



Pension Review Commission

August 9, 2024

Andrew Roth, Chief Executive Officer/Executive Director

Amy C. McGarrity, Chief Investment Officer/Chief Operating Officer

Michael Steppat, Director of Government Relations



Agenda

- **Overview**
- **2023 Annual Comprehensive Financial Report (ACFR)**
 - **Facts & Figures**
 - **Valuation Highlights**
 - **Investment Performance**
- **Recent Legislation**
- **What to Expect Moving Forward**

Public Employees' Retirement Association of Colorado (PERA)

Defined Benefit Plan

Stable benefit payments to over 138,000 retired public employees

Defined Contribution Plan

Choice available to State and Local Government employees

Voluntary Investment Program

PERAPlus 401(k) and 457 Plans



Health Benefits Program

Active and retired member coverage



Governance



Colorado General Assembly

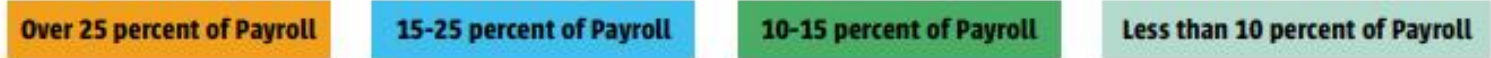
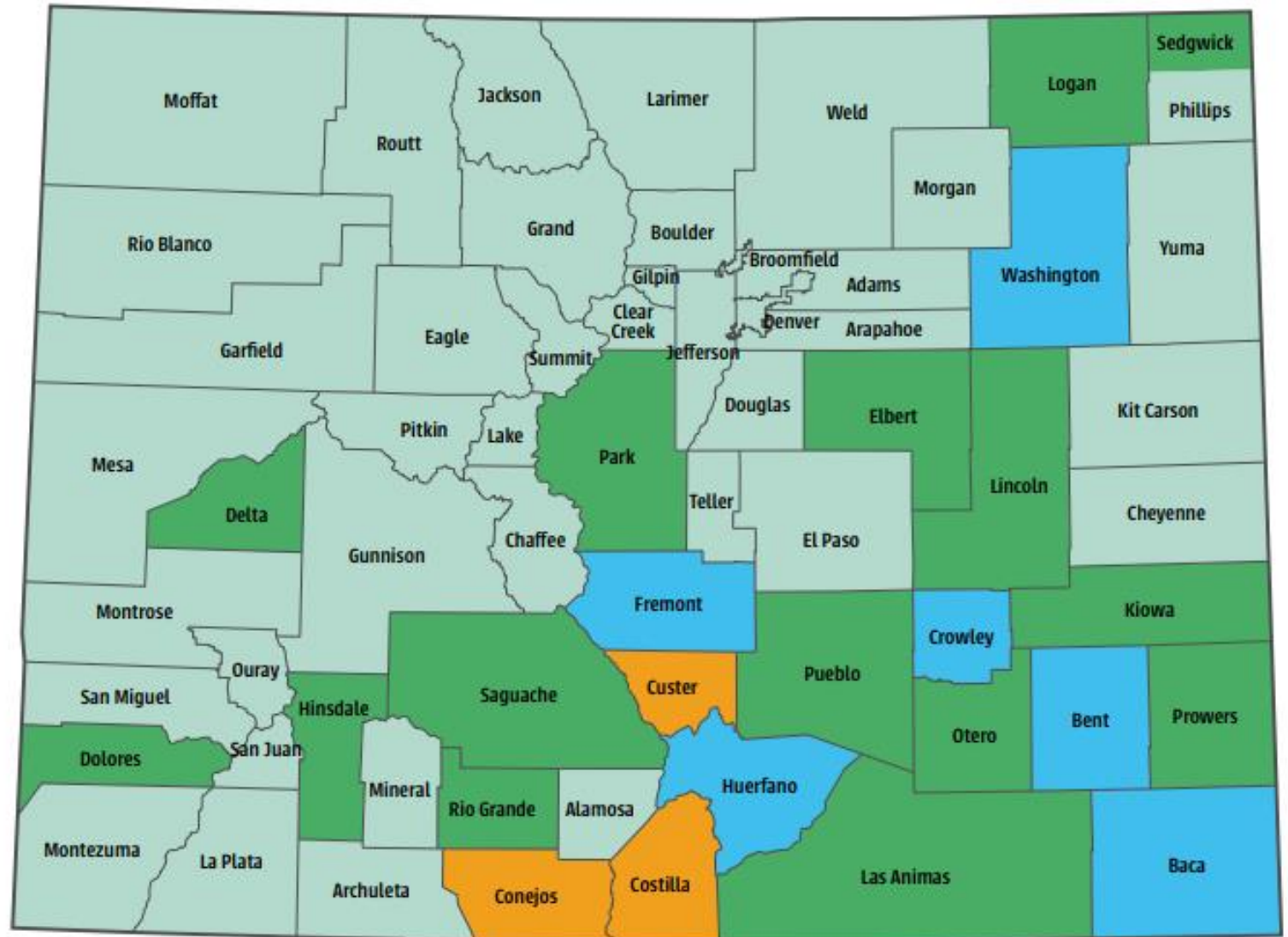
- Sets benefit and contribution structure, along with other plan requirements
- Provides legislative oversight via the following committees:
 - Legislative Audit Committee
 - Joint Budget Committee
 - Joint Finance Committee (SMART Act)
 - Pension Review Commission
 - Pension Review Subcommittee



PERA Board of Trustees

- Trustees, as fiduciaries, oversee investment program and benefits administration
- Adopt and revise rules in accordance with state statutes
- Sets policy and delegates the policy implementation to the Executive Director

