COLORADO PERA®

One of Colorado's Best Investments

Colorado Public Employees' Retirement Association

Comprehensive Annual Financial Report

For the Year Ended December 31, 2013

WE **WORK** FOR COLORADO

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Prepared by Colorado PERA Staff

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COLORADO PERA®

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June 24, 2014

Dear Colorado PERA Members, Benefit Recipients, Employers, and Members of the Board of Trustees:

Gregory W. Smith
Executive Director

I am pleased to present Colorado PERA's *Comprehensive Annual Financial Report (CAFR)* for the year ended December 31, 2013. At PERA, the year was highlighted by extensive outreach efforts and strategic planning for many initiatives vital to the continued success of PERA.

We live in a constantly changing world that requires us to continuously adapt to new circumstances. Anyone not thinking ahead can quickly be left behind. It was with this mindset that PERA recognized our long-term sustainability was in jeopardy after the Great Recession. We were the first state in the nation to offer a workable solution to address our funding shortfall when the PERA Board of Trustees (Board) recommended to the Colorado General Assembly that a plan was needed to ensure PERA's financial health for the long term.

The landmark pension legislation enacted in 2010 by the state Legislature continues to be on track to ensure a solid retirement for more than half a million of Colorado's current and former public employees. PERA is a not-for-profit economic engine that is adaptive, innovative, and consistently delivering value to Colorado's largest workforce and we must remain diligent in ensuring that the reforms in 2010's Senate Bill 1 (SB 10-001) are allowed to work.

PERA has long been considered an industry leader across many facets of our operation. In 2013, the Board focused on developing a five-year strategic plan to ensure PERA stays a leader. As part of the process, the Board identified strategic issues facing PERA and then approved initiatives in early 2014 to be implemented over the five-year period. The initiatives approved by the Board will center around the following four priorities: PERA's financial stability and long-term viability; stakeholder communications; organizational efficiency and process improvements; and member services. Staff is already working on several initiatives tied to these priorities.

Another focal point of 2013 has been outreach with key constituents across the state, which is a component of the Strategic Communications Plan. Throughout the year, I met with hundreds of business and community leaders, economic development groups, and Kiwanis and Rotary Clubs to help educate the business community about the economic value of PERA in their cities and counties and the effectiveness of the SB 10-001 reforms. One key message to the business community is that PERA is a stabilizing factor in Colorado's economy because the retirement distributions we provide do not fluctuate with the market, which is especially critical in times of economic downturn.

The Strategic Communications Plan continues to be vital in the daily operations at PERA. It's critical to understand what PERA does and the fiscal responsibilities required to be prepared for retirement. PERA is reaching out in many ways to educate our members and all Coloradans about the value of PERA. In addition to communicating through social media channels and more traditional methods, we held inaugural telephone town halls early in 2014 with members and retirees to talk about current issues facing PERA. These calls were a huge success and more will be planned for the future.

While our primary focus is to work for members and retirees to ensure they have a solid retirement, we also work for small businesses, local communities, and Colorado—what we do every day has an impact across the state in many ways.

At PERA, we are very proud to serve Colorado's public employees and proud to work for Colorado.

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303.832.9550 | 1.800.759.PERA (7372) | **www.copera.org**

Report Contents and Structure

This *CAFR* is designed to comply with the reporting requirements under Title 24, Article 51, Section 204(8) of the Colorado Revised Statutes.

The compilation of this *CAFR* reflects the combined efforts of PERA staff and is the responsibility of PERA management. It is intended to provide complete and reliable information as a basis for making management decisions, determining compliance with legal provisions, and determining responsible stewardship of assets contributed by the members and their employers.

Overview of Colorado PERA

Established in 1931, PERA operates by authority of the Colorado General Assembly and is administered under Title 24, Article 51, of the Colorado Revised Statutes. Initially covering all State employees, PERA has expanded to include all Colorado school districts, the State's judicial system, and many municipalities and other local government entities.

Legislation

During the 2013 legislative session, two bills were introduced which would have impacted PERA. The Board takes positions on legislation affecting PERA based on its fiduciary responsibility to act in the best interests of its membership.

Senate Bill 13-055: PERA Actuarial Soundness & Reporting Requirements

This bill would have set one component of the measure of the actuarial soundness of the defined benefit pension trusts by "assuming a discount rate [on liabilities] equal to the state's long-term debt interest rate." The bill would have required the Board to annually submit recommendations to the General Assembly on possible methods to bring the trusts to full funding based upon a 30-year amortization period of unfunded liabilities. The bill would have extended the current authority of the General Assembly to adjust contribution rates. Finally, the bill would have mandated that the Board publicly publish its *CAFR* by May 31 of every year for the prior calendar year. Currently, PERA publishes the *CAFR* by June 30 in compliance with the Government Finance Officers Association's (GFOA) best practices.

The Board voted to oppose SB 13-055 and the bill was postponed indefinitely by the Senate State, Veterans, and Military Affairs Committee.

House Bill 13-1040: PERA Highest Average Salary

This bill would have changed the Highest Average Salary (HAS) calculation from three years to seven years for anyone, except judges, who was not a member, inactive member, or retiree of PERA as of December 31, 2013.

The Board voted to oppose HB 13-1040 and the bill was postponed indefinitely by the House Finance Committee.

Lawsuit Regarding Senate Bill 10-001

Shortly after SB 10-001 was signed into law, a civil action was filed in Denver District Court (*Justus, et al. v. State of Colorado, et al.)*. The plaintiffs, who claim to be acting on behalf of a class of individuals, allege that a portion of SB 10-001 is unconstitutional. The civil action challenges the portion of SB 10-001 which modifies the annual increase payable to existing PERA retirees and, in the future, to PERA members who were eligible to draw retirement benefits as of the effective date of the bill. On June 29, 2011, the Denver District Court ruled in favor of PERA and the State of Colorado and determined that the plaintiffs do not have a contractual right to a specific annual increase formula for life without change. The District Court's decision rejected the plaintiffs' claims based upon failure to establish a contractual relationship. On July 25, 2011, the plaintiffs appealed the District Court's decision and in October 2012, the Court of Appeals remanded the case to the District Court for further review.

In remanding the case to the District Court, the Court of Appeals set forth the legal test for when benefits can be reduced and determined that the plaintiffs are not entitled to a fixed annual increase formula for life without change. The Court determined that the annual increase is a vested contract right, but the annual increase percentage can be reduced in certain circumstances. The annual increase can be reduced if the modification was reasonable and necessary to address a legitimate public purpose.

On November 21, 2012, PERA and the State of Colorado filed an appeal with the Colorado Supreme Court. The plaintiffs also filed their appeal with the Colorado Supreme Court objecting to the legal standard adopted by the Court of Appeals. On August 5, 2013, the Supreme Court announced that it would accept and hear the case. Specifically, the Court said it would address the following issues: (1) what the proper legal test is for when benefits can be reduced; (2) whether PERA members have a contract right to the annual increase in place on their date of retirement for life without change; and (3) whether the change to the annual increase in SB 10-001 was constitutional. Oral argument before the Supreme Court took place on June 4, 2014. The Colorado Supreme Court has not yet issued an opinion.

Lawsuit Regarding Memorial Health System

On October 1, 2012, Memorial Health System (Memorial) terminated its affiliation with PERA. Memorial's termination results from the 30-year lease of Memorial to University of Colorado Health (UCH) and its related entities. In exchange for the lease, the City of Colorado Springs (the City) received $259 million, of which $185 million is contractually specified as having been paid to the City to put toward the PERA liability associated with Memorial's termination of affiliation. As of October 1, 2012, employees of Memorial no longer were eligible to participate in PERA since they no longer were employed with a PERA-affiliated employer.

On September 6, 2012, the City, UCH, and PERA entered into an agreement by which the parties agreed that the $259 million would be placed in a court-supervised escrow account pending resolution of the litigation between the City, Memorial, and PERA.

As part of this agreement, the parties agreed that the City would file its claims in the City and County of Denver. The City filed its Complaint on September 13, 2012, and PERA filed its Answer and Counterclaims on September 26, 2012.

PERA's position is that the termination of affiliation provisions, as outlined in PERA statutes, apply to the Memorial transaction, and that Memorial must pay its share of the current unfunded liability, with interest, in PERA's Local Government Division and PERA's Health Care Trust Fund because it terminated its affiliation with PERA.

The City and Memorial's position is that the termination of affiliation provisions in PERA statutes do not apply to this transaction and PERA is not owed anything as a result of the Memorial transaction.

The parties filed motions with the Court asking the Court to determine whether the termination of affiliation provisions in the PERA statutes apply to this transaction. On February 10, 2014, the Court found that the termination of affiliation provisions apply, and that Memorial violated the provisions by failing to apply to the Board to withdraw and by failing to comply with all of the statutory termination provisions prior to withdrawing its status as a PERA-affiliated employer. The Court noted that the mandatory process ensures that a withdrawing employer pays for the accrued, unfunded benefits of its retirees and employees before leaving PERA.

The City and Memorial have requested that the District Court allow them to immediately appeal the Court's February 10, 2014, order to the Court of Appeals. On June 17, 2014, the District Court denied the request. The matter will continue to be heard by the District Court at this time.

Stapleton v. PERA Lawsuit

In April 2012, Denver District Court Judge Edward D. Bronfin ruled in favor of PERA in the lawsuit (*Stapleton v. PERA*) brought by Colorado State Treasurer Walker Stapleton in June 2011. In his ruling, Judge Bronfin determined that the PERA Board properly concluded that the Treasurer is not entitled to information he requested regarding the top 20 percent of PERA benefit recipients. Information requested by the Treasurer included: the annual retirement benefit, year of retirement, age at retirement, last five years of salary as a PERA member, employer division, and ZIP code.

Judge Bronfin stated "the Treasurer–just like any Trustee of the PERA Board–is not entitled to unlimited, unfettered access to individual PERA member and benefit recipient information which is rendered confidential by statute. Rather, any request for such confidential information must be in furtherance of the Treasurer's–or other Trustees'–fiduciary duty 'solely' to act in the interest of PERA members and benefit recipients…The request for confidential information must reasonably be calculated or designed to further 'solely' the interests of PERA members and benefit recipients."

The judge went on to conclude that "here, the Treasurer was unable or unwilling to provide his co-Trustees and co-fiduciaries with any explanation about how the requested information was reasonably designed to further 'solely' the interests of PERA members and benefit recipients." He explained further, "Because the Treasurer was unable to articulate any legitimate explanation for how or why the requested information was needed, or how or why it would further his fiduciary duty 'solely' to PERA members and benefit recipients, the Court concludes…the PERA Board acted appropriately in denying the Treasurer's request for the requested information."

Colorado law requires PERA to maintain the confidentiality of "all information" in PERA's member records. With this ruling, PERA was able to obtain guidance regarding circumstances under which it can lawfully disclose information regarding its members and benefit recipients to PERA Trustees.

In May 2012, Trustee Stapleton filed his Notice of Appeal, indicating that he was appealing the District Court's decision to the Colorado Court of Appeals. The Court of Appeals heard oral argument on June 11, 2013, and issued its decision on August 1, 2013. The Court of Appeals affirmed the District Court's decision and found that Trustee Stapleton is not entitled to unfettered access to the PERA records that he requested. The Court wrote: "Thus, while a PERA trustee may need to access PERA records to fulfill his or her statutory duties, such access is guided by the statutory requirements that it be (1) solely in the interest of the members and benefit recipients, and (2) for the exclusive purpose of providing benefits and defraying reasonable expenses incurred in performing such duties as required by law."

The Court supported the Board's process and stated, "the other trustees also must act in accordance with their fiduciary duties, and if that requires them to place reasonable conditions on, or refuse, a co-trustee's wholesale request for information, then the trustees must do so…."

On November 12, 2013, Trustee Stapleton filed his appeal with the Colorado Supreme Court. PERA opposed the appeal, arguing that the Court of Appeals' decision was correct. The Colorado Supreme Court has not yet announced whether it will hear the case.

Lawsuit Regarding Short-Term Disability Program

On March 7, 2011, a civil action was filed in Denver District Court *(Tracey Lawless v. Standard Insurance Company, et al.)* where the plaintiff, who claims to be acting on behalf of a class of individuals, alleges that PERA has adopted the wrong disability standard under the short-term disability program. The primary claim is that PERA Rule 7.45E, which sets forth the medical standard for short-term disability, conflicts with the medical standard defined in PERA statutes. On January 4, 2012, the Denver District Court ruled in favor of PERA and determined that Rule 7.45E is not in conflict with the medical standard set forth in PERA statutes. On March 22, 2012, the plaintiff filed her Notice of Appeal, and the Court of Appeals heard this matter on January 29, 2013. The Court of Appeals rendered its decision on November 21, 2013, and affirmed the District Court's decision. On January 13, 2014, the plaintiff filed her appeal with the Colorado Supreme Court. PERA opposed the appeal, arguing that the Court of Appeals' decision was correct. The Colorado Supreme Court has not yet announced whether it will hear the case.

Economic Condition and Outlook

The U.S. economy grew 1.9 percent during 2013 driven by consumer spending, housing and business investment. Reduced government spending was a moderate drag on growth. The unemployment rate ended the year at 6.7 percent, an improvement from 7.8 percent at the end of 2012, although much of the improvement was a result of a reduction in the workforce. Manufacturing numbers reflected a modestly expanding economy. The residential housing market continued to strengthen despite increases in interest rates, as housing prices rose, existing inventory fell, and housing construction increased. The Federal Reserve (Fed) maintained the Fed Funds rate at a stated range of 0.0 percent to 0.25 percent during the year, but began to reduce its asset purchases at the end of the year. The Fed has indicated that as long as inflation pressures appear contained, it intends to leave short-term rates low for an extended period of time, possibly until 2015.

Global growth improved during 2013 as certain developed markets such as the U.S., U.K., and Japan benefited from stimulative monetary policy. China, whose growth rate accelerated toward the end of the year, also provided a significant contribution to the global economy. Conditions in Europe have stabilized, although periphery countries continue to experience struggles related to austerity measures and high debt levels. Developed market countries closely tied to commodity production have started to experience slowing growth as a result of falling commodity prices and declining investment. Certain emerging market economies have experienced reduced capital inflows in addition to slowing growth and rising inflation.

The Colorado economy grew at a relatively modest pace in 2013. Agriculture continues to be a key driver of economic growth in the state. The natural resources, mining, and health care industries, along with professional and business services, also provided strong contributions to growth in the state's economy during 2013. The construction sector showed improvement during 2013 as single-family and multi-family permits continued to increase. The Colorado labor market has shown modest improvement with unemployment falling during the year. The residential housing market showed significant improvement in 2013 as foreclosure filings fell significantly and home prices generally appreciated.

Investments

The Board's Investment Committee is responsible for assisting the Board in overseeing PERA's investment program.

Investment portfolio income is a significant source of revenue to PERA. In 2013, there was net investment income of $6,621,101,000 compared with total member contributions of $787,911,000 and employer contributions of $1,218,514,000.

For the year ended December 31, 2013, the total fund had a rate of return of 15.6 percent net-of-fees on a market value basis. PERA's annualized net-of-fee rate of return over the last three years was 9.9 percent, over the last five years it was 12.2 percent, and over the last 10 years it was 7.6 percent.

Prudent funding and healthy investment returns are important to the financial soundness of PERA. Changes in the composition of the portfolio are reflected in the Investment Summary on page 108.

An integral part of the overall investment policy is the strategic asset allocation policy. The targeted strategic asset allocation is designed to provide appropriate diversification and balance expected total rate of return with the volatility of expected returns. Specifically, the fund is to be broadly diversified across and within asset classes to limit the volatility of the total fund investment returns and to limit the impact of large losses on individual investments. Both traditional and nontraditional assets are incorporated into the asset allocation mix.

In addition to asset class targets, the Board sets ranges within which asset classes are maintained. The permissible ranges in effect during 2013 were adopted by the Board in 2010. The targeted asset allocation mix and the specified ranges for each asset class are presented on page 105. All of the asset classes were within their specified ranges at year-end as described on page 105.

PERA's investment policy is summarized in the Colorado PERA Report on Investment Activity on page 105.

Corporate Governance

PERA has maintained its commitment to corporate governance reform through its participation in the Council of Institutional Investors as well as several other coalitions of long-term shareholders. PERA continues to actively advocate for comprehensive improvements to shareholder rights, rigorous federal oversight, and credit rating agency reform to a broad range of congressional and federal regulatory officials.

In addition, PERA continues to be active in the securities litigation arena, fulfilling the Board's commitment to support corporate governance reforms such as transparency, accountability, and enforcement of shareholder's rights.

Financial Information and Management Responsibility

The financial statements of PERA have been prepared by management, which is responsible for the integrity and fairness of the data presented, including the many amounts which must, of necessity, be based on estimates and judgments. The *CAFR* was prepared to conform to the accounting principles generally accepted in the United States of America. Financial information presented through the annual report is consistent with that which is displayed in the basic financial statements.

Ultimate responsibility for the basic financial statements and annual report rests with the management of PERA; the Board provides an oversight role. The Board is assisted in its responsibilities by the Audit Committee, consisting of six Board members and two outside members. The Audit Committee has the responsibility to oversee the adequacy and effectiveness of PERA's system of internal controls, and the accounting and financial reporting systems. A more detailed description of the role of the Audit Committee can be found in their report on pages 14–15.

Management is responsible for establishing and maintaining adequate internal control over financial reporting. PERA's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The internal controls over financial reporting include those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of management; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the financial statements.

Management has concluded that as of December 31, 2013, internal controls over financial reporting are effective.

There are inherent limitations in the effectiveness of any system of internal control, including the possibility of human error and the circumvention or overriding of controls. Accordingly, even an effective internal control system may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

State law requires that the State Auditor conduct or cause to be conducted an annual audit of PERA. Pursuant to this requirement, under the direction of the State Auditor, KPMG LLP audited PERA's 2013 basic financial statements in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards. This audit is described in the Report of the Independent Auditors on pages 23–25 of the Financial Section. Management has provided the auditors with full and unrestricted access to PERA's staff to discuss their audit and related findings to facilitate independent validation of the integrity of the plan's financial reporting and the adequacy of internal controls.

The Financial Section of the *CAFR* also contains Management's Discussion and Analysis (MD&A) that serves as a narrative introduction, overview, and analysis of the basic financial statements. This Letter of Transmittal is designed to complement the MD&A and should be read in conjunction with it. The MD&A can be found immediately following the Report of the Independent Auditors and starts on page 26.

GASB Statement No. 67 and Statement 68

The Governmental Accounting Standards Board (GASB) issued two related statements which substantially change the accounting and financial reporting of pensions for PERA and PERA-affiliated employers. GASB Statement No. 67 (GASB 67), *Financial Reporting for Pension Plans,* affects the financial statements of PERA and is effective for fiscal years beginning after June 15, 2013. GASB Statement No. 68 (GASB 68), *Accounting and Financial Reporting for Pensions,* affects financial statements of PERA-affiliated employers and is effective for fiscal years beginning after June 15, 2014.

PERA created a GASB workgroup in October 2012 to study and interpret the requirements of the new GASB Statements and their impact to PERA and PERA-affiliated employers. The GASB workgroup has identified the stakeholders impacted by the revised GASB statements and determined the most efficient mode of communication and education to these groups.

The GASB workgroup is developing a method to determine and reconcile the contribution base that will be used to determine an allocation percentage for each employer. The allocation percentage is used to determine the net pension liability each employer will report in its financial statements. In addition, the GASB workgroup is in the process of developing a series of educational videos available on the PERA website discussing the implementation details of these new GASB standards.

PERA will continue to work with affiliated employers and their governing boards to understand and implement the changes required by GASB 68.

Funding

The Board's Statement of Funding Policy dated November 16, 2007, is as follows: "To secure promised and mandated benefits, the funding goal of the Colorado Public Employees' Retirement Association's defined benefit and retiree health care plans is to maintain employer and member contributions into the trust funds sufficient to accumulate assets over a member's term of employment to fully finance the benefits members receive throughout retirement by achieving and maintaining a minimum 100 percent funding ratio of assets to accrued actuarial liabilities. The Board's minimum 100 percent funding ratio goal over time avoids externalizing the costs of amortizing unfunded accrued liabilities onto others in the future, and provides for fairness and intergenerational equity for taxpayers, employers, and employees with respect to the costs of providing benefits."

On December 31, 2013, PERA's funded ratio was 60.4 percent with an unfunded liability of $27.1 billion based on the actuarial value of assets and an investment rate of return and discount rate assumption of 7.50 percent. (Please see the MD&A on page 43 for additional information on PERA's funded ratio.)

Investment income is the most significant driver in a defined benefit plan. To understand the significance of this assumption, a sensitivity analysis is included in the MD&A on pages 44–45.

PERA's funded position is the top concern and priority for the Board and management.

The Board worked extensively with elected officials in 2004 and 2006 to pass SB 04-257 and SB 06-235, which were designed to move PERA toward full funding over the coming decades.

Key features of these bills include increased funding through the Amortization Equalization Disbursement (AED) and the Supplemental Amortization Equalization Disbursement (SAED), as well as a new benefit structure for new hires that includes a Rule of 85 and a separate Annual Increase Reserve (AIR) fund.

With this legislation and its phased 3 percent increases in both the AED and SAED and the projected reductions in normal cost due to benefit adjustments for new hires, PERA was expected to achieve a 30-year amortization period on unfunded liabilities in all trust funds by the end of a 30-year period and eventually achieve a minimum of 100 percent funding in 60 years.

However in 2008, PERA, along with investors worldwide, suffered through one of the worst financial markets in history. During 2009 and again in 2012, the Board initiated and completed an actuarial experience study and an actuarial audit and initiated an asset/liability study to assist in determining the best course of action for the various funds. These studies included a detailed review of all significant actuarial assumptions and methods used in preparing the annual actuarial valuation including the investment rate of return and discount rate assumptions, which as a result of these studies, were reduced 0.5 percent to 8.0 percent. Additionally in 2009, the Board requested and had completed an actuarial analysis of the impact of different possible benefit and contribution changes which would be considered during the 2010 legislative session so as to achieve long-term sustainability for the trust funds.

PERA believed it was necessary to work toward proposed legislation in the 2010 legislative session to address the dramatic decline in the financial markets and economy and the resulting decline in the PERA investment portfolio. The comprehensive proposal for legislative action came to fruition in 2010 and was based on thorough calculations and a robust analysis of how the various possible changes would impact PERA's funded status and its members. The modifications of SB 10-001 were included in the 2009 actuarial valuation results. To maintain the sustainability of PERA it is critical that every aspect of the bill be fulfilled. The entire bill can be reviewed online at http://www.leg.state.co.us.

The Board studies the investment rate of return and discount rate assumptions with the assistance of outside consultants on an annual basis. In 2013, the Board reduced both rates 0.50 percent to 7.50 percent. The Board also approved a reduction in the price inflation assumption from 3.50 percent to 2.80 percent and a reduction in the wage inflation assumption from 4.25 percent to 3.90 percent. These new rates are used in the 2013 actuarial valuation and are effective January 1, 2014, for administrative purposes.

The actuarial valuation is a valuable tool to help the Board assess the health of the system, but this is just a snapshot on one day in the past. To have a better understanding of the health of the system going forward, PERA's actuaries perform actuarial projections upon each Division of the system based upon generating future valuations with the Board's underlying actuarial assumptions. I am happy to report that this year's projections show that each Division of the PERA Trusts are on the path toward eliminating all unfunded liabilities and obtaining full funding in a reasonable time. Based upon the Board's assumptions including anticipated growth in active membership, the actuaries project that the complete amortization of unfunded liabilities in approximately 35 years for the State Division, 34 years in the School and DPS Divisions, 28 years in the Local Government Division, and 45 years in the Judicial Division.

PERAPlus 401(k)/457 and Defined Contribution Plans

In addition to the defined benefit plans, PERA offers members opportunities to save for retirement through the PERAPlus 401(k) and 457 Plans. The assets in the PERAPlus

Plans continue to grow steadily and, in October 2013, total Plan assets exceeded $3 billion. One factor of the Plans' success was the addition of several new affiliated employers in the PERAPlus 457 Plan. Continued employer outreach has resulted in 19 employers affiliating with the Plan in 2013, including a number of large school districts. Some employers have chosen to close their other voluntary plans and only offer the PERAPlus Plans to their employees.

Colorado Mile High Fund

In October 2012, PERA introduced a new investment vehicle that makes millions of dollars available for qualifying opportunities within Colorado's business community. The creation of the Colorado Mile High Fund earmarks capital for Colorado businesses that have a nexus to Colorado. The primary focus of this fund is private equity and venture capital opportunities structured as co-investments with financial sponsors. The fund may also consider uniquely-structured capital formation opportunities to private equity and venture capital firms targeting Colorado-based opportunities. PERA uses an outside manager and adheres to the same investment and underwriting criteria for this fund as it uses in its overall private equity program.

PERA and its adviser have reviewed more than 40 investment opportunities resulting from an active deal sourcing effort that included discussions with more than 75 representatives from prospective investment opportunities. As part of its community outreach, PERA has participated in events such as the High Altitude Investors Forum in Colorado Springs, the 29th Annual Esprit Entrepreneur event in Boulder, and other events affiliated with Silicon Flatiron and the University of Colorado.

At the end of 2013, the Colorado Mile High Fund had committed approximately 20 percent of the fund's total capital to three co-investments. One co-investment has already performed very well and was exited in 2013. The two remaining co-investments are based in Colorado and are in the health care and industrial sectors.

PERACare Health Benefits Program

The voluntary PERACare program has several plans providing health care, dental, and vision coverage to PERA members and retirees. PERA focuses on designing plans that are competitive, cost-effective, and valuable to members. Throughout 2013, PERA studied the likely impacts of health care reform and the options available in the public marketplace. Enrollment in PERA's plans increased during the fall 2013 enrollment period, confirming the membership's support of PERA's plans vs. marketplace plans.

PERA introduced a narrow network HMO plan option in 2013, and participates in a number of value-based programs designed to support improving the patient experience of care, improving the health of populations, and reducing the per capita cost of health care (known as the "Triple Aim").

Following a multi-year analysis of Medicare Part D approaches, PERA conducted a comprehensive RFP for its prescription drug program in 2013. The Medicare prescription drug benefit in its self-insured plans was moved from the Retiree Drug Subsidy to an Employer Group Waiver Plan effective January 1, 2014. Member premiums, cost-share, and PERA's GASB liability were reduced.

Total Compensation Philosophy

PERA recognizes that people are its primary asset, and its principal source of competitive advantage. PERA offers competitive compensation and provides comprehensive health and welfare benefits to its employees. The key elements of PERA's compensation program are: salaries, health benefits, work-life balance, performance recognition, growth, and development. These programs serve to attract and retain valued employees while motivating extraordinary performance.

PERA strives to maintain its competitive compensation structure and benefit package by using external market survey data and partnering with consultants to stay abreast of current employment trends. Notable surveys include the Mountain States Employers' Council Front Range Survey and the McLagan Partners Pension Fund Data Exchange Compensation Survey. These surveys provide solid comparable data in keeping PERA's programs competitive.

PERA will continue to develop, implement, and support programs that add value for employees, leading to improved employee welfare, engagement, growth, retention, and performance.

Recognition of Achievements

The GFOA awarded a Certificate of Achievement for Excellence in Financial Reporting to PERA for its *CAFR* for the year ended December 31, 2012. The GFOA's Certificate of Achievement is the highest form of recognition in the area of public employee retirement system accounting and financial reporting. To receive this award, a government unit must publish an easily readable and efficiently organized *CAFR* that meets or exceeds program standards, and satisfies both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for one year. PERA has been awarded this distinction for the past 28 years. We believe this *CAFR* continues to meet GFOA requirements and we are submitting it to the GFOA to determine its eligibility for another Certificate.

The GFOA also awarded PERA an Award for Outstanding Achievement in Popular Annual Financial Reporting for its Popular Annual Financial Report for the year ended December 31, 2012. This is the 11th year that PERA has received this prestigious national award recognizing its conformance with the highest standards for preparation of state and local government reports. In order to receive this award, a government unit must publish a Popular Financial

Report whose contents conform to program standards of creativity, presentation, understandability, and reader appeal.

PPCC Standards Award Program

The Public Pension Coordinating Council (PPCC) presented PERA with its Recognition Award for Administration for meeting professional standards in 2013 for plan administration as set forth in the Public Pension Standards. The PPCC is a coalition of three national associations that represent public retirement systems and administrators—the National Association of State Retirement Administrators, National Council on Teacher Retirement, and National Conference on Public Employee Retirement Systems. These three associations represent more than 500 of the largest pension plans in the U.S.

Employer Affiliations

In 2013, the following employers affiliated with PERA in the School Division: Adams County BOCES and Colorado Digital BOCES. Also in 2013, the following employers affiliated with PERA in the Local Government Division: Colorado River Fire Rescue, Estes Park Housing Authority, Statewide Internet Portal Authority, and Strasburg Metropolitan Parks & Recreation District. PERA welcomes these employers and their employees.

Management Changes

In February 2013, CH Meili was promoted to Director of Real Estate replacing Jim Lavan who retired in January 2013 after 14 years of service. CH was previously a Senior Real Estate Portfolio Manager for PERA and has been at PERA since January 2006. As Director of Real Estate, CH directs the overall management of PERA's real estate portfolio in accordance with established investment statutes, policies, and guidelines.

In May 2013, Amy McGarrity was promoted to Deputy Chief Investment Officer replacing David Bomberger who left PERA in September 2012. Amy was previously the Senior Investment Officer for PERA and joined PERA in 2010 as a result of the Denver Public Schools Retirement System (DPSRS) merger. As Deputy Chief Investment Officer, Amy manages the investment activities of PERA in accordance with established investment statutes, policies, and guidelines.

In June 2013, Adam Franklin was promoted to General Counsel. Adam joined PERA in 2003 as a staff attorney after working at the law firm of Hamilton and Faatz, P.C. He was promoted to Senior Staff Attorney in January 2007. As General Counsel, Adam is responsible for implementing, maintaining and protecting the Association's legal posture and interests within the scope established by Colorado Statute, PERA's Board of Trustees, and the Executive Director.

In July 2013, Lisa Bishop joined PERA as the new Director of Customer Service replacing Anne Bandy, who retired after 11 years of service. Previously, Lisa was a Quality Manager at Southern California Edison and also worked for TIAA-CREF and Great-West Retirement Services. As Director of Customer Service, Lisa is responsible for the overall management and direction of PERA's call center.

Board Composition

PERA is governed by a 16-member Board of Trustees; 11 are elected by the membership for staggered four-year terms and serve without compensation except for necessary expenses. In addition, there are three Governor-appointed Trustees confirmed by the Senate who receive limited compensation. The State Treasurer serves as an ex officio voting member, and the Denver Public Schools (DPS) Division seat also serves as a non-voting ex officio Trustee.

In May 2013, PERA members and retirees re-elected Marcus A. Pennell, Scott L. Noller, Maryann Motza, and Carole Wright to the Board. Trustees Pennell and Noller will serve four-year terms in the School Division as two seats were up for election. State Division members re-elected Maryann Motza, who is the current Board Vice Chair, to a four-year term. Current Board Chair, Carole Wright, was re-elected by retirees of the School, Judicial, and Local Government Divisions to serve a four-year term.

In August 2013, Governor John Hickenlooper reappointed Susan G. Murphy to the Board and she was confirmed by the State Senate in February 2014. Trustee Murphy was originally appointed to the Board in 2007. By law, governor-appointed trustees must have experience in investment management, finance, banking, economics, accounting, pension administration, or actuarial analysis.

Acknowledgements

The cooperation of our affiliated employers is significant to the success of PERA—we thank the staff and management of these employers for their continuing support.

Copies of this *CAFR* are provided to all PERA-affiliated employers and other interested parties; a summary *(Popular Annual Financial Report)* will be sent to members and benefit recipients. An electronic version of both publications is available on the PERA website at www.copera.org.

I also thank the PERA staff and Board of Trustees for their commitment and efforts to ensure that PERA meets the needs of all public servants in Colorado.

I am honored to serve our members and beneficiaries as Executive Director. I am proud to be a part of an organization with such a commitment to excellence.

Respectfully submitted,

Gregory W. Smith
Colorado PERA Executive Director
One of Colorado's Best Investments

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Colorado Public Employees' Retirement Association

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

December 31, 2012

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2013

Presented to

Colorado Public Employees' Retirement Association

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

June 24, 2014

Carole Wright
Board Chair

To All Colorado PERA Members, Benefit Recipients, and Employers:

On behalf of the Board of Trustees, I am pleased to present Colorado PERA's *Comprehensive Annual Financial Report* for the year ended December 31, 2013. This report offers a detailed view of the financial and actuarial status of your retirement system.

At the end of 2013, PERA's investments generated a return of 15.6 percent, or just over $6 billion, net of fees. This return was more than the 12.9 percent rate of return for the year ended December 31, 2012, and was higher than the actuarial assumed rate. While the 2013 return was slightly below its benchmark, there will be years when the PERA investment portfolio will outperform or underperform benchmarks due to varying market conditions. The goal is to outperform over the long term.

It should be noted that in November 2013, the Board voted to lower its assumed rate of return over the next 30 years from 8 percent to 7.5 percent, for the 2013 actuarial valuation and beginning January 1, 2014, for administrative purposes. This decision means that PERA will take a more conservative approach to evaluating its financial well-being. PERA remains committed to the long-term sustainability of the fund and providing a safe and secure retirement for public employees across Colorado.

During 2013, the Board devoted significant time and efforts to developing a new performance management plan for the Executive Director. Creating a new plan was a natural step as we look upon new horizons under Greg Smith's leadership as the recently appointed Executive Director of PERA. To develop this plan, the Board's Evaluation Committee selected the Hay Group to design a new performance management plan with objective goals to drive short-and long-term performance within the context of PERA's overall business strategy. Identifying the unique challenges facing the Executive Director and creating a process promoting ongoing dialogue between the Board and Executive Director was accomplished as a result of all the efforts put forth by the Committee. A special thanks to Angela Setter, PERA Director of Human Resources, for her assistance with this project.

Representing another significant highlight in 2013, the Board determined and prioritized strategic issues facing PERA and the potential key initiatives to address them. Ensuring the financial stability and long-term viability of PERA remains the highest priority set by the Board. If the Board were to become less vigilant in monitoring PERA's financial condition, it would represent a risk not only to PERA's membership, but to the citizens of Colorado. Therefore, the Board will continue to monitor and emphasize the implementation of Senate Bill 10-001 to facilitate continued progress toward full funding.

An initiative related to PERA's financial stability addresses the upcoming changes issued by the Governmental Accounting Standards Board (GASB), which will substantially change the accounting and financial reporting of pensions for PERA and its affiliated employers. The new GASB Statements no longer require disclosure of funding requirements, but focus only on accounting and financial reporting issues—how pension costs and obligations are measured and reported in financial statements.

The Board has determined that PERA should have a role in providing GASB-related employer education, communications, and training. To accomplish this, a cross-functional work team has been created, which is led by Karl Greve, PERA Chief Financial Officer. The PERA GASB workgroup has spent countless hours

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303.832.9550 | 1.800.759.PERA (7372) | **www.copera.org**

studying the changes and then devising a communication and training plan for employers, which includes the development of the GASB video series available on the PERA website. The materials being developed by the PERA GASB workgroup convey not only the details of these reporting changes, but also the impact on employer financial statements and what this may mean statutorily, economically, and politically, in adjusting to the new reporting requirements.

The GASB Standards project is just one of several strategic initiatives that PERA staff will be executing throughout a five-year period under the Board's oversight. I'd like to note that there are more than 275 people who work for you, and they are the PERA staff. The dedicated employees at PERA get the work done on many levels and it has been a gratifying experience for me to be Chair of a plan that works so well.

One of the personal highlights of being Board Chair has been the opportunity to speak to members and retirees throughout Colorado. The PERA story is a joy to tell. Many thanks to Katie Kaufmanis, PERA's Public Information Officer, who ensures I have the most up-to-date narrative and the members of the PERA Creative Services team who provide the colorful visuals for each event.

Also working on your behalf are the PERA Trustees, and I would like to take this opportunity to express my gratitude to my fellow Trustees for their acumen and dedication when meeting the many challenges we face. The Board's guidance and support are critical to the success of PERA.

I would also like to express my gratitude to two Trustees who will be leaving the Board with the release of this *CAFR*—Scott Murphy and Rochelle Logan. Rochelle will soon retire from Douglas County Libraries. For Scott and me, our work together on the PERA Board has been a serendipitous reunion after having been at a board table together 35 years ago.

Scott has served on the Board since 2005 and provided quality leadership through some of the more difficult times during the past decade. Rochelle has been on the Board since 2011 and brought a true member-focus to the Board and provided a thoughtful and common sense approach to many discussions. On behalf of the Board, I formally recognize and thank both Scott and Rochelle for their dedication and many contributions.

I would also like to extend my appreciation to the entire PERA membership and other constituencies for their continued support of PERA. You work for Colorado and we work for you—at PERA, we are dedicated to preserving the retirement you work so hard for every day.

Sincerely,

Carole Wright
Chair, Colorado PERA Board of Trustees

As described more fully in its Charter, the purpose of the Colorado PERA Audit Committee (Audit Committee) is to assist the Board in fulfilling its fiduciary responsibilities as they relate to accounting policies and financial reporting, the system of internal controls, PERA's *Standards of Professional and Ethical Conduct,* the sufficiency of auditing relative thereto, the internal audit process, and the practices of the Director of Internal Audit. Management is responsible for the preparation, presentation, and integrity of PERA's financial statements; accounting and financial reporting principles; internal controls; and procedures designed to reasonably ensure compliance with accounting standards, applicable laws, and regulations. PERA has a full-time Internal Audit Division that reports functionally to the Audit Committee. This Division is responsible for independently and objectively reviewing and evaluating the adequacy, effectiveness, and efficiency of PERA's system of internal controls.

KPMG LLP, PERA's independent public accounting firm (Independent Auditor), is responsible for performing an independent audit of PERA's financial statements in accordance with generally accepted auditing standards and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States. In accordance with law, the Colorado State Auditor's Office has ultimate authority and responsibility for selecting, evaluating, and, when appropriate, replacing PERA's Independent Auditor.

The Audit Committee serves a Board-level oversight role in which it provides advice, counsel, and direction to management and to the Internal Audit function on the basis of the information it receives, discussions with management and Internal Audit, and the experience of the Audit Committee's members in business, financial, and accounting matters. In this role, the Audit Committee also reviews the audit plan of the Independent Auditor, the results of the audit, and the status of management's actions to implement recommendations from the audit.

The Audit Committee believes that a candid, substantive, and focused dialogue with the internal auditors and the Independent Auditor is fundamental to the Audit Committee's oversight responsibilities. To support this belief, the Audit Committee periodically meets separately with both the internal auditors and the Independent Auditor, without management present. In the course of its discussions in these meetings, the Audit Committee asked a number of questions intended to bring to light any areas of potential concern related to PERA's financial reporting and internal controls. These questions include, but are not limited to:

- Are there any significant accounting judgments, estimates, or adjustments made by management in preparing the financial statements that would have been made differently had the Independent Auditor prepared and been responsible for the financial statements?
- Based on the Independent Auditors' experience, and their knowledge of PERA, do PERA's financial statements fairly present to users, with clarity and completeness, PERA's financial position and performance for the reporting period in accordance with generally accepted accounting principles?
- Based on the Independent Auditors' experience, and their knowledge of PERA, has PERA implemented internal controls and internal audit procedures that are appropriate for PERA?
- Are the Independent Auditor and internal auditors getting the support they need from management to execute their duties?

Questions raised by the Audit Committee regarding these matters were answered to the Audit Committee's satisfaction.

The Audit Committee had an agenda for 2013 that included:

- Recommending the *Comprehensive Annual Financial Report,* including the Report of the Independent Auditors, to the Board for its approval;
- Reviewing and approving the internal audit plans of the Director of Internal Audit;

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- Reviewing the adequacy of resources made available to the Director of Internal Audit;
- Reviewing the scope, objectives, and timing of the annual external audit;
- Providing input into the Executive Director's annual performance evaluation of the Director of Internal Audit;
- Reviewing PERA's compliance with its *Standards of Professional and Ethical Conduct;*
- Meeting with the Independent Auditor separately, without management;
- Meeting separately with the Executive Director, Director of Internal Audit, Chief Financial Officer, and General Counsel;
- Meeting with the Director of Internal Audit, or with the person acting in a similar capacity, and with management, to discuss the effectiveness of PERA's internal controls; and
- Reviewing any changes in accounting practices or policies, and the financial impact thereof, any accruals, provisions, estimates, or management programs and policies that may have a significant effect on the financial statements of PERA.

The Audit Committee has reviewed and discussed the audited financial statements for the year ended December 31, 2013, with management and KPMG LLP. Management represented to the Audit Committee that PERA's audited financial statements were prepared in accordance with U.S. generally accepted accounting principles, and KPMG LLP represented that their presentations to the Audit Committee included the matters required to be discussed with the Independent Auditor by auditing standards regarding auditor communication. This review included a discussion with management of the quality, not merely the acceptability, of PERA's accounting principles, the reasonableness of significant estimates and judgments, and the clarity of disclosure in PERA's financial statements, including the disclosures related to critical accounting estimates.

In reliance on these reviews and discussions, and the reports of KPMG LLP, the Audit Committee has recommended to the Board, and the Board has approved, the inclusion of the audited financial statements in PERA's *Comprehensive Annual Financial Report* for the year ended December 31, 2013.

Audit Committee as of June 24, 2014

Timothy M. O'Brien, Chairman
Hon. James Casebolt
Roger Johnson
Warren Malmquist
Susan Murphy
Marcus Pennell
Hon. Walker Stapleton
Lynn Turner

Board of Trustees

By State law, the management of the public employees' retirement fund is vested in the Board. The Board is composed of 16 members, which includes the following:

- Eleven members elected by mail ballot by their respective Division members to serve on the Board for four–year terms; four members from the School Division, three from the State Division, one from the Local Government Division, one from the Judicial Division, and two retiree members elected by benefit recipients.
- Three members appointed by the Governor and approved by the State Senate.
- The State Treasurer.
- One ex officio (non-voting) member from the DPS Division.

If a Board member resigns, a new member is appointed from the respective Division for the remainder of the year until the next election.

Carole Wright
Chair
Elected by Retirees
Retired Teacher,
Aurora Public Schools
Current term expires June 30, 2017

Amy Grant
Non-voting, Ex officio member
Elected by DPS Division members
and retirees;
Former Chair of the Denver Public Schools
Retirement System (DPSRS) Board
Secretary, DPS JROTC Program
Current term expires June 30, 2016

Maryann Motza
Vice Chair
Elected by State Members
Social Security Administrator for the State
Current term expires June 30, 2017

Brett Johnson
Deputy State Treasurer
Delegated Substitute for
State Treasurer
Continuous term effective January 2011

Honorable James Casebolt
Elected by Judicial Members
Judge, Colorado Court of Appeals
Current term expires June 30, 2015

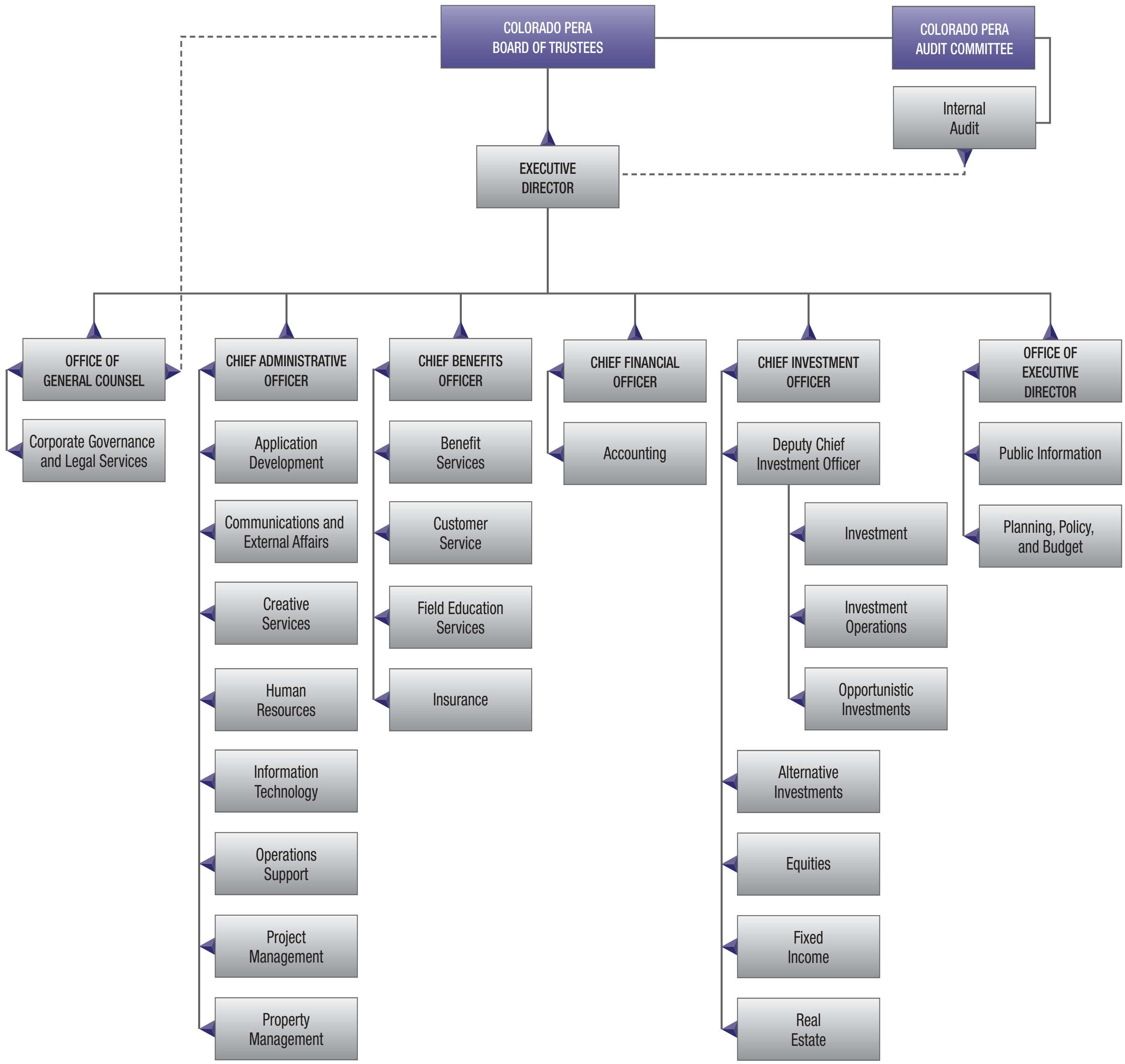
Carolyn Jonas-Morrison
Elected by State Members
Dean, Math and English Division,
Pikes Peak Community College
Current term expires June 30, 2014

Richard Delk
Elected by State Members
Director, Strategic Fiscal Planning
Office of the Colorado State Patrol
Current term expires June 30, 2016

Rochelle Logan
Elected by Local Government Members
Associate Director of Support Services,
Douglas County Libraries
Current term expires June 30, 2014

Administrative Organizational Chart

As of June 1, 2014



Gregory W. Smith—Executive Director

Jennifer Paquette—*Chief Investment Officer*
Karl Greve—*Chief Financial Officer*
Donna Trujillo—*Chief Benefits Officer*
Ron Baker—*Chief Administrative Officer*
Katie Kaufmanis—*Public Information Officer*
David Mather—*Director of Internal Audit*
Karl Paulson—*Director of Planning, Policy, and Budget*
Adam Franklin—*General Counsel*

Adam Franklin—General Counsel

Luz Rodriguez—*Director of Corporate Governance and Legal Services*
Staff Attorneys

Jennifer Paquette—Chief Investment Officer

Amy McGarrity—*Deputy Chief Investment Officer*
Martha Argo—*Director of Investment*
Bill Koski—*Director of Opportunistic Investments*
Tom Liddy—*Director of Investment Operations*
Jim Liptak—*Director of Equities*
CH Meili—*Director of Real Estate*
Tim Moore—*Director of Alternative Investments*
Mark Walter—*Director of Fixed Income*

Karl Greve—Chief Financial Officer

Accounting Division

Donna Trujillo—Chief Benefits Officer

Lisa Bishop—*Director of Customer Service*
Matt Carroll—*Director of Benefit Services*
Dennis Gatlin—*Director of Field Education Services*
Wendy Tenzyk—*Director of Insurance*

Ron Baker—Chief Administrative Officer

Kevin Carpenter—*Director of Information Technology*
Dennis Fischer—*Director of Property Management*
Madalyn Knudsen—*Director of Creative Services*
Rich Krough—*Director of Application Development*
Leslie Oliver—*Director of Communications and External Affairs*
Aubre Schneider—*Director of Operations Support*
Angela Setter—*Director of Human Resources*
Project Management Division

Consultants

Health Care Program Consultant
Denver Series of Lockton Companies, LLC
8100 East Union Avenue
Suite 700
Denver, CO 80237

Independent Auditors
KPMG LLP
1225 17th Street
Suite 800
Denver, CO 80202

Investments—Portfolio Consultant
Hewitt EnnisKnupp, Inc.
200 East Randolph Street
Suite 1500
Chicago, IL 60601

Investment Performance Consultants
Hewitt EnnisKnupp, Inc.
200 East Randolph Street
Suite 1500
Chicago, IL 60601

The Northern Trust Company
50 South LaSalle Street
Chicago, IL 60603

Investments—Real Estate Performance
Hewitt EnnisKnupp, Inc.
200 East Randolph Street
Suite 1500
Chicago, IL 60601

Master Custodian
The Northern Trust Company
50 South LaSalle Street
Chicago, IL 60603

Pension and Health Care Program Actuary
Cavanaugh Macdonald Consulting, LLC
3550 Busbee Parkway
Suite 250
Kennesaw, GA 30144

Risk Management
IMA of Colorado
1705 17th Street
Suite 100
Denver, CO 80202

401(k), Colorado PERA DC Plan and Deferred Compensation Plan Investment and Performance Consultant
RVK (formerly R.V. Kuhns & Associates, Inc.)
1211 SW 5th Avenue
Suite 900
Portland, OR 97204

401(k), Colorado PERA DC Plan, and Deferred Compensation Plan Service Provider
ING Institutional Plan Services, LLC
One Windsor Way
Windsor, CT 06095

WE WORK FOR EMPLOYERS

FINANCIAL SECTION

COLORADO PERA®

One of Colorado's Best Investments

KPMG LLP
Suite 800
1225 17th Street
Denver, CO 80202-5598

Independent Auditors′ Report

The Board of Trustees
Colorado Public Employees Retirement Association:

Report on the Financial Statements

We have audited the accompanying financial statements of Colorado Public Employees′ Retirement Association (Colorado PERA), as of and for the year ended December 31, 2013, and the related notes to the financial statements, which collectively comprise the Colorado PERA′s basic financial statements as listed in the table of contents. We have also audited the financial statements of each individual fund of Colorado PERA as of and for the year ended December 31, 2013, as displayed in Colorado PERA′s basic financial statements. The prior year comparative combined financial information has been derived from Colorado PERA′s December 31, 2012 financial statements, and in our report dated June 25, 2013, we expressed an unqualified opinion on the respective financial statements.

Management′s Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors′ Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors′ judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity′s preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity′s internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

KPMG

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the net position of the Colorado Public Employees′ Retirement Association as of December 31, 2013, and the respective changes in net position for the year then ended in accordance with U.S. generally accepted accounting principles. In addition, in our opinion, the financial statements referred to previously present fairly, in all material respects, the respective net position of each individual fund of the Colorado Public Employees′ Retirement Association as of December 31, 2013, and the respective changes in net position thereof for the year then ended in conformity with U.S. generally accepted accounting principles.

Emphasis of Matter

As described in note 10 to the financial statements, the funded ratio of the actuarial accrued liability as of December 31, 2013 was 57.5% for the State Division, 60.3% for the School Division, 73.1% for the Local Government Division, 73.0% for the Judicial Division, 81.2% for the Denver Public Schools Division Trust Fund, 18.8% for the Health Care Trust Fund, and 20.2% for the Denver Public Schools Health Care Trust Fund. These funded ratios were derived using a 7.5% investment rate of return and discount rate and the actuarial value of assets. Any significant deviation in the actual rate of return from the assumed rate of return over a 30-year period would have a material impact on the reported actuarial liability as of December 31, 2013.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management′s discussion and analysis on pages 26 to 53 and Required Supplementary Information on pages 91 to 98 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management′s responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Colorado PERA′s basic financial statements. The supplementary schedules included on pages 99 through 101 are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplementary schedules on pages 99 through 101 are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary schedules on pages 99 through 101 are fairly stated in all material respects in relation to the basic financial statements as a whole.

KPMG

The information contained in the Introductory, Investment, Actuarial, and Statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 24, 2014 on our consideration of Colorado PERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Colorado PERA's internal control over financial reporting and compliance.

KPMG LLP

Denver, Colorado
June 24, 2014

3

Management's Discussion and Analysis (Unaudited)
(In Thousands of Dollars)

Management is pleased to provide this discussion and analysis of the financial activities of the Colorado Public Employees' Retirement Association (PERA) for the year ended December 31, 2013. We encourage readers to consider the information presented here in conjunction with additional information in the Letter of Transmittal beginning on page 3 of this *Comprehensive Annual Financial Report (CAFR)* and with the basic financial statements of PERA on pages 54–57.

In addition to historical information, the Management's Discussion and Analysis includes forward-looking statements, which involve certain risks and uncertainties. PERA's actual results, performance, and achievements may differ materially from the results, performance, and achievements expressed or implied in such forward-looking statements, due to a wide range of factors, including changes in interest rates, changes in the securities markets, general economic conditions, and legislative changes, as well as other factors.

PERA administers 11 fiduciary funds, including five cost-sharing multiple-employer defined benefit pension trust funds: the State Division Trust Fund, the School Division Trust Fund, the Local Government Division Trust Fund, the Judicial Division Trust Fund, and the Denver Public Schools (DPS) Division Trust Fund (the Division Trust Funds). PERA also administers two defined contribution pension trust funds—the Voluntary Investment Program and the Defined Contribution Retirement Plan; one deferred compensation trust fund, the Deferred Compensation Plan; two cost-sharing multiple-employer defined benefit other postemployment benefit plans (OPEB)—the Health Care Trust Fund (HCTF) and the Denver Public Schools Health Care Trust Fund (DPS HCTF); and one private purpose trust fund, the Life Insurance Reserve (LIR).

The Management's Discussion and Analysis is organized into the following two sections: Defined Benefit Funds and Defined Contribution and Deferred Compensation Funds. The Defined Benefit Funds section includes the discussion and analysis of the Division Trust Funds, OPEB Funds, and the LIR. The Defined Contribution and Deferred Compensation Funds section includes discussion and analysis of the Voluntary Investment Program, the Defined Contribution Retirement Plan, and the Deferred Compensation Plan.

DEFINED BENEFIT FUNDS

Basic Retirement Equation
Investment Income + Contributions = Benefits Paid + Expenses (I+C=B+E)

At the most basic level, in the long run, a retirement plan must balance the money coming in through investment earnings and contributions against the money going out through benefit and expense payments.

I + C = B + E

Where: **I** is investment income
C is contribution inflows
B is benefits paid
E is expenses

During any year in the life of a plan, one side of the equation will be greater than the other with the goal that they will balance in the long run. The Statement of Changes in Net Position on pages 56–57 details the contributions, investment income, benefit payments, and expenses for all of the fiduciary funds PERA administers.

The results for the past 30 years (January 1, 1984, to December 31, 2013) show that the funds grew by $40,242,000. The breakdown of the change in net position is shown below for the 30-year period January 1, 1984, to December 31, 2013. During this time, the number of members and benefit recipients grew over 300 percent from 120,437 to 512,414.

Change in Net Position (30-Year Period)

I	– Investment income	$52,680,000
C	– Contributions	31,754,000
C	– Plan transfers	2,764,000
	Subtotal	87,198,000
B	– Benefits	46,294,000
E	– Expenses	662,000
	Subtotal	46,956,000
	Change in net position	$40,242,000

(In Thousands of Dollars)

For the year ended December 31, 2013, the net position of the defined benefit funds increased by $3,920,879 or 9.8 percent. The increase was principally due to the strong financial markets where the total fund realized an annual return of 15.6 percent versus the total fund benchmark's annual return of 16.2 percent. The custom benchmark for the total fund comprises 56 percent of the Global Equity Custom Benchmark; 25 percent of the Fixed Income Custom Benchmark; 7 percent of the Real Estate Custom Benchmark; 7 percent of the Alternative Custom Benchmark; and 5 percent of the Opportunity Fund Benchmark. Benefits and expenses exceeded contributions by $2,170,364. The breakdown of the net change in assets is shown below for the year ended December 31, 2013.

2013 Change in Net Position

I -	Investment income	$6,091,243
C -	Contributions	2,022,072
	Subtotal	8,113,315
B -	Benefits	4,144,605
E -	Expenses	47,831
	Subtotal	4,192,436
	Change in net position	$3,920,879

Financial Reporting Highlights

The net position for all defined benefit funds administered by PERA increased $3,920,879 during calendar year 2013.

Net Position

	2013 CHANGE IN NET POSITION	2013 ENDING NET POSITION
State Division Trust Fund	$1,183,108	$13,980,460
School Division Trust Fund	2,063,648	22,740,003
Local Government Division Trust Fund	342,180	3,508,312
Judicial Division Trust Fund	29,436	272,653
Denver Public Schools Division Trust Fund	276,361	3,272,439
Health Care Trust Fund	22,872	314,609
Denver Public Schools Health Care Trust Fund	1,646	16,489
Life Insurance Reserve	1,628	17,492
Total	$3,920,879	$44,122,457

In all funds, the increase in the net position was primarily due to strong investment income in 2013.

Change in Net Position

	(C) CONTRIBUTIONS AND OTHER ADDITIONS	+ (C) PLAN TRANSFERS	+ (I) INVESTMENT GAIN/(LOSS)	– (B) – (E) BENEFITS, EXPENSES, AND OTHER DEDUCTIONS	= NET CHANGE CHANGE IN NET POSITION
State Division Trust Fund	$631,567	$—	$1,931,658	$1,380,117	$1,183,108
School Division Trust Fund	966,425	—	3,136,269	2,039,046	2,063,648
Local Government Division Trust Fund	117,201	—	482,297	257,318	342,180
Judicial Division Trust Fund	11,502	—	37,096	19,162	29,436
Denver Public Schools Division Trust Fund	70,824	—	452,919	247,382	276,361
Health Care Trust Fund	213,401	—	46,097	236,626	22,872
Denver Public Schools Health Care Trust Fund	11,152	—	2,277	11,783	1,646
Life Insurance Reserve	—	—	2,630	1,002	1,628
2013 change in net position	$2,022,072	$—	$6,091,243	$4,192,436	$3,920,879
2012 change in net position	$1,927,278	$—	$4,737,372	$3,995,663	$2,668,987
2011 change in net position	$1,861,792	$—	$721,110	$3,771,506	($1,188,604)
2010 change in net position	$1,813,362	$2,764,076	$4,812,116	$3,599,611	$5,789,943
2009 change in net position[1]	$1,667,852	$—	$4,933,674	$3,193,578	$3,407,948
2009–2013 change in net position[1]	$9,292,356	$2,764,076	$21,295,515	$18,752,794	$14,599,153

[1]Does not include the DPS Division Trust Fund and the DPS HCTF prior to 2010.

(In Thousands of Dollars)

Analysis of Investment Income
*Basic Funding Equation: **I**+C = B+E*

Investment Highlights

Investment Income

	NET APPRECIATION/ (DEPRECIATION) IN FAIR VALUE	INTEREST AND DIVIDENDS	REAL ESTATE, ALT INVEST, AND OPPTY FUND NET OPERATING INC	INVESTMENT EXPENSES	SECURITIES LENDING INCOME	NET INVESTMENT INCOME
State Division Trust Fund	$1,653,942	$255,974	$64,521	($46,129)	$3,350	$1,931,658
School Division Trust Fund	2,685,527	415,456	104,720	(74,870)	5,436	3,136,269
Local Government Division Trust Fund	413,030	63,844	16,092	(11,505)	836	482,297
Judicial Division Trust Fund	31,775	4,905	1,236	(884)	64	37,096
Denver Public Schools Division Trust Fund	387,798	60,023	15,130	(10,817)	785	452,919
Health Care Trust Fund	39,478	6,101	1,537	(1,099)	80	46,097
Denver Public Schools Health Care Trust Fund	1,951	301	75	(55)	5	2,277
Life Insurance Reserve	2,250	350	88	(63)	5	2,630
2013 Total	$5,215,751	$806,954	$203,399	($145,422)	$10,561	$6,091,243
2012 Total	$3,854,770	$791,481	$225,967	($147,602)	$12,756	$4,737,372
2011 Total	($105,461)	$727,068	$227,310	($142,377)	$14,570	$721,110
2010 Total	$4,022,081	$703,530	$226,428	($153,918)	$13,995	$4,812,116
2009 Total[1]	$4,201,203	$663,565	$158,338	($118,731)	$29,299	$4,933,674

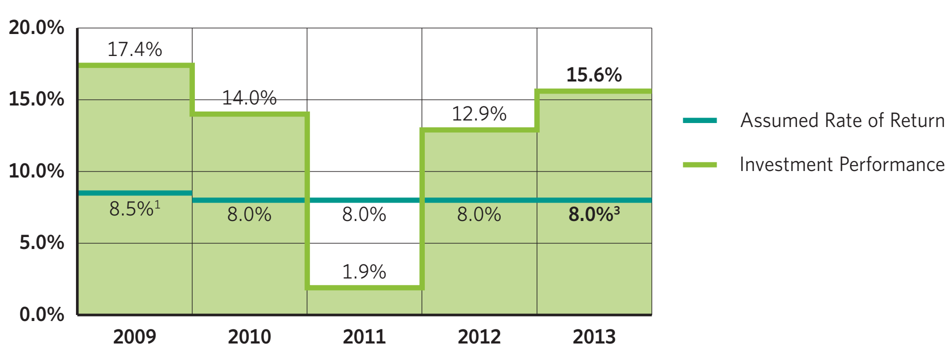
[1] Does not include the DPS Division Trust Fund and the DPS HCTF prior to 2010.

The largest inflow into a retirement plan over the long term comes from investment income. Over the past 30 years, even with the large losses in 2008, investment income represents 60 percent of the inflows into PERA, and over the past 10 years it represents 58 percent of the inflows.

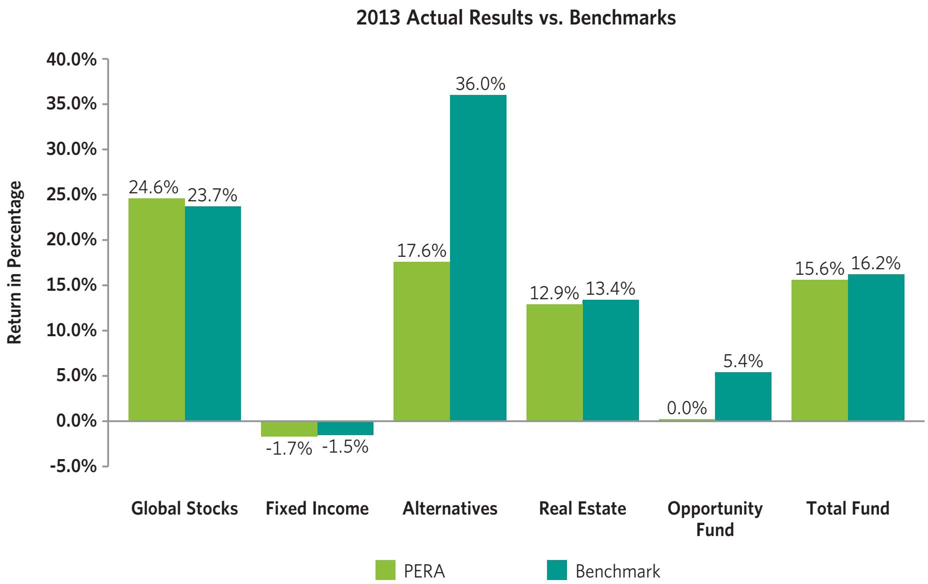
Investment Performance

For the year ended December 31, 2013, the net-of-fee rate of return on the pooled investment assets was 15.6 percent compared to 12.9 percent for the year ended December 31, 2012. The 2013 return was higher than the actuarial assumed rate. The net-of-fee annualized rate of return for the pooled investment assets was 12.2 percent for the past five years and 7.6 percent for the past 10 years. The 30-year annualized gross-of-fee rate of return for the pooled investment assets was 9.5 percent. Market returns and volatility will vary from year to year for the total fund and across various asset classes. The graph below compares the actual investment performance of the pooled investment assets versus the actuarial assumed rate of return for each of the last five years.

Actual vs. Assumed Rate of Return[1, 2, 3]



[1] In September 2009, the assumed rate of return was lowered to 8.0 percent effective January 1, 2010.
[2] Does not include the DPS Division Trust Fund and the DPS HCTF prior to 2010.
[3] In November 2013, the assumed rate of return was lowered to 7.5 percent effective January 1, 2014.



Note: Hewitt EnnisKnupp, Inc., the Board's investment consultant, provides the investment returns based on data made available by PERA's custodian, The Northern Trust Company. Listed above are the one-year net-of-fee time-weighted rates of return for each asset class and their respective benchmarks.

As of April 1, 2004, PERA adopted a policy benchmark, which is a passive representation of the asset allocation policy. For 2013, the policy benchmark is a combination of 56 percent of the Global Equity Custom Benchmark; 25 percent of the Fixed Income Custom Benchmark; 7 percent of the Real Estate Custom Benchmark; 7 percent of the Alternative Custom Benchmark; and 5 percent of the Opportunity Fund Benchmark. For more information, see the Schedule of Investment Results on page 109 and the Fund Performance Evaluation on pages 111–113.

The total fund underperformed the policy benchmark return by approximately 60 basis points for the year ended December 31, 2013. The Alternative Investment asset class was the primary contributor to the underperformance, while Fixed Income and Real Estate also made modest negative contributions. Alternative Investment performance tends to lag public stock market returns when the stock market has a large move. In addition, while activity such as initial public offerings and mergers and acquisitions improved during 2013, there were still limited opportunities to realize appreciation of alternative partnership investments. Nonetheless, Alternative Investments did return 17.6 percent, which is more than double the investment rate of return. Global Stocks provided a positive contribution. The outperformance of the Global Stocks portfolio was due to several factors, including an underweight to basic materials stocks, which underperformed the rest of the equity market and superior stock selection. Stock selection was aided by overweight holdings of certain internet-related technology companies. Asset allocation, or the variance in the actual weights of the various asset classes versus the target weights, produced a positive impact to the total fund returns, while cash had a small negative impact on the overall return.

For the year ended December 31, 2013, PERA's total fund returned 15.6 percent net-of-fees, compared to the BNY Mellon Performance and Risk Analytics and Investment Metrics Median Public Fund Universe return of 15.5 percent. As of December 31, 2013, the BNY Mellon Performance and Risk Analytics and Investment Metrics Median Public Fund Universe measure was comprised of 84 public pension funds with assets of approximately $1.3 trillion. PERA's total fund returned 9.9 percent and 12.2 percent on a three- and five-year annualized basis, respectively, compared with the BNY Mellon Performance and Risk Analytics and Investment Metrics Median Public Fund Universe returns of 9.4 percent and 12.1 percent, respectively.

Asset Allocation

The PERA Board of Trustees (Board) is responsible for the investment of PERA's funds with the following statutory limitations: the aggregate amount of monies invested in corporate stocks and fixed income securities convertible into stock cannot exceed 65 percent of the then book value of the fund, no investment in common and/or preferred stock of any single corporation can exceed 5 percent of the then book value of the fund, and the fund cannot acquire more than 12 percent of the outstanding stock or bonds of any single corporation. As a fiduciary of the funds, the Board is responsible to carry out its investment functions solely in the interest of the PERA members and benefit recipients and for the exclusive purpose of providing benefits.

In 2010, the Board commissioned an Asset/Liability Study prepared by Hewitt EnnisKnupp, Inc. The objective of the study was to determine the optimal strategic asset allocation policy that would ultimately allow PERA to meet its benefit obligations, while also ensuring that PERA incurs appropriate levels of risk. The Board's policy specifies the desired target allocation for each asset class as well as the ranges within which each asset class may operate. As a result of the study, the Board approved the current asset allocation targets and ranges at its September 2010 Board meeting.

(In Thousands of Dollars)

Asset Allocation Targets and Ranges

	12/31/2012 ACTUAL %[1]	2012 TARGET %	2012 RANGES	12/31/2013 ACTUAL %[1]	2013 TARGET %	2013 RANGES
Global Stocks	56.5%	56%	50%–62%	58.4%	56%	50%–62%
Fixed Income	23.3%	25%	22%–28%	23.4%	25%	22%–28%
Alternative Investments[2]	8.7%	7%	4%–10%	7.8%	7%	4%–10%
Real Estate	8.1%	7%	4%–10%	7.1%	7%	4%–10%
Opportunity Fund[3]	2.5%	5%	0%–8%	2.5%	5%	0%–8%
Cash & Short-Term Investments[4]	0.9%	0%		0.8%	0%	

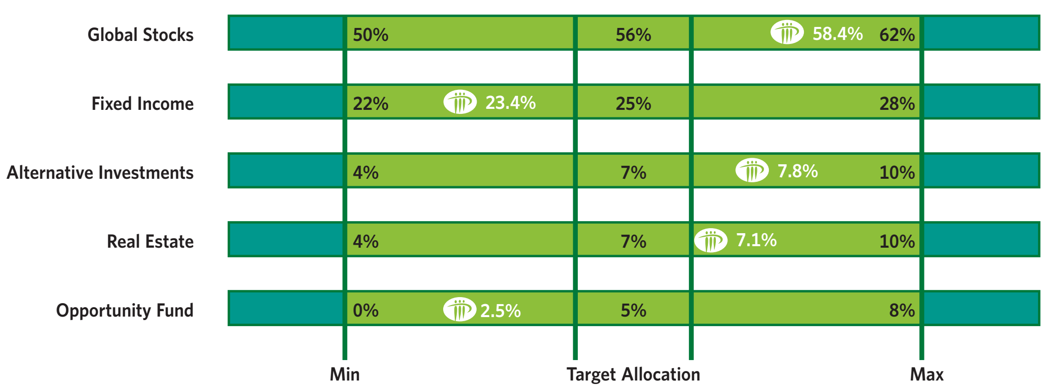
[1] Asset allocation decisions are made based on the total holdings of the portfolios within each asset class. Therefore, the investment receivables, payables, accruals, and cash and short-term investments are allocated back to the investment portfolios that hold them for purposes of the table above and chart below.

[2] The Alternative Investment asset class has exposure to private equity, venture capital, secondary interests in private equity funds, and distressed debt.

[3] The Opportunity Fund asset class has exposure to timber, commodity, risk-parity, and tactical opportunity funds.

[4] A range has not been set for Cash & Short-Term Investments in the Asset Allocation Policy. The target percentage is zero.

2013 Asset Allocation Permissible Ranges vs. December 31, 2013, Actual Allocation



Sudan Divestment

Following the 2007 legislative session, former Governor Ritter signed into law House Bill 07-1184: Sudan Divestment by Public Pension Plans, which imposes targeted divestment from companies with active business operations in Sudan. As a result of this legislation, PERA is required to create a list of scrutinized companies at least every six months and to prohibit investments in these companies going forward. The establishment of the list requires PERA to engage the companies on the list to warn them of potential divestment and to encourage the companies to change their activities in Sudan. PERA must also engage the managers of indirect investments in companies on the list and request removal of scrutinized companies or ask the manager to create a similar fund that does not contain the identified companies. PERA contacts managers in its defined benefit plans as well as managers of funds within the defined contribution and deferred compensation plans regarding the Scrutinized Companies List. In 2013, PERA submitted its annual required report to elected officials on June 25, 2013.

