

# 2021 Internal Audit Plan – Year End Results

---

## **Audit of Production Data & Application Deployment Access**

**Objective:** To assess the adequacy and effectiveness of access to production data, production environment and application deployment.


**Scope:** Our audit scope consisted of an evaluation of the adequacy of controls over separation of duties and a review of access rights in the system development life cycle (SDLC). To achieve our objective, we reviewed policies and procedures, interviewed staff, and performed testing on a selection of IT projects that were deployed into production during the audit period. To evaluate controls, we selected a sample of 22 projects to determine if separation of duties (SOD) standards were followed through the development, testing, and deployment of the projects. We also determined if there was appropriate separation of duties in the Release Managers’ access to the code repository in the Team Foundation Server (TFS). The audit period was July 1, 2020 through June 30, 2021.

**Effective Practices:**

- Testing for system code changes has clear guidelines in the System DevelopmentLife Cycle.
- Separation of duties is supported by policy and well-defined responsibilities.
- Automated tracking for all changes to non-mainframe systems exists.

**Strategic Plan:** Goal 4: Organization Strength: Grow capacity and enhance efficiency in alignment with the mission and vision.  
Objective B: Improve business processes and reduce costs.

### **RISK: SEPARATION OF DUTIES CONTROLS MAY BE INADEQUATE.**

<i>Results</i>	<i>Management Action</i>
<p> 1. SOD is a key concept in the SDLC to establish safeguards to prevent fraud and errors. CalSTRS SOD Policy Standards states:</p> <p>Staff who designs/builds the system cannot perform the following for the system they built/designed:</p> <ul style="list-style-type: none"> <li>○ Quality code review</li> <li>○ System Integration Testing (SIT)</li> <li>○ User Acceptance Testing (UAT)</li> <li>○ Deploy/Release system into production</li> </ul> <p>Internal Audits identified two staff and two contractors (Release Managers) with authority to release projects into production, and all four staff have access to develop systems.</p>	<p>Enterprise IT Solutions &amp; Innovation will update documentation to include a management review process, including the frequency of review over the Release Managers’ activities to ensure Release Managers are not releasing code they developed.</p> <p>Target Completion Date: June 2022</p> <p>Review TFS Admin access privileges to ensure the least access required has been assigned. Admin access to TFS was removed for two team members (SR150976 and SR150993).</p> <p>Target Completion Date: Completed but not validated by Audit Services</p>

**RISK: SEPARATION OF DUTIES CONTROLS MAY BE INADEQUATE.**

<i>Results</i>	<i>Management Action</i>
<p>▲ 2. The SDLC states changed/edited/updated Codes must go through the SIT and UAT before being released into Production. The SDLC is silent on testing requirements for Content changes. The CalSTRS Production Release Management Procedures supports the SDLC and includes the following:</p> <ul style="list-style-type: none"> <li>○ States Content changes do not impact the functionality or availability of the applications</li> <li>○ Acknowledges there are grey areas between the definitions of a Code change and a Content change</li> <li>○ Advises staff to consult the Release Management team if unsure a change is of the Content variety.</li> </ul> <p>Clearly defined procedures ensure consistency of the process and internal controls are working as intended.</p>	<p>Enterprise IT Solutions &amp; Innovation will develop detailed procedures for content changes. These procedures will include the definition of a content change and what testing should be completed and by whom.</p> <p>Target Completion Date: June 2022</p>

**RISK: ACCESS MAY NOT BE RESTRICTED AND MONITORED.**

<i>Results</i>	<i>Management Action</i>
<p>▲ 3. Within the TFS, a repository holds all the codes used in TFS. Developers have unlimited access to check out codes to make changes/edits. Updated codes are reviewed and tested and then released into production.</p> <p>Internal Audits determined code change activities in the repository are not monitored. Only updated codes released into production are reviewed.</p>	<p>Enterprise IT Solutions &amp; Innovation will implement a management oversight plan over the code change activities which defines a time interval of when the activities are to be reviewed and identifies acceptable variances.</p> <p>Target Date: June 2022</p>

## **Audit of Headquarters Expansion – Change Orders**

**Objective:** To assess the adequacy and effectiveness of the change order process.

**Scope:** The audit scope consisted of an evaluation of the adequacy of controls over the process for reviewing and approving change orders in the headquarters expansion (HQE) project. To achieve the objective, Audit Services interviewed staff and reviewed the governance manual, contracts, job aid and policies to gain an understanding of the change order process. Audit Services then evaluated all 20 change orders processed during the audit period that impacted the contingency funds. Additionally, Audit Services reviewed the process for monitoring the cash flow in the HQE project and validating invoices before they are approved for payment. Further, Audit Services verified (1) the budget changes that the construction manager presents to the Executive Steering Committee are accurate and (2) that the construction manager reviews and approves invoices from contractors and subcontractors before submitting for payment.

The audit period was January 1, 2020 through July 31, 2021.

**Effective Practices:**

- Facilities Management implemented a process for reviewing and approving change orders for the HQE project which includes an additional layer of review performed by the Facilities Management Director.
- Financial Planning, Accounting and Reporting (FPAR) performs a monthly reconciliation of changes that impact the HQE budget's hard cost and/or project cost contingencies.
- Treasury and Banking Management, a unit of FPAR, monitors the construction costs of the HQE project and manually reviews the monthly invoices before payment is issued.

