

Chief Operations Office – Enterprise Program Operations

Xerox Print Mail Process

Internal Audit Report #17-103

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Department of Information Resources
Internal Audit

Internal Audit Mission Statement

To collaborate with DIR leadership to fulfill the agency's core mission by providing independent and objective audit services designed to add value and improve the effectiveness of risk management, control, and governance processes.

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Executive Summary

This report summarizes the scope, results, and recommendations from the work performed in conducting the Department of Information Resources (DIR) Xerox Print Mail Process audit. This performance audit was requested by the DIR Executive Leadership and approved by the DIR Finance and Audit Subcommittee on February 14, 2017.

The **audit objective** was to evaluate whether the Xerox process for print mail services was effective, performed in accordance with established requirements, and supported the billing and monthly performance targets reported.

To accomplish the objective, Internal Audit performed procedures to gain an understanding of Xerox's business processes designed to effectively manage and operate the print mail services provided to the state agencies (DIR customers) through the contract with DIR. In conducting these procedures, we interviewed subject matter experts and reviewed financial transactions, invoices, and selected resource units (RUs). Internal Audit performed data analytics on data from information systems used to compile performance results and billing reports. In addition, Internal Audit reviewed documentation such as state law, regulations, contract requirements, amendments, selected service level agreements (SLAs), service provider's internal documentation and guides, Service Management Manual (SMM), data files from relevant information systems, flat files, supporting documentation of jobs selected for review, testing, and analysis, and other documentation relevant to accomplish the audit objective.

This was a limited **scope** performance audit that focused on the Xerox Corporation, LLC. (Xerox), service provider for the Data Center Services (DCS) print mail services. The audit scope included selected job records from the following data sets for the period of September 1, 2016 to February 28, 2017. Samples selected are summarized in Appendix B.

- 3 of the 7 Category 4 – “Other Service Delivery” SLAs for print mail – November 2016:
 - P401-U1.4.5P Daily Mailing Completion Timeliness,
 - P407-U1.4.8P Per Piece Daily Mailing Completion Timeliness, and
 - P402-U1.4.6P Document Delivery Timeliness.
- Resources Units (RUs) – November 2016:
 - Print Images, and
 - Mail Insertions.
- Billing and invoice data for November 2016.
- Prior Period Adjustments (PPAs).

- Supporting documentation (e.g. job tacking logs, job banner pages, job trailer pages, Pitney Bowes Presort Services (PBPS) customer pick-up slips, daily shift completed job logs, courier manifests, etc.) – November 2016.
- Postage records from September 2016 to March 2017.
- Delivery records for November 2016.
- NearStar change requests (upgrades, changes, updates, etc.) for fiscal year 2017.

Out of scope items are summarized in Appendix A.

Overall, Xerox operations for print mail services include both automated and manual processes. Based on the results of our review, testing, and analysis, the internal controls around the print-mail processes do not ensure that existing processes are effective in accomplishing contracted performance and chargeback operations. Existing processes for the reporting of monthly performance targets (service level agreements – SLAs) and billing are not fully supported with valid documentation.

Internal Audit noted the following issues pertaining to the Xerox print mail process:

- Xerox operations for the processing and support of SLA performance data and chargeback data include manual processes in which records are added, deleted or changed, including the application of MS Excel macros and Access queries not included in documented approved processes and not subject to a formal change management process.
- Documentation to support that jobs were completed, completed timely, and in accordance to the job specifications is not always available, complete or valid and sometimes not required.
- The systems in place do not always capture the required data needed to support performance targets and billing reported.
- Reported mailed and delivered dates did not always represent the actual dates when the jobs were mailed or delivered.
- Limited or no supporting documentation was available or required for the jobs produced at the Annex locations.
- Deposits for prepaid postage included in the individual customer agencies' summaries (used for forecasting purposes) and the ADC Postage Summary did not always agree and transfers of postage funds were not always supported with valid documentation.
- Two sets of individual customer summaries for postage are kept for each customer agency (one set with reconciled amounts and one set with forecasted amounts); TABC transactions for postage are fully manual.

- The Xerox Chargeback and Service Reporting Team and Procurement Team are performing tasks that should be separated to ensure proper segregation of duties.
- Some optional print mail services for print images and mail insertions are not available to the DIR customers via the DCS Collaboration Portal – Services Catalog but included in the contract.

Internal Audit noted the following issues pertaining to the MSI roles and responsibilities related to the Xerox print mail process:

- Chargeback data posted in the DCS Collaboration Portal contains summarized data and invalid mail dates.
- Chargeback data included jobs considered as “tests” by the requesting customer agency.
- Prior Period Adjustments (PPAs) included in the monthly invoices do not include enough documentation to support the PPAs are valid and properly approved.
- The MSI did not provide the audit team with supporting documentation of the limited review performed to validate the SLA performance and chargeback data uploaded to the portal.
- The MSI staff exhibited limited knowledge of Xerox Processes and Operations.

Recommendations to improve the Xerox’s control environment over its print mail operations and to ensure full compliance with contract requirements were identified and communicated to DIR management from the Chief Operations Office (COO), Enterprise Program Operations (EPO). The recommendations are included in the detail that follows and summarized in Appendix D of this report.

DIR management from the COO EPO concurred with the results and recommendations reported by Internal Audit and provided action plans, estimated completion dates, and assigned responsibility to management staff for implementing the recommendations.

We conducted this performance audit in conformance with the *International Standards for the Professional Practice of Internal Auditing* and in accordance with the *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 issues and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our issues and conclusions based on our audit objectives.

Internal Audit thanks management and staff from the DIR COO EPO, and the service providers Xerox Corporation, LLC. and Capgemini America, Inc. for their time, cooperation, and assistance provided during this audit.

Detailed results of the audit are documented in the report that follows.

Background

Xerox Corporation, LLC (Xerox), is one of the Data Center Services (DCS) Service Component Providers (SCP) that provides bulk print and mail services for DIR customers. Texas state agencies and local governments are eligible customers for the DCS program which provides data center infrastructure as a managed service. Customers pay only for the amount of services used, rather than owning hardware, software, and hiring staff to operate and maintain IT infrastructure at an individual the agency level. According to Xerox staff, since April 1, 2007 print and mail services have printed more than 2,840,000,000 pages and mailed more than 760,000,000 envelopes.

DIR bases its Service Management practices on the Information Technology Infrastructure Library (ITIL), a world-wide recognized best-practice framework for the management and delivery of IT services throughout their full life-cycle. Accordingly, DIR requires that the Service Provider Service Management practices, which are used to support the Services, be based on the ITIL framework and guidance.

Print Services

Print services support a wide breadth of output and distribution business operations needs using consistent, cost-effective and accurate processes. Xerox uses a variety of equipment to create high-speed production print output from document files received from DIR Customers or Third Parties on a continuous basis. Xerox supports, maintains, and coordinates all online print/media activities associated with print services, such as:

- Operational services
- Assigning jobs to printers
- Managing print queues
- Controlling report distribution
- Logging completed reports

Mail Production Services

Mailing services related to print operations include the management of postal meters. Process categories include:

- Postal bar coding
- Readable addresses
- Tray makeup
- Postal code sort

Activities associated with mail production services include:

- Presort
- Production control
- Quality control
- Procuring and maintaining inventory for all customer print stock, envelopes, inserts, laser labels, and stuffers
- Processing manual or automated exceptions

Print Mail Locations

Print and mail (P&M) services are delivered to DIR customers from the following locations:

- Austin Data Center (ADC), Austin, Texas
- Texas Workforce Commission (TWC) Annex building, Austin, Texas
- Texas Department of Criminal Justice (TDCJ), Administration Building, Huntsville, Texas
- TDCJ, Brown Oil Tool (BOT) building, Huntsville, Texas

DIR contracted with Xerox Corporation, LLC, for print mail services in January 2012. Currently, Xerox provides print mail services to 13 state agencies. Refer to Appendix B of this report for a listing of the 13 state agencies receiving print mail services from Xerox.

According to the fiscal year 2016 DCS Consolidation and Measurement Report, payments to Xerox Corporation, LLC, totaled \$16.7 million for bulk printing and mailing services, courier services, paper, and envelopes. Annually, Xerox prints nearly 393 million images and mails nearly 56 million items.

Capgemini America, Inc. is the DCS Multi-Sourcing Integrator (MSI). The MSI role is to integrate and manage the services of Xerox Corporation, LLC for the one technology service: Print/Mail. Capgemini also provides service level management (agreeing, monitoring, reporting, and reviewing IT service achievements) and financial management (validating that the IT Financial Management (ITFM) process provides an audit trail that meets the legislative and policy requirements to which DIR and DIR customers must comply). The MSI also provides and maintains a Chargeback and Utilization Tracking System (Chargeback System) that serves as the single source of information regarding all IT financial information.

The Xerox Print Mail Process audit was requested by the DIR Executive Leadership and approved by the DIR Finance and Audit Subcommittee on February 14, 2017.

The **audit objective** was to evaluate whether the Xerox process for print mail services was effective, performed in accordance with established requirements, and supports the billing and monthly performance targets reported.

The **scope** and **methodology** are described in detailed in Appendix A of this report.

Detailed Results

Overall, Xerox operations for print mail services include both automated and manual processes. Based on the results of our review, testing, and analysis, the internal controls around the print-mail processes do not ensure the existing processes are effective in accomplishing contracted performance and chargeback operations. Existing processes for the reporting of monthly performance targets (service level agreements – SLAs) and billing are not fully supported with valid documentation.

Internal Audit noted the following issues pertaining to the Xerox print mail process:

- Xerox operations for the processing and support of SLA performance data and chargeback data include manual processes in which records are added, deleted or changed, including the application of MS Excel macros and Access queries not included in documented approved processes and not subject to a formal change management process.
- Documentation to support that jobs were completed, completed timely, and in accordance to the job specifications is not always available, complete or valid and sometimes not required.
- The systems in place do not always capture the required data needed to support performance targets and billing reported.
- Reported mailed and delivered dates did not always represent the actual dates when the jobs were mailed or delivered.
- Limited or no supporting documentation was available or required for the jobs produced at the Annex locations.
- Deposits for prepaid postage included in the individual customer agencies' summaries (used for forecasting purposes) and the ADC Postage Summary did not always agree and transfers of postage funds were not always supported with valid documentation.
- Two sets of individual customer summaries for postage are kept for each customer agency (one set with reconciled amounts and one set with forecasted amounts); TABC transactions for postage are fully manual.
- The Xerox Chargeback and Service Reporting Team and Procurement Team are performing tasks that should be separated to ensure proper segregation of duties.
- Some optional print mail services for print images and mail insertions are not available to the DIR customers via the DCS Collaboration Portal – Services Catalog but included in the contract.

Internal Audit noted the following issues pertaining to the MSI roles and responsibilities related to the Xerox print mail process:

- Chargeback data posted in the DCS Collaboration Portal contains summarized data and invalid mail dates.
- Chargeback data included jobs considered as “tests” by the requesting customer agency.
- Prior Period Adjustments (PPAs) included in the monthly invoices do not include enough documentation to support the PPAs are valid and properly approved.
- The MSI did not provide the audit team with supporting documentation of the limited review performed to validate the SLA performance and chargeback data uploaded to the portal.
- The MSI staff exhibited limited knowledge of Xerox Processes and Operations.

Recommendations to improve the Xerox’s control environment over its print mail operations and to ensure full compliance with contract requirements were identified and communicated to DIR management from the Chief Operations Office (COO), Enterprise Program Operations (EPO). The recommendations are included in the detail that follows and summarized in Appendix D of this report.

DIR management from the COO EPO concurred with the results and recommendations reported by Internal Audit and provided action plans, estimated completion dates, and assigned responsibility to management staff for implementing the recommendations.

To support the Service Level Management Cycle of the contract between DIR and Xerox Corporation, which includes monitoring, reporting and improving the delivery of the services to DIR and DIR Customers, Xerox performs services to which service levels apply. The service level performance levels are met or exceeded each month. The monthly performance reports are due by the 20th day of each month and include:

- A set of soft-copy reports such that DIR is able to verify the service provider's performance and compliance with the service levels.
- A description of any failure to meet the service levels.
- Detailed supporting information for each report with sufficient detail to reproduce the calculations made and validate the results reported.

