Specifically, ACL was used on this project to assist with the analysis of duplicate vendors, duplicate payments, and user roles.
C. Audit Summary

Based on conversations with management, testing performed, and observations completed, OIG determined that the AP process is functioning properly. Opportunities were identified to enhance the control environment and transactional processing associated with the AP process, and alternative processing recommendations were provided for management’s consideration. In summary, based on the completion of our audit, the following was determined and communicated to the Chief Financial Officer (CFO) and Directors of Finance for DRPA and PATCO:

- opportunities to improve the control environment associated with accounts payable processing were observed. Areas requiring management’s attention include, system-based roles / segregation of duties, “not to exceed” controls and management oversight, and the need for formalized and communicated procedures;
- invoiced disbursements are approved, paid, and accounted for correctly and in a timely manner;
- the Authority is in compliance with unclaimed property / escheat laws;
- invoices and supporting documentation are properly maintained and retained within the SAP system; and,
- no transactions indicating fraud, waste, or abuse were observed.

Opportunities for improvement were noted during the audit, and the following highlighted and summarized findings were communicated:

- Policies and procedures pertaining to all AP processes should be drafted, approved and communicated. These procedures should be consistent between DRPA and PATCO and expanded to include controls such as review / approval process, as well as controls within SAP for each type of payment process (Non-receiving PO, Receiving PO, Non-PO, and Blanket). Since the Authority is now on a common accounts payable processing platform (SAP) there should only be the need for one standard accounts payable procedure;
- A formal maintenance activity involving the review of inactive vendors and duplicate vendors should be conducted routinely, at least annually;
- Written requests for authorizing vendor creation should be maintained;
- Policies and procedures should be created for the review of outstanding checks and the process of remitting the unclaimed property amounts to the state(s). A quarterly review of outstanding checks should be conducted and included within the Accounts Payable policies and procedures;
- The SAP duplicate payment control setting should be corrected to meet Finance management’s expectations to prevent duplicate invoices from further processing;
- The Non-Purchase Order approval threshold settings in SAP did not reflect the exact approval requirements documented within the Non-Purchase Order Invoice Workflow Policy. This was corrected during the course of the audit upon communication by OIG (mid 2018);
- The operational areas (invoice reviewers / approvers) should be educated / reeducated to compare the invoice to the blanket purchase order pricing for accuracy prior to approving
the invoice. This invoice review and approval responsibilities should also be formally added to / documented within the associated AP policies and procedures;

- SAP system-based roles and associated process / data access privileges should be revisited and changed to position specific role-based access taking into consideration proper segregation of duties and developing and assigning roles based on “need to know” and “least privileges” principles;

- A governance process should be created where any changes / additions in personnel, roles, or transaction codes are requested by one authorized individual (i.e. local operating area’s manager, director, etc.) and subject to review and approval by the CFO (or CFO’s designee). In addition, the master data administrative role should be limited to one person, with one trained back-up person to assist the primary master data administrator in an effort to limit access to AP master data;

- A documented review process of SAP financial transaction user access should be performed quarterly to assure valid and accurate financial reporting. This process should be detailed and documented within a formal procedure; and,

- Manual and system-based controls for monitoring Authority-wide compliance with resolution-based “not to exceed value” contracts require improvement.

These summarized findings and associated recommendations are presented in more detail within the report, along with management’s responses / corrective actions. The management responses were provided by the Authority’s CFO and his management team, as well as the Director, Information Services and Director, Procurement.

**D. AP Policies and Procedures**

Policies and procedures are designed to provide management authorized guidance for all major decisions and actions, and all activities that take place within the boundaries set by them. Procedures are the specific methods employed to express policies in action in day-to-day operations of the organization. Together, policies and procedures ensure that a point of view held by the governing body of an organization is translated into steps that result in an outcome compatible with that view.

The establishment and routine maintenance of policies and procedures can also assist management in their effort to eliminate or greatly diminish any operational, compliance, legal and potential fraud risks and exposures by including appropriate internal controls and management oversight / monitoring responsibilities.

The following AP Standard Operating Procedures (SOPs) were available and were provided to OIG for review:

- Non-Purchasing Order Invoice Processing;
- DRPA Invoice LookupFBL1N SOP;
- DRPA Positive Pay Upload SOP;
- DRPA Vendor Master Data Create a Vendor (Reviewed in Section E);
- PATCO SOP How to view Vendors Open and Paid Invoices (FBL1N) in SAP;
- PATCO SOP PRINTING CHECKS
• PATCO SOP AP Check Proposal; and,
• PATCO SOP ZFCHX-TD Positive Pay.

Additionally, the DRPA and PATCO AP staff, DRPA Accounting Manager, PATCO Senior Accountant, and DRPA & PATCO Directors of Finance were interviewed about the AP process.

Some of the positive values observed based on OIG’s review of the SOPs provided include:

• “Positive pay” exists for both DRPA and PATCO checks paid to vendors. Positive pay is a bank fraud prevention and detection tool that electronically matches the account number, check number and dollar amount of each check presented for payment against a list of checks previously authorized and issued by the Authority.
• PATCO & DRPA procedures exist to view reports of open and paid invoices as well as view invoice and vendor information to help the AP Department analyze invoices and follow-up on unpaid invoices.
• PATCO procedures exist to instruct how to execute a check run and how to print checks.
• The Authority Non-Purchase Order Invoice processing SOP includes requirements for electronic scanning of invoices, invoice review/responsibilities, and electronic approval.

Audit Finding 1: Policies and procedures related to AP do not include controls such as review / approval process, as well as system-based controls within SAP for each type of payment process (non-receiving PO, receiving PO, non-PO, and blanket). The SOP for the non-purchase invoicing has been circulated to Authority management by the CFO; however, the SOP was never promoted to the Authorities intranet policies and procedures website. SOPs for non-receiving PO, receiving PO, and blanket orders have not been circulated. Where procedures do exist, PATCO and DRPA have their own separate set of procedures as opposed to a common procedure for reference.

Audit Recommendation 1: Policies and procedures related to the AP process should be expanded to include controls such as review / approval process, as well as controls within SAP for each type of payment process (non-receiving PO, receiving PO, non-PO, and blanket). Additionally, DRPA and PATCO should coordinate SOP’s to ensure they are consistent with each other. Since both DRPA and PATCO use SAP, they should ultimately have one overarching set of procedures for the Authority’s A/P function. Procedures should be communicated to Authority management and staff and referenced on the Authority’s intranet policies and procedures website where appropriate.

