



Providing a  
**FOUNDATION**  
for the Future

**Colorado Public Employees' Retirement Association**  
*Comprehensive Annual Financial Report*  
*For the Year Ended December 31, 2014*

Colorado PERA provides a foundation for the future of our membership and the work of our affiliated employers is fundamental to that foundation. This *Comprehensive Annual Financial Report* honors those employers by featuring some of the distinctive architecture on display throughout the state.

PERA thanks these employers for permission to include their photos in this *CAFR*:

**Cover:** Ralph L. Carr Colorado Judicial Center, Denver

**Introductory Section:** Robert Hoag Rawlings Public Library, Pueblo

**Financial Section:** Denver Public Schools

**Investment Section:** Jefferson County Government Building, Golden

**Actuarial Section:** Colorado School of Mines, Golden

**Statistical Section:** Englewood Public Schools

All photos by PERA (Brian Bandimere, Staff Photographer).



*One of Colorado's Best Investments*

**Colorado Public Employees' Retirement Association**  
Comprehensive Annual Financial Report  
*For the Year Ended December 31, 2014*  
*Prepared by Colorado PERA Staff*



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Providing a  
Foundation for  
**INNOVATION**



*Through strategic planning,  
Colorado PERA evolves and  
enhances its programs and  
services to remain innovative  
and an industry leader.*

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**INTRODUCTORY SECTION**







June 23, 2015

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

I am pleased to present Colorado PERA's *Comprehensive Annual Financial Report (CAFR)* for the year ended December 31, 2014.

At PERA, our primary purpose is to work for our members and retirees to ensure they have a foundation for the future that includes a secure and stable retirement. We also work for small businesses, local communities, and the entire state of Colorado. What we do every day has an impact across the state, and it's essential we provide ongoing education and outreach about the value our members provide to the economy and local communities throughout Colorado.

PERA is a not-for-profit economic engine that is adaptive, innovative, and consistently delivering value to Colorado's largest workforce. Retirees, active members, and employers—more than half a million of Colorado's current and former public employees—ensure PERA's long-term sustainability. As a result of shared sacrifices, fiscal discipline, and reforms implemented under 2010's Senate Bill 1 (SB 10-001), PERA has the resources it needs now and into the future to deliver the benefits and services earned by our hardworking members. PERA is on track to full funding as a result of the foundation set by SB 10-001, and the Board of Trustees (Board) continues to monitor progress toward this goal as one of their top priorities.

It's essential that we provide an educational foundation for all Coloradans about PERA's value to the state's economy, which is why I met with thousands of PERA members, as well as community and business leaders across the state in 2014. This extensive outreach is part of PERA's strategic communication plan. It's critical to understand the financial freedom and flexibility a PERA retirement means to our teachers, State Troopers, prison guards, game wardens, snow plow drivers, and all of our other members—the public employees who build our communities and keep our state moving. In addition to communicating through social media channels and more traditional methods, we are increasing outreach efforts with PERA employers as well as with the business and education community. These efforts highlight PERA's transparency and enhance the dialogue about the importance of our public workforce to the infrastructure of our state as well as the value of a portable, stable, and secure PERA retirement to both public employees and the Colorado economy.

I am proud of PERA's dedication to serve our members as well as our commitment to transparency and security in managing the retirement savings of more than a half million current and former public employees. It's a foundation for their future and for the future of Colorado as we continue to be one of Colorado's best investments.

**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



**Gregory W. Smith**  
Executive Director

expanded to include all Colorado school districts, the State's judicial system, and many municipalities and other local government entities.

### Legislation

During the 2014 legislative session, three bills were introduced which would have impacted PERA, and of the three, one was passed. The Board takes positions on legislation affecting PERA based on its fiduciary responsibility to act in the best interests of its membership.

#### ***Senate Bill 14-214: PERA Studies Conducted by Actuarial Firm***

This bill was a Joint Budget Committee-sponsored bill that created three separate studies. The first study changes the State's annual total compensation survey process performed by the Department of Personnel and Administration to incorporate retirement benefits by January 15, 2015, and to perform the study again including retirement benefits every eighth year thereafter. The second study directs the State Auditor's Office, with input from PERA, to contract with an actuarial firm to perform a comprehensive study of the current PERA plan design compared to other alternative retirement plans. The third study directs the State Auditor's Office, with input from PERA, to contract with an actuarial firm to perform a sensitivity analysis of actuarial assumptions.

The Board voted to support SB 14-214, and the bill was passed and signed into law by Governor Hickenlooper on June 4, 2014.

#### ***Senate Bill 14-068: Retirement Age for PERA Members***

This bill would have changed the retirement eligibility for people who are not active or inactive members or retirees of PERA on December 31, 2016, with the exception of State Troopers. It would have been required to have 30 years of service and be age 65 or be a minimum of age 65 and have their age plus years of service equal 95 to receive a full service retirement benefit.

The Board voted to oppose SB 14-068 and the bill was postponed indefinitely by the Senate State, Veterans, and Military Affairs Committee.

#### ***Senate Bill 14-1201: Align PERA Highest Average Salary With Other States***

This bill would have changed the Highest Average Salary (HAS) calculation from three years to five years for people who are not active or inactive members or retirees of PERA on December 31, 2014.

The Board voted to oppose SB 14-1201, 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 claimed to be acting on behalf of a class of individuals, alleged that a portion of SB 10-001 was unconstitutional. The civil action challenged the

portion of SB 10-001 which modified 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.

On October 20, 2014, the Colorado Supreme Court ruled in favor of PERA and the State of Colorado and upheld the reduction of the annual increase under SB 10-001. The Court found that the reduction was constitutional and applied the modern, three-prong contract clause test set forth in the 2002 case of *In re Estate of DeWitt*. Under that test, the Court found that the plaintiffs must have established that: (1) they have a clear and unmistakable right to an unchangeable annual increase for the rest of their lives; (2) that the modification to the annual increase was a substantial impairment that was inconsistent with their reasonable expectations; and (3) that the modification of the annual increase was not reasonable and necessary to further or accomplish a legitimate public purpose. In applying this test, the Court found that there is no right to receive a specific annual increase in place on the date of retirement or on the date of retirement eligibility. In its decision, the Court noted the difference in the statutory language defining the COLA versus the language defining the monthly base benefit. It stated, "the Legislature's use of language like 'future' and 'payable for the life of the retiree'

clearly evidences an intent to be bound to pay PERA members their vested base benefit for life.” The Colorado Supreme Court’s decision in this matter is final and not subject to further appeals.

### Lawsuit Regarding Memorial Health System

On October 1, 2012, Memorial Health System (Memorial) terminated its affiliation with PERA. Memorial’s termination resulted 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 was 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 was that the termination of affiliation provisions, as outlined in PERA statutes, applied 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 was that the termination of affiliation provisions in PERA statutes did not apply to this transaction and PERA was 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.

In September 2014, the parties entered into a settlement agreement whereby the City paid PERA \$190 million for the liabilities associated with Memorial’s termination of PERA participation. This agreement ended the lawsuit and ensured that the liabilities associated with the retirement and health care benefits already earned by Memorial employees for the

work that they performed before Memorial ceased to be a PERA employer were funded.

### 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. On August 18, 2014, the Colorado Supreme Court declined to hear the case, which means that the case is concluded and the Court of Appeals’ decision is not subject to further review.

### 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 claimed to be acting on behalf of a class of individuals, alleged that PERA adopted the wrong disability standard under the short-term disability program. The primary claim was 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. On August 18, 2014, the Colorado Supreme Court declined to hear the case, which means that the case is concluded and the Court of Appeals’ decision is not subject to further review.

### Economic Condition and Outlook

The U.S. economy grew 2.4 percent during 2014, principally driven by consumer spending and business investment. The unemployment rate ended the year at 5.6 percent, an improvement from 6.7 percent at the end of 2013. Despite the recovery in the labor market, wage growth has not accelerated and inflation has remained low. Manufacturing performance improved modestly during the year. The residential housing market continued to slowly strengthen 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 ended its asset purchase program during the year. The Fed has indicated that it can be patient in beginning to raise short-term rates, and has signaled this may occur sometime during 2015.

Global growth accelerated modestly at the end of 2014. In contrast to the U.S. where the Fed is beginning to tighten monetary policy, other developed markets such as Europe and Japan are benefiting from an accommodative monetary policy. The U.S. dollar strengthened considerably during the last half of the year and, accordingly, most foreign currencies have weakened versus the dollar. Conditions in Europe have weakened as periphery countries continue to struggle with austerity measures and high debt levels. Developed market and emerging market countries closely tied to commodity production continue to experience slowing growth as a result of falling commodity prices and declining investment.

The Colorado economy grew at a relatively modest pace in 2014. Agriculture continues to be a key driver of economic growth in the state; gross farm revenue was at historical highs for the year. Other strong contributors to the economic growth were manufacturing, natural resources, and the mining industry. The construction sector showed improvement as residential permits continued to increase; the most residential permits since 2006 were issued during the year. The Colorado labor market has shown improvement with unemployment falling during the year. The residential housing market showed continued improvement in 2014 as home prices increased in response to a decreasing supply of available houses.

### 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 2014, there was net investment income of \$2,701,426,000 compared with total member contributions of \$826,192,000 and employer contributions of \$1,322,036,000.

For the year ended December 31, 2014, the total fund had a time-weighted rate of return of 5.7 percent net-of-fees on a market value basis. PERA’s annualized, net-of-fee, time-weighted, rate of return over the last three years was 11.3 percent, over the last five years it was 9.9 percent, and over the last 10 years it was 6.8 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 120.

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 2014 were adopted by the Board in 2010. The targeted asset allocation mix and the specified ranges for each asset class are presented on page 117. All of the asset classes were within their specified ranges at year end.

The Board commissioned an Asset/Liability Study in 2014, which was prepared by Aon Hewitt Investment Consulting, 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 PERA incurs appropriate levels of risk. As a result of the study, the Board approved certain asset allocation targets and ranges at its March 20, 2015, Board meeting which are described as follows:

ASSET CLASS	INTERIM TARGET	LONG-TERM TARGET	TARGET RANGE
Global Equity	55.0%	53.0%	47.0% - 59.0%
Fixed Income	24.0%	23.0%	18.0% - 28.0%
Private Equity <sup>1</sup>	7.5%	8.5%	5.0% - 12.0%
Real Estate	7.5%	8.5%	5.0% - 12.0%
Opportunity Fund	5.0%	6.0%	0.0% - 9.0%
Cash	1.0%	1.0%	0.0% - 3.0%

<sup>1</sup> Effective July 1, 2015, the name of the Alternative Investment asset class will change to Private Equity.

PERA’s investment policy is summarized in the Colorado PERA Report on Investment Activity on page 117.

**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 PERA management; the Board

provides an oversight role. The Board is assisted in its responsibilities by the Audit Committee, consisting of seven 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 15–16.

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, 2014, 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 2014 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 25–27 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 (pages 28–57). This Letter of Transmittal is designed to complement the MD&A and should be read in conjunction with it.

## **GASB Statement Nos. 67 and 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 identified the stakeholders impacted by the revised GASB statements and developed an efficient mode of communication to educate these groups.

The provisions of GASB 67 were implemented for this *CAFR*. GASB 67 enhances the standards for footnote disclosures and required supplementary information for pension plans. While no longer included in required supplementary information, the tables displaying the plan's funded status are presented in the Actuarial Section of this *CAFR*.

The GASB workgroup will be delivering schedules and other supporting information to the PERA-affiliated employers to assist them with preparation of their financial statements and other disclosures under GASB 68. PERA will also continue to provide educational materials to assist employers in understanding this complex accounting standard.

## **Funding**

The Board adopted a revised pension funding policy in March 2015, with regard to the division trust funds, to update and replace the funding policy dated November 2007. The purpose of the revised funding policy is three-fold: (1) to define the overall funding benchmarks of the five defined benefit pension trust funds, (2) to assess the adequacy of the contribution rates which are set by the Colorado Legislature, and (3) to define the annual actuarial metrics which will assist the Board in assessing the sustainability of the plan. The results of these three items are intended to guide the Board when considering whether to pursue or support proposed legislation pertaining to changes in contribution and/or benefit provisions.

One of the stated goals in the Board's Funding Policy is the achievement of a combined division trust fund actuarial funded ratio equal to or greater than 110 percent.

On December 31, 2014, the funded ratio for PERA's five defined benefit pension trust funds was 62.3 percent with an unfunded liability of \$25.9 billion based on the actuarial value of assets and an investment rate of return and discount rate assumption of 7.50 percent. (Please see pages 158–159 for additional information on PERA's funded ratio.)

Investment income is the most significant driver of the funded status in a defined benefit plan. To understand the significance of this assumption, a sensitivity analysis is included in the Actuarial Section on pages 160–161.

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.

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. A summary of SB 10-001 can be found on the PERA website.

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 and a market value of assets of \$44,229,312,000 as of December 31, 2014, including anticipated growth in active membership, the actuaries project that the complete amortization of unfunded liabilities will occur in approximately 37 years for the State Division, 38 years in the School Division, 33 years in the DPS Division, 25 years in the Local Government Division, and 48 years in the Judicial Division.

**PERAPlus 401(k)/457 and Defined Contribution Retirement Plans**

In addition to the defined benefit plans, PERA offers members opportunities to save for retirement through the PERAPlus 401(k)/457 and Defined Contribution (DC) Retirement Plans. The assets in the PERAPlus and DC Plans continue to grow steadily and for the year ended December 31, 2014, these plans earned \$227,077,000 in investment income with a fiduciary net position of \$3,502,917,000.

The value of offering more choices in savings was recognized with 19 new employer affiliations in the PERAPlus 457 Plan. In addition, a Roth option was added in the PERAPlus 401(k) and 457 Plans. The Roth option in the PERAPlus Plans offers advantages over a Roth IRA, including higher contribution limits and no income-based contribution limitations. The Roth option was available at the end of 2014 to those members whose employer adopted the option.

**Colorado Mile High Fund**

In October 2012, PERA introduced the Colorado Mile High Fund, 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 50 investment opportunities resulting from an active deal sourcing effort that has included discussions with more than 120 representatives from prospective investment opportunities. As part of its community outreach, PERA has participated in events such as the Boulder Chamber's Esprit Event, the Silicon Flatirons Fall Private Equity Conference, and the Rocky Mountain Corporate Growth Conference.

At the end of 2014, the Colorado Mile High Fund had committed approximately 40 percent of the fund's total capital to five co-investments. One co-investment has already performed very well and was exited in 2013. The four remaining co-investments are either based in or have significant operations 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 2014 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 moved the Medicare prescription drug benefit in its self-insured plans 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. This program serves 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. These surveys provide solid comparable data in keeping PERA's programs competitive.

## Recognition of Achievements

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PERA for its *CAFR* for the year ended December 31, 2013. 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 29 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, 2013. This is the 12th 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 2014 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 2014, the following employers affiliated with PERA in the Local Government Division: Upper Thompson Sanitation District, Durango Fire Protection District, and Cheyenne Wells Housing Authority. In addition, the Mt. Evans BOCES began reporting independently from the Gilpin School District in the School Division. PERA welcomes these employers and their employees.

## Management Changes

In June 2014, Leslie Oliver joined PERA as the Communications and External Affairs Director, a new position within the organization. Previously she was the Policy and Communications Director in the office of U.S. Rep. Ed Perlmutter, a position she held for eight years. Leslie is responsible for furthering PERA's communication and stakeholder outreach efforts.

## 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 2014, PERA members re-elected Carolyn Jonas-Morrison and elected Karl Fisch to the Board. Mason Parsaye ran unopposed and was appointed to the Board as a representative from the Local Government Division. Trustee Jonas-Morrison was elected by State Division members as the representative from institutions of higher education. Trustee Fisch was elected by members of the School Division. All three Trustees will serve four-year terms.

In June 2014, Governor John Hickenlooper re-appointed Lynn E. Turner to the Board and he was confirmed by the State Senate on March 2, 2015. Trustee Turner 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.

In April 2015, Trustee Ben Valore-Caplan resigned from the Board. Mr. Valore-Caplan was a Governor-appointed Trustee who was named to the Board by Gov. Hickenlooper in 2012. On behalf of the PERA executive team, we will miss Mr. Valore-Caplan's perspective on guiding PERA, along with his insight on investment issues. In June 2015, the Governor appointed Roger P. Johnson to fill this vacancy.

## 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](http://www.copera.org).

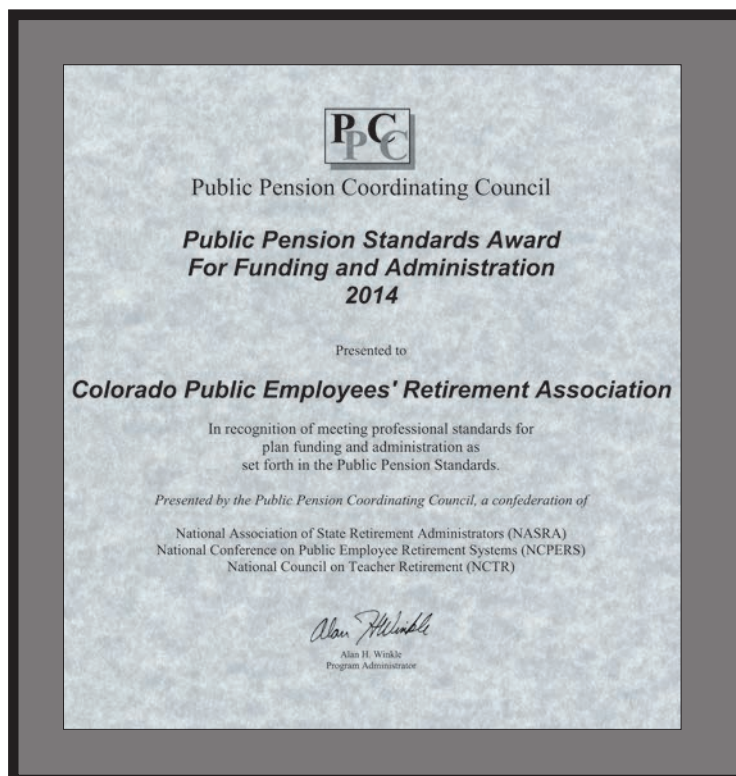
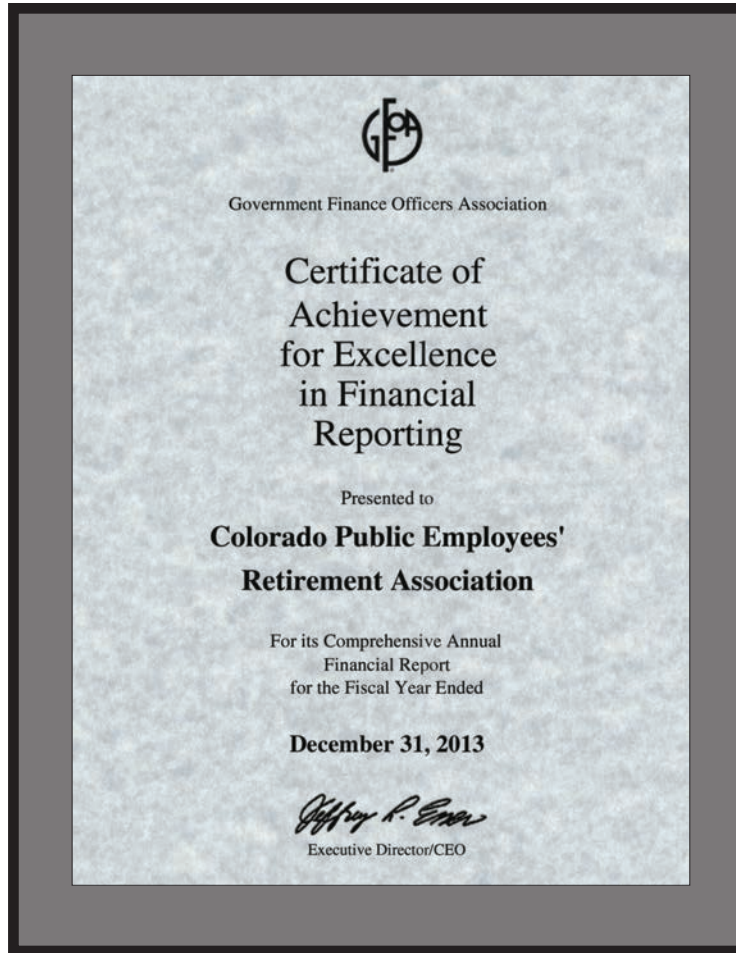
I also thank the PERA staff and Board of Trustees for their commitment and efforts to ensure that PERA meets the needs of all public servants in Colorado.

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*







June 23, 2015



**Maryann Motza**  
Board Chair

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

As Chair of the Board of Trustees (Board) of the Colorado Public Employees' Retirement Association (PERA), I am pleased to present PERA's *Comprehensive Annual Financial Report* for the year ended December 31, 2014. This report offers a detailed view of the financial and actuarial status of your retirement system that shows it is sustainable and is on the correct path to full funding.

During 2014, the Board remained focused on monitoring and emphasizing the implementation of Senate Bill (SB) 10-001 to facilitate continued progress toward full funding. PERA looks forward to updating the General Assembly on the effect SB 10-001 had on the sustainability of the PERA trust funds. While we are still in the early stages of SB 10-001 implementation, the shared sacrifices made by members, retirees, and public employers are working.

Nearly 90 percent of PERA beneficiaries remain in Colorado after retirement. Consequently, PERA beneficiaries' retirement (and survivor and disability) income recirculates throughout the state creating a "multiplier" effect in local economies and the state as a whole. In 2014, \$3.9 billion was paid out to PERA retirement beneficiaries with a large economic impact on the state. In 2014, for every dollar contributed by both employers and employees into the system resulted in \$1.96 (almost double) in distributions.

In sharp contrast to PERA's economic benefit to the entire state, not just to beneficiaries, is the U.S. Social Security (Old Age-Survivor-Disability Insurance, "OASDI") program. For every dollar Colorado employees and employers pay into Social Security, only 80 cents returns to retirees in Colorado, causing a net drain to Colorado's economy. In 2009, \$2.1 billion was redistributed to retirees in other states under the Social Security retirement program.

PERA's cost to fund benefits earned today is 11.01 percent, compared with the current contribution rate of 12.4 percent for the OASDI portion of Social Security (which Social Security acknowledges as insufficient to fund all future benefits). Currently, the average Social Security retirement benefit is \$1,333, while the average PERA retirement benefit is \$3,112, which is more than double that of Social Security. That difference in benefits reduces the chances significantly that PERA members will need additional resources to sustain themselves in retirement, including those from the social safety net, such as food stamps and welfare payments.

Monitoring PERA's financial condition is one of 23 initiatives included in the Board's five-year Strategic Plan, which was initiated in 2014 (a summary of the plan is on the Board of Trustees' page on the PERA website). An additional initiative implemented in 2014 was the commissioning of an asset/liability study. The study was completed by Aon Hewitt Investment Consulting, Inc. and in March 2015, the Board voted to approve a new long-term strategic asset allocation and adopt a phased implementation plan to reflect the changing dynamics of the investment landscape. More information on the interim and long-term targets can be found on page 117 of the Investment Section.

Also included in the Board's Strategic Plan is an initiative to revise PERA's Funding Policy, which was last revised and adopted in November 2007. Since then, the Governmental Accounting Standards Board (GASB) issued Statements Nos. 67 and 68, which substantially change the accounting and financial reporting of pensions for PERA and its affiliated employers. The revised reporting and disclosure requirements entail a shift in focus from a funding-based approach to an accounting-based approach.

**Mail:** PO Box 5800, Denver, CO 80217-5800 | **Offices:** 1301 Pennsylvania Street, Denver | 1120 W. 122nd Avenue, Westminster  
1.800.759.PERA (7372) | [www.copera.org](http://www.copera.org)

Under this new approach, the Annual Required Contribution (ARC) is no longer a required reporting element and instead PERA has developed a new funding benchmark to reflect its funding policy objectives. This has been achieved while recognizing the statutory nature of PERA's contribution structure. PERA staff led by Koren Holden, PERA Senior Project Manager, have spent many months educating the Board about the development of a revised pension funding policy to ensure that PERA remains at the forefront of public pension plans and is able to anticipate challenges initiated by the new GASB requirements as well as various economic circumstances.

As mentioned, related to the Funding Policy are GASB Statements Nos. 67 and 68. The Board determined that PERA should provide GASB-related employer education, communications, and training. To accomplish this, a cross-functional work team was created under the direction of Karl Greve, PERA Chief Financial Officer. This workgroup has developed a wide gamut of materials to convey the details of these reporting changes, the impact on employer financial statements, and how to implement the new reporting requirements.

While the Board and PERA staff were doing heavy lifting on many strategic initiatives, recent litigation issues were resolved, which are significant and should be recognized. First, in October 2014, the Supreme Court, in *Justus v. State of Colorado and PERA*, upheld the legality of the SB 10-001 reform legislation, specifically the reduction of the annual increase, or cost-of-living adjustment. Second, a settlement agreement with the City of Colorado Springs was reached in September 2014 related to Memorial Health System's departure from PERA that involved the City paying PERA \$190 million for the liabilities associated with benefits already earned by the 7,666 Memorial employees. Finally, the Colorado Supreme Court declined to hear Treasurer Walker Stapleton's challenge to the August 2013 ruling by the Colorado Court of Appeals denying his request for unfettered access to PERA members' information.

The successful resolution of these cases is due to excellent legal counsel by both PERA staff, directed by PERA General Counsel Adam Franklin, and outside counsel hired by PERA. In addition, the successful outcomes were equally possible because of the due diligence by current and former PERA staff and Board members. In particular, in the *Justus* case, the groundwork by Greg Smith (when he was PERA's General Counsel) and Meredith Williams (when he was PERA's Executive Director) enabled the PERA Board to make the best possible decision to ensure minimal harm to both current and future members and beneficiaries. Such a decision was critical to ensure the long-term sustainability of the fund both for the 100-year-old benefit recipient and the 18-year-old who was just hired today, as well as for everyone in between.

Working on behalf of all members are the PERA Trustees. I would like to take this opportunity to thank former Board Chair Carole Wright for her adeptness and dedication in leading the Board. I would also like to express my gratitude to two Trustees who left the Board in July 2014—Scott Murphy and Rochelle Logan. Scott served on the Board since 2005 and provided quality leadership during his tenure. Rochelle was on the Board since 2011 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.

It is with deep regret that I also recognize the resignation of Ben Valore-Caplan from the Board in April 2015. Ben was a Governor-appointed Trustee and named to the Board by Governor Hickenlooper in 2012. He was elected by his fellow Trustees to serve as Vice Chair in January 2015. On behalf of the Board, we will miss his eloquence and knowledgeable, insightful comments on critical issues that impact PERA.

## Board Chair's Report

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On a more somber note, I would also like to acknowledge the passing of former Trustee and Board Chair, Mark Anderson. Mark served on the Board for more than 17 years from January 1993 through September 2010 as a representative from the Local Government Division. He served on the Board during a time when the public retirement landscape was rapidly evolving and he led PERA through a challenging period. He embodied the highest qualities of a public servant and served as a role model for others to emulate. PERA will be forever indebted to Mark and his many contributions to ensuring the retirement security of Colorado's public employees.

While there were Trustee departures from the Board, we also welcomed new Trustees—Karl Fisch and Mason Parsaye. Karl is the Director of Technology at Arapahoe High School in Littleton Public Schools and is a School Division Trustee in the seat previously held by Scott Murphy. Mason is the General Manager of the Energy Construction, Operations and Maintenance Department for Colorado Springs Utilities and is a Local Government Trustee in the seat previously held by Rochelle Logan. In addition, in June 2015, the Governor appointed Roger P. Johnson to fill the vacancy created by the resignation of Ben Valore-Caplan. Roger has served as an external member of the Board's Audit Committee since 2012 and is the Chief Financial Officer of the Sunshine Silver Mining & Refining Company. He is a Certified Public Accountant and has 35 years of financial experience.

Furthermore, I express my gratitude to all of my fellow Trustees for their perseverance and dedication when meeting the challenges before them. The Board's guidance and support is paramount to the success of PERA.

It is also with profound gratitude that I extend my appreciation to the entire PERA membership and other constituencies for their continued support of PERA. As Trustees we are dedicated to preserving the retirement system for all PERA members, but cannot do so without the dedication of PERA staff and continuing support of PERA members, affiliated employers, the business community, and the public at large throughout this great state.

Sincerely,

*Maryann Motza, PhD*  
*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 of Trustees (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. KPMG LLP has performed the independent audit of PERA's annual financial statements for the six years ended December 31, 2014.

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 2014 that included:

- Recommending the *Comprehensive Annual Financial Report*, including the Report of the Independent Auditors, to the Board for its approval;



# Report of the Colorado PERA Audit Committee

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- Reviewing and approving the internal audit plans of the Director of Internal Audit;
- 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. This included reviewing the impact of the adoption of GASB 67 and 68.

The Audit Committee has reviewed and discussed the audited financial statements for the year ended December 31, 2014, 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, 2014.

Audit Committee as of June 23, 2015

*Timothy M. O'Brien, Chairman*

*Hon. James Casebolt*

*Richard Delk*

*Warren Malmquist*

*Susan Murphy*

*Mason Parsaye*

*Hon. Walker Stapleton*

*Lynn Turner*

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.



**Maryann Motza**

*Chair*

Elected by State Members  
Social Security Administrator for the State  
*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 Board  
Secretary, DPS JROTC Program  
*Current term expires June 30, 2016*



**Honorable James Casebolt**

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



**Brett Johnson**

Deputy State Treasurer  
Delegated Substitute for  
State Treasurer  
*Resigned as Deputy State Treasurer January 2015*



**Richard Delk**

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



**Carolyn Jonas-Morrison**

Elected by State Members  
Dean, Math and English Division,  
Pikes Peak Community College  
*Current term expires June 30, 2018*



**Karl Fisch**

Elected by School Members  
Director of Technology,  
Littleton Public Schools  
*Current term expires June 30, 2018*



**Rochelle Logan**

Elected by Local Government Members  
Associate Director of Support Services,  
Douglas County Libraries  
*Term expired June 30, 2014*

## Board of Trustees

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### Scott Murphy

Elected by School Members  
Superintendent,  
Littleton Public Schools  
*Term expired June 30, 2014*



### Marcus Pennell

Elected by School Members  
Physics Teacher, Jefferson County  
School District  
*Current term expires June 30, 2017*



### Susan G. Murphy

Appointed by the Governor  
*Current term expires July 10, 2017*



### Honorable Walker Stapleton

Ex officio member  
State Treasurer  
*Continuous term effective January 2011*



### Amy L. Nichols

Elected by School Members  
Aurora Education Association President  
Adams-Arapahoe 28J  
*Current term expires June 30, 2016*



### Lynn E. Turner

Appointed by the Governor  
*Current term expires July 10, 2018*



### Scott L. Noller

Elected by School Members  
Principal,  
Colorado Springs School District #11  
*Current term expires June 30, 2017*



### Ben Valore-Caplan

Appointed by the Governor  
*Elected Vice Chair January 2015*  
*Resigned from the Board April 2015*  
*Term expired July 10, 2016*



### Timothy M. O'Brien

Elected by Retirees  
Retired Colorado State Auditor,  
Office of the State Auditor  
*Current term expires June 30, 2015*



### Carole Wright

Elected by Retirees  
Retired Teacher,  
Aurora Public Schools  
*Current term expires June 30, 2017*



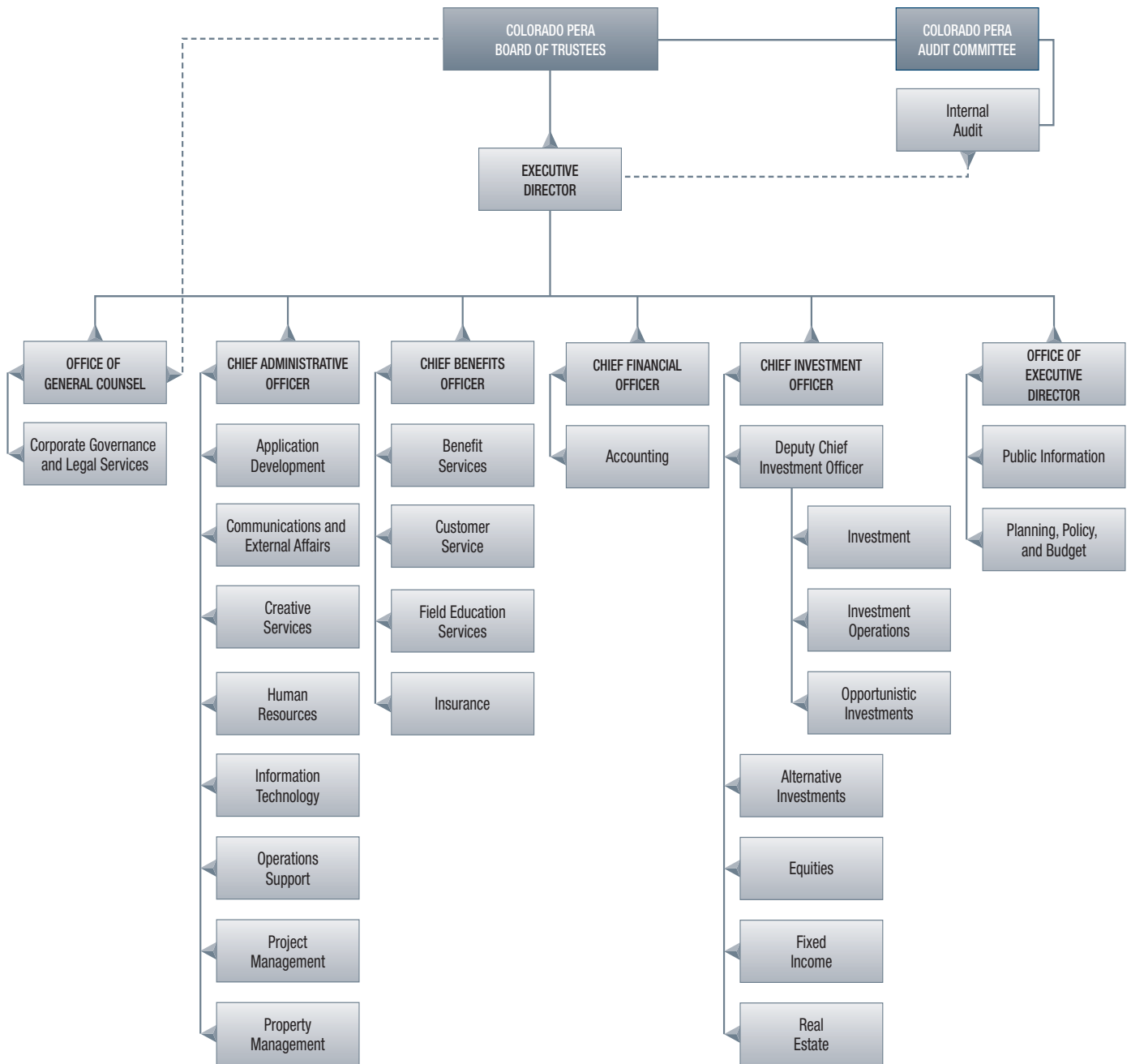
### Mason Parsaye

Elected by Local Government Members  
General Manager of the Energy Construction,  
Operations, and Maintenance Department,  
Colorado Springs Utilities  
*Current term expires June 30, 2018*



# Administrative Organizational Chart

As of June 1, 2015



# Colorado PERA Executive Management



## **Gregory W. Smith—Executive Director**

Jennifer Paquette—*Chief Investment Officer*  
Karl Greve—*Chief Financial Officer*  
Donna Baros—*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—*Investment Director*  
Tom Liddy—*Director of Investment Operations*  
*Opportunistic Investments Division*

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 Baros—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*

**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**

*Aon Hewitt Investment Consulting, Inc.*  
200 East Randolph Street  
Suite 1500  
Chicago, IL 60601

**Investment Performance Consultants**

*Aon Hewitt Investment Consulting, 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**

*Aon Hewitt Investment Consulting, 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

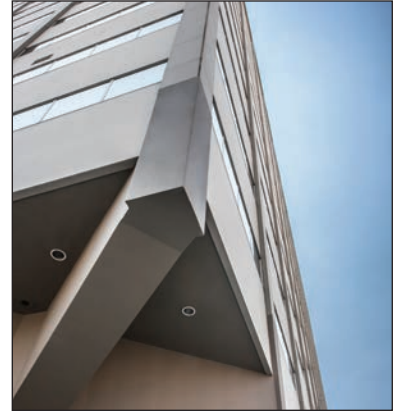
**Voluntary Investment Program, Defined Contribution Retirement, and Deferred Compensation Plan Investment and Performance Consultant**

*RVK, Inc.*  
1211 SW 5th Avenue  
Suite 900  
Portland, OR 97204

**Voluntary Investment Program, Defined Contribution Retirement, and Deferred Compensation Plan Service Provider**

*Voya Institutional Plan Services, LLC*  
30 Braintree Hill Office Park  
Braintree, MA 02184

Providing a  
Foundation for  
**FLEXIBILITY**



*By offering a variety of  
voluntary benefit programs,  
Colorado PERA allows its  
members the flexibility to  
safeguard their financial  
stability.*

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**FINANCIAL SECTION**





**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, 2014, and the related notes to the financial statements, which collectively comprise 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, 2014, 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, 2013 financial statements, and in our report dated June 24, 2014, 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 LLP is a Delaware limited liability partnership, the U.S. member firm of KPMG International Cooperative ("KPMG International"), a Swiss entity.



## ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Colorado Public Employees' Retirement Association as of December 31, 2014, and the respective changes in fiduciary 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 fiduciary net position of each individual fund of the Colorado Public Employees' Retirement Association as of December 31, 2014, and the respective changes in fiduciary net position thereof for the year then ended in conformity with U.S. generally accepted accounting principles.

## ***Emphasis of Matter***

As discussed in Note 2 to the financial statements, in 2014, Colorado PERA adopted Governmental Accounting Standards Board No. 67, *Financial Reporting for Pension Plans – an amendment to GASB No. 25*. Our opinion is not modified with respect to this matter.

## ***Other Matters***

### ***Required Supplementary Information***

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 28 to 57 and Required Supplementary Information including the schedules of changes in net pension liability, pension liability, employer contributions, investment returns, funding progress, and contributions from employers and other contributing entities on pages 97 to 110 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 schedules of administrative expenses, other additions, other deductions, investment expenses and payments to consultants, and the Introductory, Investment, Actuarial and Statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules of administrative expenses, other additions, other deductions, investment expenses and payments to consultants 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 schedules of administrative expenses, other additions, other deductions, investment expenses and payments to consultants are fairly stated in all material respects in relation to the basic financial statements as a whole.



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 23, 2015 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 23, 2015



# 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, 2014. 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 58–61.

In addition to historical information, the Management's Discussion and Analysis (MD&A) 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 capital markets, general economic conditions, and legislative changes, as well as other factors.

PERA administers the following plans:

PLAN NAME	TYPE OF PLAN
<i>Defined Benefit Pension Plans (Division Trust Funds)</i>	
State Division Trust Fund	Cost-sharing multiple-employer
School Division Trust Fund	Cost-sharing multiple-employer
Local Government Division Trust Fund	Cost-sharing multiple-employer
Judicial Division Trust Fund	Cost-sharing multiple-employer
Denver Public Schools (DPS) Division Trust Fund	Single-employer
<i>Defined Benefit Other Postemployment Benefit Plans (Health Care Trust Funds)</i>	
Health Care Trust Fund (HCTF)	Cost-sharing multiple-employer
Denver Public Schools Health Care Trust Fund (DPS HCTF)	Cost-sharing multiple-employer
<i>Defined Contribution Plans</i>	
Voluntary Investment Program	Multiple-employer
Defined Contribution Retirement Plan	Single-employer
<i>Deferred Compensation Plan</i>	
Deferred Compensation Plan	Multiple-employer
<i>Private Purpose Trust Fund</i>	
Life Insurance Reserve (LIR)	Multiple-employer

The MD&A is organized into the following two sections: Defined Benefit Funds and Defined Contribution Pension and Deferred Compensation Trust Funds. The Defined Benefit Funds section includes the discussion and analysis of the Division Trust Funds, Health Care Trust 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

$$\text{Investment Income} + \text{Contributions} = \text{Benefits Paid} + \text{Expenses} \quad (I + C = B + E)$$

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 Statements of Changes in Fiduciary Net Position on pages 60–61 detail the contributions, investment income, benefit payments, and expenses for all of the fiduciary funds PERA administers.

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

The results for the past 30 years (January 1, 1985, to December 31, 2014) show that the funds grew by \$40,099,000. The breakdown of the change in fiduciary net position (FNP) is shown below for the 30-year period January 1, 1985, to December 31, 2014. During this time, the number of members and benefit recipients grew over 300 percent from 123,961 to 529,140.

## CHANGE IN FIDUCIARY NET POSITION (30-YEAR PERIOD)

<b>I</b> - Investment income	\$54,750,000
<b>C</b> - Contributions	33,661,000
<b>C</b> - Plan transfers	2,764,000
Subtotal	91,175,000
<b>B</b> - Benefits	50,367,000
<b>E</b> - Expenses	709,000
Subtotal	51,076,000
Change in fiduciary net position	<u>\$40,099,000</u>

For the year ended December 31, 2014, the FNP of the defined benefit funds increased by \$451,007 or 1.0 percent. The increase was principally due to modest growth in the financial markets and contributions recognized which were greater than benefits incurred by the funds. The total fund realized an annual return of 5.7 percent versus the total fund benchmark's annual return of 5.7 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 \$2,023,342. The breakdown of the net change in FNP is shown below for the year ended December 31, 2014.

## 2014 CHANGE IN FIDUCIARY NET POSITION

<b>I</b> - Investment income	\$2,474,349
<b>C</b> - Contributions	2,313,846
Subtotal	4,788,195
<b>B</b> - Benefits	4,285,140
<b>E</b> - Expenses	52,048
Subtotal	4,337,188
Change in fiduciary net position	<u>\$451,007</u>

## Financial Reporting Highlights

The FNP for all defined benefit funds administered by PERA increased \$451,007 during calendar year 2014.

### FIDUCIARY NET POSITION

	2014 CHANGE IN FIDUCIARY NET POSITION	2014 ENDING FIDUCIARY NET POSITION
State Division Trust Fund	\$33,487	\$14,013,947
School Division Trust Fund	180,604	22,920,607
Local Government Division Trust Fund	243,156	3,751,468
Judicial Division Trust Fund	6,846	279,499
DPS Division Trust Fund	(8,648)	3,263,791
HCTF	(4,971)	309,638
DPS HCTF	532	17,021
LIR	1	17,493
<b>Total</b>	<u>\$451,007</u>	<u>\$44,573,464</u>

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

## CHANGE IN FIDUCIARY NET POSITION

	(C) CONTRIBUTIONS AND OTHER ADDITIONS	+ (C) PLAN TRANSFERS	+ (I) NET INVESTMENT INCOME	- (B) - (E) BENEFITS, EXPENSES, AND OTHER DEDUCTIONS	= CHANGE IN FIDUCIARY NET POSITION
State Division Trust Fund	\$681,717	\$—	\$780,762	\$1,428,992	\$33,487
School Division Trust Fund	1,042,955	—	1,274,862	2,137,213	180,604
Local Government Division Trust Fund	304,029	—	200,394	261,267	243,156
Judicial Division Trust Fund	11,622	—	15,299	20,075	6,846
DPS Division Trust Fund	67,900	—	182,823	259,371	(8,648)
HCTF	194,897	—	18,203	218,071	(4,971)
DPS HCTF	10,726	—	938	11,132	532
LIR	—	—	1,068	1,067	1
2014 change in fiduciary net position	\$2,313,846	\$—	\$2,474,349	\$4,337,188	\$451,007
2013 change in fiduciary net position	\$2,022,072	\$—	\$6,091,243	\$4,192,436	\$3,920,879
2012 change in fiduciary net position	\$1,927,278	\$—	\$4,737,372	\$3,995,663	\$2,668,987
2011 change in fiduciary net position	\$1,861,792	\$—	\$721,110	\$3,771,506	(\$1,188,604)
2010 change in fiduciary net position	\$1,813,362	\$2,764,076	\$4,812,116	\$3,599,611	\$5,789,943
2010-2014 change in fiduciary net position	\$9,938,350	\$2,764,076	\$18,836,190	\$19,896,404	\$11,642,212

## Investment Highlights

### Analysis of Investment Income

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

## INVESTMENT INCOME

	NET APPRECIATION/ (DEPRECIATION) IN FAIR VALUE	INTEREST AND DIVIDENDS	REAL ESTATE, ALT INVEST, AND OPPTY FUND NET OPERATING INC	INVESTMENT EXPENSES	NET SECURITIES LENDING INCOME	NET INVESTMENT INCOME
State Division Trust Fund	\$493,422	\$269,613	\$64,719	(\$50,469)	\$3,477	\$780,762
School Division Trust Fund	805,467	440,437	105,724	(82,446)	5,680	1,274,862
Local Government Division Trust Fund	126,864	68,994	16,561	(12,915)	890	200,394
Judicial Division Trust Fund	9,647	5,304	1,273	(993)	68	15,299
DPS Division Trust Fund	115,597	63,078	15,142	(11,807)	813	182,823
HCTF	11,576	6,217	1,493	(1,164)	81	18,203
DPS HCTF	593	322	78	(60)	5	938
LIR	677	367	88	(69)	5	1,068
2014 Total	\$1,563,843	\$854,332	\$205,078	(\$159,923)	\$11,019	\$2,474,349
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

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 56 percent of the inflows.

## Investment Performance

### Money-Weighted Rate of Return

A money-weighted rate of return methodology provides information about the performance on the pooled investment assets. This methodology considers the effect of timing of transactions that increase the amount of pension plan investments (such as contributions) and those that decrease the amount of pension plan investments (such as benefit payments). Additionally, the money-weighted rate of return provides information that is comparable with the long-term assumed rate of return on the pooled investment assets.

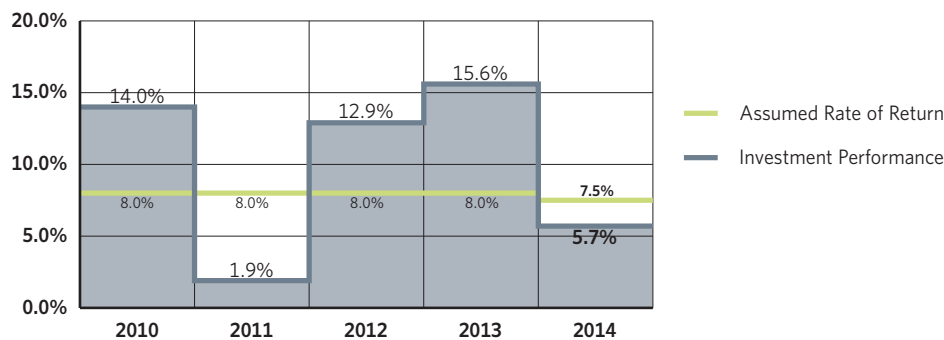
For the year ended December 31, 2014, the net-of-fee money-weighted rate of return on the pooled investment assets was 5.8 percent, which was lower than the actuarial assumed rate of 7.5 percent.

## Time-Weighted Rate of Returns

The time-weighted rate of return methodology considers investment performance of a hypothetical dollar invested from the beginning of an investment period to the period's end. The effect of timing on varying amounts invested due to, for example, the receipt of contributions or the payments of benefits are not considered. This methodology allows Colorado PERA to compare its investment performance with relevant benchmark rates, as well as its performance with other pension plans, as shown below.

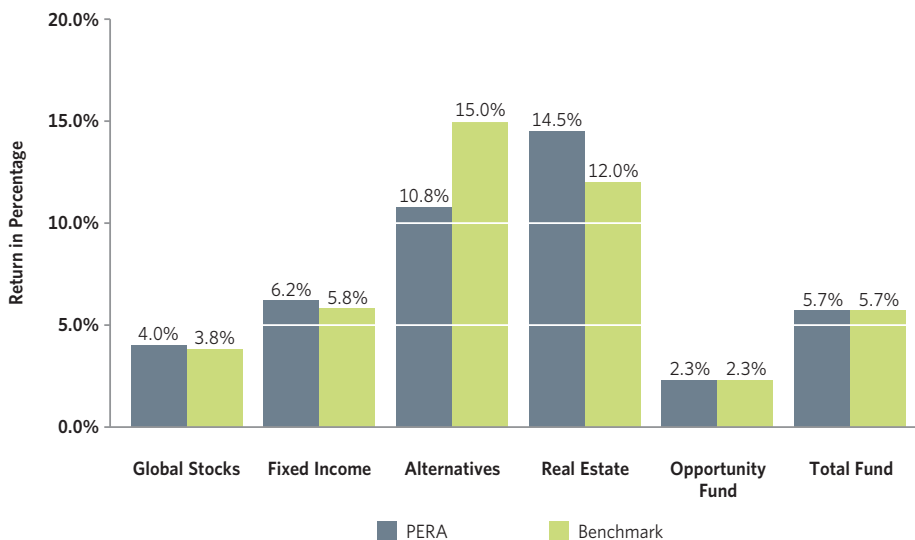
For the year ended December 31, 2014, the net-of-fee time-weighted rate of return on the pooled investment assets was 5.7 percent compared to 15.6 percent for the year ended December 31, 2013. The net-of-fee annualized rate of return for the pooled investment assets was 9.9 percent for the past five years and 6.8 percent for the past 10 years. The 30-year annualized gross-of-fee rate of return for the pooled investment assets was 9.4 percent. It is important to note that market returns and volatility will vary from year to year for the total fund and across various asset classes.

**Actual Time-Weighted Return vs. Assumed Rate of Return<sup>1</sup>**



<sup>1</sup> In November 2013, the assumed rate of return was lowered to 7.5 percent effective January 1, 2014.

**2014 Actual Time-Weighted Return vs. Benchmark**



Note: Aon Hewitt Investment Consulting, 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 2014, 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

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

5 percent of the Opportunity Fund Benchmark. For more information, see the Schedule of Investment Results on page 121 and the Fund Performance Evaluation on pages 123–125.

The total fund outperformed the policy benchmark return by approximately 4 basis points for the year ended December 31, 2014. Global Stocks, Fixed Income and Real Estate were the primary contributors to the outperformance. The Alternative Investment asset class detracted from overall performance. Alternative Investment performance tends to lag public stock market returns when the stock market has a large move. In addition, the sharp decline in oil prices negatively impacted certain partnership holdings. The outperformance of the Global Stocks portfolio was due to strong manager performance and superior stock selection. 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, 2014, PERA's total fund returned 5.7 percent net-of-fees, compared to the BNY Mellon Performance and Risk Analytics' and Investment Metrics' Median Public Fund Universe return of 6.2 percent. As of December 31, 2014, the BNY Mellon Performance and Risk Analytics' and Investment Metrics' Median Public Fund Universe measure was comprised of 94 public pension funds with assets of approximately \$1.4 trillion. PERA's total fund returned 11.3 percent and 9.9 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 11.4 percent and 9.5 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., now known as Aon Hewitt Investment Consulting, Inc. (Aon Hewitt). 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.

## ASSET ALLOCATION TARGETS AND RANGES

	12/31/2013 ACTUAL % <sup>1</sup>	2013 TARGET %	2013 RANGES	12/31/2014 ACTUAL % <sup>1</sup>	2014 TARGET %	2014 RANGES
Global Stocks	58.4%	56.0%	50.0%- 62.0%	56.5%	56.0%	50.0% - 62.0%
Fixed Income	23.4%	25.0%	22.0%- 28.0%	24.9%	25.0%	22.0% - 28.0%
Alternative Investments <sup>2</sup>	7.8%	7.0%	4.0%- 10.0%	7.8%	7.0%	4.0% - 10.0%
Real Estate	7.1%	7.0%	4.0%- 10.0%	7.4%	7.0%	4.0% - 10.0%
Opportunity Fund <sup>3</sup>	2.5%	5.0%	0.0%- 8.0%	2.5%	5.0%	0.0% - 8.0%
Cash & Short-Term Investments <sup>4</sup>	0.8%	0.0%		0.9%	0.0%	

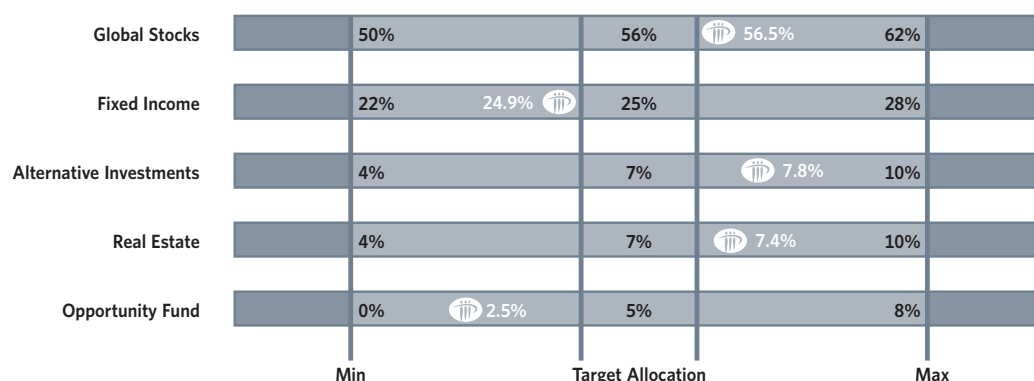
<sup>1</sup> Asset allocation decisions are made based on the total holdings of the portfolios within each asset class. Therefore, the investment receivables, payables, accruals, and cash and short-term investments are allocated back to the investment portfolios that hold them for purposes of the table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

<sup>2</sup> The Alternative Investment asset class has exposure to private equity, venture capital, secondary interests in private equity funds, and distressed debt.

<sup>3</sup> The Opportunity Fund asset class has exposure to timber, commodity, risk-parity, tactical opportunity, and credit opportunity funds.

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

2014 Asset Allocation Permissible Ranges vs. December 31, 2014, Actual Allocation



The Board commissioned an asset/liability study in 2014, which was prepared by Aon Hewitt. On March 20, 2015, the Board voted to change the strategic asset allocation policy of the fund effective July 1, 2015. The new strategic asset allocation contains an interim target allocation as of July 1, 2015, and a long-term target allocation and the specified ranges for each asset class. The long-term target allocation will be achieved over time. The Investment Committee will be responsible for providing the Board interim policy targets annually until the long-term target allocation and ranges are achieved. The table below shows the interim target asset allocation effective July 1, 2015, and the long-term policy and target ranges for each asset class.

	INTERIM ASSET ALLOCATION TARGET EFFECTIVE JULY 1, 2015	LONG-TERM ASSET ALLOCATION TARGET	TARGET RANGE EFFECTIVE JULY 1, 2015
Global Equity	55.0%	53.0%	47.0% - 59.0%
Fixed Income	24.0%	23.0%	18.0% - 28.0%
Private Equity <sup>1</sup>	7.5%	8.5%	5.0% - 12.0%
Real Estate	7.5%	8.5%	5.0% - 12.0%
Opportunity Fund	5.0%	6.0%	0.0% - 9.0%
Cash	1.0%	1.0%	0.0% - 3.0%

<sup>1</sup> Effective July 1, 2015, the name of the Alternative Investment asset class will change to Private Equity.

## 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 2014, PERA submitted its annual required report to elected officials on July 3, 2014.

More information regarding the Sudan Divestment can be obtained from the PERA website at [www.copera.org](http://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](http://www.copera.org).

## Commitments

As of December 31, 2014, PERA had commitments for future investments in Alternative Investments of \$2,019,618, in Real Estate of \$921,363, and in the Opportunity Fund of \$195,201.