Xerox is required to create and maintain detailed procedure documentation of its Service Level Agreement (SLA) measurement process used to 1) collect SLA data, and 2) calculate SLA attainment. The process documentation must include quality assurance reviews and verification procedures. The measurement process must be automated to the extent possible, and any manual data collection steps must be clearly documented, verified, and auditable. All methods, codes, and automated programs must be documented and provided to DIR for validation and approval. Xerox must ensure it tests and validates the accuracy and currency of the documentation and measurement process on a quarterly basis. As part of this process, the Multi-Sourcing Integrator (MSI), Capgemini America, Inc., has overall responsibility for communication, coordination, reporting, and process across the enterprise. Service level credits can be assessed against Xerox or the MSI and are calculated based on specific invoice amount, at-risk amount, and allocation of pool percentage.

Print Services is a leveraged capability offered to all DIR customers to satisfy high-volume printing needs, such as production of statements, notifications, letters, and other constituent communication. The goal of Print Services is to offer a wide variety of print capabilities and formats, achieved in a highly secure and cost-effective manner. The standard print services process consists of four activities:

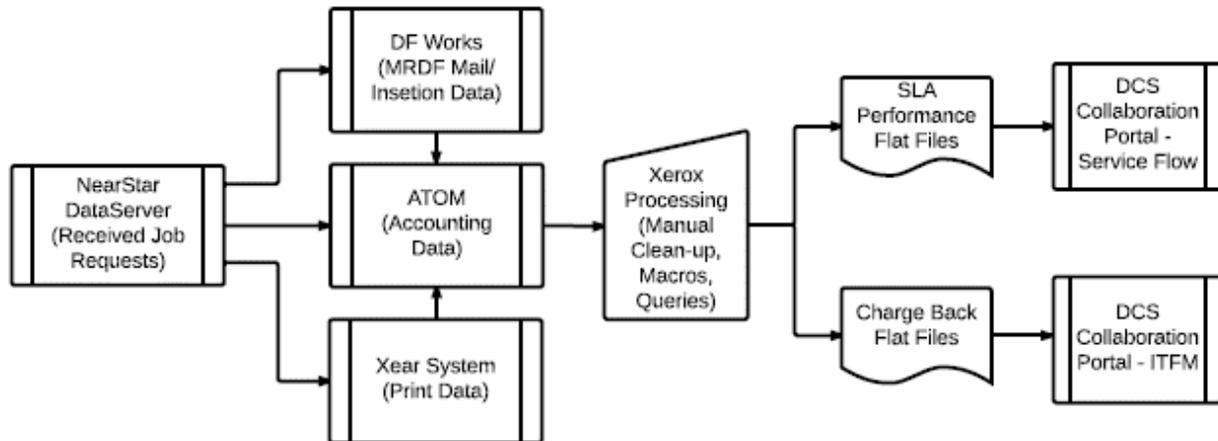
- Print file pre-processing.
- Austin Data Center (ADC) print production.
- ADC print handoff to mail¹ for insertion.

¹ Xerox – Mail Services Process and Procedure | Version 5.0 | Version Date: 11/09/2016 – The ADC mail process starts with the completion of the printing process and it ends when the completed and postmarked envelopes are removed for postal presort processing by Pitney Bowes Presort.

- ADC print handoff to courier for delivery².

Issue 1: Processing of the SLA Performance Data

The diagram describes the workflow for the receipt, processing, and reporting of SLA performance and chargeback data from the time it is received by NearStar – Data Server to the Data Center Services (DCS) Collaboration Portal.



Processing of Data from the NearStar – Data Server to the ATOM Module for Print Mail Jobs

DIR customers frequently create print jobs through regularly scheduled or ad-hoc batch programs. The ADC NearStar – Data Server accepts the jobs submitted and validates every job received in the system. If a job is not defined in NearStar – Data Server or if an error is detected, the job is placed in error status and the error correction process is followed. The NearStar – Data Server software processes all error-free jobs received and assigns a unique job number for all print jobs received that is printed on the job banner page. This number is used to identify and track the job throughout the print process.

The NearStar Accounting and Tracking Operations Manager (ATOM) module automates the post-print workflow by consolidating information about the customer agencies and their print jobs. It captures print data such as: job ID, job name, dates and time stamps, counts of pages, SLA dates, and agency. In addition, it receives printer data from the XEAR System and mail inserter data from the DF Works System. Currently, ATOM is not capturing mail pick-up data and does not always capture insertion/ metered data or delivery data.

² Xerox – Mail Services Process and Procedure | Version 5.0 | Version Date: 11/09/2016 – The ADC courier for delivery process starts with the completion of the printing process and it ends when the courier delivers the job to the corresponding agency.

To review and test the processing of the SLA performance data from the NearStar – Data Server to the ATOM module, the audit team conducted data analytics using the raw data produced by both systems for the month of November 2016 and found no unresolved differences. The NearStar – Data Server included more records than ATOM; however, the audit team confirmed the records/ jobs not included in ATOM were justified by the process implemented (e.g. incomplete job requests, parent-child relationship between the jobs, job updates). The data sets reviewed were consistent between the systems, e.g. completion dates were not changed and the SLAs were properly calculated. The job data transitioned from NearStar – Data Server to ATOM was complete and accurate, no invalid jobs were added or valid jobs removed even though the data file from the NearStar – Data Server included more jobs/ records than the ATOM module.

Additional Notes: The number of gaps in the sequence of Job IDs from NearStar – Data Server to ATOM was significant. The NearStar system administrators had multiple reasons for the gaps noted. At a minimum, the reasons for the large data gaps included:

- TDI TxComp sends hundreds of PDF files followed by a “trigger file”; the workflow generates jobs that are requeued to NearStar – Data Server for printing and mailing.
- OAG-CS drops multiple database extracts to a SFTP server that NearStar – Data Server; when picked-up for processing, the files generate multiple jobs for printing and mailing.
- For TIERS, Xerox combines multiple jobs into runs to make the printing and mailing more efficient to handle.
- RRC requires jobs to be combined from multiple job submissions.
- TWC has a workflow called “commingled” which is a carry-over from the pre-2007 transformation cases; two or three jobs are processed and pages are merged from each of the jobs to create a single job.
- TSLAC is like OAG-CS, the data dropped is database based and in addition to generating the output, TSLAC requires additional jobs be generated to replace their manual reporting and divider cards related to the handling of the “print tickets” once delivered.
- Other.

SLA Data from the ATOM Module to the DCS Portal Flat File – Print Mail Jobs

As part of the monthly performance reporting to DIR and its agency customers, Xerox is required to load the weekly SLA performance data produced by the ATOM module into the Data

Center Services (DCS) Collaboration Portal³ – Service Flow, in a flat file format, as supporting documentation for the performance targets reached (met or not met/ failed). Two sets of data are produced 1) flat file for print and mail jobs, and 2) flat file for print and courier jobs.

For print mail jobs, before the flat file is loaded into the portal, the data produced by the ATOM module is manually prepared (cleaned) by the Xerox SLA and Chargeback Team who runs a set of MS Excel macros on the raw SLA performance data retrieved from ATOM.

1. Formatting Macro,
2. Sheet Counts Macro (Combined – All in One), and
3. Mail SLA Clean-up Macro.

Macro rule or pattern that specifies how a certain input sequence should be mapped to a replacement output sequence according to a defined procedure.

Source: *Wikipedia, The Free Online Encyclopedia*

The MS Excel macros are not subject to a formal change management process or procedures and have not been validated and approved by the MSI and DIR, as required. There are no rules set around the Excel macros or detailed documentation, they are just customized to the Xerox’s cleanup process, and changed each time the job attributes change. The macros recording of the series of tasks performed is kept on a Xerox staff personal computer (PC) and backed-up in an external hard drive. The MSI staff indicated they were not aware of the macros being used by Xerox staff. Based on contractual requirements, Xerox and the MSI are responsible for coordinating to ensure the operations documentation is up-to-date, accurate, and posted in the Service Management Manual (SMM). Xerox is responsible for developing and maintaining documentation on all operational procedures for which Xerox is responsible. The MSI is responsible for validating the documentation regularly to ensure is complete, accurate, and up-to-date.

To review and analyze the processing of the SLA performance data from the ATOM module to the portal flat file for print and mail jobs, the audit team reviewed the process implemented by Xerox to create the flat file required from the data source produced by ATOM. The audit team also compared the SLA data flat file created in November 2016 with the source data produced by ATOM in November 2016. The audit team noted:

- Records with a zero (0) in the “Mail Count” field are manually deleted; this could indicate that the job was a “parent record” or was not mailed.
- Ad-hoc jobs are manually added; this could indicate that the job was not received through the NearStar – Data Sever but via email or other means.

³ Data Center Services Collaboration Portal – centralized point of access to all documentation and information pertaining to the delivery of print mail services. Exhibit 2.1 Multi-Sourcing Integrator Statement of Work. The portal contains the SMM, service level performance data and reports (Service Flow), and chargeback data and reports (ITFM).

- The total records count per the SLA data was lower than the total records count per the ATOM data by 176 records – per Xerox staff, these were intentionally removed since the “Volume Mailed on Time” was left blank on those records.

The Functional Requirements Document (FRD) for mail jobs, indicates that the flat file is manually created and/or edited and must not contain duplicate records or null values. If required fields contains null values, then each associated record is denoted as “Discarded Records” within the flat file upload confirmation window and not uploaded to the DCS Collaboration Portal – Service Flow.

The controls in place for the processing of data from the NearStar – Data Server to the ATOM module for mail jobs does not mitigate the risk that errors and unauthorized data changes, additions or deletions (e.g. removal of incomplete jobs or late jobs) occur without being detected. The service level reporting could reflect a higher percentage of “met” results than what was achieved.

SLA Data from the ATOM Module to the DCS Portal Flat File – Print-Courier Jobs

Before the weekly print SLA flat file is loaded into the portal, the data produced by the ATOM module is manually prepared (cleaned) by the Xerox Print SLA and Chargeback Team who performs the following tasks:

- Delete duplicate jobs (e.g. to consolidate parent-child records).
- Delete reprint jobs.
- Delete test jobs.
- Populate records with blanks in the “Completed⁴ Date” field; the assumption is that jobs are completed timely unless any missed due date is communicated to the Xerox SLA and Chargeback Team.
- Summarize and add the data from the jobs printed at the TDCJ Annex locations that is sent to the Xerox ADC, via email.
- Job Names are created⁵ for the jobs added from the TDCJ Annex locations.

To review and analyze the processing of the SLA performance data from the ATOM module to the portal flat file for print and courier jobs, the audit team reviewed the process implemented by Xerox to create the flat file required from the data source produced by ATOM. The audit team

⁴ For courier jobs, the “Completed Date” is the “Delivered Date”.

⁵ Because print jobs at TDCJ are completed on printers that do not have a network connection to the NearStar – Data Server, daily activity reports are sent to Xerox ADC to be manually added to the weekly flat files uploaded to the portal. A job ID and name must be assigned to these jobs since they are processed outside the automated process.

also compared the flat file created in November 2016 with the source data produced by ATOM in November 2016. The audit team noted:

- Blank “Date Delivered” fields are manually added using the “Delivery Due Date” – per Xerox staff, if the courier drivers do not scan the manifest barcodes at the delivery site or the scanning gun malfunctions, the “Date Delivered” field is left blank in ATOM; then, the Xerox SLA and Chargeback Team intentionally adds the date and time manually using the “Job Delivery Due Date and time” with the assumption that jobs are always delivered and delivered on time unless a customer agency complains or the driver notifies the Xerox SLA and Chargeback Team that the job was not delivered or delivered late and provides the supporting job documentation (e.g. job banner page with job ID and name); from the November 2016 “Document Delivery Timeliness” SLA Report loaded to the portal, the audit team identified 4,580 of 6,430 or 71% records with identical “Delivery Due Date and time” and “Date Delivered and time”, indicating that the delivery date and times were manually populated for SLA performance reporting purposes.

The Functional Requirements Document (FRD) for courier jobs, indicates the SLA data measures the percentage of time Xerox delivers documents within the relevant timeframe specified for the jobs. A job is considered on time if Xerox delivers the scheduled job by the required delivery time. According to the FRD, the data will only include jobs which have been delivered to prevent any null fields from being uploaded. The “Job Delivered Date” is uploaded into ATOM via the courier’s scanners. The courier procedure is complete when the courier driver delivers the job. According to the MSI SLA Performance Team, they were not aware that Xerox staff manually populated delivery dates and times to the flat file loaded into the DCS Portal and specified all entries should automatically be uploaded from the scanners and all data fields must be populated automatically. Otherwise, an exception process should be invoked and a Remedy Ticket should be opened. The MSI staff also indicated that Xerox staff is responsible for ensuring all data is complete and accurate in the finalized flat files.