**Strategic Plan:** Goal 4: Organizational Strength: Grow capacity and enhance efficiency in alignment with the mission and vision.

Objective D: Hire, develop and retain staff to meet the needs of our changing business models and growth expectations.

**Results:** No audit findings were noted during the course of this audit.

**Audit of Third-Party Vendor - Genesys Cloud Services, Inc.**

**Objective:** To assess whether Genesys Cloud Services, Inc. (Genesys) complies with specific provisions of the Teachers’ Retirement Law and the agreement with CalSTRS.

**Scope:** Our audit scope consisted of an evaluation of Genesys’ compliance with parts of the following contract sections: Fees, Budget Detail and Payment Provisions, General Terms and Conditions, Affirmative Covenants, Special Terms and Conditions, Scopes of Services, CalSTRS Information Privacy and Security Requirements, Required Features Form, Service Level Agreement, and Unanticipated Tasks. To achieve our objective, we conducted interviews and reviewed invoices, required contract documents, personnel documentation, various reports, and correspondence. The audit period was July 1, 2020 through September 30, 2021.

**Results:** Audit Services selected 21 key provisions from the contract to validate compliance. Genesys complied with 14 of the 21 requirements. Listed below are the seven areas of noncompliance.

**Strategic Plan:** Goal 4: Organizational Strength: Grow capacity and enhance efficiency in alignment with the mission and vision.

Objective B: Improve business processes and reduce costs




**RISK: Genesys may not comply with specific provisions of the Teachers’ Retirement Law and the agreement with CalSTRS.**

<i>Compliance Issues</i>	<i>Management Action</i>
<p>◆ 1. Genesys did not always include important elements in the Work Authorization forms. The following could not be determined:</p> <ul style="list-style-type: none"> <li>• name/identification of personnel assigned to the task</li> <li>• dates when the work would begin</li> <li>• job classification or approximate skill level of personnel assigned to the task</li> </ul> <p>In addition, we were unable to determine if the work authorizations were received prior to Genesys beginning work.</p>	<p><b>Genesys Response:</b> Genesys believes the Work Authorization form is a CalSTRS document and Genesys was not asked for that detail. Genesys will coordinate with CalSTRS on the resolution to ensure compliance with existing contract requirements or amend the contract accordingly.</p> <p>Target Completion Date: February 2023</p> <p><b>CalSTRS Response:</b> Management will coordinate with the vendor to ensure compliance with existing contract requirements or amend the contract accordingly.</p> <p>Target Completion Date: February 2023</p>

**RISK: Genesys may not comply with specific provisions of the Teachers’ Retirement Law and the agreement with CalSTRS.**

<i>Compliance Issues</i>	<i>Management Action</i>
<p>◆ 2. Genesys does not support screen capture function and retrieval of screen captures consistently. For instance, Customer Service Quality Assurance has reviewed voice recordings where the system indicated a screen capture was also available; however, one could not be retrieved.</p> <p>Additionally, Customer Service has an outstanding issue, created in December 2020, where screen capture does not function on one user's computer.</p>	<p><b>Genesys Response:</b> The individual case was escalated within Genesys and is now awaiting an update from CalSTRS. Genesys will coordinate with CalSTRS on the resolution to ensure Genesys complies with existing contract requirements to provide consistent functionality of the screen capture function and data retrieval.</p> <p>Target Completion Date: March 2022</p> <p><b>CalSTRS Response:</b> Management will continue to work through identified issues, escalate and remediate as available in the contract. Additionally, internal controls that prevent future occurrences will be reiterated to team members.</p> <p>Target Completion Date: March 2022</p>
<p>◆ 3. Genesys does not retain all documentation to support the Design, Development and implementation of projects.</p>	<p><b>Genesys Response:</b> For future projects, Genesys will provide all the deliverables specified in the DD&amp;I section of the contract. Genesys will coordinate with CalSTRS on the resolution to ensure compliance with existing contract requirements.</p> <p>Target Completion Date: February 2023</p> <p><b>CalSTRS Response:</b> Management will reinforce the contract requirement with the vendor and will ensure internal controls are in place to prevent recurrence.</p> <p>Target Completion Date: February 2023</p>

**RISK: Genesys may not comply with specific provisions of the Teachers’ Retirement Law and the agreement with CalSTRS.**

<i>Compliance Issues</i>	<i>Management Action</i>
<p> 4. Genesys provided one Deliverable Acceptance Form; however, it was not signed by all CalSTRS approving officials. Additionally, a Deliverable Acceptance Form was not provided with Genesys’ monthly invoices.</p> <p>Moreover, Genesys did not provide a Deliverable Expectation Document for each project deliverable.</p>	<p><b>Genesys Response:</b> Genesys will coordinate with CalSTRS on the resolution to ensure compliance with existing contract requirements or amend the contract accordingly.</p> <p>Target Completion Date: February 2023</p> <p><b>CalSTRS Response:</b> Management will reinforce the contract requirement with the vendor, will ensure internal controls are in place to prevent recurrence and initiate a contract amendment as appropriate.</p> <p>Target Completion Date: February 2023</p>
<p> 5. Genesys did not show full conformance with the Americans with Disabilities Act (ADA)/Web Content Accessibility Guidelines (WCAG) 2.0 AA success criteria.</p>	<p><b>Genesys Response:</b> Genesys will ensure compliance to with the ADA/Web Content Accessibility Guidelines 2.0 AA success criteria and will coordinate with CalSTRS on the resolution to ensure compliance with existing contract requirements or amend the contract accordingly.</p> <p>Target Completion Date: February 2023</p> <p><b>CalSTRS Response:</b> Management will reinforce the contract requirement with the vendor and will review internal controls.</p> <p>Target Completion Date: February 2023</p>
<p> 6. Genesys does not provide the Service Level Agreement monthly performance report by the 10th calendar day of the following month.</p>	<p><b>Genesys Response:</b> Genesys acknowledges the finding as a compliance issue; however, data may not be available timely to ensure Service Level Agreement performance reports can be issued by the 10<sup>th</sup> calendar day of the following month. Genesys will coordinate with CalSTRS</p>

