COLORADO PERA

Colorado PERA Board of Trustees

Board of Trustees Meeting Materials

November 20, 2026

Agenda

Board of Trustees Meeting

Raymond “Doc” Heath Memorial Boardroom
1301 Pennsylvania Street
Denver, Colorado

Friday November 20, 2026
8:00 a.m.

All times are approximate and for reference only. Items designated for Information are appropriate for Action if the Board wishes to take action.

1. **Approval of Consent Agenda**

   (Governance Item) Action

   Presented by: Rebecca Freyre, Chair, Board of Trustees

   a. **November 20, 2026, Board Meeting Agenda**
   b. **September 23, 2026, Board Meeting Minutes**
   c. **September 24, 2026, Board Meeting Minutes**
   d. **September 25, 2026, Board Meeting Minutes**

2. **Public Comment**

   (Governance Item) Information

   Presented by: Rebecca Freyre, Chair, Board of Trustees

3. **Board Officer Elections**

   (Governance Item) Action

   Presented by: Jason Orvin, PERA Interim Audit Leader

4. **2027 Board Election Calendar**

   (Governance Item) Action

   Presented by: Jason Orvin, PERA Interim Audit Leader

   a. **2027 Board Election Calendar Presentation**

5. **2027 Calendar Year Committee Preferences**

   (Governance Item) Information

   Presented by: Rebecca Freyre, Chair, Board of Trustees

6. 2027 Operating Budget Overview

(Governance Item) Information

Presented by: Sarah Wager, PERA Deputy Executive Director; Cheryl Pattelli, PERA Chief Financial Officer; Rebecca Harren, PERA Chief Human Resources Officer; Catherine Maninger, PERA Director of Accounting/Controller

a. 2027 Operating Budget Presentation

7. Committee Reports

(Governance Item) Information/Action

Audit Committee

Presented by: Timothy M. O'Brien, Chairman, Audit Committee

Benefits Committee Action

Presented by: Nate Geroche, Chair, Benefits Committee

Compensation & Budget Committee Action

Presented by: Amy Grant, Chair, Compensation & Budget Committee

Governance Committee

Presented by: Rebecca Freyre, Chair, Governance Committee

Investment Committee

Presented by: Marcus Pennell, Chair, Investment Committee

8. Strategic Plan Update

(Strategic Plan Item) Information

Presented by: Andrew Roth, PERA Chief Executive Officer/Executive Director; Annalise Anderson, PERA Director of Strategy

a. Strategic Plan Update Presentation

9. Member Contribution Interest Rate

(Statutory Item) Action

Presented by: Patrick Lane, PERA Chief Benefits Officer; Matt Carroll, PERA Senior Director of Benefit Services; Joshua Neugebauer, PERA Assistant Director of Investment Administration; Koren Holden, PERA System Actuary

a. Member Contribution Interest Rate Presentation

b. Policy for Setting the PERA Member Contribution Interest Rate

10. Enterprise Risk & Compliance Update

(Strategic Plan Item) Information

Presented by: Meg Cody, PERA Director of Risk & Compliance

a. Enterprise Risk & Compliance Update Presentation

11. Rulemaking Hearing 1:00 p.m. (set time)

(Governance Item) Action

Presented by: Susan Malcolm, PERA Senior Staff Attorney; Ethan Draper, PERA Staff Attorney

a. Rulemaking Hearing Presentation

12. PRISM Update

(Strategic Plan Item) Information

Presented by: Faheem Naushad, PERA Director of Modernization

a. PRISM Update Presentation

13. Actuarial Audit Results

(Governance Item) Information

Presented by: Koren Holden, PERA System Actuary; Anne Harper, Principal Consulting Actuary, Cheiron; Jake Libauskas, Principal Consulting Actuary, Cheiron; Daniel Rhodes, Principal Consulting Actuary, Cheiron

a. Actuarial Audit Results Presentation - Cheiron
b. Colorado PERA 2026 Actuarial Audit - Cheiron
c. Response Letter to 2026 Actuarial Audit Recommendations – Segal

14. Pension and OPEB Funding Policy Review Plan 2027

(Governance Item) Information

Presented by: Koren Holden, PERA System Actuary; Bill Detweiler, PERA Actuary

a. Pension and OPEB Funding Policy Review Plan 2027 Presentation

15. Legislative Update

(Governance Item) Information

Presented by: Andrew Roth, PERA Chief Executive Officer/Executive Director; Michael Steppat, PERA Director of Public and Government Affairs

a. Legislative Update Presentation

16. Staff Reports

(Governance Item) Information

a. Chief Executive Officer/Executive Director Update
Presented by: Andrew Roth, PERA Chief Executive Officer/Executive Director

b. Market and Portfolio Update
Presented by: Amy C. McGarrity, PERA Chief Investment Officer

c. Legal Update
Presented by: Megan Peitzmeier, PERA Interim General Counsel

17. Board Announcements

(Governance Item) Information
Presented by: Rebecca Freyre, Chair Board of Trustees

18. 2027 (Committee) Board Meeting Dates

(Governance Item) Information
Presented by: Rebecca Freyre, Chair Board of Trustees

- January 29, 2027
- March (25) 26, 2027
- June 8, 2027 (Audit)
- June (24) 25, 2027
- September 15-17 or 22-24, 2027, Planning Session - Location TBD
- November 3, 2027 (Compensation & Budget)
- November (18) 19, 2027

Exhibit A – January 29, 2027, Board Meeting Agenda Draft
Exhibit B – PERA Board 2026 Workplan
Exhibit C – Draft 2027 Board Workplan

The Board may convene in Closed Executive Session pursuant to, but not limited to, the following:

A. Colorado Open Meetings Law, Section § 24-6-402(4)(a): Purchase, acquisition, lease, transfer, or sale of any real, personal, or other property interest;
B. Colorado Open Meetings Law, Section § 24-6-402(4)(b): Conferences with an attorney for the local public body for the purposes of receiving legal advice on specific legal questions;
C. Colorado Open Meetings Law, Section § 24-6-402(4)(c): Matters required to be kept confidential by federal or state law or rules and regulations.
D. Colorado Open Meetings Law, Section § 24-6-402(4)(d): Specialized details of security arrangements or investigations, including defenses against terrorism, both domestic and foreign, and including where disclosure of the matters discussed might reveal information that could be used for the purpose of committing, or avoiding prosecution for, a violation of the law;

E. Colorado Open Meetings Law, Section § 24-6-402(4)(e)(I): Determining positions relative to matters that may be subject to negotiations; developing strategy for negotiations; and instructing negotiators;
F. Colorado Open Meetings Law, Section § 24-6-402(4)(f)(I): Personnel matters except if the employee who is the subject of the session has requested an open meeting, or if the personnel matter involves more than one employee, all of the employees have requested an open meeting.
G. Colorado Open Meetings Law, Section § 24-6-402(4)(g): Consideration of any documents protected by the mandatory nondisclosure provisions of the “Colorado Open Records Act”, part 2 of article 72

Minutes

Board of Trustees Planning Session

Cheyenne Mountain Resort
3225 Broadmoor Valley Road
Colorado Springs, CO 80906

Wednesday September 23, 2026
9:55 a.m.

Board Members Present:	Rebecca Freyre (Board Chair), Eunice Botchway, Tristan Gearhart, Nate Geroche, Amy Grant, Cynthia Loh, Chad Marturano (Zoom), Maruti Moré, Tina Mueh, Timothy O'Brien, Jennifer Pasquino, Marcus Pennell (Zoom), Andrew Schremp, Scott Simon, Tonya Thompson, Treasurer Dave Young
COPERA Staff Present:	Andrew Roth, Sarah Wager, Jesse Bertoli, Ryan Ericson, Rebecca Harren, Jeremy Hill, Patrick Lane, Amy C. McGarrity, Jason Orvin, Cheryl Pattelli, Annalise Anderson, Bill Detweiler, Ethan Draper, Michael Flowers, Ben Garfield, Koren Holden, Rachel Kelley, Patrick von Keyserling, Sterling Lenway-Stowe, Sara Medina, Megan Peitzmeier, Cale Rogers, Rebecca Shelton, Michael Steppat
Others in Attendance:	Suzanne Dugan and Luke Bierman of Cohen Milstein Sellers & Toll PLLC (Cohen Milstein); Saba Hashmi of Mosaic Governance Advisors LLC (Mosaic); Matt Strom, Tanya Dybal and Noel Cruse of Segal; Chris Doll of CEM; James Chung of Reach Advisors

Rebecca Freyre, Board Chair, called the meeting to order at 9:55 a.m. Trustee Timothy O'Brien arrived at 2:03 p.m. and Treasurer Dave Young arrived at 2:05 p.m.

Rulemaking Hearing

The PERA Board of Trustees was unable to hold the scheduled Rulemaking Hearing due to technical issues with the Wi-Fi at the Cheyenne Mountain Resort venue. The Rulemaking Hearing was rescheduled to the November 20, 2026, Board Meeting. The Wi-Fi was down from 9:55 a.m. to 10:37 a.m.

Board Chair Freyre welcomed attendees to the September Planning Meeting of the PERA Board and extended a special welcome to new trustees Tristan Gearhart and Chad Marturano. This marked Chad Marturano's first Board meeting following his election to the State/Higher Education Trustee seat,

effective July 1, 2026. Board Chair Freyre also noted that she appointed Tristan Gearhart to the PERA Board on August 31, 2026, pursuant to C.R.S. § 24-51-203(4), to fill the vacancy created by the August 2026 resignation of former Local Government Division Trustee, Trina Ruhland. As the candidate who received the next-highest number of votes in that election, Tristan Gearhart will serve through the next election, which is scheduled for spring 2027.

Fiduciary Training

Megan Peitzmeier, PERA Interim General Counsel, introduced Suzanne Dugan and Luke Bierman of Cohen Milstein to the Board. The team from Cohen Milstein provided fiduciary training to the trustees, using a series of hypothetical situations and case studies. Discussion focused on maintaining impartiality, avoiding conflicts of interest, understanding communication responsibilities, and ensuring that Board actions are conducted through established governance processes. Trustees were encouraged to rely on available resources and expert guidance when addressing fiduciary questions and governance matters.

Discussion highlighted PERA's long-standing collaborative relationship with the Colorado General Assembly and the value of constructive engagement in support of members' interests. Additional commentary centered on the Board's fiduciary responsibilities regarding emerging risks, including artificial intelligence and cybersecurity. Board Chair Freyre thanked Suzanne Dugan and Luke Bierman for the annual fiduciary education session and noted its value in helping trustees navigate practical governance and fiduciary responsibilities.

Board Vice Chair Election

Jason Orvin, PERA Interim Audit Leader, reviewed the process for nominations and election of the Board Vice Chair position. He explained that any written nominations previously submitted to the Board Chair would be presented first, after which additional nominations could be made from the floor. All nominations are required to receive a second, and nominees proposed by another trustee are required to accept the nomination before being considered. He further explained that, following the close of nominations, each nominee could be provided up to five minutes to address the Board regarding their qualifications and interest in serving as Vice Chair. He noted that an election would be conducted only if more than one trustee was nominated and seconded.

Trustee Tina Mueh nominated Trustee Amy Grant for the position of Board Vice Chair of the Colorado PERA Board of Trustees; seconded by Trustee Eunice Botchway.

Trustee Tina Mueh recognized Trustee Amy Grant's longstanding Board leadership, institutional knowledge, and commitment to the organization, as well as her national level leadership in promoting sound public pension stewardship.

Trustee Amy Grant accepted the nomination for Vice Chair of the PERA Board of Trustees and emphasized her commitment to fiduciary education, collaboration, and thoughtful stakeholder input.

There were no additional nominations for the role of Board Vice Chair.

MOTION: A motion was made by Rebecca Freyre and seconded by Cynthia Loh that Amy Grant be appointed as Board Vice Chair.

The motion was unanimously approved.

Legislative Update

Michael Steppat, PERA Director of Public and Government Affairs, provided an update on the legislative interim period and preparations for the 2027 legislative session. With the 2026 session concluded, staff's focus has shifted to the upcoming election, legislative oversight activities, stakeholder engagement, and issues that could develop into legislation. Significant legislative turnover is anticipated, requiring continued education and outreach to new and returning policymakers. He discussed upcoming oversight hearings, plans to participate in new legislator orientation, ongoing engagement with stakeholder organizations and legislative and Governor's Office staff, and efforts to simplify communications through new fact sheets explaining key financial reports and PERA fundamentals.

Michael Steppat also reviewed issues being monitored ahead of the 2027 session, including the State's budget environment and potential implications for PERA funding mechanisms and the annual $225 million direct distribution; continued legislative interest in private equity and possible changes to anti-BDS provisions; a potential automatic enrollment and escalation concept for new employees participating in PERA's 457(b) Plan; and a possible PERA-initiated technical cleanup bill. He noted that these issues remain preliminary and will continue to be monitored as the 2027 legislative session approaches.

The Board recessed for lunch at 12:00 p.m. and reconvened at 1:00 p.m.

Funding Policy Review Realignment

Koren Holden, PERA System Actuary, and Bill Detweiler, PERA Actuary, reviewed the Board's Significant Events Timeline for actuarial activities through 2029. They noted that the 2026 actuarial audit is underway, with findings expected to be presented to the Board in November 2026. PERA Staff also reported that actuarial audits and experience studies will be conducted on four-year cycles, with the next Experience Study and Asset Liability Modeling Study scheduled for 2028. To better distribute the Board's actuarial responsibilities and align related activities with the new statutory cycle, staff proposed accelerating the Board's pension and OPEB funding policy reviews from 2028 to 2027 and transitioning the periodic reviews from a five-year to a four-year cycle, noting that the shorter cycle would provide more frequent review of the funding policies as PERA approaches full funding. No Board action was required to enable these changes.

Trustee Tina Mueh asked whether moving to a four-year review cycle would have budget implications. Koren Holden explained that the statutory acceleration of the actuarial audit would result in some

additional expense, but the pension and OPEB funding policy reviews are primarily conducted by PERA's internal actuarial team, with outside actuarial assistance as needed. She indicated that the proposed changes are not expected to result in a significant increase in budgetary needs. Trustee Maruti Moré inquired whether the Actuarial Experience Study and Asset Liability Modeling Study could be moved from 2028 to 2027. Staff explained that the timing of the Actuarial Experience Study is governed by the statutorily required four-year cycle and therefore cannot be accelerated. The Asset Liability Modeling Study is scheduled for 2028 under its regular cadence. In response to a follow-up question regarding circumstances that might warrant accelerating the Asset Liability Modeling Study, staff noted that PERA has historically maintained its established schedule and cautioned against changing the timing in response to short-term market conditions, given the long-term strategic nature of asset allocation.

Actuarial Modeling

Koren Holden introduced the actuarial modeling session with representatives from Segal, Matt Strom, Senior Vice President & Actuary and Tanya Dybal, Vice President & Actuary. Koren Holden provided an updated review of the shared responsibility impacts associated with SB 200, explaining that the updated analysis continues to reflect the shared impact among retirees, members, employers, and the State through the direct distribution, although the methodology and percentages have evolved over time. Based on the 2025 valuation, the estimated impact was approximately 22% for retirees, 37% for members, and 41% for employers and the direct distribution combined. She noted that the analysis is based on the present value of benefits and does not fully capture the effect of inflation and reduced purchasing power on retirees.

Trustee Tina Mueh inquired whether there was an intent to maintain the original distribution of shared responsibility established in 2018 or whether the percentages were intended primarily as a means of tracking how the impacts have evolved. Koren Holden explained that changes in methodology make it difficult to return to the original percentages and that the broader objective was to maintain an approximately equitable distribution among retirees, members, and employers/the State.

The team from Segal then presented the actuarial modeling tool, which projects funded status and Automatic Adjustment Provision (AAP) triggers under varying assumptions. The Board reviewed scenarios involving investment returns and the sequencing of returns, historical market downturns, demographic gains and losses, payroll growth, active-member headcount, and changes to the State's $225 million direct distribution. Segal demonstrated that investment experience can significantly affect the timing of AAP adjustments and progress toward full funding, while demographic and payroll changes may have less effect on the overall funding trajectory but can alter the timing of contribution and annual increase adjustments. Modeling also illustrated the importance of the State's direct distribution to the projected funding path. Trustee Cynthia Loh asked how sustained inflation above the current annual increase (AI) cap would affect the modeling and liabilities. Segal explained that retiree benefits are modeled based on the annual increases provided under the plan, while the loss of retiree purchasing power resulting from inflation above the AI cap is external to the projections.

The Board also considered severe market stress scenarios, including historical downturns and extended periods of negative investment returns. Trustee Nate Geroche asked how the Annual

Increase Reserve is treated and whether it is incorporated into the modeling. PERA staff explained that Annual Increase Reserve assets are accounted for separately from division funding assets and liabilities. Each year amounts necessary to support annual increases for eligible members are calculated and transferred from the reserve to the applicable plan assets. Trustees also discussed the historical causes of PERA's existing unfunded liabilities. It was noted that the decline in funded status should not be attributed solely to investment performance, but rather to a combination of factors, including benefit and assumption changes, legislative and Board actions, and significant market downturns. PERA staff noted that subsequent funding reforms, contribution increases, SB 200 changes, and reductions in the assumed long-term rate of return have strengthened PERA's risk profile. The value of continuing to monitor both downside and upside AAP triggers, along with the factors affecting PERA's progress toward full funding was emphasized.

Trustee Timothy O'Brien arrived at 2:03 p.m. and Treasurer Dave Young arrived at 2:05 p.m.

The Board recessed for a break at 2:25 p.m. and reconvened at 2:45 p.m.