Management’s Response 1: Finance management from DRPA and PATCO agrees with the recommendation. The procedure for non-PO invoices was already circulated to the Chiefs and Directors by the CFO (May 2016); however, there were updates made to the SOP after that to correct for inconsistencies in SAP and the approval thresholds in some of those related procedures, after research by the Manager, Accounting. The CFO will recirculate the non-PO process after getting clarity on when the budget notices described in the SOP can be activated and it will be added to SharePoint along with the rest of the Authority’s SOPs, if/when that decision is made. (Alternatively, it may be added to the Finance section on the Intranet.) Since there were no changes made to the physical process involving end users, reviewers and approvers, its recirculation is not time sensitive but the CFO will look to complete this task by the end of July 2019. Distribution of the PO invoice procedure was originally delayed in order to confirm if the thresholds for non-POs were applied to
POs which was recently confirmed to be true by IS. This too will be added to the Finance Intranet, or circulated by July 2019.

DRPA and PATCO are currently in compliance and following the shared guidelines with the NON-PO and PO SOPs. The majority of all other Accounts Payable SOPs are followed by both companies (DRPA and PATCO), with the exception of those outlining things specific to one company, i.e. choice of AP bank account since DRPA uses Santander Bank while PATCO uses TD Bank. The core policies for review, approval and required documentation as it relates to all AP processes is followed by both companies. Examples of core policies would include SOPs related to master data, 1099s, outstanding check review, voiding and reissuing checks. SOPs were created and updated late 2018 to comply with the new strategic initiative for SOPs.

E. Review of Vendor Management

The DRPA and PATCO vendor management process was reviewed for segregation of duties, vendor naming standards, prevention of duplicate names, proper process for receiving W-9 forms prior to vendor set-up, checking vendors with Federal Bureau of Industry and Security’s lists of excluded persons and companies, annually reviewing vendors for inactive vendors and duplicate vendors. DRPA provided a written SOP. PATCO communicated the process; however, it was not documented in a formal SOP.

Based on OIG’s review of the DRPA policy, the following controls exist for the Vendor management process:

- Appropriate segregation of duties was identified within the policy since the employees responsible for vendor master data maintainers do not have access to AP or purchasing roles in SAP;
- Before a vendor is added, the vendor master data maintainer searches for the vendor name in the vendor file to ensure the vendor is not already on file in an effort to prevent duplication;
- W-9 forms are required, reviewed, and retained by attaching the scanned form to the vendor file in SAP. The W-9 forms are used to confirm the company name, address, employee identification number (EID), and whether a 1099 should be used;
- All names, addresses, Tax ID numbers, etc. are required to be entered in the system in a consistent manner, using all capital letters in an effort to establish standard naming conventions and data entry requirements; and,
- An email request containing the vendor name, mailing address, payee name, phone number, fax number, and W-9 attachment is required to add a new vendor.

Audit Finding 2: A formal routine maintenance practice to remove inactive and duplicate vendors does not exist. Below are the number of potential duplicate vendors which were encountered based on this review; the specific details associated with the potential duplicate vendors were provided to A/P management for review during the course of the audit:
### Active Vendors (as of June 2018)

<table>
<thead>
<tr>
<th></th>
<th>Active Vendors</th>
<th>Potential Duplicate Vendors</th>
<th>Potential Duplicate Vendors as a % of Total Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRPA</td>
<td>2,327</td>
<td>351</td>
<td>15%</td>
</tr>
<tr>
<td>PATCO</td>
<td>1,760</td>
<td>426</td>
<td>24%</td>
</tr>
<tr>
<td>Total</td>
<td>4,087</td>
<td>777</td>
<td>19%</td>
</tr>
</tbody>
</table>

**Audit Recommendation 2:** A formal review of inactive vendors and duplicate vendors should be conducted routinely, at least annually. This will establish a routine file maintenance process, while minimizing the opportunity of a payment being issued to an inactive vendor and reduce the opportunity for duplicate payments by paying each duplicated vendor for the same invoice.

**Management’s Response 2:** Finance management from DRPA and PATCO agrees with the recommendation. The potential duplicate list described above is largely inflated because it includes the remit to vendor ID for vendors who have a PO address, vendor ID for the same vendor in SAP. The actual potential duplicate list would be much smaller due to the specific prevention settings that are on in SAP and actual duplicates would be even smaller if any even exist.

A review process is already happening for the cleanup and implementation of ARIBA and S4 Hana, wherein SAP consultants will perform the vendor file cleanup. This has been approved by the PMO and will commence after a contract is executed (by June 2019). Outside of that, those in charge of vendor master data, invoice input and supervision over AP review vendor data whenever they become suspicious that a vendor may be a duplicate. Any duplicates found are immediately marked for deletion once it is confirmed that there are no outstanding POs or invoices using that vendor number.

Additionally, as stated above, the Authority is using a third party to clean up our vendor list which includes removing duplicates as a result of recent decision to upgrade to ARIBA/S4 Hana. An additional annual review for year ending 12/31/2018 is not needed. Once we go live in S4 Hana, most duplicate vendors should be caught by the system blocks in ARIBA and S4 Hana, but the vendor master maintainer will do an annual review as part of the 1099 process to look for duplicate vendors in addition to checking for duplicates anytime a new vendor request comes in.

**Audit Finding 3:** Although W-9 forms are maintained and attached to the vendor file in SAP, the policy does not require the written requests for vendor creation to be maintained.

**Audit Recommendation 3:** Written requests for vendor creation should be maintained to provide a documented audit trial of who requested and authorized the addition of a new vendor and when it was requested.

**Management’s Response 3:** Finance management from DRPA and PATCO agrees with the recommendation. Note that presently, formal requests are made from purchasing to create or change a vendor in SAP. These written requests, which include an email and/or an attached form, are submitted to a Senior Accountant at both DRPA and PATCO, for review and execution. Then they are stored via email, hard-drive and attached to the vendor file in SAP.
This recommendation has been addressed for DRPA at the start of 2018. The SOP for vendor creation has been specifically updated to include this language as of 2/13/2019 and sent to PATCO.

PATCO will follow this recommendation going forward for all vendor requests coming in starting 2/14/2019.