More information regarding the Sudan Divestment can be obtained from the PERA website at www.copera.org.

Iran-Related Investment Policy

On January 18, 2008, the Board adopted an Iran-Related Investment Policy. This policy outlines a phased strategy to address PERA's direct public investments in foreign companies doing business in the Islamic Republic of Iran. The strategy addresses and includes a number of actions, up to and including possible divestment. PERA recognizes the federal government has sole responsibility for the conduct of American foreign policy. PERA is acting out of a fiduciary concern for the welfare of its members' assets, which requires a broad horizon and sensitivity to the potential risks posed by investment in Iran.

More information regarding the Iran investment policy can be obtained from the PERA website at www.copera.org.

Commitments

As of December 31, 2013, PERA had commitments for future investments in Alternative Investments of $1,793,255, in Real Estate of $650,936, and in the Opportunity Fund of $55,260.

(In Thousands of Dollars)

Analysis of Contributions
*Basic Funding Equation: I+**C** = B+E*

Contributions
2013 Total Contributions for Division and Health Care Trust Funds

TRUST FUND	EMPLOYER CONTRIBUTIONS[1]	MEMBER CONTRIBUTIONS	PURCHASED SERVICE	RETIREE HEALTH AND LIFE PREMIUMS	FEDERAL HEALTH CARE SUBSIDIES	OTHER	TOTAL CONTRIBUTIONS AND OTHER
State Division	$401,658	$202,799	$22,241	$—	$—	$4,869	$631,567
School Division	624,784	322,217	19,285	—	—	139	966,425
Local Government Division	67,197	42,627	7,363	—	—	14	117,201
Judicial Division	6,587	3,224	240	—	—	1,451	11,502
Denver Public Schools Division	25,157	43,564	1,834	—	—	269	70,824
Health Care	72,784	—	—	114,364	15,731	10,522	213,401
Denver Public Schools Health Care	5,558	—	—	4,719	563	312	11,152
2013 Total	$1,203,725	$614,431	$50,963	$119,083	$16,294	$17,576	$2,022,072
2012 Total	$1,093,193	$640,560	$49,795	$111,399	$14,686	$17,645	$1,927,278
2011 Total	$1,013,731	$676,768	$31,441	$113,218	$14,650	$11,984	$1,861,792
2010 Total	$987,139	$636,703	$31,428	$114,905	$27,003	$16,184	$1,813,362
2009 Total[2]	$941,801	$569,338	$23,439	$106,903	$13,633	$12,738	$1,667,852

[1] Employer contributions include the employer statutory rate, AED, and SAED, less an offset (14.51 percent in 2013 and 15.37 percent in 2012) for the DPS Division as required by C.R.S. § 24-51-412 *et seq.*

[2] Does not include the DPS Division and the DPS HCTF prior to 2010.

Member Contribution Rates for 2013

TRUST FUND	JANUARY 1–DECEMBER 31, 2013
State Division (except State Troopers)	8.00%
State Division (State Troopers)	10.00%
School Division	8.00%
Local Government Division	8.00%
Judicial Division	8.00%
Denver Public Schools Division	8.00%
Health Care	0.00%
Denver Public Schools Health Care	0.00%

Member and employer contribution rates are set in statute. Member contributions for the Division Trust Funds decreased from $640,560 in 2012 to $614,431 in 2013. The decrease in member contributions is primarily due to the expiration of the contribution rate swap required by Senate Bill (SB) 10-146 and SB 11-076. SB 10-146 required member contributions to increase by 2.50 percent and employer contributions to decrease by 2.50 percent for the State and Judicial Divisions for the period July 1, 2010 through June 30, 2011 (contribution rate swap). SB 11-076 extended the contribution rate swap an additional year, from July 1, 2011, through June 30, 2012. Over the past 30 years, member contributions represent 19 percent of the inflows into the Division Trust Funds.

Employer contributions for the Division Trust Funds, the HCTF, and the DPS HCTF increased from $1,093,193 in 2012 to $1,203,725 in 2013. In addition to the 2.50 percent contribution rate swap in the State and Judicial Divisions for six months in 2012, employer contributions increased due to increases in the Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED). Over the past 30 years, employer contributions represent 19 percent of the inflows into the Division Trust Funds, HCTF, and the DPS HCTF.

(In Thousands of Dollars)

Employer Contribution Rates for 2013

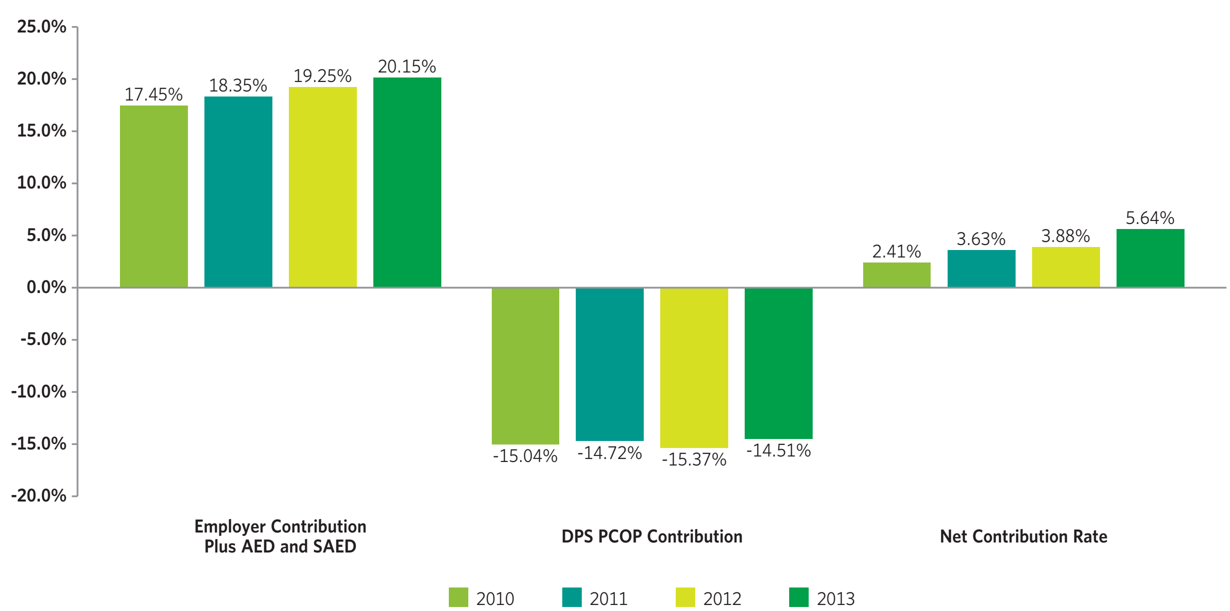
TRUST FUND	ANNUAL REQUIRED CONTRIBUTION[1]	ACTUAL EMPLOYER CONTRIBUTION RATE	HEALTH CARE CONTRIBUTION RATE	AED	SAED	DENVER PUBLIC SCHOOLS PCOP OFFSET	CONTRIBUTION RATE AVAILABLE FOR FUNDING
State Division (except State Troopers)	20.01%	10.15%	(1.02%)	3.40%	3.00%	—	15.53%
State Division (State Troopers)	—	12.85%	(1.02%)	3.40%	3.00%	—	18.23%
School Division	19.79%	10.15%	(1.02%)	3.40%	3.00%	—	15.53%
Local Government Division	10.62%	10.00%	(1.02%)	2.20%	1.50%	—	12.68%
Judicial Division	21.53%	13.66%	(1.02%)	2.20%	1.50%	—	16.34%
Denver Public Schools Division	11.53%	13.75%	(1.02%)	3.40%	3.00%	(14.51%)	4.62%
Health Care	1.24%	—	1.02%	—	—	—	1.02%
Denver Public Schools Health Care	0.86%	—	1.02%	—	—	—	1.02%

[1] Annual Required Contribution rates for 2013 contributions are based on the 2011 Actuarial Valuation.

C.R.S § 24-51-412 *et seq.* provides for an offset to the DPS Division employer contribution rate. The offset, expressed as a percentage of payroll, is equal to the annual assumed payment obligations for pension certificates of participation (PCOPs) issued in 1997 and 2008, including subsequent refinancings by the Denver Public Schools at a fixed effective annual interest rate of 8.50 percent. At a minimum, the DPS Division employer contribution rate must be sufficient to fund the DPS HCTF (1.02 percent) and the Annual Increase Reserve (AIR) (1.00 percent) as the AIR applies to the DPS Division. The annual increase (AI) is a post-retirement cost-of-living adjustment meeting certain criteria as described in Note 1 of the Notes to the Financial Statements. The staff of Denver Public Schools calculated the PCOP offset rate of 15.04 percent for 2010, 14.72 percent for 2011, 15.37 percent for 2012, 14.51 percent for 2013, and 16.89 percent for 2014.

C.R.S § 24-51-401(1.7) (e) recognizes the effort to equalize the funded status of the DPS Division and the School Division of PERA. Beginning January 1, 2015, and every fifth year thereafter, the bill requires a true-up calculation to confirm the equalization of the funded status of these two divisions. The true-up calculation is an actuarial projection to assure the funded status of these divisions will be equal in 30 years. In the event a true-up calculation does not project equalization between these divisions over a 30-year period, the Board shall recommend an adjustment of the DPS Division employer contribution rate to the Colorado General Assembly. The PCOP offset in the DPS Division will be a significant contributor to lowering the funded ratio, until such a time that the employer contribution rate is adjusted. An adjustment to the DPS Division employer contribution rate may result in a significant increase in the total contributions paid by the DPS Division employers.

Denver Public Schools Employer Contribution Rates Plus AED, SAED, and DPS PCOP Contribution Offset (Includes DPS Health Care Trust Fund Contribution)



(In Thousands of Dollars)

Prospective Contribution Information

The AED and the SAED are set to increase in future years, as described in the table shown below. With the passage of SB 10-001, the AED and the SAED can be adjusted based on the year-end funded status within a particular Division Trust Fund. If a particular Division Trust Fund reaches a funded status of 103 percent, a decrease in the AED and SAED is mandated and if it subsequently falls below a funded status of 90 percent, an increase is mandated. For the Local Government and Judicial Divisions, if the funded ratio reaches 90 percent and subsequently falls below 90 percent, an increase in the AED and SAED is mandated. Increases cannot exceed the maximum allowable limitations shown in the table below.

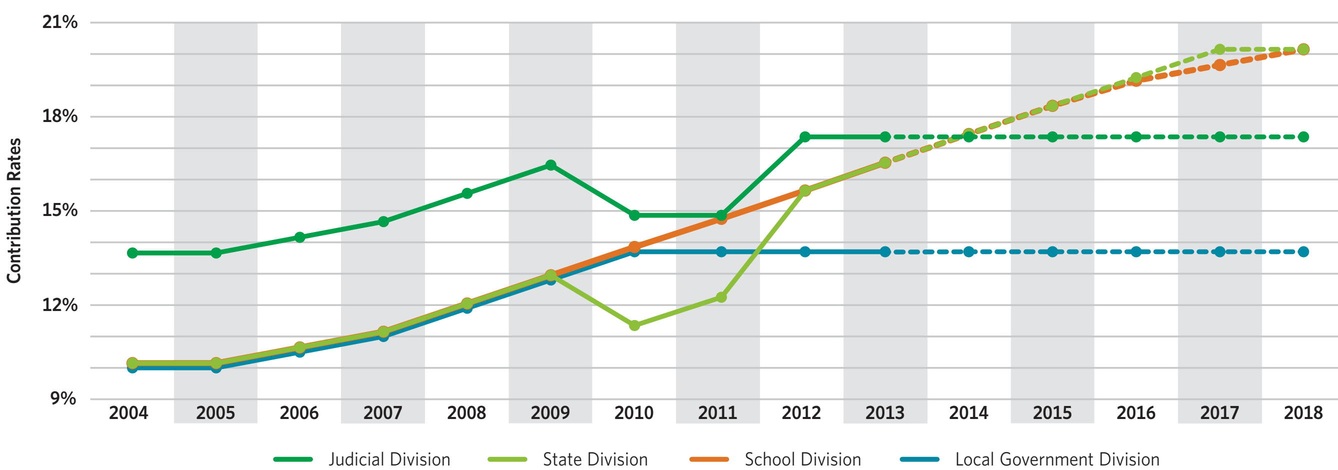
Future AED and SAED Rates

	STATE DIVISION TRUST FUND		SCHOOL DIVISION TRUST FUND		LOCAL GOVERNMENT DIVISION TRUST FUND		JUDICIAL DIVISION TRUST FUND		DENVER PUBLIC SCHOOLS DIVISION TRUST FUND[1]	
PERIOD	AED	SAED	AED	SAED	AED	SAED	AED	SAED	AED	SAED
1/1/2014—12/31/2014	3.80%	3.50%	3.80%	3.50%	2.20%	1.50%	2.20%	1.50%	3.80%	3.50%
1/1/2015—12/31/2015	4.20%	4.00%	4.20%	4.00%	2.20%	1.50%	2.20%	1.50%	4.20%	4.00%
1/1/2016—12/31/2016	4.60%	4.50%	4.50%	4.50%	2.20%	1.50%	2.20%	1.50%	4.50%	4.50%
1/1/2017—12/31/2017	5.00%	5.00%	4.50%	5.00%	2.20%	1.50%	2.20%	1.50%	4.50%	5.00%
1/1/2018—12/31/2018	5.00%	5.00%	4.50%	5.50%	2.20%	1.50%	2.20%	1.50%	4.50%	5.50%
Maximum allowable limitations	5.00%	5.00%	4.50%	5.50%	5.00%	5.00%	5.00%	5.00%	4.50%	5.50%

[1] DPS Division employers are permitted to reduce the AED and SAED by the PCOP offset, as specified in C.R.S. § 24-51-412 *et seq.*

Based on the current covered payroll for the State Division, School Division, and the DPS Division, the annual AED and SAED increase would cause contributions to grow annually by $22,300, $35,400, and $4,900, respectively. If the scheduled future increases in the AED and SAED are not made, it could result in significant underfunding of the plans and impact the ability to make future benefit payments. The shift of the State and Judicial Divisions' employer contributions to member contributions, as required by SB 10-146 and SB 11-076 (contribution rate swap), negatively affects the stated goal of SB 10-001 for those divisions. The actuarial liabilities in the State and Judicial Divisions are estimated to increase by $17,000 and $100, respectively, by the rate swap required in these bills.

Employer Contribution Rates Plus AED and SAED (Includes Health Care Trust Fund Contributions)

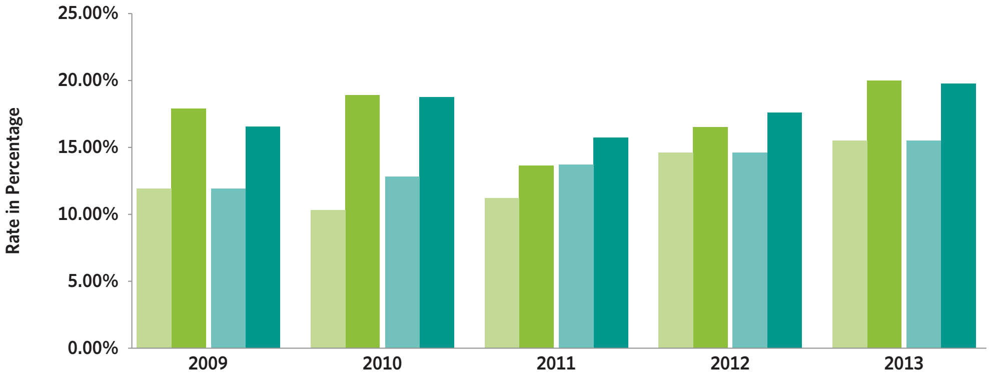


Note: The 2010 and 2011 contributions for the State and Judicial Divisions include the 2.50 percent rate swap required by SB 10-146, and extended through June 30, 2012, by SB 11-076.

Annual Required Contribution (ARC)

ARC History

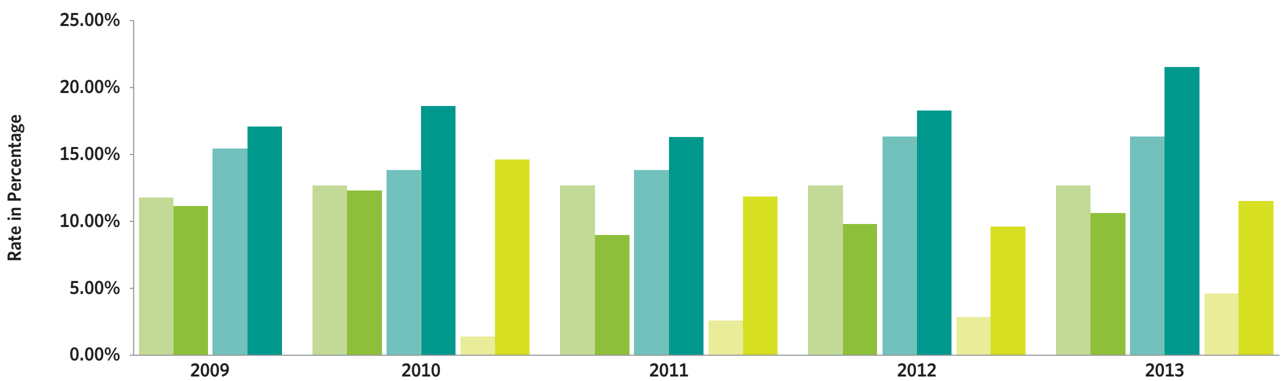
State and School Divisions; Year-End Employer Contribution/ARC Comparison
(Contribution Includes AED and SAED Less Health Care Trust Fund Allocation)



	2009	2010	2011	2012	2013
State Actual[1]	11.93%	10.33%[2]	11.23%[2]	14.63%	**15.53%**
State ARC	17.91%	18.93%[2]	13.63%[2]	16.52%[2]	**20.01%**
School Actual	11.93%	12.83%	13.73%	14.63%	**15.53%**
School ARC	16.56%	18.75%	15.73%	17.60%	**19.79%**

[1] Actual rates are for non-State Troopers.
[2] The rate includes the 2.50 percent reduction required by SB 10-146 and SB 11-076.

Local Government, Judicial, and Denver Public Schools Divisions; Year-End Employer Contribution/ARC Comparison
(Contribution Includes AED and SAED Less Health Care Trust Fund Allocation)



	2009	2010	2011	2012	2013
Local Govt Actual	11.78%	12.68%	12.68%	12.68%	**12.68%**
Local Govt ARC	11.14%	12.31%	8.98%	9.79%	**10.62%**
Judicial Actual	15.44%	13.84%[1]	13.84%[1]	16.34%	**16.34%**
Judicial ARC	17.08%	18.63%[1]	16.30%[1]	18.28%[1]	**21.53%**
DPS Actual[2]	—	1.39%	2.61%	2.86%	**4.62%**
DPS ARC[2]	—	14.61%	11.85%	9.60%	**11.53%**

[1] The rate includes the 2.50 percent reduction required by SB 10-146 and SB 11-076.
[2] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

ARC Deficiency/(Excess)

The Annual Required Contribution (ARC) is calculated and reported in the annual actuarial valuation using the investment rate of return and discount rate assumptions in that valuation. The ARC calculated provides the rate effective two years from the date of valuation. In 2013, the actual contributions, as set in statute, were $278.0 million less than the ARC as calculated by the actuaries. Even with SB 10-001, the ARC deficiency is expected to continue until statutory benefit and contribution changes are fully implemented. However, it should be noted, the significant decrease in the annual deficiency during the past three years is due to the benefit and funding changes set forth in SB 10-001. During the past 11 years, this shortfall in funding without adjustment for investment earnings to the Division Trust Funds has been $3.7 billion. The table on the next page shows the yearly ARC shortfall (excess) by fund for the past five years.

Yearly ARC Deficiency/(Excess)[1]
(Amounts in Millions of Dollars)

VALUATION YEAR	2009	2010	2011	2012	2013
State Division	$131.5	$169.4	$43.0	$60.7	$98.5
School Division	173.9	214.6	56.7	99.3	158.6
Local Government Division	(5.6)	(1.3)	(26.2)	(45.4)	(9.5)
Judicial Division	0.6	1.3	1.0	1.2	2.1
Denver Public Schools Division	—	67.1	46.5	35.6	40.3
Health Care	(8.8)	(9.4)	1.6	(7.0)	(10.4)
Denver Public Schools Health Care	—	(0.8)	(1.0)	(1.0)	(1.6)
Total	$291.6	$440.9	$121.6	$143.4	$278.0

[1] The DPS Division and the DPS HCTF were established January 1, 2010.

For more detail on the ARC, see the Required Supplementary Information—Schedule of Employer Contributions for the Division Trust Funds on page 93 and the Schedule of Contributions from Employers and Other Contributing Entities for the Health Care Trust Funds on page 94.

Cumulative Employer Contribution Deficiency

The following chart shows the net pension obligation (NPO) of all employers in each fund. The NPO is a measure that represents employers' cumulative contribution shortfall versus actuarially determined contributions adjusted to include investment earnings at the actuarial assumed investment rate of return. This accounts for the difference from the yearly ARC deficiency shown above. If the Division Trust Funds of PERA were single employer plans or an agent multi-employer plan, these amounts, allocated to each employer, would need to be reported as a liability on the employers' financial statements. As the employers are part of a cost-sharing multi-employer plan, they do not record these amounts as liabilities and only record a liability if they have not paid the statutorily required contribution rate. This table illustrates the overall impact of the employer contribution deficiency.

Cumulative Net Pension Obligation at End of Valuation Year[1,2]
(Amounts in Millions of Dollars)

VALUATION YEAR	2009	2010	2011	2012	2013
State Division	$1,201.7	$1,404.1	$1,485.7	$1,587.3	$1,729.5
School Division	1,697.2	1,958.5	2,069.1	2,225.3	2,445.1
Local Government Division	76.4	77.2	53.1	9.1	(0.2)
Judicial Division	9.0	10.5	11.7	13.2	15.7
Denver Public Schools Division	—	67.1	115.5	154.2	198.7
Total	$2,984.3	$3,517.4	$3,735.1	$3,989.1	$4,388.8

[1] A net OPEB obligation is not shown for the HCTF and the DPS HCTF as there has not been a cumulative ARC deficiency for these funds.

[2] The DPS Division was established January 1, 2010.

Future ARC

Using the Governmental Accounting Standards Board (GASB) Statements No. 25 and No. 43 as a guide and the 2012 actuarial valuation based on an assumed 8.0 investment rate of return and discount rate, the 2014 annual required employer contributions, to meet a 30-year amortization period, would need to be as follows:

- State Division Trust Fund—20.45 percent
- School Division Trust Fund—19.65 percent
- Local Government Division Trust Fund—11.78 percent
- Judicial Division Trust Fund—20.07 percent
- Denver Public Schools Division Trust Fund—9.67 percent
- Health Care Trust Fund—1.32 percent
- Denver Public Schools Health Care Trust Fund—0.87 percent

(In Thousands of Dollars)

Additionally, using the 2013 actuarial valuation based on an assumed 7.5 investment rate of return and discount rate, the 2015 annual required employer contributions, to meet a 30-year amortization period, would need to be as follows:

- State Division Trust Fund—22.35 percent
- School Division Trust Fund—21.94 percent
- Local Government Division Trust Fund—13.62 percent
- Judicial Division Trust Fund—21.45 percent
- Denver Public Schools Division Trust Fund—11.06 percent
- Health Care Trust Fund—1.15 percent
- Denver Public Schools Health Care Trust Fund—0.81 percent

Analysis of Benefits and Expenses

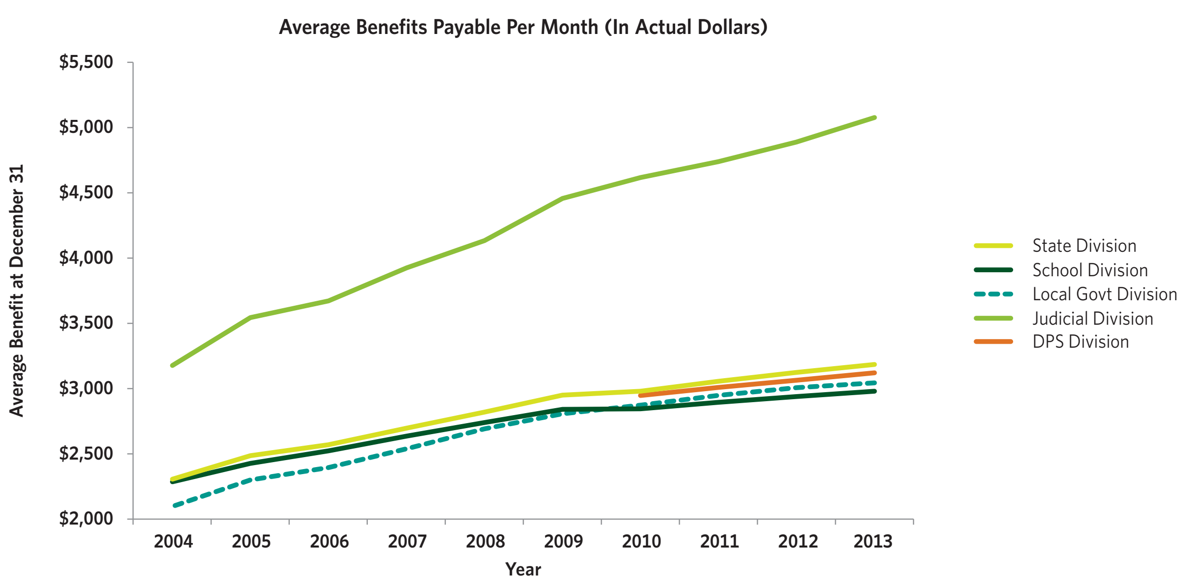
*Basic Funding Equation: I+C = **B+E***

Summary of Benefits and Expenses

Total Deductions by Trust Fund

TRUST FUND	BENEFIT PAYMENTS	REFUNDS	DISABILITY PREMIUMS	ADMIN EXPENSES	OTHER	TOTAL DEDUCTIONS
State Division	$1,295,780	$68,735	$2,229	$9,780	$3,593	$1,380,117
School Division	1,932,756	76,980	3,655	18,523	7,132	2,039,046
Local Government Division	217,875	32,480	479	2,021	4,463	257,318
Judicial Division	18,616	385	40	69	52	19,162
Denver Public Schools Division	237,921	6,733	338	2,240	150	247,382
Health Care	222,860	—	—	13,766	—	236,626
Denver Public Schools Health Care	11,222	—	—	561	—	11,783
2013 Total	$3,937,030	$185,313	$6,741	$46,960	$15,390	$4,191,434
2012 Total	$3,736,653	$195,742	$4,749	$42,730	$15,217	$3,995,091
2011 Total	$3,537,615	$176,244	$5,010	$42,121	$9,396	$3,770,386
2010 Total	$3,364,830	$173,931	$5,296	$42,966	$11,468	$3,598,491
2009 Total[1]	$2,992,743	$149,004	$5,812	$36,307	$8,561	$3,192,427

[1] Does not include the DPS Division Trust Fund and the DPS HCTF prior to 2010.



Note: The DPS Division was established January 1, 2010.

(In Thousands of Dollars)

Average Monthly Benefit[1] by Division (In Actual Dollars)

YEAR	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DENVER PUBLIC SCHOOLS DIVISION
2009	$2,950	$2,841	$2,807	$4,457	$—
2010	2,980	2,845	2,873	4,617	2,947
2011	3,056	2,895	2,948	4,739	3,009
2012	3,124	2,939	3,007	4,889	3,064
2013	**3,185**	**2,980**	**3,044**	**5,077**	**3,121**

[1] Most employees working for a PERA-affiliated employer do not earn Social Security benefits.

Ratio of Active Members to Retirees and Beneficiaries (As of December 31)

YEAR	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DENVER PUBLIC SCHOOLS DIVISION
2009	1.73	2.51	3.45	1.09	—
2010	1.69	2.33	3.18	1.08	2.12[1]
2011	1.65	2.21	3.02	1.05	2.15
2012	1.61	2.14	2.05[2]	1.02	2.17
2013	**1.58**	**2.10**	**1.94**	**1.03**	**2.26**

[1] The ratio increased from the 2009 DPSRS ratio of 1.30 due to the hourly and part-time staff of DPS becoming members of the DPS Division at PERA as required by C.R.S. § 24-51-412 *et seq.*

[2] The rate decreased due to the termination of affiliation with PERA by Memorial Health System (see "Other Changes" below).

The decline in the ratio of active members to retirees and beneficiaries is reflective of the aging population and maturing of the plan. By itself, a declining ratio of active members to retirees and beneficiaries does not pose a problem to a Division Trust Fund's actuarial condition. However, to the extent that a plan is underfunded, a low or declining ratio of active members to retirees and beneficiaries, coupled with increasing life expectancy, can complicate the Division Trust Fund's ability to move toward full funding, as fewer active, contributing members, relatively, are available to amortize the unfunded liability.

Ratio of Benefit Payments to Contributions

TRUST FUND	EMPLOYER CONTRIBUTIONS	MEMBER CONTRIBUTIONS	TOTAL CONTRIBUTIONS	BENEFIT PAYMENTS	RATIO OF BENEFITS/CONTRIBUTIONS 2013	2012	2011	2010	2009
State Division	$401,658	$202,799	$604,457	$1,295,780	**2.1**	2.2	2.2	2.2	2.2
School Division	624,784	322,217	947,001	1,932,756	**2.0**	2.1	2.0	2.0	2.0
Local Government Division	67,197	42,627	109,824	217,875	**2.0**	1.4	1.2	1.1	1.1
Judicial Division	6,587	3,224	9,811	18,616	**1.9**	1.8	1.8	1.7	1.7
Denver Public Schools Division	25,157	43,564	68,721	237,921	**3.5**	4.1	4.2	5.0	—

Other Changes

Memorial Health System

Effective October 1, 2012, Memorial Health System (Memorial) terminated its affiliation with PERA and employees of Memorial were no longer eligible to participate in PERA. The termination of Memorial arises from the 30-year lease of Memorial to University of Colorado Health (UCH) and its related entities. The termination had a significant effect on the Local Government Division Trust Fund, which can be seen in the following demographic and financial statistics:

	LOCAL GOVERNMENT DIVISION 12/31/2011	LOCAL GOVERNMENT DIVISION 12/31/2012	2011 TO 2012 CHANGE AMOUNT	LOCAL GOVERNMENT DIVISION 12/31/2013	2011 TO 2013 CHANGE AMOUNT	MEMORIAL 12/31/2011
Active members						
Total active members	16,065	12,097	(3,968)	**11,954**	(4,111)	4,201
Total-covered salary	$718,169	$523,668	($194,501)	**$529,003**	($189,166)	$210,122
Inactive members						
Total non-vested inactive members	17,725	20,104	2,379	**20,286**	2,561	2,343
Total vested inactive members	1,436	3,075	1,639	**2,868**	1,432	544
Retirees and beneficiaries						
Total retirees and beneficiaries	5,320	5,901	581	**6,167**	847	836
Total annual benefit amount	$184,867	$209,574	$24,707	**$222,050**	$37,183	$28,570

(In Thousands of Dollars)

	LOCAL GOVERNMENT DIVISION 12/31/2011	LOCAL GOVERNMENT DIVISION 12/31/2012	2011 TO 2012 CHANGE AMOUNT	LOCAL GOVERNMENT DIVISION 12/31/2013	2011 TO 2013 CHANGE AMOUNT	MEMORIAL 12/31/2011
Active members						
Total employer contributions	$91,780	$86,113	($5,667)	**$67,197**	($24,583)	$29,596
Total member contributions	$58,590	$54,827	($3,763)	**$42,627**	($15,963)	$17,080
Refunds						
Total refund amount	$22,686	$42,941	$20,255	**$32,480**	$9,794	$9,535
Purchased service						
Total purchase dollars	$3,902	$13,927	$10,025	**$7,363**	$3,461	$1,771
Retirements						
Total retirements	320	679	359	**338**	18	83
Total annual benefit amount	$11,120	$23,433	$12,313	**$10,177**	($943)	$2,845

PERA's position is that the termination of affiliation provisions of the PERA statutes, specifically C.R.S. §§ 24-51-313 to 321 apply to the Memorial transaction. PERA's position is that Memorial must pay its share of the current unfunded liability in PERA's Local Government Division and PERA's Health Care Trust Fund because it has terminated its affiliation with PERA.

The City of Colorado Springs and Memorial's position is that the termination of affiliation provisions of the PERA statutes do not apply to this transaction and PERA is not owed anything as a result of the Memorial transaction.

The actuarial valuation results for the Local Government Division Trust Fund reflect the termination of Memorial, which was formerly the largest employer within the Local Government Division Trust Fund. For purposes of the December 31, 2013, actuarial valuation, no additional funding is included as there is ongoing litigation regarding potential dollars owed to the Local Government Division Trust Fund and the PERA Health Care Trust Fund due to the termination. (See Note 7 and the Letter of Transmittal for additional disclosure related to the litigation.) Sufficient funds to discharge the liability in the amount of $259,000 have been placed in a court-supervised escrow account pending resolution of the litigation.

PERA's actuary calculated that Memorial's share of the unfunded liability in the Local Government Division and the Health Care Trust Fund was $190,025 as of September 30, 2012. Interest has continued to accrue on that amount since it has not been paid, and as a result, the City and Memorial owe interest of $24,493 as of April 28, 2014. If the amount owed to PERA (as determined by PERA's actuary) is paid, the reserves will be adequate to maintain current benefits payable to benefit recipients and to preserve the vested rights of inactive members. If the amount is paid, Memorial's termination of affiliation will not have an adverse financial impact on the net position or actuarial soundness of the Local Government Division Trust Fund. If Memorial is allowed to withdraw from the fund without paying its share of the unfunded liability, all other Local Government Division Trust Fund employers will absorb Memorial's share of the unfunded liability.

Securities Lending Collateral and Obligations
For the year-ended December 31, 2013, Colorado PERA had securities lending collateral of $1,780,000, an increase of $345,000 from 2012. The securities lending collateral increased due to a significant increase in the market value of securities on loan.

Disability Insurance Premiums
For the year ended December 31, 2013, the Division Trust Funds disability insurance premiums increased by $1,992. The increase was due to significantly higher disability insurance premiums for 2013 compared to 2012. Based on analysis of actual experience from prior years, the premium rate was increased in 2013.

Receivables
For the year ended December 31, 2013, the Health Care Trust Fund and DPS Health Care Trust Fund's receivables increased by $1,549. This was primarily due to the increase in prescription costs based on the Medicare Retiree Drug Subsidy.

Life Insurance Reserve Claims
Life insurance claims increased from $62 in 2012 to $131 in 2013. The increase is due to premium expenses which are based on covered lives, age, and the amount of insurance coverage. The premium expense increases as covered participants age.

Administrative Expenses
For the year ended December 31, 2013, the Life Insurance Trust Fund administrative expenses increased $361. The increase was due to a $297 increase in insurance premiums which were paid by PERA and a $64 increase due to an increase of costs allocated to this fund based on customer service statistics and higher indirect costs.

Actuarial Summary

Cavanaugh Macdonald Consulting, LLC, prepared the December 31, 2013, actuarial valuation. Actuarial valuations, based on a set of assumptions, examine a fund's assets as compared to actuarial liabilities, compare past and future trends, and determine the ARC rates required of each employer in order to pay current and future benefits in accordance with the main provisions of the plan and compare them to the statutory contribution rate.

The Board studies all economic and demographic assumptions at least every five years and approves changes to those assumptions. The Board last completed an experience study in 2012. In addition, the Board annually reviews the economic actuarial assumptions. The Board adopted the following changes, effective for the December 31, 2013, valuation:

- The investment rate of return assumption decreased from 8.00 percent to 7.50 percent per annum.
- The price inflation assumption decreased from 3.50 percent to 2.80 percent per annum.
- The wage inflation assumption decreased from 4.25 percent to 3.90 percent per annum.

Health Care Trust Fund Actuarial Liabilities

The HCTF and the DPS HCTF are cost-sharing multiple-employer defined benefit OPEB plans with the purpose of subsidizing PERACare, PERA's health benefits program. Participation in the HCTF and the DPS HCTF is voluntary pursuant to C.R.S. § 24-51-1201. Employer contributions and investment earnings on the assets of the plans pay for the costs. In addition, any employer, as defined by C.R.S § 24-51-101 (20), may elect to provide health care coverage through PERACare for its employees who are members.

The HCTF and the DPS HCTF provide a health care premium subsidy based upon the benefit structure under which a member retires and the member's years of service credit. There is an allocation of the premium subsidy between the trust funds for members who retire with service credit in the DPS Division and one or more of the other divisions. The basis for the allocation of the premium subsidy is the percentage of the member contribution balance from each division as it relates to the total member contribution account balance.

In general, the actuarial accrued liabilities of the HCTF and the DPS HCTF consist of the following three types of benefits.

- A service-based monthly premium subsidy.
- A subsidy for members not eligible for premium-free Medicare Part A coverage.
- For the results of the valuations from December 31, 2005, through December 31, 2012, a premium reduction for enrollees covered under plans receiving the Retiree Drug Subsidy (RDS) program.

C.R.S. § 24-51-1204 and § 24-51-1206 specify the eligibility for enrollment and the amount of subsidy available, respectively under the following benefit structures. For the results of the valuations from December 31, 2005, through December 31, 2012, the RDS premium reduction is valued in the same manner regardless of whether the enrollee is under the PERA or the DPS benefit structure, as indicated below. The plan actuary determines the costs relating to the subsidies provided by the HCTF and the DPS HCTF and the results are contained within the annual actuarial valuation report. Currently, all participating employers are statutorily required to contribute 1.02 percent of covered payroll to fund these benefits.

The valuation takes into account the effect of amendments to PERA and DPS benefit structures through the valuation date. The following is a change made to the main provisions since the previous valuation:

Effective January 1, 2014, PERACare no longer participates in the Centers for Medicare & Medicaid Services' (CMS) RDS program. PERACare enrollees participating in the self-insured Medicare supplement plans and the Medicare HMO plan offered by Rocky Mountain Health Plans now receive their prescription drug benefits through a Medicare Prescription Drug Plan (PDP). Therefore, the change to PDPs eliminates the liability associated with the RDS premium subsidies.

Listed below are the changes in actuarial assumptions to the health care plans in addition to the changes noted above.

- Initial health care costs for PERACare enrollees who are age 65 and older and do not have Medicare Part A were updated to reflect the change in costs for the 2014 plan year.
- The assumed rates of inflation for health care costs for Medicare Part A premiums were revised to reflect the current expectation of future increases.
- The utilization rates for the No Part A subsidy of both retirees and their spouses were revised.

PERA Benefit Structure: All PERA benefit structure benefit recipients enrolled in PERACare are eligible for the health care subsidies as described below.

The maximum service-based premium subsidy is $230 (actual dollars) per month for benefit recipients who are under 65 years of age and who are not entitled to Medicare; the maximum service-based subsidy is $115 (actual dollars) per month for benefit recipients who are 65 years of age or older or who are under 65 years of age and entitled to Medicare. The basis for the maximum service-based subsidy, in each case, is for benefit recipients with retirement benefits based on 20 or more years of service credit. There is a 5 percent reduction in the subsidy for each year less than 20. The benefit recipient pays the remaining portion of the premium to the extent the subsidy does not cover the entire amount.

For benefit recipients who have not participated in Social Security and who are not otherwise eligible for premium-free Medicare Part A for hospital-related services, C.R.S. § 24-51-1206(4) provides an additional subsidy. According to the statute, the HCTF cannot charge premiums to benefit recipients without Medicare Part A that are greater than premiums charged to benefit recipients with Part A for the same plan option, coverage level, and service credit. Currently, for each individual PERACare enrollee, the total premium for Medicare coverage is determined assuming plan participants have both Medicare Part A and Part B and the difference in premium cost is paid by the HCTF or the DPS HCTF on behalf of benefit recipients who are not covered by Medicare Part A.

DPS Benefit Structure: All DPS benefit structure retirees enrolled in PERACare are eligible for the health care subsidies as described below. Upon the death of the retiree, no further subsidy is payable.

The maximum service-based premium subsidy is $230 (actual dollars) per month for retirees who are under 65 years of age and who are not entitled to Medicare; the maximum service-based subsidy is $115 (actual dollars) per month for retirees who are 65 years of age or older or who are under 65 years of age and entitled to Medicare. The basis for the maximum subsidy, in each case, is for retirees with retirement benefits based on 20 or more years of service credit. There is a 5 percent reduction in the subsidy for each year less than 20. The retiree pays the remaining portion of the premium to the extent the subsidy does not cover the entire amount.

For retirees who have not participated in Social Security and who are not otherwise eligible for premium-free Medicare Part A for hospital-related services, the DPS HCTF or the HCTF pays an alternate service-based premium subsidy. Each individual retiree meeting these conditions receives the maximum $230 (actual dollars) per month subsidy reduced appropriately for service less than 20 years, as described above.

Retiree Drug Subsidy: Prior to January 1, 2014, for those members under the PERA and the DPS benefit structure who elected coverage in a plan option that produced an RDS, the HCTF and DPS HCTF reduced the full cost of the premium to the member by the estimated RDS. The RDS is payable to the HCTF and the DPS HCTF under Part D of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA). GASB standards do not allow for future assumed RDS payments to be used as a direct offset of premiums for future liabilities. Therefore, for the results of the valuations from December 31, 2005, through December 31, 2012, a liability for these payments was included in the total HCTF and DPS HCTF liabilities. Plan options producing an RDS in 2013 were the Self-Funded Medicare Supplement plans and the Rocky Mountain Health Plan's Medicare HMO. While GASB standards require the additional cost to be included in the PERA liabilities, if the RDS payment did not exist, the cost would have been borne by the member in the plan and would not have been a cost of the plan per current Colorado statute. Beginning January 1, 2014, PERA no longer participates in the RDS program.

Annual Actuarial Valuation Statistics

As of December 31, 2013, the Funded Ratio, the Unfunded Actuarial Accrued Liabilities (UAAL), the ARC for 2015 as a percentage of covered payroll, and the amortization periods with current funding for each trust fund are shown in the table on the next page. The results in this table are based on parameters set by GASB and do not fully consider future contribution rate increases nor the impact of reduced benefits for those hired in the future as provided for in Colorado law.

(In Thousands of Dollars)

Actuarial Statistics

TRUST FUND	FUNDED RATIO	UAAL	ARC	ARC AMORTIZATION PERIOD	AMORTIZATION PERIOD CURRENT YEAR FUNDING
State Division	57.5%	$9,714,265	22.35%	30 Years	60 Years
School Division	60.3%	14,067,932	21.94%	30 Years	61 Years
Local Government Division	73.1%	1,210,984	13.62%	30 Years	37 Years
Judicial Division	73.0%	94,798	21.45%	30 Years	Infinite
Denver Public Schools Division	81.2%	709,977	11.06%	30 Years	Infinite
Total Defined Benefit Plans[1]		25,797,956			
Health Care	18.8%	1,263,850	1.15%	30 Years	40 Years
Denver Public Schools Health Care	20.2%	61,154	0.81%	30 Years	19 Years
Total Other Postemployment Benefit Plans[1]		1,325,004			
Total[1]		$27,122,960			

[1] The data in this table has been aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

For calculation of the ARC rate, the amortization period used is 30 years, which is the maximum period permitted by GASB. The amortization period is the number of years it will take to pay off the UAAL, given the current funding and benefits, for each division based on a set of assumptions. See the Required Supplementary Information and the accompanying notes on pages 91–98 for additional information.

The table below shows the amortization periods adjusted to include the future additional contributions of the AED and the SAED. For the DPS Division, no adjustment has been made for the current PCOP offset. However, considering anticipated reductions in the future PCOP offset to DPS employer contribution requirements to the DPS Division for the cost of certain PCOPs as currently structured, the amortization period is expected to be below 30 years. Colorado statutes call for a "true-up" in 2015, and every five years following, with the express purpose of adjusting the total DPS employer contribution rate to ensure equalization of the ratio of UAAL over payroll between the DPS and School Divisions at the end of the 30-year period beginning January 1, 2010.

Amortization Periods With Future AED and SAED Increases

TRUST FUND	AMORTIZATION PERIOD WITH FUTURE AED AND SAED INCREASES
State Division	44 Years
School Division	44 Years
Local Government Division	37 Years
Judicial Division	Infinite
Denver Public Schools Division	Infinite
Health Care	40 Years
Denver Public Schools Health Care	19 Years

The amortization periods with future AED and SAED increases do not include the full effect of the 2006 and 2010 legislation. The legislation includes plan changes that will lower the normal cost for future new hires and will allow more of the employer's contribution to be used to amortize past service costs earned. The future AED and SAED increases have not been taken into consideration in the calculation of the ARC as defined in GASB Statement 25 or in the amortization period based on the current year funding levels.

C.R.S. § 24-51-211 states that the amortization period of 30 years shall be deemed actuarially sound. At the end of 2013, given the current contribution rates, all funds except for the Denver Public Schools Health Care Trust Fund exceeded the 30-year amortization period.

As stated by Cavanaugh Macdonald Consulting, LLC, in the Report of the Independent Actuary on pages 125–128 in the Actuarial Section of the *CAFR:*

> "The employer contribution rate, together with the anticipated future employee growth and service purchase transfers, is sufficient to eventually finance the PERA Health Care Trust Fund and the DPS Health Care Trust Fund benefits in accordance with GASB 43 and 45.
>
> Considering the offsets of PCOP Credits as a percentage of payroll, applicable to the DPS Division only, the DPS employer contribution rate is currently sufficient to finance the promised pension benefits and eventually meet the required contribution levels under GASB 25 and 27. Considering the addition of the AED and SAED contributions and projected reductions in liability due to benefit structure changes for newer hires, the State and School Divisions' employer contribution rates are expected to be sufficient to finance the promised benefits. The total employer contributions, combined with projected reductions in liability due to benefit structure changes for newer hires, are expected to fund the Local Government and Judicial Divisions."

(In Thousands of Dollars)

At December 31, 2013, and December 31, 2012, PERA had the following funded status for all of its Division Trust Funds and the HCTFs.

Funded Status for Colorado PERA Division Trust Funds and the Health Care Trust Funds

	MARKET VALUE OF ASSETS		ACTUARIAL VALUE OF ASSETS	
	12/31/2012	12/31/2013	12/31/2012	12/31/2013
State Division Trust Fund[1]				
Actuarial accrued liability	$21,191,495	$22,843,725	$21,191,495	$22,843,725
Assets held to pay those liabilities[2]	12,766,459	13,935,754	12,538,675	13,129,460
Unfunded actuarial accrued liability	8,425,036	8,907,971	8,652,820	9,714,265
Funded Ratio	60.2%	61.0%	59.2%	57.5%
School Division Trust Fund[1]				
Actuarial accrued liability	$32,619,033	$35,437,312	$32,619,033	$35,437,312
Assets held to pay those liabilities[2]	20,636,677	22,682,339	20,266,574	21,369,380
Unfunded actuarial accrued liability	11,982,356	12,754,973	12,352,459	14,067,932
Funded Ratio	63.3%	64.0%	62.1%	60.3%
Local Government Division Trust Fund[1]				
Actuarial accrued liability	$4,157,621	$4,502,282	$4,157,621	$4,502,282
Assets held to pay those liabilities[2]	3,154,897	3,493,355	3,098,721	3,291,298
Unfunded actuarial accrued liability	1,002,724	1,008,927	1,058,900	1,210,984
Funded Ratio	75.9%	77.6%	74.5%	73.1%
Judicial Division Trust Fund[1]				
Actuarial accrued liability	$326,897	$351,598	$326,897	$351,598
Assets held to pay those liabilities[2]	242,877	272,160	238,807	256,800
Unfunded actuarial accrued liability	84,020	79,438	88,090	94,798
Funded Ratio	74.3%	77.4%	73.1%	73.0%
Denver Public Schools Division Trust Fund[1]				
Actuarial accrued liability	$3,495,549	$3,785,872	$3,495,549	$3,785,872
Assets held to pay those liabilities[2]	2,992,217	3,265,768	2,936,695	3,075,895
Unfunded actuarial accrued liability	503,332	520,104	558,854	709,977
Funded Ratio	85.6%	86.3%	84.0%	81.2%
Health Care Trust Fund[1]				
Actuarial accrued liability	$1,723,495	$1,557,406	$1,723,495	$1,557,406
Assets held to pay those liabilities[2]	291,737	314,609	285,097	293,556
Unfunded actuarial accrued liability	1,431,758	1,242,797	1,438,398	1,263,850
Funded Ratio	16.9%	20.2%	16.5%	18.8%
Denver Public Schools Health Care Trust Fund[1]				
Actuarial accrued liability	$77,669	$76,636	$77,669	$76,636
Assets held to pay those liabilities[2]	14,843	16,489	14,443	15,482
Unfunded actuarial accrued liability	62,826	60,147	63,226	61,154
Funded Ratio	19.1%	21.5%	18.6%	20.2%
All Division Trust Funds, HCTF, and DPS HCTF[1,3]				
Actuarial accrued liability	$63,591,759	$68,554,831	$63,591,759	$68,554,831
Assets held to pay those liabilities[2,4]	40,099,707	43,980,474	39,379,012	41,431,871
Unfunded actuarial accrued liability	23,492,052	24,574,357	24,212,747	27,122,960
Funded Ratio	63.1%	64.2%	61.9%	60.4%

[1] The 2012 funded status is based upon an assumed rate of return on investments of 8.0 percent and an assumed rate of 8.0 percent to discount the liabilities to be paid in the future to a value as of December 31, 2012. The 2013 funded status is based upon an assumed rate of return on investments of 7.5 percent and an assumed rate of 7.5 percent to discount the liabilities to be paid in the future to a value as of December 31, 2013.

[2] The market value of assets is the fair value of the investments. The actuarial value of assets calculates the value of the assets by spreading any market gains or losses above or below the assumed rate of return over four years.

[3] The data in this table has been aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

[4] In aggregate, the market value of the assets as of December 31, 2013, is $2,548,603 more than the actuarial value of assets calculated by the actuaries, as they are recognizing the gains and losses in value over four years, rather than in the year they occurred. The remaining gains and (losses) to be smoothed for 2011 are ($573,707), for 2012 are $907,114, and for 2013 are $2,215,196.

(In Thousands of Dollars)

Actuarial Trend Information

Funded Ratio

The funded ratio for the plan is determined by dividing the actuarial value of assets by the actuarial accrued liability. The actuarial value of assets is not the current market value but a market-related value, as mandated by GASB, which smoothes changes in the market value over four years. The actuarial value of the assets as of December 31, 2013, was $41,431,871 compared to a market value of assets of $43,980,474, and to the actuarial accrued liability of $68,554,831. The funded ratio for each of the funds, based on the actuarial value of assets, at December 31 for each of the last five years is shown below.

TRUST FUND	2009	2010	2011	2012	2013
State Division	67.0%	62.8%	57.7%	59.2%	**57.5%**
School Division	69.2%	64.8%	60.2%	62.1%	**60.3%**
Local Government Division	76.2%	73.0%	69.3%	74.5%	**73.1%**
Judicial Division	77.3%	75.0%	69.3%	73.1%	**73.0%**
Denver Public Schools Division	—	88.9%	81.5%	84.0%	**81.2%**
Total Defined Benefit Plans[1]	68.9%	66.1%	61.2%	63.2%	**61.5%**
Health Care	14.8%	17.5%	16.5%	16.5%	**18.8%**
Denver Public Schools Health Care	—	17.9%	18.6%	18.6%	**20.2%**
Total Other Postemployment Benefit Plans[1]	14.8%	17.6%	16.6%	16.6%	**18.9%**
Total all funds[1]	**67.2%**	**64.7%**	**59.9%**	**61.9%**	**60.4%**

[1] The data in this table has been aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

The Board's Statement of Funding Policy dated November 16, 2007, is as follows:

> "To secure promised and mandated benefits, the funding goal of the Colorado Public Employees' Retirement Association's defined benefit and retiree health care plans is to maintain employer and member contributions into the trust funds sufficient to accumulate assets over a member's term of employment to fully finance the benefits members receive throughout retirement by achieving and maintaining a minimum 100 percent funded ratio of assets to accrued actuarial liabilities. The Board's minimum 100 percent funded ratio goal over time avoids externalizing the costs of amortizing unfunded accrued liabilities onto others in the future, and provides for fairness and intergenerational equity for taxpayers, employers and employees with respect to the costs of providing benefits."

The funded ratios listed above give an indication of how well this objective has been met to date. A larger funded ratio indicates that a plan is better funded. As an example, for every $1.00 of the actuarially determined benefits earned for the School Division Trust Fund as of December 31, 2013, approximately $0.60 of assets are available for payment based on the actuarial value of assets. These benefits earned will be payable over the life span of members after their retirement and therefore, it is not necessary that the actuarially determined benefits equal the actuarial value of assets at any given moment in time.

Sensitivity of Actuarial Valuation to Changes in Assumed Investment Rate of Return and Discount Rate

The most important long-run driver of a pension plan is investment income. Over the last 30 years, investment income at PERA represented 60 percent of the inflows into the plans. The investment return assumption and the discount rate for liabilities, as mandated by GASB, should be based on an estimated long-term investment yield for the plan, with consideration given to the nature and mix of current and expected plan investments and the basis used to determine the actuarial value of assets.

Each year for the past four years, the Board has participated in an actuarial assumption workshop to ensure understanding and to provide for the adoption of all economic assumptions under the guidance provided by Actuarial Standard of Practice (ASOP) No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations,* as prescribed by the Actuarial Standards Board. During this workshop, Cavanaugh Macdonald Consulting, LLC, reported the results of their lognormal simulation modeling. Considering historical investment and economic data with projected inflation and asset class returns, the modeling process provides a best-estimate range of future investment returns over a 50-year period given PERA's targeted asset allocation and expected investment expenses. These ranges are used to produce assumptions regarding future inflation, productivity, and real rates of return for asset classes above inflation. Using the "Building Block Method," the assumed inflation rate is combined with the assumed real rate of return, net of investment expenses, to form the overall investment rate assumption. The mean overall investment rate of return based on this modeling process was 8.29 percent. The one standard deviation range around the mean was 6.43 percent to 10.18 percent, which represents 68.2 percent of the possible outcomes. The two standard deviations range around the mean was 4.66 percent to 12.05 percent, which represents 95.4 percent of the possible outcomes.

Based on the results from the actuarial workshop, the Board reduced the investment return assumption from 8.0 percent to 7.5 percent. This new rate was used in the 2013 actuarial valuation and is effective January 1, 2014, for administrative purposes.

(In Thousands of Dollars)

To understand the importance of the investment rate of return, which is used to discount the actuarial liabilities of PERA, a one and one-half, and one-half percent fluctuation in the investment rate of return and discount rate would change the funded ratio, UAAL, and ARC (for contributions for the fiscal year ended December 31, 2015) as shown on the tables below and on the next page.

Investment Return Assumption (Discount Rate) Equal to 6.0 Percent

	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
TRUST FUND	FUNDED RATIO	UAAL	ARC	UAAL
State Division	48.6%	$13,877,242	30.50%	$13,070,948
School Division	50.7%	20,805,694	31.38%	19,492,735
Local Government Division	61.1%	2,098,751	22.92%	1,896,694
Judicial Division	62.7%	152,805	31.74%	137,445
Denver Public Schools Division	69.0%	1,382,777	20.10%	1,192,904
Total Defined Benefit Plans[1]		38,317,269		35,790,726
Health Care	16.1%	1,529,557	1.24%	1,508,504
Denver Public Schools Health Care	17.5%	73,162	0.92%	72,155
Total Other Postemployment Benefit Plans[1]		1,602,719		1,580,659
Total[1]		$39,919,988		$37,371,385

[1] The data in this table has been aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

Investment Return Assumption (Discount Rate) Equal to 7.0 Percent

	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
TRUST FUND	FUNDED RATIO	UAAL	ARC	UAAL
State Division	54.5%	$10,973,965	24.89%	$10,167,671
School Division	57.0%	16,100,320	24.86%	14,787,361
Local Government Division	69.0%	1,478,035	16.54%	1,275,978
Judicial Division	69.5%	112,642	24.71%	97,282
Denver Public Schools Division	77.1%	913,509	13.86%	723,636
Total Defined Benefit Plans[1]		29,578,471		27,051,928
Health Care	17.9%	1,344,782	1.17%	1,323,729
Denver Public Schools Health Care	19.3%	64,821	0.85%	63,814
Total Other Postemployment Benefit Plans[1]		1,409,603		1,387,543
Total[1]		$30,988,074		$28,439,471

[1] The data in this table has been aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

Current Investment Return Assumption (Discount Rate) Equal to 7.5 Percent

	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
TRUST FUND	FUNDED RATIO	UAAL	ARC	UAAL
State Division	57.5%	$9,714,265	22.35%	$8,907,971
School Division	60.3%	14,067,932	21.94%	12,754,973
Local Government Division	73.1%	1,210,984	13.62%	1,008,927
Judicial Division	73.0%	94,798	21.45%	79,438
Denver Public Schools Division	81.2%	709,977	11.06%	520,104
Total Defined Benefit Plans[1]		25,797,956		23,271,413
Health Care	18.8%	1,263,850	1.15%	1,242,797
Denver Public Schools Health Care	20.2%	61,154	0.81%	60,147
Total Other Postemployment Benefit Plans[1]		1,325,004		1,302,944
Total[1]		$27,122,960		$24,574,357

[1] The data in this table has been aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

(In Thousands of Dollars)

Investment Return Assumption (Discount Rate) Equal to 8.0 Percent

	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
TRUST FUND	**FUNDED RATIO**	**UAAL**	**ARC**	**UAAL**
State Division	60.5%	$8,556,969	19.92%	$7,750,675
School Division	63.6%	12,203,982	19.17%	10,891,023
Local Government Division	77.3%	966,642	10.79%	764,585
Judicial Division	76.7%	78,217	18.31%	62,857
Denver Public Schools Division	85.5%	523,610	8.38%	333,737
Total Defined Benefit Plans[1]		22,329,420		19,802,877
Health Care	19.8%	1,189,487	1.11%	1,168,434
Denver Public Schools Health Care	21.1%	57,778	0.79%	56,771
Total Other Postemployment Benefit Plans[1]		1,247,265		1,225,205
Total[1]		$23,576,685		$21,028,082

[1] The data in this table has been aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

Investment Return Assumption (Discount Rate) Equal to 9.0 Percent

	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
TRUST FUND	**FUNDED RATIO**	**UAAL**	**ARC**	**UAAL**
State Division	66.8%	$6,527,995	15.38%	$5,721,701
School Division	70.5%	8,949,745	14.06%	7,636,786
Local Government Division	85.9%	541,523	5.43%	339,466
Judicial Division	84.1%	48,600	12.36%	33,240
Denver Public Schools Division	94.0%	196,815	3.42%	6,942
Total Defined Benefit Plans[1]		16,264,678		13,738,135
Health Care	21.7%	1,057,850	1.08%	1,036,797
Denver Public Schools Health Care	23.0%	51,779	0.75%	50,772
Total Other Postemployment Benefit Plans[1]		1,109,629		1,087,569
Total[1]		$17,374,307		$14,825,704

[1] The data in this table has been aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

Note: The net-of-fees annualized rate of return for the pooled investment assets was 12.2 percent for the past five years and 7.6 percent for the past 10 years. The 30-year annualized gross-of-fees rate of return for the pooled investment assets was 9.5 percent.

Current Year Actuarial Gains/(Losses)

To better understand why the UAAL changed for the year, a summary of the gains and losses in the actuarial accrued liability for 2013 are shown in the table below by fund. Actuarial gains and losses are amortized over 30 years using an open amortization period as allowed by GASB. Typically, a valuation report should provide a gain/loss analysis that identifies the magnitude of actuarial gains and losses, based on variations between actual and assumed experience. A gain or loss occurs when the actual amount paid differs from the previous valuation.

AMOUNTS (IN MILLIONS OF DOLLARS)	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DENVER PUBLIC SCHOOLS DIVISION	HCTF	DENVER PUBLIC SCHOOLS HCTF
From differences between assumed and actual experience on liabilities							
Age and service retirements[1]	$25.3	($46.5)	$0.8	$3.4	($15.7)	($0.5)	($0.3)
Disability retirements[2]	(9.9)	(8.1)	(3.5)	—	(2.7)	(0.6)	(0.1)
Deaths[3]	(23.1)	(57.6)	7.8	(0.7)	3.2	(2.1)	0.1
Withdrawals[4]	(35.5)	(89.4)	(8.6)	(0.4)	11.5	(4.0)	0.3
New members[5]	(76.6)	(89.0)	(12.2)	(2.8)	(34.7)	(5.3)	(0.8)
Pay increases[6]	49.5	145.4	20.0	3.4	11.9	—	—
Other[7]	2.1	9.5	(2.6)	1.2	1.2	34.5	0.4
Subtotal	(68.2)	(135.7)	1.7	4.1	(25.3)	22.0	(0.4)
From differences between assumed and actual experience on assets	364.8	589.4	90.3	6.9	87.7	9.8	0.5
From change in plan assumptions[8]	(1,034.8)	(1,701.7)	(219.0)	(13.7)	(171.1)	2.6	(3.2)
From change in plan provisions[9]	—	—	—	—	—	170.8	5.0
Total actuarial gains/(losses) on 2013 activities	($738.2)	($1,248.0)	($127.0)	($2.7)	($108.7)	$205.2	$1.9
Total actuarial gains/(losses) on 2012 activities	$540.7	$932.0	$252.0	$14.9	$143.0	$30.0	$0.1

[1] *Age and service retirements:* If members retire at older ages than assumed, there is a gain. If members retire at younger ages, there is a loss.

[2] *Disability retirements:* If disability claims are lower than assumed, there is a gain. If disability claims are higher than assumed, there is a loss.

[3] *Deaths:* If survivor claims are lower than assumed, there is a gain. If survivor claims are higher than assumed, there is a loss. If retirees die sooner than assumed, there is a gain. If retirees live longer than assumed, there is a loss.

[4] *Withdrawal from employment:* If more members terminate and more liabilities are released by withdrawals than assumed, there is a gain. If fewer liabilities are released, there is a loss.

[5] *New members:* If the number of new members entering the plan is lower than assumed, or if they have prior service, there is a loss.

[6] *Pay increases:* If there are smaller salary increases than assumed, there is a gain. If greater salary increases occur than assumed, there is a loss.

[7] *Other:* Miscellaneous gains and losses result from changes in actuary's valuation software, data adjustments, timing of financial transactions, etc.

[8] *Change in plan assumptions:* The plan assumptions were revised in 2013 as described in the Notes to the Required Supplemental Information on pages 95–98.

[9] *Change in plan provisions:* The liability related to medicare retiree drug subsidy program was eliminated as PERACare no longer participates in this program.

Unfunded Actuarial Accrued Liabilities

The table below identifies the components that contributed to the growth in the underfunded status of the Defined Benefit Trust Funds for the period 2009 to 2013. There are many factors that contribute to this complex issue and this table is included to provide a better understanding.

Defined Benefit Pension Trust Funds Changes in Unfunded Actuarial Accrued Liabilities
(Amounts in Millions of Dollars)

	2009	2010[1]	2011	2012	2013	2009—2013
UAAL beginning of year	($16,813.0)	($16,937.6)	($20,108.8)	($23,549.6)	**($22,711.2)**	($16,813.0)
Experience Gains and Losses						
Age and service retirements	(18.7)	(4.2)	1.7	(49.0)	**(32.7)**	(102.9)
Disability retirements	31.2	9.1	9.2	9.9	**(24.2)**	35.2
Deaths	(91.2)	(59.7)	(33.8)	(5.2)	**(70.4)**	(260.3)
Withdrawal from employment	(139.7)	(16.3)	(154.1)	44.1	**(122.4)**	(388.4)
New members	(105.5)	(139.7)	(147.1)	(160.0)	**(215.3)**	(767.6)
Pay increases	407.1	727.1	901.0	385.3	**230.2**	2,650.7
Investment income	(2,908.6)	(2,806.5)	(3,188.9)	1,062.4	**1,139.1**	(6,702.5)
Other	(368.6)	230.2	18.3	(68.6)	**11.4**	(177.3)
Experience gain/(loss) during year	(3,194.0)	(2,060.0)	(2,593.7)	1,218.9	**915.7**	(5,713.1)
Non-recurring Items						
DPSRS UAAL transfer[1]	—	(386.8)	—	—	**—**	(386.8)
Effect of changes in plan provisions	8,873.2	—	—	—	**—**	8,873.2
Actuarial assumption changes	(4,827.5)	—	—	663.7	**(3,140.3)**	(7,304.1)
Non-recurring items	4,045.7	(386.8)	—	663.7	**(3,140.3)**	1,182.3
30-year amortization contribution deficiency	(313.2)	(468.6)	(125.8)	(157.3)	**(301.7)**	(1,366.6)
Expected change in UAAL with 30-year amortization or less	(663.1)	(255.8)	(721.3)	(886.9)	**(560.5)**	(3,087.6)
Total gain/(loss) for year	(124.6)	(3,171.2)	(3,440.8)	838.4	**(3,086.8)**	(8,985.0)
UAAL end of year	($16,937.6)	($20,108.8)	($23,549.6)	($22,711.2)	**($25,798.0)**	($25,798.0)

[1] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

The previous schedule shows where losses and gains occurred over the five-year period compared to what was expected or assumed. These include the following significant gains and losses:

- $6.7 billion loss due to investment income.
- $8.9 billion gain from plan provision changes which primarily are the result of SB 10-001 (State Division: $3.2 billion; School Division: $5.0 billion; Local Government Division: $631 million; and Judicial Division: $44 million).
- $4.8 billion loss primarily due to the investment rate of return assumption being reduced from 8.5 percent to 8.0 percent in 2009.
- $3.1 billion loss primarily due to the investment rate of return assumption being reduced from 8.0 percent to 7.5 percent in 2013.
- $3.1 billion loss which is the difference between last year's UAAL and the expected UAAL using the normal cost earned, less the required employer contributions all of which is adjusted for interest.
- $2.7 billion gain due to lower pay increases.
- $1.4 billion loss from contribution deficiencies from the required amortization period of 30 years. (The contribution deficiency is created when the actual contributions flowing into the plans are less than the annual required contribution calculated for accounting purposes.)

Initiatives to Improve Funding

In 2003, the Board sought legislation which would stabilize the contribution rates and allow for increases or decreases in the rates when certain funding thresholds were reached. This legislation passed, but was ultimately vetoed by former Governor Owens.

In 2004, the Board again sought legislation to improve funding, revise benefits, and move the funds back toward achieving the then 40-year amortization period goal. The Board supported major legislation (SB 04-132 and SB 04-257) that would help to address PERA's funding needs in a cost-effective and equitable manner. Both pieces of legislation were enacted into law.

In 2005, SB 05-73 was enacted and provided for an employer AED contribution for PERA retirees who return to work after retirement.

In 2006, SB 06-235 was enacted and improved funding, revised benefits, made changes to Board composition, and expanded retirement plan choice to institutions of higher education.

In 2007, HB 07-1377 repealed a provision of SB 06-235 that would have expanded retirement plan choice to eligible new employees of higher educational institutions. The legislation was amended in the House to allow new employees of community colleges the ability to choose between the PERA defined benefit program and the PERA defined contribution program.

The Board has also acted to address funding concerns by raising the cost to purchase service credit effective November 1, 2003, and raising it again effective November 1, 2005, to the full actuarial cost based on the current assumed rate of return.

At its November 2008 meeting, the Board approved a new interest rate credit policy allowing the Board to modify the calculated member credit interest rate, reducing it up to 2 percent in whole numbers at their discretion in any future year where the year-to-date investment returns experienced by PERA are negative after three quarters. The interest rate was then set to 3 percent in 2009, a decrease from the rate of 5 percent set in 2008. This rate has been maintained at 3 percent for 2010 through 2013. This rate is used in calculating interest on refunds and in determining the money purchase formula benefit in the Division Trust Funds. For more information on benefit provisions, refer to Note 1 of the Financial Statements on pages 58–66.

The combination of the dramatic losses due to the financial markets along with the cumulative effect of the recent contribution shortfalls and the benefit enhancements in the 1990's brought into question the long-term sustainability of the Division Trust Funds. At the end of 2008, the Board began studying revisions to the funds' plans to analyze changes, which could lead the funds back on a path to long-term sustainability. After completing their analysis, the Board put together a recommendation to the General Assembly that ultimately led to the creation of SB 10-001. The changes are substantive and affect employers, active and inactive members, and retirees. The entire bill can be found online at http://www.leg.state.co.us.

GASB Pension Project—Implementation of GASB Statement Nos. 67 and 68

In June 2012, GASB issued Statement No. 67, *"Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25."* Statement No. 67 establishes new standards for financial reporting and note disclosure by defined benefit pension plans administered through qualified trusts, and note disclosure requirements for defined contribution pension plans administered through qualified trusts. Statement No. 67 will be effective for periods beginning after June 30, 2013, and PERA has chosen not to early adopt Statement No. 67. One of the major changes in the new standard is the rate used to discount projected benefit payments. The new standard states the long-term expected rate of return on the investments of the pension plan should be applied only to available pension plan assets that are expected to be invested using a strategy to achieve that return. If there comes a point in the projections when plan net position and contributions related to active and inactive employees are no longer projected to be greater than or equal to projected benefit payments related to those employees and administrative expenses (crossover point), then from that point forward the pension plan will be required to discount the projected benefit payments after the crossover point using a municipal borrowing rate—a tax-exempt, high-quality 20-year municipal general obligation bond index rate. PERA has not yet determined the impact of this standard on its financial statements and disclosures.

Also in June 2012, GASB issued Statement No. 68, *"Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27."* Statement No. 68 establishes new standards for accounting for pensions by employers whose employees are provided with pensions through pension plans administered through trusts, or equivalent arrangements, that meet the characteristics defined in the statements and addresses accounting and financial reporting issues of certain nonemployer entities that contribute to such plans. Statement No. 68 will be effective for periods beginning after June 30, 2014, and PERA has chosen not to early adopt Statement No. 68. PERA has not yet determined the impact of this standard on its financial statements and disclosures.

(In Thousands of Dollars)

DEFINED CONTRIBUTION PENSION AND DEFERRED COMPENSATION TRUST FUNDS

Financial Reporting Highlights

Net Position

	2013 CHANGE IN NET POSITION	2013 ENDING NET POSITION
Voluntary Investment Program	$404,075	$2,509,750
Defined Contribution Retirement Plan	30,233	113,500
Deferred Compensation Plan	99,084	643,602
Total	$533,392	$3,266,852

The net position for the Voluntary Investment Program, the Defined Contribution Retirement Plan, and the Deferred Compensation Retirement Plan, administered by PERA, increased $533,392 for the year ended December 31, 2013. The increase in net position for the three trust funds was primarily due to positive investment returns arising from the global stock markets.