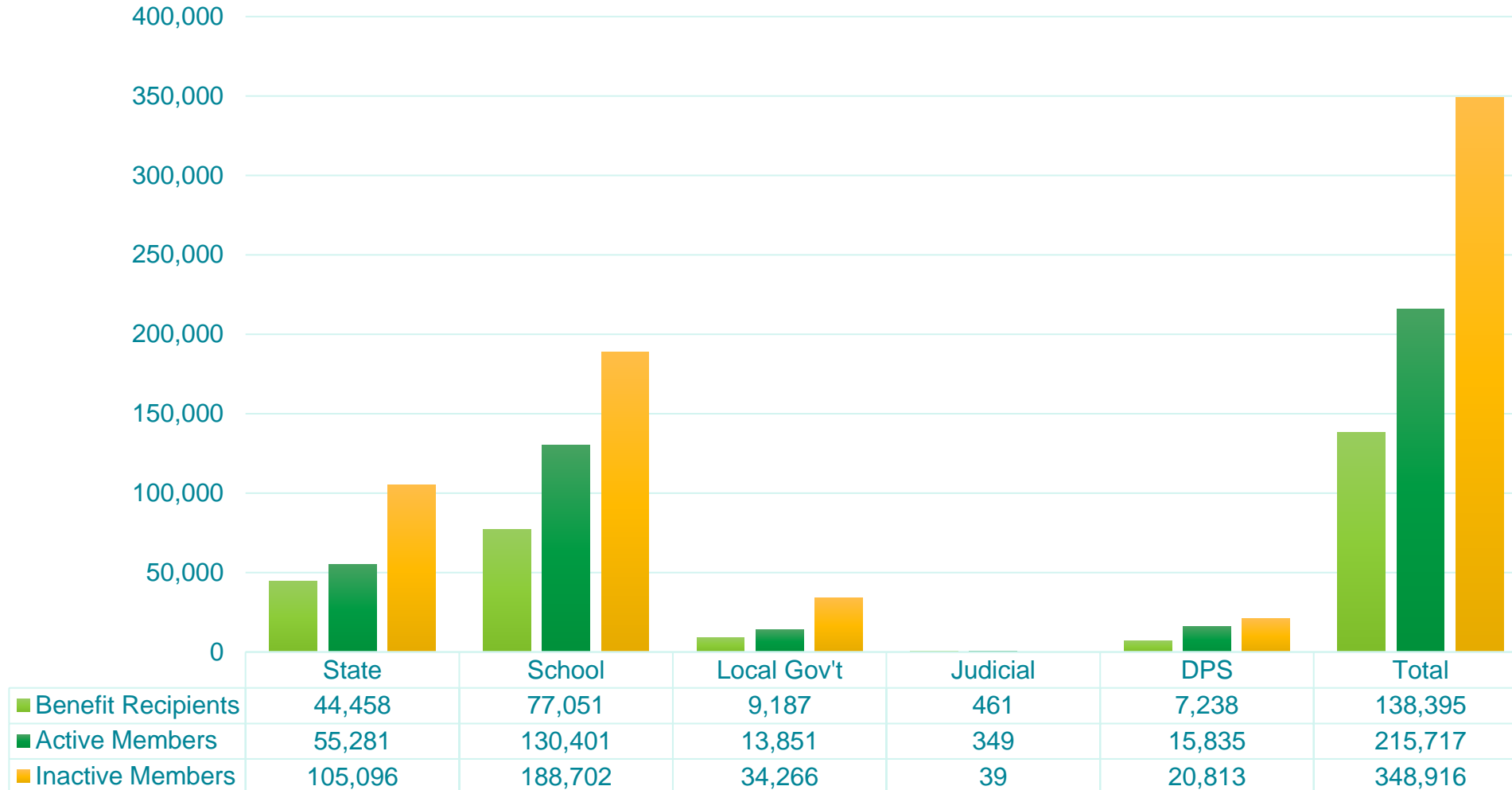
Annual PERA Retirement Distributions by County



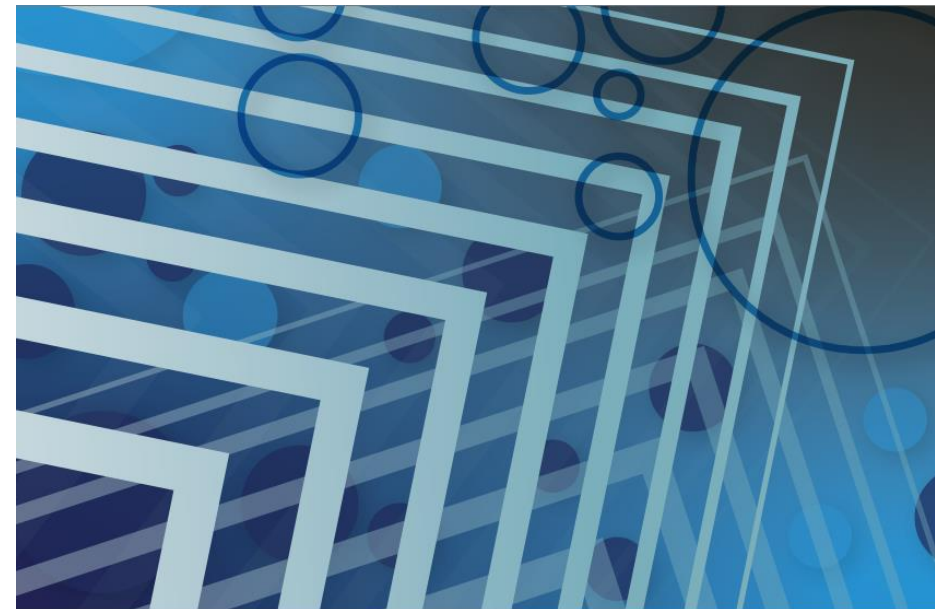
1 in 10 Coloradans are members of PERA

As of May, 2024

Total: 703,028



2023 Annual Report



**Evolve.
Innovate.
Invest.**

Annual Comprehensive Financial Report

FOR THE YEAR ENDED DECEMBER 31, 2023

Public Employees' Retirement Association of Colorado





Investment Portfolio Fair Value
\$61.5 billion
(Defined Benefit Plans)



Net Rate of Return
13.4%



Members Actively
 Contributing to PERA
213,548



Employers
410



Total Covered Participants
59,470
(In PERACare Health Benefits Program)



Funded Status
69.6%
(Division Trust Funds)



Retirees and Benefit Recipients
138,553



Annual Retirement
 Benefit Payments
\$5.3 billion



Invested in Colorado-Based Companies,
 Partnerships, and Assets
\$788.9 million



30-Year Rate of Return
8.3%
(Annualized, Gross-of-Fees)

2023 in Review

Facts & Figures as
 of December 31,
 2023

Summary of Valuation Highlights

» Asset Return

- The **market value of assets** increased from **\$54.7 billion** (as of 12/31/22) to **\$60.0 billion** (as of 12/31/23)
 - » The investment return was approximately **13.4%**, net of investment expenses
- The **actuarial value of assets** – which smooths investment gains and losses over four years – increased from **\$60.9 billion** (as of 12/31/22) to **\$62.9 billion** (as of 12/31/23)

» Effective Amortization Periods¹

Trust Fund	December 31, 2023	December 31, 2022	Change
State Division	18 years	20 years	-2
School Division	23 years	24 years	-1
Local Government Division	8 years	9 years	-1
Judicial Division	5 years	6 years	-1
DPS Division*	6 years	7 years	-1

✦ Segal

» Funded Percentage

Trust Fund	December 31, 2023	December 31, 2022	Change
State Division	66.2%	66.5%	-0.3%
School Division	66.7%	67.0%	-0.3%
Local Government Division	90.7%	91.0%	-0.3%
Judicial Division	89.2%	88.5%	+0.7%
DPS Division	89.6%	90.3%	-0.7%

✦ Segal

¹Funding periods are determined on a closed-group basis and shown as of prior and current valuation dates.

