

Your Legacy. Our Commitment.

Annual Comprehensive Financial Report
FOR THE YEAR ENDED DECEMBER 31, 2024



2024 IN REVIEW

Facts and Figures as of December 31, 2024



Investment Portfolio Fair Value

\$66.7 billion

(Defined Benefit Plans)



Net Rate of Return

10.8%



Members Actively
Contributing to PERA

219,204



Employers

412



Total Covered Participants

57,323

(In PERACare Health Benefits Program)



Funded Status

69.2%

(Division Trust Funds)



Retirees and Benefit Recipients

141,438



Annual Retirement
Benefit Payments

\$5.4 billion



Invested in Colorado-Based Companies,
Partnerships, and Assets

\$768.4 million



30-Year Rate of Return

8.4%

(Annualized, Net-of-Fees)



Annual Comprehensive Financial Report

For the Year Ended December 31, 2024

Public Employees' Retirement Association of Colorado

*Prepared by Colorado PERA's Accounting Division in
coordination with staff from other divisions*



Table of Contents

Introductory Section

Letter of Transmittal	3
Professional Awards	13
Board Chair's Report	15
Report of the Colorado PERA Audit Committee	16
Board of Trustees	18
Administrative Organizational Chart and Executive Management	20
Consultants	21

Financial Section

Independent Auditors' Report	25
Management's Discussion and Analysis (Unaudited)	29

Basic Financial Statements

Fund Financial Statements

Statements of Fiduciary Net Position	43
Statements of Changes in Fiduciary Net Position	46

Notes to the Financial Statements

Note 1—Plan Description	49
Note 2—Summary of Significant Accounting Policies	58
Note 3—Leases, Capital Assets, and Subscription Liabilities	60
Note 4—Contributions	62
Note 5—Investments	65
Note 6—Derivative Instruments	75
Note 7—Commitments and Contingencies	75
Note 8—Voluntary Investment Program, Defined Contribution Retirement Plan, and Deferred Compensation Plan	76
Note 9—Health Care Trust Funds—Defined Benefit Health Care Plans	78
Note 10—Net Pension Liability of the Division Trust Funds	81
Note 11—Net OPEB Liability of the Health Care Trust Funds	85
Note 12—Subsequent Events	89

Required Supplementary Information (Unaudited)—

Division Trust Funds

Schedule of Changes in Net Pension Liability and Related Ratios	90
Schedule of Employer and Nonemployer Contributions	100
Schedule of Investment Returns	102

Notes to the Required Supplementary Information (Unaudited)—

Division Trust Funds

Note 1—Significant Changes in Plan Provisions Affecting Trends in Actuarial Information	103
Note 2—Significant Changes in Assumptions or Other Inputs Affecting Trends in Actuarial Information	105
Note 3—Methods and Assumptions Used in Calculations of ADC	107

Financial Section (continued)

Required Supplementary Information (Unaudited)—

Health Care Trust Funds

Schedule of Changes in Net OPEB Liability and Related Ratios	108
Schedule of Employer Contributions	112
Schedule of Investment Returns	112

Notes to the Required Supplementary Information (Unaudited)—

Health Care Trust Funds

Note 1—Significant Changes in Plan Provisions Affecting Trends in Actuarial Information	113
Note 2—Significant Changes in Assumptions or Other Inputs Affecting Trends in Actuarial Information	113
Note 3—Methods and Assumptions Used in Calculations of ADC	116

Supplementary Schedules

Schedule of Administrative Expenses	117
Schedule of Investment Expenses	118
Schedule of Payments for Professional and Consulting Services	118

Investment Section

Defined Benefit Plans

Chief Investment Officer Letter	121
Report on Investment Activity	124
Schedule of Investment Results	126
Investment Summary	128
Schedule of Investment Expenses	129
Schedule of Internal and External Asset Management	129
Schedule of Investment Income and Expenses by Asset Class	130
Schedule of Private Market Investment Contributions, Distributions, and Paid Carried Interest	130
Profile of Investments in Colorado	131
Largest Equity Holdings by Fair Value	132
Largest Fixed Income Holdings by Fair Value	132
Investment Brokers/Advisers (Internally Managed Assets)	133
Schedule of Commissions	133

Defined Contribution Plans

Report on Investment Activity	134
Schedule of Investment Results	136
Investment Summary	137

Table of Contents

Actuarial Section

Actuary's Certification Letter	141
--------------------------------------	-----

Division Trust Funds—Pension

Actuarial Topics	151
Actuarial Assumptions: Exhibits A-G	159
Summary of Funding Progress	165
Schedule of Funded Liabilities by Type	165
Unfunded Actuarial Accrued Liability	168
Actuarial Gains and Losses	171
Actuarial Valuation Results	173
Plan Data	180

Health Care Trust Funds—OPEB

Actuarial Topics	188
Actuarial Assumptions: Exhibits H-L	194
Summary of Funding Progress	196
Schedule of Funded Liabilities by Type	196
Unfunded Actuarial Accrued Liability	197
Actuarial Gains and Losses	199
Actuarial Valuation Results	199
Plan Data	203

Statistical Section

Overview	209
Changes in Fiduciary Net Position	210
Benefits and Refund Deductions from Fiduciary Net	221
Position by Type	
Member and Benefit Recipient Statistics	224
Schedule of Average Retirement Benefits Payable	225
Benefit Payments—All Division Trust Funds	227
Schedule of Retirees and Survivors by Types of Benefits	229
Schedule of Average Benefit Payments	234
Schedule of Contribution Rate History	243
Principal Participating Employers	248

Commonly Used Acronyms

Commonly Used Acronyms	253
------------------------------	-----

Introductory Section





LETTER OF TRANSMITTAL



June 27, 2025

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

I'm pleased to present this *Annual Comprehensive Financial Report (ACFR)* for the Public Employees' Retirement Association of Colorado (PERA) for the year ended December 31, 2024.

The PERA defined benefit plan portfolio ended the year with a return of 10.8% net-of-fees compared to the benchmark's return of 11.1%. The value of the portfolio as of December 31, 2024, was \$66.7 billion for the defined benefit plans and \$6.7 billion for the defined contribution plans. The combined funded ratio for the five Division Trust Funds was 69.2%, a decrease from 69.6% in 2023.

Planning for the future is fundamental to the work of public pension funds. In 2024, the Board of Trustees (Board) reviewed PERA's actuarial assumptions, which are used to project future costs and liabilities, through a systematic process known as an experience study, which takes place every four years. The goal of an experience study is to compare recent plan experience to current actuarial assumptions and make appropriate adjustments where necessary to make future projections as accurate as possible.

Global financial markets have recently experienced volatility. While PERA's portfolio is well diversified and built for long-term resilience, we are still subject to market downturns. The good news: you may rest assured your retirement benefits remain secure. However, persistent adverse market performance may increase the unfunded liability over time, which in turn, may increase the probability of triggering the automatic adjustment provision (AAP). The AAP mechanism, established under Senate Bill 18-200, is designed to maintain PERA's financial health by allowing for, under certain conditions, automatic adjustments to member and employer contribution rates, as well as to annual increases for benefit recipients. We remain vigilant in monitoring economic and market conditions and are committed to keeping you informed well in advance of any potential changes.

While the Board did not make any adjustments to PERA's economic assumptions in 2024, some of the non-economic assumptions did change as a result of the experience study mentioned above, which resulted in additional liabilities for the fund. For example, population growth assumptions were scaled back for certain groups. Fortunately, due to strong investment returns, among other factors, the additional liabilities did not trigger the need for automatic adjustments next year. That means there will be no adjustments to contribution rates and all eligible benefit recipients will receive a 1.0% increase this July and most, if not all, will receive 1.0% in July 2026.

Throughout 2024, our leadership team worked with the Board to develop a new strategic plan that will guide PERA's work over the next three years. That plan focuses on three major goals: strengthening our financial stability, improving relationships with stakeholders, and modernizing our organization. Staff have already begun the work of implementing the plan to ensure we meet our goals and position PERA for future success.

Since I joined PERA in mid-2024, I've met with many stakeholders, including legislators and policymakers, retiree groups, and active members. I've listened to retirees, employers, and legislators share their frustrations, acknowledgments of PERA's accomplishments, and their priorities moving forward. The relationships we have with our stakeholders are of vital importance to me as well as to the future of this organization and the futures we work every day to secure on behalf of more than 700,000 current and former public employees we proudly serve.

While PERA is undergoing significant change as we modernize for the future, one thing that remains constant is our dedication to our membership. To PERA members and beneficiaries: Your legacy is our commitment. We work every day to ensure you have a stable, secure retirement and as we work toward meeting our long-term goals, that commitment will remain at the core of everything we do.



Andrew Roth
Chief Executive Officer/
Executive Director

LETTER OF TRANSMITTAL

2024 Legislation

During the 2024 legislative session, five bills pertaining to PERA passed the Colorado General Assembly and became law. PERA's Board of Trustees did not take an official position on any legislation during the 2024 legislative session.

Senate Bill 24-099: PERA Employment After Retirement for Rural Schools

This bill adds superintendents and principals to the list of service retirees (which currently includes teachers, school bus drivers, food services cooks, school nurses, and paraprofessionals) who may be hired by a rural school district and employed without a reduction in retirement benefits and clarifies that the exemption for a rural school district also includes a small rural school district which has a funded pupil count for the prior budget year of less than 1,000 pupils. The bill also requires PERA to submit a report to the finance and education committees every five years beginning with December 1, 2025, on all working after retirement provisions.

Governor Jared Polis signed the bill into law on April 11, 2024.

Senate Bill 24-169: State Firefighter PERA Job Classification

Beginning July 1, 2025, this bill modifies the definition of "State Trooper" to include a duly sworn employee of the Division of Fire Prevention and Control in the Department of Public Safety. The bill applies the "State Trooper" member and employer contribution rates and benefit structure to eligible employees whose duties include structural or wildfire management, wildfire response, live-fire training, or wildfire leadership, as determined by the executive director of the Department of Public Safety.

Governor Jared Polis signed the bill into law on May 24, 2024.

Senate Bill 24-186: County Coroner & Deputy Coroner PERA Eligibility

Beginning January 1, 2025, this bill classifies a county coroner or deputy coroner elected, reelected, or appointed on or after January 1, 2021, by a Local Government Division employer as a "State Trooper" for the purpose of PERA service retirement eligibility and benefits.

Governor Jared Polis signed the bill into law on June 5, 2024.

House Bill 24-1044: Additional PERA Service Retirees for Schools

Effective July 1, 2024, this bill allows for each employer in the School Division and the Denver Public Schools (DPS) Division, as well as each state college or university, to designate up to 10 retirees who are

permitted to work up to 140 days or 916 hours per calendar year without a reduction in their benefits. Additionally, this bill increases the number of retirees who can be designated under the 140-day provision by allowing school districts with over 10,000 students to designate an additional retiree for each 1,000 students enrolled. The bill caps the maximum number of years a retiree may be designated under the 140-day provision to six consecutive years. The bill also requires PERA to submit a report to the General Assembly every five years beginning with December 1, 2025, on all working after retirement provisions.

Governor Jared Polis signed the bill into law on April 19, 2024.

House Bill 24-1427: PERA Study Conducted by an Actuarial Firm

The bill requires the State Auditor, in cooperation with PERA, to contract with a nationally recognized and enrolled actuarial firm with experience in public pension plans to conduct a comprehensive study comparing the cost and effectiveness of the current hybrid defined benefit plan design to alternative plans, and specified aspects of the defined benefit plan and the defined contribution plan currently administered by PERA. A report detailing the findings of this study will be completed on or before August 15, 2025.

Governor Jared Polis signed the bill into law on April 18, 2024.

Economic Environment

The Federal Reserve (Fed) made progress on bringing down the inflation rate in 2024 as the steep rate increases of the past few years gave way to an extended pause in rate adjustments. The Fed cut rates in September by a half percent, for the first time in four years. Two additional quarter-point rate cuts were made at subsequent meetings, and the federal funds rate ended the year with an upper bound of 4.5%, a full point lower than where it began the year and back to where it was two years prior. 30-year fixed mortgage rates approached 6% in September before rising to end the year a quarter point higher than where they began. Despite the Fed's efforts to lower rates, existing home sales remain little changed from 2023, owing to rising prices, high mortgage rates, and current homeowners feeling locked in with ultra-low mortgage rates obtained during the pandemic housing boom. Rate relief was also scarce in the auto sector, with monthly payments on new cars nearing \$750 per month as the average price of a new car has climbed to just under \$50,000.

On paper, 2024 was a good year for U.S. economic growth, employment, and inflation but sentiment was a different story. Persistently high prices weighed on consumer sentiment even though the University of Michigan Consumer Sentiment Index, a monthly survey of consumer confidence often cited by economists,

LETTER OF TRANSMITTAL

ended the year higher than where it began. Real gross domestic product (GDP) also grew at the highest level since the recovery following the pandemic, up 2.8% from the prior year. Wage and salary growth outpaced inflation for the second consecutive year, increasing 3.8% for civilian workers for the twelve months ending in December. The Consumer Price Index (CPI-U) for all items rose 2.9% for the twelve months ending in December, dropping below 3% for the first time post-pandemic. The Personal Consumption Expenditures (PCE) price index is the Fed's preferred measure of inflation and rose 2.6% in December from a year earlier, nearing the Fed's 2% target inflation rate. The U.S. labor market continued to add jobs in 2024, albeit at a slower rate, with 2.2 million jobs gained. The unemployment rate remained low by historical standards, rising to 4.1% to end the year.

Global economic growth ticked up slightly from the prior year, with 2024 estimated real GDP growth at 2.7%. Emerging market and developing economies grew at 4.1% while advanced economies increased 1.7%. The United States continued to outperform among its peers, recording growth of 2.8% against the Euro area's growth rate of 0.7% and Japan's at 0.0%. South and East Asia countries again outperformed other emerging market and developing economies. Global financial conditions eased throughout the year as rates came down, but uncertainty persisted with the unresolved conflicts in Ukraine and Gaza and simmering tensions with China.

Colorado's economy continued to grow but underperformed the national average GDP, growing at 2.4% in 2024. The unemployment rate increased more than the national rate, rising steadily throughout the year to end at 4.6%; however, the labor force participation rate remained significantly above the national average of 62.5%, at 67.9%. Over the medium term, Colorado has been a top-performing state in employment and wage gains, population growth rates, labor force participation, and home price appreciation, but has moved closer to the middle in the short term. This trend is expected to continue as population growth, mainly net migration, slows. Colorado's housing market remains undersupplied, but higher mortgage rates and prices have slowed the housing appreciation rate. The median price of a single-family home rose 4.7% in 2024 to \$575,000 statewide and by 3.7% to \$612,000 in the Denver metro region, while townhomes and condos saw prices decline by 2.7% and 6.7%, respectively.

Investments

Investment portfolio income is a significant source of revenue to PERA. The Board's Investment Committee is responsible for assisting the Board in overseeing PERA's investment program.

In 2024, there was net investment income of \$7.6 billion compared with total member contributions of \$1.7 billion and employer contributions of \$2.7 billion.

For the year ended December 31, 2024, the defined benefit funds had a time-weighted rate of return of 10.8% net-of-fees. The annualized, net-of-fees, time-weighted, rates of return over the last three-, five-, 10-, and 30-year periods were 2.8%, 8.2%, 8.3%, and 8.4%, respectively.

Prudent funding and healthy investment returns are important to the financial soundness of PERA. More information on the composition of the portfolio is reflected in the Investment Summary on page 128.

An integral part of the overall investment policy is the strategic asset allocation. The strategic asset allocation is designed to provide appropriate diversification and balance expected total rates of return with the volatility of expected returns. 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 policy benchmark weight and the specified ranges for each asset class are presented on page 124. All of the asset classes were within their specified ranges at year-end.

PERA's investment policy is summarized in the Report on Investment Activity on page 124.

Investment Stewardship

PERA's fiduciary duty is to serve as stewards of capital for our members, participants, and beneficiaries. Foundational to PERA's investment stewardship are cost-consciousness, integration of material factors in PERA's investment and proxy voting decisions, market advocacy, and the ongoing evaluation of portfolio holdings. These efforts are intended to strengthen PERA's investment stewardship across all asset classes in the portfolio while prioritizing financial sustainability.

On the recommendation of the Investment Committee, the Board approved updates to its Proxy Voting Policy effective January 1, 2025. Substantive changes to voting guidelines include support for disclosure of corporate board skills matrices and labor-related matters. The Board believes these enhancements will improve transparency into how companies manage risks and opportunities that may impact long-term shareholder value.

Senior members of PERA staff serve on advisory groups and boards to advocate for robust capital markets and business practices accretive to long-term investment value. I had the honor of being elected to serve on the Board of Directors for the Council of Institutional Investors (CII) in 2025. Amy C. McGarrity, Chief Investment Officer/Chief Operating Officer, was

LETTER OF TRANSMITTAL

appointed to the Investor Advisory Committee of the U.S. Securities and Exchange Commission (SEC) in 2024 and continues to serve as Chair of the Investor Advisory Group of the Public Company Accounting Oversight Board (PCAOB). Tara Stacy, Director of Investment Stewardship, served as Chair of the U.S. Asset Owners Advisory Council of CII 2024-2025. Luz Rodriguez, Senior Investment Stewardship Analyst, has served on the Board of Directors of the International Corporate Governance Network (ICGN) since 2021. These efforts demonstrate PERA's leadership in setting market standards and global best practices in governance and stewardship. PERA believes healthy markets that support long-term investment value are in the best interest of PERA members and beneficiaries.

Major Initiatives

Throughout 2024, the organization continued to make significant progress on priorities and initiatives outlined in the Board's 2019-2023 strategic plan, which extended into 2024. The organization focused on the continued themes of evolving systems, innovating programs, and investing in our employees. Ultimately, the end-result on these multi-year projects will strengthen PERA as an organization and help build a solid foundation for future initiatives.

Evolve

Investment Systems Modernization Program

The Investment Systems Modernization Program is a multi-year program to modernize our Investment systems and architecture, streamline workflows, and increase self-service reporting and data analytics capabilities. It will reduce manual processing, minimize redundancies, improve PERA's transmission and storage of data, and be scalable to accommodate future investment needs. In 2024, PERA consolidated two of the private market asset classes onto a single platform, onboarded a new data warehouse, and increased data analytic and reporting capabilities. Further development of these initiatives will continue in the coming years.

Change Management Office

In response to and in support of the significant change underway at PERA, the Change Management Office (CMO) was expanded in 2024. The CMO supports PERA employees going through organizational change and to help learn new ways of working and navigating change.

Expansion of Executive Team

As part of the strategic planning process, the Board recognized and supported expanding additional leadership positions at the executive and director levels as the organization focuses on implementing significant multi-year initiatives. This expansion ensures PERA has the talent and resources needed for success in both near-term operational needs and strategic endeavors.

Initial changes were made in September 2024 to the executive level with Kevin Gallaway, General Counsel, and Sarah Wager, then Chief Audit Executive, both being named as part of PERA's Executive team. It is considered best practice from a governance standpoint to have both the General Counsel and Internal Audit leadership be included at the executive level to provide valuable perspective and insights to senior management for strategic decision-making. Also as part of this change, the title of Director of Internal Audit became Chief Audit Executive to more accurately align with the contributions this role provides to the organization.

Two new executive positions were later created and filled in 2024 and include Deputy Executive Director held by Sarah Wager, and Chief Technology Officer held by Ryan Ericson. Please see the Management Changes section for more information about these new executives.

In collaboration with the entire executive team, a new organizational structure was developed, which reflects a balanced approach to delegating leadership responsibilities among the executive team and creates opportunities for each executive to administer functions for which they have strong experience and a vision for success.

Pension Administration System and Business Process Initiative

PERA continued to evaluate paths toward modernization of its pension administration system. The first major step in this project is the Business Process Initiative (BPI) within the Benefits Department. A BPI maps essential processes and helps determine opportunities for efficiencies and automation. The BPI creates a blueprint to ensure the new pension administration system continues to serve members, retirees, and affiliated employers while implementing new technologies and data processes. Concurrent to the BPI, PERA engaged with a vendor for the next phase of the pension administration system initiative, which is to assist in the formation of the project management office, the development of the larger project charter and overall governance, as well as the creation of the roadmap for the project.

Innovate

Accessibility

PERA is committed to providing equitable access to our services and content. Our ongoing accessibility effort works toward being in line with Colorado law, and the Web Content Accessibility Guidelines (WCAG) version 2.1 by July 1, 2025. These guidelines not only help make technology accessible to users with sensory, cognitive, and mobility disabilities, but ultimately to all users, regardless of ability. Under executive sponsorship, a project team from Application Development, Communications, and Legal collaborated

LETTER OF TRANSMITTAL

on remediation of the public website and all digital documents and resources, the secure member portal and mobile app, the employer /agency portal, and the vendor portal. Our efforts are part of a meaningful change in making all our services inclusive and accessible.

Unitization Project

Unitization provides a compelling opportunity for defined contribution plan participants to gain access to PERA’s low-cost, institutional quality, internal asset management capabilities by investing alongside the defined benefit plan. As the next step in the process of unitizing the defined benefit plan, the Global Equity asset class was unitized in January 2025. By unitizing PERA’s defined benefit asset classes, we can more effectively integrate those investment offerings into our defined contribution investment lineup.

Invest

Diversity, Equity, and Inclusion Strategic Plan

The Board’s strategic plan for 2019-2024 calls for continuous development of a culture that is inclusive, collaborative, and resilient. PERA has worked diligently over the past several years to develop a Diversity, Equity, and Inclusion (DEI) program that supports this Board strategic goal. In April 2024, PERA launched a three-year DEI strategic plan that is the continued evolution of the DEI program at PERA. Through the implementation of this DEI strategic plan, PERA demonstrates our continued commitment to ensuring a safe, equitable, and inclusive workplace for all employees.

DEI Training

As part of PERA’s ongoing staff and leadership development, all employees participated in *Principles and Practices of DEI* sessions conducted by Seven Focus, a Denver-based organization focusing on the path from intent to impact. These sessions helped facilitate our organizational journey toward fostering and engaging a diverse and inclusive workforce. Employees were able to participate in dialogue to explore the foundational concepts of promoting community and belonging at PERA while learning about the impact of bias in words, actions, and environments. Strategies to mitigate the impacts of biased behavior and language were also explored.

Top Workplaces

For the third year in a row, PERA was recognized as being one of Denver’s Top 150 Workplaces. In addition, PERA was awarded a national Financial Services Top Workplaces Award. This recognition is a testimonial and exciting way to share with the community about the opportunities at PERA. The Top Workplace recognition is awarded based only on employee feedback. An independent research company conducts the survey and does not disclose individual responses to PERA.

Actuarial Results

Two types of actuarial valuations are required to be performed for PERA’s five defined benefit pension and two other postemployment benefit (OPEB) trust funds: one for accounting and financial reporting purposes and the other for funding purposes. The results of both actuarial valuations are included in the financial and actuarial sections of this report, respectively.

The results of the actuarial valuations performed for accounting and financial reporting purposes are prepared in accordance with requirements of the Governmental Accounting Standards Board (GASB). Assets are required to be stated at fair value and the liabilities are determined using a standardized methodology allowing for transparency and comparability across U.S. governmental defined benefit pension and OPEB systems. The amount of total pension liability (TPL) in excess of the fair value of assets or the fiduciary net position (FNP) is referred to as the net pension liability (NPL).

The results of the actuarial valuations for funding purposes are prepared in accordance with the Actuarial Standards of Practice (ASOPs) and the Board’s pension and OPEB funding policies. Investment gains and losses are recognized over a four-year period to calculate a smoothed or actuarial value of assets (AVA) used to determine funding metrics. The amount of actuarial accrued liability (AAL) in excess of the AVA is referred to as the unfunded actuarial accrued liability (UAAL). The ratio of AVA to AAL represents the funded status of each plan.

Although the same funding or attribution method is used to determine liabilities for both accounting and financial reporting and funding purposes, differing asset values (fair value versus AVA) and other typically less impactful valuation processes can result in notably different assessments of unfunded liabilities (NPL versus UAAL) under various economic conditions.

For the five defined benefit pension trust funds as of the year ended December 31, 2024, the results of the two types of actuarial valuations are shown below, reflecting the calculation differences as described (dollars in billions):

	Accounting & Financial Reporting (GASB)	Funding (ASOPs & Board Funding Policy)
A. Liabilities: TPL and AAL	\$94.0	\$93.9
B. Assets: FNP and AVA	66.0	65.0
Unfunded Liability (A) - (B): NPL and UAAL	\$28.0	\$28.9

For the five defined benefit pension trust funds as of December 31, 2023, the NPL calculated for accounting and financial reporting purposes was \$29.3 billion compared to the UAAL calculated for funding purposes was \$27.5 billion.

LETTER OF TRANSMITTAL

The decrease in the NPL, from year-end 2023 to year-end 2024 primarily is due to favorable investment performance during 2024, partially offset by a net demographic actuarial loss and changes in actuarial assumptions.

In accordance with GASB 67 and GASB 74, the discount rate determination for 2024 required the use of the long-term expected rate of return of 7.25% for the five pension and two OPEB trust funds. When calculating the AAL for funding purposes, the discount rate used always is equal to the long-term expected rate of return set by the Board.

A comprehensive discussion of the results of the actuarial valuation performed for accounting and financial reporting purposes can be found in the Management's Discussion and Analysis (MD&A) on pages 39-40, as well as in Notes 10 and 11 of the Notes to the Financial Statements in the Financial Section. The results of the actuarial valuations performed for funding purposes are briefly summarized below with information on certain funding actuarial metrics provided in the MD&A on pages 35-38. A more comprehensive discussion is provided in the Actuarial Section.

Funding

On December 31, 2024, the funded ratio for PERA's five defined benefit pension trust funds was 69.2% compared to 69.6% on December 31, 2023. The AVA as of December 31, 2024, was \$65.0 billion. Although the 2024 fair value investment return of 10.8% was favorable when compared to the long-term expected rate of return of 7.25%, the investment return on an AVA basis was 5.8% versus the 7.25% assumption. This less than expected return for 2024 was predominantly due to the 2022 investment losses still being recognized in the smoothed actuarial value. The UAAL as of December 31, 2024, was \$28.9 billion, an increase of approximately \$1.4 billion from the previous year, reflecting the AVA investment loss, as previously described, and a net demographic actuarial loss, slightly offset by a small decrease in liability resulting from the adoption of revised actuarial assumptions.

The development and ongoing review of a pension funding policy are responsibilities of the Board. PERA's current pension funding policy initially was adopted by the Board in March 2015, and last revised January 19, 2024, for the five defined benefit pension trust funds. The Board adopted a similarly structured OPEB funding policy in January 2018, which also was last revised January 19, 2024. Both policies focus on the determination of an actuarially determined contribution reflecting closed and layered 30-year amortization periods. The purpose of each policy is three-fold: (1) to define the overall funding benchmarks of each trust fund, (2) to assess the adequacy of the contribution rates

set by the Colorado Legislature by comparing each trust fund's statutorily set contribution rate to an actuarially determined contribution benchmark, and (3) to define the annual actuarial metrics which will assist in assessing the sustainability of the plan. The results of these three items help guide the Board when considering whether to pursue or support proposed contribution and benefit legislation.

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 page 179 for the Division Trust Funds and page 202 for the Health Care Trust Funds. Additional information on PERA's funded ratio, unfunded liabilities, and actuarial assumptions may be found in the Actuarial Section starting on page 151 for the Division Trust Funds and on page 188 for the Health Care Trust Funds.

Employer contributions also drive the funded status. Considering all five Division Trust funds, 2024 is only the fourth year within the last 22 years the actual statutory employer and nonemployer contributions received were in excess of (\$487.4 million greater than) the required actuarially determined contributions, or ADC. The ADC is calculated by PERA's actuaries, pursuant to the Board's pension funding policy, as a benchmark to compare the statutory rates. This actuarial metric is also a key component of the AAP assessment.

Four years of excess contributions unfortunately does not fully compensate for the 18 years of deficiency, which has accumulated over the 22-year period to \$4.5 billion as of December 31, 2024. See page 37 of the MD&A in the Financial Section for additional details.

Investment Rate of Return Sensitivity Effect on Projected Amortization Periods

In addition to the annual actuarial funding valuation, the Board's actuary performs actuarial projections for each Division Trust Fund. These projections are forward-looking and take into consideration the many tiers of PERA benefit provisions and the statutory contribution rate structures. The projections also reflect applicable salary, demographic, and economic actuarial assumptions, as well as anticipated member growth. Considering the various benefit tiers currently in effect within PERA, the Board believes the results of the actuarial projections provide valuable insight into the long-term impact of the pension reforms adopted in 2010 and 2018.

The main focus of these projections is to provide, by division, the amortization or funding period, meaning the expected number of years until full funding status is achieved. The projected amortization periods reflect all actuarial assumptions and the benefit and contribution provisions currently enacted, even if not yet effective.

LETTER OF TRANSMITTAL

The following table shows the projected amortization periods under two scenarios: (1) as of the December 31, 2024, actuarial valuation, reflecting the 2024 investment return and other plan experience, the revised actuarial assumptions, and the enactment of House Bill (HB) 25-1105 - Public Employees' Retirement Association True-up of Denver Public Schools Division Employer Contribution, and (2) as of the December 31, 2023, actuarial valuation.

Division Trust Fund	Projected Amortization Periods (in years)	
	2024 Valuation Results	2023 Valuation Results
State	19	23
School	28	27
Local Government	11	14
Judicial	5	8
DPS	10	9

It is important to understand the risks related to defined benefit plans, specifically the risks associated with the selection and application of the long-term expected rate of return on investments. Given the long-term funding horizon and anticipated ongoing aspect of such defined benefit plans, particularly those providing benefits in the public sector, it is generally understood that the plan's existence is tied to the ongoing nature of governmental services. Therefore, it is common practice for plan sponsors/administrators of governmental or public sector pension plans also to apply the expected long-term rate of return as the discount rate used to determine the liabilities of the plan.

In order to derive the long-term rate of return assumption, the Board looks to the expertise of its investment and actuarial consultants to perform a comprehensive asset/liability study on a periodic basis (generally every three to five years). In conjunction with this study, the Board reviews capital market data from numerous sources. PERA concluded the most recent asset/liability study in September 2024. As a result of the study, the Board updated and approved long-term asset allocations and target ranges effective January 1, 2025, and reaffirmed the current 7.25% long-term expected rate of return applicable to all five Division Trust Funds and the two Health Care Trust Funds.

The following table illustrates the projected amortization periods, in years, of the School Division Trust Fund under the various return scenarios (used for both assumed investment return and to discount liabilities of the plan) which correspond to the confidence levels (probabilities of investment return) as indicated.

This table reflects the results and experience of the December 31, 2024, actuarial funding valuation and the effect of the revised actuarial assumptions adopted January 17, 2025, effective for the December 31, 2024, actuarial valuations and measurement date. The

projected funding periods reflect 50-year probability outlooks (Monte Carlo simulations), provided by the Board's actuaries, and are based on 30-year capital market assumptions, employed in the 2024 asset/liability study as previously described, provided by the Board's investment consultants.

Projected Amortization Periods—School Division Trust Fund					
Probability of Achieving at Least the Rate of Return Displayed (or Better), per Annum	Long-Term Expected Investment Return & Discount Rate				
	4.69%	6.36%	7.25%	8.74%	10.40%
95th Percentile	Infinite				
75th Percentile		82			
53rd Percentile			28		
25th Percentile				9	
5th Percentile					3

PERAPlus 401(k), Defined Contribution Retirement, and PERAPlus 457 Plans

PERA offers members opportunities to save more for retirement through the Voluntary Investment Program (PERAPlus 401(k) Plan), the Defined Contribution Retirement Plan (DC Plan), and the Deferred Compensation Plan (PERAPlus 457 Plan). All employees working for a PERA-affiliated employer may contribute to the PERAPlus 401(k) Plan. As of December 31, 2024, there were a total of 229 employers who recognized the value of offering more choices in savings by affiliating with the PERAPlus 457 Plan. The Roth option was added to the PERAPlus 401(k) and 457 Plans at the end of 2014. As of December 31, 2024, there were a total of 222 employers who have adopted the Roth option. The Roth option in these plans offers advantages over a Roth IRA, including higher contribution limits and no income-based contribution limitations.

The fiduciary net position of the PERAPlus 401(k), DC, and PERAPlus 457 Plans increased for the year ended December 31, 2024. The PERAPlus 401(k), DC, and PERAPlus 457 Plans earned \$701.0 million, \$63.2 million, and \$177.7 million of investment income with a fiduciary net position of \$4.9 billion, \$509.2 million, and \$1.4 billion, respectively.

Overview of Colorado PERA

PERA provides retirement and other benefits to the employees of more than 500 government agencies and public entities in the State of Colorado. Established by State law in 1931, PERA operates by authority of the Colorado General Assembly and is administered under Title 24, Article 51 of the Colorado Revised Statutes. In accordance with its duty to administer PERA, the Board has the authority to adopt and revise Rules in accordance with State statutes. See Notes 1, 8, and 9 of the Notes to the Financial Statements in the Financial Section for participant information and services provided by PERA.

LETTER OF TRANSMITTAL

Employer Affiliation

PERA welcomes the Boulder Public Library District, which affiliated in the Local Government Division on January 1, 2024.

Board of Trustees Composition

PERA is governed by a 16-member Board; 11 Trustees 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 a voting ex officio Trustee, and the Denver Public Schools (DPS) Division elects one member to serve as a non-voting ex officio Trustee.

In March 2024, the Board reappointed Amy Grant to the DPS Division seat since she was the sole candidate duly nominated and eligible to be elected. Trustee Grant will serve a four-year term that expires in June 2028.

In June 2024, as a result of the 2024 Board election, two new Trustees were elected and one Trustee was reelected. Lisa Landis, the Associate Vice President of Employee Services for the University of Colorado, was elected to the State Division seat for Higher Education, filling the seat vacated by Ramon Alvarado. Trustee Landis will serve the remaining two years of that seat's term, which expires in June 2026. Scott Simon, the Chief Investment Officer for the Fire and Police Pension Association of Colorado, was elected by State Division members to the non-Higher Education seat previously held by Tracy Marie Rushing. Trustee Simon will serve a four-year term that expires in June 2028. Nathan Geroche, a science teacher in the Boulder Valley School District, was reelected by School Division members. He will serve a four-year term which expires in June 2028.

In September 2024, Trustee Scott Smith resigned from the Board. As a result, in November 2024, Dr. Louis L. Fletcher was appointed to fill the seat as he was the runner-up in the 2024 Board election. Trustee Fletcher will serve until the 2025 Board election. Trustee Fletcher is the Executive Director for Facilities & Operations for Falcon School District 49.

In November 2024, in compliance with procedures established in PERA's *Governance Manual*, Trustees elected Taylor McLemore as Board Chair, and Judge Rebecca R. Freyre as Board Vice Chair. Both of these positions are two-year terms and official duties were assumed at the January 2025 Board meeting.

In April 2025, Trustee Taylor McLemore was confirmed by the Senate following his reappointment to the Board by Governor Polis in May 2024. In June 2025, Chair McLemore notified the Board of his intent to resign at the conclusion of the June 2025 Board meeting. Judge Rebecca R. Freyre will assume the role of Chair in accordance with PERA's *Governance Manual*.

Management Changes

Sarah Wager was named Deputy Executive Director in January 2025. Previously she was Chief Audit Executive in 2024 and Director of Internal Audit since 2019. Sarah began her career at the Colorado Office of the State Auditor where she conducted performance, financial, and IT audits of state agencies over a 20-year period. Prior to joining PERA in 2019, Sarah served in an executive leadership role at the Colorado Department of Human Services. As the Deputy Executive Director, Sarah oversees PERA's shared services and the benefits line of business. Sarah is also responsible for collaborating with each member of the Executive team to foster alignment, drive organizational results, and will serve as the acting CEO if needed.

Ryan Ericson was selected as Chief Technology Officer in December 2024. Ryan joined PERA in 2011 as a Senior Software Developer and most recently served as Director of Application Development. In his new position, Ryan will serve as a member of the Executive leadership team and oversee Application Development, Information Technology, and the newly created Product Management Division. As Chief Technology Officer, he will be responsible for providing the technology vision, strategy, and roadmap to enable PERA's operations and modernization efforts. Prior to joining PERA, Ryan was a Senior Lead Programmer/Analyst with Citi.

Chris Harless was named Interim Chief Audit Executive in January 2025. Chris joined PERA in 2022 as a Financial Audit Manager. As Interim Chief Audit Executive, Chris is responsible for ensuring the Internal Audit Division is effectively evaluating areas identified as high risk and facilitating collaboration with leaders in each division to help identify risks and opportunities to improve operational efficiency and effectiveness. Prior to joining PERA, Chris spent 15 years with the Colorado Office of the State Auditor leading teams in conducting both financial and performance audits of state agencies and programs.

Michael Steppat was promoted from Manager to Director of Public and Government Affairs in September 2024. This position also moved from the Communications Division to the Executive Offices as a direct report of the Chief Executive Officer/Executive Director. In his new role, Michael is responsible for developing and implementing PERA's government affairs strategic plan and pursuing legislative outcomes that align with the Board's position. He also serves as the primary point of contact for elected officials and represents PERA at the State Capitol. Before joining PERA in 2018, Michael was a Contract Lobbyist at HB Strategies Colorado.

Rachel Sei was promoted to Director of the new Product Management Division in March 2025. As Director of Product Management, Rachel is responsible for leading strategic planning activities that inform

LETTER OF TRANSMITTAL

product roadmap development across business and technology teams and ensuring alignment of business and product strategies. Rachel joined PERA in 2021 and recently served as the Digital Experience Product Manager. Prior to joining PERA, Rachel was a Marketing and Product Manager at the Center for Improving Value in Health Care.

Annalise Yahne joined PERA as Director of the new Strategy Division in May 2025. In this role, Annalise will coordinate, report on, and assist with development of organizational strategy at PERA. She will help management develop plans and measure progress toward achieving the Board's strategic objectives. Prior to joining PERA, Annalise was a Management Consultant at Propeller, where she focused on helping companies direct and manage strategic projects.

Luis Esquivel was promoted to Director of Application Development in June 2025 after serving as Interim Director since December 2024 when Ryan Ericson was selected as Chief Technology Officer. Luis joined PERA in 2003 and most recently served as Application Development Team Manager. As Director of Application Development, Luis is responsible for providing leadership in overall development strategies, provides technical assistance to other operational functions at PERA, and coordinates and manages projects. Prior to joining PERA, Luis was a Software Engineer Consultant at Valtech Technologies.

Phil Hill, Director of Customer Service, left PERA in May 2025 after four years of service. The open position is being actively recruited.

Financial Information and Management Responsibility

Our *ACFR* must comply with the reporting requirements under Title 24, Article 51, Section 204(8) of the Colorado Revised Statutes.

This *ACFR* was prepared to conform to the accounting principles generally accepted in the United States of America, and the financial information presented in the report is consistent with the Basic Financial Statements. The ultimate responsibility for the Basic Financial Statements and *ACFR* rests with PERA management with the Board providing oversight. The Board is assisted in its duties by the Audit Committee, which consists of at least five Board members and two independent outside members. A more detailed description of the Audit Committee's role can be found in their report on pages 16-17.

Management is responsible for establishing and maintaining adequate internal control over financial reporting. In addition, our internal audit personnel provide a continuing review of the internal controls and operations of PERA, and the Chief Audit Executive regularly reports to the Audit Committee.

The cost of controls should not exceed the benefits to be derived. PERA's internal control over financial reporting is designed to provide reasonable, but not absolute assurance, regarding the reliability of financial reporting, including data that is, out of necessity, based on estimates and judgments.

State law requires the State Auditor to conduct or cause to be conducted an annual audit of PERA. Pursuant to this requirement and under the direction of the State Auditor, CliftonLarsonAllen LLP audited PERA's 2024 Basic Financial Statements in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards. CliftonLarsonAllen LLP issued an unmodified opinion on PERA's financial statements, which can be found in the Independent Auditors' Report in the Financial Section on pages 25-28.

The Financial Section of the *ACFR* also contains the MD&A that serves as a narrative introduction, overview, and analysis of the Basic Financial Statements. This Letter of Transmittal is designed to complement the MD&A and should be read in conjunction.

Recognition of Achievements

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PERA for its *ACFR* for the year ended December 31, 2023. This was the 39th consecutive year PERA has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current *ACFR* continues to meet the Certificate of Achievement Program's 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, 2023. The Award for Outstanding Achievement in Popular Annual Financial Reporting is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government popular reports.

In order to receive an Award for Outstanding Achievement in Popular Annual Financial Reporting, a government unit must publish a Popular Annual Financial Report, whose contents conform to program standards of creativity, presentation, understandability, and reader appeal.

LETTER OF TRANSMITTAL

An award for Outstanding Achievement in Popular Annual Financial Reporting is valid for a period of one year only. PERA has received a Popular Award for the last 22 consecutive years. We believe our current report continues to conform to the Popular Annual Financial Reporting requirements, and we are submitting it to the GFOA.

PPCC Standards Award Program

The Public Pension Coordinating Council (PPCC) presented PERA with a Public Pension Standards Award for Funding and Administration in 2024 for meeting professional standards for funding and plan administration as set forth in the Public Pension Standards. This is the 22nd consecutive year PERA has received this annual award. 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.

Acknowledgments

This *ACFR* reflects the combined efforts of PERA staff and is the responsibility of PERA management. I extend my sincere appreciation to all who assisted in and contributed toward its completion. Our *ACFR* is intended to provide complete and reliable information for transparent communication and to serve as a resource.

An email with a link to this *ACFR* is provided to all PERA-affiliated employers and other interested parties; a summary (*Popular Annual Financial Report*) is distributed to members and benefit recipients. Electronic versions of both reports are available on the PERA website at copera.org.

I would like to thank our affiliated employers for their continued support and cooperation, which is vital to the success of PERA today and into the future. I would also like to thank the PERA Board and staff for their hard work and many contributions in moving the mission forward to provide retirement security for Colorado's public employees.

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

Respectfully submitted,

Andrew Roth

*Chief Executive Officer/Executive Director
Colorado PERA*

PROFESSIONAL AWARDS



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

**Public Employees' Retirement Association
of Colorado**

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

December 31, 2023

Christopher P. Morill

Executive Director/CEO

PROFESSIONAL AWARDS



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2024***

Presented to

Public Employees' Retirement Association of Colorado

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

Presented by the Public Pension Coordinating Council, a confederation of

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

A handwritten signature in black ink, reading 'Alan H. Winkle', is positioned above the printed name and title.

Alan H. Winkle
Program Administrator

BOARD CHAIR'S REPORT



June 27, 2025

Dear Colorado PERA Members, Benefit Recipients, and Employers:

As Chair of the Board of Trustees (Board), I am pleased to present this *Annual Comprehensive Financial Report* for the year ended December 31, 2024.

The information contained in this report speaks to the skill and dedication of our staff who work every day to administer benefits and manage plan assets on behalf of members and benefit recipients. PERA investments earned a return of 10.8% net-of-fees in 2024, and while we underperformed relative to our benchmark, we continued to exceed our long-term assumed rate of return on an annualized, time weighted, net-of-fees basis, earning 8.3% over the past decade and 8.4% over the past 30 years.

PERA's strong investment performance through the decades speaks to the value of maintaining our long-term focus amid market uncertainty and volatility. Our thoughtful, strategic approach to asset allocation is what allows us to safeguard the funds that provide vital retirement income to Colorado's public workforce.

Part of that approach is a regular review of our investment strategy and asset allocation, and in 2024 we completed an asset/liability study that resulted in slight adjustments to our mix of investments, with increased allocations to private equity and real estate. It's our belief that adding diversification to the portfolio enhances our ability to seek the best returns without adding unnecessary risk.

PERA has long been considered a leader in public retirement plans. It's important that we continue to be thoughtful as we lay out our vision and ambitions for PERA's future. Throughout 2024 the Trustees, staff, and consultants worked to develop PERA's next three-year strategic plan, which reaffirms our commitment to pension excellence. The Board approved the plan in March 2025. I encourage all our stakeholders to visit copera.org and read the plan to better understand how we plan to modernize our operations, improve the services we provide, and build stronger relationships with our members, retirees, and employers.

I was honored to be elected by my fellow Trustees to serve as Chair of this Board beginning in January 2025, alongside the Honorable Rebecca Freyre, who was elected Vice Chair. I want to thank outgoing Chair Marcus Pennell for his steadfast leadership and thoughtful guidance over the past four years. Mr. Pennell's dedication to public service and his sincere consideration for the needs of our members have been enormous assets to this organization during his time on the Board, and I'm grateful that he will continue to serve as a Trustee.

I want to thank the Trustees whose time on the Board came to an end in 2024: Scott Smith and Tracy Rushing. They brought valuable perspectives and skills to the Board, and I want to thank them for their service on behalf of the entire Board.

We also welcomed some new faces to the Board in 2024. Lisa Landis, Scott Simon, and Louis Fletcher have already demonstrated their expertise and willingness to engage in the challenges this Board faces.

It has been a profound honor to serve as Chair. I have deep respect for the mission of PERA and the dedication of the staff, fellow Trustees, and stakeholders who work to secure the retirement benefits of Colorado's public employees. Personal obligations require me to relocate out of state making it difficult to dedicate the time and attention required of a Trustee. PERA has a strong Board and leadership team to manage the fund for Colorado's public workforce. It will be in excellent hands with Judge Freyre serving as the Board Chair.

I want to extend my sincere appreciation to PERA staff and all PERA members. While PERA leadership may be undergoing significant changes, our commitment to you, our members, hasn't changed. You do important work for Colorado, and we're dedicated to safeguarding the retirement you work so hard for every day.

Sincerely,

Taylor McLemore
Chair, Colorado PERA Board of Trustees



Taylor McLemore
Board Chair

REPORT OF THE COLORADO PERA AUDIT COMMITTEE



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 control, PERA's *Standards of Professional and Ethical Conduct*, the internal audit process, and the practices of the Chief Audit Executive. Management is responsible for the preparation, presentation, and integrity of PERA's financial statements; accounting and financial reporting principles; PERA's system of internal control; 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. The Internal Audit Division is responsible for independently and objectively reviewing and evaluating the effectiveness and efficiency of PERA's system of internal control.

CliftonLarsonAllen LLP is the Independent Auditor 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 State law, the Colorado State Auditor has ultimate authority and responsibility for selecting, evaluating, and, when appropriate, replacing PERA's Independent Auditor.

The Audit Committee provides Board-level oversight offering guidance to management and the Internal Audit Division based on Committee members' expertise in business, finance, and accounting, information received, and discussions with management, the Independent Auditor, and Internal Audit Division. In this role, the Audit Committee also reviews the audit plans of both the Independent Auditor and the Internal Audit Division, the results of their audits, and the status of management's actions to implement any recommendations from the audits.

The Audit Committee believes 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 Chair of the Audit Committee periodically meets with the Chief Audit Executive without management present and reports key information from these meetings to the Audit Committee, and the Audit Committee periodically meets with the Independent Auditor without management present. During these meetings, the Chair and 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 control system. These questions included, but were 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 Auditor's expertise, and its knowledge of PERA and PERA's financial statements, have subsequent events been appropriately disclosed in the financial statements?
- Based on the Independent Auditor's experience, and its 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 Auditor's experience, and its knowledge of PERA, has PERA implemented internal control 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?
- Were ethics hotline complaints, if any, adequately investigated and resolved?
- Did all PERA staff, including members of management, attest to their compliance with the PERA Standards of Ethical and Professional Conduct?

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

REPORT OF THE COLORADO PERA AUDIT COMMITTEE

The Audit Committee had an agenda for 2024 that included the following items:

- Recommending the *Annual Comprehensive Financial Report* to the Board for its approval;
- Reviewing and approving the plan and budget of the Internal Audit Division;
- Reviewing the adequacy of resources made available to the Internal Audit Division;
- Reviewing the scope, objectives, and timing of the annual independent audit of PERA's financial statements;
- Providing input into the Chief Executive Officer/Executive Director's annual performance evaluation of the Chief Audit Executive;
- Reviewing PERA's compliance with its *Standards of Professional and Ethical Conduct*;
- Meeting with the Independent Auditor separately, without management present;
- Meeting with the Chief Executive Officer/Executive Director, Chief Audit Executive, Director of Accounting/Controller, and General Counsel; and
- Meeting with the Chief Audit Executive and with management to discuss the effectiveness of PERA's system of internal control.

The Audit Committee has reviewed and discussed the audited financial statements for the year ended December 31, 2024, with management and the Independent Auditor. Management represented to the Audit Committee that PERA's audited financial statements were prepared in accordance with accounting principles generally accepted in the United States of America that apply to governmental accounting for fiduciary funds. The Independent Auditor represented that their presentations to the Audit Committee included the matters required by auditing standards to be discussed with those charged with governance. The Audit Committee's review included a discussion with the Independent Auditor of the quality of PERA's accounting policies, the reasonableness of significant estimates, and the clarity of disclosures in PERA's financial statements.

In reliance on these reviews and discussions, and the reports of the Independent Auditor and the Chief Audit Executive, the Audit Committee has recommended to the Board, and the Board has approved PERA's *Annual Comprehensive Financial Report* for the year ended December 31, 2024.

Audit Committee as of June 26, 2025

Timothy M. O'Brien, Chairman

Norm Franke

Julie Friedemann

Mary-Margaret Henke

Tammie Lowrie

Jennifer Pasquino

Trina Ruhland

Ashley M. Smith

BOARD OF TRUSTEES

Serving from January 1, 2024, to June 27, 2025

By State law, authority over the Public Employees' Retirement Association of Colorado (PERA) is vested in the Board of Trustees (Board). The Board is composed of the following 16 Trustees:

- Nine members elected by members from their respective Divisions to serve on the Board for four-year terms; four from the School Division, three from the State Division, one from the Local Government Division, and one from the Judicial Division.
- Two retirees elected by retirees to serve on the Board for four-year terms.
- Three Trustees appointed by the Governor and confirmed by the State Senate to serve on the Board for four-year terms.
- The State Treasurer.
- One ex officio (non-voting) member or retiree elected by members and retirees of the Denver Public Schools (DPS) Division to serve on the Board for a four-year term.

If a Board member resigns, a new Trustee is appointed from the respective Division until the next election of Trustees.



Taylor McLemore
Chair

Appointed by the Governor
Current term expires July 10, 2028



Honorable Rebecca R. Freyre
Vice Chair

Appointed to Judicial Division seat
Judge
Colorado Court of Appeals
Current term expires June 30, 2027



Eunice Botchway

Elected by School Members
Special Education Teacher
Cherry Creek School District
Current term expires June 30, 2025



Julie Friedemann

Elected by Retirees
Retired Mathematics Teacher
Jefferson County School District R-1
Current term expires June 30, 2025



Dr. Louis L. Fletcher

Appointed to School Division seat
Executive Director for Facilities &
Operations
Falcon School District 49
Current term expires June 30, 2025



Nathan Geroche

Elected by School Members
Science Teacher
Boulder Valley School District
Current term expires June 30, 2028



Norm Franke

Appointed by the Governor
Current term expires July 10, 2025



Amy Grant

Non-voting, Ex officio member
Elected by DPS Division Active Members
and Retirees
Former Chair of the Denver Public Schools
Retirement System Board
Retired Secretary
Current term expires June 30, 2028

BOARD OF TRUSTEES (CONTINUED)

Serving from January 1, 2024, to June 27, 2025



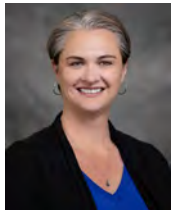
Suzanne E. Kubec

Elected by State Members
Liability Program Manager
State Office of Risk Management
Resigned from the Board January 31, 2024



Trina Ruhland

Elected by Local Government Division
Members
Deputy County Attorney
Boulder County Attorney's Office
Current term expires June 30, 2027



Lisa Landis

Elected by State Members
Associate Vice President of Employee
Services
University of Colorado
Current term expires June 30, 2026



Tracy Marie Rushing

Elected by State Members
Supervisor in Division of Vocational
Rehabilitation
Colorado Department of Labor and
Employment
Term expired June 30, 2024



Timothy M. O'Brien

Elected by Retirees
Retired Colorado State Auditor
Office of the State Auditor
Current term expires June 30, 2027



Scott Simon

Elected by State Members
Chief Investment Officer
Fire and Police Pension Association of
Colorado
Current term expires June 30, 2028



Jennifer Pasquino

Appointed by the Governor
Current term expires July 10, 2026



Ashley M. Smith

Appointed to State Division seat
Director of Corporate Strategy and
Development
Pinnacol Assurance
Current term expires June 30, 2025



Marcus A. Pennell

Elected by School Members
Physics Teacher
Jefferson County School District R-1
Current term expires June 30, 2025



Scott Smith

Elected by School Members
Chief Financial and Operating Officer
Cherry Creek School District
Resigned from the Board September 18, 2024



Eric Rothaus

Deputy State Treasurer
Delegated Substitute for the State
Treasurer
Continuous term effective January 2019



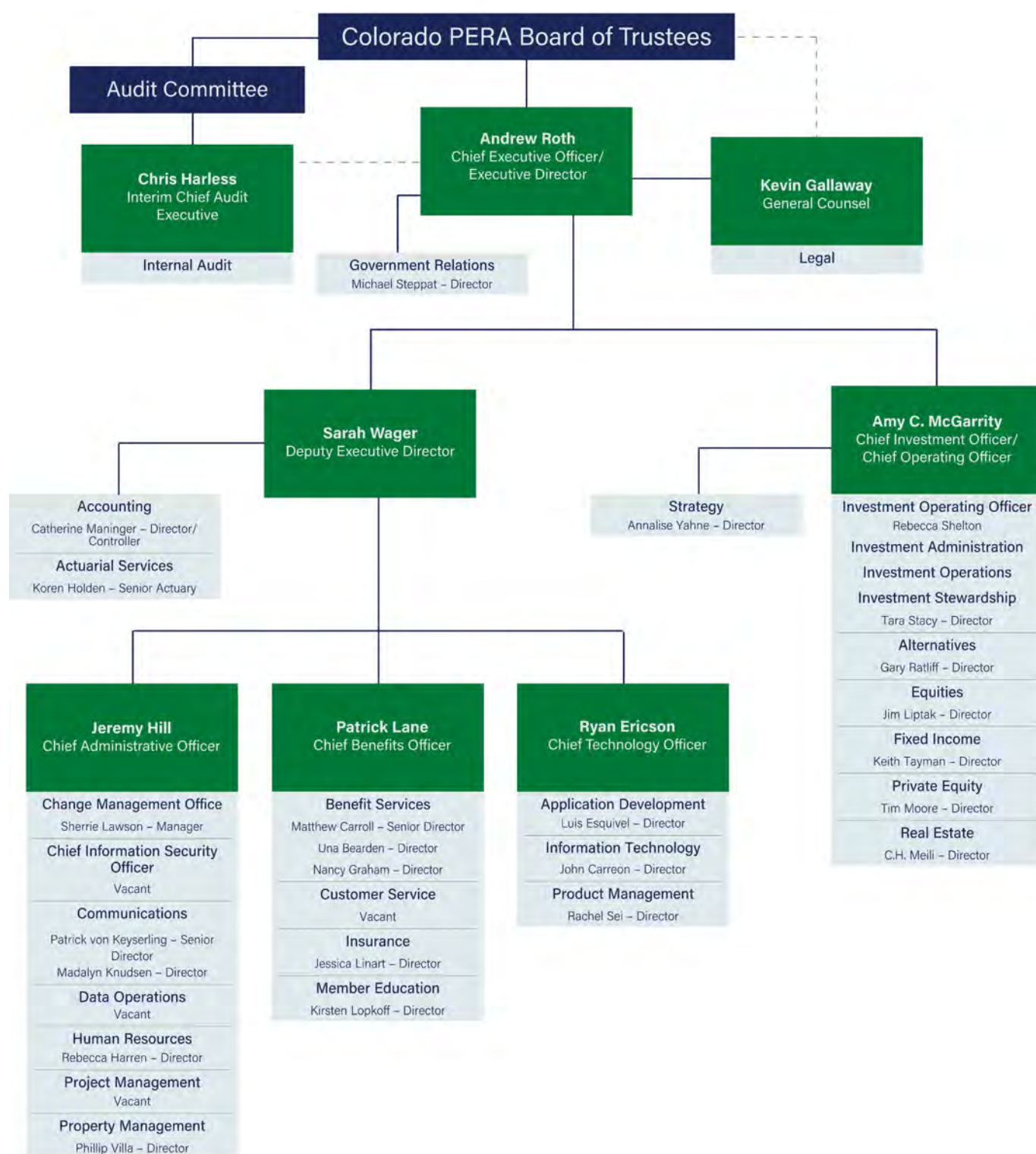
Honorable Dave Young

Ex officio member
State Treasurer
Continuous term effective January 2019

Additional detail about Trustees can be found in Board of Trustees Composition on page 10 in the Letter of Transmittal.

ADMINISTRATIVE ORGANIZATIONAL CHART AND EXECUTIVE MANAGEMENT

As of June 1, 2025



CONSULTANTS

As of December 31, 2024

Disability and Life Insurance Consultant

Milliman, Inc.
One Canal Plaza
Suite 1001
Portland, ME 04101

Fiduciary Counsel

Cohen Milstein Sellers & Toll PLLC
1100 New York Ave. NW
Fifth Floor
Washington, DC 20005

Governance Consultant

Mosaic Governance Advisors, LLC
PO Box 350604
Westminster, CO 80035

Health Care Program and Pharmacy Benefits Consultant

Segal
7951 East Maplewood Avenue
Suite 327
Greenwood Village, CO 80111

Investment Consultant

Aon Investments USA, Inc.
200 E Randolph Street
Chicago, IL 60601

Master Custodian

The Northern Trust Company
50 South La Salle Street
Chicago, IL 60603

Pension and Health Care Program Actuary

Segal
7951 East Maplewood Avenue
Suite 327
Greenwood Village, CO 80111

Risk Management

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

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

Callan, LLC
1900 16th Street
Suite 1175
Denver, CO 80202

Voluntary Investment Program, Defined Contribution Retirement, and Deferred Compensation Plan Recordkeeper

Empower
8515 East Orchard Road
Greenwood Village, CO 80111

A list of PERA's Investment Brokers/Advisers, the Schedule of Commissions, and other information related to investment expenses can be found in the Investment Section on pages 129-133.



Financial Section





INDEPENDENT AUDITORS' REPORT



CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT

Board of Trustees
Public Employees' Retirement Association of Colorado
Denver, Colorado

Report on the Audit of the Financial Statements***Opinions***

We have audited the accompanying financial statements of Public Employees' Retirement Association of Colorado (Colorado PERA), including the individual fund financial statements, as of and for the year ended December 31, 2024, and the related notes to the financial statements, which collectively comprise Colorado PERA's basic financial statements, as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of Colorado PERA as of December 31, 2024, and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America. 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 Colorado PERA as of December 31, 2024, and the respective changes in fiduciary net position thereof for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Colorado PERA and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

CLA Global, Inc. is a registered provider of continuing education for accountants. [CLAGlobal.com/disclaimer](https://www.claglobal.com/disclaimer)

INDEPENDENT AUDITORS' REPORT

Board of Trustees
Public Employees' Retirement Association of Colorado

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Colorado PERA's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Colorado PERA's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Colorado PERA's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

INDEPENDENT AUDITORS' REPORT

Board of Trustees
Public Employees' Retirement Association of Colorado

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the division trust funds' schedules of changes in net pension liability and related ratios, employer and nonemployer contributions, and investment returns and related notes, and the health care trust funds' schedules of changes in net OPEB liability and related ratios, contributions from employers, and investment returns and related notes, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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 GAAS, 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 Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise Colorado PERA's basic financial statements. The schedules of administrative expenses, investment expenses, and payments for professional and consulting services (supplementary information) are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The 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 GAAS. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, actuarial and statistical sections but does not include the basic financial statements and our auditors' report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

INDEPENDENT AUDITORS' REPORT

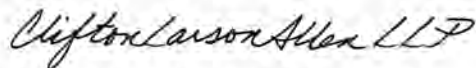
Board of Trustees
Public Employees' Retirement Association of Colorado

Report on Summarized Comparative Information

We have previously audited Colorado PERA's 2023 financial statements, and we expressed unmodified opinions on the respective financial statements of Colorado PERA and of each individual fund as displayed in the basic financial statements in our report dated June 21, 2024. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2023, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June 27, 2025, 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 solely 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 the effectiveness of Colorado PERA's 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.



CliftonLarsonAllen LLP

Denver, Colorado
June 27, 2025

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

This Management's Discussion and Analysis (MD&A) section provides a narrative overview and analysis of the financial activities of the Public Employees' Retirement Association of Colorado (PERA) for the year ended December 31, 2024. Please consider the information presented here in conjunction with additional information in the Letter of Transmittal starting on page 3 of this *Annual Comprehensive Financial Report (ACFR)* and with the Basic Financial Statements of PERA starting on page 43.

In addition to historical information, this MD&A includes forward-looking statements, involving 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, legislative changes, as well as other factors.

Overview of the Association

PERA administers the following 11 fiduciary funds:

Plan Name

Defined Benefit Pension Plans (Division Trust Funds)

State Division Trust Fund
School Division Trust Fund
Local Government Division Trust Fund
Judicial Division Trust Fund
Denver Public Schools (DPS) Division Trust Fund

Defined Benefit Other Postemployment Benefit Plans (Health Care Trust Funds)

Health Care Trust Fund (HCTF)
Denver Public Schools Health Care Trust Fund (DPS HCTF)

Defined Contribution Plans

Voluntary Investment Program
Defined Contribution Retirement Plan
Deferred Compensation Plan

Private Purpose Trust Fund

Life Insurance Reserve

Additional information regarding the contribution and benefit provisions of the plans can be found in Notes 1, 4, 8, and 9 of the Notes to the Financial Statements.

Financial Statement Overview

PERA's financial statements are prepared in conformity with generally accepted accounting principles (GAAP) in the United States and all applicable Governmental Accounting Standards Board (GASB) pronouncements. The actuarial valuations reported in the Actuarial Section are prepared in accordance with the Actuarial Standards of Practice and the PERA Board's funding policy.

Basic Financial Statements

PERA's financial statements include the following components:

1. Basic Financial Statements
 - Statements of Fiduciary Net Position
 - Statements of Changes in Fiduciary Net Position
2. Notes to the Basic Financial Statements
3. Required Supplementary Information - Unaudited
4. Supplementary Schedules

The Statements of Fiduciary Net Position present information on PERA's assets, liabilities, and deferred inflows of resources, with the difference reported as fiduciary net position (FNP). Over time, the increase or decrease in FNP indicates PERA's financial condition and ability to fund future benefits.

The Statements of Changes in Fiduciary Net Position reflect how PERA's FNP changed during the fiscal year, including additions such as contributions and investment income and deductions such as benefit payments, refunds, and administrative expenses.

Notes to the Financial Statements

The Notes to the Financial Statements provide essential information for understanding the Basic Financial Statements.

Note 1—Plan Description: provides a general description of PERA, the administered funds, and an overview of plan provisions for the defined benefit pension trust funds.

Note 2—Summary of Significant Accounting Policies: provides a summary of significant accounting policies, including the basis of accounting for PERA and management's use of estimates.

Note 3—Leases, Capital Assets, and Subscription Liabilities: provides information on PERA's leases and tangible and intangible capital assets.

Note 4—Contributions: provides information related to contribution requirements of the defined benefit pension trust funds and the authority for establishing or amending those requirements.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

Note 5—Investments: provides information related to deposits and investments, required investment disclosures, including risks related to credit (including custodial credit and concentrations of credit risk), interest rate, and foreign currency.

Note 6—Derivative Instruments: provides information on PERA's investment derivative instruments.

Note 7—Commitments and Contingencies: summarizes PERA's significant commitments and generally describes any potential contingencies of PERA.

Note 8—Voluntary Investment Program, Defined Contribution Retirement Plan, and Deferred Compensation Plan: identifies and describes the three defined contribution plans.

Note 9—Health Care Trust Funds: identifies and describes the types of defined benefit other postemployment benefit (OPEB) plans.

Note 10—Net Pension Liability (NPL) of the Division Trust Funds: provides a summary of the NPL of employers and the nonemployer contributing entity (if applicable) in accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans*.

Note 11—Net OPEB Liability (NOL) of the Health Care Trust Funds: provides a summary of the NOL or net OPEB asset (NOA) of employers in accordance with GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*.

Note 12—Subsequent Events: provides a summary of conditions that did not exist at the date of the Financial Statements but arose subsequent to that date.

Required Supplementary Information (RSI)

The following 10-year RSI is found after the Notes to the Financial Statements:

Division Trust Funds	Health Care Trust Funds
Schedule of Changes in Net Pension Liability and Related Ratios	Schedule of Changes in Net OPEB Liability and Related Ratios
Schedule of Employer and Nonemployer Contributions	Schedule of Employer Contributions
Schedule of Investment Returns	Schedule of Investment Returns

Supplementary Information

The section for Supplementary Information includes details on expenses. The schedules available in this section include:

- Schedule of Administrative Expenses
- Schedule of Investment Expenses
- Schedule of Payments for Professional and Consulting Services

Financial Highlights

Combined assets increased \$7,636,069, or 10.0%, from 2023 to \$84,104,507 as of December 31, 2024, primarily because investments, at fair value, increased \$5,687,913 and securities lending collateral increased \$1,865,614.

Combined liabilities increased \$1,628,941, or 18.5%, from 2023 to \$10,425,082 as of December 31, 2024, primarily due to securities lending obligations increasing \$1,804,843.

Combined deferred inflows from tenant leases increased by \$640, or 47.9%, from 2023 to \$1,977 as of December 31, 2024.

PERA's combined FNP increased \$6,006,488, or 8.9%, from 2023 to \$73,677,448 as of December 31, 2024, primarily due to positive investment returns.

See the remainder of the MD&A and the Notes to the Financial Statements for additional information

Comparative Financial Statements

The following comparative condensed statements of Fiduciary Net Position and Changes in Fiduciary Net Position for five Division Trust Funds, two Health Care Trust Funds, and the Life Insurance Reserve have been derived from PERA's audited financial statements. For the year ended December 31, 2024, the FNP for five Division Trust Funds, two Health Care Trust Funds, and the Life Insurance Reserve increased by \$5,119,254, \$113,484, and \$2,402, respectively. The increase was principally due to investment income. While the annual changes in FNP can provide meaningful insight into the financial activities and financial status, long-term views and trend analysis are critical factors in reporting and understanding the financial status of PERA.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

FIDUCIARY NET POSITION

As of December 31

	Division Trust Funds			Health Care Trust Funds			Life Insurance Reserve		
	2024	2023	% Chg	2024	2023	% Chg	2024	2023	% Chg
Assets									
Cash and cash equivalents	\$1,744,259	\$927,103	88.1%	\$21,437	\$10,503	104.1%	\$791	\$435	81.8%
Receivables	612,918	1,357,458	(54.8%)	15,314	24,980	(38.7%)	172	535	(67.9%)
Investments, at fair value	64,830,439	60,005,273	8.0%	796,762	679,821	17.2%	29,432	28,078	4.8%
Securities lending collateral	8,666,812	7,002,332	23.8%	106,514	79,332	34.3%	3,935	3,277	20.1%
Capital assets, net of accumulated depreciation	15,459	15,105	2.3%	—	—	—%	—	—	—%
Total assets	75,869,887	69,307,271	9.5%	940,027	794,636	18.3%	34,330	32,325	6.2%
Liabilities									
Investment settlements and other liabilities	1,220,991	1,385,691	(11.9%)	44,236	38,801	14.0%	2,007	3,036	(33.9%)
Securities lending obligations	8,598,367	6,990,945	23.0%	105,675	79,203	33.4%	3,903	3,271	19.3%
Total liabilities	9,819,358	8,376,636	17.2%	149,911	118,004	27.0%	5,910	6,307	(6.3%)
Deferred inflows of resources	1,977	1,337	47.9%	—	—	—%	—	—	—%
Net position	\$66,048,552	\$60,929,298	8.4%	\$790,116	\$676,632	16.8%	\$28,420	\$26,018	9.2%

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

	Division Trust Funds			Health Care Trust Funds			Life Insurance Reserve		
	2024	2023	% Chg	2024	2023	% Chg	2024	2023	% Chg
Additions									
Employer contributions	\$2,562,363	\$2,329,726	10.0%	\$133,716	\$122,376	9.3%	\$—	\$—	—%
Nonemployer contributions	225,000	49,561	354.0%	—	—	—%	—	—	—%
Member contributions	1,428,037	1,306,321	9.3%	—	—	—%	—	—	—%
Purchased service	96,628	89,958	7.4%	—	—	—%	—	—	—%
Employer disaffiliation	486	24,967	(98.1%)	20	1,033	(98.1%)	—	—	—%
Net investment income	6,540,646	7,273,742	(10.1%)	74,740	76,835	(2.7%)	2,954	3,293	(10.3%)
Other	14,036	14,405	(2.6%)	6,400	6,991	(8.5%)	—	—	—%
Total additions	10,867,196	11,088,680	(2.0%)	214,876	207,235	3.7%	2,954	3,293	(10.3%)
Deductions									
Benefit payments	5,439,900	5,308,424	2.5%	92,502	86,862	6.5%	—	—	—%
Refunds	230,907	207,923	11.1%	—	—	—%	—	—	—%
Disability and life insurance premiums	3,811	3,275	16.4%	—	—	—%	449	511	(12.1%)
Administrative expenses	54,345	48,049	13.1%	8,810	8,583	2.6%	103	44	134.1%
Other	18,979	19,320	(1.8%)	80	97	(17.5%)	—	—	—%
Total deductions	5,747,942	5,586,991	2.9%	101,392	95,542	6.1%	552	555	(0.5%)
Change in net position	5,119,254	5,501,689	(7.0%)	113,484	111,693	1.6%	2,402	2,738	(12.3%)
Net position									
Beginning of year	60,929,298	55,427,609	9.9%	676,632	564,939	19.8%	26,018	23,280	11.8%
End of year	\$66,048,552	\$60,929,298	8.4%	\$790,116	\$676,632	16.8%	\$28,420	\$26,018	9.2%

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

Additions to Net Position

Investments

INVESTMENT INCOME/(LOSS)

Trust Fund	Net Appreciation/ (Depreciation) in Fair Value	Interest and Dividends	Real Estate, Private Equity, and Alternatives Net Operating Inc	Investment Expenses	Net Securities Lending Income	Net Investment Income/(Loss)
State Division	\$1,563,110	\$323,824	\$113,495	(\$70,679)	\$24,327	\$1,954,077
School Division	2,791,431	579,193	202,997	(126,417)	43,524	3,490,728
Local Government Division	463,011	95,952	33,630	(20,944)	7,209	578,858
Judicial Division	38,996	8,088	2,836	(1,765)	608	48,763
DPS Division	374,424	77,687	27,227	(16,956)	5,838	468,220
HCTF	53,853	11,321	3,968	(2,471)	853	67,524
DPS HCTF	5,751	1,214	425	(265)	91	7,216
Life Insurance Reserve	2,361	491	172	(107)	37	2,954
2024 Total	\$5,292,937	\$1,097,770	\$384,750	(\$239,604)	\$82,487	\$6,618,340
2023 Total	\$6,233,595	\$1,011,520	\$305,278	(\$218,450)	\$21,927	\$7,353,870
2022 Total	(\$9,840,641)	\$916,589	\$298,825	(\$212,124)	\$11,277	(\$8,826,074)
2021 Total	\$8,386,384	\$761,721	\$318,225	(\$203,004)	\$6,107	\$9,269,433
2020 Total	\$7,878,679	\$760,772	\$258,171	(\$179,178)	\$5,293	\$8,723,737

The Division Trust Funds, the Health Care Trust Funds, and the Life Insurance Reserve pool their investments into a combined investment fund (CIF). CIF investments are the largest asset in PERA's defined benefit plans. Investment income generated by PERA ultimately defrays the cost of benefits provided to PERA's membership. CIF net investment income for the year ended December 31, 2024, was \$6,618,340, a decrease of \$735,530 from 2023.

PERA's target and actual investment allocation includes equity and fixed income investments in public markets and private equity, real estate, and alternatives in private markets. A modest cash balance provides ongoing liquidity to meet cash needs. Additional information on limitations, an overview of the investment policy, the targeted investment asset allocation, as well as the permissible ranges of asset allocation for PERA's investment program can be found on page 124 of the Investment Section.

The global equity market, in which over 50% of the portfolio is invested, is the single greatest driver of PERA's annual return. This asset class returned 17.1% in 2024. Fixed income investments comprise nearly 20% of the portfolio. This asset class had a return of 1.7% in 2024.

The private market asset classes (private equity, real estate, and alternatives) experienced mixed results in 2024. Private equity and alternatives were positive for the year, 6.4% and 8.0%, respectively, while real estate was slightly negative (0.6%). Cash and cash equivalents ended the year with a positive return of 5.4%.

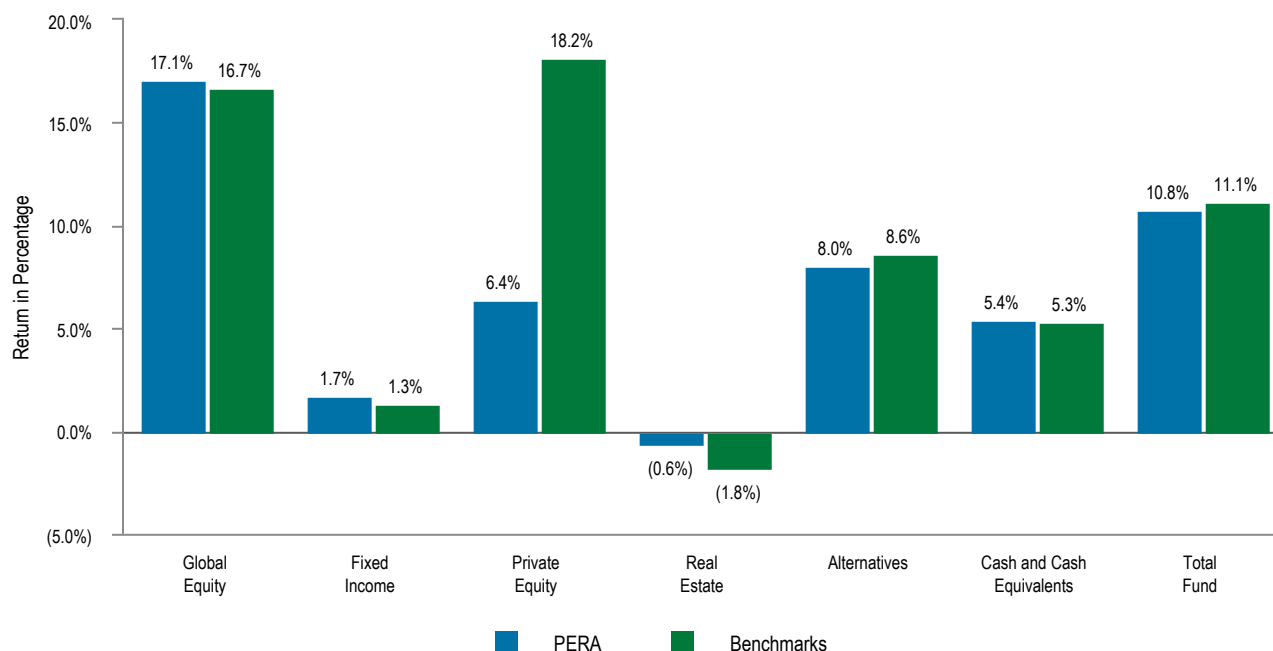
The actual net-of-fees, time-weighted rate of return was 10.8% for the year ended December 31, 2024. Additional information on investment returns and benchmarks as well as a comprehensive discussion of the 2024 performance evaluation can be found in the Investment Section.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

The net-of-fees time-weighted rates of return of the various asset classes, the total fund, and the various benchmarks are as follows:

2024 Net-of-Fees Time-Weighted Rates of Returns



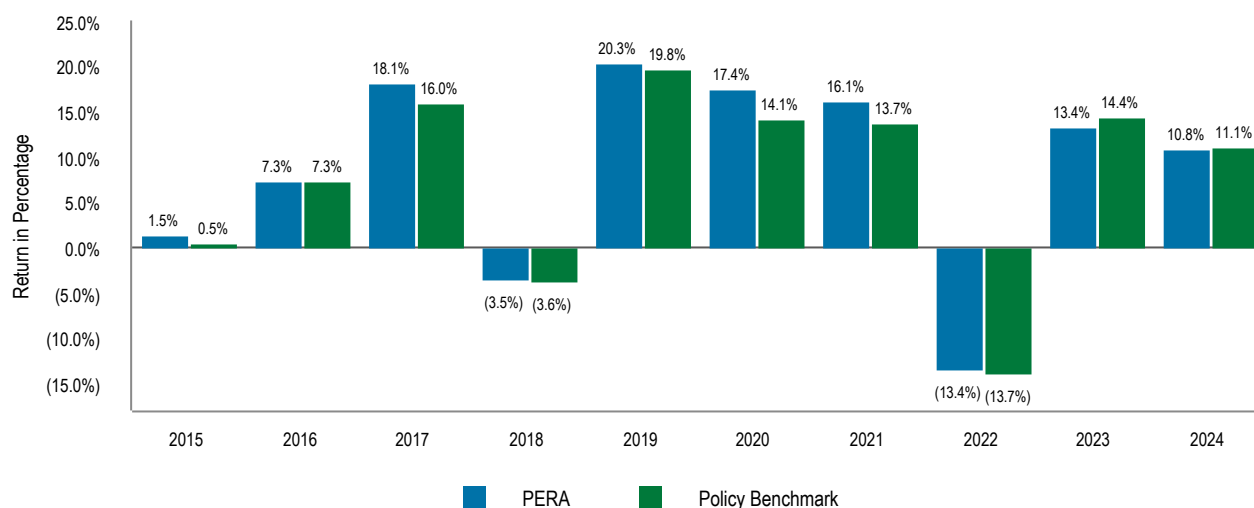
Long-Term Investment Returns

While the annual investment returns can provide meaningful insight into the financial activities and financial status, long-term views and trend analysis are critical factors in understanding the financial status of PERA. Additional information on longer-term investment returns for the investment program and

benchmarks for the three-, five-, and 10-year periods for each investment asset class can be found in the Investment Section.

The following chart shows the annual investment returns for the total fund and the policy benchmark for each of the past 10 years:

Historical Net-of-Fees Time-Weighted Rates of Return



MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

Contributions and Other Additions

TOTAL CONTRIBUTIONS AND OTHER FOR DIVISION AND HEALTH CARE TRUST FUNDS

Trust Fund	Employer Contributions ¹	Nonemployer Contributions ²	Member Contributions	Purchased Service	Employer Disaffiliation Payment	Other	Total Contributions and Other
State Division	\$865,714	\$75,146	\$445,303	\$32,473	\$—	\$7,385	\$1,426,021
School Division	1,444,279	129,789	779,963	51,433	—	293	2,405,757
Local Government Division	130,956	—	85,767	8,764	486	34	226,007
Judicial Division	15,551	1,274	7,160	211	—	4,297	28,493
DPS Division	105,863	18,791	109,844	3,747	—	2,027	240,272
HCTF	123,529	—	—	—	20	6,231	129,780
DPS HCTF	10,187	—	—	—	—	169	10,356
2024 Total	\$2,696,079	\$225,000	\$1,428,037	\$96,628	\$506	\$20,436	\$4,466,686
2023 Total	\$2,452,102	\$49,561³	\$1,306,321	\$89,958	\$26,000	\$21,396	\$3,945,338
2022 Total	\$2,213,889	\$605,000³	\$1,174,072	\$107,526	\$—	\$20,499	\$4,120,986
2021 Total	\$2,056,019	\$225,000	\$1,062,408	\$114,246	\$—	\$19,956	\$3,477,629
2020 Total	\$1,954,366	\$—⁴	\$938,121	\$75,623	\$—	\$20,228	\$2,988,338

¹ Employer contributions include the employer statutory rates, AED, and SAED, less an offset of 9.78% in 2024 for the DPS Division as required by C.R.S. § 24-51-412 *et seq.*

² Beginning in 2018, contributions from a nonemployer contributing entity are required by C.R.S. § 24-51-414 *et seq.*

³ A restorative payment to recompense PERA for the suspended 2020 contribution was made in 2022 as required by C.R.S. §§ 24-51-414(6-9), which also advanced part of the 2023 distribution.