Note that vendors created as a result of miscellaneous finance vouchers and the like do not follow this same process because it cannot be applied. A W-9 is included with the invoice backup that comes into AP as required by their procedures for those invoices (or requested if not already provided).

F. Review of Outstanding Payments / Unclaimed Property Compliance

Outstanding checks are checks that have been issued to vendors but have not been cashed and cleared by the bank. Checks that are outstanding for a long period of time are known as “stale dated checks” and once they remain outstanding beyond a prescribed period of time are considered unclaimed property. The amounts must be turned over to a company’s respective state after several years. Each state has their own laws reflecting the time period before unclaimed property should be forwarded to the state. Prior to allowing outstanding checks to become stale and remitting the money to the state, companies should demonstrate (and document) that they have attempted to contact the payee if a check is outstanding for more than several months.

OIG reviewed outstanding checks that were issued before December 31, 2017 and were still outstanding as of June 2018 to document the amount, quantity, and age of outstanding checks and to ensure a process was in place to minimize the amount of non-current outstanding checks. OIG also reviewed the New Jersey and Pennsylvania State unclaimed property laws to ensure the Authority was compliant.

Compliance with unclaimed property laws (New Jersey & Pennsylvania) was observed. Each year, unclaimed property, greater than 3 years from the previous year, is submitted by the Authority to the appropriate state.

For reference as to annual AP activity volume and value, below is a list of the amount of vendor checks issued during 2017:

<table>
<thead>
<tr>
<th>Vendor</th>
<th># of Checks issued to Vendors</th>
<th>Amount of Checks issued to Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRPA</td>
<td>4,916</td>
<td>$165,409,837.25</td>
</tr>
<tr>
<td>PATCO</td>
<td>3,574</td>
<td>$35,304,729.49</td>
</tr>
</tbody>
</table>
Below is a list of outstanding checks by year for DRPA:

<table>
<thead>
<tr>
<th>Year</th>
<th># of Checks</th>
<th>Total Value of Checks ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>35</td>
<td>$5,354.57</td>
</tr>
<tr>
<td>2016</td>
<td>32</td>
<td>$35,960.52</td>
</tr>
<tr>
<td>2015</td>
<td>30</td>
<td>$3,698.35</td>
</tr>
<tr>
<td>2014</td>
<td>4</td>
<td>$65.00</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>$45,078.44</td>
</tr>
</tbody>
</table>

Below is a list of outstanding checks by year for PATCO:

<table>
<thead>
<tr>
<th>Year</th>
<th># of checks</th>
<th>Amount of checks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>5</td>
<td>$814.17</td>
</tr>
<tr>
<td>2016</td>
<td>6</td>
<td>$84.80</td>
</tr>
<tr>
<td>2015</td>
<td>1</td>
<td>$20.00</td>
</tr>
<tr>
<td>2014</td>
<td>4</td>
<td>$95.40</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>$1,014.37</td>
</tr>
</tbody>
</table>

**Audit Finding 4:** During the review, there were no documented SOPs for the review of outstanding checks or remitting unclaimed property amounts to the state(s).

**Audit Recommendation 4:** Policies and procedures should be created for the review of outstanding checks and the process of remitting the unclaimed property amounts to the state(s) to ensure documented guidance of controls and accountability exists.

**Management’s Response 4:** Finance management from DRPA and PATCO agrees with the recommendation. DRPA and PATCO have been more aggressive in the review of outstanding checks within the past year to minimize the number of outstanding checks which need to be held until the time of escheatment.

ACCT20 Review Outstanding Checks (completed 10/2018) is DRPA and PATCO’s policy for reviewing the outstanding check list which is done every 6 months. This procedure was sent to our designated Finance SOP index tracker and presently resides in the SOP drive for use by AP staff. We follow the written state policies regarding the escheatment process for checks issued to vendors in NJ and PA. There is no need for an internal document to replicate their policies. The DRPA actually provides more information than is required because we provide payee information to the state for all check amounts regardless of size. The state rules would allow us to combine all checks under $50 without payee information, which would be less work for us.
**Audit Finding 5:** A total of 101 DRPA checks valued at $45,078.44 were issued before December 31, 2017 and remained outstanding as of June 2018. Of the total outstanding checks, one outstanding DRPA check issued on February 12, 2016 is valued at $32,309.18 (representing 72% of the total value of outstanding checks).

In January 2019, outstanding checks that were issued before December 31, 2017 and remained outstanding as of December 31, 2018 were reviewed and a total of 81 checks remained outstanding for a total of $10,024.12. This represents a significant reduction in the remaining value outstanding due to the clearing of the $32,309.18 check; however, 81 stale dated checks still remain outstanding.

**Audit Recommendation 5:** The 81 remaining stale dated checks should be reviewed, and a routine quarterly review of outstanding checks should be established going forward. The review process should be documented in a formal procedure as suggested within Audit Recommendation 4.

**Management’s Response 5:** Finance management from DRPA and PATCO agrees with the recommendation except that the date should be once every 6 months, rather than quarterly, as stated in our SOP.

Note that the majority of the value of DRPA’s outstanding check list relates to one outstanding check that DRPA had with Dell Marketing in the amount of $32,309.18. It took several attempts from accounts payable to obtain all the information regarding this uncashed check from Dell and the IS department. The IS department confirmed receipt of the goods relating to that check while Dell insisted the amount wasn’t owed. It appears that Dell applied a credit against that payment for some reason unknown to AP and then failed to send us a credit memo invoice that would normally void the check on our end. AP took some extra time to get multiple confirms from both Dell and IS before officially removing the expense and outstanding check from our records. Neither Dell nor IS ever provided AP with concrete proof as to why Dell credited us for goods supposedly received which is the primary reason it remained on DRPA’s books for so long.

The majority of the outstanding checks in that list were from employee reimbursement checks for minimal amounts that were usually misplaced by the employee. Since SOP ACCT20 has been in place (completed on 10/20/2018), the AP/AR supervisor is reviewing stale dated checks and reaching out to employees with aging checks every 6 months. The AP/AR supervisor reaches out to the employee to see if he/she has the original check for deposit and if not reissues them a new check and voids the aging one.

