The Auditor of the City and County of Denver is independently elected by the citizens of Denver. He is responsible for examining and evaluating the operations of City agencies for the purpose of ensuring the proper and efficient use of City resources and providing other audit services and information to City Council, the Mayor and the public to improve all aspects of Denver’s government. He also chairs the City’s Audit Committee and oversees the City’s Comprehensive Annual Financial Report (CAFR).

The Audit Committee is chaired by the Auditor and consists of seven members. The Audit Committee assists the Auditor in his oversight responsibilities of the integrity of the City’s finances and operations, including the integrity of the City’s financial statements. The Audit Committee is structured in a manner that ensures the independent oversight of City operations, thereby enhancing citizen confidence and avoiding any appearance of a conflict of interest.

Audit Committee

Dennis Gallagher, Chair          Robert Bishop
Maurice Goodgaine               Robert Haddock
Jeffrey Hart                    Bonney Lopez
Timothy O’Brien

Audit Staff

John Carlson, Deputy Director, CIA
Heather Darlington, Internal Audit Supervisor, CPA
Kristin Donald, Lead Internal Auditor
Rebecca Corral, Senior Internal Auditor, CFE
Travis Henline, Senior Internal Auditor

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(720) 913-5000 • Fax (720) 913-5026

Or view an electronic copy by visiting our website at:

www.denvergov.org/auditor
November 18, 2010

Dear Mr. Hutt:

Attached is the Auditor’s Office Audit Services Division’s report of their audit of the Denver Employees Retirement Plan (DERP) for the audit period January 2009 through July 2010. The purpose of the audit was to assess the internal control structure, accounting practices, and funded status of the Plan. The proper management and custodial duties surrounding our employees retirement savings is an important responsibility. I want to ensure that your office understands just how important this mission is. Our co-workers are counting on you to make wise decisions and having a strong system of internal controls will facilitate a sound decision making process.

Our audit identified reportable conditions, which are fully described in the accompanying report. Controls over investments were in place however, there are several areas for improvement in accounting practices, information system controls, and Advisory Committee roles.

If you have any questions, please call Kip Memmott, Director of Audit Services, at 720-913-5029.

Sincerely,

Dennis J. Gallagher
Auditor

cc:
Honorable John Hickenlooper, Mayor
Honorable Members of City Council
Members of Audit Committee
Members of DERP Retirement Board
Ms. Roxane White, Chief of Staff
Mr. Claude Pumilia, Chief Financial Officer
Mr. David Fine, City Attorney
Mr. L. Michael Henry, Staff Director, Board of Ethics

To promote open, accountable, efficient and effective government by performing impartial reviews and other audit services that provide objective and useful information to improve decision making by management and the people.

We will monitor and report on recommendations and progress towards their implementation.
To promote open, accountable, efficient and effective government by performing impartial reviews and other audit services that provide objective and useful information to improve decision making by management and the people.

We will monitor and report on recommendations and progress towards their implementation.
AUDITOR’S REPORT

We have completed an audit of the Denver Employees Retirement Plan (DERP) for the period January 2009 through July 2010. The purpose of the audit was to examine and assess DERP’s internal control environment, organizational structure, and compliance with legal requirements.

This performance audit is authorized pursuant to the City and County of Denver Charter, Article V, Part 2, Section 1, General Powers and Duties of Auditor, and was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Based on our audit work, we determined controls over monitoring investments were adequate. However, audit work determined significant internal control weaknesses related to segregation of duties over accounting processes and information technology systems. In addition, a review of the Advisory Committee function revealed a lack of participation in Board meetings and little Plan member interest.

We extend our appreciation to DERP and personnel who assisted and cooperated with us during the audit.

Audit Services Division

Kip Memmott, MA, CGAP, CICA
Director of Audit Services
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EXECUTIVE SUMMARY

Certain Accounting Processes Lack Key Internal Controls Necessary to Mitigate Risk

The Denver Employee Retirement Plan’s (DERP) accounting section accounts for investments, benefits and administrative accounting. DERP’s accounting system of record is AccPac. Audit work revealed DERP does not have documented policies and procedures for this system. We noted several internal control issues related to review processes and controls over the accounting functions. We recommend DERP create policies and procedures for accounting processes and reduce the use of multiple Excel spreadsheets in order to mitigate risk of errors and fraudulent transactions.

Information Technology System Controls are Insufficient to Protect Data

DERP lacks documented IT policies and has not effectively managed its IT system controls. The audit found DERP’s information system controls lack key processes and documentation. Specifically, we noted DERP did not address the external auditor’s Management Letter findings concerning information technology controls within AccPac, employee access profiles are not appropriately assigned based on job duties, and that the City transmits unencrypted personally identifiable information to DERP. We recommend DERP create IT policies and procedures that include documented access type, segregation of duties, and a disaster recovery plan. We also recommend DERP require the City’s Career Service Authority Department of Compensation and Benefits to encrypt payroll files and implement accounting system controls.