⁴ The 2020 contribution for the State's 2020-21 fiscal year was suspended as required by C.R.S. § 24-51-414(1)(b).

Contribution rates are set in statute and are thus determined by the Colorado General Assembly. See pages 243-247 in the Statistical Section for the Schedule of Contribution Rate History.

Contributions	2024	2023
From members to the Division Trust Funds	\$1,428,037	\$1,306,321
From employers to the Division Trust Funds, HCTF, and DPS HCTF	2,696,079	2,452,102

Member and employer contributions increased due to increases in membership count and covered payroll with slight increases in certain employer contribution rates subject to Colorado Revised Statutes (C.R.S.). At the end of 2024, PERA had benefit receivables in the amount of \$239,479 which primarily represents contributions owed by members and employers for service credit earned in December 2024. Over the past 30 years, employer contributions (including nonemployer contributing entities and disaffiliation payments) represent 23% of the inflows into the Division Trust Funds and Health Care Trust Funds. Member contributions and purchased service represent 15% of the inflows into the Division Trust Funds.

C.R.S. § 24-51-412 *et seq.* provides for a unique offset to the employer contributions that otherwise would go toward financing the unfunded actuarial accrued liability (UAAL) of the DPS Division, allowing relief to

DPS Division employers by recognizing the dollars they contribute toward the pension certificates of participation (PCOPs). The statute states that as long as the funded status of the DPS Division exceeds the School Division, the Denver Public Schools is allowed this 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 PCOPs issued in 1997 and 2008, including subsequent refinancing by the Denver Public Schools at a fixed effective annual interest rate of 8.50%. At a minimum, the DPS Division employer contribution rate must be sufficient to fund the DPS HCTF (1.02%, 0.20% effective July 1, 2025) and the Annual Increase Reserve (AIR) (1.00%) applicable to the DPS Division. The annual increase (AI) is a post-retirement, cost-of-living adjustment meeting certain criteria as described in Note 1 of the Notes to the Financial Statements. The staff of Denver Public Schools calculated the PCOP offset rate of 9.78% for 2024.

C.R.S. § 24-51-401(1.7)(e) requires a periodic "true-up" calculation to be performed beginning in 2015 and every five years following, with the purpose of determining the total DPS Division employer contribution rate that would result in the equalization of the ratio of UAAL over payroll between the DPS and School Divisions at the end of the 30-year period beginning January 1, 2010. The 2020 and 2025 true-up calculations each indicated a reduction to the total

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

DPS Division employer rate would be needed to equalize the defined ratio. House Bill (HB) 25-1105, enacted May 23, 2025, and effective July 1, 2025, reduces the base employer contribution rate for the DPS Division by 3.0% of salary, from 10.4% to 7.4%, and reduces the allocated employer contribution to the DPS HCTF by 0.82% of salary, from 1.02% to 0.20%.

It should be noted the automatic adjustment provision (AAP) compares the blended actual contribution rates to the blended actuarially determined contribution rates, resulting in one ratio considering all participating Division Trust Funds. Therefore, a reduction in an employer contribution rate for any one of the participating Division Trust Funds could potentially influence the outcome of the AAP assessment. A failed assessment would trigger additional employer and member contributions for all divisions, and a decrease in the AI cap, affecting all benefit recipients of the plan.

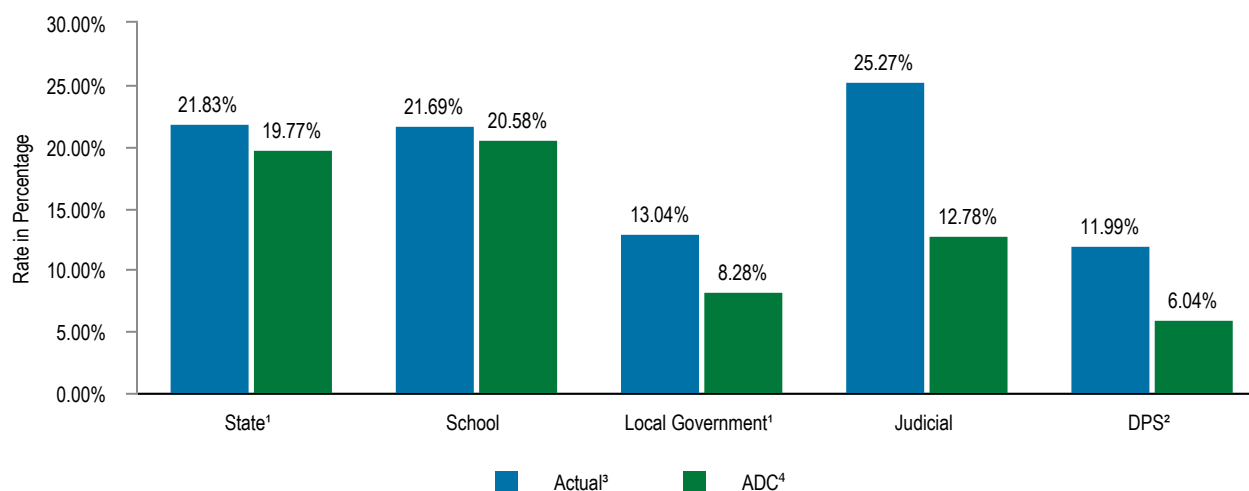
In addition, effective July 1, 2025, and prior to July 1, 2030, HB 25-1105 excludes the DPS Division contribution rates from consideration in the blended total contribution amount and the blended total

required contribution used in the determination of the AAP assessment ratio; however, the DPS Division remains subject to AAP adjustments, if triggered.

While the annual contribution amounts can provide meaningful insight into the financial activities and financial status of PERA, the assessment of the adequacy of contributions on an actuarial funding basis is a critical factor in reporting the financial status of PERA. In accordance with the actuarial standards of practice and the Board's pension and OPEB funding policies, a plan-specific actuarially determined contribution (ADC) benchmark is developed against which to gauge the adequacy of PERA's statutory contribution rates for the five Division Trust Funds and two OPEB Funds. The ADC for each trust fund is developed annually and reported by management to be used as a benchmark for contributions two years in the future.

The following two charts show the ADC and actual contributions as a percentage of covered payroll for each trust fund for 2024. Additional information on long-term trends can be found in the Actuarial Section.

State, School, Local Government, Judicial, and DPS Divisions
2024 Year-End Actual Contributions/ADC Comparison



¹ Actual employer rates are for non-Safety Officers and include the applicable defined contribution (DC) supplement pursuant to C.R.S. § 24-51-415.

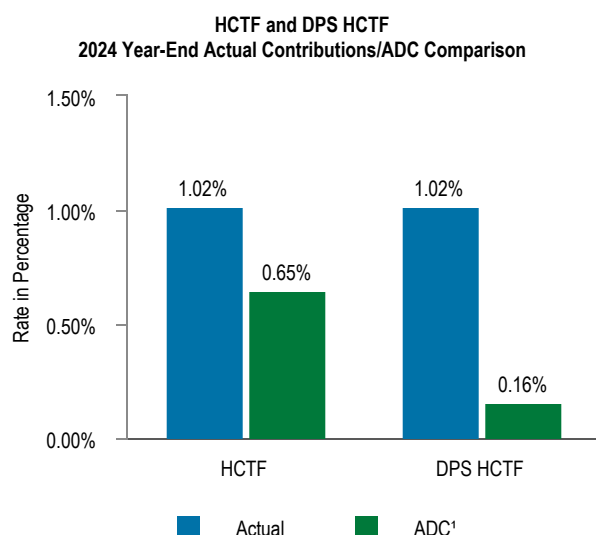
² Includes an offset as provided for under C.R.S. § 24-51-412.

³ Actual contributions include employer, AED, SAED, DC supplement and nonemployer, as applicable, less the AIR and health care contributions.

⁴ ADC rates for 2024 are based on the 2022 actuarial valuations.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)



¹ ADC rates for 2024 are based on the 2022 actuarial valuations.

Contribution Deficiency/(Excess)

Governmental accounting standards require the disclosure of the amount of contributions recognized by the defined benefit plan, the ADC amount, and the difference between these two amounts as RSI. An annual contribution deficiency arises when actual contributions are less than the ADC and an annual contribution excess arises when the actual contributions are greater than the ADC. The ADC is calculated using the investment rate of return and discount rate assumptions according to the Board's funding policies. The ADC for 2024 was determined based on the results of the December 31, 2022, actuarial valuation. The 10-year schedules illustrating the annual contribution deficiency/(excess) can be found in the RSI on pages 100-102 and 112.

Contribution deficiency/(excess) on an actuarial funding basis is determined through a similar process. Each year, the actuaries assess the increase or decrease to the expected unfunded liability by comparing the expected dollar inflows into each fund versus the actual dollar amounts recognized. This calculation for funding purposes differs slightly from the approach required by governmental accounting standards. It considers additional contributions from all sources each year and the timing of contributions made. Taking these factors into consideration results in a total contribution excess of \$487.4 million for the Division Trust Funds in 2024. During the past 22 years, contribution experience for the Division Trust Funds has resulted in 18 years of deficiencies, four years of excess, and an accumulated shortfall of \$4.5 billion.

Due to legislative actions such as the implementation of the AAP, specifically designed to better align actual contributions with actuarially determined contributions, and the State's annual direct distribution, progress is being made to dampen and eventually eliminate contribution deficiencies. A breakdown of benefit structures by division and type can be found on page 50 in the Financial Section.

Senate Bill (SB) 18-200 implemented the AAP, which annually assesses actual contributions compared to required contributions to ascertain if adjustments to certain plan provisions are required in accordance with State statute beginning July 1, 2020. Based on certain statutory parameters, the AAP requires, as necessary, adjustments to member contributions, employer contributions, the direct distribution from the State, and the AI cap. The AAP is designed to help mitigate future contribution deficiencies and to keep PERA on the path to full funding. Additional information on this AAP can be found in Note 4 of the Notes to the Financial Statements starting on page 63, the Actuarial Section starting on page 176, and C.R.S. § 24-51-413.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

CONTRIBUTION DEFICIENCY/(EXCESS)

(Dollars in Millions)

Trust Fund	2024	2023	2022	2021	2020	Cumulative Deficiency/(Excess) 2003–2024
State Division ¹	(\$163.4)	(\$53.0)	(\$163.3)	(\$83.2)	\$93.5	\$1,387.1
School Division ¹	(185.2)	(34.5)	(178.1)	(102.0)	155.9	2,423.6
State and School Division ²	N/A	N/A	N/A	N/A	N/A	685.5
Local Government Division	(51.7)	(39.4)	(13.5)	(15.1)	3.6	(310.8)
Judicial Division ¹	(8.8)	(6.9)	(7.6)	(3.3)	0.3	(2.4)
DPS Division ^{1,3}	(78.3)	(28.8)	(54.9)	(13.0)	26.9	315.0
Total Division Trust Funds	(\$487.4)	(\$162.6)	(\$417.4)	(\$216.6)	\$280.2	\$4,498.0
HCTF	(\$56.2)	(\$43.4)	(\$32.7)	(\$23.8)	(\$15.9)	(\$262.0)
DPS HCTF ³	(9.3)	(7.8)	(6.5)	(5.4)	(4.5)	(51.1)
Total OPEB Trust Funds	(\$65.5)	(\$51.2)	(\$39.2)	(\$29.2)	(\$20.4)	(\$313.1)

¹ Beginning in 2018, includes contributions from a nonemployer contributing entity as required by C.R.S. § 24-51-414 *et seq.*

² The State and School Divisions merged July 1, 1997, and separated on January 1, 2006.

³ The DPS Division and DPS HCTF were established on January 1, 2010.

Amortization of Unfunded Actuarial Accrued Liabilities

The following table shows the amortization periods for the Division Trust Funds and Health Care Trust Funds for the prior and current valuation year. The amortization periods determined as of the December 31, 2024, actuarial valuation consider the revised actuarial assumptions adopted by the Board January 17, 2025, effective for the December 31, 2024, actuarial valuation and measurement date and the reduced employer contributions pursuant to the enactment of HB 25-1105:

Trust Fund	Actuarial Funding Valuation Results	
	2024 Amortization Period	2023 Amortization Period
State Division	17 Years	18 Years
School Division	28 Years	23 Years
Local Govt Division	10 Years	8 Years
Judicial Division	4 Years	5 Years
DPS Division ¹	10 Years	6 Years
HCTF	4 Years	8 Years
DPS HCTF	N/A	N/A

¹ The calculation considers declining PCOP offset rate as described in statute.

The amortization periods for the five Division Trust Funds do not include the full effect of legislation enacted in 2006, 2010, and 2018. This legislation includes plan changes designed to lower the normal cost over time as new members are added to PERA's population, and to allow a greater proportion of the employers' contribution to be used to amortize the unfunded liability. The 2018 legislation also increased contributions to the Division Trust Funds in order to

further accelerate the amortization of the unfunded liability. From 2023 to 2024 the amortization periods, determined on a valuation or closed-group basis, increased for the School, Local Government, and DPS Divisions and slightly decreased for the State and Judicial Divisions.

The longer amortization periods for three of the five Division Trust Funds primarily reflect unfavorable recent plan experience and the adoption of revised actuarial assumptions effective December 31, 2024, as well as the reduced employer contribution rates for the DPS Division pursuant to HB 25-1105. The shorter amortization period for the HCTF reflects favorable changes in the revised actuarial assumptions as well as recognizes the increase in the margin of the employer contribution rate available to pay down the HCTF's unfunded liability. Also note that the DPS HCTF has achieved and maintained full funding (greater than 100% funded ratio) since December 31, 2023. The reduced employer allocation to the DPS HCTF (from 1.02% to 0.20%, effective July 1, 2025) is sufficient to meet the normal cost of the plan and thus is not expected to impact the current full funding status.

Unless otherwise temporarily altered by statute, the amortization periods shown in the previous table consider ongoing employer, member, AED, and SAED contributions, including any future statutory increases, and the direct distribution and DC supplement, where applicable.

C.R.S. § 24-51-211 states that a maximum amortization period of 30 years shall be deemed actuarially sound.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

As stated by Segal in the Certification Letter on pages 141-149 in the Actuarial Section:

"The results indicate that for all Division Trust Funds, the combined employer and member contribution rates, including the Direct Distribution from the State, as appropriate, are sufficient to fund the normal cost for all members and each division's unfunded actuarial accrued liability (UAAL), with consideration of the amounts allocated to finance the Annual Increase Reserve (AIR) Funds, and provide additional contributions to help finance both Health Care Trust Funds. In addition, the employer contribution rate with anticipated service purchase transfers is sufficient to eventually finance benefits for the HCTFs."

"At the direction of PERA, Segal has prepared deterministic financial projections for all Division Trust Funds with the lower cost benefit structure for new members and using the following assumptions:

- All actuarial assumptions, including assuming 7.25% investment returns are realized each year

- Performed on an open-group basis with assumed active membership growth, as follows:

- For State, Judicial, and Denver Public Schools – 0.25% each year
- For Local Government – 0.50% each year
- For School – 0.75% each year

These projections indicate that fully funding the actuarial accrued liability under the PERA revised benefit structure created by SB 18-200 is achievable within a projection period of 28 years and include the impact of the revised actuarial assumptions effective December 31, 2024, and the impact of legislative changes pursuant to SB 23-056 and HB 25-1105."

Deductions from Net Position

SUMMARY OF BENEFITS, REFUNDS, AND EXPENSES BY TRUST FUND

Trust Fund	Benefit Payments	Refunds	Disability and Life Insurance Premiums	Administrative Expenses	Other	Total Deductions
State Division	\$1,849,953	\$84,185	\$1,137	\$15,698	\$2,232	\$1,953,205
School Division	2,904,258	109,720	2,163	30,584	11,884	3,058,609
Local Government Division	362,044	17,820	269	4,104	4,768	389,005
Judicial Division	36,741	802	32	257	31	37,863
DPS Division	286,904	18,380	210	3,702	64	309,260
HCTF	88,492	—	—	8,335	79	96,906
DPS HCTF	4,010	—	—	475	1	4,486
Life Insurance Reserve	—	—	449	103	—	552
2024 Total	\$5,532,402	\$230,907	\$4,260	\$63,258	\$19,059	\$5,849,886
2023 Total	\$5,395,286	\$207,923	\$3,786	\$56,676	\$19,417	\$5,683,088
2022 Total	\$5,240,894	\$201,198	\$3,220	\$53,318	\$19,235	\$5,517,865
2021 Total	\$5,052,188	\$184,072	\$3,715	\$54,434	\$18,007	\$5,312,416
2020 Total	\$4,881,951	\$148,014	\$4,776	\$51,094	\$18,274	\$5,104,109

At the end of 2024, PERA was paying benefits to more than 141,000 retired public employees and their beneficiaries who received an average benefit of \$3,237 per month (actual dollars). Historical information about benefit payments, average benefit payments, and the number of retirees receiving payments and earned service credit can be found in the Statistical Section.

Since 2000, many changes to plan provisions have been enacted into law, which do not have an immediate effect on PERA's financial activities and financial status but have had an effect over time.

On average, members are retiring with generally lower monthly benefit amounts than members who retired in prior years. This trend is likely to continue and become more evident over time, as each year a larger portion of the retirement calculations will reflect the recent changes to benefit provisions (retirement eligibilities, determination of highest annual salary, etc.). The effect of these changes is tracked and monitored by PERA's management and reported as part of the overall governance structure of PERA.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

Other Significant Changes: Division Trust Funds, Health Care Trust Funds, and Life Insurance Reserve

For the year ended December 31, 2024, PERA had cash and cash equivalents of \$1,766,487, an increase of \$828,446 from 2023. The increase was primarily due to PERA's use of cash as a tool to manage the portfolio duration versus the benchmark in the unitized PERA Fixed Income Pool.

For the year ended December 31, 2024, PERA had total receivables of \$628,404, a decrease of \$754,569 from 2023. The decrease was primarily due to lower pending settlements of investment sales.

For the year ended December 31, 2024, PERA had securities lending collateral of \$8,777,261 and securities lending obligations of \$8,707,945, an increase of \$1,692,320 and \$1,634,526, respectively, from 2023. The securities lending collateral and obligations increased primarily due to an increase in the securities on loan because of increased borrower demand.

For the year ended December 31, 2024, the Health Care Trust Funds had investment settlements and other liabilities of \$44,236, an increase of \$5,435 from 2023. The increase was due to pending settlements of investment purchases and health care premiums and claims.

For the year ended December 31, 2024, the Life Insurance Reserve had investment settlements and other liabilities of \$2,007, a decrease of \$1,029 from 2023. The decrease was primarily due to lower pending settlements of investment purchases and life insurance premiums.

Nonemployer contributions for the Division Trust Funds increased from \$49,561 in 2023 to \$225,000 in 2024. The lower amount in 2023 was because the State, as a nonemployer contributing entity, and pursuant to HB 22-1029, advanced part of the 2023 nonemployer contribution in 2022. The standard direct distribution occurred in 2024.

PERA recognized \$506 and \$26,000 in employer disaffiliation income for the years ended December 31, 2024, and December 31, 2023, respectively. The income is related to the disaffiliation of Tri-County Health Department as a PERA-affiliated employer.

Administrative expenses for the Life Insurance Reserve increased from \$44 in 2023 to \$103 in 2024. The increase was primarily due to a total administrative expense increase for PERA as well as reported workload increases for the Life Insurance Reserve.

Actuarial Valuations: Accounting

Separate actuarial valuations are prepared for accounting and funding purposes for the Division Trust Funds and the Health Care Trust Funds. Calculations for purposes of financial reporting for the pension and OPEB plans are determined in accordance with GASB 67 and GASB 74, respectively.

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 allowing comparability of amounts and increased transparency of liabilities across U.S. plans complying with GASB 67 and GASB 74.

One of the key measurements in the accounting valuation which assesses the pension liabilities for accounting and financial reporting purposes is the NPL. The NPL is the difference between the FNP and the total pension liability (TPL). Similarly, one of the key measurements which assesses the OPEB liabilities for accounting and financial reporting purposes is the NOL or the NOA. The NOL/NOA is the difference between the FNP and the total OPEB liability (TOL). The individual components which collectively comprise the FNP can be found in the Statements of Fiduciary Net Position starting on page 43.

PERA-affiliated employers who comply with GASB 68 and GASB 75 are required to report their proportionate share of the collective NPL, collective NOL/NOA, and other related amounts for the plan(s) in which they participate. GASB requires employer contributions and nonemployer contributions (if applicable) to be used as a basis for the proportion.

The following schedules show the collective NPLs and collective NOLs/NOAs as of December 31, 2024, and December 31, 2023, as well as the breakdown of changes in the collective liabilities and assets for 2024. The decrease in NPLs for all five Division Trust Funds primarily is due to favorable investment performance during 2024. The decrease in NOL for the HCTF and the increase in NOA for the DPS HCTF largely is due to favorable investment and demographic experience during 2024.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

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 ¹
2023 Net pension liability	\$10,113,093	\$17,683,422	\$734,041	\$73,563	\$647,704	\$29,251,823
Service cost	478,151	930,772	112,092	10,632	125,048	1,656,695
Interest	2,022,261	3,593,681	438,853	37,639	360,103	6,452,537
Changes of benefit terms	—	—	—	—	—	—
Differences between expected and actual experience	380,310	718,878	89,572	7,023	75,087	1,270,870
Changes of assumptions or other inputs	(122,248)	182,163	35,033	(10,077)	63,256	148,127
Contributions—employer	(865,714)	(1,444,279)	(130,956)	(15,551)	(105,863)	(2,562,363)
Contributions—nonemployer	(75,146)	(129,789)	—	(1,274)	(18,791)	(225,000)
Contributions—employer disaffiliation	—	—	(486)	—	—	(486)
Contributions—active member, including purchased service	(477,776)	(831,396)	(94,531)	(7,371)	(113,591)	(1,524,665)
Net investment (gain)	(1,954,077)	(3,490,728)	(578,858)	(48,763)	(468,220)	(6,540,646)
Administrative expenses	15,698	30,584	4,104	257	3,702	54,345
Other	(5,153)	11,591	4,734	(4,266)	(1,963)	4,943
2024 Net pension liability	\$9,509,399	\$17,254,899	\$613,598	\$41,812	\$566,472	\$27,986,180

¹ 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.

SCHEDULE OF CHANGES IN NET OPEB LIABILITY

	Health Care Trust Fund	DPS Health Care Trust Fund	All Health Care Trust Funds ¹
2023 Net OPEB liability (asset)	\$713,726	(\$4,378)	\$709,348
Service cost	14,347	1,030	15,377
Interest	93,842	4,299	98,141
Changes of benefit terms	—	—	—
Differences between expected and actual experience	(33,646)	(1,228)	(34,874)
Changes of assumptions or other inputs	(118,468)	(5,649)	(124,117)
Contributions—employer	(123,529)	(10,187)	(133,716)
Contributions—employer disaffiliation	(20)	—	(20)
Purchased service transfers	(3,763)	(38)	(3,801)
Net investment (gain)	(67,524)	(7,216)	(74,740)
Administrative expense ²	5,591	335	5,926
Other	(2,389)	(130)	(2,519)
2024 Net OPEB liability (asset)	\$478,167	(\$23,162)	\$455,005

¹ 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.

² Excludes administrative and other health care claims processing fees.

Additional information regarding the NPL, NOL/NOA, assumptions used to determine total pension and OPEB liabilities, sensitivity analysis of pension liabilities based on different discount rates, sensitivity analysis of OPEB liabilities based on different discount and health care trend rates, and development of the investment rate of return assumption can be found in Notes 10 and 11 of the Notes to the Financial Statements.

Defined Contribution Plans

Comparative Financial Statements

PERA administers three defined contribution plans. The following tables are the comparative condensed statements of Fiduciary Net Position and Changes in Fiduciary Net Position for the Voluntary Investment Program (PERAPlus 401(k) Plan), Defined Contribution

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

Retirement Plan (DC Plan), and Deferred Compensation Plan (PERAPlus 457 Plan), collectively known as the Capital Accumulation Plans (CAPs). This information has been derived from PERA's audited financial statements. While the annual changes in FNP can provide meaningful insight into the financial activities and financial status of PERA, long-term views and trend analysis are critical factors in reporting and understanding the financial status of the plans.

DEFINED CONTRIBUTION PLANS FIDUCIARY NET POSITION

As of December 31

	2024	2023	% Chg
Assets			
Cash and cash equivalents	\$70,020	\$53,308	31.3%
Receivables	85,716	94,117	(8.9%)
Investments, at fair value	6,674,558	5,930,106	12.6%
Securities lending collateral	429,969	256,675	67.5%
Total assets	7,260,263	6,334,206	14.6%
Liabilities			
Investment settlements and other liabilities	23,330	38,938	(40.1%)
Securities lending obligations	426,573	256,256	66.5%
Total liabilities	449,903	295,194	52.4%
Net position	\$6,810,360	\$6,039,012	12.8%

DEFINED CONTRIBUTION PLANS CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

	2024	2023	% Chg
Additions			
Employer contributions	\$32,766	\$28,964	13.1%
Member contributions	291,841	261,763	11.5%
Net investment income	941,967	955,440	(1.4%)
Other	5,325	4,749	12.1%
Total additions	1,271,899	1,250,916	1.7%
Deductions			
Distributions	494,902	438,680	12.8%
Administrative expenses	3,750	3,518	6.6%
Other	1,899	1,641	15.7%
Total deductions	500,551	443,839	12.8%
Change in net position	771,348	807,077	(4.4%)
Net position			
Beginning of year	6,039,012	5,231,935	15.4%
End of year	\$6,810,360	\$6,039,012	12.8%

Investments

Investments for the CAPs are managed in a single investment pool. Underlying investments are grouped into one of 17 white label PERAdvantage funds which participants can choose to contribute to and/or make transfers from on a daily basis. In addition, participants can choose to select their own investments by transferring funds into a Schwab self-directed brokerage account. The PERAdvantage funds provide diversification and cover a wide risk/return spectrum within each of the seven primary investment options and 10 target retirement date funds. The target retirement date funds are broadly diversified across global asset classes and automatically adjust the underlying asset allocation to become more conservative over time. By investing in a single target retirement date fund, participants may capture diversified investment opportunities without having to manage multiple funds. More information about investment options and results can be found in the Investment Section on pages 135-136.

For the year ended December 31, 2024, the CAPs had net investment income of \$941,967, a decrease of \$13,473 from 2023. Investments at fair value increased by \$744,452 or 12.6% for the year ended December 31, 2024. Additional information on performance and benchmarks for the one-, three-, five-, and 10-year periods for each investment option can be found in the Investment Section.

Plan administrative fees pay for recordkeeping, custodial services, consulting, and internal PERA administrative expenses. The administrative fee for the PERAPlus 401(k) Plan and the PERA DC Plan consist of a flat \$1.00 (actual dollars) per month per participant per plan and an asset-based fee of up to 0.03% on each underlying PERAdvantage fund. The PERAPlus 401(k) asset-based fee was waived in 2024. The administrative fee for the PERAPlus 457 Plan consisted of a flat \$1.50 (actual dollars) per month per participant and an asset-based fee of up to 0.03% on each underlying PERAdvantage fund in 2024. The PERAPlus 457 Plan flat fee was reduced to \$1.00 (actual dollars) in 2025. The asset-based fee was waived for all three plans in 2025.

Participants also pay investment management fees. See additional details on page 134.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

(Dollars in Thousands)

Plan Participants and Contributions

In 2024, overall participation in the CAPs decreased by 2840 participants from 2023. The following table shows the number of participants in each plan at the end of fiscal years 2024 and 2023:

Plan	2024	2023	Change
PERAPlus 401(k) Plan	63,930	66,394	(2,464)
DC Plan	7,647	8,083	(436)
PERAPlus 457 Plan	20,265	20,205	60
Total	91,842	94,682	(2,840)

For the year ended December 31, 2024, the CAPs had employer and member contributions of \$324,607, an increase of \$33,880 from 2023.

See current annual contribution limits for PERAPlus 401(k) Plan and PERAPlus 457 Plan and contribution rates for the DC Plan in Note 8 of the Notes to the Financial Statements on pages 76-77.

Distributions

Participants can take normal distributions when they reach the minimum age designated by the plan. Participants can also take in-service withdrawals and can transfer funds after termination of employment. For the year ended December 31, 2024, the CAPs had distributions of \$494,902, an increase of \$56,222 from 2023. See Note 8 of the Notes to the Financial Statements for additional information about allowable in-service withdrawals in each plan.

Other Changes

For the year ended December 31, 2024, the CAPs had cash and cash equivalents of \$70,020, an increase of \$16,712 from 2023. The increase was primarily due to trading activity in the International Stock Fund and PERA's use of cash as a tool to manage the portfolio duration versus the benchmark in the unitized PERA Fixed Income Pool.

For the year ended December 31, 2024, the CAPs had securities lending collateral of \$429,969 and securities lending obligations of \$426,573, an increase of \$173,294 and \$170,317, respectively, from 2023. The securities lending collateral and obligations increased primarily due to an increase in the securities on loan because of increased borrower demand.

For the year ended December 31, 2024, the CAPs had investment settlements and other liabilities of \$23,330, a decrease of \$15,608 from 2023. The decrease was primarily due to lower pending settlements of investment purchases.

STATEMENTS OF FIDUCIARY NET POSITION

As of December 31, 2024, with Summarized Financial Information for 2023

(Dollars in Thousands)

	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
Assets						
Cash and cash equivalents	\$519,121	\$932,831	\$153,782	\$13,004	\$125,521	\$1,744,259
Receivables						
Benefit	109,350	97,760	9,666	2,418	9,633	228,827
Interfund	202	364	60	5	49	680
Investment settlements and income	112,669	202,460	33,376	2,823	27,243	378,571
Other	1,347	2,857	309	11	316	4,840
Total receivables	223,568	303,441	43,411	5,257	37,241	612,918
Investments, at fair value						
Global equity	10,812,400	19,429,256	3,203,005	270,850	2,614,389	36,329,900
Fixed income	3,755,086	6,747,670	1,112,385	94,066	907,962	12,617,169
Private equity	1,504,465	2,703,435	445,674	37,687	363,773	5,055,034
Real estate	1,813,907	3,259,486	537,342	45,438	438,595	6,094,768
Alternatives	1,408,791	2,531,516	417,332	35,290	340,639	4,733,568
Multi-asset class funds	—	—	—	—	—	—
Self-directed brokerage	—	—	—	—	—	—
Total investments, at fair value	19,294,649	34,671,363	5,715,738	483,331	4,665,358	64,830,439
Securities lending collateral	2,579,392	4,635,017	764,104	64,614	623,685	8,666,812
Capital assets, net of accumulated depreciation and amortization	4,303	9,126	986	35	1,009	15,459
Total assets	22,621,033	40,551,778	6,678,021	566,241	5,452,814	75,869,887
Liabilities						
Investment settlements and other liabilities	364,921	652,438	106,893	8,984	87,755	1,220,991
Securities lending obligations	2,559,021	4,598,413	758,070	64,103	618,760	8,598,367
Interfund	—	—	—	—	—	—
Total liabilities	2,923,942	5,250,851	864,963	73,087	706,515	9,819,358
Deferred inflows of resources	550	1,167	126	5	129	1,977
Net position restricted for pensions, other postemployment benefits, and private purpose trust fund participants	\$19,696,541	\$35,299,760	\$5,812,932	\$493,149	\$4,746,170	\$66,048,552

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

STATEMENTS OF FIDUCIARY NET POSITION (CONTINUED)

As of December 31, 2024, with Summarized Financial Information for 2023

(Dollars in Thousands)

	Voluntary Investment Program	Defined Contribution Retirement Plan	Deferred Compensation Plan	Health Care Trust Fund	Denver Public Schools Health Care Trust Fund	Life Insurance Reserve
Assets						
Cash and cash equivalents	\$40,181	\$12,081	\$17,758	\$19,365	\$2,072	\$791
Receivables						
Benefit	56,281	4,106	15,869	9,713	939	—
Interfund	—	—	—	8	1	—
Investment settlements and income	6,501	641	2,318	4,203	450	172
Other	—	—	—	—	—	—
Total receivables	62,782	4,747	18,187	13,924	1,390	172
Investments, at fair value						
Global equity	2,848,307	179,054	733,131	403,337	43,156	16,493
Fixed income	584,078	37,025	240,786	140,077	14,987	5,728
Private equity	—	—	—	56,121	6,005	2,295
Real estate	—	—	—	67,664	7,240	2,767
Alternatives	—	—	—	52,552	5,623	2,149
Multi-asset class funds	1,276,251	264,129	388,559	—	—	—
Self-directed brokerage	62,019	13,254	47,965	—	—	—
Total investments, at fair value	4,770,655	493,462	1,410,441	719,751	77,011	29,432
Securities lending collateral	318,586	21,118	90,265	96,219	10,295	3,935
Capital assets, net of accumulated depreciation and amortization	—	—	—	—	—	—
Total assets	5,192,204	531,408	1,536,651	849,259	90,768	34,330
Liabilities						
Investment settlements and other liabilities	16,633	1,188	4,820	41,490	2,746	2,007
Securities lending obligations	316,041	20,963	89,569	95,460	10,215	3,903
Interfund	459	90	140	—	—	—
Total liabilities	333,133	22,241	94,529	136,950	12,961	5,910
Deferred inflows of resources	—	—	—	—	—	—
Net position restricted for pensions, other postemployment benefits, and private purpose trust fund participants	\$4,859,071	\$509,167	\$1,442,122	\$712,309	\$77,807	\$28,420

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

STATEMENTS OF FIDUCIARY NET POSITION (CONTINUED)

As of December 31, 2024, with Summarized Financial Information for 2023

(Dollars in Thousands)

	Total for all PERA Plans	
	2024	2023
Assets		
Cash and cash equivalents	\$1,836,507	\$991,349
Receivables		
Benefit	315,735	294,922
Interfund	689	337
Investment settlements and income	392,856	1,178,004
Other	4,840	3,827
Total receivables	714,120	1,477,090
Investments, at fair value		
Global equity	40,553,378	36,686,063
Fixed income	13,639,850	12,352,406
Private equity	5,119,455	5,358,065
Real estate	6,172,439	6,222,787
Alternatives	4,793,892	4,230,082
Multi-asset class funds	1,928,939	1,705,792
Self-directed brokerage	123,238	88,083
Total investments, at fair value	72,331,191	66,643,278
Securities lending collateral	9,207,230	7,341,616
Capital assets, net of accumulated depreciation and amortization	15,459	15,105
Total assets	84,104,507	76,468,438
Liabilities		
Investment settlements and other liabilities	1,289,875	1,466,129
Securities lending obligations	9,134,518	7,329,675
Interfund	689	337
Total liabilities	10,425,082	8,796,141
Deferred inflows of resources	1,977	1,337
Net position restricted for pensions, other postemployment benefits, and private purpose trust fund participants	\$73,677,448	\$67,670,960

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

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

For the Year ended December 31, 2024, with Summarized Financial Information for 2023

(Dollars in Thousands)

	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
Additions						
Contributions						
Employers	\$865,714	\$1,444,279	\$130,956	\$15,551	\$105,863	\$2,562,363
Nonemployer	75,146	129,789	—	1,274	18,791	225,000
Members	445,303	779,963	85,767	7,160	109,844	1,428,037
Purchased service	32,473	51,433	8,764	211	3,747	96,628
Employer disaffiliation	—	—	486	—	—	486
Total contributions	1,418,636	2,405,464	225,973	24,196	238,245	4,312,514
Investment income						
Net appreciation in fair value of investments	1,563,110	2,791,431	463,011	38,996	374,424	5,230,972
Interest	152,596	272,934	45,216	3,811	36,609	511,166
Dividends	171,228	306,259	50,736	4,277	41,078	573,578
Real estate, private equity, and alternatives net operating income	113,495	202,997	33,630	2,836	27,227	380,185
Less investment expenses	(70,679)	(126,417)	(20,944)	(1,765)	(16,956)	(236,761)
Net income from investing activities	1,929,750	3,447,204	571,649	48,155	462,382	6,459,140
Securities lending income	155,268	277,725	46,008	3,879	37,251	520,131
Securities lending borrower rebates	(130,197)	(232,871)	(38,578)	(3,252)	(31,235)	(436,133)
Securities lending management fees	(744)	(1,330)	(221)	(19)	(178)	(2,492)
Net income from securities lending	24,327	43,524	7,209	608	5,838	81,506
Net investment income	1,954,077	3,490,728	578,858	48,763	468,220	6,540,646
Other additions	7,385	293	34	4,297	2,027	14,036
Total additions	3,380,098	5,896,485	804,865	77,256	708,492	10,867,196
Deductions						
Benefits						
Benefits paid to retirees/cobeneficiaries	1,835,130	2,886,595	358,946	36,459	285,326	5,402,456
Benefits paid to survivors	14,823	17,663	3,098	282	1,578	37,444
Benefits paid on behalf of health care participants	—	—	—	—	—	—
Total benefits	1,849,953	2,904,258	362,044	36,741	286,904	5,439,900
Refunds and distributions	84,185	109,720	17,820	802	18,380	230,907
Disability and life insurance premiums	1,137	2,163	269	32	210	3,811
Administrative expenses	15,698	30,584	4,104	257	3,702	54,345
Other deductions	2,232	11,884	4,768	31	64	18,979
Total deductions	1,953,205	3,058,609	389,005	37,863	309,260	5,747,942
Net increase in net position	1,426,893	2,837,876	415,860	39,393	399,232	5,119,254
Net position						
Beginning of year	18,269,648	32,461,884	5,397,072	453,756	4,346,938	60,929,298
End of year	\$19,696,541	\$35,299,760	\$5,812,932	\$493,149	\$4,746,170	\$66,048,552

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

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION (CONTINUED)

For the Year ended December 31, 2024, with Summarized Financial Information for 2023

(Dollars in Thousands)

	Voluntary Investment Program	Defined Contribution Retirement Plan	Deferred Compensation Plan	Health Care Trust Fund	Denver Public Schools Health Care Trust Fund	Life Insurance Reserve
Additions						
Contributions						
Employers	\$8,189	\$24,459	\$118	\$123,529	\$10,187	\$—
Nonemployer	—	—	—	—	—	—
Members	170,981	27,123	93,737	—	—	—
Purchased service	—	—	—	—	—	—
Employer disaffiliation	—	—	—	20	—	—
Total contributions	179,170	51,582	93,855	123,549	10,187	—
Investment income						
Net appreciation in fair value of investments	646,774	59,200	160,297	53,853	5,751	2,361
Interest	14,216	1,239	5,855	5,335	572	231
Dividends	40,359	2,959	11,757	5,986	642	260
Real estate, private equity, and alternatives net operating income	—	—	—	3,968	425	172
Less investment expenses	(3,498)	(363)	(1,104)	(2,471)	(265)	(107)
Net income from investing activities	697,851	63,035	176,805	66,671	7,125	2,917
Securities lending income	21,070	1,377	6,062	5,431	582	236
Securities lending borrower rebates	(17,775)	(1,171)	(5,152)	(4,552)	(488)	(198)
Securities lending management fees	(100)	(7)	(28)	(26)	(3)	(1)
Net income from securities lending	3,195	199	882	853	91	37
Net investment income	701,046	63,234	177,687	67,524	7,216	2,954
Other additions	3,228	1,497	600	6,231	169	—
Total additions	883,444	116,313	272,142	197,304	17,572	2,954
Deductions						
Benefits						
Benefits paid to retirees/cobeneficiaries	—	—	—	—	—	—
Benefits paid to survivors	—	—	—	—	—	—
Benefits paid on behalf of health care participants	—	—	—	88,492	4,010	—
Total benefits	—	—	—	88,492	4,010	—
Refunds and distributions	358,973	28,491	107,438	—	—	—
Disability and life insurance premiums	—	—	—	—	—	449
Administrative expenses	2,126	941	683	8,335	475	103
Other deductions	1,230	146	523	79	1	—
Total deductions	362,329	29,578	108,644	96,906	4,486	552
Net increase in net position	521,115	86,735	163,498	100,398	13,086	2,402
Net position						
Beginning of year	4,337,956	422,432	1,278,624	611,911	64,721	26,018
End of year	\$4,859,071	\$509,167	\$1,442,122	\$712,309	\$77,807	\$28,420

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

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION (CONTINUED)

For the Year ended December 31, 2024, with Summarized Financial Information for 2023

(Dollars in Thousands)

	Total for all PERA Plans	
	2024	2023
Additions		
Contributions		
Employers	\$2,728,845	\$2,481,066
Nonemployer	225,000	49,561
Members	1,719,878	1,568,084
Purchased service	96,628	89,958
Employer disaffiliation	506	26,000
Total contributions	4,770,857	4,214,669
Investment income		
Net appreciation in fair value of investments	6,159,208	7,121,737
Interest	538,614	440,067
Dividends	635,541	642,428
Real estate, private equity, and alternatives net operating income	384,750	305,278
Less investment expenses	(244,569)	(222,745)
Net income from investing activities	7,473,544	8,286,765
Securities lending income	554,889	249,638
Securities lending borrower rebates	(465,469)	(225,728)
Securities lending management fees	(2,657)	(1,365)
Net income from securities lending	86,763	22,545
Net investment income	7,560,307	8,309,310
Other additions	25,761	26,145
Total additions	12,356,925	12,550,124
Deductions		
Benefits		
Benefits paid to retirees/cobeneficiaries	5,402,456	5,269,877
Benefits paid to survivors	37,444	38,547
Benefits paid on behalf of health care participants	92,502	86,862
Total benefits	5,532,402	5,395,286
Refunds and distributions	725,809	646,603
Disability and life insurance premiums	4,260	3,786
Administrative expenses	67,008	60,194
Other deductions	20,958	21,058
Total deductions	6,350,437	6,126,927
Net increase in net position	6,006,488	6,423,197
Net position		
Beginning of year	67,670,960	61,247,763
End of year	\$73,677,448	\$67,670,960

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

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Note 1—Plan Description

Organization

Public Employees’ Retirement Association of Colorado (PERA) was established in 1931. The statute governing PERA is Title 24, Article 51 of the Colorado Revised Statutes (C.R.S.). PERA administers the following plans:

Plan Name	Type of Plan
Defined Benefit Pension Plans (Division Trust Funds)	
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
Defined Benefit Other Postemployment Benefit Plans (Health Care Trust Funds)	
Health Care Trust Fund (HCTF)	Cost-sharing multiple-employer
Denver Public Schools Health Care Trust Fund (DPS HCTF)	Single-employer
Defined Contribution Plans	
Voluntary Investment Program	Multiple-employer
Defined Contribution Retirement Plan	Multiple-employer
Deferred Compensation Plan	Multiple-employer
Private Purpose Trust Fund	
Life Insurance Reserve	Multiple-employer

Responsibility for the organization and administration of these plans rests with the PERA Board of Trustees (Board). The Board is composed of the following 16 Trustees:

- Nine members elected by members from their respective Divisions to serve on the Board for four-year terms; four from the School Division, three from the State Division, one from the Local Government Division, and one from the Judicial Division.
- Two retirees elected by retirees to serve on the Board for four-year terms.
- Three Trustees appointed by the Governor and confirmed by the State Senate to serve on the Board for four-year terms.
- The State Treasurer.
- One ex officio (non-voting) member or retiree elected by members and retirees of the DPS Division to serve on the Board for a four-year term.

This table is the number of active participating employers for the five Division Trust Funds. Guidance under the Governmental Accounting Standards Board (GASB) Statement No. 67 classifies a primary government and its component units as one employer.

Division	As of December 31, 2024 ¹
State	32
School	235
Local Government	142
Judicial	2
DPS	1
Total employers	412

¹ 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.

Pursuant to C.R.S. § 24-51-414, for 2024, the State of Colorado (State) is required to make an annual nonemployer contribution to PERA to be allocated to all divisions except the Local Government Division.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Membership—Division Trust Funds-Defined Benefit Pension Plans

The following chart shows PERA benefit recipients and members as of December 31, 2024, with summarized totals for 2023, along with the percentages representing the different benefit structures within each category:

	State Division	School Division	Local Government Division	Judicial Division	DPS Division	2024	2023
Retirees and beneficiaries (includes deferred survivors)	44,999	79,228	9,404	476	7,331	141,438	138,553
PERA benefit structure hired prior to 1/1/07 and DPS benefit structure	92.6%	93.8%	90.7%	91.0%	91.3%	93.1%	94.0%
PERA benefit structure hired after 12/31/06 ¹	7.4%	6.2%	9.3%	9.0%	8.7%	6.9%	6.0%
Inactive members							
Inactive members eligible but not yet receiving benefits	9,890	24,866	3,134	28	3,436	41,354	41,015
Inactive members not eligible for benefits	97,002	166,279	32,740	9	18,010	314,040	302,721
Total inactive members	106,892	191,145	35,874	37	21,446	355,394	343,736
PERA benefit structure hired prior to 1/1/07 and DPS benefit structure	33.0%	28.5%	29.1%	35.1%	9.8%	28.8%	30.7%
PERA benefit structure hired after 12/31/06 ¹	67.0%	71.5%	70.9%	64.9%	90.2%	71.2%	69.3%
Active members							
Vested members other than Safety Officers	30,188	74,284	6,363	264	8,602	119,701	117,507
Vested Safety Officers	820	—	2	—	—	822	786
Non-vested members other than Safety Officers	22,022	59,796	6,557	87	7,605	96,067	93,043
Non-vested Safety Officers	2,554	—	60	—	—	2,614	2,212
Total active members	55,584	134,080	12,982	351	16,207	219,204	213,548
PERA benefit structure hired prior to 1/1/07 and DPS benefit structure	19.7%	22.0%	16.8%	31.6%	14.9%	20.6%	22.8%
PERA benefit structure hired after 12/31/06 ¹	80.3%	78.0%	83.2%	68.4%	85.1%	79.4%	77.2%
Total	207,475	404,453	58,260	864	44,984	716,036	695,837

¹ For membership benefit tiers beginning in 2007, the annual increase (AI) granted each year, as eligible, is provided through the affiliated Annual Increase Reserve (AIR). The AIR is created and maintained within each division for the sole purpose of funding benefit increases. The percentages represent the portion of each membership category for whom each division's AIR funds current and future AIs. Please see later in this Note and Note 4 for additional information related to the AI and AIR.

Membership—Defined Contribution Plans

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 enrolled in the PERA Defined Benefit Plan, 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 employees of the State or Local Government Divisions, classified employees at State colleges and universities, most community colleges, as well as the District Attorney within each Judicial District, and if authorized by the county and the District Attorney, the attorneys within that Judicial District. If an eligible employee does not make a choice of which plan to participate in within 60 days of the starting date of employment, the employee is automatically enrolled in the defined benefit plan. Between the second and fifth year of participation in their original plan, employees may make a one-time, irrevocable election to switch to the other plan. After the fifth year of participation, this option to switch plan participation no longer exists.

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

NOTES TO THE FINANCIAL STATEMENTS

*(Dollars in Thousands)***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 detailed in the following pages in this Note as of December 31, 2024. Following the January 1, 2010, merger of the Denver Public Schools Retirement System (DPSRS) into PERA, the benefit provisions of existing PERA members and all new hires post-merger date are identified as the PERA benefit structure and the benefit provisions originating under DPSRS are referred to as the DPS benefit structure.

Member Accounts

During 2024, most members in the State, School, Judicial, and DPS Divisions contributed 11.00% of their PERA-includable salary to their member accounts. Safety Officers (as defined in the next paragraph) contributed 13.00% of their PERA-includable salary. Most members of the Local Government Division contributed 9.00% of their PERA-includable salary.

The term "Safety Officers" is used for PERA purposes to better describe the expanded definition of the term "State Trooper", which under Colorado law includes several categories of employees: (1) employees of the Colorado State Patrol or Colorado Bureau of Investigation (CBI) vested with the powers of peace officers; (2) beginning July 1, 2020, new or existing employees of the Division of Fire Prevention and Control in the Department of Public Safety classified as firefighter I through firefighter VII; (3) new members hired on or after January 1, 2020, as a county sheriff, undersheriff, deputy sheriff, noncertified deputy sheriff, or detention officer by a Local Government Division employer; (4) new members hired on or after January 1, 2020, as a corrections officer classified as I through IV by a State Division employer; and (5) beginning July 1, 2023, wildlife officers or parks and recreation officers hired on or after January 1, 2011, by the Division of Parks and Wildlife in the Department of Natural Resources.

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%. Effective January 1, 2009, the annual rate was set at 3% 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. Positions with an employment pattern of

at least eight months but fewer than 12 months (including, but not limited to, positions in the School and DPS Divisions) receive a higher ratio of service credit for each month worked, up to a maximum of 12 months of service credit per year.

Eligible members may purchase additional service credit based upon (1) other employment 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 an interest accrual, but no match if the member 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, which must begin by the member's applicable required beginning date, as defined by IRC § 401(a)(9)(C).
- Request a distribution of the member account plus an applicable match, which cancels all service credit and any benefit entitlements associated with the account. The distribution may be taken as a cash refund with the resulting tax consequences or as a rollover to an eligible qualified plan.

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% match on eligible amounts. For members under the PERA benefit structure who withdraw their accounts before reaching retirement eligibility, all contributions received prior to January 1, 2011, are eligible for the 50% match regardless of how much service credit the member has earned. However, contributions received after January 1, 2011, are not eligible for the 50% 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% 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 reaching retirement eligibility who choose to take a retirement benefit are entitled to a minimum monthly benefit equal to the member's account plus a

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

100% match on eligible amounts, annuitized into a monthly benefit using PERA's expected rate of return.

Highest Average Salary

Plan benefits generally are calculated as a percentage of the member's three- or five- 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% 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, who have at least five years of service credit on December 31, 2019:** 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% 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 and DPS benefit structures, except judges, regardless of hire date, who do not have at least five years of service credit on December 31, 2019:** HAS is determined by the highest annual salaries associated with six periods of 12 consecutive months of service credit. The six 12-month periods selected do not have to be consecutive nor do they have to include the last six years of membership. The lowest of the six periods becomes a base year used as a starting point for an 8% cap on annual salary increases for the next five 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) who have at least five years of service credit on December 31, 2019:** HAS is one-twelfth of the highest annual salary associated with one period of 12 consecutive months of service credit.
- **For members of the Judicial Division Trust Fund (judges) who do not have at least five years of service credit on December 31, 2019, regardless of the date of hire:** 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% 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 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, and have at least five years of service credit on December 31, 2019:** 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% 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

With one exception, the service retirement benefit for all retiring members under the PERA benefit structure is the greater of the defined benefit formula or the money purchase formula explained as follows:

- **Defined Benefit Formula**
HAS multiplied by 2.5% and then multiplied by years of service credit. The service retirement benefit is limited to 100% of HAS.
- **Money Purchase Formula**
Values the retiring member's account plus a 100% 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.

The exception is retiring members who are age 65, 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.

In all cases, a service retirement benefit cannot exceed the maximum benefit amount allowed by federal law.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Service Retirement Benefits for Members other than Safety Officers—PERA Benefit Structure

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

**Members 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 or at least 60 payroll postings

**Members 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 or at least 60 payroll postings

**Members 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 or at least 60 payroll postings

**Members 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 or at least 60 payroll postings

**Members Hired on or After January 1, 2011,
But Before January 1, 2017, or Hired on or After January 1, 2017,
But Before January 1, 2020, Whose Most Recent 10
Years of Service are in the School or DPS Divisions**

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 or at least 60 payroll postings

**Members Hired on or After January 1, 2017,
But Before January 1, 2020, Whose Most Recent 10
Years of Service are not in the School or DPS Divisions**

Age Requirement (in years)	Service Credit Requirement (in years)
Any Age	35
60	30
60	Age and Service = 90 or more
65	5 or at least 60 payroll postings

Members Hired on or After January 1, 2020

Age Requirement (in years)	Service Credit Requirement (in years)
Any Age	35
64	30
64	Age and Service = 94 or more
65	5 or at least 60 payroll postings

**Service Retirement Benefits for Safety Officers—
PERA Benefit Structure**

Upon termination of PERA-covered employment and reaching eligibility for service retirement benefits, a Safety Officer may begin receipt of benefits as follows:

Safety Officer Hired Before January 1, 2020

Age Requirement (in years)	Service Credit Requirement (in years)
Any Age	30
50	25
55	20
60	Age and Service = 80 or more
65	5 or at least 60 payroll postings

Safety Officers Hired on or After January 1, 2020

Age Requirement (in years)	Service Credit Requirement (in years)
Any Age	35
55	25
55	Age and Service = 80 or more
65	5 or at least 60 payroll postings

**Reduced Service Retirement Benefits—
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.

Members and Safety Officers Hired Before January 1, 2020

Age Requirement (in years)	Service Credit Requirement (in years)
50	25
50 (Safety Officers only)	20
55	20
60	5

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Members and Safety Officers Hired on or After January 1, 2020

Age Requirement (in years)	Service Credit Requirement (in years)
55	25
55 (Safety Officers only)	20
60	5

For members eligible to retire as of January 1, 2011, the early retirement reduction factors used to determine the reduced service retirement benefit are specified in C.R.S. § 24-51-605.

For members not eligible to retire as of January 1, 2011, the early retirement reduction factors used to determine the reduced service retirement benefit reflect an actuarial equivalent reduction.

Service Retirement Benefits—DPS Benefit Structure

The service retirement benefit for all retiring members under the DPS benefit structure is the greater of the two calculations explained as follows:

- HAS multiplied by 2.5% and then multiplied by years of service credit.
- \$15 (actual dollars) times the first 10 years of service credit plus \$20 (actual dollars) 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% of HAS and cannot exceed the maximum benefit amount allowed by federal law.

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

Members With Five Years of Service Credit on January 1, 2011

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

¹ 15 years must be earned service credit

Member 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 ¹
55	Age and Service = 85 or more ¹
60	25
65	5

¹ 20 years must be earned service credit

**Reduced Service Retirement Benefits—
DPS Benefit Structure****Member With Five Years of Service Credit on January 1, 2011**

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

Member With Less Than Five Years of Service Credit on January 1, 2011

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

Members with less than five years of service credit under the DPS benefit structure do not have the option to apply for a benefit and are only eligible for a refund of the member account.

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 Safety Officers who become disabled as the result of injuries in the line of duty.

Medical determinations for the disability program are made by UNUM, PERA's disability program administrator pursuant to C.R.S. § 24-51-703. 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% 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% 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

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

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.
- *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 reduced to be the actuarial equivalent of Option 1, to ensure equitable benefits are provided regardless of the payment option chosen.

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 reduced to be the actuarial equivalent of Option A, to ensure equitable benefits are provided regardless of the payment option chosen.

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 does not have any qualified survivors, the deceased's named beneficiary or the estate receives a lump-sum payment of the deceased member's account plus a 100% 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 specified in statute, the member's named

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

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 eligibility and amounts are determined by the date the retiree or deceased member began membership in PERA.

The AI provisions are explained as follows:

- 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 for 2024 is 1.00%. Each year, the AI is equal to the maximum AI or "AI cap," currently 1.00% per year, unless it is adjusted by the automatic adjustment provision (AAP). The AAP may raise or lower the AI cap by up to 0.25% if the AAP ratio of the Division Trust Funds is outside the parameters specified in C.R.S. § 24-51-413. The amount of the first AI 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, who already received the first AI on or before May 1, 2018, the benefit recipient has received benefit payments for the 12 months prior to the July in which the AI is to be paid.

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, who had not yet received the first AI on or before May 1, 2018, the benefit recipient has received benefit payments for 36 months total, including 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, but who already received the first AI on or before May 1, 2018: 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 immediately preceding 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.

For reduced service retirees who are not eligible to retire as of January 1, 2011, and who had not yet received the AI on or before May 1, 2018: A reduced service retiree is eligible to receive the AI in July of the year in which all of the following conditions are met: (1) the retiree has received benefit payments for 36 months total; (2) the retiree has received benefit payments for 12 months immediately preceding the July in which the AI is to be paid; and (3) 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 for 2024 is 1.00%. Each year, the AI is equal to the AI cap, currently 1.00% per year, unless it is adjusted by the AAP. The AAP may raise or lower the AI cap by up to 0.25% if the AAP ratio of the Division Trust Funds is outside the parameters specified in C.R.S. § 24-51-413.
- 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 who had already received an AI on or before May 1, 2018: 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 full service retirees, disability retirees, and survivor benefit recipients who had not yet received an AI on or before May 1, 2018: The benefit recipient becomes eligible in July if the benefit recipient has received 36 months of benefit payments total including 12 months of benefit payments in the prior calendar year.

A reduced service retiree who had already received an AI on or before May 1, 2018, 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

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

unreduced service retirement applicable to the retiree's plan.

A reduced service retiree who had not yet received an AI on or before May 1, 2018, is eligible to receive the AI in July of the year in which all of the following conditions are met: (1) as of January 1 of the year the AI is to be paid, the retiree has received 36 months of benefit payments total; (2) the retiree received 12 months of benefit payments in the prior calendar year; and (3) 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 for 2024 is 1.00%. Each year, the AI is the lesser of the AI cap, currently 1.00% (unless adjusted by the AAP), or the average of the monthly Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) amounts for the prior calendar year. In no case can the present value of the year's AIs paid to a division's benefit recipients exceed 10% of the division's Annual Increase Reserve (AIR).

Changes to the AI Cap: If PERA's overall funded status (actuarial value of assets/actuarial accrued liability) is at or above 103%, the AI cap will increase by 0.25%. This adjustment will occur separately from any impact of the AAP.

Automatic Adjustment Provision

Adjustments may be made to the AI cap, member and employer contribution rates, and, under certain circumstances, the direct distribution from the State.

Based on the results of the AAP assessment which utilized the December 31, 2023, actuarial valuation performed for funding purposes, effective July 1, 2025, no adjustment to the AI cap is required.

Based on the results of the AAP assessment which utilized the December 31, 2024, actuarial valuation performed for funding purposes, effective July 1, 2026, no adjustment to the AI cap is required.

A summary of AAP provisions is provided in Note 4.

Indexing of Benefits

Inactive members, who meet the following conditions, have their benefit amounts increased by the applicable AI granted by PERA from their date of membership termination to their effective date of retirement:

- Covered by the plan as of December 31, 2006;
- Eligible to retire as of January 1, 2011;
- Have 25 or more years of service credit; and
- Have not started receiving monthly benefits.

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 an applicable 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 an applicable 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), supplemental amortization equalization disbursement (SAED), and defined contribution (DC) supplement (if applicable) on salary earned by retirees who work for them. Most working retirees are also 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, outlined as follows, 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, DPS Division, and each Higher Education Institution assigned to the State Division may designate up to 10 service retirees each calendar year to work up to 30 additional days for a total of 140 days/916 hours in that calendar year. House Bill (HB) 24-1044 enacted April 19, 2024, increases the number of service retirees who may be designated by School & DPS employers with over 10,000 students. These employers may now designate one additional service retiree, for each 1,000 students above 10,000 students, to work a total of 140 days/916 hours in that calendar year. The following working after retirement provisions apply:

- The employer is required to provide full payment of PERA employer contributions, AED, SAED, DC supplement (if applicable), and remit working retiree contributions on all salary earned.
- The retiree cannot work for any PERA employer during the month of the effective date of retirement.
- The retiree does not resume PERA membership or build an additional benefit.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

- **“Critical Shortage” Exceptions to the Limits on Working After Retirement:** Retirees who have applicable experience, skills, or qualifications of a listed position may work more than the above-referenced 110- or 140-day limit without a reduction in retirement benefits if the retiree’s employer has declared a critical shortage of that position. Following is a summary of PERA law containing such exceptions, each with specific provisions or requirements not detailed here:
 - C.R.S. § 24-51-1101(1.9) is applicable to retirees who work for a rural school district, Boards of Cooperative Services (BOCES) within a rural school district, or a charter school within a rural school district that has determined it has a critical shortage of qualified teachers, school bus drivers, school food services cooks, school nurses, or paraprofessionals. Senate Bill (SB) 24-099 enacted April 11, 2024, added principals and superintendents to the list of critical shortage positions.
 - C.R.S. § 24-51-1101(5) enacted July 13, 2020, to be repealed effective July 1, 2025, is applicable to retirees who work as a special service provider for a BOCES that serves rural school districts and has determined it has a critical shortage of qualified service providers. SB 24-099, enacted April 12, 2024, extended the repeal date through June 30, 2030.
 - C.R.S. § 24-51-1101(1.3) enacted March 17, 2022, to be repealed effective July 1, 2025, is applicable to retirees who hold a valid Colorado teaching license and work as substitute teachers for any school district or charter school that has determined it has a critical shortage of substitute teachers.

Benefit Provisions—Defined Contribution Plans

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 Life Insurance Reserve is an accumulation of dividends received in the past from the insurance company based upon plan experience. The investment income from the Life Insurance Reserve is 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; 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.

Measurement Focus, Basis of Accounting, and 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.

The accompanying financial statements for the Division Trust Funds, the Health Care Trust Funds, the Defined Contribution Plans, and the Private Purpose Trust Fund 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 Division Trust Funds, the Health Care Trust Funds, and the Defined Contribution Plans. Benefits and refunds are recognized when due and payable.

The Basic Financial Statements include summarized prior-year comparative information in total but not at the level of detail required for a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the financial statements for the year ended December 31, 2023, from which the summarized information was derived.

Adoption of Accounting Standards

PERA implemented all applicable new GASB pronouncements in the year ended December 31, 2024.

PERA implemented GASB Statement No. 101 *Compensated Absences* for the year ended December 31, 2024. The objective of GASB Statement No. 101 is to better meet the

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. There was no accounting change related to this new standard implementation. See compensated absences disclosure on page 60.

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 Voluntary Investment Program, the Defined Contribution Retirement Plan, the Deferred Compensation Plan, the HCTF, the DPS HCTF, and the Life Insurance Reserve 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 Health Care Trust Funds, and the Life Insurance Reserve pool their investments into a combined investment fund (CIF). Investment value and earnings of the CIF are allocated among the funds based on each fund's percentage ownership. As of December 31, 2024, the ownership percentages of each fund are shown in the following table:

Trust Fund	Ownership Percentages
State Division	29.39%
School Division	52.81%
Local Government Division	8.70%
Judicial Division	0.74%
DPS Division	7.10%
HCTF	1.10%
DPS HCTF	0.12%
Life Insurance Reserve	0.04%
Total	100.00%

The administrative activities and operating assets and liabilities are pooled and recorded in a common operating fund (COF). Expenses incurred and net operating assets are allocated from the COF to the Division Trust Funds based on administrative staff workload devoted to these funds and the ratio of the number of active and retired members in each division to the total for all the Division Trust Funds. Expenses are allocated to the HCTF and DPS HCTF based on administrative staff workload devoted to these funds and member participation in health plans. Expenses are allocated to the Voluntary Investment Program, the Defined Contribution Retirement Plan, and the Deferred Compensation Plan based on administrative staff workload, internally managed investment fees earned for Investment division expenses, and the ratio of FNP of each program or plan to the total for the program and plans. Expenses are allocated to the Life Insurance Reserve based on administrative staff workload.

Cash and Cash Equivalents

PERA replaced cash and short-term investments with cash and cash equivalents on the Statements of Fiduciary Net Position as of December 31, 2024. PERA's historic policy required reclassifying fixed income investments maturing in less than a year from fixed income to cash and short-term investments. PERA updated the policy in 2024 to reclassify highly liquid fixed income securities purchased within 90 days of maturity from fixed income investments to cash and cash equivalents. No fixed income securities were reclassified to short-term investments in 2023. Accordingly, there is no restatement.

Cash and cash equivalents include cash and short-term, highly liquid investments that are readily convertible to known amounts of cash and so near their maturity that they present an insignificant risk of changes in value because of changes in interest rates. This includes investments with an original maturity of three months or less at the time of acquisition.

The total carrying value of cash and cash equivalents in the Statements of Fiduciary Net Position as of December 31, 2024, was \$1,836,507. Cash balances represent operating cash accounts and investment cash held by banks.

See custodial credit risk disclosure on page 71 and foreign currency risk disclosure on page 74.

Fair Value of Investments

Plan investments are presented at fair value in the Statements of Fiduciary Net Position. See Note 5 for additional information.

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 in addition to the Fund 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 Basic Financial Statements include amounts due from other funds and due to other funds and are classified as interfund receivables and interfund liabilities on the Statements of Fiduciary Net Position. As of December 31, 2024, interfund balances existed between funds due to unreimbursed internal operating expenses. All interfund balances are expected to be repaid within one year.

Other Additions and Other Deductions

The Statements of Changes in Fiduciary Net Position include other additions and other deductions. Other additions include administrative fee income, participant loan interest, net retirement transfer balances from other

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

divisions, purchased service transfers in to health care, settlement income, and other miscellaneous additions. Other deductions include net retirement transfer balances to other divisions, purchased service transfers out to health care, and other miscellaneous deductions.

Deferred Inflows of Resources

Deferred inflows of resources represent an acquisition of net assets that applies to a future period and will not be recognized as income until that future period. The Statements of Fiduciary Net Position include deferred inflows of resources from tenant leases.

Compensated Absences

Expenses for accumulated compensatory time earned by PERA's employees are recorded when earned. Unused leave is paid upon termination of employment. The total compensated absences liability as of December 31, 2024, was \$8,180, an increase of \$743 from 2023, and is included in investment settlements and other liabilities on the Statements of Fiduciary Net Position.

Subsequent Events

PERA has evaluated subsequent events through June 26, 2025. See Note 12 for disclosure of material events.

Note 3—Leases, Capital Assets, and Subscription Liabilities

Leases

Lease receivables are included in other receivables in the Statements of Fiduciary Net Position. PERA, acting as lessor, leases office space at the Pointe Office in Westminster under long-term, non-cancelable lease payments. The agreements range from 30 months to 84 months with interest rates between 1.77% and 8.50% and provide for renewal options up to five years. During the year ended December 31, 2024, PERA recognized \$574 and \$67 in lease revenue and interest revenue, respectively.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Capital Assets

Capital assets include tangible capital assets and intangible right-to-use assets. PERA has adopted capitalization thresholds to determine whether acquisitions of assets are classified as capital assets or operating expenses.

Tangible capital assets are recorded at cost less accumulated depreciation since acquisition. Depreciation for tangible capital assets is calculated using the straight-line method, with estimated lives ranging from three to 40 years.

Intangible right-to-use assets and related liabilities are recorded at the present value of expected payments over the contract term. Right-to-use assets are amortized using the straight-line method over the contract term or the useful life of the underlying asset, whichever is shortest.

Capital asset balances and activity for the year ended December 31, 2024, are reported below:

SCHEDULE OF CAPITAL ASSETS

	December 31, 2023	Increases	Decreases	December 31, 2024
Non-depreciable capital assets				
Land	\$4,043	\$—	\$—	\$4,043
Construction in progress	230	907	(231)	906
Total non-depreciable capital assets	4,273	907	(231)	4,949
Capital assets being depreciated or amortized				
Building and improvements	31,905	418	(174)	32,149
Furnishings, equipment, and automobiles	4,107	649	(761)	3,995
Intangible right to use assets	1,718	728	—	2,446
Total capital assets being depreciated or amortized	37,730	1,795	(935)	38,590
Total capital assets	42,003	2,702	(1,166)	43,539
Less accumulated depreciation or amortization				
Building and improvements	(23,080)	(1,182)	174	(24,088)
Furnishings, equipment, and automobiles	(3,510)	(352)	761	(3,101)
Intangible right to use assets	(308)	(583)	—	(891)
Total accumulated depreciation or amortization	(26,898)	(2,117)	935	(28,080)
Total net capital assets	\$15,105	\$585	(\$231)	\$15,459

Subscription Liabilities

GASB Statement No. 96 *Subscription-Based Information Technology Arrangements (SBITAs)*, requires the recognition of liabilities related to SBITAs. The liabilities related to these arrangements are included in investment settlements

and other liabilities in the Statements of Fiduciary Net Position, with interest expense recognized over the contract term.

SCHEDULE OF MINIMUM COMMITMENTS

Fiscal Year	Principal	Imputed Interest ¹	Total
2025	\$656	\$64	\$720
2026	695	25	720
Total	\$1,351	\$89	\$1,440

¹ The discount rate to calculate the present value of the new SBITA liabilities ranged from 3.26% to 3.72%. PERA reports the difference between the liability booked to record the present value of these future payment obligations and the actual lease payments as interest expense.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

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 a percentage of their PERA-includable salary as shown in the contribution rates table on page 63. 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 depending on division as shown in the following contribution rates table.

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, including an additional 2.00% for retirees rehired pursuant to C.R.S. § 24-51-1101(5), 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.

For purposes of deferring federal income tax imposed on salary, member contributions and working retiree contributions shall be treated as employer contributions pursuant to the provisions of 26 U.S.C. § 414 (h)(2), as amended. For all other purposes, these contributions shall be treated as member contributions and working retiree contributions as previously described.

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).

C.R.S. § 24-51-411 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%, a decrease in the AED and SAED is mandated and if it subsequently falls below a funded status of 90%, an increase in the AED and SAED is mandated. For the Local Government and Judicial Divisions, if the funded ratio reaches 90% and subsequently falls below 90%, an increase in the AED and SAED is mandated. AED and SAED rates cannot exceed the maximums listed in the table on page 174.

Effective January 1, 2021, and every year thereafter, C.R.S. § 24-51-415 adjusts employer contribution rates for the State and Local Government Divisions to include a DC supplement. The DC supplement for these two divisions will be determined based on the employer contribution amounts paid on behalf of eligible employees who commence employment on or after January 1, 2019, to DC plan participant accounts that would have otherwise gone to the defined benefit trusts to pay down the unfunded liability. This calculation includes defined benefit investment earnings thereon, and is expressed as a percentage of salary on which employer contributions are made.

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 DPS at a fixed effective annual interest rate of 8.50%. 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 applicable to the DPS Division. The staff of Denver Public Schools provided the PCOP offset rate of 9.78% for 2024, which is reviewed and analyzed by PERA staff.

C.R.S. § 24-51-401(1.7)(e) requires a periodic “true-up” calculation to be performed beginning in 2015 and every five years following, with the purpose of determining the total DPS Division employer contribution rate that would result in the equalization of the ratio of UAAL over payroll between the DPS and School Divisions at the end of the 30-year period beginning January 1, 2010. The 2020 and 2025 calculations indicated a reduction to the total DPS Division employer rate would be needed to equalize the defined ratio. As of December 31, 2024, the ratio of UAAL over payroll is 264.9% for the School Division and 50.7% for the DPS Division. It should be noted a reduction in an employer contribution rate for any one Division Trust Fund could potentially influence the outcome of the assessment of contributions (actual versus actuarially determined) considering all participating Division Trust Funds, annually performed under the AAP, enacted through C.R.S. § 24-51-413, and described in greater detail starting on page 63.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

PERA-affiliated employers forward the contributions to PERA for deposit. For 2024, PERA transferred a portion of these contributions, equal to 1.02% of the reported salaries, into the HCTF or DPS HCTF for health care benefits. Beginning in 2007, the AIR, under C.R.S. § 24-51-1009, 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 1.00% of the salary reported for members in the PERA benefit structure hired on or after January 1, 2007. In 2024, post-retirement benefit increases for these members were limited to a maximum of 1.00% (unless further adjusted by the AAP) compounded annually, subject to the availability of assets in the AIR for each division. As of

December 31, 2024, the value of the AIR was \$372,346 in the State Division, \$533,044 in the School Division, \$97,390 in the Local Government Division, \$4,862 in the Judicial Division, and \$92,247 in the DPS Division. The remainder of the contributions were transferred into a trust fund established for each division for the purpose of meeting current benefit accruals and future benefit payments.

The DC supplement provisions increased employer contribution rates, effective January 1, 2024, by 0.04% and 0.02% for all employers in the State and Local Government Divisions, respectively.

The combined employer contribution rates for retirement and health care benefits along with the member contribution rates for 2024 are shown as follows:

CONTRIBUTION RATES

Trust Fund ¹	Employer Contribution Rate	AED	SAED	DC Supplement	PCOP Offset	Total Contribution Rate Paid by Employer	Member Contribution Rate
State Division (members other than Safety Officers)	11.40%	5.00%	5.00%	0.21%	—%	21.61%	11.00%
State Division (Safety Officers)	14.10%	5.00%	5.00%	0.21%	—%	24.31%	13.00%
School Division	11.40%	4.50%	5.50%	—%	—%	21.40%	11.00%
Local Government Division (members other than Safety Officers)	11.00%	2.20%	1.50%	0.08%	—%	14.78%	9.00%
Local Government Division (Safety Officers)	14.10%	2.20%	1.50%	0.08%	—%	17.88%	13.00%
Judicial Division	14.91%	5.00%	5.00%	—%	—%	24.91%	11.00%
DPS Division	11.40%	4.50%	5.50%	—%	(9.78%)	11.62%	11.00%

¹ See Note 1 for the definition of "Safety Officers".

Funding of the plan assumes statutory contributions 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.

Direct Distribution

Pursuant to C.R.S. § 24-51-414, PERA is to receive an annual direct distribution from the State, as a nonemployer contributing entity, in the amount of \$225,000. Beginning in 2018, the distribution will occur each July 1 until there are no unfunded actuarial accrued liabilities in the trust fund of any division that receives such distribution. For 2024, PERA shall allocate the distribution to the trust funds as it would an employer contribution in a manner proportionate to the annual payroll of each division except there shall be no allocation to the Local Government Division.

The allocation for 2024 was as follows:

Trust Fund	Direct Distribution
State Division	\$75,146
School Division	129,789
Judicial Division	1,274
DPS Division	18,791
Total	\$225,000

Automatic Adjustment Provision

The primary intent of the AAP is to gauge the adequacy of the contributions coming into the pension trust fund against the amount required, and if determined necessary, to initiate automatic changes to member and employer contribution rates, the AI cap, and, under certain circumstances, the direct distribution from the State. This assessment commenced with the December 31, 2018, actuarial funding valuation and is performed annually thereafter.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Pursuant to C.R.S. § 24-51-413, the AAP assessment involves the comparison of two blended rates, weighted across all participating Division Trust Funds, determining a resulting ratio as follows:

+ employer contribution rates	
+ member contribution rate	
+ direct distribution as a rate of pay	
= Blended Total Contribution Amount	
divided by	AAP
	Resulting
+ actuarially determined contribution (ADC) rate	Ratio
+ member contribution rate	
= Blended Total Required Contribution	

If the resulting ratio falls within an acceptable corridor (98% to 119%), no adjustments are made. If the resulting ratio does not achieve a minimum benchmark (less than 98%), adjustments are applied in an equitable manner of impact resulting in increases in contributions and a decrease in the AI cap. If the resulting ratio exceeds the acceptable corridor (120% or greater), adjustments are applied in an equitable manner of impact resulting in decreases in contributions and an increase in the AI cap.

Pursuant to HB 25-1105, effective July 1, 2025, and prior to July 1, 2030, the DPS Division contribution rates are excluded from consideration in the blended total contribution amount and the blended total required contribution used in the determination of the AAP assessment ratio; however, the DPS Division remains subject to AAP adjustments, if triggered.

Per statute, the first adjustment required as a result of the AAP did not occur until July 1, 2020. The AAP defines the limited amounts of total adjustment available in each category, and the increments of adjustments that can occur in any year. Adjustments over multiple years arising from a single AAP are permitted, although they cannot exceed the ultimate limits as set forth in statute. An adjustment (increase or decrease) to each of the employer contribution rates and the member contribution rates cannot exceed 0.50% in any one year, and in total, cannot exceed 2.00% above the rates defined in C.R.S. § 24-51-401(1.7)(a)(IV) or fall below the rates defined in C.R.S. § 24-51-401(1.7)(a)(I). An adjustment (increase or decrease) to the direct distribution cannot exceed \$20,000 in any one year, and cannot exceed the initially legislated annual \$225,000 amount, but can be reduced to \$0.

Further, adjustments required because funding is below the 98% AAP ratio threshold will be made to an extent that will bring the revised ratio to 103% following the corrective efforts, but in no event can the adjustments in one year be greater than the limits as previously described. Similarly, adjustments required because funding has reached the 120% AAP ratio threshold must not cause the ratio to fall below 103%.

Based on the results of the AAP assessment which utilized the December 31, 2023, actuarial valuation performed for funding purposes, effective July 1, 2025, no adjustments to member and employer contribution rates are required, with no adjustment to the \$225,000 direct distribution.

Based on the results of the AAP assessment which utilized the December 31, 2024, actuarial valuation performed for funding purposes, effective July 1, 2026, no adjustments to member and employer contribution rates are required, with no adjustment to the \$225,000 direct distribution.

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. For 2024, this limit is set at \$275,000 (actual dollars) for retirees who are age 62 or older. This dollar amount is actuarially decreased for retirees younger than 62. 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 2024, employers under these agreements used current employer contributions to pay retirees \$2,728 in the State Division; \$626 in the School Division; \$1,086 in the Local Government Division; \$0 in the Judicial Division; and \$0 in the DPS Division. As of December 31, 2024, payroll, there were 88 accounts receiving a replacement benefit.

Contributions—Defined Contribution Plans

See Note 8.

Contributions—Health Care Trust Funds

See Note 9.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

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 moneys invested in corporate stocks or corporate bonds, notes, or debentures that are convertible into corporate stock or in investment trust shares cannot exceed 65% 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% of the then book value of the fund.
- The fund cannot acquire more than 12% of the outstanding stock or bonds of any single corporation.
- The origination of mortgages or deeds of trust on real residential property is prohibited.

Additionally, C.R.S. § 24-54.8-201 *et seq.* imposes targeted divestment from companies that have economic prohibitions against Israel.

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.

Investment Committee

The Investment Committee is responsible for assisting the Board in overseeing the PERA investment program. Specific responsibilities include:

- Recommend *Statements of Investment Policy and Philosophy* and review the statements at least biennially.
- Recommend the strategic asset allocation and associated benchmarks.
- Review, at least annually, PERA's compliance with the *Statement of Investment Policy*.
- Review costs of the investment program.
- Review total fund, asset class, and investment manager performance and risk.
- Advise on any other investment matters and make recommendations for action when necessary.

Overview of Investment Policy

PERA's investment policy is established and may be amended by a majority vote of the Board. The 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 for the fund. This strategic asset allocation contains a policy benchmark weight and specific ranges within which each asset class may operate. The asset allocation policy benchmark weight and ranges for each asset class are presented in the Investment Section on page 124.

The asset allocation policy is determined by an intensive asset/liability study which considers expected investment returns, risks, and correlations of returns. 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 returns while ensuring an appropriate level of risk is incurred.

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.

Information on the most recent asset/liability study can be found in the Investment Section on page 124.

Investment Performance

For the year ended December 31, 2024, the net-of-fees, money-weighted rate of return on the pooled investment assets was 10.9%.

A money-weighted rate of return considers the effect of timing of transactions that increase the amount of pension plan investments (such as contributions) and those that

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

decrease the amount of pension plan investments (such as benefit payments). Additionally, the money-weighted rate of return provides information comparable with the long-term assumed rate of return on the pooled investment assets.

Fair Value

Investments are measured at fair value in accordance with GASB Statement No. 72. Fair value is defined as the amount for which an investment could be sold in an orderly transaction between market participants at the measurement date in the principal or most advantageous market of the investment. This Statement establishes a three-tier, hierarchical disclosure framework which prioritizes and ranks the level of market price observability used in measuring fair value. The hierarchy is based on the valuation inputs used to measure the fair value of the investment and gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Inputs refer broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk, for example, the risk

inherent in a particular valuation technique used to measure fair value (such as a pricing model) and/or the risk inherent in the inputs to the valuation technique. The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk. The three-tier framework is summarized as follows:

- **Level 1**—Unadjusted quoted prices for identical instruments in active markets.
- **Level 2**—Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- **Level 3**—Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments in certain entities that calculate a net asset value (NAV) per share (or its equivalent) sometimes do not have a readily determinable fair value. For these investments, governmental accounting standards permit establishment of fair value using a practical expedient based on the NAV per share (or its equivalent).