Summary of Valuation Highlights (cont.)

» Actuarially Determined Contribution Rates

Trust Fund	December 31, 2023 (ADC for 2025)	December 31, 2022 (ADC for 2024)	Change
State Division	18.78%	19.77%	-0.99%
School Division	20.49%	20.58%	-0.09%
Local Government Division	8.22%	8.28%	-0.06%
Judicial Division	12.20%	12.78%	-0.58%
DPS Division	6.08%	6.04%	+0.04%

★ Segal

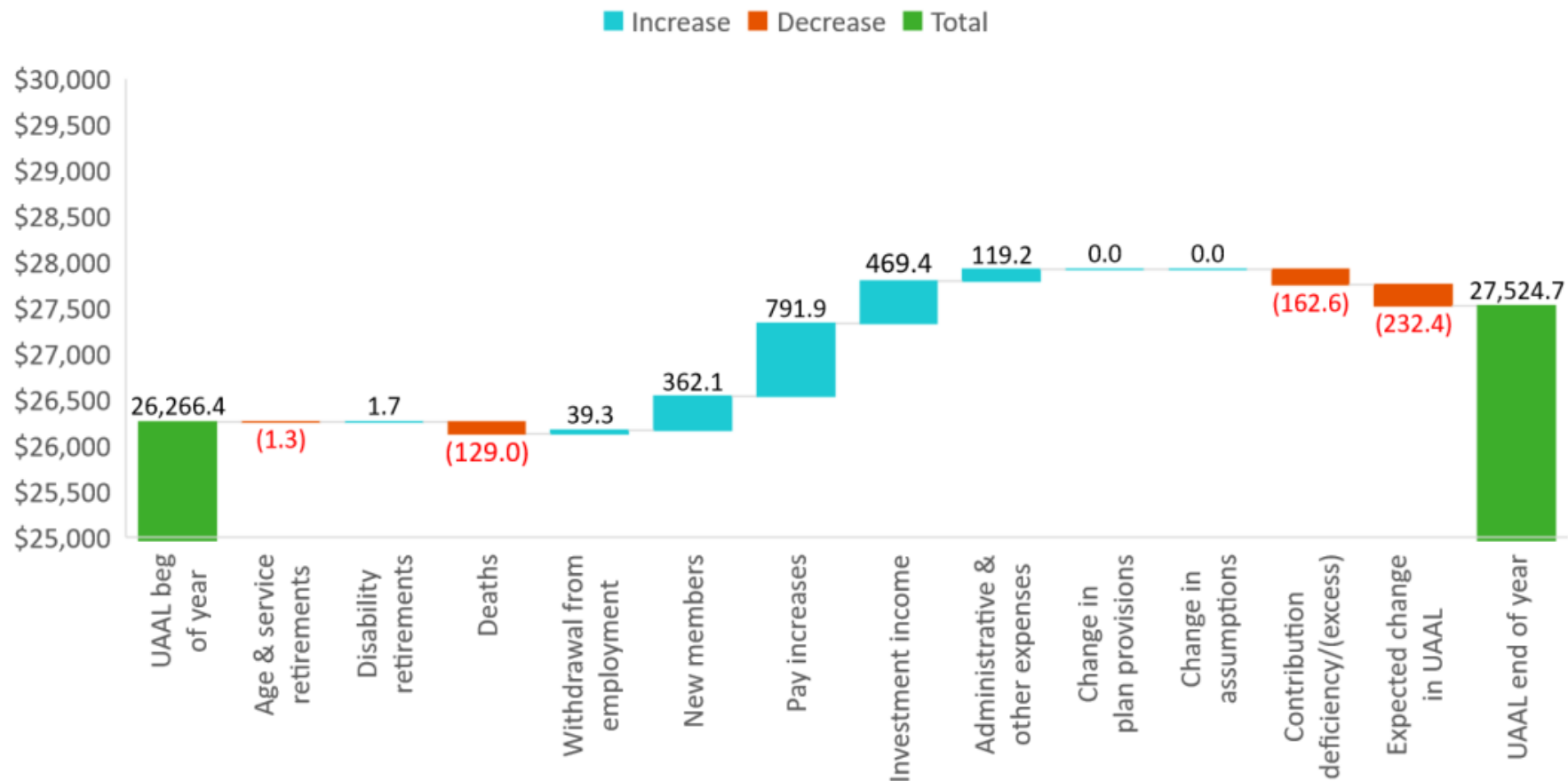
» Unfunded Actuarial Accrued Liability (UAAL)

- The actuarial accrued liability (AAL) increased from \$87.2 billion (as of December 31, 2022) to \$90.5 billion (as of December 31, 2023)
- The unfunded actuarial accrued liability (UAAL) increased from \$26.3 billion to \$27.5 billion.
 - » \$1.2 billion increase includes an expected decrease of \$0.4, offset by \$0.4 billion loss from investments and \$1.2 billion loss from demographic experience

UAAL – Pension Division Trust Funds

(\$ in millions)

» The following graph shows a reconciliation of the \$1,258.3M increase in UAAL from 2022 to 2023



Item	State Division	School Division	Local Government Division	Judicial Division	Denver Public Schools Division	Total Weighted Average
1 Unfunded actuarial accrued liability as of December 31, 2023 (\$ in millions)	\$9,608.8	\$16,766.1	\$571.8	\$57.3	\$520.7	\$27,524.7
2 Member contribution rate	11.14%	11.00%	9.02%	11.00%	11.00%	11.01%
3 Employer contribution rate*	20.06%	19.74%	13.06%	23.23%	9.94%	19.53%
4 Actuarially determined employer contribution rate	18.78%	20.49%	8.22%	12.20%	6.08%	19.35%
5 Direct distribution rate						1.80%
6 Blended total contribution rate: 2 + 3 + 5						32.34%
7 Blended total required contribution: 2 + 4						30.36%
8 Ratio of blended total contribution rate to blended total required contribution: 6 ÷ 7						106.52%