The controls in place for the processing of data from the NearStar – Data Server to the ATOM module for courier jobs does not sufficiently mitigate the risk that errors and unauthorized data changes, additions or deletions (e.g. removal of incomplete jobs or late) can occur without being detected. The integrity of service performance data is weakened when a significant number of records are manually populated based on assumptions instead of actual support of delivery dates. Service level reporting could reflect a higher percentage of “met” results than what was achieved.

Recommendations:

The DIR Chief Operations Office (COO), Enterprise Program Operations (EPO) management should:

- A. Require Xerox to automate the manual processes that are part of the processing of the Service Level Agreement (SLA) performance data (from beginning to end) to ensure manual intervention is minimized, when possible.

- B. Require Xerox to coordinate with the MSI to document all manual processes that prevail for the processing of the SLA performance data. Obtain approval from DIR. Require the MSI to update the Service Management Manual (SMM), accordingly.
- C. Require Xerox to abide to the formal change management process for all changes needed to the automated and manual processes implemented that are related to the processing of SLA performance data.
- D. Require Xerox to develop, document, and implement a process to ensure complete, accurate, and valid SLA performance data is uploaded to the DCS Collaboration Portal. Any job produced that results in a null or zero (0) value in a key data field (e.g. dates, times, volumes) should be reported on the SLA performance report as “non-met”. The process should address, at a minimum:
 - Mailed dates, delivered dates, times, and volumes for jobs produced at the Austin Data Center (ADC) location.
 - Mailed dates, delivered dates, times, and volumes for jobs produced at the Annex locations.
 - Mailed dates, delivered dates, times, and volumes for jobs produced as “ad-hoc” jobs.
 - Other (e.g. special handling jobs)

Obtain approval from DIR on the process implemented. Require the MSI to validate the process and update the SMM, accordingly.

Management Response:

DIR management from the COO EPO agreed with Internal Audit’s recommendations.

The action plans, estimated completion dates, and responsible DIR management staff are documented in Appendix D of this report.

Issue 2: Support of the SLA Performance Data

According to contractual requirements for service levels, Xerox is required to create and maintain detailed procedure documentation of its Service Level Agreement (SLA) measurement processes used to 1) collect SLA data, and 2) calculate SLA attainment. Only jobs that are due in the reporting month can be included in that months’ SLA performance report.

To review and analyze the documentation collected and maintained by Xerox to support the SLA performance targets reported through the DCS Collaboration Portal, the audit team selected a sample of 45 jobs from the following SLAs, including the supporting documentation, for November 2016:

- P401-U1.4.5 Daily Mailing Completion Timeliness – Xerox reported this SLA as met or exceeded the Expected Service Level (100.00%).
- P407-U1.4.8 Per Piece Daily Mailing Completion Timeliness – Xerox reported this SLA as did not achieve the minimum service level (99.99%).
- P402-U1.4.6 Document Delivery Timeliness – Xerox reported this SLA as did not achieve the minimum service level (99.99%).

Daily Mailing Completion Timeliness SLA | Per Piece Daily Mailing Completion Timeliness SLA

These Service Level Agreements (SLAs) measure the percentage of time Xerox completes the daily mailing of documents timely. The SLA reported data should include jobs with due dates in the reporting month that have been mailed and must be reported in a flat file format. The “Daily Mailing Completion Timeliness” SLA is driven by the “Job Due Date” and the “Job Completion Date”, including the corresponding pieces of mail within each date. Timeliness is determined and supported by the:

1. NearStar – Data Server job banner page (job cover page) – automatically created by the system, if the job is printed at the Austin Data Center (ADC).
2. NearStar – Data Server trailer page (end-of-job page) – automatically created by the system, if the job is printed at the Austin Data Center (ADC).
3. DF Works job tracking reports – automatically created by the system.
4. Job Tracking Log – manually updated by Xerox staff; it includes counts, dates, and postage details.

Sample Review Results – Print Mail Jobs

The documentation described below provides support such as the jobs’ dates, times, and counts of mail pieces to ensure the jobs are printed, printed to specifications, printed timely, mailed, mailed to specifications, mailed timely, and the correct postage was applied. Based on the review and analysis performed for a sample of 50 print and mail jobs, the audit team noted the following.

- Banner or trailer pages with no operator’s signature and date stamp (evidence of review) – 4; per Xerox staff, two (2) of these jobs were “special handling jobs”; therefore, no signature and date stamp were required.
- Missing Pitney Bowes Presort Services (PBPS) customer pick-up slips – 7, per Xerox staff, the slips could be missing because PBPS staff did not take the job to the PBPS presort location as the process requires, but directly to the United States Postal Service (USPS); these jobs were paid at full rate.
- Mail counts per the daily shift completed job logs did not always agree to the mail piece counts per the PBPS customer pick-up slips – 12; therefore, the audit team could not

validate the actual pick-up dates and times to confirm the timeliness and volumes reported for these jobs.

- Incomplete PBPS customer pick-up slips – 3.
- Incomplete daily shift completed job logs – 7, (e.g. missing totals, missing PBPS pick-up time), the audit team further reviewed the logs for the whole month of November 2017 and noted 72+ logs were incomplete.
- Per the SLA data reported, the “Job Completion Date” and time is the date and time the DF Works System records when the insertion process is complete; however, after the insertion process is complete, Xerox staff still has to perform 1) presort preparation and mail staging, and 2) handoff to PBPS (the handoff only happens three (3) times a day). Per the DCS Service Management Manual (SMM) for mail services, the job is complete when the mail is handed off to PBPS for presort and mailing services, and not when the job is completed for insertion purposes. Currently, the systems in place do not capture the actual completion date or mailed date of the jobs, as required. In addition, the hand off date for PBPS is manually added by Xerox staff to the 1) job tracking logs, when mail insertions are completed, 2) daily shift completed jobs logs, when jobs are staged for pickup, and 3) customer pick-up slips when the jobs are picked-up by PBPS. However, this date is not entered in the SLA performance reporting data (flat file).
- Relevant dates and counts from the supporting documentation did not always agree with the dates and counts reported for SLA attainment.

The job tracking documents are used to support postage charges to customer accounts and establish an audit trail for work completed at the ADC. These records provide support for both 1) timeliness details for service level performance reporting, and 2) envelope counts and postage used for billing purposes.

The audit team also compared the November 2016 SLA data reported with the November 2016 source data from ATOM to identify discrepancies in the SLA reported data, if any. The audit team noted the following per SLA reported data:

- For nine (9) jobs/ records, the “Date Mailed” per the SLA differed from the “Date Mailed” per ATOM – per Xerox staff, these jobs were completed after 2:45 PM and mailed the next day; policies and procedures do not address cutoff dates and times.
- For sixty-two (62) jobs/ records, the “Completion Date” per the SLA differed from the “Date Mailed” per ATOM – per Xerox staff, because the jobs were mailed earlier than the date/ time in ATOM, the SLA data was manually updated.
- Twenty-one (21) records had a “Date Mailed”, per the SLA data, of 12/28/16, 2/24/17, or 2/27/17, after the November 2016 timeframe – per Xerox staff, these dates were caused by operator or system errors.
- Thirty (30) records with dates in the “Date Mailed” fields per the SLA data and blank dates per ATOM – per Xerox staff, these records were manually added in the SLA data

because ATOM dates were left blank due to operator or system error. Per the NearStar staff, the “Date Mailed” is captured by the DF Works System; when the insertion and metering processes are complete (because there is not a direct interface between the DF Works System and the ATOM module), DF Works stores a Mail Run Data File (MRDF) in a network drive that ATOM then uses to compile insertion and metering data for mail jobs; however, due to DF Works errors, a complete MRDF is not always placed in the network drive or the data in the MRDF is not always complete; as a result, the “Date Mailed” in ATOM is left blank.

- Records were manually deleted from the SLA data due to for example 1) jobs with blanks or zero (0) counts in the “Mailed on Time” field, 2) combined jobs/ orders with the same ID, 3) duplicates, 4) test jobs, 5) re-prints, 6) jobs with errors or 7) TWC Annex jobs.

Per the Functional Requirements Document (FRD) for mail jobs, processing manual or automated exceptions is allowed, and the SLA flat file can be manually created and/or edited. However, the controls in place to create and maintain supporting documentation for the SLA performance data loaded into the DCS Collaboration Portal for print mail jobs does not mitigate the risk that errors and unauthorized data changes, additions or deletions occur without being detected. The integrity of SLA performance data is weakened when supporting documentation is not available or can't be used to support the dates and counts reported. Service level reporting could reflect a higher percentage of “met” results than what was achieved.

Document Delivery Timeliness SLA

This SLA measures the percentage of time Xerox delivers documents timely via courier services. The SLA reported data should only include jobs that have been delivered and must be reported in a flat file format. The Daily Mailing Completion Timeliness SLA is driven by the “Job Delivery Due Date” and the “Job Delivery Date”. A job is considered on time if Xerox delivers scheduled jobs by the required delivery time. Timeliness is supported by the:

1. NearStar “Job Due Date” – automatically created by the system.
2. NearStar “Job Delivered Date” – automatically created by the scanning system integrated with NearStar ATOM⁶.

Sample Review Results – Print Courier Jobs

Courier manifests provide support that courier jobs are delivered, delivered to specifications, and delivered timely. Based on the review and analysis performed for a sample of 15 print and

⁶ The “Job Delivery Date” may be manually populated in the SLA flat file when the delivery drivers either 1) forgets to scan the barcodes at the mail drop off location where the courier jobs are delivered or 2) the barcode scanner malfunctions.

courier jobs, the audit team noted the following. This documentation provides support that the jobs were delivered, delivered to specifications, and delivered timely.

- Missing courier manifests – 2.
- No supporting documentation is created and maintained for in-house delivered jobs; the SMM and Functional Requirement Document (FRD) for print courier jobs are silent regarding supporting documentation for in-house delivered jobs.
- The NearStar “Job Delivered Date” is not always created because the courier drivers do not always scan the manifest barcodes from the package set up at the delivery site or the scanning guns malfunction. As a result, the “Job Delivered Date” is manually added. Additional detail is described in page 16 of Issue #1 above.

The controls in place to create and maintain supporting documentation for the SLA performance data loaded to the DCS Collaboration Portal for print courier jobs does not mitigate the risk that errors and unauthorized data changes, additions or deletions can occur without being detected. The integrity of SLA performance data is weakened when a significant number of records have delivered dates that are manually added and based on assumptions instead of actual dates. Service level reporting could reflect a higher percentage of “met” results than what was achieved.

Recommendations:

The DIR Chief Operations Office (COO), Enterprise Program Operations (EPO) management should:

- A. Require Xerox to create and retain the supporting documentation required for all jobs produced, including the “in-house delivered” jobs. The documentation should include, at a minimum,
 - Banner page (job cover page).
 - Trailer page (end-of-job page).
 - Job Tracking Log.
 - Daily Shift Completed Job Log.
 - Pitney Bowes (PB) Customer Pick-up Slip.
 - Courier manifests, as applicable.

Require Xerox to fully complete the pages, logs, slips, and manifests with all the information and counts required. Consider using sequentially numbered daily shift completed job logs.

- B. Require Xerox to ensure supporting documentation includes evidence of quality control or supervisory review or approval (e.g. signatures, date/ time stamps), when required.

Obtain approval from DIR on the supporting documentation for quality control or supervisory review or approval. Require the MSI to update the SMM, accordingly.

- C. Define the “Mailed Date” of the jobs subject to SLA performance attainment. Require Xerox to communicate the definition to the DIR customers. Require the MSI to update the SMM, accordingly.
- D. Require Xerox to capture actual mailed dates and times and actual delivered dates and times for all mail and couriers jobs produced. The “Mailed Date” is currently undefined. The “Delivered Date and time” is the date and time when the job is delivered (e.g. courier drops-off the job at the customer’s location).
- E. Require Xerox to establish and document cut-off dates and times for “same day” jobs that are received late (e.g. after the last PBPS pick-up time) or at the end-of-the day to ensure they are properly accounted for SLA performance (when the job is completed). Obtain approval from DIR on the cutoff dates and communicate the cutoff dates to the DIR customers. Require the MSI to update the SMM, accordingly.

Management Response:

DIR management from the COO EPO agreed with Internal Audit’s recommendations.

The action plans, estimated completion dates, and responsible DIR management staff are documented in Appendix D of this report.

Issue 3: Processing of the Chargeback Data

As part of the monthly performance reporting to DIR and its customer agencies, Xerox is required to generate chargeback data with charges allocated to DIR customer agencies, and load mail and print chargeback flat files into the Data Center Services (DCS) Collaboration Portal – IT Financial Management (ITFM) System. The flat files are the supporting documentation for billing. Once the reports are in the Collaboration Portal, ITFM applies the required Resource Unit (mail insertions, print images or images delivered) rates to the resource unit volumes for completed jobs and creates the monthly invoice.