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

The following table presents PERA's investments within the hierarchical framework, as well as investments where fair value is determined using the practical expedient, as of December 31, 2024:

INVESTMENTS MEASURED AT FAIR VALUE

		Fair Value Measurements Using:		
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Global Equity				
Public market investments ¹				
Information technology	\$11,086,756	\$11,085,284	\$1,472	\$—
Financials	6,240,066	6,219,624	4,912	15,530
Consumer discretionary	4,892,513	4,891,128	1,337	48
Industrials	4,339,682	4,338,285	59	1,338
Health care	3,629,144	3,628,572	245	327
Communication services	3,380,230	3,379,062	1,168	—
Consumer staples	2,261,408	2,257,064	2,171	2,173
Energy	1,293,935	1,289,258	1,910	2,767
Materials	1,290,885	1,279,085	1,930	9,870
Real estate	705,066	704,279	724	63
Utilities	518,333	518,057	227	49
Total global equity investments	39,638,018	39,589,698	16,155	32,165
Fixed Income				
U.S. Treasuries	4,882,957	4,882,957	—	—
U.S. government MBS/CMBS	4,290,861	1,011,581	3,279,280	—
U.S. corporate bonds	2,564,552	—	2,564,552	—
Non-U.S. corporate bonds	500,510	—	500,510	—
Non-U.S. government/agency bonds	421,314	—	421,314	—
Non-agency MBS/CMBS	180,154	—	180,154	—
U.S. municipal bonds	67,536	—	67,536	—
U.S. government agencies	62,953	—	62,953	—
Fixed income mutual fund	23,211	23,211	—	—
Total fixed income investments	12,994,048	5,917,749	7,076,299	—
Real estate	2,427,289	—	—	2,427,289
Self-directed brokerage	86,370	77,597	8,773	—
Total investments by fair value level	55,145,725	\$45,585,044	\$7,101,227	\$2,459,454
Investments Measured at the NAV				
Global equity	915,360			
Fixed income	217,568			
Self-directed brokerage	36,868			
Private equity	5,119,455			
Real estate	3,745,150			
Alternatives	4,793,892			
Multi-asset class funds	1,928,939			
Total investments measured at the NAV	16,757,232			
Total investments measured at fair value	\$71,902,957			

¹ Public market investments of \$15,800 are classified in Level 2 due to the election of fair value pricing for international equity portfolios. This election employs the use of intra-day movements of the Russell 1000 index as a factor in pricing individual equity investments to ensure equitability between participants in the PERAdvantage International Stock Fund.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

RECONCILIATION OF INVESTMENT LEVELING DISCLOSURE TO THE STATEMENTS OF FIDUCIARY NET POSITION

	Investments by Fair Value Level ¹	Investments Measured at the NAV	Stable Value Fund ²	Statements of Fiduciary Net Position Combined Total
Global equity	\$39,638,018	\$915,360	\$—	\$40,553,378
Fixed income	12,994,048	217,568	428,234	13,639,850
Private equity	—	5,119,455	—	5,119,455
Real estate	2,427,289	3,745,150	—	6,172,439
Alternatives	—	4,793,892	—	4,793,892
Multi-asset class funds	—	1,928,939	—	1,928,939
Self-directed brokerage	86,370	36,868	—	123,238
Total	\$55,145,725	\$16,757,232	\$428,234	\$72,331,191

¹ Futures investments of \$63,888 that would be classified as Level 1 in the fair value hierarchy are excluded from this table but included as a component of Investment receivables in the Statements of Fiduciary Net Position.

² The Stable Value Fund is the underlying investment in the PERAdvantage Capital Preservation Fund which is available to participants in the three defined contribution plans. The value of the investment is based on the contract value, which approximates fair value. Contract value represents what is owed to the plan participants and at what price the shares of the stable value fund are being bought and sold.

Global equity investments classified in Level 1 of the hierarchical framework include securities which trade on a national or international exchange. These investments are primarily valued at the official closing price or last reported sales price of the instrument according to the rules of the exchange. Mutual funds classified in Level 1 of the hierarchical framework include instruments which trade on a national exchange and the fund's NAV is the basis for the fund's transactions. Fixed income securities classified as Level 1 include U.S. Treasuries and U.S. mortgage-backed securities (MBS) purchased in the to-be-announced forward market. These securities are valued using the bid price, which is the price prospective buyer(s) are prepared to pay to purchase the security. Self-directed brokerage is an investment vehicle available to participants in the three defined contribution plans. Equity investments contained in the self-directed brokerage accounts trade on an exchange, and therefore are classified in Level 1 of the hierarchical framework.

Global equity investments classified in Level 2 of the hierarchical framework include securities valued using a theoretical price which utilizes a standardized formula to derive a price from a related security or from the intra-day movement of a market index. Fixed income investments

classified as Level 2 typically do not trade on a national or international exchange and their fair value is based on equivalent values of the same or comparable securities with similar yield and risk, otherwise known as matrix pricing. Fixed income investments contained in the self-directed brokerage are typically valued using a matrix pricing approach, and therefore are classified in Level 2 of the hierarchical framework.

Global equity public market investments classified in Level 3 of the hierarchical framework are valued using one or more unobservable inputs. This includes instruments delisted from an exchange, instruments where trading has been suspended, and instruments that lack recent transaction information. Fixed income securities classified in Level 3 of the hierarchical framework include instruments in default and instruments whose values are estimated, out of necessity, using unobservable inputs due to lack of comparable securities in the market place. Real estate investments classified in Level 3 of the hierarchical framework were valued by an independent appraiser.

Typically, pricing information for public market investments is made available to PERA by independent, third-party pricing services and other third-party vendors.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

The following table presents PERA's unfunded commitments, the investment redemption frequency and redemption notice period as of December 31, 2024, for PERA investments measured at the NAV:

INVESTMENTS MEASURED AT THE NET ASSET VALUE

	Investments Measured at the NAV	Unfunded Commitments ¹	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Global equity commingled funds	\$915,360	\$—	Daily	1 - 3 days
Fixed income commingled funds	217,568	—	Daily	1 - 3 days
Private equity partnerships	5,119,455	2,824,703	N/A	N/A
Private real estate				
Directly held joint ventures	1,043,067	19,173	N/A	N/A
Real estate partnerships	1,268,007	465,588	N/A	N/A
Commingled open-end funds	1,434,076	—	Daily, Quarterly	30 - 90 days
Alternatives				
Alternatives partnerships	2,937,192	1,656,513	Daily, Monthly, Quarterly, Semiannual, Annual, Biennial, Quinquennial	0 - 180 days
Commingled open-end funds	1,856,700	167,319	Daily, Monthly, Quarterly, Biennial	30 - 180 days
Multi-asset class commingled funds	1,928,939	—	Daily	1 - 3 days
Self-directed brokerage	36,868	—	N/A	N/A
Total	\$16,757,232	\$5,133,296		

¹ Corresponding Note 7 includes unfunded commitments to assets valued at Level 3 within the hierarchical framework or with no fair value as of December 31, 2024.

The fair value of the investments in global equity, fixed income, and multi-asset class commingled funds has been determined using NAV of the units held at December 31, 2024. Commingled funds are only offered to a limited group of investors, and the most significant element of the NAV is the fair value of the underlying investment holdings of the fund. Unit values are determined by dividing each fund's net assets by the number of units outstanding on the valuation date. Global equity commingled funds include six funds which primarily consist of investments whose objective is to produce returns that either match or exceed the total rate of return of a particular benchmark. Fixed income commingled funds include three funds that seek results which correspond generally to the price and yield performance of a particular index or to produce returns in excess of the total rate of return of a particular benchmark. Multi-asset class commingled funds include 10 target date retirement funds which are broadly diversified across global asset classes, where asset allocations become more conservative over time with the objective of providing for retirement outcomes consistent with investor preferences throughout the savings and drawdown phase. Additionally, this asset class also includes one fund whose objective is to produce returns that exceed inflation.

Private equity partnerships include 140 private equity limited partnership funds with various strategies including: buyout, venture, distressed, mezzanine, energy, secondary, and fund-of-funds. The fair values of the investments in this type have been determined using the

NAV per share (or its equivalent) of PERA's ownership interest in partners' capital. The most significant element of NAV is the fair value of the investment holdings. The valuation techniques vary based on investment type and involve a certain degree of expert judgment. These holdings are valued by the general partners in conjunction with management, investment advisers, and valuation specialists and are generally audited annually. These investments cannot be redeemed during the term of the partnership. Typically, private equity partnerships have an approximate life of 10 years, with the first four to six years deemed as the investment period when capital is deployed. The remaining years are typically the harvest period in which distributions are received through the liquidation of the underlying assets of the fund. The fair value for these investments could differ significantly if a ready market for these assets existed.

Private real estate includes 57 funds that invest primarily in U.S. institutional quality commercial real estate across a broad range of real estate asset types and locations. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of PERA's ownership interest in partners' capital. The most significant element of NAV is the fair value of the investment holdings. The valuation techniques vary based on investment type and involve a certain degree of expert judgment. These holdings are valued by the general partners in conjunction with management, investment advisers, and valuation specialists and are generally audited annually. There are 34 real estate closed-end

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

limited partnership funds, which are considered illiquid as these investments cannot typically be redeemed during the term of the partnership. Distributions can be made periodically based on the sole discretion of the general partner. There are six majority-owned joint venture investments which consist of industrial and multifamily assets in various locations throughout the U.S., Mexico, and Europe. These investments are considered illiquid. There are 17 real estate commingled open-end funds which are considered semi-liquid real estate funds by nature of the open-end structure of the fund. Open-end funds generally offer periodic distributions of net cash flow, which investors may elect to reinvest. Additionally, open-end funds generally offer quarterly redemption windows for requesting portions, or all, of PERA's investments. The fair value for these investments could differ significantly if a ready market for these assets existed.

Alternatives include 73 funds that invest in timber, real assets, tactical, credit, global macro, multi-strategy, and other opportunistic strategies. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of PERA's ownership interest in partners' capital. The most significant element of NAV is the fair value of the investment holdings. The valuation techniques vary based on investment type and involve a certain degree of expert judgment. These holdings are valued by the general partners in conjunction with management, investment advisers, and valuation specialists and are generally audited annually. There are 52 partnerships within Alternatives considered illiquid as the investments cannot be redeemed during the term of the partnership. Two open-end funds are also considered illiquid due to redemption restrictions. Illiquid funds represent approximately 42.6% of the value of alternatives. Seven partnerships have redemption periods ranging from monthly to every five years. There are 12 investments within alternatives considered liquid by nature of the open-end structure of the fund. Open-end funds generally offer periodic distributions of net cash flow, which investors may elect to reinvest. Additionally, open-end funds generally offer daily and monthly redemption windows for requesting portions, or all, of PERA's investments. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected the underlying assets of the funds may be liquidated over the next two to 10 years. The fair value for these investments could differ significantly if a ready market for these assets existed.

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. In 2024, PERA ended our relationship with Deutsche Bank AG, New York Branch.

As of December 31, 2024, PERA lent securities exclusively through Securities Finance Trust Company (eSecLending).

eSecLending lends global equity and fixed income securities for cash and securities collateral. Securities are loaned versus collateral valued between 102% and 111% of the fair value of the securities plus any accrued interest. For non-cash collateral, eSecLending relies on Tri-Party agents to value the securities held as collateral and ensures pricing is within a 5% threshold tolerance.

For cash collateral investments, eSecLending determines the market values of each holding as follows: for fixed-rate securities with final maturities of 100 days or less, eSecLending uses an amortized cost basis; for fixed-rate securities with maturities longer than 100 days, eSecLending uses a fair value derived from a bid-side market indication; and for money market fund investments, eSecLending uses the NAV per share for the respective money market fund. eSecLending's pricing process is done weekly as well as at month-end for both cash and non-cash collateral.

PERA cannot pledge or sell the collateral securities unless the borrower defaults.

eSecLending invests the cash collateral related to PERA's loaned securities in a separate account according to guidelines stipulated by PERA. eSecLending's Credit Risk Department sets borrower credit limits. As of December 31, 2024, the total fair value of securities on loan with eSecLending was not limited.

The following table details the balances relating to securities lending transactions at December 31, 2024:

Securities Lent	Fair Value of Underlying Securities	Cash Collateral Received/ Securities Collateral Value	Cash Collateral Investment Value
For Cash Collateral			
Global equity	\$5,264,798	\$5,383,890	\$5,426,746
Fixed income	3,674,969	3,750,628	3,780,484
For Securities Collateral			
Global equity	748,756	807,796	—
Fixed income	3,227,953	3,482,479	—
Total	\$12,916,476	\$13,424,793	\$9,207,230

PERA's income from securities lending, including realized and unrealized gain/(loss), net of expenses, was \$86,763 for the year ended December 31, 2024.

As of December 31, 2024, PERA had no credit risk exposure to borrowers because the associated value of the collateral held exceeded the value of the securities loaned. The contracts with PERA's lending agents did and do provide that the lending agents would and will indemnify PERA if loaned securities were or are not

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

returned and PERA suffered or suffers direct losses due to a borrower's default and 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 agents for the year ended December 31, 2024.

PERA or the borrower may terminate any security loan on demand. Though every loaned security may be sold and reclaimed at any time from the borrower, the weighted average loan life of overall loans outstanding at eSecLending was approximately 34 days as of December 31, 2024. Loans were made on an overnight (one day) basis throughout 2024. The approximate weighted average maturity (to the next reset date) at eSecLending was 2.5 days as of December 31, 2024. Since all securities loans were and are made 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.

As of December 31, 2024, the \$9,207,230 investment value of the reinvested cash collateral consisted of \$73,139 cash and receivables and \$9,134,091 of investments. \$5,780,000 of the investments were valued at par, and accordingly were not classified within the fair value hierarchical framework. Fixed rate securities with final maturities of 100 days or less totaling \$326,510 were valued using amortized cost basis; floating rate securities totaling \$2,051,215 used a fair value derived from a bid-side market indication and are considered Level 2 investments in the fair value hierarchical framework. Money market fund investments totaling \$976,366 were valued using the NAV per share for the respective money market fund.

Custodial Credit Risk

Governmental accounting standards limit the disclosure of custodial credit risk to investment securities that are uninsured, held in physical or book entry form, are not registered in PERA's name, and are held by either the counterparty or the counterparty's trust department or agent but not in PERA's name.

To mitigate custodial credit risk, PERA's custodial credit risk policy has requirements governing how securities are held by the master custodian and for the effective management of cash balances. To further minimize custodial credit risk, periodic reviews are required to be completed on the master custodian's credit quality and capital levels. Additionally, assessments of counterparty risk are completed periodically using internal analysis and information obtained from third-party research and rating agency reports.

Northern Trust is the master custodian for the majority of PERA's securities. At December 31, 2024, there were no investments or collateral securities subject to custodial credit risk.

Disclosure of custodial credit risk is also required when deposits are not covered by depository insurance and are uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging financial institution's trust department or agent but not in PERA's name.

Operating cash account balances are covered by the Federal Deposit Insurance Corporation (FDIC) up to \$250. Balances above that amount are collateralized, as required by the State of Colorado Public Deposit Protection Act statute, at 102% with a U.S. Bank Letter of Credit from the Federal Home Loan Bank of Cincinnati. Negative operating cash book balances resulting from investing the float of outstanding checks are recorded as investment settlements and other liabilities on the Statements of Fiduciary Net Position.

Uninvested cash deposits in the Schwab self-directed brokerage account are eligible for \$250 FDIC insurance protection per participant at each bank.

Uninvested cash deposits held by Northern Trust, the custodian bank, are covered by FDIC up to \$250, and the remaining balances are uninsured and uncollateralized. Projected cash held by the custodial bank is invested daily in short-term investment funds at a specified cut-off time. Projected cash may be higher than actual cash, resulting in an overinvestment in short-term investment funds, which may cause a negative investment cash balance overnight. Trade timing differences can also cause negative cash. Investment settlements and other liabilities on the Statements of Fiduciary Net Position include material negative investment cash book balances.

At December 31, 2024, there were \$59,145 of U.S. dollar deposits, \$26,038 of foreign currency deposits, \$432 securities lending uninvested cash collateral, \$63,888 of margin, and \$13,840 cash collateral pledged outside of 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)(b) 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% of the then book value of the fund, nor shall the fund acquire more than 12% of the outstanding stock or bonds of any single corporation. There is no single issuer exposure that comprises 5% of the then book value of the fund and no holdings greater than 12% of the outstanding stock or bonds of any single corporation at December 31, 2024.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Credit Risk

Credit risk is the risk an issuer or other counterparty to an investment will not fulfill its obligation. As of December 31, 2024, PERA held investments across the credit ratings spectrum.

PERA's fixed income credit risk provisions primarily include limitations on the fixed income portfolio. However, the policy also governs limitations on the total fund. For the unitized PERA Fixed Income Pool, the amount of below investment grade securities defined as having a rating of Ba1 or lower issued by Moody's (or the equivalent by another nationally recognized statistical rating organization (NRSRO) which PERA does not have a

license to publish) is limited to 3%. Additionally, the exposure of a single company's securities is limited to 5% and there are limits pertaining to holdings within the spectrum of credit rating categories. Additional individual manager mandates in the defined contribution plans have limits pertaining to holdings within the spectrum of credit rating categories to limit below investment grade securities.

The following table provides Moody's credit quality ratings for PERA's fixed income holdings as of December 31, 2024:

CREDIT QUALITY RATING DISPERSION SCHEDULE

Quality Rating	Total	U.S. Govt MBS/CMBS	U.S. Corporate Bonds	Non-U.S. Corporate Bonds	Stable Value Fund	Non-U.S. Govt/ Agency Bonds	Non-Agency MBS/ CMBS	U.S. Municipal Bonds	U.S. Govt Agencies ¹
Aaa	\$456,209	\$33,722	\$68,041	\$—	\$—	\$211,720	\$65,521	\$16,117	\$61,088
Aa1	35,204	—	—	—	—	5,790	12,379	17,035	—
Aa2	115,709	—	27,733	13,752	—	49,750	6,090	18,384	—
Aa3	137,685	2,202	110,291	8,431	—	9,675	5,159	1,927	—
A1	482,971	—	400,838	69,664	—	12,197	—	272	—
A2	473,990	—	398,089	61,787	—	13,743	—	371	—
A3	387,134	—	265,576	111,123	—	—	—	10,435	—
Baa1	391,475	—	215,277	149,685	—	26,513	—	—	—
Baa2	508,281	—	409,710	42,152	—	56,419	—	—	—
Baa3	513,463	—	444,822	43,916	—	16,455	7,354	916	—
Ba1	155,950	—	155,950	—	—	—	—	—	—
Not rated ²	4,264,758	3,661,652	68,225	—	428,234	19,052	83,651	2,079	1,865
Subtotal	7,922,829	\$3,697,576	\$2,564,552	\$500,510	\$428,234	\$421,314	\$180,154	\$67,536	\$62,953
U.S. Treasuries	4,882,957								
Explicit U.S. govt agencies ³	593,285								
Fixed income commingled funds ^{2,4}	217,568								
Fixed income mutual funds ²	23,211								
Total	\$13,639,850								

¹ Includes bonds issued by Federal Home Loan Bank, Federal Home Loan Mortgage Corporation, Federal National Mortgage Association, and other Government-sponsored enterprises.

² Not rated by Moody's.

³ Bonds issued by the Government National Mortgage Association.

⁴ The fair value and average fund-level credit quality ratings as reported by the commingled fund managers are: \$12,224—Aa1; \$5,602—Aa2, and \$199,742—Aa3.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Interest Rate Risk

Interest rate risk is the risk changes in interest rates will adversely affect the fair value of an investment. PERA's policy is to manage 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. 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, MBS, and variable-rate debt.

Effective duration for PERA's fixed income holdings as of December 31, 2024, is shown in the following table:

INTEREST RATE RISK—EFFECTIVE DURATION

	Fair Value	Effective Weighted Duration in Years
U.S. Treasuries	\$4,882,957	4.08
U.S. government MBS/CMBS	4,290,861	6.30
U.S. corporate bonds	2,564,552	6.96
Non-U.S. corporate bonds	500,510	5.65
Stable value fund	428,234	3.70
Non-U.S. government/agency bonds	421,314	4.88
Fixed income commingled funds	217,568	6.30
Non-agency MBS/CMBS	180,154	4.36
U.S. municipal bonds	67,536	8.21
U.S. government agencies	62,953	4.00
Fixed income mutual fund	23,211	6.04
Total	\$13,639,850	5.45

Mortgage-Backed Securities

PERA invests in residential MBS and commercial mortgage-backed securities (CMBS) which are reported at fair value in the Statements of Fiduciary Net Position under investments at fair value, fixed income. PERA invests in MBS for diversification and to enhance fixed income returns.

A residential MBS depends on the underlying pool of single-family mortgage loans to provide the cash flow to make principal and interest payments on the security. MBS are subject to credit risk, the risk the borrower will be unable to meet its obligations. In many cases, the payment of principal and interest is guaranteed by an agency of the U.S. Government, or a Government-sponsored enterprise. While these guarantees reduce credit risk, residential MBS are also subject to prepayment risk as the timing of principal and interest payments remains uncertain. A decline in interest rates can result in call risk as prepayments accelerate, which reduces the weighted average life of the security. Alternatively, an increase in interest rates can result in extension risk as prepayment rates decline, which may cause the weighted average life of a mortgage investment to be longer than anticipated.

CMBS depend on underlying pools of commercial real estate loans to provide the cash flow to make principal and interest payments on the security. CMBS are subject to credit risk, the risk the borrower will be unable to meet its obligations. 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 MBS.

To reduce PERA's counterparty credit risk while trading residential MBS, PERA has entered into Master Securities Forward Transaction Agreements with a number of 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, 2024, there was \$13,840 in pledged collateral to counterparties.

As of December 31, 2024, the fair value of residential MBS and CMBS was \$3,844,576 and \$626,439, respectively, which excludes the fair value of those securities held in commingled funds.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Foreign Currency Risk

Foreign currency risk is the risk changes in exchange rates will adversely impact the fair value of an investment or a deposit. PERA's currency risk exposure resides primarily within the Global Equity asset class. In accordance with governmental accounting standards, this disclosure is limited to investments denominated in non-U.S. dollars. There may be additional foreign currency risk in investments that contain underlying securities or business operations exposed to a foreign currency. PERA's formal policy regarding foreign currency risk is to incorporate the

risk as part of the fund's periodic asset/liability study and to consider it in determining the total fund asset allocation.

At December 31, 2024, PERA did not have a currency hedging program at the total fund level. However, at the manager level, hedging currency risk may be permitted which allows the manager to actively manage currency exposure at their discretion in accordance with their individual investment guidelines. PERA monitors currency risk at the total fund, asset class, and portfolio levels. PERA's exposure to foreign currency risk as of December 31, 2024, is shown in the following table:

FOREIGN CURRENCY RISK

Currency	Total	Global Equity	Private Equity	Real Estate	Alternatives	Cash and Cash Equivalents	Income Receivable	Pending Trades	Pending Foreign Exchange Trades
Euro	\$3,229,130	\$2,614,244	\$308,675	\$125,706	\$121,698	\$5,196	\$53,611	(\$113)	\$113
Japanese yen	1,751,628	1,749,460	—	—	—	89	2,079	(120)	120
British pound sterling	1,237,698	1,214,048	18,773	—	—	1,135	3,742	204	(204)
Swiss franc	706,751	690,012	—	—	—	183	16,556	—	—
Canadian dollar	696,779	693,803	—	—	—	1,541	1,435	—	—
Hong Kong dollar	692,815	692,165	—	—	—	587	177	—	(114)
New Taiwan dollar	597,902	596,978	—	—	—	187	737	—	—
Australian dollar	396,890	395,698	—	—	—	729	463	—	—
Swedish krona	361,967	358,369	—	—	—	3	3,595	—	—
Indian rupee	314,619	311,742	—	—	—	2,609	—	268	—
Singapore dollar	189,346	189,274	—	—	—	45	27	—	—
South Korean won	171,963	170,972	—	—	—	373	618	—	—
Chinese yuan renminbi (offshore)	145,521	145,024	—	—	—	497	—	—	—
Danish krone	141,214	134,088	—	—	—	—	7,126	—	—
Mexican peso	82,129	82,097	—	—	—	31	1	—	—
Indonesian rupiah	76,216	70,894	—	—	—	4,266	1,056	—	—
Saudi riyal	67,121	65,038	—	—	—	2,083	—	—	—
United Arab Emirates dirham	61,289	59,733	—	—	—	1,556	—	—	—
Brazilian real	60,908	59,216	—	—	—	577	1,115	—	—
Norwegian krone	45,802	45,727	—	—	—	46	29	(153)	153
Israeli shekel	36,296	36,253	—	—	—	22	21	—	—
Thai baht	31,356	31,354	—	—	—	2	—	—	—
Russian ruble	30,455	26,162	—	—	—	2,580	1,713	—	—
Polish zloty	30,333	30,262	—	—	—	33	38	43	(43)
South African rand	25,668	25,614	—	—	—	54	—	4	(4)
Malaysian ringgit	20,057	19,821	—	—	—	235	1	—	—
New Zealand dollar	11,907	11,894	—	—	—	13	—	—	—
Qatari riyal	8,543	7,792	—	—	—	751	—	—	—
Philippine peso	7,719	7,571	—	—	—	148	—	—	—
Hungarian forint	5,908	5,828	—	—	—	80	—	—	—
Kuwaiti dinar	2,330	1,826	—	—	—	504	—	—	—
Czech koruna	1,022	1,003	—	—	—	—	19	—	—
Chilean peso	321	317	—	—	—	4	—	—	—
Turkish lira	260	260	—	—	—	—	—	—	—
Colombian peso	69	66	—	—	—	3	—	—	—
Egyptian pound	21	10	—	—	—	11	—	—	—
Peruvian sol	6	—	—	—	—	6	—	—	—
Chinese yuan renminbi	(141)	—	—	—	—	(141)	—	—	—
Total	\$11,239,818	\$10,544,615	\$327,448	\$125,706	\$121,698	\$26,038	\$94,159	\$133	\$21

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Note 6—Derivative Instruments

PERA reports 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, derivative instruments are considered to be investments and not hedges.

The following table summarizes the derivative instruments outstanding as of December 31, 2024, deemed significant by management. These instruments are recorded in investment receivables in the Statements of Fiduciary Net Position and the changes in fair value 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.

DERIVATIVE INSTRUMENTS—DEFINED BENEFIT PLANS

Changes in Fair Value		
Investment Derivatives	Classification	Amount
Equity futures	Investment income	\$63,097
Fixed income futures	Investment loss	(8,067)
Total		\$55,030

Fair Value at December 31, 2024		
	Classification	Amount
	Investment receivables	\$63,888
Total		\$63,888

Equity/Fixed Income Futures

Equity and fixed income futures represent contracts between two parties to purchase or sell securities or cash at a future date for a specified price. Futures contracts trade on organized exchanges with quoted prices, are included as investment receivables in the Statements of Fiduciary Net Position, and would be classified in Level 1 of the fair value hierarchy. Recognition of investment income, with a corresponding change to the amount of investment receivables or liabilities, occurs on a daily basis according to the fluctuation of value of the futures contract. Payments are received or made to settle the

fluctuation of the contract's value on a periodic basis. 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.

Investment in futures contracts exposes PERA to credit risk. No losses related to counterparty nonperformance occurred in 2024. Credit risk is minimized by central counterparty clearing, margin deposits, and periodic settlement payments. Investments in fixed income futures exposes PERA to interest rate risk.

At December 31, 2024, PERA's defined benefit plans had 4,035 outstanding futures contracts with a total notional market exposure of \$586,034 and total investment receivables of \$63,888 reflecting counterparty margin deposits and fluctuation of the contract value since the last periodic settlement payment.

FUTURES CONTRACTS OUTSTANDING—DEFINED BENEFIT PLANS

As of December 31, 2024

Contract Type	Year of Maturity	Notional Amount (Market Exposure)
Equity	2025	\$503,838
Fixed income	2025	82,196
Total		\$586,034

Note 7—Commitments and Contingencies

As of December 31, 2024, PERA had commitments for future investments in Private Equity of \$2,824,703, Real Estate of \$484,761, and Alternatives of \$1,823,832.

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.

Contribution Settlements

In the normal course of business, administrative errors can occur resulting in corrections to prior employer and member contribution remissions.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

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

PERA administers three defined contribution plans: the Voluntary Investment Program (PERAPlus 401(k) Plan), the Defined Contribution Retirement Plan (DC Plan), and the Deferred Compensation Plan (PERAPlus 457 Plan), collectively known as the Capital Accumulation Plans (CAPs). The Board has the authority to establish and administer the CAPs pursuant to C.R.S. § 24-51-1401, C.R.S. § 24-51-1501, and C.R.S. § 24-51-1601, respectively. The provisions of the PERAPlus 401(k) Plan and the DC Plan are found in the law at C.R.S. § 24-51-1401 *et seq.*, C.R.S. § 24-51-1501 *et seq.*, PERA Rules, 8 CCR 1502-1, and *PERA's 401(k) and Defined Contribution Plan and Trust* document. The provisions of the PERAPlus 457 Plan are found in the law at C.R.S. § 24-51-1601 *et seq.*, PERA Rules, 8 CCR 1502-1, and *The PERA Deferred Compensation Plan* document.

All Plans

The following investment, distribution, and fee provisions are the same under all three CAPs:

- Participants have the choice of contributing to 18 different investment options. In addition, participants may also make transfers, at any time, among the following listed investment options:
 - PERAdvantage Capital Preservation Fund
 - PERAdvantage Fixed Income Fund
 - PERAdvantage Real Return Fund
 - PERAdvantage Socially Responsible Investment (SRI) Fund
 - PERAdvantage U.S. Large Cap Stock Fund
 - PERAdvantage U.S. Small and Mid-Cap Stock Fund
 - PERAdvantage International Stock Fund
 - PERAdvantage Income Fund
 - PERAdvantage 2030 Fund
 - PERAdvantage 2035 Fund
 - PERAdvantage 2040 Fund
 - PERAdvantage 2045 Fund
 - PERAdvantage 2050 Fund
 - PERAdvantage 2055 Fund
 - PERAdvantage 2060 Fund
 - PERAdvantage 2065 Fund
 - PERAdvantage 2070 Fund
 - Schwab Self-Directed Brokerage Account
- The participant's account balances become available for distribution upon termination from all PERA-affiliated employers. All distributions are in accordance with the Plan documents and IRC requirements.
- Empower administers the recordkeeping for all participant transactions. Northern Trust provides an array of financial services in support of day to day operations of the CAPs, including custodial services.
- Cash balances represent both operating cash accounts and investment cash on deposit held by the custodians.
- Participants pay plan administration fees and investment management fees. Plan administrative fees cover fees for services such as recordkeeping, accounting, and plan maintenance. Investment management fees are charged by the fund managers for the CAPs' investment options to cover the costs of managing their respective funds.

This table presents the number of employers eligible to participate in the three defined contribution plans as of December 31, 2024.

Plan	Employers ¹
PERAPlus 401(k) Plan	412
DC Plan	165
PERAPlus 457 Plan	124

¹ 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.

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.

In 2024, participants could contribute the lesser of \$23,000 (actual dollars) or 100% of compensation less PERA member contributions. Catch-up contributions up to \$7,500 (actual dollars) in 2024 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 \$69,000 (actual dollars) per participant in 2024 (plus catch-up contributions, if applicable).

Provisions of the PERAPlus 401(k) Plan permit in-service withdrawals by participants while employed with a PERA-affiliated employer through loans, hardship withdrawals, additional withdrawals allowed by the tax code, 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, 2024, was \$51,785 and was recorded as a benefit receivable on the Statements of Fiduciary Net Position. There were 63,930 participants with balances as of December 31, 2024. During 2024, 5,524 terminated participants received full distributions of their PERAPlus 401(k) Plan accounts.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

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 certain employees of the State or Local Government Divisions, classified employees at State colleges and universities, most community colleges, as well as the District Attorney within each Judicial District, and if authorized by the county and the District Attorney, the attorneys within that Judicial District. The eligible employees have the option to choose the PERA defined benefit plan or the DC Plan. If an eligible employee does not make a choice of which plan to participate in within 60 days of the starting date of employment, the employee is automatically enrolled in the defined benefit plan.

Between the second and fifth year 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 the second and fifth year of membership, to terminate membership in the defined benefit plan and become a participant of the DC Plan. Either election is irrevocable.

2024 rates for employer and member contributions deposited to DC Plan participant accounts are shown in the following table:

Trust Fund ¹	Employer Contribution Rate ^{2,3}	Member Contribution Rate
State Division (members other than Safety Officers) ⁴	10.15%	11.00%
State Division (Safety Officers) ⁴	12.85%	13.00%
Local Government Division (members other than Safety Officers)	10.00%	9.00%
Local Government Division (Safety Officers) ⁴	12.85%	13.00%

¹ See Note 1 for the definition of "Safety Officers".

² Employers also contribute the AED and SAED to the respective Division Trust Fund. See Note 4 for additional details on AED and SAED.

³ Additional employer DC supplement contributions and employer AAP contributions are deposited in the respective Division Trust Fund. See Note 4 for additional information on the DC supplement and AAP.

⁴ Additional 0.25% in statutory employer contribution increases are deposited in the respective Division Trust Fund.

DC Plan participants immediately vest in 50% of their employer contributions, together with accumulated investment earnings on the vested portion. For each full year of participation, vesting increases by 10%. Contribution requirements are established under C.R.S. § 24-51-1505.

Provisions of the DC Plan allow for the transfer of DC funds to the PERAPlus 401(k) Plan if a participant is still a PERA member but not active in the DC Plan. Additionally, the election to purchase service credit is available to those who are eligible and who are members of the PERA defined benefit plan with an existing DC Plan account. As of December 31, 2024, the DC Plan had 7,647 participants with balances. During the year, 1,377 participants received full distributions of their DC Plan 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.

In 2024, participants could defer the lesser of \$23,000 (actual dollars) or 100% of compensation less PERA member contributions. Catch-up deferrals, up to the greater of \$7,500 (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 2024, 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 PERA-affiliated employer through loans, unforeseen emergency withdrawals, de minimis distributions, additional withdrawals allowed by the tax code, 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, 2024, was \$12,919 and was recorded as a benefit receivable on the Statements of Fiduciary Net Position. There were 20,265 participants with balances as of December 31, 2024. During the year, 1,488 terminated participants received full distributions of their PERAPlus 457 Plan accounts.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Note 9—Health Care Trust Funds—Defined Benefit Health Care Plans

PERA offers two defined benefit other postemployment benefit (OPEB) health care plans to benefit recipients and retirees. The HCTF and the DPS HCTF were created under C.R.S. § 24-51-1201(1) and (2), respectively. The HCTF is a cost-sharing multiple-employer plan and the DPS HCTF is a single-employer plan. These funds provide a health care premium subsidy to eligible 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 Health Care Trust Funds. The basis for the amount of the premium subsidy funded by each trust 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 retirement benefit is paid.

PERA Board Authority

Title 24, Article 51, Part 12 of the C.R.S., as amended, sets forth a framework that grants authority to the Board to contract, self-insure, and authorize disbursements necessary in order to carry out the purposes of the PERACare health benefits program, including the administration of the premium subsidies. PERA contracts with health insurance companies to provide fully insured health care plans as well as to administer medical, pharmacy, dental, and vision claims for the self-insured plans.

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 Eligibility

Enrollment in the PERACare health benefits 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 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% 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.

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

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

who are under 65 years of age and entitled to Medicare. 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% 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 previously described. Retirees who do not have Medicare Part A pay the difference between the total premium and the monthly subsidy.

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. In 2024, PERA-affiliated employers submitted contributions for all PERA members equal to 1.02% of covered salaries. PERA-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.

This table is the number of active participating employers for the two Health Care Trust Funds. Guidance under GASB 74 classifies a primary government and its component units as one employer.

Trust Fund	As of December 31, 2024 ¹
HCTF	411
DPS HCTF	1
Total employers	412

¹ This employer count is presented for purposes of complying with GASB 74 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.

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

Plan Data

Benefit recipients and members of PERA consisted of the following as of December 31, 2024:

MEMBERSHIP—HEALTH CARE TRUST FUNDS¹

	HCTF	DPS HCTF	Total
Retirees and beneficiaries ²	134,107	7,331	141,438
Inactive members eligible but not yet receiving benefits ³	37,918	3,436	41,354
Active members ³	202,997	16,207	219,204
Total	375,022	26,974	401,996

¹ Inactive members not eligible for benefits are not included in this membership count.

² Currently receiving or eligible for OPEB benefits.

³ May be eligible for future OPEB benefits.

PARTICIPATION IN PERACARE HEALTH PLANS FOR ELIGIBLE RETIREES AND BENEFICIARIES

	HCTF	DPS HCTF	Total
Enrolled in PERACare			
Under age 65	5,488	240	5,728
Age 65 and older	48,772	2,823	51,595
	54,260	3,063	57,323
Not enrolled in PERACare			
Under age 65	17,017	652	17,669
Age 65 and older	62,830	3,616	66,446
	79,847	4,268	84,115
Total eligible retirees and beneficiaries	134,107	7,331	141,438

Summary of HCTF and DPS HCTF

PERA offers two general types of health plans: fully insured plans offered through health care organizations and self-insured plans administered by third-party vendors. The plans offered include HMO, PPO, and Medicare Advantage plans.

Premiums collected and payments made are reported in two ways, depending on whether or not the funds bear any level of risk with regard to the health coverage. When there is no transfer of risk to the funds, the premiums collected are reported as a liability and the liability is relieved when the premiums are paid to the health

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

insurance company that provides the fully insured health plan. When there is no health coverage risk, the only benefit payment reported is the subsidy benefit which is equal to the difference between the premiums collected from the enrollees and the full premium due to the health insurance company.

When the health care plan bears risk, all claims paid are reported as benefit payments and premiums collected are reported as a reduction to benefit payments. The health care plan that involves risk to the funds is the self-insured plan administered by UMR, a UnitedHealthcare company. For this plan, the commercial medical and prescription claims are self-insured, while the UnitedHealthcare Medicare Advantage medical and prescription plans are fully insured. Due to PERA's premium structure, the Medicare premiums paid to United are reported as an expense within the plan and included in benefit payments. 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 actual claims experience could be different from the consultant's determination resulting in either a gain or loss to the funds. In addition, other estimates and assumptions are made for these funds. It is possible actual results could significantly differ from these estimates.

Dental and Vision Plans

Dental and vision plans are also available to benefit recipients. PERA offers fully insured and self-insured dental plans and self-insured vision plans. The funds provide no subsidy and the participants pay the full premiums for dental and vision coverage. For the fully insured dental plan, premiums collected are reported as a liability and the liability is relieved when the premiums are paid to the insurance company who provides the coverage. For this plan, the risk is borne by the insurance company contracted to provide the coverage. The claims paid for the self-insured dental and vision plans are recorded as benefit payments and the premiums collected

are recorded as a reduction to benefit payments. PERA uses an outside consultant to determine the premiums required to cover anticipated claims. The risk to these plans is actual claims experience could be different from the estimates resulting in either a gain or loss to the funds. As of December 31, 2024, there were 69,955 participants enrolled in the dental plans and 57,541 participants enrolled in the vision plans in both the HCTF and the DPS HCTF.

PERA-Affiliated Employer Program Participation

In addition, fully insured pre-Medicare health plans offered through 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. As of December 31, 2024, there were 12 employers in the program with 196 active members enrolled.

Fully insured dental and vision plans are also available to eligible employees of employers who have elected to provide health care coverage through PERA. As of December 31, 2024, there were 260 participants enrolled in the dental plans and 319 participants enrolled in the vision plans.

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 funds provide no subsidy and the insurance companies providing the benefits bear the risk for the plans. The participants and/or employers pay the full premiums for the coverage. PERA collects the premiums and remits them to the insurance companies who provide the coverage.

It is under this fully-insured set of plans that PERA offers coverage to members who are receiving short-term disability program payments.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Note 10—Net Pension Liability of the Division Trust Funds

The components of the net pension liability (NPL) for participating employers for each Division Trust Fund as of December 31, 2024, are as follows:

	State Division	School Division	Local Government Division	Judicial Division	DPS Division
Total pension liability	\$29,205,940	\$52,554,659	\$6,426,530	\$534,961	\$5,312,642
Plan fiduciary net position	19,696,541	35,299,760	5,812,932	493,149	4,746,170
Net pension liability	\$9,509,399	\$17,254,899	\$613,598	\$41,812	\$566,472
Plan fiduciary net position as a percentage of the total pension liability	67.44%	67.17%	90.45%	92.18%	89.34%

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 Changes in Net Pension Liability and Related Ratios is included in the Required Supplementary Information (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 total pension liability (TPL) for each division. 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, 2023, and generally accepted actuarial techniques were applied to roll forward the TPL to December 31, 2024 (measurement date). The December 31, 2023, actuarial valuations used the following actuarial cost method and key actuarial assumptions and other inputs:

	State Division	School Division	Local Government Division	Judicial Division	DPS Division
Actuarial cost method	Entry age	Entry age	Entry age	Entry age	Entry age
Price inflation	2.30%	2.30%	2.30%	2.30%	2.30%
Real wage growth	0.70%	0.70%	0.70%	0.70%	0.70%
Wage inflation	3.00%	3.00%	3.00%	3.00%	3.00%
Salary increases, including wage inflation:					
Members other than Safety Officers ¹	3.30%-10.90%	3.40%-11.00%	3.20%-11.30%	2.80%-5.30%	3.80%-11.50%
Safety Officers ¹	3.20%-12.40%	N/A	3.20%-12.40%	N/A	N/A
Long-term investment rate of return, net of pension plan investment expenses, including price inflation	7.25%	7.25%	7.25%	7.25%	7.25%
Discount rate	7.25%	7.25%	7.25%	7.25%	7.25%
Post-retirement benefit increases:					
PERA benefit structure hired prior to 1/1/07 and DPS benefit structure (compounded annually)	1.00%	1.00%	1.00%	1.00%	1.00%
PERA benefit structure hired after 12/31/06 ²	Financed by the AIR	Financed by the AIR	Financed by the AIR	Financed by the AIR	Financed by the AIR

¹ See Note 1 for the definition of "Safety Officers".

² Post-retirement benefit increases are provided by the AIR, accounted separately within each Division Trust Fund, and subject to moneys being available; therefore, liabilities related to increases for members of these benefit tiers can never exceed available assets.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

As of the December 31, 2024, measurement date, the FNP and related disclosure components for the Local Government Division reflect additional payments related to the disaffiliation of Tri-County Health Department (Tri-County Health) as a PERA-affiliated employer, effective December 31, 2022. The additional employer disaffiliation payment allocations to the Local

Government Division Trust Fund and HCTF were \$486 and \$20, respectively.

All mortality assumptions are developed on a benefit-weighted basis and apply generational mortality. Note that in all categories, displayed as follows, the mortality tables are generationally projected using scale MP-2019.

Pre-Retirement	Mortality Table	Adjustments, as Applicable
State and Local Government Divisions (members other than Safety Officers)	PubG-2010 Employee	N/A
Safety Officers	PubS-2010 Employee	N/A
School and DPS Divisions	PubT-2010 Employee	N/A
Judicial Division	PubG-2010(A) Above-Median Employee	N/A
Post-Retirement (Retiree), Non-Disabled	Mortality Table	Adjustments, as Applicable
State and Local Government Divisions (members other than Safety Officers)	PubG-2010 Healthy Retiree	Males: 94% of the rates prior to age 80/ 90% of the rates age 80 and older Females: 87% of the rates prior to age 80/ 107% of the rates age 80 and older
Safety Officers	PubS-2010 Healthy Retiree	N/A
School and DPS Divisions	PubT-2010 Healthy Retiree	Males: 112% of the rates prior to age 80/ 94% of the rates age 80 and older Females: 83% of the rates prior to age 80/ 106% of the rates age 80 and older
Judicial Division	PubG-2010(A) Above-Median Healthy Retiree	N/A
Post-Retirement (Beneficiary), Non-Disabled	Mortality Table	Adjustments, as Applicable
All Beneficiaries	Pub-2010 Contingent Survivor	Males: 97% of the rates for all ages Females: 105% of the rates for all ages
Disabled	Mortality Table	Adjustments, as Applicable
Members other than Safety Officers	PubNS-2010 Disabled Retiree	99% of the rates for all ages
Safety Officers	PubS-2010 Disabled Retiree	N/A

The actuarial assumptions used in the December 31, 2023, valuations were based on the 2020 experience analysis, dated October 28, 2020, for the period January 1, 2016, through December 31, 2019. Revised economic and demographic assumptions were adopted by the Board on November 20, 2020.

Based on the 2024 experience analysis, dated January 3, 2025, for the period January 1, 2020, to December 31, 2023, revised actuarial assumptions were adopted by the Board on January 17, 2025, and were effective as of December 31, 2024. The following assumptions were reflected in the roll forward calculation of the TPL from December 31, 2023, to December 31, 2024.

	State Division	School Division	Local Government Division	Judicial Division	DPS Division
Salary increases, including wage inflation:					
Members other than Safety Officers	2.70%-13.30%	4.00%-13.40%	3.40%-13.00%	2.30%-4.70%	3.90%-16.80%
Safety Officers	3.20%-16.30%	N/A	3.20%-16.30%	N/A	N/A

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

- Salary scale assumptions were altered to better reflect actual experience.
- Rates of termination/withdrawal, retirement, and disability were revised to more closely reflect actual experience.
- The estimated administrative expense as a percentage of covered payroll was increased from 0.40% to 0.45%.
- The adjustments for credibility applied to the Pub-2010 mortality tables for active and retired lives, including beneficiaries, were updated based on the experience. All mortality assumptions are developed on a benefit-weighted basis. Note that in all categories, displayed as follows, the mortality tables are generationally projected using the 2024 adjusted MP-2021 projection scale.

Pre-Retirement	Mortality Table	Adjustments, as Applicable
State and Local Government Divisions (members other than Safety Officers)	PubG-2010 Employee	N/A
Safety Officers	PubS-2010 Employee	N/A
School and DPS Divisions	PubT-2010 Employee	N/A
Judicial Division	PubG-2010(A) Above-Median Employee	N/A
Post-Retirement (Retiree), Non-Disabled	Mortality Table	Adjustments, as Applicable
State and Local Government Divisions (members other than Safety Officers)	PubG-2010 Healthy Retiree	Males: 90% of the rates for all ages Females: 85% of the rates prior to age 85/ 105% of the rates age 85 and older
Safety Officers	PubS-2010 Healthy Retiree	N/A
School and DPS Divisions	PubT-2010 Healthy Retiree	Males: 106% of the rates for all ages Females: 86% of the rates prior to age 85/ 115% of the rates age 85 and older
Judicial Division	PubG-2010(A) Above-Median Healthy Retiree	N/A
Post-Retirement (Beneficiary), Non-Disabled	Mortality Table	Adjustments, as Applicable
All Beneficiaries	Pub-2010 Contingent Survivor	Males: 92% of the rates for all ages Females: 100% of the rates for all ages
Disabled	Mortality Table	Adjustments, as Applicable
Members other than Safety Officers	PubNS-2010 Disabled Retiree	95% of the rates for all ages
Safety Officers	PubS-2010 Disabled Retiree	N/A

The long-term expected return on plan assets is monitored on an ongoing basis and reviewed as part of periodic experience studies prepared every four years, and asset/liability studies, performed every three to five years for PERA. The most recent analyses were outlined in the 2024 Experience Study report dated January 3, 2025.

Several factors are considered in evaluating 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 percentages 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 future returns.

The Board first adopted the 7.25% long-term expected rate of return as of November 18, 2016. Following an asset/liability study, the Board reaffirmed the assumed rate of return at the November 15, 2019, meeting, and again at the Board's September 20, 2024, meeting. As of the most recent reaffirmation of the long-term rate of return, the target asset allocation and best estimates of geometric

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

real rates of return for each major asset class are summarized in the table as follows:

Asset Class	Target Allocation	30-Year Expected Geometric Real Rate of Return
Global Equity	51.00%	5.00%
Fixed Income	23.00%	2.60%
Private Equity	10.00%	7.60%
Real Estate	10.00%	4.10%
Alternatives	6.00%	5.20%
Total	100.00%	

Note: In setting the long-term expected rate of return, projections employed to model future returns provide a range of expected long-term returns that, including expected inflation, ultimately support a long-term expected nominal rate of return assumption of 7.25%.

Discount Rate/Single Equivalent Interest Rate

The projection of cash flows used to determine the discount rate was performed in accordance with GASB 67. The basis for the projection of the liabilities and the FNP was an actuarial valuation performed as of December 31, 2023, and the financial status of the funds as of the current measurement date (December 31, 2024). In addition to the actuarial cost method and assumptions presented earlier, the projection of cash flows applied the following methods and assumptions:

- Total covered payroll for the initial projection year consists of the covered payroll of the active membership present on the valuation date and the covered payroll of future plan members assumed to be hired during the year. In subsequent projection years, total covered payroll was assumed to increase annually at a rate of 3.00%.
- Employee contributions were assumed to be made at the member contribution rates in effect for each year, including the scheduled increases in SB 18-200 and required adjustments resulting from the 2018 and 2020 AAP assessments. Employee contributions for future plan members were used to reduce the estimated amount of total service costs for future plan members.
- Employer contributions were assumed to be made at rates equal to the fixed statutory rates specified in law for each year, including the scheduled increase in SB 18-200 and required adjustments resulting from the 2018 and 2020 AAP assessments. Employer contributions also include current and estimated future AED and SAED, until the actuarial value funding ratio reaches 103%, at which point the AED and SAED will each drop 0.50% every year until they are zero. Additionally, estimated employer contributions reflect reductions for the funding of the AIR and retiree health care benefits. For future plan members, employer contributions were further reduced by the estimated

amount of total service costs for future plan members not financed by their member contributions.

- Employer contributions for the DPS Division Trust Fund 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.
- As specified in law, the State, as a nonemployer contributing entity, will provide an annual direct distribution of \$225,000, commencing July 1, 2018, that is proportioned between the State, School, Judicial, and DPS Division Trust Funds based upon the covered payroll of each Division. The annual direct distribution ceases when all Division Trust Funds are fully funded.
- As of the December 31, 2024, measurement date, the FNP and related disclosure components for the Local Government Division reflect additional payments related to the disaffiliation of Tri-County Health as a PERA-affiliated employer, effective December 31, 2022. The additional employer disaffiliation payment allocations to the Local Government Division Trust Fund and HCTF were \$486 and \$20, respectively.
- Employer contributions and the amount of total service costs for future plan members were based upon a process to estimate future ADCs assuming an analogous future plan member growth rate.
- The AIR balance was excluded from the initial FNP, as, per statute, AIR amounts cannot be used to pay benefits until transferred to either the retirement benefits reserve or the survivor benefits reserve, as appropriate. AIR transfers to the FNP position and the subsequent AIR benefit payments were estimated and included in the projections.
- Benefit payments and contributions were assumed to be made at the middle of the year.

Based on those methods and assumptions and the GASB 67 projection test methodology, the FNP for all Division Trust Funds 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 plan investments was applied to all periods of projected benefit payments to determine the TPL for each fund. The discount rate determination did not use a municipal bond index rate. Therefore, the discount rate used to measure the TPL for these funds as of the measurement date (December 31, 2024) was 7.25%, unchanged from the prior measurement date.

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

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

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

The following tables present the NPL or net pension asset (NPA) for participating employers for each fund using the current discount rate, as well the fund's NPL/NPA if calculated using a discount rate one percentage point lower or one percentage point higher than the current rate:

Trust Fund	1.0% Decrease in Discount Rate	Net Pension Liability
State Division	6.25%	\$12,670,595
School Division	6.25%	23,393,644
Local Government Division	6.25%	1,343,043
Judicial Division	6.25%	94,910
DPS Division	6.25%	1,235,104

Trust Fund	Current Discount Rate	Net Pension Liability
State Division	7.25%	\$9,509,399
School Division	7.25%	17,254,899
Local Government Division	7.25%	613,598
Judicial Division	7.25%	41,812
DPS Division	7.25%	566,472

Trust Fund	1.0% Increase in Discount Rate	Net Pension Liability (Asset)
State Division	8.25%	\$6,846,530
School Division	8.25%	12,112,842
Local Government Division	8.25%	781
Judicial Division	8.25%	(3,708)
DPS Division	8.25%	13,808

As shown, if there is a significant deviation, over a long period, in the actual rate of return compared to the assumed discount rate, the measurement of the NPL/NPA could be materially under- or over-reported as of December 31, 2024.

Note 11—Net OPEB Liability of the Health Care Trust Funds

The components of the net OPEB liability (NOL) or net OPEB asset (NOA) for participating employers for each Health Care Trust Fund as of December 31, 2024, are as follows:

	HCTF	DPS HCTF
Total OPEB liability	\$1,190,476	\$54,645
Plan fiduciary net position	712,309	77,807
Net OPEB liability (asset)	\$478,167	(\$23,162)
Plan fiduciary net position as a percentage of the total OPEB liability	59.83%	142.39%

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 Changes in Net OPEB Liability and Related Ratios 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 total OPEB liability (TOL) for each trust fund. Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each actuarial valuation and on the pattern of sharing of costs between employers of each fund to that point. Actuarial calculations reflect a long-term perspective.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

The TOL for the Health Care Trust Funds was determined by actuarial valuations as of December 31, 2023, and generally accepted actuarial techniques were applied to roll forward the TOL to December 31, 2024 (measurement

date). The December 31, 2023, actuarial valuations used the following actuarial cost method and key actuarial assumptions and other inputs:

	HCTF				DPS HCTF
	State Division	School Division	Local Government Division	Judicial Division	DPS Division
Actuarial cost method			Entry age		Entry age
Price inflation			2.30%		2.30%
Real wage growth			0.70%		0.70%
Wage inflation			3.00%		3.00%
Salary increases, including wage inflation:					
Members other than Safety Officers ¹	3.30%-10.90%	3.40%-11.00%	3.20%-11.30%	2.80%-5.30%	3.80%-11.50%
Safety Officers ¹	3.20%-12.40%	N/A	3.20%-12.40%	N/A	N/A
Long-term investment rate of return, net of OPEB plan investment expenses, including price inflation			7.25%		7.25%
Discount rate at measurement date			7.25%		7.25%
Health care cost trend rates					
PERA benefit structure:					
Service-based premium subsidy			0.00%		0.00%
PERACare Medicare plans			16.00% in 2024, then 6.75% in 2025, gradually decreasing to 4.50% in 2034		16.00% in 2024, then 6.75% in 2025, gradually decreasing to 4.50% in 2034
MAPD PPO #2			105.00% in 2024, then 8.55% in 2025, gradually decreasing to 4.50% in 2034		105.00% in 2024, then 8.55% in 2025, gradually decreasing to 4.50% in 2034
Medicare Part A premiums			3.50% in 2024, gradually increasing to 4.50% in 2033		3.50% in 2024, gradually increasing to 4.50% in 2033
DPS benefit structure:					
Service-based premium subsidy			0.00%		0.00%
PERACare Medicare plans			N/A		N/A
Medicare Part A premiums			N/A		N/A

¹ See Note 1 for the definition of "Safety Officers".

As of the December 31, 2024, measurement date, the FNP and related disclosure components for the HCTF reflect additional payments related to the disaffiliation of Tri-County Health as a PERA-affiliated employer, effective December 31, 2022. The additional employer disaffiliation payment allocations to the HCTF and Local Government Division Trust Fund were \$20 and \$486, respectively.

Each year the per capita health care costs are developed by plan option. As of the December 31, 2023, actuarial valuation, costs are based on 2024 premium rates for the UnitedHealthcare Medicare Advantage Prescription Drug (MAPD) PPO plan #1, the UnitedHealthcare MAPD PPO plan #2, and the Kaiser Permanente MAPD HMO plan. Actuarial morbidity factors were then applied to estimate individual retiree and spouse costs by age, gender, and health care cost trend.

This approach applies for all members and is adjusted accordingly for those not eligible for premium-free Medicare Part A for the PERA benefit structure.

AGE-RELATED MORBIDITY ASSUMPTIONS

Participant Age	Annual Increase (Male)	Annual Increase (Female)
65-68	2.2%	2.3%
69	2.8%	2.2%
70	2.7%	1.6%
71	3.1%	0.5%
72	2.3%	0.7%
73	1.2%	0.8%
74	0.9%	1.5%
75-85	0.9%	1.3%
86 and older	0.0%	0.0%

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

(in Actual Dollars)	MAPD PPO #1 with Medicare Part A		MAPD PPO #1 without Medicare Part A	
	Retiree/Spouse		Retiree/Spouse	
	Male	Female	Male	Female
Sample Age				
65	\$1,710	\$1,420	\$6,536	\$5,429
70	1,921	1,589	7,341	6,073
75	2,122	1,670	8,110	6,385

(in Actual Dollars)	MAPD PPO #2 with Medicare Part A		MAPD PPO #2 without Medicare Part A	
	Retiree/Spouse		Retiree/Spouse	
	Male	Female	Male	Female
Sample Age				
65	\$585	\$486	\$4,241	\$3,523
70	657	544	4,764	3,941
75	726	571	5,262	4,143

(in Actual Dollars)	MAPD HMO (Kaiser) with Medicare Part A		MAPD HMO (Kaiser) without Medicare Part A	
	Retiree/Spouse		Retiree/Spouse	
	Male	Female	Male	Female
Sample Age				
65	\$1,897	\$1,575	\$7,063	\$5,866
70	2,130	1,763	7,933	6,563
75	2,353	1,853	8,763	6,900

The 2024 Medicare Part A premium is \$505 (actual dollars) per month.

All costs are subject to the health care cost trend rates, discussed as follows.

Health care cost trend rates reflect the change in per capita health costs over time due to factors such as medical inflation, utilization, plan design, and technology improvements. For the PERA benefit structure, health care cost trend rates are needed to project the future costs associated with providing benefits to those PERACare enrollees not eligible for premium-free Medicare Part A.

Health care cost trend rates for the PERA benefit structure are based on published annual health care inflation surveys in conjunction with actual plan experience (if credible), building block models, and industry methods developed by health plan actuaries and administrators. In addition, projected trends for the Federal Hospital Insurance Trust Fund (Medicare Part A premiums) provided by the Centers for Medicare & Medicaid Services are referenced in the development of these rates. PERACare Medicare plan rates are applied where members have no premium-free Part A and where those premiums are already exceeding the maximum subsidy. MAPD PPO #2 has a separate trend because the first year rates are still below the maximum subsidy and to reflect the estimated impact of the Inflation Reduction Act for that plan option.

The PERA benefit structure health care cost trend rates used to measure the TOL are summarized in the following table:

Year	PERACare Medicare Plans ¹	MAPD PPO #2 ¹	Medicare Part A Premiums
2024	16.00%	105.00%	3.50%
2025	6.75%	8.55%	3.75%
2026	6.50%	8.10%	3.75%
2027	6.25%	7.65%	4.00%
2028	6.00%	7.20%	4.00%
2029	5.75%	6.75%	4.25%
2030	5.50%	6.30%	4.25%
2031	5.25%	5.85%	4.25%
2032	5.00%	5.40%	4.25%
2033	4.75%	4.95%	4.50%
2034+	4.50%	4.50%	4.50%

¹ Increase in 2024 trend rates due to the effect of the Inflation Reduction Act.

Mortality assumptions used in the December 31, 2023, valuation for the Division Trust Funds are shown in Note 10 on page 82, and were applied, as applicable, in the December 31, 2023, valuation for the HCTF and DPS HCTF but developed using a headcount-weighted basis. Affiliated employers of the State, School, Local Government, and Judicial Divisions participate in the HCTF. Affiliated employers of the DPS Division participate in the DPS HCTF.

The following health care costs assumptions were updated for the HCTF and DPS HCTF:

- Per capita health care costs in effect as of the December 31, 2023, valuation date for those PERACare enrollees under the PERA benefit structure who are expected to be age 65 and older and are not eligible for premium-free Medicare Part A benefits were updated to reflect costs for the 2024 plan year.
- The health care cost trend rates applicable to health care premiums were revised to reflect the current expectation of future increases in those premiums. A separate trend rate assumption set was added for MAPD PPO #2 as the first-year rate is still below the maximum subsidy and also the assumption set reflects the estimated impact of the Inflation Reduction Act for that plan option.
- The Medicare health care plan election rate assumptions were updated effective as of the December 31, 2023, valuation date based on an experience analysis of recent data.

The actuarial assumptions used in the December 31, 2023, valuations were based on the 2020 experience analysis, dated October 28, 2020, and November 4, 2020, for the period January 1, 2016, through December 31, 2019. Revised economic and demographic assumptions were adopted by the Board on November 20, 2020.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Based on the 2024 experience analysis, dated January 3, 2025, for the period January 1, 2020, to December 31, 2023, revised actuarial assumptions were adopted by the Board on January 17, 2025, and were

effective as of December 31, 2024. The following assumptions were reflected in the roll forward calculation of the TOL from December 31, 2023, to December 31, 2024:

	HCTF				DPS HCTF
	State Division	School Division	Local Government Division	Judicial Division	DPS Division
Salary increases, including wage inflation:					
Members other than Safety Officers	2.70%-13.30%	4.00%-13.40%	3.40%-13.00%	2.30%-4.70%	3.90%-16.80%
Safety Officers	3.20%-16.30%	N/A	3.20%-16.30%	N/A	N/A

The mortality assumptions used in the roll forward calculations for the Division Trust Funds shown in Note 10 on page 83, were applied in the roll forward calculations for the Health Care Trust Funds, using a headcount-weighted basis.

The following health care costs assumptions were used in the roll forward calculation for the HCTF and DPS HCTF:

- Salary scale assumptions were altered to better reflect actual experience.
- Rates of termination/withdrawal, retirement, and disability were revised to more closely reflect actual experience.
- Participation rates were reduced.
- MAPD premium costs are no longer age graded:

(in Actual Dollars)	With Medicare Part A	Without Medicare Part A
MAPD PPO #1	\$1,824	\$6,972
MAPD PPO #2	624	4,524
MAPD HMO (Kaiser)	2,040	7,596

The actuarial assumptions pertaining to per capita health care costs and their related trend rates are analyzed annually and updated, as appropriate, by the Board's actuary.

The long-term expected return on plan assets is monitored on an ongoing basis and reviewed as part of periodic experience studies prepared every four years, and asset/liability studies, performed every three to five years for PERA. The most recent analyses were outlined in the 2024 Experience Study report dated January 3, 2025.

Several factors are considered in evaluating 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 percentages 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 OPEB 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 future returns.

The Board first adopted the 7.25% long-term expected rate of return as of November 18, 2016. Following an asset/liability study, the Board reaffirmed the assumed rate of return at the November 15, 2019, meeting, and again at the Board's September 20, 2024, meeting. As of the most recent reaffirmation of the long-term rate of return, the target asset allocation and best estimates of geometric real rates of return for each major asset class are summarized in the table in Note 10 on page 84.

Sensitivity of the Net OPEB Liability to Changes in the Health Care Cost Trend Rates

The following table presents the NOL/NOA using the current health care cost trend rates applicable to the PERA benefit structure, as well as the fund's NOL/NOA if calculated using health care cost trend rates one percentage point lower or one percentage point higher than the current rates:

	1.0% Decrease in Trend Rates	Current Trend Rates	1.0% Increase in Trend Rates
Initial PERACare			
Medicare trend rate ¹	5.75%	6.75%	7.75%
Ultimate PERACare			
Medicare trend rate	3.50%	4.50%	5.50%
Initial MAPD			
PPO #2 trend rate ¹	7.55%	8.55%	9.55%
Ultimate MAPD			
PPO #2 trend rate	3.50%	4.50%	5.50%
Initial Medicare			
Part A trend rate ¹	2.75%	3.75%	4.75%
Ultimate Medicare			
Part A trend rate	3.50%	4.50%	5.50%
Net OPEB liability (asset)			
HCTF	\$465,284	\$478,167	\$492,747
DPS HCTF	(23,165)	(23,162)	(23,160)

¹ For the January 1, 2025, plan year.

NOTES TO THE FINANCIAL STATEMENTS

(Dollars in Thousands)

Discount Rate/Single Equivalent Interest Rate

The projection of cash flows used to determine the discount rate was performed in accordance with GASB 74. The basis for the projections of the liabilities and the FNP was an actuarial valuation performed as of December 31, 2023, and the financial status of the fund as of the current measurement date (December 31, 2024). In addition to the actuarial cost method and assumptions presented earlier, the projection of cash flows applied the following methods and assumptions:

- Updated health care cost trend rates for Medicare Part A premiums as of the December 31, 2024, measurement date.
- Total covered payroll for the initial projection year consists of the covered payroll of the active membership present on the valuation date and the covered payroll of future plan members assumed to be hired during the year. In subsequent projection years, total covered payroll was assumed to increase annually at a rate of 3.00%.
- Employer contributions were assumed to be made at rates equal to the fixed statutory rates specified in law and effective as of the measurement date.
- Employer contributions and the amount of total service costs for future plan members were based upon a process to estimate future ADCs assuming an analogous future plan member growth rate.
- Estimated transfers of dollars from the Division Trust Funds into the Health Care Trust Funds representing a portion of purchased service agreements intended to cover the costs associated with OPEB benefits.
- Benefit payments and contributions were assumed to be made at the middle of the year.
- As of the December 31, 2024, measurement date, the FNP and related disclosure components for the HCTF reflect additional payments related to the disaffiliation of Tri-County Health as a PERA-affiliated employer, effective December 31, 2022. The additional employer disaffiliation payment allocations to the HCTF and Local Government Division Trust Fund were \$20 and \$486, respectively.

Based on those methods and assumptions and the GASB 74 projection test methodology, the FNP for the HCTF and DPS HCTF 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 plan investments was applied to all periods of projected benefit payments to determine the TOL for each fund. The discount rate determination did not use a municipal bond index rate. Therefore, the discount rate used to measure

the TOL for these funds as of the measurement date (December 31, 2024) was 7.25%, unchanged from the prior measurement date.

The results of the GASB 74 projection test methodology and development of the discount rate for each fund do not necessarily indicate the fund's ability to make benefit payments in the future.

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following tables present the NOL/NOA for participating employers for each fund using the current discount rate, as well as the fund's NOL/NOA if calculated using a discount rate one percentage point lower or one percentage point higher than the current rate:

	1.0% Decrease in Discount Rate	Net OPEB Liability (Asset)
HCTF	6.25%	\$586,001
DPS HCTF	6.25%	(18,069)
	Current Discount Rate	Net OPEB Liability (Asset)
HCTF	7.25%	\$478,167
DPS HCTF	7.25%	(23,162)
	1.0% Increase in Discount Rate	Net OPEB Liability (Asset)
HCTF	8.25%	\$385,201
DPS HCTF	8.25%	(27,533)

As shown, if there is a significant deviation, over a long period, in the actual rate of return compared to the assumed discount rate, the measurement of the NOL/NOA could be materially under- or over-reported as of December 31, 2024.

Note 12—Subsequent Events

HB 25-1105, enacted May 23, 2025, and effective July 1, 2025, reduces the base employer contribution rate for the DPS Division by 3.0% of salary, from 10.4% to 7.4%, and reduces the allocated employer contribution to the DPS HCTF by 0.82% of salary, from 1.02% to 0.20%.

SB 25-310, enacted June 2, 2025, and effective immediately, allows PERA to accept a series of warrants from the State Treasurer totaling \$500 million (actual dollars) on or after July 1, 2025, and before October 1, 2025. These dollars are to be proportioned over time to replace reductions to future direct distributions intended to fund the Peace Officer Training and Support Fund and, at that time, will be allocated to the appropriate Division Trust Fund(s) within PERA. SB 25-310 also allows for an alternative actuarial method to allocate the direct distribution if the allocation, based on the reported payroll of each participating division, results in an AAP assessment ratio below the 98% benchmark.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—STATE DIVISION

For the Years Ended December 31

	2024	2023	2022	2021	2020
Total pension liability					
Service cost	\$478,151	\$420,173	\$401,939	\$413,596	\$355,719
Interest	2,022,261	1,963,844	1,945,315	1,948,606	1,825,929
Changes of benefit terms	—	—	—	(547,823)	—
Difference between expected and actual experience	380,310	280,910	(229,762)	(16,478)	195,634
Changes of assumptions or other inputs	(122,248)	—	—	—	1,025,120
Benefit payments, refunds, and disability premiums	(1,935,275)	(1,899,046)	(1,861,237)	(1,802,036)	(1,734,329)
Net change in total pension liability	823,199	765,881	256,255	(4,135)	1,668,073
Total pension liability – beginning	28,382,741	27,616,860	27,360,605	27,364,740	25,696,667
Total pension liability – ending (a)	\$29,205,940	\$28,382,741	\$27,616,860	\$27,360,605	\$27,364,740
Plan fiduciary net position					
Contributions – employer	\$865,714	\$790,373	\$704,797	\$664,304	\$646,386
Contributions – nonemployer	75,146	16,233	198,247	76,706	—
Contributions – active member (includes purchased service)	477,776	438,359	396,222	369,166	326,786
Net investment income (loss)	1,954,077	2,187,360	(2,657,031)	2,806,442	2,652,870
Benefit payments, refunds, and disability premiums	(1,935,275)	(1,899,046)	(1,861,237)	(1,802,036)	(1,734,329)
Administrative expense	(15,698)	(13,979)	(13,312)	(12,051)	(11,385)
Other additions and deductions	5,153	6,064	(8,968)	3,088	6,756
Net change in plan fiduciary net position	1,426,893	1,525,364	(3,241,282)	2,105,619	1,887,084
Plan fiduciary net position – beginning	18,269,648	16,744,284	19,985,566	17,879,947	15,992,863
Plan fiduciary net position – ending (b)	\$19,696,541	\$18,269,648	\$16,744,284	\$19,985,566	\$17,879,947
Net pension liability – ending (a)-(b)	\$9,509,399	\$10,113,093	\$10,872,576	\$7,375,039	\$9,484,793
Plan fiduciary net position as a percentage of the total pension liability	67.44%	64.37%	60.63%	73.05%	65.34%
Covered payroll	\$3,884,095	\$3,576,201	\$3,183,955	\$3,092,509	\$3,089,161
Net pension liability as a percentage of covered payroll	244.83%	282.79%	341.48%	238.48%	307.03%

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—STATE DIVISION (CONTINUED)

For the Years Ended December 31

	2019	2018	2017	2016	2015
Total pension liability					
Service cost	\$344,666	\$727,319	\$518,360	\$317,466	\$309,351
Interest	1,800,848	1,658,186	1,640,426	1,741,390	1,700,903
Changes of benefit terms	(501,768)	(1,967,940)	—	—	—
Difference between expected and actual experience	408,792	330,007	416,731	176,889	237,147
Changes of assumptions or other inputs	—	(8,968,282)	2,286,877	7,313,068	(192,776)
Benefit payments, refunds, and disability premiums	(1,700,965)	(1,675,880)	(1,615,021)	(1,546,071)	(1,483,517)
Net change in total pension liability	351,573	(9,896,590)	3,247,373	8,002,742	571,108
Total pension liability – beginning	25,345,094	35,241,684	31,994,311	23,991,569	23,420,461
Total pension liability – ending (a)	\$25,696,667	\$25,345,094	\$35,241,684	\$31,994,311	\$23,991,569
Plan fiduciary net position					
Contributions – employer	\$612,282	\$583,164	\$563,977	\$521,804	\$484,005
Contributions – nonemployer	77,088	78,489	—	—	—
Contributions – active member (includes purchased service)	287,297	261,540	256,420	247,533	244,926
Net investment income (loss)	2,764,719	(497,562)	2,391,683	947,981	210,337
Benefit payments, refunds, and disability premiums	(1,700,965)	(1,675,880)	(1,615,021)	(1,546,071)	(1,483,517)
Administrative expense	(11,294)	(11,903)	(11,745)	(11,271)	(10,779)
Other additions and deductions	(2,685)	4,871	12,208	5,668	1,617
Net change in plan fiduciary net position	2,026,442	(1,257,281)	1,597,522	165,644	(553,411)
Plan fiduciary net position – beginning	13,966,421	15,223,702	13,626,180	13,460,536	14,013,947
Plan fiduciary net position – ending (b)	\$15,992,863	\$13,966,421	\$15,223,702	\$13,626,180	\$13,460,536
Net pension liability – ending (a)-(b)	\$9,703,804	\$11,378,673	\$20,017,982	\$18,368,131	\$10,531,033
Plan fiduciary net position as a percentage of the total pension liability	62.24%	55.11%	43.20%	42.59%	56.11%
Covered payroll	\$2,995,453	\$2,898,827	\$2,774,207	\$2,710,651	\$2,641,867
Net pension liability as a percentage of covered payroll	323.95%	392.53%	721.57%	677.63%	398.62%

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

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—SCHOOL DIVISION

For the Years Ended December 31

	2024	2023	2022	2021	2020
Total pension liability					
Service cost	\$930,772	\$842,132	\$815,689	\$783,583	\$663,873
Interest	3,593,681	3,410,269	3,313,326	3,278,565	3,006,736
Changes of benefit terms	—	—	—	(964,344)	—
Difference between expected and actual experience	718,878	1,155,873	47,448	110,446	595,867
Changes of assumptions or other inputs	182,163	—	—	—	2,020,180
Benefit payments, refunds, and disability premiums	(3,016,141)	(2,918,064)	(2,813,457)	(2,708,328)	(2,605,668)
Net change in total pension liability	2,409,353	2,490,210	1,363,006	499,922	3,680,988
Total pension liability – beginning	50,145,306	47,655,096	46,292,090	45,792,168	42,111,180
Total pension liability – ending (a)	\$52,554,659	\$50,145,306	\$47,655,096	\$46,292,090	\$45,792,168
Plan fiduciary net position					
Contributions – employer	\$1,444,279	\$1,317,476	\$1,201,265	\$1,113,636	\$1,048,992
Contributions – nonemployer	129,789	28,908	350,393	127,781	—
Contributions – active member (includes purchased service)	831,396	759,800	699,671	630,849	536,847
Net investment income (loss)	3,490,728	3,871,069	(4,623,013)	4,847,781	4,556,622
Benefit payments, refunds, and disability premiums	(3,016,141)	(2,918,064)	(2,813,457)	(2,708,328)	(2,605,668)
Administrative expense	(30,584)	(26,887)	(25,562)	(22,608)	(22,779)
Other additions and deductions	(11,591)	(16,049)	1,610	(8,572)	(11,226)
Net change in plan fiduciary net position	2,837,876	3,016,253	(5,209,093)	3,980,539	3,502,788
Plan fiduciary net position – beginning	32,461,884	29,445,631	34,654,724	30,674,185	27,171,397
Plan fiduciary net position – ending (b)	\$35,299,760	\$32,461,884	\$29,445,631	\$34,654,724	\$30,674,185
Net pension liability – ending (a)-(b)	\$17,254,899	\$17,683,422	\$18,209,465	\$11,637,366	\$15,117,983
Plan fiduciary net position as a percentage of the total pension liability	67.17%	64.74%	61.79%	74.86%	66.99%
Covered payroll	\$6,743,067	\$6,176,713	\$5,670,280	\$5,465,866	\$5,146,118
Net pension liability as a percentage of covered payroll	255.89%	286.29%	321.14%	212.91%	293.77%

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—SCHOOL DIVISION (CONTINUED)

For the Years Ended December 31

	2019	2018	2017	2016	2015
Total pension liability					
Service cost	\$618,937	\$1,270,011	\$954,368	\$567,247	\$548,358
Interest	2,938,492	2,759,146	2,690,433	2,722,256	2,652,731
Changes of benefit terms	(856,299)	(3,247,230)	—	—	—
Difference between expected and actual experience	770,676	443,651	564,155	346,658	278,464
Changes of assumptions or other inputs	—	(15,247,222)	3,547,294	13,572,334	(298,005)
Benefit payments, refunds, and disability premiums	(2,545,230)	(2,492,928)	(2,411,987)	(2,300,644)	(2,208,452)
Net change in total pension liability	926,576	(16,514,572)	5,344,263	14,907,851	973,096
Total pension liability – beginning	41,184,604	57,699,176	52,354,913	37,447,062	36,473,966
Total pension liability – ending (a)	\$42,111,180	\$41,184,604	\$57,699,176	\$52,354,913	\$37,447,062
Plan fiduciary net position					
Contributions – employer	\$1,002,760	\$923,910	\$857,740	\$812,740	\$754,182
Contributions – nonemployer	127,367	126,505	—	—	—
Contributions – active member (includes purchased service)	462,891	414,336	399,053	386,481	372,378
Net investment income (loss)	4,676,607	(838,899)	3,982,275	1,569,026	344,000
Benefit payments, refunds, and disability premiums	(2,545,230)	(2,492,928)	(2,411,987)	(2,300,644)	(2,208,452)
Administrative expense	(22,619)	(23,560)	(23,019)	(21,991)	(20,865)
Other additions and deductions	(7,929)	5,456	(22,378)	(17,334)	(9,082)
Net change in plan fiduciary net position	3,693,847	(1,885,180)	2,781,684	428,278	(767,839)
Plan fiduciary net position – beginning	23,477,550	25,362,730	22,581,046	22,152,768	22,920,607
Plan fiduciary net position – ending (b)	\$27,171,397	\$23,477,550	\$25,362,730	\$22,581,046	\$22,152,768
Net pension liability – ending (a)-(b)	\$14,939,783	\$17,707,054	\$32,336,446	\$29,773,867	\$15,294,294
Plan fiduciary net position as a percentage of the total pension liability	64.52%	57.01%	43.96%	43.13%	59.16%
Covered payroll	\$5,104,431	\$4,789,503	\$4,471,357	\$4,349,320	\$4,235,290
Net pension liability as a percentage of covered payroll	292.68%	369.71%	723.19%	684.56%	361.12%

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

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—LOCAL GOVERNMENT DIVISION

For the Years Ended December 31

	2024	2023	2022	2021	2020
Total pension liability					
Service cost	\$112,092	\$100,274	\$93,983	\$93,133	\$77,400
Interest	438,853	421,430	411,598	408,879	379,994
Changes of benefit terms	—	—	(9,807)	(118,435)	—
Difference between expected and actual experience	89,572	79,448	(8,688)	(2,587)	32,128
Changes of assumptions or other inputs	35,033	—	—	—	222,809
Benefit payments, refunds, and disability premiums	(380,133)	(365,198)	(350,307)	(338,375)	(320,919)
Net change in total pension liability	295,417	235,954	136,779	42,615	391,412
Total pension liability – beginning	6,131,113	5,895,159	5,758,380	5,715,765	5,324,353
Total pension liability – ending (a)	\$6,426,530	\$6,131,113	\$5,895,159	\$5,758,380	\$5,715,765
Plan fiduciary net position					
Contributions – employer	\$130,956	\$119,470	\$108,748	\$96,481	\$89,662
Contributions – employer disaffiliation	486	24,967	—	—	—
Contributions – active member (includes purchased service)	94,531	85,521	80,759	77,096	66,958
Net investment income (loss)	578,858	643,967	(781,550)	820,403	771,556
Benefit payments, refunds, and disability premiums	(380,133)	(365,198)	(350,307)	(338,375)	(320,919)
Administrative expense	(4,104)	(3,653)	(3,450)	(3,065)	(2,459)
Other additions and deductions	(4,734)	(598)	(5,721)	(3,061)	(3,122)
Net change in plan fiduciary net position	415,860	504,476	(951,521)	649,479	601,676
Plan fiduciary net position – beginning	5,397,072	4,892,596	5,844,117	5,194,638	4,592,962
Plan fiduciary net position – ending (b)	\$5,812,932	\$5,397,072	\$4,892,596	\$5,844,117	\$5,194,638
Net pension liability (asset) – ending (a)-(b)	\$613,598	\$734,041	\$1,002,563	(\$85,737)	\$521,127
Plan fiduciary net position as a percentage of the total pension liability	90.45%	88.03%	82.99%	101.49%	90.88%
Covered payroll	\$922,767	\$843,453	\$760,262	\$723,744	\$698,060
Net pension liability (asset) as a percentage of covered payroll	66.50%	87.03%	131.87%	(11.85%)	74.65%