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

## Contributions

### Analysis of Contributions

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

## Statutory Contributions

### 2014 TOTAL CONTRIBUTIONS FOR DIVISION AND HEALTH CARE TRUST FUNDS

TRUST FUND	EMPLOYER CONTRIBUTIONS <sup>1</sup>	MEMBER CONTRIBUTIONS	PURCHASED SERVICE	RETIREE HEALTH AND LIFE PREMIUMS	FEDERAL HEALTH CARE SUBSIDIES	EMPLOYER DISAFFILIATION PAYMENT	OTHER	TOTAL CONTRIBUTIONS AND OTHER
State Division	\$444,372	\$211,610	\$22,446	\$—	\$—	\$—	\$3,289	\$681,717
School Division	686,323	334,585	21,935	—	—	—	112	1,042,955
Local Government Division	68,719	43,792	5,498	—	—	186,006	14	304,029
Judicial Division	7,070	3,461	835	—	—	—	256	11,622
DPS Division	18,478	47,083	2,326	—	—	—	13	67,900
HCTF	75,631	—	—	105,459	—	3,994	9,813	194,897
DPS HCTF	6,003	—	—	4,442	—	—	281	10,726
2014 Total	<u>\$1,306,596</u>	<u>\$640,531</u>	<u>\$53,040</u>	<u>\$109,901</u>	<u>\$—</u>	<u>\$190,000</u>	<u>\$13,778</u>	<u>\$2,313,846</u>
2013 Total	<u>\$1,203,725</u>	<u>\$614,431</u>	<u>\$50,963</u>	<u>\$119,083</u>	<u>\$16,294</u>	<u>\$—</u>	<u>\$17,576</u>	<u>\$2,022,072</u>
2012 Total	<u>\$1,093,193</u>	<u>\$640,560</u>	<u>\$49,795</u>	<u>\$111,399</u>	<u>\$14,686</u>	<u>\$—</u>	<u>\$17,645</u>	<u>\$1,927,278</u>
2011 Total	<u>\$1,013,731</u>	<u>\$676,768</u>	<u>\$31,441</u>	<u>\$113,218</u>	<u>\$14,650</u>	<u>\$—</u>	<u>\$11,984</u>	<u>\$1,861,792</u>
2010 Total	<u>\$987,139</u>	<u>\$636,703</u>	<u>\$31,428</u>	<u>\$114,905</u>	<u>\$27,003</u>	<u>\$—</u>	<u>\$16,184</u>	<u>\$1,813,362</u>

<sup>1</sup> Employer contributions include the employer statutory rate, AED, and SAED, less an offset (16.89 percent in 2014 and 14.51 percent in 2013) for the DPS Division as required by C.R.S. § 24-51-412 *et seq.*

### MEMBER CONTRIBUTION RATES FOR 2014

TRUST FUND	JANUARY 1-DECEMBER 31, 2014
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%
DPS Division	8.00%
HCTF	0.00%
DPS HCTF	0.00%

Member and employer contribution rates are set in statute. Member contributions for the Division Trust Funds increased from \$614,431 in 2013 to \$640,531 in 2014. Over the past 30 years, member contributions represent 18 percent of the inflows into the Division Trust Funds.

Employer contributions for the Division Trust Funds, the HCTF, and the DPS HCTF increased from \$1,203,725 in 2013 to \$1,306,596 in 2014. Employer contributions increased due to increases in payroll and 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.



# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

## EMPLOYER CONTRIBUTION RATES FOR 2014

TRUST FUND	ACTUARIALLY DETERMINED CONTRIBUTION <sup>1</sup>	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)	20.45%	10.15%	(1.02%)	3.80%	3.50%	—	16.43%
State Division (State Troopers)	—	12.85%	(1.02%)	3.80%	3.50%	—	19.13%
School Division	19.65%	10.15%	(1.02%)	3.80%	3.50%	—	16.43%
Local Government Division	11.78%	10.00%	(1.02%)	2.20%	1.50%	—	12.68%
Judicial Division	20.07%	13.66%	(1.02%)	2.20%	1.50%	—	16.34%
DPS Division	9.67%	13.75%	(1.02%)	3.80%	3.50%	(16.89%)	3.14%
HCTF	1.32%	—	1.02%	—	—	—	1.02%
DPS HCTF	0.87%	—	1.02%	—	—	—	1.02%

<sup>1</sup> Actuarially Determined Contribution rates for 2014 are based on the 2012 actuarial valuation. The 2012 actuarial valuation determined the Annual Required Contributions under the parameters promulgated by GASB 25 and GASB 43.

Colorado Revised Statutes (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 refinancing 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 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, 16.89 percent for 2014, and 15.97 percent for 2015.

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 time that the employer contribution rate is adjusted. An adjustment to the DPS Division employer contribution rate may result in a significant increase or decrease in the total contributions paid by the DPS Division employers.

C.R.S. 24-51-401(1.7) created a mechanism to reduce the funding status of the DPS Division from 88.3 percent at its inclusion into PERA in 2010 to the funded status of the school system in 2040. This mechanism involves offsetting the employer contributions into the DPS Division Trust Fund by the amount of the PCOPs payments as described above. It is expected that the equalization will occur in approximately 25 years.

On June 3, 2015, House Bill 15-1391 was signed into law, which reduces the employer contribution rate for the DPS Division from 13.75 percent to 10.15 percent, with a retroactive effective date of January 1, 2015.

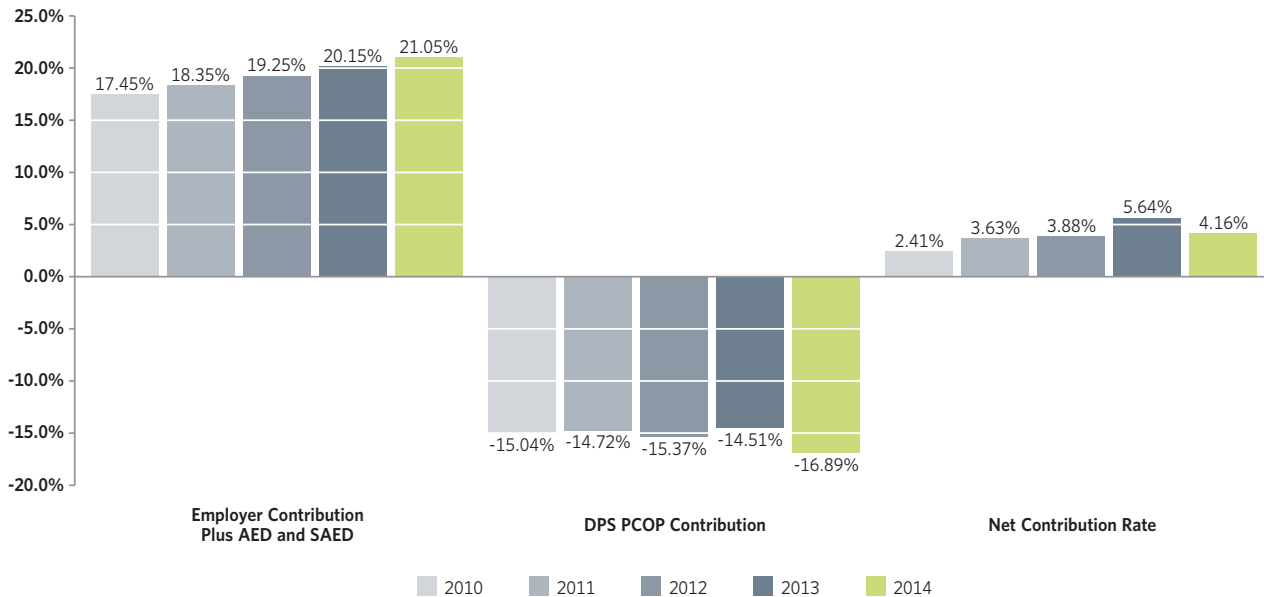
Employer contribution rates, PCOP offset rates, and net contribution rates for the DPS Division for the past five years are disclosed in the chart on the next page.



# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

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



## Employer Disaffiliation Payment: Memorial Health System Lawsuit Resolution

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 arose 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.

In 2012, a lawsuit was initiated in Denver District Court to determine the amount owed to PERA by Memorial and the City of Colorado Springs (the City) for Memorial's departure from PERA. PERA's position was that the termination of affiliation provisions of the PERA statutes, specifically C.R.S. §§ 24-51-313 to 321, applied to the Memorial transaction. PERA's position was that Memorial must pay its share of the current unfunded liability in PERA's Local Government Division and PERA's HCTF because it has terminated its affiliation with PERA. The City and Memorial's position was that the termination of affiliation provisions of the PERA statutes do not apply to this transaction and PERA was not owed anything as a result of the Memorial transaction.

In September 2014, PERA and the City agreed to resolve the lawsuit. The agreement provided for the City to pay PERA \$190,000 for the liabilities associated with the retirement and health care benefits already earned by 7,666 Memorial employees for the work that they performed before Memorial ceased to be a PERA employer. This employer disaffiliation payment of \$190,000 was allocated to the Local Government Division and HCTF in the amounts of \$186,006 and \$3,994, respectively.

## Prospective Contribution Information

The AED and the SAED are set to increase in future years, as described in the table on the next page. With the passage of Senate Bill (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 on the next page.

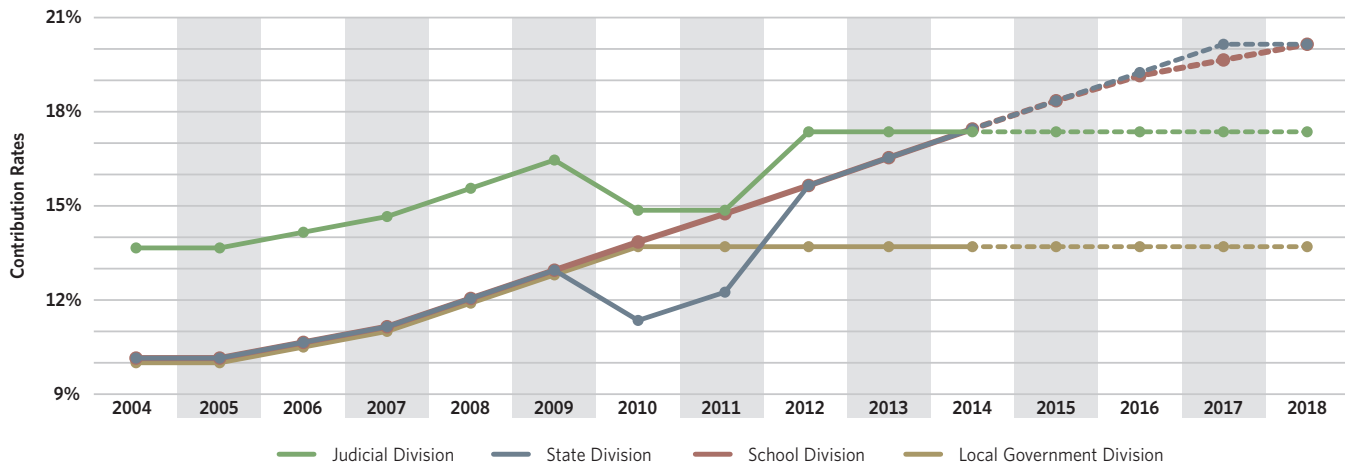
## FUTURE AED AND SAED RATES

PERIOD	STATE DIVISION TRUST FUND		SCHOOL DIVISION TRUST FUND		LOCAL GOVERNMENT DIVISION TRUST FUND		JUDICIAL DIVISION TRUST FUND		DENVER PUBLIC SCHOOLS DIVISION TRUST FUND <sup>1</sup>	
	AED	SAED	AED	SAED	AED	SAED	AED	SAED	AED	SAED
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%

<sup>1</sup> 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 \$23,082, \$36,569, and \$5,259, 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.

**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. Information on the DPS Division contribution rates can be found on page 36.

## Contribution Analysis—Division Trust Funds Funding Policy

PERA implemented the Governmental Accounting Standards Board (GASB) Statement No. 67 in 2014, and as a result, separate actuarial valuations have been performed for funding and accounting purposes. The new guidance under GASB 67 establishes a decided shift in financial disclosure requirements from a funding-based approach to an accounting-based approach. Therefore, the disclosure and use of the annual required contribution (ARC) as a funding benchmark is no longer a required reporting element. This philosophical shift necessitates the development and use of a plan-specific actuarially determined contribution (ADC) benchmark against which to gauge the adequacy of Colorado PERA's statutory contribution rates. In response to these changes, the Board adopted a revised pension funding policy in March 2015, with regard to the Division Trust Funds, to update and replace the funding policy dated November 2007. The purpose of the revised funding policy is three-fold: (1) to define the overall funding benchmarks of the five defined benefit pension trust funds, (2) to assess the adequacy of the contribution rates which are set by the Colorado Legislature by comparing these rates to an ADC rate, and (3) to define the annual actuarial metrics which will assist the Board in assessing the sustainability of the plan. The results of these three items are intended to guide the Board when considering whether to pursue or support proposed legislation pertaining to changes in contribution and/or benefit provisions. Based on this policy, the ADC calculated in the 2014 actuarial valuation for funding purposes will be the benchmark to gauge the adequacy of 2016 contributions. More information about the new funding policy can be found in the Actuarial Section on page 141.

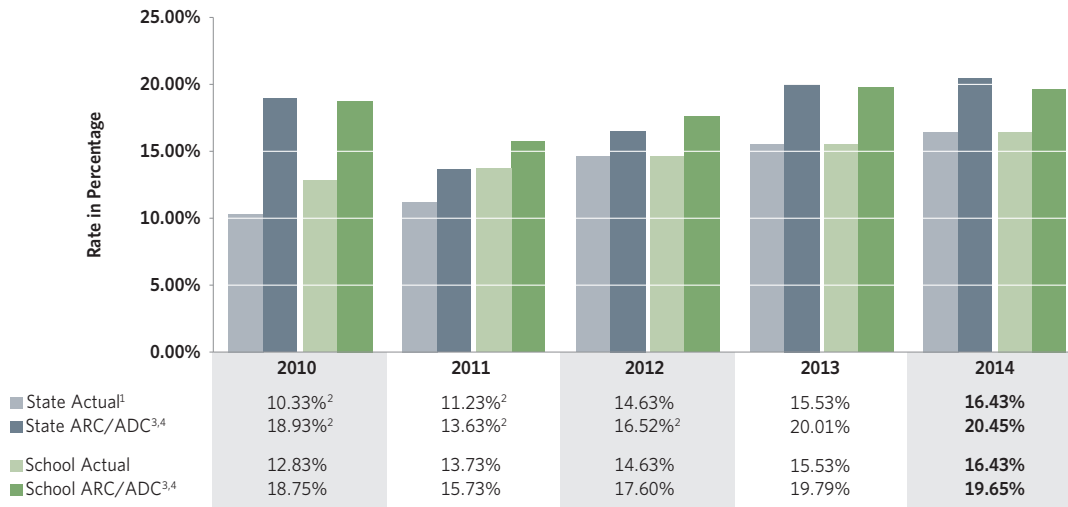
# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

## Actuarially Determined Contribution (ADC)

### History

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



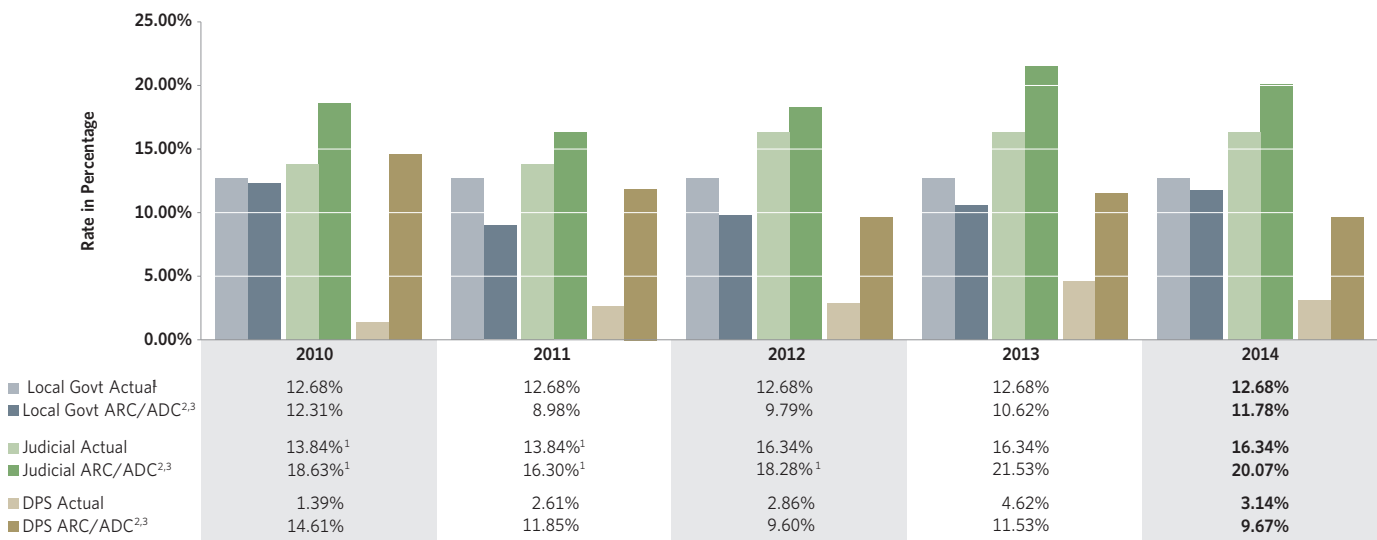
<sup>1</sup> Actual rates are for non-State Troopers.

<sup>2</sup> The rate includes the 2.50 percent reduction required by SB 10-146 and SB 11-076.

<sup>3</sup> The rates shown for years 2010-2013 reflect the ARC rates under GASB 25.

<sup>4</sup> ADC rates for 2014 are based on the 2012 actuarial valuation. The 2012 actuarial valuation determined the ARC rates under the parameters promulgated by GASB 25.

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



<sup>1</sup> The rate includes the 2.50 percent reduction required by SB 10-146 and SB 11-076.

<sup>2</sup> The rates shown for years 2010-2013 reflect the ARC rates calculated under GASB 25.

<sup>3</sup> ADC rates for 2014 are based on the 2012 actuarial valuation. The 2012 actuarial valuation determined the ARC rates under the parameters promulgated by GASB 25.

### ADC Deficiency/(Excess)

New guidance under GASB 67 requires the disclosure of the amount of contributions recognized by the pension plan, the ADC amount, as well as the difference between these two amounts as Required Supplementary Information (RSI). An ADC deficiency arises when contributions are less than the ADC. The ADC is calculated using the investment rate of return and discount rate assumptions according to the Board's funding policy. In 2014, the actual contributions, as set in statute, were \$69.0 million less than the ADC as calculated by the actuaries. During the past 10 years, this shortfall in funding without adjustment for investment earnings to the Division Trust Funds has been \$3.2 billion. Even with SB 10-001, the ADC deficiency is expected to

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

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 four years is due to the benefit and funding changes set forth in SB 10-001.

## ADC DEFICIENCY/(EXCESS)<sup>1</sup> (Amounts in Millions of Dollars)

VALUATION YEAR	2010	2011	2012	2013	2014	CUMULATIVE
						DEFICIENCY/(EXCESS) 2005-2014
State Division	\$170.2	\$49.2	\$65.9	\$102.0	\$90.1	\$1,297.4
School Division	219.0	66.9	107.7	165.7	125.4	1,869.6
Local Government Division	(0.9)	(25.0)	(32.5)	(9.1)	(188.9) <sup>2</sup>	(185.7)
Judicial Division	1.4	1.0	1.3	2.1	1.7	12.2
DPS Division	63.0	46.5	35.9	40.0	40.7	226.1 <sup>3</sup>
<b>Total</b>	<b>\$452.7</b>	<b>\$138.6</b>	<b>\$178.3</b>	<b>\$300.7</b>	<b>\$69.0</b>	<b>\$3,219.6</b>

<sup>1</sup> A 10-year schedule showing the amount of contributions, the ADC amount, and the difference between these two amounts can be found in the Required Supplementary Information on pages 99-101.

<sup>2</sup> Includes the receipt of the disaffiliation payment of \$186.0 for Memorial. See page 36 for more information on the Memorial Health System Lawsuit Resolution.

<sup>3</sup> The DPS Division was established January 1, 2010.

## Future ADC

Using GASB 25 as a guide and the 2013 actuarial valuation based on an assumed 7.5 investment rate of return and discount rate, the 2015 annual required employer contributions needed for the Divisional Trust Funds are 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

Additionally, using the funding policy approved by the Board on March 20, 2015, and the 2014 actuarial funding valuation based on an assumed 7.5 percent investment rate of return and discount rate, the 2016 actuarially determined employer contributions needed for the Divisional Trust Funds are as follows:

- State Division Trust Fund—22.31 percent
- School Division Trust Fund—22.36 percent
- Local Government Division Trust Fund—11.98 percent
- Judicial Division Trust Fund—22.07 percent
- Denver Public Schools Division Trust Fund—10.46 percent

## Amortization of Unfunded Actuarial Accrued Liability

The table below shows the amortization periods considering 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 unfunded actuarial accrued liability (UAAL) over payroll between the DPS and School Divisions at the end of the 30-year period beginning January 1, 2010.

TRUST FUND	AMORTIZATION PERIOD WITH FUTURE AED AND SAED INCREASES
State Division	45 Years
School Division	48 Years
Local Government Division	28 Years
Judicial Division	Infinite
DPS Division	Infinite

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.

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

C.R.S. § 24-51-211 states that the amortization period of 30 years shall be deemed actuarially sound. At the end of 2014, given the current contribution rates, all the Division Trust Funds, except the Local Government Division exceeded the 30-year amortization period.

As stated by Cavanaugh Macdonald Consulting, LLC, in the Actuary's Certification Letter on pages 137–140 in the Actuarial Section of the CAFR:

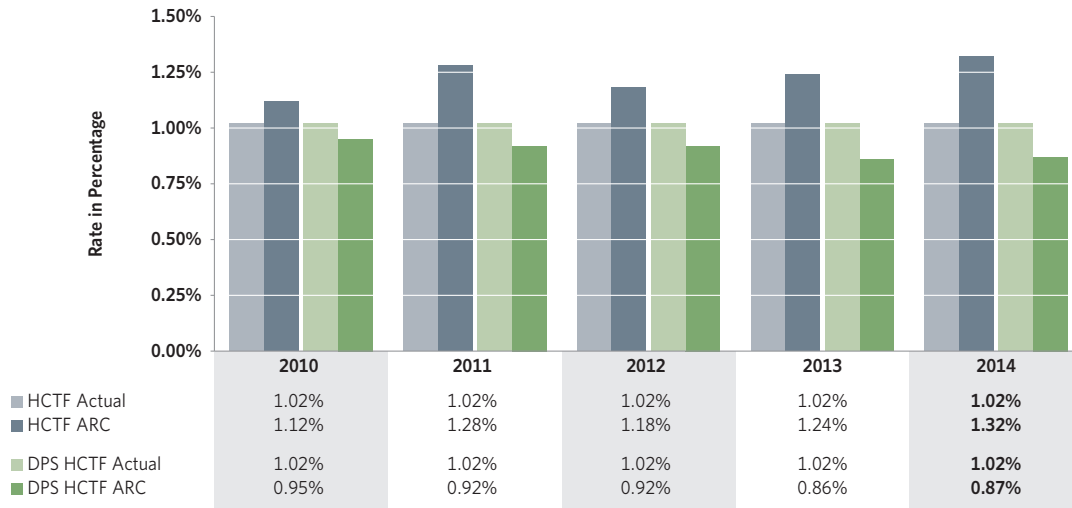
"The results of the valuation indicate that the combined employer and member contribution rates are sufficient to fund the normal cost for all members and provide additional contributions to help finance both the PERA HCTF and the DPS Health Care Trust Fund (DPS HCTF), each division's unfunded actuarial accrued liability and the Annual Increase Reserve (AIR) Fund."

## Contribution Analysis—Health Care Trust Funds

### Funding Policy

The funding policy dated November 2007 remains in force for the two pre-funded retiree health care trust funds, the HCTF and DPS HCTF. The HCTF and DPS HCTF are other postemployment benefit (OPEB) plans and financial information is reported in accordance with GASB 43. More information about the November 2007 funding policy can be found on page 169.

Health Care Trust Fund and DPS Health Care Trust Fund;  
Year-End Employer Contribution/ARC Comparison



### Contribution Deficiency/(Excess)

The ARC is calculated and reported in the annual actuarial valuations produced for funding purposes 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 2014, the actual contributions, as set in statute, were \$14.7 million less than the ARC as calculated by the actuaries based on parameters promulgated by GASB 43. The table below shows the yearly ARC shortfall (excess) by health care trust fund for the past five years.

#### YEARLY ARC DEFICIENCY/(EXCESS)

(Amounts in Millions of Dollars)

VALUATION YEAR	2010	2011	2012	2013	2014
HCTF	(\$9.4)	\$1.6	(\$7.0)	(\$10.4)	\$15.6
DPS HCTF	(0.8)	(1.0)	(1.0)	(1.6)	(0.9)
Total	(\$10.2)	\$0.6	(\$8.0)	(\$12.0)	\$14.7

For more detail on the ARC, see the Actuarial Section on page 169 and the Schedule of Contributions from Employers and Other Contributing Entities for the Health Care Trust Funds on page 107.

### **Future ARC**

Using GASB 43 as a guide and the 2013 actuarial valuation based on an assumed 7.5 percent investment rate of return and discount rate, the 2015 annual required employer contributions needed to meet a 30-year amortization period are as follows:

- Health Care Trust Fund—1.15 percent
- Denver Public Schools Health Care Trust Fund—0.81 percent

Additionally, using GASB 43 as a guide and the 2014 actuarial valuation based on an assumed 7.5 percent investment rate of return and discount rate, the 2016 annual required employer contributions needed to meet a 30-year amortization period are as follows:

- Health Care Trust Fund—1.09 percent
- Denver Public Schools Health Care Trust Fund—0.75 percent

### **Annual Actuarial Valuation Statistics**

As of December 31, 2014, the Funded Ratio, the UAAL, the ARC for 2016 as a percentage of covered payroll, and the amortization periods with current funding for each health care trust fund are shown in the table below. The results in this table are based on parameters set by GASB 43.

#### **ACTUARIAL STATISTICS**

TRUST FUND	FUNDED RATIO	UAAL	ARC	ARC AMORTIZATION PERIOD	AMORTIZATION PERIOD CURRENT YEAR FUNDING
HCTF	19.4%	\$1,237,084	1.09%	30 Years	35 Years
DPS HCTF	21.7%	59,524	0.75%	30 Years	16 Years
Total Health Care Trust Funds <sup>1</sup>		\$1,296,608			

<sup>1</sup> 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, based on a set of assumptions. See the RSI and the accompanying notes on pages 106–110 for additional information.

C.R.S. § 24-51-211 states that the amortization period of 30 years shall be deemed actuarially sound. At the end of 2014, given the current contribution rates, the HCTF exceeded the 30-year amortization period.

As stated by Cavanaugh Macdonald Consulting, LLC, in the Actuary's Certification Letter on pages 137–140 in the Actuarial Section of the CAFR:

“The employer contribution rate, combined with anticipated future employee growth and service purchase transfers, is sufficient to eventually finance the PERA HCTF's and DPS HCTF's benefits in accordance with GASB 43 and 45.”



# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

## Summary of Benefits and Expenses

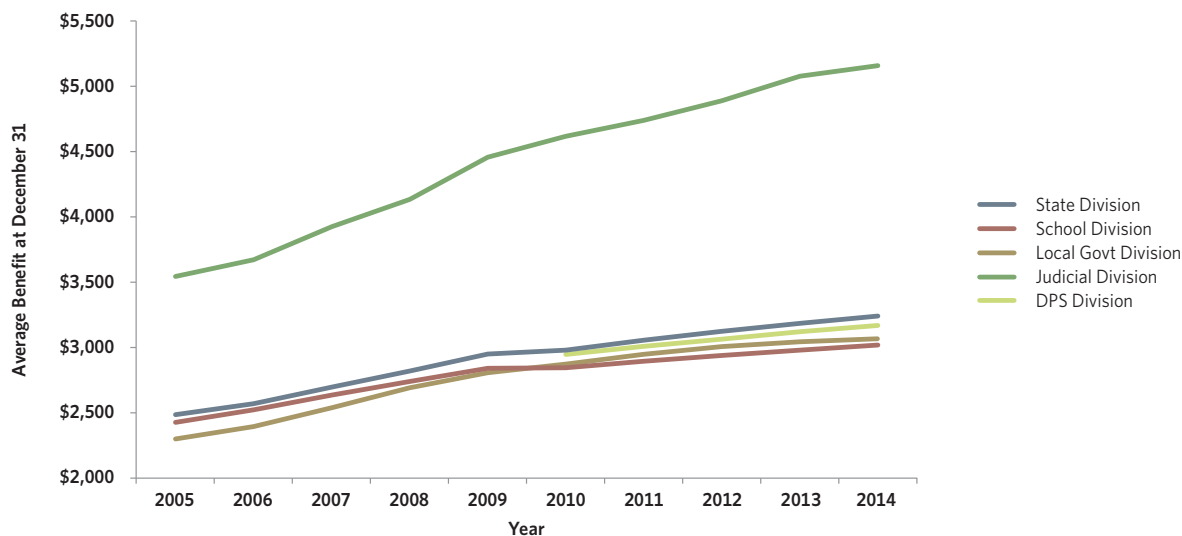
### Analysis of Benefits and Expenses

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

#### TOTAL DEDUCTIONS BY TRUST FUND

TRUST FUND	BENEFIT PAYMENTS	REFUNDS	DISABILITY PREMIUMS	ADMIN EXPENSES	OTHER	TOTAL DEDUCTIONS
State Division	\$1,352,293	\$61,152	\$2,309	\$10,067	\$3,171	\$1,428,992
School Division	2,032,628	77,171	3,748	19,290	4,376	2,137,213
Local Government Division	232,055	24,436	481	2,091	2,204	261,267
Judicial Division	19,800	60	43	72	100	20,075
DPS Division	247,005	8,063	366	2,377	1,560	259,371
HCTF	200,627	—	—	16,612	832	218,071
DPS HCTF	10,432	—	—	668	32	11,132
2014 Total	\$4,094,840	\$170,882	\$6,947	\$51,177	\$12,275	\$4,336,121
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

Average Benefits Payable Per Month (In Actual Dollars)



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

#### AVERAGE MONTHLY BENEFIT BY DIVISION<sup>1</sup>

(In Actual Dollars)

YEAR	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DPS DIVISION
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
2014	3,241	3,019	3,067	5,158	3,169

<sup>1</sup> Most employees working for a PERA-affiliated employer do not earn Social Security benefits.

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

## RATIO OF ACTIVE MEMBERS TO RETIREES AND BENEFICIARIES (AS OF DECEMBER 31)

YEAR	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DPS DIVISION
2010	1.69	2.33	3.18	1.08	2.12
2011	1.65	2.21	3.02	1.05	2.15
2012	1.61	2.14	2.05 <sup>1</sup>	1.02	2.17
2013	1.58	2.10	1.94	1.03	2.26
2014	1.54	2.06	1.87	1.01	2.30

<sup>1</sup> The rate decreased due to the termination of affiliation with PERA by Memorial Health System.

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				
					2014	2013	2012	2011	2010
State Division	\$444,372	\$211,610	\$655,982	\$1,352,293	2.1	2.1	2.2	2.2	2.2
School Division	686,323	334,585	1,020,908	2,032,628	2.0	2.0	2.1	2.0	2.0
Local Government Division	68,719	43,792	112,511	232,055	2.1	2.0	1.4	1.2	1.1
Judicial Division	7,070	3,461	10,531	19,800	1.9	1.9	1.8	1.8	1.7
DPS Division	18,478	47,083	65,561	247,005	3.8	3.5	4.1	4.2	5.0

## Lawsuit Resolution 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 claimed to be acting on behalf of a class of individuals, alleged that a portion of SB 10-001 was 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 was 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 were the State of Colorado, Governor Hickenlooper, Carole Wright, and Maryann Motza. The individuals were 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.

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.

On October 20, 2014, the Colorado Supreme Court ruled in favor of Colorado PERA and the State of Colorado in the case. The Court upheld the reduction of the annual increase under SB 10-001. The Court stated, "We hold that the PERA legislation providing for cost of living adjustments does not establish any contract between PERA and its members entitling them to perpetual receipt of the specific COLA formula in place on the date each became eligible for retirement or on the date each actually retires." With this ruling, the case has concluded.

## Lawsuit Resolution Regarding the 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 claimed to be acting on behalf of a class of individuals, alleged that PERA adopted the wrong disability standard under the short-term disability program. The primary claim was 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 were: The Standard Insurance Company, PERA, PERA's Board of Trustees,

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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. On August 18, 2014, the Colorado Supreme Court decided not to hear this case which renders the Court of Appeals' decision final.

## Other Changes

### Cash and Short-Term Investments

For the year ended December 31, 2014, Colorado PERA had cash and short-term investments of \$1,187,692, an increase of \$192,210 from 2013. The increase in cash was primarily to settle pending fixed income investment purchases at year-end.

### Receivables

For the year ended December 31, 2014, Colorado PERA had receivables of \$400,630, an increase of \$162,920 from 2013. The increase was primarily due to pending sales of fixed income investments at year-end.

### Investment Settlements and Other Liabilities

For the year ended December 31, 2014, Colorado PERA had investment settlements and other liabilities of \$614,471, an increase of \$403,639 from 2013. The increase was primarily due to pending purchases of fixed income investments at year-end.

### Securities Lending Collateral and Obligations

For the year-ended December 31, 2014, Colorado PERA had securities lending collateral of \$1,526,849, a decrease of \$253,468 from 2013. The securities lending collateral decreased due to a significant decrease in the amount of securities on loan.

### Other Additions and Other Deductions

For the year-ended December 31, 2014, The Division Trust Funds other additions decreased by \$3,058 and other deductions decreased by \$3,979. This change is primarily due to recording interfund transfers at retirement as an addition for the State and Judicial Divisions and a deduction for the School, Local Government, and DPS Divisions. The amount of interfund transfers, and whether they are recorded as other additions or deductions, depends on the number of retirements where the member has earned service credit in more than one Division.

### Federal Subsidies

The HCTF and DPS HCTF recognized zero dollars of federal health care subsidies for the year-ended December 31, 2014, compared to \$16,294 for the year-ended December 31, 2013. Prior to January 1, 2014, federal health care subsidies were payable to these funds under the Centers for Medicare & Medicaid Services (CMS) Retiree Drug Subsidy (RDS) Program. Beginning January 1, 2014, PERACare's prescription drug coverage was moved to an Employer Group Waiver Plan (EGWP). Subsidies provided by the EGWP are recognized as a reduction in prescription claims, a component of benefit payments in the financial statements.

### Administrative Expenses

For the year-ended December 31, 2014, the HCTF and DPS HCTF administrative expenses increased \$2,953. The increase was primarily due to higher fees paid to the health care and prescription insurance providers for the self-insured PERACare plan.

### Life Insurance Reserve Claims

Life insurance claims increased from \$131 in 2013 to \$196 in 2014. The increase was 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.

## GASB Pension Project—Implementation of GASB Statement No. 67

In June 2012, GASB issued Statement No. 67, "Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25." GASB 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. GASB 67 is effective for periods beginning after June 15, 2013, and PERA has implemented GASB 67 in this CAFR. 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 FNP 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.

Implementation of GASB 67 results in separate actuarial valuations for funding and accounting purposes for the Division Trust Funds. The purpose of the funding valuation is to guide the Board's actions necessary to ensure the long-term sustainability of the Division Trust Funds. The funding valuation aids this action by allowing Colorado PERA to assess the sufficiency of the current statutory contribution rates and analyze the sufficiency of future contributions to meet current and future benefit obligations. Information pertaining to the funding valuation can be found in the Actuarial Section of this *CAFR* on pages 141-168. The actuarial valuation for accounting purposes emphasizes the obligation an employer incurs to employees through the employment-exchange process. The primary purpose of the valuation for accounting purposes is to provide a consistent, standardized methodology that allows comparability of amounts and increased transparency of the pension liability across U.S. pension plans complying with this new reporting standard. To accomplish this, GASB 67 requires a different approach for determining the net pension liability (NPL), as compared to the previously disclosed UAAL. As a result, much of the following comparative analysis in this MD&A between 2014 and prior periods reflects a shift to the new approach.

## **Actuarial Summary—Division Trust Funds**

Cavanaugh Macdonald Consulting, LLC, prepared the December 31, 2014, actuarial valuations for the Division Trust Funds for purposes of complying with GASB 67. These actuarial valuations, based on a set of actuarial assumptions, examine each fund's assets as compared to actuarial liabilities, compare past and future trends, and determine the collective net pension liability for all PERA-affiliated employers participating in each of the five Division Trust Funds.

The Board studies all economic and demographic actuarial 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 reviews the economic assumptions on a more frequent basis. The Board determined that changes to the economic and demographic assumptions were not necessary for the December 31, 2014, accounting actuarial valuations. However, it should be noted that the discount rate assumption for the Judicial Division Trust Fund was lowered to 6.14 percent in accordance with GASB 67.

The actuarial valuations prepared for purposes of complying with GASB 67 were based on member data as of December 31, 2013. As permitted by GASB 67, appropriate actuarial procedures were applied to roll-forward the total pension liability (TPL), based upon this member data, to December 31, 2014. The roll-forward procedures considered service cost associated with accruing benefits for the year, interest on the TPL, and benefits paid to recipients during the year.

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(In Thousands of Dollars)

## STATUS OF COLORADO PERA DIVISION TRUST FUNDS

	12/31/2013		12/31/2014
<b>STATE DIVISION TRUST FUND</b>			
Actuarial accrued liability <sup>1</sup>	\$22,843,725	Total Pension Liability <sup>1</sup>	\$23,420,461
Assets held to pay those liabilities <sup>2</sup>	13,935,754	Fiduciary Net Position <sup>2</sup>	14,013,947
Unfunded actuarial accrued liability	8,907,971	Net Pension Liability	9,406,514
Funded Ratio	61.0%	Fiduciary Net Position/Total Pension Liability	59.8%
<b>SCHOOL DIVISION TRUST FUND</b>			
Actuarial accrued liability <sup>1</sup>	\$35,437,312	Total Pension Liability <sup>1</sup>	\$36,473,966
Assets held to pay those liabilities <sup>2</sup>	22,682,339	Fiduciary Net Position <sup>2</sup>	22,920,607
Unfunded actuarial accrued liability	12,754,973	Net Pension Liability	13,553,359
Funded Ratio	64.0%	Fiduciary Net Position/Total Pension Liability	62.8%
<b>LOCAL GOVERNMENT DIVISION TRUST FUND</b>			
Actuarial accrued liability <sup>1</sup>	\$4,502,282	Total Pension Liability <sup>1</sup>	\$4,647,777
Assets held to pay those liabilities <sup>2</sup>	3,493,355	Fiduciary Net Position <sup>2</sup>	3,751,468
Unfunded actuarial accrued liability	1,008,927	Net Pension Liability	896,309
Funded Ratio	77.6%	Fiduciary Net Position/Total Pension Liability	80.7%
<b>JUDICIAL DIVISION TRUST FUND</b>			
Actuarial accrued liability <sup>1</sup>	\$351,598	Total Pension Liability <sup>1</sup>	\$417,853
Assets held to pay those liabilities <sup>2</sup>	272,160	Fiduciary Net Position <sup>2</sup>	279,499
Unfunded actuarial accrued liability	79,438	Net Pension Liability	138,354
Funded Ratio	77.4%	Fiduciary Net Position/Total Pension Liability	66.9%
<b>DPS DIVISION TRUST FUND</b>			
Actuarial accrued liability <sup>1</sup>	\$3,785,872	Total Pension Liability <sup>1</sup>	\$3,888,361
Assets held to pay those liabilities <sup>2</sup>	3,265,768	Fiduciary Net Position <sup>2</sup>	3,263,791
Unfunded actuarial accrued liability	520,104	Net Pension Liability	624,570
Funded Ratio	86.3%	Fiduciary Net Position/Total Pension Liability	83.9%
<b>ALL DIVISION TRUST FUNDS<sup>3</sup></b>			
Actuarial accrued liability <sup>1</sup>	\$66,920,789	Total Pension Liability <sup>1</sup>	\$68,848,418
Assets held to pay those liabilities <sup>2</sup>	43,649,376	Fiduciary Net Position <sup>2</sup>	44,229,312
Unfunded actuarial accrued liability	23,271,413	Net Pension Liability	24,619,106
Funded Ratio	65.2%	Fiduciary Net Position/Total Pension Liability	64.2%

<sup>1</sup> The actuarial accrued liability was based on the 2013 Valuation which used GASB 25 as guidance, as well as the Board's Funding Policy dated November 2007. The Total Pension Liability was based on the 2014 Actuarial Valuation which used GASB 67 as guidance.

<sup>2</sup> The assets held to pay those liabilities and the Fiduciary Net Position both represent the fair value of the investments.

<sup>3</sup> 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.

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(In Thousands of Dollars)

## SCHEDULE OF CHANGES IN NET PENSION LIABILITY

	STATE DIVISION TRUST FUND	SCHOOL DIVISION TRUST FUND	LOCAL GOVERNMENT DIVISION TRUST FUND	JUDICIAL DIVISION TRUST FUND	DPS DIVISION TRUST FUND	ALL DIVISION TRUST FUNDS <sup>1</sup>
2013 Unfunded actuarial accrued liability (UAAL) <sup>2</sup>	\$8,907,971	\$12,754,973	\$1,008,927	\$79,438	\$520,104	\$23,271,413
2013 Adjustment to UAAL <sup>3</sup>	—	—	—	30,532	—	30,532
<b>2013 Net Pension Liability</b>	<b>8,907,971</b>	<b>12,754,973</b>	<b>1,008,927</b>	<b>109,970</b>	<b>520,104</b>	<b>23,301,945</b>
Service cost	285,311	511,059	58,676	9,024	76,564	940,634
Interest	1,663,542	2,582,865	329,156	24,820	274,862	4,875,245
Changes of benefit terms	—	—	—	—	—	—
Changes of assumptions	—	—	—	21,294	—	21,294
Differences between expected and actual experience	(1,069)	(1,387)	(322)	(5)	(174)	(2,957)
Contributions—employer	(444,372)	(686,323)	(68,719)	(7,070)	(18,478)	(1,224,962)
Contributions—employer disaffiliation <sup>4</sup>	—	—	(186,006)	—	—	(186,006)
Contributions—member	(234,056)	(356,520)	(49,290)	(4,296)	(49,409)	(693,571)
Net investment income	(780,762)	(1,274,862)	(200,394)	(15,299)	(182,823)	(2,454,140)
Administrative expense	10,067	19,290	2,091	72	2,377	33,897
Other	(118)	4,264	2,190	(156)	1,547	7,727
<b>2014 Net Pension Liability</b>	<b>\$9,406,514</b>	<b>\$13,553,359</b>	<b>\$896,309</b>	<b>\$138,354</b>	<b>\$624,570</b>	<b>\$24,619,106</b>

<sup>1</sup> 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.

<sup>2</sup> The 2013 UAAL shown above is based on the fair value of investments.

<sup>3</sup> Represents the required adjustment to the UAAL to compute the 2013 Net Pension Liability in accordance with GASB 67.

<sup>4</sup> Represents the settlement received by the Local Government Division from the City of Colorado Springs for the disaffiliation of Memorial Health System. For more information, refer to the section titled "Employer Disaffiliation Payment: Memorial Health System Lawsuit Resolution" on page 36 of this MD&A.

## SUMMARY OF THE RATIOS FIDUCIARY NET POSITION TO TOTAL PENSION LIABILITY<sup>1,2,3</sup>

TRUST FUND	2010	2011	2012	2013	2014
State Division	61.3%	57.6%	60.2%	61.0%	59.8%
School Division	63.3%	60.2%	63.3%	64.0%	62.8%
Local Government Division	71.9%	69.1%	75.9%	77.6%	80.7%
Judicial Division	73.6%	69.2%	74.3%	77.4%	66.9%
DPS Division	88.2%	81.9%	85.6%	86.3%	83.9%
<b>Total Division Trust Funds<sup>4</sup></b>	<b>64.7%</b>	<b>61.2%</b>	<b>64.4%</b>	<b>65.2%</b>	<b>64.2%</b>

<sup>1</sup> The ratios for 2010 through 2013 are computed by dividing the total fair value of assets available to pay benefits by actuarial accrued liabilities. The ratios for 2014 are computed by dividing the fiduciary net position by the total pension liability.

<sup>2</sup> The actuarial accrued liability for years 2010 through 2013 was based on actuarial valuations which used GASB 25 and the Board's Funding Policy dated November 2007 as guidance. The total pension liability for year 2014 is based on the actuarial valuation which was prepared in accordance with GASB 67.

<sup>3</sup> The ratios for years 2010 through 2013 have been restated to include the actual fair value of assets for improved comparability. The ratios contained in this schedule in previous annual reports used the actuarial value of assets, which calculated the value of the assets by spreading any markets gains or losses above or below the assumed rate of return over four years.

<sup>4</sup> 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 ratios listed above give an indication of a plan's ability to meet its current and future obligations in accordance with GASB 67. As an example, for every \$1.00 of the TPL or earned benefits for the School Division Trust Fund as of December 31, 2014, approximately \$0.63 of assets is available for payment based on the actual fair 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 TPL or earned benefits equal the fair value of assets at any given moment in time.



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## 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. Currently, the long-term expected rate of return assumption is 7.50 percent. The investment return assumption and the discount rate for liabilities, as mandated by GASB 67, are based on an estimated long-term investment yield for the plan, with consideration given to the nature and mix of current and expected investments as long as projections of plan investments indicate that assets are available to pay benefit obligations. At the point in the projections when plan FNP 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 is 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.

Based on the projection test required by GASB, assets are available to pay all future benefit obligations of the State, School, Local Government, and DPS Division trust funds. As a result, the discount rate used to determine the NPL equals the long-term expected rate of return assumption of 7.50 percent.

However, the projection test indicates assets will be insufficient to cover a portion of future benefit obligations for the Judicial Division Trust Fund, and as a result, the discount rate used to determine the NPL of this division is a blended rate of 6.14 percent. There are a number of methods to assess the sufficiency of assets available to pay future benefits and the projection test required by GASB does not necessarily reflect a plan's actual ability or inability to cover future benefit obligations.

The long-term expected return on plan assets is reviewed as part of regular experience studies prepared every four years for PERA. Recently, this assumption has been reviewed more frequently. The most recent analysis was outlined in presentations to the Board on November 15, 2013, and January 17, 2014. Several factors were considered in establishing the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. 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.

To understand the importance of the long-term assumed investment rate of return, which is used to determine the discount rate, a 1 percent fluctuation in the discount rate would change the ratio of FNP to TPL as shown on the tables below and on the next page.

### 1 PERCENT DECREASE IN DISCOUNT RATE

TRUST FUND	DISCOUNT RATE	FIDUCIARY NET POSITION/ TOTAL PENSION LIABILITY	TOTAL PENSION LIABILITY— FIDUCIARY NET POSITION
State Division	6.50%	53.7%	\$12,061,426
School Division	6.50%	56.2%	17,871,342
Local Government Division	6.50%	71.9%	1,463,771
Judicial Division <sup>1</sup>	5.14%	60.2%	184,732
DPS Division	6.50%	75.4%	1,063,991
Total Division Trust Funds <sup>2</sup>		57.5%	\$32,645,262

<sup>1</sup> The Judicial Division Trust Fund reflects a blended discount rate as required by GASB 67.

<sup>2</sup> 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.

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## CURRENT DISCOUNT RATE

TRUST FUND	DISCOUNT RATE	FIDUCIARY NET POSITION/ TOTAL PENSION LIABILITY	TOTAL PENSION LIABILITY— FIDUCIARY NET POSITION
State Division	7.50%	59.8%	\$9,406,514
School Division	7.50%	62.8%	13,553,359
Local Government Division	7.50%	80.7%	896,309
Judicial Division <sup>1</sup>	6.14%	66.9%	138,354
DPS Division	7.50%	83.9%	624,570
<b>Total Division Trust Funds<sup>2</sup></b>		<b>64.2%</b>	<b>\$24,619,106</b>

<sup>1</sup> The Judicial Division Trust Fund reflects a blended discount rate as required by GASB 67.

<sup>2</sup> 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.

## 1 PERCENT INCREASE IN DISCOUNT RATE

TRUST FUND	DISCOUNT RATE	FIDUCIARY NET POSITION/ TOTAL PENSION LIABILITY	TOTAL PENSION LIABILITY— FIDUCIARY NET POSITION
State Division	8.50%	66.1%	\$7,173,378
School Division	8.50%	69.8%	9,939,134
Local Government Division	8.50%	89.9%	423,212
Judicial Division <sup>1</sup>	7.14%	73.9%	98,741
DPS Division	8.50%	92.7%	256,200
<b>Total Division Trust Funds<sup>2</sup></b>		<b>71.2%</b>	<b>\$17,890,665</b>

<sup>1</sup> The Judicial Division Trust Fund reflects a blended discount rate as required by GASB 67.

<sup>2</sup> 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 time-weighted, net-of-fees, annualized rate of return for the pooled investment assets was 9.9 percent for the past five years and 6.8 percent for the past 10 years. The 30-year annualized gross-of-fees rate of return for the pooled investment assets was 9.4 percent.

## Actuarial Summary—Health Care Trust Funds

Cavanaugh Macdonald Consulting, LLC, prepared the December 31, 2014, actuarial valuations for the HCTF and DPS HCTF for purposes of complying with GASB 43 and the Board's funding policy dated November, 2007. These actuarial valuations, based on a set of assumptions, examine each 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. These actuarial valuations are based on member data as of December 31, 2014.

The Board studies all economic and demographic assumptions at least every five years and approves changes to those assumptions. The last experience study was completed in 2012. In addition, the Board reviews the economic assumptions on a more frequent basis. The Board determined that changes to the economic and demographic assumptions were not necessary for the December 31, 2014, valuations.

### 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.

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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 RDS program. Effective January 1, 2014, PERACare no longer participates in the CMS 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 PERA benefit structure and DPS benefit structure. See Note 9 of the Notes to the Financial Statements on page 89 for more detail on the benefit provisions available under the PERA benefit structure and DPS benefit structure. 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.

At December 31, 2014, and December 31, 2013, PERA had the following funded status for its Health Care Trust Funds.

## FUNDED STATUS FOR COLORADO PERA HEALTH CARE TRUST FUNDS

	MARKET VALUE OF ASSETS		ACTUARIAL VALUE OF ASSETS	
	12/31/2013	12/31/2014	12/31/2013	12/31/2014
<b>HEALTH CARE TRUST FUND<sup>1</sup></b>				
Actuarial accrued liability	\$1,557,406	\$1,534,461	\$1,557,406	\$1,534,461
Assets held to pay those liabilities <sup>2</sup>	314,609	309,638	293,556	297,377
Unfunded actuarial accrued liability	1,242,797	1,224,823	1,263,850	1,237,084
Funded Ratio	20.2%	20.2%	18.8%	19.4%
<b>DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND<sup>1</sup></b>				
Actuarial accrued liability	\$76,636	\$76,026	\$76,636	\$76,026
Assets held to pay those liabilities <sup>2</sup>	16,489	17,021	15,482	16,502
Unfunded actuarial accrued liability	60,147	59,005	61,154	59,524
Funded Ratio	21.5%	22.4%	20.2%	21.7%
<b>TOTAL HEALTH CARE TRUST FUNDS<sup>1,3</sup></b>				
Actuarial accrued liability	\$1,634,042	\$1,610,487	\$1,634,042	\$1,610,487
Assets held to pay those liabilities <sup>2,4</sup>	331,098	326,659	309,038	313,879
Unfunded actuarial accrued liability	1,302,944	1,283,828	1,325,004	1,296,608
Funded Ratio	20.3%	20.3%	18.9%	19.5%

<sup>1</sup> The above funded ratio 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, and 2014.

<sup>2</sup> The market value of assets is the fair value of the investments. The actuarial value of assets is calculated by spreading any market gains or losses above or below the assumed rate of return over four years.

<sup>3</sup> 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.

<sup>4</sup> In aggregate, the market value of the assets as of December 31, 2014, is \$12,780 more than the 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 2012 are \$3,985, for 2013 are \$12,402, and for 2014 are (\$3,607).

## Actuarial Trend Information

### Funded Ratio

The funded ratio is determined by dividing the actuarial value of assets by the AAL. The actuarial value of assets is not the current market value, but a market-related value, as permitted by GASB 43, which smoothes changes in the market value over four years. The actuarial value of assets as of December 31, 2014, was \$313,879 compared to a market value of assets of \$326,659 and to the AAL of \$1,610,487. 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 on the next page.

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

TRUST FUND	2010	2011	2012	2013	2014
HCTF	17.5%	16.5%	16.5%	18.8%	19.4%
DPS HCTF	17.9%	18.6%	18.6%	20.2%	21.7%
Total Health Care Trust Funds <sup>1</sup>	17.6%	16.6%	16.6%	18.9%	19.5%

<sup>1</sup> 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 funded ratios listed above give an indication of how well the funding 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 HCTF as of December 31, 2014, approximately \$0.19 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 an OPEB plan is investment income. The investment return assumption and the discount rate for liabilities, as mandated by GASB 43, 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.

The long-term expected return on plan assets is reviewed as part of regular experience studies prepared every four years for PERA. Recently, this assumption has been reviewed more frequently. The most recent analysis was outlined in presentations to the Board on November 15, 2013, and January 17, 2014. Several factors were considered in establishing the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. 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.

To understand the importance of the long-term assumed investment rate of return, which is used to discount the actuarial liabilities of PERA, a 1 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 December 31, 2016) as shown on the tables below and on the next page.

### INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 6.5 PERCENT

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ARC	UAAL
HCTF	17.5%	\$1,400,965	1.16%	\$1,388,704
DPS HCTF	19.7%	67,227	0.82%	66,708
Total Health Care Trust Funds <sup>1</sup>		<u>\$1,468,192</u>		<u>\$1,455,412</u>

<sup>1</sup> 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

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ARC	UAAL
HCTF	19.4%	\$1,237,084	1.09%	\$1,224,823
DPS HCTF	21.7%	59,524	0.75%	59,005
Total Health Care Trust Funds <sup>1</sup>		<u>\$1,296,608</u>		<u>\$1,283,828</u>

<sup>1</sup> 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.

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

## INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 8.5 PERCENT

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ARC	UAAL
HCTF	21.3%	\$1,098,479	1.05%	\$1,086,219
DPS HCTF	23.7%	53,006	0.71%	52,487
Total Health Care Trust Funds <sup>1</sup>		<u>\$1,151,485</u>		<u>\$1,138,706</u>

<sup>1</sup> 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 time-weighted, net-of-fees, annualized rate of return for the pooled investment assets was 9.9 percent for the past five years and 6.8 percent for the past 10 years. The time-weighted 30-year gross-of-fees annualized rate of return for the pooled investment assets was 9.4 percent.

## GASB OPEB Project

In June 2015, the GASB Board approved Statement No. 74, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans." Statement No. 74 addresses reporting by OPEB plans that administer benefits on behalf of governments. The new OPEB standard parallels the pension standard issued in 2012—GASB Statement No. 67, Financial Reporting for Pension Plans. The Statement requires more extensive note disclosures and RSI related to the measurement of the OPEB liabilities for which assets have been accumulated. Statement No. 74 will be effective for periods beginning after June 15, 2016, and PERA has chosen not to early adopt Statement No. 74. PERA has not yet determined the impact of this standard on its financial statements and disclosures.