PERACare Market and Program Update

Jessica Linart, PERA Director of Insurance, and Noel Cruse, Vice President and Benefits Consultant with Segal, presented an informational update on the PERACare market and program, including healthcare market trends, the results of the recent health plan procurement, and changes taking effect for the 2027 plan year. Noel Cruse reviewed market conditions affecting both the pre-Medicare and Medicare populations. He noted that healthcare costs continue to increase, with particularly significant pressure from prescription drug trends. Key cost drivers include advances in medical technology and treatments, an aging population and increased prevalence of chronic conditions, greater utilization of healthcare services, provider consolidation, cost shifting, benefit design, and legislative and regulatory changes. Medicare plans face additional pressures from changes implemented by the Centers for Medicare & Medicaid Services (CMS), including changes associated with the Inflation Reduction Act and Medicare Advantage risk adjustment. He also discussed strategies plans are using to manage costs, including narrower provider networks and formularies, management of high-cost claimants, biosimilars, clinical controls, site-of-care strategies, and greater use of technology. Noel Cruse described the growing practice of "decoupling" Medicare Advantage and Part D prescription drug coverage. Under this approach, the medical and prescription components are administered separately on the back end, allowing carriers to better optimize risk adjustment and reduce premiums while maintaining a largely seamless experience for members. He noted that the approach has become increasingly common among retirement systems.

Jessica Linart reviewed the results of PERA's recent procurement and the changes planned for 2027. Anthem will provide the pre-Medicare plans, including a national PPO and a narrower-network statewide option. Humana will provide the Medicare Advantage PPO and Part D coverage using the decoupled model, which is expected to result in lower premiums for most Medicare Advantage participants while generally maintaining current benefits and provider access. Moda Health will offer a new Medicare Companion Plan, providing members access to any provider that accepts Medicare and offering an alternative for retirees who prefer traditional Medicare or experience limitations with Medicare Advantage providers. The Medicare Companion Plan will require an active election. She also discussed changes to Kaiser offerings. Due to low enrollment and significant projected costs, the pre-

Medicare Everyday Care Plan will be discontinued, with affected participants transitioned to the deductible HMO. Kaiser pre-Medicare participants are expected to experience a larger premium increase than other PERACare populations, while the Kaiser Medicare Advantage premium will remain relatively stable. Jessica Linart outlined the open enrollment and transition process, noting that existing participants generally will be passively transitioned to the most comparable 2027 plan when their current carrier or plan is ending. Participants wishing to select a different option will need to make an election during open enrollment. PERA will provide enrollment materials, webinars, carrier question-and-answer sessions, and additional communications to assist retirees with understanding the changes.

The Board also received an update on PERACare for Employers. Two statewide PPO options are being added through Kaiser to expand geographic access and potentially make the program attractive to additional participating employers. PERA staff noted that increasing employer participation and the size of the covered population could help spread risk and stabilize the program.

Trustee Tonya Thompson departed the meeting at 4:40 p.m.

CEM 2025 Management Insights Report

Chris Doll of CEM Benchmarking presented the 2025 pension administration benchmarking results, which compare PERA's administrative costs and member service against a peer group of similarly sized U.S. public pension systems. Patrick Lane noted that PERA has participated in CEM benchmarking since its inception and uses the information to identify best practices and opportunities for improvement rather than to optimize a particular benchmark score. PERA’s peer group within CEM remained the same in 2025.

Chris Doll reported that PERA's 2025 overall service score was 89, seven points above the peer median, and had increased five points over the past eight years. PERA's administrative cost was $77 per active member, compared with the peer average of $80, placing PERA in CEM's high-service, lower-cost quadrant. While PERA's ongoing business-as-usual costs were slightly above the peer average, major project spending was below peers. CEM noted that major project costs are expected to increase as PERA progresses with pension system modernization. The presentation highlighted strong service performance in several areas, including contact center accessibility, transaction processing, retirement applications, pension payments, and outreach to inactive members. PERA's average call wait time decreased and remained substantially below the peer average resulting in a significant improvement in undesirable call outcomes. Areas of opportunity included improving first-contact resolution, increasing secure website use among inactive members, and enhancing online pension estimate capabilities through system modernization.

By member category, PERA's retiring member experience service score was 93, annuitant experience service score was 91, active member experience service score was 83, and inactive member experience service score was 81, CEM particularly highlighted retirement processing, noting that 100% of member and survivor pensions were initiated without an interruption in cash flow. Patrick Lane clarified that, although the overwhelming majority of retirement applications are received with complete information through PERA's secure website, retirement benefits calculations continue to involve review

by a PERA analyst. Chris Doll also discussed broader industry trends, including increasing expectations for personalized and digital services, greater reliance on accurate and integrated data, cybersecurity and fraud prevention, and pension system modernization. PERA's digital reach was reported at 81%, compared with 77% for peers and 72% for CEM's broader universe. A significant portion of systems in CEM's universe are undergoing some form of modernization, and PERA's current pension administration system was identified as the oldest among systems participating in CEM's universe.

2026 Retirement Confidence (NPS) Survey

Patrick Lane introduced James Chung, President of Reach Advisors, who presented the results of PERA's 2026 Retirement Confidence and Net Promoter Score (NPS) Survey. Patrick Lane explained that PERA has conducted the survey periodically since 2019 and uses the results primarily as a continuous improvement tool to better understand member satisfaction and identify opportunities to improve the member experience. The 2026 survey marks the fourth iteration of NPS measurement by PERA since 2019.

NPS has a range of measurement of -100 to +100. James Chung reported that PERA's overall NPS increased from 4 in 2024 to 17 in 2026, representing a significant improvement in member satisfaction. Satisfaction increased among both retirees and active members, with retirees continuing to report higher satisfaction overall. The improvement among retirees was attributed in part to increased recognition of PERA's advocacy efforts, including advocacy related to the Social Security Fairness Act in 2024. Active member satisfaction also improved, with increased online engagement, greater access to information and resources, and increased awareness of PERA's advocacy contributing to the improvement. Analysis of the survey results identified trust in PERA as a plan steward as the strongest predictor of overall member satisfaction. Additional analysis found that perceptions of PERA as transparent and accountable and as a provider of useful, relevant, and timely information were also significant drivers of satisfaction. Conversely, negative perceptions in these areas had a substantial effect on member satisfaction.

He discussed the characteristics of survey respondents identified as detractors. Among retirees, dissatisfaction was frequently associated with broader economic and political concerns, including inflation, retirement security, and concerns regarding cost-of-living adjustments. Active member detractors similarly expressed concerns about broader economic and political conditions and tended to have lower levels of engagement with PERA. The presentation noted that continued improvements to PERA's online tools and digital resources appear to be helping active members obtain information more readily and contributing to improved satisfaction. The survey also identified several issues associated with negative perceptions of transparency and accountability, including concerns regarding cost-of-living adjustment changes, actuarial table changes, and healthcare costs. James Chung noted that many factors contributing to member dissatisfaction are outside PERA's direct control; however, clear and timely communication about these issues remains important to maintaining member trust.

James Chung concluded that the survey findings support three primary areas of continued focus: earning members' trust as a responsible plan steward, operating transparently and accountably, and providing members with useful information when they need it. Patrick Lane observed that these findings

closely align with PERA's existing strategic priorities, including organizational sustainability, customer and stakeholder engagement, and system modernization.

With no further business to discuss, the Board Meeting adjourned at 5:30 p.m.

Respectfully submitted by,

Rachel Kelley

Board Liaison

Approved:

Minutes

Board of Trustees Planning Session

Cheyenne Mountain Resort
3225 Broadmoor Valley Road
Colorado Springs, CO 80906

Thursday September 24, 2026
8:00 a.m.

Board Members Present:	Rebecca Freyre (Board Chair), Amy Grant, Eunice Botchway, Tristan Gearhart, Nate Geroche, Cynthia Loh, Chad Marturano, Maruti Moré, Tina Mueh, Timothy O'Brien, Jennifer Pasquino, Marcus Pennell, Andrew Schremp, Scott Simon, Tonya Thompson (Zoom), Treasurer Dave Young
COPERA Staff Present:	Andrew Roth, Sarah Wager, Jesse Bertoli, Ryan Ericson, Rebecca Harren, Jeremy Hill, Patrick Lane, Amy C. McGarrity, Jason Orvin, Cheryl Pattelli, Annalise Anderson, Julie Borisov; Bill Detweiler, Ethan Draper, Michael Flowers, Ben Garfield, Koren Holden, Rachel Kelley, Patrick von Keyserling, Sterling Lenway-Stowe, Sara Medina, Megan Peitzmeier, Gary Ratliff, Cale Rogers, Rebecca Shelton, Michael Steppat
Others in Attendance:	Suzanne Dugan and Luke Bierman of Cohen Milstein Sellers & Toll PLLC (Cohen Milstein); Maureen Reilly and Alex Bell of Aon/McLagan; Josh Wilson of Mercer; Saba Hashmi of Mosaic Governance Advisors LLC (Mosaic); David Stauss of the Stauss Firm; Judge Steven Kabler (Zoom); Caleb Durling of Fox Rothschild LLP; Katie Comstock, Richard Parker, and Eric Friedman of Aon; Larry Lee, of Colorado Employment Law LLC

Rebecca Freyre, Board Chair, called the meeting to order at 8:00 a.m.

Compensation Framework and Governance

Andrew Roth, PERA Chief Executive Officer/Executive Director, and Rebecca Harren, PERA Chief Human Resources Officer, presented an overview of PERA's Compensation Framework and Governance. Rebecca Harren reviewed PERA's compensation structure, components of compensation, and Board-approved philosophies, which are designed to support recruitment and retention while promoting fiscal responsibility, accountability, and transparency. Andrew Roth outlined the respective roles of the Board and management, noting that the Board establishes the Compensation Philosophy,

oversees CEO compensation and organizational resources, and retains authority over certain components of the Investment Incentive Compensation Plan, while management implements and administers the Board-approved framework.

Trustee Maruti Moré asked whether investment performance is measured against liability benchmarks. Andrew Roth noted that a liability benchmark is not currently incorporated into the Investment Incentive Compensation Plan (Plan). Trustee Scott Simon questioned whether the Board's role in the plan had become too operational and whether greater responsibility could be delegated to management, while expressing concern about the potential impact of compensation changes on employee morale and retention. Andrew Roth noted that governance practices vary among public pension systems and emphasized the opportunity to evaluate the appropriate level of Board oversight while maintaining transparency. He also highlighted the stakeholder and plan sponsor interest in the Plan.

Trustees discussed the relationship between investment performance, PERA's unfunded liability, and incentive compensation. Trustee Marcus Pennell emphasized that investment professionals should be evaluated on factors within their control, with liabilities addressed through the Board's asset-liability and asset allocation responsibilities. Trustee Maruti Moré expressed concern regarding historical asset allocation results and suggested reviewing allocation targets and performance benchmarks. Trustees and staff noted that PERA's unfunded liability reflects multiple factors, including market downturns, historical contribution levels, and actuarial assumptions, rather than investment performance alone. Trustee Eunice Botchway asked what opportunities PERA had to further support members and retirees facing increasing health care costs, while also providing incentive compensation to investment staff. Andrew Roth acknowledged the concern and noted that improved investment performance and funded status could provide greater flexibility to support members. Trustee Tristan Gearhart and Treasurer Dave Young emphasized the cost savings of PERA's internally managed investment program and the importance of recruiting and retaining qualified investment professionals. Trustee Jennifer Pasquino noted the benefits of investment performance in avoiding previously anticipated automatic adjustments, while Trustee Tina Mueh emphasized the significant role of investment earnings in achieving PERA's full-funding objective.

Andrew Roth concluded by outlining potential governance refinements, including establishing a regular three-year review cycle for PERA's Compensation Philosophies, formally incorporating the Investment Department Total Compensation Philosophy into the Governance Manual, periodically reviewing the Investment Incentive Compensation Plan and related market data, and establishing defined review intervals for CEO compensation and comparator data.

Investment Total Comp Philosophy & Incentive Plan Review

Maureen Reilly and Alex Bell with Aon/McLagan presented a review of PERA's Investment Total Compensation Philosophy and Investment Incentive Compensation Plan, including an assessment of PERA's compensation structure relative to comparable public pension funds and private-sector firms. The review focused on market competitiveness, recruitment and retention, public accountability, and alignment of incentive compensation with long-term investment performance.

Aon reviewed PERA's current compensation peer group, weighted 75% toward leading public pension funds and 25% toward private-sector firms, reflecting the market in which PERA competes for investment professionals. Under the current philosophy, base salaries are targeted at the market median and maximum total compensation at the 75th percentile of both the public and private peer groups. Aon noted that base salaries generally align with the blended peer-group median, while maximum compensation opportunities remain below the target established in 2018. Aon presented alternatives ranging from maintaining the current philosophy to modifying the private-sector component to continue to reflect a pay-for-performance philosophy in line with public pension fund peers while moderating the influence of private-sector compensation levels.

Trustee Maruti Moré inquired about the inclusion of private-sector compensation data and its relationship to investment performance benchmarks. Aon explained that private-sector data reflects PERA's actual competitive labor market, while investment performance is separately measured against Board-approved benchmarks and alpha targets.

The meeting was temporarily paused from 9:41 a.m. to 9:44 a.m. due to a loss of Wi-Fi service by the meeting venue.

Trustee Jennifer Pasquino questioned whether reducing the private-sector compensation benchmark could increase the risk of losing employees to higher-paying organizations. Aon acknowledged that PERA would not be fully competitive with private-sector compensation and emphasized balancing market competitiveness with public-sector norms and PERA's public-service mission. Trustee Tina Mueh asked about current recruitment and retention challenges. PERA Chief Investment Officer, Amy C. McGarrity, noted that, while some departures may reflect compensation differences, PERA was not experiencing significant difficulty recruiting or retaining investment professionals.

Aon reviewed the Investment Incentive Compensation Plan, noting that it is generally consistent with leading public pension fund practices and bases incentives on total fund, asset class, and individual portfolio performance relative to established benchmarks over multiple periods. Aon identified potential refinements, including standardizing incentive opportunities by position level, increasing the weighting of total fund performance, revising new-hire eligibility, establishing a three-year review cycle, and allowing the Board to defer incentive compensation following significant market declines.

Trustee Tina Mueh asked whether increasing the weighting of total fund performance could strengthen the connection between incentive compensation and PERA's funded status. Aon noted that total fund performance contributes to funded status but emphasized balancing overall results with measures employees can directly influence. Treasurer Dave Young suggested considering a greater role for qualitative factors, such as leadership and teamwork, while staff clarified that qualitative measures under the current plan may reduce or eliminate, but not increase, an incentive award. Trustee Scott Simon asked about deferring incentive compensation during significant market downturns and requested additional information on peer funds' public/private compensation weightings and investment performance hurdles. Aon noted that deferral provisions are rarely exercised but provide flexibility in extraordinary circumstances and indicated it would explore available peer compensation data, while

investment performance hurdles would be more appropriately addressed by PERA's investment consultants.

Aon concluded that PERA's Investment Incentive Compensation Plan is generally aligned with leading public pension fund practices and presented the potential refinements for further Board consideration.

The Board recessed for a break at 10:10 a.m. and reconvened at 10:20 a.m.

CEO Compensation and Performance Pay

PERA Chief Executive Officer/Executive Director, Andrew Roth, departed the room for this agenda item.

Rebecca Harren, PERA Chief Human Resources Officer, introduced Josh Wilson, Partner with Mercer, who reviewed the CEO/Executive Director compensation structure and market positioning. He reported that the CEO's current base salary and maximum total cash compensation are within a competitive market range and reviewed the current performance award, which is capped at 25% of base salary and considers CEO performance, organizational and strategic results, and investment performance. He recommended maintaining a pay-for-performance approach and suggested that the Board consider increasing the maximum incentive opportunity from 25% to 50% of base salary, with a greater portion tied to investment performance. Josh Wilson noted that this approach would emphasize variable compensation and further align CEO compensation with organizational and investment outcomes. No action was requested.

Trustee Amy Grant asked how long-term incentive compensation differs from other incentive arrangements used by public pension funds. Josh Wilson explained that public pension incentive programs generally measure performance over multiple years and therefore already have a long-term focus. Trustee Cynthia Loh asked how the CEO incentive structure should align with the Investment Incentive Compensation Plan during periods of negative market performance. Josh Wilson noted that the investment component should generally follow the same performance considerations applied to investment staff, while recognizing the CEO's broader responsibility for organizational performance.

Trustee Chad Marturano asked how increasing the maximum incentive opportunity to 50% would affect the CEO's market positioning. Josh Wilson indicated that maximum total cash compensation would remain between the market median and 75th percentile if fully earned. Trustees also discussed how a larger incentive opportunity might be allocated among investment performance and other organizational measures. Mercer noted that comparable organizations vary but suggested that a significant portion of any increase could be tied to investment results. Rebecca Harren clarified that the CEO evaluation also includes quantitative measures beyond investment performance, including organizational and member-service measures.

Trustee Marcus Pennell asked about the timing of the Board's decision and Mosaic's involvement. Saba Hashmi with Mosaic confirmed that the Board would revisit CEO evaluation criteria and

compensation in November. Trustees reaffirmed that CEO evaluation and compensation should be considered together. Josh Wilson emphasized the importance of stakeholder considerations and noted that tying variable compensation to measurable investment and organizational performance could strengthen alignment with member interests and enhance transparency. He concluded that the CEO's current compensation is competitively positioned and recommended that the Board consider placing greater emphasis on variable, performance-based compensation.

Cyber-Security Update

The Board approved going into Closed Executive Session at 11:15 a.m. It was appropriate for the Board to go into a Closed Executive Session pursuant to Colorado Revised Statute 24-6-402(3)(a)(IV) for the purpose of discussing details of security arrangements concerning PERA. A quorum was noted by Board Chair Freyre.