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—LOCAL GOVERNMENT DIVISION (CONTINUED)
For the Years Ended December 31

	2019	2018	2017	2016	2015
Total pension liability					
Service cost	\$75,305	\$84,331	\$75,417	\$65,250	\$63,005
Interest	373,200	386,381	360,995	346,944	338,616
Changes of benefit terms	(105,812)	(412,930)	(110)	—	—
Difference between expected and actual experience	65,687	77,207	125,585	42,105	14,930
Changes of assumptions or other inputs	—	—	—	179,802	(36,449)
Benefit payments, refunds, and disability premiums	(312,629)	(302,903)	(289,218)	(272,344)	(265,789)
Net change in total pension liability	95,751	(167,914)	272,669	361,757	114,313
Total pension liability – beginning	5,228,602	5,396,516	5,123,847	4,762,090	4,647,777
Total pension liability – ending (a)	\$5,324,353	\$5,228,602	\$5,396,516	\$5,123,847	\$4,762,090
Plan fiduciary net position					
Contributions – employer	\$85,597	\$81,358	\$78,291	\$75,132	\$70,415
Contributions – employer disaffiliation	—	—	1,063	—	—
Contributions – active member (includes purchased service)	62,823	58,063	56,797	52,451	51,986
Net investment income (loss)	792,219	(142,476)	669,011	261,276	56,328
Benefit payments, refunds, and disability premiums	(312,629)	(302,903)	(289,218)	(272,344)	(265,789)
Administrative expense	(2,476)	(2,621)	(2,541)	(2,395)	(2,253)
Other additions and deductions	(3,961)	(3,118)	(3,823)	(1,123)	(1,646)
Net change in plan fiduciary net position	621,573	(311,697)	509,580	112,997	(90,959)
Plan fiduciary net position – beginning	3,971,389	4,283,086	3,773,506	3,660,509	3,751,468
Plan fiduciary net position – ending (b)	\$4,592,962	\$3,971,389	\$4,283,086	\$3,773,506	\$3,660,509
Net pension liability – ending (a)-(b)	\$731,391	\$1,257,213	\$1,113,430	\$1,350,341	\$1,101,581
Plan fiduciary net position as a percentage of the total pension liability	86.26%	75.96%	79.37%	73.65%	76.87%
Covered payroll	\$681,093	\$660,998	\$632,768	\$608,223	\$561,518
Net pension liability as a percentage of covered payroll	107.38%	190.20%	175.96%	222.01%	196.18%

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

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—JUDICIAL DIVISION

For the Years Ended December 31

	2024	2023	2022	2021	2020
Total pension liability					
Service cost	\$10,632	\$9,938	\$9,790	\$9,791	\$9,106
Interest	37,639	35,975	34,772	34,282	32,590
Changes of benefit terms	—	—	—	(9,135)	105
Difference between expected and actual experience	7,023	12,762	5,974	4,037	10,421
Changes of assumptions or other inputs	(10,077)	—	—	—	915
Benefit payments, refunds, and disability premiums	(37,575)	(35,239)	(32,951)	(31,488)	(29,485)
Net change in total pension liability	7,642	23,436	17,585	7,487	23,652
Total pension liability – beginning	527,319	503,883	486,298	478,811	455,159
Total pension liability – ending (a)	\$534,961	\$527,319	\$503,883	\$486,298	\$478,811
Plan fiduciary net position					
Contributions – employer	\$15,551	\$14,920	\$12,318	\$9,787	\$10,402
Contributions – nonemployer	1,274	288	3,576	1,360	—
Contributions – active member (includes purchased service)	7,371	7,683	8,822	9,389	7,697
Net investment income (loss)	48,763	53,800	(63,501)	66,030	61,634
Benefit payments, refunds, and disability premiums	(37,575)	(35,239)	(32,951)	(31,488)	(29,485)
Administrative expense	(257)	(238)	(212)	(186)	(87)
Other additions and deductions	4,266	2,872	4,492	5,383	2,456
Net change in plan fiduciary net position	39,393	44,086	(67,456)	60,275	52,617
Plan fiduciary net position – beginning	453,756	409,670	477,126	416,851	364,234
Plan fiduciary net position – ending (b)	\$493,149	\$453,756	\$409,670	\$477,126	\$416,851
Net pension liability – ending (a)-(b)	\$41,812	\$73,563	\$94,213	\$9,172	\$61,960
Plan fiduciary net position as a percentage of the total pension liability	92.18%	86.05%	81.30%	98.11%	87.06%
Covered payroll	\$63,470	\$60,606	\$56,565	\$55,780	\$54,780
Net pension liability as a percentage of covered payroll	65.88%	121.38%	166.56%	16.44%	113.11%

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—JUDICIAL DIVISION (CONTINUED)

For the Years Ended December 31

	2019	2018	2017	2016	2015
Total pension liability					
Service cost	\$8,774	\$13,516	\$14,364	\$12,639	\$10,813
Interest	32,105	30,417	27,480	25,774	25,005
Changes of benefit terms	(8,459)	(33,997)	—	—	—
Difference between expected and actual experience	2,732	3,122	16,644	22,804	7,289
Changes of assumptions or other inputs	—	(100,437)	(14,394)	43,576	21,485
Benefit payments, refunds, and disability premiums	(28,097)	(26,463)	(25,298)	(22,888)	(21,200)
Net change in total pension liability	7,055	(113,842)	18,796	81,905	43,392
Total pension liability – beginning	448,104	561,946	543,150	461,245	417,853
Total pension liability – ending (a)	\$455,159	\$448,104	\$561,946	\$543,150	\$461,245
Plan fiduciary net position					
Contributions – employer	\$10,649	\$8,299	\$8,080	\$8,024	\$7,702
Contributions – nonemployer	1,344	1,385	—	—	—
Contributions – active member (includes purchased service)	5,187	4,700	4,863	4,037	4,197
Net investment income (loss)	61,719	(11,006)	51,173	19,783	4,149
Benefit payments, refunds, and disability premiums	(28,097)	(26,463)	(25,298)	(22,888)	(21,200)
Administrative expense	(84)	(86)	(86)	(81)	(77)
Other additions and deductions	6,670	155	2,226	2,678	3,081
Net change in plan fiduciary net position	57,388	(23,016)	40,958	11,553	(2,148)
Plan fiduciary net position – beginning	306,846	329,862	288,904	277,351	279,499
Plan fiduciary net position – ending (b)	\$364,234	\$306,846	\$329,862	\$288,904	\$277,351
Net pension liability – ending (a)-(b)	\$90,925	\$141,258	\$232,084	\$254,246	\$183,894
Plan fiduciary net position as a percentage of the total pension liability	80.02%	68.48%	58.70%	53.19%	60.13%
Covered payroll	\$53,427	\$50,506	\$48,948	\$48,700	\$46,870
Net pension liability as a percentage of covered payroll	170.19%	279.69%	474.14%	522.07%	392.35%

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

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—DPS DIVISION

For the Years Ended December 31

	2024	2023	2022	2021	2020
Total pension liability					
Service cost	\$125,048	\$113,314	\$113,836	\$107,672	\$93,058
Interest	360,103	345,494	333,769	326,361	309,174
Changes of benefit terms	—	—	—	(89,028)	—
Difference between expected and actual experience	75,087	34,752	15,514	46,732	(15,298)
Changes of assumptions or other inputs	63,256	—	—	—	125,275
Benefit payments, refunds, and disability premiums	(305,494)	(302,075)	(299,660)	(291,799)	(287,719)
Net change in total pension liability	318,000	191,485	163,459	99,938	224,490
Total pension liability – beginning	4,994,642	4,803,157	4,639,698	4,539,760	4,315,270
Total pension liability – ending (a)	\$5,312,642	\$4,994,642	\$4,803,157	\$4,639,698	\$4,539,760
Plan fiduciary net position					
Contributions – employer	\$105,863	\$87,487	\$74,199	\$65,215	\$56,245
Contributions – nonemployer	18,791	4,132	52,784	19,153	—
Contributions – active member (includes purchased service)	113,591	104,916	96,124	90,154	75,456
Net investment income (loss)	468,220	517,546	(619,265)	649,370	610,847
Benefit payments, refunds, and disability premiums	(305,494)	(302,075)	(299,660)	(291,799)	(287,719)
Administrative expense	(3,702)	(3,292)	(3,133)	(2,829)	(2,667)
Other additions and deductions	1,963	2,796	652	(3,115)	(1,010)
Net change in plan fiduciary net position	399,232	411,510	(698,299)	526,149	451,152
Plan fiduciary net position – beginning	4,346,938	3,935,428	4,633,727	4,107,578	3,656,426
Plan fiduciary net position – ending (b)	\$4,746,170	\$4,346,938	\$3,935,428	\$4,633,727	\$4,107,578
Net pension liability – ending (a)-(b)	\$566,472	\$647,704	\$867,729	\$5,971	\$432,182
Plan fiduciary net position as a percentage of the total pension liability	89.34%	87.03%	81.93%	99.87%	90.48%
Covered payroll	\$888,094	\$894,245	\$810,403	\$823,396	\$771,347
Net pension liability as a percentage of covered payroll	63.79%	72.43%	107.07%	0.73%	56.03%

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS—DPS DIVISION (CONTINUED)

For the Years Ended December 31

	2019	2018	2017	2016	2015
Total pension liability					
Service cost	\$91,764	\$90,657	\$91,986	\$85,988	\$82,079
Interest	301,210	313,294	295,838	283,862	281,752
Changes of benefit terms	(82,064)	(318,480)	—	—	—
Difference between expected and actual experience	86,001	35,147	47,121	(2,839)	45,767
Changes of assumptions or other inputs	—	—	—	205,645	(113,772)
Benefit payments, refunds, and disability premiums	(288,984)	(287,825)	(281,844)	(272,071)	(263,323)
Net change in total pension liability	107,927	(167,207)	153,101	300,585	32,503
Total pension liability – beginning	4,207,343	4,374,550	4,221,449	3,920,864	3,888,361
Total pension liability – ending (a)	\$4,315,270	\$4,207,343	\$4,374,550	\$4,221,449	\$3,920,864
Plan fiduciary net position					
Contributions – employer	\$43,340	\$35,994	\$27,578	\$17,071	\$8,494
Contributions – nonemployer	19,201	18,621	—	—	—
Contributions – active member (includes purchased service)	65,496	61,098	56,820	54,852	53,558
Net investment income (loss)	632,669	(114,070)	548,585	218,415	49,172
Benefit payments, refunds, and disability premiums	(288,984)	(287,825)	(281,844)	(272,071)	(263,323)
Administrative expense	(2,713)	(2,919)	(2,857)	(2,754)	(2,599)
Other additions and deductions	2,975	(4,497)	3,781	3,135	(1,764)
Net change in plan fiduciary net position	471,984	(293,598)	352,063	18,648	(156,462)
Plan fiduciary net position – beginning	3,184,442	3,478,040	3,125,977	3,107,329	3,263,791
Plan fiduciary net position – ending (b)	\$3,656,426	\$3,184,442	\$3,478,040	\$3,125,977	\$3,107,329
Net pension liability – ending (a)-(b)	\$658,844	\$1,022,901	\$896,510	\$1,095,472	\$813,535
Plan fiduciary net position as a percentage of the total pension liability	84.73%	75.69%	79.51%	74.05%	79.25%
Covered payroll	\$736,264	\$722,040	\$658,198	\$642,177	\$621,115
Net pension liability as a percentage of covered payroll	89.48%	141.67%	136.21%	170.59%	130.98%

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

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF EMPLOYER AND NONEMPLOYER CONTRIBUTIONS

For the Years Ended December 31

State Division	2024	2023	2022	2021	2020
Actuarially determined contribution rate (a)	19.77%	20.71%	23.45%	21.05%	23.69%
Covered payroll (b)	\$3,884,095	\$3,576,201	\$3,183,955	\$3,092,509	\$3,089,161
Annual Increase Reserve contribution (c)	29,471	26,039	22,441	20,606	19,442
Actuarially determined contribution (a) x (b) + (c)	797,357	766,670	769,078	671,579	751,264
Contributions in relation to the actuarially determined contribution ^{1,2}	940,860	806,606	903,044	741,010	646,386
Annual contribution deficiency (excess)	(\$143,503)	(\$39,936)	(\$133,966)	(\$69,431)	\$104,878
Actual contributions as a percentage of covered payroll	24.22%	22.55%	28.36%	23.96%	20.92%
	2019	2018	2017	2016	2015
Actuarially determined contribution rate (a)	23.28%	26.30%	22.71%	22.31%	22.35%
Covered payroll (b)	\$2,995,453	\$2,898,827	\$2,774,207	\$2,710,651	\$2,641,867
Annual Increase Reserve contribution (c)	17,663	15,919	14,355	12,838	11,400
Actuarially determined contribution (a) x (b) + (c)	715,004	778,311	644,377	617,584	601,857
Contributions in relation to the actuarially determined contribution ¹	689,370	661,653	563,977	521,804	484,005
Annual contribution deficiency	\$25,634	\$116,658	\$80,400	\$95,780	\$117,852
Actual contributions as a percentage of covered payroll	23.01%	22.82%	20.33%	19.25%	18.32%
	2024	2023	2022	2021	2020
Actuarially determined contribution rate (a)	20.58%	21.13%	24.54%	20.61%	23.37%
Covered payroll (b)	\$6,743,067	\$6,176,713	\$5,670,280	\$5,465,866	\$5,146,118
Annual Increase Reserve contribution (c)	45,882	40,019	35,114	31,169	28,159
Actuarially determined contribution (a) x (b) + (c)	1,433,605	1,345,158	1,426,601	1,157,684	1,230,807
Contributions in relation to the actuarially determined contribution ^{1,2}	1,574,068	1,346,384	1,551,658	1,241,417	1,048,992
Annual contribution deficiency (excess)	(\$140,463)	(\$1,226)	(\$125,057)	(\$83,733)	\$181,815
Actual contributions as a percentage of covered payroll	23.34%	21.80%	27.36%	22.71%	20.38%
	2019	2018	2017	2016	2015
Actuarially determined contribution rate (a)	23.59%	26.80%	22.54%	22.36%	21.94%
Covered payroll (b)	\$5,104,431	\$4,789,503	\$4,471,357	\$4,349,320	\$4,235,290
Annual Increase Reserve contribution (c)	26,062	22,497	19,903	17,868	15,648
Actuarially determined contribution (a) x (b) + (c)	1,230,197	1,306,084	1,027,747	990,376	944,871
Contributions in relation to the actuarially determined contribution ¹	1,130,127	1,050,415	857,740	812,740	754,182
Annual contribution deficiency	\$100,070	\$255,669	\$170,007	\$177,636	\$190,689
Actual contributions as a percentage of covered payroll	22.14%	21.93%	19.18%	18.69%	17.81%

¹ Includes an annual contribution from a nonemployer contributing entity required by C.R.S. § 24-51-414 *et seq.* starting on July 1, 2018.² House Bill 20-1379 suspended the July 2020 contribution from the nonemployer contributing entity for the State's 2020-21 fiscal year.

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

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF EMPLOYER AND NONEMPLOYER CONTRIBUTIONS (CONTINUED)

For the Years Ended December 31

Local Government Division	2024	2023	2022	2021	2020
Actuarially determined contribution rate (a)	8.28%	9.20%	12.72%	10.84%	13.01%
Covered payroll (b)	\$922,767	\$843,453	\$760,262	\$723,744	\$698,060
Annual Increase Reserve contribution (c)	7,261	6,403	5,739	4,964	4,492
Actuarially determined contribution (a) x (b) + (c)	83,666	84,001	102,444	83,418	95,310
Contributions in relation to the actuarially determined contribution ¹	130,956	119,470	108,748	96,481	89,662
Annual contribution deficiency (excess)	(\$47,290)	(\$35,469)	(\$6,304)	(\$13,063)	\$5,648
Actual contributions as a percentage of covered payroll	14.19%	14.16%	14.30%	13.33%	12.84%
	2019	2018	2017	2016	2015
Actuarially determined contribution rate (a)	11.13%	14.27%	11.92%	11.98%	13.62%
Covered payroll (b)	\$681,093	\$660,998	\$632,768	\$608,223	\$561,518
Annual Increase Reserve contribution (c)	4,201	3,779	3,390	2,969	2,522
Actuarially determined contribution (a) x (b) + (c)	80,007	98,103	78,816	75,834	79,001
Contributions in relation to the actuarially determined contribution ¹	85,597	81,358	78,291	75,132	70,415
Annual contribution deficiency (excess)	(\$5,590)	\$16,745	\$525	\$702	\$8,586
Actual contributions as a percentage of covered payroll	12.57%	12.31%	12.37%	12.35%	12.54%
Judicial Division	2024	2023	2022	2021	2020
Actuarially determined contribution rate (a)	12.78%	13.83%	15.56%	14.13%	22.05%
Covered payroll (b)	\$63,470	\$60,606	\$56,565	\$55,780	\$54,780
Annual Increase Reserve contribution (c)	434	397	357	314	289
Actuarially determined contribution (a) x (b) + (c)	8,545	8,779	9,159	8,196	12,368
Contributions in relation to the actuarially determined contribution ^{2,3}	16,825	15,208	15,894	11,147	10,402
Annual contribution deficiency (excess)	(\$8,280)	(\$6,429)	(\$6,735)	(\$2,951)	\$1,966
Actual contributions as a percentage of covered payroll	26.51%	25.09%	28.10%	19.98%	18.99%
	2019	2018	2017	2016	2015
Actuarially determined contribution rate (a)	21.90%	27.26%	22.54%	22.07%	21.45%
Covered payroll (b)	\$53,427	\$50,506	\$48,948	\$48,700	\$46,870
Annual Increase Reserve contribution (c)	251	207	191	164	141
Actuarially determined contribution (a) x (b) + (c)	11,952	13,975	11,224	10,912	10,195
Contributions in relation to the actuarially determined contribution ²	11,993	9,684	8,080	8,024	7,702
Annual contribution deficiency (excess)	(\$41)	\$4,291	\$3,144	\$2,888	\$2,493
Actual contributions as a percentage of covered payroll	22.45%	19.17%	16.51%	16.48%	16.43%

¹ Contributions do not include disaffiliation payments, if applicable.² Includes an annual contribution from a nonemployer contributing entity required by C.R.S. § 24-51-414 *et seq.* starting on July 1, 2018.³ House Bill 20-1379 suspended the July 2020 contribution from the nonemployer contributing entity for the State's 2020-21 fiscal year.

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

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—DIVISION TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF EMPLOYER AND NONEMPLOYER CONTRIBUTIONS (CONTINUED)

For the Years Ended December 31

DPS Division	2024	2023	2022	2021	2020
Actuarially determined contribution rate (a)	6.04%	6.77%	9.25%	8.22%	10.42%
Covered payroll (b)	\$888,094	\$894,245	\$810,403	\$823,396	\$771,347
Annual Increase Reserve contribution (c)	7,564	6,859	6,160	5,905	5,357
Actuarially determined contribution (a) x (b) + (c)	61,205	67,399	81,122	73,588	85,731
Contributions in relation to the actuarially determined contribution ^{1,2}	124,654	91,619	126,983	84,368	56,245
Annual contribution deficiency (excess)	(\$63,449)	(\$24,220)	(\$45,861)	(\$10,780)	\$29,486
Actual contributions as a percentage of covered payroll	14.04%	10.25%	15.67%	10.25%	7.29%
	2019	2018	2017	2016	2015
Actuarially determined contribution rate (a)	11.14%	13.50%	10.28%	10.46%	11.06%
Covered payroll (b)	\$736,264	\$722,040	\$658,198	\$642,177	\$621,115
Annual Increase Reserve contribution (c)	4,989	4,624	4,100	3,685	3,186
Actuarially determined contribution (a) x (b) + (c)	87,009	102,099	71,763	70,857	71,881
Contributions in relation to the actuarially determined contribution ¹	62,541	54,615	27,578	17,071	8,494
Annual contribution deficiency	\$24,468	\$47,484	\$44,185	\$53,786	\$63,387
Actual contributions as a percentage of covered payroll	8.49%	7.56%	4.19%	2.66%	1.37%

¹ Includes an annual contribution from a nonemployer contributing entity required by C.R.S. § 24-51-414 *et seq.* starting on July 1, 2018.² House Bill 20-1379 suspended the July 2020 contribution from the nonemployer contributing entity for the State's 2020-21 fiscal year.

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

SCHEDULE OF INVESTMENT RETURNS

For the Years Ended December 31

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Annual money-weighted rate of return, net of investment expenses	10.9%	13.4%	(13.5%)	16.1%	17.1%	20.4%	(3.3%)	18.1%	7.3%	1.6%

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

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)— DIVISION TRUST FUNDS

(Dollars in Thousands)

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

2024 Changes in Plan Provisions Since 2023

- As of the December 31, 2024, measurement date, the fiduciary net position (FNP) and related disclosure components for the Local Government Division reflect additional payments related to the disaffiliation of Tri-County Health Department (Tri-County Health) as a PERA-affiliated employer, effective December 31, 2022. The additional employer disaffiliation payment allocations to the Local Government Division Trust Fund and Health Care Trust Fund (HCTF) were \$486 and \$20, respectively.
- 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.

2023 Changes in Plan Provisions Since 2022

- As of the December 31, 2023, measurement date, the FNP and related disclosure components for the Local Government Division reflect payments related to the disaffiliation of Tri-County Health as a PERA-affiliated employer, effective December 31, 2022. As of the December 31, 2023, year-end, PERA recognized two additions for accounting and financial reporting purposes: a \$24,000 payment received on December 4, 2023 and a \$2,000 receivable. The employer disaffiliation payment and receivable allocations to the Local Government Division Trust Fund and HCTF were \$24,967 and \$1,033, respectively.
- Senate Bill (SB) 23-056, enacted and effective June 2, 2023, intended to recompense PERA for the remaining portion of the \$225,000 direct distribution originally scheduled for receipt July 1, 2020, suspended due to the enactment of House Bill (HB) 20-1379, but not fully repaid through the provisions within HB 22-1029. Pursuant to SB 23-056, the State Treasurer issued a warrant consisting of the balance of the PERA Payment Cash Fund, created in C.R.S. § 24-51-416, plus \$10,000 from the General Fund, totaling \$14,561.
- SB 23-163, enacted and effective June 6, 2023, states beginning July 1, 2023, a wildlife officer and a parks and recreation officer employed by the Division of Parks and Wildlife in the Department of Natural Resources, is classified as a "State Trooper" for the purpose of determining their service retirement eligibility.
- As of the December 31, 2023, measurement date, the total pension liability (TPL) recognizes the change in

the default method applied for granting service accruals for certain members, from a "12-pay" method to a "non-12-pay" method. The default service accrual method for positions with an employment pattern of at least eight months but fewer than 12 months (including, but not limited to positions in the School and DPS Divisions) receive a higher ratio of service credit for each month worked, up to a maximum of 12 months of service credit per year.

- 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.

2022 Changes in Plan Provisions Since 2021

- HB 22-1029, effective upon enactment in 2022, required the State Treasurer to issue, in addition to the regularly scheduled \$225,000 direct distribution, a warrant to PERA in the amount of \$380,000 with reductions to future direct distributions. The July 1, 2023, direct distribution will be reduced by \$190,000 to \$35,000. The July 1, 2024, direct distribution will not be reduced from \$225,000 due to a negative investment return in 2022.
- The TPL for the Local Government Division, as of the December 31, 2022, measurement date, was adjusted to reflect the disaffiliation, as allowable under C.R.S. § 24-51-313, of Tri-County Health, effective December 31, 2022. As of the close of the 2022 fiscal year, no disaffiliation payment associated with Tri-County Health was received, and therefore no disaffiliation dollars were reflected in the FNP as of the December 31, 2022, measurement date.
- 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.

2021 Changes in Plan Provisions Since 2020

- The following changes reflect the anticipated adjustments resulting from the 2020 automatic adjustment provision (AAP) assessment, statutorily recognized July 1, 2021, and effective July 1, 2022:
 - Member contribution rates increase by 0.50%.
 - Employer contribution rates increase by 0.50%.
 - Annual increase (AI) cap is lowered from 1.25% per year to 1.00% per year.
- 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.

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)— DIVISION TRUST FUNDS

(Dollars in Thousands)

2020 Changes in Plan Provisions Since 2019

- HB 20-1379, enacted on June 29, 2020, suspended the \$225,000 direct distribution payable on July 1, 2020 for the State's 2020-21 fiscal year.
- HB 20-1394, enacted on June 29, 2020, requires 5.0% of the Judicial Division base employer contributions rate to be paid by the members of the Judicial Division for the State's 2020-21 and 2021-22 fiscal years. This does not apply to the employer or member contribution rates for judges employed by the Denver County Court.
- SB 18-200 and SB 20-057, enacted in 2018 and 2020, respectively expanded the definition of "State Trooper" under Colorado law as follows:
 - Beginning July 1, 2020, new or existing employees of the Division of Fire Prevention and Control in the Department of Public Safety classified as firefighter I through firefighter VII;
 - New members hired on or after January 1, 2020, as a county sheriff, undersheriff, deputy sheriff, noncertified deputy sheriff, or detention officer by a Local Government Division employer; and
 - New members hired on or after January 1, 2020, as a corrections officer classified as I through IV by a State Division employer.
- 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.

2019 Changes in Plan Provisions Since 2018

- SB 18-200 was enacted on June 4, 2018, which included the adoption of the AAP. The following changes reflect the anticipated adjustments resulting from the 2018 AAP assessment, statutorily recognized July 1, 2019, and effective July 1, 2020:
 - Member contribution rates increase by 0.50%.
 - Employer contribution rates increase by 0.50%.
 - AI cap is lowered from 1.50% per year to 1.25% per year.
- HB 19-1217, enacted May 20, 2019, repealed the member contribution increases scheduled for the Local Government Division pursuant to SB 18-200.
- 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.

2018 Changes in Plan Provisions Since 2017

- The following changes were made to the plan provisions as part of SB 18-200:
 - Member contribution rates increase by 0.75% effective July 1, 2019, an additional 0.75% effective July 1, 2020, and an additional 0.50% effective July 1, 2021.
 - Employer contribution rates increase by 0.25% effective July 1, 2019 for State, School, Judicial, and DPS Divisions.
 - An annual direct distribution of \$225,000 from the State of Colorado, recognized as a nonemployer contributing entity, is distributed between the State, School, Judicial, and DPS Divisions proportionally based on payroll.
 - AI cap is lowered from 2.00% per year to 1.50% per year.
 - Initial AI waiting period is extended from one year after retirement to three years after retirement.
 - AI payments are suspended for 2018 and 2019.
 - The number of years used in the highest average salary calculation for non-vested members as of January 1, 2020, increases from three to five years for the State, School, Local Government, and DPS Divisions and increases from one to three years for the Judicial Division.
- 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.

2017 Changes in Plan Provisions Since 2016

- The Cunningham Fire Protection District (CFPD) disaffiliated from the Local Government Division on December 2, 2017. For the purpose of the December 31, 2017, measurement date, liabilities were determined assuming no additional benefit accruals for the disaffiliated membership of the CFPD that had not refunded their PERA member contribution accounts. The total disaffiliation payment of \$1,159 was allocated to the Local Government Division Trust Fund and the HCTF in the amount of \$1,063 and \$96, respectively.
- Pursuant to HB 17-1265, the amortization equalization disbursement (AED) and supplemental amortization equalization disbursement (SAED) contribution rates are adjusted for employers in the Judicial Division as follows:
 - For the calendar year beginning in 2019, C.R.S. § 24-51-411(4.5) increased the AED payment to 3.40% of PERA-includable salary and requires the AED payment to increase by 0.40% at the start of each of the following four calendar years through 2023

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)— DIVISION TRUST FUNDS

(Dollars in Thousands)

at which time the AED payment will be 5.00% of PERA-includable salary.

- For the calendar year beginning in 2019, C.R.S. § 24-51-411(7.5) increased the SAED payment to 3.40% of PERA-includable salary and requires the SAED payment to increase by 0.40% at the start of each of the following four calendar years through 2023 at which time the SAED payment will be 5.00% of PERA-includable salary.
- 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.

2016 Changes in Plan Provisions Since 2015

- 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.

2015 Changes in Plan Provisions Since 2014

- 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.
- As required under C.R.S. § 24-51-401(1.7)(e), 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 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.

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

2024 Changes in Assumptions or Other Inputs Since 2023

- Salary scale assumptions were altered to better reflect actual experience.
- Rates of termination/withdrawal, retirement, and disability were revised to more closely reflect actual experience.
- The Pub-2010 Public Retirement Plans Mortality base tables were retained for purposes of active, retired, disabled, and beneficiary lives, with revised adjustments for credibility and gender, where applicable. In addition, the applied generational projection scale was updated to the 2024 adjusted scale MP-2021.

- The estimated administrative expense as a percentage of covered payroll was increased from 0.40% to 0.45%.

2023 Changes in Assumptions or Other Inputs Since 2022

- There were no changes made to the actuarial methods or assumptions.

2022 Changes in Assumptions or Other Inputs Since 2021

- There were no changes made to the actuarial methods or assumptions.

2021 Changes in Assumptions or Other Inputs Since 2020

- The assumption used to value the AI cap benefit provision was changed from 1.25% to 1.00%.

2020 Changes in Assumptions or Other Inputs Since 2019

- The price inflation assumption was lowered from 2.40% to 2.30%.
- The wage inflation assumption was lowered from 3.50% to 3.00%.
- The real rate of investment return assumption was increased to 4.95% per year, net of investment expenses from 4.85% per year, net of investment expenses.
- Salary scale assumptions were revised to align with revised economic assumptions and to more closely reflect actual experience.
- Rates of termination/withdrawal, retirement, and disability were revised to more closely reflect actual experience.
- The pre-retirement mortality assumption for the State and Local Government Divisions (members other than Safety Officers) was changed to the PubG-2010 Employee Table with generational projection using scale MP-2019.
- The pre-retirement mortality assumption for Safety Officers was changed to the PubS-2010 Employee Table with generational projection using scale MP-2019.
- The pre-retirement mortality assumption for the School and DPS Divisions was changed to the PubT-2010 Employee Table with generational projection using scale MP-2019.
- The pre-retirement mortality assumption for the Judicial Division was changed to the PubG-2010(A) Above-Median Employee Table with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for the State and Local Government Divisions (members other than Safety Officers) was changed to the PubG-2010 Healthy Retiree Table, adjusted as follows:
 - Males:** 94% of the rates prior to age 80 and 90% of the rates for ages 80 and older, with generational projection using scale MP-2019.

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)— DIVISION TRUST FUNDS

(Dollars in Thousands)

- **Females:** 87% of the rates prior to age 80 and 107% of the rates for ages 80 and older, with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for Safety Officers was changed to the unadjusted PubS-2010 Healthy Retiree Table, with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for the School and DPS Divisions was changed to the PubT-2010 Healthy Retiree Table, adjusted as follows:
 - **Males:** 112% of the rates prior to age 80 and 94% of the rates for ages 80 and older, with generational projection using scale MP-2019.
 - **Females:** 83% of the rates prior to age 80 and 106% of the rates for ages 80 and older, with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for the Judicial Division was changed to the unadjusted PubG-2010(A) Above-Median Healthy Retiree Table with generational projection using scale MP-2019. The post-retirement non-disabled beneficiary mortality assumption for the Division Trust Funds was changed to the Pub-2010 Contingent Survivor Table, adjusted as follows:
 - **Males:** 97% of the rates for all ages, with generational projection using scale MP-2019.
 - **Females:** 105% of the rates for all ages, with generational projection using scale MP-2019.
- The disabled mortality assumption for the Division Trust Funds (members other than Safety Officers) was changed to the PubNS-2010 Disabled Retiree Table using 99% of the rates for all ages with generational projection using scale MP-2019.
- The disabled mortality assumption for Safety Officers was changed to the unadjusted PubS-2010 Disabled Retiree Table with generational projection using scale MP-2019.
- The mortality tables are generational mortality tables developed on a benefit-weighted basis.

2019 Changes in Assumptions or Other Inputs Since 2018

- The assumption used to value the AI cap benefit provision was changed from 1.50% to 1.25%.

2018 Changes in Assumptions or Other Inputs Since 2017

- The single equivalent interest rate (SEIR) for the State Division was increased from 4.72% to 7.25% to reflect the changes to the projection's valuation basis which no longer resulted in a projected year of depletion of the FNP, thereby eliminating the need to apply the municipal bond index rate.

- The SEIR for the School Division was increased from 4.78% to 7.25% to reflect the changes to the projection's valuation basis which no longer resulted in a projected year of depletion of the FNP, thereby eliminating the need to apply the municipal bond index rate.
- The SEIR for the Judicial Division was increased from 5.41% to 7.25% to reflect the changes to the projection's valuation basis which no longer resulted in a projected year of depletion of the FNP, thereby eliminating the need to apply the municipal bond index rate.

2017 Changes in Assumptions or Other Inputs Since 2016

- The SEIR for the State Division was lowered from 5.26% to 4.72% to reflect the changes to the projection's valuation basis, a projected year of depletion of the FNP, and the resulting application of the municipal bond index rate.
- The SEIR for the School Division was lowered from 5.26% to 4.78% to reflect the changes to the projection's valuation basis, a projected year of depletion of the FNP, and the resulting application of the municipal bond index rate.
- The SEIR for the Judicial Division was increased from 5.18% to 5.41% to reflect the changes to the projection's valuation basis, a projected year of depletion of the FNP, and the resulting application of the municipal bond index rate.
- The municipal bond index rate used in the determination of the SEIR for the State, School, and Judicial Divisions changed from 3.86% on the prior measurement date to 3.43% on the measurement date.

2016 Changes in Assumptions or Other Inputs Since 2015

- The investment return assumption was lowered from 7.50% to 7.25%.
- The price inflation assumption was lowered from 2.80% to 2.40%.
- The wage inflation assumption was lowered from 3.90% to 3.50%.
- The post-retirement mortality assumption for healthy lives for the State and Local Government Divisions was changed to the RP-2014 Healthy Annuitant Mortality Table with adjustments for credibility and gender adjustments of a 73% factor applied to ages below 80 and a 108% factor applied to age 80 and above, projected to 2018, for males, and a 78% factor applied to ages below 80 and a 109% factor applied to age 80 and above, projected to 2020, for females.
- The post-retirement mortality assumption for healthy lives for the School, Judicial, and DPS Divisions was changed to the RP-2014 White Collar Healthy Annuitant Mortality Table with adjustments for credibility and gender adjustments of a 93% factor applied to ages

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)— DIVISION TRUST FUNDS

(Dollars in Thousands)

- below 80 and a 113% factor applied to age 80 and above, projected to 2018, for males, and a 68% factor applied to ages below 80 and a 106% factor applied to age 80 and above, projected to 2020, for females.
- For disabled retirees, the mortality assumption was changed to reflect 90% of RP-2014 Disabled Retiree Mortality Table.
- The mortality assumption for active members was changed to RP-2014 White Collar Employee Mortality Table, a table specifically developed for actively working people. To allow for an appropriate margin of improved mortality prospectively, the mortality rates incorporate a 70% factor applied to male rates and a 55% factor applied to female rates.
- The rates of retirement, withdrawal, and disability were revised to reflect more closely actual experience.
- The estimated administrative expense as a percentage of covered payroll was increased from 0.35% to 0.40%.
- The SEIR for the State and School Divisions was lowered from 7.50% to 5.26% to reflect the changes to the projection's valuation basis, a projected year of depletion of the FNP, and the resulting application of the municipal bond index rate of 3.86% on the measurement date.
- The SEIR for the Local Government Division was lowered from 7.50% to 7.25%, reflecting the change in the long-term expected rate of return.
- The SEIR for the Judicial Division was lowered from 5.73% to 5.18% to reflect the changes to the projection's valuation basis, a projected year of depletion of the FNP, and the resulting application of the municipal bond index rate from 3.57% on the prior measurement date to 3.86% on the measurement date.
- The SEIR for the DPS Division was lowered from 7.50% to 7.25%, reflecting the change in the long-term expected rate of return.

2015 Changes in Assumptions or Other Inputs Since 2014

- The SEIR for the Judicial Division was lowered from 6.14% to 5.73% to reflect the changes to the projection's valuation basis, a projected year of depletion of the FNP, and the resulting application of the municipal bond index rate from 3.70% on the prior measurement date to 3.57% on the measurement date.
- The following programming changes were made:
 - Valuation of the full survivor benefit without any reduction for possible remarriage.
 - Reflection of the employer match on separation benefits for all eligible years.
 - Reflection of one year of service eligibility for survivor annuity benefit.
 - Refinement of the 18-month AI timing.
 - Refinements to directly value certain and life, modified cash refund and pop-up benefit forms.
- The following methodology changes were made:
 - Recognition of merit salary increases in the first projection year.
 - Elimination of the assumption that 35% of future disabled members elect to receive a refund.
 - Removal of the negative value adjustment for liabilities associated with refunds of future terminating members.
 - Adjustments to the timing of the normal cost and UAAL payment calculations to reflect contributions throughout the year.

Note 3—Methods and Assumptions Used in Calculations of ADC

The ADC rates, as a percentage of covered payroll, used to determine the ADC amounts in the Schedule of Employer and Nonemployer 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, 2022, actuarial valuation were used to determine contribution rates reported in that schedule for the year ending December 31, 2024:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll
Amortization period ¹	30 years, closed, layered
	22 years (23 years for Judicial and DPS Divisions, 25 years for School Division)
Equivalent single amortization period	
Asset valuation method	4-year smoothed market
Price inflation	2.30%
Real wage growth	0.70%
Wage inflation	3.00%
Salary increases, including wage inflation	2.80% to 12.40% ²
Long-term investment rate of return, net of pension plan investment expense, including price inflation	7.25%
Future post-retirement benefit increases	
PERA benefit structure hired prior to 1/1/07 and DPS benefit structure	1.00% compounded annually
PERA benefit structure hired after 12/31/06	0.00%, as financed by the AIR

¹ Effective with the December 31, 2014, actuarial valuation, gains and losses are to be amortized over a closed period.

² Salary increase range varies by Division Trust Fund.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET OPEB LIABILITY AND RELATED RATIOS—HEALTH CARE TRUST FUND¹

For the Years Ended December 31

	2024	2023	2022	2021	2020
Total OPEB liability					
Service cost	\$14,347	\$15,571	\$15,727	\$18,188	\$18,074
Interest	93,842	94,376	101,209	101,172	106,997
Changes of benefit terms	—	—	(43)	—	—
Difference between expected and actual experience	(33,646)	(18,579)	(59,877)	(52,850)	(68,772)
Changes of assumptions or other inputs	(118,468)	(8,889)	(65,295)	15,483	(69,759)
Benefit payments and health care claims/ administrative processing fees	(91,236)	(86,025)	(85,592)	(72,465)	(61,522)
Net change in total OPEB liability	(135,161)	(3,546)	(93,871)	9,528	(74,982)
Total OPEB liability – beginning	1,325,637	1,329,183	1,423,054	1,413,526	1,488,508
Total OPEB liability – ending (a)	\$1,190,476	\$1,325,637	\$1,329,183	\$1,423,054	\$1,413,526
Plan fiduciary net position					
Contributions – employer	\$123,529	\$112,931	\$103,818	\$97,974	\$94,634
Contributions – employer disaffiliation	20	1,033	—	—	—
Other additions (includes purchased service transfers)	6,231	6,755	9,004	8,108	7,909
Net investment income (loss)	67,524	69,617	(70,476)	68,319	60,280
Benefit payments	(88,492)	(82,911)	(83,145)	(63,893)	(53,023)
Administrative expense	(8,335)	(8,122)	(7,136)	(12,976)	(10,977)
Other deductions	(79)	(96)	(110)	(84)	(32)
Net change in plan fiduciary net position	100,398	99,207	(48,045)	97,448	98,791
Plan fiduciary net position – beginning	611,911	512,704	560,749	463,301	364,510
Plan fiduciary net position – ending (b)	\$712,309	\$611,911	\$512,704	\$560,749	\$463,301
Net OPEB liability – ending (a)-(b)	\$478,167	\$713,726	\$816,479	\$862,305	\$950,225
Plan fiduciary net position as a percentage of the total OPEB liability	59.83%	46.16%	38.57%	39.40%	32.78%
Covered payroll	\$11,613,399	\$10,656,973	\$9,671,062	\$9,337,899	\$8,988,119
Net OPEB liability as a percentage of covered payroll	4.12%	6.70%	8.44%	9.23%	10.57%

Please see next page for footnote references.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET OPEB LIABILITY AND RELATED RATIOS—HEALTH CARE TRUST FUND¹ (CONTINUED)

For the Years Ended December 31

	2019	2018	2017	2016 ²
Total OPEB liability				
Service cost	\$18,159	\$19,328	\$20,036	
Interest	117,840	112,849	108,625	
Changes of benefit terms	—	—	5	
Difference between expected and actual experience	(224,212)	(2,482)	7,354	
Changes of assumptions or other inputs	2,006	11,438	—	
Benefit payments and health care claims/ administrative processing fees	(65,019)	(77,221)	(116,960)	
Net change in total OPEB liability	(151,226)	63,912	19,060	
Total OPEB liability – beginning	1,639,734	1,575,822	1,556,762	
Total OPEB liability – ending (a)	\$1,488,508	\$1,639,734	\$1,575,822	\$1,556,762
Plan fiduciary net position				
Contributions – employer	\$92,011	\$86,559	\$83,077	
Contributions – employer disaffiliation	—	—	96	
Other additions (includes purchased service transfers)	6,984	8,373	9,760	
Net investment income (loss)	53,867	(9,678)	44,990	
Benefit payments	(58,221)	(61,777)	(102,665)	
Administrative expense	(9,290)	(20,401)	(19,162)	
Other deductions	(33)	(106)	(102)	
Net change in plan fiduciary net position	85,318	2,970	15,994	
Plan fiduciary net position – beginning	279,192	276,222	260,228	
Plan fiduciary net position – ending (b)	\$364,510	\$279,192	\$276,222	\$260,228
Net OPEB liability – ending (a)-(b)	\$1,123,998	\$1,360,542	\$1,299,600	\$1,296,534
Plan fiduciary net position as a percentage of the total OPEB liability	24.49%	17.03%	17.53%	16.72%
Covered payroll	\$8,834,404	\$8,399,835	\$7,927,280	\$7,716,894
Net OPEB liability as a percentage of covered payroll	12.72%	16.20%	16.39%	16.80%

¹ Information is not available prior to 2016. In future reports, additional years will be added until 10 years of historical data are presented.² Amounts for changes in net OPEB liability shaded in gray are not available for 2016.

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

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET OPEB LIABILITY AND RELATED RATIOS—DPS HEALTH CARE TRUST FUND¹

For the Years Ended December 31

	2024	2023	2022	2021	2020
Total OPEB liability					
Service cost	\$1,030	\$1,138	\$1,095	\$1,237	\$1,291
Interest	4,299	4,358	4,675	4,750	5,005
Changes of benefit terms	—	—	—	—	—
Difference between expected and actual experience	(1,228)	(2,206)	(2,353)	(2,855)	(4,339)
Changes of assumptions or other inputs	(5,649)	134	(3,703)	—	(1,764)
Benefit payments and health care claims/ administrative processing fees	(4,150)	(4,105)	(4,162)	(3,873)	(3,453)
Net change in total OPEB liability	(5,698)	(681)	(4,448)	(741)	(3,260)
Total OPEB liability – beginning	60,343	61,024	65,472	66,213	69,473
Total OPEB liability – ending (a)	\$54,645	\$60,343	\$61,024	\$65,472	\$66,213
Plan fiduciary net position					
Contributions – employer	\$10,187	\$9,445	\$8,744	\$8,622	\$8,045
Other additions (includes purchased service transfers)	169	236	306	206	224
Net investment income (loss)	7,216	7,218	(7,311)	6,963	6,019
Benefit payments	(4,010)	(3,951)	(4,022)	(3,516)	(3,086)
Administrative expense	(475)	(461)	(434)	(639)	(516)
Other deductions	(1)	(1)	(1)	(4)	(1)
Net change in plan fiduciary net position	13,086	12,486	(2,718)	11,632	10,685
Plan fiduciary net position – beginning	64,721	52,235	54,953	43,321	32,636
Plan fiduciary net position – ending (b)	\$77,807	\$64,721	\$52,235	\$54,953	\$43,321
Net OPEB liability (asset) – ending (a)-(b)	(\$23,162)	(\$4,378)	\$8,789	\$10,519	\$22,892
Plan fiduciary net position as a percentage of the total OPEB liability	142.39%	107.26%	85.60%	83.93%	65.43%
Covered payroll	\$888,094	\$894,245	\$810,403	\$823,396	\$771,347
Net OPEB liability (asset) as a percentage of covered payroll	(2.61%)	(0.49%)	1.08%	1.28%	2.97%

Please see next page for footnote references.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF CHANGES IN NET OPEB LIABILITY AND RELATED RATIOS—DPS HEALTH CARE TRUST FUND¹ (CONTINUED)
For the Years Ended December 31

	2019	2018	2017	2016 ²
Total OPEB liability				
Service cost	\$1,342	\$1,420	\$1,591	
Interest	4,970	5,245	5,057	
Changes of benefit terms	—	—	—	
Difference between expected and actual experience	(2,070)	(6,045)	(35)	
Changes of assumptions or other inputs	—	5	—	
Benefit payments and health care claims/ administrative processing fees	(3,968)	(4,693)	(6,191)	
Net change in total OPEB liability	274	(4,068)	422	
Total OPEB liability – beginning	69,199	73,267	72,845	
Total OPEB liability – ending (a)	\$69,473	\$69,199	\$73,267	\$72,845
Plan fiduciary net position				
Contributions – employer	\$7,649	\$7,417	\$6,930	
Other additions (includes purchased service transfers)	188	205	242	
Net investment income (loss)	4,892	(894)	3,305	
Benefit payments	(3,644)	(4,158)	(5,694)	
Administrative expense	(477)	(845)	(808)	
Other deductions	(1)	(4)	(4)	
Net change in plan fiduciary net position	8,607	1,721	3,971	
Plan fiduciary net position – beginning	24,029	22,308	18,337	
Plan fiduciary net position – ending (b)	\$32,636	\$24,029	\$22,308	\$18,337
Net OPEB liability – ending (a)-(b)	\$36,837	\$45,170	\$50,959	\$54,508
Plan fiduciary net position as a percentage of the total OPEB liability	46.98%	34.72%	30.45%	25.17%
Covered payroll	\$736,264	\$722,040	\$658,198	\$642,177
Net OPEB liability as a percentage of covered payroll	5.00%	6.26%	7.74%	8.49%

¹ Information is not available prior to 2016. In future reports, additional years will be added until 10 years of historical data are presented.

² Amounts for changes in net OPEB liability shaded in gray are not available for 2016.

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

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)—HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

SCHEDULE OF EMPLOYER CONTRIBUTIONS

For the Years Ended December 31

Health Care Trust Fund	2024	2023	2022	2021	2020
Actuarially determined contribution rate (a)	0.65%	0.73%	0.84%	0.89%	0.97%
Covered payroll (b)	\$11,613,399	\$10,656,973	\$9,671,062	\$9,337,899	\$8,988,119
Actuarially determined contribution (a) x (b)	75,487	77,796	81,237	83,107	87,185
Contributions in relation to the actuarially determined contribution ¹	123,529	112,931	103,818	97,974	94,634
Annual contribution excess	(\$48,042)	(\$35,135)	(\$22,581)	(\$14,867)	(\$7,449)
Actual contributions as a percentage of covered payroll	1.06%	1.06%	1.07%	1.05%	1.05%
	2019	2018	2017	2016	2015
Actuarially determined contribution rate (a)	1.11%	1.12%	1.08%	1.09%	1.15%
Covered payroll (b)	\$8,834,404	\$8,399,835	\$7,927,280	\$7,716,894	\$7,485,545
Actuarially determined contribution (a) x (b)	98,062	94,078	85,615	84,114	86,084
Contributions in relation to the actuarially determined contribution ¹	92,011	86,559	83,077	80,825	78,463
Annual contribution deficiency	\$6,051	\$7,519	\$2,538	\$3,289	\$7,621
Actual contributions as a percentage of covered payroll	1.04%	1.03%	1.05%	1.05%	1.05%
DPS Health Care Trust Fund	2024	2023	2022	2021	2020
Actuarially determined contribution rate (a)	0.16%	0.24%	0.35%	0.44%	0.51%
Covered payroll (b)	\$888,094	\$894,245	\$810,403	\$823,396	\$771,347
Actuarially determined contribution (a) x (b)	1,421	2,146	2,836	3,623	3,934
Contributions in relation to the actuarially determined contribution	10,187	9,445	8,744	8,622	8,045
Annual contribution excess	(\$8,766)	(\$7,299)	(\$5,908)	(\$4,999)	(\$4,111)
Actual contributions as a percentage of covered payroll	1.15%	1.06%	1.08%	1.05%	1.04%
	2019	2018	2017	2016	2015
Actuarially determined contribution rate (a)	0.60%	0.67%	0.68%	0.75%	0.81%
Covered payroll (b)	\$736,264	\$722,040	\$658,198	\$642,177	\$621,115
Actuarially determined contribution (a) x (b)	4,418	4,838	4,476	4,816	5,031
Contributions in relation to the actuarially determined contribution	7,649	7,417	6,930	6,723	6,371
Annual contribution excess	(\$3,231)	(\$2,579)	(\$2,454)	(\$1,907)	(\$1,340)
Actual contributions as a percentage of covered payroll	1.04%	1.03%	1.05%	1.05%	1.03%

¹ Contributions do not include disaffiliation payments, if applicable.

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

SCHEDULE OF INVESTMENT RETURNS

For the Years Ended December 31

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Annual money-weighted rate of return, net of investment expenses	10.9%	13.4%	(13.5%)	16.1%	17.1%	20.4%	(3.3%)	18.1%	7.3%	1.6%

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

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)— HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

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

2024 Changes in Plan Provisions Since 2023

- As of the December 31, 2024, measurement date, the fiduciary net position (FNP) and related disclosure components for the Health Care Trust Fund (HCTF) reflect additional payments related to the disaffiliation of Tri-County Health Department (Tri-County Health) as a PERA-affiliated employer, effective December 31, 2022. The additional employer disaffiliation payment allocations to the HCTF and Local Government Division Trust Fund were \$20 and \$486, respectively.

2023 Changes in Plan Provisions Since 2022

- As of the December 31, 2023, measurement date, the FNP and related disclosure components for the HCTF reflect payments related to the disaffiliation of Tri-County Health as a PERA-affiliated employer, effective December 31, 2022. As of the December 31, 2023, year-end, PERA recognized two additions for accounting and financial reporting purposes: a \$24,000 payment received on December 4, 2023 and a \$2,000 receivable. The employer disaffiliation payment and receivable allocations to the HCTF and Local Government Division Trust Fund were \$1,033 and \$24,967, respectively.

2022 Changes in Plan Provisions Since 2021

- The total OPEB liability for the HCTF, as of the December 31, 2022, measurement date, was adjusted to reflect the disaffiliation, allowable under C.R.S. § 24-51-313, of Tri-County Health, effective December 31, 2022. As of the close of the 2022 fiscal year, no disaffiliation payment associated with Tri-County Health was received, and therefore no disaffiliation dollars were reflected in the FNP as of the December 31, 2022, measurement date.

2021 Changes in Plan Provisions Since 2020

- There were no changes made to plan provisions.

2020 Changes in Plan Provisions Since 2019

- There were no changes made to plan provisions.

2019 Changes in Plan Provisions Since 2018

- There were no changes made to plan provisions.

2018 Changes in Plan Provisions Since 2017

- There were no changes made to plan provisions.

2017 Changes in Plan Provisions Since 2016

- The Cunningham Fire Protection District (CFPD) disaffiliated from the Local Government Division, thereby ending participation in the HCTF on December 2, 2017. For the purpose of disclosure as of the December 31, 2017, measurement date, liabilities were determined assuming no additional service accruals impacting possible future premium subsidies for the disaffiliated membership of the CFPD that had not refunded their PERA member contribution accounts. The total disaffiliation payment of \$1,159 was allocated to the Local Government Division Trust Fund and the HCTF in the amount of \$1,063 and \$96, respectively.

2016 Changes in Plan Provisions Since 2015

- There were no changes made to plan provisions.

2015 Changes in Plan Provisions Since 2014

- There were no changes made to plan provisions.

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

2024 Changes in Assumptions or Other Inputs Since 2023

- Salary scale assumptions were altered to better reflect actual experience.
- Rates of termination/withdrawal, retirement, and disability were revised to more closely reflect actual experience.
- The adjustments for credibility applied to the Pub-2010 mortality tables for active and retired lives, including beneficiaries, were updated based on experience. In addition, the mortality projection scale was updated to the 2024 adjusted scale MP-2021 to reflect future improvements in mortality for all groups.
- Participation rates were reduced.
- MAPD premium costs are no longer age graded.

2023 Changes in Assumptions or Other Inputs Since 2022

- There were no changes made to the actuarial methods or assumptions.

2022 Changes in Assumptions or Other Inputs Since 2021

- The timing of the retirement decrement was adjusted to middle-of-year.

2021 Changes in Assumptions or Other Inputs Since 2020

- There were no changes made to the actuarial methods or assumptions.

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)— HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

2020 Changes in Assumptions or Other Inputs Since 2019

- The price inflation assumption was lowered from 2.40% to 2.30%.
- The wage inflation assumption was lowered from 3.50% to 3.00%.
- The real rate of investment return assumption was increased to 4.95% per year, net of investment expenses from 4.85% per year, net of investment expenses.
- Rates of termination/withdrawal, retirement, and disability were revised to more closely reflect actual experience.
- The pre-retirement mortality assumption for the State and Local Government Divisions (members other than Safety Officers) was changed to the PubG-2010 Employee Table with generational projection using scale MP-2019.
- The pre-retirement mortality assumption for Safety Officers was changed to the PubS-2010 Employee Table with generational projection using scale MP-2019.
- The pre-retirement mortality assumption for the School and DPS Divisions was changed to the PubT-2010 Employee Table with generational projection using scale MP-2019.
- The pre-retirement mortality assumption for the Judicial Division was changed to the PubG-2010(A) Above-Median Employee Table with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for the State and Local Government Divisions (members other than Safety Officers) was changed to the PubG-2010 Healthy Retiree Table, adjusted as follows:
 - **Males:** 94% of the rates prior to age 80 and 90% of the rates for ages 80 and older, with generational projection using scale MP-2019.
 - **Females:** 87% of the rates prior to age 80 and 107% of the rates for ages 80 and older, with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for Safety Officers was changed to the unadjusted PubS-2010 Healthy Retiree Table, with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for the School and DPS Divisions was changed to the PubT-2010 Healthy Retiree Table, adjusted as follows:
 - **Males:** 112% of the rates prior to age 80 and 94% of the rates for ages 80 and older, with generational projection using scale MP-2019.

- **Females:** 83% of the rates prior to age 80 and 106% of the rates for ages 80 and older, with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for the Judicial Division was changed to the unadjusted PubG-2010(A) Above-Median Healthy Retiree Table with generational projection using scale MP-2019.
- The post-retirement non-disabled beneficiary mortality assumption for the Division Trust Funds was changed to the Pub-2010 Contingent Survivor Table, adjusted as follows:
 - **Males:** 97% of the rates for all ages, with generational projection using scale MP-2019.
 - **Females:** 105% of the rates for all ages, with generational projection using scale MP-2019.
- The disabled mortality assumption for the Division Trust Funds (members other than Safety Officers) was changed to the PubNS-2010 Disabled Retiree Table using 99% of the rates for all ages with generational projection using scale MP-2019.
- The disabled mortality assumption for Safety Officers was changed to the unadjusted PubS-2010 Disabled Retiree Table with generational projection using scale MP-2019.
- The mortality tables are generational mortality tables developed on a head-count weighted basis.

2019 Changes in Assumptions or Other Inputs Since 2018

- There were no changes made to the actuarial methods or assumptions.

2018 Changes in Assumptions or Other Inputs Since 2017

- There were no changes made to the actuarial methods or assumptions.

2017 Changes in Assumptions or Other Inputs Since 2016

- There were no changes made to the actuarial methods or assumptions.

2016 Changes in Assumptions or Other Inputs Since 2015

- The following methodology change was made:
 - The Entry Age Normal actuarial cost method allocation basis has been changed from a level dollar amount to a level percentage of pay.
- The following changes were made to the actuarial assumptions:
 - The investment rate of return assumption decreased from 7.50% to 7.25%.
 - The price inflation assumption decreased from 2.80% to 2.40%

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)— HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

- The wage inflation assumption decreased from 3.90% to 3.50%.
 - The mortality assumption for active members was changed to RP-2014 White Collar Employee Mortality Table, a table specifically developed for actively working people. To allow for an appropriate margin of improved mortality prospectively, the mortality rates incorporate a 70% factor applied to male rates and a 55% factor applied to female rates.
 - The post-retirement mortality assumption for healthy lives for the State and Local Government Divisions was changed to the RP-2014 Healthy Annuitant Mortality Table with adjustments for credibility and gender adjustments of a 73% factor applied to ages below 80 and a 108% factor applied to age 80 and above, projected to 2018, for males, and a 78% factor applied to ages below 80 and a 109% factor applied to age 80 and above, projected to 2020, for females.
 - The post-retirement mortality assumption for healthy lives for the School, Judicial, and DPS Divisions was changed to the RP-2014 White Collar Healthy Annuitant Mortality Table with adjustments for credibility and gender adjustments of a 93% factor applied to ages below 80 and a 113% factor applied to age 80 and above, projected to 2018, for males, and a 68% factor applied to ages below 80 and a 106% factor applied to age 80 and above, projected to 2020, for females.
 - For disabled retirees, the mortality assumption was changed to reflect 90% of RP-2014 Disabled Retiree Mortality Table.
 - The assumed rates of withdrawal, retirement, and disability have been adjusted to more closely reflect experience.
 - The assumed rates of PERACare participation have been revised to reflect more closely actual experience.
 - Initial per capita health care costs for those PERACare enrollees under the PERA benefit structure who are expected to attain age 65 and older ages and are not eligible for premium-free Medicare Part A benefits have been updated to reflect the change in costs for the 2017 plan year.
 - The percentage of PERACare enrollees who will attain age 65 and older ages and are assumed to not qualify for premium-free Medicare Part A coverage have been revised to reflect more closely actual experience.
 - The percentage of disabled PERACare enrollees who are assumed to not qualify for premium-free Medicare Part A coverage has been revised to reflect more closely actual experience.
 - The health care cost trend rates for Medicare Part A premiums have been revised to reflect the then-current expectation of future increases in rates of inflation applicable to Medicare Part A premiums.
 - Assumed election rates for the PERACare coverage options available to future PERACare enrollees who will qualify for the “No Part A Subsidy” when they retire have been revised to more closely reflect actual experience.
 - Assumed election rates for the PERACare coverage options available to those current PERACare enrollees, who qualify for the “No Part A Subsidy” but have not reached age 65, have been revised to more closely reflect actual experience.
 - The rates of PERACare coverage election for spouses of eligible inactive members and future retirees was revised to reflect more closely actual experience.
 - The assumed age differences between future retirees and their participating spouses have been revised to reflect more closely actual experience.
- 2015 Changes in Assumptions or Other Inputs Since 2014**
- The following methodology changes were made:
 - Rates of morbidity to model the growth in assumed claims as a PERACare enrollee ages have been added to the process used to project per capita health care costs of those PERACare enrollees under the PERA benefit structure who have attained age 65 and older and are not eligible for premium-free Medicare Part A benefits.
 - Adjustments were made to the timing of the normal cost and unfunded actuarial accrued liability (UAAL) payment calculations to reflect contributions throughout the year.
 - The following changes were made to the actuarial assumptions:
 - The percentage of PERACare enrollees who will attain age 65 and older ages and are assumed to not qualify for premium-free Medicare Part A coverage have been revised to more closely reflect actual experience.
 - Initial per capita health care costs for those PERACare enrollees under the PERA benefit structure who are expected to attain age 65 and older ages and are not eligible for premium-free Medicare Part A benefits have been updated to reflect the change in costs for the 2016 plan year.
 - The health care cost trend rates for Medicare Part A premiums have been revised to reflect the current expectation of future increases in rates of inflation applicable to Medicare Part A premiums.

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)— HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

Note 3—Methods and Assumptions Used in Calculations of ADC

The ADC rates, as a percentage of covered 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, 2022, actuarial valuation were used to determine contribution rates reported in that schedule for the year ending December 31, 2024:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll
Amortization period ¹	30 years, closed, layered
Asset valuation method	4-year smoothed market
Price inflation	2.30%
Real wage growth	0.70%
Wage inflation	3.00%
Salary increases, including wage inflation	3.00% in aggregate
Long-term investment rate of return, net of OPEB plan investment expense, including price inflation	7.25%
Health care inflation factors	
PERA benefit structure:	
Service-based premium subsidy	0.00%
Medicare Part A premiums ²	3.50% initial 4.50% ultimate
Carrier premiums ^{2,3}	7.00% initial 4.50% ultimate
DPS benefit structure:	
Service-based premium subsidy	0.00%
Medicare Part A premiums	N/A
Carrier premiums	N/A

¹ Effective with the December 31, 2017, actuarial valuation, gains and losses are to be amortized over a closed period.

² The Medicare Part A and carrier premiums only apply to calculation of the implicit subsidy applicable to the PERA benefit structure.

³ UnitedHealthcare MAPD PPO plans are 0% for 2023.

SUPPLEMENTARY SCHEDULES

(Dollars in Thousands)

SCHEDULE OF ADMINISTRATIVE EXPENSES

For the Year Ended December 31

	2024
Personnel Services	
Salaries	\$52,318
Employee benefits	16,235
Total personnel services	68,553
Professional and Consulting Services	
Investment services	4,240
Other professional and consulting services	12,299
Total professional and consulting services	16,539
Miscellaneous	
Building rent, utilities, and supplies	1,305
Insurance	568
Memberships, publications, and subscriptions	291
Office supplies and printing	948
Postage	1,023
Services and equipment rental	2,228
Travel and meeting	712
Total miscellaneous	7,075
Direct Expenses	
Voluntary Investment Program	1,631
Defined Contribution Retirement Plan	185
Deferred Compensation Plan	522
Health Care Trust Fund	2,754
Denver Public Schools Health Care Trust Fund	141
Total direct expenses	5,233
Depreciation and amortization¹	1,779
Tenant and other expenses/(income)¹	179
Less internal investment manager expenses	(32,350)
Total administrative expenses	\$67,008

¹ \$338 in depreciation of tenant capital assets is included in tenant and other expenses/(income).

Note: The 2024 ratio of administrative expenses to fiduciary net position is eight basis points (0.08%) for the Division Trust Funds and is nine basis points (0.09%) for all funds.

See accompanying Independent Auditors' Report.

SUPPLEMENTARY SCHEDULES

(Dollars in Thousands)

SCHEDULE OF INVESTMENT EXPENSES

For the Year Ended December 31

	2024
Division Trust Funds, Health Care Trust Funds, and Life Insurance Reserve	
External manager expenses	
Global equity	\$29,533
Fixed income	—
Private equity	72,120
Real estate	37,648
Alternatives	61,063
Cash and cash equivalents	383
Total external manager expenses	200,747
Internal manager expenses	30,667
Other investment expenses and custody fees	8,190
Defined Contribution Plans	
Internal manager expenses	1,683
Other investment expenses	3,282
Total investment expenses	\$244,569

SCHEDULE OF PAYMENTS FOR PROFESSIONAL AND CONSULTING SERVICES

For the Year Ended December 31

	2024
Professional and Consulting Services	
Actuarial	\$949
Audit and accounting	364
Payroll services	93
Legal and legislative counsel	3,334
Computer services and consulting	3,720
Management consulting	2,192
Health care consulting	412
Other	1,235
Total payments for professional and consulting services¹	\$12,299

¹ Excludes investment advisers.

The Schedule of Commissions and other information related to investment expenses can be found in the Investment Section on pages 129-133.

See accompanying Independent Auditors' Report.

Investment Section

The background of the page is an abstract geometric design. The top half is a solid dark blue. A diagonal line runs from the left edge, about one-third of the way down, to the right edge. Below this line, the background is composed of a grid of squares. The squares are colored in three main groups: orange, grey, and light blue. The orange squares are located in the top-left, top-middle, and top-right areas, following the diagonal line. The grey squares are located in the bottom-left, bottom-middle, and bottom-right areas. The light blue squares are located in the bottom-left, bottom-middle, and bottom-right areas. The overall effect is a modern, minimalist design.



DEFINED BENEFIT PLANS

CHIEF INVESTMENT OFFICER LETTER



June 27, 2025

Dear Colorado PERA Stakeholders:

The Public Employees' Retirement Association of Colorado (PERA) provides stable retirement benefits for more than 700,000 members, contributing to local economies from Durango to Julesburg. Our dedicated investment team manages 61% of assets internally, including 100% of fixed income and nearly 75% of global equities, at a cost that is among the lowest of its peers. Low-cost internal management, paired with our skilled external advisors, has allowed us to stay on course to achieve full funding. For the 30-year period ending December 31, 2024, Colorado PERA has achieved a total portfolio return of 8.4% (annualized, time weighted, net-of-fees), greater than the assumed rate of return of 7.25%. Double-digit returns in 2024 allowed the investment portfolio to end the year at \$66.7 billion, a net increase of \$5.2 billion from 2023.

Long-term performance is driven by the Board-approved strategic asset allocation policy and is determined by an asset/liability study conducted every three to five years. We began work on the latest asset/liability study in 2023 and it was completed in 2024. The asset/liability study resulted in modest changes to the strategic asset allocation policy effective January 1, 2025, and will guide long-term performance of the diversified portfolio while balancing expected return and risk.

Our organization continues to evolve, with several multi-year projects ongoing. Work on modernizing our investment systems is underway, with the migration to Athena, FundHub, and Snowflake bringing improved data management and investment analytic capabilities to the organization. Progress toward unitization of the defined benefit plan continued as the Global Equity asset class was completed in early 2025. By unitizing PERA's defined benefit asset classes, we can more effectively integrate those investment offerings into our defined contribution investment lineup.

Total Portfolio

Global markets trended higher in 2024 with stock and bond indices posting positive performance. PERA's performance was driven by strong returns in domestic equity (MSCI USA IMI +23.3%) and, to a lesser degree, international equity (MSCI ACWI ex U.S. IMI +5.2%) with fixed income also contributing positive returns (Bloomberg U.S. Agg +1.3%).

Inflation continued to ease in 2024 with the consumer price index (CPI) and personal consumption expenditures (PCE) price index moving closer to the Federal Reserve's (Fed) target rate of inflation. Unemployment increased modestly, but softening inflation allowed the Fed to cut rates by a full 100 basis points (bps) to better manage their dual mandate of price stability and maximum employment. Wage and salary growth again outpaced inflation, providing a boost to consumer spending.

Long-term relative outperformance has been anchored by PERA's strategic asset allocation policy and our low-cost internal management of public assets. The equity portfolio's U.S. large cap exposure contributed to strong returns, as these holdings have outperformed small cap and international equity, while historically low interest rates and accommodative monetary policy aided fixed income's outperformance over the benchmark during the last decade. Private asset performance was helped along by these same forces, with private equity outperforming public markets

For the year ended December 31, 2024, PERA's total fund returned 10.8%, compared to the policy benchmark's return of 11.1%. PERA's policy benchmark is a passive representation of the asset allocation policy adopted by the Board. The total fund has outperformed the policy benchmark over the five- and 10-year periods (8.2% versus 7.3% and 8.3% versus 7.5%, for the five- and 10-year periods, respectively) and trailed over the three-year period (2.8% versus 3.1%).



Amy C. McGarrity
Chief Investment Officer/
Chief Operating Officer

DEFINED BENEFIT PLANS

The total fund return of 10.8% for 2024 outperformed a hypothetical portfolio consisting of 60% global equities (MSCI ACWI IMI) and 40% fixed income (Bloomberg U.S. Aggregate Bond Index), which returned 10.3%. The total fund has performed better than this hypothetical portfolio over the three-, five-, and 10-year periods (2.8% versus 2.2%, 8.2% versus 6.0%, and 8.3% versus 6.3%, for the three-, five-, and 10-year periods, respectively). The total fund return of 10.8% outperformed the BNY Mellon Performance & Risk Analytics in conjunction with the Investment Metrics Median Public Fund Universe return of 8.9%. As of December 31, 2024, this universe was comprised of 184 public pension funds over \$1 billion with aggregate assets of approximately \$4.3 trillion. The total fund has performed better than this universe over the five- and 10-year periods and trailed over the three-year period.

Global Equity

U.S. economic resiliency, moderating inflation, and expectations of rate cuts from the Fed lifted global equity markets in 2024. U.S. equity markets saw robust returns, driven by technological innovation (e.g., artificial intelligence - AI), a decisive U.S. election outcome, and an expansion in valuation multiples, particularly among U.S. mega-cap technology stocks. Over the last decade, U.S. equities, led by the technology sector, significantly outperformed international markets, although bouts of volatility due to geopolitical events (e.g., wars, trade tensions), pandemic supply disruptions, and subsequent inflation occurred in more recent years.

PERA's Global Equity portfolio returned 17.1% in 2024, outperforming its custom benchmark's return of 16.7%. The Global Equity portfolio has outperformed its custom benchmark over the one-, five-, and 10-year periods and trailed over the three-year period.

Fixed Income

The Fed cut rates 100 bps, to a range of 4.25%-4.50%, in the latter half of 2024 as the PCE price index continued to decline, ending the year at 2.6%. Volatility persisted in the rates markets with the 10-year Treasury rate fluctuating between a low of 3.6% in September and 4.6% at year end. Fixed income returns experienced headwinds over the last five years in large part to rising interest rates caused by higher inflation and large government deficits following the pandemic.

During 2024, PERA's Fixed Income portfolio returned 1.7%, outperforming its custom benchmark's return of 1.3%. The Fixed Income portfolio has outperformed its custom benchmark over the one-, three-, five-, and 10-year periods.

Private Equity

Valuations paid by private equity (PE) sponsors in 2024 increased relative to the prior year and remained above long-term averages. PE exit activity remained below long-term averages while interest rates and inflation continued to hinder deal-making. Continuation vehicles grew meaningfully in 2024 and have become an alternative to more traditional exit routes such as initial public offerings (IPO) or merger and acquisitions (M&A). PE deal activity increased in 2024 after a relatively tepid 2023 and remained robust relative to 10-year averages. Secondaries continue to allow for liquidity during exit scarcity, with global transaction volumes reaching a decade high.

PERA's Private Equity portfolio returned 6.4% in 2024, compared with its custom benchmark's return of 18.2%. The Private Equity portfolio has outperformed its custom benchmark over the five-year period and trailed over the one-, three-, and 10-year periods. The ultimate goal of private equity is to outperform public equities over the long term. Over the past 10 years, the Private Equity portfolio has outperformed the Global Equity custom benchmark by 2.3%. The portfolio's 35-year internal rate of return as of December 31, 2024, was 10.3% compared to its custom benchmark's internal rate of return of 6.2%.

Real Estate

Rising interest rates, challenging liquidity, and downward pressure on asset valuations made 2024 a difficult total return year for real estate investments. Increasing material costs, softness in tenant demand, and reduction of goods movement globally led to valuation impairments in industrial investments. However, an underweighting to office properties in a declining valuation environment proved to be a short-term positive in the portfolio. Longer term, the portfolio has benefited from a tactical move toward overweighting multifamily and industrial properties, and direct investments held for an extended period has reduced frictional costs and led to predictable income yields.

PERA's Real Estate portfolio returned negative 0.6% in 2024, outperforming its custom benchmark's return of negative 1.8%. The Real Estate portfolio has outperformed its custom benchmark over the one-, three-, five-, and 10-year periods.

DEFINED BENEFIT PLANS

Alternatives

PERA's risk mitigation strategy within the Alternatives asset class produced significant excess returns in 2024, while the opportunistic and real asset strategies trailed their respective benchmarks, although all sub-portfolios generated positive returns for the year. Within risk mitigation, multi-strategy funds had a strong year, while global macro funds had more mixed results. Gains in the opportunistic strategy were challenged by private market funds and real asset strategy performance was tempered by timber and agriculture investments. Over longer periods, the opportunistic strategy has produced the highest returns, driven by private credit, special situations, and tactical strategies. Real assets and risk mitigation have added to performance by generating consistent returns and current income and providing downside protection during periods of volatility.

In 2024, PERA's Alternatives portfolio returned 8.0%, compared with its custom benchmark's return of 8.6%. The Alternatives portfolio has outperformed its custom benchmark over the three-, five-, and 10-year periods and trailed over the one-year period.

PERA continues to engage with our stakeholders and adapt to the evolving needs of today's retirees and tomorrow's workforce. Our investment team remains dedicated to achieving strong returns over the long term, within the Board's asset allocation framework. We are honored to serve our members and are dedicated to providing secure retirement income for generations of Coloradans.

Sincerely,

Amy C. McGarrity
Chief Investment Officer/Chief Operating Officer
Colorado PERA

DEFINED BENEFIT PLANS

REPORT ON INVESTMENT ACTIVITY

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

The Division Trust Funds, the Health Care Trust Funds, and the Life Insurance Reserve are included in the information discussed in this subsection on Colorado PERA's defined benefit plans.

State Law

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

- The aggregate amount of moneys invested in corporate stocks or corporate bonds, notes, or debentures, which are convertible into corporate stock or in investment trust shares cannot exceed 65% 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% of the then book value of the fund.
- The fund cannot acquire more than 12% of the outstanding stock or bonds of any single corporation.
- The origination of mortgages or deeds of trust on real residential property is prohibited.

Additionally, Colorado Revised Statutes (C.R.S.) § 24-54.8-201 *et seq.* imposes targeted divestment from companies that have economic prohibitions against Israel.

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.

Objective

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 for the fund. This strategic asset allocation contains a policy benchmark weight and specific ranges within which each asset class may operate. The asset allocation policy benchmark weight and ranges in effect for 2024 are listed as follows:

ASSET ALLOCATION TARGETS AND RANGES¹

	Policy Benchmark Weight	Target Range
Global Equity	54.0%	48.0% – 60.0%
Fixed Income	23.0%	18.0% – 28.0%
Private Equity	8.5%	4.0% – 13.0%
Real Estate	8.5%	4.0% – 13.0%
Alternatives	6.0%	0.0% – 12.0%
Cash and Cash Equivalents	0.0%	0.0% – 3.0%

¹ See Note 5 of the Notes to the Financial Statements in the Financial Section for detailed disclosures about each asset class.

The asset allocation policy is determined by an intensive asset/liability study which considers expected investment returns, risks, and correlations of returns. 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, while ensuring an appropriate level of risk is incurred. The current strategic asset allocation was determined by an asset/liability study completed in 2019. The Board finalized an asset/liability study in 2024, which was prepared by Aon Investments USA Inc. (Aon). The objective of the study was to determine the optimal strategic asset allocation that will ultimately allow PERA to meet its financial obligations, while also ensuring that PERA incurs appropriate levels of risk and liquidity. As a result of this study, the Board slightly modified the asset allocation ranges and targets effective January 1, 2025, while reaffirming the investment return assumption of 7.25%.

The asset allocation targets are adhered to through the implementation of portfolio rebalancing. Investments are managed and monitored in a manner which seeks to balance return and risk within the asset/liability

DEFINED BENEFIT PLANS

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.

Basis of Presentation

Aon, the Board's defined benefit plan investment 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. Returns for periods longer than one year are annualized.

Investment Stewardship

It is the fiduciary duty of the Board and Investment staff to manage plan assets with prudence and care in pursuit of long-term financial sustainability for the benefit of members and plan participants. PERA staff demonstrate stewardship of plan assets by: protecting members' interests through cost-conscious investments; integrating financially material factors into investment decisions; advocating for robust market practices that support long-term value; and evaluating portfolio exposures and performance on an ongoing basis.

Investment staff initiatives and philosophy supporting the pursuit of financial sustainability through stewardship are discussed in greater detail in PERA's *Investment Stewardship Report*. The *Investment Stewardship Report* is updated annually, and can be found on PERA's website at copera.org.

Proxy Voting

As part of investment stewardship, PERA promotes corporate governance and other business practices expected to contribute to financial sustainability through proxy voting. The Board views the right to vote as an asset of the plans to be managed under fiduciary duty, and has charged the Investment Committee with oversight in fulfilling that responsibility.

The Board and the Investment Committee have delegated to staff the authority to review and vote on proxy proposals in compliance with PERA's *Proxy Voting Policy (Policy)*. Accordingly, staff vote proxies for domestic and international equity shares held in separately managed public market portfolios.

The *Policy* sets forth guidance on a broad range of issues that may present risks and opportunities for the public companies in which PERA invests. The Board regularly updates the *Policy* in seeking alignment of corporate management interests with the interests of long-term shareholders, as relevant to PERA's investment thesis. The *Policy* was reviewed and approved in 2024. The *Policy* and a link to disclosure of votes cast can be viewed on PERA's website at copera.org.

DEFINED BENEFIT PLANS

Aon provides the investment returns for the fund based on data made available by Northern Trust. The annualized one-, three-, five-, and 10-year net-of-fees time-weighted rates of return for each asset class and their respective benchmarks are as follows:

SCHEDULE OF INVESTMENT RESULTS

As of December 31, 2024

	2024	3-Year	5-Year	10-Year
PERA Total Portfolio	10.8%	2.8%	8.2%	8.3%
Total Fund Policy Benchmark ¹	11.1%	3.1%	7.3%	7.5%
Median Plan (BNY Mellon Performance & Risk Analytics in conjunction with Investment Metrics Median Public Fund Universe)	8.9%	2.9%	6.9%	7.0%
Global Equity	17.1%	4.8%	10.8%	10.3%
Global Equity Custom Benchmark ²	16.7%	5.2%	10.0%	9.2%
Fixed Income	1.7%	(2.0%)	0.1%	1.7%
Fixed Income Custom Benchmark ³	1.3%	(2.4%)	(0.3%)	1.5%
Private Equity	6.4%	1.3%	11.7%	11.5%
Private Equity Custom Benchmark ⁴	18.2%	6.7%	11.5%	12.7%
Real Estate	(0.6%)	0.5%	5.9%	8.6%
Real Estate Custom Benchmark ⁵	(1.8%)	(2.6%)	2.5%	5.4%
Alternatives	8.0%	7.8%	8.1%	6.8%
Alternatives Custom Benchmark ⁶	8.6%	5.7%	7.4%	6.5%
Cash and Cash Equivalents	5.4%	4.1%	2.5%	1.9%
ICE BofAML U.S. 3-Month Treasury Bill Index	5.3%	3.9%	2.5%	1.8%

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

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

- The Total Fund Policy Benchmark—A combination of 54.0% of the Global Equity Custom Benchmark, 23.0% of the Fixed Income Custom Benchmark, 8.5% of the Private Equity Custom Benchmark, 8.5% of the Real Estate Custom Benchmark, and 6.0% of the Alternatives Custom Benchmark. Prior to January 2023, 55.0% of the Global Equity Custom Benchmark, 23.5% of the Fixed Income Custom Benchmark, 8.5% of the Private Equity Custom Benchmark, 8.5% of the Real Estate Custom Benchmark, and 4.5% of the Alternatives Custom Benchmark. Prior to January 2022, 55.5% of the Global Equity Custom Benchmark, 23.5% of the Fixed Income Custom Benchmark, 8.5% of the Private Equity Custom Benchmark, 8.5% of the Real Estate Custom Benchmark, and 4.0% of the Alternatives Custom Benchmark. Prior to January 2021, 56.0% of the Global Equity Custom Benchmark, 23.5% of the Fixed Income Custom Benchmark, 8.5% of the Private Equity Custom Benchmark, 8.5% of the Real Estate Custom Benchmark, and 3.5% of the Alternatives Custom Benchmark. Prior to January 2020, 53.5% of the Global Equity Custom Benchmark, 23.5% of the Fixed Income Custom Benchmark, 8.5% of the Private Equity Custom Benchmark, 8.5% of the Real Estate Custom Benchmark, 5.0% of the Alternatives Custom Benchmark, and 1.0% of the ICE BofAML U.S. 3-Month Treasury Bill Index. Prior to July 2016, 55.0% of the Global Equity Custom Benchmark, 24.0% of the Fixed Income Custom Benchmark, 7.5% of the Real Estate Custom Benchmark, 7.5% of the Private Equity Custom Benchmark, 5.0% of the Alternatives Custom Benchmark, and 1.0% of the ICE BofAML U.S. 3-Month Treasury Bill Index. Prior to July 2015, 56.0% of the Global Equity Custom Benchmark, 25.0% of the Fixed Income Custom Benchmark, 7.0% of the Real Estate Custom Benchmark, 7.0% of the Private Equity Custom Benchmark, and 5.0% of the Alternatives Custom Benchmark.