To create the monthly chargeback flat files that are loaded into the portal, Xerox staff performs the following tasks on the source data produced by the ATOM module:

Mail Chargeback

- 1. Runs a set of MS Excel macros on the raw mail chargeback data retrieved from ATOM.
 - Copy_Data Macro,
 - Format Macro,
 - Usage Type Macro,

- Standard Envelope,
- Fast Forward Macro,
- Clean-up Macro, and
- Filter Macro.

The MS Excel macros are not subject to a formal change management process or procedures and have not been validated and approved by the MSI and DIR, as required. There are no rules set around the Excel macros or detailed documentation, they are just customized to the Xerox's cleanup process, and changed each time the job attributes change. The macros recording of the series of tasks performed is kept on a Xerox staff personal computer (PC) and backed-up in an external hard drive. The MSI staff indicated they were not aware of the macros being used by Xerox staff. Based on contractual requirements, Xerox and the MSI are responsible for coordinating to ensure the operations documentation is up-to-date, accurate, and posted in the Service Management Manual (SMM). Xerox is responsible for developing and maintaining documentation on all operational procedures for which Xerox is responsible. The MSI is responsible for validating the documentation regularly to ensure is complete, accurate, and up-to-date.

2. Applies MS Access queries to the raw mail chargeback data retrieved from ATOM – the queries import the data needed to create the Mail Chargeback Report; per Xerox staff, the queries do not add, remove or change the mail chargeback data; the SMM for invoicing and chargeback indicates that Xerox is to provide the source data and any associated billing queries or logic normally applied to the raw data to the MSI for documentation purposes.

Print Chargeback

1. Manually prepares (cleans-up) the print chargeback data by performing the same tasks (additional detail is described in page 15 of Issue #1 above) that are performed during the print SLA performance data clean-up.
2. Applies MS Access queries to the raw print chargeback data retrieved from ATOM – the queries import the data needed to create the Print Chargeback Report; per Xerox staff, the queries do not add, remove or change the print chargeback data; the SMM for invoicing and chargeback indicates that Xerox is to provide the source data and any associated billing queries or logic normally applied to the raw data to the MSI for documentation purposes.

Based on the contract pricing and financial provisions, Xerox is responsible for data collection, data integrity, and providing data feeds to the MSI for chargeback information.

Optional Services – 15th Day Options Not Used

Based on the contract pricing and financial provisions, the following are optional services available to customer agencies through the DCS Collaboration Portal – IT Service Management (ITSM) System managed by the MSI:

- Print Images (15-Day Delivery) – designated as a fifteen (15) business day completion job; one category of consumption measurement that includes volumes for two types of print output: 1) standard or 2) custom; with custom print paper provided by the customer agencies; billed monthly as one unit rate when the option selected.
- Mail Insertions (15-Day Delivery) – designated as a fifteen (15) business day completion job; one category of consumption measurement that includes volumes for three types of inserts: 1) standard, 2) SCP Customized, and 3) custom; with envelopes provided by the customer agencies; billed monthly as one unit rate when the option selected.

The following table depicts the comparison of the Resource Unit Rate (RUR) for print images and mail insertions noting the RURs for the optional services are lower.

Banding Range	Print Images	Print Images Optional	Mail Insertions	Mail Insertions Optional
-		.0120		.0250
25%	.0130		.0270	
>25%=<50%	.0210		.0350	

Although the contract allows these options, they are not currently available to the customer agencies in the DCS Collaboration Portal – Services Catalog and are not being used by the customer agencies. Currently, there is no functionality in the ITSM for the customer agencies to select these options. The ITSM automatically defaults to delivery in less than 15 days. The audit team reviewed the monthly invoices for FY 2016 and FY 2017 through March 31, 2017 and noted no amounts charged for the print images (15-day delivery) or mail insertions (15-day delivery) options. The contract pricing and financial provisions state the MSI is responsible for developing, managing, and maintaining the Chargeback System as well as developing and coordinating the associated processes for the DCS service providers or Xerox.

The controls in place for the processing of the mail and print chargeback data retrieved from the ATOM module does not mitigate the risk that errors and unauthorized data changes, additions or deletions occur without being detected. Invoices could reflect higher volumes than what was achieved. Without system functionality for the section of optional services, specifically for the 15-day delivery, the customer agencies cannot take advantage of these postage options.

Recommendations:

The DIR Chief Operations Office (COO), Enterprise Program Operations (EPO) management should:

- A. Require Xerox to automate the manual processes that are part of the processing of the chargeback data (from beginning to end) to ensure manual intervention is minimized, when possible.
- B. Require Xerox to document all manual processes that prevail for the processing of chargeback data. Obtain approval from DIR. Require the MSI to update the SMM, accordingly.
- C. Require Xerox to abide to the formal change management process for all changes needed to the automated and manual processes implemented that are related to the processing of chargeback data.
- D. Require Xerox to develop, document, and implement a process to ensure complete, accurate, and valid chargeback data is uploaded to the DCS Collaboration Portal. Any job produced that results in a null or zero (0) value in a key data field (e.g. dates, times, volumes) should be reported as “non-billable”. Obtain approval from DIR on the process implemented. Require the MSI to validate the process and update the SMM, accordingly.
- E. Amend the contract to delete the 15-day optional services for mail insertions and print images if these services are not going to be included in the DCS Collaboration Portal – Services Catalog.

Management Response:

DIR management from the COO EPO agreed with Internal Audit’s recommendations.

The action plans, estimated completion dates, and responsible DIR management staff are documented in Appendix D of this report.

Issue 4: Support of the Chargeback Data

To review and analyze the documentation collected and maintained by Xerox to support the mail and print chargeback files loaded into the DCS Collaboration Portal – IT Financial Management (ITFM) System, including volumes (jobs), Resource Units (RUs), and Prior Period Adjustments (PPAs), the audit team selected a sample of 30 jobs from the November 2016 invoice. The audit team noted:

- Invalid Mail Date – the “Date Mailed” field per the ITFM chargeback data defaults to the 1st day of the month invoiced instead of showing the actual date the job was completed – per the MSI staff, the ITFM System only shows the month the job was completed, not the date the job was completed. Without Job IDs and a correct job completion date, the audit team could not validate whether the jobs 1) were completed or 2) should have been included in the November 2016 invoice. Only jobs that are reported as complete during the month can be included in that month’s invoice. Further review revealed the chargeback reports submitted by Xerox to the portal included actual dates. Per the MSI

staff, prior to the start of this fiscal year the correct dates were populated in ITFM, but after that they were seeing the first of the month instead of the correct actual dates.

- Summarized Chargeback Data – in the ITFM, jobs are summarized for billing purposes to avoid having potentially thousands of rows of data in each billing file. For example, HHSC TIERS jobs may be grouped and shown as a single line for multiple parts of a single type of job or large jobs that are processed in parts.
- Test Jobs in Invoice – 7 test jobs totaling \$21.39 (1,645 print images @ \$0.013) were included in the invoice for print images; the jobs were not included in the SLA performance data and were considered as “tests” by the requesting customer agency.
- Since print or mail jobs with a completed status in the reporting month can be included in the chargeback flat file, when the “Date Mailed” field is blank in ATOM, the Xerox SLA and Chargeback Team manually populates a date in the blank field to prepare the flat file for chargeback purposes.
- Dates and RUs per the invoice and dates and RUs per ATOM agreed.
- The paper support was validated for all 30 jobs reviewed (20 print images, 5 mail insertions, and 5 courier); paper trail included: job banner pages, job trailers, job tracking logs, and courier manifests, as required.

Prior Period Adjustments (PPAs)

Based on the Service Management Manual (SMM), each month any charges that fall outside of the normal billing process are evaluated by the MSI, Xerox, and DIR staff for billing and billing methodology. These charges are reflected as billing inputs that include PPAs. PPAs could result from billing disputes and corrections. The SMM however, does not specify what documentation is needed to support a PPA adjustment or charge as initiated by the customer agencies or Xerox. PPAs are documented in the Remedy System⁷. The approved PPA amounts are spread out among the different agencies’ invoices, if the PPA impacts all. These invoices are posted in the IT Financial Management (ITFM) System.

The audit team reviewed the two (2) largest PPAs (\$9,675 and \$698) posted in the November 2016 invoice for supporting documentation. The audit team noted:

- Both PPAs were documented in the Remedy System and included a work order.
- The PPA amounts appeared to be valid and were not previously billed.
- The PPA for \$9,675 did not have enough supporting documentation such as to validate:
1) the root cause of the PPA (e.g. jobs not billed in the month that they were completed),

⁷ The **Remedy System** is the self-service, e-ticketing incident, and service management system for the DIR DCS Program.

and 2) approval authority; according to the MSI staff, to resolve the PPA, Xerox must agree and the customer agency must approve the resolution. The MSI, Xerox, and DIR staff review the PPAs before they are processed.

The controls in place to create and maintain supporting documentation for the chargeback data loaded into the DCS Collaboration Portal does not mitigate the risk that errors and unauthorized data changes, additions or deletions can occur without being detected. The integrity of the chargeback data is weakened when the data is summarized, fields are manually populated or test jobs are comingled with production jobs. Invoices could reflect higher volumes than what was achieved.

Recommendations:

The DIR Chief Operations Office (COO), Enterprise Program Operations (EPO) management should:

- A. Require Xerox to coordinate with the MSI to ensure actual dates and times are included in the invoice detail posted in the DCS Collaboration Portal – IT Financial Management (ITFM) System. Require the MSI to validate the process and update the SMM, accordingly.
- B. Require Xerox to coordinate with the MSI to develop a documented methodology to report groups of jobs that are combined for billing purposes. Obtain approval from DIR on the methodology implemented. Require the MSI to update the SMM, accordingly.
- C. Require Xerox to determine the minimum documentation required in the Remedy System to support the Prior Period Adjustments (PPAs) included in the invoices to ensure 1) the PPA is valid, 2) the root cause is identified, 3) the details are included, and 4) proper approval was obtained. Require Xerox to attached the supporting documentation to the Remedy Ticket created. Require the MSI to update the SMM, accordingly.
- D. Require Xerox to coordinate with the MSI to document the processing of certain types of “test” jobs (per the customer agencies’ requests) for billing purposes. Obtain approval from DIR on the process documented. Require the MSI to update the SMM, accordingly.

Management Response:

DIR management from the COO EPO agreed with Internal Audit’s recommendations.

The action plans, estimated completion dates, and responsible DIR management staff are documented in Appendix D of this report.

Issue 5: Processing and Support of the Annex Jobs

Print jobs are produced at Xerox non-consolidated location sites including the 1) TWC Annex building, 2) TDCJ Annex – Administration building, and 3) TDCJ Annex – BOT building. Annex jobs do not have a defined requirement for receipt time and print time in the SMM. Currently, jobs at these locations are only printed and are not mailed or delivered by Xerox. No financial penalties are applied to these jobs if the corresponding SLA is not met.

Processing of the Annex Jobs

Requests for jobs printed at the TWC Annex are received by NearStar – Data Server and processed through Xerox printers that are connected to the Xerox network. The data needed for SLA performance reporting and chargeback reporting is captured by the ATOM module and manually processed by the Xerox staff just like the data is processed for jobs produced at the Austin Data Center (ADC).

Requests for jobs printed at the TDCJ Annex locations are not received by the NearStar – Data Server. They are processed through Xerox printers that are not connected to the Xerox network and systems. The data needed for SLA performance reporting and chargeback reporting is manually compiled by Xerox staff at the ADC using daily reports received via email from TDCJ. The Xerox SLA and Chargeback Team manually adds the TDCJ job data to the flat files prepared as part of the SLA reporting and chargeback clean-up process. During the clean-up process of the SLA and chargeback reports, Xerox staff creates a “Job Name” for each TDCJ print job using a standard process. The job number includes the fiscal year as the first four digits, followed by the month and day as the next four digits, followed by a 2-digit sequence # for the jobs added during the same day (e.g. 2016110301, 201611030, and so on).

Based on contractual requirements, Xerox is to manually append to the ATOM SLA flat file the SLA data obtained from TDCJ.

Support of the Annex Jobs

At the Annex locations, Xerox is not required to produce and maintain the same supporting documentation that is required for the jobs printed at the ADC (e.g. job tracking logs, banner pages, trailer pages).