Automatic Adjustment Provision (AAP)



Automatic changes are triggered when the ratio of the Blended Total Contribution Rate to the Blended Total Required Contribution is less than 98% (or greater than 120%)

» As of December 31, 2023, this ratio is equal to **106.52%**

Automatic Adjustment Provision (AAP) – levers available

PERA's current positioning on the four levers is shown below

- The right-side of the exhibit represents the limit on each lever to improve the funded ratio



- » The AAP was triggered for the 2020 and 2022 plan years resulting in:
 - Cumulative 1% increase to member and employer contributions
 - Cumulative 0.5% reduction in the annual increase to retirees (from 1.5% to 1.0%)
 - No change to the direct distribution

Employer Contribution Rates

DC Supplement Rates

State Division

	Employer Base Rate	AED	SAED	Automatic Adjustment	DC Supplement	Total Contribution
January 2023	10.40%	5.00%	5.00%	1.00%	0.17%	21.57%
January 2024	10.40%	5.00%	5.00%	1.00%	0.21%	21.61%

School Division

	Employer Base Rate	AED	SAED	Automatic Adjustment	DC Supplement	Total Contribution
January 2023	10.40%	4.50%	5.50%	1.00%		21.40%
January 2024	10.40%	4.50%	5.50%	1.00%		21.40%

DPS Division¹

	Employer Base Rate	AED	SAED	Automatic Adjustment	DC Supplement	Total Contribution
January 2023	10.40%	4.50%	5.50%	1.00%		21.40%
January 2024	10.40%	4.50%	5.50%	1.00%		21.40%

¹ Actual DPS employer contributions into the DPS Division vary based upon DPS payments toward its pension obligation bonds.

Local Government Division

	Employer Base Rate	AED	SAED	Automatic Adjustment	DC Supplement	Total Contribution
January 2023	10.00%	2.20%	1.50%	1.00%	0.06%	14.76%
January 2024	10.00%	2.20%	1.50%	1.00%	0.08%	14.78%

Judicial Division

	Employer Base Rate	AED	SAED	Automatic Adjustment	DC Supplement	Total Contribution
January 2023	13.91%	5.00%	5.00%	1.00%		24.91%
January 2024	13.91%	5.00%	5.00%	1.00%		24.91%



INTERNAL AND EXTERNAL MANAGEMENT EXPENSES

\$218.5 million



ASSETS MANAGED IN-HOUSE BY PERA STAFF

59.8%



SAVINGS IN 2023 DUE TO INTERNAL INVESTMENT MANAGEMENT

\$65 million



BASIS POINTS OF TOTAL ASSETS SPENT ON MANAGEMENT

35.5

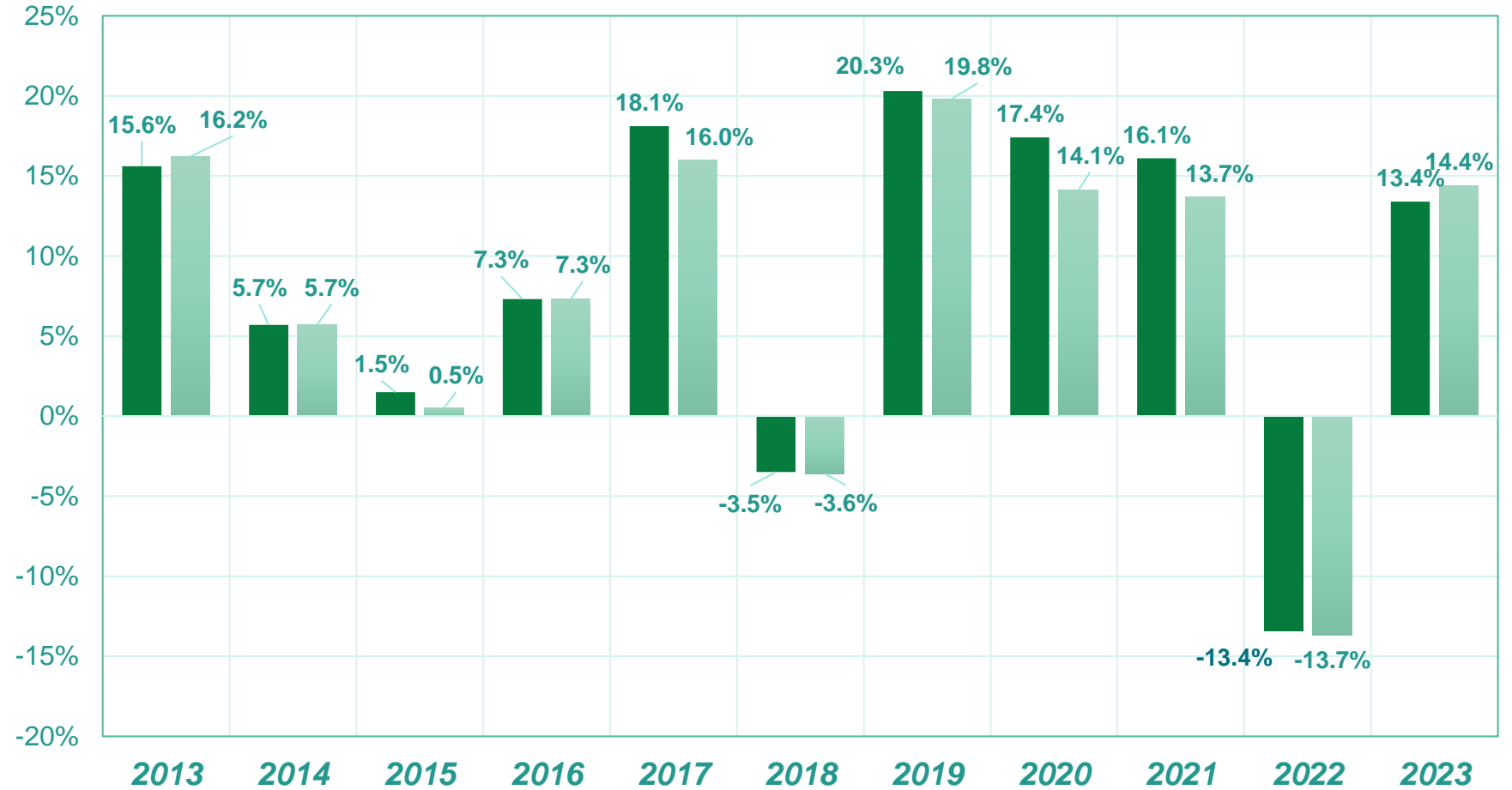
PERA's Investment Program

2023 Investment Performance

Rates of Return Over 10 Years (Net-of-Fees)