**RISK: Genesys may not comply with specific provisions of the Teachers’ Retirement Law and the agreement with CalSTRS.**

<i>Compliance Issues</i>	<i>Management Action</i>
	<p>on the resolution to ensure compliance with existing contract requirements or amend the contract accordingly.</p> <p>Target Completion Date: February 2023</p> <p><b>CalSTRS Response:</b> Management will reinforce the contract requirement with the vendor and initiate a contract amendment as appropriate.</p> <p>Target Completion Date: February 2023</p>
<p><span style="background-color: yellow;">■</span> 7. Genesys is required by contract to submit invoices with five required elements. The sampled invoices were missing two required elements – (1) the contractor’s telephone number and (2) fiscal year in which services were rendered.</p>	<p><b>Genesys Response:</b> Genesys provides other contact information on each invoice. Genesys has assigned to CalSTRS a CustomerSuccess Manager who can be contacted directly with any invoicing questions. Additionally, each invoice indicates the invoice date and billing period/month for the yearly subscription. Genesys acknowledges the finding as a compliance issue; however, it may not be cost effective to add the telephone number and fiscal year to each invoice as that must be completed manually. Genesys will coordinate with CalSTRS on the resolution to ensure compliance with existing contract requirements or amend the contract accordingly.</p> <p>Target Completion Date: February 2023</p> <p><b>CalSTRS Response:</b> Management will reinforce the contract requirement with the vendor and initiate a contract amendment as appropriate.</p> <p>Target Completion Date: February 2023</p>



## **Audit of Sustainable Investment & Stewardship Strategies – Weaver**

**Objective:** The objectives of our procedures were to evaluate whether adequate controls were in place and operating effectively over specified areas of the SISS portfolio and program including governance, new product/strategy, manager due diligence and oversight, front office reporting, voting proxy, and regulatory / legislative advocacy.

**Scope:** To accomplish the objectives, we confirmed our understanding of current processes, interviewed CalSTRS personnel as deemed necessary, reviewed available documentation, and tested compliance with applicable policies, laws, and regulations. Transaction testing generally covered the period August 2020 through July 2021. Our fieldwork was performed in July 2021 through January 2022.

We evaluated activities for the selected compliance areas under review and tailored our audit programs, accordingly, using a risk-based approach to our procedures. Our procedures addressed the following:

- SISS Program governance, policies and procedures were in conformance with CalSTRS Corporate Governance Principles and the 2020 SISS Stewardship Plan.
- Due diligence for new SISS investment strategies were consistent with CalSTRS guidelines.
- CalSTRS Environmental, Social and Governance (ESG) Risk Factors were incorporated into the management and oversight of the SISS Portfolio.
- SISS Portfolio third party and external manager due diligence adhered to CalSTRS guidelines.
- Front office reporting met requirements to the Board for the SISS Portfolio and Stewardship Program.
- Voting proxy procedures were in conformance with Corporate Governance Principles by SISS for the Total Portfolio.
- Regulatory and legislative advocacy was conducted in accordance with the SISS Program.

**Effective Practices:**

- Governance and oversight of the Sustainable Investments and Stewardship Strategies (SISS) Portfolio and Program.
- Monitoring and oversight of investment performance and performance against benchmarks.
- Identification of new sustainability and ESG developments and incorporation into the SISS Program.
- Due diligence on new investment opportunities.
- Execution of proxy voting in line with the Corporate Governance Principles.
- Implementation of stewardship strategies to monitor and influence change within investment holdings and regulatory / legislative bodies.

**Strategic Plan:** GOAL 1: Financial/Governance Ensure a well-governed, financially sound trust fund.  
OBJECTIVE B Integrate CalSTRS’ sustainable investment and stewardship strategies, which support long-term value creation and educate and inform interested parties.