The Advisory Committee is not Functioning as Intended

The Advisory Committee is a non-voting committee acting as a liaison between Plan members and the Board. However, there is a clear lack of interface between members and the Committee as evidenced by poor voting numbers. We also observed a lack of interaction with the Board at meetings we attended. Additionally, benchmarking shows that having an Advisory Committee is not a common practice. The Advisory Committee’s role needs to be examined for relevance and whether duties and responsibilities are being carried out effectively to represent plan members.
INTRODUCTION & BACKGROUND

The Denver Employee Retirement Plan (DERP) is a defined benefit plan (Plan) that was established on January 1, 1963.¹ A defined benefit plan is a pension plan in which the employer promises the employee a certain monthly retirement benefit based on the employee’s salary, years of service, and retirement age. Defined benefit plans differ from private sector 401(k) plans in which employees contribute untaxed wages in an account to be invested. The Plan also differs from the optional benefit the City offers through its 457(b) plan. 457s are public sector benefit programs that are administered in a similar fashion as 401(k) plans. The Plan is available to most City and County of Denver employees, some Denver Health and Hospital Authority (DHHA) employees, and members of the DERP staff. All active Plan members are required to contribute to social security while enrolled in the plan in addition to their bi-weekly DERP contributions.

Funded Status and Asset Allocation

A leading indicator for a public pension plans performance is funded status which identifies the provider’s ability to meet commitments it has set forth to the plan members. Based on the actuarial valuation performed for the year ended December 31, 2009, the Plan has a funded ratio of 88.4%, meaning for every dollar of the pension benefits due to participants, the Plan holds approximately $0.88 in actuarial assets available for payment to members. The Plan’s funded status compares favorably to other public sector municipalities reviewed.² The Plan is in a better financial position than other public pension plans for many reasons. Specifically, the Plan has not had a cost of living adjustment in several years. DERP’s portion of health benefits offered to members are not subject to increases in premiums, employees are not able to purchase years of service at a discounted cost, and “the contribution rate has been actuarially determined by an independent actuary to be sufficient to accumulate assets necessary to pay the actuarial liability when due.”³ These controls make the Plan less susceptible to changes in the market when compared to other public pension plans.

Summit Strategies Group compiles a comprehensive Quarterly Report on behalf of the DERP. The Quarterly Report consists of a general overview of the economic and capital market highlights and a detailed review of the following: total fund review, a review of US Equities, International Equities, Fixed Income, Real Estate, and Alternative investments.

² See Appendix A for the list of benchmarked public pension plans and their associated funded status.
(See Appendix B for asset allocation versus target for June 30, 2009 through June 30, 2010).

Each pension plan must invest contributions based on a number of factors, which include risk, rate of return needed, and the promises that have been made to retirees and current members. We compared DERP’s asset allocation to other public pension funds and determined that DERP is either above (over weight) or below (under weight) the median in every instance excluding Alternative Investments. More importantly, DERP’s asset allocation falls within the established ranges set by the Board to meet those promises (See Appendix C for a summary of DERP’s asset allocation compared to other public pension plan benchmarks identified by DERP).

Plan Structure

A five member Board, each appointed by the Mayor for six-year terms, governs DERP. DERP also is comprised of a three person non-voting advisory committee. Each advisory committee member is elected by Plan membership for three-year terms and acts as a liaison between the Board and Plan members. DERP’s Executive Director is hired by the Board and is responsible for administering the Plan, the annual audit of financial statements, and the annual actuarial valuation.

The Plan funds retirement benefits three ways, employer contributions, employee contributions, and through income gained through financial investments. Contributions to the Plan are made on a bi-weekly basis through a pre-tax payroll deduction. Currently, the City contributes 8.5% of each eligible employee’s gross salary while employees’ contribute 4.5% of gross salary. Beginning January 1, 2011, the percentages will be increasing to 9.5% and 5.5%, respectively. This increase, both to City and employee contributions, was a result of the most recent actuarial valuation and was deemed necessary by DERP to meet the promises made to both retired and active vested members of the Plan. Proposed changes to the Plan can be found in the Table 1 on page 6 of the report.

For active members employed by the City and County of Denver or DHHA prior to September 1, 2004, the lifetime monthly retirement benefit calculation is two percent of the employee’s average monthly salary (AMS) (based on the highest 36 consecutive months’ salary that the member earns from the employer) times years of credited service. For members who were hired or re-hired on or after September 1, 2004, the retirement benefit is based on one and one half percent of the average monthly salary times years of credited service.

**Example:** The member was hired prior to September 1, 2004, is sixty-five, has worked for the City for twenty-five years, and has an average monthly salary of $4000.