Trustees present: Jennifer Pasquino, Nate Geroche, Timothy O'Brien, Tonya Thompson, Scott Simon, Maruti Moré, Andrew Schremp, Tina Mueh, Rebecca Freyre, Marcus Pennell, Eunice Botchway, Amy Grant, Tristan Gearhart, Chad Marturano, Treasurer Dave Young

In addition to the Trustees: Andrew Roth, Sarah Wager, Jesse Bertoli, Ryan Ericson, Jeremy Hill, Patrick Lane, Amy C. McGarrity, Cheryl Pattelli, Megan Peitzmeier, Jason Orvin, Julie Borisov, Ben Garfield, Rachel Kelley, Sterling Lenway-Stowe, Sara Medina, David Stauss, Suzanne Dugan and Luke Bierman participated in the Closed Executive Session. All other PERA staff and guests were asked to leave the room.

The closed Executive Session concluded at 12:10 p.m.

The Board recessed for lunch at 12:10 p.m. and reconvened at 1:00 p.m.

Member Administrative Appeal

PERA Board Chair Rebecca Freyre noted that the next item on the agenda was an Administrative Appeal with Caleb Durling on behalf of PERA and the Appellant Jerome Greene on behalf of himself. Judge Steven Kabler, an Administrative Law Judge with the Office of Administrative Courts, presided over this Appeal remotely.

The Appellant submitted a written request for a PERA Board review of the Panel's Decision from the Administrative Review Hearing. The Administrative Appeal involves member information which is deemed confidential by C.R.S. § 24-51-213(1). The Appellant shall, therefore, have the option to request that the oral argument portion of this hearing be heard in a Closed Executive Session in accordance with the Colorado Open Meetings Act at C.R.S. 24-6-402(3)(a)(III), as the issues discussed are required to be kept confidential.

PERA staff advised the Appellant on September 16, 2026, that the Board review would be conducted in Closed Executive Session, unless Appellant notified PERA that he would prefer the Appeal to be heard

in an open session. Before the Appeal, Judge Kabler asked Appellant whether he wanted the Appeal to be conducted in open or closed session. The Appellant requested that the Appeal take place in open session. Accordingly, oral arguments were conducted in open session, with Board deliberations in Closed Executive Session.

In accordance with the requirements of due process and pursuant to PERA Rule 2.20, Trustees Scott Simon and Amy Grant and Treasurer Dave Young, who served on the Panel, did not participate in the Board's review and left the meeting. Andrew Roth and Megan Peitzmeier also left due to their prior involvement in the Administrative Review process. Judge Rebecca Freyre recused herself due to her position with the Colorado Court of Appeals and the possibility of a future appeal to that court, thereby avoiding any potential or perceived conflict of interest. Trustee Chad Marturano also recused himself due to his current role with the University of Colorado.

Appellant Jerome Greene began his statement at 1:08 p.m. and concluded at 1:23 p.m.

PERA Counsel, Caleb Durling began his statement at 1:23 p.m. and concluded at 1:30 p.m.

The Board of Trustees approved going into Closed Session at 1:30 p.m. All PERA staff left the room, and the Closed Executive Session concluded at 1:37 p.m. Some staff returned to the room.

MOTION: A motion was made by Tina Mueh and seconded by Andrew Schremp that the Board affirm the Findings of Fact, Conclusions of Law and Decision of the Administrative Review Panel to deny Jerome Greene's request.

The motion was unanimously approved.

Remaining PERA staff and all recused PERA trustees returned to the meeting.

Total Portfolio Approach

Katie Comstock, Richard Parker, and Eric Friedman, Partners with Aon, provided an educational overview of the Total Portfolio Approach (TPA), describing it as a governance approach characterized by greater investment flexibility and delegation of decision-making authority to investment staff. Aon emphasized that TPA exists along a spectrum and varies based on an organization's objectives, risk tolerance, resources, investment beliefs, and governance structure. Aon compared TPA with PERA's strategic asset allocation approach, noting that PERA operates within a more structured framework of Board-approved asset allocation targets and ranges while already incorporating some TPA-like elements. Aon reviewed various models, including reference portfolios, tracking error limits, factor-based risk measures, and other guardrails designed to provide investment staff with greater flexibility while maintaining appropriate Board oversight.

Trustees discussed the implications of TPA for alternative and illiquid investments, asset-liability management, actuarial assumptions, risk measurement, and investment flexibility. Trustee Scott Simon asked whether TPA provides greater flexibility for alternative and opportunistic investments. Aon responded that both TPA and traditional strategic asset allocation can incorporate alternative investments, although TPA is generally designed to provide greater flexibility in making portfolio

changes. Aon emphasized that TPA does not inherently provide access to different investments or guarantee improved performance, and that many of its features can also be incorporated within a traditional strategic asset allocation framework.

Aon further emphasized that increased flexibility and delegation require strong governance, clearly defined roles and responsibilities, appropriate risk-management guardrails, adequate staffing and expertise, and robust monitoring and reporting. Trustees also discussed whether advances in technology and artificial intelligence could support more dynamic investment analysis. Andrew Roth asked whether implementation of a more flexible investment model could require greater technological sophistication, data, and analytical capabilities. Aon agreed that certain TPA models require more sophisticated portfolio analytics but emphasized it's appropriate for PERA to focus on the technology and resources that support its chosen governance and investment framework rather than replicating the systems used by other funds.

Aon concluded that the Board should focus on whether individual elements of TPA could enhance PERA's existing investment governance and portfolio management rather than viewing TPA as an all-or-nothing approach. The presentation was educational, and Aon made no recommendation regarding adoption of TPA.

The Board recessed for a break at 2:52 p.m. and reconvened at 3:10 p.m.

Board Discussion

The Board discussed establishing a trustee liaison for the PRISM modernization project to provide additional oversight and help communicate project developments to the full Board. Given the project's scope, complexity, and multi-year duration, trustees discussed the value of having a Board member with relevant technology experience to receive more detailed information, ask informed questions, and provide periodic high-level updates. Trustee Andrew Schremp expressed willingness to serve as the liaison. Trustees generally supported the liaison concept while emphasizing the importance of maintaining appropriate boundaries between Board oversight and management responsibilities.

The Board also discussed the potential use of independent verification and validation (IV&V) services, noting that a trustee liaison and independent reviewer would serve distinct and complementary roles. The liaison would provide the Board with additional perspective and help translate technical information, while IV&V could provide a more comprehensive, independent assessment of project execution. Staff indicated that IV&V services could be considered as the project progresses. The Board supported Trustee Andrew Schremp serving as the PRISM liaison and receiving periodic reports from him in accordance with applicable governance and open meeting requirements.

The PERA Board reviewed the process for trustees to request agenda items. Trustees Tina Mueh and Marcus Pennell discussed their experiences using the agenda request process and noted that it provided a structured means to evaluate a proposed topic, including its alignment with PERA's Strategic Plan and Board workplan and whether additional staff review was needed before presentation

to the Board. Trustees expressed support for the process, noting that it balances a trustee's ability to propose topics with the need to use Board time effectively.

The Board also discussed professional and ethical conduct and the importance of maintaining respectful, fact-based communications during board meetings among trustees and interactions with staff, service providers, stakeholders, and the public. Trustees were encouraged to revisit the Standards of Professional and Ethical Conduct in the Governance Manual, including expectations regarding decorum, integrity, professionalism, and informed fiduciary decision-making.

Finally, the Board reviewed educational topics identified through the Trustee Education Assessment Survey, including artificial intelligence, investments, asset allocation, investment performance, technology governance, digital transformation, and cybersecurity risk oversight. Trustees discussed whether future cybersecurity presentations could include a high-level public component describing PERA's cybersecurity oversight and preparedness, followed by a closed session for confidential security information. Trustees supported greater transparency where appropriate while emphasizing that public disclosures should not reveal information that could compromise PERA's security. Staff will consider an appropriate approach in consultation with cybersecurity expertise.

Annual Meeting with CEO/Executive Director
CEO Performance Evaluation

The Board approved going into Closed Executive Session at 4:04 p.m. It was appropriate for the Board to go into a Closed Executive Session pursuant to C.R.S. § 24-6-402(3)(b)(I) regarding the employment of an employee when that employee requests an executive session. Andrew Roth, PERA's Chief Executive Officer/Executive Director, requested the Board enter Closed Executive Session. A quorum was noted by Chair Freyre.

Trustees present: Rebecca Freyre, Nate Geroche, Amy Grant, Maruti Moré, Tim O'Brien, Marcus Pennell, Scott Simon, Tonya Thompson, Chad Marturano, Tina Mueh, Jennifer Pasquino, Andrew Schremp, Dave Young, Tristan Gearhart, Eunice Botchway, Cynthia Loh

In addition to the Trustees, Andrew Roth, PERA Chief Executive Officer/Executive Director, Suzanne Dugan and Luke Bierman of Cohen Milstein Sellers & Toll, participated in the Closed Executive Session. All other PERA staff and guests left the room.

The Closed Executive Session concluded at 5:13 p.m.

With no further business to discuss, the Board Meeting adjourned at 5:14 p.m.

Respectfully submitted by,

Rachel Kelley

Board Liaison

Approved:

Minutes

Board of Trustees Planning Session

Cheyenne Mountain Resort
3225 Broadmoor Valley Road
Colorado Springs, CO 80906

Friday September 25, 2026
8:00 a.m.

Board Members Present:	Rebecca Freyre (Board Chair), Amy Grant, Eunice Botchway, Tristan Gearhart, Nate Geroche, Chad Marturano, Maruti Moré, Tina Mueh, Timothy O'Brien, Jennifer Pasquino, Marcus Pennell, Andrew Schremp, Scott Simon, Tonya Thompson (Zoom), Treasurer Dave Young
Board Members Absent:	Cynthia Loh
COPERA Staff Present:	Andrew Roth, Sarah Wager, Jesse Bertoli, Ryan Ericson, Rebecca Harren, Jeremy Hill, Patrick Lane, Amy C. McGarrity, Jason Orvin, Cheryl Pattelli, Megan Peitzmeier, Annalise Anderson, Julie Borisov, Bill Detweiler, Ethan Draper, Michael Flowers, Ben Garfield, Koren Holden, John Kasic, Rachel Kelley, Patrick von Keyserling, Sterling Lenway-Stowe, Sara Medina, Tim Moore, Gary Ratliff, Cale Rogers, Rebecca Shelton, Michael Steppat
Others in Attendance:	Suzanne Dugan and Luke Bierman of Cohen Milstein Sellers & Toll PLLC (Cohen Milstein); Amy McDuffee of Mosaic Governance Advisors LLC (Mosaic); Maryanne Hancock of Y Analytics (Zoom); David Trujillo of TPG (Zoom); Katie Comstock, Richard Parker, Daniel Van Breene and Daniel Ingram of Aon

Rebecca Freyre, Board Chair, called the meeting to order at 8:00 a.m.

Approval of Consent Agenda

MOTION: A motion was made by Amy Grant and seconded by Jennifer Pasquino to approve the Consent Agenda as published with the following items:

a. September 25, 2026, Board Meeting Agenda
b. June 25, 2026, Board Meeting Minutes
c. Board Appointed Service Provider Evaluation Summaries

d. Divestment from Companies with Prohibitions Against Israel Restricted Company List
e. Resolution for Signature Authorization

The motion was unanimously approved.

Public Comment

Board Chair Freyre, called for public comment at 8:02 a.m. Jeffrey Sprole, PERA Stakeholder Engagement Manager, confirmed there were no public comment calls in the queue. Board Chair Freyre asked if there were any members of the public in the audience who wished to make comments. There were no members of the public present who wished to speak.

Public comment concluded at 8:03 a.m.

Proclamations

Proclamation Concerning Trustee Lisa Landis

Whereas, Lisa Landis served as a Trustee on the Board of the Public Employees' Retirement Association of Colorado (PERA) from June 2024 to June 2026; and

Whereas, Lisa was first appointed to the Board in 2024, in the State Division Seat – Higher Education and then did not seek re-election in 2026; and

Whereas, during her time on the PERA Board, Lisa served as a committee member of the Audit, Benefits, Compensation & Budget; and

Whereas, Lisa demonstrated her expertise, dedication, and passion for the PERA membership during deliberations of the PERA Board and represented the entire membership honorably during her service; and

Whereas, Lisa embodied the highest qualities of a Trustee and earned the admiration and esteem of PERA Board members, and staff; and

Whereas, Lisa's term on the PERA Board of Trustees ended in 2026; now, therefore, be it

Resolved, that with the highest level of appreciation and congratulations, the Board of Trustees of Colorado PERA formally recognizes and thanks Lisa Landis for her time and service to the PERA membership, and wishes her well as she leaves the PERA Board; and

Resolved, that a copy of this Resolution be placed in the official minutes of the September 25, 2026, PERA Board of Trustees' meeting.

MOTION: A motion was made by Amy Grant and seconded by Dave Young that the Board of Trustees approve the Proclamation for Trustee Lisa Landis.

The motion was unanimously approved.

Proclamation Concerning Trustee Trina Ruhland

Whereas, Trina Ruhland served as a Trustee on the Board of the Public Employees' Retirement Association of Colorado (PERA) from June 2022 to August 2026; and

Whereas, Trina was first appointed to the Board in 2022, in the Local Government Division Seat and departed the Board in August 2026; and

Whereas, during her time on the PERA Board, Trina served as a committee member of the Audit, Governance, Investment, Benefits; and

Whereas, Trina served as the Chair of the Investment Committee from January 2025 to June 2025; and

Whereas, Trina served as the Vice Chair of the PERA Board of Directors from June 2025 to August 2026; and

Whereas, Trina demonstrated her expertise, dedication, and passion for the PERA membership during deliberations of the PERA Board and represented the entire membership honorably during her service; and

Whereas, Trina embodied the highest qualities of a Trustee and earned the admiration and esteem of PERA Board members, and staff; and

Whereas, Trina resigned from the PERA Board of Trustees in 2026; now, therefore, be it

Resolved, that with the highest level of appreciation and congratulations, the Board of Trustees of Colorado PERA formally recognizes and thanks Trina Ruhland for her time and service to the PERA membership, and wishes her well as she leaves the PERA Board; and

Resolved, that a copy of this Resolution be placed in the official minutes of the September 25, 2026, PERA Board of Trustees' meeting.

MOTION: A motion was made by Rebecca Freyre and seconded by Eunice Botchway that the Board of Trustees approve the Proclamation for Trustee Trina Ruhland.

The motion was unanimously approved.

Private Markets Governance

Amy C. McGarrity, PERA Chief Investment Officer, introduced an educational session on governance considerations in private markets. Panelists included Tim Moore, PERA Director of Private Equity; Gary Ratliff, PERA Director of Alternatives; John Kasic, PERA Senior Private Equity Portfolio Manager; Julie Borisov, PERA Assistant General Counsel; Katie Comstock, Partner-Public Sector Solutions Leader, Aon; Daniel Ingram, Partner-Head of Responsible Investing, Aon; David Trujillo, Managing Partner, TPG; and Maryanne Hancock, Chief Executive Officer, Y Analytics. The discussion addressed how

regulatory, governance, reputational, operational, and other financially material considerations are evaluated in private market investments, as well as the respective roles of the Board, PERA staff, general partners (GPs), limited partners (LPs), and portfolio company management. Aon emphasized that responsible investment considerations should be evaluated based on the circumstances of each investment and that the Board's role is to establish investment policy and provide oversight, while staff, consultants, and investment managers implement and monitor the investment program.

Tim Moore described PERA's fiduciary-first due diligence process, which focuses on risk-adjusted returns and evaluates investment strategy, performance, governance, alignment of interests, legal terms, and other financially material risks. PERA staff discussed ongoing oversight through Limited Partner Advisory Committees, manager reporting and engagement, partnership agreements, regulatory requirements, and industry best practices, noting that PERA holds advisory committee seats representing approximately 85% of its private equity assets. Maryanne Hancock discussed the integration of financially material considerations throughout the investment lifecycle, including due diligence, investment decisions, portfolio company monitoring, governance, and exit planning. Julie Borisov reinforced the distinction between the Board's responsibility for establishing the investment policy framework and staff's responsibility for individual investment and portfolio company matters. Staff noted that responses to material concerns may include enhanced monitoring, GP engagement, corrective action, consideration in future commitments, secondary sales, or, in exceptional circumstances, contractual or legal remedies. Aon advised that potential changes to the Statement of Investment Policy should be considered based on whether they would strengthen the existing governance framework rather than duplicate established practices.

Treasurer Dave Young asked how Board-level investment policies inform private markets due diligence and whether additional guidance similar to PERA's proxy voting policies would be appropriate. Staff explained that PERA applies a consistent due diligence framework while evaluating material risks based on the circumstances of each investment. Staff cautioned that prescriptive requirements may be difficult to apply consistently across managers. Staff reiterated that PERA's fiduciary responsibility to pursue the best risk-adjusted returns remains unchanged despite evolving regulatory conditions. Board Chair Freyre asked how PERA monitors GP communications regarding emerging portfolio company issues. Staff described ongoing engagement through advisory committees, manager relationships, regular communications, and interactions with portfolio companies, while the TPG presenters provided examples of proactive communication during significant market and geopolitical events. Trustee Tina Mueh asked how the Board could appropriately participate in oversight and provide feedback without becoming involved in investment operations. Presenters emphasized maintaining clear distinctions between Board policy oversight and staff responsibilities, with Board education, reporting, and policy review serving as appropriate avenues for engagement.

Trustee Scott Simon expressed support for PERA's existing due diligence process and suggested the Stewardship Report as a potential means of communicating private markets governance practices, while questioning whether additional policy requirements would provide sufficient benefit given existing processes. Trustee Tina Mueh asked whether PERA's proxy voting policies inform its participation on private markets advisory committees. Staff explained that advisory committees generally focus on fund-level governance, conflicts of interest, valuations, and best practices, while portfolio company operations remain primarily the responsibility of the GP. In response to Board Chair Freyre's question

regarding verification of compliance with PERA's private markets processes, staff explained that the processes are reviewed through periodic internal audits and annual external audits focused on controls, documentation, and adherence to established procedures. Trustee Nate Geroche suggested incorporating governance considerations into future Board education on individual asset classes. Aon also noted that PERA's participation in industry organizations helps staff remain informed of emerging issues and best practices.