**G. Process Walk-Thru and Transactional Testing**

A process walk-thru of the accounts payable system controls within SAP was performed to obtain an understanding of the AP related control processes and ensure the controls are effective. The controls reviewed included: invoice tolerance keys for invoice processing, duplicate invoice payment controls, Non-PO approval process, SAP Roles, and controls for ensuring costs do not exceed Contract/Resolution or Budget Amount.
Invoice Tolerance Keys
The invoice tolerance keys are a setting in SAP that allows the user set to block invoices for payment if the invoice does not match the PO and/or good receipt. OIG reviewed the Invoice Tolerance Keys for reasonableness and to ensure DRPA and PATCO are consistent. OIG concluded that the Invoice Tolerance keys are consistent between PATCO and DRPA and the controls seem reasonable. Key controls in place include:

- There is a Tolerance Key set to prevent the invoice from being paid until the goods are received.
- There is a Tolerance Key set to prevent the invoice from being paid if the invoice price is greater than the PO price by a specific amount or a specific percentage.
- There is a Tolerance Key set to prevent the invoice from being paid if the quantity invoiced is different from the quantity on the PO by a specific lower limit percentage and an upper limit percentage.

Duplicate Payment Controls
The system based duplicate payment controls are set to prevent invoices for payment if another invoice with the same invoicing data has already been entered into the system. The OIG worked with the Accounts Payable & Receivable Supervisor to test duplicate invoice scenarios in the SAP test environment. Scenarios include entering duplicate invoices with a combination of the same Vendor Number, Company Code, Invoice Number, Invoice Date, and Invoice Amount.

The Duplicate Payment control system setting for duplicate payments in SAP are consistent between PATCO and DRPA.

The SAP system settings for duplicate payments should block a duplicate invoice if it has the same:

- VendorID
- Reference (Invoice Number)
- Company code
- Currency

These settings will block an invoice with the same vendor ID, invoice number, company code, currency, which are management’s expectations. If the invoice date is different, the duplicate payment control setting should block the second invoice entered.

Based on the testing by OIG with the Accounts Payable & Receivable Supervisor in the SAP test environment, it was determined that a duplicate invoice will be blocked if the following entered criteria are the same:

- VendorID
- Reference (Invoice Number)
- Company code
- Currency
- Invoice Date
This is not management’s expectations. Management expects SAP to block duplicate invoices if the vendor number, company code, currency type and the invoice number are duplicates; invoice date was not an agreed upon criteria.

All 2017 and January through July 2018 invoice payments were reviewed for duplicate payments. There were two payments made in October 2017 for the same invoice that had the same VendorID, same Invoice Number, same company code, same amount, but a different invoice date was entered. The second invoice should have been blocked by SAP duplicate payment system controls, but the SAP system was not set according to management’s expectations and both payments were processed. The duplicate payment encountered was to UPS for $88.97. The invoice number was 00002XW772427. The vendor caught the duplicate payment after it was paid and refunded the duplicate amount to the Authority. While the duplicate payment observed was minimal in value, this observation evidenced that the duplicate payment controls are not working as expected by management, and invoices of all values would be subject to the same level of control and systematic processing.

An Information Services’ Help Desk ticket was created by the Manager, ERP & Applications, and SAP support, and involved the OIG, as well as the SAP support team to investigate the duplicate payment system controls. It was determined that the duplicate payment controls in SAP were not set to management’s expectations and duplicate invoices would not be rejected unless the Invoice Date was also duplicated. This was verified by SAP support and the Manager, ERP & Applications. Per SAP support, the duplicate payment setting is set to the SAP default setting and a custom enhancement will be required to correct the SAP duplicate payment system controls to management’s expectations.

Audit Finding 6: The system-based duplicate payment controls are inconsistent with management’s expectations to block a duplicate invoice. The existing system controls observed allows invoice data entry and payment processing to vendors who submit duplicate invoices but change the invoice date.

Audit Recommendation 6: The SAP system’s duplicate payment control setting should be corrected to meet and reflect Finance management’s expectations for blocking duplicate invoices. The system controls should not allow invoice data entry and payment processing to vendors who submit duplicate invoices but change the invoice date.

Management’s Response 6: Finance management from DRPA and PATCO agrees with the recommendation. Action to address this recommendation was initiated with a help desk ticket (2/08/2019) requesting an update to the controls in this area. The controls to remove SAPs control setting regarding company code should be relatively easy to correct. There is a system glitch on the invoice date option that will likely require AMS assistance to determine if they can fix the underlying issue. Finance will test the controls in the test system when they are applied by IS within a month of them being changed.

IS has unclicked the company code control boxes in test as of 2/12/2019. Testing by AP is in process. If testing shows the function working, IS should be able to put the change in production by March 2019.
We will follow up with IS/AMS concerning the invoice date control glitch they are looking into getting fixed by AMS by June 2019. If this cannot be addressed in the current system, we will have it setup correctly in S4 Hana which should be fully live by June 2020.

**Audit Finding 7:** When a vendor is added to vendor master data, a check box has to be manually checked within SAP to have the duplicate payment settings applied. This process has to be performed for each vendor added. The check boxes are not checked automatically, however OIG did observe that there is a hard stop that will not allow a vendor to be added unless the check box is checked.

OIG discussed the possibility of having the “Chk double inv” check box enabled as the system default when adding a new vendor with the Manager, ERP & Applications, Information Services. Information Services informed OIG that there was no option currently available to hard code the “Chk double inv” check box so that it is automatically enabled each time a new vendor is added.

**Audit Recommendation 7:** Since the “Chk double inv” check box currently cannot be hard coded / programed as enabled within the SAP system, this functionality should be reviewed during the implementation of SAP S/4HANA to see if it can be automatically checked and remove the manual process of checking the check box.

**Management’s Response 7:** Finance management from DRPA and PATCO agrees with the recommendation. A vendor cannot be saved/used for invoicing when that box is unchecked. The system is not configured in a way to make that check box automatic and thus not relevant for the vendor maintainer to update. We will look to get that functionality automated in S4 HANA if possible.

In terms of insuring that box is always checked one way or another, this recommendation is completed as no vendor can exist until that box is checked and it cannot be unchecked once the vendor exists.

**Non-PO Approval Process**

There is a non-PO work flow set up is SAP which shows the approval process based on the dollar amount of the invoice (i.e., a dollar threshold). OIG reviewed the Non-PO Approval process for reasonableness, to ensure it is consistent with the Non-Purchase Order Invoice workflow policy, and to ensure DRPA and PATCO are consistent.