² MSCI ACWI IMI (Net) with USA Gross. Prior to July 2018, MSCI ACWI IMI.

³ Bloomberg U.S. Aggregate Bond Index. Prior to August 2018, Bloomberg U.S. Universal Bond Index. Prior to July 2015, 98.0% of the Bloomberg U.S. Universal Bond Index and 2.0% of the Bloomberg U.S. Long Government/Credit Index.

⁴ MSCI ACWI IMI (Net) with USA Gross plus 150 basis points. Prior to January 2019, Burgiss Time Weighted Rate of Return Benchmark. Prior to January 2015, DJ U.S. Total Stock Market Index plus 250 basis points annually.

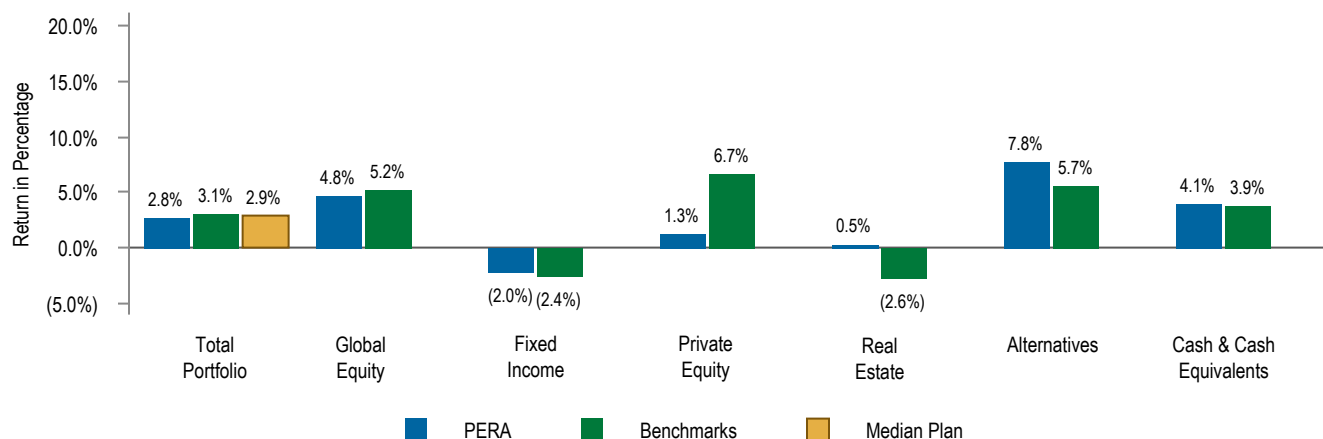
⁵ NCREIF Open End Diversified Core Equity Index (NFI-ODCE) plus 50 basis points annually.

⁶ Weighted average of each of the three objectives (Risk Mitigation: HFRI FOF Market Defensive Index, Real Assets: CPI plus 400 basis points, Opportunistic: PERA Public Markets plus 150 basis points). Prior to January 2019, weighted aggregate of the benchmarks of the individual strategies included in Alternatives.

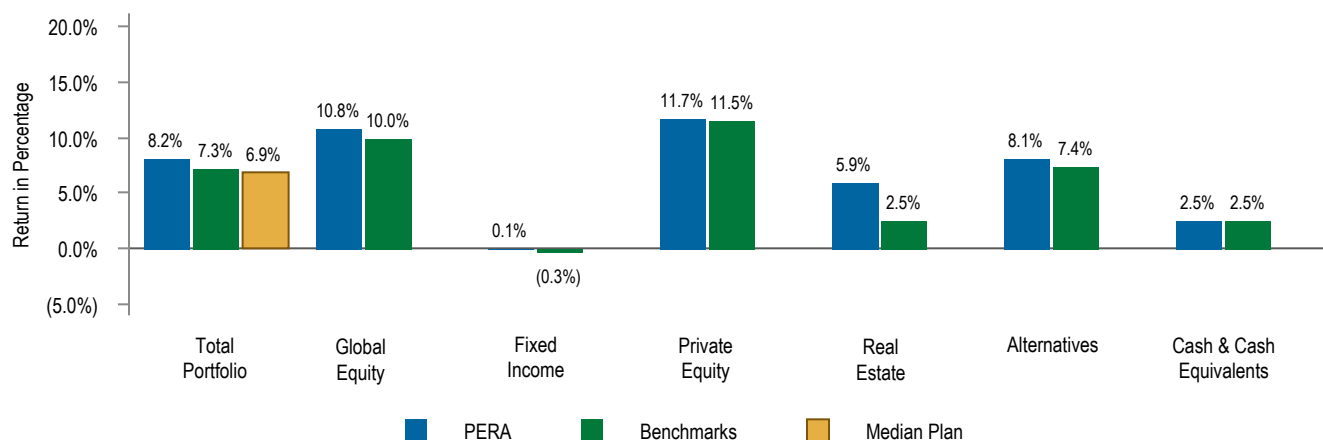
DEFINED BENEFIT PLANS

The three-, five-, and 10-year net-of-fees time-weighted rates of return for the total fund and each asset class and their respective benchmarks are as follows:

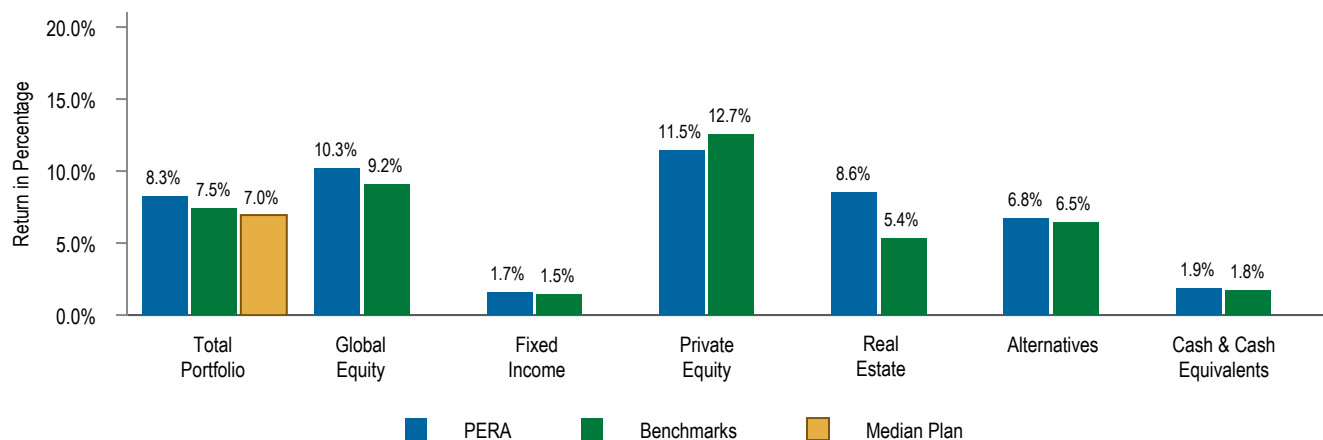
Three-Year Net-of-Fees Time-Weighted Rates of Return



Five-Year Net-of-Fees Time-Weighted Rates of Return



Ten-Year Net-of-Fees Time-Weighted Rates of Return



DEFINED BENEFIT PLANS

(Dollars in Thousands)

INVESTMENT SUMMARY

	Fair Value per Financial Statements December 31, 2024	Reallocation of Investment Amounts ¹	Non- Investment Amounts ²	Fair Value per Investment Portfolio December 31, 2024	2024 Policy Benchmark Weight ³	Actual Asset Allocation (% of Fair Value)		
						12/31/24	12/31/23	12/31/22
Global Equity	\$36,792,886	\$207,725	\$—	\$37,000,611	54.0%	55.5%	55.0%	52.8%
Fixed Income	12,777,961	373,611	—	13,151,572	23.0%	19.7%	18.9%	19.4%
Private Equity	5,119,455	5	—	5,119,460	8.5%	7.7%	8.7%	9.2%
Real Estate	6,172,439	(978)	—	6,171,461	8.5%	9.2%	10.1%	11.9%
Alternatives	4,793,892	1	—	4,793,893	6.0%	7.2%	6.9%	6.3%
Cash and Cash Equivalents								
Operating Cash	5,822	—	(5,822)	—				
Cash and Cash Equivalents	1,760,665	(1,288,103)	—	472,562	0.0%	0.7%	0.4%	0.4%
Net securities lending collateral and obligations	69,316	(69,316)	—	—				
Net investment settlements and income and other liabilities ⁴	(883,838)	777,055	106,783	—				
Benefit, interfund, and other receivables, and capital assets ⁵	260,467	—	(260,467)	—				
Deferred inflows of resources	(1,977)	—	1,977	—				
Total	\$66,867,088	\$—	(\$157,529)	\$66,709,559	100.0%	100.0%	100.0%	100.0%

¹ Investment receivables, payables, accruals, securities lending collateral, securities lending obligations, and cash and cash equivalents are allocated back to the investment portfolios that hold them.

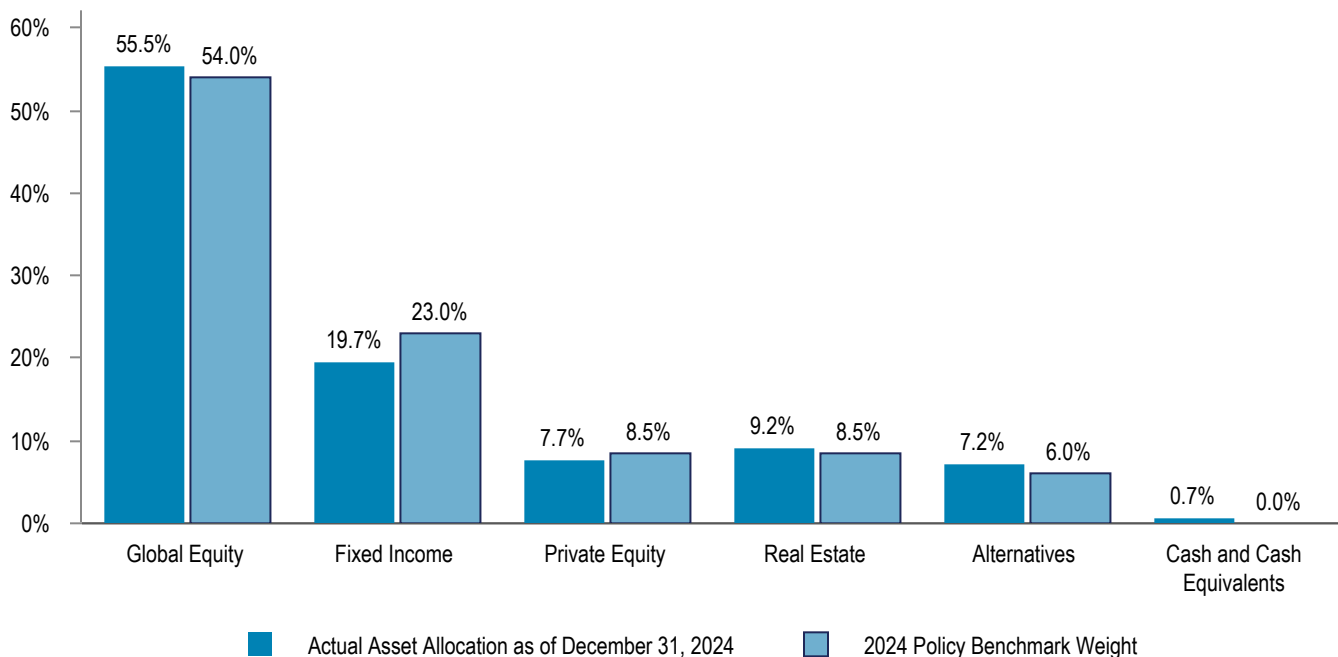
² Non-investment amounts are not included in the determination of actual investment asset allocation.

³ See page 124 for more information about the strategic asset allocation of the fund.

⁴ Includes non-investment payables of \$106,783.

⁵ Includes benefit receivables of \$239,479, interfund receivables of \$689, other receivables of \$4,840, and capital assets of \$15,459.

Actual Asset Allocation versus Policy Benchmark Weight



DEFINED BENEFIT PLANS

(Dollars in Thousands)

(In actual dollars for this paragraph only)

Total investment expenses for internal and external asset management of PERA's \$66.7 billion investment portfolio were \$239.6 million representing about 35.9 bps. PERA strives to manage the investment assets in a cost efficient manner. The driving factor in the low overall cost is the use of internal management. PERA staff manages 61.0% of total fund assets in-house at a calculated cost for internal asset management of \$20.2 million (5.0 bps); outsourcing such management would cost an estimated \$111.3 million (27.3 bps). The remaining portion of the \$30.7 million internal manager expenses shown in the following table is for PERA staff oversight of externally-managed assets.

SCHEDULE OF INVESTMENT EXPENSES¹

As of December 31, 2024

	Investment Expenses
Global Equity	\$29,533
Fixed Income	—
Private Equity	72,120
Real Estate	37,648
Alternatives	61,063
Cash and Cash Equivalents	383
Total external manager expenses	200,747
Internal manager expenses	30,667
Other investment expenses and custody fees	8,190
Total investment expenses	\$239,604

¹ See the Investment Summary on page 128 for information about fair value of investments.

The following table breaks out both the dollar amount and percentage of each asset class managed internally. It is important to note that all accounts, both internal and external, are held to the same high performance standards.

SCHEDULE OF INTERNAL AND EXTERNAL ASSET MANAGEMENT

As of December 31, 2024

Asset Class	Internal		External		Total Amount
	Amount	Percent	Amount	Percent	
Global Equity	\$27,567,531	74.5%	\$9,433,080	25.5%	\$37,000,611
Fixed Income	13,151,572	100.0%	—	—	13,151,572
Private Equity	—	—	5,119,460	100.0%	5,119,460
Real Estate	—	—	6,171,461	100.0%	6,171,461
Alternatives	—	—	4,793,893	100.0%	4,793,893
Cash and Cash Equivalents	—	—	472,562	100.0%	472,562
Total	\$40,719,103	61.0%	\$25,990,456	39.0%	\$66,709,559

DEFINED BENEFIT PLANS

(Dollars in Thousands)

SCHEDULE OF INVESTMENT INCOME AND EXPENSES BY ASSET CLASS

As of December 31, 2024

Asset Class	Net Appreciation/ (Depreciation) in Fair Value ¹	Interest and Dividends	Net Operating Income ²	Investment Expenses ³	Net Income from Securities Lending	Net Investment Income/(Loss)
Global Equity	\$5,108,811	\$591,723	\$—	(\$51,446)	\$47,952	\$5,697,040
Fixed Income	(303,413)	480,847	—	(7,206)	34,535	204,763
Private Equity	404,768	14	1,851	(76,673)	—	329,960
Real Estate	(220,325)	—	220,232	(40,214)	—	(40,307)
Alternatives	248,040	1	162,667	(63,628)	—	347,080
Cash and Cash Equivalents	55,056	25,185	—	(437)	—	79,804
Total	\$5,292,937	\$1,097,770	\$384,750	(\$239,604)	\$82,487	\$6,618,340

¹ Global Equity and Fixed Income include realized gain/(loss) recognized on securities sold during 2024, current year unrealized gain/(loss) and unrealized translation gain/(loss), and class action revenue. Private Equity, Real Estate, and Alternatives include current year realized and unrealized gain/(loss), paid carried interest, and adjustments to accrued carried interest as reported by the General Partners.

² Private Equity, Real Estate, and Alternatives include investment income and expenses as reported by the General Partners.

³ Includes external and internal investment management, custody, and other investment expenses.

SCHEDULE OF PRIVATE MARKET INVESTMENT CONTRIBUTIONS, DISTRIBUTIONS, AND PAID CARRIED INTEREST

As of December 31, 2024

Asset Class	Contributions ¹	Distributions ²	Paid Carried Interest ³
Private Equity	\$558,122	\$1,131,814 ⁴	\$75,292
Real Estate	416,372	428,890	19,952
Alternatives	636,665	424,572	56,994
Total	\$1,611,159	\$1,985,276	\$152,238

¹ Represents money sent to external entities for the purpose of funding private market investments and/or fees during the current fiscal year.

² Represents money or shares of companies received from external entities during the current fiscal year, generally due to PERA receiving its proportionate share of an investment's exited value.

³ Represents the share of profits paid to external entities due to investment returns surpassing agreed-upon thresholds. Amounts will vary, potentially significantly, from year to year depending on the timing of sales of the underlying investments and the magnitude of the gains. Amounts are based on best available information provided by external entities. Actual results could differ from those amounts.

⁴ Includes money received from the sale of PERA's partnership interests on the secondary market.

DEFINED BENEFIT PLANS

(Dollars in Thousands)

PROFILE OF INVESTMENTS IN COLORADO

As of December 31, 2024

	Fair Value
Public Equity¹	\$65,738
Fixed Income¹	12,686
Private Equity	
Portfolio investments ²	126,284
Future commitments to Colorado-based general partnerships or funds	32,750
Total Private Equity	159,034
Real Estate	
Portfolio investments ²	107,960
Future commitments to Colorado-based general partnerships or funds	142,844
Total Real Estate	250,804
Alternatives	
Portfolio investments ²	195,810
Future commitments to Colorado-based general partnerships or funds	84,365
Total Alternatives	280,175
Total	\$768,437

¹ Companies headquartered in Colorado.

² Portfolio investments domiciled in Colorado.

DEFINED BENEFIT PLANS

(Dollars in Thousands)

LARGEST EQUITY HOLDINGS BY FAIR VALUE¹

As of December 31, 2024

	Shares	Fair Value
Apple Inc.	6,879,987	\$1,722,886
NVIDIA Corporation	12,015,947	1,613,622
Microsoft Corporation	3,314,498	1,397,061
Amazon.com, Inc.	5,465,844	1,199,152
Alphabet Inc.	5,820,629	1,101,845
Meta Platforms, Inc.	1,095,650	641,514
Visa Inc.	1,341,753	424,048
Costco Wholesale Corporation	460,870	422,281
JPMorgan Chase & Co.	1,599,839	383,497
UnitedHealth Group Incorporated	753,026	380,926

¹ Does not include commingled funds.

Note: A complete list of holdings is available on copera.org.

LARGEST FIXED INCOME HOLDINGS BY FAIR VALUE¹

As of December 31, 2024

	Par Value	Income Rate	Maturity Date	Fair Value
FNMA TBA	\$522,119	5.500%	1/14/55	\$515,065
US Treasury Notes	275,836	4.000%	8/31/26	273,638
US Treasury Notes	213,913	4.125%	11/30/29	211,456
US Treasury Notes	188,109	4.125%	11/30/31	184,082
US Treasury Notes	182,249	4.375%	7/31/26	182,541
FHLMC Pool #K167	151,316	4.760%	10/25/34	148,779
US Treasury Notes	141,959	4.250%	11/30/26	141,920
US Treasury Notes	142,844	4.125%	10/31/29	141,181
FNMA TBA	157,621	2.000%	1/14/55	122,503
US Treasury Bonds	123,135	4.250%	8/15/54	112,650

¹ Based on the allocated portion of the unitized PERA Fixed Income Pool.

Note: A complete list of holdings is available on copera.org.

DEFINED BENEFIT PLANS

(Dollars in Thousands)

INVESTMENT BROKERS/ADVISERS (INTERNALLY MANAGED ASSETS)

Barclays Capital Inc.	Mizuho Securities USA LLC
BMO Capital Markets Corp.	Morgan Stanley & Co. LLC
BNP Paribas Securities Corp.	MUFG Securities Americas Inc.
BofA Securities, Inc.	NatWest Markets Securities Inc.
Brean Capital, LLC	Nomura Securities International, Inc.
Cantor Fitzgerald & Co.	PNC Capital Market LLC
CIBC World Markets Corp.	RBC Capital Markets, LLC
Citadel Securities LLC	Santander US Capital Markets LLC
Citigroup Global Markets Inc.	SG Securities Americas, LLC
Credit Agricole (USA) Inc.	State Street Global Markets LLC
DASH Financial Technologies LLC	Stifel, Nicolaus & Company Incorporated
Deutsche Bank Securities Inc.	Sumitomo Mitsui Banking Corp
Fifth Third Securities, Inc.	TD Securities (USA) LLC
Goldman Sachs & Co. LLC	The Bank of New York Mellon Corp.
HSBC Securities (USA) Inc.	The Northern Trust Company
J.P. Morgan Securities LLC	Tradeweb Markets Inc.
Jefferies Group LLC	Truist Securities, Inc.
Jones Trading Institutional Services LLC	U.S. Bancorp
Liquidnet, Inc.	UBS Securities, LLC
Lloyds Bank PLC	Wells Fargo Securities, LLC
MarketAxess Corp.	

Note: A list of investment managers is available upon request.

SCHEDULE OF COMMISSIONS¹

As of December 31, 2024

Security Type	Internally Managed Investments	Externally Managed Investments	Total Commissions
	Commissions	Commissions	
Global Equity ²	\$830	\$1,231	\$2,061
Fixed Income ³	5,529	—	5,529
Futures	412	—	412
Total commissions	\$6,771	\$1,231	\$8,002

¹ Does not include commissions from Private Equity, Real Estate, or Alternatives.² Does not include commissions from commingled funds.³ Fixed Income commissions are estimated, with the exception of commissions on exchange-traded funds.

DEFINED CONTRIBUTION PLANS

REPORT ON INVESTMENT ACTIVITY

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

Plan Summary

Colorado PERA administers three participant-directed defined contribution plans: the Voluntary Investment Program (PERAPlus 401(k) Plan), the Deferred Compensation Plan (PERAPlus 457 Plan), and the Defined Contribution Retirement Plan (DC Plan), collectively known as the Capital Accumulation Plans (CAPs). All three plans are governed by the Board.

The PERAPlus 401(k) Plan is an Internal Revenue Code (IRC) § 401(k) supplementary defined contribution plan. All employees working for a PERA-affiliated employer may contribute to the PERAPlus 401(k) Plan.

The PERAPlus 457 Plan is an IRC § 457 supplementary defined contribution plan. All employees working for a PERA employer affiliated with the PERAPlus 457 Plan may contribute.

The PERA DC Plan is an IRC Section 401(a) defined contribution plan administered by Colorado PERA. The PERA DC Plan offers an alternative to the PERA defined benefit plan for certain employees of the State or Local Government Divisions, classified employees at State colleges and universities, most community colleges, the District Attorney within each Judicial District, and some attorneys within some Judicial Districts.

The CAPs' participants are expected to have different retirement objectives, time horizons, and investment risk tolerances. To meet these varying needs, participants are able to direct their contributions and account balances among a range of investment options, including a self-directed brokerage account, to construct diversified portfolios that can reasonably align with the financial goals and risk tolerances. Investment options in the CAPs are identical. Participants alone bear the risk of investment results.

For additional information on the CAPs, please refer to Note 8 starting on page 76.

Basis of Presentation

Callan, LLC (Callan), the Board's CAP investment consultant, provides the investment returns based on data made available by Empower. Performance calculations were prepared using time-weighted rates of return and are net-of-fees unless otherwise indicated. Returns for periods longer than one year are annualized.

Overview of Investment Policy

The Board is responsible for approving an appropriate range of investments that addresses the needs of the participants in the CAPs. The objectives of selecting the investment options under each CAP 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.
- Achieve returns within reasonable and prudent levels of risk.
- Provide returns comparable to returns for similar investment options.
- Control administrative and investment management costs to the plan and participants.

Year End Statistics

<i>(Dollars in Thousands)</i>	2024	2023	% Chg
Fiduciary Net Position			
PERAPlus 401(k) Plan	\$4,859,071	\$4,337,956	12.01%
DC Plan	509,167	422,432	20.53%
PERAPlus 457 Plan	1,442,122	1,278,624	12.79%
Number of Accounts			
PERAPlus 401(k) Plan	63,930	66,394	(3.71%)
DC Plan	7,647	8,083	(5.39%)
PERAPlus 457 Plan	20,265	20,205	0.30%

The CAPs' participants pay investment management fees, as shown in the following table:

Fund	Fee
PERAdvantage Capital Preservation Fund	0.21%
PERAdvantage Fixed Income Fund	0.13%
PERAdvantage Real Return Fund	0.17%
PERAdvantage Socially Responsible Investment Fund	0.18%
PERAdvantage U.S. Large Cap Stock Fund	0.05%
PERAdvantage U.S. Small and Mid Cap Stock Fund	0.15%
PERAdvantage International Stock Fund	0.26%
PERAdvantage Target Retirement Date Funds	0.07%

Note: Fees shown are investment management fees. Participants who have a self-directed brokerage account pay an annual \$50 (actual dollars) self-directed brokerage fee.

Investment Stewardship

The CAPs adhere to the same principles of investment stewardship as the defined benefit plans. For more information, please refer to the Investment Stewardship section on page 125.

2024 Changes

The PERAdvantage 2025 fund was removed from the lineup and assets were moved to the PERAdvantage Income fund. The PERAdvantage 2070 fund was added to the investment options.

DEFINED CONTRIBUTION PLANS

PERAdvantage Investment Options

The PERAdvantage funds provide diversification within each of the seven primary funds and 10 target retirement date funds. The white label structure of the PERAdvantage funds simplifies choices, increases diversification, and helps participants identify investments based on how the fund invests the money rather than name familiarity. In addition, the CAPs 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, low volatility fixed income securities to produce the income. Since the underlying fixed income investments fluctuate in fair value with changes in the market, the portfolio is paired with an insurance contract to provide a more stable return and to offer participants the ability to withdraw or transfer their funds, subject to plan rules, without any fair value risk or other penalty for premature withdrawal. The fund is managed by Empower Capital Management (100%).

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. This fund primarily invests in investment grade debt securities, but may invest a portion of its assets in high-yield securities. The fund may invest in derivative instruments or in mortgage- or asset-backed securities. The fund is managed by PERA (50% unitized Fixed Income) and BlackRock (50% Core Alpha).

PERAdvantage Real Return Fund

The fund seeks to provide broad exposure to real assets and U.S. inflation protected bonds and to produce a return over a full market cycle that exceeds the rate of inflation. This fund invests in U.S. inflation-linked bonds, real estate investment trusts (REITs), commodities, and global natural resources and infrastructure stocks. The fund is managed by State Street Global Advisors (70% Real Asset Strategy and 30% U.S. Inflation Protected Index).

PERAdvantage Socially Responsible Investment (SRI) Fund

The fund seeks to produce a return above the index by investing in a portfolio of global equities and investment grade fixed income securities. The equity portion seeks to replicate the return of the MSCI ACWI ESG Focus Index. The fixed income portion invests in U.S. dollar

denominated securities that demonstrate environmental, social, and governance (ESG) leadership and direct and measurable environmental and social impact. The fund is managed by BlackRock (60% ACWI ESG Focus Index) and Nuveen (40% Core Impact Bond).

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. This fund invests in a wide array of U.S. stocks with market capitalizations similar to those found in the MSCI USA Large Cap Index. The fund is managed by PERA (60% Large Cap Index and 40% Large Cap Core).

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. This fund invests in a wide array of U.S. stocks with market capitalizations similar to those found in the MSCI USA SMID Cap Index. The fund is managed by PERA (50% Small Cap Core) and Dimensional Fund Advisors (50% Mid Cap Core).

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. This fund invests in a wide array of international stocks similar to those found in the MSCI All Country World Index (ACWI) ex USA. The fund is managed by Schroder Investment Management (60% International Alpha) and PERA (40% International Multi-Factor).

Additional Investment Options***PERAdvantage Target Retirement Date Funds***

There are 10 funds with varying asset mixes and risk levels based on expected retirement date. Each fund is comprised of the corresponding BlackRock LifePath Index Target Retirement Date Fund. These funds seek a combination of capital appreciation and income and will automatically adjust the underlying asset allocation to become more conservative as they reach their target retirement date, at which time the fund will be blended into the PERAdvantage Income Fund. The funds are managed by BlackRock (100%).

Schwab 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 Schwab.

DEFINED CONTRIBUTION PLANS

Callan provides the investment returns for the CAPs based on data made available by Empower. The annualized one-, three-, five-, and 10-year net-of-fees time-weighted rates of return for each PERAdvantage fund and their respective benchmarks are as follows:

SCHEDULE OF INVESTMENT RESULTS

As of December 31, 2024

Fund/Benchmark	2024	3-Year	5-Year	10-Year
PERAdvantage Capital Preservation Fund	2.6%	2.1%	2.0%	2.0%
ICE BofAML U.S. 3-Month Treasury Bill Index ¹	5.3%	3.9%	2.5%	2.3%
PERAdvantage Fixed Income Fund	2.0%	(2.2%)	0.0%	1.5%
Bloomberg U.S. Aggregate Bond Index	1.3%	(2.4%)	(0.3%)	1.4%
PERAdvantage Real Return Fund	3.8%	1.4%	5.2%	3.8%
Real Return Custom Index ²	3.6%	1.4%	5.1%	3.8%
PERAdvantage Socially Responsible Investment Fund	11.4%	2.2%	6.2%	6.4%
SRI Custom Index ³	10.7%	2.0%	6.0%	6.2%
PERAdvantage U.S. Large Cap Stock Fund	26.7%	9.3%	15.0%	13.3%
MSCI USA Large Cap Index ⁴	26.1%	8.9%	14.6%	13.0%
PERAdvantage U.S. Small and Mid Cap Stock Fund	12.9%	4.0%	9.7%	8.7%
MSCI USA SMID Cap Index ⁵	13.3%	2.5%	9.5%	9.3%
PERAdvantage International Stock Fund	8.2%	2.0%	7.1%	6.5%
MSCI ACWI ex USA Index	5.5%	0.8%	4.1%	4.8%
PERAdvantage Income Fund	7.1%	0.5%	4.0%	4.5%
BlackRock LifePath® Retirement Index	7.1%	0.6%	4.0%	4.6%
PERAdvantage 2030 Fund	9.1%	1.6%	5.7%	6.3%
BlackRock LifePath® 2030 Index	9.1%	1.6%	5.7%	6.3%
PERAdvantage 2035 Fund	10.9%	2.4%	6.8%	7.1%
BlackRock LifePath® 2035 Index	10.9%	2.4%	6.8%	7.1%
PERAdvantage 2040 Fund	12.6%	3.3%	7.8%	7.9%
BlackRock LifePath® 2040 Index	12.6%	3.3%	7.8%	7.8%
PERAdvantage 2045 Fund	14.3%	4.1%	8.8%	8.5%
BlackRock LifePath® 2045 Index	14.3%	4.1%	8.7%	8.5%
PERAdvantage 2050 Fund	15.6%	4.7%	9.4%	8.9%
BlackRock LifePath® 2050 Index	15.7%	4.6%	9.4%	8.8%
PERAdvantage 2055 Fund	16.2%	4.9%	9.6%	9.0%
BlackRock LifePath® 2055 Index	16.3%	4.9%	9.6%	8.9%
PERAdvantage 2060 Fund	16.2%	4.9%	9.6%	N/A
BlackRock LifePath® 2060 Index	16.4%	4.9%	9.6%	N/A
PERAdvantage 2065 Fund	16.3%	4.9%	N/A	N/A
BlackRock LifePath® 2065 Index	16.4%	4.9%	N/A	N/A
PERAdvantage 2070 Fund⁶	N/A	N/A	N/A	N/A
BlackRock LifePath® 2070 Index	N/A	N/A	N/A	N/A

Note: Performance is net of investment management fees (and net of administrative fees prior to 12/03/2021) and calculated using time-weighted net asset values. Returns for periods greater than one year are annualized.

¹ ICE BofAML U.S. 3-Month Treasury Bill Index represents the Huebel Index through December 2019 and the ICE BofAML U.S. 3-Month Treasury Bill Index from January 2020 forward.

² 70% State Street Real Asset Strategy DC Index/30% Bloomberg U.S. TIPS Index.

³ 60% MSCI World ESG Leaders/40% Bloomberg U.S. Gov't Bond through September 2019, 60% MSCI ACWI ESG Focus/40% Bloomberg U.S. Gov't Bond through December 2019, and 60% MSCI ACWI ESG Focus/40% Bloomberg U.S. Aggregate from January 2020 forward.

⁴ MSCI USA Large Cap Index represents the Russell 1000 Index through December 2018 and the MSCI USA Large Cap Index from January 2019 forward.

⁵ MSCI USA SMID Cap Index represents the Russell 2500 Index through December 2018 and the MSCI USA SMID Cap Index from January 2019 forward.

⁶ The PERAdvantage 2070 Fund was inceptioned into the PERA Plans on November 5, 2024.

DEFINED CONTRIBUTION PLANS

(Dollars in Thousands)

INVESTMENT SUMMARY

Fund	Fair Value as of December 31, 2024		
	Voluntary Investment Program	Defined Contribution Retirement Plan	Deferred Compensation Plan
PERAdvantage Capital Preservation Fund ¹	\$273,427	\$15,337	\$139,471
PERAdvantage Fixed Income Fund	293,366	18,691	92,156
Fixed Income Funds	566,793	34,028	231,627
PERAdvantage Real Return Fund	25,918	2,682	12,657
PERAdvantage Socially Responsible Investment Fund	35,356	5,527	16,546
Multi-Asset Funds	61,274	8,209	29,203
PERAdvantage U.S. Large Cap Stock Fund	2,249,127	103,043	447,943
PERAdvantage U.S. Small and Mid Cap Stock Fund	246,081	37,288	150,085
PERAdvantage International Stock Fund	347,603	37,298	131,347
Equity Funds	2,842,811	177,629	729,375
PERAdvantage Income Fund	355,483	25,866	86,179
PERAdvantage 2030 Fund	191,465	21,088	51,477
PERAdvantage 2035 Fund	206,140	26,306	60,673
PERAdvantage 2040 Fund	163,903	30,864	58,012
PERAdvantage 2045 Fund	135,125	49,502	47,596
PERAdvantage 2050 Fund	101,068	46,094	34,587
PERAdvantage 2055 Fund	63,049	38,244	19,914
PERAdvantage 2060 Fund	29,429	17,657	13,267
PERAdvantage 2065 Fund	12,024	6,648	7,689
PERAdvantage 2070 Fund	127	12	129
Target Retirement Date Funds	1,257,813	262,281	379,523
Schwab Self-Directed Brokerage Account	67,012	14,935	52,727
Self-Directed Brokerage	67,012	14,935	52,727
Total Investment Portfolio²	\$4,795,703	\$497,082	\$1,422,455
Reconciliation to fair value per financial statements³			
Adjustments:			
Cash and cash equivalents	(29,354)	(3,782)	(13,331)
Net securities lending collateral and obligations	(2,545)	(155)	(696)
Net investment settlements and income and other liabilities	6,851	317	2,013
Fair value per financial statements	\$4,770,655	\$493,462	\$1,410,441

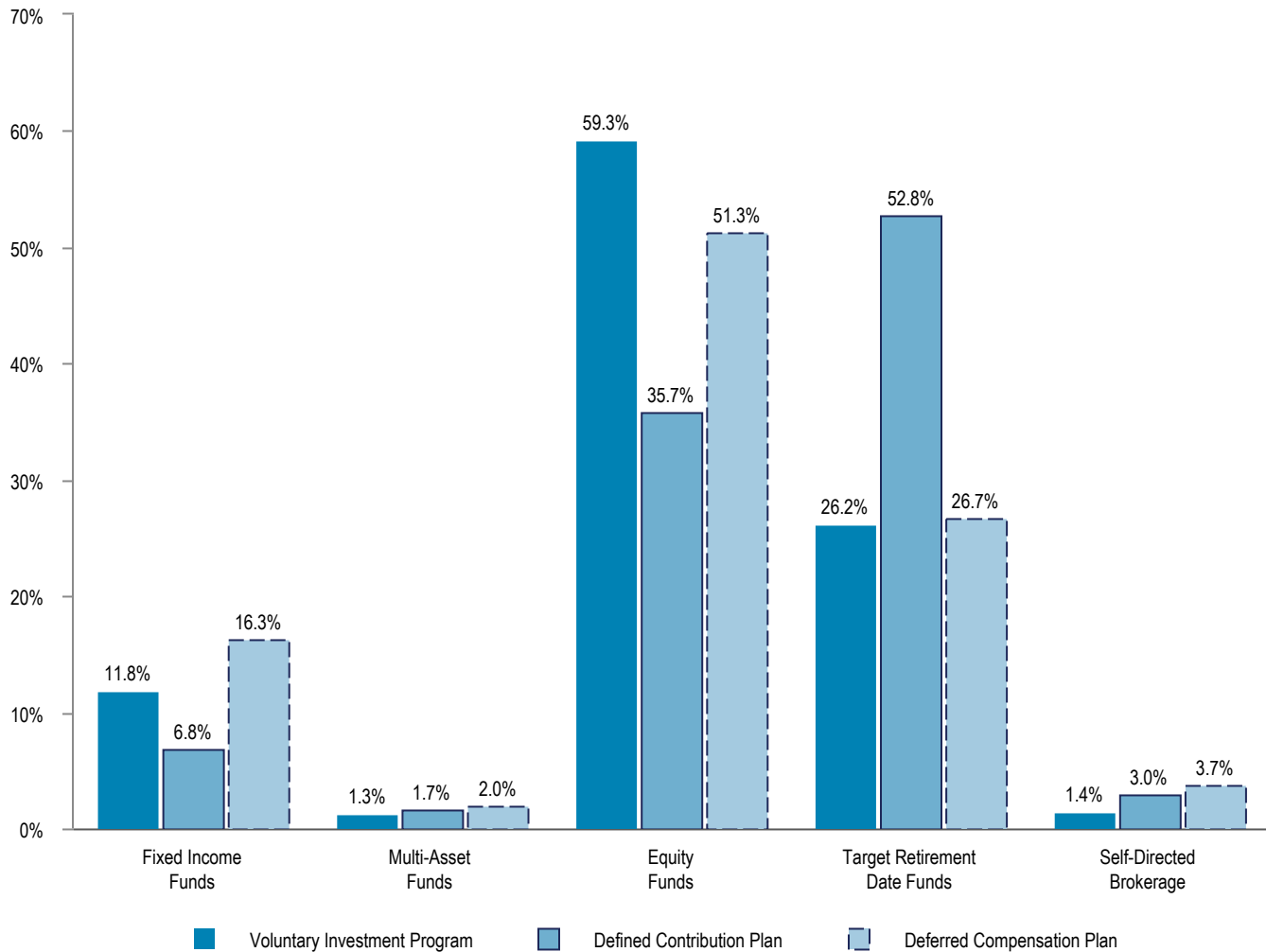
¹ The Stable Value Fund in the PERAdvantage Capital Preservation Fund is reported at contract value.

² The total investment portfolio managed by PERA for the defined contribution plans is \$6,715,240.

³ Investment receivables, payables, accruals, securities lending collateral, securities lending obligations, and cash and cash equivalents are excluded from investments in the financial statements.

DEFINED CONTRIBUTION PLANS

Asset Breakdown
As of December 31, 2024



Actuarial Section





ACTUARY'S CERTIFICATION LETTER



101 North Wacker Drive
Suite 1800
Chicago, IL 60606-1722
T 312.984.8500
F 312.896.9364
segalco.com

June 5, 2025

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

Re: Actuarial Certification of PERA Division and Health Care Trust Funds

Dear Members of the Board:

Per the "Colorado PERA Defined Benefit Pension Plan Funding Policy", adopted by the Board of Trustees on March 20, 2015, and most recently revised on January 19, 2024, and the "Colorado PERA OPEB Plan Funding Policy", adopted by the Board of Trustees on January 19, 2018, and most recently revised on January 19, 2024, the main funding objectives of the Public Employees' Retirement Association of Colorado (Colorado PERA) 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 performed as a measure of the progress towards meeting them. The most recent valuations are based on the plan provisions and actuarial assumptions and methods in effect on December 31, 2024. In completing the valuation of the five defined benefit pension plans, referred to as the Division Trust Funds, and the two defined benefit Other Post-employment Benefit (OPEB) plans, referred to as the Health Care Trust Funds (HCTFs), Segal relied on membership and financial data provided by Colorado PERA. We have reviewed the membership data for reasonableness and consistency. We have not audited the membership data, but we have reconciled it with the data used in the prior year's valuation.

6498382v6/14923.001

ACTUARY'S CERTIFICATION LETTER

Board of Trustees
June 5, 2025
Page 2

To the extent possible, this actuarial valuation reflects the following changes resulting from legislation enacted in 2024 and 2025:

- SB 24-099, enacted April 11, 2024, and effective 90 days following adjournment, adds superintendents and principals to the list of service retirees (along with teachers, school bus drivers, food services cooks, school nurses and paraprofessionals) that may be hired by a rural school district and employed without a reduction in retirement benefits. This legislation clarifies that the exemption for a rural school district also includes a small rural school district that has a funded pupil count for the prior budget year of less than 1,000 pupils. The bill extends the BOCES critical shortage provisions through June 30, 2030, and clarifies that the two-year moratorium for those who have not met full-service retirement applies to all critical shortage positions and aligns the designation date for reporting critical shortage positions to September 1st of each year.
- HB 24-1044, enacted April 19, 2024, and effective July 1, 2024, increases the number of retirees that can be designated under the 140-day provision. This legislation increases the current retiree limit of 10 "140-day provision" designees, for certain districts. For districts with over 10,000 students, an additional retiree may be designated under the "140-day provision" for each thousand students in excess of 10,000. In addition, this bill modifies the requirement that positions be filled based on a "critical shortage of qualified candidates" test to filling positions based on "need". The bill places a 6-year cap on the total years a retiree may be designated under the "140-day provision" and aligns the designation date for all "140-day" designees to September 1st of each year.
- SB 24-169, enacted May 24, 2024, and effective July 1, 2025, modifies the definition of "State Trooper" to include a duly sworn employee of the Division of Fire Prevention and Control in the Department of Public Safety. The bill applies the "State Trooper" member and employer contribution rates and benefit structure to eligible employees whose duties include structural or wildfire management, wildfire response, live-fire training, or wildfire leadership, as determined by the Executive Director of the Department of Public Safety.
- SB 24-186, enacted June 5, 2024, and effective January 1, 2025, modifies the definition of "State Trooper" to include employees of a Local Government Division employer classified as a coroner or deputy coroner who were elected, reelected, or appointed on or after January 1, 2021, which includes the Boulder County Coroner. The bill applies the "State Trooper" member and employer contribution rates and benefit structure to eligible employees meeting these criteria.
- SB 25-310, enacted June 2, 2025, and effective immediately, allows PERA to accept a series of warrants from the State Treasurer totaling \$500 million on or after July 1, 2025, and before October 1, 2025. These dollars are to be accounted for as a deferred inflow of resources to be proportioned over time to replace reductions to future Direct Distributions intended to fund the Peace Officer Training and Support Fund and, at that time, will be allocated to the appropriate division trust fund(s) within PERA. SB 25-310 also allows for an alternative actuarial method to allocate the Direct Distribution if the allocation, based on the reported payroll of each participating division, results in an Automatic Adjustment Provision (AAP) assessment ratio below the 98% benchmark.
- HB 25-1105, enacted May 23, 2025, and effective July 1, 2025, reduces the base employer contribution rate for the Denver Public Schools (DPS) Division by 3.0% of salary, from 10.4% to 7.4%, and reduces the allocated employer contribution to the DPS Health Care Trust Fund

6498382v6/14923.001

ACTUARY'S CERTIFICATION LETTER

Board of Trustees
June 5, 2025
Page 3

by 0.82% of salary, from 1.02% to 0.20%. In addition, prior to July 1, 2030, HB 25-1105 excludes the DPS Division from receiving a portion of the Direct Distribution and excludes DPS contribution rates from consideration in the blended total contribution amount and the blended total required contribution used in the determination of the AAP assessment ratio; however, the DPS Division remains subject to AAP adjustments, if triggered.

Note that the 2024 and 2025 PERA-related legislation listed above had limited impact on the results of the funding actuarial valuation as of December 31, 2024. The 2024 valuation results most directly affected by this legislation is DPS's amortization period due to the reduced funding enacted through HB 25-1105, as described above.

As of December 31, 2024, and December 31, 2023, assets for the Local Government Division Trust Fund and Health Care Trust Fund (HCTF) reflect additional payments related to the disaffiliation of Tri-County Health Department as a PERA-affiliated employer, effective December 31, 2022. The employer disaffiliation payments and receivable allocations to the Local Government Division Trust Fund and the HCTF as of December 31, 2024, were \$0.486 million and \$0.020 million, respectively, and as of December 31, 2023, were \$24.967 million and \$1.033 million, respectively.

Other changes reflected in this actuarial valuation include:

- Changes to actuarial assumptions resulting from the 2024 Experience Analysis Report, titled, "Public Employees' Retirement Association of Colorado Analysis of Actuarial Experience during the period January 1, 2020, through December 31, 2023", dated January 3, 2025, and adopted by the Board at their January 17, 2025, meeting, to be effective for this December 31, 2024, actuarial valuation. The assumption changes are:
 - The individual salary increase assumptions were updated to reflect increases to the merit and seniority (and productivity) portion of the individual salary increases based on age or service.
 - The administrative expense load added to the normal cost rate was increased from 0.40% of payroll to 0.45% of payroll.
 - The mortality assumptions were updated to the following:
 - Post-Retirement non-disabled retirees:
 - For the State and Local Government Divisions (other than Safety Officers), post-retirement non-disabled retiree mortality rates are based upon the PubG-2010 Healthy Retiree table with adjustments for credibility and gender. For males, the adjustment is 90% of the rates for all ages, and for females, the adjustments are 85% of the rates prior to age 85 and 105% of the rates for ages 85 and older.
 - For the School and DPS Divisions, the post-retirement non-disabled retiree mortality table is the PubT-2010 Healthy Retiree table with adjustments for credibility and gender. For males, the adjustment is 106% of the rates for all ages, and for females, the adjustments are 86% of the rates prior to age 85 and 115% of the rates for ages 85 and older.
 - Post-Retirement non-disabled beneficiaries:
 - For all Divisions, the post-retirement non-disabled beneficiary mortality table is the Pub-2010 Contingent Survivor table with adjustments for credibility and gender. For males, the adjustment is 92% of the rates for all ages, and for females, the adjustments are 100% of the female rates for all ages.

6498382v6/14923.001

ACTUARY'S CERTIFICATION LETTER

Board of Trustees
June 5, 2025
Page 4

- Disabled retirees:
 - For all Divisions (other than Safety Officers), the disabled mortality rates are based upon the PubNS-2010 Disabled Retiree table using 95% of the rates for all ages.
- The generational improvement scale was updated to the 2024 adjusted MP-2021 scale.
- For future benefit recipients, mortality rates used to determine factors for money purchase benefits, reduced service benefits for members who were not eligible to retire as of January 1, 2011, and co-beneficiary payment options are based upon the collective experience of all PERA divisions. For members, the rates are based upon the gender-distinct PubG-2010 Juvenile, Employee, and Healthy Retiree mortality tables, adjusted for credibility and projected to 2027 using the 2024 adjusted MP-2021 projection scale. For surviving spouses, the rates are based upon the gender-distinct PubG-2010 Juvenile, Employee, and Contingent Survivor mortality tables, adjusted for credibility and projected to 2027 using the 2024 adjusted MP-2021 projection scale. Unisex factors are then developed using a male/female blend based upon factor type, benefit tier, and/or benefit structure.
- The active retirement rates were updated to include various modifications at several ages throughout most divisions.
- The inactive retirement rates were updated to add 20% and 18% assumed reduced retirement rates for the State and Local Government (Non-Safety Officers), and School and DPS (PERA Benefit Structure) Divisions, respectively.
- The select and ultimate termination rates were primarily decreased. The separate termination rates were established for the State and Local Government Divisions (Safety Officers). The unisex rates of termination were established for All Divisions (DPS benefit structure).
- The disability retirement rates were updated as follows:
 - For the State and Local Government Divisions (Non-Safety Officers), the disability retirement rates were decreased by about 20%, on average.
 - For the State and Local Government Divisions (Safety Officers), the disability retirement rates were decreased by about 19%, on average.
 - For the School, Judicial, and DPS Divisions, the disability retirement rates were decreased by about 22%, on average.
- These changes decreased the total actuarial accrued liability by \$70.4 million and increased the total normal cost by \$187.6 million.
- Changes to additional actuarial assumptions for the HCTFs resulted from the 2024 Experience Analysis report, titled “Public Employees’ Retirement Association of Colorado – Health Care Trust Fund and Denver Public Schools Health Care Trust Fund Analysis of Actuarial Experience during the Period January 1, 2020 through December 31, 2023”, dated January 3, 2025, and adopted by the Board at their January 17, 2025, meeting, to be effective for this December 31, 2024, actuarial valuation. The additional assumption changes are:
 - Removed morbidity assumptions – the post-65 per capita costs for the fully insured Medicare Advantage Prescription Drug (MAPD) plan are now based on premium rates, with no adjustment for aging, an allowed exception under Section 3.7.7(c) of ASOP No. 6.
 - Generally, decreased participation rates at each retirement age and for eligible inactive members for both the PERA and the DPS Benefit Structure.

6498382v6/14923.001

ACTUARY'S CERTIFICATION LETTER

Board of Trustees
June 5, 2025
Page 5

- Reduced the percentage of assumed participants qualifying for “No Medicare Part A Premium” subsidy for those hired before age 30 under both the PERA and the DPS benefit structures.
- These changes decreased the total actuarial accrued liability for the HCTFs by \$136.1 million and decreased the total normal cost by \$2.5 million.
- Annual assumption changes for the HCTFs were recognized, resulting from updates to retiree health care cost and health care cost trend assumptions based upon a review of historical experience, Medicare plan option elections, health care cost trend survey data, and available retiree premium increases for 2025.
 - These changes decreased the total actuarial accrued liability for the HCTFs by \$21.8 million and decreased the total normal cost by \$0.0 million.

In our opinion, the assumptions are individually reasonable, taking into account the experience of the Division Trust Funds and the HCTFs and reasonable expectations, are internally consistent, and, in combination, offer our estimate of anticipated experience affecting the Division Trust Funds and the HCTFs. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

Future actuarial results may differ significantly from the current results due to such factors as the following:

- Plan experience differing from that anticipated by the economic or demographic assumptions;
- Changes in economic or demographic assumptions;
- Increases 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 or contribution requirements based on the plan's funded status); and
- Changes in plan provisions or applicable law.

Additionally, retiree group benefits models necessarily rely on the use of approximations and estimates and are sensitive to changes in these approximations and estimates. Small variations may lead to significant changes in actuarial measurements. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Segal provided the following information and/or schedules for the December 31, 2024, Annual Report:

Financial Section

- Prepared for the Division Trust Funds and HCTFs
 - Yearly Contribution Deficiency
 - Required Discount Rate Sensitivity Information providing the Net Pension Liability and the Net OPEB Liability at a discount rate that is one percentage point lower and one percentage point higher than the discount rate at Measurement Date
 - Membership Data
 - Notes to Required Supplementary Information
- Prepared for the Division Trust Funds Only
 - Average Monthly Benefit By Division for 2024, considering entire retired population and those retiring in 2024

6498382v6/14923.001

ACTUARY'S CERTIFICATION LETTER

Board of Trustees
June 5, 2025
Page 6

- Required Supplementary Information
 - Schedule of Changes in Net Pension Liability
 - Schedule of the Net Pension Liability
 - Schedule of Employer Contributions
- Prepared for the HCTFs Only
 - Required Health Care Cost Trend Rate Sensitivity Information at health care cost trend rates that are one percentage point lower and one percentage point higher than the health care cost trend rates applied at Measurement Date
 - Participation Data
 - Required Supplementary Information
 - Schedule of Changes in Net OPEB Liability
 - Schedule of the Net OPEB Liability
 - Schedule of Employer Contributions

Actuarial Section

- Prepared for the Division Trust Funds and HCTFs
 - Schedule of Retirees and Beneficiaries Added to and Removed from the Benefit Payroll
 - Schedule of Funded Liabilities by Type (formerly known as the Solvency Test)
 - Schedule of Funding Progress
 - Analysis of Financial Experience
 - Schedule of Gains and Losses in Accrued Liabilities and Reconciliation of Unfunded Actuarial Accrued Liabilities
 - Schedule of Computed Employer Contribution Rates for the 2026 Fiscal Year
 - Actuarial Statistics
 - Actuarially Determined Contributions (ADCs)
 - Alternative ADCs using 25-year, 20-year and 15-year amortization periods
 - Funded Ratios
 - Funded Ratio, Unfunded Actuarial Accrued Liability and Actuarially Determined Contributions using 6.25%, 7.25% and 8.25% investment return assumptions
 - Schedule of Active Member Actuarial Valuation Data
- Prepared for the Division Trust Funds Only
 - Member – Retiree Comparison

Statistical Section

- Prepared for the Division Trust Funds and HCTFs
 - Schedule of Average Benefit Payments
- Prepared for the Division Trust Funds Only
 - Member and Benefit Recipient Statistics
 - Breakdown of Membership by Tiers
 - PERA Benefit Payments
 - Benefit Payments by Benefit Range
 - Benefit Payments by Benefit Range including RBA amounts
 - Benefit Payments by Decile
 - Schedule of Average Retirement Benefits Payable by Year of Retirement
 - For all retirees
 - For members who retired during the year
 - Schedule of Retirees and Survivors by Types of Benefits

6498382v6/14923.001

ACTUARY'S CERTIFICATION LETTER

Board of Trustees
June 5, 2025
Page 7

In aggregate, the Division Trust Funds have a funded ratio of 69.2% based on the Actuarial Value of Assets and 69.1% based on the Fair Value of Assets. For the HCTFs combined, the funded ratios are 66.5% on an Actuarial Value of Assets basis and 66.9% on a Fair Value of Assets basis.

The results indicate that for all Division Trust Funds, the combined employer and member contribution rates, including the Direct Distribution from the State, as appropriate, are sufficient to fund the normal cost for all members and each division's unfunded actuarial accrued liability (UAAL), with consideration of the amounts allocated to finance the Annual Increase Reserve (AIR) Funds, and provide additional contributions to help finance both Health Care Trust Funds. In addition, the employer contribution rate with anticipated service purchase transfers is sufficient to eventually finance benefits for the HCTFs.

The Board's funding policy, in accordance with Senate Bill 18-200, is targeted to fully fund the UAAL determined as of December 31, 2017, for each of the five pension Division Trust Funds over a closed 30-year period (23 years remaining as of December 31, 2024). Shown in the following table are the resulting effective amortization periods for each division as of December 31, 2024, recognizing all current sources of income from employer contributions, member contributions, and the Direct Distribution as applicable, and any future changes to the base employer contributions, member contributions, Amortization Equalization Disbursement (AED), Supplemental Amortization Equalization Disbursement (SAED), and Pension Certificates of Participation (PCOP):

Trust Fund	Effective Amortization Period ¹
State Division	17 years
School Division	28 years
Local Government Division	10 years
Judicial Division	4 years
Denver Public Schools (DPS) Division	10 years
HCTF	4 years
DPS HCTF	N/A

Based upon the current effective amortization periods, all Trust Funds are on schedule to meet the funding policy goal except for the School Division.

At the direction of PERA, Segal has prepared deterministic financial projections for all Division Trust Funds with the lower cost benefit structure for new members and using the following assumptions:

- All actuarial assumptions, including assuming 7.25% investment returns are realized each year
- Performed on an open-group basis with assumed active membership growth, as follows:
 - For State, Judicial, and Denver Public Schools – 0.25% each year
 - For Local Government – 0.50% each year
 - For School – 0.75% each year

¹ Calculations completed on an actuarial valuation basis with a closed population (i.e., based upon the membership, normal cost rate and UAAL as of December 31, 2024). For the DPS Division, the resulting amortization period assumes an annually declining (rather than static) Pension Certificates of Participation (PCOP) offset rate as described in statute.

ACTUARY'S CERTIFICATION LETTER

Board of Trustees
June 5, 2025
Page 8

These projections² indicate that fully funding the actuarial accrued liability under the PERA revised benefit structure created by SB 18-200 is achievable within a projection period of 28 years and include the impact of the revised actuarial assumptions effective December 31, 2024, and the impact of legislative changes pursuant to SB 23-056 and HB 25-1105. The projected number of years² until each trust fund is expected to be 100% funded is shown in the table below:

Trust Fund	Projected Years ² Until 100% Funded
State Division	19 years
School Division	28 years
Local Government Division	11 years
Judicial Division	5 years
DPS Division	10 years
HCTF	5 years
DPS HCTF	N/A

The AAP assessment, performed as of December 31, 2024, resulted in a ratio of 102.58%. Since this ratio falls between 98% and 120%, no additional modifications to contribution rates, the AI cap, or the Direct Distribution payments are required as of July 1, 2026.

Actuarial computations presented in the December 31, 2024, actuarial valuation reports are for purposes of determining the actuarially determined contribution rates and evaluating the funding of the Division Trust Funds and HCTFs. Determinations for purposes other than meeting these requirements may be significantly different from the results shown in the December 31, 2024, actuarial valuation reports.

We also prepared actuarial computations as of December 31, 2024, for purposes of fulfilling financial accounting requirements for PERA under Governmental Accounting Standards Board (GASB) Statement No. 67 and Statement No. 74. The actuarial assumptions used in the funding valuations were also used for GASB 67 and GASB 74 reporting except GASB 74 reporting reflects health care cost and trend assumptions effective as of December 31, 2023. In addition, the entry age actuarial cost method, which is required to be used under GASB 67 and GASB 74, is also used for purposes of the funding valuations. The actuarial assumptions used in the funding and the GASB 67 and GASB 74 accounting valuations, as detailed in Segal's reports, meet the parameters set by the 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.

² Calculations completed on a projected basis with an open, increasing population (i.e., active members expected to retire, terminate, or die are replaced by new members who will accrue pension benefits under a lower cost basis).

ACTUARY'S CERTIFICATION LETTER

Board of Trustees
June 5, 2025
Page 9

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 yours,



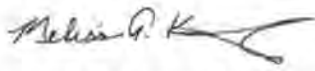
Matthew Strom, FSA, MAAA, EA
Senior Vice President and Actuary



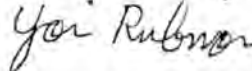
Brad Ramirez, FSA, MAAA, EA
Vice President and Actuary



Tanya Dybal, FSA, MAAA, EA
Vice President and Actuary



Melissa A. Krumholz, FSA, MAAA
Vice President and Actuary



Yori Robinson, FSA, MAAA
Vice President and Retiree Health
Actuary

6498382v6/14923.001



DIVISION TRUST FUNDS—PENSION

Actuarial Topics

The standard promulgated by the Governmental Accounting Standards Board (GASB) Statement No. 67, results in the preparation of two actuarial valuations—one for funding purposes and one for accounting and financial reporting purposes. Unless otherwise noted, this Division Trust Funds subsection reports on the actuarial valuation performed for funding purposes, but also includes information on specific differences between the two actuarial valuations.

The plan provisions in effect on December 31, 2024, are summarized in Note 1 of the Notes to the Financial Statements in the Financial Section. Changes to plan provisions enacted into law after December 31, 2024, and included in the actuarial valuation are summarized under “Changes Since Last Actuarial Valuation” on page 158.

PERA BOARD GOVERNANCE - FIVE DEFINED BENEFIT PENSION PLANS

PERA Defined Benefit Pension Plans	The five defined benefit pension plans of the Public Employees' Retirement Association of Colorado (PERA), include the State Division, School Division, Local Government Division, Judicial Division, and Denver Public Schools (DPS) Division Trust Funds. All but the DPS Division Trust Fund are cost-sharing multiple-employer plans and the DPS Division Trust Fund is a single-employer plan.
PERA Board Pension Funding Policy	The PERA Board of Trustees (Board) is responsible for maintaining a pension funding policy applicable to these plans. The current pension funding policy initially was adopted by the Board on March 20, 2015, effective for the December 31, 2014, funding actuarial valuation and last amended on January 19, 2024. The pension funding policy requires the calculation of an actuarially determined contribution (ADC) for each of the five Division Trust Funds for the purpose of assessing the adequacy of the statutory contribution rates of each division. The ADC is determined in accordance with the pension plan provisions in effect as of the date of the actuary's Letter of Certification and is expressed as a level percentage of assumed future covered payroll.
Actuarial Service Provider	The Board retains an external actuary, and effective November 1, 2018, Segal was retained to perform annual actuarial valuations and sustainability projections as well as periodic experience studies to review the actuarial assumptions versus actual plan experience. The Board's initial contract agreement with Segal was extended effective January 1, 2024, for an additional five-year period ending December 31, 2028.
Actuarial Service Provider Funding Method Statement	Per their actuarial valuation report, “Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability and a portion of the principal balance. The pension funding policy adopted by PERA...meets this standard.”

ACTUARIAL METHODS

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). Through formal action, the Board updates, replaces, or adopts new actuarial methods and assumptions as deemed necessary.
--------------------------	--

Actuarial Methods	Type	Description / Source / Basis	Adoption / Effective Date
Asset Valuation Method	Smoothed Actuarial Value of Assets	In 1992, the Board adopted a method for valuing assets that determines a smoothed market value of assets to help mitigate volatile investment market experience. Note, the term “market value” used in the Board's pension funding policy regarding the description of the determination of the asset valuation method applied for funding purposes, is synonymous with the term “fair value” used consistently throughout the Actuarial Section and all other sections of this <i>Annual Comprehensive Financial Report (ACFR)</i>. The smoothed fair 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 fair value of assets excludes the Annual Increase Reserve (AIR).	Initially Adopted: 1992; Effective: Dec 31, 1992; Reinitialized to Fair Value as of: Dec 31, 2004; Effective: Dec 31, 2005

DIVISION TRUST FUNDS—PENSION

Actuarial Methods	Type	Description / Source / Basis	Adoption / Effective Date
Actuarial Cost Method	Entry Age Actuarial Cost Method (EA)	The EA funding or cost method is designed to keep annual costs level as a percent of covered payroll and for this reason, was selected by the Board to be used in the actuarial valuations. Under the EA 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 plan cost allocated to the current year. Normal cost is determined only for active members currently accruing benefits. The actuarial accrued liability (AAL) for active members is the portion of the total plan cost allocated to prior years. The total AAL for the plan includes the AAL for active members and 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 determined within each annual actuarial valuation. These differences produce actuarial gains or losses that result in an adjustment of the UAAL.	State, School, and Local Government (Municipal) Divisions - Effective: Jun 30, 1968; Judicial Division - Effective: Dec 31, 1980 DPS Division - Initially Adopted: Jun 30, 1950; Last Revised: Merger, Jan 1, 2010
Amortization Method	Defined, Closed, and Layered Periods	The 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. Each amortized item is tracked over the closed period defined for that category. The 30-year period used to amortize the legacy UAAL was initialized as of December 31, 2017. All gains, losses, and changes in actuarial methods and assumptions on and after January 1, 2018, are recognized each year and amortized separately over closed 30-year periods. 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%. 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% funded ratio.	Initially Adopted: Mar 20, 2015; Amended: Nov 16, 2018; Effective: Dec 31, 2018

DIVISION TRUST FUNDS—PENSION

ACTUARIAL ASSUMPTIONS

Actuarial Assumptions¹	Unless otherwise noted, it can be assumed 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. Periodically, the Board participates in discussions related to actuarial assumptions to ensure understanding and to provide for the retention or adoption of all economic and non-economic assumptions under the guidance provided by Actuarial Standards of Practice (ASOP) No. 27, <i>Selection of Economic Assumptions for Measuring Pension Obligations</i>, and ASOP No. 35, <i>Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations</i>, as prescribed by the Actuarial Standards Board. The discussions typically occur during asset/liability or experience analysis studies and include participation of the Board's actuarial service provider, their investment consultant, and other actuarial and investment experts who also may provide their market outlook.
Basis for Actuarial Assumptions Used	Unless otherwise noted, the basis of all selected economic and non-economic actuarial assumptions resulted from the 2024 experience analysis and related discussions that took place during the January 17, 2025, Board meeting. As a result of the most recent asset/liability study, initiated in 2023 and concluded at the September 20, 2024, Board meeting, the Board reaffirmed the 7.25% assumed long-term rate of investment return effective as of January 1, 2025, which was supported by the analysis provided by Segal in the 2024 Experience Analysis report delivered and dated January 3, 2025.

¹ See Exhibits A through G for detailed assumption information.

Economic Assumptions	Value(s) / Type	Description / Source / Basis	Adoption / Effective Date
Rate of Investment Return	7.25%	Long-term assumed rate of investment return represented as a percent per year, compounded annually, net of investment expenses. The 2024 experience analysis supported the existing assumption.	Assumed rate of investment return - Last Revised: Nov 18, 2016; Effective: Dec 31, 2016
Real Rate of Investment Return	4.95%	Long-term assumed rate of real investment return (net of price inflation) represented as a percent per year, compounded annually, net of investment expenses. The 2024 experience analysis supported the existing assumption.	Reaffirmed: Nov 15, 2019, Effective: Jan 1, 2020 Reaffirmed: Sept 20, 2024, Effective: Jan 1, 2025
Price Inflation	2.30%	Long-term assumed rate of price inflation represented as a percent per year, compounded annually. The 2024 experience analysis supported the existing assumption.	All economic actuarial assumptions – Last Revised/ Reaffirmed: Jan 17, 2025;
Wage Inflation	3.00%	Long-term assumed rate of wage inflation composed of the plan's assumed price inflation and the assumed real wage growth, represented as a percent per year, compounded annually. The 2024 experience analysis supported the existing assumption.	Effective: Dec 31, 2024
Pay Increases	Exhibit A	Age-related (service-related for Judicial Division) pay increase assumptions for individual members as developed and recommended by the Board's retained actuary. The 2024 experience analysis indicated much lower than expected non-inflationary salary increases in the first two years of the study period, and much greater than expected non-inflationary salary increases in the two most recent years of the study. The revised non-inflationary salary increases were developed based on weighting the existing assumptions by one-half and the 2020-2023 actual experience by one-half, except as noted, below: --School and DPS Divisions: The revised non-inflationary salary increases were developed weighting the existing assumptions by one-third and the 2020-2023 actual experience by two-thirds. --Judicial Division: The revised non-inflationary salary increases were developed weighting the existing assumptions by two-thirds and the 2020-2023 actual experience by one-third.	
Board Crediting Interest Rate	3.00%	Annually, the Board reviews the rate at which interest is credited to member accounts. On November 15, 2024, the Board voted to continue the annual interest rate at 3.00% for interest earned during 2025. Basis: Board Crediting Interest Rate Policy and Board annual discussion at the November 15, 2024, Board meeting.	Annual Review Policy initiated in 2006, slight revisions since. Last Adopted: Nov 15, 2024; Effective: Jan 1, 2025

DIVISION TRUST FUNDS—PENSION

Non-Economic Assumptions	Value(s) / Type	Description / Source / Basis	Adoption / Effective Date
Rates of Withdrawal	Select and Ultimate Withdrawal Rates - Exhibit B	Beginning in 1986, PERA uses a select and ultimate approach for all members (except members of the Judicial Division and those classified under the Safety Officers and DPS benefit structures) in applying rates of withdrawal or termination when estimating the number of members who will leave service prior to retirement. The 2024 experience analysis added a select-period for Safety Officers and indicated, in the aggregate, fewer active member terminations prior to retirement than expected, resulting in a reduction in withdrawal rates across most groups/ages to better match actual experience.	Separation from active service assumptions - Last Revised: Jan 17, 2025; Effective: Dec 31, 2024
Rates of Disability	Exhibit C	The 2024 experience analysis indicated, in the aggregate, fewer active members retired with disability benefits than expected. This resulted in a 19% to 22% reduction of disability rates across all groups, other than the Judicial Division.	
Rates of Retirement	Reduced Early Retirement Rates - Exhibit E	The 2024 experience analysis indicated, in the aggregate, fewer reduced early retirements than expected, except for Safety Officers who experienced more reduced retirements than expected. Retirement experience was analyzed on a benefit-weighted basis separately for males and females, resulting in modifications to reduced early retirement rates at several ages across most divisions.	
	Unreduced Retirement Rates - Exhibit F	The 2024 experience analysis indicated, in the aggregate, more unreduced retirements than expected. Retirement experience was analyzed on a benefit-weighted basis separately for males and females, resulting in modifications to unreduced retirement rates at several ages across most divisions.	

DIVISION TRUST FUNDS—PENSION

Non-Economic Assumptions	Value(s) / Type	Description / Source / Basis	Adoption / Effective Date
Rates of Mortality	Healthy Pre-Retirement Mortality - Exhibit D	Healthy pre-retirement mortality is based on the Pub-2010 mortality tables, by category, as associated with each group using applied generational projection updated to the 2024 adjusted scale MP-2021, based on the 2024 experience analysis: --State and Local Government Divisions (other than Safety Officers): PubG-2010 Employee Table; --State and Local Government Divisions (Safety Officers): PubS-2010 Employee Table; --School and DPS Divisions: PubT-2010 Employee Table; and --Judicial Division: PubG-2010(A) Above-Median Employee Table. The tables are benefit-weighted.	First implemented use of separate mortality tables for different groups / divisions Effective: Dec 31, 2016; First implemented generational mortality and use of a separate mortality table for beneficiaries Effective: Dec 31, 2020; Mortality - Last Revised: Jan 17, 2025; Effective: Dec 31, 2024
	Healthy Post-Retirement Mortality - Exhibit G	The 2024 experience analysis employed a benefit-weighted approach and indicated, in the aggregate, slightly more deaths than expected for all groups of retirees, after adjusting for excess deaths related to COVID. As a result, the appropriate base Pub-2010 mortality tables were retained, with adjustments based on PERA-specific experience where credible data exists. To reflect future improvements in mortality, the applied mortality projection scale was updated to the 2024 adjusted scale MP-2021. Healthy post-retirement non-disability retiree mortality is based on the Pub-2010 mortality tables, by category, as associated with each group using applied generational projection: --State and Local Government Divisions (other than Safety Officers): PubG-2010 Healthy Retiree Table with credibility adjustments by gender and age. For males, the adjustments are 90% of the rates for all ages; for females, the adjustments are 85% of the rates prior to age 85 and 105% of the rates for ages 85 and older; --State and Local Government Divisions (Safety Officers): Unadjusted PubS-2010 Healthy Retiree Table for males and females; --School and DPS Divisions: PubT-2010 Healthy Retiree Table with credibility adjustments by gender and age. For males, the adjustments are 106% of the rates for all ages; for females, the adjustments are 86% of the rates prior to age 85 and 115% of the rates for ages 85 and older; and --Judicial Division: Unadjusted PubG-2010(A) Above-Median Healthy Retiree Table for males and females. The tables are benefit-weighted.	
	Beneficiary Post-Retirement Mortality - Exhibit G	The 2024 experience analysis employed a benefit-weighted approach and indicated fewer deaths than expected for beneficiaries. As a result, the appropriate post-retirement non-disabled beneficiary mortality of the Pub-2010 Contingent Survivor Table (benefit weighted) was retained and adjusted for credibility and gender using applied generational projection updated to the 2024 adjusted scale MP-2021. For males, the adjustments are 92% of the rates for all ages; for females, the adjustments are 100% of the rates for all ages.	
	Disabled Post-Retirement Mortality	The 2024 experience analysis employed a benefit-weighted approach and indicated fewer disabled retiree deaths than expected. Disabled post-retirement mortality was retained based on the Pub-2010 mortality tables using applied generational projection updated to the 2024 adjusted scale MP-2021: --All Divisions (other than Safety Officers): PubNS-2010 Disabled Retiree Table using 95% of the rates for all ages; and --State and Local Government Divisions (Safety Officers): Unadjusted PubS-2010 Disabled Retiree Table for males and females. The tables are benefit-weighted.	

DIVISION TRUST FUNDS—PENSION

Non-Economic Assumptions	Value(s) / Type	Description / Source / Basis	Adoption / Effective Date
Rate of Vested Terminated Members to Refund Member Account	Non-Judicial - 35%	The 2024 experience analysis confirmed the current assumption that 35% of the vested members who terminate will elect to withdraw their accounts while the remaining 65% will elect to leave their accounts in the plan to be eligible for a benefit at retirement date.	Last Revised: 2009; Effective: Dec 31, 2009
	Judicial - 0%	The 2024 experience analysis confirmed the current assumption that none of the vested members who terminate will elect to withdraw their accounts while 100% will elect to leave their accounts in the plan to be eligible for a benefit at retirement date.	
Rate of Non-Vested Terminated Members to Refund Member Account	100%	The 2024 experience analysis confirmed the current assumption that 100% of the non-vested members who terminate will elect to withdraw their accounts.	Since inception of termination benefits, first mentioned in Dec 31, 2011 actuarial valuation report
Administrative Expense Load	0.45%	The load added to the normal cost for each division, referred to as the administrative expense load, was first adopted by the Board as of November 5, 2012, effective for the December 31, 2012, actuarial valuation. The 2024 experience analysis indicated the need for a 0.05% increase for a total of 0.45% administrative expense load deemed appropriate for this purpose.	Initially adopted: Nov 5, 2012; Effective: Dec 31, 2012; Last Revised: Jan 17, 2025; Effective: Dec 31, 2024

Annual Increase (AI) Assumptions	Value(s)	Description / Source / Basis	Adoption / Effective Date
AI Rate Cap (Membership Prior to Jan 1, 2007 under the PERA Benefit Structure & Members under the DPS Benefit Structure)	1.00%	The AI cap that may be awarded by the Board in 2022 and thereafter is assumed to be 1.00% per year after payments begin and eligibility requirements for payment of the AI have been met. Basis: Adjusted pursuant to C.R.S. § 24-51-413, based on results of the 2018 and 2020 automatic adjustment provision (AAP) assessments.	Effective: Dec 31, 2021
AI Rate Cap (Membership After Dec 31, 2006 under the PERA Benefit Structure)	0.00%	An AIR was established for each Division Trust Fund to provide AIs, to the extent affordable, once benefits become payable for these members. Therefore, the AI actuarial assumption applied to these members is 0.00%, since members in this category receive AIs through the affiliated AIR only to the extent affordable in accordance with C.R.S. § 24-51-1009. Basis: AI provisions Pursuant to Senate Bill (SB) 06-235, enacted May 25, 2006.	Enacted: May 25, 2006; Effective: Dec 31, 2006
AI Waiting Period	36 months	The 36-month waiting period to meet the eligibility for AI payments was enacted June 4, 2018, and first recognized in the December 31, 2017, actuarial valuations. Basis: Pursuant to SB 18-200, enacted June 4, 2018	Enacted: Jun 4, 2018; Effective: Dec 31, 2017

DIVISION TRUST FUNDS—PENSION

ACTUARIAL STUDIES				
Governance Studies	Following their adopted governance procedures and practices, the Board performs periodic asset/liability modeling studies, actuarial audits, and actuarial experience analyses approximately every three to five years.			
Actuarial Studies	Description / Result	Last Conducted By	Completed	Next Scheduled
Asset Liability Modeling (ALM) Study	The Board commissioned an asset/liability study, prepared by Aon Investments USA, Inc. (Aon), which commenced in 2023 and was concluded September 20, 2024. The objective of the study was to determine the optimal strategic asset allocation allowing PERA to meet its financial obligations, while also ensuring that PERA incurs appropriate levels of risk and cash liquidity. As a result of this study, the Board slightly modified the asset allocation ranges and targets effective January 1, 2025, while reaffirming the investment return assumption of 7.25%.	Aon	Sep, 20, 2024	2028 - 2029
Actuarial Audit	The primary focus of an actuarial 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. The most recent actuarial audit was conducted in 2022 by Buck, an independent actuarial consulting firm with significant experience performing actuarial services within the public plan sector. Buck's October 14, 2022, actuarial audit report states: "Based on our review of the census data, experience study documents, liability replication, review of individual sample life calculations, and the actuarial valuation reports, we believe the December 31, 2021, actuarial valuations for Division Trust Funds and Health Care Trust Funds are reasonable, based on appropriate assumptions and methods, and the reports generally comply with the Actuarial Standards of Practice (ASOPs)", and, additionally, "Our review has indicated that the actuarial process followed by Colorado PERA is thorough, complete, and complies with applicable Actuarial Standards of Practice (ASOPs) and U.S. Qualification Standards (USQ) of the American Academy of Actuaries (AAA)."	Buck	Oct 14, 2022	2026
Experience Analysis	In late December of 2024, Segal completed an experience analysis covering plan experience for the four-year period from 2020 through 2023, to provide the Board an updated view of all economic and demographic assumptions. In addition to the recommendations regarding revised assumptions, the Board's 2024 decision to reaffirm the assumed long-term rate of investment return of 7.25% was supported by the analysis provided in the experience analysis report, delivered and dated January 3, 2025. Based on the results of the experience analysis, the presentation by Segal, and related discussion, the Board adopted the recommended revised economic and demographic assumptions, as proposed, during the January 17, 2025, Board meeting effective for the December 31, 2024, actuarial valuation.	Segal	Reports Delivered: Jan 3, 2025; Revised Assumptions Adopted: Jan 17, 2025 Effective: For Valuation: Dec 31, 2024 For Actuarial Admin Factors: Mar 1, 2025	2028

DIVISION TRUST FUNDS—PENSION

CHANGES SINCE LAST ACTUARIAL VALUATION	
Changes in Actuarial Methods	There are no changes in actuarial methods incorporated in the December 31, 2024, actuarial valuation since the last actuarial valuation as of December 31, 2023.
Changes in Actuarial Assumptions	The following changes in economic and demographic actuarial assumptions are incorporated in the December 31, 2024, actuarial valuation, since the last actuarial valuation as of December 31, 2023. - Salary scale assumptions were altered to better reflect actual recent experience. - Assumed rates of termination/withdrawal, retirement, and disability were revised to more closely reflect actual experience. - Mortality assumptions, Pub-2010 Public Retirement Plans Mortality base tables were retained with revised adjustments for credibility and gender, where applicable. In addition, the applied generational projection scale was updated to the 2024 adjusted scale MP-2021. - Administrative expense load (an element of the normal cost for each division), was increased from 0.40% to 0.45%, as a percentage of covered payroll.
Changes in Plan Provisions	Except for the items noted below, there are no changes to contribution and plan provisions incorporated in the December 31, 2024, actuarial valuation since the last actuarial valuation as of December 31, 2023. As of December 31, 2024, plan assets for the Local Government Division Trust Fund reflect additional payments related to the disaffiliation of Tri-County Health Department as a PERA-affiliated employer, effective December 31, 2022. The additional employer disaffiliation payment allocations to the Local Government Division Trust Fund and the Health Care Trust Fund (HCTF) were \$0.486 million and \$0.020 million, respectively. House Bill (HB) 25-1105, enacted May 23, 2025, and effective July 1, 2025, was reflected to the extent possible in the December 31, 2024, valuation. HB 25-1105 reduces the base employer contribution rate for the DPS Division by 3.0% of salary, from 10.4% to 7.4%, and reduces the allocated employer contribution to the DPS HCTF by 0.82% of salary, from 1.02% to 0.20%. SB 25-310, enacted June 2, 2025, and effective immediately, allows PERA to accept a series of warrants from the State Treasurer totaling \$500 million on or after July 1, 2025, and before October 1, 2025. These dollars are to be proportioned over time to replace reductions to future direct distributions intended to fund the Peace Officer Training and Support Fund and, at that time, will be allocated to the appropriate Division Trust Fund(s) within PERA. SB 25-310 also allows for an alternative actuarial method to allocate the direct distribution if the allocation, based on the reported payroll of each participating division, results in an AAP assessment ratio below the 98% benchmark.