CAP Recordkeeping Services Recommendation

Patrick Lane, PERA Chief Benefits Officer, provided a follow-up to the June Benefits Committee discussion regarding recordkeeping services for PERA's 401(k), 457, and Defined Contribution Plans. He reviewed the Board's oversight responsibilities and PERA's current agreement with Empower, which expires in December 2026 and includes two one-year renewal options. Staff evaluated Empower's performance through a cross-functional review of services and staff experience, an external audit by CLA, the Board's service provider survey, and administrative fee benchmarking conducted by Callan. He reported that Empower's current scope of services remains appropriate, and that staff's experience with its service and engagement has been generally positive. The CLA audit rated Empower satisfactory, which indicates that management is currently maintaining adequate internal controls in all 13 areas reviewed, with only low-risk findings that will be addressed by staff. Board survey results were also generally favorable, with some concerns regarding reporting, investment performance information, costs, and member needs. Callan's benchmarking of 22 comparable plans found PERA's annual administrative fee of $18.50 per account ranked approximately in the top 10th percentile. Based on the overall evaluation, staff recommended continuing the relationship with Empower.

Treasurer Dave Young emphasized the importance of identifying comparable plans used in Callan's benchmarking analysis to support transparency and credibility, and Callan agreed to provide additional information. Trustee Tristan Gearhart asked about Empower's history with PERA and the resources required for an RFP. Staff noted that Empower was selected through the 2020 RFP process and that conducting another RFP would require significant organizational resources. Trustee Tina Mueh expressed support for Empower's low fees and improved member experience and raised concerns regarding the potential for members unwittingly opting for managed-account services. Patrick Lane informed the Board that staff monitors this activity and included a re-election process at the time of the transition to Empower to ensure members make conscious decisions for this service. Staff will continue monitoring. Trustee Chad Marturano asked whether a contract extension would preserve opportunities to negotiate service improvements. Staff confirmed that improvements could continue to be pursued with Empower while avoiding the significant resources required for an RFP during PERA's other modernization initiatives. Treasurer Young requested that staff report back to the Board on improvements achieved through negotiations, and staff agreed.

MOTION: A motion was made by Marcus Pennell and seconded by Tim O'Brien that the Board of Trustees engage with Empower as Capital Accumulation Plans recordkeeper in a one-year extension for 2027 and proceed with negotiating a five-year extension to the existing contract, with two optional one-year extensions, pursuant to Section 20(i) of the Charter for the Board of Trustees and Section 12 of the Board-Appointed Service Provider Selection and Monitoring Policy.
The motion was unanimously approved.

The Board recessed for a break at 10:03 a.m. and reconvened at 10:20 a.m.

Strategic Plan Update

Andrew Roth, PERA Chief Executive Officer/Executive Director and Annalise Anderson, PERA Director of Strategy provided an update on the Year 2 Strategic Plan Implementation Plan. Progress included the development of several fact sheets to support legislator and other stakeholders understanding of PERA's financial stability, the development of surveys for both member and employer insights, implementation planning for modernization initiatives, and a pilot methodology for tracking strategic initiative costs. Cheryl Pattelli, PERA Chief Financial Officer, joined Andrew Roth and Annalise Anderson to propose a recommended revision to the 3-year Strategic Plan. Based on lessons learned from the pilot, staff recommended limiting detailed strategic costing and Board reporting to major initiatives with significant new or multi-year financial impacts, while managing operational and moderate initiatives through the existing budget process. PERA Staff requested modifications to the Objective and Key Result (OKR) language as it existed in Strategic Plan Goal 1, Objective B to reflect this lesson learned through the pilot.

MOTION: A motion was made by Marcus Pennell and seconded by Amy Grant that the Board approve the revision to the existing OKR language in Strategic Plan Goal 1, Objective B, as presented in the September 25, 2026, Board Meeting Materials 6.a. Strategic Plan Update.

The motion was unanimously approved.

Amy McDuffee of Mosaic Governance Advisors and Annalise Anderson then previewed development of PERA's 2028–2030 Strategic Plan. The approximately year-long process will include an environmental scan, expanded member and stakeholder input, review of PERA's mission, vision, and core values, Board strategy discussions, and alignment of strategic priorities with the budget process. The process will also incorporate PERA's enterprise risk, compliance, and data analytics functions, with a draft plan scheduled for Board review in September 2027 and final approval anticipated in November 2027.

Board Chair Freyre asked whether moving the Board's strategic planning engagement earlier in the year would provide sufficient time for meaningful discussion given the Board's typically full March agenda. Amy McDuffee clarified that March would focus on findings from the environmental scan, followed by a separate two- to three-hour Board strategy workshop later in the spring. Treasurer Dave Young expressed support for expanding member input, noting the importance of grounding strategic decisions in stakeholder perspectives. Board Chair Freyre asked whether input from the plan sponsor and other stakeholders would also be incorporated. Staff confirmed that outreach would include legislators, members, employers, associations, Board consultants, trustees, and staff. Trustee Chad Marturano emphasized beginning the planning process with a clear understanding of PERA's mission and vision before identifying strategic priorities. He also encouraged a focused plan that establishes high-level Board priorities without becoming overly detailed or operational. Mosaic agreed that mission, vision, and values should provide the foundation for the planning process and noted that the Board would have an opportunity to review those elements and determine whether revisions are appropriate.

Staff Reports

Chief Executive Officer/Executive Director Update

Andrew Roth, PERA Chief Executive Officer/Executive Director, provided an organizational update, reporting that PERA's net position exceeded $75 billion at year-end 2025 and that membership continued to grow toward 750,000. Andrew highlighted member outreach through virtual and in-person town halls, which provide opportunities to share information, address member questions, and promote transparency. He also discussed ongoing engagement with legislators and other stakeholders throughout the year to strengthen relationships, maintain open lines of communication, and better understand emerging priorities. Additional organizational efforts included trustee onboarding, succession and workforce planning, executive recruitment, and expanded employee engagement.

Andrew Roth also reviewed development of the 2027 operating budget, emphasizing priorities related to modernization, succession, stakeholder outreach, cybersecurity and information security, and risk mitigation. He noted that staff has strengthened the budget review process to ensure proposed investments are strategic, sustainable, and aligned with organizational priorities. The proposed budget will be presented to the Compensation and Budget Committee before consideration by the Board.

Market and Portfolio Update

Amy C. McGarrity, PERA Chief Investment Officer, provided a market and portfolio update. The total fund returned 7.2% year-to-date through June 30 and 14.4% over one year, with short-term results affected by private market reporting lags. She emphasized PERA's long-term investment perspective and discussed market risks related to inflation and interest rates, government deficits, AI-related concentration, and private markets liquidity. She reported that all asset classes remained within Board-approved ranges and active risk limits, with the private equity underweight reflecting the pace of capital deployment rather than a change in strategy.

She also reported that private equity systems modernization remains delayed while a critical component is being evaluated, while the broader investment technology roadmap remains on track. In response to trustee questions regarding private equity performance and longer-term asset allocation, Amy McGarrity explained that the Board establishes strategic asset allocation through the periodic asset-liability study and staff implements the strategy within approved ranges. She emphasized that each asset class serves a distinct portfolio purpose, and that performance should be evaluated over a long-term market cycle.

Chief Human Resources Officer Update

Rebecca Harren, PERA Chief Human Resources Officer, provided an overview of Human Resources and its role in supporting PERA's strategic plan through workforce readiness, leadership continuity, culture and engagement, total rewards, and operational effectiveness. She reported that PERA had 392 employees as of July 31 and highlighted continued internal advancement, with 17 employees promoted during the year. She noted that voluntary turnover had increased slightly, driven largely by retirements, reinforcing the importance of succession planning and knowledge transfer as a significant portion of PERA's workforce approaches retirement eligibility.

She highlighted several workforce and engagement accomplishments, including PERA's recognition as a Denver Top Workplace for the fifth consecutive year and 96% participation in the Gallup Employee Engagement Survey, with PERA achieving the 93rd percentile among participating employers. She also discussed continued efforts to embed PERA's culture anchors, expand employee listening and engagement opportunities, strengthen workforce and succession planning, and enhance leadership development and internal knowledge sharing. She also reviewed enhancements to HR operations and learning and development, including expanded staffing, the implementation of the Achieve Plus learning platform, and additional leadership development and feedback tools. Looking ahead to 2027, HR will continue advancing workforce and succession planning, safe and responsible AI use, culture and leadership initiatives, total rewards, and a more strategic HR business partner model to support organizational needs.

Chief Benefits Officer Update

Patrick Lane, PERA Chief Benefits Officer, provided an update on Benefits Services, noting that overall activity remained stable, with service credit purchases continuing to decline. He highlighted PERA's continued shift toward a digital-first, multi-channel approach to member service and education, with the majority of counseling and educational engagement now occurring through virtual, telephone, webinar, and on-demand channels. He reported continued strong customer service performance, with an 84% service level against an 80% target despite current vacancies and noted increased engagement with digital educational content across members' career stages.

He also reviewed enhancements to employer engagement, including expanded electronic communications, a redesigned and searchable Employer Topics resource, and an enhanced employer website with roles-based navigation for HR, payroll, finance, and new employer representatives. He discussed the development of employer personas based on research and employer feedback to support more targeted communications. In response to a trustee question regarding recurring audit findings, Patrick confirmed that staff plans to incorporate audit-related guidance into short-form employer training and educational resources.

Patrick Lane concluded by recognizing the recent passing of former Benefits Services Compliance Manager Derek Dye and Employer Relations Manager Katie Remington, acknowledging their significant contributions to PERA, its members, and employers. He also thanked Human Resources and the Council of Community and Belonging for supporting staff following their passing. Treasurer Dave Young shared his personal experience working with Derek and recognized his professionalism and commitment to assisting PERA members.

Legal Update

Megan Peitzmeier, PERA Interim General Counsel, provided an update on the Office of the General Counsel. She noted that the Office includes three primary functions: Enterprise Risk and Compliance, Board Liaison, and the legal team of attorneys and paralegals. Megan reported that the department has continued operations without interruption following staffing transitions earlier in the year. She invited questions regarding the Legal Update, noting that any substantive discussion would occur in executive session. No questions were raised.

Proposed 2027 (Committee) Board Meeting Dates

The Board considered the proposed 2027 Board and Committee meeting schedule.

MOTION: A motion was made by Amy Grant and seconded by Eunice Botchway that the Board approve the following 2027 Board and Committee Dates

- January 29, 2027 – Board Meeting
- March 25, 2027 – Committee Meetings
- March 26, 2027 – Board Meeting
- June 8, 2027 - Audit Committee Meeting
- June 24, 2027 – Committee Meetings
- June 25, 2027 – Board Meeting
- Sept. 15-17, 2027 or Sept. 22-24, 2027 – Planning Session (based on venue availability)
- Nov. 3, 2027 – Comp & Budget Committee Meeting
- Nov. 18, 2027 – Committee Meetings
- Nov. 19, 2027 – Board Meeting

The motion was unanimously approved.

Board Announcements

Board Chair Freyre asked if there were any board announcements. There were no additional announcements.

With no further business to discuss, the Board Meeting adjourned at 12:15 p.m.

2026 (Committee) Board Meeting Dates

November 4, 2026 (Compensation & Budget)
November (19) 20, 2026

Respectfully submitted by,

Rachel Kelley

Board Liaison

Approved:

Board Election Overview

Jason Orvin
Interim Audit Leader

November 20, 2026

COLORADO PERA®



2027 Trustee Seats Up for Election & Term Expirations

Seat	2027	2028	2029	2030
State (not Higher Ed)			Maruti D. More	
State (Higher Ed)				Chad Marturano
State (not Higher Ed)		Scott Simon		
School			Eunice Botchway	
School				Tonya J. Thompson
School		Nathan Geroche		
School			Marcus A. Pennell	
Local Government	Tristan Gearhart			
Judicial	Rebecca Freyre			
Retirees (School)			Tina Mueh	
Retirees (State)	Timothy O'Brien			
Denver Public Schools		Amy Grant		
Governor Appointee		Cynthia Loh		
Governor Appointee				Jennifer Pasquino
Governor Appointee			Andrew Schremp	
State Treasurer (no term limit)				

2027 Board of Trustees' Candidate Election Calendar

Jan 4	Candidacy application begins; candidacy packets available
Feb 26	Last day to request candidacy packets*
Mar 1	Deadline to upload petitions and biographical information to SBS is 11:59 p.m. (MT)**
Mar 12	Candidate will receive letter of petition validation from PERA
Mar 22	Deadline for a candidate to provide notice to PERA of withdrawal**
Mar 26	Board waives election of any uncontested positions (at March Board meeting)
Mar 26	Candidate list available from PERA (after March Board meeting)
May 3	Candidate information posted on PERA website
May 3–7	Ballots mailed
May 21	Deadline for requesting a duplicate or special ballot from SBS
May 31	Deadline for ballots to be postmarked; Internet, phone, and mobile app/ secure member portal voting closes at 11:59 p.m. (MT)**
June 25	Presentation of certified election results to Board for approval and notification to all candidate of certified results after Board approval.
July 1	Deadline to submit ballot recount requests to PERA**

* PERA encourages candidates to apply for candidacy at least 7-10 days prior to this date to allow sufficient time to collect valid signatures.

** PERA/SBS must receive notification and/or materials by this date.

Promotion Plan

- To promote awareness of open seats:
  - Board election announcement in Member Report newsletter of upcoming candidacy/open seats (send Nov 11)
  - Email announcement of candidacy opening
    - Judicial and Local Government members, and Retirees (State, Local Govt, and Judicial) (send Jan 4)
    - Judicial and Local Government employers (send Jan 5)
  - Email reminder on candidacy deadline
    - Judicial and Local Government members, and Retirees (State, Local Govt, and Judicial) (send Feb 2)
    - Judicial and Local Government employers (send Feb 3)

Promotion Plan

- To solicit voting participation:
  - “Ballots on the Way” email
    - All members eligible to vote (send May 4)
  - “Time to Vote” email
    - All members eligible to vote (send May 12)
  - “Voting Deadline Reminder” email
    - All members eligible to vote (send May 27)

Questions?

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2027 PERA Operating Budget

Andrew Roth
Chief Executive Officer/Executive Director

Sarah Wager
Deputy Executive Director

Cheryl Pattelli
Chief Financial Officer

Rebecca Harren
Chief Human Resources Officer

Catherine Maninger
Director of Accounting/Controller

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Agenda

- 2027 Budget Overview and Key Drivers
- Strategic Priorities and Value Delivered
- Workforce and Capacity Investments
- Modernization and Other Operating Investments
- Multi-year Outlook and Action
- Appendix

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Where we are in the budget process

May – June	July – August	September – October	November	December – January
Direction Setting Executive Budget Team (EBT) set principles, priorities, and guidelines **Complete**	**Division Development** Kickoff with chiefs and directors, requests and forecasts built **Complete**	**Enterprise Review** Division presentations to EBT, enterprise recommendation **Complete**	**Board Consideration And Approval** Budget and Compensation Committee, then the full Board **We are here**	**Post Budget Debrief** All-staff budget meeting, lessons learned **Next**

Enhanced budget processes increased enterprise-level review and discipline

Enhancement	How it showed up in 2027
Executive-level oversight	The Executive Budget Team (EBT) established budget principles and guidelines, heard division presentations, engaged in discussion, and evaluated requests before developing the enterprise recommendation
Strategic prioritization	Requests were evaluated against the Strategic Plan and organizational priorities
Multi-year planning	Requests identified ongoing obligations and projected 2028-2030 costs; PRISM planning expanded to 24-months
Stronger decision support	Expanded documentation requirements including, but not limited to, greater detail on alternatives, risks if not approved, priority rankings, and KPIs; Chiefs and Directors presented budgets to the EBT
Broader engagement and communication	Greater engagement and communication through the director kickoff, open budget presentations, broader leadership participation, a company-wide budget meeting, and post-budget debrief

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2027 Budget Overview and Key Drivers

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Executive Summary

Key Highlights

Modernization moves from planning to build

PRISM Wave 1 ($12.4M) and investment systems modernization ($3.6M) are the largest project investments

Targeted capacity supports strategic and organizational priorities

New roles support modernization delivery, succession, financial controls, cybersecurity, and employer outreach

Enhanced budget processes increased discipline

About half of requested FTE recommended; 71 non-personnel line-item adjustments reduced requests by $1.1M

$166.9M

2027 total budget; up $20.3M (+13.8%) from the 2026 budget of $146.6M

+6.1%

Growth in the ongoing budget, excluding one-time and project costs

$19.3M

One-time and project costs, up from $7.5M. 58.1% of the total budget increase

21.5 FTE

New FTE proposed of 42 requested. $4.9M, 24.1% of the total budget increase

Action requested:
Approve the 2027 Operating Budget of $166,867,778

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Non-personnel operating expenses drive the increase; personnel is 68% of the budget

$ Millions

Category	2026 Budget	2027 Proposed Budget	Change	% Change	Share of 2027 Budget
Personnel	$103.7	$113.1	$9.4	9.1%	67.8%
*Non-Personnel Operating	39.0	53.1	14.1	36.2%	31.8%
Capital	3.2	0.0	(3.2)	-100.0%	0.0%
Contingency	0.7	0.7	0.0	0.0%	0.4%
Total	**$146.6**	**$166.9**	**$20.3**	**13.8%**	**100.0%**

*2027 Non-Personnel Operating includes services and charges ($50.6M), supplies and materials ($1.8M), and Pointe and parking, net of rental income $0.7M. See Appendix A1-A2 for detail.