■ Rates of Return
■ Policy Benchmark

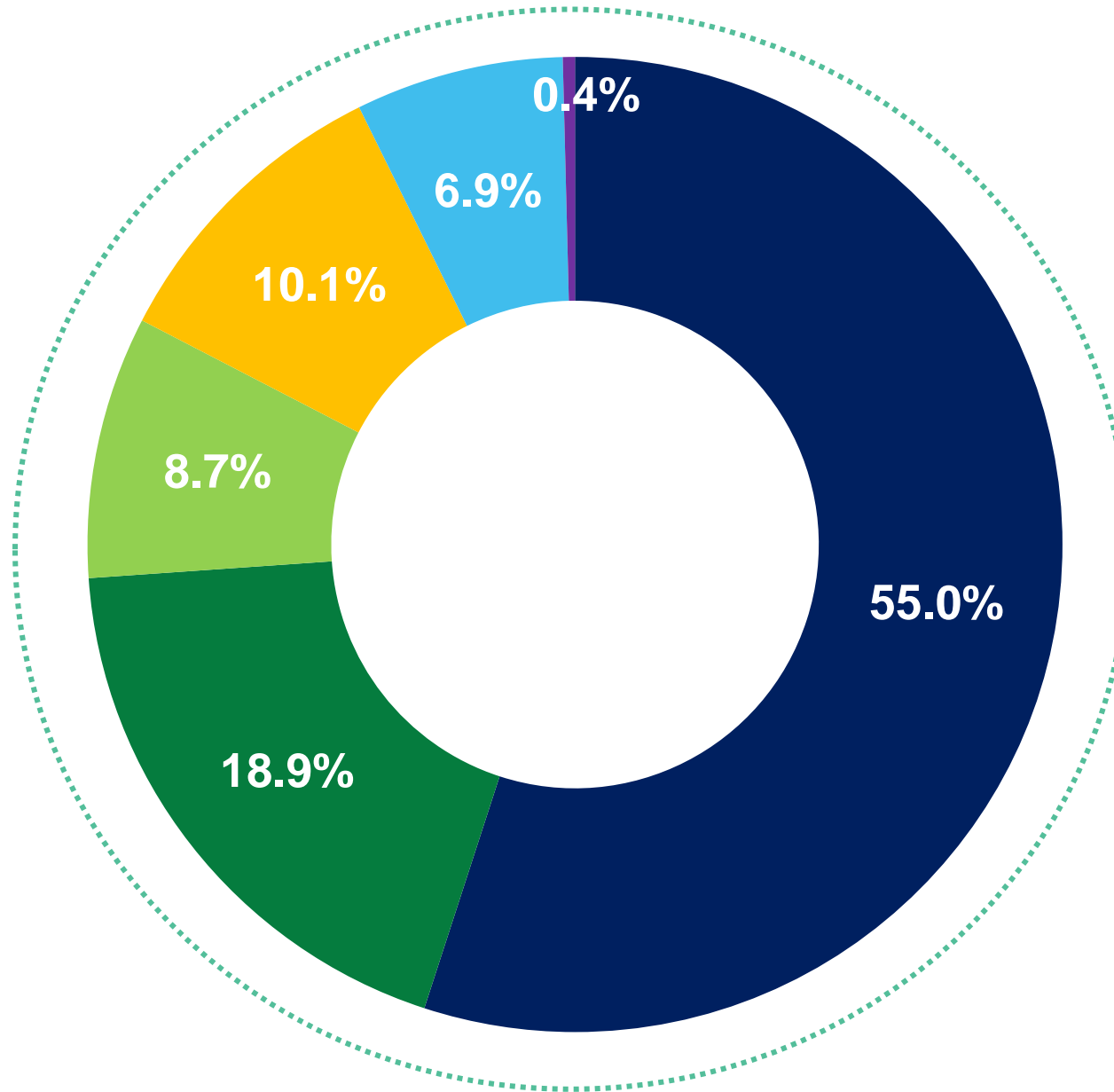
The 10-year annualized return is 7.8%



PERA's Asset Allocation

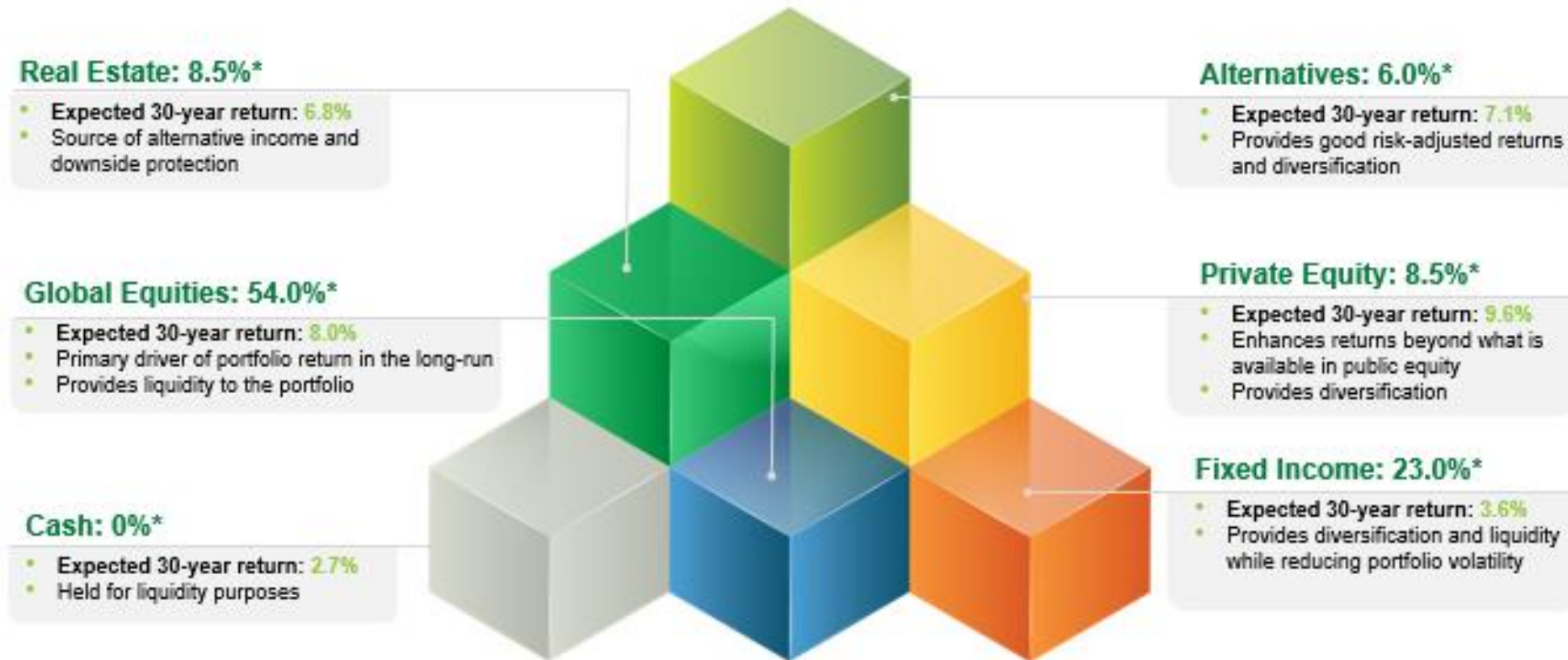
As of December 31,
2023

- Global Equity
- Fixed Income
- Private Equity
- Real Estate
- Alternatives
- Cash



Asset/Liability Study

Takes into account each plan's unique circumstances to determine the Strategic Asset Allocation



* Long-Term target allocation

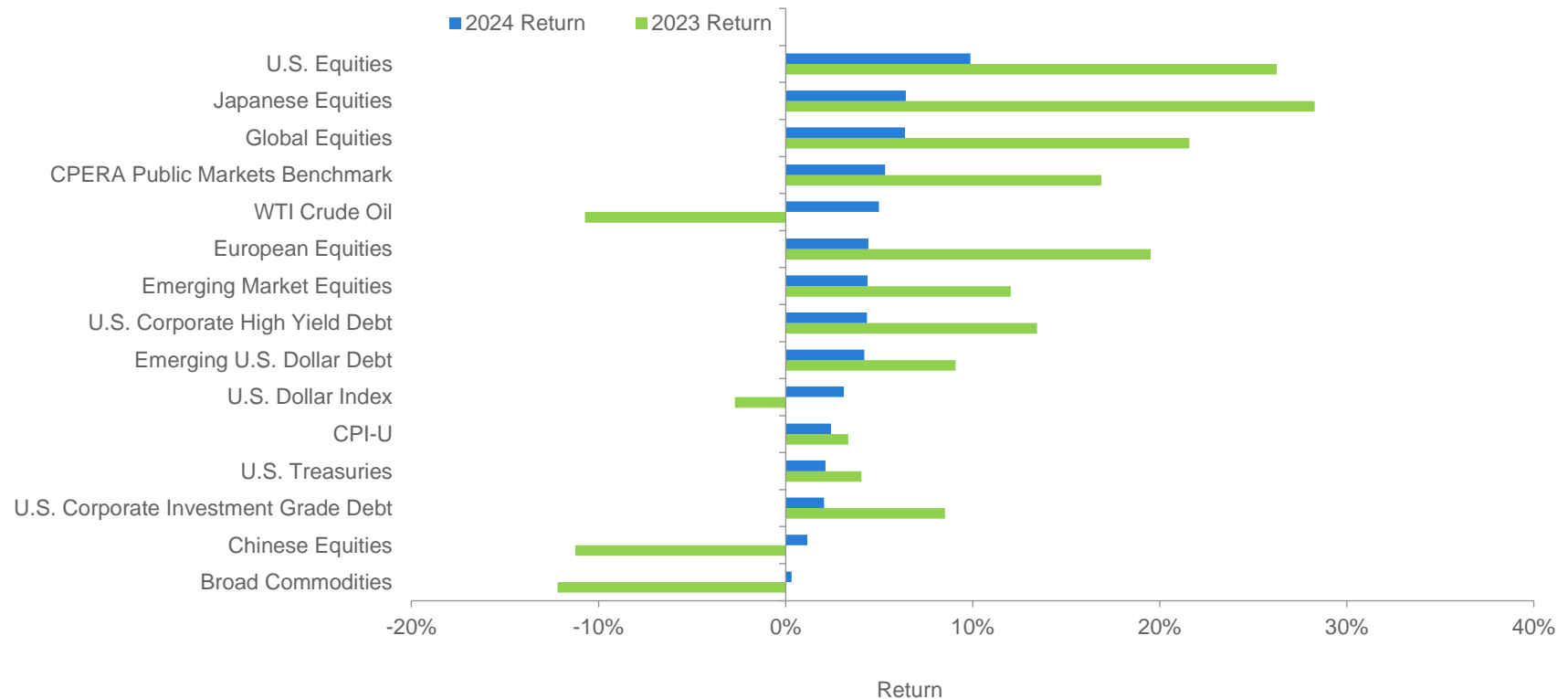
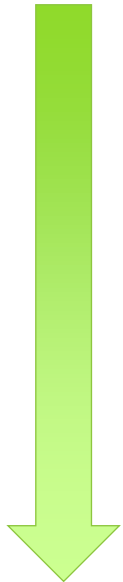
Note: Expected 30-year returns were as of Q1 2019, were provided by the Board's external consultant (Aon) and were used in the 2019 asset/liability study.

Market Performance:

2024 YTD* vs. 2023 Calendar Year

All asset classes are positive YTD. Equities have continued their upward trend from 2024 while oil, commodities, and Chinese equities have reversed their negative performance from the prior year.

2024 Highest Performers



All returns are presented in unhedged USD terms
 *YTD as of 8/7/2024 (CPI-U YTD as of 6/30/2024)

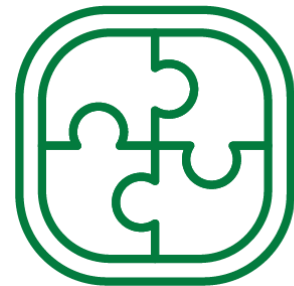
Investing for the Future

Each pillar of Colorado PERA's investment stewardship supports our mission to provide retirement benefits to our members while ensuring the sustainability of the fund.



