SAN DIEGO CITY EMPLOYEES' RETIREMENT SYSTEM

STAFF REPORT

AUDIT DIVISION

DATE: June 16, 2014

TO: AUDIT COMMITTEE

FROM: Lee Parravano, Internal Auditor

SUBJECT: Investment Accounting and Reconciliation Audit

Enclosed is the Investment Accounting and Reconciliation Audit for the period July 1, 2012 through November 30, 2013. Overall, SDCERS has procedures in place for the monthly investment accounting and reconciliation process and control strengths were identified during the audit. Issues were also identified that should be addressed to further strengthen these controls.

Based on this review, five recommendations have been made to improve internal controls related to the investment accounting and reconciliation process, and SDCERS' management agrees with all five of the recommendations. Management's written response can be found after page nine of the audit report.

I would like to thank SDCERS staff for all of the assistance and cooperation provided during this audit. Everyone involved was very helpful and willing to provide the information needed. Their valuable time and efforts spent on this audit is greatly appreciated.

Internal Audit Report

Investment Accounting and Reconciliation Audit

Prepared by:
Lee Parravano, Internal Auditor

Table of Contents

EXECUTIVE SUMMARY

SDCERS has procedures in place for the monthly investment reconciliation process. Control strengths identified during the audit period from July 1, 2012 through November 30, 2013 include:

- Investment reconciliations were mathematically accurate.
- The adjusted investment balance agreed with the adjusted book balance per the investment reconciliation.
- The book balance per the investment reconciliation matched the general ledger.
- Staff identified appropriate adjustments to be made and adjusting entries were properly recorded in the general ledger.
- All investment accounts in the general ledger were identified by the investment reconciliation.
- Monthly investment manager fee accruals were reasonable.
- Adequate supporting documentation was maintained.

However, the following issues were identified that should be addressed to further strengthen internal controls over the investment reconciliation processes. It should be noted that management was already aware of, and actively working on, some of these issues identified.

<u>Timeliness of Reconciliations</u>
Due to staff turnover in the Finance and Administration Division, the investment reconciliations had not been completed in a timely manner during the audit period. The number of days after month end to complete the investment reconciliation diminished from a maximum of 328 days to 46 days. Management was aware of this issue and as of February 3, 2014, the investment reconciliation for the month of December 31, 2013 was completed by January 24, 2014.

<u>Unrealized Gains/Losses</u>
Unrealized gains/losses on investments were allocated based on investment guidelines in the investment manager's contract and not based on the actual investment holdings by asset classifications for financial reporting. This caused the fair market value of investments by major categories at the end of the reporting period to be misallocated for the months randomly selected. However, in total, the allocation did not result in a misstatement.

<u>Securities Lending</u>
Securities lending collateral that was invested in an external investment pool was not being marked to market as of the end of the reporting period for February 2013. The result was that the fair market value of the securities lending collateral did not agree to the monthly unaudited financial statements or the general ledger balance.

Management was aware of this situation and since May 2013 has been adjusting the securities lending collateral to fair market value each month.

EXECUTIVE SUMMARY (Continued)

Supervisory Review and Approval

The reconciliations did not show proof that they had been reviewed and approved by a supervisor or another appropriate individual. All reconciliations should be reviewed and approved as evidenced by the supervisor or another appropriate individual's signature and date the review was completed.

Investment Reconciliation Procedures

The written investment reconciliation procedures should be updated to include specific elements needed to strengthen internal controls, and accounting staff should follow those procedures.

Investment Manager Reconciliations

Monthly reconciliations between the external investment managers' and State Street were not performed for the period from July 2012 through March 2013. In April 2013, a template was given to all investment managers for which State Street acts as the custodian. The template included columns for security description, quantity, and price. The templates are completed by the investment manager and are delivered to both State Street and SDCERS on a monthly basis. State Street uses the template to identify quantity and valuation differences, by holding, between State Street's investment records to the investment managers' records over a determined threshold. SDCERS is not monitoring the investment reconciliation process performed by State Street.