For the jobs printed at the TWC Annex, Xerox staff can obtain a screenshot from the ATOM module showing that the jobs were printed at the Annex. The TWC Annex also produces a daily “Case Print Summary Sheet” that includes the totals of the jobs produced for the day. This summary sheet is shared with the Xerox staff; however, it does not contain the counts and dates needed at the job detail level to support and validate whether all jobs requested were printed, printed in accordance to the job specifications, and printed timely.

For the jobs printed at the TDCJ Annex location, Xerox staff relies on the daily reports received via email from TDCJ to support relevant dates (e.g. job due date, job completion date) and counts needed for SLA performance and chargeback reporting. No additional documentation is

compiled to support and validate all jobs requested were printed, printed in accordance to the job specifications, and printed timely.

Based on contractual documents and approved procedures, Xerox is not required to complete job banner pages and trailer pages for Annex print jobs. The contract is silent about supporting documentation to be created and retained for jobs printed at the Annex locations. However, the Service Management Manual (SMM) states that job header banner and trailer banner pages are required to be printed along with every job.

Without supporting documentation, the dates and counts reported by Xerox for jobs printed at the Annex locations cannot be validated. The dates (e.g. job due date, job completion date) drive the attainment of the performance SLAs that are based on timeliness, and the counts drive the charges included in the customer agencies' invoices that are based on volumes produced.

Recommendations:

The DIR Chief Operations Office (COO), Enterprise Program Operations (EPO) management should:

- A. Evaluate the appropriateness of the SLA that applies to jobs produced at the Annex locations to ensure it adequately measures timelines and volumes, including the supporting documentation required. Update contractual documents, if needed.
- B. Require Xerox to create and retain documentation that supports relevant SLA performance and chargeback data (e.g. job identification, dates, volumes) for the jobs produced at the Annex locations. For example:
 - Banner page (job cover page),
 - Trailer page (end-of-job page),
 - Job tracking log or
 - Other.

Obtain approval from DIR on the supporting documentation. Require the MSI to update the SMM, accordingly.

- C. Require Xerox to create and retain documentation that supports quality control or supervisory review or approval (e.g. signatures, date/ time stamps), quality control or supervisory review or approval (e.g. signatures, date/ time stamps) at the Annex locations. Obtain approval from DIR on the supporting documentation. Require the MSI to update the SMM, accordingly.
- D. Require Xerox to develop, document, and implement a process to reconcile the volume of jobs produced at the Annex locations. Obtain approval from DIR on the process implemented. Require the MSI to update the SMM, accordingly.

Management Response:

DIR management from the COO EPO agreed with Internal Audit's recommendations.

The action plans, estimated completion dates, and responsible DIR management staff are documented in Appendix D of this report.

Issue 6: Processing and Support of the Postage Reserve Account

The Postage Reserve Account is a bank account furnished by Pitney Bowes (PB), the sub-contractor providing mailing services for the DCS Program customers. Xerox, but primarily customer agencies, make deposits into this account to prepay and replenish funds for postage services when their balances are low or to pay for postage invoices.

As envelopes are stamped using postage meters, the mail operators manually enter job information from the DF Works System on the job tracking logs, noting the beginning balance on the PB meter when a job is started and the ending balance on the PB meter after the last envelope is metered. DF Works registers the jobs processed and keeps record of the postage used. Postage used is registered in the account as a "withdrawal". As the postage funds are being used and the agency account balance gets low, the customer agencies make deposits to replenish the prefunded account. Xerox mail operators "refill" the postage meters to make additional funds available to the customer agencies. In addition, transfers of postage funds are registered in this account for meters in other locations outside the Austin Data Center (ADC) for production overflow and disaster recovery purposes. Per Xerox staff, Xerox can't see or pull the monthly balances (beginning, ending) of the Postage Reserve Account; they can only pull and see the transactions in between. However, during the audit fieldwork Xerox staff got a screenshot of the account main screen to show that as of May 5, 2017, the account had a total balance of \$1,130,768 (\$1.1 M).

The Austin Data Center (ADC) Postage Summary is created, maintained, and used by Xerox staff to track postage-related transactions on behalf of the state agencies (customers). These transactions include:

- free postage payments (interest earned),
- refills,
- remittances,
- transfers,
- customer refunds (from Xerox),
- debit/ credit adjustments,
- withdrawals, and
- transfers to the service providers for jobs printed and mailed at the ADC, overflow locations, and disaster recovery locations.

According to Xerox staff, this summary is updated twice per week. Once a year, credits identified are applied to the summary and allocated to the individual customer summaries. As of March 31, 2017, the postage summary had a balance of \$2,213,798 (\$2.2 M).

The audit team compared the monthly deposits, withdrawals, and transfers recorded in the ADC Postage Summary with the monthly deposits, withdrawals, and transfers recorded in the PB Postage Reserve Account for the period of September 2016 to March 2017.

- The monthly deposits per the ADC Postage Summary and per the PB Reserve Postage Account differed by \$9,887.
- The monthly withdrawals and transfers per the ADC Postage Summary and per the PB Reserve Postage Account differed by \$20,000 in January 2017 and -\$20,000 in March 2017.

	Deposits			Withdrawals and Transfers		
	PB Postage Reserve Account	ADC Postage Summary	Difference	PB Postage Reserve Account	ADC Postage Summary	Difference
September	\$1,561,856	\$1,561,856	\$0	-\$1,843,307	-\$1,843,307	\$0
October	\$2,776,587	\$2,776,587	\$0	-\$1,433,224	-\$1,433,224	\$0
November	\$2,252,941	\$2,252,941	\$0	-\$1,357,256	-\$1,357,256	\$0
December	\$1,254,125	\$1,254,125	\$0	-\$1,473,961	-\$1,473,961	\$0
January	\$2,058,451	\$2,048,564	\$9,887	-\$3,296,090	-\$3,316,090	\$20,000
February	\$1,166,528	\$1,166,528	\$0	-\$1,915,531	-\$1,915,531	\$0
March	\$3,103,100	\$3,103,100	\$0	-\$2,190,762	-\$2,170,762	-\$20,000
Total	\$14,173,589	\$14,163,701	\$9,887	-\$13,510,131	-\$13,510,131	\$0

Individual Customer Postage Summaries are created, maintained, and used by Xerox staff to keep track of the deposits, withdrawals, transfers, beginning balances, and ending postage balances for each individual customer. There are two sets of these summaries: one used for invoicing DIR customers with reconciled amounts, and one used for forecasting.

- Postage Summary for Invoicing DIR Customers – the reconciled amounts are used to 1) document the exact details of the postage used and credits (the manually calculated difference between the "Total Postage Used" (from the postage meters) and the "Correct Rate" applied to the customers' invoices, 2) reconcile with the monthly Postage Chargeback Report (the completion of this report requires significant manual intervention from Xerox staff) to manually eliminate errors and duplicates, and 3) share the balances and transactions with the customer agencies monthly, except for TDI who wants the summary with forecasted amounts, and HHSC who receives none of the summaries due

to the complexities of the HHSC postage process; the HHSC account summaries are difficult to reconcile.

- Postage Summary with Forecasted Amounts – according to Xerox staff, the summaries with forecasted amounts are used to 1) reconcile the customer agencies summaries to the ADC Postage Summary balances and the PB Postage Reserve Account, 2) calculate Xerox's internal projections/ estimates on postage spent to determine the approximate reserve balance needed from the customer agencies; 3) monitor the customers' reserve summary balances to ensure invoices are paid in a timely manner (the established postage minimum balances for the different customer agencies include: HHSC - \$500,000, OAG-CS - \$8,000, RRC - \$15,000, TDA - \$5,000, TDI - \$25,000, THECB - \$30,000, TWC - \$8,000, TxDMV - \$100,000, and TABC - \$3,000), 4) make sure the PB (bank account) transactions are valid and taking place, and 5) account for postage funds that have been loaded onto the PB meters but not spent yet.

The forecast methodology used to calculate the withdrawals needed to refill all postage meters is based on the customer's historical usage of postage captured by the DF Works System. The audit team reviewed this methodology for the month of November 2016 and noticed:

- Based on the methodology being used, the percentages applied to each customer agency should add up to 100%; however, the calculation made by Xerox staff left a difference of 3.96% that was automatically allocated to HHSC. This allocation overstated HHSC's percentage and its postage replenishment amount and understated the other agencies' percentages and replenishment amounts when compared to the allocation that would have resulted from the weighted average method normally used in accounting transactions.
- Since a TABC job account has not been set up in the DF Works System and postage data for this agency is not available, its replenishment amount was \$0.
- Two (2) of the amounts used in the calculation of the percentages differed from the postage usage data amounts per the DF Works System; according to Xerox staff, the data from the system was changed after the calculation was performed.
- The postage usage data used per the DF Works System was incomplete; according to Xerox staff, the rows with missing data were deleted from the spreadsheets for viewing simplicity purposes and had no impact on the amounts of postage used in the calculations; the data removed was related to duplicate and test server data.

The forecasting postage summaries and the reconciled summaries are not compared or reconciled periodically to identify discrepancies, if any. The forecasting postage summaries and their supporting documentation, including the reconciliations performed are internal to Xerox and not shared with DIR or Capgemini, the Multi-Sourcing Integrator (MSI) for this contract.

The audit team compared the deposits from the ADC Postage Summary with the individual customer postage summaries and noticed the following:

- November 2016 and December 2016 – the combined deposit amount from the HHSC summary account (\$1,253,524) was \$3,760 less when compared to the deposit amount from the ADC Postage Summary (\$1,257,284).
- September 2016 and October 2016 – the deposit amounts from the TDI summary account (\$100,015) was \$127 less when compared to the deposit amount from the ADC Postage Summary (\$100,142).

The audit team compared the transfers from the ADC Postage Summary with the individual customer summaries with forecasted amounts and requested supporting documentation for the transfers to confirm they were valid. Base on the reviewed performed, the audit team noticed the following:

- Only three (3) customer agencies had transfers in their summaries: HHSC, TxDMV, and OAG-CS.
- Four (4) transfers totaling \$1,580,524 from the HHSC summary did not have valid supporting documentation.

Xerox staff indicated they do not have internal policies and procedures to operate, manage, reconcile, and approve the transactions related to the postage account(s) and related summaries.

Interest Earned

The interest earned on the PB Reserved Account for prepaid postage is saved by Xerox. The DIR contract with Xerox is silent regarding the ownership and management of the interest earned by this account from the postage amounts prepaid by the customer agencies. For the period of September 2016 to March 2017 the postage account earned interest of \$2,870.

The controls in place for the processing and support of the Postage Reserve Account(s) and related summaries can be strengthened to ensure errors and unauthorized financial transactions (e.g. deposits, withdrawals, and transfers) do not occur and are detected.

Recommendations:

The DIR Chief Operations Office (COO), Enterprise Program Operations (EPO) management should:

- A. Amend the contract to provide clarity as to the handling of interest earned on the Postage Reserve Account(s).
- B. Require Xerox to coordinate with the MSI to incorporate billing for postage transactions (e.g. deposits, transfers, withdrawals, adjustments, etc.) including the interest, into the chargeback process. Obtain approval from DIR and document the process. Require the MSI to update the SMM, accordingly.

- C. Require Xerox to coordinate with the MSI to determine the minimum documentation required to support all postage transactions (e.g. deposits, transfers, withdrawals, adjustments, interest, etc.), develop policies and procedures, and upload copies of the documentation into the DCS Collaboration Portal. Obtain approval from DIR on the documentation. Require the MSI to update the SMM, accordingly.
- D. Require Xerox to document and reconcile the transactions and balances from the Postage Reserve Account(s) to supporting documentation (e.g. DIR customers' summaries, customer's invoices, customers' postage records, etc.) and upload the reconciliation documentation and monthly transaction reports to the DCS Collaboration Portal monthly. Obtain approval from DIR on the reconciliation methodology(s) and document the methodology(s). Require the MSI to update the SMM, accordingly.
- E. Require Xerox to set up TABC in the DF Works System to ensure TABC postage and metered data is automatically compiled by the information systems or DF Works.
- F. Conduct an independent audit of the Postage Reserve Account(s) and related summaries to determine whether 1) balances reconcile to supporting documentation, 2) transactions and balances are valid, complete, and accurate, 3) methodologies and calculations performed are adequate and free of errors (e.g. methodology used for the calculation of replenishment of postage funds), and 4) thresholds and minimum balances established per DIR customer are adequate.
- G. Coordinate with OAG-CS to ensure all DIR customers' postage transactions are executed consistently and in accordance to the approved process (e.g. OAG-CS prepayment of postage services).

Management Response:

DIR management from the COO EPO agreed with Internal Audit's recommendations.