Change in Net Position

	(C) CONTRIBUTIONS AND OTHER ADDITIONS	+ (C) PLAN TRANSFERS	+ (I) INVESTMENT GAIN/(LOSS)	– (B) – (E) BENEFITS, EXPENSES, AND OTHER DEDUCTIONS	= NET CHANGE CHANGE IN NET POSITION
Voluntary Investment Program	$126,023	$—	$423,877	$145,825	$404,075
Defined Contribution Retirement Plan	19,924	—	17,416	7,107	30,233
Deferred Compensation Plan	44,897	—	88,565	34,378	99,084
2013 change in net position	$190,844	$—	$529,858	$187,310	$533,392
2012 change in net position	$181,367	$—	$295,165	$181,981	$294,551
2011 change in net position	$193,333	$4	$3,453	$172,471	$24,319
2010 change in net position	$198,689	$35	$242,251	$132,073	$308,902
2009 change in net position	$177,954	$373,236	$336,532	$90,837	$796,885
2009–2013 change in net position	$942,187	$373,275	$1,407,259	$764,672	$1,958,049

Investment Highlights

Voluntary Investment Program, the Defined Contribution Retirement Plan, and the Deferred Compensation Retirement Plan Investment Options

The current investment funds for the three plans are the PERAdvantage Capital Preservation Fund, PERAdvantage Fixed Income Fund, PERAdvantage Real Return Fund, PERAdvantage U.S. Large Cap Stock Fund, PERAdvantage International Stock Fund, PERAdvantage U.S. Small and Mid Cap Stock Fund, PERAdvantage Socially Responsible Investment (SRI) Fund, PERAdvantage Income Fund, PERAdvantage 2015 Fund, PERAdvantage 2020 Fund, PERAdvantage 2025 Fund, PERAdvantage 2030 Fund, PERAdvantage 2035 Fund, PERAdvantage 2040 Fund, PERAdvantage 2045 Fund, PERAdvantage 2050 Fund, PERAdvantage 2055 Fund, and TD Ameritrade Self-Directed Brokerage Account. Each PERAdvantage option is made up of one or more underlying portfolios. There were no changes to the investment options in 2013.

Cash and Short-Term Investments

For the year ended December 31, 2013, the two Defined Contribution Pension and Deferred Compensation Trust Funds cash and short-term investments increased by $29,340 primarily due to portfolio rebalancing in the U.S. Large Cap Stock Fund at the end of 2013. The rebalancing resulted in cash proceeds received from sales awaiting a pending purchase at the end of 2013.

Total Liabilities

For the year ended December 31, 2013, the two Defined Contribution Pension and Deferred Compensation Trust Funds total liabilities increased by $12,924 primarily due to portfolio rebalancing in the U.S. Large Cap Stock Fund at the end of 2013. The rebalancing resulted in an increase in pending purchases at the end of 2013.

Other Changes

For the year ended December 31, 2013, the two Defined Contribution Pension and Deferred Compensation Trust Funds employer contributions increased by $3,081 primarily due to the increase in the statutory employer contribution rates resulting from the conclusion of SB 10-146 and SB 11-076.

For the year ended December 31, 2013, the two Defined Contribution Pension and Deferred Compensation Trust Funds other deductions increased $569. The increase is due to higher professional account management fees as a result of more assets under management.

(In Thousands of Dollars)

COMPARATIVE FINANCIAL STATEMENTS

Defined Benefit Pension Trust Funds

The five defined benefit funds provide retirement, survivor, and disability benefits to the employees of affiliated State, School, Local Government, Judicial, and Denver Public Schools employers. Benefits are funded by member and employer contributions and by earnings on investments.

Defined Benefit Pension Trust Funds Net Position

ASSETS	DECEMBER 31, 2013	DECEMBER 31, 2012	% CHANGE
Cash and short-term investments	$986,816	$933,429	5.7%
Securities lending collateral	1,764,817	1,422,131	24.1%
Receivables	227,692	215,654	5.6%
Investments, at fair value	42,706,428	38,876,642	9.9%
Capital assets, net of accumulated depreciation	18,399	19,521	(5.7%)
Total assets	45,704,152	41,467,377	10.2%
LIABILITIES			
Investment settlements and other liabilities	165,673	162,421	2.0%
Security lending obligations	1,764,612	1,425,822	23.8%
Total liabilities	1,930,285	1,588,243	21.5%
Net position	$43,773,867	$39,879,134	9.8%

Defined Benefit Pension Trust Funds Changes in Net Position

ADDITIONS	FOR THE YEAR ENDED DECEMBER 31, 2013	FOR THE YEAR ENDED DECEMBER 31, 2012	% CHANGE
Employer contributions	$1,125,383	$1,015,397	10.8%
Member contributions	614,431	640,560	(4.1%)
Purchased service	50,963	49,795	2.3%
Investment income	6,040,239	4,696,842	28.6%
Other	6,742	5,761	17.0%
Total additions	7,837,758	6,408,355	22.3%
DEDUCTIONS			
Benefit payments	3,702,948	3,506,858	5.6%
Refunds	185,313	195,742	(5.3%)
Disability insurance premiums	6,741	4,749	41.9%
Administrative expenses	32,633	28,669	13.8%
Other	15,390	15,217	1.1%
Total deductions	3,943,025	3,751,235	5.1%
Change in net position	3,894,733	2,657,120	46.6%
Net position			
Beginning of year	39,879,134	37,222,014	7.1%
End of year	$43,773,867	$39,879,134	9.8%

(In Thousands of Dollars)

Other Postemployment Benefit Funds

The HCTF and the DPS HCTF provide a health care premium subsidy to participating PERA benefit recipients and their eligible beneficiaries who choose to enroll in the Program. They are funded by amounts contributed by employers during an employee's working life based on a percentage of pay and by earnings on investments.

Other Postemployment Benefit Funds Net Position

ASSETS	DECEMBER 31, 2013	DECEMBER 31, 2012	% CHANGE
Cash and short-term investments	$8,231	$7,948	3.6%
Securities lending collateral	14,721	12,110	21.6%
Receivables	9,961	8,412	18.4%
Investments, at fair value	356,221	331,042	7.6%
Total assets	389,134	359,512	8.2%
LIABILITIES			
Investment settlements and other liabilities	43,317	40,790	6.2%
Securities lending obligations	14,719	12,142	21.2%
Total liabilities	58,036	52,932	9.6%
Net position	$331,098	$306,580	8.0%

Other Postemployment Benefit Funds Changes in Net Position

ADDITIONS	FOR THE YEAR ENDED DECEMBER 31, 2013	FOR THE YEAR ENDED DECEMBER 31, 2012	% CHANGE
Employer contributions	$78,342	$77,796	0.7%
Retiree health care premium payments	119,083	111,399	6.9%
Federal health care subsidies	16,294	14,686	10.9%
Investment income	48,374	38,510	25.6%
Other	10,834	11,884	(8.8%)
Total additions	272,927	254,275	7.3%
DEDUCTIONS			
Benefit payments	234,082	229,795	1.9%
Administrative expenses	14,327	14,061	1.9%
Total deductions	248,409	243,856	1.9%
Change in net position	24,518	10,419	135.3%
Net position			
Beginning of year	306,580	296,161	3.5%
End of year	$331,098	$306,580	8.0%

(In Thousands of Dollars)

Private Purpose Trust Fund

The Life Insurance Reserve (LIR) is an accumulation of dividends received from an insurance company as a return on the premiums paid by those members who have voluntarily enrolled in life insurance programs, adjusted for actual historical experience. The administrative costs of the plan are paid using proceeds from dividends and investment income.

Life Insurance Reserve Net Position

ASSETS	DECEMBER 31, 2013	DECEMBER 31, 2012	% CHANGE
Cash and short-term investments	$435	$408	6.6%
Securities lending collateral	779	621	25.4%
Receivables	57	52	9.6%
Investments, at fair value	18,842	16,971	11.0%
Total assets	20,113	18,052	11.4%
LIABILITIES			
Investment settlements and other liabilities	1,842	1,566	17.6%
Securities lending obligations	779	622	25.2%
Total liabilities	2,621	2,188	19.8%
Net position	$17,492	$15,864	10.3%

Life Insurance Reserve Changes in Net Position

ADDITIONS	FOR THE YEAR ENDED DECEMBER 31, 2013	FOR THE YEAR ENDED DECEMBER 31, 2012	% CHANGE
Investment income	$2,630	$2,020	30.2%
Total additions	2,630	2,020	30.2%
DEDUCTIONS			
Life insurance claims	131	62	111.3%
Administrative expenses	871	510	70.8%
Total deductions	1,002	572	75.2%
Change in net position	1,628	1,448	12.4%
Net position			
Beginning of year	15,864	14,416	10.0%
End of year	$17,492	$15,864	10.3%

(In Thousands of Dollars)

Defined Contribution Pension and Deferred Compensation Trust Funds

PERA administers two defined contribution pension trust funds and a deferred compensation trust fund. The Voluntary Investment Program and the Deferred Compensation Plan provide retirement benefits to members of the Defined Benefit Pension Trust Funds who have voluntarily made contributions during their employment. The Defined Contribution Retirement Plan provides retirement benefits to eligible State of Colorado employees hired on or after January 1, 2006, and eligible community college employees hired on or after January 1, 2008, who selected the PERA DC plan as their retirement plan.

Defined Contribution Pension and Deferred Compensation Trust Funds Net Position

ASSETS	DECEMBER 31, 2013	DECEMBER 31, 2012	% CHANGE
Cash and short-term investments	$96,584	$67,244	43.6%
Receivables	83,514	77,254	8.1%
Investments, at fair value	3,107,132	2,596,416	19.7%
Total assets	3,287,230	2,740,914	19.9%
LIABILITIES			
Liabilities	20,378	7,454	173.4%
Total liabilities	20,378	7,454	173.4%
Net position	$3,266,852	$2,733,460	19.5%

Defined Contribution Pension and Deferred Compensation Trust Funds Changes in Net Position

ADDITIONS	FOR THE YEAR ENDED DECEMBER 31, 2013	FOR THE YEAR ENDED DECEMBER 31, 2012	% CHANGE
Employer contributions	$14,789	$11,708	26.3%
Member contributions	173,480	167,228	3.7%
Investment income	529,858	295,165	79.5%
Other	2,575	2,431	5.9%
Total additions	720,702	476,532	51.2%
DEDUCTIONS			
Refunds	181,232	176,667	2.6%
Administrative expenses	4,975	4,780	4.1%
Other	1,103	534	106.6%
Total deductions	187,310	181,981	2.9%
Change in net position	533,392	294,551	81.1%
Net position			
Beginning of year	2,733,460	2,438,909	12.1%
End of year	$3,266,852	$2,733,460	19.5%

Statement of Net Position

As of December 31, 2013, with Comparative Combined Totals for 2012
(In Thousands of Dollars)

ASSETS	STATE DIVISION TRUST FUND	SCHOOL DIVISION TRUST FUND	LOCAL GOVERNMENT DIVISION TRUST FUND	JUDICIAL DIVISION TRUST FUND	DENVER PUBLIC SCHOOLS DIVISION TRUST FUND	TOTAL DEFINED BENEFIT PENSION PLANS
Cash and short-term investments						
Cash and short-term investments	$314,798	$512,908	$79,176	$6,136	$73,798	$986,816
Securities lending collateral	562,984	917,280	141,598	10,974	131,981	1,764,817
Total cash and short-term investments	877,782	1,430,188	220,774	17,110	205,779	2,751,633
Receivables						
Benefit	48,167	37,647	4,351	1,408	5,832	97,405
Interfund	234	382	59	5	55	735
Investment settlements and income	41,328	67,336	10,394	806	9,688	129,552
Total receivables	89,729	105,365	14,804	2,219	15,575	227,692
Investments, at fair value						
Fixed income	3,181,048	5,182,941	800,080	62,008	745,734	9,971,811
Global stocks	8,097,750	13,193,817	2,036,699	157,852	1,898,358	25,384,476
Alternative investments	1,074,738	1,751,090	270,312	20,950	251,951	3,369,041
Real estate investments	1,000,778	1,630,587	251,710	19,509	234,613	3,137,197
Opportunity fund	269,208	438,626	67,710	5,248	63,111	843,903
Self-directed brokerage	—	—	—	—	—	—
Total investments, at fair value	13,623,522	22,197,061	3,426,511	265,567	3,193,767	42,706,428
Capital assets, at cost, net of accumulated depreciation of $23,603 and $21,897 at December 31, 2013, and 2012, respectively	5,480	10,455	1,143	38	1,283	18,399
Total assets	14,596,513	23,743,069	3,663,232	284,934	3,416,404	45,704,152
LIABILITIES						
Investment settlements and other liabilities	53,135	85,892	13,338	1,308	12,000	165,673
Securities lending obligations	562,918	917,174	141,582	10,973	131,965	1,764,612
Interfund	—	—	—	—	—	—
Total liabilities	616,053	1,003,066	154,920	12,281	143,965	1,930,285
Commitments and contingencies (Note7)						
Net position restricted for pension plan benefits, deferred compensation benefits, other postemployment benefits, and private purpose trust fund participants	$13,980,460	$22,740,003	$3,508,312	$272,653	$3,272,439	$43,773,867
NET POSITION RESTRICTED FOR:						
Defined benefit pension plan benefits	$13,980,460	$22,740,003	$3,508,312	$272,653	$3,272,439	$43,773,867
Defined contribution pension plan benefits	—	—	—	—	—	—
Deferred compensation plan benefits	—	—	—	—	—	—
Other postemployment benefits	—	—	—	—	—	—
Private purpose trust fund participants	—	—	—	—	—	—
Net position restricted for pension plan benefits, deferred compensation benefits, other postemployment benefits, and private purpose trust fund participants	$13,980,460	$22,740,003	$3,508,312	$272,653	$3,272,439	$43,773,867

The accompanying notes are an integral part of these financial statements.

Statement of Net Position

As of December 31, 2013, with Comparative Combined Totals for 2012
(In Thousands of Dollars)

VOLUNTARY INVESTMENT PROGRAM	DEFINED CONTRIBUTION RETIREMENT PLAN	DEFERRED COMPENSATION PLAN	HEALTH CARE TRUST FUND	DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND	LIFE INSURANCE RESERVE	COMBINED TOTAL 2013	COMBINED TOTAL 2012
$73,093	$5,797	$17,694	$7,827	$404	$435	**$1,092,066**	$1,009,029
—	—	—	13,999	722	779	**1,780,317**	1,434,862
73,093	5,797	17,694	21,826	1,126	1,214	**2,872,383**	2,443,891
67,204	1,466	12,529	8,246	628	—	**187,478**	180,447
—	—	—	6	—	—	**741**	2,153
1,970	50	295	1,028	53	57	**133,005**	118,772
69,174	1,516	12,824	9,280	681	57	**321,224**	301,372
622,918	26,151	250,111	79,097	4,079	4,400	**10,958,567**	10,099,258
1,752,136	79,845	356,416	201,352	10,385	11,200	**27,795,810**	24,205,207
—	—	—	26,724	1,378	1,486	**3,398,629**	3,463,149
—	—	—	24,884	1,283	1,384	**3,164,748**	3,284,289
—	—	—	6,694	345	372	**851,314**	755,929
9,628	817	9,110	—	—	—	**19,555**	13,239
2,384,682	106,813	615,637	338,751	17,470	18,842	**46,188,623**	41,821,071
—	—	—	—	—	—	**18,399**	19,521
2,526,949	114,126	646,155	369,857	19,277	20,113	**49,400,629**	44,585,855
16,732	521	2,384	41,251	2,066	1,842	**230,469**	210,078
—	—	—	13,997	722	779	**1,780,110**	1,438,586
467	105	169	—	—	—	**741**	2,153
17,199	626	2,553	55,248	2,788	2,621	**2,011,320**	1,650,817
$2,509,750	$113,500	$643,602	$314,609	$16,489	$17,492	**$47,389,309**	$42,935,038
$—	$—	$—	$—	$—	$—	**$43,773,867**	$39,879,134
2,509,750	113,500	—	—	—	—	**2,623,250**	2,188,942
—	—	643,602	—	—	—	**643,602**	544,518
—	—	—	314,609	16,489	—	**331,098**	306,580
—	—	—	—	—	17,492	**17,492**	15,864
$2,509,750	$113,500	$643,602	$314,609	$16,489	$17,492	**$47,389,309**	$42,935,038

Statement of Changes in Net Position

For the Year Ended December 31, 2013, with Comparative Combined Totals for 2012
(In Thousands of Dollars)

ADDITIONS	STATE DIVISION TRUST FUND	SCHOOL DIVISION TRUST FUND	LOCAL GOVERNMENT DIVISION TRUST FUND	JUDICIAL DIVISION TRUST FUND	DENVER PUBLIC SCHOOLS DIVISION TRUST FUND	TOTAL DEFINED BENEFIT PENSION PLANS
Contributions						
Employers	$401,658	$624,784	$67,197	$6,587	$25,157	$1,125,383
Members	202,799	322,217	42,627	3,224	43,564	614,431
Purchased service	22,241	19,285	7,363	240	1,834	50,963
Retiree health care and life premiums	—	—	—	—	—	—
Federal health care subsidies	—	—	—	—	—	—
Total contributions	626,698	966,286	117,187	10,051	70,555	1,790,777
Investment income						
Net appreciation in fair value of investments	1,653,942	2,685,527	413,030	31,775	387,798	5,172,072
Interest	91,491	148,493	22,819	1,753	21,454	286,010
Dividends	164,483	266,963	41,025	3,152	38,569	514,192
Real estate, alternative investment, and opportunity fund net operating income	64,521	104,720	16,092	1,236	15,130	201,699
Less investment expense	(46,129)	(74,870)	(11,505)	(884)	(10,817)	(144,205)
Net income from investing activities	1,928,308	3,130,833	481,461	37,032	452,134	6,029,768
Securities lending income	1,399	2,270	349	27	327	4,372
Less securities lending borrower rebates	2,292	3,720	572	44	538	7,166
Less securities lending agent fees	(341)	(554)	(85)	(7)	(80)	(1,067)
Net income from securities lending	3,350	5,436	836	64	785	10,471
Net investment income	1,931,658	3,136,269	482,297	37,096	452,919	6,040,239
Other additions	4,869	139	14	1,451	269	6,742
Total additions	2,563,225	4,102,694	599,498	48,598	523,743	7,837,758
DEDUCTIONS						
Benefits						
Benefits paid to retirees/cobeneficiaries	1,282,092	1,918,936	215,843	18,270	236,284	3,671,425
Benefits paid to survivors	13,688	13,820	2,032	346	1,637	31,523
Benefits paid to health care participants	—	—	—	—	—	—
Total benefits	1,295,780	1,932,756	217,875	18,616	237,921	3,702,948
Refunds of contribution accounts, including match and interest	68,735	76,980	32,480	385	6,733	185,313
Disability premiums and life insurance claims	2,229	3,655	479	40	338	6,741
Administrative expenses	9,780	18,523	2,021	69	2,240	32,633
Other deductions	3,593	7,132	4,463	52	150	15,390
Total deductions	1,380,117	2,039,046	257,318	19,162	247,382	3,943,025
Net increase in net position available	1,183,108	2,063,648	342,180	29,436	276,361	3,894,733
Net position restricted for pension plan benefits, deferred compensation benefits, other postemployment benefits, and private purpose trust fund participants						
Beginning of year	12,797,352	20,676,355	3,166,132	243,217	2,996,078	39,879,134
End of year	$13,980,460	$22,740,003	$3,508,312	$272,653	$3,272,439	$43,773,867

The accompanying notes are an integral part of these financial statements.

Statement of Changes in Net Position

For the Year Ended December 31, 2013, with Comparative Combined Totals for 2012
(In Thousands of Dollars)

VOLUNTARY INVESTMENT PROGRAM	DEFINED CONTRIBUTION RETIREMENT PLAN	DEFERRED COMPENSATION PLAN	HEALTH CARE TRUST FUND	DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND	LIFE INSURANCE RESERVE	COMBINED TOTAL	
						2013	2012
$3,679	$11,090	$20	$72,784	$5,558	$—	$1,218,514	$1,104,901
120,203	8,828	44,449	—	—	—	787,911	807,788
—	—	—	—	—	—	50,963	49,795
—	—	—	114,364	4,719	—	119,083	111,399
—	—	—	15,731	563	—	16,294	14,686
123,882	19,918	44,469	202,879	10,840	—	2,192,765	2,088,569
394,431	16,702	80,952	39,478	1,951	2,250	5,707,836	4,109,173
4,723	183	3,653	2,181	107	125	296,982	312,904
27,491	658	4,621	3,920	194	225	551,301	522,387
—	—	—	1,537	75	88	203,399	225,967
(2,768)	(127)	(661)	(1,099)	(55)	(63)	(148,978)	(150,650)
423,877	17,416	88,565	46,017	2,272	2,625	6,610,540	5,019,781
—	—	—	33	2	2	4,409	6,441
—	—	—	55	3	3	7,227	7,582
—	—	—	(8)	—	—	(1,075)	(1,267)
—	—	—	80	5	5	10,561	12,756
423,877	17,416	88,565	46,097	2,277	2,630	6,621,101	5,032,537
2,141	6	428	10,522	312	—	20,151	20,076
549,900	37,340	133,462	259,498	13,429	2,630	8,834,017	7,141,182
—	—	—	—	—	—	3,671,425	3,476,510
—	—	—	—	—	—	31,523	30,348
—	—	—	222,860	11,222	—	234,082	229,795
—	—	—	222,860	11,222	—	3,937,030	3,736,653
142,064	6,314	32,854	—	—	—	366,545	372,409
—	—	—	—	—	131	6,872	4,811
3,137	744	1,094	13,766	561	871	52,806	48,020
624	49	430	—	—	—	16,493	15,751
145,825	7,107	34,378	236,626	11,783	1,002	4,379,746	4,177,644
404,075	30,233	99,084	22,872	1,646	1,628	4,454,271	2,963,538
2,105,675	83,267	544,518	291,737	14,843	15,864	42,935,038	39,971,500
$2,509,750	$113,500	$643,602	$314,609	$16,489	$17,492	$47,389,309	$42,935,038

Note 1—Plan Description

Organization

Colorado PERA was established in 1931. The statute relating to PERA is Title 24, Article 51 of the Colorado Revised Statutes (C.R.S.). PERA administers cost-sharing multiple-employer defined benefit plans for the State Division Trust Fund, School Division Trust Fund, Local Government Division Trust Fund, Judicial Division Trust Fund, and Denver Public Schools Division Trust Fund (Division Trust Funds). Additionally, PERA administers cost-sharing multiple-employer defined benefit other postemployment benefit plans for the Health Care Trust Fund (HCTF) and the Denver Public Schools Health Care Trust Fund (DPS HCTF), collectively Health Care Trust Funds (see Note 9), a private purpose trust fund (Life Insurance Reserve), two multiple-employer defined contribution plans (Voluntary Investment Program and Defined Contribution Retirement Plan), and the Deferred Compensation Plan; see Note 8. Prior to 2009, the Defined Contribution Retirement Plan was a component plan of the Voluntary Investment Program. Senate Bill (SB) 09-66, established a separate trust fund for the Defined Contribution Retirement Plan and it is now shown as a separate fiduciary fund. Additionally, as a result of SB 09-66, PERA became the administrator of the Deferred Compensation Plan on July 1, 2009, and received a plan transfer from the State of Colorado 457 Plan. SB 09-282 required the merger of the Denver Public Schools Retirement System (DPSRS) into PERA on January 1, 2010, and established the separate Denver Public Schools (DPS) Division Trust Fund and DPS HCTF.

Responsibility for the organization and administration of the Division Trust Funds, Health Care Trust Funds, Voluntary Investment Program, Defined Contribution Retirement Plan, the Deferred Compensation Plan, and Life Insurance Reserve rests with the PERA Board of Trustees (Board). The State Division Trust Fund was established in 1931, the School and Local Government Division Trust Funds in 1944, the Judicial Division Trust Fund in 1949, and the DPS Division Trust Fund in 2010. The State and School Division Trust Funds were combined in 1997 and separated in 2006.

Listed below is the number of active affiliated employers for the five Division Trust Funds. The School and DPS Divisions employer counts include charter schools operating within the respective public school districts and under the Colorado Charter School Institute.

DIVISION	AS OF DECEMBER 31, 2013
State	70
School	294
Local Government	146
Judicial	6
Denver Public Schools	31
Total employers	547

Membership—Division Trust Funds-Defined Benefit Pension Plans

Benefit recipients and members of PERA consisted of the following as of December 31, 2013, with comparative combined totals for 2012:

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DENVER PUBLIC SCHOOLS DIVISION	2013	2012
Retirees and beneficiaries	34,981	55,986	6,167	323	6,564	**104,021**	100,714
Terminated employees entitled to benefits but not yet receiving benefits	5,340	12,854	2,868	6	759	**21,827**	20,698
Inactive members	63,759	96,832	20,286	5	5,501	**186,383**	178,913
Active members							
Vested general employees	31,632	68,242	6,494	281	5,384	**112,033**	111,098
Vested State Troopers	637	—	—	—	—	**637**	630
Non-vested general employees	22,906	49,485	5,460	51	9,432	**87,334**	84,526
Non-vested State Troopers	179	—	—	—	—	**179**	181
Total actives	55,354	117,727	11,954	332	14,816	**200,183**	196,435
Total	159,434	283,399	41,275	666	27,640	512,414	496,760

Membership—Voluntary Investment Program and Defined Contribution Retirement Plan

See Note 8.

Membership—Deferred Compensation Plan

See Note 8.

Membership—Health Care Trust Funds

See Note 9.

Benefit Provisions—Division Trust Funds

Plan benefits are specified in Title 24, Article 51 of the C.R.S. and applicable provisions of the federal Internal Revenue Code. Colorado State law provisions may be amended from time to time by the Colorado General Assembly.

Plan Eligibility

All employees of PERA employers who work in a position eligible for PERA membership must be covered by PERA, except for employees who are hired into a position that makes them eligible for a choice between enrolling in the PERA Defined Benefit (DB) Plan or the PERA Defined Contribution Plan (PERAChoice).

PERAChoice eligibility applies to certain new employees of State agencies and departments and community colleges. If an eligible employee does not make a choice of which plan he or she would like to participate in within 60 days of the starting date of employment, the employee is automatically enrolled in the PERA DB Plan. Between month 13 and month 72 of participation in their plan of choice, employees may make a one-time, irrevocable election to switch their original election. After the 72nd month of participation in their plan of choice, this option to switch plan participation no longer exists.

Some positions of PERA-affiliated employers are not eligible for PERA membership and may be covered by another separate retirement program.

Benefit Provisions

The Division Trust Funds have various benefit provisions depending upon the member's date of hire or upon the member's date of retirement. The differences in plan benefit provisions are noted below. On January 1, 2010, DPSRS merged with PERA. On that date all liabilities and assets of DPSRS transferred to and became liabilities and assets of the DPS Division of PERA. The benefit provisions of DPSRS were incorporated into PERA as the DPS benefit structure. The benefit provisions of existing members of PERA on the merger date and all new hires post-merger date are identified as the PERA benefit structure.

Member Accounts

Members contribute 8 percent of their PERA-includable salary to their member accounts; State Troopers and Colorado Bureau of Investigation agents contribute 10 percent.

State law authorizes the Board to determine annually the interest to be credited to member accounts, but in no event may the Board specify a rate that exceeds 5 percent. Effective January 1, 2009, the rate was set at 3 percent and has been reconfirmed each November since adoption.

SB 10-146 was signed by former Governor Ritter on March 31, 2010. This bill was proposed by the Governor and recommended by the Joint Budget Committee to reduce the State's expenditures. SB 11-076 was signed by Governor Hickenlooper on May 23, 2011. This bill was proposed by the Joint Budget Committee to reduce the State's expenditures.

These two legislative bills temporarily increased the State and Judicial Divisions' member contribution rates by 2.50 percent of salary, and correspondingly decreased the State and Judicial Divisions' employer contribution rates by 2.50 percent, effective July 1, 2010, through June 30, 2012. On July 1, 2012, the State and Judicial Divisions' member contribution rates returned to their previous statutory rates.

Service Credit

Members earn service credit for each month of work performed as an employee of a PERA-affiliated employer for which salary is earned for such services.

A full month of service credit is earned for each month of work where the salary earned by the employee is equal to or greater than 80 multiplied by the federal minimum hourly wage in effect for that month. Earned salary which is less than this amount results in a partial month of service credit.

Eligible members may purchase additional service credit based upon (1) other employment that is not covered by PERA or another retirement program or (2) the service credit forfeited as the result of a withdrawn PERA member account. Such service credit purchases are subject to limits in State and federal law. The amounts used to purchase service credit are credited to the member's account and may include tax-paid funds and eligible rollovers of tax-deferred funds. Such amounts are eligible for interest accrual, but no match if the account is refunded in a lump-sum distribution.

Refund or Distribution Provisions
Upon termination of employment with all PERA employers, members have the following options concerning their member account:

- Leave the account invested in the Division Trust Funds for a future distribution or retirement benefit; however, a distribution must begin by April 1 following the year in which the member reaches age 70½.
- Request a distribution of the member account plus an applicable match. Such a distribution cancels the refunding member's service credit and any benefit entitlements associated with the account. The distribution may be taken as cash with the resulting tax consequences or as a rollover to an eligible qualified plan, 403(b) plan, 457 plan, or an Individual Retirement Account.

Matching Amounts
Members under the PERA benefit structure who withdraw their accounts on or after reaching retirement eligibility or age 65 receive their member account plus a 100 percent match on eligible amounts. Due to SB 10-001, as of January 1, 2011, members under the PERA benefit structure who withdraw their accounts before reaching retirement eligibility must have five years of earned service credit in order to receive a 50 percent match. All contributions received prior to January 1, 2011, are eligible for the 50 percent match regardless of how much service credit the member has earned. However, contributions received after January 1, 2011, will not be eligible for the 50 percent match until the member earns five years of service credit.

Members under the DPS benefit structure who terminated employment on or after January 1, 2001, and withdraw their accounts on or after reaching retirement eligibility receive their member account plus a 100 percent match on eligible amounts. Members under the DPS benefit structure who withdraw their accounts before reaching retirement eligibility receive a refund of their member accounts, but do not receive any match.

Highest Average Salary
Plan benefits, described below, generally are calculated as a percentage of the member's three-year highest average salary (HAS). The following conditions apply to the HAS calculation:

- *For all members of the PERA benefit structure, except judges, eligible to retire as of January 1, 2011, who were hired before January 1, 2007, and who retire on or after January 1, 2009:* HAS is determined by the highest annual salaries associated with four periods of 12 consecutive months of service credit. The four 12-month periods selected do not have to be consecutive nor do they have to include the last four years of membership. The lowest of the four periods becomes a base year used as a starting point for a 15 percent cap on annual salary increases for the next three periods used to determine the applicable HAS. This salary cap applies regardless of when the annual salaries used in the HAS calculation occurred.
- *For all members of the PERA benefit structure, except judges, not eligible to retire as of January 1, 2011, or members of the PERA benefit structure who are hired on or after January 1, 2007, regardless of the date of retirement:* HAS is determined by the highest annual salaries associated with four periods of 12 consecutive months of service credit. The four 12-month periods selected do not have to be consecutive nor do they have to include the last four years of membership. The lowest of the four periods becomes a base year used as a starting point for an 8 percent cap on annual salary increases for the next three periods used to determine the applicable HAS. This salary cap applies regardless of when the annual salaries used in the HAS calculation occurred.
- *For members of the Judicial Division Trust Fund (judges) regardless of the date of hire or the date of retirement:* HAS is one-twelfth of the highest annual salary associated with one period of 12 consecutive months of service credit.
- *For members of the DPS benefit structure who are eligible to retire as of January 1, 2011:* HAS is the average monthly salary of the 36 months of earned service having the highest salaries.
- *For members of the DPS benefit structure who are not eligible to retire as of January 1, 2011:* HAS is determined by the highest annual salaries associated with four periods of 12 consecutive months of service credit. The four 12-month periods selected do not have to be consecutive nor do they have to include the last four years of membership. The lowest of the four periods becomes a base year used as a starting point for an 8 percent cap on annual salary increases for the next three periods used to determine the applicable HAS. This salary cap applies regardless of when the annual salaries used in the HAS calculation occurred.

Service Retirement Benefits—PERA Benefit Structure

Upon termination of PERA-covered employment and reaching eligibility for service retirement benefits, a member may begin receipt of benefits as shown below.

SERVICE RETIREMENT ELIGIBILITY FOR MEMBERS (OTHER THAN STATE TROOPERS) HIRED BEFORE JULY 1, 2005, WITH FIVE YEARS OF SERVICE CREDIT ON JANUARY 1, 2011

Age Requirement (in years)	*Service Credit Requirement (in years)*
50	30
55	Age and Service = 80 or more
60	20
65	5
65	Less than 5 but 60 payroll postings[1]

[1] Retiring members who are age 65 and have less than five years of service credit and less than 60 payroll postings will receive a service retirement benefit under the Money Purchase Formula only.

SERVICE RETIREMENT ELIGIBILITY FOR MEMBERS (OTHER THAN STATE TROOPERS) HIRED ON OR AFTER JULY 1, 2005, BUT BEFORE JANUARY 1, 2007, WITH FIVE YEARS OF SERVICE CREDIT ON JANUARY 1, 2011

Age Requirement (in years)	*Service Credit Requirement (in years)*
Any Age	35
55	Age and Service = 80 or more
60	20
65	5
65	Less than 5 but 60 payroll postings[1]

[1] Retiring members who are age 65 and have less than five years of service credit and less than 60 payroll postings will receive a service retirement benefit under the Money Purchase Formula only.

SERVICE RETIREMENT ELIGIBILITY FOR MEMBERS (OTHER THAN STATE TROOPERS) HIRED ON OR AFTER JANUARY 1, 2007, BUT BEFORE JANUARY 1, 2011, WITH FIVE YEARS OF SERVICE CREDIT ON JANUARY 1, 2011

Age Requirement (in years)	*Service Credit Requirement (in years)*
Any Age	35
55	30
55	Age and Service = 85 or more
60	25
65	5
65	Less than 5 but 60 payroll postings[1]

[1] Retiring members who are age 65 and have less than five years of service credit and less than 60 payroll postings will receive a service retirement benefit under the Money Purchase Formula only.

SERVICE RETIREMENT ELIGIBILITY FOR MEMBERS (OTHER THAN STATE TROOPERS) HIRED BEFORE JANUARY 1, 2011, WITH LESS THAN FIVE YEARS OF SERVICE CREDIT ON JANUARY 1, 2011

Age Requirement (in years)	*Service Credit Requirement (in years)*
Any Age	35
55	30
55	Age and Service = 85 or more
60	25
65	5
65	Less than 5 but 60 payroll postings[1]

[1] Retiring members who are age 65 and have less than five years of service credit and less than 60 payroll postings will receive a service retirement benefit under the Money Purchase Formula only.

SERVICE RETIREMENT ELIGIBILITY FOR MEMBERS (OTHER THAN STATE TROOPERS) HIRED ON OR AFTER JANUARY 1, 2011

Age Requirement (in years)	*Service Credit Requirement (in years)*
Any Age	35
58	30
58	Age and Service = 88 or more
60	28
65	5
65	Less than 5 but 60 payroll postings[1]

[1] Retiring members who are age 65 and have less than five years of service credit and less than 60 payroll postings will receive a service retirement benefit under the Money Purchase Formula only.

SERVICE RETIREMENT ELIGIBILITY FOR STATE TROOPERS

Age Requirement (in years)	*Service Credit Requirement (in years)*
Any Age	30
50	25
55	20
65	5
65	Less than 5 but 60 payroll postings[1]

[1] Retiring members who are age 65 and have less than five years of service credit and less than 60 payroll postings will receive a service retirement benefit under the Money Purchase Formula only.

The service retirement benefit for all retiring members, except certain judges, is the higher of the Defined Benefit Formula or the Money Purchase Formula as explained below:

- ***Defined Benefit Formula***
  HAS multiplied by 2.5 percent and then multiplied by Years of Service Credit.
- ***Money Purchase Formula***
  Values the retiring member's account plus a 100 percent match on eligible amounts as of the member's retirement date. This amount is then annuitized into a monthly benefit using the retiring member's life expectancy, expected rates of return, and other actuarial factors.

In addition, a special benefit calculation applies for certain judges. Service retirement benefits for members of the Judicial Division Trust Fund (judges) who were on the bench on or before July 1, 1973, will receive the higher of the above service retirement calculation or the following:

[(4% × Years of Service Credit 1-10) + (1.66% × Years of Service Credit Over 10-16) + (1.5% × Years of Service Credit Over 16-20) + (2.5% × Years of Service Credit over 20)]

In all cases, a service retirement benefit is limited to 100 percent of highest average salary and also cannot exceed the maximum benefit amount allowed by federal law.

In addition to the Service Retirement Eligibility Charts on page 61, SB 10-001 made the following change to the age and service credit requirements for a full service retirement:

- For all new members, other than State Troopers, first covered under the plan on or after January 1, 2017, eligibility includes a modified Rule of 90 (age and service must add to 90 with a minimum age of 60). If the most recent 10 years of service credit is earned under either the School Division Trust Fund or the DPS Division Trust Fund, eligibility will include a modified Rule of 88 (age and service must add to 88 with a minimum age of 58).

Reduced Service Retirement—PERA Benefit Structure
Reduced service retirement benefits are calculated in the same manner as a service retirement benefit with a reduction for each month prior to the member's first eligible date for a service retirement. The benefit calculation reduction factors are specified in C.R.S. § 24-51-605.

REDUCED SERVICE RETIREMENT ELIGIBILITY

Age Requirement (in years)		*Service Credit Requirement (in years)*
50		25
50	—(State Troopers only)—	20
55		20
60		5

SB 10-001 did not change the age and service requirements to be eligible for a reduced service retirement benefit nor did it change the reduced service retirement benefit for members who are eligible to retire as of January 1, 2011; for these members the current reduction factors found at C.R.S. § 24-51-605 will remain in place. The legislation did change the reduction factors used to calculate reduced benefits for those members not eligible to retire as of January 1, 2011. For these members, an actuarial equivalent reduction will be applied to the reduced service retirement benefit.

Service Retirement and Reduced Service Retirement Benefits—DPS Benefit Structure
Members in the DPS benefit structure are eligible to receive a monthly retirement benefit when they meet the age and service requirements listed below. If the member has less than five years of service credit under the DPS benefit structure, the member does not have the option to apply for a benefit and the member is only eligible for a refund of his or her account.

If the member has five years of service credit as of January 1, 2011, the following age and service requirements apply:

SERVICE RETIREMENT BENEFIT

Age Requirement (in years)	*Service Credit Requirement (in years)*
50	30
55	25[1]
65	5

[1] 15 years must be earned service credit

REDUCED SERVICE RETIREMENT BENEFIT

Age Requirement (in years)	*Service Credit Requirement (in years)*
Less than 50	30
Less than 55	25
55	15

If the member does not have five years of service credit as of January 1, 2011, the following age and service requirements apply:

SERVICE RETIREMENT BENEFIT

Age Requirement (in years)	*Service Credit Requirement (in years)*
Any Age	35
55	30[1]
55	Age and Service = 85 or more[1]
60	25
65	5

[1] 20 years must be earned service credit

REDUCED SERVICE RETIREMENT BENEFIT

Age Requirement (in years)	*Service Credit Requirement (in years)*
50	25
55	20
60	5

Disability Program

Eligible active members, other than judges, with five or more years of earned service credit are covered by the PERA Disability Program. Judges are immediately covered under the disability program. The earned service credit requirement may be waived for State Troopers who become disabled as the result of injuries in the line of duty.

Medical determinations for the disability program are outsourced to a separate disability program administrator, Unum. Applicants found to be disabled receive payments under one of two tiers:

- ***Short-Term Disability (STD):*** Disability applicants are eligible for STD payments if they are found to be mentally or physically incapacitated from performance of essential job duties after reasonable accommodation, and who are medically unable to earn at least 75 percent of their pre-disability earnings from any job, but who are not totally and permanently incapacitated from regular and substantial gainful employment. PERA's STD program is an insurance product with PERA's disability program administrator and payments are made directly to the individual from PERA's disability program administrator. The maximum income replacement is 60 percent of the member's pre-disability PERA salary for up to 22 months.
- ***Disability Retirement Benefits:*** Disability applicants who are found to be totally and permanently mentally or physically incapacitated from regular and substantial gainful employment are eligible for disability retirement benefits. These benefits are paid by PERA for as long as the disability retiree remains disabled. The benefit is calculated as a percentage of the disabled member's HAS using accrued, and in some cases, projected service credit.

Benefit Options

Service retirees in the PERA benefit structure and all members in either the DPS benefit structure or the PERA benefit structure who meet the requirements of a disability retirement, may elect to receive their retirement or disability benefits in the form of a single-life benefit payable for the retiree's lifetime only or one of two joint-life benefits payable for the lifetime of the retiree with a continuing benefit paid upon the retiree's death to the retiree's cobeneficiary. Such option designations may only be changed under limited conditions specified in State law. The options are as follows:

- *Option 1:* A single-life benefit payable for the life of the retiree and, upon the death of the retiree, no further monthly benefits are payable.
- *Option 2:* A joint-life benefit payable for the life of the retiree and, upon the death of the retiree, one-half of the benefit becomes payable to the cobeneficiary of the retiree for life. Upon the death of the cobeneficiary prior to the death of the retiree, an Option 1 benefit becomes payable to the retiree.
- *Option 3:* A joint-life benefit payable for the life of the retiree and, upon the death of the retiree, the same benefit becomes payable to the cobeneficiary of the retiree for life. Upon the death of the cobeneficiary prior to the death of the retiree, an Option 1 benefit becomes payable to the retiree.

Options 2 and 3 are the actuarial equivalent of Option 1.

Service retirees in the DPS benefit structure have the following options:

- *Option A:* A single-life benefit payable for the life of the retiree and, upon the death of the retiree, no further monthly benefits are payable.
- *Option B:* A single-life benefit, reduced from an Option A benefit to provide benefits to designated beneficiaries for a fixed period of time after retirement. As part of the retirement calculation, a guaranteed payment period is determined and if the retiree dies before the guaranteed period ends, the benefit will continue to the Option B beneficiary(ies) for the remainder of the guaranteed period. If the death of the retiree occurs after the guaranteed period, the benefit ends.
- *Option P2:* A joint-life benefit payable for the life of the retiree and, upon the death of the retiree, one-half of the benefit becomes payable to the cobeneficiary of the retiree for life. Upon the death of the cobeneficiary prior to the death of the retiree, an Option A benefit becomes payable to the retiree.
- *Option P3:* A joint-life benefit payable for the life of the retiree and, upon the death of the retiree, the same benefit becomes payable to the cobeneficiary of the retiree for life. Upon the death of the cobeneficiary prior to the death of the retiree, an Option A benefit becomes payable to the retiree.

Options B, P2, and P3 are the actuarial equivalent of Option A.

Survivor Benefits Program—PERA Benefit Structure
Members who have at least one year of earned service credit are covered by the PERA survivor benefits program. This one-year requirement is waived if a member's death is job-incurred.

In the event of the covered member's death, monthly survivor benefits may be paid to the qualified survivors of the deceased. Qualified survivors generally include minor children, a surviving spouse, dependent parents, or a cobeneficiary (for deceased members who were eligible for retirement at the time of death).

Monthly benefits are specified in statute and vary based upon the deceased's HAS, years of service credit, the qualified survivor to whom benefits are to be paid, and the number of qualified survivors receiving benefits.

If at the time of death, a member has less than one year of earned service credit or with no qualified survivors, the deceased's named beneficiary or the estate receives a lump-sum payment of the deceased member's account plus a 100 percent match on eligible amounts.

Survivor Benefits Program—DPS Benefit Structure
Active members who have at least five years of continuous service under the DPS benefit structure prior to the date of death and DPS disability retirements (prior to age 65) are covered by the Survivor Benefits Program applicable to the DPS benefit structure.

In the event of the covered member's death, the member's qualified survivors are eligible for survivor benefits as long as the named beneficiary(ies) waive their right to receive a refund of the member's contributions. Qualified survivors generally include minor children, a surviving spouse, or dependent parents.

Monthly benefits are specified in statute and vary based upon the deceased's HAS, years of service credit, the qualified survivor to whom benefits are to be paid, and the number of qualified survivors receiving benefits.

If at the time of death, a member has not met the eligibility requirements for the DPS benefit structure survivor benefits program that are specified in statute, the member's named beneficiary(ies) will receive a lump-sum payment of the deceased member's account without a match.

Annual Increases
On an annual basis, eligible benefit recipients receive post-retirement cost-of-living adjustments called annual increases (AI). The AI payment month, eligibility, and amounts are determined by the date the retiree or deceased member began membership in PERA.

The AI provisions are explained below.

- *For benefit recipients of the PERA benefit structure who began membership before January 1, 2007, and whose benefit is paid based on a retirement date prior to January 1, 2011, and benefit recipients of the DPS benefit structure whose benefit is paid based on a retirement date prior to January 1, 2011:*
  - ***Payment Month:*** The AI is paid in July.
  - ***Eligibility:*** The benefit recipient has been receiving benefits for at least seven months immediately preceding the July in which the AI is to be paid.
  - ***AI Amount:*** The AI is 2 percent per year unless PERA has a negative investment year in which case, for the next three years, the AI becomes the lesser of 2 percent or the average of the monthly Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) amounts for the prior calendar year. The amount of the first annual increase will be prorated from the month of retirement to the first AI payment date.
- *For benefit recipients of the PERA benefit structure who began membership before January 1, 2007, and whose benefit is paid based on a retirement date on or after January 1, 2011, and benefit recipients of the DPS benefit structure whose benefit is paid based on a retirement date on or after January 1, 2011, the following eligibility criteria is required:*
  - ***Payment Month:*** The AI is paid in July.
  - ***Eligibility:*** For full service retirees, disability retirees, and reduced service retirees who are eligible to receive a benefit on January 1, 2011, and survivor benefit recipients, the benefit recipient has received benefit payments for the 12 months prior to the July in which the AI is to be paid.

    For reduced service retirees who are not eligible to retire as of January 1, 2011: A reduced service retiree is eligible to receive the AI in July of the year in which both of the following conditions are met: (1) the retiree has received benefit payments for 12 months prior to the July in which the AI is to be paid and (2) as of January 1 of the year the AI is paid, the retiree has either reached age 60 or the age and service Rule for unreduced service retirement applicable to the retiree's Plan.
  - ***AI Amount:*** The AI is 2 percent per year unless PERA has a negative investment year in which case, for the next three years, the AI becomes the lesser of 2 percent or the average of the monthly CPI-W amounts for the prior calendar year.
- *For benefit recipients of the PERA benefit structure who began membership on and after January 1, 2007:*
  - ***Payment Month:*** The AI is paid in July.
  - ***Eligibility:*** For full service retirees, disability retirees, and survivor benefit recipients: The benefit recipient becomes eligible in July of the calendar year following the calendar year in which the benefit recipient has received 12 months of benefit payments.

    For reduced service retirees: A reduced service retiree is eligible to receive the AI in July of the year in which both of the following conditions are met: (1) as of January 1 of the year the AI is to be paid, the retiree has received 12 months of benefit payments in the prior calendar year and (2) as of January 1 of the year the AI is paid, the retiree has either reached age 60 or the age and service Rule for unreduced service retirement applicable to the retiree's Plan.
  - ***AI Amount:*** The AI is the lesser of 2 percent or the average of the monthly CPI-W amounts for the prior calendar year. In no case can the sum of AIs paid to a Division's benefit recipients exceed 10 percent of the divisional Annual Increase Reserve (AIR).

Changes to the 2 Percent AI Cap: If PERA's overall funded status is at or above 103 percent, the AI cap of 2 percent will increase by 0.25 percent per year. If after PERA's overall funded status reaches 103 percent and it subsequently drops below 90 percent, the 2 percent AI cap will decrease by 0.25 percent per year, but will never drop below 2 percent.

Indexing of Benefits
Under previous law, inactive members who were covered by the plan as of December 31, 2006, who have 25 or more years of service credit, but do not begin receiving monthly benefits, have their benefit amount increased by the applicable AI granted by PERA from their date of termination of membership to their effective date of retirement. SB 10-001 removed this provision for all members not eligible to retire as of January 1, 2011.

Suspending Benefits
If a retiree suspends retirement, returns to membership, and earns at least one year of service credit, a separate benefit will be earned. In this case, the retiree may opt to refund the contributions remitted with interest and a match. The original benefit will not be recalculated.

If less than one year of service credit is earned during the return to membership, the retiree will be required to refund the contributions remitted with interest and a 100 percent or 50 percent match before the original benefit will resume.

Working After Retirement Without Suspending Benefits

- ***Retiree Contributions:*** With a few statutory exceptions, employers are required to remit employer contributions, AED, and SAED on salary earned by retirees who work for them, but do not suspend retirement and return to membership. Beginning January 1, 2011, working retirees are required to make contributions at a percentage equal to the member contribution rate. Under C.R.S. § 24-51-101 (53), working retiree contributions are nonrefundable and are not deposited into member accounts. PERA deposits these contributions into the employer reserve.
- ***Limits on Working After Retirement:*** With a few statutory exceptions, retirees may work up to 110 days/720 hours per calendar year for a PERA employer with no reduction in benefits. In addition, each employer assigned to the School Division Trust Fund, DPS Division Trust Fund, and each Higher Education Institution assigned to the State Division Trust Fund may designate on a calendar year basis, up to 10 service retirees who may work up to 30 additional days for a total of 140 days/916 hours in a calendar year. The employer contributions, AED, SAED, and working retiree contributions are due on all salary earned.

Benefit Provisions—Voluntary Investment Program and Defined Contribution Retirement Plan
See Note 8.

Benefit Provisions—Deferred Compensation Plan
See Note 8.

Benefit Provisions—Health Care Trust Funds
See Note 9.

Pension Plan Disclosure Statements for Colorado PERA Employees
All employees of PERA, an affiliated employer, are members of the State Division Trust Fund, earn, and accrue benefits as would any other member as described above. PERA, as an affiliated employer, contributes to the State Division Trust Fund (see Note 4); PERA also contributes to the HCTF (see Note 9) and employees are entitled to participate in the 401(k) component of the Voluntary Investment Program and the 457 Deferred Compensation Plan (see Note 8).

PERA's employer contributions to the State Division Trust Fund for the years ended December 31, 2013, 2012, and 2011, were $3,534, $3,139, and $2,405, respectively, equal to its required contributions for each year. PERA's member contributions to the State Division Trust Fund for the years ended December 31, 2013, 2012, and 2011, were $1,813, $2,036, and $2,231, respectively. PERA's contributions to the HCTF for the years ended December 31, 2013, 2012, and 2011, were $232, $224, and $218, respectively, equal to its required contributions for each year. The contributions of PERA members to the 401(k) Plan for the years ended December 31, 2013, 2012, and 2011 were $1,851, $1,717, and $1,690, respectively. Contributions to the 457 Plan by PERA members for the years ended December 31, 2013, 2012, and 2011 were $328, $280, and $268, respectively. PERA also provides its employees with an employer partial match to their contributions to the 401(k) Plan, and the totals for the years ended December 31, 2013, 2012, and 2011, were $391, $373, and $346, respectively.

Life Insurance Reserve
The Life Insurance Reserve (LIR) is an accumulation of dividends received from an insurance company as a return on the premiums paid by those members who have voluntarily enrolled in life insurance programs, adjusted for actual historical experience. The proceeds received from the LIR are used to pay the administrative costs of the plan.

Termination of PERA
If PERA is partially or fully terminated for any reason, C.R.S. § 24-51-217 provides that the rights of all members and benefit recipients to all benefits on the date of termination, to the extent then funded, will become nonforfeitable.

Note 2—Summary of Significant Accounting Policies

Reporting Entity

The Board oversees all funds included in the financial statements of PERA and has the ability to influence operations. The Board's responsibilities include designation of management, membership eligibility, investment of funds, and accountability for fiscal matters.

PERA is an instrumentality of the State of Colorado (State); it is not an agency of State government. In addition, it is not subject to administrative direction by any department, commission, board, bureau, or agency of the State. Accordingly, PERA's financial statements are not included in the financial statements of any other organization.

Basis of Presentation

The accompanying financial statements are prepared in accordance with accounting principles generally accepted in the United States of America that apply to governmental accounting for fiduciary funds including the Governmental Accounting Standards Board (GASB) Statements numbers 25, 28, 33, 34, 37, 40, 43, 50, and 53.

In June 2012, GASB issued Statement No. 67, *"Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25."* Statement No. 67 establishes new standards for financial reporting and note disclosure by defined benefit pension plans administered through qualified trusts, and note disclosure requirements for defined contribution pension plans administered through qualified trusts. Statement No. 67 is effective for periods beginning after June 30, 2013, and PERA has chosen not to early adopt Statement No. 67. One of the major changes in the new standard is the rate used to discount projected benefit payments. The new standard states the long-term expected rate of return on the investments of the pension plan should be applied only to available pension plan assets that are expected to be invested using a strategy to achieve that return. If there comes a point in the projections when plan net position and contributions related to active and inactive employees are no longer projected to be greater than or equal to projected benefit payments related to those employees and administrative expenses (crossover point), then from that point forward the pension plan will be required to discount the projected benefit payments after the crossover point using a municipal borrowing rate—a tax-exempt, high-quality 20-year municipal general obligation bond index rate. PERA has not yet determined the impact of this standard on its financial statements and disclosures.

Also in June 2012, GASB issued Statement No. 68, *"Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27."* Statement No. 68 establishes new standards for accounting for pensions by employers whose employees are provided with pensions through pension plans administered through trusts, or equivalent arrangements, that meet the characteristics defined in the Statements and addresses accounting and financial reporting issues of certain nonemployer entities that contribute to such plans. Statement No. 68 will be effective for periods beginning after June 30, 2014, and PERA has chosen not to early adopt Statement No. 68. PERA has not yet determined the impact of this standard on its financial statements and disclosures.

In November 2013, GASB issued Statement No. 71, "*Pension Transition for Contributions Made Subsequent to the Measurement Date—an amendment of GASB Statement No. 68."* Statement No. 71 addresses an issue regarding application of the transition provisions of Statement No. 68. The issue relates to amounts associated with contributions, if any, made by a state or local government employer or nonemployer contributing entity to a defined benefit pension plan after the measurement date of the government's beginning net pension liability. Statement No. 71 will be effective for periods beginning after June 30, 2014, and PERA has chosen not to early adopt Statement No. 71. PERA has not yet determined the impact of this standard on its financial statements and disclosures.

Basis of Accounting

The accompanying financial statements for the defined benefit and defined contribution trust funds (DB and DC trust funds), the deferred compensation trust fund, the private purpose trust fund, and the other postemployment benefit plans are prepared using the economic resources measurement focus and the accrual basis of accounting. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires PERA to use estimates and assumptions that affect the accompanying financial statements and disclosures. Actual results could differ from those estimates. Member and employer contributions are recognized as revenues in the period in which the compensation becomes payable to the member and the employer is statutorily committed to pay these contributions to the DB and DC trust funds, the deferred compensation trust fund, the HCTF, and the DPS HCTF. Benefits and refunds are recognized when due and payable.

Fund Accounting

The financial activities of the State Division Trust Fund, the School Division Trust Fund, the Local Government Division Trust Fund, the Judicial Division Trust Fund, the DPS Division Trust Fund, the HCTF, the DPS HCTF, the LIR, the Voluntary Investment Program, the Defined Contribution Retirement Plan, and the Deferred Compensation Plan are recorded in separate funds. The

State, School, Local Government, Judicial, and DPS Division Trust Funds maintain separate accounts, and all actuarial determinations are made using separate division-based information.

The Division Trust Funds, the HCTF, the DPS HCTF, and the LIR pool their investments into a combined investment portfolio. Investment value and earnings of the investment pool are allocated among the funds based on each fund's percentage ownership. As of December 31, 2013, the ownership percentages of each fund are shown in the table below.

Ownership Percentages

State	31.63%
School	51.52%
Local Government	7.95%
Judicial	0.62%
Denver Public Schools	7.41%
HCTF	0.79%
DPS HCTF	0.04%
LIR	0.04%
Total	100.00%

The administrative activities and operating assets and liabilities are pooled and recorded in a Common Operating Fund. Expenses incurred and net operating assets are allocated from the Common Operating Fund to the Division Trust Funds based on administrative staff workload devoted to these funds and the ratio of the number of active and retired members in each division to the total for all the Division Trust Funds. Expenses are allocated to the HCTF and DPS HCTF based on administrative fees charged to participants. Expenses are allocated to the Voluntary Investment Program, the Defined Contribution Retirement Plan, and the Deferred Compensation Plan based on administrative staff workload and the ratio of net position of each program or plan to the total for the program and plans. Expenses are allocated to the LIR based on administrative staff workload.

Fair Value of Investments

Plan investments are presented at fair value in the Statement of Net Position. Global stocks and fixed income securities traded on a national or international exchange are valued at the last reported sales price. Fixed income securities, not traded on a national or international exchange, are based on equivalent values of comparable securities with similar yield and risk.

Alternative Investments (private equity) include investments in leveraged buyouts, venture capital, and special situations partnerships. PERA invests as a limited partner in these funds which are long term and generally illiquid. As a result, investors are subject to redemption restrictions which generally limit distributions and restrict the ability of limited partners to exit a partnership investment prior to its dissolution. Alternative Investments are valued using their respective net asset values (NAV) and are generally audited annually. The most significant element of NAV is the fair value of the investment holdings. These holdings are valued by the general partners in conjunction with management, investment advisors, and valuation specialists. The valuation techniques vary based on investment type and involve a certain degree of expert judgment. The fair value for these investments could differ significantly if a ready market for these assets existed.

Real estate is held directly, as a limited partner, or in commingled funds. These investments are long-term and illiquid in nature. As a result, investors are subject to redemption restrictions which generally limit distributions and restrict the ability of limited partners to exit a partnership investment prior to its dissolution. The fair value of directly owned real estate investments and open-end commingled funds are based on periodic independent appraisals. Limited partner real estate investments and closed-end commingled real estate equity are valued based on their respective NAV, and are generally audited annually. The most significant element of NAV is the fair value of the investment holdings. The general partners value these holdings using valuation assumptions based on both market and property specific inputs which are not observable and involve a certain degree of expert judgment. Real estate debt is valued on the basis of future principal and interest payments and discounted at prevailing interest rates for similar instruments. The fair value for these investments could differ significantly if a ready market for these assets existed.

The Opportunity Fund asset class is comprised of timber, commodities, risk parity, and tactical opportunity investments. PERA has both direct and indirect investments in this asset class. Indirect investments include ownership of commingled fund investments, which are long term and generally illiquid. As a result, investors are subject to redemption restrictions, which generally limit distributions and restrict the ability to exit the commingled fund investment. The fair value of directly owned timber investments is based on periodic independent appraisals. PERA gains exposure to commodities by direct investments in derivative positions on commodities and by investing in a commodities-based commingled fund. The fair value of commodity investments is based on the underlying value of the commodities and/or the associated derivative positions. Risk parity and tactical opportunity commingled funds are valued using their respective NAV and are generally audited annually. The most significant element of NAV is the fair value of the investment holdings. The general partners value these holdings in conjunction with management, investment advisors, and valuation specialists. The valuation techniques vary based on investment type and involve a certain degree of subjective judgment. The fair value for these investments could differ significantly if a ready market for these assets existed.

(In Thousands of Dollars)

Interests in commingled funds are valued using the NAV per unit of each fund. The NAV reported by the fund manager is based on the market value of the underlying investment owned by each fund, minus its liabilities, divided by the number of shares outstanding. Investments in mutual funds are valued at the NAV of shares held at year-end.

The PERAdvantage Capital Preservation Fund in the two defined contribution and the deferred compensation funds is a stable value fund and the value of the fund is based on the contract value of the investments. This value is the amortized cost of the securities owned by the separate account, plus cash, and accrued interest less liabilities.

The carrying value of short-term investments is at cost, which approximates fair value.

Property, Equipment, and Intangible Assets

Property and equipment are carried at cost, less accumulated depreciation. All costs of property and equipment $5,000 (actual dollars) or greater are capitalized. The cost of computer software developed for internal operational use $500,000 (actual dollars) or greater is capitalized. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is calculated using the straight-line method, with estimated lives ranging from three to forty years in the following major classes: vehicles, five years; computer and office equipment, three years to five years; office furniture and leasehold improvements, five to ten years; building and building additions, forty years; and internally developed computer software, five years.

Health Care Trust Funds Specific Policies

See Note 9.

Note 3—Interfund Transfers and Balances

Interfund transfers of assets take place on a regular basis between the Division Trust Funds. The transfers occur upon the initiation of a retirement or survivor benefit where the member earned or purchased service in another Division Trust Fund in addition to the Fund that is paying the benefit. The transfers for the year ended December 31, 2013, consisted of the following amounts:

Interfund Transfers

	STATE DIVISION TRUST FUND	SCHOOL DIVISION TRUST FUND	LOCAL GOVERNMENT DIVISION TRUST FUND	JUDICIAL DIVISION TRUST FUND	DPS DIVISION TRUST FUND	HEALTH CARE TRUST FUND	DPS HEALTH CARE TRUST FUND
Transfers in from other Funds for retirements	$17,401	$11,119	$3,037	$1,977	$2,117	$—	$—
Transfers out to other Funds for retirements	(12,479)	(14,454)	(6,331)	(527)	(1,860)	—	—
Transfers in from other Funds for survivor benefits	3	107	—	—	—	—	—
Transfers out to other Funds for survivor benefits	(107)	(3)	—	—	—	—	—
Transfers out to Health Care Trust Funds for purchased service credit	(3,125)	(3,827)	(1,166)	(52)	(147)	—	—
Transfers in to Health Care Trust Funds for purchased service credit	—	—	—	—	—	8,170	147

(In Thousands of Dollars)

As of December 31, 2013, interfund balances existed between funds due to unreimbursed internal operating expenses. The interfund balances consisted of the following amounts:

Interfund Balances

TRUST FUND	
State Division	$234
School Division	382
Local Government Division	59
Judicial Division	5
Denver Public Schools Division	55
Voluntary Investment Program	(467)
Defined Contribution Retirement Plan	(105)
Deferred Compensation Plan	(169)
HCTF	6

Note 4—Contributions

Division Trust Funds—Defined Benefit Pension Plans

Members and employers are required to contribute to PERA at a rate set by Colorado statute. The contribution requirements of plan members and affiliated employers are established under C.R.S. § 24-51-401 *et seq*. Colorado State law provisions may be amended from time to time by the Colorado General Assembly.

Members are required to contribute 8 percent of their PERA-includable salary (State Troopers contribute 10 percent). PERA records these contributions in individual member accounts. Member contributions are tax-deferred for federal and Colorado income tax purposes, effective July 1, 1984, (January 1, 1986, for members of the DPS benefit structure) and January 1, 1987, respectively. Prior to those dates, contributions were on an after-tax basis. PERA-affiliated employers contribute a percentage of active member covered payrolls at employer rates ranging from 10.15 percent to 13.75 percent. SB 10-146 and SB 11-076 required that member contributions increase and employer contributions decrease by 2.50 percent for the State and Judicial Divisions for the two-year period beginning July 1, 2010, through June 30, 2012.

Employers that rehire a PERA retiree as an employee or under any other work arrangement (working retiree) are required to report and pay employer contributions on the amounts paid to the working retiree. In addition, effective January 1, 2011, working retirees are required to make contributions at a percentage of salary equal to the member contribution rate. However, under C.R.S. §§ 24-51-101 (53), these contributions are not member contributions, are not deposited into a member account, and therefore, are nonrefundable to the working retiree.

Beginning January 1, 2006, employers are required to pay the AED and, beginning January 1, 2008, employers are required to pay the SAED. The employers pay these amounts on the PERA-includable salary for all employees working for the employer who are members of PERA, or who are eligible to elect to become members of PERA on or after January 1, 2006, including any amounts paid in connection with the employment of a retiree by an employer. PERA uses these payments to help amortize the unfunded actuarial accrued liability. The AED and SAED are set to increase in future years, as described in the table on the next page. SB 10-001 provides for adjustment of the AED and SAED based on the year-end funded status within a particular division trust fund. If a particular division trust fund reaches a funded status of 103 percent, a decrease in the AED and SAED is mandated and if it subsequently falls below a funded status of 90 percent, an increase in the AED and SAED is mandated. For the Local Government and Judicial Divisions, if the funded ratio reaches 90 percent and subsequently falls below 90 percent, an increase in the AED and SAED is mandated. AED and SAED rates cannot exceed the maximums listed in the table on the next page.

C.R.S. § 24-51-412 permits a Pension Certificates of Participation (PCOP) offset to the DPS Division employer contribution rate. The offset, expressed as a percentage of covered payroll, is equal to the annual assumed payment obligations for PCOPs issued in 1997 and 2008 by the Denver Public Schools at a fixed effective annual interest rate of 8.50 percent. At a minimum, the DPS Division employer rate, after applying the PCOP offset, must be sufficient to fund the DPS HCTF and the AIR contribution rates as it applies to the DPS Division. The staff of Denver Public Schools provided the PCOP offset rate of 14.51 percent for 2013.

C.R.S § 24-51-401(1.7) (e) recognizes the effort to equalize the funded status of the DPS Division and the School Division of PERA. As of December 31, 2013, the funded ratio of the DPS Division is 81.2 percent and the funded ratio of the School Division is 60.3 percent. Beginning January 1, 2015, and every fifth year thereafter, the statute requires a true-up calculation to confirm the equalization of the funded status of these two divisions. The true-up calculation is an actuarial projection to assure the funded status of these divisions will be equal in 30 years from 2010. In the event a true-up calculation does not project equalization between these divisions over the 30-year period, the Board shall recommend an adjustment of the DPS Division employer contribution rate to the Colorado General Assembly. An adjustment to the DPS Division contribution rate may result in a significant increase in the total contributions paid by the DPS Division employers.

(In Thousands of Dollars)

PERA-affiliated employers forward the contributions to PERA for deposit. PERA transfers a portion of these contributions, equal to 1.02 percent of the reported salaries, into the HCTF or DPS HCTF for health care benefits and 1.0 percent of applicable reported salaries into the AIR of each division for future benefit increases. The remainder of these contributions are transferred into a trust fund established for each division for the purpose of creating actuarial reserves for future benefits.

The combined employer contribution rates for retirement and health care benefits along with the member contribution rates from January 1, 2013, through December 31, 2013, are as follows:

Contribution Rates

DIVISION	MEMBERSHIP	EMPLOYER CONTRIBUTION RATE	AMORTIZATION EQUALIZATION DISBURSEMENT	SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT	DENVER PUBLIC SCHOOLS OFFSET	TOTAL CONTRIBUTION RATE PAID BY EMPLOYER	MEMBER CONTRIBUTION RATE
State	All members (except State Troopers)	10.15%	3.40%	3.00%	—	16.55%	8.00%
State	State Troopers	12.85%	3.40%	3.00%	—	19.25%	10.00%
School	All members	10.15%	3.40%	3.00%	—	16.55%	8.00%
Local Government	All members	10.00%	2.20%	1.50%	—	13.70%	8.00%
Judicial	All members	13.66%	2.20%	1.50%	—	17.36%	8.00%
Denver Public Schools	All members	13.75%	3.40%	3.00%	(14.51%)	5.64%	8.00%

Future AED and SAED Rates

	STATE DIVISION TRUST FUND		SCHOOL DIVISION TRUST FUND		LOCAL GOVERNMENT DIVISION TRUST FUND		JUDICIAL DIVISION TRUST FUND		DPS DIVISION TRUST FUND[1]	
PERIOD	AED	SAED	AED	SAED	AED	SAED	AED	SAED	AED	SAED
1/1/2014 — 12/31/2014	3.80%	3.50%	3.80%	3.50%	2.20%	1.50%	2.20%	1.50%	3.80%	3.50%
1/1/2015 — 12/31/2015	4.20%	4.00%	4.20%	4.00%	2.20%	1.50%	2.20%	1.50%	4.20%	4.00%
1/1/2016 — 12/31/2016	4.60%	4.50%	4.50%	4.50%	2.20%	1.50%	2.20%	1.50%	4.50%	4.50%
1/1/2017 — 12/31/2017	5.00%	5.00%	4.50%	5.00%	2.20%	1.50%	2.20%	1.50%	4.50%	5.00%
1/1/2018 — 12/31/2018	5.00%	5.00%	4.50%	5.50%	2.20%	1.50%	2.20%	1.50%	4.50%	5.50%
Maximum allowable limitations	5.00%	5.00%	4.50%	5.50%	5.00%	5.00%	5.00%	5.00%	4.50%	5.50%

[1] DPS Division employers are permitted to reduce the AED and SAED by the PCOP offset, as specified in C.R.S. § 24-51-412 *et seq.*

Replacement Benefit Arrangements

Internal Revenue Code (IRC) § 415 limits the amount of the benefit payable to a retiree or survivor in a defined benefit plan. In some cases, the IRC limit is lower than the benefit calculated under the plan provisions. IRC § 415(m) allows a government plan to set up a "qualified governmental excess benefit arrangement" to pay the difference to those retirees. To accomplish this, PERA has entered into agreements with the employers who last employed the affected retirees. Under the agreement, the employer pays the benefit difference to the retiree from a portion of the current employer contributions. In 2013, employers under these agreements used current employer contributions to pay retirees $1,707 in the State Division; $707 in the School Division; $437 in the Local Government Division; $0 in the Judicial Division, and $0 in the DPS Division.

Contributions—Voluntary Investment Program and Defined Contribution Retirement Plan

See Note 8.

Contributions—Deferred Compensation Plan

See Note 8.

Contributions—Health Care Trust Funds

See Note 9.

(In Thousands of Dollars)

Note 5—Investments

Investment Authority

Under C.R.S. § 24-51-206, the Board has responsibility for the investment of PERA's funds, with the following investment limitations:

- The aggregate amount of monies invested in corporate stocks or corporate bonds, notes, or debentures that are convertible into corporate stock or in investment trust shares cannot exceed 65 percent of the then book value of the fund.
- No investment of the fund in common or preferred stock (or both) of any single corporation can exceed 5 percent of the then book value of the fund.
- The fund cannot acquire more than 12 percent of the outstanding stock or bonds of any single corporation.

Cash

Cash balances represent both operating cash accounts and investment cash on deposit held by banks. To maximize investment income, the float caused by outstanding checks is invested, thus causing a possible negative book balance. Negative book balances are reflected in the liabilities section of the Statement of Net Position.

The carrying value of cash and short-term investments at December 31, 2013, on the Statement of Net Position includes short-term fixed income securities of $242,818, pending foreign exchange contracts of $1,453, and deposit and money market funds of $847,795 for a total of $1,092,066. PERA considers fixed income securities with a maturity of 12 months or less to be short-term investments.

The table below presents the PERA combined total deposits and money market funds as of December 31, 2013.

	CARRYING VALUE	BANK BALANCE
Deposits with banks (fully insured by federal depository insurance)	$1,553	$1,535
Deposits held at bank (uncollateralized, held by PERA's agent in PERA's name)	13,346	13,346
Short-term investment funds held at bank (shares in commingled funds, held by PERA's agent in PERA's name)	832,896	832,896
Total deposits and money market funds	$847,795	$847,777

Securities Lending Transactions

C.R.S. § 24-51-206 and Board policies permit PERA to lend its securities to broker-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. PERA utilized two lending agents in 2013, its custodian, The Northern Trust Company (Northern Trust) and Deutsche Bank.

Northern Trust primarily lends international stocks and fixed income securities for cash collateral. U.S. securities are loaned versus collateral valued at 102 percent of the market value of the securities plus any accrued interest. Non-U.S. securities are loaned versus collateral valued at 105 percent of the market value of the securities plus any accrued interest. Collateral is marked-to-market daily if price movements exceed certain minimal thresholds.

Northern Trust invests the cash collateral related to PERA's loaned securities in a separate account, the PERA Custom Fund, according to guidelines stipulated by PERA. As of December 31, 2013, the total market value of securities on loan with Northern Trust cannot exceed $600,000. Northern Trust's Senior Credit Committee sets borrower credit limits.