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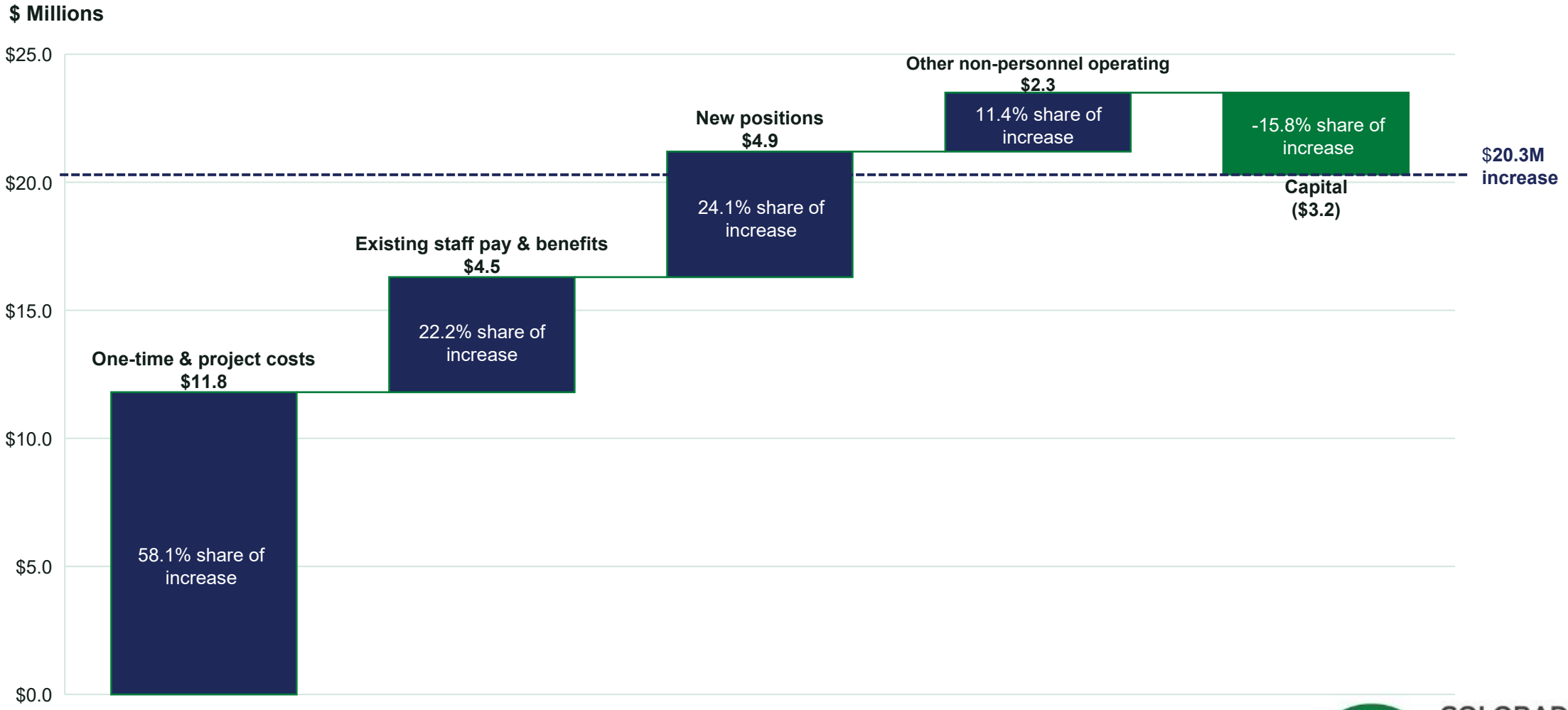
Project costs, existing staff compensation, and new positions account for $20.3M year-over-year increase



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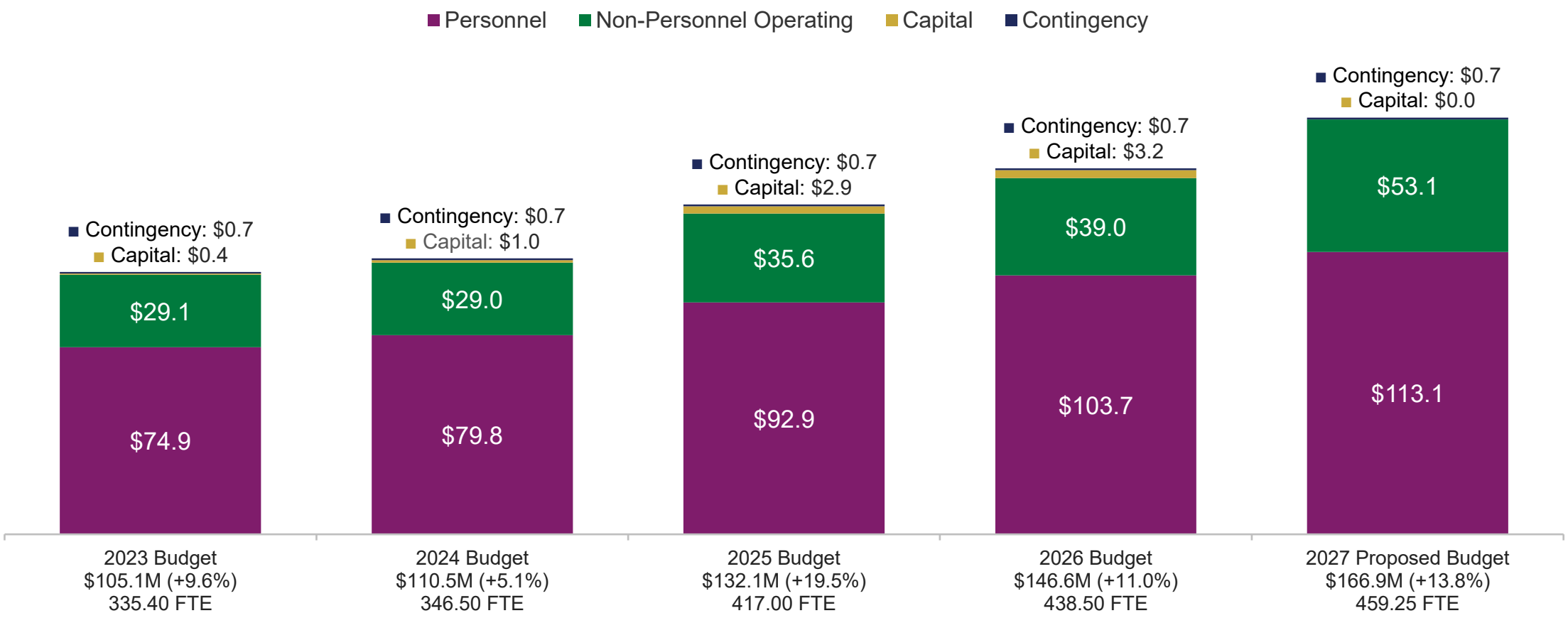
Growth since 2024 reflects investment in modernization and operating capacity



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Strategic Priorities and Organizational Value

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Strategic Plan goals and organizational priorities guide 2027 budget

Strategic Plan Goal	2027 Organizational Priorities
 **Goal 1** **Financial Stability** Strengthen PERA's long-term financial health	**Risk mitigation and audit findings**
 **Goal 2** **Customer/Stakeholder Experience** Be a trusted partner in service of our customers	**Stakeholder outreach** *Board-approved priority*
 **Goal 3** **Organizational Excellence and Modernization** Create value through exceptional performance	**Modernization projects** *Board-approved priority*; **Succession planning** *Board-approved priority*; **Cybersecurity and information security**

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The 2027 budget supports PERA's members, employers, and assets

732,169 member accounts served

145,554 benefit payments per month

$5.6B annual retirement benefits paid

7,108 total retirements

232,572 customer calls and emails answered

414 employers supported

91,485 enrolled in PERACare health, dental, and vision plans

93,194 enrolled in PERAPlus 401(k)/457 and DC Plans

$7.3B economic output in Colorado from benefit payments

Source: 2025 Data

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Managing 62% of assets in-house avoided estimated $100M of fees in 2025

$23.6M

2025 cost of internal management, versus an estimated $124.0M to outsource

62%

Of total assets managed in-house – 74% of equities and 100% of fixed income

$248.5M

Total internal and external management expenses in 2025

33.1 bps

Of total assets spent on investment expenses

$75.1B

Assets under management (12/31/25)

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Workforce and Capacity Investments

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New positions account for 52% of $9.4M personnel increase

2027 Personnel = $113.1M, +9.1%

Driver of Increase	Increase ($M)	Share of Increase
New positions (21.5 FTE)	$4.9	52.1%
Merit increases	1.9	20.2%
Promotions	0.6	6.4%
Market adjustments	0.4	4.3%
Performance awards, existing staff (employees outside the investment incentive plan)	0.5	5.3%
Pension contributions on performance awards	0.9	9.5%
Investment incentives, existing staff	0.5	5.3%
Health plan costs (medical, HSA, accident/hospital), current staff	0.4	4.3%
Other rate and benefit changes (net)	(0.7)	-7.4%
Total	**$9.4**	**100.0%**

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Nine of 21.5 recommended FTE support modernization delivery

Goal 3: Organizational Excellence and Modernization

15.25 FTE

Goal 1: Financial Stability

4.0 FTE

Goal 2: Customer/ Stakeholder Experience

2.25 FTE

Modernization delivery — **9.00FTE** **$2.1M**
Program Manager, Business Analyst, QA Manager, 2 Senior Developers, DevOps and Linux Engineers, 2 Investment Help Desk

Succession, development, and depth — **5.25 FTE** **$1.1M**
Actuarial Analyst, Fixed Income PM, Portfolio Associate, HR Business Partner, L&D / LMS Coordinator, Legal Intern

Risk, controls, and audit — **3.00 FTE** **$0.7M**
Procurement Manager, Payroll Manager, Senior IT Internal Auditor

Stakeholder and employer outreach — **2.25 FTE** **$0.5M**
Director - Employer Services, Employer Relations Coordinator, Communications Intern

Cybersecurity and AI — **2.00 FTE** **$0.5M**
Security Architect - AI and Detection Engineering, AI Enterprise Architect

Modernization and Other Operating Investments

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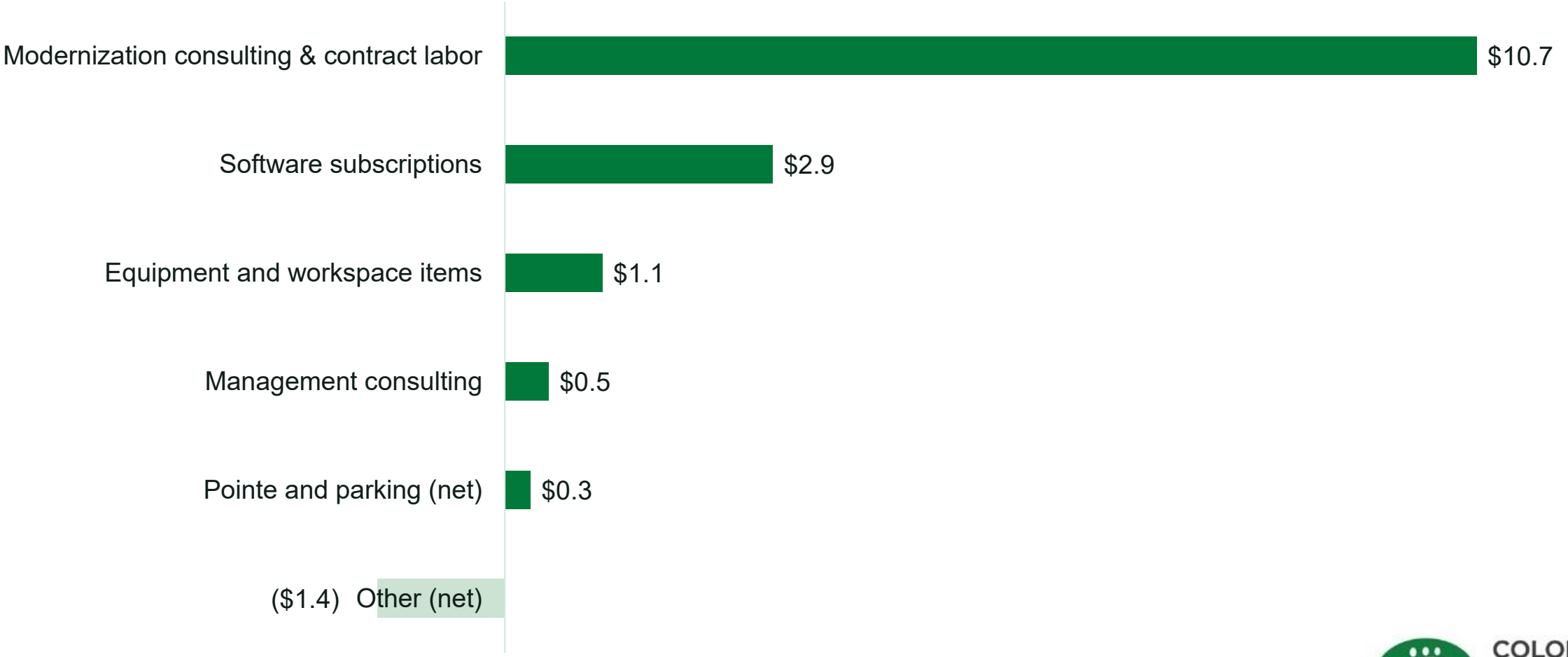
Modernization consulting and contract labor drive 76% of non-personnel operating growth



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PRISM Wave consulting and contract costs total $12.4M in 2027

2027 PRISM Projects
Waves 0 & 1

- **Rate Maintenance**
- **Employer Directory**
- **Employer Reporting**
- **Base Benefit Calculator**

Description	Amount ($M)
Contract labor - 14 roles + 20% contingency	$7.3
Provaliant program and delivery management	2.5
ICON/Linea data architecture and governance	1.1
Accounting modernization implementation (vendor costs)	0.9
Independent verification and validation	0.5
Modernization office support	0.1
Total	**$12.4**

Plus $7.9M of PERA staff time already in division budgets: About **$20.3M total PRISM program cost in 2027**.

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Investment and Finance systems modernization add $4.2M

Investment systems

$3.6M

- $3.0M roadmap (Investment Systems Modernization)
- $0.6M upgrades, integrations, production fixes (Investment Systems Modernization)

Finance systems

$0.6M

- $0.3M ACFR and budget system updates
- $0.3M Accounting modernization system: Expenses and Projects modules and post-implementation support

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Enterprise cybersecurity: consolidated, more visible, and focused on emerging risks

Information Security Division

$4.0M

Up $1.9M from 2026

New 2027 Security Investments	Amount ($M)
AI security tooling and interaction monitoring	$0.2
Consulting and CyberArk implementation	0.2
Security analytics and detection	0.1
Software licenses transferred from IT	0.9
Security Architect, AI, and Detection (FTE)	0.3
Other personnel, travel and supplies increases	0.2
Total	**$1.9**

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Multi-Year Outlook and Action

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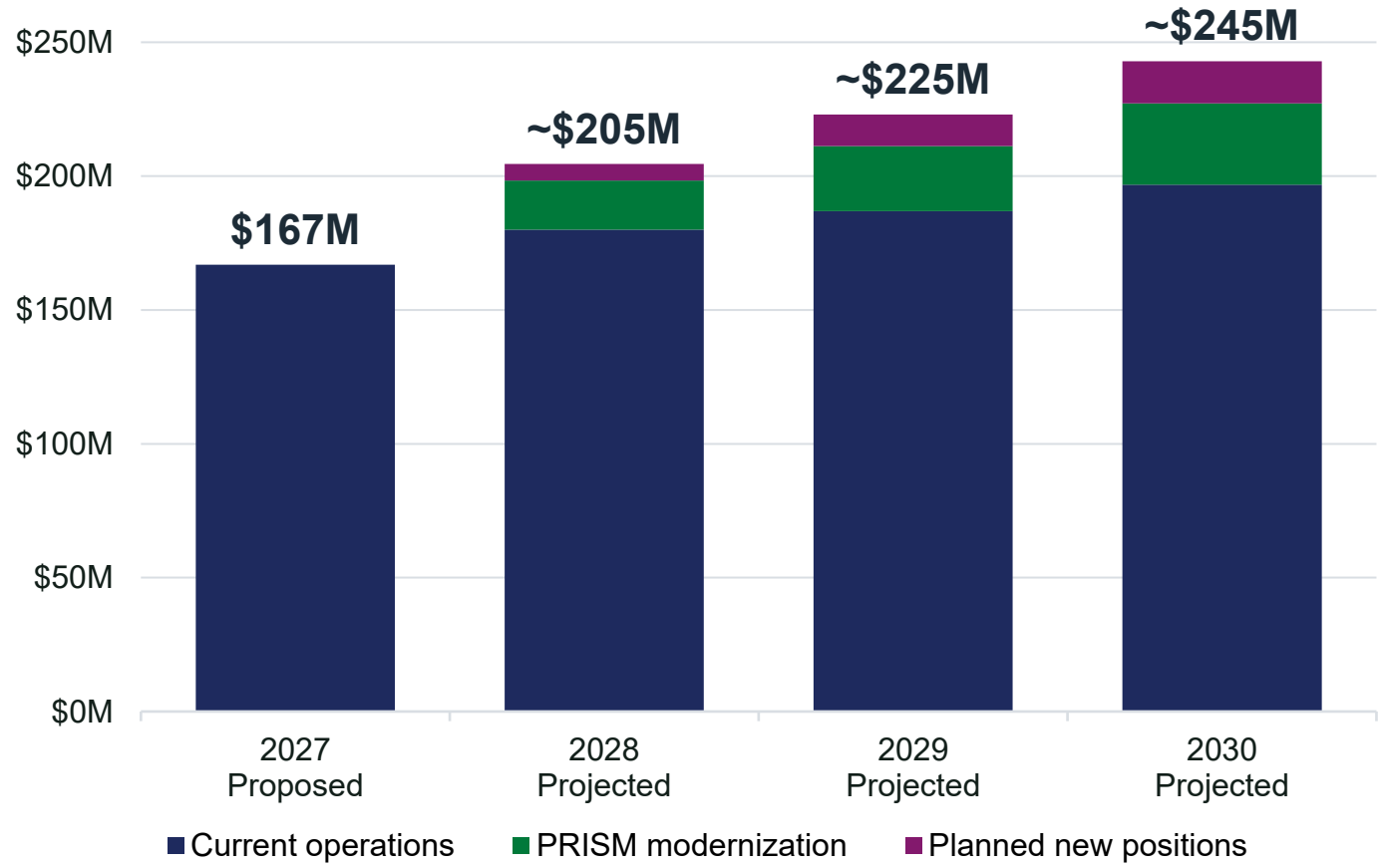
Base costs grow roughly 5% a year; strategic decisions drive the remainder



Average annual growth, 2027–2030

About 5–6%

Current operations only

Pay, benefits and inflation on today's staff and services

About 11%

Plus PRISM modernization

Largest driver of the 2028 step-up; follows the multi-year plan

About 13%

Plus planned new positions

Includes positions deferred from 2027; each needs future approval

Projections are planning estimates based on current assumptions, not budget requests. Each year's budget comes to the Board for approval. Totals rounded.