PROTECT

Protect members' interests by watching costs



INTEGRATE

Integrate relevant factors into PERA's investment strategy



ADVOCATE

Advocate for robust markets



EVALUATE

Evaluate exposures and recognize limitations

2024 Legislation Concerning PERA

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

- This bill increases the current limit of 10 retirees that can be designated to work up to 140 days without a reduction in their benefits by allowing school districts with over 10,000 students to designate an additional retiree for each thousand students in excess of 10,000.

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

- The bill adds superintendents and principals to the list of service retirees that may be hired by a rural school district and be employed without a reduction in retirement benefits.

Senate Bill 24-169: State Firefighter PERA Job Classification

- The bill modifies the definition of “state trooper” to include duly sworn employees of the division of fire prevention & control in the department of public safety effective July 1, 2025.

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

- The bill 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, effective January 1, 2025.

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

- The bill requires the state auditor to contract with an actuarial firm 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 must be completed on or before August 15, 2025.

Snapshot of PERA Significant Events Timeline

	2024	2025	2026	2027	2028
Asset/Liability Study	█				█
Actuarial Experience Study		█			
Actuarial Audit				█	
Proxy Voting Policy	█				
Pension Funding Policy					█
OPEB Funding Policy					█
Strategic Planning	█				
Governance Manual Review			█		
SB 10-001 / SB 18-200 Report		█			
Working After Retirement Report		█			
SB 09-282 DPS True-Up		█			

PNYX Report

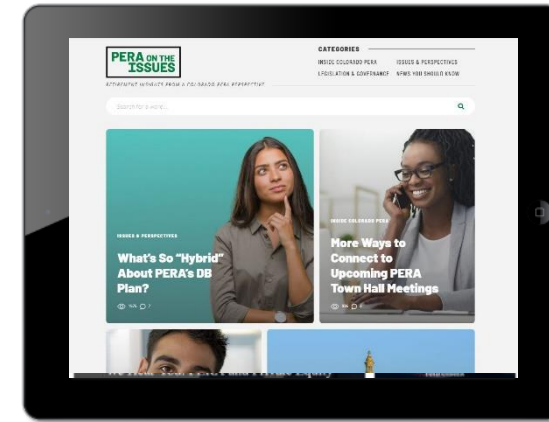
Pursuant to Section 24-51.1-101 (4)(a), the Pension Review Subcommittee shall, every three years, commission a review of the assumptions used to model the financial situation of the Public Employees' Retirement Association

- **Recap progress steps in review**
- **Highlight initial reactions**
- **Expectations & next steps**

Stay in Touch



Website
www.copera.org



Retirement Insights
www.peraontheissues.com

Social Media
[@coloradopera](https://twitter.com/coloradopera)



Call us at
800-759-7372



Appendix

2024 Legislation Concerning PERA

Postponed Indefinitely

Senate Bill 24-044: PERA Retiree Refundable Income Tax Credit

House Bill 24-1159: Contracted Private Employee Exclusion from PERA

House Bill 24-1169: Repeal Divest from Companies with Israel Prohibitions Law

Funding Period Progress¹

40-Year Projections – Projected Years Until 100% Funded

Division Trust Fund	December 31, 2023	December 31, 2022	Change
State	23 Years	32 Years	-9
School	27 Years	34 Years	-7
Local Government	14 Years	23 Years	-9
Judicial	8 Years	12 Years	-4
Denver Public Schools (DPS)	9 Years	13 Years	-4

¹Funding periods are determined on an open-group basis and shown as of the current valuation date only.

Funded Status

As of December 31, 2023

Total Unfunded Liability: \$27.5 billion
Funded Status: 69.6%



STATE UNFUNDED LIABILITY
\$9.6 billion

FUNDED STATUS
66.2%



SCHOOL UNFUNDED LIABILITY
\$16.8 billion

FUNDED STATUS
66.7%



LOCAL GOVT. UNFUNDED LIABILITY
\$572 million

FUNDED STATUS
90.7%



JUDICIAL UNFUNDED LIABILITY
\$58 million

FUNDED STATUS
89.2%



DPS UNFUNDED LIABILITY
\$521 million

FUNDED STATUS
89.6%

Membership (Pension) – Actives

Item	State Division General	State Division Troopers	School Division	Local Government Division	Local Government Division State Troopers	Judicial Division	Denver Public Schools Division
December 31, 2023:							
Number	50,738	2,949	131,188	12,651	49	347	15,626
Average age	45.3	35.3	44.5	44.4	37.2	53.1	41.2
Average service	9.1	4.8	8.9	7.7	1.9	11.6	7.7
Average payroll	\$65,771	\$81,082	\$47,083	\$66,345	\$84,209	\$174,657	\$57,228
December 31, 2022:							
Number	48,820	2,072	128,057	12,071	32	340	15,254
Average age	45.5	36.3	44.5	43.9	37.1	53.3	41.1
Average service	9.2	5.6	9.0	7.8	2.1	11.9	7.6
Average payroll	\$61,864	\$79,043	\$44,279	\$62,784	\$75,023	\$166,369	\$53,127
Change							
Number	+3.9%	+42.3%	+2.4%	+4.8%	+53.1%	+2.1%	+2.4%
Average payroll	+6.3%	+2.6%	+6.3%	+5.7%	+12.2%	+5.0%	+2.4%

Membership (Pension) – Retirees and Survivors

Item	State Division General	School Division	Local Government Division	Judicial Division	Denver Public Schools Division
December 31, 2023:					
Number	44,517	77,165	9,095	460	7,316
Average annual benefit	\$41,152	\$36,931	\$38,761	\$77,844	\$39,275
Average age	73.0	72.7	71.3	75.4	75.1
December 31, 2022:					
Number	43,860	75,094	8,829	446	7,256
Average annual benefit	\$40,909	\$36,798	\$38,530	\$76,355	\$39,250
Average age	72.6	72.4	70.9	75.2	74.9
Change					
Number	+1.5%	+2.8%	+3.0%	+3.1%	+0.8%
Average annual benefit	+0.6%	+0.4%	+0.6%	+2.0%	+0.1%
Average age	+0.4	+0.3	+0.4	+0.2	+0.2

★ Segal

Schedule of Computed Employer Contribution Rates for the 2025 Plan Year
Based upon the Results of the December 31, 2023, Actuarial Funding Valuation