Deutsche Bank is a third-party lending agent for PERA. Deutsche Bank lends domestic and international stocks for cash collateral. U.S. securities are loaned versus collateral valued at a minimum of 102 percent of the market value of the securities. International securities are loaned versus collateral valued at a minimum of 105 percent of the market value of the securities. Collateral is marked-to-market daily. Borrower credit limits are assigned by Deutsche Bank's Global Credit Risk Department.

As of December 31, 2013, and December 31, 2012, the aggregate of the difference between the cash collateral investment value, including certain receivables and payables related to the securities lending program and the cash collateral received, was $207 and ($3,724), respectively.

The table below represents the balances relating to the securities lending transactions at December 31, 2013.

SECURITIES LENT FOR CASH COLLATERAL	FAIR VALUE OF UNDERLYING SECURITIES	CASH COLLATERAL RECEIVED	CASH COLLATERAL INVESTMENT VALUE
Cash and cash equivalents	$—	$—	$1,770,306
Fixed income	482,576	493,064	10,011
Global stocks	1,250,160	1,287,046	—
Total	$1,732,736	$1,780,110	$1,780,317

(In Thousands of Dollars)

As of December 31, 2013, PERA had no credit risk exposure to borrowers because the associated value of the collateral held exceeded the value of the securities borrowed. The contracts with PERA's lending agents provide that the lending agents will indemnify PERA if loaned securities are not returned and PERA suffers direct losses due to a borrower's default or the lending agent's noncompliance with the contract. PERA had no losses on securities lending transactions resulting from the default of a borrower or the lending agent for the year ended December 31, 2013. PERA has limited the total market value of securities outstanding to one borrower to 25 percent of the total market value of all securities outstanding in the program.

PERA or the borrower can terminate any security loan on demand. Though every loaned security can be sold and reclaimed at any time from the borrower, the weighted average loan life of overall loans at Northern Trust was approximately 74 days and at Deutsche Bank was approximately 60 days as of December 31, 2013. At Northern Trust and Deutsche Bank, all loans were done on an overnight (one day) basis as of December 31, 2013. The PERA Custom Fund had a weighted average maturity of 17 days as of December 31, 2013. Deutsche Bank invests PERA's cash collateral in a separate account. As of December 31, 2013, the weighted average maturity of the separate account was 10.5 days. The weighted average life of a security or instrument is, in the case of a fixed rate security or instrument, the date on which final payment is due or the principal amount can be recovered through demand (if applicable). In the case of a floating or variable rate security or instrument, weighted average life is the shorter of the period of time remaining until either the next readjustment of the interest rate or the principal amount can be recovered through demand (if applicable). Since the majority of securities loans are done on an overnight basis, there is usually a difference between the weighted average maturity of the investments made with the cash collateral provided by the borrower and the maturities of the securities loans.

The following table represents the balances relating to the securities lending transactions as of December 31, 2013, and December 31, 2012.

	FAIR VALUE OF UNDERLYING SECURITIES DECEMBER 31, 2013	FAIR VALUE OF UNDERLYING SECURITIES DECEMBER 31, 2012
Fixed income	$482,576	$317,737
Global stocks	1,250,160	1,079,322
Total	$1,732,736	$1,397,059

As of December 31, 2013, the fair value of lent securities was $1,732,736, the value of associated cash collateral received was $1,780,110, and the cash collateral investment value, including certain receivables and payables related to the securities lending program, was $1,780,317. PERA's income net of expenses from securities lending was $10,561 for the year ended December 31, 2013. Included in net securities lending income for the year ended December 31, 2013, is $174 from commingled funds. As of December 31, 2012, the fair value of lent securities was $1,397,059, the value of associated cash collateral received was $1,438,586, and the cash collateral investment value, including certain receivables and payables related to the securities lending program, was $1,434,862. PERA's income net of expenses from securities lending was $12,756 for the year ended December 31, 2012. Included in net securities lending income for the year ended December 31, 2012, is $271 from commingled funds.

Custodial Credit Risk

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, PERA would not be able to recover the value of investment or collateral securities that are in possession of an outside party. PERA has no formal policy for custodial credit risk for investments. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in PERA's name and are held by either a counterparty, or the counterparty's trust department, or agent, but not in PERA's name. Northern Trust is the master custodian for the majority of PERA's securities. At December 31, 2013, there were no investment or collateral securities subject to custodial credit risk and $13,192 in foreign currency deposits held at Northern Trust which were uninsured and uncollateralized and therefore exposed to custodial credit risk.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of PERA's investment in a single issuer. C.R.S. § 24-51-206 (3) requires that no investment of the fund in common or preferred stock, or both, of any single corporation shall be of an amount which exceeds 5 percent of the then book value of the fund, nor shall the fund acquire more than 12 percent of the outstanding stock or bonds of any single corporation. The 12 percent requirement does not apply to governmental securities (U.S. Treasuries, sovereigns, etc.), GSE securities (agencies including FNMA, FHLMC, etc.), mortgage-backed securities (agency or non-agency), commercial mortgage-backed securities (CMBS), asset-backed securities, or municipal securities. There is no single issuer exposure that comprises 5 percent of the then book value of the fund and no holdings greater than 12 percent of the outstanding stock or bonds of any single corporation at December 31, 2013.

(In Thousands of Dollars)

Reconciliation of Credit and Interest Rate Risk Disclosures to Financial Statements

	AS OF DECEMBER 31, 2013
Fixed income	$10,958,567
Real estate debt	39,456
Fixed-income securities classified as short-term	242,818
Total fixed income securities	$11,240,841

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. As of December 31, 2013, PERA held investments across the credit ratings spectrum, with the majority invested in investment grade issuers defined as having a minimum rating of Baa3/BBB-, issued by Moody's and Standard and Poor's (S&P), respectively. PERA's credit risk policy is as follows: Investment-grade fixed income managers are prohibited from buying securities rated CCC or below. Some investment grade managers are allowed to purchase below investment grade securities, but in general are limited to no more than 5 percent exposure to below investment grade securities. For portfolio managers that manage below investment grade portfolios, securities rated CCC or below generally cannot exceed the portfolio's benchmark weighting of securities rated CCC or below plus 5 percent. The table below provides S&P credit quality ratings for PERA's fixed income holdings as of December 31, 2013.

Credit Quality Rating Dispersion Schedule

QUALITY RATING S & P	GRAND TOTAL	U.S. CORPORATE BONDS	U.S. GOVT MORTGAGE BACKED SECURITIES	NON-U.S. CORPORATE BONDS	NON-U.S. GOVT/AGENCY BONDS	IMPLICIT U.S. GOVT AGENCIES	NON-AGENCY MBS	U.S. MUNICIPAL BONDS	REAL ESTATE DEBT
AAA	$193,589	$10,901	$—	$1,972	$112,091	$—	$61,925	$6,700	$—
AA+	371,075	52,798	—	—	18,572	277,763	11,219	10,723	—
AA	41,288	13,073	—	5,238	3,024	—	9,331	10,622	—
AA-	120,465	36,531	—	26,463	36,265	4,251	7,175	9,780	—
A+	140,150	57,401	—	44,836	22,947	—	11,001	3,965	—
A	280,569	223,091	—	22,867	9,896	—	9,013	15,702	—
A-	491,270	386,704	—	84,865	5,844	—	12,915	942	—
BBB+	479,692	330,219	—	78,872	56,656	—	13,945	—	—
BBB	522,575	302,402	—	124,590	87,498	—	8,085	—	—
BBB-	327,684	219,491	—	70,081	29,297	—	8,815	—	—
BB+	87,038	44,309	—	24,261	18,468	—	—	—	—
BB	135,676	97,160	—	30,884	7,632	—	—	—	—
BB-	160,461	138,003	—	12,184	10,274	—	—	—	—
B+	99,772	79,890	—	15,925	3,957	—	—	—	—
B	98,926	85,017	—	12,890	1,019	—	—	—	—
B-	117,714	86,685	—	7,125	23,904	—	—	—	—
CCC+	68,525	66,042	—	2,483	—	—	—	—	—
CCC	4,531	4,531	—	—	—	—	—	—	—
CCC-	4,707	4,707	—	—	—	—	—	—	—
CC	801	801	—	—	—	—	—	—	—
Not rated[1]	1,955,843	49,141	1,680,321	40,106	61,335	2,759	65,085	17,640	39,456
Subtotal	$5,702,351	$2,288,897	$1,680,321	$605,642	$508,679	$284,773	$218,509	$76,074	$39,456
U.S. Govts	2,775,533								
Explicit U.S. Govt — Agencies[2]	539,194								
BlackRock Aggregate Index Pooled Investment[3]	1,324,583								
Defined Contribution and Deferred Compensation Fixed Income Funds[1]	899,180								
Total	$11,240,841								

[1] Not rated by S&P.

[2] Bonds issued by the Government National Mortgage Association (GNMA).

[3] Commingled fund not rated by S&P. The quality ratings of the securities within this commingled account are as follows: AAA or equivalent 73.53 percent, AA 3.84 percent, A 11.09 percent, and BBB 11.53 percent, and not rated .01 percent.

(In Thousands of Dollars)

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. PERA has no overall formal investment policy for interest rate risk. PERA utilizes effective duration as the primary measure of interest rate risk within its fixed income investments. Duration estimates the sensitivity of a bond's price to interest rate changes. Effective duration makes assumptions regarding the most likely timing and amounts of variable cash flows arising from such investments as callable bonds, mortgage-backed securities, and variable-rate debt. PERA manages its exposure to fair value losses arising from changes in interest rates by requiring that the duration of individual portfolios stays within defined bands of the duration of each portfolio's benchmark.

Effective duration for PERA fixed income holdings as of December 31, 2013, is disclosed in the table below.

Interest Rate Risk—Effective Duration

	FAIR VALUE TOTAL	FAIR VALUE DURATION NOT AVAILABLE	FAIR VALUE DURATION AVAILABLE	EFFECTIVE WEIGHTED DURATION
U.S. governments	$2,775,533	$—	$2,775,533	4.95
U.S. corporate bonds	2,288,897	48,917	2,239,980	6.33
U.S. government mortgage-backed securities	2,219,515	—	2,219,515	5.06
BlackRock aggregate index pooled investment	1,324,583	—	1,324,583	5.47
Non-U.S. corporate bonds	605,642	2,011	603,631	5.66
Non-U.S. government/agency bonds	508,679	3,052	505,627	5.84
U.S. government agencies	284,773	5,077	279,696	3.78
Non-agency mortgage-backed securities	218,509	4,035	214,474	3.23
U.S. municipal bonds	76,074	25,559	50,515	12.75
Real estate debt	39,456	39,456	—	—
Total non-defined contribution and non-deferred compensation investment assets[1]	10,341,661	128,107	10,213,554	5.40
Defined contribution and deferred compensation plans fixed income[2]	899,180	—	899,180	4.81
Total	$11,240,841	$128,107	$11,112,734	

[1] All of the investment assets other than those held in defined contribution and deferred compensation plans are pooled and managed separately.

[2] Defined contribution and deferred compensation plans fixed income is the total of fixed income assets for the Voluntary Investment Program, the Defined Contribution Retirement Plan, and the Deferred Compensation Plan.

Mortgage-Backed Securities

PERA invests in residential and commercial mortgage-backed securities which are reported at fair value in the Statement of Net Position under Investments at fair value, Fixed income. A residential mortgage-backed security depends on the underlying pool of single-family mortgage loans to provide the cash flow to make principal and interest payments on the security. In many cases, the payment of principal and interest is guaranteed by an agency of the U.S. Government, or a Government Sponsored Entity. While these guarantees reduce credit risk, the timing of principal and interest payments remains uncertain. A decline in interest rates can result in prepayments, which reduces the weighted average life of the security. Alternatively, an increase in interest rates results in decreased prepayments, which may cause the weighted average life of a mortgage investment to be longer than anticipated.

Commercial mortgage-backed securities depend on underlying pools of commercial real estate loans to provide the cash flow to make principal and interest payments on the security. These loans are typically for a fixed term, cannot be repaid early by the borrower without penalty and, accordingly, have lower prepayment risk than residential mortgage-backed securities.

PERA invests in mortgage-backed securities for diversification and to enhance fixed income returns. Mortgage-backed securities are subject to credit risk, the risk that the borrower will be unable to meet its obligations. Residential mortgage-backed securities are also subject to prepayment risk, which is the risk that a payment will be made in excess of the regularly scheduled principal payment. Prepayment risk is comprised of two risks: call risk, the risk that prepayments will increase when interest rates have declined, and extension risk, the risk that prepayments will decrease when interest rates have increased.

As of December 31, 2013, the fair value of residential and commercial mortgage-backed securities was $2,219,515 and $218,509, respectively. This does not include the fair value of mortgage-backed securities held in commingled funds.

(In Thousands of Dollars)

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment or a deposit. PERA's currency risk exposures reside primarily within international and global equity portfolios. In addition, there is currency risk exposure in the Opportunity Fund asset class and in Alternative and Real Estate investments that are non-U.S. dollar denominated. PERA's formal policy regarding foreign currency risk is to evaluate the risk as part of the fund's periodic asset and liability study and to consider it in determining the total fund asset allocation. At December 31, 2013, PERA did not have a currency hedging program at the total fund level. However, at the manager level, hedging currency risk is allowed and certain managers actively manage currency exposure. PERA monitors currency risk at the total fund level, portfolio level, and asset class level.

PERA's exposure to foreign currency risk in U.S. dollars as of December 31, 2013, is disclosed in the following table.

Foreign Currency Risk

CURRENCY	TOTAL	GLOBAL STOCKS	ALTERNATIVE INVESTMENTS	REAL ESTATE EQUITY	INCOME RECEIVABLE	CASH AND SHORT-TERM INVESTMENTS	CORPORATE BONDS	PENDING TRADES	PENDING FOREIGN EXCHANGE TRADES
Euro	$2,822,902	$2,599,826	$184,956	$24,653	$9,953	$3,505	$—	$189	($180)
British pound sterling	2,128,997	2,048,750	73,804	—	6,061	382	—	26	(26)
Japanese yen	1,727,900	1,723,894	—	—	3,910	98	—	—	(2)
Swiss franc	783,964	774,638	—	—	9,301	25	—	—	—
Canadian dollar	657,051	654,652	1	—	1,415	1,061	—	—	(78)
Hong Kong dollar	576,146	575,305	—	—	7	834	—	67	(67)
Australian dollar	429,457	443,038	—	—	579	47	—	—	(14,207)
South Korean won	332,237	332,258	—	—	17	—	—	(68)	30
Swedish krona	269,311	268,955	—	—	350	672	—	—	(666)
New Taiwan dollar	193,353	188,706	—	—	—	4,647	—	—	—
Indian rupee	174,841	174,686	—	—	—	155	—	—	—
Singapore dollar	163,396	162,764	—	—	398	234	—	—	—
Brazilian real	116,627	115,605	—	—	135	255	224	493	(85)
Norwegian krone	102,465	102,416	—	—	2	47	—	—	—
South African rand	101,591	100,947	—	—	466	178	—	40	(40)
Danish krone	99,227	99,166	—	—	43	18	—	—	—
Thai baht	76,311	75,851	—	—	—	—	—	460	—
Mexican peso	64,658	58,992	—	5,652	—	13	—	854	(853)
Turkish lira	53,653	53,412	—	—	—	241	—	—	—
Malaysian ringgit	49,317	48,633	—	—	47	600	—	184	(147)
Indonesian rupiah	47,185	47,163	—	—	20	2	—	—	—
New Israeli shekel	28,109	28,096	—	—	7	6	—	—	—
Philippine peso	17,508	22,570	—	—	24	—	—	—	(5,086)
New Zealand dollar	13,106	13,094	—	—	—	12	—	—	—
Chilean peso	10,770	10,770	—	—	—	—	—	—	—
Czech koruna	9,552	9,454	—	—	98	—	—	—	—
Polish zloty	4,932	4,901	—	—	—	31	—	153	(153)
UAE dirham	2,635	2,635	—	—	—	—	—	(631)	631
Peruvian nuevo sol	1,958	1,958	—	—	—	—	—	—	—
Kenyan shilling	1,533	1,533	—	—	—	—	—	—	—
Russian ruble (new)	137	—	—	—	8	129	—	—	—
Total	$11,060,829	$10,744,668	$258,761	$30,305	$32,841	$13,192	$224	$1,767	($20,929)

Note 6—Derivative Instruments

PERA reports all derivative instruments at fair value. These derivative instruments involve, to varying degrees, elements of market risk to the extent of future market movements in excess of amounts recognized in the Statement of Net Position. For accounting purposes, all derivative instruments are considered to be investments and not hedges.

The following table summarizes the derivative instruments outstanding as of December 31, 2013. These instruments are recorded in cash and short-term investments, investment liabilities, and investments at fair value in the Statement of Net Position and the changes in fair value are included in investment income in the Statement of Changes in Net Position. Investments in limited partnerships and commingled funds include derivative instruments that are not reported in the following disclosure.

(In Thousands of Dollars)

Fair Values and Notional Amounts of Derivative Instruments—Defined Benefit Plan

	CHANGES IN FAIR VALUE		FAIR VALUE AT DECEMBER 31, 2013		
INVESTMENT DERIVATIVES	CLASSIFICATION	AMOUNT	CLASSIFICATION	AMOUNT	NOTIONAL (NUMBER OF UNITS)
Foreign Currency Forwards	Investment income	$1,533	Cash and short-term	$1,456	—
Rights/Warrants	Investment income	6,504	Global stocks	850	—
Futures	Investment income	(3,516)	Opportunity fund	—	15,601
			Investment liabilities	(318)	—
Commodity Index Swaps	Investment income	(19,926)	Opportunity fund	(965)	761
Variance Swaps	Investment income	(1)	Opportunity fund	34	1,814
Commodity Forwards	Investment income	(47)	Opportunity fund	(135)	60
Total		($15,453)	Total	$922	

Fair Values and Notional Amounts of Derivative Instruments—Defined Contribution Plan (Separately Managed Accounts)

	CHANGES IN FAIR VALUE		FAIR VALUE AT DECEMBER 31, 2013		
INVESTMENT DERIVATIVES	CLASSIFICATION	AMOUNT	CLASSIFICATION	AMOUNT	NOTIONAL (NUMBER OF UNITS)
Foreign Currency Forwards	Investment income	($16)	Cash and short-term	$—	—
Rights/Warrants	Investment income	17	Global stocks	—	—
Total		$1	Total	$—	

Foreign Currency Forward Contracts

A foreign currency forward is a contractual agreement between two parties to pay or receive specific amounts of foreign currency at a future date in exchange for another currency at an agreed upon exchange rate. The settlement date for these contracts is three business days or more after the trade date. Forward commitments are not standardized and carry credit risk due to the possible nonperformance by one of the counterparties. The maximum potential loss is the aggregate face value in U.S. dollars at the time the contract was opened; however, the likelihood of such loss is remote. No losses related to counterparty default occurred in 2013. Foreign currency forward contracts are usually traded over-the-counter. These transactions are entered into in order to hedge risks from exposure to foreign currency rate fluctuation and to facilitate trade settlement of foreign security transactions. Foreign currency forwards carry risk resulting from adverse fluctuations in foreign exchange rates. Recognition of realized gain or loss depends on whether the currency exchange rate has moved favorably or unfavorably to the contract holder upon termination of the contract. Prior to termination of the contract, PERA records the unrealized currency translation gain or loss based on the applicable forward currency exchange rates which are determined by an external pricing service.

At December 31, 2013, PERA's defined benefit plans had outstanding foreign currency forward contracts to purchase foreign currencies with a fair value of $67,427 and outstanding contracts to sell foreign currencies with a fair value of ($65,971).

Notes to the Financial Statements

(In Thousands of Dollars)

Foreign Currency Forward Contracts Outstanding—Defined Benefit Plan
(As of December 31, 2013)

OBJECTIVE[1]	NOTIONAL AMOUNT BUY (SELL)	EFFECTIVE DATE	MATURITY DATE	TERMS	FAIR VALUE	COUNTERPARTY	COUNTERPARTY CREDIT RATING[2]
Hedge risk from exposure to rate fluctuations	5,210 USD (224,535) PHP	11/6/2013	2/13/2014	Exchange Philippine pesos for U.S. dollars	$125	JP Morgan Chase Bank, N.A.	A+ / Aa3 / A+
Hedge risk from exposure to rate fluctuations	26,114 USD (27,627) AUD	10/29/2013	1/31/2014	Exchange Australian dollars for U.S. dollars	1,443	The Northern Trust Company	AA- / A1 / AA-
Hedge risk from exposure to rate fluctuations	4,320 AUD (3,925) USD	12/3/2013	1/31/2014	Exchange U.S. dollars for Australian dollars	(67)	The Northern Trust Company	AA- / A1 / AA-
Hedge risk from exposure to rate fluctuations	1,205 AUD (1,089) USD	12/6/2013	1/31/2014	Exchange U.S. dollars for Australian dollars	(13)	The Northern Trust Company	AA- / A1 / AA-
Hedge risk from exposure to rate fluctuations	5,671 AUD (5,175) USD	12/10/2013	1/31/2014	Exchange U.S. dollars for Australian dollars	(110)	The Northern Trust Company	AA- / A1 / AA-
Hedge risk from exposure to rate fluctuations	522 AUD (464) USD	12/17/2013	1/31/2014	Exchange U.S. dollars for Australian dollars	2	The Northern Trust Company	AA- / A1 / AA-
Hedge risk from exposure to rate fluctuations	11,617 USD (8,553) EUR	10/7/2013	1/15/2014	Exchange Euro for U.S. dollars	(169)	The Northern Trust Company	AA- / A1 / AA-
Hedge risk from exposure to rate fluctuations	8,553 EUR (11,543) USD	11/19/2013	1/15/2014	Exchange U.S. dollars for Euro	242	Royal Bank of Scotland Plc	A- / A3 / A
Repatriate foreign currency proceeds from sales	22 USD (236) ZAR	12/31/2013	1/8/2014	Exchange South African rand for U.S. dollars	0	Brown Brothers Harriman and Co.	NR*/NR*/A+
Repatriate foreign currency proceeds from sales	18 USD (184) ZAR	12/30/2013	1/7/2014	Exchange South African rand for U.S. dollars	0	Brown Brothers Harriman and Co.	NR*/NR*/ A+
Repatriate foreign currency proceeds from sales	26 USD (16) GBP	12/31/2013	1/6/2014	Exchange British pound sterling for U.S. dollars	0	The Bank of New York Mellon	A+ / Aa3 / AA-
Facilitate trade settlement	231 HKD (30) USD	12/30/2013	1/3/2014	Exchange U.S. dollars for Hong Kong dollars	0	The Bank of New York Mellon	A+ / Aa3 / AA-
Repatriate foreign currency proceeds from sales	148 USD (445) PLN	12/30/2013	1/3/2014	Exchange Polish zloty for U.S. dollars	1	Brown Brothers Harriman and Co.	NR*/ NR*/ A+
Repatriate foreign currency proceeds from sales	152 USD (1,178) HKD	12/30/2013	1/3/2014	Exchange Hong Kong dollars for U.S. dollars	0	Brown Brothers Harriman and Co.	NR*/NR*/ A+
Repatriate foreign currency proceeds from sales	74 USD (962)	12/30/2013 MXN	1/3/2014	Exchange Mexican pesos for U.S. dollars	0	The Northern Trust Company	AA- / A1 / AA-
Repatriate foreign currency proceeds from sales	6 USD (18) PLN	12/23/2013	1/2/2014	Exchange Polish zloty for U.S. dollars	0	Brown Brothers Harriman and Co.	NR*/NR*/A+
Facilitate trade settlement	426 HKD (55) USD	12/27/2013	1/2/2014	Exchange U.S. dollars for Hong Kong dollars	0	The Bank of New York Mellon	A+ / Aa3 / AA-
Facilitate trade settlement	215 BRL (91) USD	12/27/2013	1/2/2014	Exchange U.S. dollars for Brazilian real	0	Brown Brothers Harriman and Co.	NR*/NR*/A+
Repatriate foreign currency proceeds from sales	619 USD (8,081) MXN	12/27/2013	1/2/2014	Exchange Mexican pesos for U.S. dollars	2	Credit Suisse AG, Global FX London	A- / A2 / A
Repatriate foreign currency proceeds from sales	163 USD (2,134) MXN	12/27/2013	1/2/2014	Exchange Mexican pesos for U.S. dollars	0	Brown Brothers Harriman and Co.	NR*/NR*/ A+
Repatriate foreign currency proceeds from sales	180 USD (131) EUR	12/27/2013	1/2/2014	Exchange Euro for U.S. dollars	0	UBS AG Stamford Branch	A / A2 / A
Repatriate foreign currency proceeds from sales	22 USD (73) MYR	12/30/2013	1/2/2014	Exchange Malaysian ringgit for U.S. dollars	0	Brown Brothers Harriman and Co.	NR*/NR*/ A+
Facilitate trade settlement	2,316 AED (631) USD	12/31/2013	1/2/2014	Exchange U.S. dollars for UAE dirham	0	The Northern Trust Company	AA- / A1 / AA-
Total					$1,456		

* Not rated

[1] Outstanding currency transactions related to security trades are included in this disclosure according to how The Northern Trust Company (PERA's custodian) defines currency forward and currency spot transactions.

[2] Ratings are listed in order of S&P, Moody's, and Fitch. If the counterparty legal entity does not have a public rating, the parent company rating is disclosed, if available.

(In Thousands of Dollars)

Rights/Warrants

Rights provide the holder with the right, but not the obligation, to buy a company's common stock at a predetermined price, the subscription price. A right permits the investor to buy at a price that may be below the actual market price for that stock. A warrant is an option to buy an underlying equity security at a predetermined price for a finite period of time. For both rights and warrants, if the predetermined price is less than the actual market price for the equity security, each have intrinsic value. Both rights and warrants potentially have intrinsic value until their expiration date.

Investment in rights/warrants exposes PERA to limited market risk. In the event the market price of the company's common stock falls below the subscription or predetermined price, the amount of loss recognized is equal to the cost to acquire the investment. PERA records rights/warrants with global stocks in the Statement of Net Position. As December 31, 2013, PERA's defined benefit plans had outstanding rights/warrants with a total fair value of $850 and a total cost of $218.

Rights/Warrants Outstanding—Defined Benefit Plan
(As of December 31, 2013)

SECURITY TYPE	EXPIRATION DATE	FAIR VALUE
Rights	Not Applicable	$—
Rights	12/31/2040	—
Rights	10/31/2014	1
Rights	1/24/2014	19
Rights	1/13/2014	70
Rights	1/9/2014	309
Warrants	1/19/2021	—
Warrants	12/18/2018	451
Warrants	8/31/2016	—
Total		$850

Futures

Futures represent commitments to purchase or sell securities or commodities at a future date for a specified price. Futures contracts trade on organized exchanges. Upon entering into a futures contract, PERA is required to pledge an amount of cash or securities (known as an initial margin deposit) equal to a percentage of the contract amount. Recognition of investment income, with a corresponding change to the amount of investment liabilities, occurs on a daily basis according to the fluctuation of value of the futures contract. Typically, payments are received or made on a daily basis to settle the day's fluctuation of value; although there are a limited number of contracts where settlement doesn't occur until after actual expiration of the contract due to exchange rules. This reporting methodology results in all futures being recorded on the Statement of Net Position with a fair value of zero since the value of all contracts at a given point in time is reflected within the balance of investment liabilities.

Investment in futures contracts exposes PERA to market risk and credit risk. In an event where market conditions change and no action is taken, the maximum amount of loss which could occur is equal to the notional market exposure of the contract. The possibility of such a loss is remote. Credit risk is minimized by initial margin deposits and daily settlement payments. At December 31, 2013, PERA's defined benefit plans had outstanding futures contracts with a total notional amount of 15,601, a total notional market exposure of $33,584, total investment liabilities value of ($318), and total net collateral posted with counterparties of $1,732.

(In Thousands of Dollars)

Futures Contracts Outstanding—Defined Benefit Plan
(As of December 31, 2013)

CONTRACT TYPE	COMMODITY	MATURITY DATE	NOTIONAL AMOUNT (NUMBER OF UNITS)
Commodity Futures	Crude Oil	11/21/2017	15
Commodity Futures	Natural Gas	9/27/2014	350
Commodity Futures	Copper	3/28/2014	700
Commodity Futures	Silver Future	3/28/2014	45
Commodity Futures	Coffee "C"	3/20/2014	563
Commodity Futures	Pri Alum	3/18/2014	1
Commodity Futures	Nickel	3/18/2014	1
Commodity Futures	Zinc	3/18/2014	1
Commodity Futures	Soybean Oil	3/15/2014	1,860
Commodity Futures	Corn	3/15/2014	350
Commodity Futures	Wheat Future	3/15/2014	60
Commodity Futures	Soybean	3/15/2014	145
Commodity Futures	Soybean Meal	3/15/2014	2
Commodity Futures	Wheat Future	3/15/2014	155
Commodity Futures	Cotton No. 2	3/8/2014	800
Commodity Futures	Heating Oil	3/1/2014	420
Commodity Futures	Live Cattle	3/1/2014	840
Commodity Futures	Sugar	3/1/2014	7,278
Commodity Futures	Gasoline	3/1/2014	420
Commodity Futures	Gold 100 Oz	2/27/2014	2
Commodity Futures	Natural Gas	2/27/2014	780
Commodity Futures	Crude Oil	2/21/2014	35
Commodity Futures	Lean Hogs	2/15/2014	760
Commodity Futures	Brent Crude	2/14/2014	18
Total			15,601

Swaps/Commodity Forwards

Swaps represent an agreement between counterparties to exchange cash flows by reference to specified indexes on a notional principal amount for a specified period. Swaps trade in the over-the-counter market. For index or total return swaps, the total return of a given index is exchanged for the return of another index. PERA's commodity index swaps primarily include the receipt of the total return from the Dow Jones-UBS Commodities Index in exchange for the sum of the interest rate on a designated Treasury Bill plus an agreed upon number of basis points. If over a one-month period the performance of the index exceeds the return of the reference Treasury Bill rate (adjusted by the mutually agreed upon basis points), PERA receives a payment for the net difference between these amounts. If the index's return is lower than the return of the reference Treasury Bill rate (adjusted by the mutually agreed upon basis points), then PERA pays the net difference between these amounts. Commodity swaps carry interest rate risk resulting from fluctuations in the underlying interest rates which may affect the fair value of the contracts. Variance swaps are a specialized version of total return swaps. These swaps are designed to exchange cash flows based on the variance in the price movements of a reference asset or index. PERA's variance swaps pay a return when the degree of price fluctuations in specified commodities fluctuate less than the degree of price fluctuations implied by the option prices in these markets. Commodity forwards are designed to exchange the net difference between the fixed price and the market price of the specified commodity in the contract. PERA invests in commodity swaps, variance swaps, and commodity forwards to gain exposure to commodities without having to purchase and hold the actual commodities.

PERA is exposed to credit risk in the event of nonperformance by the counterparty to the financial instrument. Credit risk is reduced by evaluating the credit quality and operational capabilities of the counterparties. Minimum ratings requirements and exposure limits on approved counterparties and requirements to post collateral serve as additional measures to reduce counterparty risk.

PERA records collateral held as a liability and recognizes a receivable for collateral held by the counterparty. A realized gain or loss is reported on contract settlement. Open contracts are reported at fair value. At December 31, 2013, PERA's defined benefit plans had open contracts with a total notional amount of 2,635, total notional market exposure of $211,817, fair value of ($1,066) and there was net collateral of ($1,870) posted with the counterparties. Fair value is determined by an external pricing source when available. In the absence of an external pricing source, fair value is determined using a proprietary analytics model.

(In Thousands of Dollars)

*Swap Contracts Outstanding—Defined Benefit Plan
(As of December 31, 2013)*

CONTRACT TYPE	MATURITY DATE	NOTIONAL AMOUNT (NUMBER OF UNITS)	FAIR VALUE	COUNTERPARTY	COUNTERPARTY CREDIT RATING[1]
Commodity Index Swap	2/18/2014	19	($23)	Macquarie Bank Limited	A / A2 / A
Commodity Index Swap	2/18/2014	19	(24)	JP Morgan Chase Bank N.A.	A+ / Aa3 / A+
Commodity Index Swap	2/18/2014	112	(133)	Bank of America NA	A / A2 / A
Commodity Index Swap	2/18/2014	112	(134)	JP Morgan Chase Bank N.A.	A+ / Aa3 / A+
Commodity Index Swap	2/18/2014	15	(6)	JP Morgan Chase Bank N.A.	A+ / Aa3 / A+
Commodity Index Swap	2/18/2014	4	(5)	Citibank NA	A / A2 / A
Commodity Index Swap	2/18/2014	174	(236)	Citibank NA	A / A2 / A
Commodity Index Swap	2/18/2014	145	(172)	Goldman Sachs Bank USA	A / A2 / A
Commodity Index Swap	2/18/2014	7	(12)	Goldman Sachs Bank USA	A / A2 / A
Commodity Index Swap	2/18/2014	45	(54)	Deutsche Bank AG	A / A2 / A+
Commodity Index Swap	2/18/2014	41	(90)	JP Morgan Chase Bank N.A.	A+ / Aa3 / A+
Commodity Index Swap	2/18/2014	61	(66)	Bank of America NA	A / A2 / A
Commodity Index Swap	2/18/2014	7	(10)	JP Morgan Chase Bank N.A.	A+ / Aa3 / A+
Variance Swap	9/30/2014	380	9	JP Morgan Chase Bank N.A.	A+ / Aa3 / A+
Variance Swap	8/6/2014	710	2	Goldman Sachs International	A / A2 / A
Variance Swap	2/25/2014	154	(2)	JP Morgan Chase Bank N.A.	A+ / Aa3 / A+
Variance Swap	1/28/2014	500	22	JP Morgan Chase Bank N.A.	A+ / Aa3 / A+
Variance Swap	1/28/2014	70	3	Citibank NA	A / A2 / A
Commodity Forward	12/31/2019	60	(135)	Deutsche Bank AG	A / A2 / A+
Total		2,635	($1,066)		

[1] Ratings are listed in order of S&P, Moody's, and Fitch. If the counterparty legal entity is not a publicly traded company, the parent company rating is disclosed, if available.

Note 7—Commitments and Contingencies

As of December 31, 2013, PERA had commitments for future investments in Alternative Investments of $1,793,255, Real Estate of $650,936, and the Opportunity Fund of $55,260.

Lawsuit Regarding Senate Bill 10-001

On February 26, 2010, a civil action was commenced in the Denver District Court, *Justus, et al. v. State of Colorado et al.,* Case No. 2010CV1589, wherein the plaintiffs, who claim to be acting on behalf of a class of individuals, allege that a portion of SB 10-001 is unconstitutional. SB 10-001 was passed by the General Assembly on February 17, 2010, and signed into law by former Governor Ritter on February 23, 2010. The provision that is the subject matter of the civil action is that portion of SB 10-001 that modifies the annual increase payable to existing PERA retirees and the annual increase that will be payable in the future to PERA members who were eligible to draw retirement benefits as of the effective date of the bill. Also named in the litigation are the State of Colorado, Governor Hickenlooper, Carole Wright, and Maryann Motza. The individuals are named exclusively in their official capacity. On June 29, 2011, the Denver District Court ruled in favor of PERA and the State of Colorado and determined that the Plaintiffs do not have a contractual right to a specific annual increase formula for life without change. On July 25, 2011, the Plaintiffs appealed the District Court's decision and in October 2012, the Court of Appeals remanded the case to the District Court for further review with instructions as to the applicable law.

The Court of Appeals held that when benefits are reduced, the proper legal test is set forth in the case of *In re Estate of DeWitt,* 54 P.3d 849 (Colo. 2002). In *DeWitt,* the Colorado Supreme Court followed United States Supreme Court precedent holding that there is a three-pronged test to determine whether there is a violation of the Contract Clause. The first prong in assessing an alleged Contract Clause violation is to determine whether there is a contractual relationship where a vested right is established. If there is a vested contractual right, the second prong requires the court to determine whether a change in the law impairs that contractual relationship and whether the impairment is substantial. Under *DeWitt,* the inquiry continues if a change in the law results in substantial impairment to a vested contract right. The third prong of the analysis is whether the reduction in the benefit was reasonable and necessary. In other words, even if SB 10-001 substantially impaired a contract right, it is constitutional if the Legislature's modification of the cost-of-living adjustment was reasonable and necessary to address the legitimate public purpose of ensuring the long-term sustainability of PERA.

The District Court's decision rejected the Plaintiffs claims based upon failure to establish a contractual relationship. The Court of Appeals reversed that determination and remanded with directions to analyze prongs two and three.

On November 21, 2012, PERA and the State of Colorado filed an appeal with the Colorado Supreme Court. Plaintiffs filed their appeal on November 20, 2012, with the Colorado Supreme Court objecting to the legal standard adopted by the Court of Appeals. On August 5, 2013, the Supreme Court announced that it would accept and hear the case. Specifically, the Court said it would address the following issues: (1) what the proper legal test is for when benefits can be reduced; (2) whether PERA members have a contract right to the annual increase in place on their date of retirement for life without change; and (3) whether the change to the annual increase in SB 10-001 was constitutional. Oral argument before the Supreme Court took place on June 4, 2014. The Colorado Supreme Court has not yet issued an opinion.

The maximum potential damages arising from this Civil Action consist of the payment of additional statutory benefits beyond those provided for by the provisions of SB 10-001. In the event the pertinent portion of SB 10-001 was held to be unconstitutional by an unappealable final court order, PERA would be required to pay the annual increase in effect prior to the passage of SB 10-001. The nature of the relief sought is a mandatory injunction requiring the payment of annual increases going forward based on the PERA statutes as they existed prior to passage and enactment of SB 10-001. PERA is unable to estimate the possible loss or range of loss at this stage in this matter, should the Plaintiff succeed on appeal. The entry of such a mandatory injunction would have material actuarial impact on the funded status of the Plan which will negatively affect the long-term sustainability of the Plan. The assessment of management is that the likelihood of success by the Plaintiffs on the merits of this appeal is not probable.

Lawsuit Regarding Short-Term Disability Program

On March 7, 2011, a civil action was commenced in Denver District Court, *Tracey Lawless v. Standard Insurance Company et al.*, Case No. 2010CV9848, wherein the Plaintiff, who claims to be acting on behalf of a class of individuals, alleges that PERA has adopted the wrong disability standard under the short-term disability program. The primary claim is that PERA Rule 7.45E, which sets forth the medical standard for short-term disability, conflicts with the medical standard set forth in the PERA statutes. The named defendants in the action are: The Standard Insurance Company, PERA, PERA's Board of Trustees, Carole Wright, Maryann Motza, and Rick Larson. The individuals were named in their official capacity only. On January 4, 2012, the Denver District Court ruled in favor of PERA and determined that Rule 7.45E is not in conflict with the medical standard set forth in the PERA statutes. On March 22, 2012, the Plaintiff filed her Notice of Appeal, and the Court of Appeals heard this matter on January 29, 2013. The Court of Appeals rendered its decision on November 21, 2013, and affirmed the District Court's decision. On January 13, 2014, the plaintiff filed her appeal with the Colorado Supreme Court. PERA opposed the appeal, arguing that the Court of Appeals' decision was correct. The Colorado Supreme Court has not yet announced whether it will hear the case.

The assessment of management is that the likelihood of success by the Plaintiff on the merits is not probable. PERA is unable to estimate the possible loss or range of loss at this stage in this matter, should the Plaintiff succeed on appeal. PERA Rule 7.45E has been in effect in the same form since January 1, 1999, the effective date of PERA's current disability program. This Rule has been uniformly applied since that time and thousands of disability applications have been processed in accordance with the disability standards provided in Rule 7.45E. If the Plaintiff is successful, there would be an additional liability to PERA related to additional benefits that would be paid beyond what has been paid to date.

Lawsuit Regarding Memorial Health System

Effective October 1, 2012, Memorial Health System (Memorial) terminated its affiliation with PERA. Memorial's termination arises from the 30-year lease of Memorial to University of Colorado Health (UCH) and its related entities. In exchange for the lease, the City of Colorado Springs (the City) received $259 million, of which $185 million is contractually specified as having been paid to the City to discharge the PERA liability associated with Memorial's termination of affiliation. As of October 1, 2012, employees of Memorial no longer were eligible to participate in PERA since they were no longer employed with a PERA-affiliated employer.

On September 6, 2012, the City, UCH, and PERA entered into an agreement whereby the parties agreed that the $259 million would be placed in a court-supervised escrow account pending resolution of the litigation between the City, Memorial, and PERA. As part of the September 6, 2012, agreement, the parties agreed that the City would file a Complaint in the City and County of Denver. The City filed its Complaint on September 13, 2012, and PERA filed its Answer and Counterclaims on September 26, 2012.

PERA's position is that the termination of affiliation provisions of the PERA statutes, specifically C.R.S. §§ 24-51-313–321 apply to the Memorial transaction. PERA's position is that Memorial must pay its share of the current unfunded liability in PERA's Local Government Division and PERA's Health Care Trust Funds because it has terminated its affiliation with PERA.

The City and Memorial's position is that the termination of affiliation provisions of the PERA statutes do not apply to this transaction and PERA is not owed anything as a result of the Memorial transaction.

The parties filed motions with the Court asking the Court to determine whether the termination of affiliation provisions in the PERA statutes apply to this transaction. On February 10, 2014, the Court found that the termination of affiliation provisions apply, and that Memorial violated the provisions by failing to apply to the PERA Board to withdraw and by failing to comply with all of the statutory termination provisions prior to withdrawing its status as a PERA-affiliated employer. The Court noted that the mandatory process ensures that a withdrawing employer pays for the accrued, unfunded benefits of its retirees and employees before leaving PERA.

The City and Memorial have requested that the District Court allow them to immediately appeal the Court's February 10, 2014, order to the Court of Appeals. On June 17, 2014, the District Court denied the request. The matter will continue to be heard by the District Court at this time.

PERA's actuary calculated that Memorial's share of the unfunded liability in the Local Government Division Trust Fund and the Health Care Trust Fund was $190,025 as of September 30, 2012. Interest has continued to accrue on that amount since it has not been paid, and as a result, the City and Memorial owe interest of $24,493 as of April 28, 2014. If the City pays the amount determined to be owed by PERA's actuary, the reserves will be adequate to maintain current benefits payable to benefit recipients and to preserve the vested rights of inactive members. In this case, Memorial's termination of affiliation will not have an adverse financial impact on the actuarial soundness of the Local Government Division or the Health Care Trust Funds. If Memorial is allowed to withdraw from the fund without paying its share of the unfunded liability, all other Local Government Division employers will absorb Memorial's share of the unfunded liability. The assessment of management is that the likelihood of success by the City and Memorial on the merits is not probable.

Other Pending or Threatened Litigation

PERA is involved in various lawsuits or threatened legal proceedings arising in the normal course of business. In the opinion of management, the ultimate resolution of these other matters will not have a material effect on the financial condition of PERA.

Note 8—Voluntary Investment Program, Defined Contribution Retirement Plan, and Deferred Compensation Plan

PERA administers the Voluntary Investment Program, the Defined Contribution Retirement Plan, and the Deferred Compensation Plan (collectively, Plans). The Voluntary Investment Program (PERAPlus 401(k) Plan) and Defined Contribution Retirement Plan (DC Plan) are both defined contribution plans. The Deferred Compensation Retirement Plan (PERAPlus 457 Plan) is a deferred compensation plan. The Board has the authority to establish and amend the Plans pursuant to C.R.S. § 24-51-1401, C.R.S. § 24-51-1501, and C.R.S. § 24-51-1601, respectively. The complete provisions of the PERAPlus 401(k) Plan and the DC Plan are incorporated into *PERA's 401(k) and Defined Contribution Plan and Trust Document.* The complete provisions of the PERAPlus 457 Plan are incorporated into *The PERA Deferred Compensation Plan Document.*

All Plans

The following investment, distribution, and fee provisions are the same under all three Plans.

- Participants have the choice of contributing to 18 different investment funds. In addition, participants may also make transfers, at any time, among the following listed investment funds:
  - PERAdvantage Capital Preservation Fund
  - PERAdvantage Fixed Income Fund
  - PERAdvantage Real Return Fund
  - PERAdvantage U.S. Large Cap Fund
  - PERAdvantage International Stock Fund
  - PERAdvantage U.S. Small and Mid-Cap Stock Fund
  - PERAdvantage SRI Fund
  - PERAdvantage Income Fund
  - PERAdvantage 2015 Fund
  - PERAdvantage 2020 Fund
  - PERAdvantage 2025 Fund
  - PERAdvantage 2030 Fund
  - PERAdvantage 2035 Fund
  - PERAdvantage 2040 Fund
  - PERAdvantage 2045 Fund
  - PERAdvantage 2050 Fund
  - PERAdvantage 2055 Fund
  - TD Ameritrade Self-Directed Brokerage Account

- The participant's entire account balance becomes available for distribution upon termination from all PERA-affiliated and/or 457-affiliated employers. All distributions are in accordance with the Plan documents and Internal Revenue Code requirements.
- ING Institutional Plan Services, LLC, administers the recordkeeping for all participant transactions. The custodian is Northern Trust for all PERAdvantage investments except for the Great-West Stable Value Fund, an investment within the PERAdvantage Capital Preservation Fund, and the TD Ameritrade Self-Directed Brokerage Account. Northern Trust, as custodial agent of the investments, carries no custodial credit risk as all deposits are insured and/or collateralized by the securities held by Northern Trust in the Plan names.
- TD Ameritrade, Inc. provides brokerage services for the Self-Directed Brokerage Account. The TD Ameritrade Self-Directed Brokerage Account, which consists of common stock, corporate bonds, and mutual funds, is presented at fair value.
- The Great-West Stable Value Fund is offered through a group fixed and variable deferred annuity contract issued by Great-West Life & Annuity Insurance Company. As of December 31, 2013, the Stable Value Fund is reported at contract value of $386,750. Fair value as of December 31, 2013, is $380,756.
- Cash balances represent both operating cash accounts and investment cash on deposit held by the custodians.
- Plan administration expenses are paid through a monthly administrative fee charged to participant accounts and an asset-based fee paid directly from each PERAdvantage fund and/or self-directed brokerage account. In addition, the underlying investment portfolio managers within each PERAdvantage fund charge an investment management fee, which is paid directly from investment earnings.

PERAPlus 401(k) Plan

The PERAPlus 401(k) Plan was established January 1, 1985, and is an Internal Revenue Code § 401(k) plan that allows for voluntary participation to provide additional benefits at retirement for PERA members. All employees working for a PERA-affiliated employer may contribute to the PERAPlus 401(k) Plan. In 2013, participants could contribute the lesser of $17,500 (actual dollars) or 100 percent of compensation less PERA member contributions. Catch-up contributions up to $5,500 (actual dollars) in 2013 were allowed for participants who had attained age 50 before the close of the plan year, subject to the limitations of IRC § 414(v). Employer matching and discretionary contributions are allowable with total participant and employer contributions limited to $51,000 (actual dollars) per participant in 2013.

Provisions of the PERAPlus 401(k) Plan permit in-service withdrawals by participants while employed with a PERA-affiliated employer through loans, hardship withdrawals, or by a trustee-to-trustee transfer to the PERA defined benefit plan to purchase service credit. The balance of outstanding loans as of December 31, 2013, is $64,730 and is recorded as a benefit receivable on the Statement of Net Position. As of December 31, 2013, there were 68,691 participants with balances. Of the participants with balances, 26,022 made contributions within the last three months of the year, including 818 retirees. There were 11,751 terminated participants and 16,154 non-contributing retirees with balances. During 2013 the PERAPlus 401(k) Plan had a total of 2,699 terminated participants take full distributions of their accounts.

DC Plan

The DC Plan was established January 1, 2006, and is an Internal Revenue Code § 401(a) governmental profit-sharing plan. Its purpose is to offer a defined contribution alternative to the PERA defined benefit plan. Participation is available to eligible new state employees hired on or after January 1, 2006, and certain community college employees hired on or after January 1, 2008. The eligible employees have the option to choose the PERA defined benefit plan or the DC Plan.

Between month 13 and month 72 of participation in the DC Plan, eligible participants may elect to terminate membership in the DC Plan and become a member of the PERA defined benefit plan. Similarly, an eligible employee of the PERA defined benefit plan may elect, between month 13 and month 72 of membership, to terminate membership in the PERA defined benefit plan and become a participant of the DC Plan. Either election is irrevocable.

Participants in the DC Plan are required to contribute 8.00 percent and employers are required to contribute 10.15 percent of includable salary (for State Troopers and CBI agents, the rates are 10.00 percent and 12.85 percent, respectively). In addition, employers contribute the 3.40 percent AED and 3.00 percent SAED to the State Division Trust Fund (see Note 4). DC Plan participants immediately vest in 50 percent of their employer contributions, together with accumulated investment earnings on the vested portion. For each full year of participation, vesting increases by 10 percent. Contribution requirements are established under C.R.S. § 24-51-1505.

Provisions of the DC Plan prohibit in-service withdrawals, although the election to purchase service is available to those who have made the one-time irrevocable election to transfer to the PERA defined benefit plan. As of December 31, 2013, the DC Plan had 4,719 participants with balances. Of the participants with balances, 2,216 made contributions within the last three months of the year, including 10 retirees. There were 2,095 terminated participants and 30 non-contributing retirees with balances. During the year 375 participants took full distributions of their accounts.

PERAPlus 457 Plan

On July 1, 2009, PERA assumed the administrative and fiduciary responsibilities for the State of Colorado Deferred Compensation Plan previously administered under C.R.S. Part 1 of Article 52 of Title 24, as said part existed prior to its repeal in 2009.

The PERAPlus 457 Plan is an Internal Revenue Code § 457 plan that allows for voluntary participation to provide additional benefits at retirement. All employees working for a PERA employer affiliated with the 457 Plan may contribute to the PERAPlus 457 Plan. All employers that were affiliated with the State 457 Plan prior to July 1, 2009, including those that are not PERA-affiliated employers, remained affiliated with the PERAPlus 457 Plan and their employees remained eligible to contribute. In 2013, participants could defer the lesser of $17,500 (actual dollars) or 100 percent of compensation less PERA member contributions. Catch-up deferrals, up to the greater of $5,500 (actual dollars) for participants who had attained age 50 before the close of the plan year or the limits of the special section 457 Plan catch-up, were allowed in 2013, subject to the limitations of IRC § 414(v) and § 457(b).

Provisions of the PERAPlus 457 Plan permit in-service withdrawals by participants while employed with a PERAPlus 457 Plan-affiliated employer through loans, unforeseen emergency withdrawals, de minimis distributions, or by a trustee-to-trustee transfer to the PERA defined benefit plan to purchase service. The balance of outstanding loans as of December 31, 2013, is $11,281 and is recorded as a benefit receivable on the Statement of Net Position. As of December 31, 2013, there were 17,462 participants with balances. Of the participants with balances, 9,469 made contributions within the last three months of the year, including 211 retirees. There were 2,031 terminated participants and 2,947 non-contributing retirees with balances. During the year, the PERAPlus 457 Plan had a total of 725 terminated participants take full distributions of their accounts.

Note 9—Health Care Trust Funds—Colorado PERA’s Cost-Sharing Multiple-Employer Defined Benefit Health Care Plans

PERA offers two cost-sharing multiple-employer defined benefit other postemployment benefit (OPEB) health care plans to benefit recipients and retirees. The HCTF and the DPS HCTF are voluntary plans which offer benefits under C.R.S. § 24-51-1201 (1) and (2), respectively. These plans provide a health care premium subsidy to participating PERA benefit recipients and retirees who choose to enroll in one of the PERA health care plans, however, the subsidy is not available if only enrolled in the dental and/or vision plan(s). The health care premium subsidy is based upon the benefit structure under which the member retires and the member’s years of service credit. For members who retire having service credit with employers in the DPS Division and one or more of the other four divisions, the premium subsidy is allocated between the two funds. The basis for the amount of the premium subsidy funded by each fund is the percentage of the member contribution account balance from each division as it relates to the total member contribution account balance from which the benefit is paid.

PERA Board Authority

The authority to contract, self-insure, authorize disbursements necessary in order to carry out the purposes of the PERACare program including the administration of the health care subsidies, rests with the Board. PERA contracts with a national insurance carrier to administer claims for the self-insured plans, with a national prescription benefit manager to administer a pharmacy benefit for the self-insured plans, and with health insurance companies to provide fully insured health care plans providing services within Colorado.

Plan Description and Benefit Provisions

C.R.S. § 24-51-1202 *et seq.* specifies the eligibility for enrollment in the health care plans offered by PERA and the amount of the premium subsidy. The law governing a benefit recipient’s eligibility for the subsidy and the amount of the subsidy differs slightly depending under which benefit structure the benefits are calculated. All benefit recipients under the PERA benefit structure and all retirees under the DPS benefit structure are eligible for a premium subsidy, if enrolled in a health care plan under PERACare. Upon the death of a DPS benefit structure retiree, no further subsidy is paid.

Membership

Enrollment in the PERACare health care program is voluntary and available to the following eligible individuals:

- Benefit recipients and their dependents.
- Guardians of children receiving PERA survivor benefits if the children are enrolled in the health care program.
- Surviving spouses of deceased retirees who are not receiving PERA benefits, but were enrolled in the program when death occurred.

- Divorced spouses of retirees who are not receiving PERA benefits, but were enrolled in the program when the divorce occurred.
- Members while receiving short-term disability program payments.
- Members whose employers have elected to provide coverage through the health care program and such members' dependents.

Available Health Care Premium Subsidy
The maximum monthly subsidy amount, $230 (actual dollars) or $115 (actual dollars), is based on 20 years or more of service credit. The maximum monthly subsidy of $230 (actual dollars) applies to eligible participants who are under 65 years of age and not entitled to Medicare. The maximum monthly subsidy of $115 (actual dollars) applies to eligible participants who are 65 years of age or older and those who are under 65 years of age and entitled to Medicare. For those with less service credit, the subsidy is reduced by 5 percent for each year less than 20 years. The plan participant is responsible for paying the remaining portion of the premium to the extent the subsidy does not cover the entire amount.

Under the PERA benefit structure, an additional subsidy exists for benefit recipients who have not participated in Social Security and are not otherwise eligible for premium-free Medicare Part A for hospital-related services. C.R.S. § 24-51-1206(4) states that PERA cannot charge premiums to benefit recipients without Part A that are greater than premiums charged to benefit recipients with Part A for the same plan option, coverage level, and service credit. Therefore, the total premium for Medicare coverage for each plan participant is determined assuming he or she has both Medicare Parts A and B and an additional subsidy is paid by the HCTF and the DPS HCTF on behalf of the individual not covered by Medicare Part A.

Under the DPS benefit structure, the HCTF and the DPS HCTF pay a monthly subsidy for retirees who are not eligible for premium-free Medicare Part A. The maximum monthly subsidy is $230 (actual dollars) per retiree, reduced for service less than 20 years. Retirees who do not have Medicare Part A pay the difference between the total premium for Medicare coverage and the monthly subsidy.

Impact of the Retiree Drug Subsidy
The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 established prescription drug coverage for Medicare beneficiaries under Medicare Part D. One of the provisions of Medicare Part D provides sponsors of postemployment health care plans the opportunity to receive a payment, referred to as a retiree drug subsidy (RDS), if the sponsor's plan provides a prescription drug benefit that is actuarially equivalent to the Medicare Part D benefit. The RDS is equal to 28 percent of the amount of eligible prescription drug benefit costs of retirees who are eligible for, but not enrolled in, Medicare Part D, by virtue of continuing coverage by the sponsor's plan. The provisions of Medicare Part D became effective on January 1, 2006. The funds receive the Medicare RDS payment for the self-insured plans administered by Anthem Blue Cross and Blue Shield (Anthem) and the insured plan offered by Rocky Mountain Health Plans. The funds use the anticipated RDS payments to reduce the required premiums collected from the enrollees. Each fund pays for the full premiums or claims during the year and recoups the additional cost when the fund receives the RDS payment from the federal government. For the year ended December 31, 2013, the HCTF and the DPS HCTF received $15,731 and $563 in Medicare RDS income, respectively.

Effective January 1, 2014, PERACare no longer participates in the Centers for Medicare & Medicaid Services' (CMS) RDS program. PERACare enrollees participating in the self-insured Medicare supplement plans and the Medicare HMO plan offered by Rocky Mountain Health Plans now receive their prescription drug benefits through a Medicare Prescription Drug Plan (PDP). Therefore, the change to PDPs eliminates the liability associated with the RDS premium subsidies.

Contributions
Contribution requirements are established by statute under C.R.S. § 24-51-208. Colorado State law provisions may be amended from time to time by the Colorado General Assembly. Affiliated employers must submit contributions for all PERA members equal to 1.02 percent of covered salaries.

Plan Data
As of December 31, 2013, there were a total of 200,183 PERA members in active service who were earning a potential future subsidy benefit if they retire from PERA and enroll in a health care plan through PERACare. This total represents 14,816 active members in the DPS Division and 185,367 active members in the other four divisions. There were 21,827 inactive members who had accumulated a potential subsidy benefit, but were not yet receiving benefits. This total includes 759 in the DPS Division and 21,068 in the other four divisions.

Participation in the Health Care Plans for Retirees and Survivors Currently Receiving Benefits

	HEALTH CARE TRUST FUND	DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND	TOTAL
Enrolled in PERACare			
Under age 65	15,340	711	16,051
Age 65 and older	37,701	3,284	40,985
	53,041	3,995	57,036
Not enrolled in PERACare			
Under age 65	15,993	580	16,573
Age 65 and older	28,423	1,989	30,412
	44,416	2,569	46,985
Total retirees and survivors currently receiving benefits	97,457	6,564	104,021

PERA offers two general types of health plans, fully insured plans offered through health care organizations and self-insured plans administered by third party vendors. The plan designs offered include HMO, PPO, Medicare Supplement, Medicare Advantage, and Medicare Cost plans. PERA also offers fully insured dental and vision plans.

Summary of HCTF Specific Significant Accounting Policies

Following the applicable recognition requirements of GASB Statement 33, the funds recognize an asset and contribution for the RDS payment. The funds apply the measurement requirements of GASB Statement 43 to determine the actuarial accrued liabilities, the ARC of the employer, and the annual OPEB cost without reduction for RDS payments.

Premiums collected and payments made are handled in two ways, depending on whether or not the plan bears any level of risk with regard to the health coverage. Where the plan bears risk, all premiums collected are recorded as contributions and all claims or premiums paid are accounted for as benefit payments. Where there is no transfer of risk to the plan, the premiums collected are held by the plan as a liability and the liability is relieved when the premiums are transferred to the health insurance company that provides the fully insured health plan. When there is no health coverage risk, the only benefit payment recorded is the subsidy benefit which is equal to the difference between the premiums collected from the enrollees and the full premium due to the insurance company.

The first health plan that involves risk to the funds is the self-insured plan administered by Anthem. PERA uses an outside consultant to determine the premiums required to cover anticipated health claims less the anticipated Medicare Part D retiree drug subsidy. The cost to the enrollee is further reduced by the amount of the enrollee's calculated subsidy, if applicable. Implicit in this process is the risk that actual claims experience and the Medicare RDS could be different from the estimates resulting in either a gain or a loss to the funds.

The second health plan that involves risk to the funds is Rocky Mountain Health Plans' (RMHP) Medicare plan where the funds directly receive the Medicare RDS payment from the federal government. Using an outside consultant, PERA estimates in advance the amount of the Medicare RDS payment that the funds will receive based on an estimate of the amount of claims that will be paid by RMHP. The anticipated savings are passed on to the enrollees through a premium reduction. The funds pay RMHP the full premium payment, which includes the amounts collected from enrollees, the funds' subsidies, as well as an additional amount for the anticipated Medicare RDS payment which reduced the enrollees' premiums. The inherent risk is that the actual Medicare RDS could be different from the estimate resulting in either a gain or a loss to the funds.

Effective January 1, 2014, PERACare no longer participates in the Centers for Medicare & Medicaid Services' (CMS) RDS program. PERACare enrollees participating in the self-insured Medicare supplement plans and the Medicare HMO plan offered by Rocky Mountain Health Plans now receive their prescription drug benefits through a Medicare Prescription Drug Plan (PDP). Therefore, the change to PDPs eliminates the liability associated with the RDS premium subsidies.

PERA-Affiliated Employer Program Participation

In addition, fully insured pre-Medicare health plans offered through Anthem and Kaiser Permanente are available to any PERA-affiliated employer who voluntarily elects to provide health care coverage through the health care plan for its employees who are PERA members. The program acts as a purchaser of private insurance to obtain economies of scale for the employers that elect to join in the joint purchasing arrangement. The insurance companies, who provide coverage through the program, set the rates for each employer group. There is no transfer of risk to the funds, PERA, or between the participating employers. The insurance companies providing the benefits bear the risk for the plan. The employers and/or participants pay the full premiums for the coverage and the funds provide no subsidy. PERA collects the premiums, deposits them into the funds, and then pays these premiums to the insurance companies who provide the coverage. As of December 31, 2013, there were 19 employers in the program with 330 active members enrolled. There are no employers in the program from the DPS Division.

(In Thousands of Dollars)

Dental and Vision Plans

Dental and vision plans are also available to benefit recipients and eligible employees of employers who have elected to provide health care coverage through PERA. These plans are all fully insured and the funds provide no subsidy; the risk is borne by the insurance companies contracted to provide the coverage. The participants and/or employers pay the full premiums for the coverage. PERA collects the premiums, deposits them into the funds, and then pays these premiums to the insurance companies who provide the coverage. As of December 31, 2013, there were 49,354 participants enrolled in the dental plans and 38,306 participants enrolled in the vision plans in both the HCTF and the DPS HCTF.

Note 10—Funded Status and Actuarial Information

Funded Status and Funding Progress

The funded status of each plan as of December 31, 2013, the most recent actuarial valuation date, is as follows:

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DENVER PUBLIC SCHOOLS DIVISION
Actuarial value of assets (a)	$13,129,460	$21,369,380	$3,291,298	$256,800	$3,075,895
Actuarial accrued liability (b)	22,843,725	35,437,312	4,502,282	351,598	3,785,872
Total unfunded actuarial accrued liability (UAAL) (b-a)	9,714,265	14,067,932	1,210,984	94,798	709,977
Funded ratio (a/b)	57.5%	60.3%	73.1%	73.0%	81.2%
Covered payroll	2,474,965	3,938,650	529,003	39,942	547,660
UAAL as a percentage of covered payroll	392.5%	357.2%	228.9%	237.3%	129.6%

	HEALTH CARE TRUST FUND	DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND
Actuarial value of assets (a)	$293,556	$15,482
Actuarial accrued liability (b)	1,557,406	76,636
Total unfunded actuarial accrued liability (UAAL) (b-a)	1,263,850	61,154
Funded ratio (a/b)	18.8%	20.2%
Covered payroll	6,982,560	547,660
UAAL as a percentage of covered payroll	18.1%	11.2%

Actuarial Methods and Assumptions

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. A schedule of funding progress immediately follows the notes to the financial statements. It presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits. Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between employers of each fund and plan members to that point. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations. Actuarial calculations reflect a long-term perspective. In addition, consistent with that perspective, the actuarial methods and assumptions used include techniques designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

The actuarial accrued liability is based on a variety of assumptions, with the most significant assumption being the assumed rate of return on investments and related discount rate. As of December 31, 2013, PERA has estimated the rate of return on investments and discount rate will be 7.50 percent for a period equal to the remaining lives of current active members and benefit recipients. Note 11 presents a summary of the impact of different assumed investment rates of return. As shown, if there is a significant deviation, over a long period, in the actual rate of return from the assumed rate of return, the measurement of the UAAL could be materially under- or over-reported as of December 31, 2013. Further, funding the actuarial accrued liability assumes the current statutory contributions by employers and members in the future will be made on a timely basis. Any significant reduction in contributions would have an impact on the ability of the plan to make benefit payments in the future.

(In Thousands of Dollars)

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DENVER PUBLIC SCHOOLS DIVISION
Valuation date	12/31/2013	12/31/2013	12/31/2013	12/31/2013	12/31/2013
Actuarial cost method	Entry age	Entry age	Entry age	Entry age	Entry age
Amortization method	Level percent Open	Level percent Open	Level percent Open	Level percent Open	Level percent Open
Remaining amortization period used in ARC calculation	30 years	30 years	30 years	30 years	30 years
Remaining amortization period with current funding	60 years	61 years	37 years	Infinite	Infinite
Asset valuation method	4-year smoothed market	4-year smoothed market	4-year smoothed market	4-year smoothed market	4-year smoothed market
Actuarial assumptions:					
Investment rate of return and discount rate[1]	7.50%	7.50%	7.50%	7.50%	7.50%
Projected salary increases[1]	3.90%–9.57%	3.90%–10.10%	3.90%–10.85%	4.40%–5.40%	3.90%–10.10%
Post-retirement benefit increases:					
Members hired prior to 1/1/07	2.00% compounded annually	2.00% compounded annually	2.00% compounded annually	2.00% compounded annually	2.00% compounded annually
Members hired between 1/1/07 and 1/1/10	None[2]	None[2]	None[2]	None[2]	2.00% compounded annually
Members hired on or after 1/1/10	None[2]	None[2]	None[2]	None[2]	None[2]

[1] Includes inflation at 2.80 percent and productivity at 1.10 percent.

[2] Post-retirement benefit increases are provided by the AIR, a separate reserve within the fund, subject to monies being available.

Beginning in 2007, the AIR was created within each Division Trust Fund for the purpose of funding future benefit increases for members in the PERA benefit structure hired on or after January 1, 2007. Funding for this reserve comes from the employer contributions and calculated at 1.0 percent of the salary reported for members in the PERA benefit structure hired on or after January 1, 2007. Post-retirement benefit increases for these members are limited to a maximum of 2.0 percent compounded annually, subject to the availability of assets in the AIR for each division. As of December 31, 2013, the value of the AIR was $44,706 in the State Division, $57,664 in the School Division, $14,957 in the Local Government Division, $493 in the Judicial Division, and $6,671 in the DPS Division. Since these assets are earmarked for the specific purpose of providing future benefit increases for members hired after January 1, 2007, they are not included in the actuarial value of assets used in the calculation of the ARC or the funded status and funding progress of the plans shown above.

	HEALTH CARE TRUST FUND	DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND
Valuation date	12/31/2013	12/31/2013
Actuarial cost method	Entry age, Level Dollar	Entry age, Level Dollar
Amortization method	Level percent Open	Level percent Open
Remaining amortization period used in ARC calculation	30 years	30 years
Remaining amortization period with current funding	40 years	19 years
Asset valuation method	4-year smoothed market	4-year smoothed market
Actuarial assumptions:		
Investment rate of return and discount rate[1]	7.50%	7.50%
Projected salary increases[1]	3.90% in aggregate	3.90% in aggregate
Health care inflation factor		
Service-based premium subsidy	0.00%	0.00%
Medicare Part A premiums	0.00% Initial 4.25% Ultimate	N/A
Carrier premiums	5.27%—5.91% Initial 5.00% Ultimate	N/A

[1] Includes inflation at 2.80 percent and productivity at 1.10 percent.

(In Thousands of Dollars)

Note 11—Sensitivity of Actuarial Valuation to Changes in Assumed Investment Rate of Return and Discount Rate

The most important long-term driver of a pension plan is investment income. The investment rate of return and discount rate assumptions, as required by GASB, should be based on an estimated long-term investment yield for the plan, with consideration given to the nature and mix of current and expected plan investments and the basis used to determine the actuarial value of assets.

Management and the Board continually monitor the investment rate of return and discount rate assumptions. The Board formally reviews these assumptions on an annual basis and makes changes in these assumptions as appropriate. In November 2013, the Board changed the investment rate of return and the discount rate assumptions from 8.0 percent to 7.5 percent and the price inflation assumption from 3.50 percent to 2.80 percent. In January 2014, the Board changed the wage inflation assumption from 4.25 percent to 3.90 percent.

To illustrate the importance of the investment rate of return used to discount the actuarial liabilities of PERA, the funded ratio, UAAL, and ARC (for contributions for fiscal year ended December 31, 2013) are shown below at 6.0 percent (a one and one-half percent decrease), 7.0 percent (a one-half percent decrease), 7.5 percent (the current assumption), 8.0 percent (a one-half percent increase), and 9.0 percent (a one and one-half percent increase).

	1.5% DECREASE 6.0 PERCENT	0.5% DECREASE 7.0 PERCENT	CURRENT ASSUMPTION 7.5 PERCENT	0.5% INCREASE 8.0 PERCENT	1.5% INCREASE 9.0 PERCENT
FUNDED RATIO					
State Division Trust Fund	48.6%	54.5%	**57.5%**	60.5%	66.8%
School Division Trust Fund	50.7%	57.0%	**60.3%**	63.6%	70.5%
Local Government Division Trust Fund	61.1%	69.0%	**73.1%**	77.3%	85.9%
Judicial Division Trust Fund	62.7%	69.5%	**73.0%**	76.7%	84.1%
Denver Public Schools Division Trust Fund	69.0%	77.1%	**81.2%**	85.5%	94.0%
Health Care Trust Fund	16.1%	17.9%	**18.8%**	19.8%	21.7%
Denver Public Schools Health Care Trust Fund	17.5%	19.3%	**20.2%**	21.1%	23.0%
UNFUNDED ACTUARIAL ACCRUED LIABILITY					
State Division Trust Fund	$13,877,242	$10,973,965	**$9,714,265**	$8,556,969	$6,527,995
School Division Trust Fund	20,805,694	16,100,320	**14,067,932**	12,203,982	8,949,745
Local Government Division Trust Fund	2,098,751	1,478,035	**1,210,984**	966,642	541,523
Judicial Division Trust Fund	152,805	112,642	**94,798**	78,217	48,600
Denver Public Schools Division Trust Fund	1,382,777	913,509	**709,977**	523,610	196,815
Health Care Trust Fund	1,529,557	1,344,782	**1,263,850**	1,189,487	1,057,850
Denver Public Schools Health Care Trust Fund	73,162	64,821	**61,154**	57,778	51,779
ANNUAL REQUIRED CONTRIBUTION					
State Division Trust Fund	30.50%	24.89%	**22.35%**	19.92%	15.38%
School Division Trust Fund	31.38%	24.86%	**21.94%**	19.17%	14.06%
Local Government Division Trust Fund	22.92%	16.54%	**13.62%**	10.79%	5.43%
Judicial Division Trust Fund	31.74%	24.71%	**21.45%**	18.31%	12.36%
Denver Public Schools Division Trust Fund	20.10%	13.86%	**11.06%**	8.38%	3.42%
Health Care Trust Fund	1.24%	1.17%	**1.15%**	1.11%	1.08%
Denver Public Schools Health Care Trust Fund	0.92%	0.85%	**0.81%**	0.79%	0.75%

Required Supplementary Information (Unaudited)—Schedule of Funding Progress

For the Years Ended December 31
(In Thousands of Dollars)

State Division

	2013	2012	2011	2010	2009	2008
Actuarial valuation date	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009	12/31/2008
Actuarial value of assets (a)	$13,129,460	$12,538,675	$12,010,045	$12,791,946	$13,382,736	$13,914,371
Actuarial accrued liability (b)	22,843,725	21,191,495	20,826,543	20,356,176	19,977,217	20,498,668
Total unfunded actuarial accrued liability (UAAL) (b-a)	9,714,265	8,652,820	8,816,498	7,564,230	6,594,481	6,584,297
Funded ratio (a/b)	57.5%	59.2%	57.7%	62.8%	67.0%	67.9%
Covered payroll	2,474,965	2,384,934	2,393,791	2,392,080	2,384,137	2,371,639
UAAL as a percentage of covered payroll	392.5%	362.8%	368.3%	316.2%	276.6%	277.6%

School Division

	2013	2012	2011	2010	2009	2008
Actuarial valuation date	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009	12/31/2008
Actuarial value of assets (a)	$21,369,380	$20,266,574	$19,266,110	$20,321,736	$21,054,910	$21,733,329
Actuarial accrued liability (b)	35,437,312	32,619,033	31,986,199	31,339,754	30,412,815	31,000,202
Total unfunded actuarial accrued liability (UAAL) (b-a)	14,067,932	12,352,459	12,720,089	11,018,018	9,357,905	9,266,873
Funded ratio (a/b)	60.3%	62.1%	60.2%	64.8%	69.2%	70.1%
Covered payroll	3,938,650	3,819,066	3,821,603	3,900,662	3,922,175	3,804,927
UAAL as a percentage of covered payroll	357.2%	323.4%	332.8%	282.5%	238.6%	243.5%

Local Government Division

	2013	2012	2011	2010	2009	2008
Actuarial valuation date	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009	12/31/2008
Actuarial value of assets (a)	$3,291,298	$3,098,721	$2,882,691	$2,926,045	$2,932,628	$2,933,296
Actuarial accrued liability (b)	4,502,282	4,157,621	4,160,015	4,005,566	3,850,821	3,838,083
Total unfunded actuarial accrued liability (UAAL) (b-a)	1,210,984	1,058,900	1,277,324	1,079,521	918,193	904,787
Funded ratio (a/b)	73.1%	74.5%	69.3%	73.0%	76.2%	76.4%
Covered payroll	529,003	523,668	718,169	705,265	705,097	718,902
UAAL as a percentage of covered payroll	228.9%	202.2%	177.9%	153.1%	130.2%	125.9%

Judicial Division

	2013	2012	2011	2010	2009	2008
Actuarial valuation date	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009	12/31/2008
Actuarial value of assets (a)	$256,800	$238,807	$221,515	$227,814	$228,714	$230,967
Actuarial accrued liability (b)	351,598	326,897	319,437	303,839	295,696	288,058
Total unfunded actuarial accrued liability (UAAL) (b-a)	94,798	88,090	97,922	76,025	66,982	57,091
Funded ratio (a/b)	73.0%	73.1%	69.3%	75.0%	77.3%	80.2%
Covered payroll	39,942	39,045	39,033	37,412	37,583	35,937
UAAL as a percentage of covered payroll	237.3%	225.6%	250.9%	203.2%	178.2%	158.9%

The accompanying notes are an integral part of the Required Supplementary Information.