**RISK: Not having consistent documentation and data standards for all external managers increases the risk that issues with the manager or within the portfolio outside of performance would not be identified.**

<i>Results</i>	<i>Management Action</i>
<p>1. During our procedures we identified that documentation and data requirements among external investment managers is not consistent:</p> <ul style="list-style-type: none"> <li>• Managers with Portfolios in liquidation do not provide due diligence questionnaire (DDQ) responses and the quarterly supplemental documents do not address compliance violations or ESG related concerns.</li> <li>• Certain managers do not provide a DDQ response each quarter or they provide a generic firm-level DDQ response that does not address specific portfolio risk of CalSTRS.</li> <li>• Follow-up calls on the DDQs do not appear to occur each quarter for all managers.</li> <li>• The additional documentation (i.e., firm or fund financials, form ADV, fund holdings, currency reports) required with each DDQ is not consistent across the managers.</li> <li>• Missing data or documentation from the due diligence for each manager does not appear to impact the quarterly manager ratings and/or are not referenced consistently in the assessments.</li> </ul> <p>To strengthen existing monitoring procedures, Management should establish consistent requirements for DDQ responses, including follow-up protocols and data specifications.</p> <p>Where an external manager has not provided the required information, this should be documented in the quarterly manager evaluation and considered in determining the manager’s overall score.</p>	<p>Staff will require all new investment managers and any portfolios that go into liquidation to provide the standard DDQ as part of the contracting process. Additionally, staff will seek conformity in the current process to the extent existing agreements allow.</p> <p>Furthermore, staff has enhanced the documentation and reporting for the key SISS portfolio teams (the SPRG – Sub-Portfolio Review Group and the PRG – the Portfolio Review Group) to address concerns that non-compliant managers are captured in the rating process.</p> <p>Target Completion Date: Complete, though not validated by Audit Services.</p>

**RISK: An external manager may make SISS portfolio investments that are not within CalSTRS ESG tolerances since there is no contractual obligation to do so.**

<i>Results</i>	<i>Management Action</i>
<p>2. The Limited Partnership agreements for the Activist Fund Managers do not require managers to assess their portfolios against the ESG Risk Categories as required by the Corporate Responsibility Policy.</p> <p>Management should add language to future limited partnership agreements requiring consideration of the ESG Risk Categories and consider whether a side letter is needed for existing Activist managers.</p>	<p>SISS will include these requirements in all future agreements. All managers are in compliance without explicit language in the contracts. Staff does not believe it is cost effective to retain legal services to add the language as a stand-alone item. SISS will seek to have the reporting requirement added to existing agreements as contracts are amended.</p> <p>Target Completion Date: Complete, though not validated by Audit Services. Will be implemented when next applicable.</p>

**RISK: New accounts within the Total Portfolio may not be added to Viewpoint and proxy votes not executed by the SISS team. Also, control issues at the vendor that impact proxy voting may not be identified.**

<i>Results</i>	<i>Management Action</i>
<p>3. The annual audit of Viewpoint by SISS, which evaluates whether eligible Portfolio accounts have been added, can be strengthened. Specifically, our observations include:</p> <ul style="list-style-type: none"> <li>• The structure of the account review does not ensure that all accounts have been added to Viewpoint as there is no reconciliation performed between the accounts at the custodian and the accounts in the system.</li> <li>• During our procedures, we observed that there is not a control to review the results of the Viewpoint audit by SISS, and the 2020 audit was never completed. Also, we were unable to determine whether management was aware of the status of the issues raised for the portion of the 2020 Viewpoint audit which was completed.</li> <li>• While the Glass Lewis Viewpoint system is not considered a critical application for CalSTRS on an entity-wide level, Viewpoint is used by SISS to monitor proxy voting. As such, it may be beneficial for the SISS team to review the SOC-1 report provided by Glass Lewis on Viewpoint</li> </ul>	<p>SISS staff will work with Investment Services staff to determine the most efficient process to ensure all accounts have been added to the Glass Lewis Viewpoint system. Staff will also annually review the Glass Lewis SOC-1 report.</p> <p>Target Completion Date: Q4 – 2022</p>

**RISK: New accounts within the Total Portfolio may not be added to Viewpoint and proxy votes not executed by the SISS team. Also, control issues at the vendor that impact proxy voting may not be identified. (continued)**

<i>Results</i>	<i>Management Action</i>
<p>to identify whether there are control deficiencies that impact proxy voting.</p> <p>Management should assess results of the annual audit and work with Operations and Glass Lewis to design procedures that ensure all portfolio accounts are added / removed by the vendor. The assessment should include reviewing the vendor SOC-1 report for issues identified.</p>	

**RISK: Issues within the Viewpoint system or with CalSTRS lending agents may go undetected by SISS. This may also impact the ability to vote in line with the corporate governance principles.**

<i>Results</i>	<i>Management Action</i>
<p>4. SISS could further strengthen monitoring controls over proxy voting and the Glass Lewis – Viewpoint application used to administer proxy voting in compliance with the Corporate Governance Principles. Specifically, we observed:</p> <ul style="list-style-type: none"> <li>• The reporting application for Viewpoint had not been updated by Glass Lewis and SISS was unable to monitor systematic or manual voting against the system recommended policies.</li> <li>• Pre &amp; Post Proxy season meetings with Glass Lewis do not include discussions related to voting patterns, system performance, and voting trends (systematic, manual, against recommendation, possible rule changes, etc.).</li> <li>• Reporting related to the recall of securities on loan (i.e. best efforts by lending agent, exceptions to recall based on financial benefit) and the impact to CalSTRS proxy voting is currently informal. There is currently no formal reporting included as part of the Stewardship and Strategic Relations (SSR) governance meetings or SISS post-mortem for each proxy season.</li> </ul>	<p>Staff will continue to engage Glass Lewis to improve the efficiency of CalSTRS proxy voting activities and improve the reporting capabilities of the voting platform.</p> <p>Staff will also work with Fixed Income staff to determine appropriate securities lending reports and/or dissemination of existing reports to SISS staff.</p> <p>Target Completion Date: Q4 – 2022.</p>