**Audit Finding 8:** When first reviewed, there was an inconsistency between approval thresholds configured in SAP and documented procedures. 1st level approval amounts were listed as $.01 to $2,501.99 in SAP but were listed as $.01 to $2,499.99 on the Non-Purchase Order Invoice Workflow Policy representing a $2 difference. Also, 2nd level approval amounts were listed as $2,502.00 to $4,999.99 in SAP but were listed as $2,500.00 to $4,999.99 on the Non-Purchase Order Invoice Workflow Policy again representing a $2 difference between the system-based controls and governing policy. This issue was addressed by Finance management during the course of our audit (mid-2018), no further action is necessary.
Invoice Transactional Testing
After the system-based controls were reviewed and tested, a random sample of 40 invoices were tested from January 1, 2018 to July 31, 2018. The sample consisted of non-PO invoices, blanket PO invoices, and standard PO invoices for both DRPA and PATCO.

Invoice were reviewed to:

- ensure proper supporting documentation existed;
- ensure the invoice matched the PO and receiving where appropriate;
- ensure proper approvals were received and that they were received before the invoice was processed;
- ensure the invoices were paid timely and proper discounts were taken when appropriate; and,
- ensure invoices were recorded to the proper general ledger account.

Based on the testing of the 40 samples, proper supporting documentation existed, proper approvals were received and were received before the invoice was processed, invoices were paid timely, and invoices were recorded to the proper general ledger account.

Audit Finding 9: It was noted that the unit cost on one of 40 invoices (2.5%) did not match the PO for a DRPA blanket order. Since this was a blanket order PO, the invoice is not systematically matched to the PO and must be review and compared manually to determine accuracy. After reviewing all other invoices from this vendor, it was determined that a total of two invoices did not agree with the PO authorized pricing. The vendor was General Fire Equipment Co and the Authority was overcharged by $129.50. As a result of the audit, the vendor was contacted by the AP Department and the Authority was refunded the amount overcharged.

Audit Recommendation 9: Finance and Accounting management should reinstruct / reinforce with the Authority’s operational areas (invoice reviewers / approvers) their responsibility to compare the invoice to the authorized blanket PO pricing for accuracy prior to approving the invoice. Additionally, the invoice review and approval process should be formally added to the policies and procedures. This requirement can also be reinforced by the circulation of associated documented procedures.

Management’s Response 9: The Finance department does regularly reinforce this issue every time a discrepancy is discovered, and the approver didn’t catch it by calling or emailing the approver of the issue and their supervisor if it’s an ongoing problem. The AP entry person and persons responsible for reviewing and approving that invoice has been made aware of the issue and reminded to check all text in the PO for relevant unit pricing (completed late 2018).

“This requirement can also be reinforced by the circulation of associated documented procedures” this has always been the policy of both DRPA and PATCO, it has been reinforced each time major updates to PO polices were made and its high importance were made very clear in the policy rendition.

Reinforcement of these policies should be a companywide shared responsibility because all employees should embody the authority’s core mission statement of stewardship.
Finance management from DRPA and PATCO agrees to reinforce when issues are identified in the course of normal business tasks but believes the effort should be Authority-wide.

This recommendation is completed and efforts to improve this area are always ongoing.

H. Review of SAP System-Based Controls / Role Analysis

OIG’s review of the AP SAP roles was performed to identify and evaluate the SAP system roles and the transaction rights assigned to the AP staff. After the initial review of AP staff, OIG observed the existence of excessive privileges, lack of position-based role access, segregation of duties issues, multiple user accounts for same employee, and decentralized master data administration, OIG decided to expand the review to the majority of the Finance Department’s staff’s SAP roles and transactions. It was determined that the Finance staff had the same or similar issues as identified within our review of the AP staff.

Audit Finding 10:

10.1 Segregation of Duties
Segregation of duties (SOD) is the concept of having more than one person required to complete a task. In business the separation by sharing of more than one individual in one single task is an internal control intended to prevent fraud and error. Examples of segregation of duty concerns observed included:

- approval and entering invoices;
- approval and entering journal entries;
- create purchasing requisition, approval and entering invoices;
- bank reconciler and invoice entry;
- receiving function and entering invoices;
- payroll processor and payroll manager;
- payroll processor and HR Master Data Maintainer; and,
- P-Card approver and processor.

10.2 Least Privilege Principle
The “least privilege” principle pertains to assigning a user only those system rights, which are essential to perform their intended function. This approach limits risk from breeches or data privacy issues. Examples of excessive privilege observed are noted below:

- AP clerk with access to salary reports;
- AP clerk with access to profit/loss reports;
- AP clerk with access to Accounts Receivable reporting;
- Payroll staff with access to Benefits Manager;
- Payroll staff with access to month end / year end Closing Coordinator;
- Non-Payroll Director with access to Payroll Processor; and,
- Accounting personnel retaining accounting related SAP rights after leaving position.
10.3 Master Data
Having a centralized master data function provides data / data entry consistency and provides a single and common governance over the master data process. Multiple individuals were observed as having access to change master data. Master data should be centralized to one individual with a trained backup. The trained backup should only be given temporary access when the primary individual is temporarily away and unable to perform as master data maintainer. Master data file access concerns observed include the following:

- Vendor master data: 15 employees have access;
- Human Resource master data: Finance personnel should not have access to the HR function;
- Month end / year end closing coordination: 80+ employees have access;
- Fixed Asset master data: 60+ employees have access;
- General Ledger Account master data: 25+ employees have access; and,
- Project master data: 21 employees have access.

Audit Recommendation 10.A: Create position specific role-based access (i.e. accounting, clerk AP) limiting access to the transaction codes for the specific position.

Management’s Response 10.A: Per the DRPA Director of Finance, segregation of duties roles are being removed from one of the AP employee’s roles, then an AP position specific role will be developed. After that, the rest of the Accounting and Finance employee roles will be reviewed to remove any segregation of duties issues and converted to position specific role-based access by 9/30/2019.

Per the Director of Information Services, conversations regarding role-based access across the Authority have already begun. These issues will be addressed during the SAP S/4 HANA implementation, which is scheduled for 2020. They are also being addressed in the SuccessFactors and Ariba implementations, which are scheduled for 2019.