Based on this audit, five recommendations have been made to improve internal controls related to the investment accounting and reconciliation process. SDCERS' management agrees with all five of the recommendations made. Details can be found in the Audit Results section of this report.

The information in this report is intended solely for the use of the Audit Committee, Board of Administration, and management of SDCERS, and is not intended to be, and should not be, used by anyone other than these specified parties.

AUDIT OBJECTIVES, SCOPE & METHODOLOGY

Audit Objectives

The objectives of the Investment Accounting and Reconciliation Audit were to:

1. Assess the adequacy of the practices and procedures for recording the monthly investment activity, investment balances and the investment reconciliation to ensure reconciliations are prepared accurately, timely and with appropriate supervisory review.
2. Assess the adequacy of segregation of duties and system access levels for staff responsible for investment reconciliations and handling of wire payments.
3. Assess the adequacy of operational controls related to the handling of wire payments.

Audit Scope & Methodology

This audit was performed for the period from July 1, 2012 through November 30, 2013 by using the following methods:

- Reviewed policies and procedures utilized by staff to record the monthly investment activity and reconciliations in order to determine if the procedures are adequate.
- Interviewed staff responsible for accounting, reconciliations and processing wire payments. Reviewed staff system access to determine if there is appropriate segregation of duties.
- Reviewed controls and safeguards related to handling of investments, wires and adjustments to investment balances.
- Reviewed the investment reconciliation schedules and documents for the audit period from July 2012 through November 2013 to determine if the reconciliations were completed in a timely manner and were properly reviewed and approved by appropriate supervisory staff.
- Randomly selected the sample months of February 2013 and August 2013 and performed detailed testing of the investment reconciliations. For each sample month selected:
  - Traced the investment balance per State Street statements to the balance on the reconciliation.
  - Tested the mathematical accuracy of the reconciliation by recalculating the mathematical computations.
  - Traced the book balance per the investment reconciliation to the general ledger to determine if they agree.
  - Reviewed the adjustments identified by the investment reconciliation to determine if they were properly recorded in the general ledger.
  - Reviewed the investment accounts per the general ledger to determine if they are properly included in the investment reconciliation.
  - Traced the investment book balance per the reconciliation to the monthly unaudited financial statements to verify they agree.
  - Traced investment manager investment balances to State Street investment balances.
  - Reviewed that the variances between investment manager investment balances and State Street investment balances have been properly identified and resolved.
  - Reviewed management fee accruals for reasonableness by comparing to written contact terms or consultant statements.

This audit was planned and performed to obtain sufficient, appropriate evidence to provide a reasonable basis for the findings and conclusions. Internal Audit believes the evidence obtained provides a reasonable basis for the findings and recommendations.

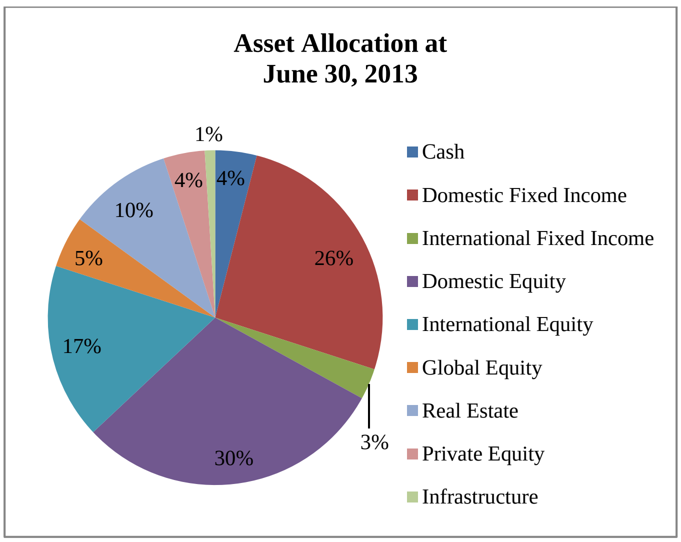
Internal Audit would like to thank SDCERS’ management and staff for their cooperation with the performance of this audit.