**Calculation:** $4,000 x .02 = $80 x 25 years = $2,000 monthly benefit

---

4 See Appendix D for the DERP organizational structure.  
Members of the Plan that begin service with the City prior to December 31, 2010 vest after five years of service and become eligible to receive benefits upon retirement. Employees that terminate prior to vesting have the option to receive reimbursement of their personal contributions, plus three percent interest. Alternatively, employees can opt to leave their contributions in the fund and earn three percent interest annually, or may have their contributions rolled over into a qualified retirement account. For individuals that have terminated employment but not reached retirement age, funds will remain in the fund.

The Plan allows for five types of retirement: normal retirement at or after age sixty-five, normal retirement rule of seventy-five, early retirement, deferred retirement, and disability retirement.

**Normal retirement at or after age sixty-five:** Normal retirement becomes effective the first day of any month after the employee reaches age sixty-five, terminates employment with the employer, and completes an application. There are no minimum service requirements for this benefit.

**Normal retirement rule of seventy-five:** The rule of seventy-five retirement enables a member to retire as early as age fifty-five, without a benefit reduction, provided the combined years and months of credited service and age at termination equal or exceed the sum of seventy-five.6

**Early retirement:** A member may retire early upon reaching the age of fifty-five with a minimum of five years credited service. The early retirement benefit is determined in accordance with a calculation based on credited service to the early retirement date and reduced by three percent per year for each year under age sixty-five. For example, at age fifty-five there would be a thirty percent reduction in the retirement benefit.

**Deferred retirement:** A vested member who has terminated employment with the employer may elect to begin receiving a benefit upon reaching age fifty-five or older. Calculation of a deferred benefit is based on the formula at the time of the member’s termination of employment, and the member’s age at the time of application. If a member should die prior to receiving a monthly-deferred retirement benefit, the spouse or, if not married, children under twenty-one, may be eligible for a benefit.7

**Disability Retirement:** Disability retirement is designed for the member with a permanent disability. For either an on or off-the-job disability, the benefit is payable for life, provided the member continues to meet eligibility requirements. This benefit becomes effective the first day of the month after the member terminates employment with the employer because of the disability. The member

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7 Ibid, page 5.
must apply in writing within ninety days of termination and complete the application requirements within three years.\textsuperscript{8}

**DERP Administration**

The Board is kept appraised of DERP investment and financial management by the Executive Director. The Board receives two monthly reports prepared by accounting and investment staff. The first report is the Staff Financial Report, which contains the following financial statements: Change in Plan Net Assets, Statement of Plan Assets, Comparison of Budget to Actual Expenditures and a listing of operating and investment management payments. The second report is the Staff Investment Report which contains information about performance of the different investment managers, funding activity and asset allocation.

DERP annually mails information to employees regarding their defined benefit. In addition, DERP staff conducts “brown bag lunches” throughout the year during work hours at City and DHHA facilities. The “brown bag lunches” provide Plan members an opportunity to ask questions regarding their personal circumstances and allow DERP staff to provide members with general information regarding the Plan. Additional Plan information is available on the DERP website. Plan members can also schedule appointments with DERP membership services representatives for specific information on a variety of topics.

Administrative costs for the Plan are comprised of operating and investment management. Denver Revised Municipal Code (D.R.M.C.) §18-403(e)(1) restricts the amounts for operating and investment management costs. Specifically, one-quarter of one percent of the average market value is allowed for investment management expenses while one-eighth is allowed for administrative expenses. Costs in 2009 were budgeted and kept well below these limits and 2010’s budget was set at a fraction of the estimated limit. Investment management costs per the D.R.M.C. limits for 2010 were $17 million and DERP budgeted at $8.9 million or fifty-two percent of the allowed amount. DERP budgeted $3 million or thirty-five percent of the allowed amount for administrative costs while the 2010 limit was $8.5 million. For 2009, DERP was in line with the benchmarked cities’ administrative costs for pension plans. DERP has matched several of the City’s cost cutting efforts by not giving employee raises and requiring furlough days.

\textsuperscript{8} Ibid, page 9.
Potential Changes to the Plan for Employees Hired After 2011

The Plan’s benefit provisions have not been reviewed for potential adjustments since 2004. However, The Plan has been subject to losses in the securities market which primarily occurred in 2008. As a result, several changes to The Plan’s benefit provisions, based on actuarial factors, have been approved by the DERP Board. These potential changes were presented to City Council on November 3, 2010. The proposed changes are highlighted in Table 1:

<table>
<thead>
<tr>
<th>Benefit Provision</th>
<th>Current</th>
<th>Recommendation</th>
<th>Historical Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vesting</td>
<td>5 years</td>
<td>7 years</td>
<td>Before 1987, 10-year vesting. Since 1987, 5-year vesting</td>
</tr>
<tr>
<td>Highest Average Salary Calculation</td>
<td>3 years</td>
<td>5 years</td>
<td>Moved HAS from 5 years to 3 years 1/1/1992</td>
</tr>
<tr>
<td>Normal Retirement “Rule of . . .”</td>
<td>Rule of 75</td>
<td>Rule of 85</td>
<td>Rule of 75 established 1/1/1988, from Rule of 88</td>
</tr>
<tr>
<td>Early Retirement Age</td>
<td>55</td>
<td>60</td>
<td>Was 60 until 1975 then came down to 55</td>
</tr>
<tr>
<td>Early Retirement Reduction Factors</td>
<td>3% annually, 55 - 65</td>
<td>6% annually, 60 - 65</td>
<td>“progressive reduction table”</td>
</tr>
<tr>
<td>Social Security Make-up</td>
<td>Available</td>
<td>Eliminate</td>
<td>Added 1/1/1996</td>
</tr>
<tr>
<td>Full Vesting at age 65 Regardless of Service</td>
<td>Available</td>
<td>Eliminate</td>
<td>Added 1/1/1988</td>
</tr>
</tbody>
</table>

*Source: Presentation made by the Actuary and DERP’s Finance and Compliance Officer to the DERP board on September 17, 2010.*
SCOPE

The performance audit of DERP was for the period from January 2009 through July 2010. The scope of the engagement focused on assessing the Plan’s internal control environment and organizational structure to identify possible inefficiencies and opportunities for improvement.

OBJECTIVE

The objective of our audit was to assess DERP’s internal control structure and accounting practices, organizational structure, and a review of plan performance. We also examined DERP’s compliance with legal requirements.

METHODOLOGY

We utilized several methodologies to achieve the audit objectives. These evidence gathering techniques include, but were not limited to:

- Reviewing related sections of Denver Revised Municipal Code and other legal requirements;
- Reviewing DERP’s investment policy;
- Reviewing internal policies and procedures;
- Evaluating the Plan’s organizational and oversight approach;
- Interviews with DERP staff, Board members, and Advisory Committee members;
- Reviewing investment manager contracts;
- Benchmarking DERP’s performance to other pension plans; and
- Analyzing investment portfolios, related accounting procedures, and reconciliations.
FINDING 1

Certain Accounting Processes Lack Key Internal Controls Necessary to Mitigate Risk

The Denver Employee Retirement Plan’s (DERP) accounting section accounts for investments, benefits and administrative accounting. DERP’s accounting system of record is AccPac. Audit work revealed DERP does not have documented policies and procedures for this system. We noted several internal control issues related to review processes and controls for accounting functions.9

DERP relies heavily on the use of Excel spreadsheets for accounting processes. Specifically, we noted DERP uses approximately two dozen spreadsheets for the accounting process. The use of spreadsheets for financial reporting increases the risk that fraud, abuse, and errors could go undetected. DERP uses Excel spreadsheets to monitor monthly and quarterly financial reporting. Although Excel spreadsheets can aid in accounting efforts, “they are ripe ground for errors and fraud for a number of reasons, including deficiencies in error control and lack of proper document security among others.”10

It is important that management identify where control breakdowns could lead to potential material misstatements and that controls for significant spreadsheets be documented, evaluated and tested ... management should evaluate whether it is possible to implement adequate controls over significant spreadsheets to sufficiently mitigate risk or if spreadsheets related with a more formalized information technology control environment.11

DERP creates journal entries in AccPac using information contained on the Excel spreadsheets. Management performs reviews of the information contained in the spreadsheets prior to posting journal entries. Although auditors found evidence of a review after the journal entries were posted, we were unable to determine if management conducted this review because no signatures were present on the trial balance.

Audit work noted other review process issues related to bank reconciliations, benefits accounting, and the Monthly Staff Financial Report. Specifically, we noted the bank reconciliation process does not involve reconciling to the accounting system’s cash

9 See Appendix E for the accounting process flow that shows weaknesses identified.
balance, but rather to various spreadsheets. Additionally, audit work determined management did not perform a review of the bank reconciliations. Also of concern, the DERP Accounting Supervisor was unable to describe the benefits accounting process to auditors. Further, interviews with staff revealed the Director does review the activation of retiree benefits, but all other benefit processes are performed without management review.

Finally, the accounting section prepares the Monthly Staff Financial Report and provides it to the Board monthly. The information in the Monthly Staff Report is tracked in Excel spreadsheets and is updated continuously with no quarterly or month-end close. However, the lack of a month-end close is due to timing issues in the delivery of finalized investment information to DERP. The Monthly Staff Financial Report is reviewed for accuracy and completeness by DERP management. However, there is no documentation of the review process. The Board gets minimal updates on changes to the financials in the next report and is not apprised of all the changes.

Process issues at DERP can be attributed to the lack of documentation for all accounting processes. If turnover occurs in the accounting section, key process knowledge will be lost. In addition, the use of spreadsheets to update the accounting system results in control failures. Accounting procedures should be documented and include controls related to accounting system use.
RECOMMENDATIONS

1.1 DERP should create policies and procedures for accounting operational processes and ensure that proper review of accounting functions and activities are in place and occurring. All reconciliation processes should include management date and sign-off.

1.2 DERP should use its accounting system to record and track financial information as an alternative to multiple Excel spreadsheets to mitigate risk of errors and fraudulent transactions.