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The outlook rests on assumptions we will revisit each year

Key assumptions

Pay and benefits

Salaries and PERA contributions grow about 3.5% a year; health insurance 7-8%

Services and supplies

General inflation of 2.5–3% a year; software about 7%+; legal services and risk insurance 10%

PRISM modernization

Funding follows the current multi-year plan, rising to about $30M a year by 2030

Staffing

Positions deferred from 2027 return in 2028; IT, Investments, Benefits and other positions added in 2029–2030

What could change the outlook

Lower if…

- PRISM phases are resequenced or rescoped
- Positions are deferred or not filled
- Savings from retiring legacy systems arrive sooner

Higher if…

- Health insurance costs outpace 7-8%
- Vendor and software prices rise faster
- New regulatory or security needs emerge

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Appendix

A1 - Operating Fund Summary by Division
A2 - Operating Fund Summary by Department
A3 - Personnel Services by Division
A4 - Personnel Services by Department
A5 - Five-Year Budget Comparison by Division
A6 - Five-Year Budget Comparison by Department
A7 - New Position Detail
A8 - Additional Slides Presented to Compensation and Budget Committee on 11/4/26

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A1 · Operating Fund Summary by Division

Division	Personnel Services	Services & Charges	Supplies & Materials	2027 Total Budget	2026 Total Budget	Increase / (Decrease)	% Increase / (Decrease)	Projected 2026
Executive Office	$2,191,707	$695,224	$5,700	$2,892,631	$2,759,162	$133,468	4.8%	$2,742,699
Actuarial	838,441	844,150	1,500	1,684,091	1,518,134	165,957	10.9%	1,518,134
Internal Audit	2,136,271	211,840	700	2,348,811	1,919,479	429,331	22.4%	1,915,025
Investments	34,863,398	7,702,482	68,870	42,634,750	40,424,914	2,209,836	5.5%	37,780,802
General Counsel/Legal	3,111,740	3,890,563	6,700	7,009,003	6,844,661	164,342	2.4%	6,095,086
Benefits	24,196,365	1,224,250	46,850	25,467,465	23,818,203	1,649,262	6.9%	22,017,005
Administration	9,401,372	5,126,229	597,274	15,124,875	14,554,565	570,310	3.9%	12,726,827
Technology (including PRISM)	22,983,185	26,102,024	974,800	50,060,009	36,430,629	13,629,379	37.4%	34,272,603
Information Security	2,314,326	1,583,107	61,507	3,958,941	2,098,014	1,860,926	88.7%	2,098,014
Human Resources	4,954,940	947,148	5,500	5,907,588	4,987,956	919,633	18.4%	3,662,109
Accounting	6,083,543	1,321,082	5,935	7,410,560	6,064,024	1,346,536	22.2%	6,064,024
Board of Trustees	22	980,352	4,500	984,874	834,599	150,274	18.0%	491,464
Capital				0	3,190,000	(3,190,000)	(100.0%)	3,190,000
Contingency				650,000	650,000	0	0.0%	0
Pointe and parking lots				734,182	451,946	282,235	62.4%	(473,414)
Grand Total	**$113,075,309**	**$50,628,451**	**$1,779,836**	**$166,867,778**	**$146,546,287**	**$20,321,491**	**13.9%**	**$134,100,378**

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

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A2 · Operating Fund Summary by Department (1 of 3)

Division / Department	Personnel Services	Services & Charges	Supplies & Materials	2027 Total Budget	2026 Total Budget	Increase / (Decrease)	% Increase / (Decrease)	Projected 2026
Executive Office	**$2,191,707**	**$695,224**	**$5,700**	**$2,892,631**	**$2,759,162**	**$133,468**	**4.8%**	**$2,742,699**
Area Direction/Strategic Planning	2,191,027	145,560	5,500	2,342,087	2,437,773	(95,687)	(3.9%)	2,437,773
Government Relations	0	451,250	0	451,250	310,000	141,250	45.6%	300,000
Strategic Planning	680	98,414	200	99,294	11,389	87,905	771.8%	4,925
Actuarial	**838,441**	**844,150**	**1,500**	**1,684,091**	**1,518,134**	**165,957**	**10.9%**	**1,518,134**
Internal Audit	**2,136,271**	**211,840**	**700**	**2,348,811**	**1,919,479**	**429,331**	**22.4%**	**1,915,025**
Investments	**34,863,398**	**7,702,482**	**68,870**	**42,634,750**	**40,424,914**	**2,209,836**	**5.5%**	**37,780,802**
Area Direction	3,628,059	784,010	38,030	4,450,099	3,945,397	504,702	12.8%	3,945,397
Equities	12,156,120	2,335,954	5,400	14,497,474	14,179,635	317,839	2.2%	12,327,996
Fixed Income	6,003,673	1,037,324	10,865	7,051,862	6,535,905	515,957	7.9%	6,535,905
Investment Operations	2,815,555	1,115,490	800	3,931,845	3,817,458	114,388	3.0%	3,265,754
Alternative Investments	2,824,110	394,993	11,075	3,230,178	2,947,059	283,119	9.6%	2,947,059
Private Equity Investments	4,370,505	988,355	0	5,358,860	5,140,487	218,373	4.2%	4,969,760
Real Estate	2,430,425	661,796	1,500	3,093,721	2,847,119	246,602	8.7%	2,847,119
Investment Stewardship	634,952	384,560	1,200	1,020,712	1,011,855	8,857	0.9%	941,811

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

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A2 · Operating Fund Summary by Department (2 of 3)

Division / Department	Personnel Services	Services & Charges	Supplies & Materials	2027 Total Budget	2026 Total Budget	Increase / (Decrease)	% Increase / (Decrease)	Projected 2026
General Counsel/Legal	**$3,111,740**	**$3,890,563**	**$6,700**	**$7,009,003**	**$6,844,661**	**$164,342**	**2.4%**	**$6,095,086**
Legal	2,477,221	3,183,363	6,500	5,667,084	6,191,322	(524,238)	(8.5%)	5,446,289
Board Liaison	221,410	9,700	200	231,310	216,659	14,651	6.8%	216,659
Compliance/Enterprise Risk Management	413,108	697,500	0	1,110,609	436,680	673,929	154.3%	432,138
Benefits	**24,196,365**	**1,224,250**	**46,850**	**25,467,465**	**23,818,203**	**1,649,262**	**6.9%**	**22,017,005**
Area Direction/Project Management	513,901	112,700	600	627,201	570,388	56,814	10.0%	570,388
Benefit Services	13,799,855	442,050	15,500	14,257,405	13,146,162	1,111,242	8.5%	11,803,367
Customer Service Center	6,268,560	47,500	5,350	6,321,410	5,856,581	464,830	7.9%	5,570,980
Member Education Services	2,321,069	158,500	23,700	2,503,269	2,469,370	33,899	1.4%	2,296,569
Insurance	1,292,979	463,500	1,700	1,758,179	1,775,702	(17,523)	(1.0%)	1,775,702
Administration	**9,401,372**	**5,126,229**	**597,274**	**15,124,875**	**14,554,565**	**570,310**	**3.9%**	**12,726,827**
Area Direction	1,538,742	53,300	3,700	1,595,742	2,658,772	(1,063,030)	(40.0%)	1,707,419
Communications	2,979,253	862,275	106,700	3,948,228	4,145,742	(197,514)	(4.8%)	3,754,864
Change Management	755,168	34,900	1,000	791,068	773,097	17,971	2.3%	773,097
Project Management	2,430,678	332,400	1,000	2,764,078	1,182,273	1,581,805	133.8%	1,182,273
Operations Support	661,318	1,604,700	5,000	2,271,018	2,224,310	46,708	2.1%	2,175,437
Property Management & Fleet Services	1,036,214	2,238,654	479,874	3,754,742	3,570,370	184,371	5.2%	3,133,737

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

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A2 · Operating Fund Summary by Department (3 of 3)

Division / Department	Personnel Services	Services & Charges	Supplies & Materials	2027 Total Budget	2026 Total Budget	Increase / (Decrease)	% Increase / (Decrease)	Projected 2026
Technology (including PRISM)	**$22,983,185**	**$26,102,024**	**$974,800**	**$50,060,009**	**$36,430,629**	**$13,629,379**	**37.4%**	**$34,272,603**
Area Direction	908,196	255,843	8,700	1,172,739	1,633,714	(460,975)	(28.2%)	1,183,303
Pension Administration (PRISM)	314,254	11,108,800	0	11,423,054	5,116,000	6,307,054	123.3%	5,116,000
Application Development	8,158,257	1,344,480	20,500	9,523,237	8,289,947	1,233,290	14.9%	7,648,783
Information Technology	12,176,743	13,358,301	945,600	26,480,644	20,158,370	6,322,274	31.4%	19,091,919
Product Management	1,425,734	34,600	0	1,460,334	1,232,598	227,736	18.5%	1,232,598
Information Security	**2,314,326**	**1,583,107**	**61,507**	**3,958,941**	**2,098,014**	**1,860,926**	**88.7%**	**2,098,014**
Human Resources	**4,954,940**	**947,148**	**5,500**	**5,907,588**	**4,987,956**	**919,633**	**18.4%**	**3,662,109**
Accounting	**6,083,543**	**1,321,082**	**5,935**	**7,410,560**	**6,064,024**	**1,346,536**	**22.2%**	**6,064,024**
Board of Trustees	**22**	**980,352**	**4,500**	**984,874**	**834,599**	**150,274**	**18.0%**	**491,464**
Capital				**0**	**3,190,000**	**(3,190,000)**	**(100.0%)**	**3,190,000**
Contingency				**650,000**	**650,000**	**0**	**0.0%**	**0**
Executive Contingency				150,000	150,000	0	0.0%	0
Legal Contingency				150,000	150,000	0	0.0%	0
Board Contingency				350,000	350,000	0	0.0%	0
Pointe and parking lots				**734,182**	**451,946**	**282,235**	**62.4%**	**(473,414)**
Grand Total	**$113,075,309**	**$50,628,451**	**$1,779,836**	**$166,867,778**	**$146,546,287**	**$20,321,491**	**13.9%**	**$134,100,378**

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

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A3 · Personnel Services by Division

Division	Compensation	Retirement Contribution	Insurance Contribution	Other Benefits	2027 Total Budget	2026 Total Budget	Increase / (Decrease)	% Increase / (Decrease)	Projected 2026
Executive Office	$1,715,611	$322,004	$122,412	$31,680	$2,191,707	$2,163,689	$28,017	1.3%	$2,163,689
Actuarial	609,042	142,659	86,740	0	838,441	642,134	196,307	30.6%	642,134
Internal Audit	1,486,492	348,815	300,363	600	2,136,271	1,651,514	484,756	29.4%	1,600,024
Investments	28,518,016	4,105,828	2,238,054	1,500	34,863,398	32,701,466	2,161,933	6.6%	30,442,400
General Counsel/Legal	2,200,753	513,084	392,903	5,000	3,111,740	2,978,136	133,604	4.5%	2,978,136
Benefits	16,543,837	3,890,269	3,731,940	30,320	24,196,365	22,286,053	1,910,312	8.6%	20,883,468
Administration	6,692,655	1,575,379	1,119,739	13,600	9,401,372	8,247,728	1,153,644	14.0%	7,529,165
Technology (including PRISM)	16,404,222	3,778,443	2,780,320	20,200	22,983,185	21,385,804	1,597,380	7.5%	19,096,535
Information Security	1,682,769	395,888	234,668	1,000	2,314,326	1,946,014	368,312	18.9%	1,946,014
Human Resources	3,199,521	748,505	743,061	263,853	4,954,940	4,363,574	591,367	13.6%	3,105,822
Accounting	4,342,972	1,015,121	720,449	5,000	6,083,543	5,306,150	777,393	14.7%	5,306,150
Board of Trustees	0	0	22	0	22	0	22	n/a	0
Grand Total	**$83,395,890**	**$16,835,995**	**$12,470,671**	**$372,753**	**$113,075,309**	**$103,672,262**	**$9,403,047**	**9.1%**	**$95,693,536**

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

COLORADO PERA®

A4 · Personnel Services by Department (1 of 3)

Division / Department	Compensation	Retirement Contribution	Insurance Contribution	Other Benefits	2027 Total Budget	2026 Total Budget	Increase / (Decrease)	% Increase / (Decrease)	Projected 2026
Executive Office	**$1,715,611**	**$322,004**	**$122,412**	**$31,680**	**$2,191,707**	**$2,163,689**	**$28,017**	**1.3%**	**$2,163,689**
Area Direction/Strategic Planning	1,715,611	322,004	122,412	31,000	2,191,027	2,163,689	27,337	1.6%	2,163,689
Government Relations	0	0	0	0	0	0	0	n/a	0
Strategic Planning	0	0	0	680	680	0	680	n/a	0
Actuarial	**609,042**	**142,659**	**86,740**	**0**	**838,441**	**642,134**	**196,307**	**30.6%**	**642,134**
Internal Audit	**1,486,492**	**348,815**	**300,363**	**600**	**2,136,271**	**1,651,514**	**484,756**	**29.4%**	**1,600,024**
Investments	**28,518,016**	**4,105,828**	**2,238,054**	**1,500**	**34,863,398**	**32,701,466**	**2,161,933**	**6.6%**	**30,442,400**
Area Direction	2,943,074	465,190	219,295	500	3,628,059	2,921,028	707,031	24.2%	2,921,028
Equities	10,422,759	1,173,978	559,382	0	12,156,120	11,937,095	219,025	1.8%	10,273,717
Fixed Income	4,940,648	695,413	367,613	0	6,003,673	5,493,870	509,804	9.3%	5,493,870
Investment Operations	1,941,978	458,818	414,759	0	2,815,555	2,771,948	43,608	1.6%	2,346,380
Alternative Investments	2,271,592	363,123	189,395	0	2,824,110	2,511,094	313,016	12.5%	2,511,094
Private Equity Investments	3,573,510	529,773	266,222	1,000	4,370,505	4,143,062	227,443	5.5%	4,072,785
Real Estate	1,960,698	310,175	159,551	0	2,430,425	2,295,724	134,701	5.9%	2,295,724
Investment Stewardship	463,758	109,357	61,837	0	634,952	627,646	7,306	1.2%	527,802

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

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A4 · Personnel Services by Department (2 of 3)

Division / Department	Compensation	Retirement Contribution	Insurance Contribution	Other Benefits	2027 Total Budget	2026 Total Budget	Increase / (Decrease)	% Increase / (Decrease)	Projected 2026
General Counsel/Legal	**$2,200,753**	**$513,084**	**$392,903**	**$5,000**	**$3,111,740**	**$2,978,136**	**$133,604**	**4.5%**	**$2,978,136**
Legal	1,778,618	413,249	285,355	0	2,477,221	2,347,247	129,974	5.5%	2,347,247
Board Liaison	146,656	34,684	40,071	0	221,410	204,959	16,451	8.0%	204,959
Compliance/Enterprise Risk Management	275,480	65,151	67,477	5,000	413,108	425,930	(12,822)	(3.0%)	425,930
Benefits	**16,543,837**	**3,890,269**	**3,731,940**	**30,320**	**24,196,365**	**22,286,053**	**1,910,312**	**8.6%**	**20,883,468**
Area Direction/Project Management	384,695	90,484	36,723	2,000	513,901	490,388	23,514	4.8%	490,388
Benefit Services	9,483,680	2,221,992	2,072,862	21,320	13,799,855	12,621,762	1,178,092	9.3%	11,560,829
Customer Service Center	4,161,148	983,884	1,118,529	5,000	6,268,560	5,784,731	483,830	8.4%	5,533,127
Member Education Services	1,607,492	380,142	331,936	1,500	2,321,069	2,204,420	116,649	5.3%	2,160,396
Insurance	906,823	213,767	171,890	500	1,292,979	1,184,752	108,227	9.1%	1,138,728
Administration	**6,692,655**	**1,575,379**	**1,119,739**	**13,600**	**9,401,372**	**8,247,728**	**1,153,644**	**14.0%**	**7,529,165**
Area Direction	1,110,902	262,399	162,442	3,000	1,538,742	2,123,372	(584,630)	(27.5%)	1,515,222
Communications	2,117,298	497,536	363,419	1,000	2,979,253	2,684,067	295,186	11.0%	2,684,067
Change Management	544,783	128,841	79,044	2,500	755,168	730,197	24,971	3.4%	730,197
Project Management	1,795,481	421,000	209,196	5,000	2,430,678	1,153,873	1,276,805	110.7%	1,153,873
Operations Support	438,236	103,481	118,101	1,500	661,318	620,110	41,208	6.6%	605,797
Property Management & Fleet Services	685,955	162,122	187,536	600	1,036,214	936,108	100,105	10.7%	840,010

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

COLORADO PERA®

A4 · Personnel Services by Department (3 of 3)