The action plans, estimated completion dates, and responsible DIR management staff are documented in Appendix D of this report.

Issue 7: Segregation of Duties

The concept of having more than one person required to complete a task is an internal control intended to prevent errors and unauthorized tasks or transactions.

Xerox Chargeback and Service Reporting Team

During the audit fieldwork process, the audit team noted that the Xerox Chargeback and Service Reporting Team is performing tasks that should be separated to ensure proper segregation of duties is accomplished. The team performs tasks that support the SLA performance data and chargeback data reported weekly to DIR via the DCS Collaboration Portal. The staff:

- Compiles or receives supporting data from the systems or customer agencies.
- Creates and keeps custody of the hard copy supporting documentation (e.g. ad-hoc jobs, annex jobs).
- Manually changes (cleans-up) the source data used to generate SLA and chargeback reports.
- Reconciles the data for reporting and invoicing.
- Reports on the data.
- Resolves data and/or report discrepancies.

Xerox Procurement Team

Xerox staff owns, aggregates the postage data, operates, manages, reconciles, invoices, and approves the postage transactions of the postage account(s). The same staff compiles the detail for invoicing DIR Customers for postage and also enters job details that support customer credits for additional postage metered by Xerox to ensure mail jobs meet SLA requirements. Excel spreadsheets are used to compile handwritten job details from the production job tracking logs. Postage related functions are performed by the same Xerox staff with no separation of duties to ensure proper review and oversight from an independent party occurs. Xerox staff can make deposits, initiate withdrawals to refill postage meters, execute the transfer of funds, debit adjustments, credit adjustments, and interest earned transfers. The amounts of these transactions are manually compiled by Xerox staff.

Mainly, additions and deletions to the individual customer summaries may result from:

- Changes in the presort mail rate vs. full mail rates.
- Non-billable testing jobs.
- Non-billable upgrades applied to the systems.
- Non-billable duplicated jobs.
- Late mail or incorrect postage mail rate used.
- Xerox deposits to fund customers' credits.
- Xerox transfers for interest earned.

Without proper segregation of duties, the staff performs incompatible tasks that can lead to fatigue, errors, and unauthorized tasks or transactions.

Recommendation:

The DIR Chief Operations Office (COO), Enterprise Program Operations (EPO) management should:

- A. Require Xerox to document and segregate incompatible duties such as: SLA performance reporting, and 2) chargeback reporting.
- Ensure that no single individual has access to systems and records results related to both a) compiling summary performance and billing reports from supporting documents, and b) reviewing and updating flat files in coordination with the MSI or for postage invoices.
 - Ensure that the Xerox staff in charge of reconciling the Postage Reserve Account(s) is not responsible for the custody of the meters, authorization of transactions, and ongoing recordkeeping for postage refills and usage.

Obtain approval from DIR for the segregated duties determined.

Management Response:

DIR management from the COO EPO agreed with Internal Audit's recommendation.

The action plan, estimated completion date, and responsible DIR management staff are documented in Appendix D of this report.

Issue 8: Validation of Xerox Self-Reported Data

Based on contractual requirements for invoicing and chargeback, the Multi-Sourcing Integrator (MSI) staff pulls reports from the DCS Collaboration Portal and compares them to load files to validate accuracy. In addition, contract provisions require the MSI to provide the following services:

- Quality checks the supporting documentation to ensure accuracy, verifying agency, service month, counts, invoice month, Resource Unit (RU) description, invoice rate, and calculated dollar amount, if applicable; uploads the supporting documentation to the DCS Collaboration Portal.
- Compares all billable data to the prior month and notes any variances outside of the 40 percent threshold for all print mail RU submissions.

MSI Validation of Xerox SLA Performance Data

According to the MSI Service Performance and Reporting (SP&R) Team, as part of the validation performed on the SLA performance data, self-reported by Xerox, and loaded into the DCS Collaboration Portal – Service Flow, the MSI:

- Checks the logic of the due dates and completion dates (if a discrepancy is noted, the MSI contacts Xerox; Xerox staff fixes the discrepancy and resubmits the data file to the portal).

- Scans over the data to look for missing fields and other noticeable data anomalies (e.g. duplicate job IDs and names).
- Verifies whether the customer agencies have placed any tickets in the Remedy System that will impact the SLA performance reporting data.

MSI Validation of Xerox Chargeback Data

According to the MSI Chargeback Team, part of the validation performed on the chargeback (billing/ invoicing) data, self-reported by Xerox, and loaded into the DCS Collaboration Portal – IT Financial Management (ITFM) System, the MSI:

- Validates the counts uploaded into the ITFM with the counts received via email.
- Runs a report showing the billable variance between the previous month and the current month to determine whether the variance is above the 40% threshold (if the threshold is above 40%, they send a worksheet to Xerox thus they can enter the variance explanation).
- Compares billable totals with agencies' totals.
- Scans over the data to look for missing fields and other noticeable data anomalies (e.g. duplicate job IDs and names).
- Coordinates with DIR staff to review RUs quarterly.

If a discrepancy is noted, the MSI contacts Xerox; Xerox staff fixes the discrepancy and resubmits the data file to the portal.

During the review of the invoice for November 2016, the audit team identified 7 test jobs totaling \$21.39 (1,645 print images @ \$0.013) included in the invoice for print images. Per Xerox staff, these test jobs should not have been included in the invoice. The MSI limited validation procedures did not identify the test jobs or were not designed to identify test jobs.

The MSI did not provide the audit team with supporting documentation of the limited review performed to validate the SLA performance and chargeback data loaded to the portal. For example, supporting documentation can include 1) what was reviewed, 2) the procedures performed or methodology applied, 3) the results achieved, 4) any data changes required, and 5) approvals obtained. Currently, the MSI staff does not have access to the source data (raw data before Xerox's clean-up process) produced by the Xerox's systems. This access would be beneficial to pull samples or compare self-reported dates and volumes to the source/ raw system data for accuracy, completeness, and validity purposes. According to the MSI Chargeback Team, existing procedures do not allow them "to determine if a particular job should be there; the job details are not part of the detail provided".

In FY 2017, DIR Internal Audit (IA) released audit report #15-103: Enterprise Contract Management in which an issue was identified regarding the "*Contract Management of Resource Units (RUs)*". As part of the issue Internal Audit made the following two recommendations:

1. Require the independent review of system tools or scripts used in RU calculations and ensure results are sufficiently documented.
2. Retain copies of MSI monitoring reports as part of the contract management file.

These previous recommendations emphasize the need for stronger validation procedures from the MSI.

MSI Limited Knowledge of Xerox Processes and Operations

Based on feedback received from the Service Performance and Reporting (SP&R) Team and Chargeback Team, the MSI exhibited limited knowledge of Xerox's processes and operations. For example, the MSI staff indicated they were unaware of the following:

- Xerox's application of MS Excel macros and Access queries during the preparation (clean-up) of the SLA performance and chargeback data flat files.
- Xerox's manual data entry of blank fields required for SLA performance and chargeback reporting purposes (e.g. "Job Delivered Date" and "Job Mailed Date").
- Xerox's systems do not always capture the key data fields required for SLA performance and chargeback reporting purposes.
- Ad-hoc Jobs – e.g. did not know how ad-hoc jobs are processed or how they should be processed, how they are requested, what supporting documentation should be collected or were unable to identify ad-hoc jobs.
- Pitney Bowes (PB) Reserve Postage Account, ADC Postage Summary, and related customer agency summaries.

Based on contractual requirements, Xerox and the MSI are responsible for coordinating to ensure the operations documentation is up-to-date, accurate, and posted in the Service Management Manual (SMM). Xerox is responsible for developing and maintaining documentation on all operational procedures for which Xerox is responsible. The MSI is responsible for validating the documentation regularly to ensure is complete, accurate, and up-to-date. According to the MSI staff, Xerox has contractual obligation to provide accurate and timely data for SLA reporting purposes.

The controls in place for the limited validation performed on the SLA performance and chargeback self-reported data do not mitigate the risk that errors and unauthorized data changes, additions or deletions (e.g. removal of incomplete jobs or late jobs) occur without being detected. Existing validation processes do not ensure the data is complete and accurate.

Recommendations:

The DIR Chief Operations Office (COO), Enterprise Program Operations (EPO) management should:

- A. Define “validation” for SLA performance, chargeback, and postage purposes. Require the MSI to update the SMM, accordingly.
- B. Require the MSI to establish and perform validation over the SLA performance, chargeback, and postage data uploaded to the DCS Collaborations Portal. Require the MSI to document the validation methodology(s). Obtain DIR approval and update the SMM, accordingly.
- C. Require the MSI to create and retain supporting documentation in the DCS Collaboration Portal for the validation work performed. Require the MSI to update the SMM, accordingly.
- D. Re-evaluate the variance threshold of 40% applicable to all billable data for print mail services to determine whether the threshold should be lower. Update contractual documents, if needed.
- E. Require the MSI to create a ticket in the Remedy System to track and resolve discrepancies, variances or issues noted during the validation process.

Management Response:

DIR management from the COO EPO agreed with Internal Audit’s recommendations.

The action plans, estimated completion dates, and responsible DIR management staff are documented in Appendix D of this report.

Appendix A: Objectives, Scope, and Methodology

Objective

To evaluate whether the Xerox process for print mail services was effective, performed in accordance with established requirements, and supported the billing and monthly performance targets reported.

Scope

In Scope

The audit scope included the following populations of data for the period of 9/1/2016 to 2/28/2017. Sampling attributes will be determined during fieldwork activities.

- 3 of the 7 Category 4 – “Other Service Delivery” SLAs for print mail – November 2016:
 - P401-U1.4.5P Daily Mailing Completion Timeliness,
 - P407-U1.4.8P Per Piece Daily Mailing Completion Timeliness, and
 - P402-U1.4.6P Document Delivery Timeliness.
- Resources Units (RUs) – November 2016:
 - Print Images, and
 - Mail Insertions.
- Billing and invoice data for November 2016.
- Prior Period Adjustments (PPAs).
- Supporting documentation (e.g. job tacking logs, job banner pages, job trailer pages, Pitney Bowes Presort Services (PBPS) customer pick-up slips, daily shift completed job logs, courier manifests, etc.) – November 2016.
- Postage records from September 2016 to March 2017.
- Delivery records for November 2016.
- NearStar change requests (upgrades, changes, updates, etc.) for fiscal year 2017.

Out of Scope

- 4 of the 7 Category 4 – “Other Service Delivery” SLAs for print mail:
 - P403-U1.4.7P Critical Mail Output Quality,
 - P408-U1.4.9P Per Piece Critical Mail Output Quality,
 - P405-U2.3.9P Print Mail Output Quality, and
 - P406-U2.3.10P Non-Consolidated Print and Print Image Timeliness.

- Resources Units (RUs) – November 2016:
 - Courier Services.
- Pitney Bowes (PB) mail delivery process.

Methodology

1. Interviewed subject matter experts.
2. Reviewed financial transactions, invoices, and selected RUs.
3. Performed data analytics on information systems' data.
4. Reviewed documentation applicable state law, regulations, contract requirements, amendments, selected service level agreements (SLAs), policies and procedures.
5. Reviewed and analyzed data files from relevant information systems and flat files.
6. Reviewed supporting documentation of jobs selected for review and analysis.
7. Other documentation relevant to accomplish the audit objectives.

Audit Criteria

The audit criteria used in the performance of this audit included:

1. DIR Master Services Agreement (MSA) with Xerox Corporation, LLC, DIR-DCS-SCP-MSA-003 and related amendments, attachments, and exhibits.
2. DIR Master Services Agreement (MSA) with Capgemini America, Inc., DIR-DCS-SCP-MSA-001 and related amendments, attachments, and exhibits.
3. Data Center Services (DCS) Service Management Manual (SMM).
4. DCS Functional Requirements Documents (FRDs).
5. State of Texas DCS Service Level Guide.
6. Xerox internal documentation and guides.

Appendix B: State Agencies and Selected Samples

State agencies receiving print mail services from Xerox Corporation, LLC.

1. Department of State Health Services (DSHS)
2. Texas Department of Agriculture (TDA)
3. Health and Human Services Commission (HHSC)
4. Texas Department of Criminal Justice (TDCJ)
5. Office of the Attorney General (OAG) – Administration
6. Texas Department of Insurance (TDI)
7. Office of the Attorney General (OAG) – Child Support (CS)
8. Texas Higher Education Coordinating Board (THECB)
9. Texas State Library and Archives Commission (TSLAC)
10. Railroad Commission (RRC)
11. Texas Alcoholic Beverage Commission (TABC)
12. Texas Workforce Commission (TWC)
13. Texas Department of Motor Vehicles (TxDMV)

The following table depicts the populations and samples selected for review, testing, and analysis.