**RISK: Issues within the Viewpoint system or with CalSTRS lending agents may go undetected by SISS. This may also impact the ability to vote in line with the corporate governance principles. (continued)**

<i>Results</i>	<i>Management Action</i>
<p>Management should consider additional oversight of the proxy voting process and the Glass Lewis – Viewpoint system that includes:</p> <ul style="list-style-type: none"> <li>• Additional analysis of voting patterns, including where votes against policy occurred or where systematic / manual policy changes are needed; and</li> <li>• Incorporate a periodic assessment of the correlation and impact of security lending on proxy voting execution.</li> </ul>	

## **Audit of Account Management and Performance Reporting – Grant Thornton**

**Objective:** An assessment of CalSTRS Account Management and Performance Reporting to assess the design and operating effectiveness of internal controls with respect to the operational, compliance, accounting, and performance reporting risks inherent in master custodial processes.

**Scope:** The objective of the 2022 Account Management and Performance Reporting Internal Audit review was to assess the adequacy of design and operating effectiveness of controls governing State Street’s key Account Management and Performance Reporting process for the CalSTRS account. The Internal Audit activities performed by Grant Thornton LLP were conducted in three phases – Planning, Fieldwork & Assess, and Report & Recommend. The auditable areas examined were outlined within the scope of work and are listed below:

- Policies and procedures
- Accounting (Reconciliations and variance resolutions)
- Asset Transfers
- Performance and Analytics
- New Account Setup
- Pricing
- Key Person Risk and Adequate Oversight Coverage


**Effective** State Street effectively performs the following:

- Practices:**
- Utilizes automated checks for multiple accounting and performance tasks
  - Maintains supervisor approved policies and procedures for account management
  - Assembles a global team to provide services across multiple asset types and time zones
  - Provides required reviews and signoffs for new accounts
  - Confirms instructions with CalSTRS before executing transactions and making
  - major updates

**Strategic Plan:** Goal 1: Financial/Governance - Ensure a well-governed, financially sound trust fund.  
Objective A – Achieve full funding of the Defined Benefit Program by June 30, 2046.

**RISK: Absence of alerts to prevent unapproved updates after fund close can result in inconsistent reporting and potential month end NAV amounts needing to be restated.**

**Repeat observation from the 2018 audit of this area; remediation steps in 2018 included addition of manual review and “future IT enhancements”.**


<i>Results</i>	<i>Management Action</i>
<p> 1. A system limitation exists within State Street’s multi-currency horizon system (MCH) that does not allow for seeking approval of service teams upon identifying the possible need to create prior period accounting changes after the period has been marked as closed (for example, in case of loan services unit posting June 2021 “as-of” amendments to fund TC5S without approval after the books had been closed).</p>	<p>An email notification alert has been enabled via MySS for all CalSTRS funds. The alert triggers when books are re-opened after being closed. The notification has been set-up for members of the CalSTRS client service team.</p> <p>Target Completion Date:  Completed–January 26, 2022</p> <p>Although SSB reports this as Complete, Audit Services will validate management’s response to this finding.</p>

**RISK: Missed or misapplied trades may affect CalSTRS cash balance amounts and reporting.**

<i>Results</i>	<i>Management Action</i>
<p>▲ 2. STIF trades on CalSTRS report do not appear on daily State Street report for one of ten sample dates.</p>	<p>Two separate issues are involved. First relates to the process of entering STIF trades into the Cash Sweep platform, which executes the custody movement of funds. Root cause of the issue were deficiencies in the cash forecasting process. Enhanced cash forecasting process implemented Q2-21. Daily check to compare trades in Cash Sweep against CalSTRS trade file before the sweep deadline also remains in place.</p> <p>Second issue relates to booking STIF trades to accounting. End-of-day check to verify that trades booked match CalSTRS instructions implemented July 23, 2021. In addition, will implement a new STIF CUSIP so trades are booked to accounting from Cash Sweep rather than through client instructions to reduce manual touchpoints in the process.</p> <p>Target Completion Date:</p> <ul style="list-style-type: none"> <li>• Cash forecasting process enhancement – Complete</li> <li>• End-of-day check to verify that trades booked match CalSTRS instructions – Complete - July 23, 2021</li> <li>• New STIF CUSIP so trades booked to accounting directly from Cash Sweep – expected March 1, 2022</li> </ul> <p>Although SSB reports the above as Complete. Audit Services will validate management’s response to this finding.</p>



**RISK: Incidents that are not remediated (or not remediated in a timely fashion) can reoccur and cause inaccuracies in accounting and performance records for CalSTRS and State Street.**