Division / Department	Compensation	Retirement Contribution	Insurance Contribution	Other Benefits	2027 Total Budget	2026 Total Budget	Increase / (Decrease)	% Increase / (Decrease)	Projected 2026
Technology (including PRISM)	**$16,404,222**	**$3,778,443**	**$2,780,320**	**$20,200**	**$22,983,185**	**$21,385,804**	**$1,597,380**	**7.5%**	**$19,096,535**
Area Direction	664,019	153,704	86,474	4,000	908,196	1,213,914	(305,718)	(25.2%)	799,603
Pension Administration (PRISM)	231,200	54,679	28,375	0	314,254	0	314,254	n/a	0
Application Development	5,880,240	1,301,753	973,263	3,000	8,158,257	7,764,222	394,035	5.1%	7,228,506
Information Technology	8,582,788	2,021,051	1,567,205	5,700	12,176,743	11,195,070	981,673	8.8%	9,855,827
Product Management	1,045,976	247,256	125,002	7,500	1,425,734	1,212,598	213,136	17.6%	1,212,598
Information Security	**1,682,769**	**395,888**	**234,668**	**1,000**	**2,314,326**	**1,946,014**	**368,312**	**18.9%**	**1,946,014**
Human Resources	**3,199,521**	**748,505**	**743,061**	**263,853**	**4,954,940**	**4,363,574**	**591,367**	**13.6%**	**3,105,822**
Accounting	**4,342,972**	**1,015,121**	**720,449**	**5,000**	**6,083,543**	**5,306,150**	**777,393**	**14.7%**	**5,306,150**
Board of Trustees	**0**	**0**	**22**	**0**	**22**	**0**	**22**	**n/a**	**0**
Grand Total	**$83,395,890**	**$16,835,995**	**$12,470,671**	**$372,753**	**$113,075,309**	**$103,672,262**	**$9,403,047**	**9.1%**	**$95,693,536**

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

COLORADO PERA®

A5 · Five-Year Budget Comparison by Division

Division	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	% Change 2026 to 2027	Average Annual Growth 2023 to 2027
Executive Office	$1,457,730	$1,440,146	$2,645,876	$2,759,162	$2,892,631	4.8%	18.7%
Actuarial	1,078,540	1,157,327	1,317,550	1,518,134	1,684,091	10.9%	11.8%
Internal Audit	1,556,410	1,632,224	1,751,455	1,919,479	2,348,811	22.4%	10.8%
Investments	36,592,353	37,692,114	39,436,998	40,424,914	42,634,750	5.5%	3.9%
General Counsel/Legal	5,122,974	5,802,391	7,026,021	6,844,661	7,009,003	2.4%	8.2%
Benefits	17,775,338	19,259,333	21,792,195	23,818,203	25,467,465	6.9%	9.4%
Administration	11,126,863	10,214,531	12,355,858	14,554,565	15,124,875	3.9%	8.0%
Technology (including PRISM)	20,404,657	22,809,647	31,147,934	36,430,629	50,060,009	37.4%	25.2%
Information Security	0	0	736,188	2,098,014	3,958,941	88.7%	n/a
Human Resources	3,229,541	3,248,798	3,549,015	4,987,956	5,907,588	18.4%	16.3%
Accounting	4,343,833	4,428,977	5,526,265	6,064,024	7,410,560	22.2%	14.3%
Board of Trustees	540,076	611,297	759,354	834,599	984,874	18.0%	16.2%
Capital	400,000	978,000	2,917,431	3,190,000	0	(100.0%)	n/a
Contingency	650,000	650,000	650,000	650,000	650,000	0.0%	0.0%
Pointe and parking lots	780,100	535,000	517,195	451,946	734,182	62.4%	(1.5%)
Grand Total	**$105,058,415**	**$110,459,785**	**$132,129,335**	**$146,546,287**	**$166,867,778**	**13.9%**	**12.3%**

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

COLORADO PERA®

A6 · Five-Year Budget Comparison by Department (1 of 3)

Division / Department	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	% Change 2026 to 2027	Average Annual Growth 2023 to 2027
Executive Office	**$1,457,730**	**$1,440,146**	**$2,645,876**	**$2,759,162**	**$2,892,631**	**4.8%**	**18.7%**
Area Direction/Strategic Planning	1,199,430	1,106,546	2,357,376	2,437,773	2,342,087	(3.9%)	18.2%
Government Relations	258,300	333,600	288,500	310,000	451,250	45.6%	15.0%
Strategic Planning	0	0	0	11,389	99,294	771.8%	n/a
Actuarial	**1,078,540**	**1,157,327**	**1,317,550**	**1,518,134**	**1,684,091**	**10.9%**	**11.8%**
Internal Audit	**1,556,410**	**1,632,224**	**1,751,455**	**1,919,479**	**2,348,811**	**22.4%**	**10.8%**
Investments	**36,592,353**	**37,692,114**	**39,436,998**	**40,424,914**	**42,634,750**	**5.5%**	**3.9%**
Area Direction	3,166,358	3,394,929	3,729,274	3,945,397	4,450,099	12.8%	8.9%
Equities	13,710,913	13,845,494	14,032,497	14,179,635	14,497,474	2.2%	1.4%
Fixed Income	6,158,648	6,606,592	6,792,627	6,535,905	7,051,862	7.9%	3.4%
Investment Operations	3,163,712	2,839,873	2,920,351	3,817,458	3,931,845	3.0%	5.6%
Alternative Investments	2,396,574	2,866,244	2,960,656	2,947,059	3,230,178	9.6%	7.7%
Private Equity Investments	4,535,903	4,706,561	5,240,755	5,140,487	5,358,860	4.2%	4.3%
Real Estate	2,444,002	2,371,106	2,648,187	2,847,119	3,093,721	8.7%	6.1%
Investment Stewardship	1,016,243	1,061,315	1,112,650	1,011,855	1,020,712	0.9%	0.1%

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

COLORADO PERA®

A6 · Five-Year Budget Comparison by Department (2 of 3)

Division / Department	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	% Change 2026 to 2027	Average Annual Growth 2023 to 2027
General Counsel/Legal	**$5,122,974**	**$5,802,391**	**$7,026,021**	**$6,844,661**	**$7,009,003**	**2.4%**	**8.2%**
Legal	5,122,974	5,802,391	7,026,021	6,191,322	5,667,084	(8.5%)	2.6%
Board Liaison	0	0	0	216,659	231,310	6.8%	n/a
Compliance/Enterprise Risk Management	0	0	0	436,680	1,110,609	154.3%	n/a
Benefits	**17,775,338**	**19,259,333**	**21,792,195**	**23,818,203**	**25,467,465**	**6.9%**	**9.4%**
Area Direction/Project Management	447,689	487,657	512,625	570,388	627,201	10.0%	8.8%
Benefit Services	8,822,049	9,781,084	11,736,692	13,146,162	14,257,405	8.5%	12.8%
Customer Service Center	4,787,068	4,997,723	5,550,121	5,856,581	6,321,410	7.9%	7.2%
Member Education Services	2,159,958	2,413,952	2,471,445	2,469,370	2,503,269	1.4%	3.8%
Insurance	1,558,574	1,578,917	1,521,311	1,775,702	1,758,179	(1.0%)	3.1%
Administration	**11,126,863**	**10,214,531**	**12,355,858**	**14,554,565**	**15,124,875**	**3.9%**	**8.0%**
Area Direction	756,044	1,033,982	1,486,106	2,658,772	1,595,742	(40.0%)	20.5%
Communications	4,466,172	4,412,088	4,131,177	4,145,742	3,948,228	(4.8%)	(3.0%)
Change Management	0	45,400	542,867	773,097	791,068	2.3%	n/a
Project Management	0	0	863,230	1,182,273	2,764,078	133.8%	n/a
Operations Support	3,434,175	2,164,434	2,175,987	2,224,310	2,271,018	2.1%	(9.8%)
Property Management & Fleet Services	2,470,472	2,558,627	3,156,491	3,570,370	3,754,742	5.2%	11.0%

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

COLORADO PERA®

A6 · Five-Year Budget Comparison by Department (3 of 3)

Division / Department	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	% Change 2026 to 2027	Average Annual Growth 2023 to 2027
Technology (including PRISM)	**$20,404,657**	**$22,809,647**	**$31,147,934**	**$36,430,629**	**$50,060,009**	**37.4%**	**25.2%**
Area Direction	0	0	420,783	1,633,714	1,172,739	(28.2%)	n/a
Pension Administration (PRISM)	0	0	2,750,000	5,116,000	11,423,054	123.3%	n/a
Application Development	5,877,860	7,075,583	7,715,126	8,289,947	9,523,237	14.9%	12.8%
Information Technology	14,526,797	15,734,064	19,917,676	20,158,370	26,480,644	31.4%	16.2%
Product Management	0	0	344,349	1,232,598	1,460,334	18.5%	n/a
Information Security	**0**	**0**	**736,188**	**2,098,014**	**3,958,941**	**88.7%**	**n/a**
Human Resources	**3,229,541**	**3,248,798**	**3,549,015**	**4,987,956**	**5,907,588**	**18.4%**	**16.3%**
Accounting	**4,343,833**	**4,428,977**	**5,526,265**	**6,064,024**	**7,410,560**	**22.2%**	**14.3%**
Board of Trustees	**540,076**	**611,297**	**759,354**	**834,599**	**984,874**	**18.0%**	**16.2%**
Capital	**400,000**	**978,000**	**2,917,431**	**3,190,000**	**0**	**(100.0%)**	**n/a**
Contingency	**650,000**	**650,000**	**650,000**	**650,000**	**650,000**	**0.0%**	**0.0%**
Executive Contingency	150,000	150,000	150,000	150,000	150,000	0.0%	0.0%
Legal Contingency	150,000	150,000	150,000	150,000	150,000	0.0%	0.0%
Board Contingency	350,000	350,000	350,000	350,000	350,000	0.0%	0.0%
Pointe and parking lots	**780,100**	**535,000**	**517,195**	**451,946**	**734,182**	**62.4%**	**(1.5%)**
Grand Total	**$105,058,415**	**$110,459,785**	**$132,129,335**	**$146,546,287**	**$166,867,778**	**13.9%**	**12.3%**

Note: Percentages may differ slightly from those shown in the presentation due to rounding.

COLORADO PERA®

A7 · New Position Detail

Position	Division	Why it is needed
Program Manager - Technology Modernization	Project Management	Runs PRISM as one program, manages the three PRISM Project Managers
Technical Business Analyst	Project Management	PMO is at capacity with 20+ active projects as PRISM and Investment Systems Modernization expand
QA Manager	Technology - Application Development	QA has no dedicated manager, the Director also leads three engineering teams
Senior Software Developers (2)	Technology - Application Development	Keep the IBMi system of record stable while modernization decomposes it
DevOps Software Engineer	Technology - Application Development	Secure, repeatable build and deployment pipelines for new applications
Linux Infrastructure Engineer	Technology - IT Infrastructure	Linux and Kubernetes platform for PRISM, built to CIS security controls
Investment Help Desk Analysts (2)	Technology - End User Computing	About 55 investment staff rely on an informal chat for support, including overnight trading hours, frees Investment Systems Modernization staff

COLORADO PERA®

A7 · New Position Detail

Position	Division	Why it is needed
Procurement Manager	Finance/Accounting	PERA's first centralized procurement function, responds to audit and risk recommendations
Payroll Manager	Finance/Accounting	Moves payroll to Finance to improve segregation of duties and audit readiness
Senior IT Internal Auditor	Internal Audit	Pre-implementation audits of PRISM and Investment Systems Modernization, new IIA cybersecurity requirements
Director - Employer Services	Benefits	Leads the new employer Services function
Employer Relations Coordinator	Benefits	Employer engagement currently depends on one person during PRISM Wave 1
Security Architect - AI and Detection	Information Security	Detection engineering across AWS and Azure, less reliance on outside monitoring
AI Enterprise Architect	Technology	One secure, governed AI platform instead of separate department tools

COLORADO PERA®

A7 · New Position Detail

Position	Division	Why it is needed
Actuarial Analyst II	Actuarial	Trained overlap before the system actuary's retirement
Fixed Income PM, Rates	Investments	Depth and succession for the largest asset class within Fixed Income
Portfolio Associate	Investments	Bench strength and manager monitoring in Alternatives
HR Business Partner	Human Resources	Addresses increased needs from organizational growth through workforce planning, talent risk management, and enterprise HR support.
L&D / LMS Coordinator	Human Resources	Scales internal training capacity to strengthen talent development and resource allocation.
Legal Intern (0.25)	General Counsel/ Legal	Talent pipeline, a past intern became PERA counsel

COLORADO PERA®

A8 · Ongoing costs grow $8.5M, or 6.1%; project investments drive remaining budget growth

2027 Proposed Budget = $166.9M



2026 Budget = $146.6M





2027 One-time and Project costs

Description	Amount ($M)
PRISM pension administration modernization	$12.4
Investment Systems Modernization	3.6
Delivery capacity: IBMi contractors, PMO and Agile consultants	1.1
Security and infrastructure hardening	0.3
Facilities and workspace	0.6
Finance systems (Accounting, ACFR and Budget Systems)	0.6
Enterprise AI consulting	0.2
Other	0.5
Total	**$19.3**

COLORADO PERA

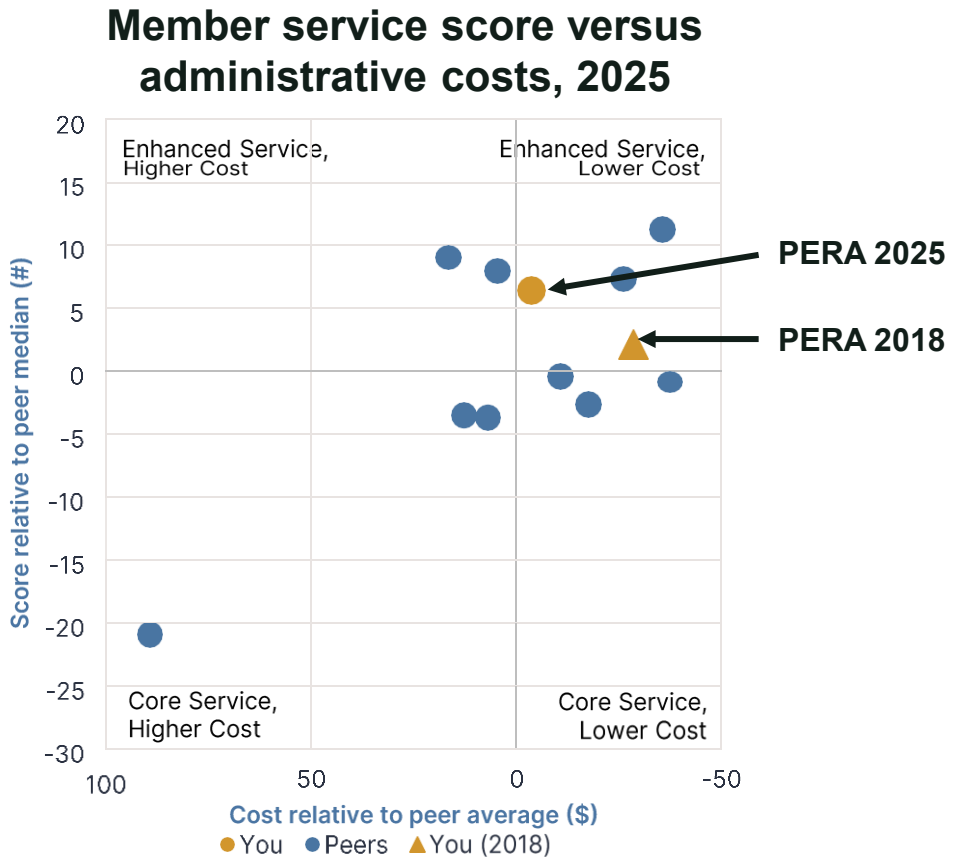
A8 · Technology, including PRISM, accounts for $13.7M, or 67%, of total year-over-year increase

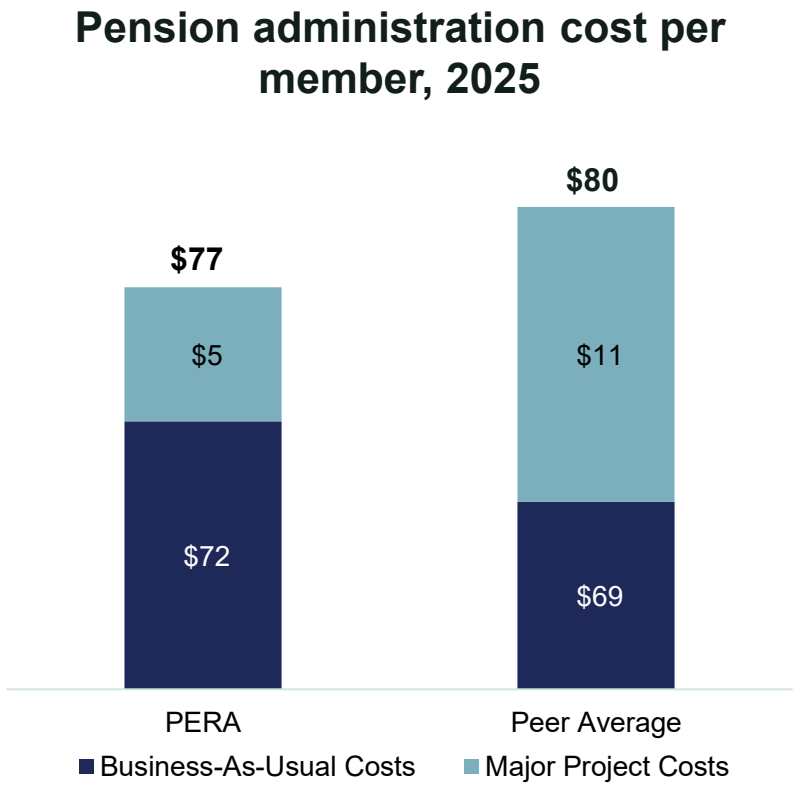
$ Millions

Division	2026 Budget	2027 Proposed Budget	Change	% Change
Executive Office	$2.8	$2.9	$0.1	3.6%
Actuarial	1.5	1.7	0.2	13.3%
Internal Audit	1.9	2.3	0.4	21.1%
Investments	40.4	42.6	2.2	5.4%
General Counsel/Legal	6.8	7.0	0.2	2.9%
Benefits	23.8	25.5	1.7	7.1%
Administration	14.6	15.1	0.5	3.4%
Technology (including PRISM)	36.4	50.1	13.7	37.6%
Information Security	2.1	4.0	1.9	90.5%
Human Resources	5.0	5.9	0.9	18.0%
Accounting	6.1	7.4	1.3	21.3%
Board of Trustees	0.8	1.0	0.2	25.0%
Capital	3.2	0.0	(3.2)	-100.0%
Contingency	0.7	0.7	0.0	0.0%
Pointe and parking lots	0.5	0.7	0.2	40.0%
Total	**$146.6**	**$166.9**	**$20.3**	**13.8%**

COLORADO PERA®

A8 · PERA remains low-cost, high-service administrator





Source: CEM Benchmarking, 2025 PERA Report

COLORADO PERA

A8 · Pay increases for existing staff follow Board's Total Compensation Philosophy

"PERA recognizes that our most valuable resource is our people…we must attract, engage, reward, and retain a high-performing and talented workforce."