INTRODUCTION

Background

SDCERS investment portfolio at June 30, 2013, the most recently audited financial statements, was valued at $6 billion. SDCERS' investments are managed by 45 outside investment managers, which are held in SDCERS' name at State Street Bank and Trust Company (State Street). State Street provides accounting services for the portfolio and maintains separate funds for each investment manager. Investment managers have discretion to direct and manage the investment and reinvestment of assets allocated to their accounts in accordance with specific investment guidelines in their contracts. The investment managers are overseen by SDCERS' Investment Division, which is made up of a Chief Investment Officer, a Senior Investment Officer and two Investment Officers.

On a monthly basis, State Street provides SDCERS a monthly reporting of the investment activities implemented by the investment managers. The monthly reporting includes a composite report that compiles the 45 individual fund working trial balances. The working trail balances and composite report show all investment activity such as cost, receivables, payables, unrealized gains/losses, dividend income, interest income, and expenses. The working trial balances are provided to SDCERS in printed binders and are also available for download on a secured web portal. The Finance and Administration Division download the State Street data into an excel document to record and reconcile the monthly activity.



Asset Classification	Amount (in thousands)
Cash & Cash Equivalents on Deposit with Custodial Bank and Fiscal Agents	$ 235,305
Domestic Fixed Income Securities	1,552,205
International Fixed Income Securities	166,714
Domestic Equity Securities	1,839,561
International Equity Securities	1,052,717
Global Equity Securities	301,122
Real Estate	572,682
Private Equity	258,176
Infrastructure	37,100
Total	$ 6,015,582

Source SDCERS' June 30, 2013 CAFR

Priority Rating Process

To assist management in its evaluation, the findings have been assigned a qualitative assessment of the need for corrective action. Each item is assessed a high, medium, or low priority as follows:

High - Represents a finding requiring immediate action by management to mitigate risks associated with the process being audited.

Medium - Represents a finding requiring timely action by management to mitigate risks associated with the process being audited.

Low - Represents a finding for corrective action by management to mitigate risks with the process being audited.

AUDIT RESULTS

Based on a review of the investment accounting and reconciliation documents for the audit period, and detailed testing of two sample months, control strengths were identified, as well as issues that should be addressed to further strengthen controls.

Control Strengths Identified

Listed below are the control strengths identified:

- Investment reconciliations were mathematically accurate.
- The adjusted investment balance agreed with the adjusted book balance per the reconciliation.
- The book balance per the investment reconciliation matched the general ledger.
- Staff identified appropriate adjustments to be made and adjusting entries were properly recorded in the general ledger.
- All investment accounts in the general ledger were identified by the investment reconciliation.
- Monthly investment manager fee accruals were reasonable.
- Adequate supporting documentation was maintained.

Below are issues that were identified that should be addressed to further strengthen internal controls over the investment accounting and reconciliation processes. It should be noted that management was already aware of, and actively working on, some of these issues identified.

Finding #1: Investment reconciliations had not been completed in a timely manner during the audit period.
Priority Rating: High

Due to staff turnover in the Finance and Administration Division, the investment reconciliations had not been completed in a timely manner during the audit period. The number of days after month end to complete the investment reconciliation diminished from a maximum of 328 days to 46 days. Management was aware of this issue and is working to bring the reconciliations up to date. As of February 3, 2014, the investment reconciliation for the month of December 31, 2013 was completed January 24, 2014.

Timely investment reconciliations are a key control to facilitate faster identification of errors in the subsidiary ledger or postings to the general ledger. Because the investment reconciliations were not completed prior to preparing the unaudited financial statements provided to the Board of Administration, the accuracy of the investment balances reported was affected. For example, the February 2013 balance per the investment reconciliation (rounded) was $5,755,569,000, and the investment balance per the financial statements, as originally presented to the Board, was $5,755,540,000, which is a difference of $29,000. The difference was made up of the following items:

Asset Classification	Balance Per Investment Reconciliation (rounded)	Balance Per Unaudited Financial Statements	Variance
Cash and Cash Equivalents on Deposit with Custodial Bank	$ 318,408,000	$ 318,499,000	$ (91,000)
Investment Income Receivable	12,407,000	12,307,000	100,000
Securities Sold	44,879,000	44,858,000	21,000
Domestic Fixed Income Securities	1,492,450,000	1,491,022,000	1,428,000
Securities Purchased	(167,489,000)	(166,060,000)	(1,429,000)
Total	$ 1,700,655,000	$ 1,700,626,000	$ 29,000

Investment reconciliations should be completed within 30 days after the month end date and prior to completing the unaudited financial statement so timely adjusting entries can be made and the investment balances reported to the Board will be as accurate as possible.