## DEFINED CONTRIBUTION PENSION AND DEFERRED COMPENSATION TRUST FUNDS

### Financial Reporting Highlights

#### FIDUCIARY NET POSITION

	2014 CHANGE IN FIDUCIARY NET POSITION	2014 ENDING FIDUCIARY NET POSITION
Voluntary Investment Program	\$172,250	\$2,682,000
Defined Contribution Retirement Plan	17,966	131,466
Deferred Compensation Plan	45,849	689,451
Total	<u>\$236,065</u>	<u>\$3,502,917</u>

The FNP for the Voluntary Investment Program, the Defined Contribution Retirement Plan, and the Deferred Compensation Retirement Plan increased \$236,065 for the year ended December 31, 2014. The increase in FNP for the three trust funds was primarily due to positive investment returns arising from the global stock markets.

#### CHANGE IN FIDUCIARY NET POSITION

	(C) CONTRIBUTIONS AND OTHER ADDITIONS	+ (C) PLAN TRANSFERS	+ (I) NET INVESTMENT INCOME	- (B) - (E) BENEFITS, EXPENSES, AND OTHER DEDUCTIONS	= CHANGE IN FIDUCIARY NET POSITION
Voluntary Investment Program	\$132,269	\$—	\$188,199	\$148,218	\$172,250
Defined Contribution Retirement Plan	20,718	—	6,745	9,497	17,966
Deferred Compensation Plan	50,891	—	32,133	37,175	45,849
2014 change in fiduciary net position	<u>\$203,878</u>	<u>\$—</u>	<u>\$227,077</u>	<u>\$194,890</u>	<u>\$236,065</u>
2013 change in fiduciary net position	\$190,844	\$—	\$529,858	\$187,310	\$533,392
2012 change in fiduciary net position	\$181,367	\$—	\$295,165	\$181,981	\$294,551
2011 change in fiduciary net position	\$193,333	\$4	\$3,453	\$172,471	\$24,319
2010 change in fiduciary net position	\$198,689	\$35	\$242,251	\$132,073	\$308,902
2010-2014 change in fiduciary net position	<u>\$968,111</u>	<u>\$39</u>	<u>\$1,297,804</u>	<u>\$868,725</u>	<u>\$1,397,229</u>

## 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 Fund, PERAdvantage Income 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.

In 2014, the three plans revised one of the investment options available to participants. Due to the passage of time, the asset allocation of the PERAdvantage 2015 Fund became increasingly close to the asset allocation of the PERAdvantage Income Fund as the Fund's target year drew closer. During the fourth quarter of 2014, the assets of the PERAdvantage 2015 Fund were transferred to the PERAdvantage Income Fund.

### *Cash and Short-Term Investments*

For the year ended December 31, 2014, the two Defined Contribution Pension and Deferred Compensation Trust Funds cash and short-term investments increased by \$14,543. The growth was primarily due to an increased accumulation in cash reserves to pay upcoming expenses and an increased allocation to cash and short-term investments within the investment funds at year-end.

### *Total Liabilities*

For the year ended December 31, 2014, the two Defined Contribution Pension and Deferred Compensation Trust Funds total liabilities decreased \$16,895. The decrease was primarily due to higher pending investment purchases related to rebalancing the U.S. Large Cap Stock Fund at the end of 2013.

### *Other Changes*

For the year ended December 31, 2014, the two Defined Contribution Pension and Deferred Compensation Trust Funds other deductions increased \$322. The growth was primarily due to an increase in member payments for professional asset management and an increase in total assets under professional management.



# Management's Discussion and Analysis (Unaudited)

(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 DPS employers. Benefits are funded by member and employer contributions and by earnings on investments.

#### DEFINED BENEFIT PENSION TRUST FUNDS FIDUCIARY NET POSITION

ASSETS	DECEMBER 31, 2014	DECEMBER 31, 2013	% CHANGE
Cash and short-term investments	\$1,177,850	\$986,816	19.4%
Securities lending collateral	1,514,197	1,764,817	(14.2%)
Receivables	379,767	227,692	66.8%
Investments, at fair value	43,220,254	42,706,428	1.2%
Capital assets, net of accumulated depreciation	18,009	18,399	(2.1%)
<b>Total assets</b>	<b>46,310,077</b>	<b>45,704,152</b>	<b>1.3%</b>
<b>LIABILITIES</b>			
Investment settlements and other liabilities	566,789	165,673	242.1%
Security lending obligations	1,513,976	1,764,612	(14.2%)
<b>Total liabilities</b>	<b>2,080,765</b>	<b>1,930,285</b>	<b>7.8%</b>
<b>Fiduciary net position</b>	<b>\$44,229,312</b>	<b>\$43,773,867</b>	<b>1.0%</b>

#### DEFINED BENEFIT PENSION TRUST FUNDS CHANGES IN FIDUCIARY NET POSITION

ADDITIONS	FOR THE YEAR ENDED DECEMBER 31, 2014	FOR THE YEAR ENDED DECEMBER 31, 2013	% CHANGE
Employer contributions	\$1,224,962	\$1,125,383	8.8%
Member contributions	640,531	614,431	4.2%
Purchased service	53,040	50,963	4.1%
Employer disaffiliation	186,006	—	—
Investment income	2,454,140	6,040,239	(59.4%)
Other	3,684	6,742	(45.4%)
<b>Total additions</b>	<b>4,562,363</b>	<b>7,837,758</b>	<b>(41.8%)</b>
<b>DEDUCTIONS</b>			
Benefit payments	3,883,781	3,702,948	4.9%
Refunds	170,882	185,313	(7.8%)
Disability insurance premiums	6,947	6,741	3.1%
Administrative expenses	33,897	32,633	3.9%
Other	11,411	15,390	(25.9%)
<b>Total deductions</b>	<b>4,106,918</b>	<b>3,943,025</b>	<b>4.2%</b>
<b>Changes in fiduciary net position</b>	<b>455,445</b>	<b>3,894,733</b>	<b>(88.3%)</b>
<b>Fiduciary net position</b>			
Beginning of year	43,773,867	39,879,134	9.8%
End of year	\$44,229,312	\$43,773,867	1.0%

# Management's Discussion and Analysis (Unaudited)

(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 FIDUCIARY NET POSITION

ASSETS	DECEMBER 31, 2014	DECEMBER 31, 2013	% CHANGE
Cash and short-term investments	\$9,328	\$8,231	13.3%
Securities lending collateral	11,991	14,721	(18.5%)
Receivables	20,742	9,961	108.2%
Investments, at fair value	342,270	356,221	(3.9%)
<b>Total assets</b>	<b>384,331</b>	<b>389,134</b>	<b>(1.2%)</b>
<b>LIABILITIES</b>			
Investment settlements and other liabilities	45,682	43,317	5.5%
Securities lending obligations	11,990	14,719	(18.5%)
<b>Total liabilities</b>	<b>57,672</b>	<b>58,036</b>	<b>(0.6%)</b>
<b>Fiduciary net position</b>	<b>\$326,659</b>	<b>\$331,098</b>	<b>(1.3%)</b>

### OTHER POSTEMPLOYMENT BENEFIT FUNDS CHANGES IN FIDUCIARY NET POSITION

ADDITIONS	FOR THE YEAR ENDED DECEMBER 31, 2014	FOR THE YEAR ENDED DECEMBER 31, 2013	% CHANGE
Employer contributions	\$81,634	\$78,342	4.2%
Retiree health care premium payments	109,901	119,083	(7.7%)
Federal health care subsidies	—	16,294	(100.0%)
Employer disaffiliation	3,994	—	—
Investment income	19,141	48,374	(60.4%)
Other	10,094	10,834	(6.8%)
<b>Total additions</b>	<b>224,764</b>	<b>272,927</b>	<b>(17.6%)</b>
<b>DEDUCTIONS</b>			
Benefit payments	211,059	234,082	(9.8%)
Administrative expenses	17,280	14,327	20.6%
Other deductions	864	—	—
<b>Total deductions</b>	<b>229,203</b>	<b>248,409</b>	<b>(7.7%)</b>
<b>Changes in fiduciary net position</b>	<b>(4,439)</b>	<b>24,518</b>	<b>(118.1%)</b>
<b>Fiduciary net position</b>			
Beginning of year	331,098	306,580	8.0%
<b>End of year</b>	<b>\$326,659</b>	<b>\$331,098</b>	<b>(1.3%)</b>

# Management's Discussion and Analysis (Unaudited)

(In Thousands of Dollars)

## Private Purpose Trust Fund

PERA offers an optional life insurance program where members can purchase varying amounts of coverage. The LIR is an accumulation of dividends received in the past from the insurance company based upon plan experience. The proceeds and investment income from the LIR are used to pay the current administrative costs of the plan.

### LIFE INSURANCE RESERVE FIDUCIARY NET POSITION

ASSETS	DECEMBER 31, 2014	DECEMBER 31, 2013	% CHANGE
Cash and short-term investments	\$514	\$435	18.2%
Securities lending collateral	661	779	(15.1%)
Receivables	121	57	112.3%
Investments, at fair value	18,858	18,842	0.1%
<b>Total assets</b>	<b>20,154</b>	<b>20,113</b>	<b>0.2%</b>
<b>LIABILITIES</b>			
Investment settlements and other liabilities	2,000	1,842	8.6%
Securities lending obligations	661	779	(15.1%)
<b>Total liabilities</b>	<b>2,661</b>	<b>2,621</b>	<b>1.5%</b>
<b>Fiduciary net position</b>	<b>\$17,493</b>	<b>\$17,492</b>	<b>0.0%</b>

### LIFE INSURANCE RESERVE CHANGES IN FIDUCIARY NET POSITION

ADDITIONS	FOR THE YEAR ENDED DECEMBER 31, 2014	FOR THE YEAR ENDED DECEMBER 31, 2013	% CHANGE
Investment income	\$1,068	\$2,630	(59.4%)
<b>Total additions</b>	<b>1,068</b>	<b>2,630</b>	<b>(59.4%)</b>
<b>DEDUCTIONS</b>			
Life insurance claims	196	131	49.6%
Administrative expenses	871	871	0.0%
<b>Total deductions</b>	<b>1,067</b>	<b>1,002</b>	<b>6.5%</b>
<b>Changes in fiduciary net position</b>	<b>1</b>	<b>1,628</b>	<b>(99.9%)</b>
<b>Fiduciary net position</b>			
Beginning of year	17,492	15,864	10.3%
<b>End of year</b>	<b>\$17,493</b>	<b>\$17,492</b>	<b>0.0%</b>

# Management's Discussion and Analysis (Unaudited)

(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 Defined Contribution Retirement Plan as their retirement plan.

### DEFINED CONTRIBUTION PENSION AND DEFERRED COMPENSATION TRUST FUNDS FIDUCIARY NET POSITION

ASSETS	DECEMBER 31, 2014	DECEMBER 31, 2013	% CHANGE
Cash and short-term investments	\$111,127	\$96,584	15.1%
Receivables	89,696	83,514	7.4%
Investments, at fair value	3,305,577	3,107,132	6.4%
<b>Total assets</b>	<b>3,506,400</b>	<b>3,287,230</b>	<b>6.7%</b>
<b>LIABILITIES</b>			
Liabilities	3,483	20,378	(82.9%)
<b>Total liabilities</b>	<b>3,483</b>	<b>20,378</b>	<b>(82.9%)</b>
<b>Fiduciary net position</b>	<b>\$3,502,917</b>	<b>\$3,266,852</b>	<b>7.2%</b>

### DEFINED CONTRIBUTION PENSION AND DEFERRED COMPENSATION TRUST FUNDS CHANGES IN FIDUCIARY NET POSITION

ADDITIONS	FOR THE YEAR ENDED DECEMBER 31, 2014	FOR THE YEAR ENDED DECEMBER 31, 2013	% CHANGE
Employer contributions	\$15,440	\$14,789	4.4%
Member contributions	185,661	173,480	7.0%
Investment income	227,077	529,858	(57.1%)
Other	2,777	2,575	7.8%
<b>Total additions</b>	<b>430,955</b>	<b>720,702</b>	<b>(40.2%)</b>
<b>DEDUCTIONS</b>			
Refunds	188,603	181,232	4.1%
Administrative expenses	4,862	4,975	(2.3%)
Other	1,425	1,103	29.2%
<b>Total deductions</b>	<b>194,890</b>	<b>187,310</b>	<b>4.0%</b>
<b>Changes in fiduciary net position</b>	<b>236,065</b>	<b>533,392</b>	<b>(55.7%)</b>
<b>Fiduciary net position</b>			
Beginning of year	3,266,852	2,733,460	19.5%
<b>End of year</b>	<b>\$3,502,917</b>	<b>\$3,266,852</b>	<b>7.2%</b>

# Statements of Fiduciary Net Position

As of December 31, 2014, with Comparative Combined Totals for 2013  
(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
<b>Cash and short-term investments</b>						
Cash and short-term investments	\$372,815	\$610,641	\$100,003	\$7,419	\$86,972	\$1,177,850
Securities lending collateral	479,276	785,015	128,561	9,537	111,808	1,514,197
<b>Total cash and short-term investments</b>	<b>852,091</b>	<b>1,395,656</b>	<b>228,564</b>	<b>16,956</b>	<b>198,780</b>	<b>2,692,047</b>
<b>Receivables</b>						
Benefit	47,951	42,972	4,992	1,556	5,459	102,930
Interfund	148	242	40	3	35	468
Investment settlements and income	87,477	143,280	23,465	1,741	20,406	276,369
<b>Total receivables</b>	<b>135,576</b>	<b>186,494</b>	<b>28,497</b>	<b>3,300</b>	<b>25,900</b>	<b>379,767</b>
<b>Investments, at fair value</b>						
Fixed income	3,420,197	5,602,003	917,431	68,058	797,880	10,805,569
Global stocks	7,843,156	12,846,448	2,103,842	156,071	1,829,687	24,779,204
Alternative investments	1,085,768	1,778,399	291,246	21,606	253,293	3,430,312
Real estate investments	1,052,920	1,724,597	282,434	20,952	245,630	3,326,533
Opportunity fund	278,108	455,517	74,599	5,534	64,878	878,636
Self-directed brokerage	—	—	—	—	—	—
<b>Total investments, at fair value</b>	<b>13,680,149</b>	<b>22,406,964</b>	<b>3,669,552</b>	<b>272,221</b>	<b>3,191,368</b>	<b>43,220,254</b>
Capital assets, at cost, net of accumulated depreciation of \$25,302 and \$23,603 at December 31, 2014, and 2013, respectively	5,296	10,277	1,122	37	1,277	18,009
<b>Total assets</b>	<b>14,673,112</b>	<b>23,999,391</b>	<b>3,927,735</b>	<b>292,514</b>	<b>3,417,325</b>	<b>46,310,077</b>
<b>LIABILITIES</b>						
Investment settlements and other liabilities	179,958	293,884	47,725	3,479	41,743	566,789
Securities lending obligations	479,207	784,900	128,542	9,536	111,791	1,513,976
Interfund	—	—	—	—	—	—
<b>Total liabilities</b>	<b>659,165</b>	<b>1,078,784</b>	<b>176,267</b>	<b>13,015</b>	<b>153,534</b>	<b>2,080,765</b>
Commitments and contingencies (Note 7)						
Fiduciary net position restricted for pensions, and held in trust for deferred compensation benefits, other postemployment benefits, and private purpose trust fund participants						
	\$14,013,947	\$22,920,607	\$3,751,468	\$279,499	\$3,263,791	\$44,229,312
<b>FIDUCIARY NET POSITION RESTRICTED FOR:</b>						
Defined benefit pension plan benefits	\$14,013,947	\$22,920,607	\$3,751,468	\$279,499	\$3,263,791	\$44,229,312
Defined contribution pension plan benefits	—	—	—	—	—	—
Deferred compensation plan benefits	—	—	—	—	—	—
Other postemployment benefits	—	—	—	—	—	—
Private purpose trust fund participants	—	—	—	—	—	—
Fiduciary net position restricted for pensions, and held in trust for deferred compensation benefits, other postemployment benefits, and private purpose trust fund participants						
	\$14,013,947	\$22,920,607	\$3,751,468	\$279,499	\$3,263,791	\$44,229,312

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

# Statements of Fiduciary Net Position

As of December 31, 2014, with Comparative Combined Totals for 2013  
(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	
						2014	2013
\$83,007	\$6,897	\$21,223	\$8,848	\$480	\$514	\$1,298,819	\$1,092,066
—	—	—	11,374	617	661	1,526,849	1,780,317
83,007	6,897	21,223	20,222	1,097	1,175	2,825,668	2,872,383
70,543	1,652	14,731	17,535	1,014	—	208,405	187,478
—	—	—	4	—	—	472	741
2,186	85	499	2,076	113	121	281,449	133,005
72,729	1,737	15,230	19,615	1,127	121	490,326	321,224
624,235	25,734	253,241	81,171	4,402	4,714	11,799,066	10,958,567
1,891,556	96,240	390,200	186,137	10,094	10,812	27,364,243	27,795,810
—	—	—	25,768	1,397	1,497	3,458,974	3,398,629
—	—	—	24,988	1,355	1,451	3,354,327	3,164,748
—	—	—	6,600	358	384	885,978	851,314
12,915	1,140	10,316	—	—	—	24,371	19,555
2,528,706	123,114	653,757	324,664	17,606	18,858	46,886,959	46,188,623
—	—	—	—	—	—	18,009	18,399
2,684,442	131,748	690,210	364,501	19,830	20,154	50,220,962	49,400,629
2,094	247	670	43,490	2,192	2,000	617,482	230,469
—	—	—	11,373	617	661	1,526,627	1,780,110
348	35	89	—	—	—	472	741
2,442	282	759	54,863	2,809	2,661	2,144,581	2,011,320
<b>\$2,682,000</b>	<b>\$131,466</b>	<b>\$689,451</b>	<b>\$309,638</b>	<b>\$17,021</b>	<b>\$17,493</b>	<b>\$48,076,381</b>	<b>\$47,389,309</b>
\$—	\$—	\$—	\$—	\$—	\$—	\$44,229,312	\$43,773,867
2,682,000	131,466	—	—	—	—	2,813,466	2,623,250
—	—	689,451	—	—	—	689,451	643,602
—	—	—	309,638	17,021	—	326,659	331,098
—	—	—	—	—	17,493	17,493	17,492
<b>\$2,682,000</b>	<b>\$131,466</b>	<b>\$689,451</b>	<b>\$309,638</b>	<b>\$17,021</b>	<b>\$17,493</b>	<b>\$48,076,381</b>	<b>\$47,389,309</b>



# Statements of Changes in Fiduciary Net Position

For the Year Ended December 31, 2014, with Comparative Combined Totals for 2013  
(In Thousands of Dollars)

	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
<b>ADDITIONS</b>						
<b>Contributions</b>						
Employers	\$444,372	\$686,323	\$68,719	\$7,070	\$18,478	\$1,224,962
Members	211,610	334,585	43,792	3,461	47,083	640,531
Purchased service	22,446	21,935	5,498	835	2,326	53,040
Retiree health care and life premiums	—	—	—	—	—	—
Federal health care subsidies	—	—	—	—	—	—
Employer disaffiliation	—	—	186,006	—	—	186,006
<b>Total contributions</b>	<b>678,428</b>	<b>1,042,843</b>	<b>304,015</b>	<b>11,366</b>	<b>67,887</b>	<b>2,104,539</b>
<b>Investment income</b>						
Net appreciation in fair value of investments	493,422	805,467	126,864	9,647	115,597	1,550,997
Interest	98,664	161,177	25,248	1,941	23,083	310,113
Dividends	170,949	279,260	43,746	3,363	39,995	537,313
Real estate, alternative investment, and opportunity fund net operating income	64,719	105,724	16,561	1,273	15,142	203,419
Less investment expense	(50,469)	(82,446)	(12,915)	(993)	(11,807)	(158,630)
<b>Net income from investing activities</b>	<b>777,285</b>	<b>1,269,182</b>	<b>199,504</b>	<b>15,231</b>	<b>182,010</b>	<b>2,443,212</b>
Securities lending income	3,837	6,268	982	75	898	12,060
Less securities lending expense	(360)	(588)	(92)	(7)	(85)	(1,132)
<b>Net income from securities lending</b>	<b>3,477</b>	<b>5,680</b>	<b>890</b>	<b>68</b>	<b>813</b>	<b>10,928</b>
<b>Net investment income</b>	<b>780,762</b>	<b>1,274,862</b>	<b>200,394</b>	<b>15,299</b>	<b>182,823</b>	<b>2,454,140</b>
<b>Other additions</b>	<b>3,289</b>	<b>112</b>	<b>14</b>	<b>256</b>	<b>13</b>	<b>3,684</b>
<b>Total additions</b>	<b>1,462,479</b>	<b>2,317,817</b>	<b>504,423</b>	<b>26,921</b>	<b>250,723</b>	<b>4,562,363</b>
<b>DEDUCTIONS</b>						
<b>Benefits</b>						
Benefits paid to retirees/cobeneficiaries	1,338,520	2,018,769	230,007	19,490	245,437	3,852,223
Benefits paid to survivors	13,773	13,859	2,048	310	1,568	31,558
Benefits paid to health care participants	—	—	—	—	—	—
<b>Total benefits</b>	<b>1,352,293</b>	<b>2,032,628</b>	<b>232,055</b>	<b>19,800</b>	<b>247,005</b>	<b>3,883,781</b>
Refunds of contribution accounts, including match and interest	61,152	77,171	24,436	60	8,063	170,882
Disability premiums and life insurance claims	2,309	3,748	481	43	366	6,947
Administrative expenses	10,067	19,290	2,091	72	2,377	33,897
Other deductions	3,171	4,376	2,204	100	1,560	11,411
<b>Total deductions</b>	<b>1,428,992</b>	<b>2,137,213</b>	<b>261,267</b>	<b>20,075</b>	<b>259,371</b>	<b>4,106,918</b>
Net increase in fiduciary net position	33,487	180,604	243,156	6,846	(8,648)	455,445
Fiduciary net position restricted for pensions, and held in trust for deferred compensation benefits, other postemployment benefits, and private purpose trust fund participants						
Beginning of year	13,980,460	22,740,003	3,508,312	272,653	3,272,439	43,773,867
End of year	\$14,013,947	\$22,920,607	\$3,751,468	\$279,499	\$3,263,791	\$44,229,312

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

## Statements of Changes in Fiduciary Net Position

For the Year Ended December 31, 2014, with Comparative Combined Totals for 2013  
(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	
						2014	2013
\$3,866	\$11,531	\$43	\$75,631	\$6,003	\$—	\$1,322,036	\$1,218,514
126,112	9,179	50,370	—	—	—	826,192	787,911
—	—	—	—	—	—	53,040	50,963
—	—	—	105,459	4,442	—	109,901	119,083
—	—	—	—	—	—	—	16,294
—	—	—	3,994	—	—	190,000	—
129,978	20,710	50,413	185,084	10,445	—	2,501,169	2,192,765
158,199	5,918	24,747	11,576	593	677	1,752,707	5,707,836
4,109	166	3,014	2,275	118	134	319,929	296,982
29,100	823	5,162	3,942	204	233	576,777	551,301
—	—	—	1,493	78	88	205,078	203,399
(3,209)	(162)	(790)	(1,164)	(60)	(69)	(164,084)	(148,978)
188,199	6,745	32,133	18,122	933	1,063	2,690,407	6,610,540
—	—	—	89	5	5	12,159	4,409
—	—	—	(8)	—	—	(1,140)	6,152
—	—	—	81	5	5	11,019	10,561
188,199	6,745	32,133	18,203	938	1,068	2,701,426	6,621,101
2,291	8	478	9,813	281	—	16,555	20,151
320,468	27,463	83,024	213,100	11,664	1,068	5,219,150	8,834,017
—	—	—	—	—	—	3,852,223	3,671,425
—	—	—	—	—	—	31,558	31,523
—	—	—	200,627	10,432	—	211,059	234,082
—	—	—	200,627	10,432	—	4,094,840	3,937,030
144,329	8,690	35,584	—	—	—	359,485	366,545
—	—	—	—	—	196	7,143	6,872
3,050	738	1,074	16,612	668	871	56,910	52,806
839	69	517	832	32	—	13,700	16,493
148,218	9,497	37,175	218,071	11,132	1,067	4,532,078	4,379,746
172,250	17,966	45,849	(4,971)	532	1	687,072	4,454,271
2,509,750	113,500	643,602	314,609	16,489	17,492	47,389,309	42,935,038
<b>\$2,682,000</b>	<b>\$131,466</b>	<b>\$689,451</b>	<b>\$309,638</b>	<b>\$17,021</b>	<b>\$17,493</b>	<b>\$48,076,381</b>	<b>\$47,389,309</b>

# Notes to the Financial Statements

(In Thousands of Dollars)

## 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 the following plans:

PLAN NAME	TYPE OF PLAN
<i>Defined Benefit Pension Plans (Division Trust Funds)</i>	
State Division Trust Fund	Cost-sharing multiple-employer
School Division Trust Fund	Cost-sharing multiple-employer
Local Government Division Trust Fund	Cost-sharing multiple-employer
Judicial Division Trust Fund	Cost-sharing multiple-employer
Denver Public Schools (DPS) Division Trust Fund	Single-employer
<i>Defined Benefit Other Postemployment Benefit Plans (Health Care Trust Funds)</i>	
Health Care Trust Fund (HCTF)	Cost-sharing multiple-employer
Denver Public Schools Health Care Trust Fund (DPS HCTF)	Cost-sharing multiple-employer
<i>Defined Contribution Plans</i>	
Voluntary Investment Program	Multiple-employer
Defined Contribution Retirement Plan	Single-employer
<i>Deferred Compensation Plan</i>	
Deferred Compensation Plan	Multiple-employer
<i>Private Purpose Trust Fund</i>	
Life Insurance Reserve (LIR)	Multiple-employer

Responsibility for the organization and administration of these plans rests with the PERA Board of Trustees (Board). The Board comprises 16 members, which includes 11 members elected by mail ballot from their respective Division to serve four-year terms, three members appointed by the Governor and approved by the State Senate, the State Treasurer, and one ex officio (non-voting) member from the DPS Division.

Listed below is the number of active participating employers for the five Division Trust Funds. New guidance under the Governmental Accounting Standards Board (GASB) Statement No. 67 classifies a primary government and its component units as one employer. In prior years, employer counts were based on separate units of government.

DIVISION	AS OF DECEMBER 31, 2014 <sup>1</sup>
State	32
School	224
Local Government	141
Judicial	2
Denver Public Schools	1
<b>Total employers</b>	<b>400</b>

<sup>1</sup> This employer count is presented for purposes of complying with GASB 67 only. For all other purposes, the definition of an employer is governed by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable, the employer's affiliation agreement with PERA.

**Membership—Division Trust Funds-Defined Benefit Pension Plans**

Benefit recipients and members of PERA consisted of the following as of December 31, 2014, with comparative combined totals for 2013:

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DPS DIVISION	2014	2013
Retirees and beneficiaries	35,937	58,145	6,466	331	6,698	107,577	104,021
Terminated employees entitled to benefits but not yet receiving benefits	5,678	13,807	2,788	5	850	23,128	21,827
Inactive members	66,330	101,603	20,956	9	6,787	195,685	186,383
Active members							
Vested general employees	31,034	67,577	6,253	277	6,090	111,231	112,033
Vested State Troopers	608	—	—	—	—	608	637
Non-vested general employees	23,437	52,041	5,831	57	9,324	90,690	87,334
Non-vested State Troopers	221	—	—	—	—	221	179
Total actives	55,300	119,618	12,084	334	15,414	202,750	200,183
Total	163,245	293,173	42,294	679	29,749	529,140	512,414

**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 (IRC). 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 Plan or the PERA Defined Contribution Retirement 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 Defined Benefit Plan. Between month 13 and month 72 of participation in their original plan, employees may make a one-time, irrevocable election to switch to the other plan. After the 72nd month of participation, 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, the Denver Public Schools Retirement System (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 (CBI) agents contribute 10 percent.

# Notes to the Financial Statements

(In Thousands of Dollars)

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.

## ***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 Senate Bill (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.

Members have the option of leaving their accounts until retirement eligibility age. The member's account plus a 100 percent match on eligible amounts is then annuitized into a monthly benefit using PERA's expected rate of return.

## ***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, who were 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, who were 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 <sup>1</sup>

<sup>1</sup> 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 <sup>1</sup>

<sup>1</sup> 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 <sup>1</sup>

<sup>1</sup> 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 <sup>1</sup>

<sup>1</sup> 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 <sup>1</sup>

<sup>1</sup> 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 <sup>1</sup>

<sup>1</sup> 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.



# Notes to the Financial Statements

(In Thousands of Dollars)

The service retirement benefit for all retiring members is the greater 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 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 65, 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**

<i>Age Requirement (in years)</i>	<i>Service Credit Requirement (in years)</i>
50	25
50	—(State Troopers only)—
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**

<i>Age Requirement (in years)</i>	<i>Service Credit Requirement (in years)</i>
50	30
55	25 <sup>1</sup>
65	5

<sup>1</sup> 15 years must be earned service credit

#### **REDUCED SERVICE RETIREMENT BENEFIT**

<i>Age Requirement (in years)</i>	<i>Service Credit Requirement (in years)</i>
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 <sup>1</sup>
55	Age and Service = 85 or more <sup>1</sup>
60	25
65	5

<sup>1</sup> 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

The service retirement benefit for all retiring members is the greater of the two calculations as explained below:

- HAS multiplied by 2.5 percent and then multiplied by Years of Service Credit.
- \$15 times the first 10 Years of Service Credit plus \$20 times Service Credit over 10 years plus a monthly amount equal to the annuitized member balance (which may include matching dollars if eligible) using the retiring member's life expectancy, expected rates of return, and other actuarial factors.

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.

### 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:** Disability applicants are eligible for short-term disability 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 short-term disability 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 retirement 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.

## Notes to the Financial Statements

(In Thousands of Dollars)

- *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.

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(In Thousands of Dollars)

## *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 on or after January 1, 2011, 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 or receive a second, separate benefit. The original benefit will not be recalculated. Individuals who suspended retirement prior to January 1, 2011, are eligible to have their original benefit recalculated upon re-retirement.

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, amortization equalization disbursement (AED), and supplemental amortization equalization disbursement (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.

## **Life Insurance Reserve**

PERA offers an optional life insurance program where members can purchase varying amounts of coverage. The LIR is an accumulation of dividends received in the past from the insurance company based upon plan experience. The proceeds and investment income from the LIR are used to pay the current 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.



Colorado PERA implemented the provisions of GASB 67, "Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25," during the year ended December 31, 2014. GASB 67 replaces the requirements of Statement No. 25, "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans," and GASB Statement No. 50, "Pension Disclosures—an amendment of GASB Statements No. 25 and No. 27," as they relate to pension plans that are administered through trusts or equivalent arrangements (hereafter jointly referred to as trusts) that meet certain criteria. GASB 67 enhances the standards for footnote disclosures and required supplementary information (RSI) for pension plans, including disclosing the plan's net pension liability (NPL), ratio of fiduciary net position (FNP) to total pension liability (TPL), actuarial methods, and assumptions. While no longer included in the RSI, the tables displaying the plan's funded status are presented in the Actuarial Section of this *CAFR*.

In February 2015, GASB issued Statement No. 72, "Fair Value Measurement and Application." GASB 72 provides guidance for determining a fair value measurement for financial reporting purposes. GASB 72 establishes a hierarchy of inputs to valuation techniques used to measure fair value and the application to certain investments. GASB 72 also provides guidance for disclosures related to all fair value measurements. GASB 72 will be effective for periods beginning after June 15, 2015. PERA has chosen not to early adopt GASB 72 and has not yet determined the impact of the standard on its financial statements and disclosures.

In June 2015, the GASB Board approved Statement No. 74, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans." Statement No. 74 addresses reporting by OPEB plans that administer benefits on behalf of governments. The new OPEB standard parallels the pension standard issued in 2012—GASB Statement No. 67, Financial Reporting for Pension Plans. The Statement requires more extensive note disclosures and RSI related to the measurement of the OPEB liabilities for which assets have been accumulated. Statement No. 74 will be effective for periods beginning after June 15, 2016, and PERA has chosen not to early adopt Statement No. 74. 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 (OPEB) 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, 2014, the ownership percentages of each fund are shown in the table below.

TRUST FUND	OWNERSHIP PERCENTAGES
State Division	31.39%
School Division	51.41%
Local Government Division	8.42%
Judicial Division	0.63%
DPS Division	7.32%
HCTF	0.75%
DPS HCTF	0.04%
LIR	0.04%
<b>Total</b>	<b>100.00%</b>

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



# Notes to the Financial Statements

(In Thousands of Dollars)

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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 FNP 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 Statements of Fiduciary 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 investments in timber, commodities, risk parity strategies, and tactical and credit opportunities strategies. 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. The fair value of commodity investments is based on the underlying value of the commodities and/or the associated derivative positions. Risk parity, tactical opportunity, and credit 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.

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 fair 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.

## 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. Transfers also occur from the Division Trust Funds to the Health Care Trust Funds to allocate a portion of the amount paid by members to purchase service credit. The transfers for the year ended December 31, 2014, 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	\$21,560	\$19,320	\$4,322	\$591	\$3,191	\$—	\$—
Transfers out to other Funds for retirements	(18,151)	(20,216)	(5,648)	(336)	(4,633)	—	—
Transfers in from other Funds for survivor benefits	—	166	—	—	—	—	—
Transfers out to other Funds for survivor benefits	(166)	—	—	—	—	—	—
Transfers out to Health Care Trust Funds for purchased service credit	(2,821)	(3,616)	(872)	(99)	(118)	—	—
Transfers in to Health Care Trust Funds for purchased service credit	—	—	—	—	—	7,408	118

As of December 31, 2014, interfund balances existed between funds due to unreimbursed internal operating expenses. The interfund balances consisted of the following amounts:

**INTERFUND BALANCES**

TRUST FUND	AMOUNT
State Division	\$148
School Division	242
Local Government Division	40
Judicial Division	3
DPS Division	35
Voluntary Investment Program	(348)
Defined Contribution Retirement Plan	(35)
Deferred Compensation Plan	(89)
HCTF	4

**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 10.00 percent to 13.75 percent.

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.

# Notes to the Financial Statements

(In Thousands of Dollars)

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 (UAAL). 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, including subsequent refinancing, 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 16.89 percent for 2014, which is reviewed and analyzed by PERA staff.

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, using the actuarial valuation for funding purposes as a basis. As of December 31, 2014, the funded ratio of the DPS Division is 82.6 percent and the funded ratio of the School Division is 60.9 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, which is based on the ratio of UAAL over payroll (currently 350.5 percent for the School Division and 113.7 percent for the DPS Division). 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 or decrease in the total contributions paid by the DPS Division employers.

C.R.S. 24-51-401(1.7) created a mechanism to reduce the funding status of the DPS Division from 88.3 percent at its inclusion into PERA in 2010 to the funded status of the school system in 2040. This mechanism involves offsetting the employer contributions into the DPS Division Trust Fund by the amount of the PCOPs payments as described above. It is expected that the equalization will occur in approximately 25 years.

On June 3, 2015, House Bill 15-1391 was signed into law, which reduces the employer contribution rate for the DPS Division from 13.75 percent to 10.15 percent, with a retroactive effective date of January 1, 2015.

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. Beginning in 2007, the AIR was created within each division for the purpose of funding future benefit increases. Funding for this reserve comes from the employer contributions and is 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, 2014, the value of the AIR was \$57,317 in the State Division, \$74,357 in the School Division, \$17,972 in the Local Government Division, \$639 in the Judicial Division, and \$9,727 in the DPS Division. The remainder of these contributions is transferred into a trust fund established for each division for the purpose of meeting current benefit accruals and future benefit payments.

The combined employer contribution rates for retirement and health care benefits along with the member contribution rates from January 1, 2014, through December 31, 2014, are as follows on the next page.

## 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%	3.80%	3.50%	—	17.45%	8.00%
State	State Troopers	12.85%	3.80%	3.50%	—	20.15%	10.00%
School	All members	10.15%	3.80%	3.50%	—	17.45%	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%
DPS	All members	13.75%	3.80%	3.50%	(16.89%)	4.16%	8.00%

## FUTURE AED AND SAED RATES

PERIOD	STATE DIVISION TRUST FUND		SCHOOL DIVISION TRUST FUND		LOCAL GOVERNMENT DIVISION TRUST FUND		JUDICIAL DIVISION TRUST FUND		DPS DIVISION TRUST FUND <sup>1</sup>	
	AED	SAED	AED	SAED	AED	SAED	AED	SAED	AED	SAED
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%

<sup>1</sup> 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

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 2014, employers under these agreements used current employer contributions to pay retirees \$2,003 in the State Division; \$781 in the School Division; \$750 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.

## Note 5—Investments

### Investment Authority

Under C.R.S. § 24-51-206, the Board has complete 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.

### 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.

# Notes to the Financial Statements

(In Thousands of Dollars)

## Investment Committee

The Investment Committee is responsible for assisting the Board in overseeing the PERA investment program. Specific responsibilities include recommending to/advising the Board of the following:

- A written statement of investment philosophy for the fund.
- A written statement of investment policy and any amendments thereto.
- Strategies to achieve the investment goals and objectives of PERA.
- New investment mandates.
- Use of internal or external management.
- On any other investment matters and make recommendations for Board action when necessary.

## Overview of Investment Policy

PERA's investment policy is established and may be amended by a majority vote of the Board.

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 2014 and the specified ranges for each asset class are as follows:

### ASSET ALLOCATION TARGETS AND RANGES

	TARGET PERCENTAGE	RANGES
Global Stocks	56%	50% - 62%
Fixed Income	25%	22% - 28%
Alternative Investments	7%	4% - 10%
Real Estate	7%	4% - 10%
Opportunity Fund	5%	0% - 8%

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.

## Investment Performance

For the year ended December 31, 2014, the net-of-fee money-weighted rate of return on the pooled investment assets was 5.8 percent.

A money-weighted rate of return methodology provides information about the performance on pooled investment assets. This methodology considers the effect of timing of transactions that increase the amount of pension plan investments (such as contributions) and those that decrease the amount of pension plan investments (such as benefit payments). Additionally, the



money-weighted rate of return provides information that is comparable with the long-term assumed rate of return on the pooled investment assets.

## Cash and Short-Term Investments

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 Statements of Fiduciary Net Position.

The carrying value of cash and short-term investments at December 31, 2014, on the Statements of Fiduciary Net Position includes short-term fixed income securities of \$257,685, pending foreign exchange contracts of \$3,135, and deposit and money market funds of \$1,037,999 for a total of \$1,298,819. 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, 2014.

	CARRYING VALUE	BANK BALANCE
Deposits with banks (fully insured by federal depository insurance)	\$2,480	\$2,451
Deposits held at bank (uncollateralized, held by PERA's agent in PERA's name)	14,866	14,866
Short-term investment funds held at bank (shares in commingled funds, held by PERA's agent in PERA's name)	1,020,653	1,020,653
<b>Total deposits and money market funds</b>	<b>\$1,037,999</b>	<b>\$1,037,970</b>

## 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 2014, 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 fair value of the securities plus any accrued interest. Non-U.S. securities are loaned versus collateral valued at 105 percent of the fair 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, 2014, the total fair 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 fair value of the securities. International securities are loaned versus collateral valued at a minimum of 105 percent of the fair value of the securities. Collateral is marked-to-market daily. As of December 31, 2014, the total market value of securities on loan with Deutsche Bank cannot exceed \$1.25 billion. Borrower credit limits are assigned by Deutsche Bank's Global Credit Risk Department.

As of December 31, 2014, and December 31, 2013, 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 \$222 and \$207, respectively.

The table below represents the balances relating to the securities lending transactions at December 31, 2014.

SECURITIES LENT FOR CASH COLLATERAL	FAIR VALUE OF UNDERLYING SECURITIES	CASH COLLATERAL RECEIVED	CASH COLLATERAL INVESTMENT VALUE
Cash and cash equivalents	\$—	\$—	\$1,526,849
Fixed income	363,989	371,621	—
Global stocks	1,123,955	1,155,006	—
<b>Total</b>	<b>\$1,487,944</b>	<b>\$1,526,627</b>	<b>\$1,526,849</b>

As of December 31, 2014, 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, 2014. PERA has limited the total fair value of securities outstanding to one borrower to 25 percent of the total fair value of all securities outstanding in the program.



# Notes to the Financial Statements

(In Thousands of Dollars)

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 51 days and at Deutsche Bank was approximately 105 days as of December 31, 2014. At Northern Trust and Deutsche Bank, all loans were done on an overnight (one day) basis as of December 31, 2014. The PERA Custom Fund had a weighted average maturity of 22 days as of December 31, 2014. Deutsche Bank invests PERA's cash collateral in a separate account. As of December 31, 2014, the weighted average maturity of the separate account was 15.9 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, 2014, and December 31, 2013.

	FAIR VALUE OF UNDERLYING SECURITIES DECEMBER 31, 2014	FAIR VALUE OF UNDERLYING SECURITIES DECEMBER 31, 2013
Fixed income	\$363,989	\$482,576
Global stocks	1,123,955	1,250,160
Total	\$1,487,944	\$1,732,736

As of December 31, 2014, the fair value of lent securities was \$1,487,944, the value of associated cash collateral received was \$1,526,627, and the cash collateral investment value, including certain receivables and payables related to the securities lending program, was \$1,526,849. PERA's income net of expenses from securities lending was \$11,019 for the year ended December 31, 2014. Included in net securities lending income for the year ended December 31, 2014, is \$160 from commingled funds. 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.

## 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, 2014, there were no investment or collateral securities subject to custodial credit risk and \$14,757 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, 2014.

## RECONCILIATION OF CREDIT AND INTEREST RATE RISK DISCLOSURES TO FINANCIAL STATEMENTS

	AS OF DECEMBER 31, 2014
Fixed income	\$11,799,066
Real estate debt	9,691
Fixed-income securities classified as short-term	257,685
Total fixed income securities	\$12,066,442

## 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, 2014, 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: Fixed income portfolios generally have guidelines that establish limits on holdings within each credit rating category. 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, and are generally limited to Ba3/BB- or better. For portfolio managers that can invest in below investment grade securities, there are limits on investments in the lowest ratings categories. For some portfolios, securities rated CCC or below generally cannot exceed the portfolio's benchmark weighting of securities rated CCC or below plus 5 percent. In other portfolios, there is a floor of CCC or better. The table on the next page provides S&P credit quality ratings for PERA's fixed income holdings as of December 31, 2014.

## CREDIT QUALITY RATING DISPERSION SCHEDULE

QUALITY RATING S & P	TOTAL	U.S. GOVT MORTGAGE-BACKED SECURITIES	U.S. CORPORATE BONDS	FIXED INCOME COMMINGLED FUNDS	NON-U.S. CORPORATE BONDS	NON-U.S. GOVT/AGENCY BONDS	IMPLICIT U.S. GOVT AGENCIES	NON-AGENCY CMBS	U.S. MUNICIPAL BONDS	REAL ESTATE DEBT
AAA	\$233,837	\$538	\$5,094	\$7,257	\$1,988	\$162,032	\$—	\$48,261	\$8,667	\$—
AA+	1,298,120	—	58,568	957,865	—	18,345	234,946	10,597	17,799	—
AA	78,292	—	27,624	29,185	7,491	—	—	4,596	9,396	—
AA-	139,436	—	47,392	—	44,489	24,317	—	—	23,238	—
A+	220,695	—	69,150	—	61,523	34,652	10,179	24,435	20,756	—
A	780,736	—	277,970	412,819	80,855	—	—	5,310	3,782	—
A-	523,644	—	406,259	—	88,080	6,911	—	21,268	1,126	—
BBB+	496,051	—	334,369	—	107,880	48,143	—	5,659	—	—
BBB	417,877	—	307,085	—	62,551	41,392	—	6,849	—	—
BBB-	412,758	—	223,915	—	111,908	75,154	—	1,781	—	—
BB+	86,925	—	42,731	—	18,423	25,771	—	—	—	—
BB	174,582	—	130,131	—	36,023	8,428	—	—	—	—
BB-	124,519	—	107,231	—	12,109	5,179	—	—	—	—
B+	125,438	—	97,578	—	24,984	2,876	—	—	—	—
B	127,063	—	120,321	—	6,742	—	—	—	—	—
B-	92,896	—	85,016	—	7,880	—	—	—	—	—
CCC+	76,019	—	60,601	—	7,387	8,031	—	—	—	—
CCC	6,307	—	6,307	—	—	—	—	—	—	—
CCC-	6,988	—	6,988	—	—	—	—	—	—	—
Not rated <sup>1</sup>	2,910,072	2,638,659	8,009	—	50,459	59,489	10,551	119,764	13,450	9,691
Subtotal	\$8,332,255	\$2,639,197	\$2,422,339	\$1,407,126	\$730,772	\$520,720	\$255,676	\$248,520	\$98,214	\$9,691
U.S. Govts	2,286,901									
Explicit U.S. Govt Agencies <sup>2</sup>	544,076									
Defined Contribution and Deferred Compensation Fixed Income Funds <sup>1</sup>	903,210									
Total	\$12,066,442									

<sup>1</sup> Not rated by S&P.

<sup>2</sup> Bonds issued by the Government National Mortgage Association (GNMA).

## 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.

# Notes to the Financial Statements

(In Thousands of Dollars)

Effective duration for PERA fixed income holdings as of December 31, 2014, 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. government mortgage-backed securities	\$3,183,273	\$—	\$3,183,273	3.59
U.S. corporate bonds	2,422,339	9,933	2,412,406	6.98
U.S. governments	2,286,901	—	2,286,901	5.62
Fixed income commingled funds	1,407,126	—	1,407,126	5.06
Non-U.S. corporate bonds	730,772	1,415	729,357	5.13
Non-U.S. government/agency bonds	520,720	1,460	519,260	5.80
U.S. government agencies	255,676	—	255,676	3.78
Non-agency CMBS	248,520	—	248,520	3.90
U.S. municipal bonds	98,214	36,015	62,199	13.25
Real estate debt	9,691	9,691	—	—
Total non-defined contribution and non-deferred compensation fixed income investment assets <sup>1</sup>	11,163,232	58,514	11,104,718	5.20
Defined contribution and deferred compensation plans fixed income <sup>2</sup>	903,210	—	903,210	4.47
<b>Total</b>	<b>\$12,066,442</b>	<b>\$58,514</b>	<b>\$12,007,928</b>	

<sup>1</sup> All of the investment assets other than those held in defined contribution and deferred compensation plans are pooled and managed separately.

<sup>2</sup> 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 Statements of Fiduciary 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.

To reduce PERA's counterparty credit risk, PERA has entered into Master Securities Forward Transaction Agreements with some counterparties which require margin collateral to be pledged or received when the change in net value of unsettled trades exceeds an agreed-upon threshold. As of December 31, 2014, the change in net value of all unsettled trades was below the agreed-upon thresholds, and as a result, no collateral was pledged or held in relation to unsettled trades of Mortgage-Backed Securities.

As of December 31, 2014, the fair value of residential and commercial mortgage-backed securities was \$3,100,827 and \$330,966, respectively. This does not include the fair value of mortgage-backed securities held in commingled funds.

## 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.

# Notes to the Financial Statements

(In Thousands of Dollars)

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, 2014, 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, asset class, and portfolio levels.

PERA's exposure to foreign currency risk in U.S. dollars as of December 31, 2014, 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	\$2,406,593	\$2,172,064	\$208,914	\$19,229	\$6,329	\$122	\$—	(\$6,248)	\$6,183
British pound sterling	1,762,837	1,660,023	97,676	—	4,804	388	—	(94)	40
Japanese yen	1,615,305	1,644,860	—	—	3,137	191	—	446	(33,329)
Swiss franc	795,313	781,768	—	—	13,529	16	—	—	—
Canadian dollar	719,262	716,726	—	—	1,370	1,280	—	597	(711)
Hong Kong dollar	459,686	456,250	—	—	10	3,447	—	—	(21)
Australian dollar	377,094	376,530	—	—	512	72	—	(155)	135
South Korean won	276,966	274,775	—	—	2,184	7	—	—	—
Swedish krona	273,725	272,845	—	—	879	70	—	—	(69)
Indian rupee	256,559	255,006	—	—	—	995	—	558	—
New Taiwan dollar	236,050	231,608	—	—	—	4,524	—	(49)	(33)
Singapore dollar	164,748	164,316	—	—	432	17	—	(55)	38
Danish krone	98,701	98,620	—	—	35	46	—	—	—
Norwegian krone	89,209	88,602	—	—	—	649	—	—	(42)
Brazilian real	85,852	84,959	—	—	222	511	199	(239)	200
South African rand	77,094	75,339	—	—	636	1,118	—	206	(205)
Thai baht	63,531	63,507	—	—	—	24	—	—	—
Mexican peso	58,973	52,500	—	6,326	—	147	—	—	—
Indonesian rupiah	49,042	49,017	—	—	13	12	—	30	(30)
Turkish lira	36,050	36,050	—	—	—	—	—	—	—
Philippine peso	34,012	34,012	—	—	—	—	—	—	—
Malaysian ringgit	31,235	30,977	—	—	4	254	—	58	(58)
New Israeli shekel	28,384	28,365	—	—	6	13	—	—	—
New Zealand dollar	11,884	11,884	—	—	—	16	—	—	(16)
Polish zloty	10,135	9,837	—	—	—	298	—	—	—
Czech koruna	10,101	9,869	—	—	185	47	—	—	—
Chilean peso	8,057	8,057	—	—	—	—	—	—	—
Qatari rial	7,876	7,876	—	—	—	493	—	(962)	469
UAE dirham	4,015	4,015	—	—	—	—	—	—	—
Hungarian forint	3,600	3,600	—	—	—	—	—	—	—
Colombian peso	2,013	2,013	—	—	—	—	—	—	—
Peruvian nuevo sol	1,508	1,508	—	—	—	—	—	—	—
Russian ruble	4	—	—	—	4	—	—	—	—
<b>Total</b>	<b>\$10,055,414</b>	<b>\$9,707,378</b>	<b>\$306,590</b>	<b>\$25,555</b>	<b>\$34,291</b>	<b>\$14,757</b>	<b>\$199</b>	<b>(\$5,907)</b>	<b>(\$27,449)</b>

## 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 Statements of Fiduciary 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, 2014. These instruments are recorded in cash and short-term investments, investment liabilities, and investments at fair value in the Statements of Fiduciary Net Position. The changes in fair value includes all derivative instrument activity and are included in investment income in the Statements of Changes in Fiduciary Net Position. Investments in limited partnerships and commingled funds include derivative instruments that are not reported in the following disclosure.

# Notes to the Financial Statements

(In Thousands of Dollars)

## FAIR VALUES AND NOTIONAL AMOUNTS OF DERIVATIVE INSTRUMENTS—DEFINED BENEFIT PLAN

INVESTMENT DERIVATIVES	CHANGES IN FAIR VALUE		FAIR VALUE AT DECEMBER 31, 2014		
	CLASSIFICATION	AMOUNT	CLASSIFICATION	AMOUNT	NOTIONAL (NUMBER OF UNITS)
Foreign Currency Forwards	Investment income	\$2,624	Cash and short-term investments	\$3,173	—
Rights/Warrants	Investment income	9,476	Global stocks	807	—
Futures	Investment income	(249)	Opportunity fund	—	294
			Investment liabilities	(4)	—
Commodity Index Swaps	Investment income	(39,927)	Opportunity fund	(10,095)	822
Variance Swaps	Investment income	(389)	Opportunity fund	(92)	1,521
Commodity Forwards	Investment income	263	Opportunity fund	(58)	79
<b>Total</b>		<b><u>(\$28,202)</u></b>	<b>Total</b>	<b><u>(\$6,269)</u></b>	

## FAIR VALUES AND NOTIONAL AMOUNTS OF DERIVATIVE INSTRUMENTS—DEFINED CONTRIBUTION AND DEFERRED COMPENSATION PLANS (SEPARATELY MANAGED ACCOUNTS)

INVESTMENT DERIVATIVES	CHANGES IN FAIR VALUE		FAIR VALUE AT DECEMBER 31, 2014		
	CLASSIFICATION	AMOUNT	CLASSIFICATION	AMOUNT	NOTIONAL (NUMBER OF UNITS)
Foreign Currency Forwards	Investment income	(\$24)	Cash and short-term investments	\$—	—
Rights/Warrants	Investment income	72	Global stocks	4	—
<b>Total</b>		<b><u>\$48</u></b>	<b>Total</b>	<b><u>\$4</u></b>	

### 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 2014. 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, 2014, PERA's defined benefit plans had outstanding foreign currency forward contracts to purchase foreign currencies with a fair value of \$66,543 and outstanding contracts to sell foreign currencies with a fair value of (\$63,370). PERA's defined contribution plans and deferred compensation plan had an outstanding foreign currency forward contract to purchase a foreign currency with a fair value of \$15 and an outstanding contract to sell foreign currency with a fair value of (\$15).

Outstanding foreign currency forward contracts which have a fair value greater than or equal to \$1 or a fair value less than or equal to (\$1) are disclosed in detail on the next page.

## FOREIGN CURRENCY FORWARD CONTRACTS OUTSTANDING—DEFINED BENEFIT PLAN

(As of December 31, 2014)

OBJECTIVE <sup>1</sup>	NOTIONAL AMOUNT BUY (SELL)		EFFECTIVE DATE	MATURITY DATE	TERMS	FAIR VALUE	COUNTERPARTY	COUNTERPARTY CREDIT RATING <sup>2</sup>
Hedge risk from exposure to rate fluctuations	15,160 USD (17,198) AUD		10/29/2014	1/30/2015	Exchange Australian dollars for U.S. dollars	\$1,115	The Northern Trust Company	AA- / A1 / AA-
Hedge risk from exposure to rate fluctuations	11,824 AUD (9,862) USD		12/4/2014	1/30/2015	Exchange U.S. dollars for Australian dollars	(206)	The Northern Trust Company	AA- / A1 / AA-
Hedge risk from exposure to rate fluctuations	5,374 AUD (4,482) USD		12/4/2014	1/30/2015	Exchange U.S. dollars for Australian dollars	(93)	The Northern Trust Company	AA- / A1 / AA-
Hedge risk from exposure to rate fluctuations	35,238 USD (3,942,031) JPY		10/31/2014	1/15/2015	Exchange Japanese yen for U.S. dollars	2,355	JP Morgan Chase Bank, N.A. London	A+ / Aa3 / A+
Facilitate foreign currency investment activity	286 USD (34,049) JPY		12/30/2014	1/7/2015	Exchange Japanese yen for U.S. dollars	2	Credit Suisse AG, Global FX London	A- / A2 / A
Facilitate foreign currency investment activity	215 USD (25,942) JPY		12/29/2014	1/6/2015	Exchange Japanese yen for U.S. dollars	(1)	Morgan Stanley and Co., LLC	A- / Baa2 / A
Facilitate foreign currency investment activity	336 BRL (126) USD		12/29/2014	1/2/2015	Exchange U.S. dollars for Brazilian real	1	The Northern Trust Company	AA- / A1 / AA-
<b>Total</b>						<u>\$3,173</u>		

<sup>1</sup> Outstanding currency transactions related to foreign currency investment activity are included in this disclosure according to how The Northern Trust Company (PERA's custodian) defines currency forward and currency spot transactions.

<sup>2</sup> 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.

## 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 Statements of Fiduciary Net Position. As of December 31, 2014, PERA's defined benefit plans had outstanding rights/warrants with a total fair value of \$807 and a total cost of \$223. As of December 31, 2014, PERA's defined contribution plans and deferred compensation plan had outstanding rights/warrants with a fair value of \$4 and a total cost of \$0.