Audit Recommendation 10.B: Create a governance process where any changes / additions in personnel, roles, or transaction codes are requested by one authorized individual (i.e. local operating area’s manager, director, etc.) and approved by the CFO (or CFO’s designee). The process requires specific documentation detailing requestor and approver to be retained by Information Services’ Help Desk for 2 years. The requests should be in electronic format (i.e. email to Help Desk). The process should also be detailed and documented within a formal procedure.

Management’s Response 10.B: Per DRPA CFO, a process exists where the person requesting access discusses the access with the Director of Finance (designated by the CFO to approve) for approval, then sends an email to the Help Desk and copies the Director of Finance, and/or CFO. The Help Desk has recently started clarifying the impact of the “T-codes” and identifying other T-codes contained in the role to the Directors before assigning the role to the requesting employee. This process has been in place since January 2016 and the requests are captured in the SolarWinds ticketing system (Help Desk system). The DRPA Director of Finance is currently working on the SOP for the process and will more than likely be completed by mid-2019.

Audit Recommendation 10.C: Invoice entry transaction codes should be removed for all non-authorized personnel, especially Information Services staff including the “SAP Almost” role...
Currently, the “SAP Almost” role allows access to all transaction codes except security management. IS should only have access for a limited time to resolve issues in a documented firefighter role. In addition, all other financial transaction codes should be removed from Information Services staff.

Management’s Response 10.C: Per the DRPA Director of Finance, a Help Desk ticket was initiated by the Director of Information Services to supply a list of all employees with the invoice entry transaction codes and Finance and Information Services will work together on this issue to be completed by mid-December 2018. Per the Director, Information Services, the “SAP Almost” role was removed from all users in August 2018, once notified by OIG.

Audit Recommendation 10.D: Current inquiry and display roles need evaluation for change transaction codes and those transaction codes need removal. Inquiry and display roles are read-only, and the roles should not have change transaction codes nested in them (i.e. G/L Inquiry & Display).

Management’s Response 10.D: Per DRPA Director of Finance, a Help Desk ticket was submitted for this recommendation. Information Services needs to confirm that there can be a separation between the inquiry and display capabilities under the current configuration without affecting the employee’s ability to complete their assigned tasks. Furthermore, this recommendation will be satisfied once the creation of position specific role-based positions are established in 2020.

Audit Recommendation 10.E: A documented review process of SAP financial transaction user access should be performed quarterly to assure valid and accurate financial reporting. The process should be detailed and documented within a formal procedure.

Management’s Response 10.E: Per the DRPA Director of Finance, this is in the discussion phase and will more than likely be implemented with the same timeline as the SAP S/4 HANA upgrade, which is expected to be implemented in 2020.

Audit Recommendation 10.F: The “Reporting Role” should be deactivated. The role allows access to too many sensitive reports by individuals who should not have this privilege and do not have a need to know. The role, as created, is very convoluted. The role contains 943 transaction codes. This creates a user access administrative nightmare and provides access to excessive, and in certain cases, sensitive information. Many of the custom transaction codes contained in this role do not have a description of their function.

Management’s Response 10.F: Per the DRPA Director of Finance, a Help Desk ticket exists to review and perhaps modify or split the reporting role, however, it cannot be deactivated until position specific roles are created. Finance will work with Information Services (Help Desk) to establish and test roles, for Finance personnel before final creation. Other departments also have access to the reporting role, their needs would also have to be addressed by IS. Furthermore, this recommendation will be satisfied once the creation of position specific role-based positions are completed, which is expected to be implemented in 2020.

Audit Recommendation 10.G: Limit master data administrative role to one person and train one back-up person to assist the primary master data administrator. Document a consistent process for requesting and approval of master data additions and changes.
Management’s Response 10.G: Per the DRPA Director of Finance, currently, certain master data is controlled by each of the Business Units. In Finance, several types of master data are administered resulting in certain employees being responsible for additions and changes. These employees make requested changes to master data with the approval of their Director. Most changes are approved by email. There needs to be a strategic review of master data responsibilities and accountabilities as this function impacts multiple departments across the Authority which is expected to be complete with the SAP upgrade in 2020.

Audit Recommendation 10.H: Limit access of “display only” Human Resource master data to only employees needing access to this sensitive data.

Management’s Response 10.H: Per the DRPA Director of Finance, Finance and Information Services did complete modifying the reporting role on November 2, 2018. This modification removed all Human Resource reports from all non-HR Authority employees except the DRPA Director of Finance.

Audit Recommendation 10.I: Eliminate Finance personnel access to Human Resource master data maintainer role. Changes made through the Human Resource master data maintainer role should be limited to the Human Resource department only.

Management’s Response 10.I: Per the CFO, there are six individuals (3 Payroll personnel, the Manager of Budget, DRPA Director of Finance, and the CFO) with PA 30 (maintain HR Master Data) access. The 3 Payroll personnel all should have access to PA20 (display HR Master Data) and PA 30. The Manager of Budget, Director of Finance and CFO should retain access to PA 20. The Payroll department still requires access to PA30 for wage attachments, one-time adjustments, health care plans and various taxes (residency, work and unemployment tax).

We are looking to put compensating controls in place, such that if Payroll needs to make a change, they would contact the CAO or her designee for approval. However, if Payroll is in the middle of the process and the CAO or her designee cannot be reached and the process needs to move forward, approval will have to come after the process is completed from the Director of Finance or the CFO. Regarding the 3 other Finance employees who have access to PA30, new roles will have to be created. The display function and maintain function are contained in the Payroll Manager / Administrator and Benefits Manager roles and cannot be separated.

In addition, also included in these roles are other T-Codes required by Finance to adequately review postings and payments.

The creation of the roles will need Application Management Services (AMS) support and there will be a cost.

The expected completion date of documenting the approval process is March 31, 2019. A mitigating control will be for the DRPA Director of Finance to review the payroll register report and compare it to current employees and the procedure will be documented.
I. “Not to Exceed” Contracts and Controls

During the course of this audit (July 2018), it was brought to the OIG’s attention that the “not to exceed” contracted amount of $1,200,000 for the purchase of PATCO gear boxes was exceeded by $511,805.87 or 43% (as of July 18, 2018). Two contracts were associated with the authorized Summary Statement and Resolution (PATCO-14-015); see background information below:

<table>
<thead>
<tr>
<th>Vendors</th>
<th>Contract Number</th>
<th>Task Order Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTC / RAS INC.</td>
<td>GN-0007-14</td>
<td>PGB100</td>
</tr>
<tr>
<td>PENN MACHINE COMPANY</td>
<td>GN-0006-14</td>
<td>PGB200</td>
</tr>
</tbody>
</table>

Contract Summary Statement and Resolution: PATCO-14-015
Contract amount: $1,200,000
Contract start date: 6/17/2014
Contract end date: 6/16/2017
(Both contracts were extended for one year for a new contract end date of June 16, 2018.)