1.3 DERP should enhance the accounting system to include additional controls such as an audit trail and edit and approval segregation. If the current system does not have this capability, DERP should identify and evaluate compensating controls.
FINDING 2

Information Technology System Controls are Insufficient to Protect Data

DERP lacks documented IT policies and has not effectively managed its IT systems controls. The audit found DERP’s information system control environment lacks key controls and documentation. Specifically, we noted DERP did not address the external auditor’s Management Letter findings related to segregation of duties and disaster recovery, employee access profiles are not appropriately assigned based on job duties, and we determined the City’s Career Service Authority Department of Compensation and Benefits transmits unencrypted personally identifiable information to DERP.

Not All Management Letter Deficiencies Have Been Addressed

The 2009 external financial audit Management Letter noted a deficiency with accounting system access controls. Specifically, the letter stated employee profile access violated segregation of duties and recommended DERP review access privileges on a regular basis. Although the access was reviewed and documented, a proper segregation of duties was not implemented. Administrator access, which entails access to all accounting modules, is currently granted to the Staff Accountant whose job duties include posting most journal entries and issuing checks which creates risk of fraud and violates segregation of duties.\(^\text{12}\) The Staff Accountant should only have edit capabilities for entries and approval access for entries entered by the Accounting Clerk. The Accounting Manager who prepares the financial statements also has administrative access to the accounting system. The preparer of the financial statements should only have approval and read-only access. In addition, the system does not log which user made edits in the system.

Access to the accounting system should be given to individuals based on job duties and titles. System access should be utilized to ensure separation of duties. DERP accounting personnel should not have administrative rights. Best practices, such as the Federal Information Security Management Act (FISMA), recommend ensuring that policies and procedures are up-to-date and that access controls are in place to enforce segregation of duties and to mitigate the risk of fraud and misstatement of financial information.

The external financial audit Management Letter also noted DERP should have a documented disaster recovery plan. DERP responded it would develop one but, as of September 14, 2010, the plan is still in progress and not complete. Best practices documented by FISMA; recommend a documented disaster recovery plan. In the event

\(^{12}\) See Appendix E for a depiction of the DERP’s accounting process.
of a disaster, recovery of information and continuing operations may be delayed. Without a documented disaster recovery plan, there is risk of loss of information; both financial and personal.

Payroll Transmission from the City is Unsecured

The City’s Career Service Authority Department of Compensation and Benefits transmits unencrypted payroll files containing personally identifiable information to DERP on a bi-weekly basis. As a result, members’ personally identifiable information is at risk of being intercepted by an unauthorized party and used for illicit purposes. The City has an "Enterprise File Transfer" (EFT) system which allows files to be encrypted and uploaded to a secure location. Once the file is uploaded, the EFT system will send an email to the intended recipient with a link and password enabling them to retrieve the files. However, DERP does not require benefit’s to use the application.
RECOMMENDATIONS

2.1 DERP should create IT policies and controls, document them, and include controls:
   a. Based on each employee's job title and responsibilities, with specialized levels of access dependant of job duties.
   b. Ensure policies have adequate IT controls to ensure segregation of duties and proper management oversight.

2.2 DERP should develop and implement an IT disaster recovery plan.

2.3 DERP should request the City’s benefits department to immediately begin using the EFT application to secure payroll information transmitted to DERP through email.
FINDING 3

The Advisory Committee is not Functioning as Intended

The Advisory Committee is a non-voting committee comprised of three members; one retired employee, one current employee, and one either currently employed or retired. The Advisory Committee was formed to act as a liaison between Plan members and the DERP Board with the responsibility to present suggestions and questions that are in the best interest of the membership. However, we determined the Committee is not functioning as intended due to, a low rate of membership voting, and a lack of promotion of the Committee functions to Plan members. We also observed a lack of interaction with the Board at meetings we attended.

Specifically, we observed a lack of Committee interface with the Board during meetings we attended. We also noted a clear lack of interface between Plan members and the Committee as evidenced by election results in 2009 and 2010. In 2009, only 700 Plan members out of 8,614 active and 7,416 retired (4.4%) voted. In 2010, a Committee member ran uncontested for the first time in DERP history.

In addition, Committee member contact information is not published on DERP’s website. The lack of published contact information does not promote the Committee or give members a way of contacting them. Committee members rarely attend the brown bag lunch sessions, which could be another avenue for increasing their visibility to employees.

In our benchmarking testwork, only one other city had a similar committee. DERP should consider whether the Advisory Committee is essential to the Plan and its members. The Advisory Committee should adopt and regularly report on performance measures related to attendance, outreach activities, level of interaction with plan members and issues addressed. Alternatively, the Committee should be disbanded.