## RIGHTS/WARRANTS OUTSTANDING—DEFINED BENEFIT PLAN

(As of December 31, 2014)

SECURITY TYPE	YEAR OF MATURITY	FAIR VALUE
Warrants	2018	\$377
Warrants	2017	33
Rights	2015	397
<b>Total</b>		<u>\$807</u>

## RIGHTS/WARRANTS OUTSTANDING—DEFINED CONTRIBUTION AND DEFERRED COMPENSATION PLANS

(As of December 31, 2014)

SECURITY TYPE	YEAR OF MATURITY	FAIR VALUE
Rights	2015	\$4
<b>Total</b>		<u>\$4</u>

## 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,



# Notes to the Financial Statements

(In Thousands of Dollars)

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 to settle the fluctuation of the contract's value when it reaches a predetermined limit. This reporting methodology results in all futures being recorded on the Statements of Fiduciary 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 settlement payments. At December 31, 2014, PERA's defined benefit plans had outstanding futures contracts with a total notional amount of 294, a total notional market exposure of \$1,055, total investment liabilities value of (\$4), and total net collateral posted with counterparties of \$112.

## FUTURES CONTRACTS OUTSTANDING—DEFINED BENEFIT PLAN

(As of December 31, 2014)

CONTRACT TYPE	COMMODITY	YEAR OF MATURITY	NOTIONAL AMOUNT (NUMBER OF UNITS)
Commodity Futures	Natural Gas	2019	55
Commodity Futures	Natural Gas	2018	5
Commodity Futures	Natural Gas	2016	192
Commodity Futures	Light Louisiana Sweet vs. West Texas Intermediate	2016	1
Commodity Futures	Natural Gas	2015	18
Commodity Futures	Light Louisiana Sweet vs. West Texas Intermediate	2015	17
Commodity Futures	Reformulated Blendstock for Oxygenated Blending vs. Brent Crude	2015	6
Total			<u>294</u>

## 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 Bloomberg Commodity 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 cash collateral held as a liability and recognizes a receivable for cash 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, 2014, PERA's defined benefit plans had open contracts with a total notional amount of 2,422, total notional market exposure of \$191,954, fair value of (\$10,245) and there was net collateral of \$6,137 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.

## SWAP/COMMODITY FORWARD CONTRACTS OUTSTANDING—DEFINED BENEFIT PLAN

(As of December 31, 2014)

CONTRACT TYPE	MATURITY DATE	NOTIONAL AMOUNT (NUMBER OF UNITS)	FAIR VALUE	COUNTERPARTY	COUNTERPARTY CREDIT RATING <sup>1</sup>
Commodity Forward	12/31/2015	32	(\$3)	Macquarie Bank Limited	A / A2 / A
Commodity Forward	12/31/2015	31	(3)	Macquarie Bank Limited	A / A2 / A
Commodity Forward	12/17/2015	1	(41)	BNP PARIBAS S.A.	A+ / A1 / A+
Commodity Forward	6/30/2015	9	(4)	Bank of America NA	A / A2 / A
Variance Swap	5/14/2015	152	(31)	Citibank NA	A / A2 / A
Commodity Forward	3/31/2015	2	(2)	JP Morgan Chase Bank, N.A.	A+ / Aa3 / A+
Commodity Forward	3/31/2015	1	(1)	BNP PARIBAS S.A.	A+ / A1 / A+
Commodity Forward	3/31/2015	2	(3)	JP Morgan Chase Bank, N.A.	A+ / Aa3 / A+
Commodity Forward	3/31/2015	1	(1)	BNP PARIBAS S.A.	A+ / A1 / A+
Commodity Index Swap	2/17/2015	77	(1,600)	JP Morgan Chase Bank, N.A.	A+ / Aa3 / A+
Commodity Index Swap	2/17/2015	52	(717)	JP Morgan Chase Bank, N.A.	A+ / Aa3 / A+
Commodity Index Swap	2/17/2015	15	(63)	JP Morgan Chase Bank, N.A.	A+ / Aa3 / A+
Commodity Index Swap	2/17/2015	157	(1,727)	Bank of America NA	A / A2 / A
Commodity Index Swap	2/17/2015	102	(1,122)	Citibank NA	A / A2 / A
Commodity Index Swap	2/17/2015	42	(465)	Macquarie Bank Limited	A / A2 / A
Commodity Index Swap	2/17/2015	175	(2,084)	Citibank NA	A / A2 / A
Commodity Index Swap	2/17/2015	2	(39)	Goldman Sachs Bank USA	A / A2 / A
Commodity Index Swap	2/17/2015	10	(106)	JP Morgan Chase Bank, N.A.	A+ / Aa3 / A+
Commodity Index Swap	2/17/2015	147	(1,614)	Goldman Sachs Bank USA	A / A2 / A
Commodity Index Swap	2/17/2015	36	(394)	Deutsche Bank AG	A / A3 / A+
Commodity Index Swap	2/17/2015	7	(164)	JP Morgan Chase Bank, N.A.	A+ / Aa3 / A+
Variance Swap	2/3/2015	232	(3)	Goldman Sachs International	A / A2 / A
Variance Swap	1/15/2015	750	(7)	Goldman Sachs Bank USA	A / A2 / A
Variance Swap	1/14/2015	31	2	Goldman Sachs International	A / A2 / A
Variance Swap	1/14/2015	146	(25)	Goldman Sachs International	A / A2 / A
Variance Swap	1/14/2015	63	4	Societe Generale Paris	A / A2 / A
Variance Swap	1/12/2015	147	(32)	Goldman Sachs International	A / A2 / A
<b>Total</b>		<b>2,422</b>	<b>(\$10,245)</b>		

<sup>1</sup> 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, 2014, PERA had commitments for future investments in Alternative Investments of \$2,019,618, Real Estate of \$921,363, and the Opportunity Fund of \$195,201.

**Employer Disaffiliation Payment: Memorial Health System Lawsuit Resolution**

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 arose 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.

In 2012, a lawsuit was initiated in Denver District Court to determine the amount owed to PERA by Memorial and the City of Colorado Springs (the City) for Memorial's departure from PERA. PERA's position was that the termination of affiliation provisions of the PERA statutes, specifically C.R.S. §§ 24-51-313 to 321 applied to the Memorial transaction. PERA's position was that Memorial must pay its share of the current unfunded liability in PERA's Local Government Division and PERA's HCTF because it has terminated its affiliation with PERA. The City and Memorial's position was that the termination of affiliation provisions of the PERA statutes do not apply to this transaction and PERA was not owed anything as a result of the Memorial transaction.

In September 2014, PERA and the City agreed to resolve the lawsuit. The agreement provided for the City to pay PERA \$190,000 for the liabilities associated with the retirement and health care benefits already earned by 7,666 Memorial employees for the work that they performed before Memorial ceased to be a PERA employer. This employer disaffiliation payment of \$190,000 was allocated to the Local Government Division and HCTF in the amounts of \$186,006 and \$3,994, respectively.

# Notes to the Financial Statements

(In Thousands of Dollars)

## Lawsuit Resolution 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 claimed to be acting on behalf of a class of individuals, alleged that a portion of SB 10-001 was 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 was 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 were the State of Colorado, Governor Hickenlooper, Carole Wright, and Maryann Motza. The individuals were 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.

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.

On October 20, 2014, the Colorado Supreme Court ruled in favor of Colorado PERA and the State of Colorado in the case. The Court upheld the reduction of the annual increase under SB 10-001. The Court stated, "We hold that the PERA legislation providing for cost of living adjustments does not establish any contract between PERA and its members entitling them to perpetual receipt of the specific COLA formula in place on the date each became eligible for retirement or on the date each actually retires." With this ruling, the case has concluded.

## Lawsuit Resolution Regarding the 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 claimed to be acting on behalf of a class of individuals, alleged that PERA adopted the wrong disability standard under the short-term disability program. The primary claim was 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 were: 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. On August 18, 2014, the Colorado Supreme Court decided not to hear this case which renders the Court of Appeals' decision final.

## 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 17 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 Socially Responsible Investment (SRI) Fund
  - PERAdvantage Income 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 asset allocation for the PERAdvantage 2015 Fund became identical to the PERAdvantage Income Fund as the Fund's target year was approaching. On November 14, 2014, the PERAdvantage 2015 Fund was discontinued and the assets were transferred into the PERAdvantage Income Fund.
- The participant's entire account balance becomes available for distribution upon termination from all PERA-affiliated and/or PERAPlus 457-affiliated employers. All distributions are in accordance with the Plan documents and IRC requirements.
- Voya Institutional Plan Services, LLC, (formerly 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, 2014, the Stable Value Fund is reported at contract value of \$391,519. Fair value as of December 31, 2014, was \$392,895.
- 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 proceeds.

**PERAPlus 401(k) Plan**

The PERAPlus 401(k) Plan was established January 1, 1985, and is an IRC § 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. There were 400 participating employers in 2014 (see Note 1). The participating employer count is presented for purposes of complying with GASB 67 only. For all other purposes, the definition of an employer is governed by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable, the employer's affiliation agreement with PERA.



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In 2014, 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 2014 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 \$52,000 (actual dollars) per participant in 2014.

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, 2014, is \$65,403 and is recorded as a benefit receivable on the Statements of Fiduciary Net Position. As of December 31, 2014, there were 68,270 participants with balances. Of the participants with balances, 25,481 made contributions within the last three months of the year, including 844 retirees. There were 12,152 terminated participants and 16,110 non-contributing retirees with balances. During 2014 the PERAPlus 401(k) Plan had a total of 2,361 terminated participants take full distributions of their accounts.

## DC Plan

The DC Plan was established January 1, 2006, and is an IRC § 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. There was one participating employer in 2014. The participating employer count is presented for purposes of complying with GASB 67 only. For all other purposes, the definition of an employer is governed by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable, the employer's affiliation agreement with PERA.

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 participant and employer rates are 10.00 percent and 12.85 percent, respectively). In addition, employers contribute the 3.80 percent AED and 3.50 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, 2014, the DC Plan had 5,046 participants with balances. Of the participants with balances, 2,261 made contributions within the last three months of the year, including 10 retirees. There were 2,275 terminated participants and 17 non-contributing retirees with balances. During the year 391 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 IRC § 457 plan that allows for voluntary participation to provide additional benefits at retirement. All employees working for a PERA employer affiliated with the PERAPlus 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 2014, 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 2014, 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, 2014, is \$11,852 and is recorded as a benefit receivable on the Statements of Fiduciary Net Position. As of December 31, 2014, there were

17,738 participants with balances. Of the participants with balances, 9,551 made contributions within the last three months of the year, including 229 retirees. There were 2,222 terminated participants and 3,551 non-contributing retirees with balances. During the year, the PERAPlus 457 Plan had a total of 666 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 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 chose single-life annuity options, if the surviving spouse was enrolled in the program when the retiree’s 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**

##### **PERA Benefit Structure**

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, PERA 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 not covered by Medicare Part A.



# Notes to the Financial Statements

(In Thousands of Dollars)

## DPS Benefit Structure

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 HCTF or the DPS 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. Retirees who do not have Medicare Part A pay the difference between the total premium and the monthly subsidy.

## Medicare Prescription Drugs

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 established prescription drug coverage for Medicare beneficiaries under Medicare Part D. From January 1, 2006, to December 31, 2013, PERACare participated in the Centers for Medicare & Medicaid Services' (CMS) Retiree Drug Subsidy (RDS) program for the self-insured Medicare plans and the Medicare HMO plan offered through Rocky Mountain Health Plans (RMHP). Beginning January 1, 2014, PERACare's prescription drug coverage for these plans was moved to Employer Group Waiver Plan (EGWP) Medicare Part D prescription drug coverage.

For the self-insured Medicare supplement plans, EGWP provides three types of subsidies. The HCTF and DPS HCTF use the anticipated subsidies 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 subsidies are received from Express Scripts, Inc. The subsidies include a monthly direct subsidy based on the number of enrollees in the plan, a quarterly Coverage Gap Discount Program which is funded by pharmaceutical manufacturers and reimburses the funds a portion of the cost of certain drugs retirees have filled, and an annual Catastrophic Coverage Federal Reinsurance which reimburses a portion of drug costs for retirees who reach a certain level of drug costs in a year.

## 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, as defined by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable the employer's affiliation agreement with PERA, must submit contributions for all PERA members equal to 1.02 percent of covered salaries.

Affiliated employers of the State Division, School Division, Local Government Division, and Judicial Division contribute to the HCTF. Affiliated employers of the DPS Division contribute to the DPS HCTF. The number of participating employers for each division, as presented for purposes of complying with GASB 67, can be found in Note 1.

Employer contributions and investment earnings on the assets of these plans pay for the cost of the premium subsidies and the administrative costs incurred by these plans.

## Plan Data

As of December 31, 2014, there were 202,750 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 15,414 active members in the DPS Division and 187,336 active members in the other four divisions. There were 23,128 inactive members who had accumulated a potential subsidy benefit, but were not yet receiving benefits. This total includes 850 in the DPS Division and 22,278 in the other four divisions.

## PARTICIPATION IN THE HEALTH CARE PLANS FOR RETIREES AND SURVIVORS CURRENTLY RECEIVING BENEFITS

	HEALTH CARE TRUST FUND	DPS HEALTH CARE TRUST FUND	TOTAL
<b>Enrolled in PERACare</b>			
Under age 65	14,473	653	15,126
Age 65 and older	39,603	3,309	42,912
	54,076	3,962	58,038
<b>Not enrolled in PERACare</b>			
Under age 65	15,806	585	16,391
Age 65 and older	30,997	2,151	33,148
	46,803	2,736	49,539
<b>Total retirees and survivors currently receiving benefits</b>	<b>100,879</b>	<b>6,698</b>	<b>107,577</b>

PERA offers two general types of health plans, fully insured plans offered through a health care organization 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**

The funds apply the measurement requirements of GASB 43 to determine the actuarial accrued liabilities, the annual required contribution (ARC) of the employer, and the annual OPEB cost.

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.

Effective January 1, 2014, the Medicare HMO plan offered by RMHP receives prescription drug benefits through a Medicare Prescription Drug Plan, which eliminated any risk to the funds. Therefore, RMHP is now treated as a fully insured health plan.

The 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. The cost to the enrollee is 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 subsidies received from Express Scripts, Inc. could be different from the estimates resulting in either a gain or a loss to the funds.

**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 plans. 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, 2014, there were 17 employers in the program with 176 active members enrolled. There are no employers in the program from the DPS Division.

**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, 2014, there were 52,330 participants enrolled in the dental plans and 40,888 participants enrolled in the vision plans in both the HCTF and the DPS HCTF.

# Notes to the Financial Statements

(In Thousands of Dollars)

## Note 10—Net Pension Liability of the Division Trust Funds

The components of the NPL for participating employers for each Division Trust Fund as of December 31, 2014, are as follows:

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DPS DIVISION
Total pension liability	\$23,420,461	\$36,473,966	\$4,647,777	\$417,853	\$3,888,361
Plan fiduciary net position	14,013,947	22,920,607	3,751,468	279,499	3,263,791
<b>Net pension liability</b>	<b>\$9,406,514</b>	<b>\$13,553,359</b>	<b>\$896,309</b>	<b>\$138,354</b>	<b>\$624,570</b>
Plan fiduciary net position as a percentage of the total pension liability	59.84%	62.84%	80.72%	66.89%	83.94%

### 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 Net Pension Liability is included in the RSI, which follows the Notes to the Financial Statements. It presents multi-year trend information about whether the FNP is increasing or decreasing over time relative to the TPL. Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each pension actuarial valuation and on the pattern of sharing of costs between employers of each Division Trust Fund and/or plan members to that point. Actuarial calculations reflect a long-term perspective.

The TPL for the Division Trust Funds was determined by actuarial valuations as of December 31, 2013, and accepted actuarial procedures were applied to roll-forward the TPL to December 31, 2014. The actuarial valuations as of December 31, 2013, used the following key actuarial assumptions or other inputs.

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DPS DIVISION
Price inflation	2.80%	2.80%	2.80%	2.80%	2.80%
Real wage growth	1.10%	1.10%	1.10%	1.10%	1.10%
Wage inflation	3.90%	3.90%	3.90%	3.90%	3.90%
Salary increases, including wage inflation	3.90%-9.57%	3.90%-10.10%	3.90%-10.85%	4.40%-5.40%	3.90%-10.10%
Long-term investment rate of return, net of pension plan investment expenses, including price inflation	7.50%	7.50%	7.50%	7.50%	7.50%
Municipal bond index rate					
Prior measurement date	N/A	N/A	N/A	4.73%	N/A
Measurement date	N/A	N/A	N/A	3.70%	N/A
Beginning period of application	N/A	N/A	N/A	2041	N/A
Discount rate					
Prior measurement date	7.50%	7.50%	7.50%	6.66%	7.50%
Measurement date	7.50%	7.50%	7.50%	6.14%	7.50%
Post-retirement benefit increases:					
PERA benefit structure hired prior to 1/1/07 and DPS benefit structure	2.00% compounded annually	2.00% compounded annually	2.00% compounded annually	2.00% compounded annually	2.00% compounded annually
PERA benefit structure hired after 12/31/06	Financed by the AIR <sup>1</sup>	Financed by the AIR <sup>1</sup>	Financed by the AIR <sup>1</sup>	Financed by the AIR <sup>1</sup>	Financed by the AIR <sup>1</sup>

<sup>1</sup> Post-retirement benefit increases are provided by the AIR, accounted separately within each Division Trust Fund, and subject to monies being available; therefore, liabilities for members of these benefit tiers can never exceed available assets.

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale AA to 2020 with males set back one year and females set back two years.

The actuarial assumptions used in the December 31, 2013, valuations were based on the results of an actuarial experience study for the period January 1, 2008 – December 31, 2011, adopted by the Board on November 13, 2012, and an economic assumptions study adopted by the Board on November 15, 2013, and January 17, 2014.

The long-term expected return on plan assets is reviewed as part of regular experience studies prepared every four years for PERA. Recently, this assumption has been reviewed more frequently. The most recent analysis was outlined in presentations to the Board on November 15, 2013, and January 17, 2014. Several factors were considered in establishing the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions may cover a shorter investment horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

As of the most recent analysis of the long-term rate of return, presented to the Board on November 15, 2013, the target asset allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

ASSET CLASS	TARGET ALLOCATION	10-YEAR EXPECTED GEOMETRIC REAL RATE OF RETURN
U.S. Equity - Large Cap	26.76%	5.00%
U.S. Equity - Small Cap	4.40%	5.19%
Non U.S. Equity - Developed	22.06%	5.29%
Non U.S. Equity - Emerging	6.24%	6.76%
Core Fixed Income	24.05%	0.98%
High Yield	1.53%	2.64%
Long Duration Gov't/Credit	0.53%	1.57%
Emerging Market Bonds	0.43%	3.04%
Real Estate	7.00%	5.09%
Private Equity	7.00%	7.15%
<b>Total</b>	<u>100.00%</u>	

Note: In setting the long-term expected return for the Plan, projections employed to model future returns provide a range of expected long-term returns that, including expected inflation, ultimately support a long-term expected rate of return assumption of 7.50 percent.

### Discount Rate/Single Equivalent Interest Rate (SEIR)

The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the fixed statutory rates specified in law, including current and future AED and SAED, until the Actuarial Value Funding Ratio reaches 103 percent, at which point, the AED and SAED will each drop 0.50 percent every year until they are zero.

Based on those assumptions and the GASB 67 projection test methodology, the pension plan's fiduciary net positions for the State Division, School Division, Local Government Division, and DPS Division were projected to be available to make all projected future benefit payments of current plan members and were not projected to reach a depletion date. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL. The discount rate determination does not use a municipal bond index rate. The discount rate used to measure the TPL for these divisions was 7.50 percent.

Using those same assumptions and the GASB 67 projection test methodology, the pension plan's FNP for the Judicial Division was projected to be depleted in 2041. For the Judicial Division, the long-term expected rate of return of 7.50 percent on pension plan investments was applied to periods before 2041 and the municipal bond index rate, the Bond Buyer General Obligation 20-year Municipal Bond Index published monthly by the Board of Governors of the Federal Reserve System, was applied to periods on and after 2041 to develop a SEIR. As of the prior measurement date, the municipal bond index rate was 4.73 percent, resulting in a SEIR of 6.66 percent for the Judicial Division. There was a change in the municipal bond index rate from the prior measurement date to the measurement date, so the measurement date SEIR of 6.14 percent was calculated using the same methodology and substituting the measurement date's municipal bond index rate of 3.70 percent.

The results of the GASB 67 projection test methodology and development of the SEIR do not necessarily indicate the fund's ability to make benefit payments in the future.

# Notes to the Financial Statements

(In Thousands of Dollars)

## Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the NPL for participating employers for each plan, calculated using the current discount rate, as well as what the plan's NPL would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

1 PERCENT DECREASE	DISCOUNT RATE	NET PENSION LIABILITY
State Division	6.50%	\$12,061,426
School Division	6.50%	17,871,342
Local Government Division	6.50%	1,463,771
Judicial Division	5.14%	184,732
DPS Division	6.50%	1,063,991
CURRENT DISCOUNT RATE	DISCOUNT RATE	NET PENSION LIABILITY
State Division	7.50%	\$9,406,514
School Division	7.50%	13,553,359
Local Government Division	7.50%	896,309
Judicial Division	6.14%	138,354
DPS Division	7.50%	624,570
1 PERCENT INCREASE	DISCOUNT RATE	NET PENSION LIABILITY
State Division	8.50%	\$7,173,378
School Division	8.50%	9,939,134
Local Government Division	8.50%	423,212
Judicial Division	7.14%	98,741
DPS Division	8.50%	256,200

As shown, if there is a significant deviation, over a long period, in the actual rate of return from the assumed discount rate, the measurement of the NPL could be materially under- or over-reported as of December 31, 2014. Further, funding the TPL 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.

## Note 11—Funded Status and Funding Progress of the Health Care Trust Funds

The funded status of each plan as of December 31, 2014, the most recent actuarial valuation date, is as follows:

	HEALTH CARE TRUST FUND	DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND
Actuarial value of assets (a)	\$297,377	\$16,502
Actuarial accrued liability (b)	1,534,461	76,026
Total unfunded actuarial accrued liability (UAAL) (b-a)	<u>\$1,237,084</u>	<u>\$59,524</u>
Funded ratio (a/b)	19.4%	21.7%
Covered payroll	\$7,211,351	\$584,319
UAAL as a percentage of covered payroll	17.2%	10.2%

## 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 is included in the RSI, which 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 (AAL) 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. 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, 2014, 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.

	HEALTH CARE TRUST FUND	DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND
Valuation date	12/31/2014	12/31/2014
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	35 years	16 years
Asset valuation method	4-year smoothed market	4-year smoothed market
Actuarial assumptions:		
Investment rate of return and discount rate <sup>1</sup>	7.50%	7.50%
Projected salary increases <sup>1</sup>	3.90% in aggregate	3.90% in aggregate
Health care inflation factor		
Service-based premium subsidy	0.00%	0.00%
Medicare Part A premiums	2.75% Initial 4.25% Ultimate	N/A
Health care plan premiums	5.14%—5.45% Initial 5.00% Ultimate	N/A

<sup>1</sup> Includes inflation at 2.80 percent.

### Sensitivity of the Unfunded Actuarial Accrued Liability to Changes in Assumed Investment Rate of Return and Discount Rate

The most important long-term driver of a postemployment benefit plan is investment income. The long-term expected rate of return on investments 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 periodically monitor the long-term expected rate of return on investments and discount rate assumptions and as a result, the Board makes changes as appropriate. In November 2013, the Board changed the investment rate of return and the discount rate assumptions from 8.00 percent to 7.50 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 understand the importance of the long-term assumed investment rate of return, which is used to discount the actuarial liabilities, a 1 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 December 31, 2016) as shown in the table below.

	1.0 PERCENT DECREASE 6.50 PERCENT	CURRENT ASSUMPTION 7.50 PERCENT	1.0 PERCENT INCREASE 8.50 PERCENT
<b>FUNDED RATIO</b>			
HCTF	17.5%	19.4%	21.3%
DPS HCTF	19.7%	21.7%	23.7%
<b>UNFUNDED ACTUARIAL ACCRUED LIABILITY</b>			
HCTF	\$1,400,965	\$1,237,084	\$1,098,479
DPS HCTF	67,227	59,524	53,006
<b>ANNUAL REQUIRED CONTRIBUTION</b>			
HCTF	1.16%	1.09%	1.05%
DPS HCTF	0.82%	0.75%	0.71%



# Notes to the Financial Statements

(In Thousands of Dollars)

## Note 12—Subsequent Events

### Strategic Asset Allocation Policy

On March 20, 2015, the Board voted to change the strategic asset allocation policy of the fund effective July 1, 2015. The new strategic asset allocation contains an interim target allocation as of July 1, 2015, and a long-term target allocation and the specified ranges for each asset class. The long-term target allocation will be achieved over time. The Investment Committee will be responsible for providing the Board interim policy targets annually until the long-term target allocation and ranges are achieved. The table below shows the target asset allocation in effect as of December 31, 2014, the interim target asset allocation effective July 1, 2015, and the long-term policy and target ranges for each asset class.

	ASSET ALLOCATION TARGET AS OF DECEMBER 31, 2014	INTERIM ASSET ALLOCATION TARGET EFFECTIVE JULY 1, 2015	LONG-TERM ASSET ALLOCATION TARGET	TARGET RANGE EFFECTIVE JULY 1, 2015
Global Equity	56.0%	55.0%	53.0%	47.0% - 59.0%
Fixed Income	25.0%	24.0%	23.0%	18.0% - 28.0%
Private Equity <sup>1</sup>	7.0%	7.5%	8.5%	5.0% - 12.0%
Real Estate	7.0%	7.5%	8.5%	5.0% - 12.0%
Opportunity Fund	5.0%	5.0%	6.0%	0.0% - 9.0%
Cash	—	1.0%	1.0%	0.0% - 3.0%

<sup>1</sup> Effective July 1, 2015, the name of the Alternative Investment asset class will change to Private Equity.

### DPS Division Employer Contribution Rate

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 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.

On June 3, 2015, House Bill 15-1391 was signed into law which reduces the employer contribution rate for the DPS Division from 13.75 percent to 10.15 percent, with a retroactive effective date of January 1, 2015.

# Required Supplementary Information (Unaudited)—Division Trust Funds

(In Thousands of Dollars)

## SCHEDULE OF CHANGES IN NET PENSION LIABILITY<sup>1</sup>

For the Year Ended December 31

	STATE DIVISION 2014	SCHOOL DIVISION 2014	LOCAL GOVERNMENT DIVISION 2014	JUDICIAL DIVISION 2014	DPS DIVISION 2014
<b>Total pension liability</b>					
Service cost at end of year	\$285,311	\$511,059	\$58,676	\$9,024	\$76,564
Interest	1,663,542	2,582,865	329,156	24,820	274,862
Changes of benefit terms	—	—	—	—	—
Difference between expected and actual experience	(1,069)	(1,387)	(322)	(5)	(174)
Changes of assumptions or other inputs	—	—	—	21,294	—
Benefit payments, including refunds of active member contributions and disability premiums	(1,415,754)	(2,113,547)	(256,972)	(19,903)	(255,434)
<b>Net change in total pension liability</b>	<b>532,030</b>	<b>978,990</b>	<b>130,538</b>	<b>35,230</b>	<b>95,818</b>
<b>Total pension liability - beginning</b>	<b>22,888,431</b>	<b>35,494,976</b>	<b>4,517,239</b>	<b>382,623</b>	<b>3,792,543</b>
<b>Total pension liability - ending (a)</b>	<b>\$23,420,461</b>	<b>\$36,473,966</b>	<b>\$4,647,777</b>	<b>\$417,853</b>	<b>\$3,888,361</b>
<b>Plan fiduciary net position</b>					
Contributions - employer	\$444,372	\$686,323	\$68,719	\$7,070	\$18,478
Contributions - employer disaffiliation	—	—	186,006	—	—
Contributions - active member (includes purchased service)	234,056	356,520	49,290	4,296	49,409
Net investment income	780,762	1,274,862	200,394	15,299	182,823
Benefit payments (includes refunds and disability premiums)	(1,415,754)	(2,113,547)	(256,972)	(19,903)	(255,434)
Administrative expense	(10,067)	(19,290)	(2,091)	(72)	(2,377)
Other additions and deductions	118	(4,264)	(2,190)	156	(1,547)
<b>Net change in plan fiduciary net position</b>	<b>33,487</b>	<b>180,604</b>	<b>243,156</b>	<b>6,846</b>	<b>(8,648)</b>
<b>Plan fiduciary net position - beginning</b>	<b>13,980,460</b>	<b>22,740,003</b>	<b>3,508,312</b>	<b>272,653</b>	<b>3,272,439</b>
<b>Plan fiduciary net position - ending (b)</b>	<b>\$14,013,947</b>	<b>\$22,920,607</b>	<b>\$3,751,468</b>	<b>\$279,499</b>	<b>\$3,263,791</b>
<b>Net pension liability - ending (a)-(b)</b>	<b>\$9,406,514</b>	<b>\$13,553,359</b>	<b>\$896,309</b>	<b>\$138,354</b>	<b>\$624,570</b>

<sup>1</sup> Information is not available prior to 2014. In future reports, additional years will be added until 10 years of historical data are presented.

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

# Required Supplementary Information (Unaudited)—Division Trust Funds

(In Thousands of Dollars)

## SCHEDULE OF NET PENSION LIABILITY<sup>1</sup>

For the Years Ended December 31

STATE DIVISION	2014	2013
Total pension liability	\$23,420,461	\$22,888,431
Plan fiduciary net position	14,013,947	13,980,460
<b>Net pension liability</b>	<b>\$9,406,514</b>	<b>\$8,907,971</b>
Plan fiduciary net position as a percentage of the total pension liability	59.84%	61.08%
Covered-employee payroll <sup>2</sup>	\$2,564,670	\$2,474,965
Net pension liability as a percentage of covered-employee payroll	366.77%	359.92%
<b>SCHOOL DIVISION</b>	<b>2014</b>	<b>2013</b>
Total pension liability	\$36,473,966	\$35,494,976
Plan fiduciary net position	22,920,607	22,740,003
<b>Net pension liability</b>	<b>\$13,553,359</b>	<b>\$12,754,973</b>
Plan fiduciary net position as a percentage of the total pension liability	62.84%	64.07%
Covered-employee payroll <sup>2</sup>	\$4,063,236	\$3,938,650
Net pension liability as a percentage of covered-employee payroll	333.56%	323.84%
<b>LOCAL GOVERNMENT DIVISION</b>	<b>2014</b>	<b>2013</b>
Total pension liability	\$4,647,777	\$4,517,239
Plan fiduciary net position	3,751,468	3,508,312
<b>Net pension liability</b>	<b>\$896,309</b>	<b>\$1,008,927</b>
Plan fiduciary net position as a percentage of the total pension liability	80.72%	77.66%
Covered-employee payroll <sup>2</sup>	\$540,468	\$529,003
Net pension liability as a percentage of covered-employee payroll	165.84%	190.72%
<b>JUDICIAL DIVISION</b>	<b>2014</b>	<b>2013</b>
Total pension liability	\$417,853	\$382,623
Plan fiduciary net position	279,499	272,653
<b>Net pension liability</b>	<b>\$138,354</b>	<b>\$109,970</b>
Plan fiduciary net position as a percentage of the total pension liability	66.89%	71.26%
Covered-employee payroll <sup>2</sup>	\$42,977	\$39,942
Net pension liability as a percentage of covered-employee payroll	321.93%	275.32%
<b>DPS DIVISION</b>	<b>2014</b>	<b>2013</b>
Total pension liability	\$3,888,361	\$3,792,543
Plan fiduciary net position	3,263,791	3,272,439
<b>Net pension liability</b>	<b>\$624,570</b>	<b>\$520,104</b>
Plan fiduciary net position as a percentage of the total pension liability	83.94%	86.29%
Covered-employee payroll <sup>2</sup>	\$584,319	\$547,660
Net pension liability as a percentage of covered-employee payroll	106.89%	94.97%

<sup>1</sup> Information is not available prior to 2013. In future reports, additional years will be added until 10 years of historical data are presented.

<sup>2</sup> Covered-employee payroll is based upon the pensionable payroll reported to the Plan and excludes additional compensation amounts that may need to be reported by the employer.

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

# Required Supplementary Information (Unaudited)—Division Trust Funds

(In Thousands of Dollars)

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

For the Years Ended December 31

STATE DIVISION	2014	2013	2012	2011	2010
Actuarially Determined Contribution rate (a)	20.45%	20.01%	16.52%	13.63%	18.93%
Covered-employee payroll (b) <sup>1</sup>	\$2,564,670	\$2,474,965	\$2,384,934	\$2,393,791	\$2,392,080
Annual Increase Reserve contribution (c)	9,984	N/A	N/A	N/A	N/A
Actuarially Determined Contribution (a) x (b) + (c)	534,459	495,241	393,991	326,274	452,821
Contributions in relation to the Actuarially Determined Contribution	444,372	393,218	328,055	277,122	282,640
<b>Annual contribution deficiency</b>	<b>\$90,087</b>	<b>\$102,023</b>	<b>\$65,936</b>	<b>\$49,152</b>	<b>\$170,181</b>
Actual contributions as a percentage of covered-employee payroll	17.33%	15.89%	13.76%	11.58%	11.82%

STATE DIVISION	2009	2008	2007	2006	2005
Actuarially Determined Contribution rate (a)	17.91%	18.45%	17.23%	19.33%	17.31%
Covered-employee payroll (b) <sup>1</sup>	\$2,384,137	\$2,371,639	\$2,236,518	\$2,099,325	\$2,064,764
Annual Increase Reserve contribution (c)	N/A	N/A	N/A	N/A	N/A
Actuarially Determined Contribution (a) x (b) + (c)	426,999	437,567	385,352	405,800	357,411
Contributions in relation to the Actuarially Determined Contribution	293,234	267,533	231,909	208,795	191,629
<b>Annual contribution deficiency</b>	<b>\$133,765</b>	<b>\$170,034</b>	<b>\$153,443</b>	<b>\$197,005</b>	<b>\$165,782</b>
Actual contributions as a percentage of covered-employee payroll	12.30%	11.28%	10.37%	9.95%	9.28%

SCHOOL DIVISION	2014	2013	2012	2011	2010
Actuarially Determined Contribution rate (a)	19.65%	19.79%	17.60%	15.73%	18.75%
Covered-employee payroll (b) <sup>1</sup>	\$4,063,236	\$3,938,650	\$3,819,066	\$3,821,603	\$3,900,662
Annual Increase Reserve contribution (c)	13,280	N/A	N/A	N/A	N/A
Actuarially Determined Contribution (a) x (b) + (c)	811,706	779,459	672,156	601,138	731,374
Contributions in relation to the Actuarially Determined Contribution	686,323	613,738	564,444	534,230	512,391
<b>Annual contribution deficiency</b>	<b>\$125,383</b>	<b>\$165,721</b>	<b>\$107,712</b>	<b>\$66,908</b>	<b>\$218,983</b>
Actual contributions as a percentage of covered-employee payroll	16.89%	15.58%	14.78%	13.98%	13.14%

SCHOOL DIVISION	2009	2008	2007	2006	2005
Actuarially Determined Contribution rate (a)	16.56%	17.18%	16.06%	19.33%	17.31%
Covered-employee payroll (b) <sup>1</sup>	\$3,922,175	\$3,804,927	\$3,618,258	\$3,371,186	\$3,241,214
Annual Increase Reserve contribution (c)	N/A	N/A	N/A	N/A	N/A
Actuarially Determined Contribution (a) x (b) + (c)	649,512	653,686	581,092	651,650	561,054
Contributions in relation to the Actuarially Determined Contribution	474,872	426,786	374,386	336,703	299,402
<b>Annual contribution deficiency</b>	<b>\$174,640</b>	<b>\$226,900</b>	<b>\$206,706</b>	<b>\$314,947</b>	<b>\$261,652</b>
Actual contributions as a percentage of covered-employee payroll	12.11%	11.22%	10.35%	9.99%	9.24%

<sup>1</sup> Covered-employee payroll is based upon the pensionable payroll reported to the Plan and excludes additional compensation amounts that may need to be reported by the employer.

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

# Required Supplementary Information (Unaudited)—Division Trust Funds

(In Thousands of Dollars)

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

For the Years Ended December 31

LOCAL GOVERNMENT DIVISION	2014	2013	2012	2011	2010
Actuarially Determined Contribution rate (a)	11.78%	10.62%	9.79%	8.98%	12.31%
Covered-employee payroll (b) <sup>1</sup>	\$540,468	\$529,003	\$523,668	\$718,169	\$705,265
Annual Increase Reserve contribution (c)	2,180	N/A	N/A	N/A	N/A
Actuarially Determined Contribution (a) x (b) + (c)	65,847	56,180	51,267	64,492	86,818
Contributions in relation to the Actuarially Determined Contribution	254,725	65,329	83,816	89,536	87,731
Annual contribution deficiency (excess)	(\$188,878)	(\$9,149)	(\$32,549)	(\$25,044)	(\$913)
Actual contributions as a percentage of covered-employee payroll	47.13%	12.35%	16.01%	12.47%	12.44%

LOCAL GOVERNMENT DIVISION	2009	2008	2007	2006	2005
Actuarially Determined Contribution rate (a)	11.14%	11.95%	11.21%	14.11%	13.98%
Covered-employee payroll (b) <sup>1</sup>	\$705,097	\$718,902	\$680,442	\$636,300	\$607,217
Annual Increase Reserve contribution (c)	N/A	N/A	N/A	N/A	N/A
Actuarially Determined Contribution (a) x (b) + (c)	78,548	85,909	76,278	89,782	84,889
Contributions in relation to the Actuarially Determined Contribution	82,986	78,291	68,254	60,664	54,357
Annual contribution deficiency (excess)	(\$4,438)	\$7,618	\$8,024	\$29,118	\$30,532
Actual contributions as a percentage of covered-employee payroll	11.77%	10.89%	10.03%	9.53%	8.95%

JUDICIAL DIVISION	2014	2013	2012	2011	2010
Actuarially Determined Contribution rate (a)	20.07%	21.53%	18.28%	16.30%	18.63%
Covered-employee payroll (b) <sup>1</sup>	\$42,977	\$39,942	\$39,045	\$39,033	\$37,412
Annual Increase Reserve contribution (c)	116	N/A	N/A	N/A	N/A
Actuarially Determined Contribution (a) x (b) + (c)	8,741	8,599	7,137	6,362	6,970
Contributions in relation to the Actuarially Determined Contribution	7,070	6,494	5,840	5,356	5,605
Annual contribution deficiency	\$1,671	\$2,105	\$1,297	\$1,006	\$1,365
Actual contributions as a percentage of covered-employee payroll	16.45%	16.26%	14.96%	13.72%	14.98%

JUDICIAL DIVISION	2009	2008	2007	2006	2005
Actuarially Determined Contribution rate (a)	17.08%	17.66%	15.33%	17.21%	16.22%
Covered-employee payroll (b) <sup>1</sup>	\$37,583	\$35,937	\$31,150	\$29,151	\$26,937
Annual Increase Reserve contribution (c)	N/A	N/A	N/A	N/A	N/A
Actuarially Determined Contribution (a) x (b) + (c)	6,419	6,346	4,775	5,017	4,369
Contributions in relation to the Actuarially Determined Contribution	5,749	5,078	4,211	3,767	3,408
Annual contribution deficiency	\$670	\$1,268	\$564	\$1,250	\$961
Actual contributions as a percentage of covered-employee payroll	15.30%	14.13%	13.52%	12.92%	12.65%

<sup>1</sup> Covered-employee payroll is based upon the pensionable payroll reported to the Plan and excludes additional compensation amounts that may need to be reported by the employer.

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

# Required Supplementary Information (Unaudited)—Division Trust Funds

*(In Thousands of Dollars)*

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

*For the Years Ended December 31*

DPS DIVISION <sup>1</sup>	2014	2013	2012	2011	2010
Actuarially Determined Contribution rate (a)	9.67%	11.53%	9.60%	11.85%	14.61%
Covered-employee payroll (b) <sup>2</sup>	\$584,319	\$547,660	\$510,872	\$491,646	\$470,774
Annual Increase Reserve contribution (c)	2,633	N/A	N/A	N/A	N/A
Actuarially Determined Contribution (a) x (b) + (c)	59,137	63,145	49,044	58,260	68,780
Contributions in relation to the Actuarially Determined Contribution	18,478	23,104	13,145	11,722	5,733
Annual contribution deficiency	\$40,659	\$40,041	\$35,899	\$46,538	\$63,047
Actual contributions as a percentage of covered-employee payroll	3.16%	4.22%	2.57%	2.38%	1.22%

<sup>1</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of the Denver Public Schools Retirement System (DPSRS).

<sup>2</sup> Covered-employee payroll is based upon the pensionable payroll reported to the Plan and excludes additional compensation amounts that may need to be reported by the employer.

## SCHEDULE OF INVESTMENT RETURNS<sup>1</sup>

*For the Year Ended December 31*

	2014
Annual money-weighted rate of return, net of investment expenses	5.8%

<sup>1</sup> Information is not available prior to 2014. In future reports, additional years will be added until 10 years of historical data are presented.

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



# Notes to the Required Supplementary Information (Unaudited)—Division Trust Funds

(In Thousands of Dollars)

## Note 1—Significant Changes in Plan Provisions Affecting Trends in Actuarial Information

### 2014 Changes in Plan Provisions Since 2013

- Actual employer contributions to the DPS Division are reduced by an amount equal to the principal payments plus interest necessary each year to finance the pension certificates of participation (PCOPs) issued in 1997 and 2008 and refinanced thereafter.

### 2013 Changes in Plan Provisions Since 2012

- Actual employer contributions to the DPS Division are reduced by an amount equal to the principal payments plus interest necessary each year to finance the PCOPs issued in 1997 and 2008 and refinanced thereafter.

### 2012 Changes in Plan Provisions Since 2011

- The valuation reflects the disaffiliation of Memorial Health System (Memorial), formerly the largest employer of the Local Government Division, as of October 1, 2012. For the purposes of the December 31, 2012, actuarial valuation, liabilities were determined assuming no additional benefit accruals for the disaffiliated membership of Memorial that had not refunded their PERA member contribution accounts. Additionally, no additional incoming dollars were assumed added to the Local Government Division Trust Fund, as there is ongoing litigation regarding the potential dollars owed to the Local Government Division Trust Fund due to the disaffiliation.
- Pursuant to Senate Bill (SB) 11-076, there was a short term contribution “swap” between employers and active members in the State and Judicial Divisions covering the period July 1, 2011, through June 30, 2012. Active member contributions for the period were increased by 2.5 percent of pensionable payroll and employer contributions were reduced by that amount.
- Actual employer contributions to the DPS Division are reduced by an amount equal to the principal payments plus interest necessary each year to finance the PCOPs issued in 1997 and 2008 and refinanced thereafter.

### 2011 Changes in Plan Provisions Since 2010

- Pursuant to SB 10-146, there was a short term contribution “swap” between employers and active members in the State and Judicial Divisions covering the period July 1, 2010, through June 30, 2011. The enactment of SB 11-076 extended the contribution swap an additional year, from July 1, 2011, through June 30, 2012. Active member contributions for both periods were increased by 2.5 percent of pensionable payroll and employer contributions were reduced by that amount.
- Actual employer contributions to the DPS Division are reduced by an amount equal to the principal payments plus interest necessary each year to finance the PCOPs issued in 1997 and 2008 and refinanced thereafter.

### 2010 Changes in Plan Provisions Since 2009

- The valuation reflects the addition of the DPS benefit structure as a result of the merger of DPSRS into PERA as a separate division, effective January 1, 2010. Major plan provisions adopted as part of the merger legislation (SB 09-282) include:
  - Transfers from the DPS Division to other Divisions may build upon a DPS benefit structure benefit within those Divisions.
  - Hourly and part-time employees of Denver Public Schools become members of the DPS Division as of January 1, 2010 with no past service credit.
  - Actual employer contributions to the DPS Division are reduced by an amount equal to the principal payments plus interest necessary each year to finance the PCOPs issued in 1997 and 2008. Colorado statutes call for a “true-up” in 2015, and every five years following, with the expressed purpose of adjusting the total DPS contribution rate to ensure equalization of the ratio of unfunded actuarial accrued liability (UAAL) over pensionable payroll between the DPS and School Divisions at the end of the 30-year period beginning January 1, 2010.
- Pursuant to SB 10-146, there was a short term contribution “swap” between employers and active members in the State and Judicial Division covering the period July 1, 2010, through June 30, 2011. Active member contributions for this period were increased by 2.5 percent of pensionable payroll and employer contributions were reduced by that amount.

### 2009 Changes in Plan Provisions Since 2008

- The following changes were made to the plan provisions as part of SB 10-001:
  - For the State Division, the amortization equalization disbursement (AED) continues to increase by 0.4 percent per year to a total rate of 5.0 percent by 2017. In addition, the supplemental amortization equalization disbursement (SAED) continues to increase by 0.5 percent per year to a total rate of 5.0 percent by 2017. However, if the funding ratio reaches 103 percent, the AED and SAED will be reduced by 0.5 percent of pay each.

# Notes to the Required Supplementary Information (Unaudited)—Division Trust Funds

(In Thousands of Dollars)

- 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 funding ratio reaches 103 percent, the AED and SAED will be reduced by 0.5 percent of pay each.
- For the Local Government and 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 funding ratio reaches 103 percent, the AED and SAED will be reduced by 0.5 percent of pay each.
- For benefit recipients of the PERA benefit structure based upon a membership date before January 1, 2007, or for benefit recipients of the DPS benefit structure, future Post-Retirement Benefit Increases (Increase) were reduced to an amount equal to 2 percent (the lesser of that or the annual Consumer Price Index for Urban Wage Earners and Clerical Workers [CPI-W] increase for 2010). However, if the investment return for the prior year is negative, then the Increase is an amount equal to the annual CPI-W increase with a cap of 2 percent. The 2 percent cap may be adjusted based upon the year-end funded status, with increases mandated when the funded status reaches 103 percent and decreases mandated when the funded status subsequently falls below 90 percent. The cap will not be reduced below 2 percent. In addition, the Increase is first paid on the July 1st that is at least 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.
- Effective January 1, 2011, other than in the Judicial Division, for all active members, who are not eligible for retirement on January 1, 2011, the annual salary increase cap in determination of Highest Average Salary (HAS) was lowered from 15 percent to 8 percent for PERA benefit structure members and for DPS benefit structure members, a change from the average of salaries of the highest 36 months of earned service to the PERA benefit structure method with an annual salary increase cap of 8 percent.
- Effective January 1, 2011, a new requirement was added that PERA benefit structure members must have five years of earned service credit in order to receive a 50 percent match on a refund.
- 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, a modified Rule of 85 for service retirement eligibility was implemented 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, a modified Rule of 88 with a minimum age of 58 for service retirement eligibility was implemented 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, a modified Rule of 90 with a minimum age of 60 for service retirement eligibility was implemented for members hired on or after January 1, 2017 (this rule does not apply to State Troopers and to participants whose last 10 years of service were in the School Division).

## ***2008 Changes in Plan Provisions Since 2007***

- The Board approved a reduction to the interest rate credited on member contribution accounts from 5 percent to 3 percent.

## ***2007 Changes in Plan Provisions Since 2006***

- No material changes to plan provisions.

## ***2006 Changes in Plan Provisions Since 2005***

- The following changes were made to the Plan's provisions as a result of the passage of SB 06-235:
  - The Annual Increase Reserve (AIR) was established January 1, 2007, and will be used to provide post-retirement benefit increases for members hired on or after that date. The AIR is financed by an allocation from the employer statutory contributions, made on behalf of members hired on or after January 1, 2007, equal to 1.00 percent of pensionable payroll and through an allocation of purchase of service dollars.
  - The Service Retirement Eligibility for those members, other than State Troopers, hired after January 1, 2007, was changed at age 55 by increasing the age and service requirements from 80 years to 85 years.

# Notes to the Required Supplementary Information (Unaudited)—Division Trust Funds

(In Thousands of Dollars)

- Beginning January 1, 2008, a SAED was created in addition to the AED. The SAED calls for additional employer contributions equal to a percent of pensionable payroll in accordance with the following schedule:

<u>YEAR</u>	<u>PERCENT OF PENSIONABLE PAYROLL</u>
2008	0.50%
2009	1.00%
2010	1.50%
2011	2.00%
2012	2.50%
2013 & after	3.00%

The AED and SAED will continue until the funded ratio for a division exceeds 100 percent. At that point, the AED and SAED will be reduced in an amount to maintain a 100 percent funded ratio.

## Note 2—Significant Changes in Assumptions or Other Inputs Affecting Trends in Actuarial Information

### 2014 Changes in Assumptions or Other Inputs Since 2013

- The Discount Rate or Single Equivalent Interest Rate for the Judicial Division was lowered from 6.66 percent to 6.14 percent to reflect the change in the Municipal Bond Index from 4.73 percent on the Prior Measurement Date to 3.70 percent on the Measurement Date.
- In 2012, a lawsuit was initiated to determine the amount owed to PERA by Memorial and the City of Colorado Springs for Memorial's departure from PERA. On October 3, 2014, PERA received a disaffiliation payment of \$190,000 from the City of Colorado Springs to settle the lawsuit. This employer disaffiliation payment was allocated to the Local Government Division Trust Fund and the HCTF in the amount of \$186,006 and \$3,994, respectively.

### 2013 Changes in Assumptions or Other Inputs Since 2012

- The investment return assumption was lowered from 8.00 percent to 7.50 percent.
- The price inflation assumption was lowered from 3.50 percent to 2.80 percent.
- The wage inflation assumption was lowered from 4.25 percent to 3.90 percent.

### 2012 Changes in Assumptions or Other Inputs Since 2011

- The price inflation assumption was lowered from 3.75 percent to 3.50 percent.
- The wage inflation assumption was lowered from 4.50 percent to 4.25 percent.
- The rates of retirement, withdrawal, mortality and disability were revised to more closely reflect actual experience.
- The post-retirement mortality tables used were changed to the RP-2000 Combined Mortality tables projected with Scale AA to 2020, set back one year for males and two years for females.
- The investment return assumption was changed to be only net of investment expenses to better represent the investment consultant's assumptions and predictions and also to better align with recent changes in GASB accounting and reporting requirements. An ongoing estimated administrative expense of 0.35 percent of pensionable payroll was added to the normal cost beginning with the December 31, 2012, actuarial valuation.
- To reflect the short-term contribution "swap" between employers and active members covering the period July 1, 2010, through June 30, 2012, the actuarially determined contribution (ADC) has been adjusted in the State and Judicial Divisions.

### 2011 Changes in Assumptions or Other Inputs Since 2010

- To reflect the short-term contribution "swap" between employers and active members covering the period July 1, 2010, through June 30, 2012, the ADC has been adjusted in the State and Judicial Division.

### 2010 Changes in Assumptions or Other Inputs Since 2009

- Assumptions were supplemented to provide for the valuation of the DPS benefit structure added as a result of the merger of DPSRS into PERA as a separate division, effective January 1, 2010.
- To reflect the short-term contribution "swap" between employers and active members covering the period July 1, 2010, through June 30, 2012, the ADC has been adjusted in the State and Judicial Division.

### 2009 Changes in Assumptions or Other Inputs Since 2008

- The investment return assumption was lowered from 8.50 percent to 8.00 percent.

# Notes to the Required Supplementary Information (Unaudited)—Division Trust Funds

(In Thousands of Dollars)

- The withdrawal rates, pre-retirement mortality rates, disability rates and retirement rates were revised to more closely reflect the actual experience of PERA.
- The post-retirement mortality tables used for service retirements and dependents of deceased pensioners were 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 was revised to more closely reflect the actual experience of PERA.

## *2008 Changes in Assumptions or Other Inputs Since 2007*

- The assumed interest rate credited on member contribution accounts was reduced from 5 percent to 3 percent, reflecting the change to the Board approved rate.

## *2007 Changes in Assumptions or Other Inputs Since 2006*

- For the AIR established on January 1, 2007, the AIR balance is excluded from both assets and liabilities in the determination of the ADC rate as a percentage of pensionable payroll.

## *2006 Changes in Assumptions or Other Inputs Since 2005*

- No material changes to assumptions or other inputs.

## **Note 3—Methods and Assumptions Used in Calculations of ADC**

The ADC rates, as a percentage of pensionable payroll, used to determine the ADC amounts in the Schedule of Employer Contributions are calculated as of December 31, two years prior to the end of the year in which ADC amounts are reported. The following actuarial methods and assumptions (from the December 31, 2012, actuarial valuation) were used to determine contribution rates reported in that schedule for the year ending December 31, 2014:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll
Amortization period	30 years, open
Asset valuation method	4-year smoothed market
Price inflation	3.50 percent
Real wage growth	0.75 percent
Wage inflation	4.25 percent
Salary increases, including wage inflation	4.25 to 11.20 percent
Long-term investment rate of return, net of pension plan investment expense, including price inflation	8.00 percent
Future post-retirement benefit increases	
PERA benefit structure hired prior to 1/1/07 and DPS benefit structure	2.00 percent
PERA benefit structure hired after 12/31/06	0.00 percent, as financed by the AIR

# Required Supplementary Information (Unaudited)—Health Care Trust Funds

(In Thousands of Dollars)

## SCHEDULE OF FUNDING PROGRESS

For the Years Ended December 31

### Health Care Trust Fund

	2014	2013	2012	2011	2010
Actuarial valuation date	12/31/2014	12/31/2013	12/31/2012	12/31/2011	12/31/2010
Actuarial value of assets (a)	\$297,377	\$293,556	\$285,097	\$282,228	\$288,193
Actuarial accrued liability (b)	1,534,461	1,557,406	1,723,495	1,710,790	1,642,993
<b>Total unfunded actuarial accrued liability (UAAL) (b-a)</b>	<b>\$1,237,084</b>	<b>\$1,263,850</b>	<b>\$1,438,398</b>	<b>\$1,428,562</b>	<b>\$1,354,800</b>
Funded ratio (a/b)	19.4%	18.8%	16.5%	16.5%	17.5%
Covered payroll	\$7,211,351	\$6,982,560	\$6,766,713	\$6,972,596	\$7,035,419
UAAL as a percentage of covered payroll	17.2%	18.1%	21.3%	20.5%	19.3%

### Health Care Trust Fund

	2009	2008	2007	2006	2005
Actuarial valuation date	12/31/2009	12/31/2008	12/31/2007	12/31/2006	12/31/2005
Actuarial value of assets (a)	\$260,341	\$255,976	\$258,775	\$214,816	\$191,264
Actuarial accrued liability (b)	1,763,241	1,368,633	1,303,594	1,247,950	1,116,627
<b>Total unfunded actuarial accrued liability (UAAL) (b-a)</b>	<b>\$1,502,900</b>	<b>\$1,112,657</b>	<b>\$1,044,819</b>	<b>\$1,033,134</b>	<b>\$925,363</b>
Funded ratio (a/b)	14.8%	18.7%	19.9%	17.2%	17.1%
Covered payroll	\$7,048,992	\$6,931,405	\$6,566,368	\$6,135,962	\$5,940,132
UAAL as a percentage of covered payroll	21.3%	16.1%	15.9%	16.8%	15.6%

### DPS Health Care Trust Fund<sup>1</sup>

	2014	2013	2012	2011	2010
Actuarial valuation date	12/31/2014	12/31/2013	12/31/2012	12/31/2011	12/31/2010
Actuarial value of assets (a)	\$16,502	\$15,482	\$14,443	\$14,448	\$14,086
Actuarial accrued liability (b)	76,026	76,636	77,669	77,475	78,513
<b>Total unfunded actuarial accrued liability (UAAL) (b-a)</b>	<b>\$59,524</b>	<b>\$61,154</b>	<b>\$63,226</b>	<b>\$63,027</b>	<b>\$64,427</b>
Funded ratio (a/b)	21.7%	20.2%	18.6%	18.6%	17.9%
Covered payroll	\$584,319	\$547,660	\$510,872	\$491,646	\$470,774
UAAL as a percentage of covered payroll	10.2%	11.2%	12.4%	12.8%	13.7%

<sup>1</sup> 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.