Source	Period	Sample Size (n)	Population Size (N)
Service Level Agreement U.1.4.5: Daily Mailing Completion Timeliness	November 2016	15	8,055
Service Level Agreement U.1.4.6: Document Delivery Timeliness	November 2016	15	6,430
Service Level Agreement U.1.4.8: Per Piece Daily Mailing Completion Timeliness	November 2016	15	835
Haphazard Jobs	November 2016	20	N/A
Ad-hoc Jobs	November 2016	5	43
Invoices – Print Images (Non-Courier)	November 2016	20	56,898
Invoices – Mail Insertions	November 2016	5	7,117
Invoices – Courier	November 2016	5	6,521
Prior Period Adjustments (PPAs)	September 2016 – February 2017	2	19
NearStar – Change Requests	September 2016 – February 2017	3	59

Appendix C: Glossary

The glossary provides key terms referenced in the audit report. Definitions were obtained from the master services agreement, information systems' guides, and other relevant guidance or professional standards.

DF Works – Pitney Bowes inserter tracking system that maintains and tracks mail run tracking files created by NearStar – Data Server; communicates with the mail inserting equipment to track and document page by page tracking information for all mailed jobs; DF Works receives mail tracking files from NearStar – Data Server and compares barcodes printed on each page of a print file against the mail tracking file; DF Works creates reports that are used by the insertion operators to help ensure each job was correctly processed.

Multi-Sourcing Integrator (MSI) – The MSI acts to standardize processes and to provide service delivery management, service desk support, project management, disaster recovery, and financial management services; the MSI coordinates data center services for mainframes, servers, networks, print and mail, and data center operations provided by multiple service component providers.

NearStar Accounting and Tracking Operations Manager (ATOM) – The job accounting module that tracks pages printed and other processing attributes; it is used in conjunction with XEAR to create print chargeback file.

NearStar – Data Server – Platform that has connectivity to customer agencies that are supported by the print operation for receiving print jobs and to all printers on the production floor for printing; this platform allows the print mail to receive numerous types of data feeds and document formats and process them into a few standard output formats; covets the various input formats to a standard output format allows the existing hardware configuration to support a wider spectrum of jobs and the production floor to have a common set of operating procedures; NearStar also transforms jobs to be compatible with the implemented systems; it also provides job tracking and reprint capability.

Remedy System – DIR's self-service, e-ticketing incident, and service management system.

Resource Unit (RU) – A measurable device, unit of consumption, or other unit or resource utilization associated with Data Center Services (DCS) that is used for purposes of calculating charges.

Service Management Manual (SMM) – A virtual management policy and procedures manual for the delivery of data center services; the manual is maintained on the DCS Collaboration Portal and includes detailed procedure documents for invoicing and resource unit validation.

Validation – An activity that ensures a new or changed IT service, process, plan or other deliverable meets the needs of the business; validation ensures that business requirements are met even though these may have changed since the original design; it can prove accuracy, completeness, and validity of something.

Verification and Audit – The activities responsible for ensuring that information in the configuration management system is accurate and that all configuration items have been identified and recorded; verification includes routine checks that are part of other processes – for example, verifying the serial number of a desktop PC when a user logs an incident. Audit is a periodic formal check.

XEAR – Accounting software installed on Xerox printers that collects real time job accounting; this data is merged with information from the NearStar – Data Server job accounting module (ATOM) and used for print chargeback.

Appendix D: Recommendations and Management Responses

Recommendation ⁸	Management Response		
	Action Plan ⁹	Estimated Implementation Date ¹⁰	Responsible Management Staff ¹¹
Issue 1: Processing of the SLA Performance Data			
A. Require Xerox to automate the manual processes that are part of the processing of the Service Level Agreement (SLA) performance data (from beginning to end) to ensure manual intervention is minimized, when possible.	DIR management will require Xerox to develop a project plan that includes the tasks necessary to evaluate all manual processes for automation opportunities, design automation solution, test solution, document, and implement. DIR will oversee the completion of all tasks with Xerox and the MSI, and will approve automation prior to implementation.	7/15/2017 Project Plan 10/31/17 Automation Phase 1 1/31/2018 Automation Complete	Director, Planning and Governance, Enterprise Program Operations (EPO), Chief Operations Office (COO)
B. Require Xerox to coordinate with the MSI to document all manual processes that prevail for the processing of the SLA performance data. Obtain approval from DIR. Require the MSI to update the Service Management Manual (SMM), accordingly.	When the automation solution of recommendation 1.A is implemented, DIR management will require Xerox to document all manual processes that prevail and submit that documentation to the MSI for inclusion in the SMM. DIR has final approval authority on all SMM changes.	7/15/2017 Project Plan 1/31/2018 SMM Documentation Complete	Director, Planning and Governance, EPO, COO
C. Require Xerox to abide to the formal change management process for all changes needed to the automated and manual processes implemented that are related to the processing of SLA performance data.	DIR management will require Xerox to comply with the existing change management processes documented in the SMM for any manual or automated changes made to the creation of SLA data. DIR will require Xerox to work with the MSI to recommend for DIR approval any enhancements to existing DCS change management	8/1/2017	Director, Planning and Governance, EPO, COO

⁸ **Recommendation** – Suggested actions to 1) correct the condition, and 2) address the cause – “what corrective actions are needed”. Recommendation are addressed to the DIR executive leadership charged with governance and with the authority and responsibility to implement the recommendation and cause change.

⁹ **Action Plan** – Planned course of action to address the recommendation.

¹⁰ **Estimated Completion Date** – Date on which the action plan will be finished.

¹¹ **Responsible Management Staff** – Executive, director or manager responsible for the implementation and execution of the action plan.

Recommendation ⁸	Management Response		
	Action Plan ⁹	Estimated Implementation Date ¹⁰	Responsible Management Staff ¹¹
	procedures to facilitate Xerox compliance.		
<p>D. Require Xerox to develop, document, and implement a process to ensure complete, accurate, and valid SLA performance data is uploaded to the DCS Collaboration Portal. Any job produced that results in a null or zero (0) value in a key data field (e.g. dates, times, volumes) should be reported on the SLA performance report as “non-met”. The process should address, at a minimum:</p> <ul style="list-style-type: none"> • Mailed dates, delivered dates, times, and volumes for jobs produced at the Austin Data Center (ADC) location. • Mailed dates, delivered dates, times, and volumes for jobs produced at the Annex locations. • Mailed dates, delivered dates, times, and volumes for jobs produced as “ad-hoc” jobs. • Other (e.g. special handling jobs) <p>Obtain approval from DIR on the process implemented. Require the MSI to validate the process and update the SMM, accordingly.</p>	DIR management will require Xerox to develop a project plan to identify validation procedures for SLA performance data used to calculate service level attainment. DIR will ensure Xerox documents the procedures for the SMM and that the MSI validates the procedures.	9/1/2017	Director, Planning and Governance, EPO, COO
Issue 2: Support of the SLA Performance Data			
<p>A. Require Xerox to create and retain the supporting documentation required for all jobs produced, including the “in-house delivered” jobs. The documentation should include, at a minimum,</p> <ul style="list-style-type: none"> • Banner page (job cover page), • Trailer page (end-of-job page), • Job tracking log, 	DIR management will require Xerox to fully document, maintain, and comply with SMM procedures that require complete supporting documentation for SLA performance data and DIR will require Xerox to document procedures in the SMM that ensure all SLA supporting documentation is maintained.	<p>9/1/2017 Draft</p> <p>10/1/2017 Complete</p>	Director, Planning and Governance, EPO, COO

Recommendation ⁸	Management Response		
	Action Plan ⁹	Estimated Implementation Date ¹⁰	Responsible Management Staff ¹¹
<ul style="list-style-type: none"> Daily Shift Completed Job Log, Pitney Bowes (PB) Customer Pick-up Slip, Courier manifests, as applicable. <p>Require Xerox to fully complete the pages, logs, slips, and manifests with all the information, counts, and sign offs required. Consider using sequentially numbered daily shift completed job logs.</p>			
<p>B. Require Xerox to ensure supporting documentation includes evidence of quality control or supervisory review or approval (e.g. signatures, date/ time stamps), when required.</p> <p>Obtain approval from DIR on the acceptable form and substance of supporting documentation for quality control or supervisory review or approval. Require the MSI to update the SMM, accordingly.</p>	<p>DIR management will require Xerox to fully document, maintain, and comply with SMM procedures that ensure evidence of quality control or supervisory review or approval, when required.</p>	<p>9/1/2017 Draft</p> <p>10/1/2017 Complete</p>	<p>Director, Planning and Governance, EPO, COO</p>
<p>C. Define the “Mailed Date” of the jobs subject to SLA performance attainment.</p> <p>Require Xerox to communicate the definition to the DIR customers. Require the MSI to update the SMM, accordingly.</p>	<p>DIR management will define the “Mail Date” for SLA performance attainment and document in the SMM and SLA definitions. DIR will require Xerox to communicate the “Mail Date” definition to all its customers.</p>	<p>7/1/2017</p>	<p>Director, Planning and Governance, EPO, COO</p>
<p>D. Require Xerox to capture actual mailed dates and times and actual delivered dates and times for all mail and couriers jobs produced. The “Mailed Date” is currently undefined. The “Delivered Date and time” is the date and time when the job is delivered (e.g. courier drops-off the job at the customer’s location).</p>	<p>DIR management will require Xerox to modify its procedures in the SMM to ensure the actual “Mailed Date and time” and actual “Delivered Date and time” is captured for SLA performance attainment and reporting. Where the “Mailed Date and time” and actual “Delivered Date and time” are estimated rather than populated with the actual dates and times, DIR will require Xerox to</p>	<p>8/1/2017 Manual</p> <p>10/1/2017 Automation</p>	<p>Director, Planning and Governance, EPO, COO</p>

Recommendation ⁸	Management Response		
	Action Plan ⁹	Estimated Implementation Date ¹⁰	Responsible Management Staff ¹¹
	document procedures in the SMM to eliminate the estimated dates.		
<p>E. Require Xerox to establish and document cut-off dates and times for “same day” jobs that are received late (e.g. after the last PBPS pick-up time) or at the end-of-the day to ensure they are properly accounted for when reporting SLA performance (when the job is completed).</p> <p>Obtain approval from DIR on the cutoff dates and communicate the cutoff dates to the DIR customers. Require the MSI to update the SMM, accordingly.</p>	DIR will work with Xerox to define and implement cut-off dates and times for “same day” jobs. DIR will require Xerox to document cut-off dates in the SMM and notify customers.	7/1/2017	Director, Planning and Governance, EPO, COO
Issue 3: Processing of the Chargeback Data			
<p>A. Require Xerox to automate the manual processes that are part of the processing of the chargeback data (from beginning to end) to ensure manual intervention is minimized, when possible.</p>	DIR management will require Xerox to develop a project plan that includes the tasks necessary to evaluate all manual processes used to create chargeback data. The project will include tasks to determine and implement automation opportunities. The plan will include the requirement that Xerox seek DIR approval for all automation prior to implementation.	<p>7/15/2017 Project Plan</p> <p>10/31/2017 Implement Automation</p>	Director, Planning and Governance, EPO, COO
<p>B. Require Xerox to document all manual processes that prevail for the processing of chargeback data.</p> <p>Obtain approval from DIR. Require the MSI to update the SMM, accordingly.</p>	When the automation solution of recommendation 3.A is implemented, DIR management will require Xerox to document all manual processes that prevail and submit that documentation to the MSI for inclusion in the SMM. DIR has final approval authority on all SMM changes.	10/31/2017	Director, Planning and Governance, EPO, COO
<p>C. Require Xerox to abide to the formal change management process for all changes needed to the automated and manual processes implemented that are related to the processing of chargeback data.</p>	DIR management will require Xerox to comply with the existing change management processes in the SMM for any manual or automated changes made to the creation of chargeback data. DIR will require Xerox to work with the MSI to	8/1/2017	Director, Planning and Governance, EPO, COO