<i>Results</i>	<i>Management Action</i>
<p> 3. Incident memos do not consistently contain relevant information (ex. responsible owner and due date), and a centralized process to monitor and report on remediation status after memo released to CalSTRS does not exist.</p> <p>Upon review of the Incident memos provided, IA found the following deficiencies:</p> <ul style="list-style-type: none"> <li>- 22 of 22 incident memos (100% percent) had no responsible owner identified</li> <li>- 18 of 22 incident memos (82% percent) had no due date</li> </ul>	<p>We have proposed to incorporate incident memo remediation actions into the open initiatives log as part of the Service Level Agreement (SLA) being finalized between CalSTRS and State Street. Section 2.1 contemplates the mechanism of adding the identified issue(s) to the open initiatives log and this is where action items associated with an issue are tracked to resolution. The log has columns that include owners on both the State Street and CalSTRS sides as well as due dates (dates when the item was added and when it was closed).</p> <p>Section 2.1 includes the following: “Any and all items that fall outside of standard processes that require tracking will be added to the open items log by either SSB or CalSTRS. Items to track include, but are not limited to:</p> <ol style="list-style-type: none"> <li>1. Aged Items</li> <li>2. Items with financial impacts to the funds</li> <li>3. Items with financial impacts to CalSTRS /State Street</li> <li>4. Reoccurring Events</li> <li>5. Change in market practice with an impact to operating process</li> <li>6. Enhancement requirements</li> <li>7. Operational model or structure change</li> <li>8. Technology or system changes</li> <li>9. State Street internal control deficiencies and/or failures”</li> </ol> <p>Target Completion Date:</p> <p>Upon agreement and finalization of proposed SLA by June 30, 2022</p>

**RISK: Inadequate checks before publishing of Net Asset Value (NAV) amounts may lead to inaccurate reporting.**

<i>Results</i>	<i>Management Action</i>
<p>■ 4. NAV Validation Status marked "Complete" when not all NAV Validation Alert errors have been cleared in ten of ten sample reports and also evidenced during walkthrough 1/11/22.</p>	<p>An additional check by the Accounting team will be introduced during fund set-up to compare MyNAV configuration with existing CalSTRS funds. Any discrepancies will be discussed with Client Service to ensure correctness and modifications to MyNAV set-up made as needed.</p> <p>Target Completion Date: Completed – February 1, 2022</p> <p>Although SSB reports this as Complete, Audit Services will validate management’s response to this finding</p>

**RISK: Inadequate review of asset transfers may lead to inaccurate entries in the accounting and custody system.**

<i>Results</i>	<i>Management Action</i>
<p>■ 5. Required client memo and internal sign-off for asset transfers missing for two of four sampled asset transfer transactions.</p>	<p>In addition to the existing process of updating the project tracker log and copying the reviewer when sending the sign-off to Client Service, for completed projects the reviewer will now also check the team share drive folder to ensure a copy of the sign-off is saved down.</p> <p>Target Completion Date: Completed – February 3, 2022</p> <p>Although SSB reports this as Complete, Audit Services will validate management’s response to this finding.</p>

**RISK: Inadequate oversight of performance reporting activities may lead to inaccurate reporting and re-work for CalSTRS and State Street teams.**

<i>Results</i>	<i>Management Action</i>
<p>6. Final onshore reviewer sign-off missing from daily performance quality control checklist for four of ten sampled checklists.</p>	<p>State Street Performance &amp; Analytics will implement an improved control, prior to delivery of reports, to address the finding. A process step for the review of quality control and production checklists will be added to the daily production checklist. An independent overseer, one who did not sign-off on the quality control sheet, will conduct the following checks, prior to his sign off on the production checklist:</p> <ol style="list-style-type: none"> <li>1. Ensure the quality control sheet is properly dated</li> <li>2. Ensure quality control sheet preparer, reviewer, additional reviewer, and final review sign-off are complete</li> <li>3. Ensure the production checklist is initialed for every process step (except the checklist review step)</li> <li>4. Ensure only the final quality control and production checklist is saved in the daily folder for proper record keeping</li> <li>5. Initial the checklist review step and save the production checklist</li> </ol> <p>Target Completion Date: March 1, 2022</p>





**RISK: Inadequate oversight of performance reporting activities may lead to inaccurate reporting and re-work for CalSTRS and State Street teams. (continued)**

<i>Results</i>	<i>Management Action</i>
<p>■ 7. Offshore and onshore reviewer sign-offs missing for benchmark checks on monthly performance checklist for one of two months sampled.</p>	<p>State Street Performance &amp; Analytics will implement an improved control, prior to delivery of the reports, to address the finding. A process step for the review of quality control and production checklists will be added to the monthly production checklist.</p> <p>An independent overseer, one who did not sign-off on the quality control sheet, will conduct the following checks, prior to his sign off on the production checklist:</p> <ol style="list-style-type: none"> <li>1. Ensure the quality control sheet is properly dated</li> <li>2. Ensure quality control sheet preparer, reviewer, additional reviewer, and final review sign-off are complete</li> <li>3. Ensure the production checklist is initialed for every process step (except the checklist review step)</li> <li>4. Ensure only the final quality control and production checklist is saved in the monthly folder for proper record keeping</li> <li>5. Initial the checklist review step and save the production checklist</li> </ol> <p>Target Completion Date: March 1, 2022</p>
<p>■ 8. Out-of-tolerance difference of \$1,063,419 not explained in one of two monthly investment manager reconciliations sampled.</p>	<p>Client Services team will introduce an additional review to ensure completeness.</p> <p>Target Completion Date: February 11, 2022</p>