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

# Required Supplementary Information (Unaudited)—Health Care Trust Funds

(In Thousands of Dollars)

## SCHEDULE OF CONTRIBUTIONS FROM EMPLOYERS AND OTHER CONTRIBUTING ENTITIES

For the Years Ended December 31

### Health Care Trust Fund

	2014	2013	2012	2011	2010
Dollar amount of annual required contribution (ARC)	\$95,190	\$86,584	\$79,847	\$89,249	\$78,797
ARC <sup>1</sup>	1.32%	1.24%	1.18%	1.28%	1.12%
% ARC contributed by Employer	84%	84%	91%	82%	94%
% ARC contributed by Medicare	—	18%	18%	16%	18%

<sup>1</sup> As a percent of covered payroll. ARC based on the annual actuarial valuation two years prior to the current year.

### Health Care Trust Fund

	2009 <sup>1</sup>	2008 <sup>1</sup>	2007 <sup>1</sup>	2006 <sup>1</sup>	2005 <sup>1</sup>
Dollar amount of annual required contribution (ARC)	\$78,949	\$76,939	\$78,140	\$73,018	\$67,793
ARC <sup>2</sup>	1.12%	1.11%	1.19%	1.19%	1.13%
% ARC contributed by Employer	94%	94%	88%	88%	90%
% ARC contributed by Medicare	17%	18%	16%	17%	—

<sup>1</sup> 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.

<sup>2</sup> As a percent of covered payroll. ARC based on the annual actuarial valuation two years prior to the current year.

### DPS Health Care Trust Fund<sup>1</sup>

	2014	2013	2012	2011	2010
Dollar amount of annual required contribution (ARC)	\$5,084	\$4,710	\$4,700	\$4,523	\$4,465
ARC <sup>2</sup>	0.87%	0.86%	0.92%	0.92%	0.95%
% ARC contributed by Employer	118%	118%	112%	111%	107%
% ARC contributed by Medicare	—	12%	10%	11%	12%

<sup>1</sup> The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

<sup>2</sup> 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.



# Notes to the Required Supplementary Information (Unaudited)—Health Care Trust Funds

(In Thousands of Dollars)

## Note 1—Significant Changes in Plan Provisions Affecting Trends in Actuarial Information

### 2014 Changes in Plan Provisions Since 2013

- The following changes were made to the actuarial assumptions:
  - 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 2015 plan year.

### 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 Centers for Medicare & Medicaid Services' (CMS) Retiree Drug Subsidy (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. 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 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:
  - DPS HCTF 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.

# Notes to the Required Supplementary Information (Unaudited)—Health Care Trust Funds

(In Thousands of Dollars)

- 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.

## 2007 Changes in Plan Provisions Since 2006

- The following changes were made to the actuarial assumptions:
  - Future plan election rates for retirees age 65 and older have been adjusted to reflect recent election patterns, incorporating the addition of the Secure Horizons (HMO) option.
  - Expected inpatient hospital claims cost for retirees age 65 and older, who do not have Medicare Part A, have been updated to better reflect anticipated changes in the various coverage categories, based on the most recent “no Medicare Part A” report presented to the Board of Trustees in March 2008.

## 2006 Changes in Plan Provisions Since 2005

- The following changes were made to the actuarial assumptions:
  - Based on the results of surveys conducted by Colorado PERA staff, the percentage of actives hired before April 1, 1986, and pre-Medicare retirees assumed to not have Part A Medicare coverage was changed to 20 percent.
  - Future plan election rates for retirees age 65 and older have been adjusted to reflect recent election patterns.
  - Expected inpatient hospital claims costs for retirees age 65 and older, who do not have Medicare Part A, have been updated and associated trend assumptions for future increases in medical costs were amended to better reflect anticipated changes in the various coverage categories.
- The following methodology change was implemented:
  - Members electing coverage in a qualified plan option produce a RDS which is payable to the HCTF under Part D of the Medicare Modernization Act of 2003. The HCTF has reduced the full cost of coverage by the estimated RDS. GASB Statement 43, GASB Technical Bulletin 2006-1, and GASB Statement 45 do not allow for future assumed RDS payments to be used as a direct offset for future liabilities. Therefore, the total HCTF actuarially accrued liability has been increased for future RDS premium offsets to members.

## 2005 Changes in Plan Provisions Since 2004

- Changed the method of calculating the actuarial value of assets such that the expected rate of investment return going forward will be based on the beginning of year market value, with annual differences between the actual and expected market value of assets smoothed over a four-year period.
- Reset the actuarial value of assets to be equal to the market value of assets as of December 31, 2004.
- Mortality, withdrawal, retirement, disability, and expected rates of participation in the HCTF programs were changed based on the actuarial experience study performed in 2005.

# Supplementary Schedules—Schedule of Administrative Expenses

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

<b>PERSONNEL SERVICES</b>	<b>2014</b>	<b>2013</b>
Salaries	\$26,551	\$24,854
Employee benefits	9,176	9,256
<b>Total personnel services</b>	<b>35,727</b>	<b>34,110</b>
<b>PROFESSIONAL SERVICES</b>		
Actuarial contracts	433	408
Audits	292	291
Investment services	2,214	2,587
Legal and legislative counsel	2,554	3,364
Computer services and consulting	1,004	524
Management consulting	1,121	1,241
Health care consulting	243	239
Other	1,038	669
<b>Total professional services</b>	<b>8,899</b>	<b>9,323</b>
<b>MISCELLANEOUS</b>		
Equipment rental and services	1,426	1,155
Memberships	327	284
Publications and subscriptions	100	80
Travel and local expense	686	715
Auto expense	25	25
Telephone	210	268
Postage	1,650	1,733
Insurance	342	331
Printing	568	546
Office supplies	675	786
Building rent, supplies, and utilities	974	971
<b>Total miscellaneous</b>	<b>6,983</b>	<b>6,894</b>
<b>DIRECT EXPENSE</b>		
Life Insurance Reserve	765	694
Health Care Trust Fund	14,247	11,433
Denver Public Schools Health Care Trust Fund	504	397
Voluntary Investment Program	1,769	1,788
Defined Contribution Retirement Plan	457	450
Deferred Compensation Plan	743	743
<b>Total direct expense</b>	<b>18,485</b>	<b>15,505</b>
Depreciation expense	606	574
Tenant and other expense	1,093	1,038
Internal investment manager expense	(14,883)	(14,638)
<b>Total administrative expense</b>	<b>\$56,910</b>	<b>\$52,806</b>
<b>ALLOCATION OF ADMINISTRATIVE EXPENSE</b>		
State Division Trust Fund	\$10,067	\$9,780
School Division Trust Fund	19,290	18,523
Local Government Division Trust Fund	2,091	2,021
Judicial Division Trust Fund	72	69
Denver Public Schools Division Trust Fund	2,377	2,240
Voluntary Investment Program	3,050	3,137
Defined Contribution Retirement Plan	738	744
Deferred Compensation Plan	1,074	1,094
Health Care Trust Fund	16,612	13,766
Denver Public Schools Health Care Trust Fund	668	561
Life Insurance Reserve	871	871
<b>Total administrative expense</b>	<b>\$56,910</b>	<b>\$52,806</b>

Note: The ratio of administrative expenses to fiduciary net position for the division trust funds is eight basis points (0.08 percent) for 2014 and seven basis points (0.07 percent) for 2013.

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	
												2014	2013
Administrative fee income	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$2,365	\$163	\$—	\$2,528	\$2,507
Revenue sharing	—	—	—	—	—	105	6	40	—	—	—	151	120
Participant loan interest	—	—	—	—	—	2,127	—	425	—	—	—	2,552	2,438
Interfund transfers at retirement	3,243	—	—	255	—	—	—	—	—	—	—	3,498	6,525
Purchase service transfer to health care	—	—	—	—	—	—	—	—	7,408	118	—	7,526	8,317
Settlement income	45	73	11	1	10	—	—	—	15	—	—	155	139
Miscellaneous	1	39	3	—	3	59	2	13	25	—	—	145	105
<b>Total other additions</b>	<b>\$3,289</b>	<b>\$112</b>	<b>\$14</b>	<b>\$256</b>	<b>\$13</b>	<b>\$2,291</b>	<b>\$8</b>	<b>\$478</b>	<b>\$9,813</b>	<b>\$281</b>	<b>\$—</b>	<b>\$16,555</b>	<b>\$20,151</b>

## 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	
												2014	2013
Interfund transfers at retirement	\$—	\$730	\$1,326	\$—	\$1,442	\$—	\$—	\$—	\$—	\$—	\$—	\$3,498	\$6,525
Purchase service transfer to health care	2,821	3,616	872	99	118	—	—	—	—	—	—	7,526	8,317
Miscellaneous	350	30	6	1	—	839	69	517	832	32	—	2,676	1,651
<b>Total other deductions</b>	<b>\$3,171</b>	<b>\$4,376</b>	<b>\$2,204</b>	<b>\$100</b>	<b>\$1,560</b>	<b>\$839</b>	<b>\$69</b>	<b>\$517</b>	<b>\$832</b>	<b>\$32</b>	<b>\$—</b>	<b>\$13,700</b>	<b>\$16,493</b>

See accompanying Independent Auditors' Report.

## Supplementary Schedules—Schedule of Investment Expenses

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

<b>EXTERNAL MANAGER EXPENSES</b>	<b>2014</b>	<b>2013</b>
Fixed income	\$3,790	\$2,624
Global equity	39,202	37,742
Alternative investments	50,078	45,727
Real estate investments	41,859	34,270
Opportunity fund investments	6,736	7,159
Short-term investments	410	390
<b>Total external manager expenses</b>	<b>142,075</b>	<b>127,912</b>
Internal manager expenses	14,883	14,638
Other investment expenses and custody fees	2,965	2,872
Defined contribution and deferred compensation plan investment expenses	4,161	3,556
<b>Total investment expenses</b>	<b>\$164,084</b>	<b>\$148,978</b>

## Supplementary Schedules—Schedule of Payments to Consultants

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

<b>PROFESSIONAL CONTRACTS</b>	<b>2014</b>	<b>2013</b>
Actuarial	\$433	\$408
Audits	292	291
Legal and legislative counsel	2,554	3,364
Computer services and consulting	1,004	524
Management consulting	1,121	1,241
Health care consulting	243	239
Other	1,038	669
<b>Total payments to consultants<sup>1</sup></b>	<b>\$6,685</b>	<b>\$6,736</b>

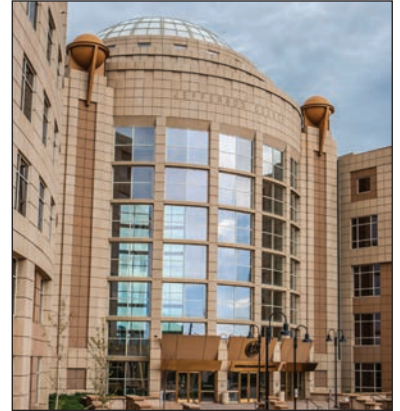
<sup>1</sup> Excludes investment advisors.

See accompanying Independent Auditors' Report.





Providing a  
Foundation for  
**CERTAINTY**



*By pioneering and incorporating the first-ever public pension reform with Senate Bill 10-001, Colorado PERA provides certainty that PERA will be there for future generations.*

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**INVESTMENT SECTION**



## 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 Colorado Revised Statutes (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, 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 2014 and the specified ranges for each asset class are as follows:

ASSET CLASS	TARGET ALLOCATION	PERMISSIBLE RANGE
Global Equity	56.0%	50.0% - 62.0%
Fixed Income	25.0%	22.0% - 28.0%
Alternative Investments	7.0%	4.0% - 10.0%
Real Estate	7.0%	4.0% - 10.0%
Opportunity Fund	5.0%	0.0% - 8.0%
<b>Total</b>	<b>100.0%</b>	

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.

The Board commissioned an Asset/Liability Study in 2014, which was prepared by Aon Hewitt Investment Consulting, Inc. (Aon Hewitt). 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 PERA incurs appropriate levels of risk. As a result of the study, the Board approved certain asset allocation targets and ranges at its March 20, 2015, Board meeting which are effective July 1, 2015. The new targets and ranges are described in the table below:

ASSET CLASS	INTERIM	LONG-TERM	TARGET RANGE
	ASSET ALLOCATION TARGET	ASSET ALLOCATION TARGET	
Global Equity	55.0%	53.0%	47.0% - 59.0%
Fixed Income	24.0%	23.0%	18.0% - 28.0%
Private Equity <sup>1</sup>	7.5%	8.5%	5.0% - 12.0%
Real Estate	7.5%	8.5%	5.0% - 12.0%
Opportunity Fund	5.0%	6.0%	0.0% - 9.0%
Cash	1.0%	1.0%	0.0% - 3.0%

<sup>1</sup> Effective July 1, 2015, the name of the Alternative Investment asset class will change to Private Equity.

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

# Colorado PERA Report on Investment Activity

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

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analysis, portfolio construction, rebalancing techniques, and other important investment functions and issues.

## **Basis of Presentation**

Aon Hewitt, 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 (Northern Trust). 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 [www.copera.org](http://www.copera.org).

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

Abel/Noser Corp.  
 Alignment Capital Group, LLC  
 Baird (Robert W.) & Co., Incorporated  
 Bank of America Merrill Lynch  
 Barclays Capital Inc.  
 Bloomberg Tradebook LLC  
 BNP Paribas Securities Corp.  
 BNY Convergenx  
 BNY Mellon  
 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.  
 Keybank Capital Markets, Inc.

LaSalle Investment Management  
 Liquidnet, Inc.  
 Merrill Lynch, Pierce, Fenner & Smith Inc.  
 Mitsubishi UFJ Securities (USA) , Inc.  
 Mizuho Securities USA, Inc.  
 Morgan Stanley & Co. Inc.  
 National Bank of Canada, New York Branch  
 Nomura Securities International, Inc.  
 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)<sup>1</sup>

*For Year Ended December 31, 2014  
 (In Thousands of Dollars)*

ASSET CLASS	2014 VALUE
Fixed Income <sup>2</sup>	\$11,515
Equities	2,127
Total commissions	13,642
Commission recapture income	(28)
Net commissions	\$13,614

<sup>1</sup> The Schedule of Commissions does not include commingled funds.

<sup>2</sup> Fixed income commissions are estimated.



## Investment Summary

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

	FAIR VALUE PER FINANCIAL STATEMENT		FAIR VALUE PER INVESTMENT PORTFOLIO		PERCENT OF TOTAL FAIR VALUE		
	DECEMBER 31, 2014	REALLOCATION <sup>1</sup>	DECEMBER 31, 2014	TARGET <sup>2,3</sup>	2014	2013	2012
Global Equity	\$24,986,247	\$190,332	\$25,176,579	56.0%	56.5%	58.4%	56.5%
Fixed Income	10,895,856	218,090	11,113,946	25.0%	24.9%	23.4%	23.3%
Alternative Investments	3,458,974	2,423	3,461,397	7.0%	7.8%	7.8%	8.7%
Real Estate	3,354,327	(57,521)	3,296,806	7.0%	7.4%	7.1%	8.1%
Opportunity Fund	885,978	207,580	1,093,558	5.0%	2.5%	2.5%	2.5%
Cash and Short-Term Investments							
Operating Cash	305	(305)	—				
Investment Cash and Short-Term	1,187,387	(779,009)	408,378	—	0.9%	0.8%	0.9%
Net Investment Receivables and Payables	(218,105)	218,105	—				
<b>Total Investments</b>	<b>\$44,550,969</b>	<b>(\$305)</b>	<b>\$44,550,664</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

<sup>1</sup> Investment receivables, payables, accruals, and cash and short-term have been reallocated back to the investment portfolios that hold them.

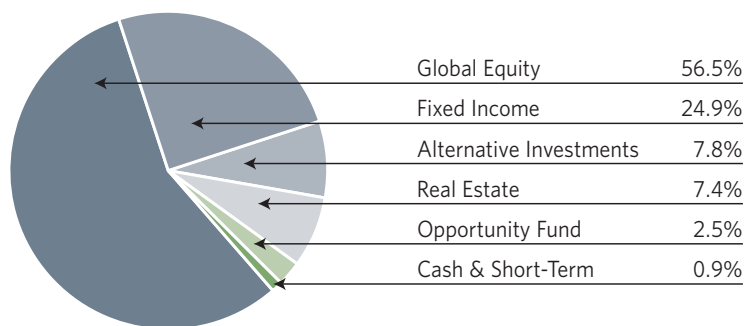
<sup>2</sup> An Asset/Liability Study was undertaken in 2010, after the enactment of Senate Bill 10-001, with the objective of determining the optimal strategic asset allocation policy. In September 2010, based on the study, the Board approved the asset allocation targets and ranges.

<sup>3</sup> On March 20, 2015, the Board voted to change the strategic asset allocation policy of the fund effective July 1, 2015. See page 117 for more details.

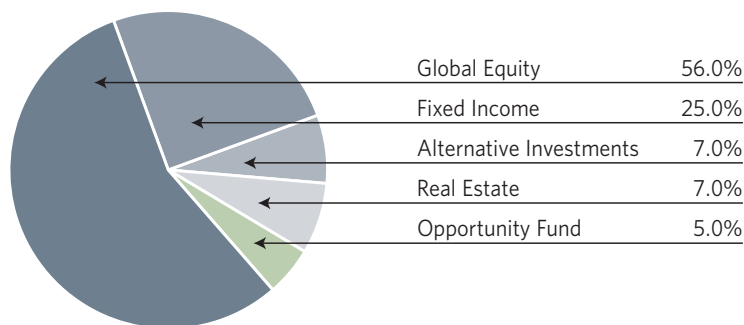
## Asset Allocation at Fair Value

Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds  
Year End December 31, 2014

Asset Allocation at Fair Value



Target Allocation



## Schedule of Investment Results

Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds  
As of December 31, 2014

Aon Hewitt, the Board's Investment Performance consultant, provides the investment returns for the fund based on data made available by the fund's custodian, Northern Trust. 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.

	2014	3-YEAR	5-YEAR	10-YEAR
<b>PERA Total Portfolio</b>	5.7%	11.3%	9.9%	6.8%
Total Fund Policy Benchmark <sup>1</sup>	5.7%	11.7%	10.0%	6.6%
Median Plan (BNY Mellon Performance and Risk Analytics' and Investment Metrics' Median Public Fund Universe)	6.2%	11.4%	9.5%	6.4%
<b>Global Stocks</b>	4.0%	14.8%	11.2%	6.7%
Global Equity Custom Benchmark <sup>1</sup>	3.8%	14.6%	10.9%	6.5%
<b>Fixed Income</b>	6.2%	3.4%	5.2%	5.3%
Fixed Income Custom Benchmark <sup>1</sup>	5.8%	3.3%	4.9%	5.0%
<b>Alternative Investments</b>	10.8%	13.1%	13.1%	10.8%
Alternative Custom Benchmark <sup>2</sup>	15.0%	22.9%	18.4%	10.9%
<b>Real Estate</b>	14.5%	13.0%	14.1%	7.6%
Real Estate Custom Benchmark <sup>3</sup>	12.0%	11.9%	13.6%	6.3%
<b>Opportunity Fund</b>	2.3%	2.3%	2.8%	—
Opportunity Fund Benchmark <sup>4</sup>	2.3%	4.0%	5.0%	—

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

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> NFI-ODCE Net (NCREIF Fund Index—Open End Diversified Core Equity) 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 percent of the NCREIF Index, 15 percent of the NAREIT Index, 20 percent of the Salomon Brothers Mortgage-Backed Securities Index, and 20 percent of the GPR General European Property Index.

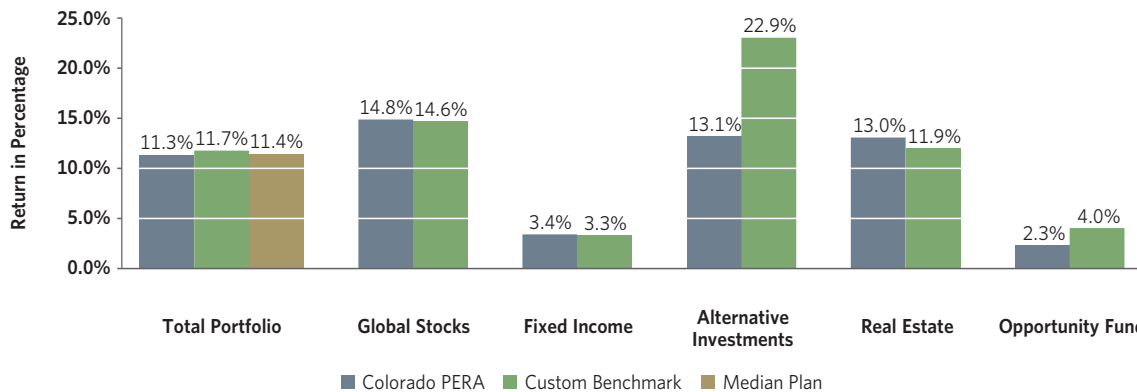
<sup>4</sup> A market value weighted aggregate of the benchmarks of the individual strategies included in the Opportunity Fund. Prior to January 2012, a combination of 69.1 percent of the Global Equity Custom Benchmark and 30.9 percent of the Fixed Income Custom Benchmark. Beginning January 1, 2008 and 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

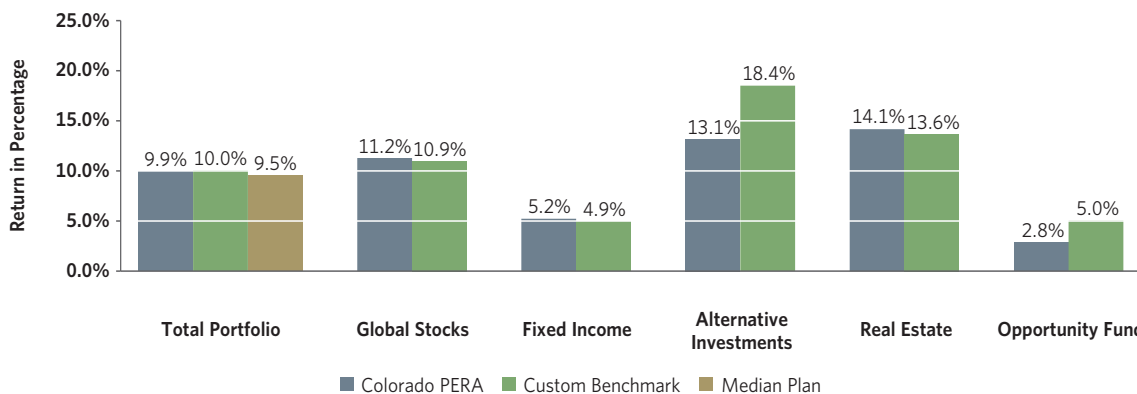
Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds  
As of December 31, 2014

Aon Hewitt, the Board’s Investment Performance consultant, provides the investment returns based on data made available by the fund’s custodian, Northern Trust. 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.

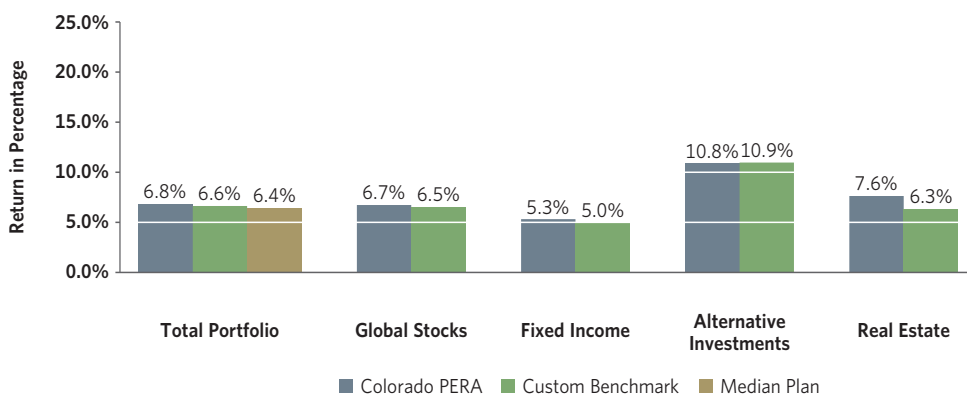
**Three-Year Net-of-Fees Time-Weighted Rate of Returns**



**Five-Year Net-of-Fees Time-Weighted Rate of Returns**



**Ten-Year Net-of-Fees Time-Weighted Rate of Returns**



## Evaluation

Aon Hewitt and Northern Trust are retained by PERA to evaluate fund performance. Aon Hewitt is also used for the real estate portfolio performance evaluation and industry comparisons. In their analysis, Aon Hewitt 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 2014, approved by the Board in 2010, are as follows: global equity 56 percent, fixed income 25 percent, alternative investments 7 percent, real estate 7 percent, and opportunity fund 5 percent. The Board has approved new asset allocation targets effective July 1, 2015, as follows: global equity 55 percent, fixed income 24 percent, private equity 7.5 percent, real estate 7.5 percent, opportunity fund 5 percent, and cash 1 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, 2014, PERA's total fund returned 5.7 percent compared to the policy benchmark return of 5.7 percent. For the three- and five-year periods ending December 31, 2014, PERA's total fund returned 11.3 percent and 9.9 percent, respectively, compared to 11.7 percent and 10.0 percent, respectively, for the policy benchmark for these periods.

For the year ended December 31, 2014, the total fund returned 5.7 percent, compared to the BNY Mellon Performance and Risk Analytics' and Investment Metrics' Median Public Fund Universe return of 6.2 percent. As of December 31, 2014, the BNY Mellon Performance and Risk Analytics' and Investment Metrics' Median Public Fund Universe was comprised of 94 public pension funds with assets of approximately \$1.4 trillion. For the three- and five-year periods ending December 31, 2014, the BNY Mellon Performance and Risk Analytics' and Investment Metrics' Median Public Fund Universe returned 11.4 percent and 9.5 percent on an annualized basis, respectively. PERA's 10-year annualized rate of return was 6.8 percent compared to the BNY Mellon Performance and Risk Analytics' and Investment Metrics' Median Public Fund Universe return of 6.4 percent.

## Global Stocks

2014 proved very positive for U.S. stocks and negative for non-U.S. stocks (in U.S. dollar terms). The U.S. dollar strengthened against most major currencies during 2014, which is the main reason for the poor performance in non-

U.S. equities since investment returns are translated into U.S. dollars. During the latter part of the year, the U.S. economy gained more traction, and U.S. stocks continued to rally ahead of non-U.S. stocks.

Many equity investors entered 2014 unsure if the good times in U.S. equities would last. The S&P 500 Index increased over 32 percent in 2013. A repeat performance in 2014 seemed unlikely given the many uncertainties that developed throughout the year. Concerns included the emergence of ISIS, indications of recessions in Europe and Japan, the Ebola outbreak, and economic disappointment in China. Stocks retreated several times in 2014, but each time the market recovered. U.S. equity returns during 2014 didn't match the exceptional levels of the prior year, but did produce positive returns.

The biggest U.S. sector gains for 2014 were in Utilities, Health Care, and Technology, as each sector climbed more than 20 percent during the year. The Energy sector had the largest negative annual return as oil prices plunged. Volatility in the stock market picked up in the fourth quarter of 2014, after being muted during most of the year. Stocks of small capitalization companies underperformed stocks of large capitalization companies.

The story outside the U.S. was quite different. Japan slipped back into recession. However, buoyed by another aggressive round of monetary easing by the Bank of Japan, Japanese equities rose more than 10 percent, in Japanese Yen terms. European economic growth slowed to a trickle, and inflation slid to levels that had investors worried about a potentially damaging environment of falling prices. Meanwhile, China's economy, the second biggest in the world, also struggled. Overall, emerging market stocks as measured by the MSCI Emerging Markets IMI Index fell about 2 percent, in U.S. dollar terms.

In 2014, PERA's global equity portfolio returned 4.0 percent, outperforming the asset class benchmark's return of 3.8 percent. PERA's three-year annualized global equity portfolio total return was 14.8 percent, exceeding the benchmark return of 14.6 percent. The five-year annualized total return for PERA's global equity portfolio was 11.2 percent, surpassing the benchmark return of 10.9 percent.

## Fixed Income

2014 was a strong year for high quality fixed income assets. Consensus forecasts calling for higher interest rates proved incorrect as rates declined throughout the year. The backdrop of falling interest rates elevated returns in most fixed income asset classes.

During the first half of the year, the market was focused on signals about the timing of interest rate hikes by incoming Federal Reserve (Fed) Chair Janet Yellen. Growth concerns

## Fund Performance Evaluation

*Does Not Include the Two Defined Contribution Pension and Deferred Compensation Trust Funds  
(Performance returns are net-of-fees unless otherwise indicated)*

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in China, Europe, and the crisis in Ukraine supported declines in interest rates, but did not deter risky assets as credit products led returns. Responding to ongoing weak economic growth, low inflation, and structural challenges in Europe, the European Central Bank (ECB) pledged to do “whatever is necessary” to avoid deflation and eased monetary policy in June. In addition to lowering interest rates, the ECB joined the U.S., U.K., and Japan as the latest major central bank to engage in a large scale asset purchase program intended to spur growth.

However, by late summer, continued concern regarding potential Fed rate hikes, weak economic growth overseas, heightened geopolitical risk, declining commodity prices, and moderating inflation globally drove market volatility higher. The growing aversion to risk placed further downward pressure on global interest rates and forced credit spreads wider. Emerging markets and the energy sector led the broad-based weakness in credit spreads as the price of oil declined by 50 percent.

PERA’s fixed income portfolio returned 6.2 percent during 2014, exceeding the benchmark’s return of 5.8 percent. PERA’s three-year and five-year returns for the fixed income portfolio were 3.4 percent and 5.2 percent, respectively, outperforming the benchmark’s returns of 3.3 percent and 4.9 percent, respectively.

### Alternatives

2014 was an active year in the private equity market, particularly for exits and realizations of private equity-backed companies. A large amount of available capital, cheap and accessible debt, a robust mergers and acquisition environment, strong demand for initial public offerings (IPOs) and a resilient public equity market contributed to a reduction in portfolio company inventory as private equity sponsors took advantage of the market dynamics to gain liquidity and return capital back to investors.

Strong performance in the public equity markets and cheap financing kept valuations for new portfolio companies at high levels. Despite this, 2014 private equity investment volume was the highest it has been since 2007. A majority of the investment activity from private equity sponsors focused on creative buy-and-build strategies in which synergies could be realized.

Private equity-backed exit activity was strong, reaching an all-time high; a level which was 21 percent higher than the prior record set in 2007. Private equity IPO volume also set a record. The venture capital industry showed a resurgence as new company financings and valuations for younger companies increased during the year. In addition, venture-backed IPO activity was the highest it has been since 2000, ending the year with 125 companies going public. 2014 was also an active fundraising year for private equity, with \$323 billion raised during the year.

One of the few, yet significant, negatives in the private equity and venture markets during 2014 was the impact of falling oil prices. Valuations for private and public companies whose primary business is in the energy space decreased during the fourth quarter due to falling commodity prices.

Cash flow for the year was strong due to exit activity throughout the year. The portfolio invested approximately \$600 million in capital calls and received over \$900 million in distributions for the year.

PERA’s alternative investment portfolio returned 10.8 percent in 2014 compared with the custom alternatives benchmark return of 15.0 percent. PERA’s alternative portfolio returned 13.1 percent and 13.1 percent for the three- and five-year annualized periods, respectively, compared with the annualized custom benchmark returns of 22.9 percent and 18.4 percent, respectively for the same periods. Alternative investment performance tends to lag public stock market returns when the stock market has a large move. The alternative investment program’s net, since inception internal rate of return as of December 31, 2014, was 10.5 percent compared to the custom benchmark’s since inception internal rate of return of 10.5 percent.

### Real Estate

Trends in the macroeconomic environment continue to be broadly positive. However, the recovery has been uneven across geographic regions, with unconventional economic stimulus in many parts of the world.

U.S. commercial real estate transaction volume in 2014 was up 17.0 percent over 2013. Global capital flows into U.S. real estate rose 37.9 percent, a sign that domestic property investments are viewed as attractive. Many investors continue to lock in long-term, low fixed-rate financing. This increased demand and generally low supply nationwide have further strengthened real estate fundamentals. Top performing assets have recorded impressive gains in both occupancy and rent growth.

The industrial sector was the best performing asset class, driven by strong appreciation and net absorption significantly outpacing new supply. Multifamily rent growth re-accelerated with significant demand for highly amenitized product catering to the urban workforce. Multifamily vacancy rates remained at a ten-year low. The office sector reported the highest level of total net absorption since 2007. Strong leasing in the financial industries boosted occupancy levels in top central business districts. The retail sector annual rent growth rebounded as well. Improved consumer confidence and household net worth led to increased profits across retail segments.



In 2014, the real estate portfolio had a total return of 14.5 percent, compared to its custom benchmark of 12.0 percent. The real estate portfolio returned 13.0 percent and 14.1 percent for the three- and five-year annualized periods, respectively, compared to the custom benchmark returns of 11.9 percent and 13.6 percent, respectively. As of December 31, 2014, real estate was principally comprised of U.S. private equity investments.

### **Opportunity Fund**

As of December 31, 2014, PERA's opportunity fund was comprised of investments in timber, commodities, risk parity strategies, and tactical and credit opportunities strategies.

Global commodity markets suffered a broad-based decline in 2014. Energy was the worst performing sector of the year, down nearly 39 percent, as a global supply glut of crude oil occurred during a time of weakening demand growth in Europe and China. The weakening economies in China and the Eurozone also contributed to the continued slump in industrial metals prices throughout the year. In addition, precious metals declined, driven by a strengthening U.S. dollar and investor expectations that the Fed will raise interest rates in 2015. Meanwhile, near perfect weather conditions in the U.S. yielded an all-time record harvest of corn and soybeans, which depressed prices for agricultural commodities.

The U.S. domestic timber market showed strength in 2014, due to improved progress in the U.S. economy and housing markets. U.S. residential construction appeared poised for growth due to strong demand, improved employment metrics, and continued low interest rates. Chinese timber demand increased modestly in 2014, even though Chinese construction activity trended lower. Domestic construction activity in Australia and New Zealand for the year was strong, however timber exports from these markets slowed.

Risk parity strategies performed well during the year, as weaker global growth and inflation expectations resulted in easier global monetary policy, thereby causing most asset types to perform well.

PERA's opportunity fund portfolio returned 2.3 percent in 2014 compared to its custom benchmark return of 2.3 percent. The opportunity fund's annualized three- and five-year returns were 2.3 percent and 2.8 percent, respectively, compared to its custom benchmark return of 4.0 percent and 5.0 percent, respectively.



## Investment Section Schedules

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

### Profile of Investments in Colorado

As of December 31, 2014

	FAIR VALUE
Common stock of companies headquartered in Colorado	\$107,244
Private placements	13,450
Real estate equity	127,101
Portion of general partnerships investing in Colorado companies <sup>1</sup>	240,616
Portion of Colorado-based general partnerships or funds—committed to future funding	56,835
Bonds and notes of companies headquartered in Colorado	40,589
<b>Total</b>	<b>\$585,835</b>

<sup>1</sup> Alternative investment partnership investments domiciled in Colorado.

### Largest Stock Holdings by Fair Value<sup>1</sup>

As of December 31, 2014

	SHARES	FAIR VALUE
Apple Inc.	3,555,710	\$392,479
Microsoft Corp.	4,587,431	213,086
Exxon Mobil Corp.	1,948,101	180,102
Novartis AG	1,792,802	166,623
Nestle SA	2,034,019	149,330
Chevron Corp.	1,330,630	149,270
Wells Fargo & Co. New	2,660,115	145,828
Walt Disney Co.	1,539,180	144,975
JP Morgan Chase & Co.	2,010,700	125,830
Oracle Corp.	2,750,614	123,695

<sup>1</sup> The top ten holdings do not include commingled funds.

Note: A complete list of holdings is available upon request.

### Largest Bond Holdings by Fair Value<sup>1</sup>

As of December 31, 2014

	PAR VALUE	INCOME RATE	MATURITY DATE	FAIR VALUE
US Treasury Notes	\$200,000	2.750%	11/30/2016	\$207,922
US Treasury Notes	167,000	2.625%	1/31/2018	174,398
US Treasury Notes	163,000	2.750%	2/15/2024	171,519
US Treasury Notes	145,000	1.625%	7/31/2019	145,226
US Treasury Notes	145,000	0.625%	4/30/2018	142,055
US Treasury Notes	125,000	1.500%	2/28/2019	125,088
US Treasury Notes	115,000	2.250%	7/31/2018	118,693
FNMA Pool #AS2751	88,373	4.500%	6/1/2044	96,094
US Treasury Notes	95,000	0.750%	6/30/2017	94,644
US Treasury Bonds	90,000	3.000%	5/15/2042	94,598

<sup>1</sup> The top ten holdings do not include commingled funds.

Note: A complete list of holdings is available upon request.

# Voluntary Investment Program, Defined Contribution Retirement Plan, and Deferred Compensation Plan (Plans) Report on Investment Activity

(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 (IRC). The Defined Contribution Retirement Plan (DC Plan) was established January 1, 2006, as an IRC § 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, now known as the 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, 2014, the PERAPlus 401(k) Plan had a fiduciary net position (FNP) of \$2,682,000 and 68,270 accounts, representing an increase of 6.9 percent in the FNP and a 0.6 percent decrease in the number of accounts from December 31, 2013, 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, 2014, the DC Plan had a FNP of \$131,466 and 5,046 accounts, representing increases of 15.8 percent in the FNP and 6.9 percent in the number of accounts from December 31, 2013, 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 State of Colorado Deferred Compensation Plan prior to July 1, 2009, and were not affiliated with PERA, remain eligible to contribute. On December 31, 2014, the PERAPlus 457 Plan had a FNP of \$689,451 and 17,738 accounts, representing increases of 7.1 percent in the FNP and 1.6 percent in the number of accounts from December 31, 2013, respectively.

### PERAPLUS 401(K) PLAN YEAR-END STATISTICS

YEAR	FIDUCIARY NET POSITION	NUMBER OF ACCOUNTS
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
2014	2,682,000	68,270

### DC PLAN YEAR-END STATISTICS

YEAR	FIDUCIARY 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
2014	131,466	5,046

### PERAPLUS 457 PLAN YEAR-END STATISTICS

YEAR	FIDUCIARY 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
2014	689,451	17,738

## 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, Inc. 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.

# Voluntary Investment Program, Defined Contribution Retirement Plan, and Deferred Compensation Plan (Plans) Report on Investment Activity

- 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 nine 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 objective is to combine actively managed core plus and passive core styles. As of December 31, 2014, the fund is managed by BlackRock (see 2014 Changes on the next page).
- **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 nine 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 Socially Responsible Investment (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).

# Voluntary Investment Program, Defined Contribution Retirement Plan, and Deferred Compensation Plan (Plans) Report on Investment Activity

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- **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.

## 2014 Changes

Effective January 2, 2014, the PERAdvantage Fixed Income Fund was rebalanced to an equal division of assets between the underlying portfolio managers, PIMCO (previously targeted at 75 percent) and BlackRock (previously targeted at 25 percent). As of September 26, 2014, 100 percent of the PIMCO assets were reallocated to BlackRock. All PERAdvantage Fixed Income Fund changes were at the recommendation of the IAC and approved by the Executive Director and Chief Investment Officer.

Effective November 14, 2014, BlackRock discontinued the LifePath® 2015 Index Target Retirement Date Fund and transferred the assets to the LifePath® Retirement Income Target Retirement Date Fund.

## 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.

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

# Voluntary Investment Program, Defined Contribution Retirement Plan, and Deferred Compensation Plan (Plans) Schedule of Investment Results

FUND/BENCHMARK	2014	3-YEAR
PERAdvantage Capital Preservation Fund	1.8%	1.9%
Hueler Stable Value Index (Equal Wtd Avg)	1.7%	1.9%
PERAdvantage Fixed Income Fund	5.5%	3.9%
Barclays US Agg Bond Index	6.0%	2.7%
PERAdvantage Real Return Fund	0.3%	0.4%
70% SSgA Real Asset Strategy <sup>1</sup> /30% Barclays US TIPS Index	0.5%	0.7%
PERAdvantage U.S. Large Cap Stock Fund	12.6%	20.5%
Russell 1000™ Index	13.2%	20.6%
PERAdvantage International Stock Fund	(1.9%)	11.7%
MSCI ACWI Ex-US	(3.9%)	9.0%
PERAdvantage U.S. Small and Mid Cap Stock Fund	4.1%	20.5%
Russell 2500™ Index	7.1%	20.0%
PERAdvantage SRI Fund	5.0%	10.2%
SRI Fund Custom Index <sup>2</sup>	5.0%	10.3%
PERAdvantage Income Fund	5.0%	6.6%
BlackRock LifePath® Retirement Index	5.2%	6.8%
PERAdvantage 2020 Fund	5.3%	8.7%
BlackRock LifePath® 2020 Index	5.5%	8.9%
PERAdvantage 2025 Fund	5.5%	9.8%
BlackRock LifePath® 2025 Index	5.8%	10.1%
PERAdvantage 2030 Fund	5.7%	10.9%
BlackRock LifePath® 2030 Index	6.0%	11.1%
PERAdvantage 2035 Fund	5.9%	11.8%
BlackRock LifePath® 2035 Index	6.2%	12.0%
PERAdvantage 2040 Fund	6.0%	12.6%
BlackRock LifePath® 2040 Index	6.3%	12.8%
PERAdvantage 2045 Fund	6.1%	13.3%
BlackRock LifePath® 2045 Index	6.5%	13.6%
PERAdvantage 2050 Fund	6.3%	14.1%
BlackRock LifePath® 2050 Index	6.6%	14.3%
PERAdvantage 2055 Fund	6.3%	14.7%
BlackRock LifePath® 2055 Index	6.7%	15.0%

Note: Performance is net of management and administrative fees. Performance is calculated using Net Asset Values (NAV). All performance is calculated by RVK, Inc. The PERAdvantage Funds commenced on October 1, 2011, therefore; actual annual historic performance for the funds does not exist prior to 2012.

<sup>1</sup> The SSgA Real Asset Strategy Index consists of 30 percent Barclays Capital U.S. Treasury Inflation Protected Securities Index, 15 percent Dow Jones U.S. Select REIT Index, 25 percent DJ-UBS Roll Select Commodity Total Return Index, 30 percent S&P Global LargeMidCap Commodity and Resources Index. Prior to July 1, 2014, the Index consisted 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 Total Return 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.

<sup>2</sup> 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.

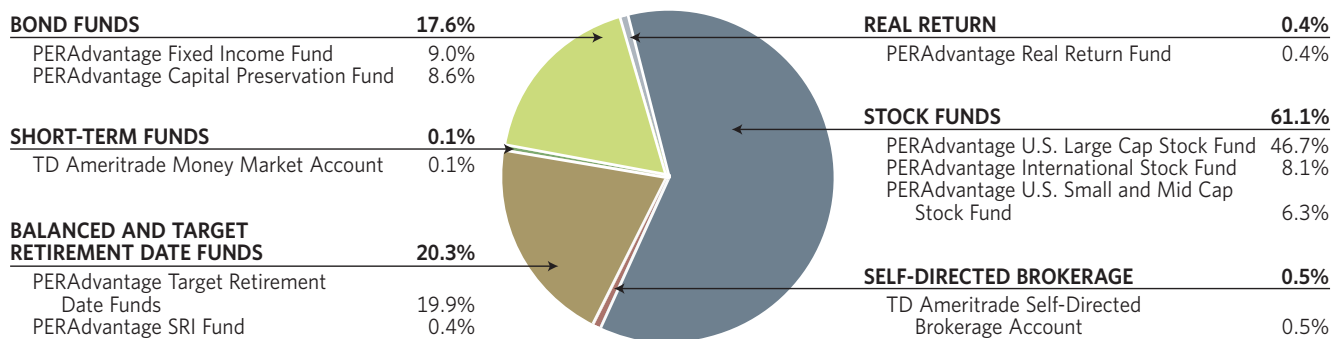
# Voluntary Investment Program Investment Summary

(In Thousands of Dollars)

	FAIR VALUE DECEMBER 31, 2014	PERCENT OF TOTAL FAIR VALUE 2014
PERAdvantage Capital Preservation Fund	\$223,152	8.6%
PERAdvantage Fixed Income Fund	234,530	9.0%
PERAdvantage Real Return Fund	11,465	0.4%
PERAdvantage U.S. Large Cap Stock Fund	1,220,448	46.7%
PERAdvantage International Stock Fund	209,872	8.1%
PERAdvantage U.S. Small and Mid Cap Stock Fund	163,520	6.3%
PERAdvantage SRI Fund	10,754	0.4%
PERAdvantage Income Fund	129,724	5.0%
PERAdvantage 2020 Fund	98,368	3.8%
PERAdvantage 2025 Fund	88,197	3.4%
PERAdvantage 2030 Fund	66,293	2.5%
PERAdvantage 2035 Fund	57,778	2.2%
PERAdvantage 2040 Fund	35,115	1.3%
PERAdvantage 2045 Fund	20,299	0.8%
PERAdvantage 2050 Fund	11,950	0.5%
PERAdvantage 2055 Fund	9,755	0.4%
TD Ameritrade Money Market Account	2,964	0.1%
TD Ameritrade Self-Directed Brokerage Account	12,915	0.5%

## Asset Allocation for Voluntary Investment Program (PERAPlus 401(k) Plan)

As of December 31, 2014





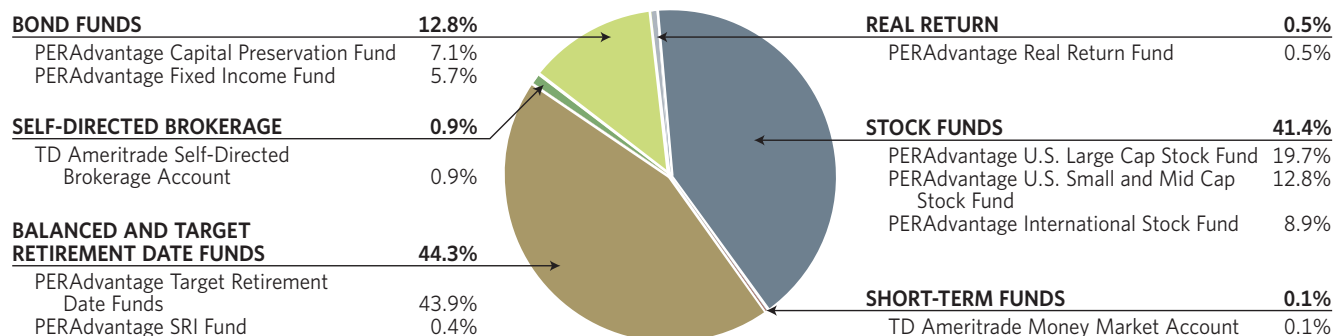
# Defined Contribution Retirement Plan Investment Summary

(In Thousands of Dollars)

	FAIR VALUE DECEMBER 31, 2014	PERCENT OF TOTAL FAIR VALUE 2014
PERAdvantage Capital Preservation Fund	\$9,133	7.1%
PERAdvantage Fixed Income Fund	7,258	5.7%
PERAdvantage Real Return Fund	636	0.5%
PERAdvantage U.S. Large Cap Stock Fund	25,303	19.7%
PERAdvantage International Stock Fund	11,440	8.9%
PERAdvantage U.S. Small and Mid Cap Stock Fund	16,462	12.8%
PERAdvantage SRI Fund	536	0.4%
PERAdvantage Income Fund	5,875	4.6%
PERAdvantage 2020 Fund	4,165	3.2%
PERAdvantage 2025 Fund	4,500	3.5%
PERAdvantage 2030 Fund	6,089	4.7%
PERAdvantage 2035 Fund	6,366	5.0%
PERAdvantage 2040 Fund	7,766	6.1%
PERAdvantage 2045 Fund	10,983	8.6%
PERAdvantage 2050 Fund	8,342	6.5%
PERAdvantage 2055 Fund	2,216	1.7%
TD Ameritrade Money Market Account	128	0.1%
TD Ameritrade Self-Directed Brokerage Account	1,140	0.9%

## Asset Allocation for Defined Contribution Retirement Plan (DC Plan)

As of December 31, 2014



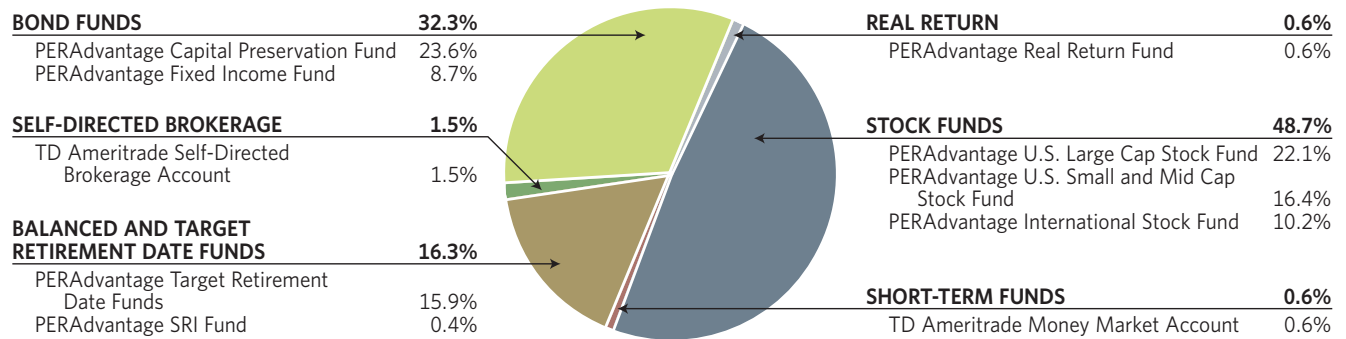
# Deferred Compensation Plan Investment Summary

(In Thousands of Dollars)

	FAIR VALUE DECEMBER 31, 2014	PERCENT OF TOTAL FAIR VALUE 2014
PERAdvantage Capital Preservation Fund	\$159,234	23.6%
PERAdvantage Fixed Income Fund	58,694	8.7%
PERAdvantage Real Return Fund	4,023	0.6%
PERAdvantage U.S. Large Cap Stock Fund	148,615	22.1%
PERAdvantage International Stock Fund	68,345	10.2%
PERAdvantage U.S. Small and Mid Cap Stock Fund	110,178	16.4%
PERAdvantage SRI Fund	2,830	0.4%
PERAdvantage Income Fund	25,971	3.9%
PERAdvantage 2020 Fund	19,252	2.9%
PERAdvantage 2025 Fund	20,013	3.0%
PERAdvantage 2030 Fund	13,543	2.0%
PERAdvantage 2035 Fund	12,357	1.8%
PERAdvantage 2040 Fund	7,278	1.1%
PERAdvantage 2045 Fund	3,532	0.5%
PERAdvantage 2050 Fund	2,044	0.3%
PERAdvantage 2055 Fund	2,680	0.4%
TD Ameritrade Money Market Account	4,150	0.6%
TD Ameritrade Self-Directed Brokerage Account	10,316	1.5%

## Asset Allocation for Deferred Compensation Plan (PERAPlus 457 Plan)

As of December 31, 2014





Providing a  
Foundation for  
**EXPANSION**



*Not only does Colorado PERA expand the services we offer to our membership, but dollars paid in retirement distributions expand and have a multiplying effect on the Colorado economy.*

---

**ACTUARIAL SECTION**





## Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

June 9, 2015

Board of Trustees  
Public Employees' Retirement Association of Colorado  
1301 Pennsylvania Street  
Denver, CO 80203-2386

**RE: ACTUARIAL CERTIFICATION OF DEFINED BENEFIT PLANS AND HEALTH CARE TRUST FUNDS**

Dear Members of the Board:

Per the "Colorado PERA Defined Benefit Pension Plan Funding Policy", adopted by the Board on March 20, 2015, the main funding objectives of Colorado Public Employees' Retirement Association are:

- Preservation of the defined benefit plan structure,
- Demonstration of transparency and accountability,
- Achievement of a funded ratio greater than or equal to 110%,
- Balance of contribution rate stability and intergenerational equity,
- Reduction of Unfunded Actuarial Accrued Liabilities, and
- Recognition of beneficial elements of pooled risk.

With these goals in mind, an annual actuarial valuation is as performed as a measure of the progress towards these goals. The most recent valuations are based on the plan provisions and assumptions in effect on December 31, 2014. In completing the valuation of these pension divisions and Health Care Trust Funds (HCTF), 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.

This valuation reflects several changes from the prior valuation including:

- The "Colorado PERA Defined Benefit Pension Plan Funding Policy", which was adopted by the Board of Trustees on March 20, 2015.
- The Local Government Division and the PERA Health Care Trust Fund (PERA HCTF) results reflect the total payment of \$190.0 million from the City of Colorado Springs for Colorado Springs Memorial Health System's disaffiliation from PERA. Approximately \$186.0 million was allocated to the Local Government Division and approximately \$4.0 million was allocated to the PERA HCTF.
- As required under Section 24-51-401(1.7)(e) of Colorado Revised Status, PERA calculated and provided to the Colorado General Assembly an adjustment to the DPS Division's employer contribution rate to assure the equalization of the School Division's and the DPS Division's ratios of unfunded actuarial accrued liability (UAAL) to payroll, as of December 31, 2039. Subsequently, the Colorado General Assembly passed HB 15-1391, reducing the employer contribution rate of the DPS Division from 13.75% to 10.15%, effective January 1, 2015.

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Board of Trustees  
Public Employees' Retirement Association of Colorado  
June 9, 2015  
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- Several changes in the valuation methods and programming were implemented as the result of an actuarial audit report issued in January, 2015.

In addition, the following change has been made to certain health care methods and assumptions since the previous valuation:

- 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 2015 plan year.

In our opinion, the assumptions are individually reasonable, taking into account the experience of the System and reasonable expectations, internally consistent, and, in combination, offer our best estimate of anticipated experience affecting the System. We also believe the assumptions and actuarial methods meet the requirements of Governmental Accounting Standards Board (GASB) Statements No. 43.

Future actuarial results may differ significantly from the current results presented herein due to factors such as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in actuarial assumptions; increase or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost of contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal actuarial valuation, an analysis of the range of potential results is not presented herein.