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13 Section 18-405 (d) 5 of Denver Revised Municipal Code.
14 See Appendix A for our benchmarking analysis of fourteen municipal retirement systems.
3.1 The DERP Board should examine the Advisory Committee’s roles and responsibilities and determine if identified enhancements would benefit Plan members, such as better promotion of the Committee by publishing contact information, requiring attendance at all meetings, and attendance at Brown Bag sessions. Alternatively, the Board should examine whether the Committee is necessary in light of the lack of participation in meetings and interface with members.
## APPENDICES

### Appendix A – Public Pension Plan Funded Status

<table>
<thead>
<tr>
<th>Pension Fund Name</th>
<th>2008 Funded Status</th>
<th>2009 Funded Status</th>
<th>Advisory Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Public Employee Retirement Fund</td>
<td>86.9%</td>
<td>74.3%*</td>
<td>No</td>
</tr>
<tr>
<td>City and County of Denver</td>
<td>91.8%</td>
<td>88.4%</td>
<td>Yes</td>
</tr>
<tr>
<td>City of Austin Employee Retirement System</td>
<td>65.9%</td>
<td>71.8%</td>
<td>No</td>
</tr>
<tr>
<td>City of Detroit General Retirement System</td>
<td>99.0%</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Colorado State Public Employee Retirement Association</td>
<td>69.8%</td>
<td>63.0%*</td>
<td>No</td>
</tr>
<tr>
<td>Contra Costa County</td>
<td>88.5%</td>
<td>77.7%*</td>
<td>No</td>
</tr>
<tr>
<td>Kansas Public Employee Retirement System</td>
<td>59.0%</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>LA County Employee Retirement System</td>
<td>94.5%</td>
<td>88.9%</td>
<td>No</td>
</tr>
<tr>
<td>Maine Public Employee Retirement System</td>
<td>74.0%</td>
<td>67.6%*</td>
<td>No</td>
</tr>
<tr>
<td>Maryland State Retirement and Pension System</td>
<td>78.6%</td>
<td>65.0%</td>
<td>Yes</td>
</tr>
<tr>
<td>Michigan Municipal</td>
<td>75.0%</td>
<td>73.9%*</td>
<td>No</td>
</tr>
<tr>
<td>Minnesota Public Employees Retirement Association</td>
<td>73.6%</td>
<td>70.0%</td>
<td>No</td>
</tr>
<tr>
<td>San Diego County</td>
<td>94.4%</td>
<td>91.5%</td>
<td>No</td>
</tr>
<tr>
<td>San Francisco City and County</td>
<td>104.0%</td>
<td>97.0%</td>
<td>No</td>
</tr>
</tbody>
</table>

* Indicates Estimates
Appendix B – Asset Allocation Targets

Denver Employees Retirement Plan
Asset Allocation vs. Target Allocation
As of June 30, 2010

June 30, 2010

<table>
<thead>
<tr>
<th>Category</th>
<th>Market Value ($K)</th>
<th>Allocation (%)</th>
<th>Target (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Cap Equity</td>
<td>406,331,075</td>
<td>25.85</td>
<td>27.00</td>
</tr>
<tr>
<td>Small Cap Equity</td>
<td>90,933,371</td>
<td>5.79</td>
<td>6.00</td>
</tr>
<tr>
<td>International Equity</td>
<td>338,089,944</td>
<td>21.57</td>
<td>22.50</td>
</tr>
<tr>
<td>Core Fixed Income</td>
<td>350,751,719</td>
<td>24.86</td>
<td>23.50</td>
</tr>
<tr>
<td>High Yield</td>
<td>80,178,713</td>
<td>5.10</td>
<td>5.00</td>
</tr>
<tr>
<td>Real Estate</td>
<td>113,469,438</td>
<td>7.22</td>
<td>8.00</td>
</tr>
<tr>
<td>Alternatives</td>
<td>148,738,269</td>
<td>9.46</td>
<td>8.00</td>
</tr>
<tr>
<td>Cash</td>
<td>2,379,416</td>
<td>0.15</td>
<td>-</td>
</tr>
<tr>
<td>Total Fund</td>
<td>1,571,771,936</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

June 30, 2009

<table>
<thead>
<tr>
<th>Category</th>
<th>Market Value ($K)</th>
<th>Allocation (%)</th>
<th>Target (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Cap Equity</td>
<td>446,991,377</td>
<td>29.98</td>
<td>28.00</td>
</tr>
<tr>
<td>Small Cap Equity</td>
<td>110,906,343</td>
<td>7.44</td>
<td>6.50</td>
</tr>
<tr>
<td>International Equity</td>
<td>266,138,684</td>
<td>17.85</td>
<td>20.00</td>
</tr>
<tr>
<td>Core Fixed Income</td>
<td>375,310,708</td>
<td>25.17</td>
<td>23.00</td>
</tr>
<tr>
<td>High Yield</td>
<td>81,224,169</td>
<td>5.45</td>
<td>5.00</td>
</tr>
<tr>
<td>Real Estate</td>
<td>130,470,618</td>
<td>8.75</td>
<td>10.00</td>
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<tr>
<td>Alternatives</td>
<td>79,580,716</td>
<td>5.34</td>
<td>7.50</td>
</tr>
<tr>
<td>Cash</td>
<td>277,870</td>
<td>0.02</td>
<td>-</td>
</tr>
<tr>
<td>Total Fund</td>
<td>1,490,900,625</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Summit Strategies Group
Appendix C – Asset Allocation Comparison