A new gear box contract was approved by the Board in August 2018 (PATCO-18-025). The term of the new agreement is 3 years: October 19, 2018 to October 18, 2021. The Procurement department had agreed to facilitate the resolution of the related internal control issues, and the Director, Procurement, provided the following action plans as requested by the OIG in response to the identified issues:

**Audit Recommendation 11:** Develop solution to address immediate PATCO Gear Box concern and assurance (w/ analysis and support) that no other “not to exceed” issues exist in regard to all current approved resolutions / contracts.

**Management’s Response 11 (Director, Procurement):** To date, our investigation did not reveal any other issues in regard to current approved resolutions / contracts exceeding the Board approved sums. We believe this is due, in part, to controls that are already in place. We continue to evaluate existing controls and strengthen same as necessary. Where controls are lacking, we plan to work with other Authority departments to develop and implement appropriate controls.

As for existing controls, the Authority’s Procurement Manual clearly defines certain duties and responsibilities of a project end-user / requisitioner. These controls were formally adopted as earlier as 2013 with the OIG approval of the 2013 version of the Procurement Manual. Specifically, the duties and responsibilities of the end-user / requisitioner identified in the Manual include, but are not limited to, the following:

1) Ensure the contractor is performing work as required.
2) Accept and evaluate the quality of deliverables.
3) Compare moneys expended with percentage of completion.
4) Alert appropriate Authority personnel, including the contracting officer to any problems that may have a negative effect on the project.
5) Immediately alert and obtain guidance from the contracting officer and counsel if contractor is not performing satisfactorily or if terms of the contract are being violated.
6) Coordinate any appropriate contract amendments with the appropriate Contracting Officer.

In addition to the above project-level controls, current Contract Administration procedures track via spreadsheet – independent from the SAP ERP environment -- multi-vendor, multi-year contracts that the Board has awarded. For example, Temporary Help Services and Medical Testing Services contracts are tracked via spreadsheet as an additional control to avoid cost overruns. Engineering employs a similar method to track the General Engineering Consultant and Program Management Services contracts. Additionally, DRPA Purchasing tracks via Excel spreadsheet -- independently from SAP -- two (2) Sole Source items, one that is inventory related and one that is not, that are Board approved. Two (2) additional sole source items are tracked by DRPA Purchasing outside the SAP environment, but they are below the $25,000 threshold and do not require Board approval.

As for other PATCO contracts similar to the Gear Box contract, PATCO Purchasing currently tracks via Excel spreadsheet -- independently from SAP -- approximately seventeen (17) Sole Source items that are inventory related and are Board approved. One (1) additional item is tracked by PATCO Purchasing, but it is below the $25,000 threshold and does not require Board approval. As such, PATCO Purchasing is knowledgeable about such additional controls and is working closely with PATCO Equipment to assist them in developing their own tracking system for Gear Boxes and Traction Motors. These additional controls help ensure that the approved “not-to-exceed” amounts are adhered to and provide a second check on the data contained within the SAP system.

As noted above, PATCO Purchasing is working closely with PATCO Equipment (the end-user / requisitioner for the Gear Box and Traction Motor contracts) to analyze the PATCO Gear Box and Traction Motor contracts and assist in the development of a cost / budget tracking system that exists outside of the SAP environment, similar to those systems already in place for other, similarly structured contracts. PATCO GM John Rink has committed to reviewing these reports on a monthly basis to ensure compliance with budget and Board authorized funding. However, it should be noted that while PATCO Purchasing will assist in developing an independent tracking system, PATCO Equipment will be responsible for maintaining its spreadsheets and monitoring spending.

This recommendation is effectively completed. PATCO Purchasing and Contract Administration have met with PATCO Equipment personnel on multiple occasions to assist in developing an independent tracking system. Procurement has not, however, independently verified that PATCO Equipment is tracking spending on an ongoing basis.

**Audit Recommendation 12:** Develop short term (Interim) solution for controlling and monitoring Authority-wide compliance with Resolution-based “not to exceed value” limits.

- Drafting and communication of responsibilities, including educating and supplying access to manual and system-based tools to assist in performing responsibilities and assuring future compliance.

**Management’s Response 12 (Director, Procurement):** Procurement is committed to working with various departments to assist in the drafting and communication of responsibilities, including educating and supplying access to manual and system-based tools to assist in performing contract monitoring responsibilities and assuring compliance. Procurement has identified certain SAP-based
reports, such as GR55/ZFBR (Board Resolution Budget Usage), that display the actual expenditures versus budgeted amounts connected to the Functional Area (Board Approval / SS&Resolution). Procurement will assist in the training of other Authority departments / personnel in the use and understanding of these reports.

Contract Administration worked closely with Purchasing, Finance, and PATCO to review current “not-to-exceed” contracts, budgeted amounts, and resolution limits. This exercise verified, to the best of our capabilities, that no other “not-to-exceed” issues exist in regard to all current approved resolutions / contracts.

Additional short-term solutions included:

- adjusting purchase orders amounts, where necessary, to more closely match the terms and yearly projected spend of a specific resolution;
- reviewing current known long-term contracts with multiple years remaining as part of an acquisition planning process to determine if and when a new procurement should be commenced; and,
- including certain “not-to-exceed” contracts in monthly Board reports for greater visibility by Authority stakeholders

This recommendation remains in progress. PATCO’s GM has added a section to his monthly Board report that documents spending against not-to-exceed contracts. Additionally, the Procurement Department has met with and offered training to PATCO and other departments in connection with the amended purchase order process noted above, and initiated Procurement Planning meetings to review, discuss, and plan for the year’s procurement activities so as to avoid lapses in services and/or over-expenditure of funds. While the new procedures have not met any noted resistance, there has been some hesitancy and/or failure to adopt the new procedures. The Procurement Department will continue to meet with PATCO and other departments to stress and encourage adoption and compliance with the procedures.

**Audit Recommendation 13:** Develop long term system-based solution for addressing Authority-wide compliance with Resolution-based “not to exceed value” limits.