CMC provided the following schedules for the December 31, 2014, CAFR:

#### **FINANCIAL SECTION**

- Yearly ARC Deficiency – Health Care Trust Funds Only
- Yearly ADC and 10-Year Cumulative Deficiency – Division Trust Fund Only
- Average Monthly Benefit – Division Trust Funds Only
- Actuarial Statistics – Health Care Trust Funds Only
- Required Discount Rate Sensitivity Information for the **Division Trust Funds** providing the ratio of the Fiduciary Net Position to Total Pension Liability and the Net Pension Liability at a discount rate that is one percentage point lower and one percentage point higher than the discount rate at Measurement Date.
- Discount Rate Sensitivity Information for the **Health Care Trust Funds** providing the Funded Ratio, Unfunded Actuarial Accrued Liability and Annual Required Contributions using 6.5%, 7.5%, and 8.5% investment assumptions
- Summary of the Ratios FNP to TPL – Division Trust Funds Only
- Funded Ratios – Health Care Trust Fund Only
- Required Supplementary Information – Schedule of Changes in Net Pension Liability – Division Trust Funds
- Required Supplementary Information – Schedule of the Net Pension Liability – Division Trust Funds
- Required Supplementary Information – Schedule of Employer Contributions – Division Trust Funds
- Notes to Required Supplementary Information – For All Trust Funds
- Required Supplementary Information – Schedule of Funding Progress – Health Care Trust Funds
- Required Supplementary Information – Schedule of Employer Contributions and Other Contributing Entities – Health Care Trust Funds



Board of Trustees  
 Public Employees' Retirement Association of Colorado  
 June 9, 2015  
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#### **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
- Schedule of Funding Progress
- Schedule of Gains and Losses in Accrued Liabilities
- Defined Benefit Pension Trust Funds Changes in Unfunded Actuarial Accrued Liabilities – Division Trust Funds Only
- Schedule of Computed Employer Contribution Rates for the 2016 Fiscal Year
- Actuarial Statistics – Division Trust Funds Only
- Funded Ratios – Division Trust Funds Only
- Funded Ratio, Unfunded Actuarial Accrued Liability and Actuarially Determined Contributions for all Division Trust funds and Health Care Trust Funds using 6.0%, 7.0%, 7.5%, 8.0% and 9.0% investment return assumptions
- Schedule of Active Member Actuarial Valuation Data

#### **STATISTICAL SECTION**

- Member and Benefit Recipient Statistics
- Schedule of Average Retirement Benefits Payable
- Colorado PERA Benefit Payments - All Division Trust Funds
  - Benefit Payments by Benefit Range
- 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 62% based on the Actuarial Value of Assets and 64% 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, combined with anticipated future employee growth and service purchase transfers, is sufficient to eventually finance the PERA HCTF's and DPS HCTF's benefits in accordance with GASB 43 and 45.

The results of the valuation indicate that the combined employer and member contribution rates are sufficient to fund the normal cost for all members and provide additional contributions to help finance both the PERA HCTF and the DPS Health Care Trust Fund (DPS HCTF), each division's unfunded actuarial accrued liability and the Annual Increase Reserve (AIR) Fund.

It should be noted that the results of the December 31, 2014 funding valuation, combined with financial projections of all divisions reflecting anticipated growth in active membership, indicate that the goal of funding 100% of the actuarial accrued liability under the PERA revised benefit structure created by SB 10-001, is achievable, within a projection period of 37 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 general trends in financial measurements,



Board of Trustees  
Public Employees' Retirement Association of Colorado  
June 9, 2015  
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not absolute results. Based on the expected actuarial experience, the long term funding trends for all divisions are positive.

Actuarial computations presented in the December 31, 2014 actuarial valuation report are for purposes of determining the actuarially determined contribution rates and evaluating the funding of the plans. Determinations for purposes other than meeting these requirements may be significantly different from the results shown in the December 31, 2014 actuarial valuation.

We also prepared actuarial computations as of December 31, 2014 for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standards Board (GASB) Statement No. 67. The actuarial assumptions used in the funding report were also used for GASB 67 reporting, with the exception of the discount rate used to determine the Total Pension Liability for the Judicial Division. In addition, the entry age normal actuarial cost method, which is required to be used under GASB 67, is also used in the funding valuation report. The actuarial assumptions used in both the funding and the GASB 67 accounting reports meet the parameters set by Actuarial Standards of Practice (ASOPs), as issued by the Actuarial Standards Board, and generally accepted accounting principles (GAAP) applicable in the United States of America as promulgated by the Governmental Accounting Standards Board.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this information is complete and accurate and that the 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,

A handwritten signature in blue ink that reads 'Patrice Beckham'.

Patrice A. Beckham, FSA, FCA, EA, MAAA  
Principal and Consulting Actuary

A handwritten signature in blue ink that reads 'Eric H. Gary'.

Eric H. Gary, FSA, FCA, MAAA  
Chief Health Actuary

A handwritten signature in blue ink that reads 'Edward J. Koebel'.

Edward J. Koebel, FCA, EA, MAAA  
Principal and Consulting Actuary

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## Introduction

Implementation of Governmental Accounting Standards Board (GASB) Statement No. 67 required the need to prepare two actuarial valuations—one for funding purposes and one for accounting and financial reporting purposes. This Division Trust Funds subsection of the Actuarial Section, unless otherwise noted, will report the results of the actuarial valuation performed for funding purposes, but also includes an area which notes specific differences between the two actuarial valuations.

The PERA Board of Trustees (Board) is responsible for maintaining a pension funding policy applicable to PERA's five Division Trust Funds. The pension funding policy was last revised and adopted by the Board on March 20, 2015, effective for the December 31, 2014, funding actuarial valuation. The revised funding policy adopts an actuarially determined contribution (ADC) for each of the five Division Trust Funds. The ADC assesses the adequacy of the statutory contribution rate of each Division Trust Fund. The ADC will be determined in accordance with pension plan provisions, as described in Note 1 of the Notes to the Financial Statements found in the Financial Section of this *CAFR*.

## Actuarial Methods and Assumptions

### Actuarial Methods

The Board is responsible for the actuarial methods and assumptions used in the actuarial valuations in accordance with Colorado Revised Statutes (C.R.S.) § 24-51-204(5). The Board retains an external actuary, currently Cavanaugh Macdonald Consulting, LLC, to perform annual actuarial valuations and sustainability projections as well as periodic experience studies to review the actuarial assumptions and actual experience of the plan. Through formal action, the Board updates, replaces, or adopts new methods and assumptions as is deemed necessary. In addition to annual actuarial 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 Milliman during 2014.

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.

### Entry Age Normal Cost Method

For PERA (as well as most public sector plans), one important funding policy 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 (EAN) Cost Method. It is for this reason that the EAN method was selected by the Board to be used in the actuarial valuation. Under the EAN 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 (AAL) for active members is the portion of the total cost of the plan allocated to prior years. The total AAL for the plan includes the AAL for active members, the present value of the expected benefit payments to members currently receiving benefits, and inactive members entitled to future benefits. The excess of the total AAL over the actuarial value of plan assets is the unfunded actuarial accrued liability (UAAL).

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 UAAL.

### Amortization Method

Under the funding policy, an ADC is determined by adding the normal cost and the cost to amortize, over defined, closed periods, any existing UAAL or new UAAL, including the impact of any experience actuarial gains and losses, actuarial assumption changes, and changes in plan provisions. Implementing a layered amortization approach requires each amortized item to be tracked over the closed period defined for that category.

The existing UAAL as of December 31, 2014, as well as all gains, losses and changes in actuarial methods and assumptions will be recognized over a closed 30-year period as of each occurrence. The impact of any changes in plan provisions will be recognized over a closed period relating to the demographics of the group affected and/or the duration of the enhancement provided, not to exceed 25 years. If any future actuarial valuation indicates a division has a negative UAAL, the ADC shall be set equal to the normal cost until such time as the funded ratio equals or exceeds 120 percent. At that time, the ADC shall be equal to the normal cost less an amount equal to 15 year amortization of the portion of the negative UAAL above the 120 percent funded ratio.

Once determined, the ADC is then expressed as a level percentage of assumed future covered payroll and compared, as a benchmark, against the current statutory employer contribution rate under each division.

### *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 (AIR).

### **Actuarial Assumptions**

The determination of the AAL includes recognition of a number of economic and non-economic assumptions in addition to the applied actuarial methods described above. Unless otherwise noted, it can be assumed that the economic and demographic actuarial assumptions applied to the actuarial valuation for funding purposes, also were applied to the actuarial valuation for accounting and financial reporting purposes.

### *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, effective December 31, 2013. This rate also is used to discount the actuarial accrued liabilities associated with each of the five Division trust Funds.

In November 2013, the Board 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. The Board received presentations given by the retained actuary, Cavanaugh Macdonald Consulting, LLC, and the investment consultant, Aon Hewitt Investment Consulting, Inc. 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 2014. 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 2014, the Board voted to continue the annual interest rate at 3.00 percent for interest earned during 2015.

### *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 withdrawal assumption, last revised in 2009, for all non-Judicial Division members in the PERA benefit structure, 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 members. 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 members of 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 with a membership date 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 (SB) 10-001.

For members in the PERA benefit structure hired on or after January 1, 2007, an AIR was established for each Division Trust Fund to provide annual increases, to the extent affordable, once benefits become payable for these members. From the employer statutory contributions submitted for these members, an amount equal to one percent of pensionable payroll 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 Consumer Price Index for Urban Wage Earners and Clerical Workers (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 funding 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 few years to evaluate the appropriateness of PERA's investment return assumption in concert with other pertinent economic assumptions.

In 2012, the Board requested an 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 November actuarial assumption workshop, and the Board adopted certain demographic assumptions, at the November 2012 Board meeting. In the following year, as a result of the November 2013 actuarial assumption workshop, effective December 31, 2013, the Board adjusted the economic assumptions as previously described.

At the March 21, 2014, Board meeting, the Board approved an asset/liability modeling study to be conducted by Aon Hewitt Investment Consulting, Inc. Based on the study, the Board adopted a new Asset Allocation policy on March 20, 2015, as described in Note 12 in the Financial Section of this CAFR. The Board periodically contracts an actuarial firm, independent of the retained actuary, to conduct an actuarial audit; the most recent performed by Milliman during 2014. The primary focus of the audit is to ensure independence, accuracy, and conformity with the accepted ASOPs with regard to results of the annual actuarial valuation and the appropriateness of the actuarial assumptions used to calculate those results. Milliman findings were favorable toward Cavanaugh Macdonald's work product concluding, overall, the calculations were reasonable. During the replication of the December 31, 2013, actuarial valuation, Milliman was able to come within a one percent margin of Cavanaugh Macdonald's calculated actuarial accrued liabilities and closely matched each division's normal cost rates applying the same methods as used by Cavanaugh Macdonald. Milliman determined that the data used by Cavanaugh Macdonald were reasonable, were able to closely match benefit and valuation asset amounts, and determined that the actuarial methods and assumptions applied were in conformity with the ASOPs. Milliman found no grounds by which to suggest a revision of the previous year's actuarial valuation, but recommended a few changes in methodologies to be considered for future actuarial valuations as listed below and on the next page.

- Apply mid-year timing of contributions used in normal cost rate calculation.
- Make a technical change in the amortization calculation.



# Division Trust Funds—Pension

(In Thousands of Dollars)

- Make slight adjustments to certain liability calculations.
- Include merit increases in first year compensation amounts.
- Add further disclosure of assumptions and methods in the actuarial valuation report.

Milliman found no grounds by which to suggest a revision of the most recent experience study, but recommended a few changes in methodologies to be considered for future experience studies.

- Increase margin for mortality assumption.
- Modify assumed timing of annual increase for active members.

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 Actuarial Valuation

### *Changes in Actuarial Methods*

There are no actuarial method changes reflected in the December 31, 2014, actuarial valuation since the last actuarial valuation as of December 31, 2013.

### *Changes in Actuarial Assumptions*

There are no actuarial assumption changes reflected in the December 31, 2014, actuarial valuation since the last actuarial valuation as of December 31, 2013.

### *Changes in Plan Provisions*

There are no changes in plan provisions reflected in the December 31, 2014, actuarial valuation since the last actuarial valuation as of December 31, 2013.

### *Significant Events*

- In September 2014, PERA and the City of Colorado Springs (the City) agreed to resolve the lawsuit regarding the termination of Memorial Health System's (Memorial) affiliation with PERA, effective October 1, 2012, which had a significant effect on the Local Government Division Trust Fund. The termination of Memorial arose from the 30-year lease of Memorial to the University of Colorado Health (UCH) and its related entities. The agreement provided for the City to pay PERA \$190,000 for the liabilities associated with the retirement and health care benefits already earned by 7,666 Memorial employees for the work that they performed before Memorial ceased to be a PERA employer. This employer disaffiliation payment of \$190,000 was allocated to the Local Government Division and HCTF in the amounts of \$186,006 and \$3,994, respectively.

## Differences in Actuarial Valuation Methods and Assumptions

- The actuarial valuation for funding purposes was performed as of December 31, 2014. The actuarial valuation for accounting and financial reporting purposes was performed as of December 31, 2013, and the total pension liability was rolled forward to the measurement date as of December 31, 2014.
- Census data used for the actuarial valuation for funding purposes reflects membership data as of December 31, 2014, and the census data used for the actuarial valuation for accounting and financial reporting purposes reflects membership data as of December 31, 2013. Therefore, all summaries and schedules, regarding actuarial valuation results for funding purposes, shown in the actuarial section of this *CAFR*, reflect census data as of December 31, 2014.
- The actuarial valuation for funding purposes for the Judicial Division used a discount rate of 7.50 percent as of December 31, 2013, and December 31, 2014. The actuarial valuation for accounting and financial reporting purposes for the Judicial Division used a discount rate of 6.66 percent and 6.14 percent as of December 31, 2013, and December 31, 2014, respectively.
- The actuarial valuation for funding purposes applies an asset valuation method that recognizes a four-year smoothed market value of assets for purposes of determining the UAAL. The actuarial valuation for accounting and financial reporting purposes applies the fair value of assets to determine the net pension liability.
- The actuarial valuation for funding purposes does not apply an annual increase assumption for members of the PERA benefit structure hired on or after January 1, 2007, in the determination of the AAL. Therefore, the ADC established by the funding valuation does not consider future increases for this member group and the assets attributable to the AIR are not included in the actuarial value of assets. A separate annual actuarial valuation is performed on the AIR to determine the applicable annual increase payable to eligible members after benefit commencement. Since the AIR plan provisions are deemed substantively automatic, ad hoc cost-of-living adjustments and liabilities associated with the AIR statutorily can never exceed available assets, the actuarial valuation for accounting and financial reporting purposes includes the balance of the AIR both in the plan assets, at fair value, and in the total pension liability of the applicable division.

Actuarial Assumptions: Exhibits A–I

Exhibit A: Separations from Employment Before Retirement and Individual Pay Increase Assumptions—  
State Division

SAMPLE AGES	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL <sup>1</sup>		DEATH <sup>2</sup>		DISABILITY		MERIT AND SENIORITY	INFLATION AND PRODUCTIVITY	TOTAL INCREASE (NEXT YEAR)
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE			
<b>State Members</b> (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%
<b>State Troopers</b>									
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%

<sup>1</sup> There are no select withdrawal assumptions for State Troopers.

<sup>2</sup> 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<sup>1</sup>

SAMPLE AGES	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL		DEATH <sup>2</sup>		DISABILITY		MERIT AND SENIORITY	INFLATION AND PRODUCTIVITY	TOTAL INCREASE (NEXT YEAR)
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE			
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%

<sup>1</sup> Rates shown are for PERA benefit structure members in the School or DPS Divisions.

<sup>2</sup> Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.

## Division Trust Funds—Pension

### Exhibit C: Separations from Employment Before Retirement and Individual Pay Increase Assumptions— Local Government Division

SAMPLE AGES	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL		DEATH <sup>1</sup>		DISABILITY		MERIT AND SENIORITY	INFLATION AND PRODUCTIVITY	TOTAL INCREASE (NEXT YEAR)
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE			
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%

<sup>1</sup> 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

SAMPLE AGES	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL <sup>1</sup>		DEATH <sup>2</sup>		DISABILITY		MERIT AND SENIORITY <sup>3</sup>	INFLATION AND PRODUCTIVITY	TOTAL INCREASE (NEXT YEAR)
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE			
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%

<sup>1</sup> There are no select withdrawal assumptions for the Judicial Division.

<sup>2</sup> Rates are shown for healthy members. Separate disability mortality tables are used for disabled retirees.

<sup>3</sup> 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)<sup>1</sup>

SAMPLE AGES	PERCENT OF MEMBERS SEPARATING WITHIN THE NEXT YEAR						PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER		
	ULTIMATE WITHDRAWAL		DEATH <sup>2</sup>		DISABILITY		MERIT AND SENIORITY	INFLATION AND PRODUCTIVITY	TOTAL INCREASE (NEXT YEAR)
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE			
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%

<sup>1</sup> Rates shown are for DPS benefit structure members in any division.

<sup>2</sup> 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<sup>1</sup>**

COMPLETED YEARS OF SERVICE	STATE DIVISION		SCHOOL & DPS DIVISIONS <sup>2</sup>		LOCAL GOVERNMENT DIVISION		DPS BENEFIT STRUCTURE <sup>3</sup>	
	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%

<sup>1</sup> There are no select withdrawal assumptions for State Troopers or Judicial Division members.

<sup>2</sup> Rates shown are for PERA benefit structure members in the School or DPS Divisions.

<sup>3</sup> 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 AGES	STATE DIVISION		STATE TROOPERS	SCHOOL & DPS DIVISIONS <sup>1</sup>		LOCAL GOVERNMENT DIVISION		JUDICIAL DIVISION	DPS BENEFIT STRUCTURE <sup>2</sup>	
	MALE	FEMALE		MALE	FEMALE	MALE	FEMALE		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%

<sup>1</sup> Rates shown are for PERA benefit structure members in the School or DPS Divisions.

<sup>2</sup> Rates shown are for DPS benefit structure members in any division.

# Division Trust Funds—Pension

## Exhibit H: Percent of Members Eligible for Unreduced Retirement Benefits Retiring Next Year

RETIREMENT AGES	STATE DIVISION		STATE TROOPERS	SCHOOL & DPS DIVISIONS <sup>1</sup>		LOCAL GOVERNMENT DIVISION		JUDICIAL DIVISION	DPS BENEFIT STRUCTURE <sup>2</sup>	
	MALE	FEMALE		MALE	FEMALE	MALE	FEMALE		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%

<sup>1</sup> Rates shown are for PERA benefit structure members in the School or DPS Divisions.

<sup>2</sup> Rates shown are for DPS benefit structure members in any division.

## Exhibit I: Rates of Post-Retirement Mortality and Single Life Retirement Values

(In Actual Dollars)

SAMPLE ATTAINED AGES	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	
	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

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 shows (by Division Trust Fund and in total) the degree to which existing liabilities are funded, including prior history.
- A schedule of funding progress shows the UAAL (by Division Trust Fund and in total) as a percentage of annual valuation payroll, including prior history.
- Schedules detailing actuarial gains and losses, by source, (by Division Trust Fund) including prior history and a reconciliation of UAAL considering the total of all five Division Trust Funds, over the past five years.
- 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, 2014, 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.



# Division Trust Funds—Pension

## SOLVENCY TEST

(In Actual Dollars)

VALUATION DATE	AGGREGATE ACCRUED LIABILITIES			VALUATION ASSETS	PORTION OF ACTUARIAL ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
	ACTIVE MEMBER CONTRIBUTIONS (A) <sup>1</sup>	RETIREEES, BENEFICIARIES, AND INACTIVE MEMBERS (B)	EMPLOYER-FINANCED PORTION OF ACTIVE MEMBERS (C)		LIABILITY (A)	LIABILITY (B)	LIABILITY (C)
<b>State Division</b>							
12/31/2006	\$2,509,680,634	\$11,230,859,584	\$4,505,470,291	\$13,327,290,139	100.0%	96.3%	0.0%
12/31/2007	2,527,090,836	12,118,948,258	4,744,256,709	14,220,680,819	100.0%	96.5%	0.0%
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%
12/31/2014	2,688,513,975	15,846,199,642	4,873,607,536	13,523,487,577	100.0%	68.4%	0.0%
<b>School Division</b>							
12/31/2006	\$3,536,250,621	\$16,803,609,348	\$7,368,821,217	\$20,535,732,606	100.0%	100.0%	2.7%
12/31/2007	3,596,453,446	18,039,390,005	7,605,584,217	22,070,769,075	100.0%	100.0%	5.7%
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%
12/31/2014	3,915,705,391	24,247,868,140	8,222,958,642	22,143,356,419	100.0%	75.2%	0.0%
<b>Local Government Division</b>							
12/31/2006	\$645,209,427	\$1,509,232,476	\$1,133,979,565	\$2,613,386,001	100.0%	100.0%	40.5%
12/31/2007	661,271,632	1,707,349,175	1,194,578,196	2,892,846,938	100.0%	100.0%	43.9%
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%
12/31/2014	534,694,536	3,114,435,619	961,837,364	3,629,400,231	100.0%	99.4%	0.0%
<b>Judicial Division</b>							
12/31/2006	\$51,296,536	\$130,980,513	\$65,213,659	\$210,632,896	100.0%	100.0%	43.5%
12/31/2007	49,444,895	152,072,819	62,692,783	231,228,304	100.0%	100.0%	47.4%
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%
12/31/2014	60,973,005	214,541,387	95,738,848	270,866,145	100.0%	97.8%	0.0%
<b>DPS Division<sup>2</sup></b>							
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%
12/31/2014	379,240,340	2,665,352,277	771,500,118	3,151,455,921	100.0%	100.0%	13.9%

Please see page 151 for footnote references.

**SOLVENCY TEST (CONTINUED)**

(In Actual Dollars)

VALUATION DATE	AGGREGATE ACCRUED LIABILITIES			VALUATION ASSETS	PORTION OF ACTUARIAL ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
	ACTIVE MEMBER CONTRIBUTIONS (A) <sup>1</sup>	RETIREES, BENEFICIARIES, AND INACTIVE MEMBERS (B)	EMPLOYER-FINANCED PORTION OF ACTIVE MEMBERS (C)		LIABILITY (A)	LIABILITY (B)	LIABILITY (C)
<b>All Division Trust Funds<sup>3,4</sup></b>							
12/31/2005 <sup>5</sup>	\$5,755,118,042	\$26,382,911,449	\$14,614,266,949	\$34,273,165,233	100.0%	100.0%	14.6%
12/31/2006	6,742,437,218	29,674,681,921	13,073,484,732	36,687,041,642	100.0%	100.0%	2.1%
12/31/2007	6,834,260,809	32,017,760,257	13,607,111,905	39,415,525,136	100.0%	100.0%	4.1%
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%
12/31/2014	7,579,127,247	46,088,397,065	14,925,642,508	42,718,566,293	100.0%	76.2%	0.0%

<sup>1</sup> Includes accrued interest on member contributions.

<sup>2</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of the Denver Public Schools Retirement System (DPSRS).

<sup>3</sup> Results prior to December 31, 2010, do not include the DPS Division.

<sup>4</sup> 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.

<sup>5</sup> Previous actuary compiled information prior to 2006; information by division is not available.

### 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 2013, the ratio of PERA's valuation assets to accrued liabilities was 61.5 percent, but increased to 62.3 percent by the end of 2014.

The following factors resulted in higher liabilities (or losses) to PERA during 2014:

- Recognition of investment losses experienced in 2011 and 2014.
- Fewer members terminated PERA-covered employment and withdrew their accounts than expected.
- More service and disability retirements were experienced than expected.
- Current retirees are living longer than expected.
- Higher number of survivor benefits were granted than anticipated.
- New PERA members had some service resulting in accrued liabilities.
- Actual contributions were less than the determined ADC.

The following factors resulted in lower liabilities (or gains) during 2014:

- Recognition of investment gains experienced in 2012 and 2013.
- Member pay increases were lower than expected.
- Certain changes to actuarial methods were incorporated in the 2014 valuation as recommended by the actuarial audit report.

Since 2000, PERA's funded ratio has declined from a high of 105.2 percent to the current funded status of 62.3 percent at the end of 2014. 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 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 76.2 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 UAAL 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 was 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. The decrease in this ratio for 2014 is mainly attributable to the investment gain on the actuarial value of assets, reflecting strong investment performance in 2012 and 2013, and changes to certain actuarial methods incorporated into the 2014 actuarial valuation as a result of the 2013 actuarial audit.

SCHEDULE OF FUNDING PROGRESS

(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)
<b>State Division</b>						
12/31/2005 <sup>1</sup>	\$12,536,916,000	\$17,541,744,000	\$5,004,828,000	71.5%	\$2,064,764,000	242.4%
12/31/2006	13,327,290,139	18,246,010,509	4,918,720,370	73.0%	2,099,325,147	234.3%
12/31/2007	14,220,680,819	19,390,295,803	5,169,614,984	73.3%	2,236,517,828	231.1%
12/31/2008	13,914,370,734	20,498,667,695	6,584,296,961	67.9%	2,371,638,806	277.6%
12/31/2009	13,382,736,472	19,977,217,169	6,594,480,697	67.0%	2,384,136,844	276.6%
12/31/2010	12,791,946,348	20,356,176,064	7,564,229,716	62.8%	2,392,080,128	316.2%
12/31/2011	12,010,044,704	20,826,543,471	8,816,498,767	57.7%	2,393,791,402	368.3%
12/31/2012	12,538,675,449	21,191,495,125	8,652,819,676	59.2%	2,384,933,961	362.8%
12/31/2013	13,129,459,956	22,843,725,166	9,714,265,210	57.5%	2,474,965,482	392.5%
12/31/2014	13,523,487,577	23,408,321,153	9,884,833,576	57.8%	2,564,669,718	385.4%
<b>School Division</b>						
12/31/2005 <sup>1</sup>	\$19,184,225,000	\$25,963,972,000	\$6,779,747,000	73.9%	\$3,241,214,000	209.2%
12/31/2006	20,535,732,606	27,708,681,186	7,172,948,580	74.1%	3,371,185,745	212.8%
12/31/2007	22,070,769,075	29,241,427,668	7,170,658,593	75.5%	3,618,258,368	198.2%
12/31/2008	21,733,328,531	31,000,201,810	9,266,873,279	70.1%	3,804,926,777	243.5%
12/31/2009	21,054,909,740	30,412,815,401	9,357,905,661	69.2%	3,922,175,230	238.6%
12/31/2010	20,321,736,466	31,339,754,491	11,018,018,025	64.8%	3,900,661,576	282.5%
12/31/2011	19,266,110,172	31,986,199,035	12,720,088,863	60.2%	3,821,603,410	332.8%
12/31/2012	20,266,573,925	32,619,033,148	12,352,459,223	62.1%	3,819,065,598	323.4%
12/31/2013	21,369,379,750	35,437,311,570	14,067,931,820	60.3%	3,938,649,818	357.2%
12/31/2014	22,143,356,419	36,386,532,173	14,243,175,754	60.9%	4,063,235,757	350.5%
<b>Local Government Division</b>						
12/31/2005 <sup>1</sup>	\$2,358,719,000	\$3,022,624,000	\$663,905,000	78.0%	\$607,217,000	109.3%
12/31/2006	2,613,386,001	3,288,421,468	675,035,467	79.5%	636,299,525	106.1%
12/31/2007	2,892,846,938	3,563,199,003	670,352,065	81.2%	680,442,121	98.5%
12/31/2008	2,933,295,754	3,838,083,247	904,787,493	76.4%	718,901,763	125.9%
12/31/2009	2,932,628,241	3,850,820,636	918,192,395	76.2%	705,097,035	130.2%
12/31/2010	2,926,045,102	4,005,566,126	1,079,521,024	73.0%	705,265,331	153.1%
12/31/2011	2,882,691,014	4,160,014,773	1,277,323,759	69.3%	718,169,015	177.9%
12/31/2012	3,098,721,347	4,157,620,538	1,058,899,191	74.5%	523,668,446	202.2%
12/31/2013	3,291,297,571	4,502,281,918	1,210,984,347	73.1%	529,003,436	228.9%
12/31/2014	3,629,400,231	4,610,967,519	981,567,288	78.7%	540,468,037	181.6%
<b>Judicial Division</b>						
12/31/2005 <sup>1</sup>	\$193,305,000	\$223,955,000	\$30,650,000	86.3%	\$26,937,000	113.8%
12/31/2006	210,632,896	247,490,708	36,857,812	85.1%	29,150,633	126.4%
12/31/2007	231,228,304	264,210,497	32,982,193	87.5%	31,150,228	105.9%
12/31/2008	230,967,047	288,058,432	57,091,385	80.2%	35,937,094	158.9%
12/31/2009	228,713,654	295,695,685	66,982,031	77.3%	37,582,661	178.2%
12/31/2010	227,813,622	303,839,197	76,025,575	75.0%	37,412,139	203.2%
12/31/2011	221,514,844	319,437,250	97,922,406	69.3%	39,033,369	250.9%
12/31/2012	238,806,614	326,897,142	88,090,528	73.1%	39,045,008	225.6%
12/31/2013	256,800,478	351,598,057	94,797,579	73.0%	39,941,730	237.3%
12/31/2014	270,866,145	371,253,240	100,387,095	73.0%	42,976,979	233.6%

Please see page 154 for footnote references.

# Division Trust Funds—Pension

## SCHEDULE OF FUNDING PROGRESS (CONTINUED)

(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)
<b>DPS Division<sup>2</sup></b>						
12/31/2010	\$2,961,719,943	\$3,332,814,445	\$371,094,502	88.9%	\$470,773,746	78.8%
12/31/2011	2,804,705,933	3,442,527,012	637,821,079	81.5%	491,646,251	129.7%
12/31/2012	2,936,695,129	3,495,549,312	558,854,183	84.0%	510,872,366	109.4%
12/31/2013	3,075,894,894	3,785,871,992	709,977,098	81.2%	547,659,912	129.6%
12/31/2014	3,151,455,921	3,816,092,735	664,636,814	82.6%	584,319,269	113.7%
<b>All Division Trust Funds<sup>3,4</sup></b>						
12/31/2005 <sup>1</sup>	\$34,273,165,000	\$46,752,295,000	\$12,479,130,000	73.3%	\$5,940,130,000	210.1%
12/31/2006	36,687,041,642	49,490,603,871	12,803,562,229	74.1%	6,135,961,050	208.7%
12/31/2007	39,415,525,136	52,459,132,971	13,043,607,835	75.1%	6,566,368,545	198.6%
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%	7,048,991,770	240.3%
12/31/2010	39,229,261,481	59,338,150,323	20,108,888,842	66.1%	7,506,192,920	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%
12/31/2014	42,718,566,293	68,593,166,820	25,874,600,527	62.3%	7,795,669,760	331.9%

<sup>1</sup> The amounts for 2005 are only available rounded to thousands of dollars.

<sup>2</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

<sup>3</sup> Results prior to December 31, 2010, do not include the DPS Division.

<sup>4</sup> 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.

Actuarial Gains and Losses

ANALYSIS OF FINANCIAL EXPERIENCE

(In Millions of Dollars)

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DPS DIVISION
<b>Amounts</b>					
From differences between assumed and actual experience on liabilities					
Age and service retirements <sup>1</sup>	\$52.1	\$100.5	\$14.1	(\$0.3)	\$14.0
Disability retirements <sup>2</sup>	11.8	8.8	1.2	(0.1)	2.2
Deaths <sup>3</sup>	7.1	69.3	(7.8)	(1.0)	(0.5)
Withdrawals <sup>4</sup>	70.0	125.3	12.9	0.1	(4.2)
New members <sup>5</sup>	63.4	61.7	10.6	1.9	38.4
Pay increases <sup>6</sup>	17.9	(60.9)	(16.2)	3.7	2.9
Other <sup>7</sup>	(6.1)	(37.3)	(0.2)	(0.1)	(8.3)
Subtotal	216.2	267.4	14.6	4.2	44.5
From differences between assumed and actual experience on assets	(184.5)	(300.3)	(46.9)	(3.6)	(43.8)
From changes in plan assumptions and methods	(194.4)	(298.8)	(37.0)	1.2	(107.9)
From changes in plan provisions	—	—	—	—	—
Total actuarial (gains)/losses on 2014 activities	(\$162.7)	(\$331.7)	(\$69.3)	\$1.8	(\$107.2)
Total actuarial (gains)/losses on 2013 activities	\$738.2	\$1,248.0	\$127.0	\$2.7	\$108.7

<sup>1</sup> *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.

<sup>2</sup> *Disability retirements*: If disability claims are lower than assumed, there is a gain. If disability claims are higher than assumed, there is a loss.

<sup>3</sup> *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.

<sup>4</sup> *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.

<sup>5</sup> *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.

<sup>6</sup> *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.

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



## Division Trust Funds—Pension

The table below identifies the components that contributed to the growth in the underfunded status of the Division Trust Funds for the period 2010 to 2014.

### SCHEDULE OF GAINS AND LOSSES IN ACCRUED LIABILITIES AND RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(In Millions of Dollars)

TYPE OF ACTIVITY	\$ (GAIN) OR LOSS FOR YEARS ENDED DECEMBER 31					2010-2014
	2010 <sup>1</sup>	2011	2012	2013	2014	
UAAL beginning of year	\$16,937.6	\$20,108.8	\$23,549.6	\$22,711.2	\$25,798.0	\$16,937.6
Experience (Gains) and Losses						
Age and service retirements	4.2	(1.7)	49.0	32.7	180.4	264.6
Disability retirements	(9.1)	(9.2)	(9.9)	24.2	23.9	19.9
Deaths	59.7	33.8	5.2	70.4	67.1	236.2
Withdrawal from employment	16.3	154.1	(44.1)	122.4	204.1	452.8
New members	139.7	147.1	160.0	215.3	176.0	838.1
Pay increases	(727.1)	(901.0)	(385.3)	(230.2)	(52.6)	(2,296.2)
Investment income	2,806.5	3,188.9	(1,062.4)	(1,139.1)	(579.1)	3,214.8
Other	(230.2)	(18.3)	68.6	(11.4)	(52.0)	(243.3)
Experience (gain)/loss during year	2,060.0	2,593.7	(1,218.9)	(915.7)	(32.2)	2,486.9
Non-recurring items						
DPSRS UAAL transfer <sup>1</sup>	386.8	—	—	—	—	386.8
Change in plan assumptions and methods	—	—	(663.7)	3,140.3	(636.9)	1,839.7
Change in plan provisions	—	—	—	—	—	—
Non-recurring items	386.8	—	(663.7)	3,140.3	(636.9)	2,226.5
Contribution deficiency	468.6	125.8	157.3	301.7	55.3	1,108.7
Expected change in UAAL	255.8	721.3	886.9	560.5	690.4	3,114.9
Total (gain)/loss for year	3,171.2	3,440.8	(838.4)	3,086.8	76.6	8,937.0
UAAL end of year	\$20,108.8	\$23,549.6	\$22,711.2	\$25,798.0	\$25,874.6	\$25,874.6

<sup>1</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

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

- \$3.2 billion cumulative loss due to investment income less than expected.
- \$3.1 billion loss, in 2013, primarily due to the reduction of the long-term expected investment rate of return assumption from 8.0 percent to 7.5 percent.
- \$3.1 billion cumulative loss indicating the five-year difference between each prior year's UAAL and the expected current year UAAL considering the normal cost earned, less the required employer contributions all of which is adjusted for interest.
- \$2.3 billion cumulative gain due to lower pay increases than expected.
- \$1.1 billion cumulative loss resulting from contribution deficiencies; occurring when actual contributions flowing into the plans are less than the determined ADC (previously, GASB's Annual Required Contribution).

**Actuarial Valuation Results**

Contribution rates for the year ending December 31, 2016, are derived from the results of the December 31, 2014, 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 2016 FISCAL YEAR**

	EXPRESSED AS A PERCENTAGE OF COVERED PAYROLL				
	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DPS DIVISION
<b>Contributions</b>					
Service retirement benefits	7.85%	9.22%	7.43%	14.95%	9.04%
Disability retirement benefits	0.38%	0.25%	0.25%	0.90%	0.33%
Survivor benefits	0.16%	0.13%	0.16%	0.46%	0.13%
Termination withdrawals	1.62%	1.77%	1.73%	1.16%	1.53%
Refunds	0.65%	0.61%	0.68%	0.11% <sup>1</sup>	1.25%
Administrative expense load	0.35%	0.35%	0.35%	0.35%	0.35%
Total normal cost	11.01%	12.33%	10.60%	17.93%	12.63%
Less member contributions	(8.05%) <sup>2</sup>	(8.00%)	(8.00%)	(8.00%)	(8.00%)
<b>Employer normal cost</b>	<b>2.96%</b>	<b>4.33%</b>	<b>2.60%</b>	<b>9.93%</b>	<b>4.63%</b>
Percentage available to amortize unfunded actuarial accrued liabilities	14.93%	13.45%	9.66%	6.13%	0.00%
Amortization period	51 years	57 years	28 years	Infinite	Infinite
Total employer contribution rate for actuarially funded benefits	10.22% <sup>2</sup>	10.15%	10.00%	13.66%	10.15%
Amortization Equalization Disbursement	4.60%	4.50%	2.20%	2.20%	4.50%
Supplemental Amortization Equalization Disbursement	4.50%	4.50%	1.50%	1.50%	4.50%
Less Health Care Trust Fund	(1.02%)	(1.02%)	(1.02%)	(1.02%)	(1.02%)
Less Annual Increase Reserve	(0.41%)	(0.35%)	(0.42%)	(0.28%)	(0.48%)
Less PCOP Credit	—	—	—	—	(15.96%) <sup>3</sup>
<b>Employer contribution rate for defined benefit plan</b>	<b>17.89%</b>	<b>17.78%</b>	<b>12.26%</b>	<b>16.06%</b>	<b>1.69%</b>

<sup>1</sup> Assumes no judge will elect a refund of contributions made for the 17th through the 20th year of service.

<sup>2</sup> Weighted average of more than one statutory rate.

<sup>3</sup> 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**

PERIOD	STATE DIVISION TRUST FUND		SCHOOL DIVISION TRUST FUND		LOCAL GOVERNMENT DIVISION TRUST FUND		JUDICIAL DIVISION TRUST FUND		DPS DIVISION TRUST FUND <sup>1</sup>	
	AED	SAED	AED	SAED	AED	SAED	AED	SAED	AED	SAED
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%

<sup>1</sup> 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.*

Note: For a history of contributions by Division Trust Fund, the actuarially determined contribution compared to the actual employer contributions paid, including the deficiency (or excess), for each of the last ten years, is shown in the Schedule of Employer Contributions, found on pages 99-101, in the Required Supplementary Information (RSI) in the Financial Section of this CAFR.

## Division Trust Funds—Pension

### Annual Actuarial Valuation Statistics

As of December 31, 2014, the Funded Ratio, the UAAL, the ADC for 2016 as a percentage of covered payroll, and the amortization period considering current funding and future increases of the AED and the SAED, for each Division Trust Fund, are shown in the following table. The results in this table are based on the actuarial valuation for funding purposes, which does not consider the impact of reduced benefits for those hired in the future as provided for in Colorado law.

#### ACTUARIAL STATISTICS

(In Thousands of Dollars)

DIVISION TRUST FUND	FUNDED RATIO	UAAL	ADC	AMORTIZATION PERIOD CONSIDERING FUTURE AED AND SAED INCREASES
State Division	57.8%	\$9,884,833	22.31%	45 Years
School Division	60.9%	14,243,176	22.36%	48 Years
Local Government Division	78.7%	981,567	11.98%	28 Years
Judicial Division	73.0%	100,387	22.07%	Infinite
DPS Division	82.6%	664,637	10.46%	Infinite
All Division Trust Funds <sup>1</sup>		<u>\$25,874,600</u>		

<sup>1</sup> 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.

### Funded Ratio

The funded ratio for the plan is determined by dividing the actuarial value of assets by the AAL. The actuarial value of assets is not the current market value but a market-related value, which recognizes the differences between actual and expected investment experience for each year in equal amounts over a four-year period. The actuarial value of the assets as of December 31, 2014, was \$42,718,566 compared to a market value of assets of \$44,069,299, and to the AAL of \$68,593,166. 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	2010	2011	2012	2013	2014
State Division	62.8%	57.7%	59.2%	57.5%	57.8%
School Division	64.8%	60.2%	62.1%	60.3%	60.9%
Local Government Division	73.0%	69.3%	74.5%	73.1%	78.7%
Judicial Division	75.0%	69.3%	73.1%	73.0%	73.0%
DPS Division	88.9%	81.5%	84.0%	81.2%	82.6%
All Division Trust Funds <sup>1</sup>	66.1%	61.2%	63.2%	61.5%	62.3%

<sup>1</sup> 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 pension funding policy, revised as of March 20, 2015, states that the targeted actuarial funded ratio is greater than or equal to 110 percent on a combined division trust fund basis. The funded ratios listed above give an indication of progress made toward achieving the stated objective. 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, 2014, approximately \$0.61 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 imperative that the AAL equal the actuarial value of assets at any given moment in time.

At December 31, 2014, and December 31, 2013, PERA had the following funded status for all of its Division Trust Funds.

## FUNDED STATUS FOR THE DIVISION TRUST FUNDS

(In Thousands of Dollars)

	MARKET VALUE OF ASSETS		ACTUARIAL VALUE OF ASSETS	
	12/31/2013	12/31/2014	12/31/2013	12/31/2014
<b>State Division Trust Fund<sup>1</sup></b>				
Actuarial accrued liability	\$22,843,725	\$23,408,321	\$22,843,725	\$23,408,321
Assets held to pay those liabilities <sup>2</sup>	13,935,754	13,956,630	13,129,460	13,523,488
Unfunded actuarial accrued liability	8,907,971	9,451,691	9,714,265	9,884,833
Funded Ratio	61.0%	59.6%	57.5%	57.8%
<b>School Division Trust Fund<sup>1</sup></b>				
Actuarial accrued liability	\$35,437,312	\$36,386,532	\$35,437,312	\$36,386,532
Assets held to pay those liabilities <sup>2</sup>	22,682,339	22,846,249	21,369,380	22,143,356
Unfunded actuarial accrued liability	12,754,973	13,540,283	14,067,932	14,243,176
Funded Ratio	64.0%	62.8%	60.3%	60.9%
<b>Local Government Division Trust Fund<sup>1</sup></b>				
Actuarial accrued liability	\$4,502,282	\$4,610,967	\$4,502,282	\$4,610,967
Assets held to pay those liabilities <sup>2</sup>	3,493,355	3,733,496	3,291,298	3,629,400
Unfunded actuarial accrued liability	1,008,927	877,471	1,210,984	981,567
Funded Ratio	77.6%	81.0%	73.1%	78.7%
<b>Judicial Division Trust Fund<sup>1</sup></b>				
Actuarial accrued liability	\$351,598	\$371,253	\$351,598	\$371,253
Assets held to pay those liabilities <sup>2</sup>	272,160	278,860	256,800	270,866
Unfunded actuarial accrued liability	79,438	92,393	94,798	100,387
Funded Ratio	77.4%	75.1%	73.0%	73.0%
<b>Denver Public Schools Division Trust Fund<sup>1</sup></b>				
Actuarial accrued liability	\$3,785,872	\$3,816,093	\$3,785,872	\$3,816,093
Assets held to pay those liabilities <sup>2</sup>	3,265,768	3,254,064	3,075,895	3,151,456
Unfunded actuarial accrued liability	520,104	562,029	709,977	664,637
Funded Ratio	86.3%	85.3%	81.2%	82.6%
<b>All Division Trust Funds<sup>1,3</sup></b>				
Actuarial accrued liability	\$66,920,789	\$68,593,166	\$66,920,789	\$68,593,166
Assets held to pay those liabilities <sup>2,4</sup>	43,649,376	44,069,299	41,122,833	42,718,566
Unfunded actuarial accrued liability	23,271,413	24,523,867	25,797,956	25,874,600
Funded Ratio	65.2%	64.2%	61.5%	62.3%

<sup>1</sup> The above 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 and 2014.

<sup>2</sup> The market value of assets is the fair value of the investments. The actuarial value of assets is calculated by spreading any market gains or losses above or below the assumed rate of return over four years.

<sup>3</sup> The data in the table has been aggregated for information purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

<sup>4</sup> In aggregate, the market value of the assets as of December 31, 2014, is \$1,350,733 greater 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 2012 are \$449,572, for 2013 are \$1,464,395, and for 2014 are (\$563,234).

## Division Trust Funds—Pension

### *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. The investment return assumption and the discount rate for liabilities 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.

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 ADC (for contributions for the fiscal year ended December 31, 2016) as shown on the tables below and on the next page.

#### INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 6.0 PERCENT

(In Thousands of Dollars)

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ADC	UAAL
State Division	48.9%	\$14,138,804	30.32%	\$13,705,661
School Division	51.2%	21,141,566	31.65%	20,438,673
Local Government Division	65.9%	1,880,116	21.31%	1,776,021
Judicial Division	62.7%	161,066	32.18%	153,072
DPS Division	69.8%	1,362,157	19.46%	1,259,549
All Division Trust Funds <sup>1</sup>		<u>\$38,683,709</u>		<u>\$37,332,976</u>

<sup>1</sup> 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

(In Thousands of Dollars)

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ADC	UAAL
State Division	54.8%	\$11,165,531	24.78%	\$10,732,388
School Division	57.6%	16,311,681	25.20%	15,608,788
Local Government Division	74.4%	1,250,433	14.82%	1,146,338
Judicial Division	69.5%	119,035	25.25%	111,041
DPS Division	78.3%	874,790	13.26%	772,182
All Division Trust Funds <sup>1</sup>		<u>\$29,721,470</u>		<u>\$28,370,737</u>

<sup>1</sup> 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

(In Thousands of Dollars)

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ADC	UAAL
State Division	57.8%	\$9,884,833	22.31%	\$9,451,691
School Division	60.9%	14,243,176	22.36%	13,540,283
Local Government Division	78.7%	981,567	11.98%	877,471
Judicial Division	73.0%	100,387	22.07%	92,393
DPS Division	82.6%	664,637	10.46%	562,029
All Division Trust Funds <sup>1</sup>		<u>\$25,874,600</u>		<u>\$24,523,867</u>

<sup>1</sup> 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 8.0 PERCENT**

*(In Thousands of Dollars)*

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ADC	UAAL
State Division	60.9%	\$8,686,888	19.84%	\$8,253,746
School Division	64.3%	12,306,059	19.53%	11,603,166
Local Government Division	83.3%	730,179	8.87%	626,083
Judicial Division	76.6%	82,967	18.92%	74,973
DPS Division	87.0%	470,702	7.80%	368,094
All Division Trust Funds <sup>1</sup>		<u>\$22,276,795</u>		<u>\$20,926,062</u>

<sup>1</sup> 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**

*(In Thousands of Dollars)*

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ADC	UAAL
State Division	67.2%	\$6,603,361	15.31%	\$6,170,218
School Division	71.2%	8,955,727	14.40%	8,252,834
Local Government Division	92.4%	296,465	3.27%	192,369
Judicial Division	83.9%	51,885	13.02%	43,891
DPS Division	96.0%	132,892	2.86%	30,285
All Division Trust Funds <sup>1</sup>		<u>\$16,040,330</u>		<u>\$14,689,597</u>

<sup>1</sup> 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 9.9 percent for the past five years and 6.8 percent for the past 10 years. The 30-year annualized gross-of-fees rate of return for the pooled investment assets was 9.4 percent.



# Division Trust Funds—Pension

## Plan Data

### SCHEDULE OF RETIREES, BENEFICIARIES, AND SURVIVORS ADDED TO AND REMOVED FROM THE BENEFIT PAYROLL

(In Actual Dollars)

YEAR ENDED	ADDED TO PAYROLL ANNUAL BENEFITS		REMOVED FROM PAYROLL ANNUAL BENEFITS		PAYROLL—END OF YEAR ANNUAL BENEFITS		AVERAGE ANNUAL BENEFITS	INCREASE IN AVERAGE BENEFITS
	NO. <sup>1</sup>		NO. <sup>1</sup>		NO. <sup>1</sup>			
<b>State Division<sup>2</sup></b>								
12/31/2006					28,672	\$872,636,112	\$30,435	—
12/31/2007	1,632	\$57,669,468	656	\$12,017,172	29,648	947,151,132	31,947	5.0%
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%
12/31/2014	1,688	70,625,718	728	17,912,280	35,806	1,369,243,770	38,241	1.2%
<b>School Division<sup>2</sup></b>								
12/31/2006					41,948	\$1,255,020,564	\$29,918	—
12/31/2007	2,713	\$87,156,144	775	\$13,230,432	43,886	1,371,661,740	31,255	4.5%
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%
12/31/2014	3,016	111,392,724	843	19,419,540	57,981	2,066,588,532	35,643	0.7%
<b>Local Government Division<sup>2</sup></b>								
12/31/2006					3,821	\$107,505,516	\$28,135	—
12/31/2007	345	\$12,147,432	78	\$892,944	4,088	122,322,048	29,922	6.4%
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%
12/31/2014	392	13,412,585	93	2,018,928	6,446	233,231,957	36,182	0.3%
<b>Judicial Division<sup>2</sup></b>								
12/31/2006					257	\$11,072,184	\$43,082	—
12/31/2007	25	\$1,438,848	5	\$99,228	277	12,786,492	46,161	7.1%
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%
12/31/2014	16	1,068,823	8	368,520	330	19,919,431	60,362	1.1%
<b>DPS Division<sup>2,3</sup></b>								
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%
12/31/2014	306	12,537,532	171	5,065,860	6,686	250,204,744	37,422	1.0%

Please see page 163 for footnote references.

**SCHEDULE OF RETIREES, BENEFICIARIES, AND SURVIVORS ADDED TO AND REMOVED FROM THE BENEFIT PAYROLL (CONTINUED)**

(In Actual Dollars)

YEAR ENDED	ADDED TO PAYROLL		REMOVED FROM PAYROLL		PAYROLL—END OF YEAR		AVERAGE ANNUAL BENEFITS	INCREASE IN AVERAGE BENEFITS
	NO. <sup>1</sup>	ANNUAL BENEFITS	NO. <sup>1</sup>	ANNUAL BENEFITS	NO. <sup>1</sup>	ANNUAL BENEFITS		
<b>All Division Trust Funds<sup>2,4</sup></b>								
12/31/2005 <sup>5</sup>	5,320	\$175,538,520	1,819	\$25,819,464	71,401	\$2,045,457,000	\$28,647	5.8%
12/31/2006	5,251	169,081,084	1,954	27,505,200	74,698	2,246,234,376	30,071	5.0%
12/31/2007	4,715	158,411,892	1,514	26,239,776	77,899	2,453,921,412	31,501	4.8%
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 <sup>6</sup>	393,574,680	1,475	33,642,072	93,655 <sup>6</sup>	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%
12/31/2014	5,418	209,037,382	1,843	44,785,128	107,249	3,939,188,434	36,729	0.9%

<sup>1</sup> The number does not include deferred survivors.

<sup>2</sup> Numbers derived on an accrual basis.

<sup>3</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

<sup>4</sup> Data prior to December 31, 2010, does not include the DPS Division.

<sup>5</sup> Previous actuary compiled information prior to 2006; information by division is not available.

<sup>6</sup> Includes the addition of 6,199 beneficiaries due to the DPSRS merger.

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<sup>1</sup>**

(In Actual Dollars)

YEAR	NUMBER OF RETIREE ACCOUNTS ON 12/31	NUMBER OF MEMBER ACCOUNTS ON 12/31 <sup>2</sup>	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
2014	104,993	421,563	24.9%	3,883,781,405

<sup>1</sup> Numbers derived on a cash basis. Data prior to 2010 does not include the DPS Division.

<sup>2</sup> Includes inactive member accounts.

## Division Trust Funds—Pension

### SCHEDULE OF MEMBERS IN ACTUARIAL VALUATION

By Attained Age and Years of Service as of December 31, 2014

(In Actual Dollars)

#### State Division

The average age for State Division members (excluding State Troopers) was 46.1 years and the average service was 9.0 years. The average age for State Troopers was 41.1 years and the average service was 11.8 years.

ATTAINED AGE	YEARS OF SERVICE TO VALUATION DATE							NO.	TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30+		ANNUAL VALUATION PAYROLL
Up to 20	142	—	—	—	—	—	—	142	\$748,598
20 - 24	1,459	7	—	—	—	—	—	1,466	27,870,764
25 - 29	3,690	381	4	—	—	—	—	4,075	132,135,994
30 - 34	3,760	1,601	260	12	—	—	—	5,633	222,635,395
35 - 39	2,803	1,786	1,080	248	2	—	—	5,919	267,125,795
40 - 44	2,497	1,639	1,250	959	231	5	—	6,581	326,747,003
45 - 49	4,075	1,651	1,192	1,038	747	334	30	9,067	440,365,455
50 - 54	1,793	1,535	1,222	1,000	857	685	240	7,332	385,688,190
55 - 59	1,556	1,471	1,186	953	835	641	392	7,034	368,095,927
60	294	257	203	169	136	95	66	1,220	63,288,954
61	235	231	206	171	108	103	71	1,125	58,095,413
62	244	237	199	164	111	86	57	1,098	55,544,052
63	180	182	161	130	114	78	66	911	47,286,310
64	174	177	151	114	104	67	56	843	41,971,202
65	141	151	126	94	69	60	43	684	33,824,676
66	122	123	84	73	41	41	38	522	25,097,975
67	92	76	69	48	44	26	31	386	18,472,553
68	86	71	63	37	27	31	35	350	15,607,323
69	57	40	37	20	20	13	21	208	9,157,234
70+	258	131	99	63	52	44	57	704	24,910,905
<b>Total</b>	<b>23,658</b>	<b>11,747</b>	<b>7,592</b>	<b>5,293</b>	<b>3,498</b>	<b>2,309</b>	<b>1,203</b>	<b>55,300</b>	<b>\$2,564,669,718</b>

#### School Division

The average age for School Division members was 44.5 years and the average service was 8.3 years.

ATTAINED AGE	YEARS OF SERVICE TO VALUATION DATE							NO.	TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30+		ANNUAL VALUATION PAYROLL
Up to 20	863	—	—	—	—	—	—	863	\$4,248,419
20 - 24	4,488	47	—	—	—	—	—	4,535	73,152,881
25 - 29	9,146	1,182	40	—	—	—	—	10,368	279,653,985
30 - 34	6,828	4,687	878	24	—	—	—	12,417	408,687,769
35 - 39	5,968	3,843	3,640	521	14	—	—	13,986	507,305,746
40 - 44	7,959	3,617	3,103	2,475	409	8	—	17,571	624,680,914
45 - 49	5,316	3,651	2,915	2,241	1,754	362	14	16,253	623,429,909
50 - 54	4,235	3,277	3,295	2,134	1,704	1,442	263	16,350	627,279,873
55 - 59	3,254	2,578	2,755	2,231	1,549	969	558	13,894	507,058,415
60	485	356	413	357	249	152	111	2,123	76,534,206
61	494	330	352	325	247	134	73	1,955	67,524,695
62	430	326	298	256	207	129	75	1,721	58,984,697
63	349	307	247	187	199	109	56	1,454	49,871,909
64	336	240	222	148	131	102	38	1,217	39,508,079
65	307	190	171	134	96	67	38	1,003	31,517,456
66	254	156	139	95	69	43	29	785	21,984,168
67	245	126	112	70	47	37	27	664	16,721,050
68	211	136	86	48	40	23	25	569	13,405,550
69	135	73	44	22	23	17	11	325	7,306,015
70 +	738	393	204	90	57	33	50	1,565	24,380,021
<b>Total</b>	<b>52,041</b>	<b>25,515</b>	<b>18,914</b>	<b>11,358</b>	<b>6,795</b>	<b>3,627</b>	<b>1,368</b>	<b>119,618</b>	<b>\$4,063,235,757</b>

**SCHEDULE OF MEMBERS IN ACTUARIAL VALUATION**

By Attained Age and Years of Service as of December 31, 2014  
(In Actual Dollars)

**Local Government Division**

The average age for Local Government Division members was 44.7 years and the average service was 7.9 years.