SIGNIFICANT EVENTS

There were no significant events during 2024.

DIFFERENCES IN ACTUARIAL VALUATION METHODS AND ASSUMPTIONS

- The actuarial valuation for funding purposes was performed as of December 31, 2024. The actuarial valuation for accounting and financial reporting purposes was performed as of December 31, 2023, and the total pension liability (TPL) was rolled forward to the measurement date as of December 31, 2024.
- Census data used for the actuarial valuation for funding purposes reflects membership data as of December 31, 2024, and the census data used for the actuarial valuation for accounting and financial reporting purposes reflects membership data as of December 31, 2023. Therefore, all summaries and schedules, regarding actuarial valuation results for funding purposes, shown in the Actuarial Section, reflect census data as of December 31, 2024.
- The actuarial valuation for funding purposes applies an asset valuation method that recognizes a four-year smoothed fair 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 AI assumption for members under 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 AI payable to eligible members after benefit commencement. AIR plan provisions are deemed substantively automatic, ad hoc cost-of-living adjustments. Liabilities associated with the AIR statutorily can never exceed available assets. As a result, 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 TPL of the applicable division.

DIVISION TRUST FUNDS—PENSION

Actuarial Assumptions: Exhibits A–G

Exhibit A: Individual Pay Increase Assumptions—All Divisions and Benefit Structures

AGE-BASED PAY INCREASE ASSUMPTIONS FOR AN INDIVIDUAL MEMBER—
STATE DIVISION, SCHOOL DIVISION, LOCAL GOVERNMENT DIVISION, SAFETY OFFICERS, AND DPS DIVISION

Sample Ages	Merit and Seniority					Inflation and Productivity	Total Increase (Next Year)				
	State ¹	School ²	Local Government ¹	Safety Officers ³	DPS ²	All Divisions / Groups	State ¹	School ²	Local Government ¹	Safety Officers ³	DPS ²
20	10.30%	10.40%	10.00%	13.30%	13.80%	3.00%	13.30%	13.40%	13.00%	16.30%	16.80%
25	5.70%	7.20%	7.60%	5.60%	9.00%	3.00%	8.70%	10.20%	10.60%	8.60%	12.00%
30	3.90%	4.50%	5.00%	3.50%	5.50%	3.00%	6.90%	7.50%	8.00%	6.50%	8.50%
35	2.90%	4.00%	3.80%	2.70%	4.20%	3.00%	5.90%	7.00%	6.80%	5.70%	7.20%
40	2.20%	3.60%	3.10%	2.20%	3.80%	3.00%	5.20%	6.60%	6.10%	5.20%	6.80%
45	1.50%	2.80%	2.40%	1.60%	3.40%	3.00%	4.50%	5.80%	5.40%	4.60%	6.40%
50	1.00%	2.20%	2.00%	1.30%	2.90%	3.00%	4.00%	5.20%	5.00%	4.30%	5.90%
55	0.60%	1.80%	1.60%	1.10%	2.30%	3.00%	3.60%	4.80%	4.60%	4.10%	5.30%
60	0.20%	1.40%	1.20%	0.60%	1.70%	3.00%	3.20%	4.40%	4.20%	3.60%	4.70%
65	0.00%	1.10%	0.70%	0.20%	1.10%	3.00% ⁴	2.80% ⁴	4.10%	3.70%	3.20%	4.10%
70	0.00%	1.00%	0.40%	0.20%	0.90%	3.00% ⁴	2.70% ⁴	4.00%	3.40%	3.20%	3.90%

¹ Rates shown do not apply to Safety Officers.

² Rates shown apply to the division indicated regardless of benefit structure.

³ Rates shown apply to Safety Officers in the State or Local Government Divisions.

⁴ For the State Division, the rates for inflation and productivity are 2.80% and 2.70% for ages 65 and 70, respectively.

SERVICE-BASED PAY INCREASE ASSUMPTIONS FOR AN
INDIVIDUAL MEMBER—JUDICIAL DIVISION

Sample Years of Service	Merit and Seniority	Inflation and Productivity	Total Increase (Next Year)
0	1.70%	3.00%	4.70%
5	1.60%	3.00%	4.60%
10	0.90%	3.00%	3.90%
15	0.30%	3.00%	3.30%
20	0.10%	3.00%	3.10%
25	0.00%	2.90%	2.90%
30	0.00%	2.68%	2.68%
35	0.00%	2.40%	2.40%
40	0.00%	2.30%	2.30%

DIVISION TRUST FUNDS—PENSION

Exhibit B: Withdrawal Assumptions—All Divisions and Benefit Structures

**SELECT RATES OF WITHDRAWAL—PERCENT OF MEMBERS WITH LESS THAN FIVE YEARS OF SERVICE
WITHDRAWING FROM EMPLOYMENT WITHIN THE NEXT YEAR**

Completed Years of Service	State Division ¹	School Division ²	Local Government Division ¹	Safety Officers ³	DPS Division ⁴
	Unisex	Unisex	Unisex	Unisex	Unisex
0	30.00%	27.00%	30.00%	25.00%	25.00%
1	20.00%	17.00%	20.00%	20.00%	19.00%
2	16.00%	13.50%	16.00%	12.00%	14.00%
3	12.00%	11.00%	12.00%	8.00%	12.00%
4	10.00%	10.00%	10.00%	6.00%	11.00%

**ULTIMATE RATES OF WITHDRAWAL—PERCENT OF MEMBERS WITH FIVE OR MORE YEARS OF SERVICE
WITHDRAWING FROM EMPLOYMENT WITHIN THE NEXT YEAR**

Sample Ages	State Division ¹		School Division ²		Local Government Division ¹		Safety Officers ³
	Male	Female	Male	Female	Male	Female	Unisex
20	20.70%	21.90%	18.00%	17.00%	20.70%	21.90%	7.30%
25	11.30%	15.10%	10.40%	11.60%	11.30%	15.10%	5.60%
30	8.70%	10.20%	6.70%	7.50%	8.70%	10.20%	4.40%
35	6.80%	7.70%	4.70%	5.30%	6.80%	7.70%	3.50%
40	5.40%	5.90%	3.60%	4.00%	5.40%	5.90%	3.10%
45	4.40%	4.90%	3.20%	3.70%	4.40%	4.90%	2.90%
50	3.90%	4.60%	3.10%	3.70%	3.90%	4.60%	2.80%
55	3.60%	4.50%	3.10%	3.70%	3.60%	4.50%	2.70%
60	3.50%	4.50%	3.10%	3.70%	3.50%	4.50%	2.70%
65	3.50%	4.50%	3.10%	3.70%	3.50%	4.50%	2.70%
70	3.50%	4.50%	3.10%	3.70%	3.50%	4.50%	2.70%

Sample Ages	Judicial Division	DPS Division ⁴		DPS Benefit Structure ⁵
	Unisex	Male	Female	Unisex
20	1.50%	16.20%	12.80%	10.00%
25	1.50%	12.60%	11.10%	8.80%
30	1.50%	9.70%	10.20%	6.20%
35	1.50%	7.10%	8.40%	4.70%
40	1.50%	6.30%	6.60%	3.90%
45	1.50%	6.10%	5.80%	3.20%
50	1.50%	5.90%	5.60%	2.70%
55	1.50%	5.60%	5.30%	2.50%
60	1.50%	5.50%	5.10%	2.50%
65	1.50%	5.50%	5.10%	2.50%
70	1.50%	5.50%	5.10%	2.50%

¹ Rates shown do not apply to Safety Officers.

² Rates shown apply to PERA benefit structure members in the School Division.

³ Rates shown apply to Safety Officers in the State or Local Government Divisions.

⁴ Rates shown apply to PERA benefit structure members in the DPS Division.

⁵ Rates shown apply to DPS benefit structure members in any division.

DIVISION TRUST FUNDS—PENSION

Exhibit C: Disability Assumptions—All Divisions and Benefit Structures**RATES OF DISABILITY—PERCENT OF MEMBERS DISABLING FROM EMPLOYMENT WITHIN THE NEXT YEAR**

Sample Ages	State Division ¹	School and DPS Divisions ²	Local Government ¹	Safety Officers ³	Judicial Division	DPS Benefit Structure ⁴
	Unisex	Unisex	Unisex	Unisex	Unisex	Unisex
20	0.004%	0.004%	0.004%	0.008%	0.004%	0.004%
25	0.004%	0.005%	0.004%	0.012%	0.005%	0.005%
30	0.006%	0.007%	0.006%	0.020%	0.007%	0.007%
35	0.018%	0.013%	0.018%	0.033%	0.013%	0.013%
40	0.037%	0.027%	0.037%	0.116%	0.027%	0.027%
45	0.072%	0.050%	0.072%	0.167%	0.050%	0.050%
50	0.128%	0.074%	0.128%	0.167%	0.074%	0.074%
55	0.163%	0.093%	0.163%	0.244%	0.093%	0.093%
60	0.169%	0.115%	0.169%	0.991%	0.115%	0.115%
65	0.169%	0.125%	0.169%	1.455%	0.125%	0.125%
70	0.169%	0.125%	0.169%	1.455%	0.125%	0.125%

¹ Rates shown do not apply to Safety Officers.

² Rates shown apply to PERA benefit structure members in the School or DPS Divisions.

³ Rates shown apply to Safety Officers in the State or Local Government Divisions.

⁴ Rates shown apply to DPS benefit structure members in any division.

Exhibit D: Pre-Retirement Mortality Assumptions—All Divisions and Benefit Structures**2024 RATES OF PRE-RETIREMENT MORTALITY¹—PERCENT OF ACTIVE MEMBERS DECEASING WITHIN THE NEXT YEAR**

Sample Ages	State and Local Government Divisions ²		School and DPS Divisions ³		Safety Officers ⁴		Judicial Division	
	Male	Female	Male	Female	Male	Female	Male	Female
20	0.038%	0.014%	0.035%	0.014%	0.042%	0.017%	0.037%	0.013%
25	0.033%	0.011%	0.019%	0.011%	0.044%	0.025%	0.028%	0.010%
30	0.051%	0.021%	0.031%	0.020%	0.058%	0.038%	0.044%	0.018%
35	0.072%	0.033%	0.046%	0.028%	0.072%	0.051%	0.063%	0.030%
40	0.091%	0.043%	0.058%	0.037%	0.081%	0.059%	0.079%	0.040%
45	0.108%	0.055%	0.074%	0.047%	0.090%	0.065%	0.094%	0.050%
50	0.141%	0.077%	0.105%	0.068%	0.113%	0.085%	0.122%	0.071%
55	0.213%	0.125%	0.167%	0.109%	0.170%	0.125%	0.185%	0.114%
60	0.332%	0.195%	0.274%	0.169%	0.274%	0.176%	0.287%	0.177%
65	0.473%	0.283%	0.440%	0.258%	0.414%	0.218%	0.409%	0.258%
70	0.655%	0.436%	0.661%	0.433%	0.714%	0.405%	0.568%	0.397%

¹ Assumptions shown are used for pension plans, developed on a benefit-weighted basis, whereas those used for OPEB plans are headcount-weighted, using the same underlying mortality tables. For more detail, please see the mortality descriptions in the Pension and OPEB introduction subsections.

² Rates shown do not apply to Safety Officers.

³ Rates shown apply to all members in the School and DPS Divisions, regardless of benefit structure.

⁴ Rates shown apply to Safety Officers in the State or Local Government Divisions.

DIVISION TRUST FUNDS—PENSION

Exhibit E: Reduced Retirement Assumptions—All Divisions and Benefit Structures**RATES OF REDUCED RETIREMENT—PERCENT OF MEMBERS ELIGIBLE FOR REDUCED RETIREMENT BENEFITS RETIRING WITHIN THE NEXT YEAR**

Retirement Ages	State Division ¹		School and DPS Divisions ²		Local Government Division ¹		Safety Officers ³	Judicial Division	DPS Benefit Structure ⁴	
	Male	Female	Male	Female	Male	Female	Unisex	Unisex	Male	Female
50	8.5%	8.0%	7.0%	7.0%	8.5%	8.0%	11.0%	15.0%	6.0%	6.0%
51	8.5%	8.0%	7.0%	7.0%	8.5%	8.0%	11.0%	15.0%	6.0%	6.0%
52	9.0%	8.0%	7.0%	7.0%	9.0%	8.0%	11.0%	15.0%	6.0%	6.0%
53	9.0%	8.0%	7.0%	8.0%	9.0%	8.0%	11.0%	15.0%	6.0%	6.0%
54	9.0%	9.0%	9.0%	10.0%	9.0%	9.0%	11.0%	15.0%	6.0%	10.0%
55	10.0%	9.0%	9.0%	10.5%	10.0%	9.0%	11.0%	11.0%	11.0%	10.0%
56	9.0%	9.0%	9.0%	10.5%	9.0%	9.0%	11.0%	11.0%	8.0%	10.0%
57	9.0%	9.0%	9.0%	10.5%	9.0%	9.0%	11.0%	11.0%	8.0%	9.0%
58	9.0%	9.0%	9.0%	10.5%	9.0%	9.0%	11.0%	11.0%	8.0%	9.0%
59	9.0%	9.0%	9.0%	10.5%	9.0%	9.0%	11.0%	11.0%	8.0%	12.0%
60	9.0%	9.0%	10.0%	12.0%	9.0%	9.0%	12.0%	12.0%	12.0%	12.0%
61	8.0%	8.0%	9.5%	10.0%	8.0%	8.0%	12.0%	12.0%	12.0%	12.0%
62	8.0%	8.0%	9.5%	10.0%	8.0%	8.0%	12.0%	12.0%	12.0%	12.0%
63	8.0%	9.0%	9.5%	10.0%	8.0%	9.0%	12.0%	12.0%	12.0%	12.0%
64	8.0%	9.0%	9.5%	10.0%	8.0%	9.0%	12.0%	12.0%	12.0%	12.0%
65 and over	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

¹ Rates shown do not apply to Safety Officers.

² Rates shown apply to PERA benefit structure members in the School or DPS Divisions.

³ Rates shown apply to Safety Officers in the State or Local Government Divisions.

⁴ Rates shown apply to DPS benefit structure members in any division.

DIVISION TRUST FUNDS—PENSION

Exhibit F: Unreduced Retirement Assumptions—All Divisions and Benefit Structures**ADDITIONAL INCREASE IN RATES DURING THE FIRST FIVE YEARS OF UNREDUCED RETIREMENT ELIGIBILITY FOR AGES 55 THROUGH 64**

First Five Years of Unreduced Retirement Eligibility	State Division ¹		School and DPS Divisions ²		Local Government Division ¹		Safety Officers ³
	Male	Female	Male	Female	Male	Female	Unisex
1	30%	20%	28%	28%	30%	20%	20%
2	13%	9%	4%	10%	13%	9%	0%
3	13%	9%	4%	10%	13%	9%	0%
4	13%	9%	4%	10%	13%	9%	0%
5	13%	9%	4%	10%	13%	9%	0%

RATES OF UNREDUCED RETIREMENT—PERCENT OF MEMBERS ELIGIBLE FOR UNREDUCED RETIREMENT BENEFITS RETIRING WITHIN THE NEXT YEAR

Retirement Ages	State Division ¹		School and DPS Divisions ²		Local Government Division ¹		Safety Officers ³	Judicial Division	DPS Benefit Structure ⁴	
	Male	Female	Male	Female	Male	Female	Unisex	Unisex	Male	Female
50	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	15.0%	60.0%	40.0%
51	57.0%	30.0%	45.0%	43.0%	57.0%	30.0%	38.0%	15.0%	33.0%	40.0%
52	47.0%	33.0%	38.0%	43.0%	47.0%	33.0%	32.0%	15.0%	38.0%	30.0%
53	36.0%	31.0%	42.0%	41.0%	36.0%	31.0%	32.0%	15.0%	30.0%	30.0%
54	33.0%	33.0%	38.0%	36.0%	33.0%	33.0%	32.0%	15.0%	25.0%	30.0%
55	41.0%	37.0%	41.0%	41.0%	41.0%	37.0%	28.0%	11.0%	30.0%	41.0%
56	21.0%	21.0%	25.0%	25.0%	21.0%	21.0%	28.0%	11.0%	27.0%	24.0%
57	20.0%	19.0%	23.0%	25.0%	20.0%	19.0%	28.0%	11.0%	27.0%	25.0%
58	20.0%	19.0%	21.0%	23.0%	20.0%	19.0%	28.0%	11.0%	36.0%	21.0%
59	21.0%	19.0%	23.0%	23.0%	21.0%	19.0%	28.0%	11.0%	36.0%	25.0%
60	20.0%	21.0%	24.0%	25.0%	20.0%	21.0%	30.0%	12.0%	33.0%	23.0%
61	20.0%	20.0%	24.0%	24.0%	20.0%	20.0%	30.0%	12.0%	26.0%	31.0%
62	20.0%	20.0%	23.0%	25.0%	20.0%	20.0%	30.0%	12.0%	32.0%	31.0%
63	22.0%	18.0%	22.0%	24.0%	22.0%	18.0%	30.0%	12.0%	34.0%	31.0%
64	22.0%	20.0%	26.0%	24.0%	22.0%	20.0%	30.0%	12.0%	26.0%	31.0%
65	29.0%	32.0%	33.0%	36.0%	29.0%	32.0%	100.0%	20.0%	40.0%	45.0%
66	27.0%	27.0%	31.0%	31.0%	27.0%	27.0%	100.0%	20.0%	28.0%	35.0%
67	28.0%	25.0%	29.0%	28.0%	28.0%	25.0%	100.0%	20.0%	28.0%	35.0%
68	25.0%	26.0%	23.0%	28.0%	25.0%	26.0%	100.0%	20.0%	28.0%	35.0%
69	24.5%	24.0%	27.0%	26.0%	24.5%	24.0%	100.0%	20.0%	28.0%	35.0%
70	24.5%	24.0%	24.0%	27.0%	24.5%	24.0%	100.0%	45.0%	46.0%	30.0%
71	24.5%	24.0%	24.0%	25.0%	24.5%	24.0%	100.0%	45.0%	40.0%	30.0%
72	24.5%	24.0%	24.0%	25.0%	24.5%	24.0%	100.0%	45.0%	40.0%	30.0%
73	24.5%	24.0%	24.0%	25.0%	24.5%	24.0%	100.0%	45.0%	40.0%	30.0%
74	24.5%	24.0%	24.0%	25.0%	24.5%	24.0%	100.0%	45.0%	40.0%	30.0%
75 and over	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

¹ Rates shown do not apply to Safety Officers.² Rates shown apply to PERA benefit structure members in the School or DPS Divisions.³ Rates shown apply to Safety Officers in the State or Local Government Divisions.⁴ Rates shown apply to DPS benefit structure members in any division.

DIVISION TRUST FUNDS—PENSION

**Exhibit G: Post-Retirement Mortality Assumptions and Single Life Retirement Values—
All Divisions and Benefit Structures****2024 RATES OF POST-RETIREMENT MORTALITY^{1,2} 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 1.00% Annually		Future Life Expectancy in Years	
	Male	Female	Male	Female	Male	Female	Male	Female
State and Local Government Divisions								
50	0.253%	0.176%	\$151.74	\$155.72	\$169.32	\$174.45	36.11	38.67
55	0.377%	0.247%	145.27	150.27	160.84	167.08	31.28	33.75
60	0.575%	0.342%	137.09	143.06	150.44	157.67	26.61	28.92
65	0.831%	0.499%	126.83	133.49	137.80	145.66	22.13	24.18
70	1.280%	0.806%	113.91	121.06	122.43	130.62	17.84	19.60
75	2.172%	1.443%	98.40	105.56	104.55	112.53	13.85	15.26
80	3.923%	2.664%	81.09	87.24	85.18	91.85	10.31	11.29
85	7.201%	6.217%	63.76	66.49	66.27	69.17	7.40	7.78
Safety Officers								
45	0.134%	0.085%	\$156.86	\$158.72	\$176.03	\$178.57	40.20	42.28
50	0.181%	0.139%	151.48	153.69	168.76	171.73	35.16	37.16
55	0.297%	0.262%	144.23	147.07	159.34	163.05	30.20	32.15
60	0.528%	0.467%	134.94	138.77	147.69	152.49	25.41	27.34
65	0.891%	0.737%	123.54	128.49	133.82	139.80	20.88	22.76
70	1.462%	1.185%	109.70	115.70	117.50	124.54	16.63	18.40
75	2.553%	2.070%	93.46	100.48	98.95	106.95	12.73	14.36
80	4.659%	3.696%	75.77	83.70	79.30	88.08	9.33	10.80
85	8.508%	6.529%	58.43	66.63	60.51	69.36	6.58	7.84
School and DPS Divisions								
55	0.230%	0.168%	\$147.72	\$152.38	\$163.72	\$169.68	31.97	34.71
60	0.393%	0.259%	139.35	145.47	153.03	160.57	27.11	29.79
65	0.634%	0.367%	128.69	136.24	139.87	148.86	22.43	24.96
70	1.057%	0.591%	115.21	123.88	123.80	133.83	17.96	20.23
75	1.945%	1.133%	98.90	108.07	105.02	115.30	13.80	15.70
80	3.722%	2.261%	80.66	89.06	84.62	93.79	10.12	11.54
85	7.144%	5.911%	62.09	67.14	64.40	69.84	7.07	7.83
Judicial Division								
50	0.252%	0.198%	\$151.61	\$154.88	\$169.13	\$173.40	35.88	38.30
55	0.376%	0.279%	145.08	149.26	160.57	165.84	31.05	33.41
60	0.574%	0.389%	136.81	141.88	150.06	156.28	26.38	28.61
65	0.829%	0.570%	126.40	132.18	137.26	144.16	21.90	23.93
70	1.287%	0.920%	113.29	119.72	121.67	129.17	17.60	19.41
75	2.202%	1.648%	97.54	104.50	103.55	111.44	13.60	15.18
80	4.009%	3.041%	79.97	87.12	83.92	91.81	10.06	11.38
85	7.419%	5.744%	62.36	68.82	64.72	71.70	7.15	8.15

Please see next page for footnote references.

DIVISION TRUST FUNDS—PENSION

2024 RATES OF POST-RETIREMENT MORTALITY^{1,2} AND SINGLE LIFE RETIREMENT VALUES (CONTINUED)

(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 1.00% Annually		Future Life Expectancy in Years	
	Male	Female	Male	Female	Male	Female	Male	Female
Beneficiaries (All Divisions)								
40	0.697%	0.316%	\$152.88	\$159.21	\$171.99	\$179.97	41.91	46.24
45	0.555%	0.256%	150.31	156.25	168.18	175.66	37.82	41.53
50	0.609%	0.298%	145.64	151.62	161.92	169.37	33.45	36.71
55	0.736%	0.452%	139.37	145.56	153.79	161.40	29.11	31.98
60	0.967%	0.652%	131.40	138.20	143.77	151.96	24.86	27.45
65	1.287%	0.861%	121.52	128.99	131.71	140.49	20.78	23.08
70	1.826%	1.206%	109.35	117.16	117.32	126.27	16.88	18.83
75	2.811%	1.940%	95.11	102.56	100.95	109.29	13.27	14.81
80	4.503%	3.333%	79.39	85.82	83.35	90.40	10.05	11.17
85	7.492%	6.027%	63.22	68.11	65.68	70.95	7.32	8.05

¹ Rates are shown for healthy benefit recipients. Separate disability mortality tables are used for disabled retirees.

² Assumptions shown are used for pension plans, developed on a benefit-weighted basis, whereas those used for OPEB plans are headcount-weighted, using the same underlying mortality tables. For more detail, please see the mortality descriptions in the Pension and OPEB introduction subsections.

Summary of Funding Progress

The PERA funding objective is 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 following schedules presented in this section provide an overview of funding progress:

- The Schedule of Funded Liabilities by Type shows the degree to which existing liabilities are funded, including prior history.
- The Schedule of Funding Progress shows the UAAL as a percentage of annual covered payroll, including prior history.
- Schedules detailing actuarial gains and losses, by source, 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 based on the December 31, 2024, actuarial valuation for the period ending December 31, 2026.

Schedule of Funded Liabilities by Type

The Schedule of Funded Liabilities by Type, formerly known as the “solvency test,” compares the plan’s actuarial value of assets 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.

The actuarial valuation of December 31, 2024, shows plan assets fully cover liability A. In addition, the remainder of plan assets covers 100% of the liabilities for future benefits to persons who have retired or terminated service with the right to a future benefit (liability B) regarding the Local Government, Judicial, and DPS Division Trust Funds and a significant portion of these liabilities for the State and School Division Trust Funds. Generally, if the system follows the discipline of level contribution rate financing, the funded portion of liability B and C is expected to increase over time.

DIVISION TRUST FUNDS—PENSION

SCHEDULE OF FUNDED LIABILITIES BY TYPE

(Dollars in Thousands)

Valuation Date	Aggregate Accrued Liabilities			Actuarial Value of Plan Assets	Portion of Actuarial Accrued Liabilities Covered by Valuation Assets		
	Active Member Contributions (A) ¹	Retirees, Beneficiaries, and Inactive Members (B)	Employer-Financed Portion of Active Members (C)		Liability (A)	Liability (B)	Liability (C)
State Division							
12/31/2015	\$2,685,014	\$16,470,370	\$4,930,287	\$13,882,820	100.0%	68.0%	0.0%
12/31/2016	2,678,312	17,933,227	5,058,377	14,026,332	100.0%	63.3%	0.0%
12/31/2017	2,668,406	17,395,423	4,718,256	14,256,410	100.0%	66.6%	0.0%
12/31/2018	2,682,956	18,095,951	4,730,945	14,303,726	100.0%	64.2%	0.0%
12/31/2019	2,737,022	18,157,929	4,822,697	14,922,050	100.0%	67.1%	0.0%
12/31/2020	2,820,780	18,876,016	5,420,009	16,039,287	100.0%	70.0%	0.0%
12/31/2021	2,881,533	19,079,270	5,199,043	17,379,516	100.0%	76.0%	0.0%
12/31/2022	2,909,654	19,514,493	5,223,224	18,371,697	100.0%	79.2%	0.0%
12/31/2023	3,146,892	19,746,746	5,567,177	18,851,972	100.0%	79.5%	0.0%
12/31/2024	3,429,965	19,911,725	5,874,863	19,358,507	100.0%	80.0%	0.0%
School Division							
12/31/2015	\$4,003,251	\$25,133,168	\$8,540,734	\$22,871,661	100.0%	75.1%	0.0%
12/31/2016	4,108,961	27,922,423	9,321,584	23,263,344	100.0%	68.6%	0.0%
12/31/2017	4,212,088	26,937,539	8,896,588	23,780,045	100.0%	72.6%	0.0%
12/31/2018	4,344,574	27,922,414	9,331,412	24,094,442	100.0%	70.7%	0.0%
12/31/2019	4,551,132	28,014,055	9,859,874	25,412,014	100.0%	74.5%	0.0%
12/31/2020	4,748,885	29,376,412	11,406,778	27,581,088	100.0%	77.7%	0.0%
12/31/2021	5,019,414	29,763,775	11,553,599	30,253,176	100.0%	84.8%	0.0%
12/31/2022	5,273,925	30,576,351	12,476,471	32,393,722	100.0%	88.7%	0.0%
12/31/2023	5,671,239	31,352,518	13,307,694	33,565,369	100.0%	89.0%	0.0%
12/31/2024	6,143,427	31,678,820	14,826,731	34,788,986	100.0%	90.4%	0.0%
Local Government Division							
12/31/2015	\$533,262	\$3,275,093	\$972,343	\$3,777,161	100.0%	99.0%	0.0%
12/31/2016	545,507	3,573,344	1,094,201	3,879,197	100.0%	93.3%	0.0%
12/31/2017	544,525	3,482,526	1,018,881	4,009,413	100.0%	99.5%	0.0%
12/31/2018	549,499	3,679,915	1,011,471	4,070,679	100.0%	95.7%	0.0%
12/31/2019	565,273	3,713,892	1,037,268	4,288,325	100.0%	100.0%	0.9%
12/31/2020	579,211	3,895,852	1,183,840	4,663,031	100.0%	100.0%	15.9%
12/31/2021	597,770	3,978,148	1,169,092	5,090,566	100.0%	100.0%	44.0%
12/31/2022	591,991	4,112,331	1,209,122	5,379,487	100.0%	100.0%	55.8%
12/31/2023	630,121	4,211,744	1,306,293	5,576,371	100.0%	100.0%	56.2%
12/31/2024	671,506	4,337,709	1,406,886	5,722,150	100.0%	100.0%	50.7%

Please see next page for footnote references.

DIVISION TRUST FUNDS—PENSION

SCHEDULE OF FUNDED LIABILITIES BY TYPE (CONTINUED)

(Dollars in Thousands)

Valuation Date	Aggregate Accrued Liabilities				Portion of Actuarial Accrued Liabilities Covered by Valuation Assets		
	Active Member Contributions (A) ¹	Retirees, Beneficiaries, and Inactive Members (B)	Employer-Financed Portion of Active Members (C)	Actuarial Value of Plan Assets	Liability (A)	Liability (B)	Liability (C)
Judicial Division							
12/31/2015	\$60,118	\$232,303	\$109,545	\$286,891	100.0%	97.6%	0.0%
12/31/2016	58,119	273,416	115,582	297,888	100.0%	87.7%	0.0%
12/31/2017	54,973	277,542	95,593	310,085	100.0%	91.9%	0.0%
12/31/2018	57,922	286,045	103,790	315,970	100.0%	90.2%	0.0%
12/31/2019	57,145	304,173	100,720	342,071	100.0%	93.7%	0.0%
12/31/2020	58,779	318,647	100,779	376,437	100.0%	99.7%	0.0%
12/31/2021	61,353	331,715	94,970	419,256	100.0%	100.0%	27.6%
12/31/2022	61,421	360,922	88,859	452,509	100.0%	100.0%	33.9%
12/31/2023	64,824	373,298	90,276	471,111	100.0%	100.0%	36.5%
12/31/2024	68,711	381,018	89,241	488,377	100.0%	100.0%	43.3%
DPS Division							
12/31/2015	\$394,306	\$2,732,879	\$778,055	\$3,207,327	100.0%	100.0%	10.3%
12/31/2016	402,849	2,999,767	843,814	3,220,935	100.0%	93.9%	0.0%
12/31/2017	419,239	2,867,254	802,033	3,257,770	100.0%	99.0%	0.0%
12/31/2018	438,008	2,941,988	868,606	3,261,338	100.0%	96.0%	0.0%
12/31/2019	461,075	2,906,773	895,537	3,410,264	100.0%	100.0%	4.7%
12/31/2020	501,422	2,975,191	1,055,933	3,682,072	100.0%	100.0%	19.5%
12/31/2021	569,134	2,921,569	1,147,171	4,029,095	100.0%	100.0%	46.9%
12/31/2022	586,071	2,991,715	1,200,823	4,313,602	100.0%	100.0%	61.3%
12/31/2023	645,167	3,020,554	1,331,333	4,476,377	100.0%	100.0%	60.9%
12/31/2024	707,612	3,000,932	1,398,501	4,656,941	100.0%	100.0%	67.8%
All Division Trust Funds ²							
12/31/2015	\$7,675,951	\$47,843,813	\$15,330,964	\$44,025,860	100.0%	76.0%	0.0%
12/31/2016	7,793,748	52,702,177	16,433,558	44,687,696	100.0%	70.0%	0.0%
12/31/2017	7,899,231	50,960,284	15,531,351	45,613,723	100.0%	74.0%	0.0%
12/31/2018	8,072,959	52,926,313	16,046,224	46,046,155	100.0%	71.7%	0.0%
12/31/2019	8,371,647	53,096,822	16,716,096	48,374,724	100.0%	75.3%	0.0%
12/31/2020	8,709,077	55,442,118	19,167,339	52,341,915	100.0%	78.7%	0.0%
12/31/2021	9,129,204	56,074,477	19,163,875	57,171,609	100.0%	85.7%	0.0%
12/31/2022	9,423,062	57,555,812	20,198,499	60,911,017	100.0%	89.5%	0.0%
12/31/2023	10,158,243	58,704,860	21,602,773	62,941,200	100.0%	89.9%	0.0%
12/31/2024	11,021,221	59,310,204	23,596,222	65,014,961	100.0%	91.0%	0.0%

¹ Includes accrued interest on member contributions.

² The data in this table is aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

DIVISION TRUST FUNDS—PENSION

Unfunded Actuarial Accrued Liability

UAAL is the difference between actuarially calculated liability for service already rendered and the valuation assets of the retirement fund.

In 2023, the ratio of PERA's valuation assets to accrued liabilities was 69.6% and decreased to 69.2% by the end of 2024.

Following are the most impactful factors resulting in higher liabilities (or losses) to PERA during 2024:

- Lower than assumed investment return (based on the smoothed actuarial value of assets) for 2024.
- Member pay increases were greater than expected.
- New PERA members had some service resulting in accrued liabilities.
- Fewer terminations than expected.

Following are the most impactful factors resulting in lower liabilities (or gains) during 2024:

- Actual payroll contributions were greater than the determined ADC.
- Retirees experienced shorter lifespans than expected.
- Fewer retirements than expected.

In 2016, PERA's funded status was negatively affected primarily by the recognition of adverse economic experience and by the adoption of more conservative economic and demographic assumptions to better reflect anticipated future behaviors, longevity, and economic conditions.

In 2017, PERA's funded status improved due to a decrease in plan liabilities reflecting the adoption of SB 18-200 pension reforms along with better than expected investment performance.

PERA's funded status was, again, negatively impacted in 2018, reflecting unfavorable demographic experience and lower than assumed investment performance.

In 2019 and 2021, PERA's funded status was positively impacted by better than expected investment performance and reductions in the AI cap resulting from the 2018 and 2020 AAP assessments, respectively.

In 2020, PERA's funded status was positively impacted by better than expected investment performance and a small mortality gain and negatively impacted by the adoption of generally more conservative actuarial assumptions, including the application of generational mortality.

In 2022, PERA's funded status increased. The funded status is determined based on an actuarial or "smoothed" value of assets, recognizing only a portion of each year's investment gain or loss over a four-year period. Therefore, even though the 2022 investment return was lower than the 7.25% expected rate of investment return, the favorable investment performance for 2019, 2020, and 2021 helped mitigate the adverse effect of the 2022 investment performance as well as other demographic actuarial losses.

In 2023, PERA's funded status, based on the actuarial value of assets, was negatively impacted by lower-than-expected investment return even though the rate of return on the fair value of assets was greater than the expected 7.25%. The funded status also was negatively impacted by net unfavorable demographic experience during 2023.

In 2024, PERA's funded status, based on the actuarial value of assets, was again negatively impacted by lower-than-expected investment return as 2022 investment losses continue to be recognized, even though the rate of return on the fair value of assets was greater than the expected 7.25%. The funded status also was negatively impacted by net unfavorable demographic experience during 2024, slightly offset by a small decrease in liability resulting from the revised actuarial assumptions as adopted by the Board based on the 2024 Experience Analysis. The main assumption updates included salary scale adjustments and changes in rates of expected termination, retirement, and disability across most divisions.

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 covered payroll, as shown in the following table, can provide a meaningful index. Opposite of the desired trend of a funded status ratio increasing toward 100%, a downward trend in the ratio of UAAL to covered payroll is the more desired outcome, indicating the positive impact additional contributions can have in funding the system.

DIVISION TRUST FUNDS—PENSION

SCHEDULE OF FUNDING PROGRESS

(Dollars in Thousands)

(A) Valuation Date	(B) Actuarial Value of Plan Assets	(C) Actuarial Accrued Liabilities	(D) Unfunded Actuarial Accrued Liabilities (UAAL) (C) – (B)	(E) Funded Ratio (B)/(C)	(F) Annual Covered Payroll	(G) UAAL As a Percentage of Covered Payroll (D)/(F)
State Division						
12/31/2015	\$13,882,820	\$24,085,671	\$10,202,851	57.6%	\$2,641,867	386.2%
12/31/2016	14,026,332	25,669,916	11,643,584	54.6%	2,710,651	429.5%
12/31/2017	14,256,410	24,782,085	10,525,675	57.5%	2,774,207	379.4%
12/31/2018	14,303,726	25,509,852	11,206,126	56.1%	2,898,827	386.6%
12/31/2019	14,922,050	25,717,648	10,795,598	58.0%	2,995,453	360.4%
12/31/2020	16,039,287	27,116,805	11,077,518	59.1%	3,089,161	358.6%
12/31/2021	17,379,516	27,159,846	9,780,330	64.0%	3,092,509	316.3%
12/31/2022	18,371,697	27,647,371	9,275,674	66.5%	3,183,955	291.3%
12/31/2023	18,851,972	28,460,815	9,608,843	66.2%	3,576,201	268.7%
12/31/2024	19,358,507	29,216,553	9,858,046	66.3%	3,884,095	253.8%
School Division						
12/31/2015	\$22,871,661	\$37,677,153	\$14,805,492	60.7%	\$4,235,290	349.6%
12/31/2016	23,263,344	41,352,968	18,089,624	56.3%	4,349,320	415.9%
12/31/2017	23,780,045	40,046,215	16,266,170	59.4%	4,471,357	363.8%
12/31/2018	24,094,442	41,598,400	17,503,958	57.9%	4,789,503	365.5%
12/31/2019	25,412,014	42,425,061	17,013,047	59.9%	5,104,431	333.3%
12/31/2020	27,581,088	45,532,075	17,950,987	60.6%	5,146,118	348.8%
12/31/2021	30,253,176	46,336,788	16,083,612	65.3%	5,465,866	294.3%
12/31/2022	32,393,722	48,326,747	15,933,025	67.0%	5,670,280	281.0%
12/31/2023	33,565,369	50,331,451	16,766,082	66.7%	6,176,713	271.4%
12/31/2024	34,788,986	52,648,978	17,859,992	66.1%	6,743,067	264.9%
Local Government Division						
12/31/2015	\$3,777,161	\$4,780,698	\$1,003,537	79.0%	\$561,518	178.7%
12/31/2016	3,879,197	5,213,052	1,333,855	74.4%	608,223	219.3%
12/31/2017	4,009,413	5,045,932	1,036,519	79.5%	632,768	163.8%
12/31/2018	4,070,679	5,240,885	1,170,206	77.7%	660,998	177.0%
12/31/2019	4,288,325	5,316,433	1,028,108	80.7%	681,093	150.9%
12/31/2020	4,663,031	5,658,903	995,872	82.4%	698,060	142.7%
12/31/2021	5,090,566	5,745,010	654,444	88.6%	723,744	90.4%
12/31/2022	5,379,487	5,913,444	533,957	91.0%	760,262	70.2%
12/31/2023	5,576,371	6,148,158	571,787	90.7%	843,453	67.8%
12/31/2024	5,722,150	6,416,101	693,951	89.2%	922,767	75.2%
Judicial Division						
12/31/2015	\$286,891	\$401,966	\$115,075	71.4%	\$46,870	245.5%
12/31/2016	297,888	447,117	149,229	66.6%	48,700	306.4%
12/31/2017	310,085	428,108	118,023	72.4%	48,948	241.1%
12/31/2018	315,970	447,757	131,787	70.6%	50,506	260.9%
12/31/2019	342,071	462,038	119,967	74.0%	53,427	224.5%
12/31/2020	376,437	478,205	101,768	78.7%	54,780	185.8%
12/31/2021	419,256	488,038	68,782	85.9%	55,780	123.3%
12/31/2022	452,509	511,202	58,693	88.5%	56,565	103.8%
12/31/2023	471,111	528,398	57,287	89.2%	60,606	94.5%
12/31/2024	488,377	538,970	50,593	90.6%	63,470	79.7%

DIVISION TRUST FUNDS—PENSION

SCHEDULE OF FUNDING PROGRESS (CONTINUED)

(Dollars in Thousands)

(A) Valuation Date	(B) Actuarial Value of Plan Assets	(C) Actuarial Accrued Liabilities	(D) Unfunded Actuarial Accrued Liabilities (UAAL) (C) – (B)	(E) Funded Ratio (B)/(C)	(F) Annual Covered Payroll	(G) UAAL As a Percentage of Covered Payroll (D)/(F)
DPS Division						
12/31/2015	\$3,207,327	\$3,905,240	\$697,913	82.1%	\$621,115	112.4%
12/31/2016	3,220,935	4,246,430	1,025,495	75.9%	642,177	159.7%
12/31/2017	3,257,770	4,088,526	830,756	79.7%	658,198	126.2%
12/31/2018	3,261,338	4,248,602	987,264	76.8%	722,040	136.7%
12/31/2019	3,410,264	4,263,385	853,121	80.0%	736,264	115.9%
12/31/2020	3,682,072	4,532,546	850,474	81.2%	771,347	110.3%
12/31/2021	4,029,095	4,637,874	608,779	86.9%	823,396	73.9%
12/31/2022	4,313,602	4,778,609	465,007	90.3%	810,403	57.4%
12/31/2023	4,476,377	4,997,054	520,677	89.6%	894,245	58.2%
12/31/2024	4,656,941	5,107,045	450,104	91.2%	888,094	50.7%
All Division Trust Funds¹						
12/31/2015	\$44,025,860	\$70,850,728	\$26,824,868	62.1%	\$8,106,660	330.9%
12/31/2016	44,687,696	76,929,483	32,241,787	58.1%	8,359,071	385.7%
12/31/2017	45,613,723	74,390,866	28,777,143	61.3%	8,585,478	335.2%
12/31/2018	46,046,155	77,045,496	30,999,341	59.8%	9,121,874	339.8%
12/31/2019	48,374,724	78,184,565	29,809,841	61.9%	9,570,668	311.5%
12/31/2020	52,341,915	83,318,534	30,976,619	62.8%	9,759,466	317.4%
12/31/2021	57,171,609	84,367,556	27,195,947	67.8%	10,161,295	267.6%
12/31/2022	60,911,017	87,177,373	26,266,356	69.9%	10,481,465	250.6%
12/31/2023	62,941,200	90,465,876	27,524,676	69.6%	11,551,218	238.3%
12/31/2024	65,014,961	93,927,647	28,912,686	69.2%	12,501,493	231.3%

¹ 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.

Note: A history of contributions by Division Trust Fund, the ADC compared to the actual contributions paid, including the deficiency or (excess), for each of the last 10 years, is shown in the Schedule of Employer and Nonemployer Contributions, found on pages 100-102 in the Required Supplementary Information (RSI) in the Financial Section.

DIVISION TRUST FUNDS—PENSION

Actuarial Gains and Losses

ANALYSIS OF FINANCIAL EXPERIENCE

(Dollars in Millions)

	State Division	School Division	Local Government Division	Judicial Division	DPS Division
Amounts					
From differences between assumed and actual experience on liabilities					
Age and service retirements ¹	(\$12.3)	(\$15.9)	\$5.6	\$0.6	\$0.6
Disability retirements ²	0.3	2.7	0.5	(0.1)	(0.1)
Deaths ³	(33.2)	(48.2)	(2.3)	1.2	(16.2)
Withdrawals ⁴	81.8	119.8	15.3	1.4	(19.6)
New members ⁵	104.8	163.2	28.4	5.9	47.3
Pay increases ⁶	184.4	566.1	33.6	0.1	(89.0)
Administrative expenses and other ⁷	20.0	51.0	6.0	0.5	(24.6)
Subtotal	345.8	838.7	87.1	9.6	(101.6)
From differences between assumed and actual experience on assets	285.4	487.5	82.7	6.8	64.8
From changes in plan assumptions and methods	(134.3)	15.5	19.7	(9.3)	38.0
From changes in plan provisions	—	—	—	—	—
Total actuarial losses on 2024 activities	\$496.9	\$1,341.7	\$189.5	\$7.1	\$1.2
Total actuarial losses on 2023 activities	\$489.0	\$927.9	\$124.2	\$10.2	\$102.0

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

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

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

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

⁵ New members: If new members entering the plan have prior service, there is a loss.

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

⁷ Administrative expenses and other: Includes miscellaneous gains and losses resulting from valuation software updates and refinements, data adjustments, timing of financial transactions, etc.

DIVISION TRUST FUNDS—PENSION

The following table identifies the components that contributed to the change in the underfunded status of the Division Trust Funds for the period 2020 to 2024:

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

(Dollars in Millions)

Type of Activity	(Gain) or Loss for Years Ended December 31					2020 - 2024
	2020	2021	2022	2023	2024	
UAAL beginning of year	\$29,809.8	\$30,976.6	\$27,195.9	\$26,266.4	\$27,524.7	\$29,809.8
Experience (gains) and losses						
Age and service retirements	91.0	44.9	56.6	(1.3)	(21.4)	169.8
Disability retirements	4.2	6.6	5.6	1.7	3.3	21.4
Deaths	(164.3)	(159.4)	(256.6)	(129.0)	(98.7)	(808.0)
Withdrawal from employment	296.5	114.1	(74.2)	39.3	198.7	574.4
New members	176.5	266.2	400.1	362.1	349.6	1,554.5
Pay increases	(24.8)	207.2	454.4	791.9	695.2	2,123.9
Investment (income) loss	(2,754.3)	(3,033.7)	(1,139.3)	469.4	927.2	(5,530.7) ¹
Other	(78.7)	47.7	197.0	119.2	52.9	338.1
Experience (gain) loss during year	(2,453.9)	(2,506.4)	(356.4)	1,653.3	2,106.8	(1,556.6)
Non-recurring items						
Change in plan assumptions and methods	3,107.9 ²	—	—	—	(70.4)³	3,037.5
Change in plan provisions	—	(1,579.0) ⁴	—	—	—	(1,579.0)
Non-recurring items	3,107.9	(1,579.0)	—	—	(70.4)	1,458.5
Contribution deficiency/(surplus)	280.2	(216.6)	(417.4)	(162.6)	(487.4)	(1,003.8) ⁵
Expected change in UAAL	232.6	521.3	(155.7)	(232.4)	(161.0)	204.8 ⁶
Total (gain)/loss for year	1,166.8	(3,780.7)	(929.5)	1,258.3	1,388.0	(897.1)
UAAL end of year	\$30,976.6	\$27,195.9	\$26,266.4	\$27,524.7	\$28,912.7	\$28,912.7

This 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:

¹ \$5.5 billion cumulative gain resulting from favorable investment experience for 2020, 2021, and 2022.

² \$3.1 billion loss in 2020, due to the recognition of revised actuarial assumptions, including the implementation of generational mortality, adopted November 20, 2020, effective December 31, 2020.

³ \$0.1 billion gain in 2024, due to the recognition of revised actuarial assumptions, including adjustments to rates of assumed termination, retirement, and salary increases, adopted January 17, 2025, effective December 31, 2024.

⁴ \$1.6 billion gain in 2021, due to the reduction in the AI cap from 1.25% to 1.00%, effective July 1, 2022, as required by the 2020 AAP assessment.

⁵ \$1.0 billion cumulative gain resulting from contribution surplus; occurring when actual contributions flowing into the plans are greater than the determined ADC.

⁶ \$0.2 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.

DIVISION TRUST FUNDS—PENSION

Actuarial Valuation Results

Contribution rates for the year ending December 31, 2026, are derived from the results of the December 31, 2024, annual actuarial valuation and are determined in advance for purposes of budgeting, completing the required assessments related to the AAP and consideration of any necessary legislative action.

SCHEDULE OF COMPUTED EMPLOYER CONTRIBUTION AND DIRECT DISTRIBUTION RATES FOR THE 2026 FISCAL YEAR

	Expressed as a Percentage of Covered Payroll				
	State Division	School Division	Local Government Division	Judicial Division	DPS Division ¹
Contributions					
Service retirement benefits	8.61%	12.46%	9.49%	13.97%	10.04%
Disability retirement benefits	0.29%	0.20%	0.28%	0.28%	0.18%
Survivor benefits	0.27%	0.23%	0.32%	0.44%	0.20%
Termination withdrawals	3.15%	3.01%	3.03%	1.03%	3.59%
Refunds	0.65%	0.46%	0.63%	0.06% ²	0.33%
Administrative expense load	0.45%	0.45%	0.45%	0.45%	0.45%
Total normal cost	13.42%	16.81%	14.20%	16.23%	14.79%
Less member contributions	(11.15%) ³	(11.00%)	(9.03%) ³	(11.00%)	(11.00%)
Employer normal cost	2.27%	5.81%	5.17%	5.23%	3.79%
Percentage available to amortize unfunded actuarial accrued liabilities	17.56%	13.90%	8.75%	17.98%	4.03%
Amortization period ⁴	17 Years	28 Years	10 Years	4 Years	10 Years
Total employer contribution rate for actuarially funded benefits	11.60% ³	11.40%	11.02% ³	14.91%	8.40%
Amortization equalization disbursement	5.00%	4.50%	2.70% ⁵	5.00%	4.50%
Supplemental amortization equalization disbursement	5.00%	5.50%	2.00% ⁵	5.00%	5.50%
Less Health Care Trust Fund	(1.02%)	(1.02%)	(1.02%)	(1.02%)	(0.20%)
Less Annual Increase Reserve	(0.75%)	(0.67%)	(0.78%)	(0.68%)	(0.77%)
Less PCOP credit ⁶	N/A	N/A	N/A	N/A	(9.61%)
Employer contribution rate for defined benefit plan	19.83%	19.71%	13.92%	23.21%	7.82%
Direct distribution⁷	1.93%	1.93%	N/A	1.93%	N/A
Defined contribution supplement rate⁸	0.25%	N/A	0.10%	N/A	N/A

¹ DPS Division contribution rates for 2026 reflect contribution rate changes effective July 1, 2025, as enacted through HB 25-1105.

² Assumes no judge will elect a refund of contributions made for the 17th through the 20th year of service.

³ Weighted average of more than one statutory rate.

⁴ The amortization periods consider ongoing employer, member, AED, SAED, and DC supplement contributions and the direct distribution, where and when applicable, including any known future changes.

⁵ Increased by 0.50%, effective January 1, 2026, due to the funded ratio of the Local Government Division decreasing from greater than 90%, as of December 31, 2023, to less than 90%, as of December 31, 2024, pursuant to C.R.S. § 24-51-411(9).

⁶ An offset to the DPS Division rate is provided for under C.R.S. § 24-51-412. See Note 4 of the Notes to the Financial Statements in the Financial Section.

⁷ Rates for the direct distribution have been estimated and are shown as a percentage of 2026 projected covered payroll.

⁸ The DC supplement will be paid to the State and Local Government Divisions on behalf of all employees of these divisions, calculated pursuant to employees hired on or after January 1, 2019, who chose to participate in the PERAChoice DC plan in lieu of participating in PERA's defined benefit plan. Designed to compensate for the employer contributions paid to the DC Plan participant accounts that otherwise would have been payment toward the UAAL, this supplement is determined separately for the State and Local Government Divisions as a rate of pay and is payable as of January 1, 2026, by all employers of the two divisions.

Note: The underlying calculations involve more precision than what is presented in the schedule and the rounded numbers shown may not add as a result.

DIVISION TRUST FUNDS—PENSION

With the passage of SB 10-001, the amortization equalization disbursement (AED) and the supplemental amortization equalization disbursement (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%, a decrease in the AED and SAED is mandated and if it subsequently falls below a funded status of 90%, an increase is mandated. For the Local Government and Judicial Divisions, if the funded ratio reaches 90% and subsequently falls below 90%, an increase in the AED and SAED is mandated. Increases cannot exceed the following maximum allowable limitations.

FUTURE AED AND SAED RATES

Trust Fund	2025 Rates		Future Annual Increases in Rates Prescribed by Colorado Revised Statutes		Maximum Allowable Limitations	
	AED	SAED	AED	SAED	AED	SAED
State Division	5.00%	5.00%	N/A	N/A	5.00%	5.00%
School Division	4.50%	5.50%	N/A	N/A	4.50%	5.50%
Local Government Division	2.20%	1.50%	Yes ¹	Yes ¹	5.00%	5.00%
Judicial Division	5.00%	5.00%	N/A	N/A	5.00%	5.00%
DPS Division ²	4.50%	5.50%	N/A	N/A	4.50%	5.50%

¹ The AED and SAED rates will be increased by 0.50%, each, effective January 1, 2026, due to the funded ratio of the Local Government Division decreasing from greater than 90%, as of December 31, 2023, to less than 90%, as of December 31, 2024, pursuant to C.R.S. § 24-51-411 (9).

² 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: A history of contributions by Division Trust Fund, the ADC compared to the actual contributions paid, including the deficiency or (excess), for each of the last 10 years, is shown in the Schedule of Employer and Nonemployer Contributions, found on pages 100-102 in the RSI in the Financial Section.

DIVISION TRUST FUNDS—PENSION

Annual Actuarial Valuation Statistics

As of December 31, 2024, the Funded Ratio, the UAAL, the ADC for 2026 as a percentage of covered payroll, and the amortization period considering current funding and future increases prescribed by Colorado statute, for each division, 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

(Dollars in Thousands)

Trust Fund	Funded Ratio	UAAL	ADC ¹	Amortization Period ²
State Division	66.3%	\$9,858,046	18.60%	17 Years
School Division	66.1%	17,859,992	22.43%	28 Years
Local Government Division	89.2%	693,951	9.91%	10 Years
Judicial Division	90.6%	50,593	10.63%	4 Years
DPS Division	91.2%	450,104	7.07%	10 Years
All Division Trust Funds³		\$28,912,686		

¹ Determined considering the 30-year target amortization period defined in the pension funding policy for purposes of funding benchmarks and RSI reporting as shown in the Financial Section.

² The amortization periods consider ongoing employer, member, AED, SAED and DC supplement contributions, and the direct distribution, where and when applicable, including any known future changes.

³ 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.

Pursuant to the pension funding policy, for reporting purposes, alternative ADCs also are determined by applying the layered amortization methodology as previously described. Under the target and alternative calculations, the legacy UAAL as of December 31, 2017, was amortized using a 30-year period, but the alternative ADCs use a 25-year closed period, a 20-year closed period, and a 15-year closed period, in lieu of the 30-year period, for amortization of any "new" UAAL recognized on and after January 1, 2018. The 2026 target and alternative ADCs, by division, are displayed as follows:

Trust Fund	Target ADC	Alternative ADCs		
	30-Year ¹	25-Year ²	20-Year ²	15-Year ²
State Division	18.60%	18.56%	18.52%	18.45%
School Division	22.43%	22.65%	23.00%	23.64%
Local Government Division	9.91%	9.82%	9.69%	9.45%
Judicial Division	10.63%	10.18%	9.48%	8.22%
DPS Division	7.07%	6.90%	6.63%	6.17%

¹ Refers to the amortization period used to amortize the legacy UAAL as of December 31, 2017, and any "new" UAAL recognized on and after January 1, 2018.

² Refers to the amortization period used to amortize any "new" UAAL recognized on and after January 1, 2018.

DIVISION TRUST FUNDS—PENSION

Automatic Adjustment Provision

The primary intent of the AAP is to gauge the adequacy of the contributions coming into the pension trust fund against the amount required, and if determined necessary, to initiate automatic changes to member and employer contribution rates, the AI cap, and, under certain circumstances, the direct distribution from the State of Colorado, to better insure achievement of the targeted 30-year funding goal, as delineated in SB 18-200. Pursuant to C.R.S. § 24-51-413, this assessment commenced with the December 31, 2018, actuarial valuation and is performed annually thereafter.

The AAP assessment compares two blended rates, weighted across all participating Division Trust Funds, defined as: the "Blended Total Contribution Amount" (employer contribution rate + member contribution rate + direct distribution as a rate of pay) divided by the "Blended Total Required Contribution" (ADC Rate + member contribution rate), determining a resulting ratio. If the resulting ratio falls within an acceptable corridor (98% to 119%), no adjustments are made. If the resulting ratio does not achieve a minimum benchmark (is less than 98%) or exceeds a maximum benchmark (is 120% or greater), adjustments are applied in an equitable manner of impact.

The following table shows the results of the AAP assessment which was conducted to determine if adjustments are necessary as of July 1, 2026:

Elements of Test Ratio ¹ (Shown as a percentage of pay)	2026 Input Percentages	Resulting Ratio	Adjustments, if Necessary (Effective July 1, 2026)	Revised Resulting Ratio
2026 Blended Total Contribution Amount ² (Divided by):	32.60% (Divided by):	(Equals) 102.58%	N/A	N/A
2026 Blended Total Required Contribution ²	31.78%			

¹ Effective July 1, 2025, and prior to July 1, 2030, HB 25-1105 excludes the DPS Division contribution rates from consideration in the blended total contribution amount and the blended total required contribution used in the determination of the AAP assessment ratio; however, the DPS Division employers, membership, and retirees remain subject to AAP adjustments, if triggered."

² The blended rates are based on the 2026 contribution rates shown on page 173, weighted based on the UAAL of each participating Division Trust Fund and are not appropriate for any other use.

A summary of the AAP guidelines, found in C.R.S. § 24-51-413, is as follows:

An automatic adjustment will occur under the following conditions:

- If the resulting ratio is less than 98%, there will be adjustments of equitable impact, increasing each of the employer and member contribution rates, decreasing the AI cap, and increasing the direct distribution (if permitted).
- If the resulting ratio is greater than or equal to 120%, there will be adjustments of equitable impact, decreasing each of the employer and member contribution rates, increasing the AI cap, and decreasing the direct distribution.

The AAP defines the limited amounts of total adjustment available in each category, and the increments of adjustments that can occur in any year. Multiple steps over multiple years are allowed for a required adjustment as necessary, but cannot exceed the ultimate limits as set forth in statute, detailed as follows:

- Adjustment (increase or decrease) to each of the employer and member contribution rates cannot exceed 0.50% in any one year, and
 - Cannot exceed 2.00% above the contribution rates reflecting SB 18-200 statutory reforms.
 - Cannot fall below the contribution rates in effect immediately prior to the passage of SB 18-200.
- Adjustment (increase or decrease) to the AI rate cannot exceed 0.25% in any one year, and
 - Cannot exceed a 2.00% AI cap maximum.
 - Cannot fall below a 0.50% AI cap minimum.
- Adjustment to the direct distribution cannot exceed \$20 million in any one year, and
 - Cannot exceed the initial \$225 million amount.
 - Can be reduced to \$0.
- Adjustments required because:
 - Funding is below the 98% threshold, will be made to an extent that will bring the revised ratio to 103% following the corrective efforts, but in no event can the adjustments in one year be greater than the limit described above.
 - Funding has reached the 120% threshold, must not cause the ratio to fall below 103%.

DIVISION TRUST FUNDS—PENSION

AAP ASSESSMENT HISTORY

Assessment	Information Based on Valuation Date	Compare Contribution Rates for Plan Year	Triggered Adjustments?	Adjustments to be Made	Effective Date for Adjustments
2018	December 31, 2018	2020	Yes	0.50% increase to member rate 0.50% increase to employer rate 0.25% decrease to AI cap No change to \$225M direct distribution ¹	July 1, 2020
2019	December 31, 2019	2021	No	N/A	N/A
2020	December 31, 2020	2022	Yes	0.50% increase to member rate 0.50% increase to employer rate 0.25% decrease to AI cap No change to \$225M direct distribution	July 1, 2022
2021	December 31, 2021	2023	No	N/A	N/A
2022	December 31, 2022	2024	No	N/A	N/A
2023	December 31, 2023	2025	No	N/A	N/A
2024	December 31, 2024	2026	No	N/A	N/A

¹ Pursuant to HB 20-1379, the direct distribution, payable July 1, 2020, was suspended.

Funded Ratio

(Dollars in Thousands)

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 fair 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, 2024, was \$65,014,961 compared to a fair value of assets of \$64,948,663, and to the AAL of \$93,927,647. 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 as follows:

Trust Fund	2020	2021	2022	2023	2024
State Division	59.1%	64.0%	66.5%	66.2%	66.3%
School Division	60.6%	65.3%	67.0%	66.7%	66.1%
Local Government Division	82.4%	88.6%	91.0%	90.7%	89.2%
Judicial Division	78.7%	85.9%	88.5%	89.2%	90.6%
DPS Division	81.2%	86.9%	90.3%	89.6%	91.2%
All Division Trust Funds¹	62.8%	67.8%	69.9%	69.6%	69.2%

¹ 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.

The Board's pension funding policy states that the targeted actuarial funded ratio is greater than or equal to 110% on a combined Division Trust Fund basis. The funded ratios listed give an indication of progress made toward achieving the stated objective. A larger funded ratio indicates a plan is better funded. As an example, in actual dollars, for every \$1.00 of the actuarially determined benefits earned for the School Division Trust Fund as of December 31, 2024, approximately \$0.66 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 the AAL equal the actuarial value of assets at any given moment in time.

DIVISION TRUST FUNDS—PENSION

At December 31, 2023, and December 31, 2024, PERA had the following funded status for the Division Trust Funds:

FUNDED STATUS FOR THE DIVISION TRUST FUNDS

(Dollars in Thousands)

	Fair Value of Assets		Actuarial Value of Assets ¹	
	12/31/2023	12/31/2024	12/31/2023	12/31/2024
State Division Trust Fund				
Actuarial accrued liability ²	\$28,460,815	\$29,216,553	\$28,460,815	\$29,216,553
Assets held to pay those liabilities	17,958,261	19,324,195	18,851,972	19,358,507
Unfunded actuarial accrued liability	\$10,502,554	\$9,892,358	\$9,608,843	\$9,858,046
Funded ratio	63.1%	66.1%	66.2%	66.3%
School Division Trust Fund				
Actuarial accrued liability ²	\$50,331,451	\$52,648,978	\$50,331,451	\$52,648,978
Assets held to pay those liabilities	32,020,642	34,766,716	33,565,369	34,788,986
Unfunded actuarial accrued liability	\$18,310,809	\$17,882,262	\$16,766,082	\$17,859,992
Funded ratio	63.6%	66.0%	66.7%	66.1%
Local Government Division Trust Fund				
Actuarial accrued liability ²	\$6,148,158	\$6,416,101	\$6,148,158	\$6,416,101
Assets held to pay those liabilities	5,315,185	5,715,542	5,576,371	5,722,150
Unfunded actuarial accrued liability	\$832,973	\$700,559	\$571,787	\$693,951
Funded ratio	86.5%	89.1%	90.7%	89.2%
Judicial Division Trust Fund				
Actuarial accrued liability ²	\$528,398	\$538,970	\$528,398	\$538,970
Assets held to pay those liabilities	449,692	488,287	471,111	488,377
Unfunded actuarial accrued liability	\$78,706	\$50,683	\$57,287	\$50,593
Funded ratio	85.1%	90.6%	89.2%	90.6%
DPS Division Trust Fund				
Actuarial accrued liability ²	\$4,997,054	\$5,107,045	\$4,997,054	\$5,107,045
Assets held to pay those liabilities	4,270,307	4,653,923	4,476,377	4,656,941
Unfunded actuarial accrued liability	\$726,747	\$453,122	\$520,677	\$450,104
Funded ratio	85.5%	91.1%	89.6%	91.2%
All Division Trust Funds³				
Actuarial accrued liability ²	\$90,465,876	\$93,927,647	\$90,465,876	\$93,927,647
Assets held to pay those liabilities ⁴	60,014,087	64,948,663	62,941,200	65,014,961
Unfunded actuarial accrued liability	\$30,451,789	\$28,978,984	\$27,524,676	\$28,912,686
Funded ratio	66.3%	69.1%	69.6%	69.2%

¹ 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.

² Based upon an assumed rate of return on investments of 7.25% and an assumed rate of 7.25% to discount the liabilities to be paid in the future to a value as of December 31, 2023, and December 31, 2024.

³ 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.

⁴ In aggregate, the fair value of the assets as of December 31, 2024, is \$66,298 less 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 only in the year they occurred. The remaining gains and (losses) to be smoothed for 2022 are (\$3,316,242), for 2023 are \$1,640,587, and for 2024 are \$1,609,357.

DIVISION TRUST FUNDS—PENSION

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

The most important long-term driver of a pension plan is investment income. The investment return assumption and the discount rate for liabilities should be based on an estimated long-term investment yield for the plan, considering 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 assumption, which is used to discount the actuarial liabilities of PERA, a 1% fluctuation in the assumed investment rate of return and discount rate would change the funded ratio, UAAL, and ADC (for contributions for the fiscal year ended December 31, 2026) as shown in the following tables:

INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 6.25%

(Dollars in Thousands)

Trust Fund	Actuarial Value of Assets			Fair Value of Assets
	Funded Ratio	UAAL	ADC	UAAL
State Division	59.8%	\$12,990,754	24.46%	\$13,025,067
School Division	59.2%	23,942,144	29.67%	23,964,414
Local Government Division	80.2%	1,414,179	16.82%	1,420,787
Judicial Division	82.4%	104,033	17.94%	104,124
DPS Division	81.2%	1,075,567	14.04%	1,078,584
All Division Trust Funds¹		\$39,526,677		\$39,592,976

¹ 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.

CURRENT INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 7.25%

(Dollars in Thousands)

Trust Fund	Actuarial Value of Assets			Fair Value of Assets
	Funded Ratio	UAAL	ADC	UAAL
State Division	66.3%	\$9,858,046	18.60%	\$9,892,358
School Division	66.1%	17,859,992	22.43%	17,882,262
Local Government Division	89.2%	693,951	9.91%	700,559
Judicial Division	90.6%	50,593	10.63%	50,683
DPS Division	91.2%	450,104	7.07%	453,122
All Division Trust Funds¹		\$28,912,686		\$28,978,984

¹ 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.

INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 8.25%

(Dollars in Thousands)

Trust Fund	Actuarial Value of Assets			Fair Value of Assets
	Funded Ratio	UAAL	ADC	UAAL
State Division	72.9%	\$7,209,816	13.36%	\$7,244,129
School Division	73.2%	12,747,197	16.05%	12,769,467
Local Government Division	98.5%	86,901	3.64%	93,509
Judicial Division	99.0%	4,745	3.76%	4,835
DPS Division	101.5%	(69,447)	0.90%	(66,430)
All Division Trust Funds¹		\$19,979,212		\$20,045,510

¹ 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.

Note: The time-weighted, net-of-fees annualized rate of return for the pooled investment assets was 8.2% for the past five years and 8.3% for the past 10 years. The 30-year annualized net-of-fees rate of return for the pooled investment assets was 8.4%.

DIVISION TRUST FUNDS—PENSION

Plan Data

SCHEDULE OF RETIREES, BENEFICIARIES, AND SURVIVORS ADDED TO AND REMOVED FROM THE BENEFIT PAYROLL

(In Actual Dollars)

	Added to Payroll		Removed from Payroll		Payroll—End of Year			Increase (Decrease) in Average Benefits
Valuation Date	No. ¹	Annual Benefits	No. ¹	Annual Benefits	No. ¹	Annual Benefits	Average Annual Benefits	
State Division ²								
12/31/2015					36,865	\$1,441,160,568	\$39,093	—
12/31/2016	1,953	\$90,963,480	805	\$22,828,296	38,013	1,509,295,752	39,705	1.6%
12/31/2017	2,029	96,524,376	810	23,794,584	39,232	1,582,025,544	40,325	1.6%
12/31/2018	1,948	64,439,160	865	29,030,196	40,315	1,617,434,508	40,120	(0.5%)
12/31/2019	1,805	60,004,122	939	33,418,682	41,181	1,644,019,948	39,922	(0.5%)
12/31/2020	1,939	63,669,828	1,252	20,885,946	41,868	1,686,803,830	40,289	0.9%
12/31/2021	2,049	74,357,738	980	16,651,788	42,937	1,744,509,780	40,630	0.8%
12/31/2022	2,098	73,553,004	1,281	28,133,745	43,754	1,789,929,039	40,909	0.7%
12/31/2023	1,707	58,197,922	1,046	20,345,040	44,415	1,827,781,921	41,152	0.6%
12/31/2024	1,539	52,673,866	1,059	22,570,978	44,895	1,857,884,809	41,383	0.6%
School Division ²								
12/31/2015					59,944	\$2,173,341,072	\$36,256	—
12/31/2016	3,023	\$123,292,224	1,027	\$25,461,636	61,940	2,271,171,660	36,667	1.1%
12/31/2017	3,249	130,564,260	1,026	26,635,332	64,163	2,375,100,588	37,017	1.0%
12/31/2018	3,319	90,191,556	1,106	32,160,792	66,376	2,433,131,352	36,657	(1.0%)
12/31/2019	3,149	84,865,404	1,163	39,402,271	68,362	2,478,594,485	36,257	(1.1%)
12/31/2020	3,506	98,641,497	1,629	15,175,838	70,239	2,562,060,144	36,476	0.6%
12/31/2021	3,834	115,785,385	1,383	16,732,525	72,690	2,661,113,004	36,609	0.4%
12/31/2022	3,954	123,361,006	1,705	26,877,020	74,939	2,757,596,990	36,798	0.5%
12/31/2023	3,612	111,936,452	1,544	25,607,199	77,007	2,843,926,243	36,931	0.4%
12/31/2024	3,644	111,446,342	1,579	26,537,572	79,072	2,928,835,013	37,040	0.3%
Local Government Division ²								
12/31/2015					6,757	\$249,777,396	\$36,966	—
12/31/2016	388	\$15,843,636	100	\$2,491,764	7,045	263,129,268	37,350	1.0%
12/31/2017	420	18,329,400	114	2,916,156	7,351	278,542,512	37,892	1.5%
12/31/2018	421	14,336,628	128	3,227,280	7,644	289,651,860	37,893	0.0%
12/31/2019	426	13,283,210	137	4,898,210	7,933	298,036,860	37,569	(0.9%)
12/31/2020	418	13,867,438	171	544,659	8,180	311,359,639	38,064	1.3%
12/31/2021	500	16,208,420	110	(64,326)	8,570	327,632,385	38,230	0.4%
12/31/2022	445	14,515,357	207	2,779,130	8,808	339,368,612	38,530	0.8%
12/31/2023	418	14,122,072	151	1,738,237	9,075	351,752,447	38,761	0.6%
12/31/2024	456	15,826,308	147	1,470,597	9,384	366,108,158	39,014	0.7%

Please see next page for footnote references.

DIVISION TRUST FUNDS—PENSION

SCHEDULE OF RETIREES, BENEFICIARIES, AND SURVIVORS ADDED TO AND REMOVED FROM THE BENEFIT PAYROLL (CONTINUED)

(In Actual Dollars)

	Added to Payroll		Removed from Payroll		Payroll—End of Year			Increase (Decrease) in Average Benefits
Valuation Date	No. ¹	Annual Benefits	No. ¹	Annual Benefits	No. ¹	Annual Benefits	Average Annual Benefits	
Judicial Division ²								
12/31/2015					344	\$21,706,896	\$63,101	—
12/31/2016	28	\$2,406,072	12	\$287,580	360	23,825,388	66,182	4.9%
12/31/2017	24	2,554,728	9	398,184	375	25,981,932	69,285	4.7%
12/31/2018	8	696,864	3	129,084	380	26,549,712	69,868	0.8%
12/31/2019	27	2,115,235	8	400,305	399	28,264,642	70,839	1.4%
12/31/2020	25	2,141,893	10	387,294	414	30,019,241	72,510	2.4%
12/31/2021	28	2,213,671	10	298,792	432	31,934,120	73,922	1.9%
12/31/2022	24	2,168,626	12	201,176	444	33,901,570	76,355	3.3%
12/31/2023	22	1,838,436	8	87,553	458	35,652,453	77,844	2.0%
12/31/2024	23	1,866,636	7	243,842	474	37,275,247	78,640	1.0%
DPS Division ²								
12/31/2015					6,803	\$259,119,756	\$38,089	—
12/31/2016	322	\$14,412,348	190	\$5,854,992	6,935	267,677,112	38,598	1.3%
12/31/2017	283	13,847,400	181	6,388,008	7,037	275,136,504	39,099	1.3%
12/31/2018	297	9,717,816	184	6,345,060	7,150	278,509,260	38,952	(0.4%)
12/31/2019	234	6,854,297	241	9,248,121	7,143	276,115,436	38,655	(0.8%)
12/31/2020	256	7,957,106	271	5,910,106	7,128	278,162,436	39,024	1.0%
12/31/2021	281	8,318,920	230	5,665,898	7,179	280,815,458	39,116	0.2%
12/31/2022	314	10,103,383	245	6,432,639	7,248	284,486,202	39,250	0.3%
12/31/2023	288	8,687,254	229	6,191,380	7,307	286,982,076	39,275	0.1%
12/31/2024	249	7,971,026	235	6,855,794	7,321	288,097,308	39,352	0.2%
All Division Trust Funds ²								
12/31/2015					110,713	\$4,145,105,688	\$37,440	—
12/31/2016	5,714	\$246,917,760	2,134	\$56,924,268	114,293	4,335,099,180	37,930	1.3%
12/31/2017	6,005	261,820,164	2,140	60,132,264	118,158	4,536,787,080	38,396	1.2%
12/31/2018	5,993	179,382,024	2,286	70,892,412	121,865	4,645,276,692	38,118	(0.7%)
12/31/2019	5,641	167,122,268	2,488	87,367,589	125,018	4,725,031,371	37,795	(0.8%)
12/31/2020	6,144	186,277,762	3,333	42,903,843	127,829	4,868,405,290	38,085	0.8%
12/31/2021	6,692	216,884,134	2,713	39,284,677	131,808	5,046,004,747	38,283	0.5%
12/31/2022	6,835	223,701,376	3,450	64,423,710	135,193	5,205,282,413	38,503	0.6%
12/31/2023	6,047	194,782,136	2,978	53,969,409	138,262	5,346,095,140	38,666	0.4%
12/31/2024	5,911	189,784,178	3,027	57,678,783	141,146	5,478,200,535	38,812	0.4%

¹ The number does not include deferred survivors.

² Amounts derived on an accrual basis.

DIVISION TRUST FUNDS—PENSION

The number of persons receiving monthly retirement benefits has grown steadily in relation to membership. As shown in the following table, this trend has substantially stabilized over the last few years as PERA has reached a mature plan status. 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 FUNDS¹

(In Actual Dollars)

Year	Number of Retiree Accounts on 12/31	Number of Member Accounts on 12/31 ²	Retiree Accounts as a Percentage 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
2015	108,426	436,465	24.8%	4,073,789,897
2020	125,363	502,972	24.9%	4,825,842,185
2021	129,325	517,470	25.0%	4,984,778,874
2022	132,676	536,426	24.7%	5,153,727,994
2023	135,681	557,284	24.3%	5,308,423,650
2024	138,528	574,598	24.1%	5,439,900,050

¹ Amounts derived on a cash basis. Data prior to 2010 does not include the DPS Division.

² 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, 2024

(In Actual Dollars)

State Division

For State Division members (excluding Safety Officers) the average age was 45.4 years, the average service was 9.1 years, and the average expected remaining service life was 9.4 years. For Safety Officers the average age was 35.1 years, the average service was 4.8 years, and the average expected remaining service life was 12.7 years.

Attained Age	Years of Service to Valuation Date							Total	
	0–4	5–9	10–14	15–19	20–24	25–29	30+	No.	Annual Valuation Payroll
Up to 20	297	—	—	—	—	—	—	297	\$7,212,410
20–24	2,242	18	—	—	—	—	—	2,260	96,042,744
25–29	4,459	522	13	—	—	—	—	4,994	276,377,488
30–34	4,312	1,865	371	9	—	—	—	6,557	410,461,711
35–39	3,402	2,088	1,261	281	9	—	—	7,041	487,838,152
40–44	2,634	1,764	1,398	1,007	287	23	—	7,113	529,267,355
45–49	2,624	1,542	1,214	1,036	843	303	16	7,578	579,063,091
50–54	1,689	1,268	1,006	1,010	905	737	166	6,781	539,824,371
55–59	1,338	1,032	933	872	731	516	305	5,727	447,931,517
60	231	179	175	175	123	77	61	1,021	78,292,637
61	214	169	158	168	126	78	54	967	71,931,785
62	178	159	149	170	103	77	59	895	66,548,474
63	133	130	107	147	108	68	52	745	55,495,573
64	131	129	124	128	100	62	47	721	52,424,503
65+	652	478	481	499	339	203	235	2,887	185,383,555
Total	24,536	11,343	7,390	5,502	3,674	2,144	995	55,584	\$3,884,095,366

School Division

For School Division members the average age was 44.5 years, the average service was 9.0 years, and the average expected remaining service life was 10.4 years.

Attained Age	Years of Service to Valuation Date							Total	
	0–4	5–9	10–14	15–19	20–24	25–29	30+	No.	Annual Valuation Payroll
Up to 20	1,819	—	—	—	—	—	—	1,819	\$18,098,910
20–24	6,343	178	—	—	—	—	—	6,521	164,258,743
25–29	8,790	2,111	65	1	—	—	—	10,967	452,138,451
30–34	6,763	4,587	1,460	53	—	—	—	12,863	608,647,475
35–39	6,826	3,819	3,526	1,096	40	—	—	15,307	765,432,266
40–44	6,952	3,856	2,976	3,244	1,166	56	—	18,250	993,210,492
45–49	10,604	3,877	2,609	2,635	3,022	927	46	23,720	1,232,620,403
50–54	3,942	2,986	2,385	2,363	2,437	2,231	431	16,775	1,071,954,621
55–59	2,979	1,964	1,832	2,110	1,921	1,207	604	12,617	753,021,576
60	499	339	307	343	310	185	90	2,073	110,893,355
61	506	322	262	324	313	176	112	2,015	108,010,678
62	479	319	270	298	269	150	79	1,864	93,808,548
63	472	283	208	258	239	136	73	1,669	80,620,862
64	421	264	218	223	221	145	57	1,549	73,590,501
65+	2,302	1,211	710	694	594	345	215	6,071	216,759,579
Total	59,697	26,116	16,828	13,642	10,532	5,558	1,707	134,080	\$6,743,066,460

DIVISION TRUST FUNDS—PENSION

SCHEDULE OF MEMBERS IN ACTUARIAL VALUATION (CONTINUED)

By Attained Age and Years of Service as of December 31, 2024

(In Actual Dollars)

Local Government Division

For Local Government Division members (excluding Safety Officers) the average age was 43.8 years, the average service was 7.7 years, and the average expected remaining service life was 9.4 years. For Safety Officers the average age was 36.8 years, the average service was 2.5 years, and the average expected remaining service life was 13.1 years.

Attained Age	Years of Service to Valuation Date							Total	
	0–4	5–9	10–14	15–19	20–24	25–29	30+	No.	Annual Valuation Payroll
Up to 20	547	—	—	—	—	—	—	547	\$5,009,495
20-24	626	13	—	—	—	—	—	639	20,903,817
25-29	900	144	5	—	—	—	—	1,049	61,158,611
30-34	952	385	83	7	—	—	—	1,427	99,099,977
35-39	820	469	204	74	11	—	—	1,578	122,202,739
40-44	643	413	242	138	75	13	—	1,524	126,245,054
45-49	755	365	226	196	145	74	5	1,766	137,163,336
50-54	432	316	191	209	214	117	30	1,509	136,051,877
55-59	370	229	181	164	186	77	39	1,246	104,954,652
60	66	39	38	23	27	12	16	221	16,834,158
61	76	44	25	22	30	17	12	226	17,643,329
62	50	33	30	45	34	19	6	217	16,557,832
63	41	32	22	31	23	10	5	164	12,387,473
64	53	30	32	14	21	13	10	173	11,985,828
65+	280	154	80	89	39	31	23	696	34,568,970
Total	6,611	2,666	1,359	1,012	805	383	146	12,982	\$922,767,148

Judicial Division

For Judicial Division members the average age was 53.0 years, the average service was 11.7 years, and the average expected remaining service life was 11.2 years.