Recommendation ⁸	Management Response		
	Action Plan ⁹	Estimated Implementation Date ¹⁰	Responsible Management Staff ¹¹
	recommend for DIR approval any enhancements to existing DCS change management procedures to facilitate Xerox compliance.		
<p>D. Require Xerox to develop, document, and implement a process to ensure complete, accurate, and valid chargeback data is uploaded to the DCS Collaboration Portal. Any job produced that results in a null or zero (0) value in a key data field (e.g. dates, times, volumes) should be reported as “non-billable”.</p> <p>Obtain approval from DIR on the process implemented. Require the MSI to validate the process and update the SMM, accordingly.</p>	<p>DIR management will require Xerox to create a project plan create a project plan to identify validation procedures for chargeback data. DIR will ensure Xerox documents the procedures for the SMM and that the MSI validates the procedures.</p>	<p>8/1/2017 Identify Validation Procedures</p> <p>9/1/2017 Complete Documentation</p>	<p>Director, Planning and Governance, EPO, COO</p>
<p>E. Amend the contract to delete the 15-day optional services for mail insertions and print images if these services are not going to be included in the DCS Collaboration Portal – Services Catalog.</p>	<p>DIR management will evaluate whether to delete the 15-day optional services for mail insertions and print images from the contract.</p>	<p>9/1/2017</p>	<p>Director, Planning and Governance, EPO, COO</p>
Issue 4: Support of the Chargeback Data			
<p>A. Require Xerox to coordinate with the MSI to ensure actual dates and times are included in the invoice detail posted in the DCS Collaboration Portal – IT Financial Management (ITFM) System.</p> <p>Require the MSI to validate the process and update the SMM, accordingly.</p>	<p>DIR management will require Xerox to work with the MSI to document procedures in the SMM that ensures actual dates and times are included in the invoice detail in ITFM.</p>	<p>10/1/2017</p>	<p>Director, Planning and Governance, EPO, COO</p>
<p>B. Require Xerox to coordinate with the MSI to develop a documented methodology to report groups of jobs that are combined for billing purposes.</p> <p>Obtain approval from DIR on the methodology implemented.</p>	<p>DIR management will require Xerox to work with the MSI to determine how to report groups of jobs that are combined for billing purposes, and document that methodology and process in the SMM.</p>	<p>10/1/2017</p>	<p>Director, Planning and Governance, EPO, COO</p>

Recommendation ⁸	Management Response		
	Action Plan ⁹	Estimated Implementation Date ¹⁰	Responsible Management Staff ¹¹
Require the MSI to update the SMM, accordingly.			
<p>C. Require Xerox to determine the minimum documentation required in the Remedy System to support the Prior Period Adjustments (PPAs) included in invoices to ensure 1) the PPA is valid, 2) the root cause is identified, 3) the details are included, and 4) proper approval was obtained.</p> <p>Require Xerox to attached the supporting documentation to the Remedy Ticket created. E.g. lists of jobs that were billed or not billed in error.</p> <p>Require the MSI to update the SMM, accordingly.</p>	DIR management will require Xerox to create and document procedures that ensure supporting documentation and customer approval is included in PPAs.	9/1/2017	Director, Planning and Governance, EPO, COO
<p>D. Require Xerox to coordinate with the MSI to document the processing of certain types of “test” jobs (per the customer agencies’ requests) for billing purposes.</p> <p>Obtain approval from DIR on the process documented. Require the MSI to update the SMM, accordingly.</p>	DIR management will require Xerox to document in the SMM how to appropriately identify, process, and invoice customer requested test jobs.	8/1/2017	Director, Planning and Governance, EPO, COO
Issue 5: Processing and Support of the Annex Jobs			
<p>A. Evaluate the appropriateness of the SLA that applies to jobs produced at the Annex locations to ensure it adequately measures timelines and volumes, including the supporting documentation required.</p> <p>Update contractual documents, if needed.</p>	DIR management will create a project plan to evaluate how to measure timeliness and volume of print jobs produced at the Annex locations. Through the project, DIR will determine the appropriateness of the current SLA and whether a modification is warranted. DIR will update contractual documents, if needed.	8/1/2017	Director, Planning and Governance, EPO, COO
<p>B. Require Xerox to create and retain documentation that supports relevant SLA</p>	DIR management will require Xerox to fully document, maintain, and comply with SMM procedures to	9/1/2017	Director, Planning and Governance, EPO, COO

Recommendation ⁸	Management Response		
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<p>performance and chargeback data (e.g. job identification, dates, volumes) for the jobs produced at the Annex locations. For example:</p> <ul style="list-style-type: none"> • Banner page (job cover page), • Trailer page (end-of-job page), • Job tracking log or • Other. <p>Obtain approval from DIR on the supporting documentation. Require the MSI to update the SMM, accordingly.</p>	<p>ensure relevant SLA performance and chargeback supporting data is retained for Annex jobs.</p>		
<p>C. Require Xerox to create and retain documentation that supports quality control or supervisory review or approval (e.g. signatures, date/ time stamps), quality control or supervisory review or approval (e.g. signatures, date/ time stamps) at the Annex locations.</p> <p>Obtain approval from DIR on the supporting documentation. Require the MSI to update the SMM, accordingly.</p>	<p>DIR management will require Xerox to create and fully document, maintain, and comply with SMM procedures to ensure quality control or supervisory review/ approval support for the work performed at the Annex locations.</p>	9/1/2017	Director, Planning and Governance, EPO, COO
<p>D. Require Xerox to develop, document, and implement a process to reconcile the volume of jobs produced at the Annex locations.</p> <p>Obtain approval from DIR on the process implemented. Require the MSI to update the SMM, accordingly.</p>	<p>DIR management will require Xerox to create and fully document, maintain, and comply with SMM processes and procedures to reconcile the volume of jobs produced at the Annex with the volume of jobs billed to the Customers.</p>	9/1/2017	Director, Planning and Governance, EPO, COO
Issue 6: Processing and Support of the Postage Reserve Account(s)			
<p>A. Amend the contract to provide clarity as to the handling of interest earned on the Postage Reserve Account(s).</p>	<p>DIR will amend the contract with requirements on how postage interest is handled.</p>	9/1/2017	Director, Planning and Governance, EPO, COO

Recommendation ⁸	Management Response		
	Action Plan ⁹	Estimated Implementation Date ¹⁰	Responsible Management Staff ¹¹
<p>B. Require Xerox to coordinate with the MSI to incorporate billing for postage transactions (e.g. deposits, transfers, withdrawals, adjustments, etc.) including the interest, into the chargeback process.</p> <p>Obtain approval from DIR and document the process. Require the MSI to update the SMM, accordingly.</p>	<p>DIR management will require Xerox to work with the MSI to create a project plan that moves the postage replenishment transactions to the invoicing process managed by the MSI. The project plan will require Xerox to document the procedures in the SMM.</p>	<p>12/1/2017 SMM Complete</p> <p>12/15/2017 Move to MSI Invoicing Process</p>	<p>Director, Planning and Governance, EPO, COO</p>
<p>C. Require Xerox to coordinate with the MSI to determine the minimum documentation required to support all postage transactions (e.g. deposits, transfers, withdrawals, adjustments, interest, etc.), develop policies and procedures, and upload copies of the documentation into the DCS Collaboration Portal.</p> <p>Obtain approval from DIR on the documentation. Require the MSI to update the SMM, accordingly.</p>	<p>DIR management will require Xerox to work with the MSI to develop and upload postage transaction documentation into the DCS Collaboration Portal, or an equivalent location, for customers to access.</p>	<p>12/1/2017</p>	<p>Director, Planning and Governance, EPO, COO</p>
<p>D. Require Xerox to document and reconcile the transactions and balances from the Postage Reserve Account(s) to supporting documentation (e.g. DIR customers' summaries, customer's invoices, customers' postage records, etc.) and upload the reconciliation documentation and monthly transaction reports to the DCS Collaboration Portal monthly.</p> <p>Obtain approval from DIR on the reconciliation methodology(s) and document the methodology(s). Require the MSI to update the SMM, accordingly.</p>	<p>DIR management will require Xerox to create a project plan to determine how postage transactions should be reconciled and validated for customer review and approval. DIR will require Xerox to seek DIR approval for the reconciliation process and will require Xerox to document the process in the SMM.</p>	<p>9/1/2017</p>	<p>Director, Planning and Governance, EPO, COO</p>
<p>E. Require Xerox to set up TABC in the DF Works System to ensure that TABC postage and metered</p>	<p>DIR management will require Xerox to create a project plan that identifies the tasks necessary to</p>	<p>8/1/2017</p>	<p>Director, Planning and Governance, EPO, COO</p>

Recommendation ⁸	Management Response		
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data is automatically compiled by the information systems or DF Works.	automatically compile TABC postage and metered data.		
F. Conduct an independent audit of the Postage Reserve Account(s) and related summaries to determine whether 1) balances reconcile to supporting documentation, 2) transactions and balances are valid, complete, and accurate, 3) methodologies and calculations performed are adequate and free of errors (e.g. methodology used for the calculation of replenishment of postage funds), and 4) thresholds and minimum balances established per DIR customer are adequate.	DIR management will recommend an independent audit of the Postage Reserve Account(s) and related summaries to the DIR Board for approval.	12/1/2017	Director, Planning and Governance, EPO, COO
G. Coordinate with OAG-CS to ensure all DIR customers' postage transactions are executed consistently and in accordance to the approved process (e.g. OAG-CS prepayment of postage services).	DIR management will work with OAG-CS to implement the standard postage replenishment process used by all other DIR customers.	9/1/2017	Director, Planning and Governance, EPO, COO
Issue 7: Segregation of Duties			
A. Require Xerox to document and segregate incompatible duties such as: SLA performance reporting, and 2) chargeback reporting. <ul style="list-style-type: none"> Ensure that no single individual has access to systems and records results related to both a) compiling summary performance and billing reports from supporting documents, and b) reviewing and updating flat files in coordination with the MSI or for postage invoices. Ensure that the Xerox staff in charge of reconciling the Postage Reserve Account is not responsible for the 	DIR management will require Xerox to propose segregated duties for DIR's approval. DIR will require Xerox to document and implement those segregated duties.	9/1/2017	Director, Planning and Governance, EPO, COO

Recommendation ⁸	Management Response		
	Action Plan ⁹	Estimated Implementation Date ¹⁰	Responsible Management Staff ¹¹
<p>custody of the meters, authorization of transactions, and ongoing recordkeeping for postage refills and usage.</p> <p>Obtain approval from DIR for the segregated duties determined.</p>			
Issue 8: Validation of Xerox Self-Reported Data			
<p>A. Define “validation” for SLA performance, chargeback, and postage purposes.</p> <p>Require the MSI to update the SMM, accordingly.</p>	<p>DIR management will work with the MSI to clarify and define the MSI’s validation responsibilities and update the SMM accordingly. Changes to the definition will be made in the SMM procedures requiring Xerox to fully complete and maintain documentation.</p>	9/1/2017	<p>Director, Planning and Governance, EPO, COO</p>
<p>B. Require the MSI to establish and perform validation over the SLA performance, chargeback, and postage data uploaded to the DCS Collaborations Portal.</p> <p>Require the MSI to document the validation methodology(s). Obtain DIR approval and update the SMM, accordingly.</p>	<p>DIR management will require the MSI to implement the validation responsibilities identified in recommendation 8.A.</p>	12/15/2017	<p>Director, Planning and Governance, EPO, COO</p>
<p>C. Require the MSI to create and retain supporting documentation in the DCS Collaboration Portal for the validation work performed.</p> <p>Require the MSI to update the SMM, accordingly.</p>	<p>DIR management will require the MSI to update its SMM procedures to require validation documentation is retained.</p>	12/15/17	<p>Director, Planning and Governance, EPO, COO</p>
<p>D. Re-evaluate the variance threshold of 40% applicable to all billable data for print mail services to determine whether the threshold should be lower.</p> <p>Update contractual documents, if needed.</p>	<p>DIR management will re-evaluate the MSI’s variance threshold and determine whether a different threshold is necessary. DIR will update contractual documents, if needed.</p>	9/1/2017	<p>Director, Planning and Governance, EPO, COO</p>
<p>E. Require the MSI to create a ticket in the Remedy System to track and resolve discrepancies,</p>	<p>DIR management will require the MSI to update, maintain, and comply with SMM procedures to</p>	9/1/2017	<p>Sally Ward, Director, Planning</p>

Xerox Print Mail Process

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variances or issues noted during the validation process.	document and retain issues noted during the validation process.		and Governance, EPO, COO

Appendix E: Report Distribution

Internal Report Distribution

Department of Information Resources (DIR) Board

DIR Executive Director

DIR Deputy Executive Director/ Texas Chief Information Officer

DIR General Counsel

DIR Chief Financial Officer

DIR Chief Operations Officer

DIR Chief Operations Office, Enterprise Program Operations, Planning and Governance
Director

External Report Distribution

Texas Office of the Governor

Texas Legislative Budget Board

Texas State Auditor's Office

Texas Sunset Advisory Commission