Recommendation #1: Internal Audit believes management has taken adequate steps to address the issue identified above. It is recommended that SDCERS' management implement procedures to continually reconcile within 30 days of the month end date to avoid any further discrepancies.

Finding #2: Unrealized gains/losses were not based on asset classifications for financial reporting.
Priority Rating: Low

Investment managers have discretion to direct and manage the investment and reinvestment of assets allocated to their accounts in accordance with specific investment guidelines in their contracts (for example domestic fixed income, international fixed income, or real estate). Finance and Administration categorize investments into the major categories of assets held (for example cash and cash equivalents, receivables, equity and debt securities, and real estate). Unrealized gains/losses were allocated based on the investment guidelines in the investment manager's contract and not based on the actual investment holdings by asset classifications for financial reporting. This caused the fair market value of investments by major categories at the end of the reporting period to be misallocated for the months randomly selected. However, in total the allocation did not result in a misstatement. For example, for the month of February 2013 this resulted in the following:

Asset Classification	Balance Per Investment Reconciliation	Fair Market Value per State Street Statements	Overstated/ (Understated)
Cash and Cash Equivalents on Deposit with Custodial Bank	$ 318,407,823	$ 318,348,011	$ 59,812
Investment Income Receivable	12,407,237	12,377,890	29,347
Domestic Fixed Income Securities	1,492,450,090	1,492,449,526	564
International Fixed Income Securities	179,030,769	179,013,978	16,791
International Equity Securities	1,071,665,039	1,071,765,886	(100,847)
Global Equities	299,771,654	299,776,074	(4,420)
Real Estate	562,553,852	562,553,788	64
Securities Purchased	(167,488,689)	(167,487,378)	(1,311)
Total	$ 3,768,797,775	$3,768,797,775	$ -

Recommendation #2: The investment reconciliation process should be modified to include monitoring or accounting for the allocation of unrealized gains/losses based on asset classifications for financial reporting depending on the level of staff resources necessary and dollar amounts involved.

Finding #3: Securities lending collateral that was invested in the external investment pool was not being marked to market.
Priority Rating: Low

SDCERS has entered into an agreement with State Street to lend domestic equity, international equity and fixed income securities to broker-dealers and banks in exchange for pledged collateral that will be returned for the same securities plus a fee in the future. State Street manages SDCERS' securities lending program and receives cash and/or securities as collateral. Cash collateral received is reinvested into an investment pool. The investment pool fair market value may differ from the cost value. Securities lending collateral that was invested in the external investment pool was not being marked to market as of the end of the reporting period for February 2013. This affected the accuracy of securities lending collateral on the unaudited financial statements.

For the month of February 2013, the securities lending collateral book balance was $245,131,352, the fair market value of the securities lending collateral was $246,350,955, and the securities lending collateral balance per the unaudited financial statements was $246,868,000. The difference between the book balance and the fair market value of securities lending collateral was $1,219,603 and the difference between the fair market value and the unaudited financial statements was $1,736,648.

Management was aware of this situation and since May 2013 has been adjusting the securities lending collateral to fair market value each month.

Recommendation #3: Not Applicable - Internal Audit believes management has taken adequate steps to address the issue identified above. Because management has taken corrective action, no response from management is deemed necessary.