- Need for system-based reporting (Payments vs. Resolution and Budget based limits), system-based alerts when approaching limits to trigger management actions, system-based hard stops to restrict processing of any additional payments when Budget and Resolution limits are approaching or will exceed the prescribed limits, etc.

**Management’s Response 13 (Director, Procurement):** Long-term, Procurement anticipates the need for system-based reporting (Payments vs. Resolution and Budget based limits), and system-based alerts and barriers that are triggered when approaching funding or budgetary limits. Upon information and belief, these soft and hard stops will be included as part of the upgraded SAP ERP system.

Additionally, going forward most multi-year, multi-vendor Purchase Orders will be set up as Blanket Purchase Orders with payment approval from the end-user required before AP will process payment. Additionally, the Purchase Orders will be divided, when necessary, among the approved vendors to assist in tracking budget vs. actuals. This change in process should help prevent Gear Box
related issues and greater visibility in connection with project spend vs. budget. Procurement will work with Budget and AP to discuss and develop additional SOP’s in connection with their involvement in the requisitioning and invoice payment process.

As noted above, Contract Administration worked closely with Purchasing, Finance, and PATCO to review current “not-to-exceed” contracts and, where possible or necessary, converted multi-year, multivendor purchase orders to blanket purchase orders to assist in tracking budget vs actuals. Going forward, all multi-year, multi-vendor purchase orders will be set up similarly to assist in budget tracking and acquisition planning.

Additionally, in October 2018, Procurement began workshopping in connection with the planned Ariba implementation. As part of this process, we’ve identified a number of system generated alerts that will assist in contract compliance. For example, beginning six months from expiration, the Ariba system will begin to automatically send contract expiration notices/warnings. These warnings are part of Ariba’s “out of the box” contract management platform. Upon information and belief, other such “out of the box” functionality will include similar alerts and notifications tied to actual spend vs. budget, forecasted contract depletion, and/or similar automatically triggered alerts/warnings related to additional contract milestones (e.g., expiration of certificate of insurance, option year triggers, etc.).

This recommendation and action plan remain in progress and is contingent upon the successful implementation of the SAP ERP System upgrade targeted for completion in 2020.

Audit Recommendation 14: Create and communicate documented SOP(s) clearly assigning accountability and monitoring responsibilities for Contract / Project Managers (and their management), as well as roles for Finance (AP and Budget) and Procurement.

Management’s Response 14 (Director, Procurement): Additional SOPs will be developed, as necessary, to clearly document accountability and monitoring responsibilities for end-users / project managers. This will be a collaborative process with Procurement, Finance, and Operations working together to develop or refine efficient and secure process controls in connection with the contracting / procurement process.

Purchasing has already commenced meetings in this regard with Finance, and Contract Administration is developing new and improved documents to be delivered with each executed contract that more clearly define the project manager’s responsibilities, contractual value, Resolution limits, term and other critical information relevant to the project so that it is more easily accessible by the end-user and/or project manager.

Additionally, during October 2018, Procurement initiated regular (e.g., quarterly), Procurement training and/or updates to review the procurement process, contract management and/or monitoring responsibilities, etc. To this end, Procurement participated in the 2018 New Manager Training offered by Human Resource Services. In a brief presentation, Procurement reviewed the procurement process, thresholds, and other basics of procurement. We believe our procurement training and outreach will be invaluable toward promoting accountability and responsibilities in connection with the procurement process.
Documented SOPs that include assignment of accountabilities and monitoring responsibilities will be documented and communicated by January 2019.

### J. Review of Payment Processing Efficiency

The AP process was evaluated for operational turn-around time effectiveness. All invoices posted from January 1st, 2018 to July 31st, 2018 were reviewed. Invoices were reviewed from invoice date to the payment date to see how long it takes to pay a vendor. Below are the statistics for DRPA and PATCO:

#### Invoices Posted January 1, 2018 to July 31, 2018

<table>
<thead>
<tr>
<th>DRPA</th>
<th># of Days from Invoice Date to Payment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 or less</td>
</tr>
<tr>
<td>Number of Invoices</td>
<td>4,768</td>
</tr>
<tr>
<td>% of Total</td>
<td>14.07%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Invoice Value</th>
<th>10 or less</th>
<th>11 to 30 days</th>
<th>31 to 60 days</th>
<th>61 to 120</th>
<th>121 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>$98,223,167</td>
<td>$21,621,571</td>
<td>$57,400,227</td>
<td>$12,236,148</td>
<td>$6,274,398</td>
<td>$690,821</td>
</tr>
<tr>
<td>% of Total</td>
<td>22.01%</td>
<td>58.44%</td>
<td>12.46%</td>
<td>6.39%</td>
<td>0.70%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PATCO</th>
<th># of Days from Invoice Date to Payment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 or less</td>
</tr>
<tr>
<td>Number of Invoices</td>
<td>3,534</td>
</tr>
<tr>
<td>% of Total</td>
<td>5.69%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Invoice Value</th>
<th>10 or less</th>
<th>11 to 30 days</th>
<th>31 to 60 days</th>
<th>61 to 120</th>
<th>121 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>$16,002,003</td>
<td>$1,963,035</td>
<td>$12,122,350</td>
<td>$1,071,134</td>
<td>$508,821</td>
<td>$336,684</td>
</tr>
<tr>
<td>% of Total</td>
<td>12.27%</td>
<td>75.76%</td>
<td>6.69%</td>
<td>3.18%</td>
<td>2.10%</td>
</tr>
</tbody>
</table>

Based on the AP activity evaluated, the Authority is processing approximately 76% (6,318 / 8,302) of their invoices within a one-month period from the date of the invoice. Only 8% (678 / 8,302) of the invoices processed are paid at or in excess of two months after the invoice was dated. The efficiency of processing results is driven by both the work of the Authority’s AP staff, the proper and timely submission of payment request documentation to AP, and the prompt invoice review and approval by Authority management. While this data demonstrates excellent responsiveness and turn-around time, Finance management should continue to focus on reducing the level of AP transactions processed greater than one month from the date of the invoice. AP management and
staff communicated that in certain situations, minimal late fees are incurred and paid for invoices processed in excess of the agreed upon payment terms; however, no records are maintained or available to quantify the amount. Per the CFO, invoice processing delays are sometimes related to lack of compliance with procurement policies.