Required Supplementary Information (Unaudited)—Schedule of Funding Progress

For the Years Ended December 31
(In Thousands of Dollars)

Denver Public Schools Division[1]

	2013	2012	2011	2010
Actuarial valuation date	12/31/2013	12/31/2012	12/31/2011	12/31/2010
Actuarial value of assets (a)	$3,075,895	$2,936,695	$2,804,706	$2,961,720
Actuarial accrued liability (b)	3,785,872	3,495,549	3,442,527	3,332,814
Total unfunded actuarial accrued liability (UAAL) (b-a)	709,977	558,854	637,821	371,094
Funded ratio (a/b)	81.2%	84.0%	81.5%	88.9%
Covered payroll	547,660	510,872	491,646	470,774
UAAL as a percentage of covered payroll	129.6%	109.4%	129.7%	78.8%

[1] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

Health Care Trust Fund

	2013	2012	2011	2010	2009	2008
Actuarial valuation date	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009	12/31/2008
Actuarial value of assets (a)	$293,556	$285,097	$282,228	$288,193	$260,341	$255,976
Actuarial accrued liability (b)	1,557,406	1,723,495	1,710,790	1,642,993	1,763,241	1,368,633
Total unfunded actuarial accrued liability (UAAL) (b-a)	1,263,850	1,438,398	1,428,562	1,354,800	1,502,900	1,112,657
Funded ratio (a/b)	18.8%	16.5%	16.5%	17.5%	14.8%	18.7%
Covered payroll	6,982,560	6,766,713	6,972,596	7,035,419	7,048,992	6,931,405
UAAL as a percentage of covered payroll	18.1%	21.3%	20.5%	19.3%	21.3%	16.1%

Denver Public Schools Health Care Trust Fund[1]

	2013	2012	2011	2010
Actuarial valuation date	12/31/2013	12/31/2012	12/31/2011	12/31/2010
Actuarial value of assets (a)	$15,482	$14,443	$14,448	$14,086
Actuarial accrued liability (b)	76,636	77,669	77,475	78,513
Total unfunded actuarial accrued liability (UAAL) (b-a)	61,154	63,226	63,027	64,427
Funded ratio (a/b)	20.2%	18.6%	18.6%	17.9%
Covered payroll	547,660	510,872	491,646	470,774
UAAL as a percentage of covered payroll	11.2%	12.4%	12.8%	13.7%

[1] The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

The accompanying notes are an integral part of the Required Supplementary Information.

For the Years Ended December 31
(In Thousands of Dollars)

State Division

	2013	2012	2011	2010	2009[2]	2008[2]
Dollar amount of annual required contribution (ARC)	**$495,241**	$393,991	$326,274	$452,821	$426,999	$437,567
ARC[1]	**20.01%**	16.52%[3]	13.63%[3]	18.93%[3]	17.91%	18.45%
% ARC contributed	**79%**	83%	85%[4]	62%	69%	61%

[1] As a percent of covered payroll. ARC based on the annual actuarial valuation two years prior to the current year.

[2] Information restated in 2010 to reflect a 12-month delay from the actuarial valuation date to the beginning of the calendar year in which each annual required contribution rate became effective.

[3] The State Division ARC for 2012, 2011, and 2010 reflects the contribution rate swap of 2.50 percent of payroll, decreasing the employer contribution rate by that amount and increasing the employee rate by a like amount for the period July 1, 2010, through June 30, 2012.

[4] Increase in percentage contributed from 2010 is primarily a result of the changes contained in SB 10-001.

School Division

	2013	2012	2011	2010	2009[2]	2008[2]
Dollar amount of annual required contribution (ARC)	**$779,459**	$672,156	$601,138	$731,374	$649,512	$653,686
ARC[1]	**19.79%**	17.60%	15.73%	18.75%	16.56%	17.18%
% ARC contributed	**79%**	84%	89%[3]	70%	73%	65%

[1] As a percent of covered payroll. ARC based on the annual actuarial valuation two years prior to the current year.

[2] Information restated in 2010 to reflect a 12-month delay from the actuarial valuation date to the beginning of the calendar year in which each annual required contribution rate became effective.

[3] Increase in percentage contributed from 2010 is primarily a result of the changes contained in SB 10-001.

Local Government Division

	2013	2012	2011	2010	2009[2]	2008[2]
Dollar amount of annual required contribution (ARC)	**$56,180**	$51,267	$64,492	$86,818	$78,548	$85,909
ARC[1]	**10.62%**	9.79%	8.98%	12.31%	11.14%	11.95%
% ARC contributed	**116%**	163%	139%[3]	101%	106%	91%

[1] As a percent of covered payroll. ARC based on the annual actuarial valuation two years prior to the current year.

[2] Information restated in 2010 to reflect a 12-month delay from the actuarial valuation date to the beginning of the calendar year in which each annual required contribution rate became effective.

[3] Increase in percentage contributed from 2010 is primarily a result of the changes contained in SB 10-001.

Judicial Division

	2013	2012	2011	2010	2009[3]	2008[3]
Dollar amount of annual required contribution (ARC)	**$8,599**	$7,137	$6,362	$6,970	$6,419	$6,346
ARC[1]	**21.53%**	18.28%[2]	16.30%[2]	18.63%[2]	17.08%	17.66%
% ARC contributed	**76%**	82%	84%[4]	80%	90%	80%

[1] As a percent of covered payroll. ARC based on the annual actuarial valuation two years prior to the current year.

[2] The Judicial Division ARC for 2012, 2011, and 2010 reflects the contribution rate swap of 2.50 percent of payroll, decreasing the employer contribution rate and increasing the employee rate by a like amount for the period July 1, 2010, through June 30, 2012.

[3] Information restated in 2010 to reflect a 12-month delay from the actuarial valuation date to the beginning of the calendar year in which each annual required contribution rate became effective.

[4] Increase in percentage contributed from 2010 is primarily a result of the changes contained in SB 10-001.

Denver Public Schools Division[1]

	2013	2012	2011	2010
Dollar amount of annual required contribution (ARC)	**$63,145**	$49,044	$58,260	$68,780
ARC[2]	**11.53%**	9.60%	11.85%	14.61%
% ARC contributed	**37%**	27%	20%[3]	8%

[1] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

[2] As a percent of covered payroll. ARC based on the annual actuarial valuation two years prior to the current year.

[3] Increase in percentage contributed from 2010 is primarily a result of the changes contained in SB 10-001.

Required Supplementary Information (Unaudited)—
Schedule of Contributions from Employers and Other Contributing Entities

For the Years Ended December 31
(In Thousands of Dollars)

Health Care Trust Fund

	2013	2012	2011	2010	2009[2]	2008[2]
Dollar amount of annual required contribution (ARC)	$86,584	$79,847	$89,249	$78,797	$78,949	$76,939
ARC[1]	1.24%	1.18%	1.28%	1.12%	1.12%	1.11%
% ARC contributed by Employer	84%	91%	82%	94%	94%	94%
% ARC contributed by Medicare	18%	18%	16%	18%	17%	18%

[1] As a percent of covered payroll. ARC based on the annual actuarial valuation two years prior to the current year.

[2] Information restated in 2010 to reflect a 12-month delay from the actuarial valuation date to the beginning of the calendar year in which each annual required contribution rate became effective.

Denver Public Schools Health Care Trust Fund[1]

	2013	2012	2011	2010
Dollar amount of annual required contribution (ARC)	$4,710	$4,700	$4,523	$4,465
ARC[2]	0.86%	0.92%	0.92%	0.95%
% ARC contributed by Employer	118%	112%	111%	107%
% ARC contributed by Medicare	12%	10%	11%	12%

[1] The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

[2] As a percent of covered payroll. ARC based on the annual actuarial valuation two years prior to the current year.

The accompanying notes are an integral part of the Required Supplementary Information.

Note 1—Description

The historical trend information about the State Division Trust Fund, School Division Trust Fund, Local Government Division Trust Fund, Judicial Division Trust Fund, Denver Public Schools Division Trust Fund, Health Care Trust Fund, and the Denver Public Schools Health Care Trust Fund is presented as required supplementary information. This information is intended to help users assess the funded status on a going-concern basis and to assess progress made in accumulating assets to pay benefits when due.

Note 2—Significant Factors Affecting Trends in Actuarial Information

Pension Plans—State, School, Local Government, Judicial, and the Denver Public Schools Division Trust Funds

2013 Changes in Plan Provisions Since 2012

- The following changes were made to the actuarial assumptions:
  - The investment rate of return assumption decreased from 8.00 percent to 7.50 percent per annum.
  - The price inflation assumption decreased from 3.50 percent to 2.80 percent per annum.
  - The wage inflation assumption decreased from 4.25 percent to 3.90 percent per annum.

2012 Changes in Plan Provisions Since 2011

- The following changes were made to the actuarial assumptions:
  - The price inflation assumption decreased from 3.75 percent to 3.50 percent.
  - The investment return assumption changed to net of investment expenses only, with administrative expenses recognized by an additional amount added to the normal cost contribution rate. That estimated additional amount is 0.35 percent of payroll for the Division Trust Funds.
  - The wage inflation assumption decreased from 4.50 percent to 4.25 percent.
  - Withdrawal rates from active service for each division were revised to more closely reflect actual experience.
  - The rates of post-retirement deaths for healthy lives changed to the RP-2000 Combined Mortality Table rates projected with Scale AA to 2020 (set back one year for males and two years for females).
  - The rates of pre-retirement mortality (deaths in active service) were revised to match the post-retirement mortality table. However, the percentages of the post-retirement mortality tables reflected on active member lives were changed to 55 percent for males and 40 percent for females.
  - The rates of disability from active service decreased slightly to more closely reflect actual experience.
  - The RP-2000 Disability Mortality Table was retained. The setback applied to the male disability mortality rates remains unchanged at two years, however, the setback applied to the female mortality rates changed from five years to two years.
  - The rates of early, reduced retirement for all divisions decreased and the rates for unreduced retirements increased to more closely reflect actual experience.

2011 Changes in Plan Provisions Since 2010

- No material changes to plan provisions.

2010 Changes in Plan Provisions Since 2009

- The following changes were made to the actuarial assumptions:
  - The assets, liabilities, and obligations of DPSRS were merged into the new Denver Public Schools Division Trust Fund on January 1, 2010.
  - No material changes to plan provisions.

2009 Changes in Plan Provisions Since 2008

- The following changes were made to the actuarial assumptions:
  - The investment rate of return has been decreased from 8.50 percent to 8.00 percent per annum.
  - The withdrawal rates, pre-retirement mortality rates, disability rates, and retirement rates for all divisions have been revised to more closely reflect the actual experience of PERA.
  - The post-retirement mortality tables used for service retirements and dependents of deceased pensioners have been changed to the 1994 Group Annuity Mortality Table set back three years for males and set back two years for females.
  - The deferral period for deferred vested members has been revised to more closely reflect the actual experience of PERA.

- The valuation takes into account the effect of amendments to PERA through the valuation date. The following changes were made to the main provisions as part of Senate Bill 10-001 since the previous valuation:
  - For the State Division, the AED will continue to increase by 0.4 percent per year to a total rate of 5.0 percent by 2017. In addition, the SAED will continue to increase by 0.5 percent per year to a total rate of 5.0 percent by 2017. However, if the funded ratio reaches 103 percent, the AED and SAED will be reduced by 0.5 percent of pay each.
  - For the School Division, the AED will continue to increase by 0.4 percent per year from 2013 through 2015 and by 0.3 percent in 2016 for a total rate of 4.5 percent. In addition, the SAED will continue to increase by 0.5 percent per year to a total rate of 5.5 percent by 2018. Also, the 0.4 percent increase in the statutory employer contribution rate in 2013 was eliminated. However, if the funded ratio reaches 103 percent, the AED and SAED will be reduced by 0.5 percent of pay each.
  - For the Local Government Division and the Judicial Division, the AED is frozen at the 2010 level of 2.20 percent. In addition, the SAED is frozen at the 2010 level of 1.50 percent. However, if the funded ratio reaches 103 percent, the AED and SAED will be reduced by 0.5 percent of pay each.
  - For Tier 1 and Tier 1A members (including retirees), the Post-Retirement Benefit Increases will be reduced to an amount equal to the CPI-W with a cap of 2 percent for the 2010 increase. In addition, the increase will be delayed 12 months after retirement for those members who retire on or after January 1, 2011. Members not eligible to retire as of January 1, 2011, who retire with a reduced service retirement allowance must reach age 60 or the age and service requirements for unreduced service retirement to be eligible for the Post-Retirement Benefit Increases.
  - Changes to the 2 Percent AI Cap: If PERA's overall funded status is at or above 103 percent, the AI cap of 2 percent will increase by 0.25 percent per year. If after PERA's overall funded status reaches 103 percent and it subsequently drops below 90 percent, the AI cap will decrease by 0.25 percent per year but will never drop below 2 percent.
  - Effective January 1, 2011, for all active members who are not eligible for retirement on January 1, 2011, the annual salary increase cap in determination of HAS was lowered from 15 percent to 8 percent.
  - Effective January 1, 2011, a new requirement is added that members must have five years of earned service credit in order to receive a 50 percent match on a refund. All matching amounts credited to member accounts before January 1, 2011, will remain credited.
  - Effective January 1, 2011, the reduction factors for a reduced service retirement benefit for members not eligible to retire as of January 1, 2011, were changed to an actuarial equivalent basis.
  - Effective January 1, 2011, implement a modified Rule of 85 for service retirement eligibility for members with less than 5 years of service credit as of January 1, 2011. This rule does not apply to State Troopers.
  - Effective January 1, 2011, implement a modified Rule of 88 with a minimum age of 58 for service retirement eligibility for members hired on or after January 1, 2011, but before January 1, 2017. This rule does not apply to State Troopers.
  - Effective January 1, 2011, implement a modified Rule of 90 with a minimum age of 60 for service retirement eligibility for members hired on or after January 1, 2017. This rule does not apply to State Troopers and those participants whose last 10 years of service were in the School and DPS Divisions.

2008 Changes in Plan Provisions Since 2007

- The following changes were made to the actuarial assumptions:
  - The interest credit on employee contribution accounts was changed from 5 percent to 3 percent, effective January 1, 2009.

Health Care Trust Fund and Denver Public Schools Health Care Trust Fund

2013 Changes in Plan Provisions Since 2012

- The following changes were made to the actuarial assumptions:
  - The investment rate of return assumption decreased from 8.00 percent to 7.50 percent per annum.
  - The price inflation assumption decreased from 3.50 percent to 2.80 percent per annum.
  - The wage inflation assumption decreased from 4.25 percent to 3.90 percent per annum.
  - Effective January 1, 2014, PERACare no longer participates in the CMS RDS program. PERACare enrollees participating in the self-insured Medicare supplement plans and the Medicare HMO plan offered by Rocky Mountain Health Plans now receive their prescription drug benefits through a Medicare Prescription Drug Plan (PDP). The liability associated with the RDS has been eliminated.

- Initial health care costs for PERACare enrollees who are age 65 and older and do not have Medicare Part A have been updated to reflect the change in costs for the 2014 plan year.
- The assumed rates of inflation for health care costs for Medicare Part A premiums have been revised to reflect the current expectation of future increases.
- The utilization rates for the No Part A subsidy of both retirees and their spouses have been revised.

2012 Changes in Plan Provisions Since 2011

- The following changes were made to the actuarial assumptions:
  - The rates of participation in PERACare for current participants of the PERA Divisions and the DPS Division, future participants of the PERA Divisions and the DPS Division, and DPS Division deferred vested members have been revised to more closely reflect actual experience.
  - The percentage of PERACare enrollees who will become age 65 and older and are assumed to not qualify for premium-free Medicare Part A coverage have been revised to more closely reflect actual experience.
  - The average age difference between covered male and female spouses has been updated to reflect actual experience.
  - Initial per capita health care costs for PERACare enrollees under the PERA benefit structure who are age 65 and older and not eligible for premium-free Medicare Part A benefits have been updated to reflect the change in costs for the 2013 plan year.
  - The initial per capita payments estimated to be made by the Centers for Medicare & Medicaid Services (CMS) under the RDS program have been updated based upon the most recent attestation of actuarial equivalence.
  - The assumed rates of inflation for health care costs for Medicare Part A premiums and RDS payments have been revised to reflect the current expectation of future increases.
  - The last year in which the prescription drug benefit provided to those members eligible for Medicare Part D is deemed to be Actuarially Equivalent has been increased to 2023.
  - The price inflation assumption decreased from 3.75 percent to 3.50 percent.
  - The wage inflation assumption decreased from 4.50 percent to 4.25 percent.
  - Withdrawal rates from active service for each division were revised to more closely reflect actual experience.
  - The rates of post-retirement deaths for healthy lives changed to the RP-2000 Combined Mortality Table rates projected with Scale AA to 2020 (set back one year for males and two years for females).
  - The rates of pre-retirement mortality (deaths in active service) were revised to match the post-retirement mortality table. However, the percentages of the post-retirement mortality tables reflected on active member lives were changed to 55 percent for males and 40 percent for females.
  - The rates of disability from active service decreased slightly to more closely reflect actual experience.
  - The RP-2000 Disability Mortality Table was retained. The setback applied to the male disability mortality rates remains unchanged at two years, however, the setback applied to the female mortality rates changed from five years to two years.
  - The rates of early, reduced retirement for all divisions decreased and the rates for unreduced retirements increased to more closely reflect actual experience.

2011 Changes in Plan Provisions Since 2010

- The following changes were made to the actuarial assumptions:
  - Initial per capita health care costs for PERACare enrollees under the PERA structure who are age 65 and older and not eligible for premium-free Medicare Part A benefits have been updated to reflect the change in costs for the 2012 plan year.
  - The initial per capita payments estimated to be made by CMS under the RDS have been updated based upon the most recent attestation of actuarial equivalence.
  - The assumed rates of inflation for health care costs for Medicare Part A premiums and RDS payments have been revised to reflect the current expectation of future increases.
  - The last year in which the prescription drug benefit provided to those members eligible for Medicare Part D is deemed to be Actuarially Equivalent has been increased to 2019.

2010 Changes in Plan Provisions Since 2009

- The following changes were made to the actuarial assumptions:
  - Denver Public Schools Health Care Trust Fund was created on January 1, 2010, to provide health care subsidies for DPS retirees participating in PERACare.
  - Initial health care costs for PERACare enrollees who are age 65 and older and not eligible for premium-free Medicare Part A have been updated to reflect the change in costs for the 2011 plan year.
  - PERACare funding rates are used to determine the health care costs for participants enrolled in the self-insured plans who are age 65 and older and not eligible for premium-free Medicare Part A.
  - The starting per capita payments estimated to be made by the CMS under the RDS have been updated based upon the most recent attestation of actuarial equivalence.
  - The assumed rates of inflation for health care costs for Medicare Part A premiums and RDS payments have been revised to reflect the current expectation of future increases.
  - The percentage of PERACare enrollees who are projected to be age 65 and older, and estimated to not be eligible for premium-free Medicare Part A has been revised to reflect plan experience.
  - The last year in which the prescription drug benefit provided to those members eligible for Medicare Part D is deemed to be Actuarially Equivalent has been increased to 2018.
  - Liabilities for those members represented under both the PERA benefit structure and the DPS benefit structure have been allocated based upon member contribution account balances.

2009 Changes in Plan Provisions Since 2008

- The following changes were made to the actuarial assumptions:
  - The investment rate of return has been decreased from 8.50 percent to 8.00 percent per annum.
  - The withdrawal rates, pre-retirement mortality rates, disability rates, and retirement rates for all divisions have been revised to more closely reflect the actual experience of PERA.
  - The post-retirement mortality tables used for service retirements and dependents of deceased pensioners have been changed to the 1994 Group Annuity Mortality Table set back three years for males and set back two years for females.
  - The rates of participation in PERACare for current members, future members, deferred vested members, and spouses have been revised to more closely reflect the actual experience of PERA.
  - Initial health care costs for participants who are age 65 and older and not eligible for premium-free Medicare Part A have been updated to reflect their change in costs for the 2010 plan year.
  - The starting per capita payments estimated to be made by CMS under the RDS Program have been updated based upon the most recent attestation of actuarial equivalence.
  - The assumed rates of inflation for health care costs have been revised to reflect the expectation of future increases.
  - The last year in which the prescription drug benefit provided to those members eligible for Medicare Part D is deemed to be actuarially equivalent has been reduced to 2017.

2008 Changes in Plan Provisions Since 2007

- The following changes were made to the actuarial assumptions:
  - Expected costs for retirees who are age 65 and older and not eligible for premium-free Medicare Part A, and who participate in the Kaiser Permanente, Rocky Mountain Health Plans, and Secure Horizons plans have been updated to reflect their change in costs for the 2009 plan year.
  - The starting per capita payments estimated to be made by CMS under the RDS have been updated based upon the most recent attestation of actuarial equivalence.
  - The assumed level of spousal participation was updated to better match plan experience.
  - The year in which the prescription drug benefit provided to those members eligible for Medicare Part D ceases to be actuarially equivalent, by failing the net test component of the Actuarial Equivalency Attestation, was extended to 2018 based upon the most recent attestation of actuarial equivalence.
  - The premium payable to CMS for Medicare Part A coverage was updated to reflect the change in cost for 2009.

Supplementary Schedules—Schedule of Administrative Expenses

For the Years Ended December 31
(In Thousands of Dollars)

PERSONNEL SERVICES	2013	2012
Salaries	$24,854	$24,142
Employee benefits	9,256	7,134
Total personnel services	34,110	31,276
PROFESSIONAL SERVICES		
Actuarial contracts	408	517
Audits	291	345
Investment services	2,587	2,389
Legal and legislative counsel	3,364	2,444
Computer services and consulting	524	496
Management consulting	1,241	1,462
Health care consulting	239	216
Other	669	407
Total professional services	9,323	8,276
MISCELLANEOUS		
Equipment rental and services	1,155	1,300
Memberships	284	200
Publications and subscriptions	80	66
Travel and local expense	715	641
Auto expense	25	24
Telephone	268	309
Postage	1,733	927
Insurance	331	325
Printing	546	496
Office supplies	786	617
Building rent, supplies, and utilities	971	912
Total miscellaneous	6,894	5,817
DIRECT EXPENSE		
Life Insurance Reserve	694	397
Health Care Trust Fund	11,433	11,238
Denver Public Schools Health Care Trust Fund	397	384
Voluntary Investment Program	1,788	1,572
Defined Contribution Retirement Plan	450	575
Deferred Compensation Plan	743	786
Total direct expense	15,505	14,952
Depreciation expense	574	682
Tenant and other expense	1,038	1,003
Internal investment manager expense	(14,638)	(13,986)
Total administrative expense	$52,806	$48,020
ALLOCATION OF ADMINISTRATIVE EXPENSE		
State Division Trust Fund	$9,780	$8,568
School Division Trust Fund	18,523	16,086
Local Government Division Trust Fund	2,021	2,035
Judicial Division Trust Fund	69	61
Denver Public Schools Division Trust Fund	2,240	1,919
Voluntary Investment Program	3,137	2,827
Defined Contribution Retirement Plan	744	848
Deferred Compensation Plan	1,094	1,105
Health Care Trust Fund	13,766	13,514
Denver Public Schools Health Care Trust Fund	561	547
Life Insurance Reserve	871	510
Total administrative expense	$52,806	$48,020

The ratio of administrative expenses to net position for the division trust funds is seven basis points (0.07 percent) for 2012 and 2013.

See accompanying Independent Auditors' Report.

Supplementary Schedules—Schedule of Investment Expenses

For the Years Ended December 31
(In Thousands of Dollars)

EXTERNAL MANAGER EXPENSES	2013	2012
Fixed income	$2,624	$2,392
Global equity	37,742	30,038
Alternative investments	45,727	46,878
Real estate investments	34,270	44,820
Opportunity fund investments	7,159	6,564
Short-term investments	390	316
Total external manager expenses	127,912	131,008
Internal manager expenses	14,638	13,986
Other investment expenses and custody fees	2,872	2,608
Defined contribution plan investment expenses	3,556	3,048
Total investment expenses	$148,978	$150,650

Supplementary Schedules—Schedule of Payments to Consultants

For the Years Ended December 31
(In Thousands of Dollars)

PROFESSIONAL CONTRACTS	2013	2012
Actuarial	$408	$517
Audits	291	345
Legal and legislative counsel	3,364	2,444
Computer services and consulting	524	496
Management consulting	1,241	1,462
Health care consulting	239	216
Other	669	407
Total payments to consultants[1]	$6,736	$5,887

[1] Excludes investment advisors.

See accompanying Independent Auditors' Report.

Supplementary Schedules—Schedule of Other Additions

For the Years Ended December 31
(In Thousands of Dollars)

	STATE DIVISION TRUST FUND	SCHOOL DIVISION TRUST FUND	LOCAL GOVERNMENT TRUST FUND	JUDICIAL DIVISION TRUST FUND	DPS DIVISION TRUST FUND	VOLUNTARY INVESTMENT PROGRAM	DEFINED CONTRIBUTION RETIREMENT PLAN	DEFERRED COMPENSATION PLAN	HEALTH CARE TRUST FUND	DPS HEALTH CARE TRUST FUND	LIFE INSURANCE RESERVE	TOTAL 2013	TOTAL 2012
Administrative fee income	$—	$—	$—	$—	$—	$6	$—	$2	$2,334	$165	$—	**$2,507**	$2,337
Revenue sharing	—	—	—	—	—	85	4	31	—	—	—	**120**	102
Participant loan interest	—	—	—	—	—	2,044	—	394	—	—	—	**2,438**	2,423
Interfund transfers at retirement[1]	4,818	—	—	1,450	257	—	—	—	—	—	—	**6,525**	5,219
Purchase service transfer to health care	—	—	—	—	—	—	—	—	8,170	147	—	**8,317**	9,216
Settlement income	44	71	11	1	10	—	—	—	2	—	—	**139**	328
Miscellaneous	7	68	3	—	2	6	2	1	16	—	—	**105**	451
Total other additions	$4,869	$139	$14	$1,451	$269	$2,141	$6	$428	$10,522	$312	$—	**$20,151**	$20,076

[1] Beginning in 2012, interfund transfers received at retirement are classified as other additions rather than negative other deductions.

Supplementary Schedules—Schedule of Other Deductions

For the Years Ended December 31
(In Thousands of Dollars)

	STATE DIVISION TRUST FUND	SCHOOL DIVISION TRUST FUND	LOCAL GOVERNMENT TRUST FUND	JUDICIAL DIVISION TRUST FUND	DPS DIVISION TRUST FUND	VOLUNTARY INVESTMENT PROGRAM	DEFINED CONTRIBUTION RETIREMENT PLAN	DEFERRED COMPENSATION PLAN	HEALTH CARE TRUST FUND	DPS HEALTH CARE TRUST FUND	LIFE INSURANCE RESERVE	TOTAL 2013	TOTAL 2012
Interfund transfers at retirement	$—	$3,231	$3,294	$—	$—	$—	$—	$—	$—	$—	$—	**$6,525**	$5,219
Purchase service transfer to health care	3,125	3,827	1,166	52	147	—	—	—	—	—	—	**8,317**	9,216
Miscellaneous	468	74	3	—	3	624	49	430	—	—	—	**1,651**	1,316
Total other deductions	$3,593	$7,132	$4,463	$52	$150	$624	$49	$430	$—	$—	$—	**$16,493**	$15,751

See accompanying Independent Auditors' Report.

WE WORK FOR

SMALL BUSINESSES

INVESTMENT SECTION

COLORADO PERA®

One of Colorado's Best Investments

State Law

State law gives complete responsibility for the investment of Colorado PERA's funds to the PERA Board of Trustees (Board), with some stipulations including:

- The aggregate amount of monies invested in corporate stocks or corporate bonds, notes, or debentures, which are convertible into corporate stock or in investment trust shares cannot exceed 65 percent of the then book value of the fund.
- No investment of the fund in common or preferred stock, or both, of any single corporation can exceed 5 percent of the then book value of the fund.
- The fund cannot acquire more than 12 percent of the outstanding stock or bonds of any single corporation.

Colorado PERA Board's Statutory Fiduciary Responsibility

By State law, the management of PERA's retirement fund is vested in the Board who is held to the standard of conduct of fiduciaries in discharging their responsibilities. According to C.R.S. § 24-51-207(2), the Board, as fiduciaries, must carry out their functions solely in the interest of PERA members and benefit recipients and for the exclusive purpose of providing benefits.

Goal

The function of PERA is to provide present and future retirement or survivor benefits for its members. The investment function is managed in a manner to promote long-term financial security for our membership while maintaining the stability of the fund.

Overview of Investment Policy

PERA's investment policy outlines the investment philosophy and guidelines within which the fund's investments will be managed, and includes the following:

- Strategic asset allocation is the most significant factor influencing long-term investment performance and asset volatility.
- The fund's liabilities are long term and the investment strategy will therefore be long term in nature.
- The asset allocation policy will be periodically re-examined to ensure its appropriateness to the then-prevailing liability considerations.
- As a long-term investor, Colorado PERA will invest across a wide spectrum of investments in a prudent manner.
- Active management may be expected to add value over passive investment alternatives under appropriate conditions.

The Board determines the strategic asset allocation policy for the fund. The Board's policy specifies the desired target allocation for each asset class as well as the ranges within which each asset class may operate. The targeted asset allocation mix in effect during 2013 and the specified ranges for each asset class are as follows:

ASSET CLASS	TARGET ALLOCATION	PERMISSIBLE RANGE
Global Equity	56%	50%–62%
Fixed Income	25%	22%–28%
Real Estate	7%	4%–10%
Alternative Investments	7%	4%–10%
Opportunity Fund	5%	0%–8%
Total	100%	

The asset allocation policy is determined by an intensive asset/liability analysis. Expected investment returns, risks, and correlations of returns are considered. The characteristics of the fund's liabilities are analyzed in conjunction with expected investment risks and returns. The targeted strategic asset allocation is designed to provide appropriate diversification and to balance the expected total rate of return with the volatility of expected returns. The asset allocation targets are adhered to through the implementation of a rebalancing policy.

Investments are managed and monitored in a manner which seeks to balance return and risk within the asset/liability framework. The Chief Investment Officer is authorized to execute investment transactions on behalf of the Board. Assets are managed both internally and externally. In making investment decisions, the Board and staff utilize external experts in various fields including risk and performance analysis, portfolio construction, rebalancing techniques, and other important investment functions and issues.

Basis of Presentation

Hewitt EnnisKnupp, Inc., the Board's Investment Performance consultant, provides the investment returns for the fund based on data made available by the fund's custodian, The Northern Trust Company. Performance calculations were prepared using time-weighted rates of return and are net-of-fees unless otherwise indicated.

Corporate Governance

General Policy

Although PERA is not subject to the Employee Retirement Income Security Act of 1974 (ERISA), the Board complies with the position taken by the U.S. Department of Labor (DOL) in February 1988. The DOL has stated that the right to vote shares of stock owned by a pension plan is, in itself, an asset of the plan, and therefore the fiduciary's responsibility to manage the assets includes proxy voting. PERA regularly works with various member organizations and federal oversight and legislative committees to promote and support national standards of corporate governance that protect long-term investor interests.

Colorado PERA Board's Shareholder Responsibility Committee

To assist the Board in carrying out its fiduciary responsibilities in voting proxies, the Board established a Shareholder Responsibility Committee. The PERA General Counsel serves as an adviser to the Committee. The Board and the Shareholder Responsibility Committee have delegated to its staff in the Corporate Governance and Legal Services Department the authority to execute and vote all proxies according to the PERA Proxy Voting Policy. Proxy issues are reviewed by staff on a case-by-case basis and then voted according to guidelines established by the PERA Proxy Voting Policy. PERA retains proxy advisors to assist in the proxy voting process.

Proxy Voting Policy

The PERA Proxy Voting Policy sets forth directives on a broad range of issues. The voting of proxy ballots for all domestic and non-U.S. stocks is accomplished by PERA's Corporate Governance and Legal Services Department. PERA regularly reviews and revises the Proxy Voting Policy to keep it up to date with established corporate governance standards. PERA's Proxy Voting Policy can be viewed on PERA's website at http://www.copera.org.

(The Colorado PERA Report on Investment Activity was prepared by internal staff.)

Investment Brokers/Advisers

Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds

Abel/Noser Corp.
Alignment Capital Group, LLC
Baird (Robert W.) & Co., Incorporated
Bank of America, National Association
Barclays Capital Inc.
Bloomberg Tradebook LLC
BNP Paribas Securities Corp.
BNY Mellon Capital Markets LLC
Calyon Securities (USA), Inc.
Cantor Fitzgerald & Co.
Citigroup Global Markets Inc.
Credit Suisse Securities (USA) LLC
CRT Capital Group LLC
Davidson (D.A.) & Co. Inc.
Deutsche Bank Securities Inc.
FTN Financial Services Corp.
Goldman Sachs & Co.
Goldman Sachs Execution & Clearing
Heitman Capital Management Corp.
HSBC Securities (USA) Inc.
ING Financial Markets, LLC
INVESCO Realty Advisors
J.P. Morgan Securities, Inc.
Jefferies & Co., Inc.
LaSalle Investment Management
Liquidnet, Inc.
Merrill Lynch, Pierce, Fenner & Smith Inc.
Macquarie Capital (USA,) Inc.
Morgan Stanley & Co. Inc.
National Bank of Canada, New York Branch
Nomura Securities International, Inc.
Pierpont Securities LLC
Piper Jaffray & Co.
RBC Capital Markets Corporation
RBS Securities, Inc.
RREEF Real Estate Investment Managers
Sanford C. Bernstein & Co., LLC
SG Americas Securities, LLC
Sidoti & Company, LLC
Sterne Agee & Leach, Inc.
Stifel, Nicolaus & Company Incorporated
Susquehanna International Group, LLC
The Northern Trust Company
UBS Securities, LLC
Wells Fargo Securities, LLC

Certain broker agreements include provisions for commission recapture.

Schedule of Commissions (Internally Managed Assets)

For Year Ended December 31, 2013
(In Thousands of Dollars)

ASSET CLASS	2013 VALUE
Fixed Income[1]	$10,850
Equities	1,999
Total commissions	12,849
Commission sharing	395
Total commissions	$13,244

[1] Fixed income commissions are estimated.

The Schedule of Commissions does not include commingled funds.

Investment Summary

Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds
(In Thousands of Dollars)

	FAIR VALUE PER FINANCIAL STATEMENT DECEMBER 31, 2013	REALLOCATION[1]	FAIR VALUE PER INVESTMENT PORTFOLIO DECEMBER 31, 2013	TARGET[2]	PERCENT OF TOTAL FAIR VALUE 2013	2012	2011
Global Equity	$25,607,413	$168,914	$25,776,327	56.0%	**58.4%**	56.5%	55.5%
Fixed Income	10,059,387	244,597	10,303,984	25.0%	**23.4%**	23.3%	23.6%
Alternative Investments	3,398,629	56,284	3,454,913	7.0%	**7.8%**	8.7%	9.3%
Real Estate Investments	3,164,748	(48,637)	3,116,111	7.0%	**7.1%**	8.1%	8.6%
Opportunity Fund	851,314	238,100	1,089,414	5.0%	**2.5%**	2.5%	2.1%
Cash and Short-Term Investments							
Operating Cash	253	(253)	—				
Investment Cash and Short-Term	995,229	(621,584)	373,645	—	**0.8%**	0.9%	0.9%
Net Investment Receivables and Payables	37,674	(37,674)	—				
Total Investments	$44,114,647	($253)	$44,114,394	100.0%	100.0%	100.0%	100.0%

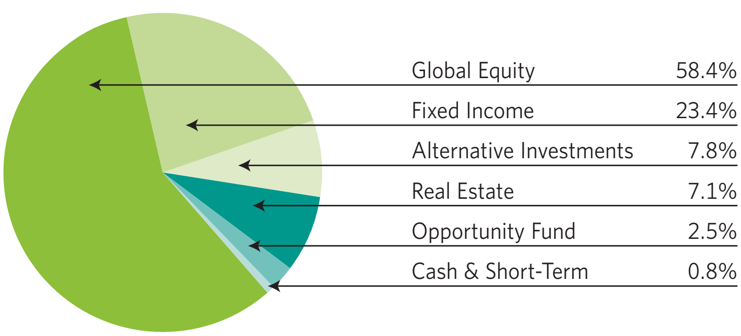
[1] Investment receivables, payables, accruals, and cash and short-term have been reallocated back to the investment portfolios that hold them.

[2] An Asset/Liability Study was undertaken in 2010, after the enactment of Senate Bill 10-001, with the objective of determining the optimal strategic asset allocation policy. In September 2010, based on the study, the Board approved the asset allocation targets and ranges.

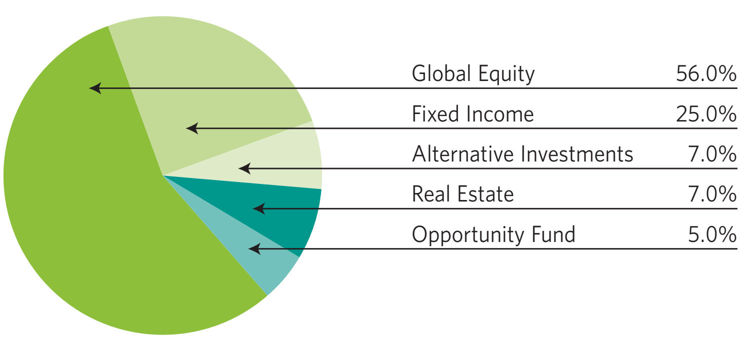
Asset Allocation at Fair Value

Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds
Year End December 31, 2013

Asset Allocation at Fair Value



Target Allocations



Hewitt EnnisKnupp, Inc., the Board's Investment Performance consultant, provides the investment returns for the fund based on data made available by the fund's custodian, The Northern Trust Company. Listed below are the one– three–, five–, and ten–year net-of-fees time-weighted rates of return for each asset class and their respective benchmarks.

	2013	3-YEAR	5-YEAR	10-YEAR
PERA Total Portfolio	15.6%	9.9%	12.2%	7.6%
Total Fund Policy Benchmark[1]	16.2%	10.1%	13.0%	—
Median Plan (BNY Mellon Performance and Risk Analytics' and Investment Metrics' Median Public Fund Universe)	15.5%	9.4%	12.1%	6.9%
Global Stocks	24.6%	12.3%	16.3%	7.8%
Global Equity Custom Benchmark[1]	23.7%	11.7%	16.3%	—
Fixed Income	(1.7%)	4.0%	5.7%	5.1%
Fixed Income Custom Benchmark[1]	(1.5%)	3.9%	5.4%	4.9%
Alternative Investments	17.6%	11.5%	14.1%	12.1%
Alternative Custom Benchmark[2]	36.0%	18.9%	21.7%	11.0%
Real Estate	12.9%	13.1%	3.9%	8.4%
Real Estate Custom Benchmark[3]	13.4%	13.2%	3.5%	6.9%
Opportunity Fund	0.0%	0.4%	3.1%	—
Opportunity Fund Benchmark[4]	5.4%	3.2%	9.3%	—

Note: Performance calculations were prepared using net-of-fees time-weighted rates of return.

[1] The PERA Board adopted benchmarks beginning April 1, 2004, for each of the various asset classes. The adopted benchmarks have changed over time and, accordingly, the benchmark returns presented represent a blend, as follows:

- **The Total Fund Policy Benchmark—**A combination of 56 percent of the Global Equity Custom Benchmark; 25 percent of the Fixed Income Custom Benchmark; 7 percent of the Real Estate Custom Benchmark; 7 percent of the Alternative Custom Benchmark, and 5 percent of the Opportunity Fund Benchmark. Beginning January 2011 and prior to January 2012, a combination of 56 percent of the Global Equity Custom Benchmark; 25 percent of the Fixed Income Custom Benchmark; 7 percent of the Real Estate Custom Benchmark; 7 percent of the Alternative Custom Benchmark, and 5 percent of the Public Markets Benchmark. Beginning January 2009 and prior to January 2011, a combination of 58 percent of the Global Equity Custom Benchmark; 25 percent of the Fixed Income Custom Benchmark; 7 percent of the Real Estate Custom Benchmark; 7 percent of the Alternative Custom Benchmark, and 3 percent of the Public Markets Benchmark. For 2008, a combination of 43 percent of the Dow Jones Wilshire 5000 Stock Index; 15 percent of the MSCI ACWI ex-U.S. Index; 25 percent of the Barclays Capital Universal Bond Index; 7 percent of the Real Estate Custom Benchmark; 7 percent of the Alternative Custom Benchmark, and 3 percent of the Public Markets Benchmark. Prior to January 1, 2008, the weight for the DJ Wilshire 5000 was 45 percent and the NCREIF Timber Index (which was replaced by the Public Markets Benchmark in 2008) was 1 percent. Prior to January 1, 2006, the weight for the MSCI ACWI ex-U.S. Index was 14 percent and the Alternative Custom Benchmark was 8 percent.
- **Global Equity Custom Benchmark—**The MSCI ACWI IMI. Prior to February 1, 2013, 52.0 percent DJ U.S. Total Stock Market Index and 48.0 percent MSCI ACWI ex-U.S. Index. Prior to October 1, 2012, 58.0 percent DJ U.S. Total Stock Market Index and 42.0 percent MSCI ACWI ex-U.S. Index. Prior to April 2012, 64.0 percent DJ U.S. Total Stock Market Index and 36.0 percent MSCI ACWI ex-U.S. Index Prior to October 1, 2011, 69.0 percent DJ U.S. Total Stock Market Index and 31.0 percent MSCI ACWI ex-U.S. Index. Prior to April 1, 2011, 74.1 percent DJ U.S. Total Stock Market Index (replaced the DJ Wilshire 5000 in 2009) and 25.9 percent MSCI ACWI ex-U.S. Index. Prior to January 1, 2008, 75 percent DJ Wilshire 5000 and 25 percent MSCI ACWI ex-U.S. Index. Prior to January 1, 2006, 76.3 percent DJ Wilshire 5000 and 23.7 percent MSCI ACWI ex-U.S. Index.
- **Fixed Income Custom Benchmark—**98 percent of the Barclays Capital Universal Bond Index and 2 percent of the Barclays Capital Long Government/Credit Index. Prior to July 1, 2010, Barclays Capital Universal Bond Index. Prior to April 1, 2004, the Barclays Capital Aggregate Bond Index.

[2] DJ U.S. Total Stock Market Index plus 250 basis points annually. Prior to January 1, 2012, DJ U.S. Total Stock Market Index (replaced the DJ Wilshire 5000 in 2009) plus 300 basis points annually.

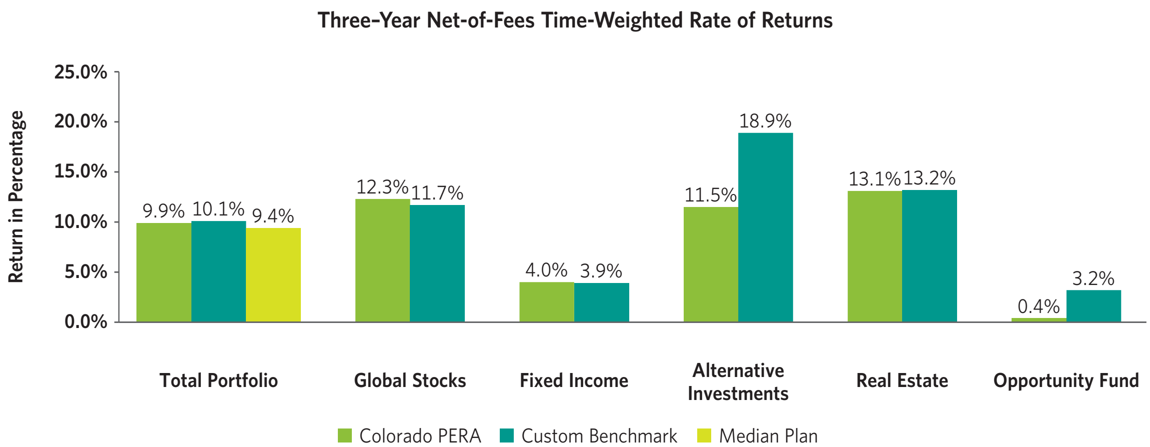
[3] NFI (NCREIF Open-end Core Fund Index) plus 50 basis points annually. Prior to January 1, 2012, the NFI plus 100 basis points annually. Prior to January 1, 2006, a combination of 45% of the NCREIF Index, 15% of the NAREIT Index, 20% of the Salomon Brothers Mortgage-Backed Securities Index and 20% of the GPR General European Property Index.

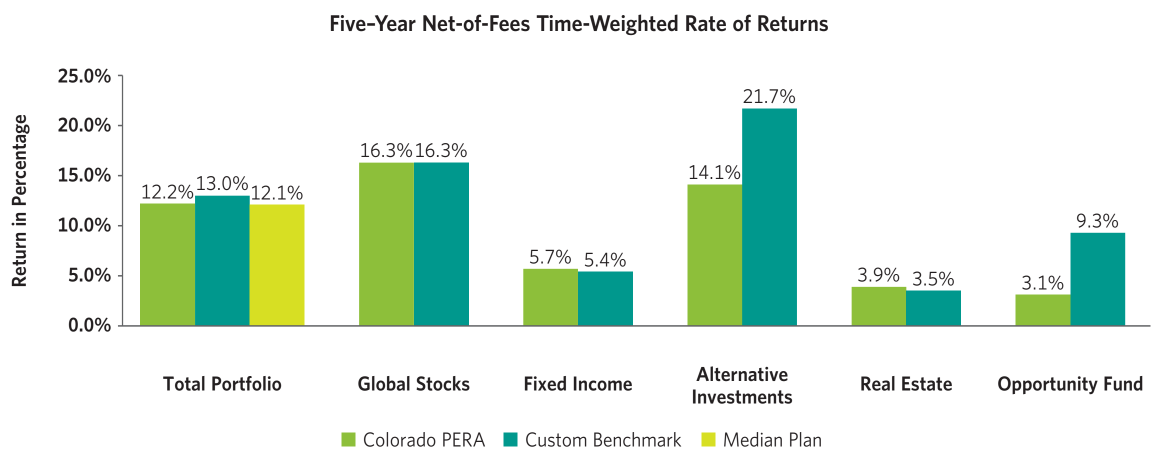
[4] A market value weighted aggregate of the benchmarks of the individual strategies included in the Opportunity Fund. Prior to January 2012, a combination of 69.1 percent of the Global Equity Custom Benchmark and 30.9 percent of the Fixed Income Custom Benchmark. Beginning January 1, 2008 and prior to January 2011, a combination of 51.8 percent DJ U.S. Total Stock Market Index (replaced the DJ Wilshire 5000 in 2009), 18.1 percent MSCI ACWI ex-U.S. Index, and 30.1 percent Fixed Income Custom Benchmark.

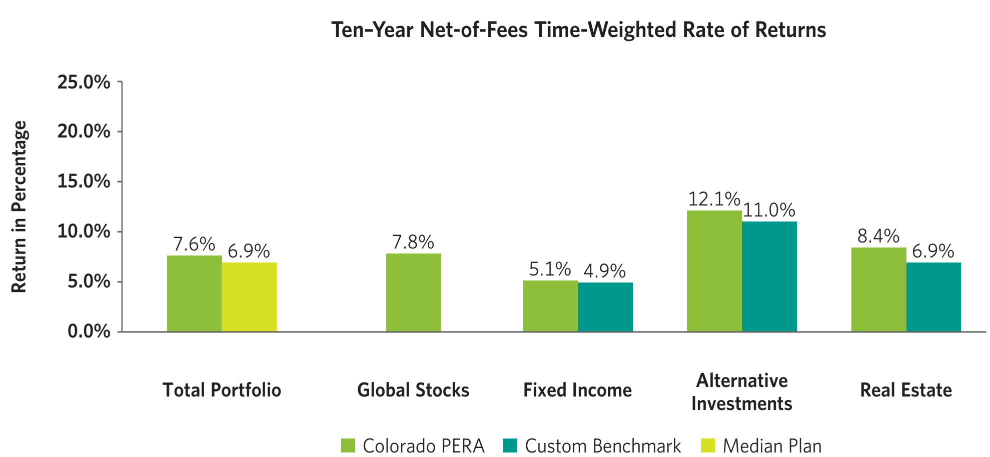
Schedule of Investment Results

Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds
As of December 31, 2013

Hewitt EnnisKnupp, Inc., the Board's Investment Performance consultant, provides the investment returns based on data made available by the fund's custodian, The Northern Trust Company. Listed below are the three–, five–, and ten–year net-of-fees time-weighted rates of return for the total fund and each asset class and their respective benchmarks.







Evaluation

Hewitt EnnisKnupp, Inc. and The Northern Trust Company (Northern Trust) are retained by PERA to evaluate fund performance. Hewitt EnnisKnupp, Inc. is also used for the real estate portfolio performance evaluation and industry comparisons. In their analysis, Hewitt EnnisKnupp, Inc. and Northern Trust include all investments within the portfolio, including cash and accrued income. They also compute the annual rates of return. In order to provide fund returns inclusive of all asset classes, performance calculations were prepared using time-weighted rates of return.

Asset Allocation

PERA's long-term strategic asset allocation policy sets forth specific portfolio targets. Asset allocation targets effective during 2013, approved by the Board in 2010, are as follows: global equity 56 percent, fixed income 25 percent, alternative investments 7 percent, real estate investments 7 percent, and opportunity fund 5 percent.

Total Portfolio Results

PERA adopted a policy benchmark, which is a passive representation of the asset allocation policy, as of April 1, 2004. For the year ended December 31, 2013, PERA's total fund returned 15.6 percent compared to the policy benchmark return of 16.2 percent. For the three- and five-year periods ending December 31, 2013, PERA's total fund returned 9.9 percent and 12.2 percent, respectively, compared to 10.1 percent and 13.0 percent, respectively, for the policy benchmark for these periods.

For the year ended December 31, 2013, the total fund returned 15.6 percent, compared to the BNY Mellon Performance and Risk Analytics and Investment Metrics Median Public Fund Universe return of 15.5 percent. As of December 31, 2013, the BNY Mellon Performance and Risk Analytics and Investment Metrics Median Public Fund Universe measure comprises 84 public pension funds with assets of approximately $1.3 trillion. For the three- and five-year periods ending December 31, 2013, the BNY Mellon Performance and Risk Analytics and Investment Metrics Median Public Fund Universe returned 9.4 percent and 12.1 percent on an annualized basis, respectively. PERA's 10-year annualized rate of return was 7.6 percent compared to the BNY Mellon Performance and Risk Analytics and Investment Metrics Median Public Fund Universe return of 6.9 percent.

Global Stocks

The U.S. stock market surged in 2013, providing investors with a gain of over 30 percent. Outside the U.S., developed market stock returns were also strong, while emerging market stock returns were more subdued. U.S. stocks rose on the back of an improving economy and unprecedented stimulus from the U.S. Federal Reserve (Fed). The market sidestepped the "fiscal cliff" at the start of the year, a government shutdown, and a jump in yields on long-term government bonds. As fears receded throughout the year, investors gained confidence and bid up stock prices. Investors' willingness to pay more for each dollar of a company's earnings resulted in rapid stock price appreciation. The price-to-earnings ratio (P/E) of the S&P 500 swelled from 14 times companies' earnings over the past 12 months at the start of 2013 to nearly 17 times by year-end.

After years of notching far slower growth than many emerging market counterparts, some leading developed economies finally gained momentum. During the year, central banks in the U.S., Japan, and Europe added money to their economies, held interest rates low, and promised to continue to do so. This bid to energize a recovery provided support for stock prices. On the other hand, emerging market stocks underperformed the rest of the world in 2013. As the global economy's uneven recovery inched forward in 2013, fast-growing emerging markets lost pace, even as developed nations gained strength. In emerging markets such as Brazil and India, domestic demand softened and exports sagged as interest rates were boosted to stem inflation.

In 2013, PERA's global equity portfolio returned 24.6 percent, outperforming the asset class benchmark's return of 23.7 percent. PERA's three-year annualized global equity portfolio total return was 12.3 percent, exceeding the benchmark return of 11.7 percent. The five-year annualized total return for PERA's global equity portfolio matched the benchmark return of 16.3 percent.

Fixed Income

The bond market started 2013 concerned about the impact of the payroll tax increase on consumer spending and slower growth caused by a sharp reduction in government spending from sequestration. However, first quarter growth held up better than some had feared. U.S. equities advanced sharply, setting the backdrop for strong performance of domestic corporate credit while interest rates drifted slightly higher.

The second quarter was difficult for the bond market as the market focus shifted towards the outlook for monetary policy. In May, the Fed signaled to the market their expectation that they would begin to slow the pace of monthly asset purchases, known as "tapering," in the later part of 2013. This ignited a broad-based sell-off in most fixed income assets. Market liquidity deteriorated and U.S. Treasury yields rose significantly driving fixed income returns into negative territory. Yields on corporate, mortgage, and emerging market debt rose even faster. The bond market turned its focus towards the fiscal policy debate and government shut-down in October. Interest rates traded in a relatively narrow range as the debate continued, while corporate bonds continued to perform relatively better, ignoring increased volatility in the equity markets.

Once the fiscal debate concluded, incoming economic data showed greater strength than expected and the Fed announced the start of tapering at the December Federal Open Market Committee meeting.

When it was all said and done, 2013 was only the third year in which the total return for the broad U.S. fixed income market was negative since the inception of the Barclay's indices in 1976. U.S. Treasury bonds returned negative 2.7 percent for the year. On the other end of the spectrum, high yield was the best performing sector, returning 7.4 percent, echoing the strength of the equity markets. Emerging market debt struggled throughout the year, returning negative 4.1 percent. PERA's fixed income portfolio returned negative 1.7 percent during 2013, trailing the benchmark's return of negative 1.5 percent. PERA's three-year and five-year returns for the fixed income portfolio were 4.0 percent and 5.7 percent, respectively, outperforming the benchmark's returns of 3.9 percent and 5.4 percent, respectively.

Alternatives

Fueled by surging public equity markets, inexpensive and readily available leverage and plenty of investable cash on the sidelines, liquidity was the theme for private equity during 2013. Many private equity sponsors positioned their portfolio companies to take advantage of market conditions and were able to return cash back to investors. This was accomplished via several avenues including dividend recapitalizations, initial public offerings, secondary offerings in the public markets, and through merger and acquisition transactions. Very few large private equity transactions were completed last year due to the relatively high priced deal environment. Much of the private equity activity in 2013 focused on small and mid-market transactions where pricing was marginally better and where private equity sponsors could take advantage of potential synergies related to add-on acquisitions.

Regulatory reforms impacting private equity were implemented in 2013. These reforms appear to be rather benign, but affect private equity firms in different ways. Many sponsors were required to register as investment advisors or rationalize alternative assets under the Dodd-Frank Act and the Volcker Rule, while others were met with additional regulatory requirements with regard to fund formation, particularly in Europe under the European Union Alternative Investment Fund Managers Directive.

During 2013, PERA committed $535 million to ten investment opportunities, seven in the buyout category, one in the special situations category, and two in the venture capital category. PERA also sold its interest in six private equity partnerships during the year.

Performance for the asset class was positive during the year as exit valuations, driven by strong public markets and cheap financing, enhanced overall performance. Cash flow for the year was positive due to exit activity, particularly in the last two quarters of the year. The portfolio invested approximately $400 million in capital calls and received over $900 million in distributions for the year. PERA's alternative investment portfolio returned 17.6 percent in 2013 compared with the custom alternatives benchmark return of 36.0 percent. PERA's alternative portfolio returned 11.5 percent and 14.1 percent for the three– and five–year annualized periods, respectively, compared with the annualized custom benchmark returns of 18.9 percent and 21.7 percent, respectively for the same periods. Alternative investment performance tends to lag public stock market returns when the stock market has a large move. In addition, while activity such as initial public offerings and mergers and acquisitions improved during 2013, there were still limited opportunities to realize appreciation of alternative partnership investments. The alternative investment program's net, since inception internal rate of return as of December 31, 2013, was 10.4 percent compared to the custom benchmark's since inception internal rate of return of 10.4 percent.

Real Estate

The rebound in commercial real estate values is becoming increasingly broad-based. Over the year, national transaction volume across the five major property types totaled $355 billion, representing an increase of 19 percent over the previous year. Sales of hotel and office assets accelerated, while price appreciation was greatest in the retail sector. Apartment and industrial transaction volume and price appreciation moderated during the year; however, property fundamentals in these two sectors remain strong relative to other sectors. For 2013, the average transaction capitalization rate declined slightly to 6.7 percent for all properties traded over $2.5 million.

Investors continue to allocate funds to equity and debt strategies in real estate. During 2013 foreign investors significantly increased their U.S. property investment, collectively expanding acquisitions by 47 percent to $39 billion, with the most significant portion coming from investors in Canada, China, Australia, and Germany. Pricing and financing for core real estate assets in top-tier markets remained highly competitive, causing yields to compress despite upward pressure on risk-free interest rates. Increased desire for risk and improved fundamentals have led core investors to pursue assets in secondary and tertiary markets, as well as to consider more value-added and opportunistic strategies in primary markets.

The long-term commercial mortgage rate increased in 2013 and CMBS (commercial mortgage-backed securities) issuance increased by 78 percent over 2012, reaching $86 billion. Underwriting has generally become more flexible, however, loan-to-value ratios still remain low relative to the previous cycle.

In 2013, the real estate portfolio had a total return of 12.9 percent, compared to its custom benchmark of 13.4 percent. The real estate portfolio returned 13.1 percent and 3.9 percent for the three- and five-year annualized periods, respectively, compared to the custom benchmark returns of 13.2 percent and 3.5 percent, respectively. As of December 31, 2013, real estate was principally comprised of U.S. private equity investments.

Opportunity Fund

As of December 31, 2013, PERA's opportunity fund was comprised of investments in timber, commodities, risk parity strategies, and tactical opportunities strategies.

Global timber markets showed improving trends for both supply and demand during 2013. Domestic demand increased as the U.S. housing market continued to show signs of strength and timber mills reopened. International demand for timber, particularly from Asia, remained strong, which aided properties located in the western U.S. and New Zealand. The mountain pine beetle infestation in western Canada is beginning to impact the supply of available timber. The U.S. imports one-third of its timber needs from Canada and the reduction in supply will result in greater demand from U.S. timberlands. The commodity markets continued to exhibit extreme volatility during the year. The energy sector was characterized by increasing supply, but the demand for energy increased as well, keeping the amount of excess capacity in a tight range. The precious metals sector suffered from a subdued inflation outlook and a reduction in geopolitical risk and base metals declined because of excess supply and weak demand. For the first time in three years, 2013 provided favorable global weather conditions, which resulted in record harvests for several agricultural commodities. Risk parity strategies reported negative performance for the year and were mainly impacted by the market's reaction in May and June to the possibility that the Fed would begin reducing its asset purchases. The resulting significant increase in interest rates caused valuations for risk assets such as fixed income and commodities to decline.

In 2013, PERA's opportunity fund portfolio returned 0.0 percent compared to its custom benchmark return of 5.4 percent. The underperformance for the current year is principally due to the negative performance of the risk parity strategies as discussed in the paragraph above. In addition, we would generally expect the risk parity strategies to underperform in markets where stocks have strong positive returns. The opportunity fund's annualized three- and five-year returns were 0.4 percent and 3.1 percent compared to its custom benchmark return of 3.2 percent and 9.3 percent, respectively.

Profile of Investments in Colorado

Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds
As of December 31, 2013
(In Thousands of Dollars)

	FAIR VALUE
Common stock of companies headquartered in Colorado	$97,441
Funds under management of Colorado companies[1]	96,234
Real estate equity	125,761
Committed to future funding	78,080
PERA portion of general partnerships investing in Colorado companies[2]	125,207
Bonds and notes of entities headquartered in Colorado	50,169
Total	$572,892

[1] General Partners based outside of Colorado.
[2] Venture capital partnerships and private placements domiciled in Colorado.

Largest Stock Holdings by Fair Value

Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds
As of December 31, 2013
(In Thousands of Dollars)

	SHARES	FAIR VALUE
Apple Inc.	558,220	$313,223
Google Inc.	211,576	237,115
Exxon Mobil Corp.	2,099,273	212,446
Chevron Corp.	1,370,242	171,157
Microsoft Corp.	4,094,974	153,275
Novartis AG	1,881,141	150,601
JP Morgan Chase & Co.	2,540,743	148,583
Pfizer Inc.	4,793,809	146,834
Vodaphone Group	36,668,018	143,933
Roche Holdings AG Genusscheine NPV	486,830	136,412

The top ten holdings do not include commingled funds.
A complete list of holdings is available upon request.

Largest Bond Holdings by Fair Value

Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds
As of December 31, 2013
(In Thousands of Dollars)

	PAR VALUE	INCOME RATE	MATURITY DATE	FAIR VALUE
US Treasury Notes	$309,000	2.750%	11/30/2016	$326,647
US Treasury Notes	200,000	2.500%	8/15/2023	192,062
US Treasury Notes	155,000	0.625%	4/30/2018	149,478
US Treasury Notes	138,000	1.875%	6/30/2015	141,342
US Treasury Notes	130,000	0.750%	6/30/2017	128,629
US Treasury Notes	125,000	0.750%	12/31/2017	122,227
US Treasury Notes	115,000	2.625%	1/31/2018	120,930
US Treasury Notes	114,000	2.750%	2/15/2019	119,451
US Treasury Notes	105,000	2.250%	7/31/2018	108,240
US Treasury Notes	109,903	0.750%	3/31/2018	106,778

The top ten holdings do not include commingled funds.
A complete list of holdings is available upon request.

(In Thousands of Dollars)

Overview

PERA established the Voluntary Investment Program (PERAPlus 401(k) Plan) on January 1, 1985, under Section 401(k) of the Internal Revenue Code. The Defined Contribution Retirement Plan (DC Plan) was established January 1, 2006, as an Internal Revenue Code § 401(a) governmental profit-sharing plan. On July 1, 2009, PERA assumed the administrative and fiduciary responsibility for the State of Colorado Deferred Compensation Plan (PERAPlus 457 Plan). PERA publishes an Annual Report for the PERAPlus 401(k), the DC Plan, and the PERAPlus 457 Plan and distributes it to all plan participants.

The PERAPlus 401(k) Plan includes voluntary contributions made by employees of PERA-affiliated employers in the State, School, Local Government, Judicial, and Denver Public Schools Division Trust Funds. These contributions are entirely separate from those that members make to the defined benefit plan each month. On December 31, 2013, the PERAPlus 401(k) Plan had a net position of $2,509,750 and 68,691 accounts, representing an increase of 19.2 percent in the net position and a 1.2 percent decrease in the number of participants from December 31, 2012, respectively.

The DC Plan offers a defined contribution alternative to the PERA defined benefit plan for new state employees hired on or after January 1, 2006, and certain community college employees hired on or after January 1, 2008. On December 31, 2013, the DC Plan had a net position of $113,500 and 4,719 accounts, representing increases of 36.3 percent in the net position and 8.2 percent in the number of participants from December 31, 2012, respectively.

The PERAPlus 457 Plan includes voluntary contributions made by employees working for a PERA-affiliated employer that have also affiliated with the PERAPlus 457 Plan. The employees of some employers that had affiliated with the 457 Plan prior to July 1, 2009, and were not affiliated with PERA, remain eligible to contribute. On December 31, 2013, the PERAPlus 457 Plan had a net position of $643,602 and 17,462 accounts, representing an increase of 18.2 percent in the net position and a .04 percent decrease in the number of participants from December 31, 2012, respectively.

PERAPlus 401(k) Plan Year-End Statistics

YEAR	NET POSITION	NUMBER OF ACCOUNTS
2004	$1,204,725	73,634
2005	1,296,998	72,867
2006	1,522,244	72,707
2007	1,730,930	72,832
2008	1,303,807	72,353
2009	1,674,861	75,819
2010	1,902,325	73,860
2011	1,891,347	71,620
2012	2,105,675	69,559
2013	2,509,750	68,691

DC Plan Year-End Statistics

YEAR	NET POSITION	NUMBER OF ACCOUNTS
2006	$595	225
2007	2,547	489
2008	4,996	864
2009	37,475	3,039
2010	53,384	3,479
2011	63,597	4,029
2012	83,267	4,362
2013	113,500	4,719

PERAPlus 457 Plan Year-End Statistics

YEAR	NET POSITION	NUMBER OF ACCOUNTS
2009	$393,352	18,007
2010	458,881	18,215
2011	483,965	17,821
2012	544,518	17,469
2013	643,602	17,462

Outline of Investment Policies

Objectives

The Board is responsible for approving an appropriate range of investments that addresses the needs of the participants in the Plans. The objectives of selecting the investment options under each Plan are to:

- Provide a wide range of investment opportunities in various asset classes so as to allow for diversification and to cover a wide risk/return spectrum.
- Maximize returns within reasonable and prudent levels of risk.
- Provide returns comparable to returns for similar investment options.
- Control administrative and management costs to the plan and participants.

Responsibilities

The Investment Advisory Committee (IAC), a committee of internal management staff, monitors and evaluates the investment asset classes and the underlying portfolio asset mix and allocation range for each investment option. The IAC also monitors and evaluates the portfolio managers and other service providers. RVK serves as consultant to the IAC and the Board.

Recommendations of the IAC are presented to PERA's Executive Director and Chief Investment Officer. Upon their concurrence, the recommendations are presented to the Board for consideration if required by the investment policy.

The Board is responsible for:

- The oversight of the Plans and portfolio composition.
- Approving changes to the plan documents.

- Approving the investment policies and amendments thereto.
- Accepting or rejecting the IAC's recommendations with regard to policies, objectives, specific investment options, and service providers.

PERAdvantage Investment Options

The PERAdvantage investments provide diversification within each of the six primary funds, one additional specialized fund, and 10 target retirement date funds. The PERAdvantage investments simplify choices, increase diversification, and help participants identify investments based on how the fund invests the money rather than name familiarity. In addition, the Plans also provide a self-directed brokerage account for participants to select their own investments.

Participants invest assets in one or more of the following investments:

Primary Investment Options

- **PERAdvantage Capital Preservation Fund**
  The fund seeks to provide consistent investment income with a stable net asset value primarily by investing in a portfolio of high quality, medium-term fixed income securities. This fund invests in securities issued by the U.S. Government or one of its agencies, including agency mortgage bonds, as well as high-grade corporate bonds. The fund is managed by Great-West Capital Management, LLC, a federally registered investment advisor and a wholly-owned subsidiary of Great-West Life & Annuity Insurance Company.

- **PERAdvantage Fixed Income Fund**
  The fund seeks to generate income, preserve capital, and provide long-term capital appreciation by investing in a diversified portfolio of fixed-income instruments of varying maturities. The fund combines actively managed core plus and passive core styles. The fund is managed by PIMCO (targeted at 75 percent of the portfolio) and BlackRock (targeted at 25 percent of the portfolio).

- **PERAdvantage Real Return Fund**
  The fund seeks to provide broad exposure to real assets and Treasury Inflation Protected Securities (TIPS) and to produce a return over a full market cycle that exceeds the rate of inflation. The fund invests in U.S. TIPS, Real Estate Investment Trusts (REITs), global commodity and natural resource stocks, and commodities. State Street Global Advisors manages the fund.

- **PERAdvantage U.S. Large Cap Stock Fund**
  The fund seeks to provide long-term capital appreciation and dividend income primarily by investing in the common stock of companies located in the United States with large market capitalizations similar to those found in the Russell 1000™ Index. The fund combines core, growth, and value investment styles, and active and passive management styles. The fund is managed by PERA (targeted at 70 percent of the portfolio), LSV Asset Management (targeted at 15 percent of the portfolio), and Winslow Capital Management (targeted at 15 percent of the portfolio).

- **PERAdvantage International Stock Fund**
  The fund seeks to provide long-term capital appreciation and dividend income primarily by investing in the common stock of companies located outside the United States. The fund invests in a wide array of international stocks similar to those found in the MSCI All Country World (ACWI) ex-U.S. Index. The fund combines growth and value investment styles, and active and passive management styles. The fund is managed by Harding Loevner (targeted at 35 percent of the portfolio), Dodge & Cox (targeted at 35 percent of the portfolio), and BlackRock (targeted at 30 percent of the portfolio).

- **PERAdvantage U.S. Small and Mid Cap Stock Fund**
  The fund seeks to provide long-term capital appreciation and dividend income primarily by investing in the common stock of companies located in the United States with small and mid-market capitalizations similar to the securities included in the Russell 2500™ Index. The fund combines growth and value investment styles and active and passive management styles. The fund is managed by TimesSquare Capital Management (targeted at 35 percent of the portfolio), Dimensional Fund Advisors (targeted at 35 percent of the portfolio), and BlackRock (targeted at 30 percent of the portfolio).

Additional Investment Options

- **PERAdvantage Target Retirement Date Funds**
  There are ten funds, in five-year increments, with varying asset mixes and risk levels based on expected retirement date. Each of the funds is invested in the corresponding BlackRock LifePath® Index Target Retirement Date fund. These funds use passive management strategies and become more conservative as the retirement date approaches. BlackRock manages the funds.