Item	State Division	School Division	Local Government Division	Judicial Division	Denver Public Schools Division
Normal cost rates					
Service retirement benefits	8.33%	10.28%	8.43%	14.66%	8.74%
Disability retirement benefits	0.34%	0.21%	0.31%	0.39%	0.21%
Survivor benefits	0.25%	0.20%	0.28%	0.47%	0.18%
Termination withdrawals	2.85%	2.85%	2.65%	1.02%	3.44%
Refunds	0.82%	0.66%	0.82%	0.07%	0.42%
Administrative expense load	0.40%	0.40%	0.40%	0.40%	0.40%
Total normal cost	12.99%	14.60%	12.89%	17.01%	13.39%
Member contributions	(11.14%)	(11.00%)	(9.02%)	(11.00%)	(11.00%)
Employer normal cost	1.85%	3.60%	3.87%	6.01%	2.39%
Percentage available to amortize unfunded actuarial accrued liabilities	17.98%	16.14%	9.08%	17.22%	7.55%
Effective amortization period	18 years	23 years	8 years	5 years	6 years
Total employer contribution rate for actuarially funded benefits	11.58%	11.40%	11.02%	14.91%	11.40%
Amortization Equalization Disbursement	5.00%	4.50%	2.20%	5.00%	4.50%
Supplemental Amortization Equalization Disbursement	5.00%	5.50%	1.50%	5.00%	5.50%
Less Health Care Trust Fund	(1.02%)	(1.02%)	(1.02%)	(1.02%)	(1.02%)
Less Annual Increase Reserve	(0.73%)	(0.64%)	(0.75%)	(0.66%)	(0.75%)
Less PCOP credit	N/A	N/A	N/A	N/A	(9.69%)
Employer contribution rate for DB plan	19.83%	19.74%	12.95%	23.23%	9.94%
DC Supplement	0.23%	N/A	0.11%	N/A	N/A

Automatic Adjustment Provision

New rates effective July 1, 2024
(No Changes)

PERA IS ON SCHEDULE TO MEET ITS FUNDING GOAL

The automatic adjustment provision is reviewed on an annual basis to help ensure the long-term stability of benefits today and in the future.

As indicated in its 2023 *Annual Comprehensive Financial Report (ACFR)*, PERA is on schedule to meet its funding goal. This means the automatic adjustment provision will not trigger any additional changes in 2025.

Current Provisions



Member contributions will not be affected by the automatic adjustment provision in July 2025.

	State, School, and DPS Divisions	Safety Officers	Local Government	Judicial Division
As of July 1, 2024	11.00%	13.00%	9.00%	11.00%

See copera.org for more information on contribution rates.



Employer contributions will not be affected by the automatic adjustment provision in July 2025.

	State Division	Safety Officers (State)	School and DPS Divisions	Local Government	Safety Officers (Local Govt.)	Judicial Division
As of July 1, 2024	21.61%	24.31%	21.40%	14.78%	17.88%	24.91%

Actual DPS employer rate will be subject to the PCOPs offset. The DC Supplement may also affect rates in the State and Local Government Divisions effective January 1, 2025. See copera.org for more information on contribution rates.



The AI will not be affected by the automatic adjustment provision in July 2025. The AI paid to eligible benefit recipients in July 2024 will be 1.0%. The AI paid in July 2025 for most eligible benefit recipients will be 1.0%.



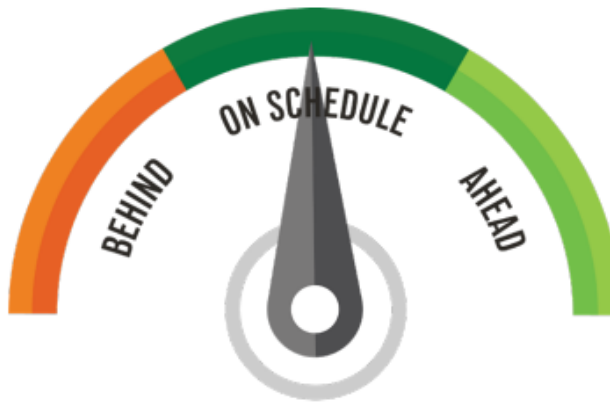
PERA will receive a direct distribution from the State budget for 2024.

How Does the Automatic Adjustment Keep PERA on Schedule?

IF PERA IS BEHIND SCHEDULE

- ↓ Decrease AI percentage by up to 0.25% in one year, not to fall below 0.5%
- ↑ Increase employer contributions by up to 0.5% in one year, not to exceed an additional 2%
- ↑ Increase member contributions by up to 0.5% in one year, not to exceed an additional 2%
- ↑ Increase the direct distribution from the State budget by up to \$20 million in one year, not to exceed \$225 million

PERA'S PROGRESS TOWARD FUNDING GOAL



IF PERA IS AHEAD OF SCHEDULE

- ↑ Increase AI percentage by up to 0.25% in one year, not to exceed 2%
- ↓ Decrease employer contributions by up to 0.5% in one year, not to fall below 2018 levels
- ↓ Decrease member contributions by up to 0.5% in one year, not to fall below 2018 levels
- ↓ Decrease the direct distribution from the State budget by up to \$20 million in one year

2024 Investment Stewardship Report

Transparency and Trust Go Hand-In-Hand

- **C.R.S. § 24-51-220(2)(a)**
 - “How does PERA identify, assess, and manage climate-related risks and opportunities?” (p. 42)
 - **C.R.S. § 24-51-220(2)(b)**
 - “How does PERA consider the impact of climate-related risks and opportunities on its investment strategy and resilience?” (p. 43)
 - **C.R.S. § 24-51-220(2)(c)**
 - “What actions is PERA taking to manage risks that climate change poses to its operations?” (pp. 43-44)
 - **C.R.S. § 24-51-220(2)(d)**
 - “Advocating for Disclosure – Did You Know?” (p. 30)
- **PERA prioritizes financial value over personal values**
 - Investment stewardship philosophy (p. 4)
 - A portfolio built to last (pp. 5-6)
 - Engagement over divestment (p. 26, p.37)
 - **PERA takes an integrative approach when making investment and proxy voting decisions**
 - Material considerations (pp. 10-12)
 - ESG and PERA’s approach (p. 13, pp. 40-41)
 - Portfolio exposures to renewable energy and more (pp. 14-16, p. 33)
 - Proxy voting approach and examples (pp. 18-27, p. 41-42)

Download a copy of the *2024 Investment Stewardship Report* and explore interactive resources pertaining to PERA’s stewardship of plan assets at: <https://copera.org/investments/investment-stewardship>.