ATTAINED AGE	YEARS OF SERVICE TO VALUATION DATE							NO.	TOTAL ANNUAL VALUATION PAYROLL
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
Up to 20	402	—	—	—	—	—	—	402	\$1,753,487
20 - 24	663	6	—	—	—	—	—	669	8,592,724
25 - 29	792	104	7	—	—	—	—	903	27,565,735
30 - 34	761	264	85	7	—	—	—	1,117	44,447,154
35 - 39	620	322	196	63	2	—	—	1,203	58,854,584
40 - 44	514	346	319	134	41	4	—	1,358	71,359,406
45 - 49	628	319	316	160	97	44	6	1,570	79,374,658
50 - 54	461	299	326	205	146	126	61	1,624	91,434,629
55 - 59	398	291	284	192	167	116	76	1,524	82,974,008
60	56	37	48	42	23	13	13	232	13,264,234
61	50	44	43	24	20	14	4	199	10,448,943
62	63	48	36	27	27	19	4	224	11,589,693
63	61	35	35	23	14	12	9	189	9,489,917
64	51	27	31	9	21	6	6	151	6,635,080
65	42	36	41	8	10	7	6	150	6,709,864
66	34	24	24	7	7	4	4	104	4,280,718
67	39	15	17	7	4	3	2	87	3,194,626
68	30	14	14	4	5	3	3	73	2,598,842
69	23	12	3	3	3	2	—	46	1,475,192
70 +	143	51	38	13	9	1	4	259	4,424,543
<b>Total</b>	<b>5,831</b>	<b>2,294</b>	<b>1,863</b>	<b>928</b>	<b>596</b>	<b>374</b>	<b>198</b>	<b>12,084</b>	<b>\$540,468,037</b>

**Judicial Division**

The average age for Judicial Division members was 56.5 years and the average service was 14.4 years.

ATTAINED AGE	YEARS OF SERVICE TO VALUATION DATE							NO.	TOTAL ANNUAL VALUATION PAYROLL
	0-4	5-9	10-14	15-19	20-24	25-29	30+		
Up to 20	—	—	—	—	—	—	—	—	\$—
20 - 24	—	—	—	—	—	—	—	—	—
25 - 29	—	—	—	—	—	—	—	—	—
30 - 34	2	—	—	—	—	—	—	2	58,595
35 - 39	4	—	—	—	—	—	—	4	418,569
40 - 44	5	7	2	—	—	—	—	14	1,613,538
45 - 49	12	17	10	5	2	1	—	47	6,154,094
50 - 54	14	20	7	10	6	4	3	64	8,290,434
55 - 59	10	20	12	9	13	9	1	74	9,432,073
60	1	1	3	2	1	1	—	9	1,099,237
61	3	4	3	—	2	1	1	14	1,856,871
62	1	5	4	4	3	1	1	19	2,400,948
63	—	1	3	—	3	—	2	9	1,227,215
64	2	2	3	4	1	3	2	17	2,263,195
65	1	3	2	1	4	3	—	14	1,887,336
66	1	1	3	2	2	3	2	14	1,607,600
67	—	1	—	3	3	1	3	11	1,476,775
68	—	—	3	—	—	—	3	6	854,873
69	1	—	—	2	2	—	1	6	846,623
70 +	—	—	—	2	2	2	4	10	1,489,003
<b>Total</b>	<b>57</b>	<b>82</b>	<b>55</b>	<b>44</b>	<b>44</b>	<b>29</b>	<b>23</b>	<b>334</b>	<b>\$42,976,979</b>

## Division Trust Funds—Pension

### SCHEDULE OF MEMBERS IN ACTUARIAL VALUATION

By Attained Age and Years of Service as of December 31, 2014  
(In Actual Dollars)

#### DPS Division

The average age for DPS Division members was 41.0 years and the average service was 5.8 years.

ATTAINED AGE	YEARS OF SERVICE TO VALUATION DATE							NO.	TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30+		ANNUAL VALUATION PAYROLL
Up to 20	38	—	—	—	—	—	—	38	\$408,816
20 - 24	896	6	—	—	—	—	—	902	16,917,271
25 - 29	2,172	198	—	—	—	—	—	2,370	72,563,386
30 - 34	1,623	666	32	2	—	—	—	2,323	88,948,204
35 - 39	1,617	627	220	28	1	—	—	2,493	92,308,584
40 - 44	794	453	282	142	12	1	—	1,684	73,287,738
45 - 49	632	357	226	168	85	12	2	1,482	65,161,590
50 - 54	510	323	188	145	123	99	10	1,398	63,178,840
55 - 59	458	253	170	141	99	95	28	1,244	52,357,626
60	93	35	32	25	23	12	6	226	10,007,047
61	74	35	31	24	22	22	4	212	8,736,181
62	58	35	27	25	15	12	4	176	7,987,809
63	53	30	25	15	8	11	5	147	5,952,018
64	47	30	16	31	17	6	1	148	6,846,211
65	44	24	15	17	13	4	2	119	4,855,640
66	37	26	10	9	7	8	4	101	4,164,195
67	32	16	8	3	3	4	—	66	2,204,540
68	30	10	3	7	3	4	5	62	2,577,786
69	16	8	6	5	4	1	—	40	1,548,939
70 +	105	44	11	5	9	1	8	183	4,306,848
<b>Total</b>	<b>9,329</b>	<b>3,176</b>	<b>1,302</b>	<b>792</b>	<b>444</b>	<b>292</b>	<b>79</b>	<b>15,414</b>	<b>\$584,319,269</b>

SCHEDULE OF ACTIVE MEMBER ACTUARIAL VALUATION DATA

As of December 31, 2014

(In Actual Dollars)

YEAR	NUMBER OF PARTICIPATING EMPLOYERS <sup>1</sup>	NUMBER OF ACTIVE MEMBERS	ANNUAL PAYROLL FOR ACTIVE MEMBERS	AVERAGE ANNUAL PAY FOR ACTIVE MEMBERS	% INCREASE (DECREASE) IN AVERAGE ANNUAL PAY
<b>State Division</b>					
2006	69	52,866	\$2,099,325,147	\$39,710	—
2007	69	53,324	2,236,517,828	41,942	5.62%
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%
2014	32	55,300	2,564,669,718	46,377	3.72%
<b>School Division</b>					
2006	196	113,288	\$3,371,185,745	\$29,758	—
2007	197	116,245	3,618,258,368	31,126	4.60%
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 <sup>2</sup>	116,486	3,900,661,576	33,486	1.93%
2011	275 <sup>2</sup>	114,820	3,821,603,410	33,283	(0.61%)
2012	281 <sup>2</sup>	115,294	3,819,065,598	33,125	(0.47%)
2013	294 <sup>2</sup>	117,727	3,938,649,818	33,456	1.00%
2014	224	119,618	4,063,235,757	33,968	1.53%
<b>Local Government Division</b>					
2006	134	15,959	\$636,299,525	\$39,871	—
2007	137	16,977	680,442,121	40,080	0.52%
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%
2014	141	12,084	540,468,037	44,726	1.07%
<b>Judicial Division</b>					
2006	6	291	\$29,150,633	\$100,174	—
2007	6	296	31,150,228	105,237	5.05%
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%
2014	2	334	42,976,979	128,674	6.96%

Please see page 168 for footnote references.



# Division Trust Funds—Pension

## SCHEDULE OF ACTIVE MEMBER ACTUARIAL VALUATION DATA (CONTINUED)

As of December 31, 2014

(In Actual Dollars)

YEAR	NUMBER OF PARTICIPATING EMPLOYERS <sup>1</sup>	NUMBER OF ACTIVE MEMBERS	ANNUAL PAYROLL FOR ACTIVE MEMBERS	AVERAGE ANNUAL PAY FOR ACTIVE MEMBERS	% INCREASE (DECREASE) IN AVERAGE ANNUAL PAY
<b>DPS Division<sup>3</sup></b>					
2010	28 <sup>2</sup>	13,171	\$470,773,746	\$35,743	—
2011	27 <sup>2</sup>	13,571	491,646,251	36,228	1.36%
2012	29 <sup>2</sup>	13,911	510,872,366	36,724	1.37%
2013	31 <sup>2</sup>	14,816	547,659,912	36,964	0.65%
2014	1	15,414	584,319,269	37,908	2.55%
<b>All Division Trust Funds<sup>4</sup></b>					
2005 <sup>5,6</sup>	405	180,630	\$5,940,132,000	\$32,886	(1.09%)
2006	405	182,404	6,135,961,050	33,639	2.29%
2007	409	186,842	6,566,368,545	35,144	4.47%
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 <sup>2</sup>	201,095	7,506,192,920	37,327	0.72%
2011	523 <sup>2</sup>	199,741	7,464,243,447	37,370	0.12%
2012	529 <sup>2</sup>	196,435	7,277,585,379	37,048	(0.86%)
2013	547 <sup>2</sup>	200,183	7,530,220,378	37,617	1.54%
2014	400	202,750	7,795,669,760	38,450	2.21%

<sup>1</sup> Prior to 2014, employer counts were based on separate units of government. Beginning in 2014, new guidance under GASB 67 classifies a primary government and its component units as one employer. The 2014 employer count is presented for purposes of complying with GASB 67 only. For all other purposes, the definition of an employer is governed by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable, the employer's affiliation agreement with PERA.

<sup>2</sup> Includes charter schools operating within the School and DPS Divisions and under the Colorado Charter School Institute.

<sup>3</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

<sup>4</sup> Data prior to 2010 does not include the DPS Division.

<sup>5</sup> Previous actuary compiled information prior to 2006; information by division is not available.

<sup>6</sup> The annual payroll for 2005 is only available rounded to thousands of dollars.

## Introduction

This Health Care Trust Funds subsection of the Actuarial Section will report the results of PERA's other postemployment benefit (OPEB) actuarial valuation, which was performed for both funding and accounting and financial reporting purposes.

The Health Care Trust Fund (HCTF) and the DPS Health Care Trust Fund (DPS HCTF) are 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.

The Board is responsible for maintaining a funding policy applicable to PERA's OPEB funds. The OPEB funding policy was last revised and adopted by the Board on November 16, 2007. The OPEB funds are subject to GASB 43 accounting standards, including the determination of an annual required contribution (ARC). The ARC is determined in accordance with the OPEB plan provisions, as described in detail in Note 9 of the Notes to the Financial Statements found in the Financial Section of this *CAFR*. The ARC rate for each of the funds will be compared to the associated statutory contribution rate.

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.

## Actuarial Methods and Assumptions

### Actuarial Methods

The Board also is responsible for the actuarial methods and assumptions used in the OPEB 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.

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. 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. 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 EAN 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.

### Amortization Method

As provided under GASB 43 reporting standards, the ARC for each health care plan is determined by adding the normal cost and the cost to amortize the UAAL over a 30-year period. The ARC is then expressed as a level percentage of assumed future covered payroll and compared, as a benchmark, against the current statutory employer contribution rate.

### Asset Valuation Method

The method for valuing assets 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 AAL 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. 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 enrollees participating in the self-insured Medicare supplement plans and the Medicare HMO plan offered by Rocky Mountain Health Plans 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, estimated to have been 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.

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.

The mortality assumptions appropriately reflect PERA's recent and anticipated plan experience and are used to estimate the value of expected future subsidy payments. Referencing information found in the Division Trust Funds subsection of this actuarial section, 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

As the service-based premium subsidy does not increase over time, there is no need for an assumption regarding increasing benefit amounts.

### Actuarial Studies

All actuarial studies described in the Division Trust Funds subsection of this actuarial section titled, Actuarial Methods and Assumptions, Actuarial Studies, incorporated a review and analysis of actuarial methods and assumptions pertaining to the HCTF and the DPS HCTF.

### Changes Since Last Actuarial Valuation

#### Changes in Actuarial Methods

There are no actuarial method changes reflected in the December 31, 2014, actuarial valuation since the last actuarial valuation as of December 31, 2013.

#### Changes in Actuarial Assumptions

- 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 2015 plan year.

***Changes in Plan Provisions***

There are no changes in plan provisions reflected in the December 31, 2014, actuarial valuation since the last actuarial valuation as of December 31, 2013.

***Significant Events***

- In September 2014, PERA and the City of Colorado Springs (the City) agreed to resolve the lawsuit regarding the termination of Memorial affiliation with PERA, effective October 1, 2012, which had a significant effect on the HCTF. The termination of Memorial arose from the 30-year lease of Memorial to the UCH and its related entities. The agreement provided for the City to pay PERA \$190,000 for the liabilities associated with the retirement and health care benefits already earned by 7,666 Memorial employees for the work that they performed before Memorial ceased to be a PERA employer. This employer disaffiliation payment of \$190,000 was allocated to the Local Government Division and HCTF in the amounts of \$186,006 and \$3,994, respectively.

# Health Care Trust Funds—OPEB

## Actuarial Assumptions: Exhibits J–N

The following exhibits (Exhibits J through N) show the actuarial assumptions employed to determine the actuarial valuation results. The basic economic and demographic actuarial assumptions as detailed in Exhibits A through I, in the Division Trust Funds subsection of the Actuarial Section of this *CAFR*, also were applied, as applicable, for purposes of determining OPEB liabilities.

### Exhibit J: Initial Health Care Costs and Trend Rate Assumptions—*PERA Benefit Structure*

#### INITIAL HEALTH CARE COSTS<sup>1</sup>

(In Actual Dollars)

PLAN	MONTHLY PREMIUM FOR MEMBERS WITHOUT MEDICARE PART A	MONTHLY PREMIUM FOR MEMBERS WITH MEDICARE PART A
Self-Funded Medicare Supplement Plans	\$653	\$285
Kaiser Permanente Medicare Advantage HMO	593	223
Rocky Mountain Health Plans Medicare HMO	590	213
UnitedHealthcare Medicare HMO	633	166

2015 Monthly Medicare Part A Premium — \$402

#### HEALTH CARE COST TREND RATE ASSUMPTIONS<sup>1</sup>

PLAN/YEAR	PREMIUM FOR MEMBERS WITHOUT MEDICARE PART A	PREMIUM FOR MEMBERS WITH MEDICARE PART A
<b>Self-Funded Medicare Supplement Plans</b>		
2015	5.45%	5.25%
2016+	5.00%	5.00%
<b>Kaiser Permanente Medicare Advantage HMO</b>		
2015	5.36%	5.23%
2016+	5.00%	5.00%
<b>Rocky Mountain Health Plans Medicare HMO</b>		
2015	5.23%	5.14%
2016+	5.00%	5.00%
<b>UnitedHealthcare Medicare HMO</b>		
2015	5.34%	5.21%
2016+	5.00%	5.00%
<b>Medicare Part A Year/Premiums</b>		
2015 —	2.75%	
2016 —	3.50%	
2017 —	4.25%	
2018 —	3.50%	
2019 —	3.75%	
2020 —	4.00%	
2021+ —	4.25%	

<sup>1</sup> Applies only to PERACare enrollees who are age 65 or older and who are not eligible for premium-free Medicare Part A.

**Exhibit K: Additional Premium Subsidy Assumptions—DPS Benefit Structure<sup>1</sup>**

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

<sup>1</sup> Health care assumptions for future PERACare enrollees who are age 65 or older and who are assumed to not be eligible for premium-free Medicare Part A.

**Exhibit L: Health Care Participation Rate Assumptions**

ATTAINED AGE(S)	PERCENT ELECTING HEALTH CARE COVERAGE		ATTAINED AGE(S)	PERCENT ELECTING HEALTH CARE COVERAGE	
	HCTF	DPS HCTF		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	DPS HCTF
Self-Funded Medicare Supplement Plans	60% <sup>1</sup>	
Kaiser Permanente Medicare Advantage HMO	25%	
Rocky Mountain Health Plans Medicare HMO	10%	
UnitedHealthcare Medicare HMO	5%	

<sup>1</sup> Eighty-two (82) percent of those PERACare enrollees participating in the self-funded plans are assumed to elect MS #1, 16 percent MS #2, and 2 percent MS #3.

**Exhibit N: Percent Qualifying for “No Part A” Subsidy Assumptions**

HIRE AGE	PERCENT QUALIFYING FOR “NO PART A” SUBSIDY	
	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.



# Health Care Trust Funds—OPEB

## Summary of Funding Progress

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 individual health care trust fund and in total) the degree to which existing liabilities are funded, including prior history.
- A schedule of funding progress shows (by individual health care trust fund and in total) the UAAL as a percentage of annual valuation payroll, including prior history.
- A schedule detailing actuarial gains and losses, by source, (by individual health care trust fund) for the current year.
- The scheduled contribution requirements (by individual health care trust fund) 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). Each 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)

VALUATION DATE	AGGREGATE ACCRUED LIABILITIES			VALUATION ASSETS	PORTION OF ACTUARIAL ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
	ACTIVE MEMBER CONTRIBUTIONS (A)	RETIREE, BENEFICIARIES, AND INACTIVE MEMBERS (B)	EMPLOYER-FINANCED PORTION OF ACTIVE MEMBERS (C)		LIABILITY (A)	LIABILITY (B)	LIABILITY (C)
<b>HCTF</b>							
12/31/2005 <sup>1</sup>	N/A	\$666,509,000	\$450,118,000	\$191,264,000	N/A	28.7%	0.0%
12/31/2006	N/A	878,996,939	368,953,474	214,816,145	N/A	24.4%	0.0%
12/31/2007	N/A	926,179,967	377,414,269	258,774,755	N/A	27.9%	0.0%
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%
12/31/2014	N/A	1,085,994,673	448,466,638	297,376,975	N/A	27.4%	0.0%
<b>DPS HCTF<sup>2</sup></b>							
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%
12/31/2014	N/A	50,997,742	25,028,185	16,501,777	N/A	32.4%	0.0%

Please see page 175 for footnote references.

**SOLVENCY TEST (CONTINUED)**  
(In Actual Dollars)

VALUATION DATE	AGGREGATE ACCRUED LIABILITIES			VALUATION ASSETS	PORTION OF ACTUARIAL ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
	ACTIVE MEMBER CONTRIBUTIONS (A)	RETIREES, BENEFICIARIES, AND INACTIVE MEMBERS (B)	EMPLOYER-FINANCED PORTION OF ACTIVE MEMBERS (C)		LIABILITY (A)	LIABILITY (B)	LIABILITY (C)
<b>Total of Health Care Trust Funds<sup>3,4</sup></b>							
12/31/2005 <sup>1</sup>	N/A	\$666,509,000	\$450,118,000	\$191,264,000	N/A	28.7%	0.0%
12/31/2006	N/A	878,996,939	368,953,474	214,816,145	N/A	24.4%	0.0%
12/31/2007	N/A	926,179,967	377,414,269	258,774,755	N/A	27.9%	0.0%
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	1,238,240,753	483,265,320	302,278,950	N/A	24.4%	0.0%
12/31/2011	N/A	1,308,672,154	479,592,188	296,676,146	N/A	22.7%	0.0%
12/31/2012	N/A	1,314,284,377	486,878,998	299,539,211	N/A	22.8%	0.0%
12/31/2013	N/A	1,144,544,201	489,497,924	309,038,139	N/A	27.0%	0.0%
12/31/2014	N/A	1,136,992,415	473,494,823	313,878,752	N/A	27.6%	0.0%

<sup>1</sup> The amounts for 2005 are only available rounded to thousands of dollars.

<sup>2</sup> The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

<sup>3</sup> Results prior to December 31, 2010, do not include the DPS HCTF.

<sup>4</sup> 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.

# Health Care Trust Funds—OPEB

## 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 higher liabilities (or losses) during 2014:

- Recognition of investment losses experienced in 2011 and 2014.
- 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.

The following factor resulted in lower liabilities (or gains) during 2014:

- Recognition of investment gains experienced in 2012 and 2013.

## SCHEDULE OF FUNDING PROGRESS

(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)
<b>HCTF</b>						
12/31/2005 <sup>1</sup>	\$191,264,000	\$1,116,627,000	\$925,363,000	17.1%	\$5,940,132,000	15.6%
12/31/2006	214,816,145	1,247,950,413	1,033,134,268	17.2%	6,135,961,050	16.8%
12/31/2007	258,774,755	1,303,594,236	1,044,819,481	19.9%	6,566,368,545	15.9%
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%
12/31/2014	297,376,975	1,534,461,311	1,237,084,336	19.4%	7,211,350,491	17.2%
<b>DPS HCTF<sup>2</sup></b>						
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%
12/31/2014	16,501,777	76,025,927	59,524,150	21.7%	584,319,269	10.2%
<b>Total of Health Care Trust Funds<sup>3,4</sup></b>						
12/31/2005 <sup>1</sup>	\$191,264,000	\$1,116,627,000	\$925,363,000	17.1%	\$5,940,132,000	15.6%
12/31/2006	214,816,145	1,247,950,413	1,033,134,268	17.2%	6,135,961,050	16.8%
12/31/2007	258,774,755	1,303,594,236	1,044,819,481	19.9%	6,566,368,545	15.9%
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	302,278,950	1,721,506,073	1,419,227,123	17.6%	7,506,192,920	18.9%
12/31/2011	296,676,146	1,788,264,342	1,491,588,196	16.6%	7,464,243,447	20.0%
12/31/2012	299,539,211	1,801,163,375	1,501,624,164	16.6%	7,277,585,379	20.6%
12/31/2013	309,038,139	1,634,042,125	1,325,003,986	18.9%	7,530,220,378	17.6%
12/31/2014	313,878,752	1,610,487,238	1,296,608,486	19.5%	7,795,669,760	16.6%

<sup>1</sup> The amounts for 2005 are only available rounded to thousands of dollars.

<sup>2</sup> The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

<sup>3</sup> Results prior to December 31, 2010, do not include the DPS HCTF.

<sup>4</sup> 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.

**Actuarial Gains and Losses**

**ANALYSIS OF FINANCIAL EXPERIENCE**  
(In Millions of Dollars)

	HCTF	DPS HCTF
From differences between assumed and actual experience on liabilities		
Age and service retirements <sup>1</sup>	\$6.0	\$0.3
Disability retirements <sup>2</sup>	0.8	0.0
Deaths <sup>3</sup>	2.5	0.0
Withdrawals <sup>4</sup>	7.5	(0.1)
New members <sup>5</sup>	5.0	0.8
Other <sup>6</sup>	(43.1)	(2.0)
Subtotal	(21.3)	(1.0)
From differences between assumed and actual experience on assets	(5.8)	(0.3)
From change in plan assumptions	(20.2)	(0.1)
From change in plan provisions	0.0	0.0
<b>Total actuarial (gains)/losses on 2014 activities</b>	<b>(\$47.3)</b>	<b>(\$1.4)</b>
<b>Total actuarial (gains)/losses on 2013 activities</b>	<b>(\$205.2)</b>	<b>(\$1.9)</b>

<sup>1</sup> *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.

<sup>2</sup> *Disability retirements*: If disability claims are lower than assumed, there is a gain. If disability claims are higher than assumed, there is a loss.

<sup>3</sup> *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.

<sup>4</sup> *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.

<sup>5</sup> *New members*: If new members entering the plan have prior service, there is a loss.

<sup>6</sup> *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.

**Actuarial Valuation Results**

Contribution rates for the year ending December 31, 2016, are derived from the results of the December 31, 2014, 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 2016 FISCAL YEAR**

	EXPRESSED AS A PERCENTAGE OF MEMBER PAYROLL	
	HCTF	DPS HCTF
<b>Contributions</b>		
Service retirement benefits	0.17%	0.20%
Disability retirement benefits	0.01%	0.01%
Survivor benefits	0.00%	0.00%
Separation benefits	0.03%	0.02%
Total normal cost	0.21%	0.23%
Less member contributions	(0.00%)	(0.00%)
<b>Employer normal cost</b>	<b>0.21%</b>	<b>0.23%</b>
Percentage available to amortize unfunded actuarial accrued liabilities	0.81%	0.79%
Amortization period	35 years	16 years
<b>Total employer contribution rate for actuarially funded benefits</b>	<b>1.09%</b>	<b>0.75%</b>

## Health Care Trust Funds—OPEB

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

The most important long-run driver of an OPEB plan is investment income. 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.

To understand the importance of the investment rate of return, which is used to discount the actuarial liabilities, 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, 2016) as shown on the tables below and on the next page.

#### INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 6.0 PERCENT

(In Thousands of Dollars)

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ARC	UAAL
HCTF	16.6%	\$1,494,283	1.19%	\$1,482,023
DPS HCTF	18.7%	71,613	0.86%	71,093
Total Health Care Trust Funds <sup>1</sup>		<u>\$1,565,896</u>		<u>\$1,553,116</u>

<sup>1</sup> 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

(In Thousands of Dollars)

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ARC	UAAL
HCTF	18.4%	\$1,315,510	1.13%	\$1,303,249
DPS HCTF	20.7%	63,211	0.79%	62,692
Total Health Care Trust Funds <sup>1</sup>		<u>\$1,378,721</u>		<u>\$1,365,941</u>

<sup>1</sup> 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

(In Thousands of Dollars)

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ARC	UAAL
HCTF	19.4%	\$1,237,084	1.09%	\$1,224,823
DPS HCTF	21.7%	59,524	0.75%	59,005
Total Health Care Trust Funds <sup>1</sup>		<u>\$1,296,608</u>		<u>\$1,283,828</u>

<sup>1</sup> 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 8.0 PERCENT**  
*(In Thousands of Dollars)*

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ARC	UAAL
HCTF	20.3%	\$1,164,955	1.07%	\$1,152,694
DPS HCTF	22.7%	56,133	0.73%	55,614
Total Health Care Trust Funds <sup>1</sup>		<u>\$1,221,088</u>		<u>\$1,208,308</u>

<sup>1</sup> 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**  
*(In Thousands of Dollars)*

TRUST FUND	ACTUARIAL VALUE OF ASSETS			MARKET VALUE OF ASSETS
	FUNDED RATIO	UAAL	ARC	UAAL
HCTF	22.3%	\$1,037,091	1.04%	\$1,024,830
DPS HCTF	24.8%	50,117	0.69%	49,598
Total Health Care Trust Funds <sup>1</sup>		<u>\$1,087,208</u>		<u>\$1,074,428</u>

<sup>1</sup> 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 9.9 percent for the past five years and 6.8 percent for the past 10 years. The 30-year annualized gross-of-fees rate of return for the pooled investment assets was 9.4 percent.



# Health Care Trust Funds—OPEB

## Plan Data

### SCHEDULE OF RETIREES, BENEFICIARIES, AND SURVIVORS ADDED TO AND REMOVED FROM THE BENEFIT PAYROLL

(In Actual Dollars)

YEAR ENDED	ADDED TO PAYROLL		REMOVED FROM PAYROLL		PAYROLL—END OF YEAR		AVERAGE ANNUAL SUBSIDY	INCREASE IN AVERAGE SUBSIDY
	NO.	ANNUAL SUBSIDY	NO.	ANNUAL SUBSIDY	NO.	ANNUAL SUBSIDY		
<b>HCTF<sup>1,2</sup></b>								
12/31/2006					41,421	\$72,539,493	\$1,751	—
12/31/2007	3,408	\$7,714,959	1,710	\$2,841,489	43,119	75,263,268	1,745	(0.3%)
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%)
12/31/2014	3,231	6,954,234	2,196	3,945,282	54,076	91,222,002	1,687	(1.7%)
<b>DPS HCTF<sup>2,3</sup></b>								
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%)
12/31/2014	184	368,943	217	346,587	3,962	5,961,324	1,505	(1.4%)
<b>Total of Health Care Trust Funds<sup>1,2,4</sup></b>								
12/31/2006					41,421	\$72,539,493	\$1,751	—
12/31/2007	3,408	\$7,714,959	1,710	\$2,841,489	43,119	75,263,268	1,745	(0.3%)
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	7,577 <sup>5</sup>	14,736,675	1,653	2,623,104	52,662 <sup>5</sup>	91,693,410	1,741	(0.5%)
12/31/2011	3,602	8,049,954	2,089	3,292,335	54,175	93,051,882	1,718	(1.3%)
12/31/2012	3,657	8,185,539	2,205	3,807,489	55,627	96,210,012	1,730	0.7%
12/31/2013	3,454	7,527,252	2,045	3,624,984	57,036	97,108,047	1,703	(1.6%)
12/31/2014	3,415	7,323,177	2,413	4,291,869	58,038	97,183,326	1,674	(1.7%)

<sup>1</sup> Information prior to 2006 is not available.

<sup>2</sup> 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.

<sup>3</sup> The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

<sup>4</sup> Data prior to 2010 does not include the DPS HCTF.

<sup>5</sup> Includes the addition of 3,944 beneficiaries due to the DPSRS merger.

**SCHEDULE OF ACTIVE MEMBER ACTUARIAL VALUATION DATA**  
(In Actual Dollars)

YEAR	NUMBER OF PARTICIPATING EMPLOYERS <sup>1</sup>	NUMBER OF ACTIVE MEMBERS	ANNUAL PAYROLL FOR ACTIVE MEMBERS	AVERAGE ANNUAL PAY FOR ACTIVE MEMBERS	% INCREASE (DECREASE) IN AVERAGE ANNUAL PAY
<b>HCTF</b>					
2005 <sup>2</sup>	405	180,630	\$5,940,132,000	\$32,886	(1.09%)
2006	405	182,404	6,135,961,050	33,639	2.29%
2007	409	186,842	6,566,368,545	35,144	4.47%
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 <sup>3</sup>	187,924	7,035,419,174	37,438	1.02%
2011	496 <sup>3</sup>	186,170	6,972,597,196	37,453	0.04%
2012	500 <sup>3</sup>	182,524	6,766,713,013	37,073	(1.01%)
2013	516 <sup>3</sup>	185,367	6,982,560,466	37,669	1.61%
2014	531	187,336	7,211,350,491	38,494	2.19%
<b>DPS HCTF<sup>4</sup></b>					
2010	28 <sup>3</sup>	13,171	\$470,773,746	\$35,743	—
2011	27 <sup>3</sup>	13,571	491,646,251	36,228	1.36%
2012	29 <sup>3</sup>	13,911	510,872,366	36,724	1.37%
2013	31 <sup>3</sup>	14,816	547,659,912	36,964	0.65%
2014	34	15,414	584,319,269	37,908	2.55%
<b>Total of Health Care Trust Funds<sup>5</sup></b>					
2005 <sup>2</sup>	405	180,630	\$5,940,132,000	\$32,886	(1.09%)
2006	405	182,404	6,135,961,050	33,639	2.29%
2007	409	186,842	6,566,368,545	35,144	4.47%
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 <sup>3</sup>	201,095	7,506,192,920	37,327	0.72%
2011	523 <sup>3</sup>	199,741	7,464,243,447	37,370	0.12%
2012	529 <sup>3</sup>	196,435	7,277,585,379	37,048	(0.86%)
2013	547 <sup>3</sup>	200,183	7,530,220,378	37,617	1.54%
2014	565	202,750	7,795,669,760	38,450	2.21%

<sup>1</sup> Any differences in the number of participating employers in this schedule compared to the same schedule for the Division Trust Funds are due to the definition of employer as promulgated by GASB 67.

<sup>2</sup> The annual payroll for 2005 is only available rounded to thousands of dollars.

<sup>3</sup> Includes charter schools operating within the School and DPS Divisions and under the Colorado Charter School Institute.

<sup>4</sup> The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust.

<sup>5</sup> Data prior to 2010 does not include the DPS HCTF.

Providing a  
Foundation for  
**FREEDOM**



*Colorado PERA offers members the freedom to use the plan in a way that best suits their needs, whether that means refunding an account after a few months of coverage or retiring with a full-service benefit.*

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**STATISTICAL SECTION**



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 fiduciary net position over the past 10 years:

- *Changes in Fiduciary Net Position*
- *Benefits and Refund Deductions from Fiduciary 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<sup>1</sup>*
- *Schedule of Average Retirement Benefits Payable—All Division Trust Funds<sup>1</sup>*
- *Schedule of Average Retirement Benefits Payable<sup>1</sup>*
- *Colorado PERA Benefit Payments—All Division Trust Funds<sup>1</sup>*
- *Schedule of Retirees and Survivors by Types of Benefits<sup>1</sup>*
- *Schedule of Average Benefit Payments<sup>1</sup>*
- *Schedule of Average Benefit Payments—All Division Trust Funds<sup>1</sup>*
- *Schedule of Contribution Rate History*
- *Principal Participating Employers*
- *Schedule of Affiliated Employers*

Note: Schedules and information are derived from PERA internal sources unless otherwise noted.

<sup>1</sup>Schedules and data are provided by the consulting actuary, Cavanaugh Macdonald Consulting, LLC.

# Changes in Fiduciary Net Position

For the Year Ended December 31

(In Thousands of Dollars)

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## STATE AND SCHOOL DIVISION TRUST FUND<sup>1</sup>

<b>ADDITIONS</b>	<b>2005</b>
Employer contributions <sup>2</sup>	\$491,031
Member contributions <sup>2</sup>	425,657
Purchased service	212,971
Investment income	2,827,871
Other	(9)
<b>Total additions</b>	<b>3,957,521</b>
<b>DEDUCTIONS</b>	
Benefit payments	1,872,565
Refunds	114,968
Disability insurance premiums	4,038
Administrative expenses	18,811
Other	10,373
<b>Total deductions</b>	<b>2,020,755</b>
<b>Change in fiduciary net position</b>	<b>1,936,766</b>
<b>Fiduciary net position held at beginning of year</b>	<b>30,019,896</b>
<b>Fiduciary net position held at end of year</b>	<b>\$31,956,662</b>

<sup>1</sup> The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

<sup>2</sup> Employer and Member contribution rate history is shown on pages 217-222.



# Changes in Fiduciary Net Position

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

## STATE DIVISION TRUST FUND<sup>1</sup>

<b>ADDITIONS</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Employer contributions <sup>2</sup>	\$208,795	\$232,997	\$270,353	\$297,240	\$287,624
Member contributions <sup>2</sup>	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
<b>Total additions</b>	<b>2,340,104</b>	<b>1,809,496</b>	<b>(3,270,687)</b>	<b>2,242,812</b>	<b>2,076,503</b>
<b>DEDUCTIONS</b>					
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)
<b>Total deductions</b>	<b>927,904</b>	<b>998,727</b>	<b>1,073,041</b>	<b>1,139,355</b>	<b>1,201,156</b>
<b>Change in fiduciary net position</b>	<b>1,412,200</b>	<b>810,769</b>	<b>(4,343,728)</b>	<b>1,103,457</b>	<b>875,347</b>
<b>Fiduciary net position held at beginning of year</b>	<b>12,629,060</b>	<b>14,041,260</b>	<b>14,852,029</b>	<b>10,508,301</b>	<b>11,611,758</b>
<b>Fiduciary net position held at end of year</b>	<b>\$14,041,260</b>	<b>\$14,852,029</b>	<b>\$10,508,301</b>	<b>\$11,611,758</b>	<b>\$12,487,105</b>

<b>ADDITIONS</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Employer contributions <sup>2</sup>	\$283,222	\$335,073	\$401,658	\$444,372
Member contributions <sup>2</sup>	258,678	227,058	202,799	211,610
Purchased service	11,277	16,358	22,241	22,446
Investment income	232,669	1,511,244	1,931,658	780,762
Other	331	150	4,869	3,289
<b>Total additions</b>	<b>786,177</b>	<b>2,089,883</b>	<b>2,563,225</b>	<b>1,462,479</b>
<b>DEDUCTIONS</b>				
Benefit payments	1,174,707	1,231,922	1,295,780	1,352,293
Refunds	70,090	69,221	68,735	61,152
Disability insurance premiums	1,685	1,570	2,229	2,309
Administrative expenses	8,685	8,568	9,780	10,067
Other	(4,546)	3,911	3,593	3,171
<b>Total deductions</b>	<b>1,250,621</b>	<b>1,315,192</b>	<b>1,380,117</b>	<b>1,428,992</b>
<b>Change in fiduciary net position</b>	<b>(464,444)</b>	<b>774,691</b>	<b>1,183,108</b>	<b>33,487</b>
<b>Fiduciary net position held at beginning of year</b>	<b>12,487,105</b>	<b>12,022,661</b>	<b>12,797,352</b>	<b>13,980,460</b>
<b>Fiduciary net position held at end of year</b>	<b>\$12,022,661</b>	<b>\$12,797,352</b>	<b>\$13,980,460</b>	<b>\$14,013,947</b>

<sup>1</sup> The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

<sup>2</sup> Employer and Member contribution rate history is shown on pages 217-222.

# Changes in Fiduciary Net Position

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

## SCHOOL DIVISION TRUST FUND<sup>1</sup>

<b>ADDITIONS</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Employer contributions <sup>2</sup>	\$336,703	\$375,480	\$430,215	\$480,239	\$519,044
Member contributions <sup>2</sup>	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
<b>Total additions</b>	<b>3,614,984</b>	<b>2,825,015</b>	<b>(5,092,847)</b>	<b>3,546,771</b>	<b>3,318,128</b>
<b>DEDUCTIONS</b>					
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
<b>Total deductions</b>	<b>1,306,629</b>	<b>1,417,786</b>	<b>1,534,539</b>	<b>1,659,758</b>	<b>1,750,664</b>
<b>Change in fiduciary net position</b>	<b>2,308,355</b>	<b>1,407,229</b>	<b>(6,627,386)</b>	<b>1,887,013</b>	<b>1,567,464</b>
<b>Fiduciary net position held at beginning of year</b>	<b>19,327,602</b>	<b>21,635,957</b>	<b>23,043,186</b>	<b>16,415,800</b>	<b>18,302,813</b>
<b>Fiduciary net position held at end of year</b>	<b>\$21,635,957</b>	<b>\$23,043,186</b>	<b>\$16,415,800</b>	<b>\$18,302,813</b>	<b>\$19,870,277</b>

<b>ADDITIONS</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Employer contributions <sup>2</sup>	\$541,962	\$573,586	\$624,784	\$686,323
Member contributions <sup>2</sup>	315,958	313,923	322,217	334,585
Purchased service	14,465	17,406	19,285	21,935
Investment income	370,045	2,434,176	3,136,269	1,274,862
Other	544	246	139	112
<b>Total additions</b>	<b>1,242,974</b>	<b>3,339,337</b>	<b>4,102,694</b>	<b>2,317,817</b>
<b>DEDUCTIONS</b>				
Benefit payments	1,731,348	1,832,643	1,932,756	2,032,628
Refunds	78,543	77,154	76,980	77,171
Disability insurance premiums	2,619	2,522	3,655	3,748
Administrative expenses	16,322	16,086	18,523	19,290
Other	9,839	9,157	7,132	4,376
<b>Total deductions</b>	<b>1,838,671</b>	<b>1,937,562</b>	<b>2,039,046</b>	<b>2,137,213</b>
<b>Change in fiduciary net position</b>	<b>(595,697)</b>	<b>1,401,775</b>	<b>2,063,648</b>	<b>180,604</b>
<b>Fiduciary net position held at beginning of year</b>	<b>19,870,277</b>	<b>19,274,580</b>	<b>20,676,355</b>	<b>22,740,003</b>
<b>Fiduciary net position held at end of year</b>	<b>\$19,274,580</b>	<b>\$20,676,355</b>	<b>\$22,740,003</b>	<b>\$22,920,607</b>

<sup>1</sup> The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

<sup>2</sup> Employer and Member contribution rate history is shown on pages 217-222.

# Changes in Fiduciary Net Position

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

## LOCAL GOVERNMENT DIVISION TRUST FUND<sup>1</sup>

<b>ADDITIONS</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Employer contributions <sup>2</sup>	\$54,357	\$60,664	\$68,711	\$79,457	\$84,456
Member contributions <sup>2</sup>	48,404	51,047	54,880	58,508	57,598
Purchased service	92,018	14,461	2,447	3,820	4,460
Investment income (loss)	206,017	369,181	274,991	(778,885)	381,350
Other	2	4	12	(2)	2
<b>Total additions</b>	<b>400,798</b>	<b>495,357</b>	<b>401,041</b>	<b>(637,102)</b>	<b>527,866</b>
<b>DEDUCTIONS</b>					
Benefit payments	90,808	104,156	117,350	132,696	150,036
Refunds	15,052	16,328	16,683	18,219	19,648
Disability insurance premiums	444	529	561	560	591
Administrative expenses	1,848	1,800	1,918	2,102	2,160
Other	2,885	(1,056)	1,326	2,014	2,737
<b>Total deductions</b>	<b>111,037</b>	<b>121,757</b>	<b>137,838</b>	<b>155,591</b>	<b>175,172</b>
<b>Change in fiduciary net position</b>	<b>289,761</b>	<b>373,600</b>	<b>263,203</b>	<b>(792,693)</b>	<b>352,694</b>
<b>Fiduciary net position held at beginning of year</b>	<b>2,087,710</b>	<b>2,377,471</b>	<b>2,751,071</b>	<b>3,014,274</b>	<b>2,221,581</b>
<b>Fiduciary net position held at end of year</b>	<b>\$2,377,471</b>	<b>\$2,751,071</b>	<b>\$3,014,274</b>	<b>\$2,221,581</b>	<b>\$2,574,275</b>

<b>ADDITIONS</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Employer contributions <sup>2</sup>	\$89,515	\$91,780	\$86,113	\$67,197	\$68,719
Member contributions <sup>2</sup>	56,728	58,590	54,827	42,627	43,792
Purchased service	3,671	3,902	13,927	7,363	5,498
Employer disaffiliation	—	—	—	—	186,006
Investment income	355,964	53,130	368,492	482,297	200,394
Other	9	78	2,663	14	14
<b>Total additions</b>	<b>505,887</b>	<b>207,480</b>	<b>526,022</b>	<b>599,498</b>	<b>504,423</b>
<b>DEDUCTIONS</b>					
Benefit payments	165,770	179,449	195,945	217,875	232,055
Refunds	22,942	22,686	42,941	32,480	24,436
Disability insurance premiums	496	442	410	479	481
Administrative expenses	2,215	2,157	2,035	2,021	2,091
Other	5,235	2,737	2,072	4,463	2,204
<b>Total deductions</b>	<b>196,658</b>	<b>207,471</b>	<b>243,403</b>	<b>257,318</b>	<b>261,267</b>
<b>Change in fiduciary net position</b>	<b>309,229</b>	<b>9</b>	<b>282,619</b>	<b>342,180</b>	<b>243,156</b>
<b>Fiduciary net position held at beginning of year</b>	<b>2,574,275</b>	<b>2,883,504</b>	<b>2,883,513</b>	<b>3,166,132</b>	<b>3,508,312</b>
<b>Fiduciary net position held at end of year</b>	<b>\$2,883,504</b>	<b>\$2,883,513</b>	<b>\$3,166,132</b>	<b>\$3,508,312</b>	<b>\$3,751,468</b>

<sup>1</sup> The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

<sup>2</sup> Employer and Member contribution rate history is shown on pages 217-222.

# Changes in Fiduciary Net Position

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

## JUDICIAL DIVISION TRUST FUND

<b>ADDITIONS</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Employer contributions <sup>1</sup>	\$3,408	\$3,767	\$4,222	\$5,105	\$5,793
Member contributions <sup>1</sup>	2,154	2,292	2,479	2,806	3,001
Purchased service	2,993	1,814	80	392	(3)
Investment income (loss)	16,953	29,920	21,965	(61,192)	29,977
<b>Total additions</b>	<b>25,508</b>	<b>37,793</b>	<b>28,746</b>	<b>(52,889)</b>	<b>38,768</b>
<b>DEDUCTIONS</b>					
Benefit payments	9,868	10,755	12,396	13,356	15,011
Refunds	181	—	4	—	30
Disability insurance premiums	20	24	25	26	31
Administrative expenses	20	19	19	21	22
Other	(742)	(3)	(2,908)	(322)	(1,778)
<b>Total deductions</b>	<b>9,347</b>	<b>10,795</b>	<b>9,536</b>	<b>13,081</b>	<b>13,316</b>
<b>Change in fiduciary net position</b>	<b>16,161</b>	<b>26,998</b>	<b>19,210</b>	<b>(65,970)</b>	<b>25,452</b>
Fiduciary net position held at beginning of year	178,504	194,665	221,663	240,873	174,903
Fiduciary net position held at end of year	<b>\$194,665</b>	<b>\$221,663</b>	<b>\$240,873</b>	<b>\$174,903</b>	<b>\$200,355</b>

<b>ADDITIONS</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Employer contributions <sup>1</sup>	\$5,654	\$5,430	\$5,922	\$6,587	\$7,070
Member contributions <sup>1</sup>	3,465	4,120	3,628	3,224	3,461
Purchased service	109	5	180	240	835
Investment income	27,400	4,105	28,063	37,096	15,299
Other	—	6	2,556	1,451	256
<b>Total additions</b>	<b>36,628</b>	<b>13,666</b>	<b>40,349</b>	<b>48,598</b>	<b>26,921</b>
<b>DEDUCTIONS</b>					
Benefit payments	15,394	16,809	17,606	18,616	19,800
Refunds	104	513	605	385	60
Disability insurance premiums	26	26	27	40	43
Administrative expenses	61	61	61	69	72
Other	(2,491)	(1,043)	22	52	100
<b>Total deductions</b>	<b>13,094</b>	<b>16,366</b>	<b>18,321</b>	<b>19,162</b>	<b>20,075</b>
<b>Change in fiduciary net position</b>	<b>23,534</b>	<b>(2,700)</b>	<b>22,028</b>	<b>29,436</b>	<b>6,846</b>
Fiduciary net position held at beginning of year	200,355	223,889	221,189	243,217	272,653
Fiduciary net position held at end of year	<b>\$223,889</b>	<b>\$221,189</b>	<b>\$243,217</b>	<b>\$272,653</b>	<b>\$279,499</b>

<sup>1</sup> Employer and Member contribution rate history is shown on pages 217-222.

# Changes in Fiduciary Net Position

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

## DENVER PUBLIC SCHOOLS DIVISION TRUST FUND<sup>1</sup>

<b>ADDITIONS</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Employer contributions <sup>2</sup>	\$6,493	\$12,859	\$14,703	\$25,157	\$18,478
Member contributions <sup>2</sup>	36,824	39,422	41,124	43,564	47,083
Plan transfer	2,750,566	—	—	—	—
Purchased service	2,056	1,792	1,924	1,834	2,326
Investment income	367,145	55,081	354,867	452,919	182,823
Other	5	77	146	269	13
<b>Total additions</b>	<b>3,163,089</b>	<b>109,231</b>	<b>412,764</b>	<b>523,743</b>	<b>250,723</b>
<b>DEDUCTIONS</b>					
Benefit payments	215,825	221,113	228,742	237,921	247,005
Refunds	3,029	4,412	5,821	6,733	8,063
Disability insurance premiums	311	238	220	338	366
Administrative expenses	2,944	1,914	1,919	2,240	2,377
Other	54	2,409	55	150	1,560
<b>Total deductions</b>	<b>222,163</b>	<b>230,086</b>	<b>236,757</b>	<b>247,382</b>	<b>259,371</b>
<b>Change in fiduciary net position</b>	<b>2,940,926</b>	<b>(120,855)</b>	<b>176,007</b>	<b>276,361</b>	<b>(8,648)</b>
<b>Fiduciary net position held at beginning of year</b>	<b>—</b>	<b>2,940,926</b>	<b>2,820,071</b>	<b>2,996,078</b>	<b>3,272,439</b>
<b>Fiduciary net position held at end of year</b>	<b>\$2,940,926</b>	<b>\$2,820,071</b>	<b>\$2,996,078</b>	<b>\$3,272,439</b>	<b>\$3,263,791</b>

<sup>1</sup> 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).

<sup>2</sup> Employer and Member contribution rate history is shown on pages 217-222.

# Changes in Fiduciary Net Position

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

## VOLUNTARY INVESTMENT PROGRAM

<b>ADDITIONS</b>	<b>2005</b>	<b>2006<sup>1</sup></b>	<b>2007<sup>1</sup></b>	<b>2008<sup>1</sup></b>	<b>2009</b>
Employer contributions	\$2,484	\$2,724	\$3,252	\$3,866	\$3,383
Member contributions	182,257	165,641	171,630	157,937	134,645
Plan transfer	—	—	—	—	18,358
Investment income (loss)	96,423	166,668	125,576	(500,862)	291,029
Other	2,964	3,396	6,317	4,472	3,654
<b>Total additions</b>	<b>284,128</b>	<b>338,429</b>	<b>306,775</b>	<b>(334,587)</b>	<b>451,069</b>
<b>DEDUCTIONS</b>					
Refunds	187,557	108,477	92,607	87,571	75,351
Administrative expenses	4,298	4,706	5,482	4,965	4,664
<b>Total deductions</b>	<b>191,855</b>	<b>113,183</b>	<b>98,089</b>	<b>92,536</b>	<b>80,015</b>
<b>Change in fiduciary net position</b>	<b>92,273</b>	<b>225,246</b>	<b>208,686</b>	<b>(427,123)</b>	<b>371,054</b>
Fiduciary net position held at beginning of year	1,204,725	1,296,998	1,522,244	1,730,930	1,303,807
<b>Fiduciary net position held at end of year</b>	<b>\$1,296,998</b>	<b>\$1,522,244</b>	<b>\$1,730,930</b>	<b>\$1,303,807</b>	<b>\$1,674,861</b>

<b>ADDITIONS</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Employer contributions	\$3,827	\$3,610	\$3,697	\$3,679	\$3,866
Member contributions	132,674	126,331	119,013	120,203	126,112
Investment income (loss)	194,500	(5,752)	236,775	423,877	188,199
Other	3,697	3,298	2,075	2,141	2,291
<b>Total additions</b>	<b>334,698</b>	<b>127,487</b>	<b>361,560</b>	<b>549,900</b>	<b>320,468</b>
<b>DEDUCTIONS</b>					
Refunds	102,056	133,719	144,171	142,064	144,329
Administrative expenses	5,178	4,717	2,827	3,137	3,050
Other	—	29	234	624	839
<b>Total deductions</b>	<b>107,234</b>	<b>138,465</b>	<b>147,232</b>	<b>145,825</b>	<b>148,218</b>
<b>Change in fiduciary net position</b>	<b>227,464</b>	<b>(10,978)</b>	<b>214,328</b>	<b>404,075</b>	<b>172,250</b>
Fiduciary net position held at beginning of year	1,674,861	1,902,325	1,891,347	2,105,675	2,509,750
<b>Fiduciary net position held at end of year</b>	<b>\$1,902,325</b>	<b>\$1,891,347</b>	<b>\$2,105,675</b>	<b>\$2,509,750</b>	<b>\$2,682,000</b>

<sup>1</sup> 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.



# Changes in Fiduciary Net Position

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

## DEFINED CONTRIBUTION RETIREMENT PLAN<sup>1</sup>

<b>ADDITIONS</b>	<b>2006<sup>2</sup></b>	<b>2007<sup>2</sup></b>	<b>2008<sup>2</sup></b>	<b>2009</b>	<b>2010</b>
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
<b>Total additions</b>	<b>603</b>	<b>2,102</b>	<b>2,672</b>	<b>33,999</b>	<b>18,889</b>
<b>DEDUCTIONS</b>					
Refunds	8	148	215	1,377	2,886
Administrative expenses	—	2	8	143	94
<b>Total deductions</b>	<b>8</b>	<b>150</b>	<b>223</b>	<b>1,520</b>	<b>2,980</b>
<b>Change in fiduciary net position</b>	<b>595</b>	<b>1,952</b>	<b>2,449</b>	<b>32,479</b>	<b>15,909</b>
<b>Fiduciary net position held at beginning of year</b>	<b>—</b>	<b>595</b>	<b>2,547</b>	<b>4,996</b>	<b>37,475</b>
<b>Fiduciary net position held at end of year</b>	<b>\$595</b>	<b>\$2,547</b>	<b>\$4,996</b>	<b>\$37,475</b>	<b>\$53,384</b>

<b>ADDITIONS</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Employer contributions	\$7,034	\$7,997	\$11,090	\$11,531
Member contributions	9,732	8,364	8,828	9,179
Investment income (loss)	(1,130)	9,046	17,416	6,745
Other	40	2	6	8
<b>Total additions</b>	<b>15,676</b>	<b>25,409</b>	<b>37,340</b>	<b>27,463</b>
<b>DEDUCTIONS</b>				
Refunds	5,176	4,869	6,314	8,690
Administrative expenses	282	848	744	738
Other	5	22	49	69
<b>Total deductions</b>	<b>5,463</b>	<b>5,739</b>	<b>7,107</b>	<b>9,497</b>
<b>Change in fiduciary net position</b>	<b>10,213</b>	<b>19,670</b>	<b>30,233</b>	<b>17,966</b>
<b>Fiduciary net position held at beginning of year</b>	<b>53,384</b>	<b>63,597</b>	<b>83,267</b>	<b>113,500</b>
<b>Fiduciary net position held at end of year</b>	<b>\$63,597</b>	<b>\$83,267</b>	<b>\$113,500</b>	<b>\$131,466</b>

<sup>1</sup> The Defined Contribution Plan was established in 2006.

<sup>2</sup> 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 Fiduciary Net Position

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

## DEFERRED COMPENSATION PLAN<sup>1</sup>

<b>ADDITIONS</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Employer contributions	\$12	\$12	\$51	\$14
Member contributions	23,875	44,203	42,253	39,851
Plan transfer	336,504	24	4	—
Investment income	40,443	42,232	10,335	49,344
Other	1,820	917	984	354
<b>Total additions</b>	<b>402,654</b>	<b>87,388</b>	<b>53,627</b>	<b>89,563</b>
<b>DEDUCTIONS</b>				
Refunds	8,745	20,869	27,524	27,627
Administrative expenses	507	822	834	1,105
Other	50	168	185	278
<b>Total deductions</b>	<b>9,302</b>	<b>21,859</b>	<b>28,543</b>	<b>29,010</b>
Change in fiduciary net position	393,352	65,529	25,084	60,553
Fiduciary net position held at beginning of year	—	393,352	458,881	483,965
Fiduciary net position held at end of year	<b>\$393,352</b>	<b>\$458,881</b>	<b>\$483,965</b>	<b>\$544,518</b>

<b>ADDITIONS</b>	<b>2013</b>	<b>2014</b>
Employer contributions	\$20	\$43
Member contributions	44,449	50,370
Investment income	88,565	32,133
Other	428	478
<b>Total additions</b>	<b>133,462</b>	<b>83,024</b>
<b>DEDUCTIONS</b>		
Refunds	32,854	35,584
Administrative expenses	1,094	1,074
Other	430	517
<b>Total deductions</b>	<b>34,378</b>	<b>37,175</b>
Change in fiduciary net position	99,084	45,849
Fiduciary net position held at beginning of year	544,518	643,602
Fiduciary net position held at end of year	<b>\$643,602</b>	<b>\$689,451</b>

<sup>1</sup> 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.