- **PERAdvantage SRI Fund**
  The fund seeks to invest in a portfolio of developed market stocks screened on environmental, social, and governance (ESG) factors, and U.S. government fixed income securities. The equity portion seeks to replicate the return of the MSCI World ESG Index. The fixed income portion invests in U.S. Government securities, and may invest a significant portion or all of its assets in mortgage-backed securities. The fund is managed by Northern Trust Investments (targeted at 60 percent of the portfolio), and J.P. Morgan (targeted at 40 percent of the portfolio).

- **TD Ameritrade Self-Directed Brokerage Account**
  This account allows selection from numerous mutual funds and other types of securities, such as stocks and bonds, for an additional fee. Investment in the self-directed brokerage account is offered through TD Ameritrade, a Division of TD Ameritrade, Inc.

2013 Changes

Effective January 1, 2013, the underlying portfolio managers of the PERAdvantage SRI Fund changed. Two new portfolio managers, Northern Trust Investments, Inc. and J.P. Morgan Investment Management, Inc., replaced PAX World. The new managers were added at the recommendation of the IAC and approved by the Board.

Loans

Participants in the PERAPlus 401(k) and PERAPlus 457 Plans may access their funds through loans as allowed under plan policy and the Internal Revenue Service. The DC Plan prohibits participant loans.

Administrative Fees

Plan administrative fees pay for recordkeeping, custodial services, consulting, and internal PERA administrative expenses.

The administrative fee consists of a flat $1.00 per month per participant per plan and an asset-based fee of up to 0.14 percent on each underlying PERAdvantage portfolio. There is a 0.06 percent plan administrative fee on the self-directed brokerage account. Investments with revenue sharing reduce the asset-based administrative fee by the amount of such revenue sharing.

Voluntary Investment Program, Defined Contribution Retirement Plan, and Deferred Compensation Plan (Plans) Schedule of Investment Results

FUND/BENCHMARK	2013	2012
PERAdvantage Capital Preservation Fund	2.1%	2.0%
Hueler Stable Value Index (Equal Wtd Avg)	1.8%	2.3%
PERAdvantage Fixed Income Fund	(2.1%)	8.6%
Barclays US Agg Bond Index	(2.0%)	4.2%
PERAdvantage Real Return Fund	(6.0%)	7.3%
70% SSgA Real Asset Strategy[1]/30% Barclays US TIPS Index	(5.8%)	7.6%
PERAdvantage U.S. Large Cap Stock Fund	34.3%	15.7%
Russell 1000™ Index	33.1%	16.4%
PERAdvantage International Stock Fund	18.6%	19.8%
MSCI ACW Ex USA Index (Net)	15.3%	16.8%
PERAdvantage U.S. Small and Mid Cap Stock Fund	40.6%	19.4%
Russell 2500™ Index	36.8%	17.9%
PERAdvantage SRI Fund	14.2%	11.6%
SRI Fund Custom Index[2]	14.7%	11.3%
PERAdvantage Income Fund	6.5%	8.4%
BlackRock LifePath® Retirement Index	6.7%	8.6%
PERAdvantage 2015 Fund	7.6%	9.5%
BlackRock LifePath® 2015 Index	7.8%	9.6%
PERAdvantage 2020 Fund	10.1%	10.8%
BlackRock LifePath® 2020 Index	10.3%	11.0%
PERAdvantage 2025 Fund	12.1%	12.0%
BlackRock LifePath® 2025 Index	12.4%	12.1%
PERAdvantage 2030 Fund	14.0%	13.1%
BlackRock LifePath® 2030 Index	14.3%	13.1%
PERAdvantage 2035 Fund	15.7%	14.0%
BlackRock LifePath® 2035 Index	16.0%	14.0%
PERAdvantage 2040 Fund	17.2%	14.8%
BlackRock LifePath® 2040 Index	17.6%	14.8%
PERAdvantage 2045 Fund	18.7%	15.6%
BlackRock LifePath® 2045 Index	19.1%	15.6%
PERAdvantage 2050 Fund	20.0%	16.5%
BlackRock LifePath® 2050 Index	20.5%	16.3%
PERAdvantage 2055 Fund	21.2%	17.2%
BlackRock LifePath® 2055 Index	21.6%	17.1%

Performance is net of management and administrative fees. Performance is calculated using Net Asset Values (NAV). All performance is calculated by R.V. Kuhns & Associates, Inc.

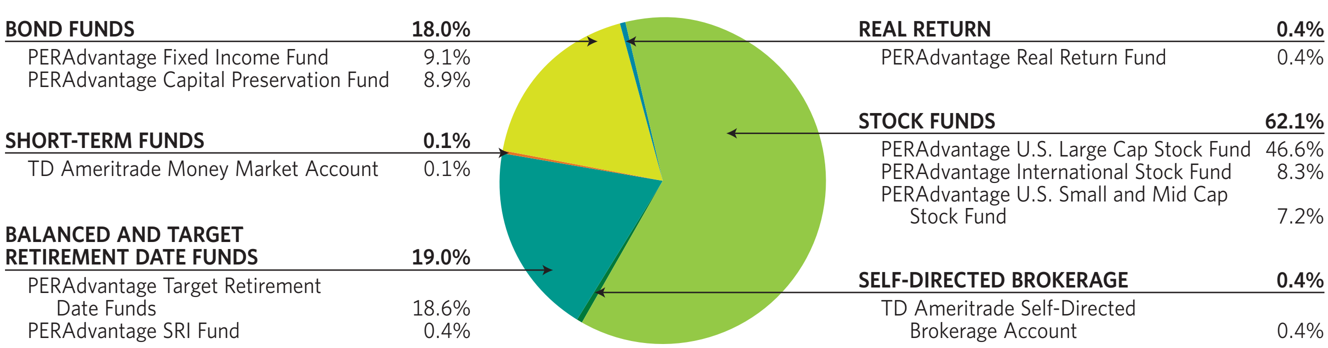
[1] The SSgA Real Asset Strategy Index consists of 25 percent Barclays Capital U.S. Treasury Inflation Protected Securities Index, 20 percent Dow Jones U.S. Select REIT Index, 20 percent DJ-UBS Roll Select Commodity Index, 35 percent S&P Global LargeMidCap Commodity and Resources Index. Prior to December 1, 2012, the DJ-UBS Roll Select Commodity Index portion of the benchmark was the DJ-UBS Commodity Total Return Index.

[2] The SRI Fund Custom Index consists of 60 percent MSCI World ESG Index (Net) and 40 percent Barclays U.S. Government Index. Prior to January 1, 2013, the benchmark consisted of 60 percent S&P 500 Index and 40 percent Barclays U.S. Aggregate Index.

Voluntary Investment Program Investment Summary
(In Thousands of Dollars)

	FAIR VALUE DECEMBER 31, 2013	PERCENT OF TOTAL FAIR VALUE 2013
PERAdvantage Capital Preservation Fund	$216,645	8.9%
PERAdvantage Fixed Income Fund	222,669	9.1%
PERAdvantage Real Return Fund	9,007	0.4%
PERAdvantage U.S. Large Cap Stock Fund	1,136,118	46.6%
PERAdvantage International Stock Fund	203,303	8.3%
PERAdvantage U.S. Small and Mid Cap Stock Fund	176,199	7.2%
PERAdvantage SRI Fund	9,387	0.4%
PERAdvantage Income Fund	58,851	2.4%
PERAdvantage 2015 Fund	66,298	2.7%
PERAdvantage 2020 Fund	86,292	3.5%
PERAdvantage 2025 Fund	77,116	3.2%
PERAdvantage 2030 Fund	57,493	2.4%
PERAdvantage 2035 Fund	49,475	2.0%
PERAdvantage 2040 Fund	29,020	1.2%
PERAdvantage 2045 Fund	16,222	0.7%
PERAdvantage 2050 Fund	8,010	0.3%
PERAdvantage 2055 Fund	5,749	0.2%
TD Ameritrade Money Market Account	3,108	0.1%
TD Ameritrade Self-Directed Brokerage Account	9,627	0.4%

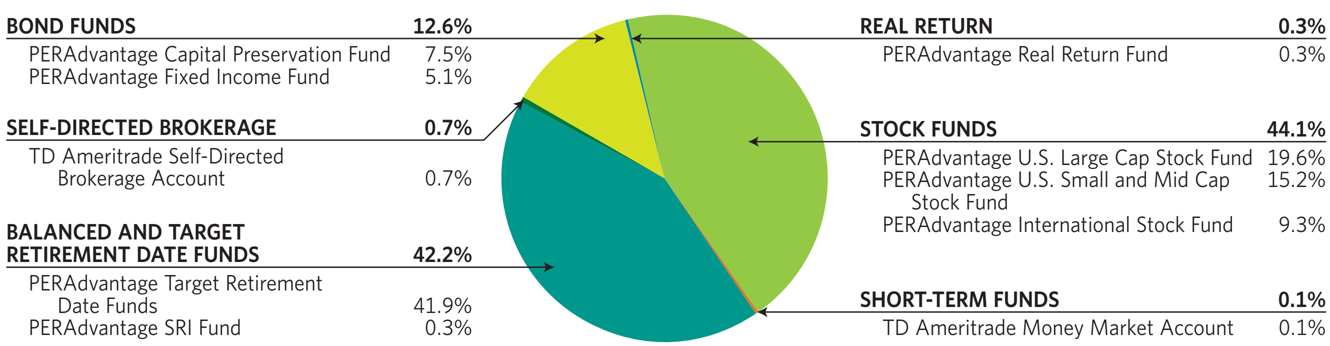
Asset Allocation for Voluntary Investment Program (PERAPlus 401(k) Plan)
As of December 31, 2013



Defined Contribution Retirement Plan Investment Summary
(In Thousands of Dollars)

	FAIR VALUE DECEMBER 31, 2013	PERCENT OF TOTAL FAIR VALUE 2013
PERAdvantage Capital Preservation Fund	$8,375	7.5%
PERAdvantage Fixed Income Fund	5,650	5.1%
PERAdvantage Real Return Fund	332	0.3%
PERAdvantage U.S. Large Cap Stock Fund	21,568	19.6%
PERAdvantage International Stock Fund	10,321	9.3%
PERAdvantage U.S. Small and Mid Cap Stock Fund	16,806	15.2%
PERAdvantage SRI Fund	386	0.3%
PERAdvantage Income Fund	1,720	1.5%
PERAdvantage 2015 Fund	3,306	3.0%
PER Advantage 2020 Fund	3,499	3.2%
PERAdvantage 2025 Fund	4,007	3.6%
PERAdvantage 2030 Fund	5,157	4.6%
PERAdvantage 2035 Fund	5,303	4.8%
PERAdvantage 2040 Fund	6,483	5.8%
PERAdvantage 2045 Fund	9,036	8.1%
PERAdvantage 2050 Fund	6,681	6.0%
PERAdvantage 2055 Fund	1,410	1.3%
TD Ameritrade Money Market Account	125	0.1%
TD Ameritrade Self-Directed Brokerage Account	817	0.7%

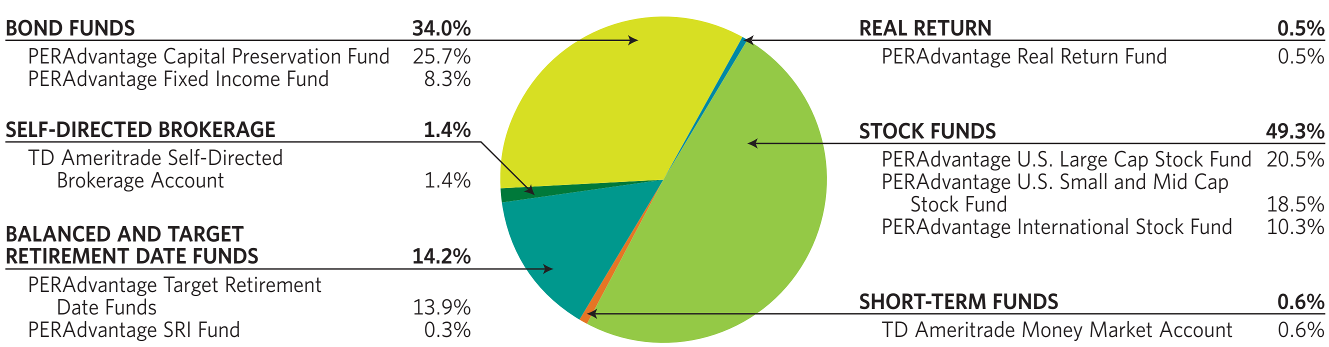
Asset Allocation for Defined Contribution Retirement Plan (DC Plan)
As of December 31, 2013



Deferred Compensation Plan Investment Summary
(In Thousands of Dollars)

	FAIR VALUE DECEMBER 31, 2013	PERCENT OF TOTAL FAIR VALUE 2013
PERAdvantage Capital Preservation Fund	$161,730	25.7%
PERAdvantage Fixed Income Fund	52,242	8.3%
PERAdvantage Real Return Fund	3,092	0.5%
PERAdvantage U.S. Large Cap Stock Fund	129,071	20.5%
PERAdvantage International Stock Fund	65,091	10.3%
PERAdvantage U.S. Small and Mid Cap Stock Fund	116,673	18.5%
PERAdvantage SRI Fund	1,800	0.3%
PERAdvantage Income Fund	11,738	1.9%
PERAdvantage 2015 Fund	13,152	2.1%
PERAdvantage 2020 Fund	15,870	2.5%
PERAdvantage 2025 Fund	15,449	2.5%
PERAdvantage 2030 Fund	10,493	1.7%
PERAdvantage 2035 Fund	9,379	1.5%
PERAdvantage 2040 Fund	5,786	0.9%
PERAdvantage 2045 Fund	2,662	0.4%
PERAdvantage 2050 Fund	1,178	0.2%
PERAdvantage 2055 Fund	1,529	0.2%
TD Ameritrade Money Market Account	3,889	0.6%
TD Ameritrade Self-Directed Brokerage Account	9,110	1.4%

Asset Allocation for Deferred Compensation Plan (PERAPlus 457 Plan)
As of December 31, 2013



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1301 Pennsylvania Street
Denver, CO 80203-5011

RE: ACTUARIAL CERTIFICATION OF DEFINED BENEFIT PLANS AND HEALTH CARE TRUST FUNDS

Dear Members of the Board:

Colorado PERA's basic financial goal is to establish contributions which, as a percentage of payroll, remain level for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

The most recent valuations are based on the plan provisions and assumptions in effect on December 31, 2013. In completing the valuation of these systems, Cavanaugh Macdonald Consulting, LLC (CMC) relied on membership and financial data provided by Colorado PERA. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. We have not audited this data, but we have reconciled the data used in the prior year's valuation with this current valuation data.

The 2013 valuation results reflect revised economic assumptions that were adopted by the Board of Trustees on November 15, 2013 and January 17, 2014, to be effective with the December 31, 2013 actuarial valuation. The economic assumption changes are as follows:

- The investment rate of return assumption was lowered from 8.00% to 7.50%.
- The price inflation assumption was lowered from 3.50% to 2.80%.
- The wage inflation assumption was lowered from 4.25% to 3.90%.

Other assumptions changes made with the December 31, 2013 actuarial valuation are as follows:

- Initial health care costs for PERACare enrollees who are age 65 and older, and do not have Medicare Part A, have been updated to reflect the change in costs for the 2014 plan year.
- The assumed rates of inflation for health care costs for Medicare Part A premiums have been revised to reflect the current expectation of future increases.
- The utilization rates for the No Part A subsidy of both retirees and their spouses have been revised.

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In our opinion, the assumptions are internally consistent and produce results which are reasonable in the aggregate. We also believe the assumptions and actuarial methods meet the requirements of Governmental Accounting Standards Board (GASB) Statements No. 25 and No. 43.

In addition, there was a change in the main provisions for the Health Care Trust Funds. The change was as follows:

- Effective January 1, 2014, PERACare no longer participates in the Centers for Medicare & Medicaid Services' (CMS) Retiree Drug Subsidy Program. PERACare enrollees participating in the self-insured Medicare supplement plans and the Medicare HMO plan offered by Rocky Mountain Health Plans now receive their prescription drug benefits through a Medicare Prescription Drug Plan (PDP). As the Medicare Part D subsidies implicit in the lower costs for PDPs may be recognized in the liability under GASB Statements No. 43 and No. 45, the liability associated with the premium subsidies funded by estimated RDS receipts has been eliminated.

CMC updated the following schedules for the December 31, 2013, CAFR:

FINANCIAL SECTION

- Yearly ARC Deficiency
- Net Pension Obligation / Net OPEB Obligation for all Funds
- Average Monthly Benefit
- Actuarial Statistics
- Funded Ratio, Unfunded Actuarial Accrued Liability and Annual Required Contributions for all Funds using 6.0%, 7.0%, 7.5%, 8.0% and 9.0% investment assumptions
- Current Year Actuarial Gains / (Losses)
- Funded Ratios
- Defined Benefit Pension Trust Funds Changes in Unfunded Actuarial Accrued Liabilities
- Required Supplementary Information - Schedule of Funding Progress
- Required Supplementary Information - Schedule of Employer Contributions and Other Contributing Entities
- Notes to Required Supplementary Information

ACTUARIAL SECTION

- Schedule of Retirees and Beneficiaries Added to and Removed from the Benefit Payroll
- Member – Retiree Comparison – All Division Trust Funds
- Schedule of Members in Valuation
- Solvency Test
- Unfunded Actuarial Accrued Liabilities (UAAL) – All Division Trust Funds
- Schedule of Gains and Losses in Accrued Liabilities - All Division Trust Funds
- Schedule of Computed Employer Contribution Rates for Fiscal Years Beginning in 2015
- Schedule of Active Member Valuation Data

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STATISTICAL SECTION

- Member and Benefit Recipient Statistics
- Schedule of Average Retirement Benefits Payable
- Colorado PERA Benefit Payments - All Division Trust Funds
- Benefit Payments by Decile
- Current Average Monthly Benefit by Year of Retirement
- Schedule of Retirees and Survivors by Types of Benefits
- Schedule of Average Benefit Payments

Colorado PERA pension divisions have a funded ratio of 61% based on the Actuarial Value of Assets and 65% based on the Market Value of Assets. For the health care trust funds combined, the funded ratios are 19% on an actuarial value basis and 20% on a market value of assets basis.

The employer contribution rate, together with the anticipated future employee growth and service purchase transfers, is sufficient to eventually finance the PERA Health Care Trust Fund and the DPS Health Care Trust Fund benefits in accordance with GASB 43 and 45.

Considering the offsets of PCOP Credits as a percentage of payroll, applicable to the Denver Public Schools Division (DPS) only, the DPS employer contribution rate is currently sufficient to finance the promised pension benefits and eventually meet the required contribution levels under GASB 25 and 27. Considering the addition of the AED and SAED contributions and projected reductions in liability due to benefit structure changes for newer hires, the State and School Divisions' employer contribution rates are expected to be sufficient to finance the promised benefits. The total employer contributions, combined with projected reductions in liability due to benefit structure changes for newer hires, are expected to fund the Local Government and Judicial Divisions.

It should be noted that the results of the December 31, 2013, valuation combined with financial projections of all divisions reflecting anticipated growth in active membership indicate that the goal of funding 100% of the accrued liability under the PERA benefit structural changes contained in SB 10-001, which is a much stronger position than required to meet current GASB standards, is achievable, within a projection period of 35 years with the exception of the Judicial Division. The Judicial Division is projected to take a longer period to reach full-funding, absent favorable actuarial experience in the future. It must be noted that projections provide trends in financial measurements, not absolute results. Based on the expected actuarial experience, the trends for all divisions are positive.

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We certify that this valuation was performed in accordance with standards of practice and by qualified actuaries as prescribed by the American Academy of Actuaries and the Actuarial Standards Board. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. All of the consultants listed below have experience in performing valuations for large statewide public retirement systems.

Sincerely,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

Patrice A. Beckham, FSA, FCA, EA, MAAA
Principal and Consulting Actuary

Eric H. Gary, FSA, FCA, MAAA
Chief Health Actuary

Edward J. Koebel, FCA, EA, MAAA
Principal and Consulting Actuary

TJC/PAB/EJK/EHG:kc

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Actuarial Methods

The Colorado PERA Board of Trustees (Board) is responsible for the actuarial methods and assumptions used in actuarial valuations in accordance with C.R.S. § 24-51-204(5). The Board retains an external actuary, currently Cavanaugh Macdonald Consulting, LLC, to perform annual actuarial valuations and projections as well as periodic experience studies to review the actuarial assumptions and actual experience. The most recent experience study concluded in October 2012 with recommendations brought to the Board in November 2012. Although dependent on the professional expertise and advice of the actuary performing the periodic studies, the Board is ultimately responsible for the actuarial methods and assumptions used in annual valuations and funding projections. Through formal action, the Board updates, replaces, or adopts new methods and assumptions as is deemed necessary. In addition to annual valuations and periodic assumption reviews, the Board established the practice of conducting actuarial audits every three to five years; the last one was performed by Buck Consultants during 2009.

The ultimate cost that a defined benefit retirement plan, such as PERA, incurs is equal to the benefits paid plus expenses. Contributions to the plan and investment earnings on the assets of the plan pay for the ultimate cost.

Using the plan's schedule of benefits, the member data, and the carefully selected actuarial assumptions, the plan's actuary annually estimates the cost of the benefits to be paid. Using a particular actuarial funding method, the actuary allocates these costs and determines a systematic manner to fund future plan benefits. For PERA (as well as most public sector plans), the objective is to fund the plan in a manner that keeps contribution rates approximately level from generation to generation. The funding method best designed to keep annual costs level as a percent of covered payroll is the Entry Age Normal Cost Method, described in greater detail below.

Entry Age Normal Cost Method

Under the Entry Age Normal Cost Method, early and service retirement, termination (including the possibility of refunds), disability, and death benefits are projected for all active members. Cost factors, which are developed to produce level annual costs in each year from the age at hire (entry age) to the assumed retirement age, are applied to the projected benefits to determine the normal cost. The normal cost is the portion of the total cost of the plan allocated to the current year. Normal cost is determined only for active members currently accruing benefits; those in receipt of benefits, terminated or beyond assumed retirement age have no allocated normal cost. The actuarial accrued liability for active members is the portion of the total cost of the plan allocated to prior years.

The total actuarial accrued liability for the plan includes the actuarial accrued liability for active members, the present value of the expected benefit payments to members currently receiving benefits, and inactive members entitled to future benefits.

The effect of differences between the actuarial assumptions and the actual experience of the plan is calculated each year when the annual actuarial valuation is performed. These differences produce actuarial gains or losses that result in an adjustment of the unfunded actuarial accrued liability (UAAL).

The excess of the total actuarial accrued liability over the actuarial value of plan assets is the unfunded actuarial accrued liability. The required employer contribution, under the Entry Age Normal Cost Method, is determined by adding the normal cost and the cost to amortize the unfunded actuarial accrued liability. The required employer contribution is then expressed as a level percentage of assumed future covered payrolls.

Asset Valuation Method

In 1992, the Board adopted a method for valuing assets that recognizes a smoothed market value of assets. The smoothed market value of assets recognizes the differences between actual and expected investment experience for each year in equal amounts over a four–year period. The smoothed market value of assets excludes the Annual Increase Reserve.

Actuarial Assumptions

The determination of the actuarial accrued liability includes recognition of a number of economic and non-economic assumptions in addition to the applied actuarial methods described above.

Economic Assumptions

In November 2013, the Board voted to lower the investment rate of return assumption from 8.00 percent per year, compounded annually, net of investment expenses to 7.50 percent, compounded annually, net of investment expenses.

Each year for the past four years, the Board has participated in an actuarial assumption workshop to ensure understanding and to provide for the adoption of all economic assumptions under the guidance provided by Actuarial Standard of Practice (ASOP) No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, as prescribed by the Actuarial Standards Board. During the workshop in November 2013, the Board received presentations given by the retained actuary, Cavanaugh Macdonald, and the investment consultant, Hewitt EnnisKnupp. In addition, the Board reviewed a variety of current and projected economic and financial information prior to the meeting.

As a result of discussions regarding economic assumptions at both the November 15, 2013, and the January 17, 2014, Board meetings, the underlying economic assumptions changed effective for the December 31, 2013, actuarial valuation, as follows:

- The inflation assumption was reduced from 3.50 percent per year to 2.80 percent per year, resulting in an increase of the real rate of return assumption from 4.50 percent per year to 4.70 percent per year.
- The overall annual member payroll increase was changed from 4.25 percent to 3.90 percent per year.

Exhibits A, B, C, and E show sample pay increase assumptions for individual members in 2013. The State Legislature determines pay increases for the Judicial Division, listed in Exhibit D.

Annually, the Board reviews the rate at which interest is credited to member accounts. The Board originally adopted the general policy regarding the annual review during 2006, with slight revisions to the policy details since adoption. In November 2013, the Board voted to continue the annual interest rate at 3.0 percent for interest earned during 2014.

Non-Economic Assumptions

ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations,* is followed for the selection and adoption of appropriate demographic assumptions. As a result of the most recent experience analysis, the withdrawal rates, pre- and post-retirement mortality rates, disability rates, and retirement rates for all divisions, were revised in 2012 to more closely reflect PERA's actual experience.

The probabilities of withdrawal from service (rates for the ultimate period), death-in-service, and disability are shown for sample ages in Exhibits A, B, C, D, and E. Exhibit F shows the select rates of withdrawal applicable to certain members in the first four years of employment (rates for the select period). The probabilities of age and service retirements for all divisions are shown in Exhibits G and H.

The results of the 2012 experience analysis supported the current assumption, last revised in 2009, for the State, School, and Local Government Divisions that 35 percent of the vested members who terminate will elect to withdraw their accounts while the remaining 65 percent will elect to leave their accounts in the plan to be eligible for a benefit at their retirement date. As a result, the actuary did not recommend adjustments to this assumption for these three divisions. In addition, based on findings of the experience analysis, the actuary recommended adoption of the same assumption for members in the DPS benefit structure. The assumption for the Judicial Division also was retained, which assumes that 100 percent of vested members who terminate elect to leave their contributions in the plan in order to be eligible for a benefit at their retirement date.

As a result of the 2012 experience analysis, Cavanaugh Macdonald recommended a change to a more recently published mortality table to provide PERA with a reasonable margin for improved mortality in the future. Therefore, healthy mortality assumptions for both pre- and post-retirement reflect the RP-2000 Combined Mortality Table projected with Scale AA to 2020, set back one year for males and set back two years for females, and the pre-retirement healthy mortality rates incorporate a 55 percent factor applied to male rates and 40 percent to female rates. Regarding mortality after disability retirement, the current table, RP-2000 Disability Mortality Table proved sufficient, but the adjustments were changed to a set back of two years for both males and females as a result of the 2012 experience analysis.

The recently revised mortality assumptions appropriately reflect PERA's recent and anticipated plan experience and are used to estimate the value of expected future benefit payments. Exhibits A, B, C, D, and E list the healthy pre-retirement mortality rates at sample ages and Exhibit I lists all the healthy post-retirement mortality rates and values at sample ages.

Annual Increase Assumptions

For PERA benefit structure members hired prior to January 1, 2007, and DPS benefit structure members, it is assumed that retirement, disability, and survivor benefits increase at a rate of 2.0 percent per year after payments begin and eligibility requirements for payment of the annual increase have been met. This assumption was adopted as of the December 31, 2009, actuarial valuation in recognition of changes made to the annual increase by Senate Bill 10-001.

For members in the PERA benefit structure hired on or after January 1, 2007, an Annual Increase Reserve (AIR) was established to provide increases once benefits become payable for these members. One percent of the current employer contributions submitted for these members and a certain percentage of reinstatement of service purchase dollars are transferred into the AIR to fund the current and future increases related to the AIR provisions. Pursuant to C.R.S. §24-51-1009(4), the maximum annual increase that may be awarded by the Board equals the lesser of 2.0 percent or the average of the CPI-W for each of the months during the prior calendar year. The total amount of increases paid in any year cannot exceed 10.0 percent of the total funds available in the AIR in the division from which they retire or decease. Therefore, the actuarial assumption applied to these members assumes that benefits do not increase with respect to the annual assessment of actuarial liability associated with the Division Trust Funds, since they receive annual increases only to the extent affordable in accordance with C.R.S. § 24-51-1009. This assumption was adopted as of the December 31, 2007, actuarial valuation in recognition of annual increase provisions enacted in 2006.

Held within the trust and accounted for separately, the dollars within the AIR are excluded from the division trust assets for purposes of the annual actuarial valuation. The

AIR is subject to a separate annual actuarial calculation to determine the extent of the payment, if any, of annual increases each year to eligible individuals.

Actuarial Studies

Accumulated investment income is a significant contributor to the success of a defined benefit plan, often providing between 50 to 80 percent of the total inflows over the life of a plan. The financial market's major decline in 2008 prompted the Board to pursue additional actuarial studies over the last four years to annually evaluate the appropriateness of PERA's investment return assumption in concert with other pertinent economic assumptions.

Since the series of studies performed in 2009, which included an experience analysis performed by Cavanaugh Macdonald, an actuarial audit performed by Buck Consultants, and an asset/liability modeling study conducted by Hewitt EnnisKnupp, the Board requested another experience analysis covering plan experience for the four-year period from 2008 through 2011, to provide an updated view of all economic and demographic assumptions. Cavanaugh Macdonald completed the experience analysis in October 2012, for purposes of discussion at the actuarial assumption workshop and adoption of certain assumptions, where appropriate, at the November 2012 Board meeting. At the March 21, 2014, Board meeting, the Board approved an asset/liability modeling study to be conducted by Hewitt EnnisKnupp during 2014.

The Board periodically contracts an actuarial firm, independent of the retained actuary, to conduct an actuarial audit. The primary focus of the audit is to ensure independence, accuracy, and conformity with accepted actuarial standards of practice with regard to results of the annual actuarial valuation and the appropriateness of the actuarial assumptions used to calculate those results.

Pursuant to C.R.S. § 24-51-1010, passed into law in 2006, prior to any increase in benefits, the Legislature is responsible for contracting an actuary or actuarial firm to conduct an actuarial assessment of the impact of such increase. Since there has not been a proposed increase in benefits since the passage of this legislation, the legislature has not been required to contract for such a study.

Changes Since Last Valuation

Changes in Actuarial Methods

There are no actuarial method changes reflected in the December 31, 2013, actuarial valuation since the last actuarial valuation as of December 31, 2012.

Changes in Actuarial Assumptions

Listed below are the actuarial assumption changes regarding the defined benefit pension plan adopted as of November 15, 2013, and January 17, 2014, and incorporated into the December 31, 2013, actuarial valuation:

- Investment rate of return assumption decreased from 8.00 percent per year, compounded annually, net of investment expenses to 7.50 percent per year, compounded annually, net of investment expenses.
- Price inflation decreased from 3.50 percent per year to 2.80 percent per year.
- Real rate of investment return increased from 4.50 percent per year, net of investment expenses to 4.70 percent per year, net of investment expenses.
- Wage inflation decreased from 4.25 percent per year to 3.90 percent per year.

Changes in Plan Provisions

There are no changes in plan provisions reflected in the December 31, 2013, actuarial valuation since the last actuarial valuation as of December 31, 2012.

Exhibit A: Separations from Employment Before Retirement and Individual Pay Increase Assumptions—State Division

	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL[1]		DEATH[2]		DISABILITY		MERIT AND	INFLATION AND	TOTAL INCREASE
SAMPLE AGES	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	SENIORITY	PRODUCTIVITY	(NEXT YEAR)
State Members (Other Than State Troopers)									
20	21.00%	18.00%	0.012%	0.005%	0.01%	0.01%	5.67%	3.90%	9.57%
25	9.00%	14.00%	0.017%	0.006%	0.01%	0.01%	3.75%	3.90%	7.65%
30	6.00%	9.00%	0.021%	0.008%	0.02%	0.02%	2.80%	3.90%	6.70%
35	5.50%	7.00%	0.035%	0.013%	0.03%	0.03%	2.05%	3.90%	5.95%
40	4.50%	5.75%	0.048%	0.018%	0.06%	0.06%	1.50%	3.90%	5.40%
45	4.00%	5.00%	0.059%	0.027%	0.10%	0.10%	0.85%	3.90%	4.75%
50	4.00%	5.00%	0.076%	0.041%	0.17%	0.17%	0.50%	3.90%	4.40%
55	4.00%	5.00%	0.120%	0.075%	0.25%	0.25%	0.10%	3.90%	4.00%
60	4.00%	5.00%	0.237%	0.142%	0.35%	0.35%	0.00%	3.90%	3.90%
65	4.00%	5.00%	0.468%	0.277%	0.45%	0.45%	0.00%	3.90%	3.90%
State Troopers									
20	10.00%	10.00%	0.012%	0.005%	0.02%	0.02%	5.50%	3.90%	9.40%
25	8.00%	8.00%	0.017%	0.006%	0.04%	0.04%	3.75%	3.90%	7.65%
30	4.25%	4.25%	0.021%	0.008%	0.06%	0.06%	2.80%	3.90%	6.70%
35	3.75%	3.75%	0.035%	0.013%	0.10%	0.10%	2.05%	3.90%	5.95%
40	3.50%	3.50%	0.048%	0.018%	0.18%	0.18%	1.50%	3.90%	5.40%
45	3.50%	3.50%	0.059%	0.027%	0.28%	0.28%	1.20%	3.90%	5.10%
50	3.50%	3.50%	0.076%	0.041%	0.40%	0.40%	0.80%	3.90%	4.70%
55	3.50%	3.50%	0.120%	0.075%	0.56%	0.56%	0.40%	3.90%	4.30%
60	3.50%	3.50%	0.237%	0.142%	0.80%	0.80%	0.00%	3.90%	3.90%
65	3.50%	3.50%	0.468%	0.277%	1.20%	1.20%	0.00%	3.90%	3.90%

[1] There are no select withdrawal assumptions for State Troopers.

[2] Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.

Exhibit B: Separations from Employment Before Retirement and Individual Pay Increase Assumptions—School Division and Denver Public Schools (DPS) Division—PERA Benefit Structure[1]

	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL		DEATH[2]		DISABILITY		MERIT AND	INFLATION AND	TOTAL INCREASE
SAMPLE AGES	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	SENIORITY	PRODUCTIVITY	(NEXT YEAR)
20	12.00%	14.50%	0.012%	0.005%	0.01%	0.01%	6.20%	3.90%	10.10%
25	9.00%	11.00%	0.017%	0.006%	0.01%	0.01%	4.10%	3.90%	8.00%
30	5.50%	7.50%	0.021%	0.008%	0.01%	0.01%	2.95%	3.90%	6.85%
35	4.25%	6.25%	0.035%	0.013%	0.02%	0.02%	2.50%	3.90%	6.40%
40	4.00%	4.50%	0.048%	0.018%	0.04%	0.04%	1.95%	3.90%	5.85%
45	4.00%	4.50%	0.059%	0.027%	0.06%	0.06%	1.35%	3.90%	5.25%
50	4.00%	4.50%	0.076%	0.041%	0.09%	0.09%	0.80%	3.90%	4.70%
55	4.00%	4.50%	0.120%	0.075%	0.15%	0.15%	0.35%	3.90%	4.25%
60	4.00%	4.50%	0.237%	0.142%	0.22%	0.22%	0.00%	3.90%	3.90%
65	4.00%	4.50%	0.468%	0.277%	0.32%	0.32%	0.00%	3.90%	3.90%

[1] Rates shown are for PERA benefit structure members in the School or DPS Divisions.

[2] Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.

Exhibit C: Separations from Employment Before Retirement and Individual Pay Increase Assumptions—Local Government Division

	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL		DEATH[1]		DISABILITY		MERIT AND	INFLATION AND	TOTAL INCREASE
SAMPLE AGES	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	SENIORITY	PRODUCTIVITY	(NEXT YEAR)
20	12.00%	20.00%	0.012%	0.005%	0.01%	0.01%	6.95%	3.90%	10.85%
25	10.00%	15.00%	0.017%	0.006%	0.01%	0.01%	4.30%	3.90%	8.20%
30	7.25%	11.00%	0.021%	0.008%	0.01%	0.01%	2.64%	3.90%	6.54%
35	5.50%	8.75%	0.035%	0.013%	0.02%	0.02%	1.72%	3.90%	5.62%
40	5.00%	6.25%	0.048%	0.018%	0.04%	0.04%	1.23%	3.90%	5.13%
45	4.50%	6.00%	0.059%	0.027%	0.08%	0.08%	0.99%	3.90%	4.89%
50	4.50%	6.00%	0.076%	0.041%	0.14%	0.14%	0.79%	3.90%	4.69%
55	4.50%	6.00%	0.120%	0.075%	0.18%	0.18%	0.60%	3.90%	4.50%
60	4.50%	6.00%	0.237%	0.142%	0.24%	0.24%	0.25%	3.90%	4.15%
65	4.50%	6.00%	0.468%	0.277%	0.30%	0.30%	0.00%	3.90%	3.90%

[1] Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.

Exhibit D: Separations from Employment Before Retirement and Individual Pay Increase Assumptions—Judicial Division

	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL[1]		DEATH[2]		DISABILITY		MERIT AND	INFLATION AND	TOTAL INCREASE
SAMPLE AGES	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	SENIORITY[3]	PRODUCTIVITY	(NEXT YEAR)
30	1.80%	1.80%	0.021%	0.008%	0.02%	0.02%	1.50%	3.90%	5.40%
35	1.80%	1.80%	0.035%	0.013%	0.03%	0.03%	1.50%	3.90%	5.40%
40	1.80%	1.80%	0.048%	0.018%	0.06%	0.06%	0.67%	3.90%	4.57%
45	1.80%	1.80%	0.059%	0.027%	0.10%	0.10%	0.50%	3.90%	4.40%
50	1.80%	1.80%	0.076%	0.041%	0.17%	0.17%	0.50%	3.90%	4.40%
55	1.80%	1.80%	0.120%	0.075%	0.25%	0.25%	0.50%	3.90%	4.40%
60	1.80%	1.80%	0.237%	0.142%	0.35%	0.35%	0.50%	3.90%	4.40%
65	1.80%	1.80%	0.468%	0.277%	0.45%	0.45%	0.50%	3.90%	4.40%

[1] There are no select withdrawal assumptions for the Judicial Division.

[2] Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.

[3] Pay raises are subject to legislative approval. Percentages shown are based on prior experience.

Exhibit E: Separations from Employment Before Retirement and Individual Pay Increase Assumptions—All Division Trust Funds (DPS Benefit Structure)[1]

	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL		DEATH[2]		DISABILITY		MERIT AND	INFLATION AND	TOTAL INCREASE
SAMPLE AGES	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	SENIORITY	PRODUCTIVITY	(NEXT YEAR)
20	7.00%	10.00%	0.012%	0.005%	0.01%	0.01%	3.50%	3.90%	7.40%
25	7.00%	10.00%	0.017%	0.006%	0.01%	0.01%	3.50%	3.90%	7.40%
30	6.00%	8.00%	0.021%	0.008%	0.01%	0.01%	3.20%	3.90%	7.10%
35	6.00%	7.00%	0.035%	0.013%	0.02%	0.02%	2.76%	3.90%	6.66%
40	4.50%	5.75%	0.048%	0.018%	0.05%	0.05%	2.12%	3.90%	6.02%
45	3.50%	4.25%	0.059%	0.027%	0.08%	0.08%	1.34%	3.90%	5.24%
50	3.50%	3.50%	0.076%	0.041%	0.12%	0.12%	0.80%	3.90%	4.70%
55	3.50%	3.50%	0.120%	0.075%	0.25%	0.25%	0.42%	3.90%	4.32%
60	3.50%	3.50%	0.237%	0.142%	0.40%	0.40%	0.20%	3.90%	4.10%
65	3.50%	3.50%	0.468%	0.277%	0.60%	0.60%	0.00%	3.90%	3.90%

[1] Rates shown are for DPS benefit structure members in any division.

[2] Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.

Exhibit F: Select Rates of Separation Assumptions— State, School and DPS Divisions, Local Government Division and DPS Benefit Structure

PERCENT OF MEMBERS WITH LESS THAN FIVE YEARS OF SERVICE WITHDRAWING FROM EMPLOYMENT NEXT YEAR[1]

COMPLETED	STATE DIVISION		SCHOOL & DPS DIVISIONS[2]		LOCAL GOVERNMENT DIVISION		DPS BENEFIT STRUCTURE[3]	
YEARS OF SERVICE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
0	43.0%	43.0%	38.0%	35.0%	40.0%	38.0%	22.0%	23.0%
1	20.0%	21.0%	20.0%	19.0%	22.0%	22.0%	20.0%	20.0%
2	14.0%	15.0%	15.0%	14.5%	15.0%	17.0%	17.0%	16.0%
3	11.0%	12.0%	11.0%	11.5%	11.5%	13.0%	13.0%	12.0%
4	9.0%	11.0%	10.0%	10.0%	9.0%	11.0%	10.0%	9.0%

[1] There are no select withdrawal assumptions for State Troopers or Judicial Division members.

[2] Rates shown are for PERA benefit structure members in the School or DPS Divisions.

[3] Rates shown are for DPS benefit structure members in any division.

Exhibit G: Percent of Members Eligible for Reduced Retirement Benefits Retiring Next Year

RETIREMENT	STATE DIVISION		STATE	SCHOOL & DPS DIVISIONS[1]		LOCAL GOVERNMENT DIVISION		JUDICIAL	DPS BENEFIT STRUCTURE[2]	
AGES	MALE	FEMALE	TROOPERS	MALE	FEMALE	MALE	FEMALE	DIVISION	MALE	FEMALE
50	10%	10%	14%	10%	10%	10%	12%	5%	10%	5%
51	10%	10%	14%	10%	10%	10%	12%	5%	10%	5%
52	10%	10%	14%	10%	10%	10%	12%	5%	10%	5%
53	10%	10%	14%	10%	10%	10%	12%	5%	10%	5%
54	10%	10%	14%	10%	10%	10%	12%	5%	10%	5%
55	10%	10%	10%	10%	10%	10%	12%	5%	10%	5%
56	10%	10%	10%	10%	10%	10%	12%	5%	10%	5%
57	10%	10%	10%	10%	10%	10%	12%	5%	10%	5%
58	10%	10%	10%	10%	10%	10%	12%	5%	11%	9%
59	10%	10%	10%	10%	10%	10%	12%	5%	12%	9%
60	10%	10%	10%	10%	10%	10%	12%	12%	13%	9%
61	10%	10%	10%	10%	10%	10%	12%	12%	14%	9%
62	10%	10%	10%	10%	10%	10%	12%	12%	15%	9%
63	10%	10%	10%	10%	10%	10%	12%	12%	15%	9%
64	10%	10%	10%	10%	10%	10%	12%	12%	15%	15%
65 and Over	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

[1] Rates shown are for PERA benefit structure members in the School or DPS Divisions.

[2] Rates shown are for DPS benefit structure members in any division.

Exhibit H: Percent of Members Eligible for Unreduced Retirement Benefits Retiring Next Year

RETIREMENT	STATE DIVISION		STATE	SCHOOL & DPS DIVISIONS[1]		LOCAL GOVERNMENT DIVISION		JUDICIAL	DPS BENEFIT STRUCTURE[2]	
AGES	MALE	FEMALE	TROOPERS	MALE	FEMALE	MALE	FEMALE	DIVISION	MALE	FEMALE
50	55%	50%	45%	55%	55%	60%	60%	5%	30%	30%
51	48%	40%	32%	46%	50%	45%	50%	5%	30%	30%
52	42%	38%	32%	44%	42%	35%	45%	5%	30%	30%
53	38%	30%	32%	42%	40%	32%	42%	5%	30%	30%
54	32%	30%	32%	40%	38%	30%	35%	5%	30%	30%
55	27%	30%	32%	28%	30%	30%	33%	5%	30%	25%
56	25%	24%	32%	26%	27%	25%	25%	5%	20%	25%
57	22%	22%	32%	25%	25%	25%	22%	5%	20%	20%
58	21%	22%	32%	26%	24%	20%	22%	5%	20%	20%
59	20%	22%	32%	26%	24%	20%	25%	5%	20%	20%
60	21%	22%	32%	26%	25%	25%	22%	12%	20%	22%
61	18%	18%	32%	28%	26%	25%	20%	12%	20%	30%
62	25%	25%	32%	25%	28%	22%	24%	12%	30%	25%
63	21%	22%	32%	25%	28%	22%	24%	12%	35%	25%
64	21%	22%	32%	27%	30%	28%	25%	12%	25%	25%
65	24%	22%	100%	27%	27%	28%	25%	12%	25%	30%
66	26%	28%	100%	28%	28%	28%	25%	12%	30%	25%
67	24%	24%	100%	23%	23%	18%	25%	12%	25%	30%
68	19%	20%	100%	19%	19%	25%	12%	12%	30%	30%
69	22%	22%	100%	20%	20%	27%	20%	12%	30%	20%
70 and Over	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

[1] Rates shown are for PERA benefit structure members in the School or DPS Divisions.

[2] Rates shown are for DPS benefit structure members in any division.

Exhibit I: Rates of Post-Retirement Mortality and Single Life Retirement Values

SAMPLE	PERCENT OF RETIREES DECEASING WITHIN THE NEXT YEAR		PRESENT VALUE OF $1 MONTHLY FOR LIFE		PRESENT VALUE OF $1 MONTHLY INCREASING 2.0% ANNUALLY		FUTURE LIFE EXPECTANCY IN YEARS	
ATTAINED AGES	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
40	0.087%	0.044%	$155.90	$157.66	$200.67	$204.32	43.24	46.22
45	0.108%	0.068%	152.14	154.30	193.19	197.49	38.43	41.34
50	0.139%	0.102%	146.95	149.70	183.71	188.89	33.65	36.49
55	0.218%	0.188%	139.83	143.51	171.74	178.17	28.91	31.71
60	0.431%	0.355%	130.59	135.53	157.29	165.29	24.30	27.07
65	0.851%	0.692%	119.22	125.64	140.61	150.30	19.94	22.65
70	1.464%	1.216%	105.96	114.14	122.21	133.77	15.92	18.56
75	2.557%	1.956%	90.31	100.84	101.78	115.65	12.20	14.80
80	4.738%	3.267%	73.19	85.83	80.63	96.30	8.95	11.39
85	8.670%	5.542%	56.61	69.49	61.07	76.32	6.32	8.40

Summary of Funding Progress—Defined Benefit Pension Plan

The PERA funding objective is to be able to pay long-term benefit promises through contributions that remain approximately level from year to year as a percent of covered payroll earned by PERA members. The information in this section provides an overview of funding progress:

- The solvency test, which shows (by division and in total) the degree to which existing liabilities are funded, including prior history.
- A schedule of the total UAAL, which also shows the UAAL as a percentage of annual valuation payroll, including prior history.
- Schedules detailing actuarial gains and losses, by source, including prior history.
- The scheduled contribution requirements for the year immediately following the reporting period, including any legislatively scheduled employer contribution increments, Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SAED) in future years.

Consideration of the plans' current funded ratio, the unfunded liabilities in relation to annual covered payroll, historic trends, including significant gains and losses, and the schedule of future contributions should provide sufficient information to appropriately measure funding progress.

Solvency Test

The solvency test is one means of checking PERA's funding progress. In this test, the retirement plan's valuation assets are compared with: (A) member contributions (with interest) on deposit, (B) the liabilities for future benefits to persons who have retired, died or become disabled, and to those who have terminated service with the right to a future benefit, and (C) the liabilities for service already rendered by active members. In a system that has been following the discipline of level contribution rate financing, the liabilities for member contributions on deposit (liability A) and the liabilities for future benefits to present retirees (liability B) are fully covered by present valuation assets, except in certain circumstances.

The actuarial valuation of December 31, 2013, shows that liability A is fully covered by PERA assets. In addition, the remainder of present valuation assets covers a large portion of the liabilities for future benefits to persons who have retired or terminated service with the right to a future benefit (liability B). Generally, if the system continues to use level contribution rate financing, the funded portion of liability B and C will increase over time.

Solvency Test
(In Actual Dollars)

	AGGREGATE ACCRUED LIABILITIES				PORTION OF ACTUARIAL ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
VALUATION DATE	ACTIVE MEMBER CONTRIBUTIONS (A)[1]	RETIREES, BENEFICIARIES, AND INACTIVE MEMBERS (B)	EMPLOYER-FINANCED PORTION OF ACTIVE MEMBERS (C)	VALUATION ASSETS	LIABILITY (A)	LIABILITY (B)	LIABILITY (C)
State Division							
12/31/2008	$2,566,619,719	$12,999,235,625	$4,932,812,351	$13,914,370,734	100.0%	87.3%	0.0%
12/31/2009	2,568,286,884	12,660,958,307	4,747,971,978	13,382,736,472	100.0%	85.4%	0.0%
12/31/2010	2,569,046,085	13,149,658,232	4,637,471,747	12,791,946,348	100.0%	77.7%	0.0%
12/31/2011	2,629,639,816	13,710,392,567	4,486,511,088	12,010,044,704	100.0%	68.4%	0.0%
12/31/2012	2,668,942,433	14,191,468,725	4,331,083,967	12,538,675,449	100.0%	69.5%	0.0%
12/31/2013	**2,675,468,549**	**15,296,367,708**	**4,871,888,909**	**13,129,459,956**	**100.0%**	**68.3%**	**0.0%**
School Division							
12/31/2008	$3,695,995,206	$19,416,005,775	$7,888,200,829	$21,733,328,531	100.0%	92.9%	0.0%
12/31/2009	3,769,099,659	18,830,712,228	7,813,003,514	21,054,909,740	100.0%	91.8%	0.0%
12/31/2010	3,779,759,908	19,658,748,616	7,901,245,967	20,321,736,466	100.0%	84.1%	0.0%
12/31/2011	3,783,336,053	20,666,020,619	7,536,842,363	19,266,110,172	100.0%	74.9%	0.0%
12/31/2012	3,823,347,689	21,466,077,782	7,329,607,677	20,266,573,925	100.0%	76.6%	0.0%
12/31/2013	**3,881,145,368**	**23,301,640,854**	**8,254,525,348**	**21,369,379,750**	**100.0%**	**75.1%**	**0.0%**
Local Government Division							
12/31/2008	$675,173,652	$1,949,108,011	$1,213,801,584	$2,933,295,754	100.0%	100.0%	25.5%
12/31/2009	678,518,930	1,963,924,503	1,208,377,203	2,932,628,241	100.0%	100.0%	24.0%
12/31/2010	657,846,613	2,180,451,070	1,167,268,443	2,926,045,102	100.0%	100.0%	7.5%
12/31/2011	666,794,291	2,330,542,885	1,162,677,597	2,882,691,014	100.0%	95.1%	0.0%
12/31/2012	528,029,133	2,750,955,523	878,635,882	3,098,721,347	100.0%	93.4%	0.0%
12/31/2013	**533,003,238**	**2,991,177,371**	**978,101,309**	**3,291,297,571**	**100.0%**	**92.2%**	**0.0%**

[1] Includes accrued interest on member contributions.

Solvency Test (continued)
(In Actual Dollars)

	AGGREGATE ACCRUED LIABILITIES				PORTION OF ACTUARIAL ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
VALUATION DATE	ACTIVE MEMBER CONTRIBUTIONS (A)[1]	RETIREES, BENEFICIARIES, AND INACTIVE MEMBERS (B)	EMPLOYER-FINANCED PORTION OF ACTIVE MEMBERS (C)	VALUATION ASSETS	LIABILITY (A)	LIABILITY (B)	LIABILITY (C)
Judicial Division							
12/31/2008	$54,593,439	$160,475,062	$72,989,931	$230,967,047	100.0%	100.0%	21.8%
12/31/2009	52,754,332	165,904,221	77,037,132	228,713,654	100.0%	100.0%	13.1%
12/31/2010	53,742,058	171,903,999	78,193,140	227,813,622	100.0%	100.0%	2.8%
12/31/2011	54,688,241	186,420,121	78,328,888	221,514,844	100.0%	89.5%	0.0%
12/31/2012	57,762,144	193,773,713	75,361,285	238,806,614	100.0%	93.4%	0.0%
12/31/2013	**59,347,907**	**208,235,801**	**84,014,349**	**256,800,478**	**100.0%**	**94.8%**	**0.0%**
Denver Public Schools Division[2]							
12/31/2010	$317,442,198	$2,370,216,811	$645,155,436	$2,961,719,943	100.0%	100.0%	42.5%
12/31/2011	333,550,047	2,435,504,442	673,472,523	2,804,705,933	100.0%	100.0%	5.3%
12/31/2012	348,739,324	2,479,706,314	667,103,674	2,936,695,129	100.0%	100.0%	16.2%
12/31/2013	**364,126,482**	**2,672,260,182**	**749,485,328**	**3,075,894,894**	**100.0%**	**100.0%**	**5.3%**
All Division Trust Funds[3]							
12/31/2008	$6,992,382,016	$34,524,824,473	$14,107,804,695	$38,811,962,066	100.0%	92.2%	0.0%
12/31/2009	7,068,659,805	33,621,499,259	13,846,389,827	37,598,988,107	100.0%	90.8%	0.0%
12/31/2010	7,377,836,862	37,530,978,728	14,429,334,733	39,229,261,481	100.0%	84.9%	0.0%
12/31/2011	7,468,008,448	39,328,880,634	13,937,832,459	37,185,066,667	100.0%	75.6%	0.0%
12/31/2012	7,426,820,723	41,081,982,057	13,281,792,485	39,079,472,464	100.0%	77.0%	0.0%
12/31/2013	**7,513,091,544**	**44,469,681,916**	**14,938,015,243**	**41,122,832,649**	**100.0%**	**75.6%**	**0.0%**

[1] Includes accrued interest on member contributions.

[2] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

[3] Results prior to December 31, 2010, do not include the DPS Division.

Summary of Funding Progress—Defined Benefit Pension Plan

Unfunded Actuarial Accrued Liability

Unfunded actuarial accrued liabilities are the difference between actuarially calculated liabilities for service already rendered and the valuation assets of the retirement fund. It is natural for unfunded liabilities to exist in a defined benefit retirement plan.

In 2012, the ratio of PERA's valuation assets to accrued liabilities was 63.2 percent, but decreased slightly to 61.5 percent by the end of 2013.

The following factors resulted in higher liabilities (or losses) to PERA during 2013:

- Reduction in the investment rate of return assumption and other changes in the underlying economic assumptions.
- Recognition of investment losses experienced in 2011.
- Fewer members terminated PERA-covered employment and withdrew their accounts than expected during 2013, increasing future liabilities.
- Higher number of survivor benefits were granted than anticipated.
- More service and disability retirements were experienced than expected.
- New PERA members had some service resulting in accrued liabilities.

The following factors resulted in lower liabilities (or gains) during 2013:

- Recognition of investment gains experienced in 2010, 2012, and 2013.
- Member pay increases were lower than expected.

Since 2000, PERA's funded ratio has declined from a high of 105.2 percent to the current funded status of 61.5 percent at the end of 2013. In response to the declining funded ratio, legislation was enacted in 2004 and 2006, with the specific purpose of strengthening PERA's future funded status. Among other cost-saving measures, the AED and the SAED were created and implemented. The 2008 global financial crisis further necessitated major pension reform. The enactment of Senate Bill (SB) 10-001 significantly affected benefit and eligibility provisions, the payment structure of annual increases, and employer funding mechanisms with the intent to return PERA to a 100 percent funded ratio within the next 30 years.

Liabilities for members are based on service rendered toward their retirement benefits payable in the future. Unfunded actuarial accrued liabilities exist because liabilities for such service by members exceed assets currently on hand for such future benefits. The Solvency Test shows that benefits to all PERA retirees are funded at 75.6 percent.

Since inflation decreases the dollar's value, it is important to examine more than basic actuarial metrics and data when assessing the plan's financial status. The ratio of unfunded actuarial accrued liability dollars divided by member salary dollars can provide a meaningful index. The lower the ratio, the greater is the strength of the system. Observation of this relative index over a period of years will give an indication of the financial strength of the system. This ratio has decreased at times over the last decade, but increased sharply in years 2002 through 2004, reflecting the poor investment environment of 2001 and 2002, as well as increased liabilities. The ratio declined from 2005 through 2007, in recognition of investment gains and additional funding measures implemented during this period. The significant increase in this ratio for the periods 2008 through 2011 was primarily a result of the four-year smoothing of the large investment loss from 2008. The increase in this ratio for 2013 is predominantly attributable to the increase in liability due to the reduction in the investment rate of return assumption, as well as the changes in the underlying economic assumptions effective for the December 31, 2013, actuarial valuation.

Unfunded Actuarial Accrued Liabilities (UAAL)—All Division Trust Funds[1, 2]
(In Actual Dollars)

(A) VALUATION DATE	(B) ACTUARIAL VALUE OF PLAN ASSETS	(C) TOTAL ACTUARIAL ACCRUED LIABILITIES	(D) UNFUNDED ACTUARIAL ACCRUED LIABILITIES (C) – (B)	(E) FUNDED RATIO (B)/(C)	(F) ANNUAL COVERED PAYROLL	(G) UAAL AS A % OF COVERED PAYROLL (D)/(F)
12/31/2008	$38,811,962,066	$55,625,011,184	$16,813,049,118	69.8%	$6,931,404,440	242.6%
12/31/2009	37,598,988,107	54,536,548,891	16,937,560,784	68.9%	7,048,991,768	240.3%
12/31/2010	39,229,261,481	59,338,150,323	20,108,888,842	66.1%	7,506,192,916	267.9%
12/31/2011	37,185,066,667	60,734,721,541	23,549,654,874	61.2%	7,464,243,447	315.5%
12/31/2012	39,079,472,464	61,790,595,265	22,711,122,801	63.2%	7,277,585,379	312.1%
12/31/2013	**41,122,832,649**	**66,920,788,703**	**25,797,956,054**	**61.5%**	**7,530,220,378**	**342.6%**

[1] Results prior to December 31, 2010, do not include the DPS Division.

[2] The data in this table is aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund. Presented on pages 91–92 are schedules of funding progress for each division.

Actuarial Gains and Losses

Schedule of Gains and Losses in Accrued Liabilities—All Division Trust Funds[1]
(In Millions of Dollars)

TYPE OF ACTIVITY	2013	2012	2011	2010	2009	2008
	$ GAIN (OR LOSS) FOR YEARS ENDED DECEMBER 31					
Age and service retirements[2]	**($32.7)**	($49.0)	$1.7	($4.2)	($18.7)	($47.1)
Disability retirements[3]	**(24.2)**	9.9	9.2	9.1	31.2	29.1
Deaths[4]	**(70.4)**	(5.2)	(33.8)	(59.7)	(91.2)	(79.1)
Withdrawal from employment[5]	**(122.4)**	44.1	(154.1)	(16.3)	(139.7)	(113.0)
New members[6]	**(215.3)**	(160.0)	(147.1)	(139.7)	(105.5)	(100.6)
Pay increases[7]	**230.2**	385.3	901.0	727.1	407.1	(147.9)
Investment income[8]	**1,139.1**	1,062.4	(3,188.9)	(2,806.5)	(2,908.6)	(2,632.8)
Other[9]	**11.4**	(68.6)	18.3	230.2	(368.6)	(97.1)
Gain (or loss) during year	**915.7**	1,218.9	(2,593.7)	(2,060.0)	(3,194.0)	(3,188.5)
Non-recurring items[10]	**(3,140.3)**	663.7	—	—	4,045.7	131.4
Composite gain (or loss) during year	**($2,224.6)**	**$1,882.6**	**($2,593.7)**	**($2,060.0)**	**$851.7**	**($3,057.1)**

[1] Results prior to 2010 do not include the DPS Division.

[2] *Age and service retirements:* If members retire at older ages than assumed, there is a gain. If members retire at younger ages, there is a loss.

[3] *Disability retirements:* If disability claims are lower than assumed, there is a gain. If disability claims are higher than assumed, there is a loss.

[4] *Deaths:* If survivor claims are lower than assumed, there is a gain. If survivor claims are higher than assumed, there is a loss. If retirees die sooner than assumed, there is a gain. If retirees live longer than assumed, there is a loss.

[5] *Withdrawal from employment:* If more members terminate and more liabilities are released by withdrawals than assumed, there is a gain. If fewer liabilities are released, there is a loss.

[6] *New members:* If the number of new members entering the plan is lower than assumed, or if they have prior service, there is a loss.

[7] *Pay increases:* If there are smaller salary increases than assumed, there is a gain. If greater salary increases occur than assumed, there is a loss.

[8] *Investment income:* If there is greater investment income than assumed, there is a gain. If income is less than assumed, there is a loss.

[9] *Other:* Miscellaneous gains and losses result from changes in actuary's valuation software, data adjustments, timing of financial transactions, etc.

[10] *Non-recurring items:* Includes changes in actuarial assumptions or methods and changes to plan provisions.

Analysis of Financial Experience
(In Millions of Dollars)

	STATE	SCHOOL	LOCAL GOVERNMENT	JUDICIAL	DENVER PUBLIC SCHOOLS
From differences between assumed and actual experience on liabilities					
Age and service retirements[1]	$25.3	($46.5)	$0.8	$3.4	($15.7)
Disability retirements[2]	(9.9)	(8.1)	(3.5)	—	(2.7)
Deaths[3]	(23.1)	(57.6)	7.8	(0.7)	3.2
Withdrawals[4]	(35.5)	(89.4)	(8.6)	(0.4)	11.5
New members[5]	(76.6)	(89.0)	(12.2)	(2.8)	(34.7)
Pay increases[6]	49.5	145.4	20.0	3.4	11.9
Other[7]	2.1	9.5	(2.6)	1.2	1.2
Subtotal	(68.2)	(135.7)	1.7	4.1	(25.3)
From differences between assumed and actual experience on assets	364.8	589.4	90.3	6.9	87.7
From changes in plan assumptions[8]	(1,034.8)	(1,701.7)	(219.0)	(13.7)	(171.1)
Total actuarial gains/(losses) on 2013 activities	**($738.2)**	**($1,248.0)**	**($127.0)**	**($2.7)**	**($108.7)**
Total actuarial gains/(losses) on 2012 activities	**$540.7**	**$932.0**	**$252.0**	**$14.9**	**$143.0**

[1] *Age and service retirements:* If members retire at older ages than assumed, there is a gain. If members retire at younger ages, there is a loss.

[2] *Disability retirements:* If disability claims are lower than assumed, there is a gain. If disability claims are higher than assumed, there is a loss.

[3] *Deaths:* If survivor claims are lower than assumed, there is a gain. If survivor claims are higher than assumed, there is a loss. If retirees die sooner than assumed, there is a gain. If retirees live longer than assumed, there is a loss.

[4] *Withdrawal from employment:* If more members terminate and more liabilities are released by withdrawals than assumed, there is a gain. If fewer liabilities are released, there is a loss.

[5] *New members:* If the number of new members entering the plan is lower than assumed, or if they have prior service, there is a loss.

[6] *Pay increases:* If there are smaller salary increases than assumed, there is a gain. If greater salary increases occur than assumed, there is a loss.

[7] *Other:* Miscellaneous gains and losses result from changes in actuary's valuation software, data adjustments, timing of financial transactions, etc.

[8] *Change in plan assumptions:* The plan assumptions were revised in 2013 as described in the Notes to the Required Supplemental Information on pages 95–98.

Summary of Funding Progress—Defined Benefit Pension Plan

Actuarial Valuation Results

Contribution rates for the year ending December 31, 2015, are derived from the results of the December 31, 2013, annual actuarial valuation and are determined in advance for purposes of budgeting and consideration of any necessary legislative action.

Schedule of Computed Employer Contribution Rates for the 2015 Fiscal Year

	EXPRESSED AS A PERCENTAGE OF COVERED PAYROLL				
	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DENVER PUBLIC SCHOOLS DIVISION
Contributions					
Service retirement benefits	7.64%	8.94%	7.20%	14.53%	8.99%
Disability retirement benefits	0.24%	0.15%	0.16%	0.57%	1.48%
Survivor benefits	0.13%	0.11%	0.13%	0.40%	0.24%
Termination withdrawals	1.58%	1.72%	1.68%	1.14%	1.24%
Refunds	0.36%	0.38%	0.38%	0.31%[2]	0.12%
Administrative expense load	0.35%	0.35%	0.35%	0.35%	0.35%
Total normal cost	10.30%	11.65%	9.90%	17.30%	12.42%
Less member contributions	(8.05%)[1]	(8.00%)	(8.00%)	(8.00%)	(8.00%)
Employer normal cost	**2.25%**	**3.65%**	**1.90%**	**9.30%**	**4.42%**
Percentage available to amortize unfunded actuarial accrued liabilities	14.78%	13.38%	10.41%	6.80%	0.00%
Amortization period	60 years	61 years	37 years	Infinite	Infinite
Total employer contribution rate for actuarially funded benefits	10.22%[1]	10.15%	10.00%	13.66%	13.75%
Amortization Equalization Disbursement	4.20%	4.20%	2.20%	2.20%	4.20%
Supplemental Amortization Equalization Disbursement	4.00%	4.00%	1.50%	1.50%	4.00%
Less Health Care Trust Fund	(1.02%)	(1.02%)	(1.02%)	(1.02%)	(1.02%)
Less Annual Increase Reserve	(0.37%)	(0.30%)	(0.37%)	(0.24%)	(0.91%)
Less PCOP Credit	—	—	—	—	(16.21%)[3]
Employer contribution rate for defined benefit plan	17.03%	17.03%	12.31%	16.10%	3.81%

[1] Weighted average of more than one statutory rate.

[2] Assumes no judge will elect a refund of contributions made for the 17th through the 20th year of service.

[3] An offset to the DPS Division rate is provided for under C.R.S. § 24-51-412. See Note 4—Contributions.

The AED and SAED are set to increase in future years as shown below. With the passage of SB 10-001, the AED and the SAED can be adjusted based on the year-end funded status within a particular Division Trust Fund. If a particular Division Trust Fund reaches a funded status of 103 percent, a decrease in the AED and SAED is mandated and if it subsequently falls below a funded status of 90 percent, an increase is mandated. For the Local Government and Judicial Divisions, if the funded ratio reaches 90 percent and subsequently falls below 90 percent, an increase in the AED and SAED is mandated. Increases cannot exceed the maximum allowable limitations shown below.

Future AED and SAED Rates

	STATE DIVISION TRUST FUND		SCHOOL DIVISION TRUST FUND		LOCAL GOVERNMENT DIVISION TRUST FUND		JUDICIAL DIVISION TRUST FUND		DPS DIVISION TRUST FUND[1]	
PERIOD	AED	SAED	AED	SAED	AED	SAED	AED	SAED	AED	SAED
1/1/2014 — 12/31/2014	3.80%	3.50%	3.80%	3.50%	2.20%	1.50%	2.20%	1.50%	3.80%	3.50%
1/1/2015 — 12/31/2015	4.20%	4.00%	4.20%	4.00%	2.20%	1.50%	2.20%	1.50%	4.20%	4.00%
1/1/2016 — 12/31/2016	4.60%	4.50%	4.50%	4.50%	2.20%	1.50%	2.20%	1.50%	4.50%	4.50%
1/1/2017 — 12/31/2017	5.00%	5.00%	4.50%	5.00%	2.20%	1.50%	2.20%	1.50%	4.50%	5.00%
1/1/2018 — 12/31/2018	5.00%	5.00%	4.50%	5.50%	2.20%	1.50%	2.20%	1.50%	4.50%	5.50%
Maximum allowable limitations	5.00%	5.00%	4.50%	5.50%	5.00%	5.00%	5.00%	5.00%	4.50%	5.50%

[1] DPS Division employers are permitted to reduce the AED and SAED by the PCOP offset, as specified in C.R.S. § 24-51-412 *et seq.*

Schedule of Retirees, Beneficiaries, and Survivors Added to and Removed From the Benefit Payroll (In Actual Dollars)

	ADDED TO PAYROLL		REMOVED FROM PAYROLL		PAYROLL—END OF YEAR			
YEAR ENDED	NO.[2]	ANNUAL BENEFITS	NO.[2]	ANNUAL BENEFITS	NO.[2]	ANNUAL BENEFITS	AVERAGE ANNUAL BENEFITS	INCREASE IN AVERAGE BENEFITS
State Division[1]								
12/31/2008	1,579	$56,570,160	713	$13,388,088	30,514	$1,020,023,424	$33,428	4.6%
12/31/2009	1,550	58,001,148	734	16,212,468	31,330	1,095,394,056	34,963	4.6%
12/31/2010	1,705	63,012,492	668	15,870,416	32,367	1,142,735,232	35,306	1.0%
12/31/2011	1,477	52,575,840	767	18,206,208	33,077	1,198,047,252	36,220	2.6%
12/31/2012	1,753	60,313,800	835	17,053,956	33,995	1,259,715,132	37,056	2.3%
12/31/2013	**1,472**	**49,314,648**	**621**	**15,343,872**	**34,846**	**1,316,530,332**	**37,781**	**2.0%**
School Division[1]								
12/31/2008	2,663	$84,572,232	795	$14,103,468	45,754	$1,487,330,100	$32,507	4.0%
12/31/2009	2,432	75,857,232	727	14,333,928	47,459	1,599,048,372	33,693	3.6%
12/31/2010	3,002	94,587,504	717	15,977,299	49,744	1,677,950,928	33,732	0.1%
12/31/2011	2,783	83,582,412	809	17,059,212	51,718	1,776,539,052	34,350	1.8%
12/31/2012	3,044	87,700,656	985	18,719,640	53,777	1,876,340,508	34,891	1.6%
12/31/2013	**2,744**	**79,704,816**	**713**	**17,081,472**	**55,808**	**1,974,615,348**	**35,382**	**1.4%**
Local Government Division[1]								
12/31/2008	367	$14,246,328	82	$1,380,000	4,373	$139,012,452	$31,789	6.2%
12/31/2009	373	12,911,052	75	1,444,056	4,671	154,915,224	33,165	4.3%
12/31/2010	463	18,211,380	82	1,560,317	5,052	171,596,184	33,966	2.4%
12/31/2011	332	11,254,980	88	1,645,992	5,296	184,500,768	34,838	2.6%
12/31/2012	687	23,576,376	105	1,892,688	5,878	209,260,764	35,601	2.2%
12/31/2013	**345**	**10,330,380**	**76**	**1,456,248**	**6,147**	**221,838,300**	**36,089**	**1.4%**
Judicial Division[1]								
12/31/2008	7	$543,828	3	$105,720	281	$13,659,096	$48,609	5.3%
12/31/2009	19	1,376,436	9	189,624	291	15,290,100	52,543	8.1%
12/31/2010	10	876,804	8	234,040	293	15,935,640	54,388	3.5%
12/31/2011	21	1,224,480	3	103,752	311	17,320,980	55,694	2.4%
12/31/2012	19	1,089,288	11	337,308	319	18,331,992	57,467	3.2%
12/31/2013	**9**	**740,508**	**6**	**156,468**	**322**	**19,219,128**	**59,687**	**3.9%**
Denver Public Schools Division[1,3]								
12/31/2010	6,199	$216,886,500	—	$—	6,199	$216,886,500	$34,987	—
12/31/2011	252	7,977,360	155	4,143,396	6,296	224,954,832	35,730	2.1%
12/31/2012	274	8,333,292	168	3,949,860	6,402	232,858,044	36,373	1.8%
12/31/2013	**284**	**9,255,936**	**135**	**3,704,628**	**6,551**	**242,733,072**	**37,053**	**1.9%**
All Division Trust Funds[1,4]								
12/31/2008	4,616	$155,932,548	1,593	$28,977,276	80,922	$2,660,025,072	$32,871	4.3%
12/31/2009	4,374	148,145,868	1,545	32,180,076	83,751	2,864,647,752	34,204	4.1%
12/31/2010	11,379[5]	393,574,680	1,475	33,642,072	93,655[5]	3,225,104,484	34,436	0.7%
12/31/2011	4,865	156,615,072	1,822	41,158,560	96,698	3,401,362,884	35,175	2.1%
12/31/2012	5,777	181,013,412	2,104	41,953,452	100,371	3,596,506,440	35,832	1.9%
12/31/2013	**4,854**	**149,346,288**	**1,551**	**37,742,688**	**103,674**	**3,774,936,180**	**36,412**	**1.6%**

[1] Numbers derived on an accrual basis.