Attained Age	Years of Service to Valuation Date							Total	
	0–4	5–9	10–14	15–19	20–24	25–29	30+	No.	Annual Valuation Payroll
Up to 20	—	—	—	—	—	—	—	—	\$—
20-24	—	—	—	—	—	—	—	—	—
25-29	—	—	—	—	—	—	—	—	—
30-34	4	1	—	—	—	—	—	5	890,634
35-39	8	3	1	—	—	—	—	12	1,849,871
40-44	19	9	12	7	—	—	—	47	8,427,801
45-49	18	23	14	6	7	—	—	68	12,405,470
50-54	11	22	9	9	9	3	—	63	11,403,302
55-59	15	15	16	21	8	5	1	81	14,859,134
60	—	1	2	3	1	1	—	8	1,304,351
61	2	—	2	1	3	1	2	11	2,093,237
62	2	—	2	4	1	2	1	12	2,102,597
63	4	1	3	3	—	—	1	12	2,136,870
64	—	1	3	—	—	—	1	5	981,721
65+	3	6	4	6	3	3	2	27	5,014,845
Total	86	82	68	60	32	15	8	351	\$63,469,833

DIVISION TRUST FUNDS—PENSION

SCHEDULE OF MEMBERS IN ACTUARIAL VALUATION (CONTINUED)

By Attained Age and Years of Service as of December 31, 2024

(In Actual Dollars)

DPS Division

For DPS Division members the average age was 41.3 years, the average service was 7.7 years, and the average expected remaining service life was 9.7 years.

Attained Age	Years of Service to Valuation Date							Total	
	0–4	5–9	10–14	15–19	20–24	25–29	30+	No.	Annual Valuation Payroll
Up to 20	159	—	—	—	—	—	—	159	\$2,474,605
20-24	1,069	21	—	—	—	—	—	1,090	28,701,418
25-29	1,617	297	12	—	—	—	—	1,926	82,605,844
30-34	1,240	819	209	8	—	—	—	2,276	122,732,835
35-39	905	695	571	146	3	—	—	2,320	136,646,828
40-44	1,080	626	553	388	56	3	—	2,706	159,883,624
45-49	509	397	326	317	190	48	6	1,793	117,834,605
50-54	373	283	251	268	211	135	12	1,533	104,865,407
55-59	259	188	172	198	128	101	34	1,080	67,557,339
60	43	26	25	44	25	9	6	178	9,950,526
61	56	34	33	39	11	13	7	193	10,536,821
62	31	39	27	34	20	7	5	163	9,884,507
63	38	23	13	32	9	9	11	135	7,282,074
64	24	15	15	23	10	7	6	100	5,392,718
65+	198	104	88	88	32	25	20	555	21,745,252
Total	7,601	3,567	2,295	1,585	695	357	107	16,207	\$888,094,403

DIVISION TRUST FUNDS—PENSION

SCHEDULE OF ACTIVE MEMBER ACTUARIAL VALUATION DATA

As of December 31

(In Actual Dollars)

Year	Number of Participating Employers ¹	Number of Active Members	Annual Payroll for Active Members	Average Annual Pay for Active Members	Percentage Increase (Decrease) in Average Annual Pay
State Division					
2015	32	55,291	\$2,641,866,650	\$47,781	—
2016	32	55,725	2,710,650,565	48,643	1.80%
2017	32	55,686	2,774,207,203	49,819	2.42%
2018	32	55,511	2,898,827,271	52,221	4.82%
2019	32	55,252	2,995,452,821	54,214	3.82%
2020	32	53,643	3,089,161,069	57,587	6.22%
2021	32	53,477	3,092,509,212	57,829	0.42%
2022	32	50,892	3,183,955,204	62,563	8.19%
2023	32	53,687	3,576,200,794	66,612	6.47%
2024	32	55,584	3,884,095,366	69,878	4.90%
School Division					
2015	227	120,239	\$4,235,290,282	\$35,224	—
2016	229	121,945	4,349,319,783	35,666	1.25%
2017	234	122,990	4,471,356,847	36,355	1.93%
2018	234	126,333	4,789,503,451	37,912	4.28%
2019	235	128,938	5,104,430,888	39,588	4.42%
2020	234	119,421	5,146,117,910	43,092	8.85%
2021	233	125,007	5,465,866,064	43,724	1.47%
2022	234	128,057	5,670,279,844	44,279	1.27%
2023	234	131,188	6,176,712,495	47,083	6.33%
2024	235	134,080	6,743,066,460	50,291	6.81%
Local Government Division					
2015	140	12,176	\$561,518,205	\$46,117	—
2016	141	12,736	608,222,609	47,756	3.55%
2017	140	12,770	632,768,337	49,551	3.76%
2018	141	13,260	660,998,127	49,849	0.60%
2019	141	13,086	681,093,520	52,047	4.41%
2020	141	12,757	698,059,659	54,720	5.14%
2021	141	12,745	723,744,103	56,787	3.78%
2022	141	12,103	760,261,752	62,816	10.62%
2023	141	12,700	843,453,258	66,414	5.73%
2024	142	12,982	922,767,148	71,081	7.03%
Judicial Division					
2015	2	334	\$46,869,730	\$140,329	—
2016	2	335	48,699,531	145,372	3.59%
2017	2	332	48,947,607	147,433	1.42%
2018	2	332	50,505,856	152,126	3.18%
2019	2	339	53,427,351	157,603	3.60%
2020	2	344	54,780,086	159,244	1.04%
2021	2	345	55,779,834	161,681	1.53%
2022	2	340	56,565,330	166,369	2.90%
2023	2	347	60,606,139	174,657	4.98%
2024	2	351	63,469,833	180,826	3.53%

Please see next page for footnote references.

DIVISION TRUST FUNDS—PENSION

SCHEDULE OF ACTIVE MEMBER ACTUARIAL VALUATION DATA (CONTINUED)

As of December 31

(In Actual Dollars)

Year	Number of Participating Employers ¹	Number of Active Members	Annual Payroll for Active Members	Average Annual Pay for Active Members	Percentage Increase (Decrease) in Average Annual Pay
DPS Division					
2015	1	15,929	\$621,114,573	\$38,993	—
2016	1	15,950	642,177,158	40,262	3.25%
2017	1	15,991	658,198,306	41,161	2.23%
2018	1	16,148	722,040,073	44,714	8.63%
2019	1	15,679	736,263,798	46,959	5.02%
2020	1	14,693	771,347,604	52,498	11.80%
2021	1	15,695	823,395,477	52,462	(0.07%)
2022	1	15,254	810,402,643	53,127	1.27%
2023	1	15,626	894,245,013	57,228	7.72%
2024	1	16,207	888,094,403	54,797	(4.25%)
All Division Trust Funds					
2015	402	203,969	\$8,106,659,440	\$39,745	—
2016	405	206,691	8,359,069,646	40,442	1.75%
2017	409	207,769	8,585,478,300	41,322	2.18%
2018	410	211,584	9,121,874,778	43,112	4.33%
2019	411	213,294	9,570,668,378	44,871	4.08%
2020	410	200,858	9,759,466,328	48,589	8.29%
2021	409	207,269	10,161,294,690	49,025	0.90%
2022	410	206,646	10,481,464,773	50,722	3.46%
2023	410	213,548	11,551,217,699	54,092	6.64%
2024	412	219,204	12,501,493,210	57,031	5.43%

¹ The employer counts are presented for purposes of complying with GASB 67 only, which classifies a primary government and its component units as one employer. 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 FUNDS—OPEB

Actuarial Topics

The standard promulgated by the GASB Statement No. 74 results in the preparation of two actuarial valuations—one for funding purposes and one for accounting and financial reporting purposes. Unless otherwise noted, this Health Care Trust Funds subsection reports on the actuarial valuation performed for funding purposes, but also includes information on specific differences between the two actuarial valuations.

The other postemployment benefit (OPEB) plan provisions in effect on December 31, 2024, are summarized in Note 9 of the Notes to the Financial Statements in the Financial Section.

PERA BOARD GOVERNANCE - TWO DEFINED BENEFIT OPEB PLANS	
PERA Defined Benefit OPEB Plans	PERA's two defined benefit OPEB plans include the Health Care Trust Fund (HCTF), a cost-sharing multiple-employer plan, and the Denver Public Schools Health Care Trust Fund (DPS HCTF), a single-employer plan. The HCTF and the DPS HCTF provide a subsidy for 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 primarily pay for the costs. The HCTF was established as of July 1, 1985, and the DPS HCTF was established January 1, 2010, with the asset transfer from the Denver Public Schools Retiree Health Benefit Trust held by the DPS Board of Education. 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, as set forth in C.R.S. § 24-51-1206.5. 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.
PERA Board OPEB Funding Policy	The PERA Board is responsible for maintaining an OPEB funding policy applicable to these plans. The current OPEB funding policy initially was adopted by the Board on January 19, 2018, effective for the December 31, 2017, funding actuarial valuation, and last amended on January 19, 2024. The OPEB funding policy requires the calculation of an ADC for each of the two Health Care Trust Funds for the purpose of assessing the adequacy of the statutory contribution rate of each fund. The ADC is determined in accordance with the OPEB plan provisions in effect as of the date of the actuary's Letter of Certification and is expressed as a level percentage of assumed future covered payroll.
Actuarial Service Provider & Other Responsibilities	The Board retains an external actuary, and effective November 1, 2018, Segal was retained to perform annual actuarial valuations and sustainability projections as well as periodic experience studies to review the actuarial assumptions versus actual plan experience. The Board's initial contract agreement with Segal was extended effective January 1, 2024, for an additional five-year period ending December 31, 2028. In addition, the Board has the authority to contract, self-insure, and authorize disbursements necessary in order to carry out the purposes of the PERACare program including the administration of the health care subsidies.
Actuarial Service Provider Funding Method Statement	Per their actuarial valuation report, "Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability and a portion of the principal balance. The OPEB funding policy adopted by PERA meets this standard."

ACTUARIAL METHODS

Actuarial Methods	The Board is responsible for the actuarial methods and assumptions used in the actuarial valuations in accordance with C.R.S. § 24-51-204(5). Through formal action, the Board updates, replaces, or adopts new actuarial methods and assumptions as deemed necessary. Initial valuations were performed on an "open group" basis approximately once every two years. Annual valuations commenced with the December 31, 1998, actuarial valuation.
--------------------------	--

HEALTH CARE TRUST FUNDS—OPEB

Actuarial Methods	Type	Description / Source / Basis	Adoption / Effective Date
Asset Valuation Method	Smoothed Actuarial Value of Assets	In 1992, the Board adopted a method for valuing assets that determines a smoothed fair value (synonymous with the term "market value," as is used in the Board's OPEB funding policy) of assets to help mitigate volatile investment market experience. The smoothed fair value of assets recognizes the differences between actual and expected investment experience for each year in equal amounts over a four-year period.	Initially Adopted: 1992; Effective: Jan 1, 1993; Reinitialized to Fair Value as of: Dec 31, 2004; Effective: Dec 31, 2005
Actuarial Cost Method	Entry Age Actuarial Cost Method (EA)	The EA funding or cost method is designed to keep annual costs level as a percent of covered payroll and for this reason, was selected by the Board to be used in the actuarial valuations. The method to determine normal cost, original based on credited service, is determined based on compensation as of the December 31, 2016, actuarial valuation. The effect of differences between the actuarial assumptions and the actual experience of the plan is determined within each annual actuarial valuation. These differences produce actuarial gains or losses that result in an adjustment of the UAAL.	EA Effective: Jan 1, 1991; Normal Cost basis changed from service to compensation Effective: Dec 31, 2016
Amortization Method	Defined, Closed, and Layered Periods	The 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. Each amortized item is tracked over the closed period defined for that category. The 30-year period used to amortize the legacy UAAL was initialized as of December 31, 2017. All gains, losses, and changes in actuarial methods and assumptions on and after January 1, 2018, are recognized each year and amortized separately over closed 30-year periods. 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%. 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% funded ratio.	Initially Adopted: Jan 19, 2018; Effective: Dec 31, 2017

HEALTH CARE TRUST FUNDS—OPEB

ACTUARIAL ASSUMPTIONS		
Actuarial Assumptions ¹	Unless otherwise noted, it can be assumed 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. All actuarial methods and assumptions necessary to assess OPEB liabilities, in addition to those already previously, are described as follows. The actuary followed ASOP No. 6, <i>Measuring Retiree Group Benefit Obligations</i>, for purposes of recommending appropriate OPEB-specific assumptions.	
	Basis of Actuarial Assumptions Used	Unless otherwise noted, the basis of all selected economic and non-economic actuarial assumptions resulted from the 2024 experience analysis and related discussions that took place during the January 17, 2025, Board meeting. As a result of the most recent asset/liability study, initiated in 2023 and concluded at the September 20, 2024, Board meeting, the Board reaffirmed the 7.25% assumed long-term rate of investment return effective as of January 1, 2025, which was supported by the analysis provided by Segal in the 2024 Experience Analysis report delivered and dated January 3, 2025.

¹ See Exhibits H through L for detailed assumption information.

Economic Assumptions	Value(s) / Type	Description / Source / Basis	Adoption / Effective Date
Initial Per Capita Health Care Costs	Exhibit H	Exhibit H contains the assumptions used in determining the additional liability for PERACare enrollees under the PERA benefit structure (and in certain circumstances, the DPS 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 2025, subject to health care cost trend rates. Basis: Reviewed annually and updated, as appropriate, and age-related morbidity assumptions removed effective December 31, 2024.	Updated Effective: Dec 31, 2024
Age-Related Morbidity Rates	Removed	Morbidity rates assist in anticipating the pace at which a defined population ages through an eligibility period. For PERA, these assumptions were applied only to Medicare-eligible members who retire under the PERA benefit structure (and in certain circumstances, the DPS benefit structure) and do not qualify for premium-free Medicare Part A, a small, closed group within the PERA census. Basis: Given the small, declining population upon which these assumptions were applied, Segal proposed, and the Board adopted, to base the post-age 65 per capita costs on the fully-insured Medicare Advantage Prescription Drug (MAPD) plan premium rates, with no adjustment for aging, an allowed exception under Section 3.7.7(c) of ASOP No. 6.	Initially Effective: Dec 31, 2015; Last Updated Effective: Dec 31, 2022 Removed Effective: Dec 31, 2024
Health Care Cost Trend Rates	Exhibit H	Health care cost trends reflect the change in per capita costs over time and include such factors as unit cost, utilization of health care services, plan design, and technological improvements. These factors impact overall cost (and thus retiree share after the fixed subsidy) as well as the costs for Medicare beneficiaries not eligible for premium-free Medicare Part A under the PERA benefit structure (and in certain circumstances, the DPS benefit structure.) Basis: Reviewed annually and updated, as appropriate.	Updated Effective: Dec 31, 2024
Additional Premium Subsidy Assumptions - DPS Benefit Structure	Exhibit I	Plan defined 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. Basis: Additional subsidy for DPS Benefit Structure in effect as of January 1, 2010	Subsidy amounts in effect as of Merger of the DPS Retirement System into PERA Effective: Jan 1, 2010

HEALTH CARE TRUST FUNDS—OPEB

Non-Economic Assumptions	Value(s) / Type	Description / Source / Basis	Adoption / Effective Date
Health Care Participation Rate Assumptions	Exhibit J	Current PERACare participants are assumed to maintain their current health care benefit elections in perpetuity. For active members retiring directly from covered employment, Exhibit J provides the assumed participation rates. The 2024 experience analysis supported a reduction in anticipated participation for retiring active members at most ages for all divisions.	Last Revised: Jan 17, 2025; Effective: Dec 31, 2024
Survivors of Retirees Choosing Joint & Survivor Payment Options	Portion of Male Retirees with Surviving Spouse: 60%; Portion of Female Retirees with Surviving Spouse: 35%	Survivors of retirees under the PERA benefit structure electing health care coverage are eligible to receive the subsidy. To anticipate future liabilities driven by these survivors, it is assumed a percent of the current members assumed to elect PERACare coverage will choose a joint and survivor optional payment and thus, their survivors will qualify for the subsidy. The 2024 experience analysis confirmed the current assumptions.	Last Revised: Nov 20, 2020; Effective: Dec 31, 2020
Age Differences	Male Retiree: Three Years Older than Female Spouse; Female Retiree: One Year Younger than Male Spouse	The assumed average number of years a covered male spouse is older than a covered female spouse is three years for a male retiree and one year for a female retiree. These assumptions initially were determined from actual census data and were revised from the previous non-gender specific assumptions used in prior actuarial valuations. The 2024 experience analysis confirmed the current assumptions.	Last Revised: Nov 18, 2016; Effective: Dec 31, 2016
Health Care Participation Election Assumption for Inactive Members	Inactive Members: 15%	It is assumed a certain percent of eligible inactive members will elect health care coverage upon commencement of their monthly benefit. The 2024 experience analysis supported a reduction in anticipated participation for inactive members.	Last Revised: Jan 17, 2025; Effective: Dec 31, 2024
Health Care Participation Spousal Election Assumption	3%	It is assumed a certain percent of participating members, regardless of prior status, retirement benefit payment selection, or eligibility for premium-free Medicare Part A, will elect coverage for their spouses. The 2024 experience analysis supported a reduction in the resulting spousal election assumption.	Last Revised: Jan 17, 2025; Effective: Dec 31, 2024
Commencement Age Assumed for Inactive Members	Age 60	For eligible inactive members, an average age at which health benefits are to begin must be assumed. Here, the assumed age of initial benefit receipt is determined using the same approach used for terminating active members who are assumed to leave their contributions in the plan in order to be eligible for a pension benefit at their retirement date. Previously, this assumption varied depending on benefit structure and years of service, however, the 2024 experience analysis supported a change to age 60 for the assumed initial benefit age for all inactive member groups.	Last Confirmed/ Revised: Jan 17, 2025; Effective: Dec 31, 2024
Medicare Health Care Plan Election Rate Assumptions	Exhibit K	Exhibit K shows the assumed plan elections for current and future Medicare-eligible retirees who are not eligible for premium-free Medicare Part A. Basis: Reviewed annually and updated, as appropriate, the revised Medicare Health Care Plan election rate assumptions were based on an experience analysis of recent data and supported by the 2024 experience analysis.	Updated Effective: Dec 31, 2023

HEALTH CARE TRUST FUNDS—OPEB

Non-Economic Assumptions	Value(s) / Type	Description / Source / Basis	Adoption / Effective Date
Percent Qualifying for “No Part A” Subsidy Assumptions	Exhibit L	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 assumed ineligible for premium-free Medicare Part A coverage through their spouse, and for those active employees hired prior to April 1, 1986, Exhibit L 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. The 2024 experience analysis supported reductions in assumptions for healthy PERACare enrollees, at certain hire ages and the percentage of those assumed to cover a spouse, as follows: Of the PERACare enrollees under the PERA benefit structure assumed to qualify for the “No Part A” subsidy, 3% are assumed to cover a spouse. Of the disability retirees enrolled in PERACare 5% are assumed to qualify for the “No Part A” subsidy. Of the eligible inactive (or deferred vested) members enrolled in PERACare, 100% 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, therefore 0% are assumed to qualify for the “No Part A” subsidy.	Last Confirmed/Revised: Jan 17, 2025; Effective: Dec 31, 2024
Mortality	Exhibit D and Exhibit G	The revised pre- and post-retirement and disability retirement mortality assumptions described in the Division Trust Funds subsection of this Actuarial Section appropriately reflect PERA's recent and anticipated plan experience and are used to estimate the value of expected future subsidy payments. Exhibit D in the Division Trust Funds subsection of this Actuarial Section, lists the healthy pre-retirement mortality rates at sample ages and Exhibit G lists the healthy post-retirement mortality rates and values at sample ages. As a result of the 2024 experience analysis, the base mortality tables were maintained with small changes to credibility adjustments, where applicable, and applied mortality projection was updated to the 2024 adjusted scale MP-2021. All mortality tables for purpose of valuing the Health Care Trust Funds are headcount-weighted.	First implemented use of separate mortality tables for different groups / divisions Effective: Dec 31, 2016; First implemented generational mortality and use of a separate mortality table for beneficiaries Effective: Dec 31, 2020 Mortality - Last Revised: Jan 17, 2025; Effective: Dec 31, 2024
AI Rate	N/A	As the service-based premium subsidy does not increase over time, there is no need for an assumption regarding increasing benefit amounts. Basis: N/A	N/A

ACTUARIAL STUDIES

Governance Studies	All actuarial studies described in the Division Trust Funds subsection of this Actuarial Section titled, Actuarial Studies, incorporated a review and analysis of actuarial methods and assumptions pertaining to the HCTF and the DPS HCTF.
---------------------------	--

HEALTH CARE TRUST FUNDS—OPEB

CHANGES SINCE LAST ACTUARIAL VALUATION	
Changes in Actuarial Methods	There are no changes in actuarial methods incorporated in the December 31, 2024, actuarial valuation, since the last actuarial valuation as of December 31, 2023.
Changes in Actuarial Assumptions	Based on the results of the 2024 experience analysis, the Board adopted revised actuarial assumptions as summarized in the Division Trust Funds subsection of this Actuarial Section. In addition, the actuarial assumption changes, specific to the HCTF and the DPS HCTF, incorporated into the December 31, 2024, actuarial valuation, since the last actuarial valuation as of December 31, 2023 are as follows: Revisions were made to the following assumptions based on annual analysis: - Per capita health care costs in effect as of the December 31, 2024, valuation date for those PERACare enrollees under the PERA benefit structure who are expected to be age 65 and older and are not eligible for premium-free Medicare Part A benefits were updated to reflect the costs for the 2025 plan year. - The health care cost trend rates applicable to health plan premiums were revised to reflect the current expectation of future increases in those premiums. Revisions were made to the following assumptions to better reflect plan experience noted during the 2024 experience analysis: - Reduced rates of health care participation at most ages for all divisions. - MAPD plan premium costs are no longer age graded. Mortality assumptions for the Health Care Trust Funds use the same generational mortality tables, adjustments for credibility and gender, and mortality projection scale, as applied to the Division Trust Funds, except the mortality tables are "headcount-weighted" for purposes of assessing the liability associated with the plans.
Changes in Plan Provisions	Except for the items noted below, there are no changes in OPEB plan provisions incorporated in the December 31, 2024, actuarial valuation since the last actuarial valuation as of December 31, 2023. As of December 31, 2024, plan assets for the HCTF reflect additional payments related to the disaffiliation of Tri-County Health Department as a PERA-affiliated employer, effective December 31, 2022. The additional employer disaffiliation payment allocations to the HCTF and Local Government Division Trust Fund were \$0.020 million and \$0.486 million, respectively. House Bill (HB) 25-1105, enacted May 23, 2025, and effective July 1, 2025, was reflected to the extent possible in the December 31, 2024, valuation. HB 25-1105 reduces the base employer contribution rate for the DPS Division by 3.0% of salary, from 10.4% to 7.4%, and reduces the allocated employer contribution to the DPS HCTF fund by 0.82% of salary, from 1.02% to 0.20%.

SIGNIFICANT EVENTS

There were no significant events during 2024.

DIFFERENCES IN ACTUARIAL VALUATION METHODS AND ASSUMPTIONS

- The actuarial valuation for funding purposes was performed as of December 31, 2024. The actuarial valuation for accounting and financial reporting purposes was performed as of December 31, 2023, and the total OPEB liability was rolled forward to the measurement date as of December 31, 2024.
- Census data used for the actuarial valuation for funding purposes reflects membership data as of December 31, 2024, and the census data used for the actuarial valuation for accounting and financial reporting purposes reflects membership data as of December 31, 2023. Therefore, all summaries and schedules, regarding actuarial valuation results for funding purposes, shown in the Actuarial Section, reflect census data as of December 31, 2024.
- The actuarial valuation for funding purposes applies an asset valuation method that recognizes a four-year smoothed fair 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 OPEB liability.
- The actuarial valuation for funding purposes reflects updated initial per capita health care costs and health care trend rates to 2025. The actuarial valuation for accounting and financial reporting purposes reflects updated initial per capita health care costs and health care trend rates to 2024.

HEALTH CARE TRUST FUNDS—OPEB

Actuarial Assumptions: Exhibits H–L

The following exhibits (Exhibits H through L) show the actuarial assumptions employed to determine the actuarial valuation results. The basic economic and demographic actuarial assumptions as detailed in Exhibits A through G, in the Division Trust Funds subsection of the Actuarial Section, also were applied, as applicable, for purposes of determining OPEB liabilities.

Exhibit H: Initial Health Care Costs and Trend Rate Assumptions—PERA Benefit Structure

PER CAPITA HEALTH CARE COST DEVELOPMENT

Continuing from the prior year, the per capita health care costs are developed by plan option. This approach applies for all members and is adjusted accordingly for those not eligible for premium-free Medicare Part A.

MAPD PPO #1:

Based on January 1, 2025, premium rates for the UnitedHealthcare Medicare Advantage Prescription Drug (MAPD) PPO plan #1.

MAPD PPO #2:

Based on January 1, 2025, premium rates for the UnitedHealthcare Medicare Advantage Prescription Drug (MAPD) PPO plan #2.

MAPD HMO:

Based on January 1, 2025, premium rates for the Kaiser Permanente Medicare Advantage Prescription Drug (MAPD) HMO plan.

PER CAPITA HEALTH CARE COSTS BEGINNING JANUARY 1, 2025

(In Actual Dollars)

Plan	With Medicare Part A	Without Medicare Part A
MAPD PPO #1	\$4,188	\$8,928
MAPD PPO #2	2,028	5,508
MAPD HMO (Kaiser)	2,040	7,596

The 2025 Medicare Part A Premium is \$518 per month.

HEALTH CARE COST TREND RATE ASSUMPTIONS¹

Year	PERACare Medicare Plans	Medicare Part A Premiums
2025	8.00%	3.50%
2026	7.65%	3.75%
2027	7.30%	3.75%
2028	6.95%	4.00%
2029	6.60%	4.00%
2030	6.25%	4.25%
2031	5.90%	4.25%
2032	5.55%	4.25%
2033	5.20%	4.50%
2034	4.85%	4.50%
2035+	4.50%	4.50%

¹ Applies only to PERACare enrollees who are age 65 or older and who are not eligible for premium-free Medicare Part A. Where the actual premiums for the selected plan are less than the service-based premium subsidy, trend rate assumptions are applied accordingly.

HEALTH CARE TRUST FUNDS—OPEB

Exhibit I: Additional Premium Subsidy Assumptions—DPS Benefit Structure¹

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

¹ 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 J: Health Care Participation Rate Assumptions

Attained Age(s)	Percent Electing Health Care Coverage		Attained Age(s)	Percent Electing Health Care Coverage	
	Other Divisions	DPS Division		Other Divisions	DPS Division
15 – 49	20%	20%	61	35%	45%
50	30%	35%	62	35%	45%
51	30%	35%	63	35%	45%
52	30%	35%	64	40%	45%
53	30%	35%	65	40%	45%
54	30%	35%	66	40%	45%
55	30%	40%	67	40%	45%
56	30%	40%	68	40%	40%
57	30%	40%	69	40%	40%
58	35%	40%	70	30%	40%
59	35%	40%	71	30%	40%
60	35%	40%	72+	30%	40%

Exhibit K: Medicare Health Care Plan Election Rate Assumptions

Medicare Plans ¹	Percent of Future Medicare Benefit Recipients Electing Medicare Plan
	All Divisions
UnitedHealthcare MAPD PPO ²	75%
Kaiser Permanente Medicare Advantage HMO	25%

¹ These assumptions are applicable to members under the PERA benefit structure only.

² Of the PERACare enrollees participating in the UnitedHealthcare MAPD PPO plans, it is assumed 73% elect MA #1 and 27% elect MA #2.

Exhibit L: Percent Qualifying for “No Part A” Subsidy Assumptions

Hire Age	HCTF ^{1,2}	DPS HCTF ²
15 – 24	15%	15%
25 – 29	10%	10%
30+	4%	4%

¹ Of the PERACare enrollees under the PERA benefit structure assumed to qualify for the “No Part A” subsidy, 3% are assumed to cover a spouse.

² Of the PERACare enrollees receiving health care benefits as a result of disability retirement, 5% are assumed to qualify for the “No Part A” subsidy. Of the eligible inactive (or deferred vested) members enrolled in PERACare, 100% 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 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 following schedules presented in this section provide an overview of funding progress:

- The Schedule of Funded Liabilities by Type shows the degree to which existing liabilities are funded, including prior history.
- The Schedule of Funding Progress shows the UAAL as a percentage of annual covered payroll, including prior history.
- A schedule detailing actuarial gains and losses, by source, for the current year.
- The scheduled contribution requirements based on the December 31, 2024, actuarial valuation for the period ending December 31, 2026.

Schedule of Funded Liabilities by Type

The Schedule of Funded Liabilities by Type, formerly known as the “solvency test,” compares the plan’s actuarial value of assets with: (A) member contributions (with interest) on deposit, (B) the liabilities for future benefits to persons who have retired, died or become disabled, and to those who have terminated service with the right to a future benefit, and (C) the liabilities for service already rendered by active members. Since the HCTF and the DPS HCTF are funded only through employer contributions, there are no member contribution accounts (liability A).

The following table shows the funded level of the liabilities for future benefits to current retirees (liability B) and the funded or unfunded level, as applicable, of liabilities associated with service already rendered by active members (liability C):

SCHEDULE OF FUNDED LIABILITIES BY TYPE

(Dollars in Thousands)

Valuation Date	Aggregate Accrued Liabilities				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)	Actuarial Value of Plan Assets	Liability (A)	Liability (B)	Liability (C)
HCTF							
12/31/2015	N/A	\$1,099,045	\$457,224	\$285,588	N/A	26.0%	0.0%
12/31/2016	N/A	1,153,015	403,747	270,150	N/A	23.4%	0.0%
12/31/2017	N/A	1,178,160	403,062	260,282	N/A	22.1%	0.0%
12/31/2018	N/A	1,084,313	393,801	288,323	N/A	26.6%	0.0%
12/31/2019	N/A	1,048,219	398,950	348,433	N/A	33.2%	0.0%
12/31/2020	N/A	1,041,551	376,340	430,256	N/A	41.3%	0.0%
12/31/2021	N/A	973,039	372,432	511,143	N/A	52.5%	0.0%
12/31/2022	N/A	965,100	352,056	571,710	N/A	59.2%	0.0%
12/31/2023	N/A	956,764	357,447	635,906	N/A	66.5%	0.0%
12/31/2024	N/A	849,060	279,391	708,113	N/A	83.4%	0.0%
DPS HCTF							
12/31/2015	N/A	\$49,891	\$25,006	\$17,557	N/A	35.2%	0.0%
12/31/2016	N/A	51,357	21,488	18,945	N/A	36.9%	0.0%
12/31/2017	N/A	50,796	19,496	21,117	N/A	41.6%	0.0%
12/31/2018	N/A	48,268	21,184	25,018	N/A	51.8%	0.0%
12/31/2019	N/A	46,398	21,539	31,189	N/A	67.2%	0.0%
12/31/2020	N/A	45,306	20,252	39,853	N/A	88.0%	0.0%
12/31/2021	N/A	40,643	21,417	49,719	N/A	100.0%	42.4%
12/31/2022	N/A	39,157	20,524	58,134	N/A	100.0%	92.5%
12/31/2023	N/A	39,156	21,657	67,109	N/A	100.0%	100.0%
12/31/2024	N/A	36,037	17,098	77,320	N/A	100.0%	100.0%

HEALTH CARE TRUST FUNDS—OPEB

SCHEDULE OF FUNDED LIABILITIES BY TYPE (CONTINUED)

(Dollars in Thousands)

Aggregate Accrued Liabilities					Portion of Actuarial Accrued Liabilities Covered by Valuation Assets		
Valuation Date	Active Member Contributions (A)	Retirees, Beneficiaries, and Inactive Members (B)	Employer-Financed Portion of Active Members (C)	Actuarial Value of Plan Assets	Liability (A)	Liability (B)	Liability (C)
Total of Health Care Trust Funds ¹							
12/31/2015	N/A	\$1,148,936	\$482,230	\$303,145	N/A	26.4%	0.0%
12/31/2016	N/A	1,204,372	425,235	289,095	N/A	24.0%	0.0%
12/31/2017	N/A	1,228,956	422,558	281,399	N/A	22.9%	0.0%
12/31/2018	N/A	1,132,581	414,985	313,341	N/A	27.7%	0.0%
12/31/2019	N/A	1,094,617	420,489	379,622	N/A	34.7%	0.0%
12/31/2020	N/A	1,086,857	396,592	470,109	N/A	43.3%	0.0%
12/31/2021	N/A	1,013,682	393,849	560,862	N/A	55.3%	0.0%
12/31/2022	N/A	1,004,257	372,580	629,844	N/A	62.7%	0.0%
12/31/2023	N/A	995,920	379,104	703,015	N/A	70.6%	0.0%
12/31/2024	N/A	885,097	296,489	785,433	N/A	88.7%	0.0%

¹ 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.

Unfunded Actuarial Accrued Liability

UAAL is the difference between actuarially calculated liability for service already rendered and the valuation assets of the fund.

The following factors resulted in higher liabilities (or losses) during 2024:

- Lower than assumed investment return (based on the smoothed actuarial value of assets) for 2024.
- Of the members who terminated PERA-covered employment fewer withdrew their accounts than expected.
- New PERA members had some service resulting in accrued liabilities.

The following factors resulted in lower liabilities (or gains) during 2024:

- Retirees experienced shorter lifespans than expected.
- Favorable benefit utilization and claims experience.
- Fewer members retired at earlier ages than expected.
- Fewer service and disability retirements than expected.
- Actual payroll contributions were greater than the determined ADC for the HCTF and the DPS HCTF.

HEALTH CARE TRUST FUNDS—OPEB

SCHEDULE OF FUNDING PROGRESS

(Dollars in Thousands)

(A) Valuation Date	(B) Actuarial Value of Plan Assets	(C) Actuarial Accrued Liabilities	(D) Unfunded Actuarial Accrued Liabilities (UAAL) (C)–(B)	(E) Funded Ratio (B)/(C)	(F) Annual Covered Payroll	(G) UAAL As a Percentage of Covered Payroll (D)/(F)
HCTF						
12/31/2015	\$285,588	\$1,556,269	\$1,270,681	18.4%	\$7,485,545	17.0%
12/31/2016	270,150	1,556,762	1,286,612	17.4%	7,716,894	16.7%
12/31/2017	260,282	1,581,222	1,320,940	16.5%	7,927,280	16.7%
12/31/2018	288,323	1,478,114	1,189,791	19.5%	8,399,835	14.2%
12/31/2019	348,433	1,447,169	1,098,736	24.1%	8,834,404	12.4%
12/31/2020	430,256	1,417,891	987,635	30.3%	8,988,119	11.0%
12/31/2021	511,143	1,345,471	834,328	38.0%	9,337,899	8.9%
12/31/2022	571,710	1,317,156	745,446	43.4%	9,671,062	7.7%
12/31/2023	635,906	1,314,211	678,305	48.4%	10,656,973	6.4%
12/31/2024	708,113	1,128,451	420,338	62.8%	11,613,399	3.6%
DPS HCTF						
12/31/2015	\$17,557	\$74,897	\$57,340	23.4%	\$621,115	9.2%
12/31/2016	18,945	72,845	53,900	26.0%	642,177	8.4%
12/31/2017	21,117	70,292	49,175	30.0%	658,198	7.5%
12/31/2018	25,018	69,452	44,434	36.0%	722,040	6.2%
12/31/2019	31,189	67,937	36,748	45.9%	736,264	5.0%
12/31/2020	39,853	65,558	25,705	60.8%	771,347	3.3%
12/31/2021	49,719	62,060	12,341	80.1%	823,396	1.5%
12/31/2022	58,134	59,681	1,547	97.4%	810,403	0.2%
12/31/2023	67,109	60,813	(6,296)	110.4%	894,245	(0.7%)
12/31/2024	77,320	53,135	(24,185)	145.5%	888,094	(2.7%)
Total of Health Care Trust Funds¹						
12/31/2015	\$303,145	\$1,631,166	\$1,328,021	18.6%	\$8,106,660	16.4%
12/31/2016	289,095	1,629,607	1,340,512	17.7%	8,359,071	16.0%
12/31/2017	281,399	1,651,514	1,370,115	17.0%	8,585,478	16.0%
12/31/2018	313,341	1,547,566	1,234,225	20.2%	9,121,875	13.5%
12/31/2019	379,622	1,515,106	1,135,484	25.1%	9,570,668	11.9%
12/31/2020	470,109	1,483,449	1,013,340	31.7%	9,759,466	10.4%
12/31/2021	560,862	1,407,531	846,669	39.8%	10,161,295	8.3%
12/31/2022	629,844	1,376,837	746,993	45.7%	10,481,465	7.1%
12/31/2023	703,015	1,375,024	672,009	51.1%	11,551,218	5.8%
12/31/2024	785,433	1,181,586	396,153	66.5%	12,501,493	3.2%

¹ 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.

Note: A history of contributions by Health Care Trust Fund, the ADC compared to the actual contributions paid, including the deficiency or (excess), for each of the last 10 years, is shown in the Schedule of Employer Contributions, found on page 112 in the RSI in the Financial Section.

HEALTH CARE TRUST FUNDS—OPEB

Actuarial Gains and Losses

ANALYSIS OF FINANCIAL EXPERIENCE

(Dollars in Millions)

	HCTF	DPS HCTF
Amounts		
From differences between assumed and actual experience on liabilities		
Age and service retirements ¹	(\$21.9)	(\$1.2)
Disability retirements ²	(0.2)	—
Deaths ³	(28.5)	(0.7)
Withdrawals ⁴	2.8	0.1
New members ⁵	2.5	0.2
Administrative expenses and other ⁶	(1.9)	(0.1)
Subtotal	(47.2)	(1.7)
From differences between assumed and actual experience on assets	8.0	0.7
From change in plan assumptions	(151.1)	(6.9)
From change in actuarial methods	—	—
From change in plan provisions	—	—
Total actuarial (gains) on 2024 activities	(\$190.3)	(\$7.9)
Total actuarial (gains)/losses on 2023 activities	(\$13.3)	\$0.9

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

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

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

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

⁵ *New members*: If new members entering the plan have prior service, there is a loss.

⁶ *Administrative expenses and other*: Includes miscellaneous gains and losses resulting from purchased service transfers, claims experience, benefit utilization, software updates and refinements, data adjustments, timing of financial transactions, etc.

Actuarial Valuation Results

Contribution rates for the year ending December 31, 2026, are derived from the results of the December 31, 2024, 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 2026 FISCAL YEAR

	Expressed as a Percentage of Member Payroll	
	HCTF	DPS HCTF
Contributions		
Service retirement benefits	0.11%	0.09%
Disability retirement benefits	0.00%	0.00%
Survivor benefits	0.00%	0.00%
Separation benefits	0.01%	0.02%
Total normal cost	0.12%	0.11%
Less member contributions	(0.00%)	(0.00%)
Employer normal cost	0.12%	0.11%
Percentage available to amortize unfunded actuarial accrued liabilities	0.90%	0.09%
Amortization period	4 Years	N/A
Total employer contribution rate for actuarially funded benefits¹	0.39%	(0.02%)

¹ Since the funded status of the DPS HCTF is greater than 120%, the ADC is equal to the normal cost less an amount equal to a 15-year amortization of the portion of the negative UAAL above the 120% funded ratio, as dictated by the Board's OPEB Funding Policy.

HEALTH CARE TRUST FUNDS—OPEB

Annual Actuarial Valuation Statistics

As of December 31, 2024, the Funded Ratio, the UAAL, the ADC for 2026 as a percentage of covered payroll, and the amortization period are shown in the following table. The results in this table are based on the actuarial valuation for funding purposes.

ACTUARIAL STATISTICS

(Dollars in Thousands)

Trust Fund	Funded Ratio	UAAL	ADC ¹	Amortization Period
HCTF	62.8%	\$420,338	0.39%	4 Years
DPS HCTF ²	145.5%	(24,185)	(0.02%)	N/A
Total of Health Care Trust Funds³		\$396,153		

¹ Determined considering the 30-year target amortization period defined in the OPEB funding policy for purposes of funding benchmarks and RSI reporting as shown in the Financial Section.

² Since the funded status of the DPS HCTF is greater than 120%, the ADC is equal to the normal cost less an amount equal to a 15-year amortization of the portion of the negative UAAL above the 120% funded ratio, as dictated by the Board's OPEB Funding Policy.

³ 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.

Pursuant to the OPEB funding policy, for reporting purposes, alternative ADCs also are determined by applying the layered amortization methodology as previously described. Under the target and alternative calculations, the legacy UAAL as of December 31, 2017, was amortized using a 30-year period, but the alternative ADCs use a 25-year closed period, a 20-year closed period, and a 15-year closed period, in lieu of the 30-year period, for amortization of any "new" UAAL recognized on and after January 1, 2018. The 2026 target and alternative ADCs, by division, are displayed as follows:

Trust Fund	Target ADC	Alternative ADCs		
	30-Year ¹	25-Year ²	20-Year ²	15-Year ²
HCTF	0.39%	0.33%	0.24%	0.06%
DPS HCTF ³	(0.02%)	(0.02%)	(0.02%)	(0.02%)

¹ Refers to the amortization period used to amortize the legacy UAAL as of December 31, 2017, and any "new" UAAL recognized on and after January 1, 2018.

² Refers to the amortization period used to amortize any "new" UAAL recognized on and after January 1, 2018.

³ Since the funded status of the DPS HCTF is greater than 120%, the ADC is equal to the normal cost less an amount equal to a 15-year amortization of the portion of the negative UAAL above the 120% funded ratio, as dictated by the Board's OPEB Funding Policy.

Funded Ratio

(Dollars in Thousands)

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 fair 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, 2024, was \$785,433 compared to a fair value of assets of \$790,116, and to the AAL of \$1,181,586. 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 as follows:

Trust Fund	2020	2021	2022	2023	2024
HCTF	30.3%	38.0%	43.4%	48.4%	62.8%
DPS HCTF	60.8%	80.1%	97.4%	110.4%	145.5%
Total of Health Care Trust Funds¹	31.7%	39.8%	45.7%	51.1%	66.5%

¹ 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

The Board's OPEB funding policy states that the targeted actuarial funded ratio is greater than or equal to 110% on a combined trust fund basis. The funded ratios listed give an indication of progress made toward achieving the stated objective. A larger funded ratio indicates a plan is better funded. As an example, in actual dollars, for every \$1.00 of the actuarially determined benefits earned for the HCTF as of December 31, 2024, approximately \$0.63 of assets are available for payment based on the actuarial value of assets. These benefits earned will be payable over a period dependent upon factors, such as, the life span of members after their retirement and participation in PERACare. Therefore, it is not imperative the AAL equal the actuarial value of assets at any given moment in time.

At December 31, 2023, and December 31, 2024, PERA had the following funded status for the Health Care Trust Funds:

FUNDED STATUS FOR THE HEALTH CARE TRUST FUNDS

(Dollars in Thousands)

	Fair Value of Assets		Actuarial Value of Assets ¹	
	12/31/2023	12/31/2024	12/31/2023	12/31/2024
Health Care Trust Fund				
Actuarial accrued liability ²	\$1,314,211	\$1,128,451	\$1,314,211	\$1,128,451
Assets held to pay those liabilities	611,911	712,309	635,906	708,113
Unfunded actuarial accrued liability	\$702,300	\$416,142	\$678,305	\$420,338
Funded ratio	46.6%	63.1%	48.4%	62.8%
DPS Health Care Trust Fund				
Actuarial accrued liability ²	\$60,813	\$53,135	\$60,813	\$53,135
Assets held to pay those liabilities	64,721	77,807	67,109	77,320
Unfunded actuarial accrued liability	(\$3,908)	(\$24,672)	(\$6,296)	(\$24,185)
Funded ratio	106.4%	146.4%	110.4%	145.5%
Total of Health Care Trust Funds³				
Actuarial accrued liability ²	\$1,375,024	\$1,181,586	\$1,375,024	\$1,181,586
Assets held to pay those liabilities ⁴	676,632	790,116	703,015	785,433
Unfunded actuarial accrued liability	\$698,392	\$391,470	\$672,009	\$396,153
Funded ratio	49.2%	66.9%	51.1%	66.5%

¹ 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.

² Based upon an assumed rate of return on investments of 7.25% and an assumed rate of 7.25% to discount the liabilities to be paid in the future to a value as of December 31, 2023, and December 31, 2024.

³ 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.

⁴ In aggregate, the fair value of the assets as of December 31, 2024, is \$4,683 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 only in the year they occurred. The remaining gains and (losses) to be smoothed for 2022 are \$(30,851), for 2023 are \$17,325, and for 2024 are \$18,209.

HEALTH CARE TRUST FUNDS—OPEB

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

The most important long-term driver of an OPEB 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, considering 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 1% 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, 2026) as shown in the following tables:

INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 6.25%*(Dollars in Thousands)*

Trust Fund	Actuarial Value of Assets			Fair Value of Assets
	Funded Ratio	UAAL	ADC	UAAL
HCTF	57.5%	\$522,760	0.44%	\$518,564
DPS HCTF ¹	133.1%	(19,214)	0.06%	(19,701)
Total of Health Care Trust Funds²		\$503,546		\$498,863

¹ Since the funded status of the DPS HCTF is greater than 120%, the ADC is equal to the normal cost less an amount equal to a 15-year amortization of the portion of the negative UAAL above the 120% funded ratio, as dictated by the Board's OPEB Funding Policy.

² The data in this table is aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

CURRENT INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 7.25%*(Dollars in Thousands)*

Trust Fund	Actuarial Value of Assets			Fair Value of Assets
	Funded Ratio	UAAL	ADC	UAAL
HCTF	62.8%	\$420,338	0.39%	\$416,142
DPS HCTF ¹	145.5%	(24,185)	(0.02%)	(24,672)
Total of Health Care Trust Funds²		\$396,153		\$391,470

¹ Since the funded status of the DPS HCTF is greater than 120%, the ADC is equal to the normal cost less an amount equal to a 15-year amortization of the portion of the negative UAAL above the 120% funded ratio, as dictated by the Board's OPEB Funding Policy.

² The data in this table is aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

INVESTMENT RETURN ASSUMPTION (DISCOUNT RATE) EQUAL TO 8.25%*(Dollars in Thousands)*

Trust Fund	Actuarial Value of Assets			Fair Value of Assets
	Funded Ratio	UAAL	ADC	UAAL
HCTF	68.1%	\$332,021	0.34%	\$327,825
DPS HCTF ¹	158.2%	(28,452)	(0.10%)	(28,939)
Total of Health Care Trust Funds²		\$303,569		\$298,886

¹ Since the funded status of the DPS HCTF is greater than 120%, the ADC is equal to the normal cost less an amount equal to a 15-year amortization of the portion of the negative UAAL above the 120% funded ratio, as dictated by the Board's OPEB Funding Policy.

² The data in this table is aggregated for informational purposes. The assets of each trust fund are for the sole purpose of its members and cannot be used by another fund.

Note: The time-weighted, net-of-fees annualized rate of return for the pooled investment assets was 8.2% for the past five years and 8.3% for the past 10 years. The 30-year annualized net-of-fees rate of return for the pooled investment assets was 8.4%.

HEALTH CARE TRUST FUNDS—OPEB

Plan Data

Except for the “Inactive members not eligible for benefits,” the PERA membership is potentially eligible for participation in OPEB benefits through receipt of a PERA-provided benefit and enrollment in PERACare. The following table represents all individuals included in the assessment of the AAL associated with the Health Care Trust Funds as of December 31, 2024:

MEMBERSHIP—HEALTH CARE TRUST FUNDS

As of December 31, 2024

	HCTF	DPS HCTF	Total
Retirees and beneficiaries ¹	134,107	7,331	141,438
Inactive members eligible but not yet receiving benefits ²	37,918	3,436	41,354
Inactive members not eligible for benefits	N/A	N/A	N/A
Active members ²	202,997	16,207	219,204
Total	375,022	26,974	401,996

¹ Currently receiving or eligible for OPEB benefits.

² May be eligible for future OPEB benefits.

PARTICIPATION IN PERACARE HEALTH PLANS FOR ELIGIBLE RETIREES AND BENEFICIARIES

As of December 31, 2024

	HCTF	DPS HCTF	Total
Enrolled in PERACare			
Under age 65	5,488	240	5,728
Age 65 and older	48,772	2,823	51,595
	54,260	3,063	57,323
Not enrolled in PERACare			
Under age 65	17,017	652	17,669
Age 65 and older	62,830	3,616	66,446
	79,847	4,268	84,115
Total eligible retirees and beneficiaries	134,107	7,331	141,438

HEALTH CARE TRUST FUNDS—OPEB

SCHEDULE OF RETIREES, BENEFICIARIES, AND SURVIVORS ADDED TO AND REMOVED FROM THE BENEFIT PAYROLL

(In Actual Dollars)

	Added to Payroll		Removed from Payroll		Payroll—End of Year		Average Annual Benefits	Increase (Decrease) in Average Benefits
Valuation Date	No.	Annual Benefits	No.	Annual Benefits	No. ^{1,2}	Annual Benefits		
HCTF ³								
12/31/2015					55,092	\$91,545,543	\$1,662	—
12/31/2016	3,217	\$6,921,114	2,520	\$4,463,334	55,789	91,567,554	1,641	(1.3%)
12/31/2017	3,352	7,255,971	2,667	7,153,713	56,474	91,669,812	1,623	(1.1%)
12/31/2018	3,337	7,068,843	3,169	5,498,610	56,642	89,984,901	1,589	(2.1%)
12/31/2019	3,265	6,495,867	3,455	6,074,346	56,452	89,033,598	1,577	(0.8%)
12/31/2020	2,743	5,640,819	2,922	6,801,192	56,273	87,873,225	1,562	(1.0%)
12/31/2021	2,969	5,509,620	3,064	5,562,987	56,178	80,751,402	1,437	(8.0%)
12/31/2022	2,985	5,212,041	2,705	4,463,307	56,458	79,917,060	1,416	(1.5%)
12/31/2023	2,573	4,251,594	2,779	4,630,527	56,252	78,067,185	1,388	(2.0%)
12/31/2024	2,031	3,537,147	4,023	6,160,629	54,260	78,684,012	1,450	4.5%
DPS HCTF ³								
12/31/2015					3,930	\$5,829,741	\$1,483	—
12/31/2016	156	\$322,230	201	\$302,220	3,885	5,703,954	1,468	(1.0%)
12/31/2017	149	325,128	218	445,188	3,816	5,583,894	1,463	(0.3%)
12/31/2018	160	346,794	351	550,827	3,625	5,905,296	1,629	11.3%
12/31/2019	276	468,441	281	492,591	3,620	5,805,591	1,604	(1.5%)
12/31/2020	112	218,592	213	424,626	3,519	5,599,557	1,591	(0.8%)
12/31/2021	109	188,670	240	420,486	3,388	4,851,156	1,432	(10.0%)
12/31/2022	105	180,891	308	449,127	3,185	4,522,734	1,420	(0.8%)
12/31/2023	103	182,460	201	317,466	3,087	4,341,885	1,407	(0.9%)
12/31/2024	80	131,445	225	323,160	2,942	4,468,647	1,519	8.0%
Total of Health Care Trust Funds ³								
12/31/2015					59,022	\$97,375,284	\$1,650	—
12/31/2016	3,373	\$7,243,344	2,721	\$4,765,554	59,674	97,271,508	1,630	(1.2%)
12/31/2017	3,501	7,581,099	2,885	7,598,901	60,290	97,253,706	1,613	(1.0%)
12/31/2018	3,497	7,415,637	3,520	6,049,437	60,267	95,890,197	1,591	(1.4%)
12/31/2019	3,541	6,964,308	3,736	6,566,937	60,072	94,839,189	1,579	(0.8%)
12/31/2020	2,855	5,859,411	3,135	7,225,818	59,792	93,472,782	1,563	(1.0%)
12/31/2021	3,078	5,698,290	3,304	5,983,473	59,566	85,602,558	1,437	(8.1%)
12/31/2022	3,090	5,392,932	3,013	4,912,434	59,643	84,439,794	1,416	(1.5%)
12/31/2023	2,676	4,434,054	2,980	4,947,993	59,339	82,409,070	1,389	(1.9%)
12/31/2024	2,111	3,668,592	4,248	6,483,789	57,202 ⁴	83,152,659	1,454	4.7%

¹ Enrolled in PERACare.

² Excludes beneficiaries enrolled in PERACare who are not receiving a subsidy.

³ The annual benefit is based upon creditable service and varies by attained age.

⁴ Excludes 121 beneficiaries enrolled in PERACare who are not receiving a subsidy.

HEALTH CARE TRUST FUNDS—OPEB

SCHEDULE OF ACTIVE MEMBER ACTUARIAL VALUATION DATA

As of December 31

(In Actual Dollars)

Year	Number of Participating Employers ^{1,2}	Total Number of Active Members	Medicare Eligible Active Members ³	Annual Payroll for Active Members	Average Annual Pay for Active Members	% Increase (Decrease) in Average Annual Pay
HCTF						
2015	534	188,040		\$7,485,544,867	\$39,808	—
2016	542	190,741		7,716,892,488	40,457	1.63%
2017	408	191,778	8,284	7,927,279,994	41,336	2.17%
2018	409	195,436	8,826	8,399,834,705	42,980	3.98%
2019	410	197,615	9,035	8,834,404,580	44,705	4.01%
2020	409	186,165	7,881	8,988,118,724	48,280	8.00%
2021	408	191,574	8,595	9,337,899,213	48,743	0.96%
2022	409	191,392	8,655	9,671,062,130	50,530	3.67%
2023	409	197,922	9,269	10,656,972,686	53,844	6.56%
2024	411	202,997	9,675	11,613,398,807	57,210	6.25%
DPS HCTF						
2015	38	15,929		\$621,114,573	\$38,993	—
2016	42	15,950		642,177,158	40,262	3.25%
2017	1	15,991	498	658,198,306	41,161	2.23%
2018	1	16,148	510	722,040,073	44,714	8.63%
2019	1	15,679	518	736,263,798	46,959	5.02%
2020	1	14,693	410	771,347,604	52,498	11.80%
2021	1	15,695	472	823,395,477	52,462	(0.07%)
2022	1	15,254	467	810,402,643	53,127	1.27%
2023	1	15,626	514	894,245,013	57,228	7.72%
2024	1	16,207	555	888,094,403	54,797	(4.25%)
Total of Health Care Trust Funds						
2015	572	203,969		\$8,106,659,440	\$39,745	—
2016	584	206,691		8,359,069,646	40,442	1.75%
2017	409	207,769	8,782	8,585,478,300	41,322	2.18%
2018	410	211,584	9,336	9,121,874,778	43,112	4.33%
2019	411	213,294	9,553	9,570,668,378	44,871	4.08%
2020	410	200,858	8,291	9,759,466,328	48,589	8.29%
2021	409	207,269	9,067	10,161,294,690	49,025	0.90%
2022	410	206,646	9,122	10,481,464,773	50,722	3.46%
2023	410	213,548	9,783	11,551,217,699	54,092	6.64%
2024	412	219,204	10,230	12,501,493,210	57,031	5.43%

¹ Prior to 2017, employer counts were based on separate units of government. Effective in 2017, GASB 74 classifies a primary government and its component units as one employer. Employer counts for the years 2017 and beyond are presented for purposes of complying with GASB 74 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.

² Participating employer counts prior to 2017 include charter schools operating within the School and DPS Divisions.

³ Information prior to 2017 was not required.



Statistical Section





Overview

The Statistical Section presents detailed information to assist users in utilizing the Basic Financial Statements, Notes to the Basic Financial Statements, and Required Supplementary Information to better understand and assess PERA's overall economic condition.

Financial Trends

The following schedules include information about the trends of key sources of additions and deductions for the past 10 years to provide context on how PERA's financial position has changed over time:

- *Changes in Fiduciary Net Position*
- *Benefits and Refund Deductions from Fiduciary Net Position by Type*

Operating Information

The following schedules contain demographic, economic, operating, and trend information related to membership and the retirement and health benefits PERA provides:

- *Member and Benefit Recipient Statistics¹*
- *Schedule of Average Retirement Benefits Payable¹*
- *Benefit Payments—All Division Trust Funds¹*
- *Schedule of Retirees and Survivors by Types of Benefits¹*
- *Schedule of Average Benefit Payments¹*
- *Schedule of Contribution Rate History*
- *Principal Participating Employers*

¹ Data for schedules are provided by the consulting actuary, Segal

Note: Schedules and information are derived from PERA internal sources unless otherwise noted.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

State Division Trust Fund

	2024	2023	2022	2021	2020
Additions					
Employer contributions ¹	\$865,714	\$790,373	\$704,797	\$664,304	\$646,386
Nonemployer contributions ¹	75,146	16,233	198,247	76,706	—
Member contributions ¹	445,303	407,449	360,523	329,652	298,264
Purchased service	32,473	30,910	35,699	39,514	28,522
Net investment income (loss)	1,954,077	2,187,360	(2,657,031)	2,806,442	2,652,870
Other	7,385	8,314	171	6,038	9,390
Total additions	3,380,098	3,440,639	(1,357,594)	3,922,656	3,635,432
Deductions					
Benefit payments	1,849,953	1,820,823	1,778,067	1,726,503	1,675,048
Refunds	84,185	77,229	82,321	74,520	57,921
Disability insurance premiums	1,137	994	849	1,013	1,360
Administrative expenses	15,698	13,979	13,312	12,051	11,385
Other	2,232	2,250	9,139	2,950	2,634
Total deductions	1,953,205	1,915,275	1,883,688	1,817,037	1,748,348
Change in net position	1,426,893	1,525,364	(3,241,282)	2,105,619	1,887,084
Net position					
Beginning of year	18,269,648	16,744,284	19,985,566	17,879,947	15,992,863
End of year	\$19,696,541	\$18,269,648	\$16,744,284	\$19,985,566	\$17,879,947

	2019	2018	2017	2016	2015
Additions					
Employer contributions ¹	\$612,282	\$583,164	\$563,977	\$521,804	\$484,005
Nonemployer contributions ¹	77,088	78,489	—	—	—
Member contributions ¹	257,803	236,313	228,978	223,005	217,980
Purchased service	29,494	25,227	27,442	24,528	26,946
Net investment income (loss)	2,764,719	(497,562)	2,391,683	947,981	210,337
Other	22	7,888	15,860	8,708	5,023
Total additions	3,741,408	433,519	3,227,940	1,726,026	944,291
Deductions					
Benefit payments	1,637,168	1,608,534	1,554,290	1,483,828	1,417,862
Refunds	61,832	65,253	58,696	60,137	63,567
Disability insurance premiums	1,965	2,093	2,035	2,106	2,088
Administrative expenses	11,294	11,903	11,745	11,271	10,779
Other	2,707	3,017	3,652	3,040	3,406
Total deductions	1,714,966	1,690,800	1,630,418	1,560,382	1,497,702
Change in net position	2,026,442	(1,257,281)	1,597,522	165,644	(553,411)
Net position					
Beginning of year	13,966,421	15,223,702	13,626,180	13,460,536	14,013,947
End of year	\$15,992,863	\$13,966,421	\$15,223,702	\$13,626,180	\$13,460,536

¹ Employer, nonemployer, and member contribution rate history is shown on pages 243-244.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

School Division Trust Fund

	2024	2023	2022	2021	2020
Additions					
Employer contributions ¹	\$1,444,279	\$1,317,476	\$1,201,265	\$1,113,636	\$1,048,992
Nonemployer contributions ¹	129,789	28,908	350,393	127,781	—
Member contributions ¹	779,963	711,530	642,202	574,948	501,214
Purchased service	51,433	48,270	57,469	55,901	35,633
Net investment income (loss)	3,490,728	3,871,069	(4,623,013)	4,847,781	4,556,622
Other	293	172	5,545	130	123
Total additions	5,896,485	5,977,425	(2,366,139)	6,720,177	6,142,584
Deductions					
Benefit payments	2,904,258	2,818,703	2,723,667	2,624,924	2,535,509
Refunds	109,720	97,538	88,355	81,725	67,873
Disability insurance premiums	2,163	1,823	1,435	1,679	2,286
Administrative expenses	30,584	26,887	25,562	22,608	22,779
Other	11,884	16,221	3,935	8,702	11,349
Total deductions	3,058,609	2,961,172	2,842,954	2,739,638	2,639,796
Change in net position	2,837,876	3,016,253	(5,209,093)	3,980,539	3,502,788
Net position					
Beginning of year	32,461,884	29,445,631	34,654,724	30,674,185	27,171,397
End of year	\$35,299,760	\$32,461,884	\$29,445,631	\$34,654,724	\$30,674,185

	2019	2018	2017	2016	2015
Additions					
Employer contributions ¹	\$1,002,760	\$923,910	\$857,740	\$812,740	\$754,182
Nonemployer contributions ¹	127,367	126,505	—	—	—
Member contributions ¹	436,899	386,811	368,740	359,059	348,537
Purchased service	25,992	27,525	30,313	27,422	23,841
Net investment income (loss)	4,676,607	(838,899)	3,982,275	1,569,026	344,000
Other	364	7,957	106	109	96
Total additions	6,269,989	633,809	5,239,174	2,768,356	1,470,656
Deductions					
Benefit payments	2,468,021	2,413,387	2,334,003	2,231,475	2,134,754
Refunds	73,871	76,035	74,637	65,715	70,298
Disability insurance premiums	3,338	3,506	3,347	3,454	3,400
Administrative expenses	22,619	23,560	23,019	21,991	20,865
Other	8,293	2,501	22,484	17,443	9,178
Total deductions	2,576,142	2,518,989	2,457,490	2,340,078	2,238,495
Change in net position	3,693,847	(1,885,180)	2,781,684	428,278	(767,839)
Net position					
Beginning of year	23,477,550	25,362,730	22,581,046	22,152,768	22,920,607
End of year	\$27,171,397	\$23,477,550	\$25,362,730	\$22,581,046	\$22,152,768

¹ Employer, nonemployer, and member contribution rate history is shown on page 245.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

Local Government Division Trust Fund

	2024	2023	2022	2021	2020
Additions					
Employer contributions ¹	\$130,956	\$119,470	\$108,748	\$96,481	\$89,662
Member contributions ¹	85,767	78,567	71,339	63,035	58,067
Purchased service	8,764	6,954	9,420	14,061	8,891
Employer disaffiliation	486	24,967	—	—	—
Net investment income (loss)	578,858	643,967	(781,550)	820,403	771,556
Other	34	112	73	23	24
Total additions	804,865	874,037	(591,970)	994,003	928,200
Deductions					
Benefit payments	362,044	348,662	336,721	322,106	307,795
Refunds	17,820	16,300	13,391	16,034	12,828
Disability insurance premiums	269	236	195	235	296
Administrative expenses	4,104	3,653	3,450	3,065	2,459
Other	4,768	710	5,794	3,084	3,146
Total deductions	389,005	369,561	359,551	344,524	326,524
Change in net position	415,860	504,476	(951,521)	649,479	601,676
Net position					
Beginning of year	5,397,072	4,892,596	5,844,117	5,194,638	4,592,962
End of year	\$5,812,932	\$5,397,072	\$4,892,596	\$5,844,117	\$5,194,638

	2019	2018	2017	2016	2015
Additions					
Employer contributions ¹	\$85,597	\$81,358	\$78,291	\$75,132	\$70,415
Member contributions ¹	55,003	52,421	50,472	48,470	45,400
Purchased service	7,820	5,642	6,325	3,981	6,586
Employer disaffiliation	—	—	1,063	—	—
Net investment income (loss)	792,219	(142,476)	669,011	261,276	56,328
Other	14	840	14	17	15
Total additions	940,653	(2,215)	805,176	388,876	178,744
Deductions					
Benefit payments	297,447	286,745	274,258	258,967	244,948
Refunds	14,761	15,716	14,530	12,938	20,410
Disability insurance premiums	421	442	430	439	431
Administrative expenses	2,476	2,621	2,541	2,395	2,253
Other	3,975	3,958	3,837	1,140	1,661
Total deductions	319,080	309,482	295,596	275,879	269,703
Change in net position	621,573	(311,697)	509,580	112,997	(90,959)
Net position					
Beginning of year	3,971,389	4,283,086	3,773,506	3,660,509	3,751,468
End of year	\$4,592,962	\$3,971,389	\$4,283,086	\$3,773,506	\$3,660,509

¹ Employer and member contribution rate history is shown on pages 245-246.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

Judicial Division Trust Fund

	2024	2023	2022	2021	2020
Additions					
Employer contributions ¹	\$15,551	\$14,920	\$12,318	\$9,787	\$10,402
Nonemployer contributions ¹	1,274	288	3,576	1,360	—
Member contributions ¹	7,160	6,888	7,844	8,589	6,637
Purchased service	211	795	978	800	1,060
Net investment income (loss)	48,763	53,800	(63,501)	66,030	61,634
Other	4,297	2,896	4,525	5,436	2,546
Total additions	77,256	79,587	(34,260)	92,002	82,279
Deductions					
Benefit payments	36,741	35,134	32,715	31,201	29,409
Refunds	802	76	218	266	48
Disability insurance premiums	32	29	18	21	28
Administrative expenses	257	238	212	186	87
Other	31	24	33	53	90
Total deductions	37,863	35,501	33,196	31,727	29,662
Change in net position	39,393	44,086	(67,456)	60,275	52,617
Net position					
Beginning of year	453,756	409,670	477,126	416,851	364,234
End of year	\$493,149	\$453,756	\$409,670	\$477,126	\$416,851

	2019	2018	2017	2016	2015
Additions					
Employer contributions ¹	\$10,649	\$8,299	\$8,080	\$8,024	\$7,702
Nonemployer contributions ¹	1,344	1,385	—	—	—
Member contributions ¹	4,575	4,064	3,955	3,928	3,772
Purchased service	612	636	908	109	425
Net investment income (loss)	61,719	(11,006)	51,173	19,783	4,149
Other	6,697	225	2,379	2,800	3,247
Total additions	85,596	3,603	66,495	34,644	19,295
Deductions					
Benefit payments	28,056	26,236	25,250	22,734	21,158
Refunds	—	186	7	109	—
Disability insurance premiums	41	41	41	45	42
Administrative expenses	84	86	86	81	77
Other	27	70	153	122	166
Total deductions	28,208	26,619	25,537	23,091	21,443
Change in net position	57,388	(23,016)	40,958	11,553	(2,148)
Net position					
Beginning of year	306,846	329,862	288,904	277,351	279,499
End of year	\$364,234	\$306,846	\$329,862	\$288,904	\$277,351

¹ Employer, nonemployer, and member contribution rate history is shown on page 246.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

DPS Division Trust Fund

	2024	2023	2022	2021	2020
Additions					
Employer contributions ¹	\$105,863	\$87,487	\$74,199	\$65,215	\$56,245
Nonemployer contributions ¹	18,791	4,132	52,784	19,153	—
Member contributions ¹	109,844	101,887	92,164	86,184	73,939
Purchased service	3,747	3,029	3,960	3,970	1,517
Net investment income (loss)	468,220	517,546	(619,265)	649,370	610,847
Other	2,027	2,911	875	15	12
Total additions	708,492	716,992	(395,283)	823,907	742,560
Deductions					
Benefit payments	286,904	285,102	282,557	280,045	278,081
Refunds	18,380	16,780	16,913	11,527	9,344
Disability insurance premiums	210	193	190	227	294
Administrative expenses	3,702	3,292	3,133	2,829	2,667
Other	64	115	223	3,130	1,022
Total deductions	309,260	305,482	303,016	297,758	291,408
Change in net position	399,232	411,510	(698,299)	526,149	451,152
Net position					
Beginning of year	4,346,938	3,935,428	4,633,727	4,107,578	3,656,426
End of year	\$4,746,170	\$4,346,938	\$3,935,428	\$4,633,727	\$4,107,578
	2019	2018	2017	2016	2015
Additions					
Employer contributions ¹	\$43,340	\$35,994	\$27,578	\$17,071	\$8,494
Nonemployer contributions ¹	19,201	18,621	—	—	—
Member contributions ¹	62,961	58,172	54,354	52,740	49,973
Purchased service	2,535	2,926	2,466	2,112	3,585
Net investment income (loss)	632,669	(114,070)	548,585	218,415	49,172
Other	3,030	770	3,870	3,264	11
Total additions	763,736	2,413	636,853	293,602	111,235
Deductions					
Benefit payments	277,849	276,223	271,189	263,152	255,068
Refunds	10,738	11,197	10,277	8,521	7,897
Disability insurance premiums	397	405	378	398	358
Administrative expenses	2,713	2,919	2,857	2,754	2,599
Other	55	5,267	89	129	1,775
Total deductions	291,752	296,011	284,790	274,954	267,697
Change in net position	471,984	(293,598)	352,063	18,648	(156,462)
Net position					
Beginning of year	3,184,442	3,478,040	3,125,977	3,107,329	3,263,791
End of year	\$3,656,426	\$3,184,442	\$3,478,040	\$3,125,977	\$3,107,329

¹ Employer, nonemployer, and member contribution rate history is shown on page 247.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

Voluntary Investment Program

	2024	2023	2022	2021	2020
Additions					
Employer contributions	\$8,189	\$7,362	\$6,792	\$6,170	\$5,917
Member contributions	170,981	152,567	147,445	145,612	140,656
Net investment income (loss)	701,046	711,748	(761,880)	679,465	558,980
Other	3,228	2,611	2,284	5,484	2,402
Total additions	883,444	874,288	(605,359)	836,731	707,955
Deductions					
Distributions	358,973	319,523	318,144	287,582	207,260
Administrative expenses	2,126	1,988	1,961	2,034	3,926
Other	1,230	1,094	1,275	1,933	1,746
Total deductions	362,329	322,605	321,380	291,549	212,932
Change in net position	521,115	551,683	(926,739)	545,182	495,023
Net position					
Beginning of year	4,337,956	3,786,273	4,713,012	4,167,830	3,672,807
End of year	\$4,859,071	\$4,337,956	\$3,786,273	\$4,713,012	\$4,167,830

	2019	2018	2017	2016	2015
Additions					
Employer contributions	\$5,701	\$5,409	\$5,072	\$4,740	\$3,889
Member contributions	140,519	132,189	135,303	129,909	129,990
Net investment income (loss)	700,274	(165,371)	469,233	206,933	(11,773)
Other	2,443	2,322	2,207	2,170	2,237
Total additions	848,937	(25,451)	611,815	343,752	124,343
Deductions					
Distributions	213,010	202,684	162,019	154,202	158,215
Administrative expenses	3,592	3,310	2,877	2,814	3,010
Other	1,656	1,598	1,411	1,172	1,019
Total deductions	218,258	207,592	166,307	158,188	162,244
Change in net position	630,679	(233,043)	445,508	185,564	(37,901)
Net position					
Beginning of year	3,042,128	3,275,171	2,829,663	2,644,099	2,682,000
End of year	\$3,672,807	\$3,042,128	\$3,275,171	\$2,829,663	\$2,644,099

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

Defined Contribution Retirement Plan

	2024	2023	2022	2021	2020
Additions					
Employer contributions	\$24,459	\$21,556	\$19,553	\$18,046	\$16,780
Member contributions	27,123	23,567	20,956	18,720	15,753
Net investment income (loss)	63,234	63,126	(63,490)	51,234	41,820
Other	1,497	1,486	1,456	50	16
Total additions	116,313	109,735	(21,525)	88,050	74,369
Deductions					
Distributions	28,491	25,722	25,334	23,798	15,100
Administrative expenses	941	922	849	753	1,118
Other	146	111	118	165	147
Total deductions	29,578	26,755	26,301	24,716	16,365
Change in net position	86,735	82,980	(47,826)	63,334	58,004
Net position					
Beginning of year	422,432	339,452	387,278	323,944	265,940
End of year	\$509,167	\$422,432	\$339,452	\$387,278	\$323,944

	2019	2018	2017	2016	2015
Additions					
Employer contributions	\$15,184	\$13,201	\$14,309	\$13,060	\$12,428
Member contributions	12,967	10,573	11,411	10,382	9,830
Net investment income (loss)	48,559	(15,381)	29,372	12,601	(2,466)
Other	21	11	39	92	9
Total additions	76,731	8,404	55,131	36,135	19,801
Deductions					
Distributions	15,445	12,722	10,593	8,932	9,419
Administrative expenses	997	819	739	726	774
Other	135	166	116	97	48
Total deductions	16,577	13,707	11,448	9,755	10,241
Change in net position	60,154	(5,303)	43,683	26,380	9,560
Net position					
Beginning of year	205,786	211,089	167,406	141,026	131,466
End of year	\$265,940	\$205,786	\$211,089	\$167,406	\$141,026

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

Deferred Compensation Plan

	2024	2023	2022	2021	2020
Additions					
Employer contributions	\$118	\$46	\$37	\$38	\$40
Member contributions	93,737	85,629	80,757	78,549	70,764
Net investment income (loss)	177,687	180,566	(188,999)	164,189	137,023
Other	600	652	496	678	553
Total additions	272,142	266,893	(107,709)	243,454	208,380
Deductions					
Distributions	107,438	93,435	93,974	77,334	51,559
Administrative expenses	683	608	574	589	1,329
Other	523	436	532	846	777
Total deductions	108,644	94,479	95,080	78,769	53,665
Change in net position	163,498	172,414	(202,789)	164,685	154,715
Net position					
Beginning of year	1,278,624	1,106,210	1,308,999	1,144,314	989,599
End of year	\$1,442,122	\$1,278,624	\$1,106,210	\$1,308,999	\$1,144,314

	2019	2018	2017	2016	2015
Additions					
Employer contributions	\$32	\$29	\$50	\$26	\$27
Member contributions	64,151	57,981	57,088	51,601	49,719
Net investment income (loss)	163,879	(47,542)	105,027	51,372	(6,427)
Other	578	574	510	496	484
Total additions	228,640	11,042	162,675	103,495	43,803
Deductions					
Distributions	55,317	56,568	47,067	41,922	39,945
Administrative expenses	1,188	1,094	993	963	1,071
Other	759	756	698	604	562
Total deductions	57,264	58,418	48,758	43,489	41,578
Change in net position	171,376	(47,376)	113,917	60,006	2,225
Net position					
Beginning of year	818,223	865,599	751,682	691,676	689,451
End of year	\$989,599	\$818,223	\$865,599	\$751,682	\$691,676

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

Health Care Trust Fund

	2024	2023	2022	2021	2020
Additions					
Employer contributions ¹	\$123,529	\$112,931	\$103,818	\$97,974	\$94,634
Employer disaffiliation	20	1,033	—	—	—
Net investment income (loss)	67,524	69,617	(70,476)	68,319	60,280
Other	6,231	6,755	9,004	8,108	7,909
Total additions	197,304	190,336	42,346	174,401	162,823
Deductions					
Benefit payments	88,492	82,911	83,145	63,893	53,023
Administrative expenses	8,335	8,122	7,136	12,976	10,977
Other	79	96	110	84	32
Total deductions	96,906	91,129	90,391	76,953	64,032
Change in net position	100,398	99,207	(48,045)	97,448	98,791
Net position					
Beginning of year	611,911	512,704	560,749	463,301	364,510
End of year	\$712,309	\$611,911	\$512,704	\$560,749	\$463,301

	2019	2018	2017	2016	2015
Additions					
Employer contributions ¹	\$92,011	\$86,559	\$83,077	\$80,825	\$78,463
Retiree health care premiums	—	—	—	138,021	127,873
Employer disaffiliation	—	—	96	—	—
Net investment income (loss)	53,867	(9,678)	44,990	19,021	4,807
Other	6,984	8,373	9,760	9,175	9,993
Total additions	152,862	85,254	137,923	247,042	221,136
Deductions					
Benefit payments	58,221	61,777	102,665	243,662	234,414
Administrative expenses	9,290	20,401	19,162	19,166	19,261
Other	33	106	102	491	594
Total deductions	67,544	82,284	121,929	263,319	254,269
Change in net position	85,318	2,970	15,994	(16,277)	(33,133)
Net position					
Beginning of year	279,192	276,222	260,228	276,505	309,638
End of year	\$364,510	\$279,192	\$276,222	\$260,228	\$276,505

¹ Employer contribution rate history is shown on page 247.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

DPS Health Care Trust Fund

	2024	2023	2022	2021	2020
Additions					
Employer contributions ¹	\$10,187	\$9,445	\$8,744	\$8,622	\$8,045
Net investment income (loss)	7,216	7,218	(7,311)	6,963	6,019
Other	169	236	306	206	224
Total additions	17,572	16,899	1,739	15,791	14,288
Deductions					
Benefit payments	4,010	3,951	4,022	3,516	3,086
Administrative expenses	475	461	434	639	516
Other	1	1	1	4	1
Total deductions	4,486	4,413	4,457	4,159	3,603
Change in net position	13,086	12,486	(2,718)	11,632	10,685
Net position					
Beginning of year	64,721	52,235	54,953	43,321	32,636
End of year	\$77,807	\$64,721	\$52,235	\$54,953	\$43,321

	2019	2018	2017	2016	2015
Additions					
Employer contributions ¹	\$7,649	\$7,417	\$6,930	\$6,723	\$6,371
Retiree health care premiums	—	—	—	6,738	6,275
Net investment income (loss)	4,892	(894)	3,305	1,235	254
Other	188	205	242	289	301
Total additions	12,729	6,728	10,477	14,985	13,201
Deductions					
Benefit payments	3,644	4,158	5,694	12,748	12,442
Administrative expenses	477	845	808	818	822
Other	1	4	4	18	22
Total deductions	4,122	5,007	6,506	13,584	13,286
Change in net position	8,607	1,721	3,971	1,401	(85)
Net position					
Beginning of year	24,029	22,308	18,337	16,936	17,021
End of year	\$32,636	\$24,029	\$22,308	\$18,337	\$16,936

¹ Employer contribution rate history is shown on page 247.