Finding #4: There are no consistent procedures for the preparer to initial and date the investment reconciliation when completed and there was no documentation the investment reconciliation had been reviewed.
Priority Rating: Medium

The investment reconciliation schedules for the audit period were examined to determine if the reconciliations include the date the investment reconciliation was completed, the name of the preparer, and if it was signed and dated by the supervisor or another appropriate individual indicating it had been properly reviewed and approved. Based on this review, it was found that there are no consistent procedures for the preparer to initial and date the investment reconciliation when it is completed, and none of the reconciliation schedules showed proof that they had been reviewed and approved by a supervisor or another appropriate individual. Management should consider establishing procedures for the preparer to initial and date the investment reconciliation when it is completed, and the reconciliation to be reviewed and approved by a supervisor or another appropriate individual, indicated by the individual's initials and date reviewed.

Recommendation #4: Investment reconciliation procedures should be modified to specify the preparer, date prepared and review procedures to require a sign off by the supervisor or another appropriate individual (initials and date) indicating the reconciliation has been reviewed and approved.

Finding #5: The written investment reconciliation procedures should be updated to include specific elements needed to strengthen internal controls, and accounting staff should follow those procedures.
Priority Rating: Medium

SDCERS' current written investment reconciliation procedures were reviewed to determine if they are adequate and include necessary elements for strong internal controls. Based on this review, the written procedures should be updated and specify the following:

- A requirement for accounting staff to reconcile the investment balances per investment statements to the general ledger.
- A timeline for when the monthly reconciliation must be completed by (i.e. within 30 days of month end), and require sign off and date of completion by the preparer.
- Supervisory review procedures requiring a sign off by the supervisor or another appropriate individual (initials and date) indicating the reconciliation has been reviewed and approved.
- How the investment reconciliation and related support should be documented each month (i.e. retaining copies of the general ledger showing the ending investment book balance, State Street working trial balance ending balance, backup retained for adjustments, etc.).
- A requirement for accounting staff to research and identify the source of existing out of balance variances found during the investment reconciliation, and to make the appropriate journal entries within a specified period of time.
- A requirement that the investment reconciliation tie to the monthly financial statements.
- The correct accounting treatment for valuing investments.
- Calculation and recording of investment management fees.
- The process of reconciling investment managers' records to the custodial bank.

Internal controls will be strengthened by specifying these requirements in written procedures for the investment reconciliation process and requiring accounting staff to follow them.

Recommendation #5: The written investment reconciliation procedures should be updated to include the specific elements identified in Finding #5, and accounting staff should follow these procedures.

Finding #6: The investment related accounts are not reconciled to the investment managers' records on a monthly or quarterly basis.
Priority Rating: Medium

Monthly reconciliations between the external investment managers' and State Street were not performed for the period from July 2012 through March 2013. In April 2013, a template was given to all investment managers for which State Street acts as the custodian. The template included columns for security description, quantity, and price. The templates are completed by the investment manager and are delivered to both State Street and SDCERS on a monthly basis. State Street uses the template to identify quantity and valuation differences, by holding, between State Street's investment records to the investment managers' records over a determined threshold. SDCERS is not monitoring the investment reconciliation process performed by State Street.

At August 31, 2013 there were 45 funds with investment balances. Of those funds 17 are Real Estate/Private Equity/Infrastructure which are valued on a quarterly basis and do not report holdings on the template. There is 1 cash account and 8 funds with terminated investment managers for which no template is completed. There are 9 comingled funds for which State Street uploads the net asset values monthly and no template is completed. The comingled fund valuations are available to SDCERS on a monthly basis. The remaining 10 separate funds have been instructed to submit the template to State Street where the quantity and price per the investment managers' and State Street's records are compared.

Of the 10 separate funds, 7 were received by SDCERS' staff. There was no indication of any review by SDCERS' staff. This is not to say it was not happening, just that there was no formal indication of review.

During August 2013, there was an incident of an investment manager template only providing the total net asset value and did not provide a detailed breakout by holding. There were also two incidents where investment managers had various differences, on a per holding basis, between the investment managers' recorded balance and State Street's recorded balance that exceed the threshold and no explanations were provided. In total the variances were less than the threshold established.

During the course of the audit, the Investment Division discovered and reported to Internal Audit an error in State Street's trial balance reports. This error affected the measuring of the investment portfolio performance and the recording of investment balances. State Street improperly valued two comingled funds as of November 30, 2013 based on a December 2, 2013 valuation rather than November 30, 2013. The date of valuation error caused SDCERS reported investment balance to be understated by $1,781,338. This was discovered by SDCERS' Investment Division in January 2014 when performing a reconciliation of investment manager fees.