[2] The number does not include deferred survivors.

[3] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

[4] Data prior to December 31, 2010, does not include the DPS Division.

[5] Includes the addition of 6,199 beneficiaries due to the DPSRS merger.

Plan Data—Defined Benefit Pension Plan

The number of persons receiving monthly retirement benefits has grown steadily in relation to membership. This trend will likely continue for many years into the future. The retirement benefit disbursements shown in the right-hand column include cost-of-living increases paid in years since 1970. Prior to 1981, figures are for years ended June 30.

Member-Retiree Comparison—All Division Trust Funds[1]
(In Actual Dollars)

YEAR	NUMBER OF RETIREE ACCOUNTS ON 12/31	NUMBER OF MEMBER ACCOUNTS ON 12/31[2]	RETIREE ACCOUNTS AS % OF MEMBERS ON 12/31	TOTAL BENEFITS PAID-YEAR ENDED 12/31
1940	93	3,715	2.5%	$72,588
1945	171	5,585	3.1%	137,442
1950	280	11,853	2.4%	237,866
1955	747	21,185	3.5%	745,679
1960	1,775	33,068	5.4%	2,055,139
1965	3,631	49,701	7.3%	5,486,225
1970	6,308	65,586	9.6%	13,115,234
1975	11,650	84,781	13.7%	32,820,433
1980	17,301	96,473	17.9%	71,289,456
1985	24,842	101,409	24.5%	192,456,029
1990	32,955	115,350	28.6%	350,398,094
1995	41,909	203,102	20.6%	639,501,796
2000	53,015	248,104	21.4%	1,093,779,068
2005	69,416	306,139	22.7%	1,973,240,491
2010	91,412	378,264	24.2%	3,161,773,781
2011	94,451	386,414	24.4%	3,323,425,219
2012	98,139	396,046	24.8%	3,506,857,384
2013	101,420	408,393	24.8%	3,702,948,533

[1] Numbers derived on a cash basis. Data prior to 2010 does not include the DPS Division.

[2] Includes inactive member accounts.

Schedule of Members in Valuation

By Attained Age and Years of Service as of December 31, 2013
(In Actual Dollars)

State Division

The average age for State Division members (excluding State Troopers) was 46.2 years and the average service was 9.0 years. The average age for State Troopers was 41.0 years and the average service was 11.8 years.

	YEARS OF SERVICE TO VALUATION DATE							TOTAL	
ATTAINED AGE	0-4	5-9	10-14	15-19	20-24	25-29	30+	NO.	ANNUAL VALUATION PAYROLL
Up to 20	152	—	—	—	—	—	—	152	$1,021,328
20-24	1,460	14	—	—	—	—	—	1,474	27,429,628
25-29	3,480	454	2	—	—	—	—	3,936	124,205,283
30-34	3,451	1,779	261	8	—	—	—	5,499	208,012,111
35-39	2,686	1,863	1,060	206	6	—	—	5,821	250,229,569
40-44	2,496	1,808	1,264	958	243	12	—	6,781	323,625,445
45-49	4,010	1,712	1,160	948	746	352	33	8,961	417,425,768
50-54	1,856	1,701	1,232	994	885	691	253	7,612	385,357,212
55-59	1,649	1,557	1,196	886	849	658	394	7,189	365,128,815
60	251	274	223	174	135	114	78	1,249	62,387,691
61	271	261	211	171	119	102	58	1,193	58,706,234
62	216	214	182	146	124	105	60	1,047	52,402,039
63	190	209	166	116	114	70	60	925	44,304,173
64	168	175	134	100	92	68	46	783	38,160,051
65	143	150	125	83	55	62	46	664	32,252,501
66	106	100	92	61	55	30	31	475	22,022,923
67	105	92	91	34	42	41	40	445	19,768,955
68	66	56	37	34	22	15	28	258	11,537,115
69	62	43	33	18	19	12	14	201	8,434,468
70+	267	130	86	66	46	38	56	689	22,554,173
Total	23,085	12,592	7,555	5,003	3,552	2,370	1,197	55,354	$2,474,965,482

School Division

The average age for School Division members was 44.6 years and the average service was 8.4 years.

	YEARS OF SERVICE TO VALUATION DATE							TOTAL	
ATTAINED AGE	0-4	5-9	10-14	15-19	20-24	25-29	30+	NO.	ANNUAL VALUATION PAYROLL
Up to 20	853	—	—	—	—	—	—	853	$4,873,171
20-24	4,257	94	—	—	—	—	—	4,351	70,536,226
25-29	8,719	1,339	33	—	—	—	—	10,091	266,867,709
30-34	6,414	5,042	842	15	—	—	—	12,313	400,059,438
35-39	5,615	3,945	3,572	441	10	—	—	13,583	487,083,055
40-44	5,860	3,893	3,136	2,373	377	12	—	15,651	577,077,162
45-49	6,667	3,797	2,928	2,008	1,619	419	19	17,457	618,798,754
50-54	4,111	3,603	3,319	2,186	1,642	1,491	317	16,669	621,490,639
55-59	3,025	2,633	2,665	2,082	1,526	1,062	597	13,590	494,203,554
60	510	385	404	372	277	147	83	2,178	75,671,312
61	465	360	342	313	218	158	84	1,940	67,786,999
62	407	335	296	212	237	121	75	1,683	59,417,750
63	361	295	244	184	157	111	50	1,402	46,668,483
64	346	230	202	159	121	74	56	1,188	38,742,156
65	279	206	165	123	91	72	40	976	30,130,404
66	268	174	127	87	60	62	30	808	21,794,079
67	255	152	112	63	43	36	30	691	17,586,378
68	165	84	54	34	31	21	11	400	9,610,575
69	157	85	43	29	13	14	10	351	6,697,959
70+	752	389	186	79	57	39	50	1,552	23,554,015
Total	49,486	27,041	18,670	10,760	6,479	3,839	1,452	117,727	$3,938,649,818

Schedule of Members in Valuation

By Attained Age and Years of Service as of December 31, 2013
(In Actual Dollars)

Local Government Division

The average age for Local Government Division members was 44.7 years and the average service was 8.0 years.

ATTAINED AGE	YEARS OF SERVICE TO VALUATION DATE 0–4	5–9	10–14	15–19	20–24	25–29	30+	TOTAL NO.	ANNUAL VALUATION PAYROLL
Up to 20	393	—	—	—	—	—	—	393	$1,787,943
20–24	676	7	—	—	—	—	—	683	8,456,866
25–29	717	124	8	—	—	—	—	849	26,180,881
30–34	686	336	75	7	—	—	—	1,104	43,144,594
35–39	566	383	177	51	—	—	—	1,177	55,215,237
40–44	469	476	245	143	46	3	—	1,382	72,791,560
45–49	582	386	231	162	89	55	4	1,509	76,691,228
50–54	436	417	273	218	156	139	63	1,702	94,655,967
55–59	378	374	206	189	147	113	71	1,478	79,262,696
60	45	57	44	27	24	13	7	217	11,681,850
61	81	51	38	23	35	17	6	251	12,364,160
62	61	57	29	22	23	10	13	215	10,780,289
63	50	44	23	19	15	11	10	172	7,866,239
64	36	56	30	13	15	3	7	160	7,471,539
65	38	35	16	10	11	4	5	119	5,402,701
66	37	28	13	8	9	4	2	101	4,280,872
67	31	22	13	7	5	5	2	85	3,329,602
68	18	16	7	3	3	3	—	50	1,875,445
69	19	11	5	6	1	1	1	44	1,137,097
70+	141	66	31	10	7	1	7	263	4,626,670
Total	5,460	2,946	1,464	918	586	382	198	11,954	$529,003,436

Judicial Division

The average age for Judicial Division members was 56.4 years and the average service was 14.2 years.

ATTAINED AGE	YEARS OF SERVICE TO VALUATION DATE 0–4	5–9	10–14	15–19	20–24	25–29	30+	TOTAL NO.	ANNUAL VALUATION PAYROLL
Up to 20	—	—	—	—	—	—	—	—	$—
20–24	—	—	—	—	—	—	—	—	—
25–29	—	—	—	—	—	—	—	—	—
30–34	2	—	—	—	—	—	—	2	49,902
35–39	2	—	—	—	—	—	—	2	143,622
40–44	4	9	3	—	1	—	—	17	1,969,876
45–49	12	21	8	6	2	—	—	49	5,791,019
50–54	15	14	10	7	11	5	2	64	7,695,773
55–59	6	16	14	11	11	6	—	64	7,662,902
60	4	3	3	—	2	2	—	14	1,755,640
61	1	6	4	3	3	2	1	20	2,408,025
62	—	2	2	2	1	—	2	9	1,149,627
63	1	3	4	2	2	2	3	17	2,125,224
64	1	5	1	1	4	3	—	15	1,894,372
65	2	3	4	—	5	1	4	19	2,042,615
66	—	1	1	2	3	2	2	11	1,382,562
67	—	—	4	—	—	1	2	7	928,595
68	1	—	—	3	2	—	1	7	916,048
69	—	—	1	2	1	2	1	7	900,058
70+	—	1	—	1	2	1	3	8	1,125,870
Total	51	84	59	40	50	27	21	332	$39,941,730

Schedule of Members in Valuation

By Attained Age and Years of Service as of December 31, 2013
(In Actual Dollars)

Denver Public Schools Division

The average age for DPS Division members was 41.5 years and the average service was 5.8 years.

	YEARS OF SERVICE TO VALUATION DATE							TOTAL	
ATTAINED AGE	0–4	5–9	10–14	15–19	20–24	25–29	30+	NO.	ANNUAL VALUATION PAYROLL
Up to 20	34	—	—	—	—	—	—	34	$275,024
20–24	877	—	—	—	—	—	—	877	16,665,738
25–29	1,987	137	3	—	—	—	—	2,127	63,731,245
30–34	1,526	534	24	1	—	—	—	2,085	75,791,181
35–39	1,728	488	241	24	—	—	—	2,481	87,991,585
40–44	855	338	285	119	14	2	—	1,613	68,549,962
45–49	700	264	219	137	82	14	1	1,417	59,659,272
50–54	561	240	187	133	133	92	12	1,358	59,487,966
55–59	553	162	187	133	117	85	34	1,271	53,903,221
60	94	29	27	33	28	19	6	236	9,711,988
61	77	29	36	28	20	11	5	206	9,191,743
62	76	31	23	21	15	15	6	187	7,604,876
63	65	24	19	34	21	7	2	172	7,750,248
64	78	12	23	24	17	2	5	161	6,477,078
65	56	28	15	14	13	13	6	145	6,353,268
66	46	10	12	5	7	3	2	85	3,156,023
67	38	9	8	6	6	5	7	79	3,241,726
68	28	6	8	6	6	1	—	55	2,025,147
69	21	7	7	2	8	2	—	47	1,913,893
70+	132	7	14	7	8	2	10	180	4,178,728
Total	9,532	2,355	1,338	727	495	273	96	14,816	$547,659,912

Plan Data—Defined Benefit Pension Plan

Schedule of Active Member Valuation Data

By Attained Age and Years of Service as of December 31, 2013
(In Actual Dollars)

YEAR	NUMBER OF PARTICIPATING EMPLOYERS	NUMBER OF ACTIVE MEMBERS	ANNUAL PAYROLL FOR ACTIVE MEMBERS	AVERAGE ANNUAL PAY FOR ACTIVE MEMBERS	% INCREASE (DECREASE) IN AVERAGE ANNUAL PAY
State Division					
2008	69	54,441	$2,371,638,806	$43,563	3.86%
2009	70	54,333	2,384,136,844	43,880	0.73%
2010	70	54,977	2,392,080,128	43,511	(0.84%)
2011	70	54,956	2,393,791,402	43,558	0.11%
2012	70	54,804	2,384,933,961	43,518	(0.09%)
2013	**70**	**55,354**	**2,474,965,482**	**44,712**	**2.74%**
School Division					
2008	197	118,547	$3,804,926,777	$32,096	3.12%
2009	196	119,390	3,922,175,230	32,852	2.36%
2010	271[1]	116,486	3,900,661,576	33,486	1.93%
2011	275[1]	114,820	3,821,603,410	33,283	(0.61%)
2012	281[1]	115,294	3,819,065,598	33,125	(0.47%)
2013	**294[1]**	**117,727**	**3,938,649,818**	**33,456**	**1.00%**
Local Government Division					
2008	141	17,379	$718,901,763	$41,366	3.21%
2009	139	16,166	705,097,035	43,616	5.44%
2010	142	16,144	705,265,331	43,686	0.16%
2011	145	16,065	718,169,015	44,704	2.33%
2012	143	12,097	523,668,446	43,289	(3.17%)
2013	**146**	**11,954**	**529,003,436**	**44,253**	**2.23%**
Judicial Division					
2008	6	317	$35,937,094	$113,366	7.72%
2009	6	317	37,582,661	118,557	4.58%
2010	6	317	37,412,139	118,019	(0.45%)
2011	6	329	39,033,369	118,642	0.53%
2012	6	329	39,045,008	118,678	0.03%
2013	**6**	**332**	**39,941,730**	**120,306**	**1.37%**
DPS Division[2]					
2010	28[1]	13,171	$470,773,746	$35,743	—
2011	27[1]	13,571	491,646,251	36,228	1.36%
2012	29[1]	13,911	510,872,366	36,724	1.37%
2013	**31[1]**	**14,816**	**547,659,912**	**36,964**	**0.65%**
All Division Trust Funds[3]					
2008	413	190,684	$6,931,404,440	$36,350	3.43%
2009	411	190,206	7,048,991,770	37,060	1.95%
2010	517[1]	201,095	7,506,192,920	37,327	0.72%
2011	523[1]	199,741	7,464,243,447	37,370	0.12%
2012	529[1]	196,435	7,277,585,379	37,048	(0.86%)
2013	**547[1]**	**200,183**	**7,530,220,378**	**37,617**	**1.54%**

[1] Includes charter schools operating within the School and DPS Divisions and under the Colorado Charter School Institute, but are not included in years prior to 2010.

[2] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

[3] Data prior to 2010 does not include the DPS Division.

Actuarial Methods

The Health Care Trust Fund (HCTF) and the DPS Health Care Trust Fund (DPS HCTF) are defined benefit other post-employment benefit (OPEB) plans, with the purpose of subsidizing PERACare, PERA's health benefits program. Participation in the HCTF and the DPS HCTF is voluntary pursuant to C.R.S. § 24-51-1201. Employer contributions and investment earnings on the assets of the plans pay for the costs. In addition, any employer, as defined by C.R.S § 24-51-101 (20), may elect to provide health care coverage through PERACare for its employees who are members.

The HCTF and the DPS HCTF provide a health care premium subsidy based upon the benefit structure under which a member retires and the member's years of service credit. There is an allocation of the premium subsidy between the trust funds for members who retire with service credit in the DPS Division and one or more of the other divisions. The basis for the allocation of the premium subsidy is the percentage of the member contribution balance from each division as it relates to the total member contribution account balance.

In general, the actuarial accrued liabilities of the HCTF and the DPS HCTF consists of the following two types of benefits:

- A service-based monthly premium subsidy.
- A subsidy for members not eligible for premium-free Medicare Part A coverage.

The plan's actuary determines the costs relating to the subsidies provided by the HCTF and the DPS HCTF and the results are contained within the annual actuarial valuation report. Currently, all participating employers are statutorily required to contribute 1.02 percent of covered compensation to fund these benefits.

The actuary followed ASOP No. 6, *Measuring Retiree Group Benefit Obligation*, for purposes of recommending appropriate OPEB assumptions. The Board is responsible for the adoption of the actuarial methods and assumptions used in the actuarial valuations of the OPEB plans. Although many of the economic and demographic assumptions used to determine pension liabilities apply in the determination of OPEB liabilities, additional assumptions typically are required. All actuarial methods and assumptions necessary to assess OPEB liabilities, in addition to those already provided on previous pages, are described and/or listed below.

Entry Age Normal Cost Method

The Entry Age Normal Cost Method used for the determination of the pension liabilities applies in a similar manner in the calculation of the OPEB liabilities with one notable exception. For the health care benefits, the calculation of the normal cost is based upon total expected career service and is independent of compensation.

Asset Valuation Method

The method for valuing assets of the HCTF and DPS HCTF is a smoothed market value of assets. The smoothed value of assets recognizes the differences between actual and expected investment experience for each year in equal amounts over a four–year period.

Actuarial Assumptions

The determination of the actuarial accrued liability includes recognition of a number of economic and non-economic assumptions in addition to the applied actuarial methods described above.

Economic Assumptions

The economic assumptions for price inflation, investment rate of return, and wage inflation, used in the determination of the pension liabilities also apply to the OPEB plans. The wage inflation rate is the basis for amortization of the unfunded liability. In addition to these economic assumptions, health care cost trend rates are needed to project the future costs associated with providing benefits to those PERACare enrollees under the PERA benefit structure who are not eligible for premium-free Medicare Part A.

Exhibit J contains the assumptions used in determining the additional liability for PERACare enrollees under the PERA benefit structure who are age 65 or older and who are not eligible for premium-free Medicare Part A. Shown are the monthly costs/premiums assumed for 2014 which are subject to the health care cost trend rates displayed in the adjacent tables.

Exhibit K contains the dollar subsidy amounts used in determining the additional liability for PERACare enrollees under the DPS benefit structure who are age 65 or older and who are not eligible for premium-free Medicare Part A.

Effective January 1, 2014, PERACare no longer participates in the Centers for Medicare & Medicaid Services' (CMS) Retiree Drug Subsidy (RDS) Program; therefore, the liability associated with the RDS has been eliminated. PERACare enrollees participating in the self-insured Medicare supplement plans and the Medicare HMO plan offered by Rocky Mountain Health Plans now receive their prescription drug benefits through a Medicare Prescription Drug Plan (PDP).

As the service-based premium subsidy does not increase over time, PERACare enrollees are required to pay the entire increase in annual health care costs each year, resulting in monthly contributions that increase more rapidly over time than the total cost of coverage.

Non-Economic Assumptions

Current PERACare participants are assumed to maintain their current health care benefit elections in perpetuity. For active members retiring directly from covered employment, Exhibit L provides the assumed participation rates. The participation of current PERACare enrollees and members retiring directly from active service is adjusted to reflect the increasing rate of participation with age, as described in Exhibit L. For eligible inactive members, 25 percent are assumed to elect health care coverage upon commencement of their monthly benefit. For spousal participation, actual census data and current plan elections of current benefit recipients are used. For spouses of eligible inactive members and future retirees, 25 percent (15 percent for DPS Division) are assumed to elect coverage for their spouse.

Exhibit M shows the assumed plan elections for future Medicare-eligible retirees.

For those current PERACare enrollees who are age 65 and older, the premium-free Medicare Part A eligibility status is provided by PERA and is assumed to be maintained in perpetuity. For current PERACare enrollees not yet age 65, hired prior to April 1, 1986, and not assumed eligible for premium-free Medicare Part A coverage through their spouse, and for those active employees hired prior to April 1, 1986, Exhibit N lists the percentage, by estimated age at hire, of PERACare enrollees assumed to not qualify for premium-free Medicare Part A benefits, thus qualifying for the applicable "No Part A" subsidy.

Actuarial Studies

All actuarial studies described in the section titled, Actuarial Methods and Assumptions – Defined Benefit Pension Plans, incorporated a review and analysis of actuarial methods and assumptions pertaining to the HCTF and the DPS HCTF.

Changes Since Last Valuation

Changes in Actuarial Methods

There are no actuarial method changes reflected in the December 31, 2013, actuarial valuation since the last actuarial valuation as of December 31, 2012.

Changes in Actuarial Assumptions

Listed below are the actuarial assumption changes for the OPEB plans, in addition to those mentioned on previous pages regarding the defined benefit pension plan, incorporated into the December 31, 2013, actuarial valuation:

- The initial health care costs, for PERACare enrollees who are age 65 and older, and do not have Medicare Part A, have been updated to reflect the change in costs for the 2014 plan year.
- The assumed rates of inflation for health care costs for Medicare Part A premiums have been revised to reflect the current expectation of future increases.
- The utilization rates for the No Part A subsidy of both retirees and their spouses have been revised.
- All actuarial assumptions related to the Retiree Drug Subsidy Program, in which PERACare no longer participates, have been eliminated.

Changes in Plan Provisions

Listed below is the change in plan provisions, effective January 1, 2014, but reflected in the December 31, 2013, actuarial valuation.

- PERACare no longer participates in the CMS Retiree Drug Subsidy Program. PERACare enrollees participating in the self-insured Medicare supplement plans and the Medicare HMO plan offered by Rocky Mountain Health Plans now receive their prescription drug benefits through a Medicare Prescription Drug Plan (PDP). The liability associated with the RDS has been eliminated.

Exhibit J: Initial Health Care Costs and Trend Rate Assumptions—*PERA Benefit Structure*

Initial Health Care Costs

PLAN	MONTHLY PREMIUM FOR MEMBERS WITHOUT MEDICARE PART A	MONTHLY PREMIUM FOR MEMBERS WITH MEDICARE PART A
Self-Funded Medicare Supplement Plans	$655	$286
Kaiser Permanente Medicare Advantage HMO	591	211
Rocky Mountain Health Plans Medicare HMO	592	217
UnitedHealthcare Medicare HMO	603	158

2014 Monthly Medicare Part A Premium — $426

Health Care Cost Trend Rate Assumptions

PLAN/YEAR	PREMIUM FOR MEMBERS WITHOUT MEDICARE PART A	PREMIUM FOR MEMBERS WITH MEDICARE PART A
Self-Funded Medicare Supplement Plans		
2014	5.91%	5.60%
2015	5.45%	5.25%
2016+	5.00%	5.00%
Kaiser Permanente Medicare Advantage HMO		
2014	5.73%	5.45%
2015	5.36%	5.23%
2016+	5.00%	5.00%
Rocky Mountain Health Plans Medicare HMO		
2014	5.45%	5.27%
2015	5.23%	5.14%
2016+	5.00%	5.00%
UnitedHealthcare Medicare HMO		
2014	5.70%	5.42%
2015	5.34%	5.21%
2016+	5.00%	5.00%

Medicare Part A Year/Premiums

2014 — 0.00%
2015 — 2.75%
2016 — 3.50%
2017 — 4.25%
2018 — 3.50%
2019 — 3.75%
2020 — 4.00%
2021+ — 4.25%

Actuarial Methods and Assumptions—Health Care Trust Funds

Exhibit K: Additional Premium Subsidy Assumptions—*DPS Benefit Structure*

YEARS OF SERVICE	MONTHLY SUBSIDY FOR MEMBERS WITHOUT MEDICARE PART A	YEARS OF SERVICE	MONTHLY SUBSIDY FOR MEMBERS WITHOUT MEDICARE PART A
20+	$115.00	10	57.50
19	109.25	9	51.75
18	103.50	8	46.00
17	97.75	7	40.25
16	92.00	6	34.50
15	86.25	5	28.75
14	80.50	4	23.00
13	74.75	3	17.25
12	69.00	2	11.50
11	63.25	1	5.75

Exhibit L: Health Care Participation Rate Assumptions

	PERCENT ELECTING HEALTH CARE COVERAGE			*PERCENT ELECTING HEALTH CARE COVERAGE*	
ATTAINED AGE(S)	HCTF	DPS HCTF	ATTAINED AGE(S)	HCTF	DPS HCTF
15-48	25%	50%	62	55%	65%
49	30%	50%	63	55%	65%
50	35%	50%	64	55%	65%
51	35%	60%	65	60%	65%
52	40%	60%	66	60%	65%
53	40%	60%	67	60%	65%
54	45%	60%	68	60%	65%
55	45%	60%	69	60%	65%
56	45%	60%	70	60%	70%
57	50%	60%	71	60%	70%
58	50%	60%	72	60%	75%
59	55%	60%	73	60%	75%
60	55%	65%	74+	65%	75%
61	55%	65%			

Exhibit M: Health Care Plan Election Rate Assumptions

PLAN	*PERCENT ELECTING PLAN* HCTF
Self-Funded Medicare Supplement Plans	60%[1]
Kaiser Permanente Medicare Advantage HMO	25%
Rocky Mountain Health Plans Medicare HMO	10%
UnitedHealthcare Medicare HMO	5%

[1] Eighty-three (83) percent of those PERACare enrollees participating in the self-funded plans are assumed to elect MS #1, 16 percent MS #2, and 1 percent MS #3.

Exhibit N: Percent Qualifying for “No Part A” Subsidy Assumptions

	PERCENT QUALIFYING FOR “NO PART A” SUBSIDY	
HIRE AGE	HCTF	DPS HCTF
0–24	18%	18%
25–29	12%	12%
30+	6%	6%

Note: Ninety-five (95) percent of PERACare enrollees receiving health care benefits as a result of disability retirement are assumed to qualify for premium-free Medicare Part A. One-hundred (100) percent of eligible inactive (or deferred vested) members enrolled in PERACare are assumed to obtain the 40 or more quarters of Medicare-covered employment required for premium-free Medicare Part A coverage as a result of their subsequent employment.

The PERA funding objective is to be able to pay long-term benefit promises through contributions that remain approximately level from year to year as a percent of salaries earned by PERA members. The following information in this section provides an overview of funding progress:

- The solvency test shows (by health care trust fund) the degree to which existing liabilities are funded, including prior history.
- A schedule of the total UAAL also shows the UAAL as a percentage of annual valuation payroll, including prior history.
- A schedule detailing actuarial gains and losses, by source, for the current year.
- The scheduled contribution requirements for the year immediately following the reporting period.

Consideration of the plans' current funded ratio, the unfunded liabilities in relation to annual payroll, historic trends, including significant gains and losses, and the schedule of future contributions should provide sufficient information to appropriately measure funding progress.

Solvency Test

The solvency test is one means of checking funding progress of defined benefit plans. In this test, the plan's valuation assets typically are compared with: (A) member contributions (with interest) on deposit, (B) the liabilities for future benefits to persons who have retired, died or become disabled, and to those who have terminated service with the right to a future benefit, and (C) the liabilities for service already rendered by active members. Since the HCTF and the DPS HCTF are funded only through employer contributions, there are no member contribution accounts (liability A). The table below shows the funded level of the liabilities for future benefits to current retirees (liability B) and the unfunded liabilities associated with service already rendered by active members (liability C).

Solvency Test
(In Actual Dollars)

	AGGREGATE ACCRUED LIABILITIES				PORTION OF ACTUARIAL ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
VALUATION DATE	ACTIVE MEMBER CONTRIBUTIONS (A)	RETIREES, BENEFICIARIES, AND INACTIVE MEMBERS (B)	EMPLOYER-FINANCED PORTION OF ACTIVE MEMBERS (C)	VALUATION ASSETS	LIABILITY (A)	LIABILITY (B)	LIABILITY (C)
Health Care Trust Fund							
12/31/2008	N/A	$969,288,304	$399,344,778	$255,976,429	N/A	26.4%	0.0%
12/31/2009	N/A	1,241,348,747	521,891,742	260,340,550	N/A	21.0%	0.0%
12/31/2010	N/A	1,179,809,147	463,184,331	288,193,296	N/A	24.4%	0.0%
12/31/2011	N/A	1,251,579,359	459,210,393	282,228,196	N/A	22.5%	0.0%
12/31/2012	N/A	1,259,557,008	463,937,680	285,096,629	N/A	22.6%	0.0%
12/31/2013	**N/A**	**1,092,437,982**	**464,967,833**	**293,556,476**	**N/A**	**26.9%**	**0.0%**
DPS Health Care Trust Fund[1]							
12/31/2010	N/A	$58,431,606	$20,080,989	$14,085,654	N/A	24.1%	0.0%
12/31/2011	N/A	57,092,795	20,381,795	14,447,950	N/A	25.3%	0.0%
12/31/2012	N/A	54,727,369	22,941,318	14,442,582	N/A	26.4%	0.0%
12/31/2013	**N/A**	**52,106,219**	**24,530,091**	**15,481,663**	**N/A**	**29.7%**	**0.0%**

[1] The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

Summary of Funding Progress—Health Care Trust Funds

Unfunded Actuarial Accrued Liability

Unfunded actuarial accrued liabilities are the difference between actuarially calculated liabilities for service already rendered and the valuation assets of the retirement fund. It is natural for unfunded liabilities to exist in a defined benefit OPEB plan.

The following factors resulted in lower liabilities (or gains) during 2013:

- Recognition of investment gains experienced in 2010, 2012, and 2013.
- Effective January 1, 2014, PERACare no longer participates in the CMS Retiree Drug Subsidy Program; therefore, the liability associated with the RDS has been eliminated.

The following factors resulted in higher liabilities (or losses) during 2013:

- Reduction in the investment rate of return assumption and other changes in the underlying economic assumptions.
- Recognition of investment losses experienced in 2011.
- Fewer members terminated PERA-covered employment than expected.
- More service and disability retirements were experienced than expected.
- Retirees lived longer than expected.
- New members had some service resulting in accrued liabilities.

Unfunded Actuarial Accrued Liabilities (UAAL)—Health Care Trust Funds (In Actual Dollars)

(A) VALUATION DATE	(B) ACTUARIAL VALUE OF PLAN ASSETS	(C) TOTAL ACTUARIAL ACCRUED LIABILITIES	(D) UNFUNDED ACTUARIAL ACCRUED LIABILITIES (C)-(B)	(E) FUNDED RATIO (B)/(C)	(F) ANNUAL COVERED PAYROLL	(G) UAAL AS A % OF COVERED PAYROLL (D)/(F)
Health Care Trust Fund						
12/31/2008	$255,976,429	$1,368,633,082	$1,112,656,653	18.7%	$6,931,404,440	16.1%
12/31/2009	260,340,550	1,763,240,489	1,502,899,939	14.8%	7,048,991,770	21.3%
12/31/2010	288,193,296	1,642,993,478	1,354,800,182	17.5%	7,035,419,174	19.3%
12/31/2011	282,228,196	1,710,789,752	1,428,561,556	16.5%	6,972,597,196	20.5%
12/31/2012	285,096,629	1,723,494,688	1,438,398,059	16.5%	6,766,713,013	21.3%
12/31/2013	**293,556,476**	**1,557,405,815**	**1,263,849,339**	**18.8%**	**6,982,560,466**	**18.1%**
DPS Health Care Trust Fund[1]						
12/31/2010	$14,085,654	$78,512,595	$64,426,941	17.9%	$470,773,746	13.7%
12/31/2011	14,447,950	77,474,590	63,026,640	18.6%	491,646,251	12.8%
12/31/2012	14,442,582	77,668,687	63,226,105	18.6%	510,872,366	12.4%
12/31/2013	**15,481,663**	**76,636,310**	**61,154,647**	**20.2%**	**547,659,912**	**11.2%**

[1] The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

Actuarial Gains and Losses

Analysis of Financial Experience—Health Care Trust Funds (In Millions of Dollars)

	HCTF	DPS HCTF
From differences between assumed and actual experience on liabilities		
Age and service retirements[1]	($0.5)	($0.3)
Disability retirements[2]	(0.6)	(0.1)
Deaths[3]	(2.1)	0.1
Withdrawals[4]	(4.0)	0.3
New members[5]	(5.3)	(0.8)
Other[6]	34.5	0.4
Subtotal	22.0	(0.4)
From differences between assumed and actual experience on assets	9.8	0.5
From change in plan assumptions[7]	2.6	(3.2)
From change in plan provisions[7]	170.8	5.0
Total actuarial gains/(losses) on 2013 activities	$205.2	$1.9
Total actuarial gains/(losses) on 2012 activities	$30.0	$0.1

[1] *Age and service retirements:* If members retire at older ages than assumed, there is a gain. If members retire at younger ages, there is a loss.

[2] *Disability retirements:* If disability claims are lower than assumed, there is a gain. If disability claims are higher than assumed, there is a loss.

[3] *Deaths:* If survivor claims are lower than assumed, there is a gain. If survivor claims are higher than assumed, there is a loss. If retirees die sooner than assumed, there is a gain. If retirees live longer than assumed, there is a loss.

[4] *Withdrawals:* If more members terminate and more liabilities are released by withdrawals than assumed, there is a gain. If fewer liabilities are released by terminations than assumed, there is a loss.

[5] *New members:* If new members entering the plan have prior service, there is a loss.

[6] *Other:* Miscellaneous gains and losses result from purchased service transfers, claims experience, changes in actuary's valuation software, data adjustments, timing of financial transactions, etc.

[7] *Changes in plan assumptions and provisions:* The plan assumptions and provisions were revised in 2013 as described in the Notes to the Required Supplemental Information on pages 95–98.

Actuarial Valuation Results

Contribution rates for the year ending December 31, 2015, are derived from the results of the December 31, 2013, annual actuarial valuation and are determined in advance for purposes of budgeting and consideration of any necessary legislative action.

Schedule of Computed Employer Contribution Rates for the 2015 Fiscal Year

	EXPRESSED AS A PERCENTAGE OF MEMBER PAYROLL	
	HCTF	DPS HCTF
Contributions		
Service retirement benefits	0.18%	0.21%
Disability retirement benefits	0.01%	0.01%
Survivor benefits	0.00%	0.00%
Separation benefits	0.03%	0.02%
Total normal cost	0.22%	0.24%
Less member contributions	(0.00%)	(0.00%)
Employer normal cost	0.22%	0.24%
Percentage available to amortize unfunded actuarial accrued liabilities	0.80%	0.78%
Amortization period	40 years	19 years
Total employer contribution rate for actuarially funded benefits	1.15%	0.81%

Schedule of Retirees, Beneficiaries, and Survivors Added to and Removed from the Benefit Payroll—Health Care Trust Funds (In Actual Dollars)

YEAR ENDED	ADDED TO PAYROLL NO.	ADDED TO PAYROLL ANNUAL SUBSIDY	REMOVED FROM PAYROLL NO.	REMOVED FROM PAYROLL ANNUAL SUBSIDY	PAYROLL—END OF YEAR NO.	PAYROLL—END OF YEAR ANNUAL SUBSIDY	AVERAGE ANNUAL SUBSIDY	INCREASE IN AVERAGE SUBSIDY
Health Care Trust Fund[1]								
12/31/2008	3,479	$7,960,047	1,713	$2,767,245	44,885	$78,323,211	$1,745	0.0%
12/31/2009	3,435	7,886,217	1,582	2,442,462	46,738	81,765,552	1,749	0.2%
12/31/2010	3,633	8,290,281	1,653	2,623,104	48,718	85,247,016	1,750	0.1%
12/31/2011	3,399	7,638,162	1,900	2,999,430	50,217	86,755,011	1,728	(1.3%)
12/31/2012	3,489	7,844,610	2,040	3,548,532	51,666	90,123,660	1,744	0.9%
12/31/2013	**3,256**	**7,098,720**	**1,881**	**3,383,139**	**53,041**	**91,009,965**	**1,716**	**(1.6%)**
DPS Health Care Trust Fund[1,2]								
12/31/2010	3,944	$6,446,394	—	$—	3,944	$6,446,394	$1,634	—
12/31/2011	203	411,792	189	292,905	3,958	6,296,871	1,591	(2.6%)
12/31/2012	168	340,929	165	258,957	3,961	6,086,352	1,536	(3.5%)
12/31/2013	**198**	**428,532**	**164**	**241,845**	**3,995**	**6,098,082**	**1,526**	**(0.7%)**

[1] The subsidy benefit is based upon creditable service and varies by attained age. Results do not include benefits valued for "No Part A" benefits or RDS subsidies prior to December 31, 2013.

[2] The DPS HCTF was established January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

Schedule of Active Member Valuation Data—Health Care Trust Funds (In Actual Dollars)

YEAR	NUMBER OF PARTICIPATING EMPLOYERS	NUMBER OF ACTIVE MEMBERS	ANNUAL PAYROLL FOR ACTIVE MEMBERS	AVERAGE ANNUAL PAY FOR ACTIVE MEMBERS	% INCREASE (DECREASE) IN AVERAGE ANNUAL PAY
Health Care Trust Fund					
2008	413	190,684	$6,931,404,440	$36,350	3.43%
2009	411	190,206	7,048,991,770	37,060	1.95%
2010	489[1]	187,924	7,035,419,174	37,438	1.02%
2011	496[1]	186,170	6,972,597,196	37,453	0.04%
2012	500[1]	182,524	6,766,713,013	37,073	(1.01%)
2013	**516[1]**	**185,367**	**6,982,560,466**	**37,669**	**1.61%**
DPS Health Care Trust Fund[2]					
2010	28[1]	13,171	$470,773,746	$35,743	—
2011	27[1]	13,571	491,646,251	36,228	1.36%
2012	29[1]	13,911	510,872,366	36,724	1.37%
2013	**31[1]**	**14,816**	**547,659,912**	**36,964**	**0.65%**

[1] Includes charter schools operating within the School and DPS Divisions and under the Colorado Charter School Institute, but are not included in years prior to 2010.

[2] The DPS HCTF was established January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

WE **WORK** FOR

RETIREES

STATISTICAL SECTION

COLORADO PERA®

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The Statistical Section presents detailed information that assists users in utilizing the basic financial statements, notes to basic financial statements, and required supplementary information to assess the economic condition of PERA.

Contents

Financial Trends
The following schedules show trend information about the changes and growth in PERA's net position over the past 10 years:

- ***Changes in Net Position***
- ***Benefits and Refund Deductions from Net Position by Type***

Operating Information
The following schedules contain information related to the services that PERA provides and the activities it performs:

- ***Member and Benefit Recipient Statistics***[1]
- ***Schedule of Average Retirement Benefits Payable—All Division Trust Funds***[1]
- ***Schedule of Average Retirement Benefits Payable***[1]
- ***Colorado PERA Benefit Payments—All Division Trust Funds***
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- ***Schedule of Average Benefit Payments***[1]
- ***Schedule of Average Benefit Payments—All Division Trust Funds***[1]
- ***Schedule of Contribution Rate History***
- ***Principal Participating Employers***
- ***Schedule of Affiliated Employers***

Schedules and information are derived from PERA internal sources unless otherwise noted.

[1] Schedules and data are provided by the consulting actuary, Cavanaugh Macdonald Consulting, LLC.

Changes in Net Position

For the Years Ended December 31
(In Thousands of Dollars)

State and School Division Trust Fund[1]

ADDITIONS	2004	2005
Employer contributions[2]	$452,997	$491,031
Member contributions[2]	411,376	425,657
Purchased service	192,033	212,971
Investment income	3,663,632	2,827,871
Other	30	(9)
Total additions	4,720,068	3,957,521
DEDUCTIONS		
Benefit payments	1,677,417	1,872,565
Refunds	108,136	114,968
Disability insurance premiums	4,186	4,038
Administrative expenses	20,949	18,811
Other	13,320	10,373
Total deductions	1,824,008	2,020,755
Change in net position available for benefits	2,896,060	1,936,766
Net position held at beginning of year	27,123,836	30,019,896
Net position held at end of year	$30,019,896	$31,956,662

[1] The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

[2] Employer and Member contribution rate history is shown on pages 189–194.

(In Thousands of Dollars)

State Division Trust Fund[1]

ADDITIONS	2006	2007	2008	2009	2010
Employer contributions[2]	$208,795	$232,997	$270,353	$297,240	$287,624
Member contributions[2]	169,965	179,971	191,481	194,168	223,240
Purchased service	39,480	8,259	13,315	8,830	12,496
Investment income (loss)	1,921,863	1,388,265	(3,745,843)	1,742,571	1,553,142
Other	1	4	7	3	1
Total additions	2,340,104	1,809,496	(3,270,687)	2,242,812	2,076,503
DEDUCTIONS					
Benefit payments	849,229	925,761	999,279	1,071,725	1,122,435
Refunds	65,911	56,578	56,716	58,416	68,844
Disability insurance premiums	1,772	1,833	1,794	2,004	1,661
Administrative expenses	7,889	6,963	8,639	8,729	8,942
Other	3,103	7,592	6,613	(1,519)	(726)
Total deductions	927,904	998,727	1,073,041	1,139,355	1,201,156
Change in net position available for benefits	1,412,200	810,769	(4,343,728)	1,103,457	875,347
Net position held at beginning of year	12,629,060	14,041,260	14,852,029	10,508,301	11,611,758
Net position held at end of year	$14,041,260	$14,852,029	$10,508,301	$11,611,758	$12,487,105

ADDITIONS	2011	2012	2013
Employer contributions[2]	$283,222	$335,073	$401,658
Member contributions[2]	258,678	227,058	202,799
Purchased service	11,277	16,358	22,241
Investment income	232,669	1,511,244	1,931,658
Other	331	150	4,869
Total additions	786,177	2,089,883	2,563,225
DEDUCTIONS			
Benefit payments	1,174,707	1,231,922	1,295,780
Refunds	70,090	69,221	68,735
Disability insurance premiums	1,685	1,570	2,229
Administrative expenses	8,685	8,568	9,780
Other	(4,546)	3,911	3,593
Total deductions	1,250,621	1,315,192	1,380,117
Change in net position available for benefits	(464,444)	774,691	1,183,108
Net position at beginning of year	12,487,105	12,022,661	12,797,352
Net position at end of year	$12,022,661	$12,797,352	$13,980,460

[1] The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

[2] Employer and Member contribution rate history is shown on pages 189–194.

Changes in Net Position
For the Years Ended December 31
(In Thousands of Dollars)

School Division Trust Fund[1]

ADDITIONS	2006	2007	2008	2009	2010
Employer contributions[2]	$336,703	$375,480	$430,215	$480,239	$519,044
Member contributions[2]	272,589	289,231	304,686	314,571	316,446
Purchased service	50,806	14,331	15,020	10,152	13,096
Investment income (loss)	2,954,863	2,145,958	(5,842,787)	2,741,797	2,469,517
Other	23	15	19	12	25
Total additions	3,614,984	2,825,015	(5,092,847)	3,546,771	3,318,128
DEDUCTIONS					
Benefit payments	1,213,875	1,329,803	1,449,907	1,563,315	1,642,350
Refunds	68,493	67,710	65,659	70,910	79,012
Disability insurance premiums	2,829	2,983	2,886	3,186	2,802
Administrative expenses	11,523	11,942	12,815	13,226	17,104
Other	9,909	5,348	3,272	9,121	9,396
Total deductions	1,306,629	1,417,786	1,534,539	1,659,758	1,750,664
Change in net position available for benefits	2,308,355	1,407,229	(6,627,386)	1,887,013	1,567,464
Net position held at beginning of year	19,327,602	21,635,957	23,043,186	16,415,800	18,302,813
Net position held at end of year	$21,635,957	$23,043,186	$16,415,800	$18,302,813	$19,870,277

ADDITIONS	2011	2012	2013
Employer contributions[2]	$541,962	$573,586	$624,784
Member contributions[2]	315,958	313,923	322,217
Purchased service	14,465	17,406	19,285
Investment income	370,045	2,434,176	3,136,269
Other	544	246	139
Total additions	1,242,974	3,339,337	4,102,694
DEDUCTIONS			
Benefit payments	1,731,348	1,832,643	1,932,756
Refunds	78,543	77,154	76,980
Disability insurance premiums	2,619	2,522	3,655
Administrative expenses	16,322	16,086	18,523
Other	9,839	9,157	7,132
Total deductions	1,838,671	1,937,562	2,039,046
Change in net position available for benefits	(595,697)	1,401,775	2,063,648
Net position held at beginning of year	19,870,277	19,274,580	20,676,355
Net position held at end of year	$19,274,580	$20,676,355	$22,740,003

[1] The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

[2] Employer and Member contribution rate history is shown on pages 189–194.

(In Thousands of Dollars)

Local Government Division Trust Fund[1]

ADDITIONS	2004	2005	2006	2007	2008
Employer contributions[2]	$47,104	$54,357	$60,664	$68,711	$79,457
Member contributions[2]	43,496	48,404	51,047	54,880	58,508
Purchased service	18,566	92,018	14,461	2,447	3,820
Investment income (loss)	255,505	206,017	369,181	274,991	(778,885)
Other	—	2	4	12	(2)
Total additions	364,671	400,798	495,357	401,041	(637,102)
DEDUCTIONS					
Benefit payments	78,494	90,808	104,156	117,350	132,696
Refunds	13,500	15,052	16,328	16,683	18,219
Disability insurance premiums	432	444	529	561	560
Administrative expenses	1,943	1,848	1,800	1,918	2,102
Other	1,832	2,885	(1,056)	1,326	2,014
Total deductions	96,201	111,037	121,757	137,838	155,591
Change in net position available for benefits	268,470	289,761	373,600	263,203	(792,693)
Net position held at beginning of year	1,819,240	2,087,710	2,377,471	2,751,071	3,014,274
Net position held at end of year	$2,087,710	$2,377,471	$2,751,071	$3,014,274	$2,221,581

ADDITIONS	2009	2010	2011	2012	2013
Employer contributions[2]	$84,456	$89,515	$91,780	$86,113	$67,197
Member contributions[2]	57,598	56,728	58,590	54,827	42,627
Purchased service	4,460	3,671	3,902	13,927	7,363
Investment income	381,350	355,964	53,130	368,492	482,297
Other	2	9	78	2,663	14
Total additions	527,866	505,887	207,480	526,022	599,498
DEDUCTIONS					
Benefit payments	150,036	165,770	179,449	195,945	217,875
Refunds	19,648	22,942	22,686	42,941	32,480
Disability insurance premiums	591	496	442	410	479
Administrative expenses	2,160	2,215	2,157	2,035	2,021
Other	2,737	5,235	2,737	2,072	4,463
Total deductions	175,172	196,658	207,471	243,403	257,318
Change in net position available for benefits	352,694	309,229	9	282,619	342,180
Net position at beginning of year	2,221,581	2,574,275	2,883,504	2,883,513	3,166,132
Net position at end of year	$2,574,275	$2,883,504	$2,883,513	$3,166,132	$3,508,312

[1] The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

[2] Employer and Member contribution rate history is shown on pages 189–194.

Changes in Net Position

For the Years Ended December 31
(In Thousands of Dollars)

Judicial Division Trust Fund

ADDITIONS	2004	2005	2006	2007	2008
Employer contributions[1]	$2,677	$3,408	$3,767	$4,222	$5,105
Member contributions[1]	2,071	2,154	2,292	2,479	2,806
Purchased service	2,203	2,993	1,814	80	392
Investment income (loss)	21,789	16,953	29,920	21,965	(61,192)
Total additions	28,740	25,508	37,793	28,746	(52,889)
DEDUCTIONS					
Benefit payments	8,806	9,868	10,755	12,396	13,356
Refunds	98	181	—	4	—
Disability insurance premiums	21	20	24	25	26
Administrative expenses	23	20	19	19	21
Other	(103)	(742)	(3)	(2,908)	(322)
Total deductions	8,845	9,347	10,795	9,536	13,081
Change in net position available for benefits	19,895	16,161	26,998	19,210	(65,970)
Net position at beginning of year	158,609	178,504	194,665	221,663	240,873
Net position at end of year	$178,504	$194,665	$221,663	$240,873	$174,903

ADDITIONS	2009	2010	2011	2012	2013
Employer contributions[1]	$5,793	$5,654	$5,430	$5,922	$6,587
Member contributions[1]	3,001	3,465	4,120	3,628	3,224
Purchased service	(3)	109	5	180	240
Investment income	29,977	27,400	4,105	28,063	37,096
Other	—	—	6	2,556	1,451
Total additions	38,768	36,628	13,666	40,349	48,598
DEDUCTIONS					
Benefit payments	15,011	15,394	16,809	17,606	18,616
Refunds	30	104	513	605	385
Disability insurance premiums	31	26	26	27	40
Administrative expenses	22	61	61	61	69
Other	(1,778)	(2,491)	(1,043)	22	52
Total deductions	13,316	13,094	16,366	18,321	19,162
Change in net position available for benefits	25,452	23,534	(2,700)	22,028	29,436
Net position held at beginning of year	174,903	200,355	223,889	221,189	243,217
Net position held at end of year	$200,355	$223,889	$221,189	$243,217	$272,653

[1] Employer and Member contribution rate history is shown on pages 189–194.

(In Thousands of Dollars)

Denver Public Schools Division Trust Fund[1]

ADDITIONS	2010	2011	2012	2013
Employer contributions[2]	$6,493	$12,859	$14,703	$25,157
Member contributions[2]	36,824	39,422	41,124	43,564
Plan transfer	2,750,566	—	—	—
Purchased service	2,056	1,792	1,924	1,834
Investment income	367,145	55,081	354,867	452,919
Other	5	77	146	269
Total additions	3,163,089	109,231	412,764	523,743
DEDUCTIONS				
Benefit payments	215,825	221,113	228,742	237,921
Refunds	3,029	4,412	5,821	6,733
Disability insurance premiums	311	238	220	338
Administrative expenses	2,944	1,914	1,919	2,240
Other	54	2,409	55	150
Total deductions	222,163	230,086	236,757	247,382
Change in net position available for benefits	2,940,926	(120,855)	176,007	276,361
Net position held at beginning of year	—	2,940,926	2,820,071	2,996,078
Net position held at end of year	$2,940,926	$2,820,071	$2,996,078	$3,272,439

[1] The Denver Public Schools (DPS) Division Trust Fund was established on January 1, 2010, and received the net assets of the Denver Public Schools Retirement System (DPSRS).

[2] Employer and Member contribution rate history is shown on pages 189–194.

Changes in Net Position

For the Years Ended December 31
(In Thousands of Dollars)

Voluntary Investment Program

ADDITIONS	2004	2005	2006[1]	2007[1]	2008[1]
Employer contributions	$13,494	$2,484	$2,724	$3,252	$3,866
Member contributions	179,909	182,257	165,641	171,630	157,937
Plan transfer	79,329	—	—	—	—
Investment income (loss)	110,598	96,423	166,668	125,576	(500,862)
Other	2,388	2,964	3,396	6,317	4,472
Total additions	385,718	284,128	338,429	306,775	(334,587)
DEDUCTIONS					
Refunds	90,618	187,557	108,477	92,607	87,571
Administrative expenses	4,390	4,298	4,706	5,482	4,965
Total deductions	95,008	191,855	113,183	98,089	92,536
Change in net position available for benefits	290,710	92,273	225,246	208,686	(427,123)
Net position held at beginning of year	914,015	1,204,725	1,296,998	1,522,244	1,730,930
Net position held at end of year	$1,204,725	$1,296,998	$1,522,244	$1,730,930	$1,303,807

ADDITIONS	2009	2010	2011	2012	2013
Employer contributions	$3,383	$3,827	$3,610	$3,697	$3,679
Member contributions	134,645	132,674	126,331	119,013	120,203
Plan transfer	18,358	—	—	—	—
Investment income (loss)	291,029	194,500	(5,752)	236,775	423,877
Other	3,654	3,697	3,298	2,075	2,141
Total additions	451,069	334,698	127,487	361,560	549,900
DEDUCTIONS					
Refunds	75,351	102,056	133,719	144,171	142,064
Administrative expenses	4,664	5,178	4,717	2,827	3,137
Other	—	—	29	234	624
Total deductions	80,015	107,234	138,465	147,232	145,825
Change in net position available for benefits	371,054	227,464	(10,978)	214,328	404,075
Net position held at beginning of year	1,303,807	1,674,861	1,902,325	1,891,347	2,105,675
Net position held at end of year	$1,674,861	$1,902,325	$1,891,347	$2,105,675	$2,509,750

[1] To improve trend analysis, the year has been restated to remove the Defined Contribution Retirement Plan which was reported as a component of the Voluntary Investment Program. For the years 2006–2008, the Defined Contribution Plan was a component plan in the Voluntary Investment Program Trust. In 2009, the Defined Contribution Retirement Plan became a separate trust.

(In Thousands of Dollars)

Defined Contribution Retirement Plan[1]

ADDITIONS	2006[2]	2007[2]	2008[2]	2009	2010
Employer contributions	$329	$1,104	$1,946	$5,899	$6,428
Member contributions	260	880	1,564	4,652	6,896
Plan transfer	—	—	—	18,374	11
Investment income (loss)	14	69	(841)	5,060	5,519
Other	—	49	3	14	35
Total additions	603	2,102	2,672	33,999	18,889
DEDUCTIONS					
Refunds	8	148	215	1,377	2,886
Administrative expenses	—	2	8	143	94
Total deductions	8	150	223	1,520	2,980
Change in net position available for benefits	595	1,952	2,449	32,479	15,909
Net position held at beginning of year	—	595	2,547	4,996	37,475
Net position held at end of year	$595	$2,547	$4,996	$37,475	$53,384

ADDITIONS	2011	2012	2013
Employer contributions	$7,034	$7,997	$11,090
Member contributions	9,732	8,364	8,828
Investment income (loss)	(1,130)	9,046	17,416
Other	40	2	6
Total additions	15,676	25,409	37,340
DEDUCTIONS			
Refunds	5,176	4,869	6,314
Administrative expenses	282	848	744
Other	5	22	49
Total deductions	5,463	5,739	7,107
Change in net position available for benefits	10,213	19,670	30,233
Net position held at beginning of year	53,384	63,597	83,267
Net position held at end of year	$63,597	$83,267	$113,500

[1] The Defined Contribution Plan was established in 2006.

[2] To improve trend analysis, the year has been restated to report changes in fiduciary net position which were included in the Voluntary Investment Program. For the years 2006–2008, the Defined Contribution Plan was a component plan in the Voluntary Investment Program Trust. In 2009, the Defined Contribution Retirement Plan became a separate trust.

Changes in Net Position
For the Years Ended December 31
(In Thousands of Dollars)

Deferred Compensation Plan[1]

ADDITIONS	2009	2010	2011	2012	2013
Employer contributions	$12	$12	$51	$14	$20
Member contributions	23,875	44,203	42,253	39,851	44,449
Plan transfer	336,504	24	4	—	—
Investment income	40,443	42,232	10,335	49,344	88,565
Other	1,820	917	984	354	428
Total additions	402,654	87,388	53,627	89,563	133,462
DEDUCTIONS					
Refunds	8,745	20,869	27,524	27,627	32,854
Administrative expenses	507	822	834	1,105	1,094
Other	50	168	185	278	430
Total deductions	9,302	21,859	28,543	29,010	34,378
Change in net position available for benefits	393,352	65,529	25,084	60,553	99,084
Net position held at beginning of year	—	393,352	458,881	483,965	544,518
Net position held at end of year	$393,352	$458,881	$483,965	$544,518	$643,602

[1] On July 1, 2009, the State's 457 Plan assets transferred to PERA, which became the administrator of that plan under the provisions of SB 09-66.

(In Thousands of Dollars)

Health Care Trust Fund

ADDITIONS	2004	2005	2006	2007	2008
Employer contributions[1]	$60,465	$61,193	$64,547	$68,508	$72,599
Retiree health care premiums	59,453	62,872	85,673	96,345	102,644
Federal health care subsidies	—	—	12,481	12,397	13,743
Investment income (loss)	23,117	17,665	30,920	23,868	(72,423)
Other	16,116	13,609	12,997	12,454	12,803
Total additions	159,151	155,339	206,618	213,572	129,366
DEDUCTIONS					
Benefit payments	130,917	135,550	164,755	159,939	196,769
Administrative expenses	6,634	8,216	8,145	11,051	11,838
Total deductions	137,551	143,766	172,900	170,990	208,607
Change in net position available for benefits	21,600	11,573	33,718	42,582	(79,241)
Net position held at beginning of year	159,959	181,559	193,132	226,850	269,432
Net position held at end of year	$181,559	$193,132	$226,850	$269,432	$190,191

ADDITIONS	2009	2010	2011	2012	2013
Employer contributions[1]	$74,073	$74,047	$73,449	$72,553	$72,784
Retiree health care premiums	106,903	110,158	108,689	107,104	114,364
Federal health care subsidies	13,633	25,751	14,151	14,198	15,731
Investment income	35,483	34,676	5,153	36,710	46,097
Other	12,721	16,035	10,574	11,668	10,522
Total additions	242,813	260,667	212,016	242,233	259,498
DEDUCTIONS					
Benefit payments	192,656	192,044	203,419	218,768	222,860
Administrative expenses	12,170	11,131	12,481	13,514	13,766
Total deductions	204,826	203,175	215,900	232,282	236,626
Change in net position available for benefits	37,987	57,492	(3,884)	9,951	22,872
Net position held at beginning of year	190,191	228,178	285,670	281,786	291,737
Net position held at end of year	$228,178	$285,670	$281,786	$291,737	$314,609

[1] Employer contribution rate history is shown on page 194.

Changes in Net Position

For the Years Ended December 31
(In Thousands of Dollars)

Denver Public Schools Health Care Trust Fund[1]

ADDITIONS	2010	2011	2012	2013
Employer contributions[2]	$4,762	$5,029	$5,243	$5,558
Plan transfer	13,510	—	—	—
Retiree health care premium	4,747	4,529	4,295	4,719
Federal health care subsidies	1,252	499	488	563
Investment income	1,992	424	1,800	2,277
Other	109	374	216	312
Total additions	26,372	10,855	12,042	13,429
DEDUCTIONS				
Benefit payments	11,012	10,770	11,027	11,222
Administrative expenses	569	501	547	561
Total deductions	11,581	11,271	11,574	11,783
Change in net position available for benefits	14,791	(416)	468	1,646
Net position held at beginning of year	—	14,791	14,375	14,843
Net position held at end of year	$14,791	$14,375	$14,843	$16,489

[1] The Denver Public Schools Health Care Trust Fund (DPS HCTF) was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

[2] Employer contribution rate history is shown on page 194.

Changes in Net Position

For the Years Ended December 31
(In Thousands of Dollars)

Life Insurance Reserve

ADDITIONS	2004	2005	2006	2007	2008
Life insurance premiums	$—	$7,351	$8,950	$9,075	$1,772
Investment income (loss)	1,932	1,652	2,625	2,851	(4,693)
Total additions	1,932	9,003	11,575	11,926	(2,921)
DEDUCTIONS					
Life insurance premiums and claims	1,610	5,571	8,653	7,961	2,820
Administrative expenses	(456)	2,486	1,100	1,732	486
Total deductions	1,154	8,057	9,753	9,693	3,306
Change in net position available for benefits	778	946	1,822	2,233	(6,227)
Net position held at beginning of year	12,976	13,754	14,700	16,522	18,755
Net position held at end of year	$13,754	$14,700	$16,522	$18,755	$12,528

ADDITIONS	2009	2010	2011	2012	2013
Investment income	$2,496	$2,280	$503	$2,020	$2,630
Total additions	2,496	2,280	503	2,020	2,630
DEDUCTIONS					
Life insurance premiums and claims	575	545	547	62	131
Administrative expenses	576	575	573	510	871
Total deductions	1,151	1,120	1,120	572	1,002
Change in net position available for benefits	1,345	1,160	(617)	1,448	1,628
Net position held at beginning of year	12,528	13,873	15,033	14,416	15,864
Net position held at end of year	$13,873	$15,033	$14,416	$15,864	$17,492

Benefits and Refund Deductions from Net Position by Type

For the Years Ended December 31
(In Thousands of Dollars)

State and School Division Trust Fund[1]

TYPE OF BENEFIT	2004	2005
Age and service benefits:		
Retirees	$1,535,496	$1,726,569
Disability	120,252	123,808
Survivors	21,669	22,188
Total benefits	$1,677,417	$1,872,565
TYPE OF REFUND		
Separation	$100,608	$109,588
Death	7,528	5,380
Total refunds	$108,136	$114,968

[1] The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

State Division Trust Fund[1]

TYPE OF BENEFIT	2006	2007	2008	2009	2010
Age and service benefits:					
Retirees	$764,672	$838,033	$910,475	$979,419	$1,031,628
Disability	72,548	75,212	76,056	78,799	77,830
Survivors	12,009	12,516	12,748	13,507	12,977
Total benefits	$849,229	$925,761	$999,279	$1,071,725	$1,122,435
TYPE OF REFUND					
Separation	$61,073	$53,220	$51,047	$53,668	$59,330
Death	3,966	2,825	5,014	3,760	9,047
Purchased service	872	533	655	988	467
Total refunds	$65,911	$56,578	$56,716	$58,416	$68,844

[1] The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

State Division Trust Fund[1]

TYPE OF BENEFIT	2011	2012	2013
Age and service benefits:			
Retirees	$1,083,722	$1,140,055	$1,202,238
Disability	77,715	78,689	79,854
Survivors	13,270	13,178	13,688
Total benefits	$1,174,707	$1,231,922	$1,295,780
TYPE OF REFUND			
Separation	$65,525	$65,627	$64,072
Death	3,986	3,503	4,411
Purchased service	579	91	252
Total refunds	$70,090	$69,221	$68,735

[1] The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

(In Thousands of Dollars)

School Division Trust Fund[1]

TYPE OF BENEFIT	2006	2007	2008	2009	2010
Age and service benefits:					
Retirees	$1,147,787	$1,261,407	$1,378,531	$1,490,293	$1,568,637
Disability	54,971	57,054	59,019	60,532	60,920
Survivors	11,117	11,342	12,357	12,490	12,793
Total benefits	$1,213,875	$1,329,803	$1,449,907	$1,563,315	$1,642,350
TYPE OF REFUND					
Separation	$64,239	$62,784	$61,259	$67,330	$74,423
Death	3,198	4,455	3,530	2,725	4,206
Purchased service	1,056	471	870	855	383
Total refunds	$68,493	$67,710	$65,659	$70,910	$79,012

[1] The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

School Division Trust Fund[1]

TYPE OF BENEFIT	2011	2012	2013
Age and service benefits:			
Retirees	$1,657,071	$1,757,279	$1,855,195
Disability	61,150	62,140	63,741
Survivors	13,127	13,224	13,820
Total benefits	$1,731,348	$1,832,643	$1,932,756
TYPE OF REFUND			
Separation	$74,446	$73,075	$73,215
Death	3,676	3,815	3,282
Purchased service	421	264	483
Total refunds	$78,543	$77,154	$76,980

[1] The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

Benefits and Refund Deductions from Net Position by Type

For the Years Ended December 31
(In Thousands of Dollars)

Local Government Division Trust Fund[1]

TYPE OF BENEFIT	2004	2005	2006	2007	2008
Age and service benefits:					
Retirees	$65,063	$76,586	$89,226	$102,239	$116,951
Disability	11,957	12,692	13,107	13,376	13,900
Survivors	1,474	1,530	1,823	1,735	1,845
Total benefits	$78,494	$90,808	$104,156	$117,350	$132,696
TYPE OF REFUND					
Separation	$12,610	$14,137	$15,405	$15,835	$16,742
Death	890	915	677	647	1,399
Purchased Service	—	—	246	201	78
Total refunds	$13,500	$15,052	$16,328	$16,683	$18,219

[1] The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

Local Government Division Trust Fund[1]

TYPE OF BENEFIT	2008	2010	2011	2012	2013
Age and service benefits:					
Retirees	$133,732	$149,260	$162,681	$178,845	$199,821
Disability	14,407	14,572	14,727	15,096	16,022
Survivors	1,897	1,938	2,041	2,004	2,032
Total benefits	$150,036	$165,770	$179,449	$195,945	$217,875
TYPE OF REFUND					
Separation	$18,703	$21,999	$21,316	$41,696	$31,268
Death	574	750	1,283	1,154	1,201
Purchased service	371	193	87	91	11
Total refunds	$19,648	$22,942	$22,686	$42,941	$32,480

[1] The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

(In Thousands of Dollars)

Judicial Division Trust Fund

TYPE OF BENEFIT	2004	2005	2006	2007	2008
Age and service benefits:					
Retirees	$7,795	$8,832	$9,708	$11,292	$12,113
Disability	682	695	696	746	850
Survivors	329	341	351	358	393
Total benefits	$8,806	$9,868	$10,755	$12,396	$13,356
TYPE OF REFUND					
Separation	$98	$181	$—	$—	$—
Purchased service	—	—	—	4	—
Total refunds	$98	$181	$—	$4	$—

Judicial Division Trust Fund

TYPE OF BENEFIT	2009	2010	2011	2012	2013
Age and service benefits:					
Retirees	$13,734	$14,126	$15,563	$16,333	$17,362
Disability	913	917	889	897	908
Survivors	364	351	357	376	346
Total benefits	$15,011	$15,394	$16,809	$17,606	$18,616
TYPE OF REFUND					
Separation	$30	$104	$513	$250	$385
Death	—	—	—	355	—
Total refunds	$30	$104	$513	$605	$385

Denver Public Schools Trust Fund[1]

TYPE OF BENEFIT	2010	2011	2012	2013
Age and service benefits:				
Retirees	$207,398	$212,524	$220,106	$228,692
Disability	6,886	7,078	7,070	7,592
Survivors	1,541	1,511	1,566	1,637
Total benefits	$215,825	$221,113	$228,742	$237,921
TYPE OF REFUND				
Separation	$2,947	$4,322	$5,602	$6,558
Death	82	82	217	160
Purchased service	—	8	2	15
Total refunds	$3,029	$4,412	$5,821	$6,733

[1] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

Member and Benefit Recipient Statistics[1]

(In Actual Dollars)

ACTIVE MEMBERS	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DENVER PUBLIC SCHOOLS DIVISION	TOTAL
Active members as of December 31, 2013	55,354	117,727	11,954	332	14,816	200,183
RETIREMENTS DURING 2013						
Disability retirements	83	92	25	1	14	215
Service retirements	1,339	2,583	313	8	261	4,504
Total	1,422	2,675	338	9	275	4,719
RETIREMENT BENEFITS						
Total receiving disability and service retirement benefits on December 31, 2012	33,130	52,727	5,718	305	6,259	98,139
Total retiring during 2013	1,422	2,675	338	9	275	4,719
Cobeneficiaries continuing after retiree's death	227	210	36	3	42	518
Returning to retirement rolls from suspension	6	20	1	—	1	28
Total	34,785	55,632	6,093	317	6,577	103,404
Retirees and cobeneficiaries deceased during year	807	877	101	8	168	1,961
Retirees suspending benefits to return to work	8	14	1	—	—	23
Total receiving retirement benefits	33,970	54,741	5,991	309	6,409	101,420
Annual retirement benefits for retirees as of December 31, 2013	$1,298,264,520	$1,957,693,032	$218,864,412	$18,824,748	$240,050,868	$3,733,697,580
Average monthly benefit on December 31, 2013	$3,185	$2,980	$3,044	$5,077	$3,121	$3,068
Average monthly benefit for all members who retired during 2013	$2,837	$2,455	$2,509	$6,857	$2,776	$2,601
SURVIVOR BENEFITS						
Survivor benefit accounts						
Total survivors being paid on December 31, 2013	876	1,067	156	13	142	2,254
Annual benefits payable to survivors as of December 31, 2013	$18,265,812	$16,922,316	$2,973,888	$394,380	$2,682,204	$41,238,600
FUTURE BENEFITS						
Future retirements to age 60 or 65	5,340	12,854	2,868	6	759	21,827
Total annual future benefits	$52,613,631	$88,841,691	$38,476,056	$174,219	$7,669,530	$187,775,127
Future survivor beneficiaries of inactive members	135	178	20	1	13	347
Total annual future benefits	$1,776,048	$1,829,448	$211,908	$27,048	$132,612	$3,977,064

[1] In addition, as of December 31, 2013, there was a total of 186,383 non-vested terminated members due a refund of their contributions as follows: State Division—63,759; School Division—96,832; Local Government Division—20,286; Judicial Division—5; DPS Division—5,501.

Schedule of Average Retirement Benefits Payable—All Division Trust Funds[1,2]

(In Actual Dollars)

YEAR ENDED	AVERAGE MONTHLY BENEFIT	AVERAGE AGE AT RETIREMENT	AVERAGE CURRENT AGE OF RETIREES	AVERAGE YEARS OF SERVICE AT RETIREMENT	AVERAGE AGE AT DEATH
12/31/2004	$2,288	57.9	68.7	22.4	N/A
12/31/2005	2,447	58.0	68.7	23.0	N/A
12/31/2006	2,538	58.1	68.8	22.9	N/A
12/31/2007	2,658	58.0	68.9	23.1	N/A
12/31/2008	2,772	58.0	69.0	23.2	N/A
12/31/2009	2,885	58.0	69.3	23.3	N/A
12/31/2010	2,905	58.1	69.7	23.6	N/A
12/31/2011	2,966	58.1	69.9	23.6	N/A
12/31/2012	3,020	58.2	70.0	23.5	N/A
12/31/2013	**3,068**	**58.2**	**70.4**	**23.5**	**82.0**[3]

[1] Includes disability retirements, but not survivor benefits.

[2] Data prior to December 31, 2010, does not include the DPS Division.

[3] Information not available prior to December 31, 2013.

Schedule of Average Retirement Benefits Payable[1]

(In Actual Dollars)

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DENVER PUBLIC SCHOOLS DIVISION
Year Ended 12/31/2013					
Average Monthly Benefit	**$3,185**	**$2,980**	**$3,044**	**$5,077**	**$3,121**
Average Age at Retirement	**58.0**	**58.3**	**57.8**	**61.3**	**58.8**
Average Age of Current Retiree	**70.8**	**70.0**	**67.9**	**74.2**	**73.5**
Average Years of Service at Retirement	**23.0**	**23.6**	**22.1**	**22.8**	**25.5**
Average Age at Death[2]	**82.5**	**81.4**	**78.6**	**88.2**	**84.8**
Year Ended 12/31/2012					
Average Monthly Benefit	$3,124	$2,939	$3,007	$4,889	$3,064
Average Age at Retirement	58.0	58.2	57.7	61.2	58.8
Average Age of Current Retiree	70.4	69.7	67.5	73.7	73.3
Average Years of Service at Retirement	23.0	23.7	22.2	22.6	25.8
Year Ended 12/31/2011					
Average Monthly Benefit	$3,056	$2,895	$2,948	$4,739	$3,009
Average Age at Retirement	58.0	58.2	57.5	61.0	58.7
Average Age of Current Retiree	70.3	69.5	67.8	73.7	73.2
Average Years of Service at Retirement	23.0	23.8	22.3	22.4	26.0

[1] Includes disability retirements, but not survivor benefits.

[2] Information not available prior to December 31, 2013.

Colorado PERA Benefit Payments—All Division Trust Funds

As of December 31, 2013
(In Actual Dollars)

At of the end of 2013, PERA was paying benefits to more than 103,000 retired public employees and their beneficiaries who received an average benefit of $3,031[1] per month. For most benefit recipients, this is the only source of income in retirement as most PERA benefit recipients and their beneficiaries do not qualify for Social Security payments. The median monthly PERA benefit is $2,818 ($33,816 a year), which means that half of all monthly benefits paid are lower than $2,818 and half are higher than that amount.

The PERA service retirement formula for calculating benefits, specified in State law, is 2.5 percent multiplied by years of service multiplied by Highest Average Salary (HAS). HAS[2] is also defined in State law as one-twelfth of the average of the highest annual salaries on which contributions were paid that are associated with three periods of 12 consecutive months of service credit. The three 12-month periods do not have to be consecutive, nor do they have to be the last three years of employment.

These three periods are tied to a fourth 12-month period which becomes the base year for the year-to-year salary increase limitation for HAS calculation purposes. The year-to-year limit for members who were eligible to retire on January 1, 2011, and hired before January 1, 2007, is 15 percent. All other members are subject to an 8 percent year-to-year limit in their HAS calculation. This annual limit applied to salaries in the HAS years is designed to moderate salary "spiking."