CHANGES IN FIDUCIARY NET POSITION

For the Years Ended December 31

(Dollars in Thousands)

Life Insurance Reserve

	2024	2023	2022	2021	2020
Additions					
Net investment income (loss)	\$2,954	\$3,293	(\$3,927)	\$4,125	\$3,909
Total additions	2,954	3,293	(3,927)	4,125	3,909
Deductions					
Life insurance premiums	449	511	533	540	512
Administrative expenses	103	44	79	80	224
Total deductions	552	555	612	620	736
Change in net position	2,402	2,738	(4,539)	3,505	3,173
Net position					
Beginning of year	26,018	23,280	27,819	24,314	21,141
End of year	\$28,420	\$26,018	\$23,280	\$27,819	\$24,314
	2019	2018	2017	2016	2015
Additions					
Net investment income (loss)	\$3,901	(\$684)	\$3,241	\$1,289	\$302
Other	—	4	—	—	—
Total additions	3,901	(680)	3,241	1,289	302
Deductions					
Life insurance premiums	479	433	373	306	250
Administrative expenses	123	111	493	1,032	805
Total deductions	602	544	866	1,338	1,055
Change in net position	3,299	(1,224)	2,375	(49)	(753)
Net position					
Beginning of year	17,842	19,066	16,691	16,740	17,493
End of year	\$21,141	\$17,842	\$19,066	\$16,691	\$16,740

BENEFITS AND REFUND DEDUCTIONS FROM FIDUCIARY NET POSITION BY TYPE

For the Years Ended December 31

(Dollars in Thousands)

State Division Trust Fund

	2024	2023	2022	2021	2020
Type of Benefit					
Retirees	\$1,762,195	\$1,730,042	\$1,686,686	\$1,634,075	\$1,581,249
Disability	72,935	74,550	76,539	77,589	78,987
Survivors	14,823	16,231	14,842	14,839	14,812
Total benefits	\$1,849,953	\$1,820,823	\$1,778,067	\$1,726,503	\$1,675,048
Type of Refund					
Separation	\$72,109	\$68,878	\$76,132	\$67,128	\$50,097
Death	11,975	8,270	6,102	7,301	7,791
Purchased service	101	81	87	91	33
Total refunds	\$84,185	\$77,229	\$82,321	\$74,520	\$57,921
	2019	2018	2017	2016	2015
Type of Benefit					
Retirees	\$1,540,738	\$1,510,747	\$1,456,159	\$1,387,374	\$1,322,592
Disability	81,434	82,947	83,280	82,221	81,310
Survivors	14,996	14,840	14,851	14,233	13,960
Total benefits	\$1,637,168	\$1,608,534	\$1,554,290	\$1,483,828	\$1,417,862
Type of Refund					
Separation	\$55,782	\$59,508	\$52,079	\$54,606	\$58,274
Death	5,909	5,728	6,561	5,464	5,213
Purchased service	141	17	56	67	80
Total refunds	\$61,832	\$65,253	\$58,696	\$60,137	\$63,567

School Division Trust Fund

	2024	2023	2022	2021	2020
Type of Benefit					
Retirees	\$2,824,167	\$2,737,326	\$2,642,395	\$2,542,456	\$2,452,428
Disability	62,428	63,992	65,199	66,230	67,467
Survivors	17,663	17,385	16,073	16,238	15,614
Total benefits	\$2,904,258	\$2,818,703	\$2,723,667	\$2,624,924	\$2,535,509
Type of Refund					
Separation	\$97,377	\$87,107	\$81,507	\$74,409	\$61,755
Death	12,241	10,155	6,602	7,183	6,101
Purchased service	102	276	246	133	17
Total refunds	\$109,720	\$97,538	\$88,355	\$81,725	\$67,873
	2019	2018	2017	2016	2015
Type of Benefit					
Retirees	\$2,384,406	\$2,329,157	\$2,249,855	\$2,149,415	\$2,053,108
Disability	67,737	68,774	68,537	67,416	67,203
Survivors	15,878	15,456	15,611	14,644	14,443
Total benefits	\$2,468,021	\$2,413,387	\$2,334,003	\$2,231,475	\$2,134,754
Type of Refund					
Separation	\$70,200	\$70,227	\$68,265	\$60,873	\$66,494
Death	3,412	5,678	6,313	4,756	3,621
Purchased service	259	130	59	86	183
Total refunds	\$73,871	\$76,035	\$74,637	\$65,715	\$70,298

BENEFITS AND REFUND DEDUCTIONS FROM FIDUCIARY NET POSITION BY TYPE

For the Years Ended December 31

(Dollars in Thousands)

(CONTINUED)

Local Government Division Trust Fund

	2024	2023	2022	2021	2020
Type of Benefit					
Retirees	\$343,606	\$330,357	\$318,330	\$303,545	\$288,944
Disability	15,340	15,240	15,481	15,868	16,215
Survivors	3,098	3,065	2,910	2,693	2,636
Total benefits	\$362,044	\$348,662	\$336,721	\$322,106	\$307,795
Type of Refund					
Separation	\$15,962	\$14,188	\$12,740	\$14,725	\$11,734
Death	1,852	2,112	610	1,279	1,053
Purchased service	6	—	41	30	41
Total refunds	\$17,820	\$16,300	\$13,391	\$16,034	\$12,828
	2019	2018	2017	2016	2015
Type of Benefit					
Retirees	\$278,543	\$267,669	\$255,105	\$240,432	\$226,400
Disability	16,315	16,582	16,775	16,274	16,327
Survivors	2,589	2,494	2,378	2,261	2,221
Total benefits	\$297,447	\$286,745	\$274,258	\$258,967	\$244,948
Type of Refund					
Separation	\$13,070	\$14,587	\$13,095	\$12,017	\$18,062
Death	1,691	1,128	1,434	921	2,317
Purchased service	—	1	1	—	31
Total refunds	\$14,761	\$15,716	\$14,530	\$12,938	\$20,410

Judicial Division Trust Fund

	2024	2023	2022	2021	2020
Type of Benefit					
Retirees	\$35,693	\$34,106	\$31,660	\$30,121	\$28,181
Disability	766	777	790	800	887
Survivors	282	251	265	280	341
Total benefits	\$36,741	\$35,134	\$32,715	\$31,201	\$29,409
Type of Refund					
Separation	\$621	\$29	\$218	\$266	\$48
Death	181	47	—	—	—
Total refunds	\$802	\$76	\$218	\$266	\$48
	2019	2018	2017	2016	2015
Type of Benefit					
Retirees	\$26,812	\$24,982	\$23,993	\$21,485	\$19,901
Disability	893	926	933	939	938
Survivors	351	328	324	310	319
Total benefits	\$28,056	\$26,236	\$25,250	\$22,734	\$21,158
Type of Refund					
Separation	\$—	\$50	\$7	\$109	\$—
Death	—	136	—	—	—
Total refunds	\$—	\$186	\$7	\$109	\$—

BENEFITS AND REFUND DEDUCTIONS FROM FIDUCIARY NET POSITION BY TYPE

For the Years Ended December 31

(Dollars in Thousands)

(CONTINUED)

DPS Division Trust Fund

	2024	2023	2022	2021	2020
Type of Benefit					
Retirees	\$277,612	\$275,630	\$272,927	\$270,210	\$268,201
Disability	7,714	7,857	8,017	8,216	8,335
Survivors	1,578	1,615	1,613	1,619	1,545
Total benefits	\$286,904	\$285,102	\$282,557	\$280,045	\$278,081
Type of Refund					
Separation	\$16,810	\$16,272	\$16,295	\$10,851	\$8,913
Death	1,488	508	617	673	431
Purchased service	82	—	1	3	—
Total refunds	\$18,380	\$16,780	\$16,913	\$11,527	\$9,344
	2019	2018	2017	2016	2015
Type of Benefit					
Retirees	\$267,956	\$266,260	\$261,361	\$253,641	\$245,683
Disability	8,358	8,278	8,221	7,929	7,804
Survivors	1,535	1,685	1,607	1,582	1,581
Total benefits	\$277,849	\$276,223	\$271,189	\$263,152	\$255,068
Type of Refund					
Separation	\$10,486	\$10,652	\$9,873	\$7,894	\$7,685
Death	250	545	349	616	207
Purchased service	2	—	55	11	5
Total refunds	\$10,738	\$11,197	\$10,277	\$8,521	\$7,897

MEMBER AND BENEFIT RECIPIENT STATISTICS¹

(In Actual Dollars)

	State Division	School Division	Local Government Division	Judicial Division	DPS Division	Total
Active Members						
Active members as of 12/31/2024	55,584	134,080	12,982	351	16,207	219,204
Retirements during 2024						
Disability retirements	26	37	7	—	5	75
Service retirements	1,460	3,471	438	21	235	5,625
Total retirements during 2024	1,486	3,508	445	21	240	5,700
Retirement Benefits						
Total receiving disability and service retirement benefits on 12/31/2023	43,438	75,736	8,884	450	7,173	135,681
Total retiring during 2024	1,486	3,508	445	21	240	5,700
Cobeneficiaries continuing after retiree's death	307	386	52	4	44	793
Returning to retirement rolls from suspension	13	30	2	—	1	46
Total	45,244	79,660	9,383	475	7,458	142,220
Retirees and cobeneficiaries deceased during year	1,306	1,856	191	9	264	3,626
Retirees suspending benefits to return to work	14	48	1	—	1	64
Data adjustment	—	1	1	—	—	2
Total receiving retirement benefits on 12/31/2024	43,924	77,755	9,190	466	7,193	138,528 ²
Annual retirement benefits for retirees as of 12/31/2024	\$1,835,257,644	\$2,906,363,050	\$361,512,131	\$36,925,557	\$285,783,539	\$5,425,841,921
Average monthly benefit on 12/31/2024	\$3,482	\$3,115	\$3,278	\$6,603	\$3,311	\$3,264
Average monthly benefit for all members who retired during 2024	\$2,891	\$2,580	\$2,885	\$7,028	\$2,733	\$2,708
Survivor Benefits						
Total survivors being paid on 12/31/2024	971	1,317	194	8	128	2,618 ²
Annual benefits payable to survivors as of 12/31/2024	\$22,627,165	\$22,471,963	\$4,596,027	\$349,690	\$2,313,769	\$52,358,614
Future Benefits						
Future retirements	9,890	24,866	3,134	28	3,436	41,354
Total annual future benefits	\$138,019,073	\$231,243,843	\$46,352,581	\$1,259,403	\$42,672,740	\$459,547,640
Future survivor beneficiaries of inactive members	104	156	20	2	10	292 ²
Total annual future benefits	\$1,517,119	\$2,454,706	\$273,834	\$47,987	\$125,181	\$4,418,827

¹ In addition, as of December 31, 2024, there was a total of 314,040 non-vested inactive members due a refund of their contributions as follows: State Division—97,002; School Division—166,279; Local Government Division—32,740; Judicial Division—9; and DPS Division—18,010.

² These line items make up the total for retirees and beneficiaries reported on page 50 in Note 1 of the Notes to the Financial Statements in the Financial Section.

SCHEDULE OF AVERAGE RETIREMENT BENEFITS PAYABLE¹

(In Actual Dollars)

	State Division	School Division	Local Government Division	Judicial Division	DPS Division	All Divisions ²
For All Retirees Year Ended 12/31/2024						
Average monthly benefit	\$3,482	\$3,115	\$3,278	\$6,603	\$3,311	\$3,264
Average age at retirement	59.1	59.4	59.3	62.9	59.9	59.3
Average age	73.6	73.2	71.9	75.8	75.4	73.4
Average years of service at retirement	22.3	22.6	20.6	23.2	22.7	22.3
Average age at death	82.8	83.5	81.3	86.6	85.6	83.3
For Members Who Retired During 2024						
Average monthly benefit	\$2,891	\$2,580	\$2,885	\$7,028	\$2,733	\$2,708
Average age at retirement	63.1	62.3	62.3	66.6	63.4	62.6
Average years of service	18.3	19.1	17.2	22.2	18.8	18.8
For All Retirees Year Ended 12/31/2023						
Average monthly benefit	\$3,463	\$3,106	\$3,259	\$6,545	\$3,305	\$3,252
Average age at retirement	59.0	59.3	59.2	62.7	59.8	59.2
Average age	73.2	72.9	71.6	75.4	75.2	73.0
Average years of service at retirement	22.4	22.7	20.8	23.2	23.0	22.5
Average age at death	80.5	81.6	78.5	86.0	83.0	81.2
For Members Who Retired During 2023						
Average monthly benefit	\$2,898	\$2,620	\$2,892	\$6,930	\$2,594	\$2,731
Average age at retirement	62.7	62.0	62.5	66.5	63.8	
Average years of service	19.0	20.0	17.7	20.3	18.4	
For All Retirees Year Ended 12/31/2022						
Average monthly benefit	\$3,442	\$3,095	\$3,236	\$6,433	\$3,302	\$3,238
Average age at retirement	58.9	59.2	59.1	62.6	59.7	59.1
Average age	72.8	72.6	71.1	75.2	75.0	72.7
Average years of service at retirement	22.5	22.8	20.9	23.2	23.2	22.6
Average age at death	81.0	81.4	78.6	87.1	83.0	81.2
For Members Who Retired During 2022						
Average monthly benefit	\$2,960	\$2,626	\$2,731	\$7,530	\$2,694	\$2,756
Average age at retirement	62.5	61.8	62.9	64.0	62.8	
Average years of service	19.6	20.5	17.3	21.8	18.7	
For All Retirees Year Ended 12/31/2021						
Average monthly benefit	\$3,419	\$3,079	\$3,212	\$6,237	\$3,293	\$3,220
Average age at retirement	58.8	59.1	58.9	62.5	59.6	59.0
Average age	72.6	72.4	70.8	75.2	75.0	72.5
Average years of service at retirement	22.5	22.9	21.0	23.2	23.5	22.7
Average age at death	82.7	83.1	79.8	85.4	85.8	83.0
For Members Who Retired During 2021						
Average monthly benefit	\$3,034	\$2,542	\$2,696	\$6,588	\$2,375	\$2,716
Average age at retirement	62.5	62.0	62.7	65.4	63.5	
Average years of service	20.5	20.6	17.7	21.8	18.2	
For All Retirees Year Ended 12/31/2020						
Average monthly benefit	\$3,393	\$3,067	\$3,201	\$6,123	\$3,284	\$3,204
Average age at retirement	58.7	59.0	58.8	62.3	59.5	58.9
Average age	72.4	72.2	70.4	74.9	74.8	72.3
Average years of service at retirement	22.6	23.0	21.2	23.2	23.8	22.8
Average age at death	81.0	81.7	79.0	87.9	83.6	81.5
For Members Who Retired During 2020						
Average monthly benefit	\$2,772	\$2,353	\$2,798	\$7,140	\$2,500	\$2,541
Average age at retirement	62.6	62.2	62.9	66.9	63.8	
Average years of service	19.9	20.2	18.9	23.8	18.6	

Please see next page for footnote references.

SCHEDULE OF AVERAGE RETIREMENT BENEFITS PAYABLE¹ (CONTINUED)

(In Actual Dollars)

	State Division	School Division	Local Government Division	Judicial Division	DPS Division	All Divisions ²
For All Retirees Year Ended 12/31/2019						
Average monthly benefit	\$3,360	\$3,050	\$3,160	\$5,984	\$3,252	\$3,179
Average age at retirement	58.6	58.9	58.6	62.0	59.4	58.8
Average age	72.1	71.9	70.0	74.8	74.6	72.0
Average years of service at retirement	22.7	23.1	21.3	23.1	24.0	22.9
Average age at death	82.4	82.1	79.2	86.2	84.9	82.3
For Members Who Retired During 2019						
Average monthly benefit	\$2,767	\$2,267	\$2,622	\$6,529	\$2,464	\$2,482
Average age at retirement	62.2	61.7	61.9	63.8	63.6	
Average years of service	19.7	20.0	17.9	21.0	18.4	
For All Retirees Year Ended 12/31/2018						
Average monthly benefit	\$3,379	\$3,085	\$3,187	\$5,915	\$3,278	\$3,208
Average age at retirement	58.6	58.8	58.6	62.0	59.4	58.8
Average age	71.9	71.6	69.7	75.0	74.3	71.7
Average years of service at retirement	22.8	23.2	21.4	23.3	24.2	23.0
Average age at death	82.7	82.4	79.8	83.2	84.6	82.5
For Members Who Retired During 2018						
Average monthly benefit	\$2,795	\$2,291	\$2,853	\$7,556	\$2,749	\$2,523
Average age at retirement	63.2	62.8	62.8	67.5	63.3	
Average years of service	20.1	20.3	18.8	25.1	20.1	
For All Retirees Year Ended 12/31/2017						
Average monthly benefit	\$3,397	\$3,115	\$3,188	\$5,864	\$3,290	\$3,232
Average age at retirement	58.4	58.7	58.4	61.8	59.3	58.6
Average age	71.7	71.3	69.3	74.3	74.2	71.5
Average years of service at retirement	22.9	23.3	21.5	23.2	24.4	23.1
Average age at death	82.1	82.8	78.2	82.9	85.2	82.5
For Members Who Retired During 2017						
Average monthly benefit	\$2,866	\$2,304	\$2,669	\$7,747	\$2,608	\$2,555
Average age at retirement	61.7	61.7	61.9	66.1	62.0	
Average years of service	20.6	20.4	18.7	25.6	19.3	
For All Retirees Year Ended 12/31/2016						
Average monthly benefit	\$3,345	\$3,086	\$3,145	\$5,624	\$3,248	\$3,193
Average age at retirement	58.3	58.6	58.2	61.6	59.2	58.5
Average age	71.4	71.0	69.0	74.2	74.0	71.2
Average years of service at retirement	22.9	23.4	21.7	23.0	24.7	23.2
Average age at death	82.4	82.7	80.1	84.2	83.3	82.5
For Members Who Retired During 2016						
Average monthly benefit	\$2,812	\$2,303	\$2,467	\$6,192	\$2,520	\$2,519
Average age at retirement	61.6	61.4	61.2	65.6	62.6	
Average years of service	20.7	20.7	18.1	21.4	19.2	
For All Retirees Year Ended 12/31/2015						
Average monthly benefit	\$3,294	\$3,052	\$3,114	\$5,379	\$3,206	\$3,153
Average age at retirement	58.2	58.5	58.1	61.4	59.1	58.4
Average age	71.2	70.7	68.6	74.5	73.9	70.9
Average years of service at retirement	23.0	23.5	21.8	22.9	25.0	23.3
Average age at death	81.7	82.2	79.6	78.9	85.3	82.2
For Members Who Retired During 2015						
Average monthly benefit	\$2,828	\$2,293	\$2,750	\$7,030	\$2,493	\$2,531
Average age at retirement	61.4	61.3	61.1	65.1	62.9	
Average years of service	21.0	20.7	19.7	25.7	18.7	

¹ Includes disability retirements, but not survivor benefits² Average age at retirement and average years of service for members who retired during the year shaded in gray are not available prior to 2024.

BENEFIT PAYMENTS—ALL DIVISION TRUST FUNDS

As of December 31, 2024

(In Actual Dollars)

Benefit Payments^{1,2}

At the end of 2024, PERA was paying benefits to more than 141,000 retired public employees and their beneficiaries who received an average benefit of \$3,237 per month. For benefit recipients, this may be the primary source of retirement income as most PERA benefit recipients do not qualify for Social Security payments³.

The PERA service retirement formula for calculating benefits, specified in State law as of December 31, 2024, is 2.5% multiplied by years of service multiplied by highest average salary (HAS). HAS⁴ is 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%. All other members are subject to an 8% 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 67.3% (94,963) of recipients receive less than \$50,000 a year in PERA benefits, as the following graph demonstrates. Slightly less than 2.4% (3,374) of PERA benefit recipients receive an annual benefit payment of \$100,000 or more. Generally, these benefit recipients had high salaries and a significant number of years of service credit.

¹ Includes amounts paid under replacement benefit arrangements.

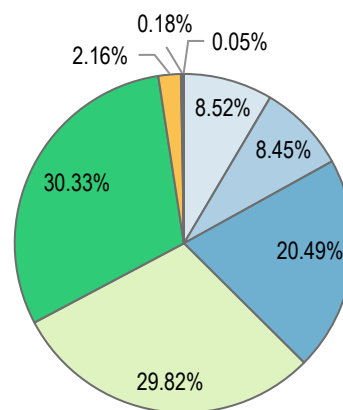
² Does not include deferred survivors and benefits that ended or were suspended in 2024.

³ The Social Security Fairness Act (SSFA), effective January 5, 2025, may benefit some PERA retirees and beneficiaries by restoring previously reduced benefits.

⁴ Some members of the DPS benefit structure, members in the Judicial Division, and members who did not have five years of service credit on December 31, 2019, have different HAS calculations. Please see Note 1 of the Notes to the Financial Statements in the Financial Section for more information.

PERA BENEFIT PAYMENTS BY DOLLAR AMOUNT OF ANNUAL BENEFIT AND NUMBER OF BENEFIT RECIPIENTS

	Benefit Range ¹	Number of Benefit Recipients ²	Percent of Benefit Recipients
	\$0 - \$4,999	12,023	8.52%
	\$5,000 - \$9,999	11,931	8.45%
	\$10,000 - \$24,999	28,916	20.49%
	\$25,000 - \$49,999	42,093	29.82%
	\$50,000 - \$99,999	42,809	30.33%
	\$100,000 - \$149,999	3,044	2.16%
	\$150,000 - \$199,999	251	0.18%
	\$200,000+	79	0.05%
	Total	141,146	100.00%



¹ Includes amounts paid under replacement benefit arrangements.

² Does not include 292 deferred survivors.

BENEFIT PAYMENTS—ALL DIVISION TRUST FUNDS

As of December 31, 2024

(In Actual Dollars)

Benefit Payments by Decile

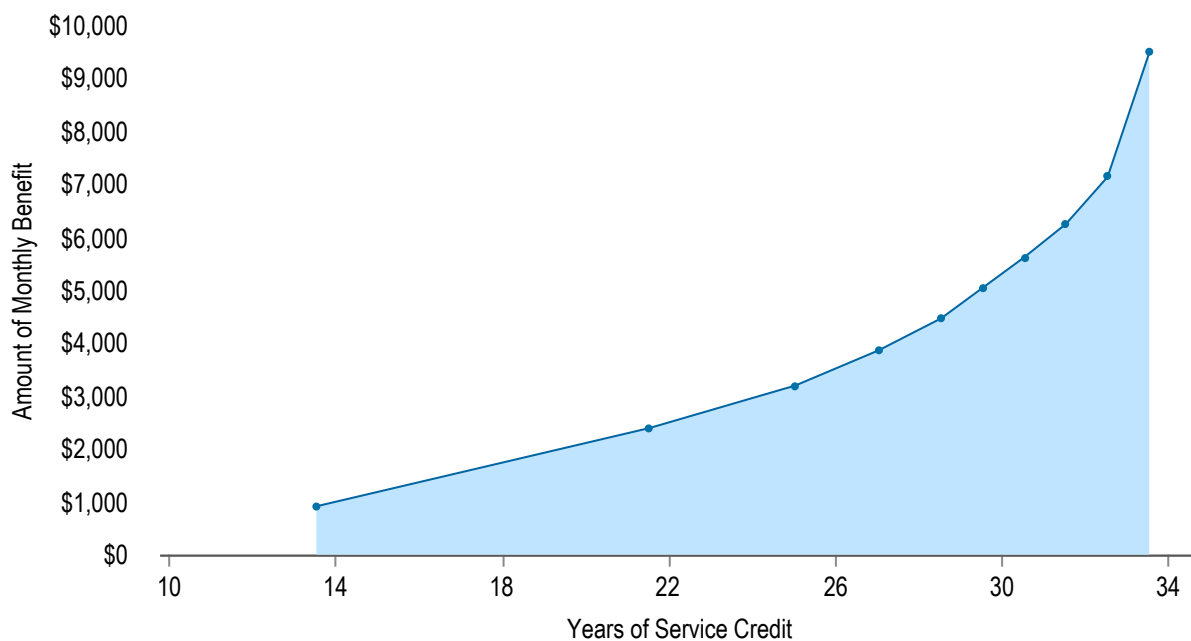
Another way to examine the data is to group benefit recipients and the benefits they receive into benefit payment ranges as a percentage of the total. The following table shows that, for the 35.43% of PERA benefit recipients (50,009) in the lowest decile, the average benefit is \$10,968 a year. This group retired at an average age of 61 with just over 13 years of service credit. For the top decile, on the other end of the scale, the average benefit is \$113,868 a year. However, this group, on average, had just 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 5,700 new retirees in 2024, the average monthly benefit is \$2,710. These members retired at an average age of 63 with 18.77 years of service credit.

Decile	Number of Benefit Recipients ¹	Percent of Benefit Recipients	Average Monthly Benefit ²	Average Age at Retirement	Average Service Credit
1%–10%	50,009	35.43%	\$914	61	13.10
11%–20%	19,086	13.52%	2,394	59	21.39
21%–30%	14,289	10.12%	3,197	58	24.57
31%–40%	11,831	8.38%	3,862	58	26.81
41%–50%	10,229	7.25%	4,466	57	28.38
51%–60%	9,057	6.42%	5,045	57	29.60
61%–70%	8,125	5.76%	5,623	57	30.44
71%–80%	7,307	5.18%	6,253	57	31.16
81%–90%	6,398	4.53%	7,141	57	32.07
91%–100%	4,815	3.41%	9,489	58	33.11
Total	141,146	100.00%	3,237	59	22.00

¹ Does not include 292 deferred survivors.

² Includes amounts paid under replacement benefit arrangements.

Average Monthly Benefit Payment by Years of Service Credit



SCHEDULE OF RETIREES AND SURVIVORS BY TYPES OF BENEFITS

As of December 31, 2024

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	7,123	6,600	190	30	248	55	5,755
\$1,001-\$2,000	7,265	5,845	1,021	46	315	38	2,754
\$2,001-\$3,000	7,732	6,522	1,050	39	117	4	860
\$3,001-\$4,000	6,863	6,428	346	32	53	4	281
\$4,001-\$5,000	5,498	5,355	97	23	21	2	113
\$5,001+	10,518	10,434	36	38	9	1	127
Total	44,999	41,184	2,740	208	763	104	9,890

Amount of Monthly Benefit ¹ (In Actual Dollars)	Option Selected				Surviving Cobeneficiary	Surviving Retiree
	1	2	3	4		
\$1-\$1,000	4,499	422	1,299	1	564	5
\$1,001-\$2,000	3,940	745	1,206	1	960	14
\$2,001-\$3,000	4,274	1,002	1,362	1	910	23
\$3,001-\$4,000	3,731	1,105	1,340	—	591	7
\$4,001-\$5,000	2,829	1,010	1,211	—	396	6
\$5,001+	5,109	2,177	2,651	—	525	8
Total	24,382	6,461	9,069	3	3,946	63

¹ For Types of Benefits 1 and 2 above.

SCHEDULE OF RETIREES AND SURVIVORS BY TYPES OF BENEFITS

As of December 31, 2024

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	18,271	16,919	624	60	590	78	18,946
\$1,001-\$2,000	12,690	11,343	938	51	310	48	4,381
\$2,001-\$3,000	10,840	10,037	623	22	139	19	1,038
\$3,001-\$4,000	10,327	9,936	306	23	56	6	317
\$4,001-\$5,000	9,668	9,515	116	13	23	1	113
\$5,001+	17,432	17,345	53	18	12	4	71
Total	79,228	75,095	2,660	187	1,130	156	24,866

Amount of Monthly Benefit ¹ (In Actual Dollars)	Option Selected				Surviving Cobeneficiary	Surviving Retiree
	1	2	3	4		
\$1-\$1,000	12,285	1,231	2,942	1	1,066	18
\$1,001-\$2,000	7,878	1,546	1,862	2	973	20
\$2,001-\$3,000	6,329	1,738	1,696	—	875	22
\$3,001-\$4,000	6,234	1,909	1,617	—	468	14
\$4,001-\$5,000	5,519	2,108	1,642	1	354	7
\$5,001+	10,778	3,695	2,484	3	428	10
Total	49,023	12,227	12,243	7	4,164	91

¹ For Types of Benefits 1 and 2 above.

SCHEDULE OF RETIREES AND SURVIVORS BY TYPES OF BENEFITS

As of December 31, 2024

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	1,806	1,708	44	5	42	7	1,743
\$1,001-\$2,000	1,723	1,433	205	9	65	11	886
\$2,001-\$3,000	1,550	1,284	230	9	25	2	293
\$3,001-\$4,000	1,317	1,219	78	7	13	—	120
\$4,001-\$5,000	972	947	14	7	4	—	46
\$5,001+	2,036	2,022	6	6	2	—	46
Total	9,404	8,613	577	43	151	20	3,134

Amount of Monthly Benefit ¹ (In Actual Dollars)	Option Selected				Surviving Cobeneficiary	Surviving Retiree
	1	2	3	4		
\$1-\$1,000	1,147	142	347	—	115	1
\$1,001-\$2,000	941	183	327	1	180	6
\$2,001-\$3,000	812	237	318	—	146	1
\$3,001-\$4,000	692	252	266	—	87	—
\$4,001-\$5,000	473	214	229	—	45	—
\$5,001+	860	481	604	—	83	—
Total	4,925	1,509	2,091	1	656	8

¹ For Types of Benefits 1 and 2 above.

SCHEDULE OF RETIREES AND SURVIVORS BY TYPES OF BENEFITS

As of December 31, 2024

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	18	16	1	—	—	1	1
\$1,001-\$2,000	27	26	—	—	1	—	4
\$2,001-\$3,000	33	30	2	—	1	—	8
\$3,001-\$4,000	34	27	2	—	4	1	7
\$4,001-\$5,000	35	29	5	—	1	—	4
\$5,001+	329	324	4	1	—	—	4
Total	476	452	14	1	7	2	28

Amount of Monthly Benefit ¹ (In Actual Dollars)	Option Selected				Surviving Cobeneficiary	Surviving Retiree
	1	2	3	4		
\$1-\$1,000	7	1	4	—	5	—
\$1,001-\$2,000	10	1	5	—	10	—
\$2,001-\$3,000	7	4	12	—	9	—
\$3,001-\$4,000	11	3	8	—	7	—
\$4,001-\$5,000	13	3	12	—	6	—
\$5,001+	113	70	119	—	26	—
Total	161	82	160	—	63	—

¹ For Types of Benefits 1 and 2 above.

SCHEDULE OF RETIREES AND SURVIVORS BY TYPES OF BENEFITS

As of December 31, 2024

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	1,229	1,094	62	4	61	8	2,119
\$1,001-\$2,000	1,147	1,035	89	2	20	1	949
\$2,001-\$3,000	1,055	942	88	8	17	—	265
\$3,001-\$4,000	1,129	1,083	34	8	4	—	73
\$4,001-\$5,000	1,213	1,185	25	1	2	—	18
\$5,001+	1,558	1,552	4	1	—	1	12
Total	7,331	6,891	302	24	104	10	3,436

Amount of Monthly Benefit ¹ (In Actual Dollars)	Option Selected ²				Surviving Cobeneficiary	Surviving Retiree	Cobeneficiaries Both Deceased
	1	2	3	4			
\$1-\$1,000	822	66	170	—	75	21	2
\$1,001-\$2,000	712	97	158	—	111	46	—
\$2,001-\$3,000	611	82	188	—	94	54	1
\$3,001-\$4,000	606	114	236	—	111	49	1
\$4,001-\$5,000	601	117	268	—	129	93	2
\$5,001+	820	165	342	—	136	91	2
Total	4,172	641	1,362	—	656	354	8

¹ For Types of Benefits 1 and 2 above.

² The equivalent DPS benefit structure options are as follows:
 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)

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

(In Actual Dollars)

State Division

Year Retired	Years of Service Credit						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2024 to 12/31/2024							
Average monthly benefit	\$197	\$727	\$1,283	\$2,224	\$3,398	\$4,811	\$6,355
Average highest average salary	\$3,097	\$4,287	\$4,694	\$5,548	\$6,491	\$7,538	\$7,954
Number of service retirees	166	217	192	181	249	220	235
Period 1/1/2023 to 12/31/2023							
Average monthly benefit	\$167	\$681	\$1,363	\$2,068	\$3,232	\$4,598	\$6,128
Average highest average salary	\$2,802	\$3,924	\$4,866	\$5,054	\$6,184	\$7,104	\$7,791
Number of service retirees	143	230	206	205	264	262	271
Period 1/1/2022 to 12/31/2022							
Average monthly benefit	\$178	\$751	\$1,417	\$2,141	\$3,151	\$4,389	\$5,955
Average highest average salary	\$2,928	\$4,196	\$5,020	\$5,305	\$5,990	\$6,740	\$7,492
Number of service retirees	146	267	258	261	365	302	379
Period 1/1/2021 to 12/31/2021							
Average monthly benefit	\$155	\$767	\$1,342	\$2,050	\$3,118	\$4,249	\$5,782
Average highest average salary	\$2,484	\$4,449	\$4,724	\$4,872	\$5,966	\$6,574	\$7,404
Number of service retirees	110	239	253	242	364	325	421
Period 1/1/2020 to 12/31/2020							
Average monthly benefit	\$183	\$634	\$1,166	\$1,990	\$2,888	\$4,105	\$5,660
Average highest average salary	\$2,948	\$3,700	\$4,229	\$4,844	\$5,538	\$6,459	\$7,169
Number of service retirees	129	228	262	240	333	290	359
Period 1/1/2019 to 12/31/2019							
Average monthly benefit	\$146	\$674	\$1,212	\$1,948	\$2,897	\$4,102	\$5,660
Average highest average salary	\$2,608	\$3,902	\$4,401	\$4,743	\$5,607	\$6,358	\$7,235
Number of service retirees	110	229	237	231	287	282	325
Period 1/1/2018 to 12/31/2018							
Average monthly benefit	\$153	\$596	\$1,250	\$1,997	\$2,880	\$3,981	\$5,571
Average highest average salary	\$2,721	\$3,531	\$4,332	\$4,838	\$5,559	\$6,179	\$7,111
Number of service retirees	83	281	228	234	306	303	379
Period 1/1/2017 to 12/31/2017							
Average monthly benefit	\$233	\$704	\$1,287	\$2,102	\$3,025	\$4,355	\$5,618
Average highest average salary	\$3,134	\$3,869	\$4,312	\$4,860	\$5,532	\$6,465	\$7,162
Number of service retirees	102	238	253	271	338	357	322
Period 1/1/2016 to 12/31/2016							
Average monthly benefit	\$240	\$641	\$1,285	\$2,050	\$2,983	\$4,128	\$5,593
Average highest average salary	\$3,010	\$3,477	\$4,394	\$4,790	\$5,397	\$6,130	\$6,957
Number of service retirees	103	244	233	238	319	357	319
Period 1/1/2015 to 12/31/2015							
Average monthly benefit	\$241	\$770	\$1,339	\$2,111	\$2,934	\$4,121	\$5,232
Average highest average salary	\$2,851	\$4,043	\$4,506	\$4,766	\$5,260	\$6,074	\$6,490
Number of service retirees	82	246	214	222	293	348	324

Note: HAS 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, members in the Judicial Division, and members who did not have five years of service credit on December 31, 2019, have different HAS calculations. Please see Note 1 of the Notes to the Financial Statements in the Financial Section for more information.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

(In Actual Dollars)

School Division

Year Retired	Years of Service Credit						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2024 to 12/31/2024							
Average monthly benefit	\$109	\$416	\$875	\$1,544	\$2,793	\$4,311	\$5,743
Average highest average salary	\$1,680	\$2,417	\$3,245	\$3,818	\$5,284	\$6,525	\$7,429
Number of service retirees	274	529	431	434	615	605	583
Period 1/1/2023 to 12/31/2023							
Average monthly benefit	\$118	\$417	\$820	\$1,624	\$2,660	\$4,114	\$5,575
Average highest average salary	\$1,811	\$2,456	\$3,052	\$4,014	\$5,063	\$6,256	\$7,171
Number of service retirees	180	483	385	429	788	591	591
Period 1/1/2022 to 12/31/2022							
Average monthly benefit	\$106	\$431	\$836	\$1,548	\$2,607	\$3,872	\$5,319
Average highest average salary	\$1,634	\$2,516	\$3,055	\$3,768	\$4,922	\$5,908	\$6,789
Number of service retirees	200	466	402	472	810	705	718
Period 1/1/2021 to 12/31/2021							
Average monthly benefit	\$121	\$434	\$839	\$1,536	\$2,489	\$3,730	\$5,225
Average highest average salary	\$1,915	\$2,600	\$3,038	\$3,757	\$4,751	\$5,730	\$6,741
Number of service retirees	151	476	426	477	799	640	707
Period 1/1/2020 to 12/31/2020							
Average monthly benefit	\$85	\$416	\$821	\$1,504	\$2,266	\$3,579	\$5,046
Average highest average salary	\$1,447	\$2,522	\$2,957	\$3,604	\$4,349	\$5,440	\$6,460
Number of service retirees	167	379	464	485	702	564	608
Period 1/1/2019 to 12/31/2019							
Average monthly benefit	\$138	\$396	\$786	\$1,440	\$2,321	\$3,503	\$4,911
Average highest average salary	\$1,981	\$2,339	\$2,854	\$3,519	\$4,428	\$5,374	\$6,356
Number of service retirees	141	366	440	377	635	509	512
Period 1/1/2018 to 12/31/2018							
Average monthly benefit	\$124	\$436	\$805	\$1,440	\$2,254	\$3,580	\$4,833
Average highest average salary	\$1,951	\$2,574	\$2,917	\$3,535	\$4,296	\$5,435	\$6,175
Number of service retirees	122	365	451	474	640	551	541
Period 1/1/2017 to 12/31/2017							
Average monthly benefit	\$185	\$433	\$925	\$1,582	\$2,418	\$3,794	\$4,891
Average highest average salary	\$1,980	\$2,351	\$3,118	\$3,615	\$4,393	\$5,547	\$6,067
Number of service retirees	159	370	463	485	611	590	428
Period 1/1/2016 to 12/31/2016							
Average monthly benefit	\$127	\$430	\$879	\$1,684	\$2,304	\$3,727	\$4,695
Average highest average salary	\$1,796	\$2,325	\$2,924	\$3,799	\$4,156	\$5,388	\$5,851
Number of service retirees	118	384	388	408	565	589	422
Period 1/1/2015 to 12/31/2015							
Average monthly benefit	\$221	\$436	\$899	\$1,565	\$2,400	\$3,682	\$4,621
Average highest average salary	\$2,015	\$2,317	\$3,058	\$3,538	\$4,322	\$5,347	\$5,741
Number of service retirees	110	372	398	397	544	618	395

Note: HAS 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, members in the Judicial Division, and members who did not have five years of service credit on December 31, 2019, have different HAS calculations. Please see Note 1 of the Notes to the Financial Statements in the Financial Section for more information.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

(In Actual Dollars)

Local Government Division

Year Retired	Years of Service Credit						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2024 to 12/31/2024							
Average monthly benefit	\$178	\$776	\$1,397	\$2,535	\$3,819	\$5,072	\$6,626
Average highest average salary	\$2,821	\$4,728	\$5,232	\$6,344	\$7,648	\$7,881	\$8,485
Number of service retirees	49	84	53	54	91	47	60
Period 1/1/2023 to 12/31/2023							
Average monthly benefit	\$218	\$926	\$1,678	\$2,548	\$3,498	\$4,361	\$6,721
Average highest average salary	\$3,597	\$5,769	\$6,068	\$6,515	\$6,885	\$6,875	\$8,759
Number of service retirees	32	71	59	64	58	51	55
Period 1/1/2022 to 12/31/2022							
Average monthly benefit	\$274	\$790	\$1,568	\$2,475	\$3,579	\$4,662	\$6,077
Average highest average salary	\$3,981	\$5,094	\$5,515	\$6,203	\$6,990	\$7,218	\$7,749
Number of service retirees	37	87	49	63	91	50	48
Period 1/1/2021 to 12/31/2021							
Average monthly benefit	\$211	\$798	\$1,535	\$2,388	\$3,233	\$4,747	\$6,020
Average highest average salary	\$3,890	\$4,900	\$5,714	\$5,572	\$6,306	\$7,384	\$7,580
Number of service retirees	40	99	68	71	77	65	65
Period 1/1/2020 to 12/31/2020							
Average monthly benefit	\$175	\$785	\$1,443	\$2,156	\$3,169	\$4,339	\$5,914
Average highest average salary	\$2,982	\$5,165	\$5,315	\$5,477	\$6,390	\$6,877	\$7,724
Number of service retirees	26	75	50	58	68	60	67
Period 1/1/2019 to 12/31/2019							
Average monthly benefit	\$204	\$737	\$1,336	\$2,127	\$3,042	\$4,447	\$5,849
Average highest average salary	\$3,752	\$4,816	\$5,056	\$5,270	\$6,155	\$7,081	\$7,701
Number of service retirees	26	66	71	62	64	62	54
Period 1/1/2018 to 12/31/2018							
Average monthly benefit	\$224	\$600	\$1,496	\$2,232	\$3,054	\$4,745	\$6,276
Average highest average salary	\$3,698	\$3,820	\$5,655	\$5,428	\$5,865	\$7,485	\$8,237
Number of service retirees	19	63	82	43	76	60	61
Period 1/1/2017 to 12/31/2017							
Average monthly benefit	\$240	\$621	\$1,282	\$2,202	\$3,241	\$4,687	\$5,720
Average highest average salary	\$4,224	\$3,889	\$4,675	\$5,056	\$6,165	\$6,969	\$7,260
Number of service retirees	29	60	72	52	78	54	55
Period 1/1/2016 to 12/31/2016							
Average monthly benefit	\$323	\$686	\$1,401	\$2,195	\$2,761	\$4,569	\$5,378
Average highest average salary	\$4,580	\$4,031	\$5,104	\$5,506	\$5,255	\$6,796	\$6,648
Number of service retirees	15	73	77	49	55	52	46
Period 1/1/2015 to 12/31/2015							
Average monthly benefit	\$252	\$663	\$1,202	\$2,255	\$3,152	\$3,970	\$5,814
Average highest average salary	\$3,727	\$4,141	\$4,581	\$5,481	\$5,960	\$5,896	\$7,317
Number of service retirees	16	64	62	36	76	70	60

Note: HAS 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, members in the Judicial Division, and members who did not have five years of service credit on December 31, 2019, have different HAS calculations. Please see Note 1 of the Notes to the Financial Statements in the Financial Section for more information.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

(In Actual Dollars)

Judicial Division

Year Retired	Years of Service Credit						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2024 to 12/31/2024							
Average monthly benefit	\$1,008	\$2,363	\$5,430	\$5,861	\$7,752	\$9,558	\$9,826
Average highest average salary	\$15,612	\$13,848	\$16,020	\$15,871	\$15,013	\$16,293	\$12,131
Number of service retirees	1	3	1	4	3	4	5
Period 1/1/2023 to 12/31/2023							
Average monthly benefit	\$—	\$2,302	\$4,823	\$5,464	\$7,450	\$9,099	\$11,310
Average highest average salary	\$—	\$15,132	\$14,603	\$15,123	\$15,196	\$14,532	\$15,637
Number of service retirees	—	3	2	2	7	6	1
Period 1/1/2022 to 12/31/2022							
Average monthly benefit	\$—	\$3,157	\$5,535	\$6,021	\$7,462	\$8,665	\$11,757
Average highest average salary	\$—	\$15,239	\$15,357	\$15,041	\$14,590	\$14,567	\$14,630
Number of service retirees	—	2	1	3	12	3	3
Period 1/1/2021 to 12/31/2021							
Average monthly benefit	\$230	\$2,878	\$3,366	\$5,796	\$6,473	\$8,659	\$9,838
Average highest average salary	\$2,704	\$15,526	\$12,689	\$14,582	\$12,528	\$13,876	\$13,822
Number of service retirees	1	1	7	3	4	3	9
Period 1/1/2020 to 12/31/2020							
Average monthly benefit	\$—	\$1,655	\$3,737	\$2,485	\$7,289	\$7,859	\$11,031
Average highest average salary	\$—	\$9,117	\$13,912	\$6,658	\$14,385	\$12,619	\$14,277
Number of service retirees	—	2	2	3	6	5	7
Period 1/1/2019 to 12/31/2019							
Average monthly benefit	\$—	\$505	\$3,822	\$5,548	\$6,389	\$9,190	\$11,134
Average highest average salary	\$—	\$4,208	\$13,596	\$13,969	\$13,267	\$13,950	\$13,458
Number of service retirees	—	2	4	7	3	7	3
Period 1/1/2018 to 12/31/2018							
Average monthly benefit	\$—	\$2,763	\$—	\$5,841	\$6,403	\$8,926	\$11,277
Average highest average salary	\$—	\$13,617	\$—	\$13,351	\$13,378	\$13,548	\$15,287
Number of service retirees	—	1	—	1	2	1	2
Period 1/1/2017 to 12/31/2017							
Average monthly benefit	\$—	\$1,929	\$3,419	\$6,000	\$—	\$8,369	\$11,366
Average highest average salary	\$—	\$13,295	\$9,786	\$12,308	\$—	\$12,825	\$13,840
Number of service retirees	—	3	3	2	—	8	8
Period 1/1/2016 to 12/31/2016							
Average monthly benefit	\$679	\$1,868	\$3,471	\$5,044	\$5,641	\$8,291	\$10,086
Average highest average salary	\$6,905	\$12,839	\$12,526	\$12,043	\$11,450	\$13,030	\$13,340
Number of service retirees	2	2	1	6	3	7	5
Period 1/1/2015 to 12/31/2015							
Average monthly benefit	\$—	\$—	\$4,012	\$4,158	\$5,913	\$7,635	\$9,227
Average highest average salary	\$—	\$—	\$13,045	\$11,602	\$11,664	\$12,097	\$12,331
Number of service retirees	—	—	2	1	6	4	6

Note: HAS 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, members in the Judicial Division, and members who did not have five years of service credit on December 31, 2019, have different HAS calculations. Please see Note 1 of the Notes to the Financial Statements in the Financial Section for more information.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

(In Actual Dollars)

DPS Division

Year Retired	Years of Service Credit						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2024 to 12/31/2024							
Average monthly benefit	\$138	\$559	\$1,036	\$2,173	\$3,306	\$4,594	\$6,018
Average highest average salary	\$2,875	\$3,504	\$3,477	\$5,876	\$6,734	\$7,450	\$7,954
Number of service retirees	15	35	54	17	28	53	33
Period 1/1/2023 to 12/31/2023							
Average monthly benefit	\$130	\$617	\$994	\$2,328	\$3,219	\$4,765	\$5,863
Average highest average salary	\$2,460	\$3,729	\$3,298	\$6,163	\$6,503	\$7,592	\$7,833
Number of service retirees	13	42	76	24	29	47	38
Period 1/1/2022 to 12/31/2022							
Average monthly benefit	\$74	\$689	\$967	\$2,058	\$3,604	\$4,384	\$5,983
Average highest average salary	\$1,917	\$3,849	\$3,407	\$5,655	\$6,964	\$6,931	\$7,623
Number of service retirees	10	45	76	24	37	66	39
Period 1/1/2021 to 12/31/2021							
Average monthly benefit	\$116	\$558	\$893	\$2,119	\$2,821	\$4,257	\$5,537
Average highest average salary	\$2,188	\$3,279	\$3,238	\$5,596	\$5,618	\$6,617	\$7,155
Number of service retirees	10	51	52	32	29	45	33
Period 1/1/2020 to 12/31/2020							
Average monthly benefit	\$22	\$595	\$837	\$2,163	\$2,893	\$4,307	\$5,498
Average highest average salary	\$795	\$3,388	\$3,142	\$5,382	\$5,959	\$6,833	\$7,201
Number of service retirees	5	27	61	29	25	35	36
Period 1/1/2019 to 12/31/2019							
Average monthly benefit	\$119	\$519	\$1,361	\$2,205	\$2,644	\$4,237	\$5,801
Average highest average salary	\$2,828	\$3,093	\$5,082	\$5,691	\$5,223	\$6,601	\$7,292
Number of service retirees	8	56	34	28	28	37	32
Period 1/1/2018 to 12/31/2018							
Average monthly benefit	\$77	\$475	\$1,369	\$1,748	\$2,727	\$4,334	\$5,337
Average highest average salary	\$1,890	\$2,972	\$4,821	\$4,714	\$5,464	\$6,788	\$6,831
Number of service retirees	5	65	23	34	35	51	61
Period 1/1/2017 to 12/31/2017							
Average monthly benefit	\$176	\$555	\$1,305	\$2,089	\$3,242	\$4,544	\$5,416
Average highest average salary	\$2,466	\$2,926	\$4,325	\$5,263	\$5,682	\$6,625	\$6,835
Number of service retirees	8	59	21	38	52	58	20
Period 1/1/2016 to 12/31/2016							
Average monthly benefit	\$163	\$611	\$1,462	\$1,989	\$3,415	\$4,133	\$5,342
Average highest average salary	\$1,938	\$3,536	\$4,816	\$4,955	\$6,055	\$5,876	\$6,785
Number of service retirees	4	59	40	60	59	56	24
Period 1/1/2015 to 12/31/2015							
Average monthly benefit	\$230	\$702	\$1,588	\$1,994	\$3,147	\$4,159	\$5,254
Average highest average salary	\$1,908	\$4,275	\$5,022	\$4,808	\$5,523	\$7,318	\$6,391
Number of service retirees	12	55	36	37	60	56	19

Note: HAS 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, members in the Judicial Division, and members who did not have five years of service credit on December 31, 2019, have different HAS calculations. Please see Note 1 of the Notes to the Financial Statements in the Financial Section for more information.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

(In Actual Dollars)

All Division Trust Funds

Year Retired	Years of Service Credit						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2024 to 12/31/2024							
Average monthly benefit	\$147	\$541	\$1,038	\$1,841	\$3,070	\$4,507	\$5,990
Average highest average salary	\$2,319	\$3,192	\$3,804	\$4,590	\$5,878	\$6,928	\$7,677
Number of service retirees	505	868	731	690	986	929	916
Period 1/1/2023 to 12/31/2023							
Average monthly benefit	\$146	\$551	\$1,072	\$1,866	\$2,878	\$4,323	\$5,815
Average highest average salary	\$2,374	\$3,258	\$3,867	\$4,632	\$5,512	\$6,639	\$7,474
Number of service retirees	368	829	728	724	1,146	957	956
Period 1/1/2022 to 12/31/2022							
Average monthly benefit	\$148	\$585	\$1,091	\$1,838	\$2,897	\$4,088	\$5,591
Average highest average salary	\$2,343	\$3,390	\$3,903	\$4,538	\$5,507	\$6,273	\$7,099
Number of service retirees	393	867	786	823	1,315	1,126	1,187
Period 1/1/2021 to 12/31/2021							
Average monthly benefit	\$145	\$578	\$1,081	\$1,798	\$2,734	\$3,983	\$5,499
Average highest average salary	\$2,380	\$3,428	\$3,890	\$4,351	\$5,237	\$6,144	\$7,074
Number of service retirees	312	866	806	825	1,273	1,078	1,235
Period 1/1/2020 to 12/31/2020							
Average monthly benefit	\$130	\$595	\$837	\$2,163	\$2,893	\$4,307	\$5,498
Average highest average salary	\$2,151	\$3,230	\$3,534	\$4,177	\$4,909	\$5,929	\$6,851
Number of service retirees	327	711	839	815	1,134	954	1,077
Period 1/1/2019 to 12/31/2019							
Average monthly benefit	\$147	\$526	\$1,005	\$1,738	\$2,549	\$3,831	\$5,280
Average highest average salary	\$2,408	\$3,128	\$3,670	\$4,264	\$4,919	\$5,919	\$6,798
Number of service retirees	285	719	786	705	1,017	897	926
Period 1/1/2018 to 12/31/2018							
Average monthly benefit	\$142	\$514	\$1,023	\$1,668	\$2,516	\$3,824	\$5,227
Average highest average salary	\$2,373	\$3,070	\$3,671	\$4,090	\$4,829	\$5,876	\$6,691
Number of service retirees	229	775	784	786	1,059	966	1,044
Period 1/1/2017 to 12/31/2017							
Average monthly benefit	\$207	\$553	\$1,088	\$1,819	\$2,707	\$4,102	\$5,302
Average highest average salary	\$2,606	\$3,064	\$3,684	\$4,196	\$4,940	\$6,039	\$6,662
Number of service retirees	298	730	812	848	1,079	1,067	833
Period 1/1/2016 to 12/31/2016							
Average monthly benefit	\$192	\$540	\$1,096	\$1,882	\$2,621	\$3,955	\$5,137
Average highest average salary	\$2,530	\$2,979	\$3,730	\$4,375	\$4,746	\$5,783	\$6,402
Number of service retirees	242	762	739	761	1,001	1,061	816
Period 1/1/2015 to 12/31/2015							
Average monthly benefit	\$231	\$587	\$1,101	\$1,802	\$2,686	\$3,879	\$5,006
Average highest average salary	\$2,445	\$3,198	\$3,753	\$4,112	\$4,848	\$5,738	\$6,225
Number of service retirees	220	737	712	693	979	1,096	804

Note: HAS 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, members in the Judicial Division, and members who did not have five years of service credit on December 31, 2019, have different HAS calculations. Please see Note 1 of the Notes to the Financial Statements in the Financial Section for more information.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

(In Actual Dollars)

Health Care Trust Fund¹

Year Retired	Years of Service Credit						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2024 to 12/31/2024							
Average monthly benefit	\$14	\$50	\$78	\$121	\$160	\$164	\$186
Number of service retirees ²	24	51	91	123	211	141	219
Period 1/1/2023 to 12/31/2023							
Average monthly benefit	\$16	\$50	\$80	\$113	\$151	\$180	\$185
Number of service retirees ²	28	80	112	139	279	209	249
Period 1/1/2022 to 12/31/2022							
Average monthly benefit	\$25	\$57	\$79	\$127	\$167	\$187	\$195
Number of service retirees ²	33	75	111	180	324	271	323
Period 1/1/2021 to 12/31/2021							
Average monthly benefit	\$16	\$55	\$89	\$132	\$190	\$197	\$196
Number of service retirees ²	21	62	130	152	334	286	412
Period 1/1/2020 to 12/31/2020							
Average monthly benefit	\$14	\$60	\$101	\$148	\$189	\$197	\$203
Number of service retirees ²	18	56	106	187	346	325	459
Period 1/1/2019 to 12/31/2019							
Average monthly benefit	\$15	\$57	\$102	\$147	\$195	\$203	\$205
Number of service retirees ²	19	57	120	184	316	319	416
Period 1/1/2018 to 12/31/2018							
Average monthly benefit	\$20	\$62	\$110	\$154	\$201	\$201	\$209
Number of service retirees ²	7	56	131	177	394	365	482

¹ Information is not available prior to 2018. In future reports, additional years will be added until 10 years of historical data are presented.

² Only includes those service retirees participating in PERACare.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

(In Actual Dollars)

DPS Health Care Trust Fund¹

Year Retired	Years of Service Credit						
	0–5	5–10	10–15	15–20	20–25	25–30	30+
Period 1/1/2024 to 12/31/2024							
Average monthly benefit	\$12	\$52	\$79	\$190	\$145	\$182	\$192
Number of service retirees ²	2	3	5	2	7	12	9
Period 1/1/2023 to 12/31/2023							
Average monthly benefit	\$—	\$49	\$81	\$146	\$164	\$215	\$172
Number of service retirees ²	—	2	11	6	7	15	9
Period 1/1/2022 to 12/31/2022							
Average monthly benefit	\$—	\$29	\$75	\$115	\$188	\$186	\$196
Number of service retirees ²	—	2	10	5	10	16	10
Period 1/1/2021 to 12/31/2021							
Average monthly benefit	\$29	\$92	\$85	\$130	\$148	\$203	\$216
Number of service retirees ²	1	1	4	7	5	13	13
Period 1/1/2020 to 12/31/2020							
Average monthly benefit	\$—	\$69	\$78	\$141	\$129	\$212	\$212
Number of service retirees ²	—	1	7	10	8	13	18
Period 1/1/2019 to 12/31/2019							
Average monthly benefit	\$6	\$68	\$99	\$131	\$201	\$208	\$203
Number of service retirees ²	1	4	9	7	13	16	17
Period 1/1/2018 to 12/31/2018							
Average monthly benefit	\$—	\$65	\$67	\$170	\$203	\$208	\$208
Number of service retirees ²	—	8	3	6	13	21	36

¹ Information is not available prior to 2018. In future reports, additional years will be added until 10 years of historical data are presented.

² Only includes those service retirees participating in PERACare.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

(In Actual Dollars)

All Health Care Trust Funds¹

Year Retired	Years of Service Credit						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
Period 1/1/2024 to 12/31/2024							
Average monthly benefit	\$14	\$50	\$78	\$122	\$159	\$165	\$186
Number of service retirees ²	26	54	96	125	218	153	228
Period 1/1/2023 to 12/31/2023							
Average monthly benefit	\$16	\$50	\$80	\$114	\$152	\$183	\$185
Number of service retirees ²	28	82	123	145	286	224	258
Period 1/1/2022 to 12/31/2022							
Average monthly benefit	\$25	\$56	\$79	\$127	\$168	\$187	\$195
Number of service retirees ²	33	77	121	185	334	287	333
Period 1/1/2021 to 12/31/2021							
Average monthly benefit	\$16	\$56	\$89	\$132	\$190	\$197	\$197
Number of service retirees ²	22	63	134	159	339	299	425
Period 1/1/2020 to 12/31/2020							
Average monthly benefit	\$14	\$60	\$100	\$148	\$187	\$198	\$203
Number of service retirees ²	18	57	113	197	354	338	477
Period 1/1/2019 to 12/31/2019							
Average monthly benefit	\$14	\$58	\$102	\$147	\$195	\$203	\$205
Number of service retirees ²	20	61	129	191	329	335	433
Period 1/1/2018 to 12/31/2018							
Average monthly benefit	\$20	\$62	\$109	\$154	\$201	\$201	\$209
Number of service retirees ²	7	64	134	183	407	386	518

¹ Information is not available prior to 2018. In future reports, additional years will be added until 10 years of historical data are presented.

² Only includes those service retirees participating in PERACare.

SCHEDULE OF CONTRIBUTION RATE HISTORY

State Division (Members other than Safety Officers)¹

		Percent of Covered Payroll						
Years		Member Contribution Rate	Employer Contribution Rate ²	Amortization Equalization Disbursement	Supplemental Amortization Equalization Disbursement	Nonemployer Contribution Rate ³	Defined Contribution Supplement ⁴	Total Contribution Rate
1/1/2015	to 12/31/2015	8.00%	10.15%	4.20%	4.00%	—	—	26.35%
1/1/2016	to 12/31/2016	8.00%	10.15%	4.60%	4.50%	—	—	27.25%
1/1/2017	to 12/31/2017	8.00%	10.15%	5.00%	5.00%	—	—	28.15%
1/1/2018	to 12/31/2018	8.00%	10.15%	5.00%	5.00%	2.71%	—	30.86%
1/1/2019	to 6/30/2019	8.00%	10.15%	5.00%	5.00%	2.57%	—	30.72%
7/1/2019	to 12/31/2019	8.75%	10.40%	5.00%	5.00%	2.57%	—	31.72%
1/1/2020	to 6/30/2020	8.75%	10.40%	5.00%	5.00%	— ⁵	—	29.15%
7/1/2020	to 12/31/2020	10.00%	10.90%	5.00%	5.00%	— ⁵	—	30.90%
1/1/2021	to 6/30/2021	10.00%	10.90%	5.00%	5.00%	2.48%	0.05%	33.43%
7/1/2021	to 12/31/2021	10.50%	10.90%	5.00%	5.00%	2.48%	0.05%	33.93%
1/1/2022	to 6/30/2022	10.50%	10.90%	5.00%	5.00%	6.23% ⁶	0.10%	37.73%
7/1/2022	to 12/31/2022	11.00%	11.40%	5.00%	5.00%	6.23% ⁶	0.10%	38.73%
1/1/2023	to 12/31/2023	11.00%	11.40%	5.00%	5.00%	0.45% ⁶	0.17%	33.02%
1/1/2024	to 12/31/2024	11.00%	11.40%	5.00%	5.00%	1.93%	0.21%	34.54%

¹ See Note 1 of the Notes to the Financial Statements in the Financial Section for the definition of "Safety Officers".

² All employer contribution rates shown include the Health Care Trust Fund (HCTF) allocation.

³ Contributions from a nonemployer contributing entity are required by C.R.S. § 24-51-414 *et seq.* and are remitted to PERA as a single sum in July of each year. For purposes of this schedule, the amount allocated to the State Division is expressed as a percentage of annual covered payroll. If applicable, the amount allocated is shown in both six-month segment contribution summaries for improved comparative analysis to the prior year.

⁴ C.R.S. § 24-51-415 adjusts employer contribution rates for the State Division. See Note 4 of the Notes to the Financial Statements in the Financial Section for additional information.

⁵ House Bill 20-1379 suspended the July 2020 contribution from the nonemployer contributing entity for the State's 2020-21 fiscal year.

⁶ In 2022, House Bill 22-1029 required a restorative payment to recompense PERA for the suspended 2020 contribution, which also advanced part of the 2023 contribution.

SCHEDULE OF CONTRIBUTION RATE HISTORY (CONTINUED)

State Division (Safety Officers)¹

Years		Percent of Covered Payroll						
		Member Contribution Rate	Employer Contribution Rate ²	Amortization Equalization Disbursement	Supplemental Amortization Equalization Disbursement	Nonemployer Contribution Rate ³	Defined Contribution Supplement ⁴	Total Contribution Rate
1/1/2015	to 12/31/2015	10.00%	12.85%	4.20%	4.00%	—	—	31.05%
1/1/2016	to 12/31/2016	10.00%	12.85%	4.60%	4.50%	—	—	31.95%
1/1/2017	to 12/31/2017	10.00%	12.85%	5.00%	5.00%	—	—	32.85%
1/1/2018	to 12/31/2018	10.00%	12.85%	5.00%	5.00%	2.71%	—	35.56%
1/1/2019	to 6/30/2019	10.00%	12.85%	5.00%	5.00%	2.57%	—	35.42%
7/1/2019	to 12/31/2019	10.75%	13.10%	5.00%	5.00%	2.57%	—	36.42%
1/1/2020	to 6/30/2020	10.75%	13.10%	5.00%	5.00%	— ⁵	—	33.85%
7/1/2020	to 12/31/2020	12.00%	13.60%	5.00%	5.00%	— ⁵	—	35.60%
1/1/2021	to 6/30/2021	12.00%	13.60%	5.00%	5.00%	2.48%	0.05%	38.13%
7/1/2021	to 12/31/2021	12.50%	13.60%	5.00%	5.00%	2.48%	0.05%	38.63%
1/1/2022	to 6/30/2022	12.50%	13.60%	5.00%	5.00%	6.23% ⁶	0.10%	42.43%
7/1/2022	to 12/31/2022	13.00%	14.10%	5.00%	5.00%	6.23% ⁶	0.10%	43.43%
1/1/2023	to 12/31/2023	13.00%	14.10%	5.00%	5.00%	0.45% ⁶	0.17%	37.72%
1/1/2024	to 12/31/2024	13.00%	14.10%	5.00%	5.00%	1.93%	0.21%	39.24%

¹ See Note 1 of the Notes to the Financial Statements in the Financial Section for the definition of "Safety Officers".

² All employer contribution rates shown include the HCTF allocation.

³ Contributions from a nonemployer contributing entity are required by C.R.S. § 24-51-414 *et seq.* and are remitted to PERA as a single sum in July of each year. For purposes of this schedule, the amount allocated to the State Division is expressed as a percentage of annual covered payroll. If applicable, the amount allocated is shown in both six-month segment contribution summaries for improved comparative analysis to the prior year.

⁴ C.R.S. § 24-51-415 adjusts employer contribution rates for the State Division. See Note 4 of the Notes to the Financial Statements in the Financial Section for additional information.

⁵ House Bill 20-1379 suspended the July 2020 contribution from the nonemployer contributing entity for the State's 2020-21 fiscal year.

⁶ In 2022, House Bill 22-1029 required a restorative payment to recompense PERA for the suspended 2020 contribution, which also advanced part of the 2023 contribution.

SCHEDULE OF CONTRIBUTION RATE HISTORY (CONTINUED)

School Division

		Percent of Covered Payroll					
Years		Member Contribution Rate	Employer Contribution Rate ¹	Amortization Equalization Disbursement	Supplemental Amortization Equalization Disbursement	Nonemployer Contribution Rate ²	Total Contribution Rate
1/1/2015	to 12/31/2015	8.00%	10.15%	4.20%	4.00%	—	26.35%
1/1/2016	to 12/31/2016	8.00%	10.15%	4.50%	4.50%	—	27.15%
1/1/2017	to 12/31/2017	8.00%	10.15%	4.50%	5.00%	—	27.65%
1/1/2018	to 12/31/2018	8.00%	10.15%	4.50%	5.50%	2.64%	30.79%
1/1/2019	to 6/30/2019	8.00%	10.15%	4.50%	5.50%	2.50%	30.65%
7/1/2019	to 12/31/2019	8.75%	10.40%	4.50%	5.50%	2.50%	31.65%
1/1/2020	to 6/30/2020	8.75%	10.40%	4.50%	5.50%	— ³	29.15%
7/1/2020	to 12/31/2020	10.00%	10.90%	4.50%	5.50%	— ³	30.90%
1/1/2021	to 6/30/2021	10.00%	10.90%	4.50%	5.50%	2.34%	33.24%
7/1/2021	to 12/31/2021	10.50%	10.90%	4.50%	5.50%	2.34%	33.74%
1/1/2022	to 6/30/2022	10.50%	10.90%	4.50%	5.50%	6.18% ⁴	37.58%
7/1/2022	to 12/31/2022	11.00%	11.40%	4.50%	5.50%	6.18% ⁴	38.58%
1/1/2023	to 12/31/2023	11.00%	11.40%	4.50%	5.50%	0.47% ⁴	32.87%
1/1/2024	to 12/31/2024	11.00%	11.40%	4.50%	5.50%	1.92%	34.32%

¹ All employer contribution rates include the HCTF allocation.

² Contributions from a nonemployer contributing entity are required by C.R.S. § 24-51-414 *et seq.* and are remitted to PERA as a single sum in July of each year. For purposes of this schedule, the amount allocated to the School Division is expressed as a percentage of annual covered payroll. If applicable, the amount allocated is shown in both six-month segment contribution summaries for improved comparative analysis to the prior year.

³ House Bill 20-1379 suspended the July 2020 contribution from the nonemployer contributing entity for the State's 2020-21 fiscal year.

⁴ In 2022, House Bill 22-1029 required a restorative payment to recompense PERA for the suspended 2020 contribution, which also advanced part of the 2023 contribution.

Local Government Division (Members other than Safety Officers)¹

		Percent of Covered Payroll					
Years		Member Contribution Rate	Employer Contribution Rate ²	Amortization Equalization Disbursement	Supplemental Amortization Equalization Disbursement	Defined Contribution Supplement ³	Total Contribution Rate
1/1/2015	to 6/30/2020	8.00%	10.00%	2.20%	1.50%	—	21.70%
7/1/2020	to 12/31/2020	8.50%	10.50%	2.20%	1.50%	—	22.70%
1/1/2021	to 12/31/2021	8.50%	10.50%	2.20%	1.50%	0.02%	22.72%
1/1/2022	to 6/30/2022	8.50%	10.50%	2.20%	1.50%	0.03%	22.73%
7/1/2022	to 12/31/2022	9.00%	11.00%	2.20%	1.50%	0.03%	23.73%
1/1/2023	to 12/31/2023	9.00%	11.00%	2.20%	1.50%	0.06%	23.76%
1/1/2024	to 12/31/2024	9.00%	11.00%	2.20%	1.50%	0.08%	23.78%

¹ See Note 1 of the Notes to the Financial Statements in the Financial Section for the definition of "Safety Officers".

² All employer contribution rates include the HCTF allocation.

³ C.R.S. § 24-51-415 adjusts employer contribution rates for the Local Government Division. See Note 4 of the Notes to the Financial Statements in the Financial Section for additional information.

SCHEDULE OF CONTRIBUTION RATE HISTORY (CONTINUED)

Local Government Division (Safety Officers)¹

			Percent of Covered Payroll					
Years ²			Member Contribution Rate	Employer Contribution Rate ³	Amortization Equalization Disbursement	Supplemental Amortization Equalization Disbursement	Defined Contribution Supplement ⁴	Total Contribution Rate
1/1/2020	to	6/30/2020	10.75%	13.10%	2.20%	1.50%	—	27.55%
7/1/2020	to	12/31/2020	12.00%	13.60%	2.20%	1.50%	—	29.30%
1/1/2021	to	6/30/2021	12.00%	13.60%	2.20%	1.50%	0.02%	29.32%
7/1/2021	to	12/31/2021	12.50%	13.60%	2.20%	1.50%	0.02%	29.82%
1/1/2022	to	6/30/2022	12.50%	13.60%	2.20%	1.50%	0.03%	29.83%
7/1/2022	to	12/31/2022	13.00%	14.10%	2.20%	1.50%	0.03%	30.83%
1/1/2023	to	12/31/2023	13.00%	14.10%	2.20%	1.50%	0.06%	30.86%
1/1/2024	to	12/31/2024	13.00%	14.10%	2.20%	1.50%	0.08%	30.88%

¹ See Note 1 of the Notes to the Financial Statements in the Financial Section for the definition of "Safety Officers".

² C.R.S. § 24-51-101 (46), as amended, expanded the definition of "Safety Officers" to include certain employees within the Local Government Division.

³ All employer contribution rates include the HCTF allocation.

⁴ C.R.S. § 24-51-415 adjusts employer contribution rates for the Local Government Division. See Note 4 of the Notes to the Financial Statements in the Financial Section for additional information.

Judicial Division

			Percent of Covered Payroll					
Years			Member Contribution Rate	Employer Contribution Rate ¹	Amortization Equalization Disbursement	Supplemental Amortization Equalization Disbursement	Nonemployer Contribution Rate ²	Total Contribution Rate
1/1/2015	to	12/31/2017	8.00%	13.66%	2.20%	1.50%	—	25.36%
1/1/2018	to	12/31/2018	8.00%	13.66%	2.20%	1.50%	2.74%	28.10%
1/1/2019	to	6/30/2019	8.00%	13.66%	3.40%	3.40%	2.51%	30.97%
7/1/2019	to	12/31/2019	8.75%	13.91%	3.40%	3.40%	2.51%	31.97%
1/1/2020	to	6/30/2020	8.75%	13.91%	3.80%	3.80%	— ³	30.26%
7/1/2020	to	12/31/2020	15.00% ⁴ / 10.00% ⁵	9.41% ⁴ / 14.41% ⁵	3.80%	3.80%	— ³	32.01%
1/1/2021	to	6/30/2021	15.00% ⁴ / 10.00% ⁵	9.41% ⁴ / 14.41% ⁵	4.20%	4.20%	2.44%	35.25%
7/1/2021	to	12/31/2021	15.50% ⁴ / 10.50% ⁵	9.41% ⁴ / 14.41% ⁵	4.20%	4.20%	2.44%	35.75%
1/1/2022	to	6/30/2022	15.50% ⁴ / 10.50% ⁵	9.41% ⁴ / 14.41% ⁵	4.60%	4.60%	6.32% ⁶	40.43%
7/1/2022	to	12/31/2022	11.00%	14.91%	4.60%	4.60%	6.32% ⁶	41.43%
1/1/2023	to	12/31/2023	11.00%	14.91%	5.00%	5.00%	0.48% ⁶	36.39%
1/1/2024	to	12/31/2024	11.00%	14.91%	5.00%	5.00%	2.01%	37.92%

¹ All employer contribution rates include the HCTF allocation.

² Contributions from a nonemployer contributing entity are required by C.R.S. § 24-51-414 *et seq.* and are remitted to PERA as a single sum in July of each year. For purposes of this schedule, the amount allocated to the Judicial Division is expressed as a percentage of annual covered payroll. If applicable, the amount allocated is shown in both six-month segment contribution summaries for improved comparative analysis to the prior year.

³ House Bill 20-1379 suspended the July 2020 contribution from the nonemployer contributing entity for the State's 2020-21 fiscal year.

⁴ House Bill 20-1394 required member contributions to increase by 5.00% and employer contributions to decrease by 5.00% for all members of the Judicial Division except those employed by the Denver County Court.

⁵ Contribution rates for members of the Judicial Division employed by the Denver County Court.

⁶ In 2022, House Bill 22-1029 required a restorative payment to recompense PERA for the suspended 2020 contribution, which also advanced part of the 2023 contribution.

SCHEDULE OF CONTRIBUTION RATE HISTORY (CONTINUED)

DPS Division

		Percent of Covered Payroll						
Years		Member Contribution Rate	Employer Contribution Rate ¹	Amortization Equalization Disbursement	Supplemental Amortization Equalization Disbursement	Employer Contribution PCOP Offset ²	Nonemployer Contribution Rate ³	Total Contribution Rate
1/1/2015	to 12/31/2015	8.00%	10.15% ⁴	4.20%	4.00%	(15.97%)	—	10.38%
1/1/2016	to 12/31/2016	8.00%	10.15%	4.50%	4.50%	(15.54%)	—	11.61%
1/1/2017	to 12/31/2017	8.00%	10.15%	4.50%	5.00%	(14.56%)	—	13.09%
1/1/2018	to 12/31/2018	8.00%	10.15%	4.50%	5.50%	(14.18%)	2.58%	16.55%
1/1/2019	to 6/30/2019	8.00%	10.15%	4.50%	5.50%	(13.35%) ⁵	2.61%	17.41%
7/1/2019	to 12/31/2019	8.75%	10.40%	4.50%	5.50%	(13.60%) ⁵	2.61%	18.16%
1/1/2020	to 6/30/2020	8.75%	10.40%	4.50%	5.50%	(12.25%) ⁵	— ⁶	16.90%
7/1/2020	to 12/31/2020	10.00%	10.90%	4.50%	5.50%	(12.75%) ⁵	— ⁶	18.15%
1/1/2021	to 6/30/2021	10.00%	10.90%	4.50%	5.50%	(12.09%)	2.33%	21.14%
7/1/2021	to 12/31/2021	10.50%	10.90%	4.50%	5.50%	(12.09%)	2.33%	21.64%
1/1/2022	to 6/30/2022	10.50%	10.90%	4.50%	5.50%	(11.22%) ⁵	6.51% ⁷	26.69%
7/1/2022	to 12/31/2022	11.00%	11.40%	4.50%	5.50%	(11.72%) ⁵	6.51% ⁷	27.19%
1/1/2023	to 12/31/2023	11.00%	11.40%	4.50%	5.50%	(10.93%)	0.46% ⁷	21.93%
1/1/2024	to 12/31/2024	11.00%	11.40%	4.50%	5.50%	(9.78%)	2.12%	24.74%

¹ All employer contribution rates include the DPS HCTF allocation.

² An offset to the DPS Division rate is provided for under C.R.S. § 24-51-412. See Note 4 of the Notes to the Financial Statements in the Financial Section.

³ Contributions from a nonemployer contributing entity are required by C.R.S. § 24-51-414 *et seq.* and are remitted to PERA as a single sum in July of each year. For purposes of this schedule, the amount allocated to the DPS Division is expressed as a percentage of annual covered payroll. If applicable, the amount allocated is shown in both six-month segment contribution summaries for improved comparative analysis to the prior year.

⁴ On June 3, 2015, House Bill 15-1391 reduced the employer contribution rate with a retroactive effective date of January 1, 2015.

⁵ To conform with this presentation of contribution rates, the annual PCOP offset for the calendar year has been adjusted based on the portion of the PCOP offset used to satisfy employer contribution requirements for each-six month segment.

⁶ House Bill 20-1379 suspended the July 2020 contribution from the nonemployer contributing entity for the State's 2020-21 fiscal year.

⁷ In 2022, House Bill 22-1029 required a restorative payment to recompense PERA for the suspended 2020 contribution, which also advanced part of the 2023 contribution.

Employer Contributions to Health Care Trust Funds

Division/Years		Percent of Covered Payroll Allocated from Employer Contribution to Health Care Trust Funds
State Division		
1/1/2015	to 12/31/2024	1.02%
School Division		
1/1/2015	to 12/31/2024	1.02%
Local Government Division		
1/1/2015	to 12/31/2024	1.02%
Judicial Division		
1/1/2015	to 12/31/2024	1.02%
DPS Division		
1/1/2015	to 12/31/2024	1.02%

PRINCIPAL PARTICIPATING EMPLOYERS

State Division Trust Fund¹

Employer	2024			2015		
	Covered Active Members December 31	Rank	Percentage of Total System	Covered Active Members December 31	Rank	Percentage of Total System
State of Colorado	52,892	1	95.16%	50,684	1	91.67%

School Division Trust Fund¹

Employer	2024			2015		
	Covered Active Members December 31	Rank	Percentage of Total System	Covered Active Members December 31	Rank	Percentage of Total System
Jefferson County School District R-1	12,031	1	8.97%	12,149	1	10.10%
Douglas County School District Re 1	9,487	2	7.08%	8,560	2	7.12%
Cherry Creek School District 5	9,201	3	6.86%	7,684	3	6.39%
Adams-Arapahoe School District 28J	6,031	4	4.50%	5,667	4	4.71%
Adams 12 Five Star Schools	5,482	5	4.09%	5,239	5	4.36%
Poudre School District R-1	5,302	6	3.95%	4,485	7	3.73%
St. Vrain Valley School District RE1J	4,902	7	3.66%	4,304	9	3.58%
Boulder Valley School District RE2	4,860	8	3.62%	4,637	6	3.86%
Academy School District #20	4,224	9	3.15%	3,666	10	3.05%
Colorado Springs School District 11	4,216	10	3.14%	4,390	8	3.65%

Local Government Division Trust Fund¹

Employer	2024			2015		
	Covered Active Members December 31	Rank	Percentage of Total System	Covered Active Members December 31	Rank	Percentage of Total System
City of Colorado Springs	3,704	1	28.53%	3,099	1	25.45%
Boulder County Government	2,393	2	18.43%	2,054	2	16.87%
City of Boulder	1,498	3	11.54%	1,448	3	11.89%

Judicial Division Trust Fund¹

Employer	2024			2015		
	Covered Active Members December 31	Rank	Percentage of Total System	Covered Active Members December 31	Rank	Percentage of Total System
Judicial Department	336	1	95.73%	317	1	94.91%

DPS Division Trust Fund¹

Employer	2024			2015		
	Covered Active Members December 31	Rank	Percentage of Total System	Covered Active Members December 31	Rank	Percentage of Total System
Denver Public School District No. 1	16,207	1	100.00%	15,929	1	100.00%

¹ The employer counts are presented for purposes of complying with GASB 67 only, which classifies a primary government and its component units as one employer. 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 (CONTINUED)

Health Care Trust Fund^{1,2}

Employer	2024			2017		
	Covered Active Members December 31	Rank	Percentage of Total System	Covered Active Members December 31	Rank	Percentage of Total System
State of Colorado	52,892	1	26.06%	51,022	1	26.60%
Jefferson County School District R-1	12,031	2	5.93%	12,295	2	6.41%
Douglas County School District Re 1	9,487	3	4.67%	9,100	3	4.75%
Cherry Creek School District 5	9,201	4	4.53%	7,929	4	4.13%
Adams-Arapahoe School District 28J	6,031	5	2.97%	5,271	5	2.75%
Adams 12 Five Star Schools	5,482	6	2.70%	5,075	6	2.65%
Poudre School District R-1	5,302	7	2.61%			
St. Vrain Valley School District RE1J	4,902	8	2.41%			
Boulder Valley School District RE2				4,763	7	2.48%
Colorado Springs School District 11				4,448	8	2.32%

DPS Health Care Trust Fund^{1,2}

Employer	2024			2017		
	Covered Active Members December 31	Rank	Percentage of Total System	Covered Active Members December 31	Rank	Percentage of Total System
Denver Public School District No. 1	16,207	1	100.00%	15,991	1	100.00%

¹ Guidance under GASB Statement No. 74 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 2017 is not available.

² This employer count is presented for purposes of complying with GASB 74 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.



Acronym Section





AAL	Actuarial Accrued Liability	GASB	Governmental Accounting Standards Board
AAP	Automatic Adjustment Provision	GDP	Gross Domestic Product
ACFR	Annual Comprehensive Financial Report	HAS	Highest Average Salary
ADC	Actuarially Determined Contribution	HB	House Bill
AED	Amortization Equalization Disbursement	HCTF	Health Care Trust Fund
AI	Annual Increase	IRC	Internal Revenue Code
AIR	Annual Increase Reserve	MBS	Mortgage-Backed Securities
ASOP	Actuarial Standards of Practice	MD&A	Management's Discussion and Analysis
AVA	Actuarial Value of Assets	NAV	Net Asset Value
BOCES	Boards of Cooperative Educational Services	NOA	Net OPEB Asset
CAPs	Capital Accumulation Plans	NOL	Net OPEB Liability
CIF	Combined Investment Fund	NPA	Net Pension Asset
CMBS	Commercial Mortgage-Backed Securities	NPL	Net Pension Liability
COF	Common Operating Fund	OPEB	Other Postemployment Benefit
C.R.S.	Colorado Revised Statutes	PCOP	Pension Certificates of Participation
DB	Defined Benefit	RSI	Required Supplementary Information
DC	Defined Contribution	SAED	Supplemental Amortization Equalization Disbursement
DC Plan	Defined Contribution Retirement Plan	SB	Senate Bill
DPS	Denver Public Schools	SBITAs	Subscription-Based Information Technology Arrangements
DPS HCTF . . .	Denver Public Schools Health Care Trust Fund	SEIR	Single Equivalent Interest Rate
DPSRS	Denver Public Schools Retirement System	SRI	Socially Responsible Investment
EA	Entry Age Actuarial Cost Method	TOL	Total OPEB Liability
ESG	Environmental, Social, and Governance	TPL	Total Pension Liability
FNP	Fiduciary Net Position	UAAL	Unfunded Actuarial Accrued Liability
GAAP	Generally Accepted Accounting Principles		



Colorado PERA thanks the following PERA-affiliated employers for permission to use their photos in this *Annual Comprehensive Financial Report*: Archuleta School District #50 JT, Colorado Department of Human Services, and Colorado Parks and Wildlife.

Public Employees' Retirement Association of Colorado
1301 Pennsylvania Street
Denver, Colorado 80203
800-759-7372 | copera.org

5/20 (REV 6-25)