Denver Employees Retirement Plan
Total Fund Asset Allocation vs. All Public Plans-Total Fund
As of June 30, 2010

Source: Summit Strategies Group
Appendix D – DERP Organizational Chart
Appendix E – Accounting Process Mapping (cont’d)

Bank Reconciliation

- Investment Accountant reconciles the bank statement to excel track spreadsheet
  - Bank Reconciliation not Reviewed by Management

Excel spreadsheet is used for the bank reconciliation for the Retirement and Sweep Accounts

Key Bank Statement for Retired Account

Key Bank Statement for Sweep Account

- Internal Retirement Account Excel spreadsheet
- AccPac check register (withdrawals report)
- Internal Deposit activity Excel spreadsheet
- Internal Cash Account Activity Excel spreadsheet
  - Only Amounts Traced to AccPac Up Check Details
 Appendix E – Accounting Process Mapping (cont’d)

DERP Monthly Staff Financial Report

- Trial Balance is run from AcctPac with adjusting entries
- Excel spreadsheets of the financials are maintained and updated as information is received by the accounting Manager
- The Financials for the report are prepared by the Accounting Manager
- Monthly Staff Financial Report is assembled by the Accounting Clerk
- Report is reviewed by Accounting Manager
- Report is reviewed by Assistant Director of Systems and Finance
- Report is reviewed by Executive Director (no physical sign-off)
- Monthly Staff Financial Report is provided to the Board
- The Board takes action to accept

No Hard Close Due
 delayed Reporting by Investment Managers

No Physical Sign-Off

Board is not Updated on Statement Changes
AGENCY RESPONSE

November 3, 2010

Kip Memmott, Director of Audit Services
Office of the Auditor
City and County of Denver
201 West Colfax Avenue, Dept. 705
Denver, Colorado 80202

Dear Mr. Memmott:

The Office of the Auditor conducted a performance audit of the Denver Employees Retirement Plan (DERP) for the period beginning January 1, 2009 through July 31, 2010. This letter provides the written responses for each recommendation noted in the Auditor’s Report draft that was sent to us on October 20, 2010. This response is in accordance with Denver Revised Municipal Code, Section 20-276(c).

Audit finding 1: Certain Accounting Processes Lack Key Internal Controls Necessary to Mitigate Risk

Recommendation 1.1: DERP should create policies and procedures for accounting operational processes and ensure that proper review of accounting functions and activities are in place and occurring. All reconciliation processes should include management date and sign-off.

<table>
<thead>
<tr>
<th>State your agreement or reason for disagreement with recommendation</th>
<th>Target date to complete implementation activities</th>
<th>Name and phone number of primary individual responsible for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>January 31, 2011</td>
<td>Mike Clark, 303-839-5419</td>
</tr>
</tbody>
</table>

DERP agrees with the recommendation. DERP will document the procedures for the accounting of its operational processes, i.e. staff payroll, accounts payable, bank reconciliation, etc. This will be added to the existing documentation for the accounting of member contributions, retiree insurance, benefits, and general ledger reconciliation. DERP is confident that proper review of accounting functions and activities is currently taking place and will ensure the same are appropriately documented. This task will be completed by January 31, 2011.

The management reviews and reconciliations that currently happen will be so documented by the reviewer initialing and dating the information reviewed. This task has already been implemented.
Recommendation 1.2: DERP should use its accounting system to record and track financial information as an alternative to multiple Excel spreadsheets to mitigate risk of errors and fraudulent transactions.

<table>
<thead>
<tr>
<th>State your agreement or reason for disagreement with recommendation</th>
<th>Target date to complete implementation activities</th>
<th>Name and phone number of primary individual responsible for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current process is thorough</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

DERP does not agree with this recommendation. DERP uses spreadsheets as a tool to accumulate accounting information from a multitude of sources. The spreadsheets are subsidiary support for the accounting system which is DERP’s official record of accounting. DERP has taken care in the design of its processes to minimize the potential for errors within the spreadsheets to go undetected. For example, there are two spreadsheets used to reconcile the accounting system. These spreadsheets will be out of balance with each other if any entry made in them is not entered properly.

Each month, all DERP internal accounting activity is entered directly into the accounting system and the spreadsheets used for reconciliation purposes. The DERP Accounting Manager performs a preliminary reconciliation of the accounting system’s general ledger to ensure it and the spreadsheets are in sync. Accounting information received from external sources is entered into the spreadsheets and journal entries prepared for later entry into the accounting system. Once all accounting information for any particular month has been obtained (some investment managers take as long as eight weeks to report results), the journal entries are entered into the accounting system. The resulting general ledger is reconciled once again with the spreadsheets by the Accounting Manager. At that point in time, the month in question is deemed closed.