Recommendation #6: Investment managers' records should be reconciled to the custodial bank records on a monthly basis except for real estate, private equity and infrastructure which should be done quarterly. To segregate duties, reconciliations between investment managers' records and the custodial bank should be performed outside of the Investment Division. Separate fund investment managers' reports reconciled by State Street should be monitored by SDCERS' staff to ensure the reconciliations meet established criteria.

DATE: April 14, 2014

TO: Lee Parravano, Internal Auditor

FROM: Ted Lasalvia, Controller

SUBJECT: Management's Response to the March 2014 Investment Accounting and Reconciliation Audit Recommendations

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Recommendation 1:
Internal Audit believes management has taken adequate steps to address the issue identified in Finding #1. It is recommended that SDCERS' management implement procedures to continually reconcile within 30 days of the month end date to avoid any further discrepancies.

Management's Response: Agree

The State Street Bank investment activity details for the reconciliation period are normally received within 10 business days after the close of the period. The investment activity is first recorded for the period and then reconciled to the General Ledger. As noted by Internal Audit, this reconciliation process is now deemed current. Estimated Completion Date: Completed

Recommendation 2:
The investment reconciliation process should be modified to include monitoring or accounting for the allocation of unrealized gains/losses based on asset classifications for financial reporting depending on the level of staff resources necessary and dollar amounts involved.

Management's Response: Agree

Finance has implemented a process to monitor the unrealized gains/losses associated with cash and other investment receivables and payables. The allocation variances noted in the audit did not result in an overall variance, but represent immaterial reclassifications among asset classifications that collectively offset each other. Immaterial and offsetting variances among the various asset classes may not be adjusted on interim financial statements, but will be adjusted for year-end reporting. Estimated Completion Date: June 30, 2014

Recommendation 3:
Not Applicable - Internal Audit believes management has taken adequate steps to address the issue identified above. Because management has taken corrective action, no response from management is deemed necessary.

Management's Response: Agree

Finance obtains a monthly report from State Street Bank to correctly value the Security Lending Collateral. This corrective action was completed by Finance in May 2013.

Recommendation 4:
Investment reconciliation procedures should be modified to specify the preparer, date prepared and review procedures to require a sign off by the supervisor or another appropriate individual (initials and date) indicating the reconciliation has been reviewed and approved.

Management's Response: Agree

Finance will modify the Investment process to provide consistent evidence of the review and approval of the reconciliation. Estimated Completion Date: May 31, 2014

Recommendation 5:
The written investment reconciliation procedures should be updated to include the specific elements identified in Finding #5, and accounting staff should follow these procedures.

Management's Response: Agree

Finance will update the investment reconciliation procedures with the identified elements. Estimated Completion Date: July 31, 2014

Recommendation 6:
Investment managers' records should be reconciled to the custodial bank records on a monthly basis except for real estate, private equity and infrastructure which should be done quarterly. To segregate duties, reconciliations between investment managers' records and the custodial bank should be performed outside of the Investment Division. Separate fund investment managers' reports reconciled by State Street should be monitored by SDCERS' staff to ensure the reconciliations meet established criteria.

Management's Response: Agree

Out of 45 funds reviewed during the audit, this recommendation pertains to 10 separate funds using a reporting template in their communications with State Street Bank (SSB) and nine comingled funds which do not use a reporting template. Per discussion with SDCERS Internal Audit, variances were noted between the templates submitted to SSB and the valuation procedures performed by SSB. In addition, two fair value variances were noted for comingled funds due to the use of an incorrect valuation date.

This finding and associated recommendations will require Finance to review work performed by SSB with respect to template valuations for the 10 separate funds. Finance will create a process for the review of templates against SSB valuation procedures and any significant variance will be communicated to SSB for corrective action. For the nine comingled funds, Finance will create a valuation review process to compare fair values reported by SSB to fair values reported by the respective funds. Estimated Completion Date: August 31, 2014