Approximately 72 percent of PERA benefit recipients receive less than $50,000 a year in retirement, as the graph below demonstrates. Less than 1 percent (999) of PERA benefit recipients receive an annual benefit payment of $100,000 or more. Generally, these benefit recipients had high salaries and a significant number of years of service credit.

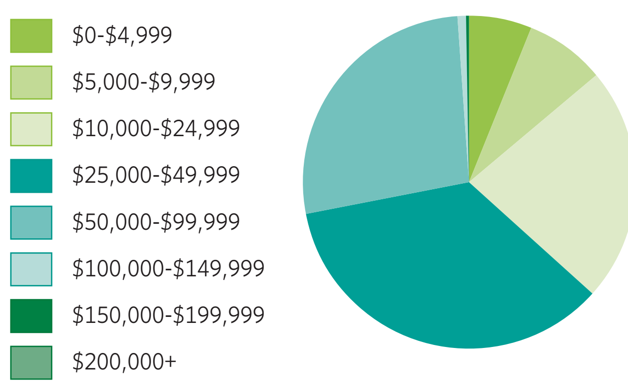
[1] Does not include benefits that ended in 2013 or retirements suspended in 2013. Includes only continuing benefits at the end of 2013, excluding amounts paid under the Replacement Benefit Arrangements.

[2] Some members of the DPS benefit structure and members in the Judicial Division have different HAS calculations.

PERA Benefit Payments by Dollar Amount of Annual Benefit/Number of Benefit Recipients in that Range

BENEFIT RANGE	NUMBER OF BENEFIT RECIPIENTS[1]
$0–$4,999	6,405
$5,000–$9,999	8,180
$10,000–$24,999	23,624
$25,000–$49,999	36,421
$50,000–$99,999	28,045
$100,000–$149,999	937
$150,000–$199,999	51
$200,000+	11
Total Benefit Recipients	103,674

[1] Does not include 347 deferred survivors.



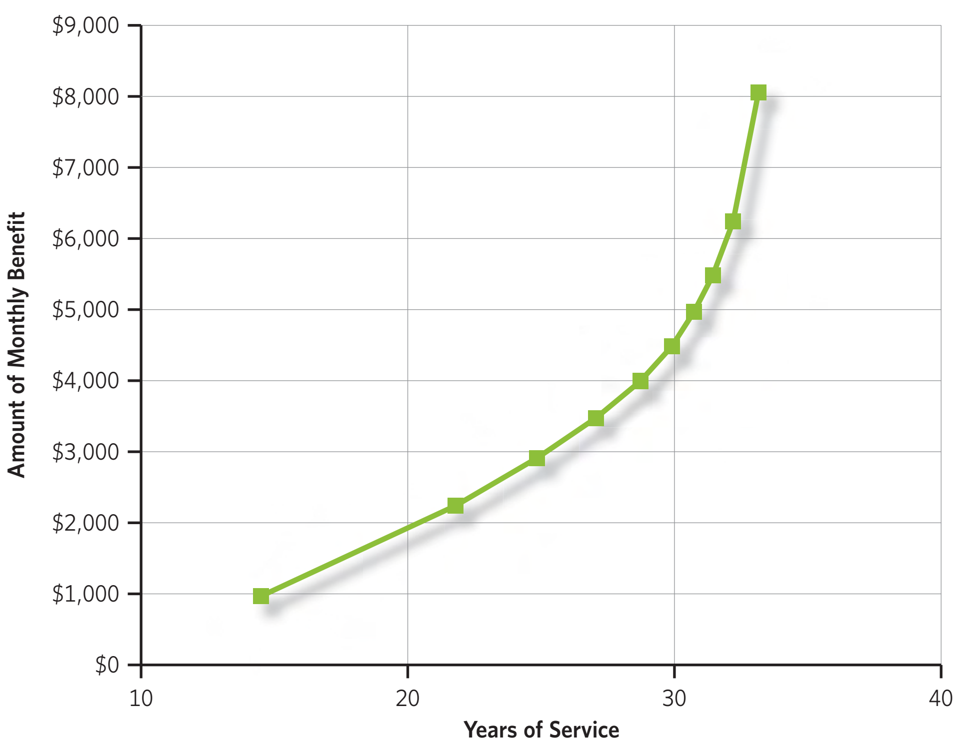
Benefit Payments by Decile

Another way to examine the data is to group benefit recipients and the benefits they receive into benefit payment ranges as a percentage of the total. The table below shows that, for the one-third of PERA benefit recipients (34,099) in the lowest decile, the average benefit is $11,604 a year. This group retired at an average age of 60 with 14½ years of service credit. For the top decile, on the other end of the scale, the average benefit is $96,636 a year. However, this group, on average, had over 33 years of service credit, which is more than twice the length of the average service credit of those in the lowest decile. For the 4,719 new retirees in 2013, the average monthly benefit is $2,601. These members retired at an average age of 61 with 21.08 years of service credit.

DECILE	NUMBER OF BENEFIT RECIPIENTS[1]	PERCENT OF BENEFIT RECIPIENTS	AVERAGE MONTHLY BENEFIT	AVERAGE AGE AT RETIREMENT	AVERAGE SERVICE CREDIT
1%–10%	34,099	32.90%	$967	60	14.49
11%–20%	14,027	13.53%	2,240	57	21.79
21%–30%	10,795	10.41%	2,912	58	24.85
31%–40%	9,052	8.73%	3,473	58	27.05
41%–50%	7,877	7.60%	3,992	57	28.72
51%–60%	7,013	6.76%	4,482	57	29.90
61%–70%	6,331	6.11%	4,967	57	30.73
71%–80%	5,734	5.53%	5,483	57	31.44
81%–90%	5,040	4.86%	6,239	57	32.20
91%–100%	3,706	3.57%	8,053	57	33.15
Total	**103,674**	**100.00%**	**3,031**	**58**	**23.23**

[1] Does not include 347 deferred survivors.

Average Monthly Benefit Payment by Years of Service Credit



Schedule of Retirees and Survivors by Types of Benefits

As of December 31, 2013

Types of Benefits

1—Age and service retirement.
2—Disability retirement.
3—Survivor payment—Option 3.
4—Survivor payment—children, spouse, or dependent parent.
5—Surviving spouse with future benefit.
6—Former member with future benefit.

Option Selected

Retirees select one of the following options at retirement:
1—Single-life benefit.
2—Joint benefit with 1/2 to surviving cobeneficiary.
3—Joint and survivor benefit.
4—Joint benefit with 1/2 to either survivor. (No longer offered to members retiring.)

Surviving Cobeneficiary

Retiree has predeceased the cobeneficiary.

Surviving Retiree

Cobeneficiary has predeceased the retiree.

State Division

Types of Benefits

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	1	2	3	4	5	6
$1–$1,000	4,702	4,007	339	20	263	73	3,940
$1,001–$2,000	6,896	4,871	1,651	39	281	54	1,047
$2,001–$3,000	7,169	5,874	1,146	24	122	3	240
$3,001–$4,000	5,940	5,627	234	25	51	3	71
$4,001–$5,000	4,239	4,138	68	20	12	1	26
$5,001+	6,035	5,998	17	14	5	1	16
Total	34,981	30,515	3,455	142	734	135	5,340

Option Selected

AMOUNT OF MONTHLY BENEFIT[1] (IN ACTUAL DOLLARS)	1	2	3	4	SURVIVING COBENEFICIARY	SURVIVING RETIREE
$1–$1,000	2,732	267	612	4	673	58
$1,001–$2,000	3,647	696	1,064	10	979	126
$2,001–$3,000	3,753	1,032	1,420	14	703	98
$3,001–$4,000	2,995	1,074	1,326	8	399	59
$4,001–$5,000	2,027	870	1,061	6	215	27
$5,001+	2,740	1,385	1,641	7	212	30
Total	17,894	5,324	7,124	49	3,181	398

[1] For Types of Benefits 1 and 2 above.

Types of Benefits

1—Age and service retirement.
2—Disability retirement.
3—Survivor payment—Option 3.
4—Survivor payment—children, spouse, or dependent parent.
5—Surviving spouse with future benefit.
6—Former member with future benefit.

Option Selected

Retirees select one of the following options at retirement:
1—Single-life benefit.
2—Joint benefit with 1/2 to surviving cobeneficiary.
3—Joint and survivor benefit.
4—Joint benefit with 1/2 to either survivor. (No longer offered to members retiring.)

Surviving Cobeneficiary

Retiree has predeceased the cobeneficiary.

Surviving Retiree

Cobeneficiary has predeceased the retiree.

School Division

Types of Benefits

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	1	2	3	4	5	6
$1-$1,000	11,572	10,052	848	42	504	126	11,067
$1,001-$2,000	9,388	7,892	1,164	22	273	37	1,471
$2,001-$3,000	8,944	8,143	663	17	113	8	232
$3,001-$4,000	8,619	8,280	275	19	38	7	64
$4,001-$5,000	8,274	8,151	101	12	10	—	14
$5,001+	9,189	9,147	25	10	7	—	6
Total	55,986	51,665	3,076	122	945	178	12,854

Option Selected

AMOUNT OF MONTHLY BENEFIT[1] (IN ACTUAL DOLLARS)	1	2	3	4	SURVIVING COBENEFICIARY	SURVIVING RETIREE
$1-$1,000	7,535	780	1,521	6	937	121
$1,001-$2,000	5,590	1,135	1,376	12	821	122
$2,001-$3,000	5,259	1,488	1,387	14	559	99
$3,001-$4,000	5,111	1,720	1,388	11	282	43
$4,001-$5,000	4,697	1,891	1,441	10	184	29
$5,001+	5,800	1,996	1,242	10	113	11
Total	33,992	9,010	8,355	63	2,896	425

[1] For Types of Benefits 1 and 2 above.

Schedule of Retirees and Survivors by Types of Benefits

As of December 31, 2013

Types of Benefits

1—Age and service retirement.
2—Disability retirement.
3—Survivor payment—Option 3.
4—Survivor payment—children, spouse, or dependent parent.
5—Surviving spouse with future benefit.
6—Former member with future benefit.

Option Selected

Retirees select one of the following options at retirement:
1—Single-life benefit.
2—Joint benefit with 1/2 to surviving cobeneficiary.
3—Joint and survivor benefit.
4—Joint benefit with 1/2 to either survivor. (No longer offered to members retiring.)

Surviving Cobeneficiary

Retiree has predeceased the cobeneficiary.

Surviving Retiree

Cobeneficiary has predeceased the retiree.

Local Government Division

Types of Benefits

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	1	2	3	4	5	6
$1-$1,000	1,039	902	72	3	49	13	1,768
$1,001-$2,000	1,365	941	357	7	54	6	681
$2,001-$3,000	1,144	900	216	12	15	1	265
$3,001-$4,000	933	880	43	5	5	—	102
$4,001-$5,000	657	642	12	2	1	—	38
$5,001+	1,029	1,022	4	2	1	—	14
Total	6,167	5,287	704	31	125	20	2,868

Option Selected

AMOUNT OF MONTHLY BENEFIT[1] (IN ACTUAL DOLLARS)	1	2	3	4	SURVIVING COBENEFICIARY	SURVIVING RETIREE
$1-$1,000	613	72	145	—	134	10
$1,001-$2,000	696	159	260	3	165	15
$2,001-$3,000	563	193	255	2	89	14
$3,001-$4,000	467	197	222	—	32	5
$4,001-$5,000	313	151	167	—	23	—
$5,001+	434	257	311	—	22	2
Total	3,086	1,029	1,360	5	465	46

[1] For Types of Benefits 1 and 2 above.

Types of Benefits
1—Age and service retirement.
2—Disability retirement.
3—Survivor payment—Option 3.
4—Survivor payment—children, spouse, or dependent parent.
5—Surviving spouse with future benefit.
6—Former member with future benefit.

Option Selected
Retirees select one of the following options at retirement:
1—Single-life benefit.
2—Joint benefit with 1/2 to surviving cobeneficiary.
3—Joint and survivor benefit.
4—Joint benefit with 1/2 to either survivor. (No longer offered to members retiring.)

Surviving Cobeneficiary
Retiree has predeceased the cobeneficiary.

Surviving Retiree
Cobeneficiary has predeceased the retiree.

Judicial Division

Types of Benefits

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	1	2	3	4	5	6
$1-$1,000	16	15	1	—	—	—	2
$1,001-$2,000	33	26	2	—	5	—	1
$2,001-$3,000	31	25	2	—	3	1	—
$3,001-$4,000	36	29	3	—	4	—	2
$4,001-$5,000	39	33	6	—	—	—	1
$5,001+	168	162	5	1	—	—	—
Total	323	290	19	1	12	1	6

Option Selected

AMOUNT OF MONTHLY BENEFIT[1] (IN ACTUAL DOLLARS)	1	2	3	4	SURVIVING COBENEFICIARY	SURVIVING RETIREE
$1-$1,000	4	1	3	—	8	—
$1,001-$2,000	10	—	5	—	12	1
$2,001-$3,000	5	7	8	—	7	—
$3,001-$4,000	8	6	10	—	8	—
$4,001-$5,000	7	6	15	1	10	—
$5,001+	54	39	65	—	9	—
Total	88	59	106	1	54	1

[1] For Types of Benefits 1 and 2 above.

Schedule of Retirees and Survivors by Types of Benefits

As of December 31, 2013

Types of Benefits

1—Age and service retirement.
2—Disability retirement.
3—Survivor payment—Option 3.
4—Survivor payment—children, spouse, or dependent parent.
5—Surviving spouse with future benefit.
6—Former member with future benefit.

Option Selected

Retirees select one of the following options at retirement:
1—Single-life benefit.
2—Joint benefit with 1/2 to surviving cobeneficiary.
3—Joint and survivor benefit.
4—Joint benefit with 1/2 to either survivor. (No longer offered to members retiring.)

Surviving Cobeneficiary

Retiree has predeceased the cobeneficiary.

Surviving Retiree

Cobeneficiary has predeceased the retiree.

Denver Public Schools Division

Types of Benefits

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	1	2	3	4	5	6
$1–$1,000	726	561	96	—	59	10	550
$1,001–$2,000	1,208	1,039	131	4	31	3	176
$2,001–$3,000	1,207	1,101	72	14	20	—	28
$3,001–$4,000	1,453	1,406	38	7	2	—	5
$4,001–$5,000	1,240	1,228	8	2	2	—	—
$5,001+	730	725	4	1	—	—	—
Total	6,564	6,060	349	28	114	13	759

Option Selected[2]

AMOUNT OF MONTHLY BENEFIT[1] (IN ACTUAL DOLLARS)	1	2	3	4	SURVIVING COBENEFICIARY	SURVIVING RETIREE	COBENEFICIARIES BOTH DECEASED
$1–$1,000	398	27	126	—	77	28	1
$1,001–$2,000	671	79	241	—	129	45	5
$2,001–$3,000	577	93	310	—	118	73	2
$3,001–$4,000	683	110	449	—	120	79	3
$4,001–$5,000	559	106	416	—	88	67	—
$5,001+	337	66	257	—	46	22	1
Total	3,225	481	1,799	—	578	314	12

[1] For Types of Benefits 1 and 2 above.

[2] Below are the equivalent DPS benefit structure options:
PERA Option 1 = Options A, B, and D (D is discontinued)
PERA Option 2 = Options P2 and E (E is discontinued)
PERA Option 3 = Options P3 and C (C is discontinued)

State Division[1]

	YEARS OF SERVICE CREDIT						
YEAR RETIRED	0-5	6-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2013 to 12/31/2013							
Average monthly benefit	$269	$628	$1,288	$1,997	$2,853	$4,165	$5,285
Average highest average salary	$2,836	$3,508	$4,030	$4,527	$5,150	$6,196	$6,617
Number of service retirees	64	173	151	167	236	296	252
Period 1/1/2012 to 12/31/2012							
Average monthly benefit	$236	$634	$1,259	$2,121	$2,855	$4,126	$5,035
Average highest average salary	$2,487	$3,355	$4,141	$4,661	$5,248	$5,969	$6,268
Number of service retirees	60	182	196	206	284	351	343
Period 1/1/2011 to 12/31/2011							
Average monthly benefit	$160	$690	$1,214	$1,956	$2,863	$4,096	$5,307
Average highest average salary	$2,254	$3,425	$4,027	$4,413	$5,181	$6,002	$6,661
Number of service retirees	53	184	130	143	237	331	305
Period 1/1/2010 to 12/31/2010							
Average monthly benefit	$266	$617	$1,089	$2,200	$2,816	$4,011	$5,156
Average highest average salary	$2,569	$3,212	$3,504	$4,923	$5,102	$5,983	$6,394
Number of service retirees	34	171	127	164	305	430	362
Period 1/1/2009 to 12/31/2009							
Average monthly benefit	$181	$530	$1,160	$1,952	$2,848	$3,974	$5,087
Average highest average salary	$2,223	$2,903	$3,750	$4,397	$5,159	$5,790	$6,426
Number of service retirees	25	131	129	143	241	406	361
Period 1/1/2008 to 12/31/2008							
Average monthly benefit	$271	$482	$1,049	$1,774	$2,437	$3,499	$4,672
Average highest average salary	$2,730	$2,686	$3,608	$4,319	$4,716	$5,428	$6,031
Number of service retirees	14	123	122	106	276	294	530
Period 1/1/2007 to 12/31/2007							
Average monthly benefit	$109	$518	$978	$1,576	$2,415	$3,267	$4,469
Average highest average salary	$2,192	$2,995	$3,477	$3,848	$4,631	$5,088	$5,748
Number of service retirees	13	134	105	100	272	321	583
Period 1/1/2006 to 12/31/2006							
Average monthly benefit	$68	$482	$889	$1,568	$2,235	$3,224	$4,391
Average highest average salary	$1,368	$2,893	$3,097	$3,927	$4,319	$5,150	$5,694
Number of service retirees	14	133	82	86	266	327	658

[1] Information not available for years prior to 2006.

Schedule of Average Benefit Payments
(In Actual Dollars)

School Division[1]

	YEARS OF SERVICE CREDIT						
YEAR RETIRED	0–5	6–10	10–15	15–20	20–25	25–30	30+
Period 1/1/2013 to 12/31/2013							
Average monthly benefit	$201	$474	$976	$1,687	$2,448	$3,685	$4,739
Average highest average salary	$1,791	$2,726	$3,197	$3,721	$4,357	$5,318	$5,886
Number of service retirees	79	350	339	311	492	571	441
Period 1/1/2012 to 12/31/2012							
Average monthly benefit	$216	$473	$815	$1,632	$2,411	$3,682	$4,592
Average highest average salary	$1,696	$2,575	$2,800	$3,546	$4,368	$5,370	$5,791
Number of service retirees	96	365	349	380	534	634	509
Period 1/1/2011 to 12/31/2011							
Average monthly benefit	$214	$462	$806	$1,625	$2,430	$3,617	$4,632
Average highest average salary	$1,980	$2,563	$2,683	$3,526	$4,344	$5,235	$5,804
Number of service retirees	71	336	273	334	506	651	497
Period 1/1/2010 to 12/31/2010							
Average monthly benefit	$212	$464	$780	$1,543	$2,393	$3,603	$4,602
Average highest average salary	$2,193	$2,572	$2,500	$3,336	$4,243	$5,207	$5,722
Number of service retirees	56	297	252	305	585	755	601
Period 1/1/2009 to 12/31/2009							
Average monthly benefit	$165	$440	$825	$1,671	$2,384	$3,508	$4,515
Average highest average salary	$1,928	$2,311	$2,663	$3,512	$4,246	$5,047	$5,632
Number of service retirees	33	268	191	232	459	618	495
Period 1/1/2008 to 12/31/2008							
Average monthly benefit	$369	$383	$706	$1,238	$2,183	$2,994	$4,313
Average highest average salary	$2,965	$2,373	$2,534	$2,948	$4,125	$4,567	$5,554
Number of service retirees	22	218	197	156	523	553	847
Period 1/1/2007 to 12/31/2007							
Average monthly benefit	$90	$352	$729	$1,143	$2,046	$2,980	$4,198
Average highest average salary	$1,465	$2,228	$2,593	$2,789	$3,871	$4,553	$5,409
Number of service retirees	12	228	170	156	499	567	961
Period 1/1/2006 to 12/31/2006							
Average monthly benefit	$49	$377	$561	$1,131	$1,892	$2,924	$4,120
Average highest average salary	$1,043	$2,257	$1,948	$2,765	$2,561	$4,488	$5,382
Number of service retirees	15	192	167	151	510	531	1,024

[1] Information not available for years prior to 2006.

Local Government Division[1]

YEAR RETIRED	0–5	6–10	10–15	15–20	20–25	25–30	30+
	YEARS OF SERVICE CREDIT						
Period 1/1/2013 to 12/31/2013							
Average monthly benefit	$211	$650	$1,259	$2,156	$2,733	$4,020	$5,692
Average highest average salary	$3,013	$3,743	$4,467	$5,107	$5,311	$6,024	$7,353
Number of service retirees	16	58	47	36	49	73	34
Period 1/1/2012 to 12/31/2012							
Average monthly benefit	$536	$839	$1,264	$2,524	$3,095	$4,323	$4,943
Average highest average salary	$4,726	$4,538	$4,213	$5,649	$5,626	$6,465	$6,275
Number of service retirees	27	96	77	83	138	138	99
Period 1/1/2011 to 12/31/2011							
Average monthly benefit	$338	$665	$1,011	$1,985	$2,908	$4,093	$5,337
Average highest average salary	$5,959	$3,988	$3,469	$4,616	$5,333	$6,070	$6,712
Number of service retirees	13	48	33	32	42	78	60
Period 1/1/2010 to 12/31/2010							
Average monthly benefit	$401	$725	$1,053	$1,955	$2,776	$4,540	$5,024
Average highest average salary	$3,879	$4,141	$3,516	$4,482	$5,184	$6,476	$6,414
Number of service retirees	8	46	32	41	73	116	124
Period 1/1/2009 to 12/31/2009							
Average monthly benefit	$327	$579	$1,496	$1,991	$2,869	$3,712	$4,755
Average highest average salary	$2,981	$3,088	$4,420	$4,380	$5,249	$5,634	$5,970
Number of service retirees	9	43	37	35	49	83	90
Period 1/1/2008 to 12/31/2008							
Average monthly benefit	$485	$605	$1,072	$1,625	$2,867	$3,453	$5,245
Average highest average salary	$5,531	$3,547	$3,832	$4,043	$5,522	$5,503	$7,011
Number of service retirees	9	42	25	27	45	59	135
Period 1/1/2007 to 12/31/2007							
Average monthly benefit	$92	$592	$1,205	$2,061	$2,388	$3,437	$4,627
Average highest average salary	$1,847	$3,446	$4,358	$5,220	$4,593	$5,463	$6,010
Number of service retirees	9	33	26	21	58	55	118
Period 1/1/2006 to 12/31/2006							
Average monthly benefit	$69	$364	$1,135	$1,451	$2,042	$3,053	$4,470
Average highest average salary	$2,098	$2,226	$3,913	$3,505	$3,930	$4,708	$5,727
Number of service retirees	3	14	16	14	41	61	118

[1] Information not available for years prior to 2006.

Schedule of Average Benefit Payments
(In Actual Dollars)

Judicial Division[1]

			YEARS OF SERVICE CREDIT				
YEAR RETIRED	0-5	6-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2013 to 12/31/2013							
Average monthly benefit	$—	$—	$3,596	$—	$—	$9,561	$9,427
Average highest average salary	$—	$—	$9,119	$—	$—	$11,271	$10,871
Number of service retirees	—	—	3	—	—	1	4
Period 1/1/2012 to 12/31/2012							
Average monthly benefit	$—	$713	$3,376	$4,438	$7,013	$6,927	$2,582
Average highest average salary	$—	$4,363	$10,256	$8,787	$12,913	$10,988	$3,077
Number of service retirees	—	4	1	2	2	8	1
Period 1/1/2011 to 12/31/2011							
Average monthly benefit	$—	$962	$2,332	$3,156	$5,642	$4,768	$7,974
Average highest average salary	$—	$8,192	$10,487	$8,704	$10,430	$7,818	$9,925
Number of service retirees	—	1	2	3	5	3	5
Period 1/1/2010 to 12/31/2010							
Average monthly benefit	$—	$—	$2,246	$—	$5,734	$7,313	$8,959
Average highest average salary	$—	$—	$7,685	$—	$10,717	$10,602	$10,999
Number of service retirees	—	—	1	—	1	4	4
Period 1/1/2009 to 12/31/2009							
Average monthly benefit	$—	$1,006	$2,549	$4,238	$5,555	$7,012	$8,330
Average highest average salary	$—	$3,171	$7,858	$10,304	$10,302	$10,449	$10,297
Number of service retirees	—	1	2	1	5	3	6
Period 1/1/2008 to 12/31/2008							
Average monthly benefit	$—	$—	$—	$—	$5,148	$8,780	$7,031
Average highest average salary	$—	$—	$—	$—	$9,636	$11,871	$9,982
Number of service retirees	—	—	—	—	3	1	3
Period 1/1/2007 to 12/31/2007							
Average monthly benefit	$—	$714	$1,853	$—	$3,764	$6,020	$6,631
Average highest average salary	$—	$3,898	$9,312	$—	$7,676	$9,227	$8,678
Number of service retirees	—	3	1	—	4	6	8
Period 1/1/2006 to 12/31/2006							
Average monthly benefit	$—	$—	$—	$—	$4,648	$5,977	$5,679
Average highest average salary	$—	$—	$—	$—	$9,104	$9,667	$7,425
Number of service retirees	—	—	—	—	5	3	4

[1] Information not available for years prior to 2006.

Denver Public Schools Division[1]

YEAR RETIRED	YEARS OF SERVICE CREDIT 0–5	6–10	10–15	15–20	20–25	25–30	30+
Period 1/1/2013 to 12/31/2013							
Average monthly benefit	$276	$890	$1,365	$1,847	$3,214	$4,350	$5,049
Average highest average salary	$2,532	$5,835	$4,861	$4,618	$5,754	$6,611	$6,097
Number of service retirees	15	30	31	32	69	57	27
Period 1/1/2012 to 12/31/2012							
Average monthly benefit	$274	$840	$1,507	$2,099	$3,032	$3,589	$4,568
Average highest average salary	$2,645	$4,483	$4,919	$5,238	$5,454	$5,478	$5,682
Number of service retirees	8	38	31	42	70	38	33
Period 1/1/2011 to 12/31/2011							
Average monthly benefit	$1,297	$996	$1,479	$2,060	$3,373	$4,188	$4,290
Average highest average salary	$2,751	$4,789	$4,956	$4,948	$5,910	$6,046	$5,198
Number of service retirees	8	30	35	38	57	38	26
Period 1/1/2010 to 12/31/2010							
Average monthly benefit	$1,203	$867	$1,386	$1,943	$2,870	$3,971	$4,710
Average highest average salary	$3,568	$4,608	$4,335	$5,151	$5,312	$5,893	$5,944
Number of service retirees	5	17	20	25	42	33	30

[1] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

Schedule of Average Benefit Payments—All Division Trust Funds[1]

(In Actual Dollars)

	YEARS OF SERVICE CREDIT						
YEAR RETIRED	**0–5**	**6–10**	**10–15**	**15–20**	**20–25**	**25–30**	**30+**
Period 1/1/2013 to 12/31/2013							
Average monthly benefit	$233	$555	$1,117	$1,822	$2,640	$3,896	$4,999
Average highest average salary	$2,352	$3,196	$3,644	$4,111	$4,747	$5,710	$6,229
Number of service retirees	174	611	571	546	846	998	758
Period 1/1/2012 to 12/31/2012							
Average monthly benefit	$270	$589	$1,038	$1,913	$2,677	$3,910	$4,779
Average highest average salary	$2,413	$3,174	$3,480	$4,227	$4,870	$5,721	$5,999
Number of service retirees	191	685	654	713	1,028	1,169	985
Period 1/1/2011 to 12/31/2011							
Average monthly benefit	$265	$576	$989	$1,770	$2,657	$3,817	$4,919
Average highest average salary	$2,480	$3,063	$2,941	$3,605	$4,371	$5,351	$6,012
Number of service retirees	145	599	473	550	847	1,101	893
Period 1/1/2010 to 12/31/2010[2]							
Average monthly benefit	$292	$549	$922	$1,795	$2,572	$3,836	$4,846
Average highest average salary	$2,515	$2,979	$2,767	$3,754	$4,401	$5,454	$5,881
Number of service retirees	103	531	432	535	1,006	1,338	1,121
Period 1/1/2009 to 12/31/2009							
Average monthly benefit	$193	$482	$1,024	$1,802	$2,585	$3,703	$4,779
Average highest average salary	$2,180	$2,564	$3,263	$3,911	$4,643	$5,377	$5,995
Number of service retirees	67	443	359	411	754	1,110	952
Period 1/1/2008 to 12/31/2008							
Average monthly benefit	$362	$439	$854	$1,471	$2,313	$3,194	$4,527
Average highest average salary	$3,405	$2,602	$3,009	$3,553	$4,411	$4,915	$5,859
Number of service retirees	45	383	344	289	847	907	1,515
Period 1/1/2007 to 12/31/2007							
Average monthly benefit	$98	$430	$860	$1,369	$2,199	$3,123	$4,335
Average highest average salary	$1,844	$2,600	$3,075	$3,356	$4,188	$4,816	$5,585
Number of service retirees	34	398	302	277	833	949	1,670
Period 1/1/2006 to 12/31/2006							
Average monthly benefit	$59	$417	$697	$1,299	$2,027	$3,049	$4,245
Average highest average salary	$1,284	$2,505	$2,422	$3,204	$3,238	$4,754	$5,523
Number of service retirees	32	339	265	251	822	922	1,804

	0–10[3]	**10–15**	**15–20**	**20–25**	**25–30**	**30+**
Period 1/1/2005 to 12/31/2005						
Average monthly benefit	$376	$661	$1,101	$1,954	$2,684	$4,063
Average highest average salary	$2,456	$2,467	$2,945	$3,893	$4,337	$5,318
Number of service retirees	296	173	244	720	859	2,331
Period 1/1/2004 to 12/31/2004						
Average monthly benefit	$421	$629	$919	$1,729	$2,443	$3,944
Average highest average salary	$2,178	$2,543	$2,679	$3,572	$4,110	$5,168
Number of service retirees	265	140	188	649	823	2,987

[1] Data prior to December 31, 2010, does not include the DPS Division.

[2] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

[3] Data prior to December 2006 for the periods “0–5” and “6–10” are not available.

State Division (Members Other Than State Troopers)[1]

YEARS			PERCENT OF COVERED PAYROLL			
			MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE[2]	AMORTIZATION EQUALIZATION DISBURSEMENT	SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT
8/1/1931	to	6/30/1938	3.50%	—	—	—
7/1/1938	to	6/30/1949	3.50%	3.50%	—	—
7/1/1949	to	6/30/1958	5.00%	5.00%	—	—
7/1/1958	to	6/30/1969	6.00%	6.00%	—	—
7/1/1969	to	6/30/1970	7.00%	7.00%	—	—
7/1/1970	to	6/30/1971	7.00%	8.00%	—	—
7/1/1971	to	6/30/1973	7.00%	8.50%	—	—
7/1/1973	to	6/30/1974	7.75%	9.50%	—	—
7/1/1974	to	6/30/1975	7.75%	10.50%	—	—
7/1/1975	to	8/31/1980	7.75%	10.64%	—	—
9/1/1980	to	12/31/1981	7.75%	12.20%	—	—
1/1/1982	to	6/30/1987	8.00%	12.20%	—	—
7/1/1987	to	6/30/1988	8.00%	10.20%	—	—
7/1/1988	to	6/30/1991	8.00%	12.20%	—	—
7/1/1991	to	4/30/1992	8.00%	11.60%	—	—
5/1/1992	to	6/30/1992	8.00%	5.60%[3]	—	—
7/1/1992	to	6/30/1993	8.00%	10.60%	—	—
7/1/1993	to	6/30/1997	8.00%	11.60%	—	—
1/1/2006	to	12/31/2006	8.00%	10.15%	0.50%	—
1/1/2007	to	12/31/2007	8.00%	10.15%	1.00%	—
1/1/2008	to	12/31/2008	8.00%	10.15%	1.40%	0.50%
1/1/2009	to	12/31/2009	8.00%	10.15%	1.80%	1.00%
1/1/2010	to	6/30/2010	8.00%	10.15%	2.20%	1.50%
7/1/2010	to	12/31/2010	10.50%	7.65%	2.20%	1.50%
1/1/2011	to	12/31/2011	10.50%	7.65%	2.60%	2.00%
1/1/2012	to	6/31/2012	10.50%	7.65%	3.00%	2.50%
7/1/2012	to	12/31/2012	8.00%	10.15%	3.00%	2.50%
1/1/2013	**to**	**12/31/2013**	**8.00%**	**10.15%**	**3.40%**	**3.00%**

[1] State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

[2] All employer contribution rates shown since July 1, 1985, include the Health Care Trust Fund (HCTF) allocation.

[3] Legislation created an annual reduction equal to 1.0 percent of salary retroactive to July 1, 1991, to be taken during May and June of 1992.

Schedule of Contribution Rate History

State Troopers[1]

YEARS			PERCENT OF COVERED PAYROLL MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE[2]	AMORTIZATION EQUALIZATION DISBURSEMENT	SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT
7/1/1945	to	6/30/1969	7.00%	7.00%	—	—
7/1/1969	to	6/30/1970	8.00%	8.00%	—	—
7/1/1970	to	6/30/1971	8.00%	9.00%	—	—
7/1/1971	to	6/30/1973	8.00%	9.50%	—	—
7/1/1973	to	6/30/1974	8.75%	10.50%	—	—
7/1/1974	to	6/30/1975	8.75%	11.50%	—	—
7/1/1975	to	8/31/1980	8.75%	11.64%	—	—
9/1/1980	to	12/31/1981	8.75%	13.20%	—	—
1/1/1982	to	6/30/1987	9.00%	13.20%	—	—
7/1/1987	to	6/30/1988	9.00%	11.20%	—	—
7/1/1988	to	6/30/1989	9.00%	13.20%	—	—
7/1/1989	to	4/30/1992	12.30%	13.20%	—	—
5/1/1992	to	6/30/1992	12.30%	7.20%[3]	—	—
7/1/1992	to	6/30/1993	11.50%	12.20%	—	—
7/1/1993	to	6/30/1997	11.50%	13.20%	—	—
7/1/1997	to	6/30/1999	11.50%	13.10%	—	—
7/1/1999	to	6/30/2001	10.00%	13.10%	—	—
7/1/2001	to	6/30/2002	10.00%	12.60%	—	—
7/1/2002	to	6/30/2003	10.00%	12.74%	—	—
7/1/2003	to	12/31/2005	10.00%	12.85%	—	—
1/1/2006	to	12/31/2006	10.00%	12.85%	0.50%	—
1/1/2007	to	12/31/2007	10.00%	12.85%	1.00%	—
1/1/2008	to	12/31/2008	10.00%	12.85%	1.40%	0.50%
1/1/2009	to	12/31/2009	10.00%	12.85%	1.80%	1.00%
1/1/2010	to	6/30/2010	10.00%	12.85%	2.20%	1.50%
7/1/2010	to	12/31/2010	12.50%	10.35%	2.20%	1.50%
1/1/2011	to	12/31/2011	12.50%	10.35%	2.60%	2.00%
1/1/2012	to	6/31/2012	12.50%	10.35%	3.00%	2.50%
7/1/2012	to	12/31/2012	10.00%	12.85%	3.00%	2.50%
1/1/2013	**to**	**12/31/2013**	**10.00%**	**12.85%**	**3.40%**	**3.00%**

[1] State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

[2] All employer contribution rates shown since July 1, 1985, include the HCTF allocation.

[3] Legislation created an annual reduction equal to 1.0 percent of salary retroactive to July 1, 1991, to be taken during May and June of 1992.

School Division[1]

YEARS			PERCENT OF COVERED PAYROLL MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE[2]	AMORTIZATION EQUALIZATION DISBURSEMENT	SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT
1/1/1944	to	12/31/1949	3.50%	3.50%	—	—
1/1/1950	to	6/30/1958	5.00%	5.00%	—	—
7/1/1958	to	6/30/1969	6.00%	6.00%	—	—
7/1/1969	to	12/31/1969	7.00%	6.00%	—	—
1/1/1970	to	12/31/1970	7.00%	7.50%	—	—
1/1/1971	to	12/31/1971	7.00%	8.50%	—	—
1/1/1972	to	6/30/1973	7.00%	9.25%	—	—
7/1/1973	to	12/31/1973	7.75%	9.25%	—	—
1/1/1974	to	12/31/1974	7.75%	10.25%	—	—
1/1/1975	to	12/31/1975	7.75%	11.25%	—	—
1/1/1976	to	12/31/1980	7.75%	12.10%	—	—
1/1/1981	to	12/31/1981	7.75%	12.50%	—	—
1/1/1982	to	6/30/1987	8.00%	12.50%	—	—
7/1/1987	to	6/30/1988	8.00%	11.50%	—	—
7/1/1988	to	6/30/1991	8.00%	12.50%	—	—
7/1/1991	to	6/30/1992	8.00%	12.20%	—	—
7/1/1992	to	6/30/1997	8.00%	11.60%	—	—
1/1/2006	to	12/31/2006	8.00%	10.15%	0.50%	—
1/1/2007	to	12/31/2007	8.00%	10.15%	1.00%	—
1/1/2008	to	12/31/2008	8.00%	10.15%	1.40%	0.50%
1/1/2009	to	12/31/2009	8.00%	10.15%	1.80%	1.00%
1/1/2010	to	12/31/2010	8.00%	10.15%	2.20%	1.50%
1/1/2011	to	12/31/2011	8.00%	10.15%	2.60%	2.00%
1/1/2012	to	12/31/2012	8.00%	10.15%	3.00%	2.50%
1/1/2013	**to**	**12/31/2013**	**8.00%**	**10.15%**	**3.40%**	**3.00%**

[1] State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

[2] All employer contribution rates shown since July 1, 1985, include the HCTF allocation.

State and School Division[1]

YEARS			PERCENT OF COVERED PAYROLL MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE[2]
7/1/1997	to	6/30/1998	8.00%	11.50%
7/1/1998	to	6/30/2000	8.00%	11.40%
7/1/2000	to	6/30/2001	8.00%	10.40%
7/1/2001	to	6/30/2002	8.00%	9.90%
7/1/2002	to	6/30/2003	8.00%	10.04%
7/1/2003	to	12/31/2005	8.00%	10.15%

[1] State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

[2] The employer contribution rates shown include the HCTF allocation.

Schedule of Contribution Rate History

Local Government Division[1]

	Percent of Covered Payroll			
YEARS	**MEMBER CONTRIBUTION RATE**	**EMPLOYER CONTRIBUTION RATE**[2]	**AMORTIZATION EQUALIZATION DISBURSEMENT**	**SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT**
1/1/1944 to 12/31/1949	3.50%	3.50%	—	—
1/1/1950 to 6/30/1958	5.00%	5.00%	—	—
7/1/1958 to 6/30/1969	6.00%	6.00%	—	—
7/1/1969 to 12/31/1969	7.00%	6.00%	—	—
1/1/1970 to 12/31/1970	7.00%	7.00%	—	—
1/1/1971 to 6/30/1973	7.00%	7.50%	—	—
7/1/1973 to 12/31/1973	7.75%	7.50%	—	—
1/1/1974 to 12/31/1974	7.75%	8.50%	—	—
1/1/1975 to 12/31/1975	7.75%	9.50%	—	—
1/1/1976 to 12/31/1980	7.75%	9.86%	—	—
1/1/1981 to 12/31/1981	7.75%	10.20%	—	—
1/1/1982 to 6/30/1991	8.00%	10.20%	—	—
7/1/1991 to 12/31/2000	8.00%	10.00%	—	—
1/1/2001 to 12/31/2001	8.00%	9.43%	—	—
1/1/2002 to 12/31/2002	8.00%	9.19%	—	—
1/1/2003 to 12/31/2003	8.00%	9.60%	—	—
1/1/2004 to 12/31/2005	8.00%	10.00%	—	—
1/1/2006 to 12/31/2006	8.00%	10.00%	0.50%	—
1/1/2007 to 12/31/2007	8.00%	10.00%	1.00%	—
1/1/2008 to 12/31/2008	8.00%	10.00%	1.40%	0.50%
1/1/2009 to 12/31/2009	8.00%	10.00%	1.80%	1.00%
1/1/2010 to 12/31/2013	8.00%	10.00%	2.20%	1.50%

[1] The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

[2] All employer contribution rates shown since July 1, 1985, include the HCTF allocation.

Judicial Division

YEARS	PERCENT OF COVERED PAYROLL: MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE[1]	AMORTIZATION EQUALIZATION DISBURSEMENT	SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT
7/1/1949 to 6/30/1957	5.00%	5.00%	—	—
7/1/1957 to 6/30/1973	6.00%	12.00%	—	—
7/1/1973 to 6/30/1980	7.00%	12.00%	—	—
7/1/1980 to 8/30/1980	7.00%	13.00%	—	—
9/1/1980 to 12/31/1981	7.00%	15.00%	—	—
1/1/1982 to 6/30/1987	8.00%	15.00%	—	—
7/1/1987 to 6/30/1988	8.00%	13.00%	—	—
7/1/1988 to 6/30/2000	8.00%	15.00%	—	—
7/1/2000 to 6/30/2001	8.00%	14.00%	—	—
7/1/2001 to 6/30/2003	8.00%	11.82%	—	—
7/1/2003 to 6/30/2004	8.00%	12.66%	—	—
7/1/2004 to 12/31/2004	8.00%	13.66%	—	—
1/1/2005 to 12/31/2005	8.00%	13.66%	—	—
1/1/2006 to 12/31/2006	8.00%	13.66%	0.50%	—
1/1/2007 to 12/31/2007	8.00%	13.66%	1.00%	—
1/1/2008 to 12/31/2008	8.00%	13.66%	1.40%	0.50%
1/1/2009 to 12/31/2009	8.00%	13.66%	1.80%	1.00%
1/1/2010 to 6/30/2010	8.00%	13.66%	2.20%	1.50%
7/1/2010 to 12/31/2011	10.50%	11.16%	2.20%	1.50%
1/1/2012 to 6/31/2012	10.50%	11.16%	2.20%	1.50%
7/1/2012 to **12/31/2013**	**8.00%**	**13.66%**	**2.20%**	**1.50%**

[1] All employer contribution rates shown since July 1, 1985, include the HCTF allocation.

Denver Public Schools Division[1]

YEARS	PERCENT OF COVERED PAYROLL: MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE[2]	AMORTIZATION EQUALIZATION DISBURSEMENT	SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT	EMPLOYER CONTRIBUTION PCOP OFFSET[3]
1/1/2010 to 12/31/2010	8.00%	13.75%	2.20%	1.50%	(15.04%)
1/1/2011 to 12/31/2011	8.00%	13.75%	2.60%	2.00%	(14.72%)
1/1/2012 to 12/31/2012	8.00%	13.75%	3.00%	2.50%	(15.37%)
1/1/2013 to 12/31/2013	**8.00%**	**13.75%**	**3.40%**	**3.00%**	**(14.51%)**

[1] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

[2] All employer contribution rates shown include the DPS HCTF allocation.

[3] An offset to the DPS Division rate is provided for under C.R.S. § 24-51-412. See Note 4—Contributions.

Schedule of Contribution Rate History

Employer Contributions to Health Care Trust Funds

DIVISION/YEARS	PERCENT OF COVERED PAYROLL ALLOCATED FROM EMPLOYER CONTRIBUTION TO HEALTH CARE TRUST FUNDS
State and School Division[1]	
7/1/1997 to 6/30/1999	0.80%
7/1/1999 to 12/31/2000	1.10%
1/1/2001 to 12/31/2001	1.42%
1/1/2002 to 12/31/2002	1.64%
1/1/2003 to 6/30/2004	1.10%
7/1/2004 to 12/31/2005	1.02%
State Division[1]	
7/1/1985 to 6/30/1997	0.80%
1/1/2006 to 12/31/2013	1.02%
School Division[1]	
7/1/1985 to 6/30/1997	0.80%
1/1/2006 to 12/31/2013	1.02%
Local Government Division[2]	
7/1/1985 to 6/30/1999	0.80%
7/1/1999 to 12/31/2000	1.10%
1/1/2001 to 12/31/2001	1.96%
1/1/2002 to 12/31/2002	2.31%
1/1/2003 to 12/31/2003	1.69%
1/1/2004 to 6/30/2004	1.10%
7/1/2004 to 12/31/2013	1.02%
Judicial Division	
7/1/1985 to 6/30/1999	0.80%
7/1/1999 to 12/31/2000	1.10%
1/1/2001 to 12/31/2002	4.37%
1/1/2003 to 12/31/2003	3.11%
1/1/2004 to 6/30/2004	1.10%
7/1/2004 to 12/31/2013	1.02%
Denver Public Schools Division[3]	
1/1/2010 to 12/31/2013	1.02%

[1] State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

[2] The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

[3] The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Health Benefit Trust.

Employer Contributions to MatchMaker[1]

DIVISION/YEARS	PERCENT OF COVERED PAYROLL AVAILABLE FROM EMPLOYER CONTRIBUTION FOR MATCHMAKER (MAXIMUM MATCH)
State and School Division[2]	
1/1/2001 to 12/31/2002	3.00%
1/1/2003 to 12/31/2003	2.00%
1/1/2004 to 5/31/2004	1.00%
Local Government Division[3]	
1/1/2001 to 12/31/2001	2.00%
1/1/2002 to 12/31/2002	3.00%
1/1/2003 to 12/31/2003	2.00%
1/1/2004 to 5/31/2004	1.00%
Judicial Division	
1/1/2001 to 12/31/2002	7.00%
1/1/2003 to 12/31/2003	6.00%
1/1/2004 to 5/31/2004	5.00%

[1] Legislation enacted in 2004 ended MatchMaker contributions by June 1, 2004.

[2] State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

[3] The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

State Division Trust Fund[1]

EMPLOYER	2013 COVERED ACTIVE MEMBERS DECEMBER 31	2013 RANK	2013 PERCENTAGE OF TOTAL SYSTEM	2006 COVERED ACTIVE MEMBERS DECEMBER 31	2006 RANK	2006 PERCENTAGE OF TOTAL SYSTEM
University of Colorado	6,076	1	10.98%	5,432	2	10.28%
Department of Corrections	6,044	2	10.92%	5,644	1	10.68%
District Courts	3,148	3	5.69%	2,936	5	5.55%
Colorado State University	3,034	4	5.48%	3,065	4	5.80%
Department of Transportation	3,004	5	5.43%	3,102	3	5.87%
Front Range Community College	1,641	6	2.96%	1,256	8	2.38%
Department of Natural Resources	1,537	7	2.78%	1,567	6	2.96%
Metropolitan State College	1,295	8	2.34%	1,222	9	2.31%
Department of Human Services	1,278	9	2.31%	1,367	7	2.59%
Department of Public Health and Environment	1,180	10	2.13%	—	—	—
Department of Revenue	—	—	—	1,171	10	2.22%

[1] Data for the number of members by employer for years prior to 2006 is not available.

School Division Trust Fund[1]

EMPLOYER	2013 COVERED ACTIVE MEMBERS DECEMBER 31	2013 RANK	2013 PERCENTAGE OF TOTAL SYSTEM	2006 COVERED ACTIVE MEMBERS DECEMBER 31	2006 RANK	2006 PERCENTAGE OF TOTAL SYSTEM
Jefferson County School District	12,050	1	10.24%	12,168	1	10.74%
Cherry Creek School District	7,437	2	6.32%	6,869	2	6.06%
Douglas County Schools	7,193	3	6.11%	6,663	3	5.88%
Adams 12 Five Star Schools	5,057	4	4.30%	4,684	4	4.13%
Aurora Public Schools	5,022	5	4.27%	4,348	7	3.84%
Boulder Valley School District	4,481	6	3.81%	4,573	5	4.04%
Colorado Springs Public Schools	4,123	7	3.50%	4,462	6	3.94%
Poudre School District RE-1	4,064	8	3.45%	3,774	8	3.33%
St. Vrain School District	3,767	9	3.20%	3,207	9	2.83%
Academy School District 20	3,106	10	2.64%	—	—	—
Mesa Valley School District	—	—	—	3,042	10	2.69%

[1] Data for the number of members by employer for years prior to 2006 is not available.

Local Government Division Trust Fund[1]

EMPLOYER	2013 COVERED ACTIVE MEMBERS DECEMBER 31	2013 RANK	2013 PERCENTAGE OF TOTAL SYSTEM	2006 COVERED ACTIVE MEMBERS DECEMBER 31	2006 RANK	2006 PERCENTAGE OF TOTAL SYSTEM
Boulder County Government	2,019	1	16.89%	1,874	4	11.57%
Colorado Springs Public Utilities	1,823	2	15.25%	1,917	3	12.01%
City of Boulder	1,416	3	11.85%	1,607	5	10.07%
City of Colorado Springs	1,325	4	11.08%	1,958	2	12.27%
City of Pueblo	459	5	3.84%	562	6	3.52%
Tri-County Health Department	363	6	3.04%	335	7	2.10%
Douglas County Libraries	311	7	2.60%	333	8	2.09%
Arapahoe Parks and Recreational District	203	8	1.70%	211	10	1.32%
Colorado Housing and Finance Authority	154	9	1.29%	—	—	—
City of Fort Morgan	141	10	1.18%	—	—	—
Town of Mountain Village	—	—	—	218	9	1.37%
Memorial Health System	—	—	—	3,779	1	23.68%

[1] Data for the number of members by employer for years prior to 2006 is not available.

Principal Participating Employers

Judicial Division Trust Fund[1]

	2013			2006		
EMPLOYER	COVERED ACTIVE MEMBERS DECEMBER 31	RANK	PERCENTAGE OF TOTAL SYSTEM	COVERED ACTIVE MEMBERS DECEMBER 31	RANK	PERCENTAGE OF TOTAL SYSTEM
Judicial Department[2]	315	1	94.88%	266	1	91.41%

[1] Data for the number of members by employer for years prior to 2006 is not available.

[2] With the exception of the Denver County Court, all of the Judicial members for all other courts are reported to PERA on a single contribution report by the State's central payroll office. Member counts for each separate court are not available.

Denver Public Schools Division Trust Fund[1]

	2013			2010		
EMPLOYER	COVERED ACTIVE MEMBERS DECEMBER 31	RANK	PERCENTAGE OF TOTAL SYSTEM	COVERED ACTIVE MEMBERS DECEMBER 31	RANK	PERCENTAGE OF TOTAL SYSTEM
Denver Public Schools	13,092	1	88.36%	12,248	1	92.99%

[1] The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

Health Care Trust Fund[1]

	2013			2006		
EMPLOYER	COVERED ACTIVE MEMBERS DECEMBER 31	RANK	PERCENTAGE OF TOTAL SYSTEM	COVERED ACTIVE MEMBERS DECEMBER 31	RANK	PERCENTAGE OF TOTAL SYSTEM
Jefferson County School District	12,050	1	6.50%	12,168	1	6.58%
Cherry Creek School District	7,437	2	4.01%	6,869	2	3.72%
Douglas County Schools	7,193	3	3.88%	6,663	3	3.60%
University of Colorado	6,076	4	3.28%	5,432	5	2.94%
Department of Corrections	6,044	5	3.26%	5,644	4	3.05%
Adams 12 Five Star Schools	5,057	6	2.73%	4,684	6	2.53%
Aurora Public Schools	5,022	7	2.71%	4,348	9	2.35%
Boulder Valley School District	4,481	8	2.42%	4,573	7	2.47%
Colorado Springs Public Schools	4,123	9	2.22%	4,462	8	2.41%
Poudre School District RE-1	4,064	10	2.19%	—	—	—
Memorial Health System	—	—	—	3,779	10	2.04%

[1] Data for the number of members by employer for years prior to 2006 is not available.

Denver Public Schools Health Care Trust Fund[1]

	2013			2010		
EMPLOYER	COVERED ACTIVE MEMBERS DECEMBER 31	RANK	PERCENTAGE OF TOTAL SYSTEM	COVERED ACTIVE MEMBERS DECEMBER 31	RANK	PERCENTAGE OF TOTAL SYSTEM
Denver Public Schools	13,092	1	88.36%	12,248	1	92.99%

[1] The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

State Division

AGENCIES AND INSTRUMENTALITIES

CollegeInvest
College Assist
Colorado Association of School Boards
Colorado Association of School Executives
Colorado Council on the Arts
Colorado High School Activities Association
Colorado Public Employees' Retirement Association
Colorado Water Resources & Power Development Authority
Colorado Community College System
CoverColorado
Department of Agriculture
Department of Corrections
Department of Education
Department of Health Care Policy and Financing
Department of Human Services
Department of Labor and Employment
Department of Law
Department of Local Affairs
Department of Military and Veterans Affairs
Department of Natural Resources
Department of Personnel and Administration
Department of Public Health and Environment
Department of Public Safety
Department of Regulatory Agencies
Department of Revenue
Department of State
Department of the Treasury
Department of Transportation
Fire and Police Pension Association
General Assembly
Joint Budget Committee
Judicial Department
Legislative Council
Office of the District Attorneys
Office of the Governor
Office of Legislative Legal Services
Office of the Lieutenant Governor
Office of the State Auditor
Pinnacol Assurance
School for the Deaf and the Blind
Special District Association of Colorado
State Historical Society

INSTITUTIONS OF HIGHER EDUCATION

Adams State College
Aims Community College
Arapahoe Community College
Auraria Higher Education Center
Aurora Community College
Colorado Mesa University
Colorado Mountain College
Colorado Northwestern Community College
Colorado School of Mines
Colorado State University
Colorado State University at Pueblo
Commission on Higher Education
Denver Community College
Fort Lewis College
Front Range Community College
Lamar Community College
Metropolitan State University of Denver
Morgan Community College
Northeastern Junior College
Otero Junior College
Pikes Peak Community College
Pueblo Vocational Community College
Red Rocks Community College
State Board for Community Colleges and Occupational Education
Trinidad State Junior College
University of Colorado
University of Northern Colorado
Western State Colorado University

Schedule of Affiliated Employers

School Division[1]

ADAMS COUNTY
Adams 12 Five Star Schools
Adams County School District 14
Bennett School District 29J
Brighton School District 27J
Mapleton School District 1
Strasburg School District 31J
Westminster School District 50

ALAMOSA COUNTY
Alamosa County School District Re-11J
Sangre de Cristo School District Re-22J

ARAPAHOE COUNTY
Adams-Arapahoe School District 28J
Byers School District 32J
Cherry Creek School District 5
Deer Trail School District 26J
Englewood School District 1
Littleton School District 6
Sheridan School District 2

ARCHULETA COUNTY
Archuleta County School District 50 Jt

BACA COUNTY
Campo School District RE-6
Pritchett School District RE-3
Springfield School District RE-4
Vilas School District RE-5
Walsh School District RE-1

BENT COUNTY
Las Animas School District RE-1
McClave School District RE-2

BOULDER COUNTY
Boulder Valley School District RE2
St. Vrain Valley School District RE1J

CHAFFEE COUNTY
Buena Vista School District R-31
Salida School District R-32(J)

CHEYENNE COUNTY
Cheyenne County School District Re-5
Kit Carson School District R-1

CLEAR CREEK COUNTY
Clear Creek School District RE-1

CONEJOS COUNTY
North Conejos School District RE1J
Sanford School District 6J
South Conejos School District RE 10

COSTILLA COUNTY
Centennial School District R-1
Sierra Grande School District R-30

CROWLEY COUNTY
Crowley County School District RE-1

CUSTER COUNTY
Custer County Consolidated School District C-1

DELTA COUNTY
Delta County School District 50(J)

DOLORES COUNTY
Dolores County School District Re No. 2

DOUGLAS COUNTY
Douglas County School District Re 1

EAGLE COUNTY
Eagle County School District Re 50

ELBERT COUNTY
Agate School District 300
Big Sandy School District 100J
Elbert School District 200
Elizabeth School District C-1
Kiowa School District C-2

EL PASO COUNTY
Academy School District #20
Calhan School District RJ1
Cheyenne Mountain School District 12
Colorado Springs School District 11
Edison School District 54 Jt
Ellicott School District 22
Falcon School District 49
Fountain School District 8
Hanover School District 28
Harrison School District 2
Lewis-Palmer School District 38
Manitou Springs School District 14
Miami/Yoder School District 60 Jt
Peyton School District 23 Jt
Widefield School District 3

FREMONT COUNTY
Canon City School District Re-1
Cotopaxi School District Re-3
Florence School District Re-2

GARFIELD COUNTY
Garfield School District 16
Garfield School District Re-2
Roaring Fork School District Re-1

[1] The list of employers in the School Division does not include charter schools operating within the respective public school districts and under the Colorado Charter School Institute.

School Division[1]

GILPIN COUNTY
Gilpin County School District Re-1

GRAND COUNTY
East Grand School District 2
West Grand School District 1

GUNNISON COUNTY
Gunnison Watershed School District Re1J

HINSDALE COUNTY
Hinsdale County School District Re-1

HUERFANO COUNTY
Huerfano School District Re-1
La Veta School District Re-2

JACKSON COUNTY
North Park School District R-1

JEFFERSON COUNTY
Jefferson County School District R-1

KIOWA COUNTY
Eads School District Re-1
Plainview School District Re-2

KIT CARSON COUNTY
Arriba-Flagler Consolidated School District No. 20
Bethune School District R-5
Burlington School District Re-6J
Hi-Plains School District R-23
Stratton School District R-4

LAKE COUNTY
Lake County School District R-1
La Plata County
Bayfield School District 10Jt-R
Durango School District 9-R
Ignacio School District 11 Jt

LARIMER COUNTY
Estes Park School District
Poudre School District R-1
Thompson School District R-2J

LAS ANIMAS COUNTY
Aguilar Reorganized School District 6
Branson Reorganized School District 82
Hoehne Reorganized School District 3
Kim Reorganized School District 88
Primero Reorganized School District 2
Trinidad School District 1

LINCOLN COUNTY
Genoa/Hugo School District C-113
Karval School District Re 23
Limon School District Re 4J

LOGAN COUNTY
Buffalo School District Re-4
Frenchman School District Re-3
Plateau School District Re-5
Valley School District Re-1

MESA COUNTY
De Beque School District 49 Jt
Mesa County Valley School District 51
Plateau Valley School District 50

MINERAL COUNTY
Creede Consolidated School District 1

MOFFAT COUNTY
Moffat County School District Re No. 1

MONTEZUMA COUNTY
Dolores School District RE 4A
Mancos School District Re-6
Montezuma-Cortez School District Re 1

MONTROSE COUNTY
Montrose County School District Re-1J
West End School District Re-2

MORGAN COUNTY
Brush School District Re-2 (J)
Fort Morgan School District Re-3
Weldon Valley School District Re-20 (J)
Wiggins School District Re-50 (J)

OTERO COUNTY
Cheraw School District 31
East Otero School District R1
Fowler School District R4J
Manzanola School District 3J
Rocky Ford School District R2
Swink School District 33

OURAY COUNTY
Ouray School District R-1
Ridgway School District R-2

PARK COUNTY
Park County School District Re-2
Platte Canyon School District 1

PHILLIPS COUNTY
Haxtun School District Re-2J
Holyoke School District Re-1J

PITKIN COUNTY
Aspen School District 1

[1] The list of employers in the School Division does not include charter schools operating within the respective public school districts and under the Colorado Charter School Institute.

Schedule of Affiliated Employers

School Division[1]

PROWERS COUNTY
Granada School District Re-1
Holly School District Re-3
Lamar School District Re-2
Wiley School District Re-13 Jt

PUEBLO COUNTY
Pueblo City School District 60
Pueblo County Rural School District 70

RIO BLANCO COUNTY
Meeker School District RE1
Rangely School District RE4

RIO GRANDE COUNTY
Del Norte School District C-7
Monte Vista School District C-8
Sargent School District Re-33J

ROUTT COUNTY
Hayden School District Re 1
South Routt School District Re 3
Steamboat Springs School District Re 2

SAGUACHE COUNTY
Center Consolidated School District 26 Jt
Moffat School District 2
Mountain Valley School District Re 1

SAN JUAN COUNTY
Silverton School District 1

SAN MIGUEL COUNTY
Norwood School District R-2J
Telluride School District R-1

SEDGWICK COUNTY
Julesburg School District Re 1
Platte Valley School District Re3

SUMMIT COUNTY
Summit School District Re 1

TELLER COUNTY
Cripple Creek-Victor School District Re-1
Woodland Park School District RE-2

WASHINGTON COUNTY
Akron School District R-1
Arickaree School District R-2
Lone Star School District 101
Otis School District R-3
Woodlin School District R-104

WELD COUNTY
Ault-Highland School District Re-9
Briggsdale School District Re-10
Eaton School District Re-2
Gilcrest School District Re-1
Greeley School District 6
Johnstown-Milliken School District Re-5J
Keenesburg School District Re-3
Pawnee School District Re-12
Platte Valley School District Re-7
Prairie School District Re-11
Weld School District Re-8
Windsor School District Re-4

YUMA COUNTY
Idalia School District RJ-3
Liberty School District J-4
Wray School District RD-2
Yuma School District 1

BOARDS OF COOPERATIVE EDUCATIONAL SERVICES (BOCES)
Adams County BOCES
Centennial BOCES
Colorado Digital BOCES
East Central BOCES
Expeditionary Learning School BOCES
Grand Valley BOCES
Mountain BOCES
Northeast BOCES
Northwest Colorado BOCES
Pikes Peak BOCES
Rio Blanco BOCES
San Juan BOCES
San Luis Valley BOCES
Santa Fe Trail BOCES
South Central BOCES
Southeastern BOCES
Ute Pass BOCES

BOARDS OF COOPERATIVE SERVICES (BOCS)
Uncompahgre BOCS

VOCATIONAL SCHOOLS
Delta-Montrose Area Vocational School

OTHER
Colorado Consortium for Earth and Space Science Education

[1] The list of employers in the School Division does not include charter schools operating within the respective public school districts and under the Colorado Charter School Institute.

Local Government Division

Adams and Jefferson County Hazardous Response Authority
Alamosa Housing Authority
Arapahoe Park and Recreation District
Aurora Housing Authority
Baca Grande Water & Sanitation District
Beulah Water Works District
Black Hawk-Central City Sanitation District
Blanca-Fort Garland Metropolitan District
Boulder County
Boulder County Public Trustee's Office
Boxelder Sanitation District
Brush Housing Authority
Carbon Valley Park & Recreation District
Castle Pines Metropolitan District
Castle Pines North Metropolitan District
Center Housing Authority
Central Colorado Water Conservancy District
City of Alamosa
City of Boulder
City of Castle Pines
City of Colorado Springs
City of Fort Morgan
City of Las Animas
City of Lone Tree
City of Manitou Springs
City of Pueblo
City of Wray
City of Yuma
Clearview Library District
Collbran Conservancy District
Colorado District Attorneys' Council
Colorado First Conservation District
Colorado Health Facilities Authority
Colorado Housing and Finance Authority
Colorado Library Consortium
Colorado River Fire Rescue
Colorado School District Self Insurance Pool
Colorado Springs Utilities
Columbine Knolls-Grove Metropolitan Recreation District
Costilla Housing Authority
County Technical Services, Inc.
Cucharas Sanitation & Water District
Cunningham Fire Protection District
Douglas County Libraries
Douglas County Housing Partnership
Durango Fire and Rescue Authority
East Cheyenne Groundwater Management District
East Larimer County Water District
Eastern Rio Blanco Metropolitan Recreation & Park District
Eaton Housing Authority
Elbert County Library District
Elizabeth Park and Recreation District
El Paso-Teller County Emergency Telephone Service Authority
Estes Park Housing Authority
Estes Park Local Marketing District
Estes Valley Fire Protection District
Estes Valley Public Library District
Forest Lakes Metropolitan District
Fremont Conservation District
Fremont Sanitation District
Garfield County Housing Authority
Grand Junction Regional Airport Authority
Grand Valley Fire Protection District
Green Mountain Water and Sanitation District
GVR Metropolitan District
Housing Authority of Arriba
Housing Authority of the City of Boulder
Housing Authority of the City of Colorado Springs
Housing Authority of the County of Adams
Housing Authority of the Town of Limon
Lamar Housing Authority
Lamar Utilities Board
Left Hand Water District
Longmont Housing Authority
Longs Peak Water District
Louisville Fire Protection District
Meeker Cemetery District
Meeker Regional Library District
Meeker Sanitation District
Montrose Fire Protection District
Montrose Recreation District
Monument Sanitation District
Morgan Conservation District
Morgan County Quality Water District
Mountain View Fire Protection District
Mountain Water and Sanitation District
Niwot Sanitation District
North Carter Lake Water District
North Chaffee County Regional Library
Northeast Colorado Health Department
Northeastern Colorado Association of Local Governments
Park Center Water District
Pikes Peak Regional Building Department
Pine Drive Water District
Plains Ground Water Management District
Pueblo City-County Health Department
Pueblo Library District
Pueblo Transit Authority
Pueblo Urban Renewal Authority
Rampart Regional Library District
Rangely Regional Library District
Red Feather Mountain Library District
Red, White & Blue Fire Protection District
Republican River Water Conservation District
Rio Blanco Fire Protection District
Rio Blanco Water Conservancy District
Routt County Conservation District
Sable-Altura Fire Protection District
San Luis Valley Development Resources Group
San Luis Valley Water Conservancy District
San Miguel County Public Library
San Miguel Regional and Telluride Housing Authority

Schedule of Affiliated Employers

Local Government Division

Scientific and Cultural Facilities District
Sheridan Sanitation District #1
Soldier Canyon Filter Plant
Statewide Internet Portal Authority
Steamboat II Water and Sanitation District
Strasburg Metropolitan Parks & Recreation District
St. Vrain Sanitation District
Tabernash Meadows Water and Sanitation District
Town of Alma
Town of Bayfield
Town of Crawford
Town of Dinosaur
Town of Eckley
Town of Estes Park
Town of Firestone
Town of Lake City
Town of Lochbuie
Town of Mountain Village
Town of Platteville
Town of Rico
Town of Rye
Town of Seibert
Town of Silver Plume
Town of Timnath
Tri-County Health Department
Tri-Lakes Wastewater Treatment Facility
Upper Colorado Environmental Plant Center
Washington-Yuma Counties Combined Communications Center
Weld County Department of Public Health and Environment
West Greeley Conservation District
Western Rio Blanco Metropolitan Recreation and Park District
White River Conservation District
Wray Housing Authority
Yuma Housing Authority

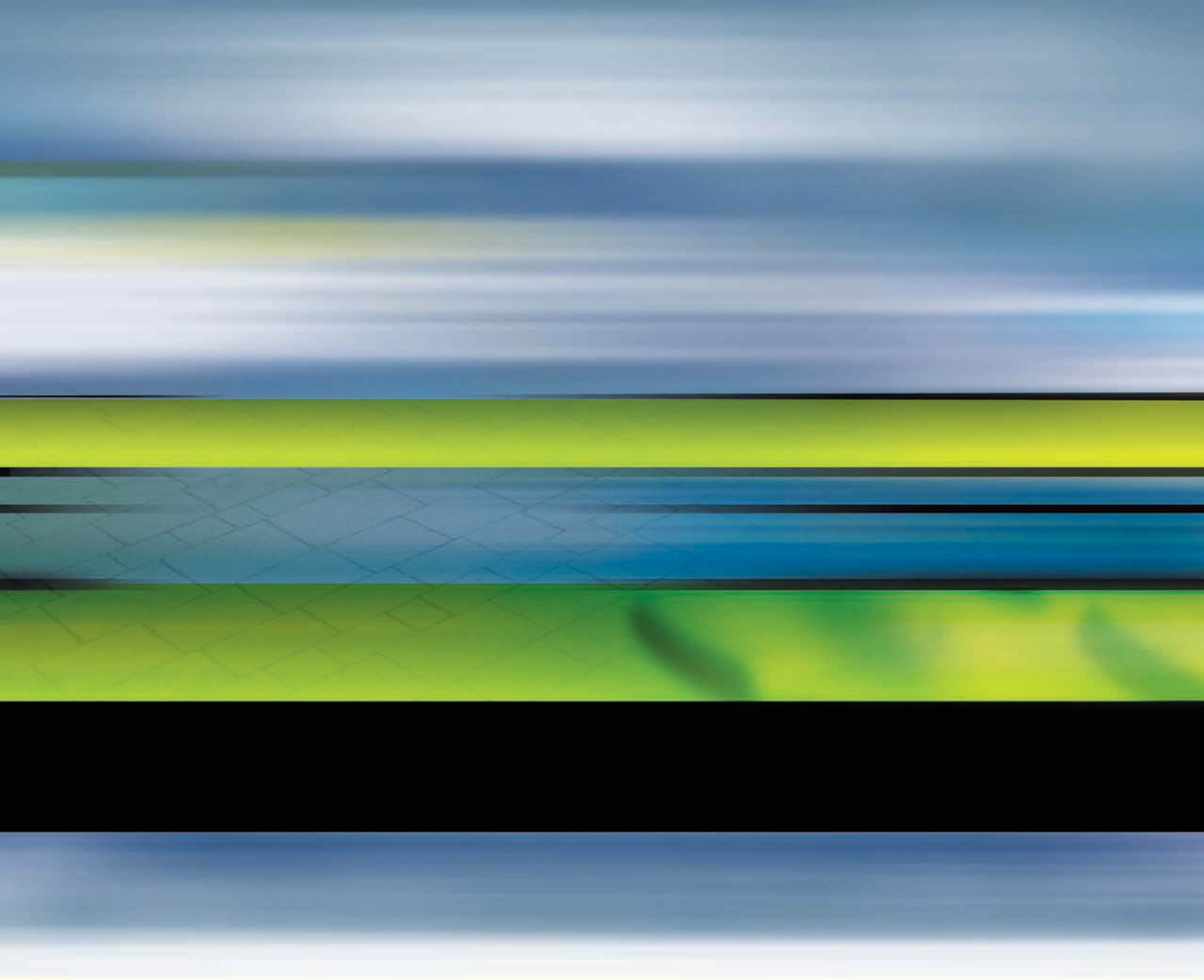
Judicial Division

1st-22nd District Court
Adams County Court
Alamosa County Court
Arapahoe County Court
Archuleta County Court
Baca County Court
Bent County Court
Boulder County Court
Broomfield County Court
Chaffee County Court
Cheyenne County Court
Clear Creek County Court
Conejos County Court
Costilla County Court
Court of Appeals
Crowley County Court
Custer County Court
Delta County Court
Denver County Court
Denver Juvenile Court
Denver Probate Court
Dolores County Court
Douglas County Court
Eagle County Court
Elbert County Court
El Paso County Court
Fremont County Court
Garfield County Court
Gilpin County Court
Grand County Court
Gunnison County Court
Hinsdale County Court
Huerfano County Court
Jackson County Court
Jefferson County Court
Kiowa County Court
Kit Carson County Court
Lake County Court
La Plata County Court
Larimer County Court
Las Animas County Court
Lincoln County Court
Logan County Court
Mesa County Court
Mineral County Court
Moffat County Court
Montezuma County Court
Montrose County Court
Morgan County Court
Otero County Court
Ouray County Court
Park County Court
Phillips County Court
Pitkin County Court
Prowers County Court
Pueblo County Court
Rio Blanco County Court
Rio Grande County Court
Routt County Court
Saguache County Court
San Juan County Court
San Miguel County Court
Sedgwick County Court
Summit County Court
Supreme Court
Teller County Court
Washington County Court
Weld County Court
Yuma County Court

Denver Public Schools Division[1]

Denver Public School District No. 1

[1] The list of employers in the Denver Public Schools Division does not include charter schools operating within the Denver Public Schools school district.



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