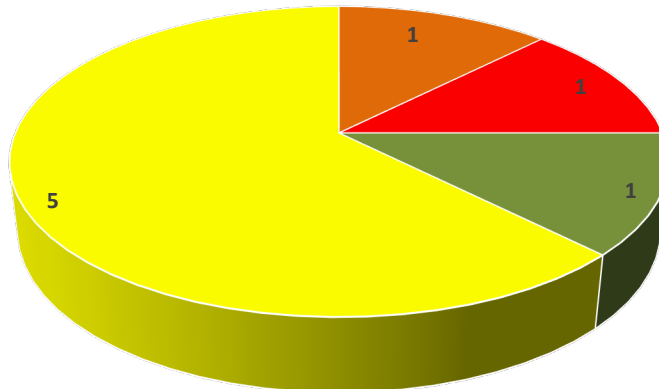
## **FOLLOW UP ON INTERNAL AUDIT FINDINGS**

Following is a summary of the status of corrective actions for internal audit findings as of December 31, 2021. Management actions and the status of audit findings over one year with the highest rating (♦) may be accessed through the link provided on the summary. Resolved findings are reported to the committee upon corrective action implementation but do not appear in subsequent status reports. Each finding is rated using the following Finding Significance Rating Scale.

### **FINDING SIGNIFICANCE RATING SCALE**

	Design of controls is adequate in addressing key risks, providing a reasonable level of assurance that objectives are being achieved. Controls/policies/procedures are documented, up-to-date, and monitored. Controls are fully implemented and operating effectively and efficiently. Identified high level of compliance with laws/regulations/policies/procedures. Some improvement opportunities have been identified but not yet actioned.
	Design of controls is adequate and effective in addressing key risks, but do not provide complete assurance that all objectives will be achieved. Controls/policies/procedures are documented, up-to-date, and monitored, but there are some gaps in the documentation relied upon to provide evidence that the key controls are operating effectively. Controls are operating as intended, but there is opportunity to improve the effectiveness or efficiency of the control. Identified general compliance with laws/regulations/policies/procedures with a few minor exceptions. There are some opportunities to improve existing controls, strengthen compensating controls and/or awareness of the controls.
	Design of controls only partially address key risks, but do not provide adequate assurance that all objectives will be achieved. Controls/policies/procedures documentation is incomplete, unclear, or outdated, and not monitored. Controls are not operating consistently and/or effectively or have not been fully implemented. Unable to confirm the effective operation of key controls. Examples of non-compliance with laws/regulations/policies/procedures and there are opportunities to develop new controls to provide a more appropriate level of assurance. There is a cost/benefit advantage to implement improvement opportunities.
	Design of controls is ineffective in addressing key risks or no process exists to manage the risk. Controls/policies/procedures documentation does not exist. Controls are not in operation or have not yet been implemented. There are significant breaches of compliance with laws/regulations/policies/procedures. Immediate need for corrective and/or improvement actions to be undertaken.









**Findings In Progress by Significance Rating**











**SUMMARY OF INTERNAL AUDIT FINDINGS**

**Resolved** – Audit Services validated finding is resolved by management’s corrective actions.





**In Progress** – Management is in the process of addressing the audit finding.





<b>SUMMARY - Findings Over One Year Old</b>			
Audit Projects	Significance Rating	Resolution Status	Findings
<b>Data Governance</b>		In Progress	Finding 2B: Data owner and data steward training and communication to new and existing staff could be formalized.
<b>IT Service Management– Change Management</b>		Resolved	Finding 3: CLA found some Emergency Changes were inconsistently documented and there was not a clear differentiation between those changes that were conducted during business hours and after hours.
		Resolved	Finding 5: CLA learned that in some cases, "routine" changes, such as replacement of failed hard disks or other redundant hardware components that do not require a service interruption, are performed without RFC documentation.
		Resolved	Finding 6: In some instances, CalSTRS did not submit Minor Change RFCs with the policy-defined approval lead-time of three days prior to implementing the change.
<b>IT Service Management– Patch Management</b>		Resolved	Finding 1: Due to technical limitations of the patch deployment system, remote laptop devices may not be patched at the same frequency as devices which are regularly connected to the CalSTRS private network.
		Resolved	Finding 2: There is no formal process for tracking the time between when an individual vulnerability is detected and remediated.
		Resolved	Finding 3: Detected vulnerabilities are not tracked through remediation and defined risk categories are not being consistently assigned.
		Resolved	Finding 7: CalSTRS has not clearly assigned responsibilities for vulnerability detection, reporting, and remediation. There is no common accountability mechanism used by both the ISO and Technology Services to track vulnerabilities and ensure they are remediated.


<b>SUMMARY - Findings Over One Year Old</b>			
<b>Audit Projects</b>	<b>Significance Rating</b>	<b>Resolution Status</b>	<b>Findings</b>
<b>IT Service Management– Patch Management (cont.)</b>		Resolved	Finding 8: Vulnerability reports are published to the ISO SharePoint site and patching reports are published by Technology Services to their SharePoint site, but the reports are not coordinated, and only limited portions of the data are reported to management.
<b>IT Service Management– Service Request Management</b>		Resolved	Finding 3: Ticket Expectations documents provide guidelines to Technology Services regarding how and when to escalate requests, but there are no guidelines published for consumers of technology services regarding request escalation.