# Changes in Fiduciary Net Position

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

## HEALTH CARE TRUST FUND

<b>ADDITIONS</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Employer contributions <sup>1</sup>	\$61,193	\$64,547	\$68,508	\$72,599	\$74,073
Retiree health care premiums	62,872	85,673	96,345	102,644	106,903
Federal health care subsidies	—	12,481	12,397	13,743	13,633
Investment income (loss)	17,665	30,920	23,868	(72,423)	35,483
Other	13,609	12,997	12,454	12,803	12,721
<b>Total additions</b>	<b>155,339</b>	<b>206,618</b>	<b>213,572</b>	<b>129,366</b>	<b>242,813</b>
<b>DEDUCTIONS</b>					
Benefit payments	135,550	164,755	159,939	196,769	192,656
Administrative expenses	8,216	8,145	11,051	11,838	12,170
<b>Total deductions</b>	<b>143,766</b>	<b>172,900</b>	<b>170,990</b>	<b>208,607</b>	<b>204,826</b>
<b>Change in fiduciary net position</b>	<b>11,573</b>	<b>33,718</b>	<b>42,582</b>	<b>(79,241)</b>	<b>37,987</b>
Fiduciary net position held at beginning of year	181,559	193,132	226,850	269,432	190,191
<b>Fiduciary net position held at end of year</b>	<b>\$193,132</b>	<b>\$226,850</b>	<b>\$269,432</b>	<b>\$190,191</b>	<b>\$228,178</b>

<b>ADDITIONS</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Employer contributions <sup>1</sup>	\$74,047	\$73,449	\$72,553	\$72,784	\$75,631
Retiree health care premiums	110,158	108,689	107,104	114,364	105,459
Federal health care subsidies	25,751	14,151	14,198	15,731	—
Employer disaffiliation	—	—	—	—	3,994
Investment income	34,676	5,153	36,710	46,097	18,203
Other	16,035	10,574	11,668	10,522	9,813
<b>Total additions</b>	<b>260,667</b>	<b>212,016</b>	<b>242,233</b>	<b>259,498</b>	<b>213,100</b>
<b>DEDUCTIONS</b>					
Benefit payments	192,044	203,419	218,768	222,860	200,627
Administrative expenses	11,131	12,481	13,514	13,766	16,612
Other	—	—	—	—	832
<b>Total deductions</b>	<b>203,175</b>	<b>215,900</b>	<b>232,282</b>	<b>236,626</b>	<b>218,071</b>
<b>Change in fiduciary net position</b>	<b>57,492</b>	<b>(3,884)</b>	<b>9,951</b>	<b>22,872</b>	<b>(4,971)</b>
Fiduciary net position held at beginning of year	228,178	285,670	281,786	291,737	314,609
<b>Fiduciary net position held at end of year</b>	<b>\$285,670</b>	<b>\$281,786</b>	<b>\$291,737</b>	<b>\$314,609</b>	<b>\$309,638</b>

<sup>1</sup> Employer contribution rate history is shown on page 222.

# Changes in Fiduciary Net Position

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

## DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND<sup>1</sup>

<b>ADDITIONS</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Employer contributions <sup>2</sup>	\$4,762	\$5,029	\$5,243	\$5,558	\$6,003
Plan transfer	13,510	—	—	—	—
Retiree health care premium	4,747	4,529	4,295	4,719	4,442
Federal health care subsidies	1,252	499	488	563	—
Investment income	1,992	424	1,800	2,277	938
Other	109	374	216	312	281
<b>Total additions</b>	<b>26,372</b>	<b>10,855</b>	<b>12,042</b>	<b>13,429</b>	<b>11,664</b>
<b>DEDUCTIONS</b>					
Benefit payments	11,012	10,770	11,027	11,222	10,432
Administrative expenses	569	501	547	561	668
Other	—	—	—	—	32
<b>Total deductions</b>	<b>11,581</b>	<b>11,271</b>	<b>11,574</b>	<b>11,783</b>	<b>11,132</b>
<b>Change in fiduciary net position</b>	<b>14,791</b>	<b>(416)</b>	<b>468</b>	<b>1,646</b>	<b>532</b>
<b>Fiduciary net position held at beginning of year</b>	<b>—</b>	<b>14,791</b>	<b>14,375</b>	<b>14,843</b>	<b>16,489</b>
<b>Fiduciary net position held at end of year</b>	<b>\$14,791</b>	<b>\$14,375</b>	<b>\$14,843</b>	<b>\$16,489</b>	<b>\$17,021</b>

<sup>1</sup> 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.

<sup>2</sup> Employer contribution rate history is shown on page 222.

## Changes in Fiduciary Net Position

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

### LIFE INSURANCE RESERVE

<b>ADDITIONS</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Life insurance premiums	\$7,351	\$8,950	\$9,075	\$1,772	\$—
Investment income (loss)	1,652	2,625	2,851	(4,693)	2,496
<b>Total additions</b>	<b>9,003</b>	<b>11,575</b>	<b>11,926</b>	<b>(2,921)</b>	<b>2,496</b>
<b>DEDUCTIONS</b>					
Life insurance premiums and claims	5,571	8,653	7,961	2,820	575
Administrative expenses	2,486	1,100	1,732	486	576
<b>Total deductions</b>	<b>8,057</b>	<b>9,753</b>	<b>9,693</b>	<b>3,306</b>	<b>1,151</b>
Change in fiduciary net position	946	1,822	2,233	(6,227)	1,345
Fiduciary net position held at beginning of year	13,754	14,700	16,522	18,755	12,528
<b>Fiduciary net position held at end of year</b>	<b>\$14,700</b>	<b>\$16,522</b>	<b>\$18,755</b>	<b>\$12,528</b>	<b>\$13,873</b>

<b>ADDITIONS</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Investment income	\$2,280	\$503	\$2,020	\$2,630	\$1,068
<b>Total additions</b>	<b>2,280</b>	<b>503</b>	<b>2,020</b>	<b>2,630</b>	<b>1,068</b>
<b>DEDUCTIONS</b>					
Life insurance premiums and claims	545	547	62	131	196
Administrative expenses	575	573	510	871	871
<b>Total deductions</b>	<b>1,120</b>	<b>1,120</b>	<b>572</b>	<b>1,002</b>	<b>1,067</b>
Change in fiduciary net position	1,160	(617)	1,448	1,628	1
Fiduciary net position held at beginning of year	13,873	15,033	14,416	15,864	17,492
<b>Fiduciary net position held at end of year</b>	<b>\$15,033</b>	<b>\$14,416</b>	<b>\$15,864</b>	<b>\$17,492</b>	<b>\$17,493</b>

# Benefits and Refund Deductions from Fiduciary Net Position by Type

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

## STATE AND SCHOOL DIVISION TRUST FUND<sup>1</sup>

TYPE OF BENEFIT	2005
Age and service benefits:	
Retirees	\$1,726,569
Disability	123,808
Survivors	22,188
<b>Total benefits</b>	<b>\$1,872,565</b>
<b>TYPE OF REFUND</b>	
Separation	\$109,588
Death	5,380
<b>Total refunds</b>	<b>\$114,968</b>

<sup>1</sup> The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

## STATE DIVISION TRUST FUND<sup>1</sup>

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
<b>Total benefits</b>	<b>\$849,229</b>	<b>\$925,761</b>	<b>\$999,279</b>	<b>\$1,071,725</b>	<b>\$1,122,435</b>
<b>TYPE OF REFUND</b>					
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
<b>Total refunds</b>	<b>\$65,911</b>	<b>\$56,578</b>	<b>\$56,716</b>	<b>\$58,416</b>	<b>\$68,844</b>

<sup>1</sup> The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

## STATE DIVISION TRUST FUND<sup>1</sup>

TYPE OF BENEFIT	2011	2012	2013	2014
Age and service benefits:				
Retirees	\$1,083,722	\$1,140,055	\$1,202,238	\$1,257,767
Disability	77,715	78,689	79,854	80,753
Survivors	13,270	13,178	13,688	13,773
<b>Total benefits</b>	<b>\$1,174,707</b>	<b>\$1,231,922</b>	<b>\$1,295,780</b>	<b>\$1,352,293</b>
<b>TYPE OF REFUND</b>				
Separation	\$65,525	\$65,627	\$64,072	\$57,895
Death	3,986	3,503	4,411	3,058
Purchased service	579	91	252	199
<b>Total refunds</b>	<b>\$70,090</b>	<b>\$69,221</b>	<b>\$68,735</b>	<b>\$61,152</b>

<sup>1</sup> The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.



# Benefits and Refund Deductions from Fiduciary Net Position by Type

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

## SCHOOL DIVISION TRUST FUND<sup>1</sup>

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	<u>\$1,213,875</u>	<u>\$1,329,803</u>	<u>\$1,449,907</u>	<u>\$1,563,315</u>	<u>\$1,642,350</u>
<b>TYPE OF REFUND</b>					
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	<u>\$68,493</u>	<u>\$67,710</u>	<u>\$65,659</u>	<u>\$70,910</u>	<u>\$79,012</u>

<sup>1</sup> The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

## SCHOOL DIVISION TRUST FUND<sup>1</sup>

TYPE OF BENEFIT	2011	2012	2013	2014
Age and service benefits:				
Retirees	\$1,657,071	\$1,757,279	\$1,855,195	\$1,952,989
Disability	61,150	62,140	63,741	65,780
Survivors	13,127	13,224	13,820	13,859
Total benefits	<u>\$1,731,348</u>	<u>\$1,832,643</u>	<u>\$1,932,756</u>	<u>\$2,032,628</u>
<b>TYPE OF REFUND</b>				
Separation	\$74,446	\$73,075	\$73,215	\$73,522
Death	3,676	3,815	3,282	3,521
Purchased service	421	264	483	128
Total refunds	<u>\$78,543</u>	<u>\$77,154</u>	<u>\$76,980</u>	<u>\$77,171</u>

<sup>1</sup> The State and School Division Trust Funds merged on July 1, 1997, and separated on January 1, 2006.

# Benefits and Refund Deductions from Fiduciary Net Position by Type

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

## LOCAL GOVERNMENT DIVISION TRUST FUND<sup>1</sup>

TYPE OF BENEFIT	2005	2006	2007	2008	2009
Age and service benefits:					
Retirees	\$76,586	\$89,226	\$102,239	\$116,951	\$133,732
Disability	12,692	13,107	13,376	13,900	14,407
Survivors	1,530	1,823	1,735	1,845	1,897
<b>Total benefits</b>	<b>\$90,808</b>	<b>\$104,156</b>	<b>\$117,350</b>	<b>\$132,696</b>	<b>\$150,036</b>
<b>TYPE OF REFUND</b>					
Separation	\$14,137	\$15,405	\$15,835	\$16,742	\$18,703
Death	915	677	647	1,399	574
Purchased service	—	246	201	78	371
<b>Total refunds</b>	<b>\$15,052</b>	<b>\$16,328</b>	<b>\$16,683</b>	<b>\$18,219</b>	<b>\$19,648</b>

<sup>1</sup> The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

## LOCAL GOVERNMENT DIVISION TRUST FUND<sup>1</sup>

TYPE OF BENEFIT	2010	2011	2012	2013	2014
Age and service benefits:					
Retirees	\$149,260	\$162,681	\$178,845	\$199,821	\$213,962
Disability	14,572	14,727	15,096	16,022	16,045
Survivors	1,938	2,041	2,004	2,032	2,048
<b>Total benefits</b>	<b>\$165,770</b>	<b>\$179,449</b>	<b>\$195,945</b>	<b>\$217,875</b>	<b>\$232,055</b>
<b>TYPE OF REFUND</b>					
Separation	\$21,999	\$21,316	\$41,696	\$31,268	\$23,034
Death	750	1,283	1,154	1,201	1,401
Purchased service	193	87	91	11	1
<b>Total refunds</b>	<b>\$22,942</b>	<b>\$22,686</b>	<b>\$42,941</b>	<b>\$32,480</b>	<b>\$24,436</b>

<sup>1</sup> The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

# Benefits and Refund Deductions from Fiduciary Net Position by Type

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

## JUDICIAL DIVISION TRUST FUND

TYPE OF BENEFIT	2005	2006	2007	2008	2009
Age and service benefits:					
Retirees	\$8,832	\$9,708	\$11,292	\$12,113	\$13,734
Disability	695	696	746	850	913
Survivors	341	351	358	393	364
<b>Total benefits</b>	<b>\$9,868</b>	<b>\$10,755</b>	<b>\$12,396</b>	<b>\$13,356</b>	<b>\$15,011</b>
<b>TYPE OF REFUND</b>					
Separation	\$181	\$—	\$—	\$—	\$30
Purchased service	—	—	4	—	—
<b>Total refunds</b>	<b>\$181</b>	<b>\$—</b>	<b>\$4</b>	<b>\$—</b>	<b>\$30</b>

## JUDICIAL DIVISION TRUST FUND

TYPE OF BENEFIT	2010	2011	2012	2013	2014
Age and service benefits:					
Retirees	\$14,126	\$15,563	\$16,333	\$17,362	\$18,573
Disability	917	889	897	908	917
Survivors	351	357	376	346	310
<b>Total benefits</b>	<b>\$15,394</b>	<b>\$16,809</b>	<b>\$17,606</b>	<b>\$18,616</b>	<b>\$19,800</b>
<b>TYPE OF REFUND</b>					
Separation	\$104	\$513	\$250	\$385	\$60
Death	—	—	355	—	—
<b>Total refunds</b>	<b>\$104</b>	<b>\$513</b>	<b>\$605</b>	<b>\$385</b>	<b>\$60</b>

## DENVER PUBLIC SCHOOLS DIVISION TRUST FUND<sup>1</sup>

TYPE OF BENEFIT	2010	2011	2012	2013	2014
Age and service benefits:					
Retirees	\$207,398	\$212,524	\$220,106	\$228,692	\$237,955
Disability	6,886	7,078	7,070	7,592	7,482
Survivors	1,541	1,511	1,566	1,637	1,568
<b>Total benefits</b>	<b>\$215,825</b>	<b>\$221,113</b>	<b>\$228,742</b>	<b>\$237,921</b>	<b>\$247,005</b>
<b>TYPE OF REFUND</b>					
Separation	\$2,947	\$4,322	\$5,602	\$6,558	\$7,424
Death	82	82	217	160	631
Purchased service	—	8	2	15	8
<b>Total refunds</b>	<b>\$3,029</b>	<b>\$4,412</b>	<b>\$5,821</b>	<b>\$6,733</b>	<b>\$8,063</b>

<sup>1</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

# Member and Benefit Recipient Statistics<sup>1</sup>

(In Actual Dollars)

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DPS DIVISION	TOTAL
<b>ACTIVE MEMBERS</b>						
Active members as of December 31, 2014	55,300	119,618	12,084	334	15,414	202,750
<b>RETIREMENTS DURING 2014</b>						
Disability retirements	78	100	12	—	8	198
Service retirements	1,564	2,854	375	16	295	5,104
<b>Total</b>	<b>1,642</b>	<b>2,954</b>	<b>387</b>	<b>16</b>	<b>303</b>	<b>5,302</b>
<b>RETIREMENT BENEFITS</b>						
Total receiving disability and service retirement benefits on December 31, 2013	33,970	54,741	5,991	309	6,409	101,420
Total retiring during 2014	1,642	2,954	387	16	303	5,302
Cobeneficiaries continuing after retiree's death	220	221	31	5	48	525
Returning to retirement rolls from suspension	13	20	4	—	1	38
<b>Total</b>	<b>35,845</b>	<b>57,936</b>	<b>6,413</b>	<b>330</b>	<b>6,761</b>	<b>107,285</b>
Retirees and cobeneficiaries deceased during year	892	1,022	120	12	211	2,257
Retirees suspending benefits to return to work	9	23	2	—	1	35
<b>Total receiving retirement benefits</b>	<b>34,944</b>	<b>56,891</b>	<b>6,291</b>	<b>318</b>	<b>6,549</b>	<b>104,993</b>
Annual retirement benefits for retirees as of December 31, 2014	\$1,358,877,924	\$2,061,357,060	\$231,552,804	\$19,681,752	\$249,064,056	\$3,920,533,596
Average monthly benefit on December 31, 2014	\$3,241	\$3,019	\$3,067	\$5,158	\$3,169	\$3,112
Average monthly benefit for all members who retired during 2014	\$2,760	\$2,405	\$2,352	\$4,969	\$2,593	\$2,529
<b>SURVIVOR BENEFITS</b>						
Survivor benefit accounts						
Total survivors being paid on December 31, 2014	862	1,090	155	12	137	2,256
Annual benefits payable to survivors as of December 31, 2014	\$18,642,924	\$17,724,000	\$3,089,040	\$358,092	\$2,653,176	\$42,467,232
<b>FUTURE BENEFITS</b>						
Future retirements to age 60 or 65	5,678	13,807	2,788	5	850	23,128
Total annual future benefits	\$56,657,209	\$98,521,300	\$37,267,401	\$180,543	\$8,748,793	\$201,375,246
Future survivor beneficiaries of inactive members	131	164	20	1	12	328
Total annual future benefits	\$1,586,340	\$1,601,496	\$167,952	\$27,048	\$104,412	\$3,487,248

<sup>1</sup> In addition, as of December 31, 2014, there was a total of 195,685 non-vested terminated members due a refund of their contributions as follows: State Division—66,330; School Division—101,603; Local Government Division—20,956; Judicial Division—9; DPS Division—6,787.

# Schedule of Average Retirement Benefits Payable—All Division Trust Funds<sup>1,2</sup>

*(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
12/31/2005	\$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 <sup>3</sup>
12/31/2014	3,112	58.3	70.7	23.4	82.8

<sup>1</sup> Includes disability retirements, but not survivor benefits.

<sup>2</sup> Data prior to December 31, 2010, does not include the DPS Division.

<sup>3</sup> Information not available prior to December 31, 2013.

## Schedule of Average Retirement Benefits Payable<sup>1</sup>

*(In Actual Dollars)*

	STATE DIVISION	SCHOOL DIVISION	LOCAL GOVERNMENT DIVISION	JUDICIAL DIVISION	DPS DIVISION
<b>Year Ended 12/31/2014</b>					
Average Monthly Benefit	\$3,241	\$3,019	\$3,067	\$5,158	\$3,169
Average Age at Retirement	58.1	58.4	58.0	61.4	59.0
Average Age of Current Retiree	71.0	70.4	68.3	74.5	73.7
Average Years of Service at Retirement	23.0	23.6	21.9	22.7	25.3
Average Age at Death <sup>2</sup>	82.2	83.1	78.8	81.1	85.2
<b>Year Ended 12/31/2013</b>					
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 <sup>2</sup>	82.5	81.4	78.6	88.2	84.8
<b>Year Ended 12/31/2012</b>					
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
<b>Year Ended 12/31/2011</b>					
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

<sup>1</sup> Includes disability retirements, but not survivor benefits.

<sup>2</sup> Information not available prior to December 31, 2013.

# Colorado PERA Benefit Payments—All Division Trust Funds

As of December 31, 2014

(In Actual Dollars)

At the end of 2014, PERA was paying benefits to more than 107,000 retired public employees and their beneficiaries who received an average benefit of \$3,076<sup>1</sup> 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 \$2,856 (\$34,272 a year), which means that half of all monthly benefits paid are lower than \$2,856 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<sup>2</sup> 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.”

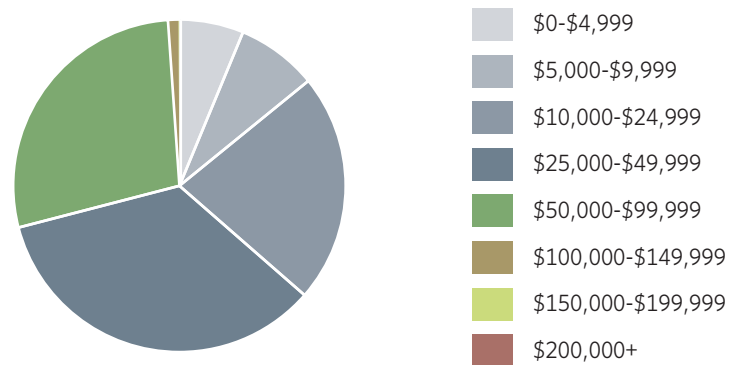
Approximately 71 percent of PERA benefit recipients receive less than \$50,000 a year in retirement, as the graph below demonstrates. Slightly more than 1 percent (1,183) of PERA benefit recipients receive an annual benefit payment of \$100,000 or more. Generally, these benefit recipients had high salaries and a significant number of years of service credit.

<sup>1</sup> Does not include benefits that ended in 2014 or retirements suspended in 2014. Includes only continuing benefits at the end of 2014, excluding amounts paid under the Replacement Benefit Arrangements.

<sup>2</sup> 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 <sup>1</sup>
\$0-\$4,999	6,703
\$5,000-\$9,999	8,449
\$10,000-\$24,999	23,918
\$25,000-\$49,999	37,035
\$50,000-\$99,999	29,961
\$100,000-\$149,999	1,105
\$150,000-\$199,999	62
\$200,000+	16
<b>Total Benefit Recipients</b>	<b>107,249</b>



<sup>1</sup> Does not include 328 deferred survivors.

# Colorado PERA Benefit Payments—All Division Trust Funds

As of December 31, 2014  
(In Actual Dollars)

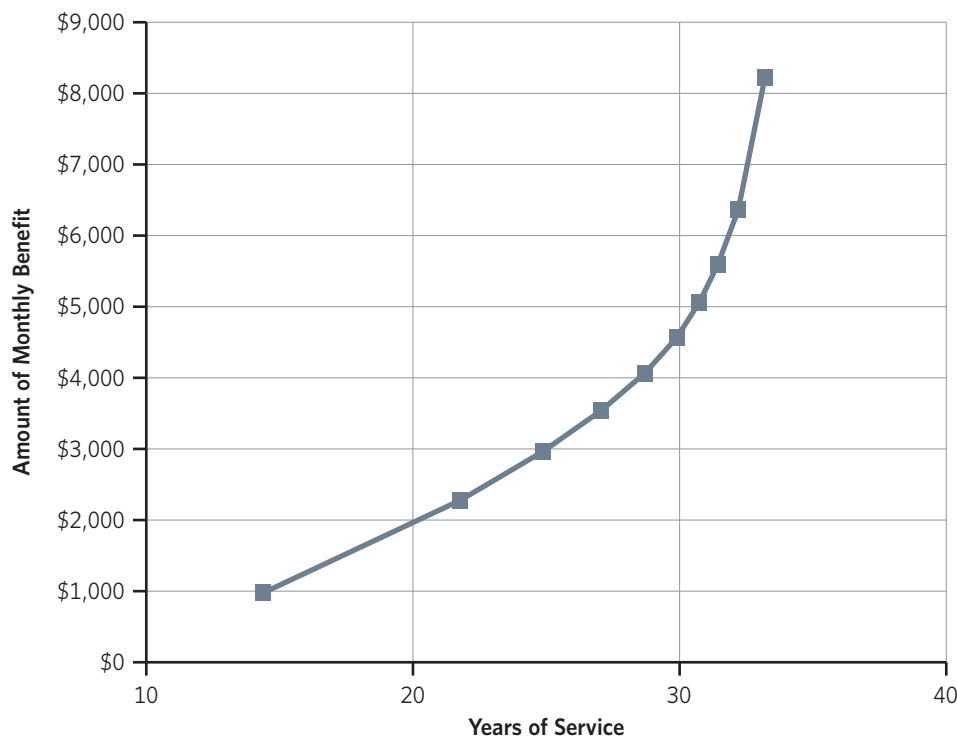
## Benefit Payments by Decile

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 (35,541) in the lowest decile, the average benefit is \$11,700 a year. This group retired at an average age of 60 with just under 14½ years of service credit. For the top decile, on the other end of the scale, the average benefit is \$98,652 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 5,302 new retirees in 2014, the average monthly benefit is \$2,529. These members retired at an average age of 61 with 20.67 years of service credit.

DECILE	NUMBER OF BENEFIT RECIPIENTS <sup>1</sup>	PERCENT OF BENEFIT RECIPIENTS	AVERAGE MONTHLY BENEFIT	AVERAGE AGE AT RETIREMENT	AVERAGE SERVICE CREDIT
1%-10%	35,541	33.14%	\$975	60	14.38
11%-20%	14,484	13.50%	2,278	58	21.78
21%-30%	11,134	10.38%	2,963	58	24.87
31%-40%	9,329	8.70%	3,537	58	27.05
41%-50%	8,114	7.57%	4,066	57	28.70
51%-60%	7,228	6.74%	4,564	57	29.89
61%-70%	6,519	6.08%	5,061	57	30.74
71%-80%	5,902	5.50%	5,590	57	31.43
81%-90%	5,185	4.83%	6,363	57	32.20
91%-100%	3,813	3.56%	8,221	57	33.20
<b>Total</b>	<b>107,249</b>	<b>100.00%</b>	<b>3,076</b>	<b>58</b>	<b>23.16</b>

<sup>1</sup>Does not include 328 deferred survivors.

## AVERAGE MONTHLY BENEFIT PAYMENT BY YEARS OF SERVICE CREDIT





# Schedule of Retirees and Survivors by Types of Benefits

As of December 31, 2014

## 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

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	Types of Benefits					
		1	2	3	4	5	6
\$1-\$1,000	4,822	4,150	324	20	258	70	4,156
\$1,001-\$2,000	6,851	4,905	1,581	38	274	53	1,140
\$2,001-\$3,000	7,224	5,903	1,183	21	114	3	259
\$3,001-\$4,000	6,086	5,760	243	27	53	3	81
\$4,001-\$5,000	4,358	4,242	82	19	14	1	24
\$5,001+	6,596	6,551	20	16	8	1	18
<b>Total</b>	<b>35,937</b>	<b>31,511</b>	<b>3,433</b>	<b>141</b>	<b>721</b>	<b>131</b>	<b>5,678</b>

AMOUNT OF MONTHLY BENEFIT <sup>1</sup> (IN ACTUAL DOLLARS)	Option Selected				SURVIVING COBENEFICIARY	SURVIVING RETIREE
	1	2	3	4		
\$1-\$1,000	2,850	281	650	4	636	53
\$1,001-\$2,000	3,646	710	1,061	6	952	111
\$2,001-\$3,000	3,804	1,008	1,419	13	743	99
\$3,001-\$4,000	3,113	1,095	1,326	6	407	56
\$4,001-\$5,000	2,109	883	1,075	4	227	26
\$5,001+	3,019	1,506	1,757	6	246	37
<b>Total</b>	<b>18,541</b>	<b>5,483</b>	<b>7,288</b>	<b>39</b>	<b>3,211</b>	<b>382</b>

<sup>1</sup> For Types of Benefits 1 and 2 above.

# Schedule of Retirees and Survivors by Types of Benefits

As of December 31, 2014

## 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

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	Types of Benefits					
		1	2	3	4	5	6
\$1-\$1,000	11,993	10,499	828	40	512	114	11,716
\$1,001-\$2,000	9,609	8,112	1,165	27	271	34	1,735
\$2,001-\$3,000	9,120	8,288	687	17	120	8	262
\$3,001-\$4,000	8,765	8,408	296	16	40	5	73
\$4,001-\$5,000	8,426	8,287	109	13	15	2	12
\$5,001+	10,232	10,184	28	11	8	1	9
<b>Total</b>	<b>58,145</b>	<b>53,778</b>	<b>3,113</b>	<b>124</b>	<b>966</b>	<b>164</b>	<b>13,807</b>

AMOUNT OF MONTHLY BENEFIT <sup>1</sup> (IN ACTUAL DOLLARS)	Option Selected				SURVIVING COBENEFICIARY	SURVIVING RETIREE
	1	2	3	4		
\$1-\$1,000	7,886	800	1,606	4	925	106
\$1,001-\$2,000	5,764	1,159	1,404	11	831	108
\$2,001-\$3,000	5,364	1,488	1,414	12	592	105
\$3,001-\$4,000	5,245	1,751	1,355	9	301	43
\$4,001-\$5,000	4,774	1,910	1,456	10	214	32
\$5,001+	6,418	2,222	1,418	10	129	15
<b>Total</b>	<b>35,451</b>	<b>9,330</b>	<b>8,653</b>	<b>56</b>	<b>2,992</b>	<b>409</b>

<sup>1</sup>For Types of Benefits 1 and 2 above.

# Schedule of Retirees and Survivors by Types of Benefits

As of December 31, 2014

## 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

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	Types of Benefits					
		1	2	3	4	5	6
\$1-\$1,000	1,110	984	63	4	46	13	1,696
\$1,001-\$2,000	1,401	981	352	7	55	6	692
\$2,001-\$3,000	1,173	927	219	12	14	1	262
\$3,001-\$4,000	977	920	46	5	6	—	89
\$4,001-\$5,000	703	689	11	2	1	—	38
\$5,001+	1,102	1,094	5	2	1	—	11
<b>Total</b>	<b>6,466</b>	<b>5,595</b>	<b>696</b>	<b>32</b>	<b>123</b>	<b>20</b>	<b>2,788</b>

AMOUNT OF MONTHLY BENEFIT <sup>1</sup> (IN ACTUAL DOLLARS)	Option Selected				SURVIVING COBENEFICIARY	SURVIVING RETIREE
	1	2	3	4		
\$1-\$1,000	668	81	158	—	130	10
\$1,001-\$2,000	716	166	266	3	167	15
\$2,001-\$3,000	596	191	261	2	83	13
\$3,001-\$4,000	494	201	232	—	35	4
\$4,001-\$5,000	342	156	176	—	26	—
\$5,001+	465	274	333	—	25	2
<b>Total</b>	<b>3,281</b>	<b>1,069</b>	<b>1,426</b>	<b>5</b>	<b>466</b>	<b>44</b>

<sup>1</sup>For Types of Benefits 1 and 2 above.

# Schedule of Retirees and Survivors by Types of Benefits

As of December 31, 2014

## 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

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	Types of Benefits					
		1	2	3	4	5	6
\$1-\$1,000	15	14	1	—	—	—	—
\$1,001-\$2,000	37	30	2	—	5	—	1
\$2,001-\$3,000	32	26	2	—	3	1	1
\$3,001-\$4,000	37	31	3	—	3	—	2
\$4,001-\$5,000	36	30	6	—	—	—	1
\$5,001+	174	168	5	1	—	—	—
<b>Total</b>	<b>331</b>	<b>299</b>	<b>19</b>	<b>1</b>	<b>11</b>	<b>1</b>	<b>5</b>

AMOUNT OF MONTHLY BENEFIT <sup>1</sup> (IN ACTUAL DOLLARS)	Option Selected				SURVIVING COBENEFICIARY	SURVIVING RETIREE
	1	2	3	4		
\$1-\$1,000	4	1	3	—	7	—
\$1,001-\$2,000	11	—	5	—	15	1
\$2,001-\$3,000	5	7	9	—	7	—
\$3,001-\$4,000	9	5	12	—	8	—
\$4,001-\$5,000	8	4	15	1	8	—
\$5,001+	57	42	64	—	10	—
<b>Total</b>	<b>94</b>	<b>59</b>	<b>108</b>	<b>1</b>	<b>55</b>	<b>1</b>

<sup>1</sup>For Types of Benefits 1 and 2 above.

# Schedule of Retirees and Survivors by Types of Benefits

As of December 31, 2014

## 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.

## DPS DIVISION

AMOUNT OF MONTHLY BENEFIT (IN ACTUAL DOLLARS)	TOTAL (COLUMNS 1-5)	Types of Benefits					
		1	2	3	4	5	6
\$1-\$1,000	734	582	87	—	57	8	619
\$1,001-\$2,000	1,214	1,053	129	4	25	3	189
\$2,001-\$3,000	1,192	1,080	74	13	24	1	35
\$3,001-\$4,000	1,465	1,412	43	8	2	—	7
\$4,001-\$5,000	1,263	1,251	9	2	1	—	—
\$5,001+	830	825	4	1	—	—	—
<b>Total</b>	<b>6,698</b>	<b>6,203</b>	<b>346</b>	<b>28</b>	<b>109</b>	<b>12</b>	<b>850</b>

AMOUNT OF MONTHLY BENEFIT <sup>2</sup> (IN ACTUAL DOLLARS)	Option Selected <sup>1</sup>				SURVIVING COBENEFICIARY	SURVIVING RETIREE	COBENEFICIARIES BOTH DECEASED
	1	2	3	4			
\$1-\$1,000	413	24	127	—	77	27	1
\$1,001-\$2,000	693	78	234	—	123	50	4
\$2,001-\$3,000	585	98	286	—	119	66	—
\$3,001-\$4,000	688	111	446	—	130	79	1
\$4,001-\$5,000	576	108	412	—	89	75	—
\$5,001+	397	77	267	—	61	27	—
<b>Total</b>	<b>3,352</b>	<b>496</b>	<b>1,772</b>	<b>—</b>	<b>599</b>	<b>324</b>	<b>6</b>

<sup>1</sup> 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)

<sup>2</sup> For Types of Benefits 1 and 2 above.

# Schedule of Average Benefit Payments

*(In Actual Dollars)*

**STATE DIVISION<sup>1</sup>**

YEAR RETIRED	YEARS OF SERVICE CREDIT						
	0-5	6-10	10-15	15-20	20-25	25-30	30+
<b>Period 1/1/2014 to 12/31/2014</b>							
Average monthly benefit	\$228	\$626	\$1,239	\$1,996	\$2,930	\$4,002	\$5,438
Average highest average salary	\$2,960	\$3,421	\$4,046	\$4,609	\$5,351	\$5,904	\$6,642
Number of service retirees	64	204	218	212	278	327	261
<b>Period 1/1/2013 to 12/31/2013</b>							
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
<b>Period 1/1/2012 to 12/31/2012</b>							
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
<b>Period 1/1/2011 to 12/31/2011</b>							
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
<b>Period 1/1/2010 to 12/31/2010</b>							
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
<b>Period 1/1/2009 to 12/31/2009</b>							
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
<b>Period 1/1/2008 to 12/31/2008</b>							
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
<b>Period 1/1/2007 to 12/31/2007</b>							
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
<b>Period 1/1/2006 to 12/31/2006</b>							
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

<sup>1</sup> Information not available for years prior to 2006.

Note: Highest Average Salary is defined as one-twelfth of the average of the highest annual salaries associated with three periods of 12 consecutive months of service credit. These three periods are tied to a fourth 12-month period which becomes the base year for the year-to-year increase limitation, which is designed to moderate "spiking." Some members of the DPS benefit structure and members in the Judicial Division have different HAS calculations.

# Schedule of Average Benefit Payments

(In Actual Dollars)

## SCHOOL DIVISION<sup>1</sup>

YEAR RETIRED	YEARS OF SERVICE CREDIT						
	0-5	6-10	10-15	15-20	20-25	25-30	30+
<b>Period 1/1/2014 to 12/31/2014</b>							
Average monthly benefit	\$194	\$467	\$939	\$1,661	\$2,407	\$3,726	\$4,778
Average highest average salary	\$2,108	\$2,580	\$3,189	\$3,706	\$4,372	\$5,422	\$5,908
Number of service retirees	106	362	401	392	531	597	465
<b>Period 1/1/2013 to 12/31/2013</b>							
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
<b>Period 1/1/2012 to 12/31/2012</b>							
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
<b>Period 1/1/2011 to 12/31/2011</b>							
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
<b>Period 1/1/2010 to 12/31/2010</b>							
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
<b>Period 1/1/2009 to 12/31/2009</b>							
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
<b>Period 1/1/2008 to 12/31/2008</b>							
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
<b>Period 1/1/2007 to 12/31/2007</b>							
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
<b>Period 1/1/2006 to 12/31/2006</b>							
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

<sup>1</sup> Information not available for years prior to 2006.

Note: Highest Average Salary is defined as one-twelfth of the average of the highest annual salaries associated with three periods of 12 consecutive months of service credit. These three periods are tied to a fourth 12-month period which becomes the base year for the year-to-year increase limitation, which is designed to moderate "spiking." Some members of the DPS benefit structure and members in the Judicial Division have different HAS calculations.



# Schedule of Average Benefit Payments

(In Actual Dollars)

## LOCAL GOVERNMENT DIVISION<sup>1</sup>

YEAR RETIRED	YEARS OF SERVICE CREDIT						
	0-5	6-10	10-15	15-20	20-25	25-30	30+
<b>Period 1/1/2014 to 12/31/2014</b>							
Average monthly benefit	\$241	\$680	\$1,185	\$2,190	\$3,110	\$4,068	\$4,796
Average highest average salary	\$4,005	\$3,912	\$4,206	\$5,106	\$5,805	\$6,299	\$6,037
Number of service retirees	15	87	63	42	61	59	48
<b>Period 1/1/2013 to 12/31/2013</b>							
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
<b>Period 1/1/2012 to 12/31/2012</b>							
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
<b>Period 1/1/2011 to 12/31/2011</b>							
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
<b>Period 1/1/2010 to 12/31/2010</b>							
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
<b>Period 1/1/2009 to 12/31/2009</b>							
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
<b>Period 1/1/2008 to 12/31/2008</b>							
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
<b>Period 1/1/2007 to 12/31/2007</b>							
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
<b>Period 1/1/2006 to 12/31/2006</b>							
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

<sup>1</sup> Information not available for years prior to 2006.

Note: Highest Average Salary is defined as one-twelfth of the average of the highest annual salaries associated with three periods of 12 consecutive months of service credit. These three periods are tied to a fourth 12-month period which becomes the base year for the year-to-year increase limitation, which is designed to moderate "spiking." Some members of the DPS benefit structure and members in the Judicial Division have different HAS calculations.

# Schedule of Average Benefit Payments

(In Actual Dollars)

## JUDICIAL DIVISION<sup>1</sup>

YEAR RETIRED	YEARS OF SERVICE CREDIT						
	0-5	6-10	10-15	15-20	20-25	25-30	30+
<b>Period 1/1/2014 to 12/31/2014</b>							
Average monthly benefit	\$—	\$1,505	\$2,767	\$4,432	\$6,197	\$7,806	\$7,287
Average highest average salary	\$—	\$9,209	\$10,444	\$10,910	\$11,182	\$12,370	\$9,350
Number of service retirees	—	3	3	1	4	2	3
<b>Period 1/1/2013 to 12/31/2013</b>							
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
<b>Period 1/1/2012 to 12/31/2012</b>							
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
<b>Period 1/1/2011 to 12/31/2011</b>							
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
<b>Period 1/1/2010 to 12/31/2010</b>							
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
<b>Period 1/1/2009 to 12/31/2009</b>							
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
<b>Period 1/1/2008 to 12/31/2008</b>							
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
<b>Period 1/1/2007 to 12/31/2007</b>							
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
<b>Period 1/1/2006 to 12/31/2006</b>							
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

<sup>1</sup> Information not available for years prior to 2006.

Note: Highest Average Salary is defined as one-twelfth of the average of the highest annual salaries associated with three periods of 12 consecutive months of service credit. These three periods are tied to a fourth 12-month period which becomes the base year for the year-to-year increase limitation, which is designed to moderate "spiking." Some members of the DPS benefit structure and members in the Judicial Division have different HAS calculations.

# Schedule of Average Benefit Payments

*(In Actual Dollars)*

## DPS DIVISION<sup>1</sup>

YEAR RETIRED	YEARS OF SERVICE CREDIT						
	0-5	6-10	10-15	15-20	20-25	25-30	30+
<b>Period 1/1/2014 to 12/31/2014</b>							
Average monthly benefit	\$472	\$810	\$1,379	\$2,233	\$3,091	\$4,243	\$4,862
Average highest average salary	\$3,399	\$4,593	\$4,489	\$5,569	\$5,607	\$6,250	\$5,891
Number of service retirees	15	39	44	49	72	44	32
<b>Period 1/1/2013 to 12/31/2013</b>							
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
<b>Period 1/1/2012 to 12/31/2012</b>							
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
<b>Period 1/1/2011 to 12/31/2011</b>							
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
<b>Period 1/1/2010 to 12/31/2010</b>							
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

<sup>1</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

Note: Highest Average Salary is defined as one-twelfth of the average of the highest annual salaries associated with three periods of 12 consecutive months of service credit. These three periods are tied to a fourth 12-month period which becomes the base year for the year-to-year increase limitation, which is designed to moderate "spiking." Some members of the DPS benefit structure and members in the Judicial Division have different HAS calculations.

# Schedule of Average Benefit Payments—All Division Trust Funds<sup>1</sup>

(In Actual Dollars)

YEAR RETIRED	YEARS OF SERVICE CREDIT						
	0-5	6-10	10-15	15-20	20-25	25-30	30+
<b>Period 1/1/2014 to 12/31/2014</b>							
Average monthly benefit	\$229	\$564	\$1,084	\$1,839	\$2,674	\$3,863	\$5,005
Average highest average salary	\$2,620	\$3,135	\$3,641	\$4,207	\$4,875	\$5,674	\$6,165
Number of service retirees	200	695	729	696	946	1,029	809
<b>Period 1/1/2013 to 12/31/2013</b>							
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
<b>Period 1/1/2012 to 12/31/2012</b>							
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
<b>Period 1/1/2011 to 12/31/2011</b>							
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
<b>Period 1/1/2010 to 12/31/2010<sup>2</sup></b>							
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
<b>Period 1/1/2009 to 12/31/2009</b>							
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
<b>Period 1/1/2008 to 12/31/2008</b>							
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
<b>Period 1/1/2007 to 12/31/2007</b>							
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
<b>Period 1/1/2006 to 12/31/2006</b>							
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
<b>Period 1/1/2005 to 12/31/2005</b>							
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

<sup>1</sup> Data prior to December 31, 2010, does not include the DPS Division.

<sup>2</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

<sup>3</sup> Data prior to December 2006 for the periods "0-5" and "6-10" are not available.

Note: Highest Average Salary is defined as one-twelfth of the average of the highest annual salaries associated with three periods of 12 consecutive months of service credit. These three periods are tied to a fourth 12-month period which becomes the base year for the year-to-year increase limitation, which is designed to moderate "spiking." Some members of the DPS benefit structure and members in the Judicial Division have different HAS calculations.

# Schedule of Contribution Rate History

## STATE DIVISION (MEMBERS OTHER THAN STATE TROOPERS)<sup>1</sup>

### PERCENT OF COVERED PAYROLL

YEARS	MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE <sup>2</sup>	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% <sup>3</sup>	—	—
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 6/30/2012	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%
1/1/2014 to 12/31/2014	8.00%	10.15%	3.80%	3.50%

<sup>1</sup> State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

<sup>2</sup> All employer contribution rates shown since July 1, 1985, include the Health Care Trust Fund (HCTF) allocation.

<sup>3</sup> 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<sup>1</sup>

YEARS	PERCENT OF COVERED PAYROLL			
	MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE <sup>2</sup>	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% <sup>3</sup>	—	—
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 6/30/2012	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%
1/1/2014 to 12/31/2014	10.00%	12.85%	3.80%	3.50%

<sup>1</sup> State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

<sup>2</sup> All employer contribution rates shown since July 1, 1985, include the HCTF allocation.

<sup>3</sup> 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

## SCHOOL DIVISION<sup>1</sup>

### PERCENT OF COVERED PAYROLL

YEARS	MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE <sup>2</sup>	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%
1/1/2014 to 12/31/2014	8.00%	10.15%	3.80%	3.50%

<sup>1</sup> State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

<sup>2</sup> All employer contribution rates shown since July 1, 1985, include the HCTF allocation.

## STATE AND SCHOOL DIVISION<sup>1</sup>

### PERCENT OF COVERED PAYROLL

YEARS	MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE <sup>2</sup>
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%

<sup>1</sup> State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

<sup>2</sup> The employer contribution rates shown include the HCTF allocation.



# Schedule of Contribution Rate History

## LOCAL GOVERNMENT DIVISION<sup>1</sup>

### PERCENT OF COVERED PAYROLL

YEARS	MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE <sup>2</sup>	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 12/31/2014	8.00%	10.00%	2.20%	1.50%

<sup>1</sup> The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

<sup>2</sup> All employer contribution rates shown since July 1, 1985, include the HCTF allocation.

# Schedule of Contribution Rate History

## JUDICIAL DIVISION

YEARS	PERCENT OF COVERED PAYROLL			
	MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE <sup>1</sup>	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 6/30/2012	10.50%	11.16%	2.20%	1.50%
7/1/2012 to 12/31/2014	8.00%	13.66%	2.20%	1.50%

<sup>1</sup> All employer contribution rates shown since July 1, 1985, include the HCTF allocation.

## DPS DIVISION<sup>1</sup>

YEARS	PERCENT OF COVERED PAYROLL				
	MEMBER CONTRIBUTION RATE	EMPLOYER CONTRIBUTION RATE <sup>2</sup>	AMORTIZATION EQUALIZATION DISBURSEMENT	SUPPLEMENTAL AMORTIZATION EQUALIZATION DISBURSEMENT	EMPLOYER CONTRIBUTION PCOP OFFSET <sup>3</sup>
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%)
1/1/2014 to 12/31/2014	8.00%	13.75%	3.80%	3.50%	(16.89%)

<sup>1</sup> The DPS Division Trust Fund was established on January 1, 2010, and received the net assets of DPSRS.

<sup>2</sup> All employer contribution rates shown include the DPS HCTF allocation.

<sup>3</sup> 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
<b>State Division<sup>1</sup></b>	
7/1/1985 to 6/30/1997	0.80%
1/1/2006 to 12/31/2014	1.02%
<b>School Division<sup>1</sup></b>	
7/1/1985 to 6/30/1997	0.80%
1/1/2006 to 12/31/2014	1.02%
<b>State and School Division<sup>1</sup></b>	
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%
<b>Local Government Division<sup>2</sup></b>	
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 12/31/2014	1.02%
<b>Judicial Division</b>	
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 12/31/2014	1.02%
<b>DPS Division<sup>3</sup></b>	
1/1/2010 to 12/31/2014	1.02%

<sup>1</sup> State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

<sup>2</sup> The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

<sup>3</sup> 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<sup>1</sup>

DIVISION/YEARS	PERCENT OF COVERED PAYROLL AVAILABLE FROM EMPLOYER CONTRIBUTION FOR MATCHMAKER (MAXIMUM MATCH)
<b>State and School Division<sup>2</sup></b>	
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%
<b>Local Government Division<sup>3</sup></b>	
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%
<b>Judicial Division</b>	
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%

<sup>1</sup> Legislation enacted in 2004 ended MatchMaker contributions by June 1, 2004.

<sup>2</sup> State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

<sup>3</sup> The Local Government Division Trust Fund was the Municipal Division Trust Fund prior to January 1, 2006.

## STATE DIVISION TRUST FUND<sup>1,2</sup>

EMPLOYER	2014		
	COVERED	RANK	PERCENTAGE OF TOTAL SYSTEM
	ACTIVE MEMBERS DECEMBER 31		
State of Colorado	50,508	1	91.33%

<sup>1</sup> New guidance under GASB 67 classifies a primary government and its component units as one employer. Due to this change, data for the number of members by employer for years prior to 2014 is not available.

<sup>2</sup> This schedule was compiled using the definition of an employer as promulgated by GASB 67. For all other purposes, the definition of an employer is governed by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable, the employer's affiliation agreement with PERA.

## SCHOOL DIVISION TRUST FUND<sup>1,2</sup>

EMPLOYER	2014		
	COVERED	RANK	PERCENTAGE OF TOTAL SYSTEM
	ACTIVE MEMBERS DECEMBER 31		
Jefferson County School District R-1	12,184	1	10.19%
Douglas County School District Re 1	8,345	2	6.98%
Cherry Creek School District 5	7,670	3	6.41%
Adams-Arapahoe School District 28J	5,453	4	4.56%
Adams 12 Five Star Schools	5,261	5	4.40%
Boulder Valley School District RE2	4,678	6	3.91%
Poudre School District R-1	4,425	7	3.70%
Colorado Springs School District 11	4,292	8	3.59%
St. Vrain School District RE1J	4,189	9	3.50%
Academy School District #20	3,660	10	3.06%

<sup>1</sup> New guidance under GASB 67 classifies a primary government and its component units as one employer. Due to this change, data for the number of members by employer for years prior to 2014 is not available.

<sup>2</sup> This schedule was compiled using the definition of an employer as promulgated by GASB 67. For all other purposes, the definition of an employer is governed by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable, the employer's affiliation agreement with PERA.

## LOCAL GOVERNMENT DIVISION TRUST FUND<sup>1,2</sup>

EMPLOYER	2014		
	COVERED	RANK	PERCENTAGE OF TOTAL SYSTEM
	ACTIVE MEMBERS DECEMBER 31		
City of Colorado Springs	3,054	1	25.27%
Boulder County	2,067	2	17.11%
City of Boulder	1,413	3	11.69%
City of Pueblo	498	4	4.12%
Tri-County Health Department	373	5	3.09%
Douglas County Libraries	308	6	2.55%
Arapahoe Park and Recreational District	210	7	1.74%
Colorado Housing and Finance Authority	156	8	1.29%
Town of Mountain Village	142	9	1.18%
City of Fort Morgan	139	10	1.15%

<sup>1</sup> New guidance under GASB 67 classifies a primary government and its component units as one employer. Due to this change, data for the number of members by employer for years prior to 2014 is not available.

<sup>2</sup> This schedule was compiled using the definition of an employer as promulgated by GASB 67. For all other purposes, the definition of an employer is governed by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable, the employer's affiliation agreement with PERA.

# Principal Participating Employers

## JUDICIAL DIVISION TRUST FUND<sup>1,2</sup>

EMPLOYER	2014		
	COVERED	RANK	PERCENTAGE OF
	ACTIVE MEMBERS DECEMBER 31		
Judicial Department	318	1	95.21%

<sup>1</sup> New guidance under GASB 67 classifies a primary government and its component units as one employer. Due to this change, data for the number of members by employer for years prior to 2014 is not available.

<sup>2</sup> This schedule was compiled using the definition of an employer as promulgated by GASB 67. For all other purposes, the definition of an employer is governed by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable, the employer's affiliation agreement with PERA.

## DENVER PUBLIC SCHOOLS DIVISION TRUST FUND<sup>1,2</sup>

EMPLOYER	2014		
	COVERED	RANK	PERCENTAGE OF
	ACTIVE MEMBERS DECEMBER 31		
Denver Public School District No. 1	15,414	1	100.00%

<sup>1</sup> New guidance under GASB 67 classifies a primary government and its component units as one employer. Due to this change, data for the number of members by employer for years prior to 2014 is not available.

<sup>2</sup> This schedule was compiled using the definition of an employer as promulgated by GASB 67. For all other purposes, the definition of an employer is governed by Title 24, Article 51 of the C.R.S., PERA's Rules, 8 CCR 1502-1, and, if applicable, the employer's affiliation agreement with PERA.

## HEALTH CARE TRUST FUND<sup>1,2</sup>

EMPLOYER	2014			2006		
	COVERED	RANK	PERCENTAGE OF	COVERED	RANK	PERCENTAGE OF
	ACTIVE MEMBERS DECEMBER 31			TOTAL SYSTEM		
Jefferson County School District	12,184	1	6.50%	12,168	1	6.58%
Cherry Creek School District	7,609	2	4.06%	6,869	2	3.72%
Douglas County Schools	7,326	3	3.91%	6,663	3	3.60%
Department of Corrections	6,068	4	3.24%	5,644	4	3.05%
University of Colorado	5,983	5	3.19%	5,432	5	2.94%
Aurora Public Schools	5,109	6	2.73%	4,348	9	2.35%
Adams 12 Five Star Schools	4,688	7	2.50%	4,684	6	2.53%
Boulder Valley School District	4,471	8	2.39%	4,573	7	2.47%
Poudre School District RE-1	4,134	9	2.21%	—	—	—
Colorado Springs Public Schools	4,084	10	2.18%	4,462	8	2.41%
Memorial Health System	—	—	—	3,779	10	2.04%

<sup>1</sup> Data for the number of members by employer for years prior to 2006 is not available.

<sup>2</sup> Any differences in the employer name and/or number of covered active members in this schedule compared to the schedules for the Division Trust Funds are due to separate guidance promulgated by GASB 44 and GASB 67.

## DENVER PUBLIC SCHOOLS HEALTH CARE TRUST FUND<sup>1,2</sup>

EMPLOYER	2014			2010		
	COVERED	RANK	PERCENTAGE OF	COVERED	RANK	PERCENTAGE OF
	ACTIVE MEMBERS DECEMBER 31			TOTAL SYSTEM		
Denver Public Schools	13,385	1	86.84%	12,248	1	92.99%

<sup>1</sup> The DPS HCTF was established on January 1, 2010, and received the balance of the Denver Public Schools Retiree Health Benefit Trust, as required by SB 09-282.

<sup>2</sup> The difference in the employer name and number of covered active members in this schedule compared to the schedule for the DPS Division Trust Fund is due to separate guidance promulgated by GASB 44 and GASB 67.

## 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

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## School Division<sup>1</sup>

### **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

<sup>1</sup>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<sup>1</sup> (continued)

### 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

<sup>1</sup>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

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## School Division<sup>1</sup> (continued)

### **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  
Revere 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  
Mt. Evans 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  
Uncompahgre BOCES  
Ute Pass BOCES

### **VOCATIONAL SCHOOLS**

Delta-Montrose Area Vocational School

### **OTHER**

Colorado Consortium for Earth and Space Science Education

<sup>1</sup> 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	Estes Park Local Marketing District
Alamosa Housing Authority	Estes Valley Fire Protection District
Arapahoe Park and Recreation District	Estes Valley Public Library District
Aurora Housing Authority	Forest Lakes Metropolitan District
Baca Grande Water & Sanitation District	Fremont Conservation District
Beulah Water Works District	Fremont Sanitation District
Black Hawk-Central City Sanitation District	Garfield County Housing Authority
Blanca-Fort Garland Metropolitan District	Grand Junction Regional Airport Authority
Boulder County	Grand Valley Fire Protection District
Boulder County Public Trustee’s Office	Green Mountain Water and Sanitation District
Boxelder Sanitation District	GVR Metropolitan District
Brush Housing Authority	Housing Authority of Arriba
Carbon Valley Park & Recreation District	Housing Authority of the City of Boulder
Castle Pines Metropolitan District	Housing Authority of the City of Colorado Springs
Castle Pines North Metropolitan District	Housing Authority of the County of Adams
Center Housing Authority	Housing Authority of the Town of Limon
Central Colorado Water Conservancy District	Lamar Housing Authority
Cheyenne Wells Housing Authority	Lamar Utilities Board
City of Alamosa	Left Hand Water District
City of Boulder	Longmont Housing Authority
City of Castle Pines	Longs Peak Water District
City of Colorado Springs	Louisville Fire Protection District
City of Fort Morgan	Meeker Cemetery District
City of Las Animas	Meeker Regional Library District
City of Lone Tree	Meeker Sanitation District
City of Manitou Springs	Montrose Fire Protection District
City of Pueblo	Montrose Recreation District
City of Wray	Monument Sanitation District
City of Yuma	Morgan Conservation District
Clearview Library District	Morgan County Quality Water District
Collbran Conservancy District	Mountain View Fire Protection District
Colorado District Attorneys’ Council	Mountain Water and Sanitation District
Colorado First Conservation District	Niwot Sanitation District
Colorado Health Facilities Authority	North Carter Lake Water District
Colorado Housing and Finance Authority	North Chaffee County Regional Library
Colorado Library Consortium	Northeast Colorado Health Department
Colorado River Fire Protection District	Northeastern Colorado Association of Local Governments
Colorado School District Self Insurance Pool	Park Center Water District
Colorado Springs Utilities	Pikes Peak Regional Building Department
Columbine Knolls-Grove Metropolitan Recreation District	Pine Drive Water District
Costilla Housing Authority	Plains Ground Water Management District
County Technical Services, Inc.	Pueblo City-County Health Department
Cucharas Sanitation & Water District	Pueblo Library District
Cunningham Fire Protection District	Pueblo Transit Authority
Douglas County Libraries	Pueblo Urban Renewal Authority
Douglas County Housing Partnership	Rampart Regional Library District
Durango Fire Protection District	Rangely Regional Library District
East Cheyenne Groundwater Management District	Red Feather Mountain Library District
East Larimer County Water District	Red, White & Blue Fire Protection District
Eastern Rio Blanco Metropolitan Recreation & Park District	Republican River Water Conservation District
Eaton Housing Authority	Rio Blanco Fire Protection District
Elbert County Library District	Rio Blanco Water Conservancy District
Elizabeth Park and Recreation District	Routt County Conservation District
El Paso-Teller County Emergency Telephone Service Authority	Sable-Altura Fire Protection District
Estes Park Housing Authority	San Luis Valley Development Resources Group
	San Luis Valley Water Conservancy District

## Schedule of Affiliated Employers

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### Local Government Division (continued)

San Miguel County Public Library  
San Miguel Regional and Telluride Housing Authority  
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  
Upper Thompson Sanitation District  
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<sup>1</sup>

Denver Public School District No. 1

<sup>1</sup> 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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