DERP has found this process to be thorough and accurate for the recording of accounting information into the accounting system. Multiple financial audits over the years by several external accounting firms have never resulted in audit findings calling this process into question. Nevertheless, in light of this Recommendation, DERP will re-examine how the accounting system is used in conjunction with the supporting spreadsheets in the routine accounting process as well as the preparation of monthly and quarterly financial reports.

Recommendation 1.3: DERP should enhance the accounting system to include additional controls such as an audit trail and edit and approval segregation. If the current system does not have this capability, DERP should identify and evaluate compensating controls.

<table>
<thead>
<tr>
<th>State your agreement or reason for disagreement with recommendation</th>
<th>Target date to complete implementation activities</th>
<th>Name and phone number of primary individual responsible for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>Currently implemented</td>
<td>Mike Clark, 303-839-5419</td>
</tr>
</tbody>
</table>

DERP agrees with the point of the recommendation, but it is recommending something that already occurs. The accounting system in use at DERP does not have the capability of providing an audit trail. However, a strong system of compensating controls is in place to ensure the
proper accounting of transactions. The accounting firm BKD in its letter to the DERP Retirement Board and Audit Committee dated May 7, 2010, stated that DERP “has strong compensating control procedures, which diminish the risk of improper access and activity in the system.”

**Audit finding 2: Information Technology System Controls are Insufficient to Protect Data**

**Recommendation 2.1:** DERP should create IT policies and controls, document them, and include controls:

a. Based on each employee’s job title and responsibilities, with specialized levels of access dependant of job duties.

b. Ensure policies have adequate IT controls to ensure segregation of duties and proper management oversight.

<table>
<thead>
<tr>
<th>State your agreement or reason for disagreement with recommendation</th>
<th>Target date to complete implementation activities</th>
<th>Name and phone number of primary individual responsible for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>January 31, 2011</td>
<td>Mike Clark, 303-839-5419</td>
</tr>
</tbody>
</table>

DERP agrees with the recommendation. DERP will reassess and further document the security assignments of the staff with access to the accounting system, including transferring administrative access from the accounting staff to the Information Technology department. This task will be implemented by January 31, 2011.

**Recommendation 2.2:** DERP should develop and implement an IT disaster recovery plan.

<table>
<thead>
<tr>
<th>State your agreement or reason for disagreement with recommendation</th>
<th>Target date to complete implementation activities</th>
<th>Name and phone number of primary individual responsible for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>January 31, 2011</td>
<td>Mike Clark, 303-839-5419</td>
</tr>
</tbody>
</table>

DERP agrees with the recommendation. Steps were taken during 2010 to ensure that benefits can be processed offsite in the event of loss of access to the DERP systems. The DERP staff is currently working on a comprehensive disaster recovery plan for the organization to address all aspects of DERP operations. This task will be completed by January 31, 2011.

**Recommendation 2.3:** DERP should request the City’s benefits department to immediately begin using the EFT application to secure payroll information transmitted to DERP through email.

<table>
<thead>
<tr>
<th>State your agreement or reason for disagreement with recommendation</th>
<th>Target date to complete implementation activities</th>
<th>Name and phone number of primary individual responsible for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>December 31, 2010</td>
<td>Mike Clark, 303-839-5419</td>
</tr>
</tbody>
</table>

DERP agrees with the recommendation. On October 14, 2010, DERP requested that the Career Service Authority use the City’s EFT application when transmitting payroll data to DERP.
DERP will stay in contact with the Career Service Authority and take whatever steps are necessary to ensure this task is implemented. This task will be completed by December 31, 2010.

**Audit finding 3: The Advisory Committee is not Functioning as Intended**

**Recommendation 3.1:** The DERP Board should examine the Advisory Committee’s roles and responsibilities and determine if identified enhancements would benefit Plan members, such as better promotion of the Committee by publishing contact information, requiring attendance at all meetings, and attendance at Brown Bag sessions. Alternatively, the Board should examine whether the Committee is necessary in light of the lack of participation in meetings and interface with members.

<table>
<thead>
<tr>
<th>State your agreement or reason for disagreement with recommendation</th>
<th>Target date to complete implementation activities</th>
<th>Name and phone number of primary individual responsible for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>January 31, 2011</td>
<td>Steven E. Hutt, 303-839-5419</td>
</tr>
</tbody>
</table>

DERP agrees with the recommendation. The DERP Board will review the roles and responsibilities of the Advisory Committee. This task will be completed by January 31, 2011. An email link to contact Advisory Committee members has already been added to the DERP website.

Please contact me at 303-839-5419 if there are any questions.

Sincerely,

Steven E. Hutt
Executive Director

cc: Retirement Board Members
    Advisory Committee Members
    Mike Clark, Assistant Director for Systems and Finance