<b>SUMMARY - Findings Less Than One Year Old</b>			
<b>Audit Projects</b>	<b>Significance Rating</b>	<b>Resolution Status</b>	<b>Findings</b>
<b>Pension Benefit Information, LLC (PBI)</b>		In Progress	Finding 1F: Although PBI is providing the Death Match and Obituary Match files using the Secure File Transfer Process, the reports are not provided in required PDF and Excel formats. Instead, the files are sent in text format and CalSTRS must convert the files into Excel for use.
		In Progress	Finding 1H: PBI is required to submit Death Match response files with five required elements. Death Match response files sampled were missing two of the five required elements. This can result in CalSTRS performing additional research to obtain pertinent data.
		In Progress	Finding 1I: PBI is required to submit monthly Obituary Match response files with seven required elements. Obituary Match response files sampled were missing three of the seven required elements. This can result in CalSTRS performing additional research to obtain pertinent data.
		In Progress	Finding 1J: PBI is required by contract to submit semi- annual Obituary Match response files with seven required elements. Obituary Match response files sampled were missing three of the seven required elements. This can result in CalSTRS performing additional research to obtain pertinent data.
<b>BusinessDirect - Application Controls</b>		In Progress	Finding 1: Organizations have business rules that need to be followed. CalSTRS has minimal validation rules set up in the system to prevent incorrect or invalid manual financial postings. BD can be set up to ensure that a combination of account string objects is allowed or not allowed. However, CalSTRS has other manual controls that currently exist outside of the BD system that mitigate the risks.
		In Progress	Finding 4: Posting to General Ledger (GL) Accounts being used in full accrual and modified accrual methods of accounting should be strictly moderated. If there are cross-postings to these accounts, there is a potential for reports being out of balance. BD for the Public Sector uses the accounts approach to manage different methods of accounting. It was observed an entry could be made in the system that would result in balance sheet reports, for a specific method of accounting, to be incorrect.



SUMMARY – Findings Less Than One Year Old			
Audit Projects	Significance Rating	Resolution Status	Findings
<b>BusinessDirect - Application Controls (cont.)</b>		In Progress	<p>Finding 5: There are certain GL accounts that should be allowed to be used in posting Accounts Payable (A/P) invoices. These GL accounts are marked statistical and not subject to funds availability. It is noted that CalSTRS mitigates this risk by using workflow in which a manager will review and reject the posting if deemed incorrect.</p>
		In Progress	<p>Finding 7: In the vendor invoice, the reference field holding the external invoice number, often a mandatory field for the vendor invoice number, needs to be unique. BD flags invoices as duplicate when the reference field, in combination with the Vendor ID and Amount, is being entered again into the system. This field once tagged to an invoice should not be changeable. In BD, a user may change the value in the reference field after an invoice document is posted.</p>
		Resolved	<p>Finding 9: Cash postings should be controlled or moderated. When being used, appropriate account strings should be carefully selected. It is observed that a cash account can be posted to a Profit Center and business area combination that are not valid.</p>
<b>Cash Management</b>		Resolved	<p>Finding 1: The Access database used for the daily cash position &amp; forecasting process, originally created as a short-term strategy, requires significant manual data entry and review to produce final outputs, requires regular archiving of data, is cumbersome to modify, and is not supported by IT technical support within CalSTRS. Internal Audit did not note any instances in which the cash position or cash forecasts resultant from use of this tool were inaccurate. Internal Audit also did not note any control operations failures associated with the use of the tool.</p>

SUMMARY - Findings Less Than One Year Old			
Audit Projects	Significance Rating	Resolution Status	Findings
<b>Workforce &amp; Succession Planning</b>		Resolved	Finding 1A. Opportunities exist for enhanced governance over workforce and succession planning. HR prepares informative and useful documents that support workforce and succession planning, such as the Workforce and Succession Plans (Plans) and the Branch Workforce Overview (BWO). The processes involved are not formally written in procedures. Documenting the processes ensures consistent preparation and governance of the Plans.
		In Progress	Finding 1B: The BWO includes branch-specific information, such as retention rate, branch analysis and a separate action plan. We were unable to validate consistent communication of the branch action plan to business leaders. Industry leading practices suggest annual evaluation of the workforce profile to address changing priorities. Communicating the need for branch’s refresh of their action plans ensures branches are working toward completion of branch specific goals.
		In Progress	Finding 1C. HR activities to support recommendations mentioned within the Plans are tracked, such as diversity and inclusion education in onboarding; redesigned performance appraisal process; and continuous expansion of SharePoint as a workflow and efficiency tool. We were unable to validate the tracking spreadsheet was updated quarterly, as indicated, and by whom. Identifying roles and responsibilities, plans and timelines with consistently documented procedures will ensure consistency and completeness of the work.
		In Progress	Finding 2: In 2018, HR prepared a model workforce and succession plan. Most of the CalHR requirements were included in the HR succession planning process. However, we noted a documented methodology for assessing the talent pipeline’s current competencies and overall readiness was not included. In addition, we noted the identification of current and future competency gaps and an action plan for addressing gaps for each key position was not consistently completed.

SUMMARY - Findings Less Than One Year Old			
Audit Projects	Significance Rating	Resolution Status	Findings
<b>Technology Procurement Services</b>		Resolved	Finding 1: EITG processes Technology Services' (TS) procurement which includes both goods and services through an exempt or solicitation process. During the review, Internal Audits identified one exempt procurement did not have appropriate, prior, written approval and justification for the vendor selection.