Merit guideline

Average 3.6% for all existing staff

Promotions

21% of staff potentially eligible in 2027

Market adjustments

$0.40 budgeted vs. $0.43 in 2026

$ Millions

Driver of Increase	Non-Investment	Investment	Total
Merit increases	$1.6	$0.3	$1.9
Promotions	0.6	0.03	0.6
Market adjustments	0.2	0.2	0.4
Total	**$2.4**	**$0.5**	**$2.9**

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A8 · Performance awards and incentives increase $1.9M; represent 20% of $9.4M personnel increase

$ Millions

Description	2026 Budget	2027 Proposed Budget	Change	% Change
Performance awards (employees outside the investment incentive plan)	$3.9	$4.4	$0.5	12.8%
Pension contributions on performance awards	0.0	0.9	0.9	n/a
Investment incentives	12.8	13.3	0.5	3.9%
Total	**$16.7**	**$18.6**	**$1.9**	**11.4%**

Performance awards

Budgeted at target plus 2% under the tiered award structure. Drivers: new positions, existing staff, and change in tier structure for non-exempt staff.

Pension on performance awards

PERA contributions on performance awards. This is newly budgeted in 2027 due to updates in the performance awards meeting the PERA rule criteria for includability.

Investment incentive plan

Incentive plan budgeted at maximum potential. Drivers: new positions and existing staff.

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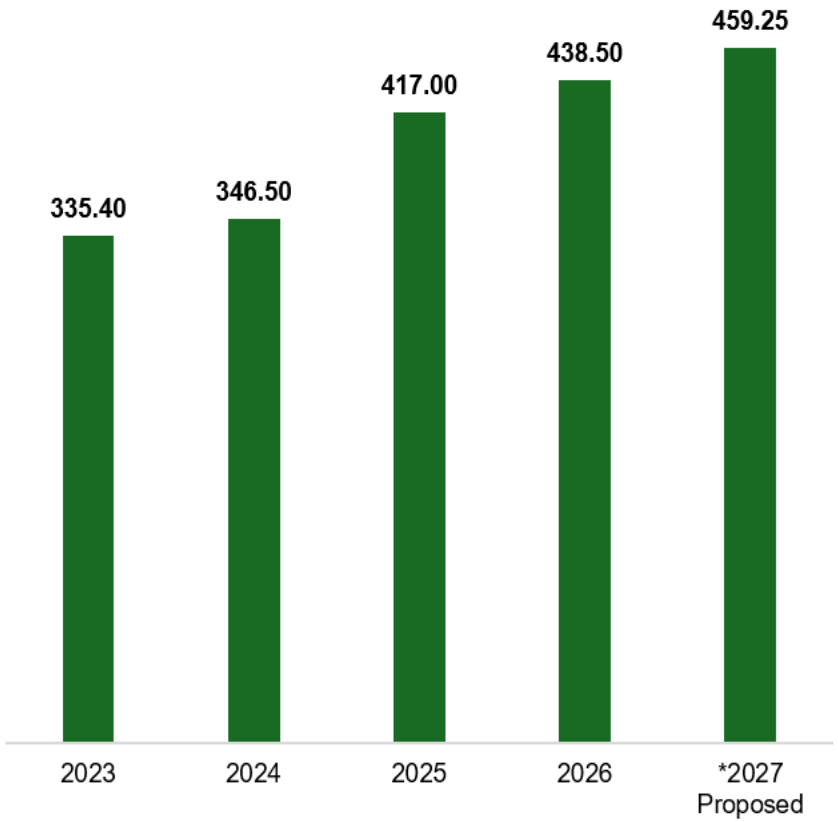
A8 · Proposed FTE rise 4.7% to 459.25

Budgeted FTE by year



FTE by Division

Division	Net New FTE	FTE Increase %	2027 Proposed FTE
Technology	8	8.9%	98.00
Human Resources	2	16.7%	14.00
Accounting	2	7.4%	29.00
Benefits	2	1.2%	165.00
Administration	1.75	3.5%	51.25
Investments	1.75	2.9%	63.00
Actuarial	1	50.0%	3.00
Internal Audit	1	14.8%	7.75
Information Security	1	11.1%	10.00
General Counsel/Legal	0.25	2.1%	12.25
Executive Office	0	–	6.00
Total	**20.75**	**4.7%**	**459.25**

* 2027 Proposed FTE increase is 20.75 (21.50 new FTE less 0.75 in FTE adjustments)

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A8 · EBT recommends 21.5 of 42 requested new FTE

Division	Requested New FTE	*Proposed New FTE	Proposed roles
Actuarial	1	1	Actuarial Analyst II
Internal Audit	1	**1	Senior IT Internal Auditor
Investments	3	2	Fixed Income Portfolio Manager, Alternatives Portfolio Associate
General Counsel/Legal	2.25	0.25	Legal Intern
Benefits	4	2	Director of Employer Services, Employer Relations Project Coordinator
Administration	5.25	2.25	Technology Modernization Program Manager, Technical Business Analyst, Communications Intern
Technology	17.5	8	Linux and DevOps Engineers, AI Architect, 2 Investment Help Desk Analysts, QA Manager, 2 Senior Developers
Information Security	2	1	Security Architect- AI and Detection Engineering
Human Resources	4	2	HR Business Partner, L&D / LMS Coordinator
Accounting	2	2	Payroll Manager, Procurement Manager
Total	**42**	***21.5	**$4.9M fully loaded, budgeted for a full year**

* The Board approves the total budget amount as opposed to individual positions or line items. Management at the direction of the CEO may adjust hiring within the approved budget.
** The Senior IT Internal Auditor position requires Audit Committee approval before it goes to the Board.
*** 2027 proposed new FTE total 21.50. Proposed FTE increase is 20.75 (21.50 new positions less 0.75 in FTE adjustments).

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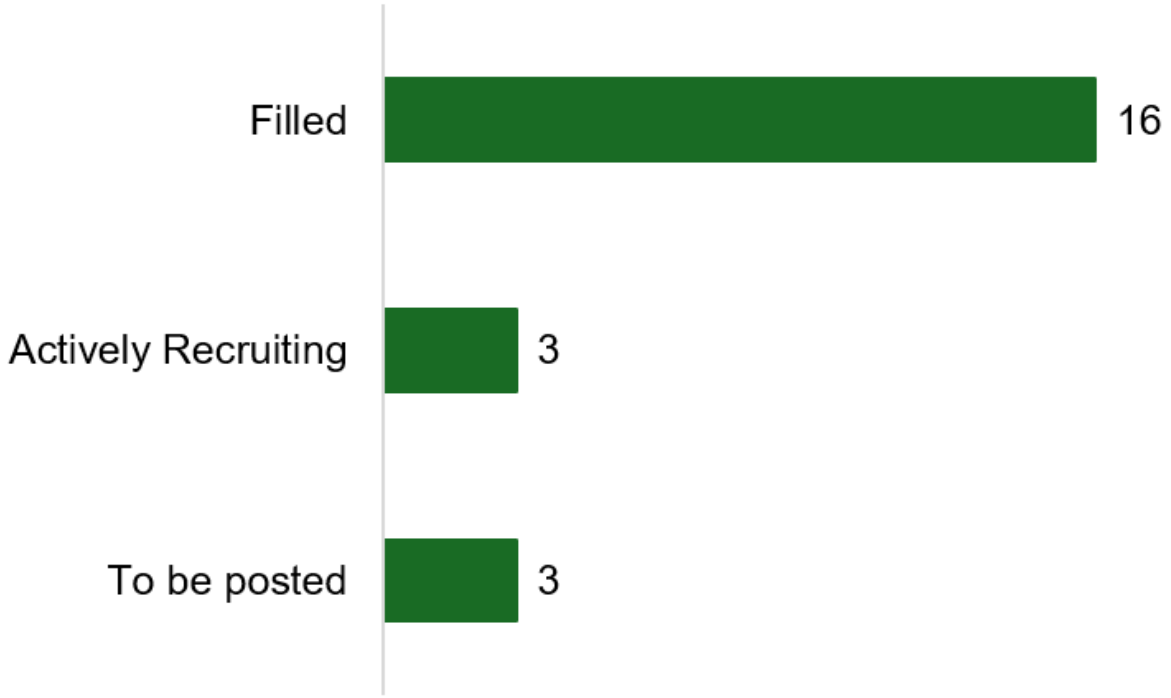
A8 · 86% of 2026 approved positions filled or in active recruitment



7.1%

Organization-wide vacancy rate (10/20/26)

79

Number of all positions filled in 2026 (10/20/26)

9.4%

Voluntary turnover, trailing 12 months

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A8 · 2027 expands PERA's outreach and engagement efforts

Employers

- Expanded employer content, education, and service level agreements
- Employer Service and Engagement Survey conducted

Members and retirees

- Leveraging insights from Retirement Confidence Survey (Net Promoter Score)
- Roadshows and targeted outreach, including modernized mid-career and pre-retirement content
- New PERACare carriers and statewide Kaiser option

Policymakers and the Board

- 2028-2030 Strategic Plan, including surveys and Board workshops
- Additional Board governance consulting
- Strategic Plan consulting

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A8 · Protecting the trust fund through investment diligence, audit, and risk oversight

Investment management

- Additional investment data and research tools
- Real estate fee validation services
- Proxy voting services consulting

Financial Oversight

- Internal and external audit services

Risk and legal

- Business continuity consulting
- Outside counsel services

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PERA Board of Trustees Strategic Plan November Update

Presented by:
Andrew Roth, CEO/Executive Director
Annalise Anderson, Director of Strategy
November 20, 2026

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Agenda

- Strategic Plan Year-End Outlook and Preparing for Year 3
- Year 2 Initiative Updates:
  - Goal 2: Stakeholder Sentiment Metrics
  - Goal 1 & Goal 2: Key Takeaways from Stakeholder Engagement
- Progress on the 2028-2030 Strategic Planning Cycle
- Next Steps

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Strategic Plan Year-End Outlook and Preparing for Year 3

Status update, no Board action requested



Year 2 Implementation Plan Status – Completion of Measures & Targets

Measures & Targets

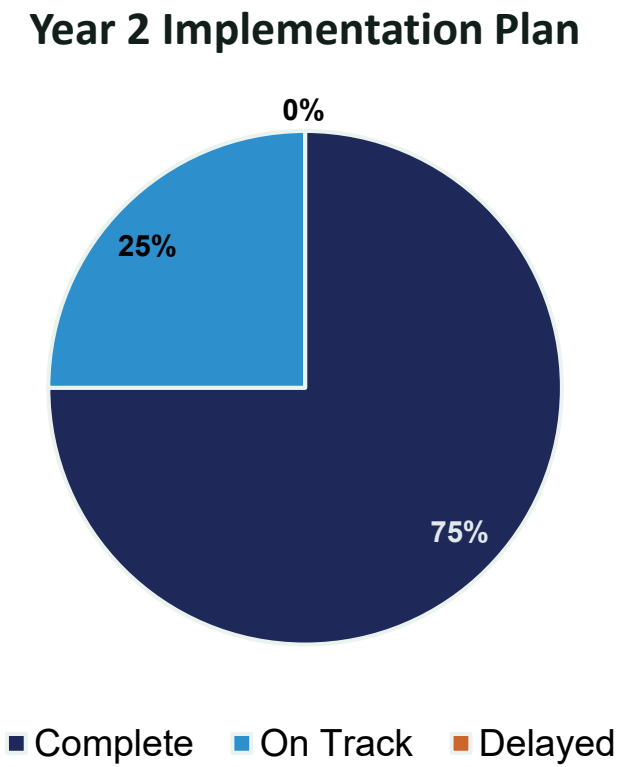
» Anticipate **100%** completion of all measures and targets in the year 2 implementation plan

» **Complete** = Done

» **On track** = Anticipate completing in 2026

» **Delayed** = Anticipate not accomplishing and/or we have moved to year 3





Data as of 10/26/26

Preparing for the Final Year of the 2025–2027 Strategic Plan

- **Deliver commitments of the Strategic Plan:** Prioritize the work necessary to deliver on the key results outlined in the Strategic Plan.
- **Demonstrate outcomes where applicable:** Focus reporting on measurable results and the impact of the work.
- **Position PERA for what comes next:** Capture lessons learned and emerging priorities that can help inform development of the next Strategic Plan.

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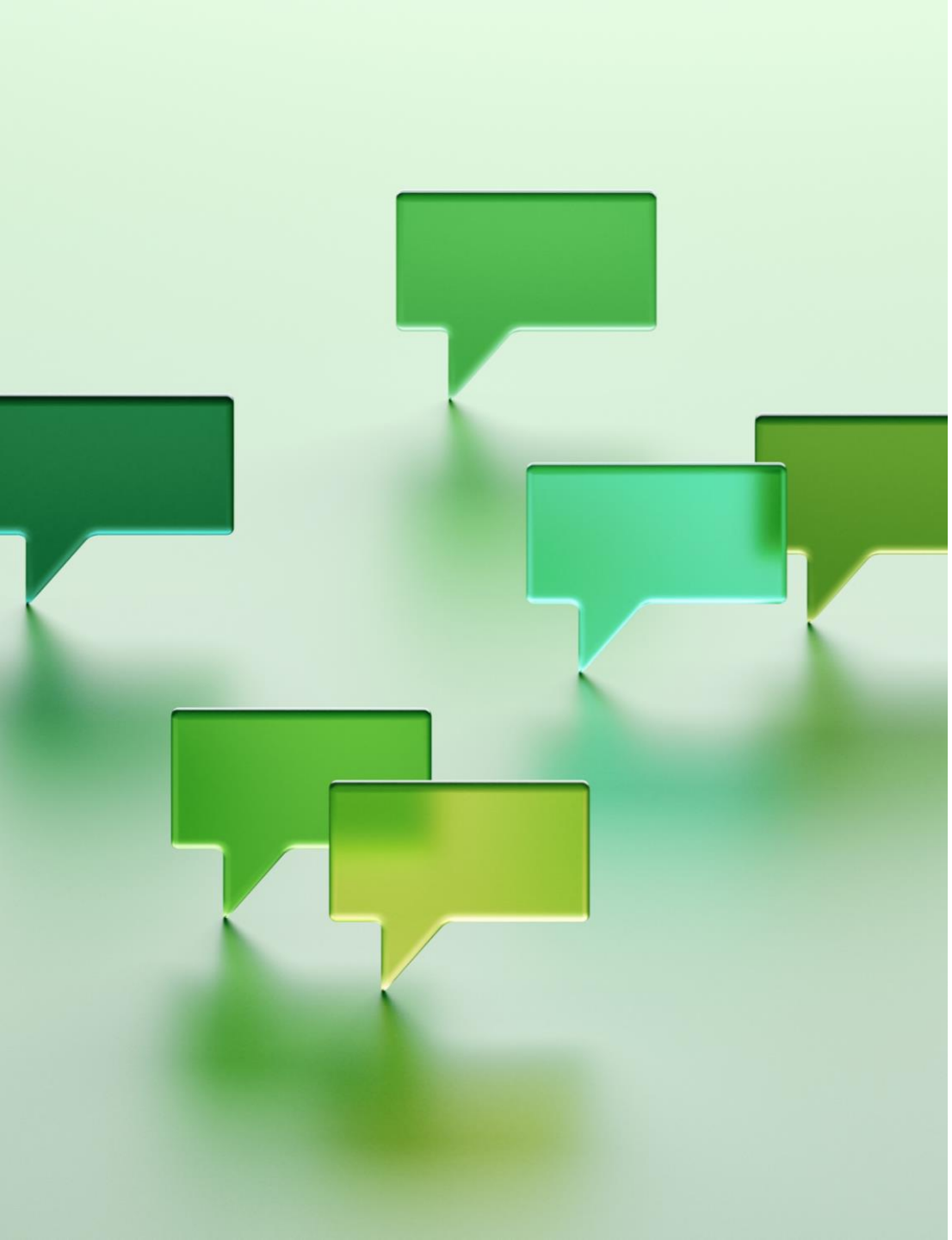
Year 2 Initiative Updates

For information only, no Board action requested





Goal 2 Objective C

Objective C: Proactively build relationships with key member groups, employer groups, and the Legislature.

Key Results By 2027:

- Expand and improve engagement programs while ensuring consistent messaging and content delivery across all stakeholder audiences.
- Develop and implement methods to assess stakeholder sentiment and use metrics to evaluate the effectiveness of engagement efforts.

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2026 Stakeholder Engagement & Sentiment Results

Three measures provide a baseline for understanding the reach, perception, and effectiveness of PERA's stakeholder engagement.

Metric	Baseline Results / Key Findings
Stakeholder Engagement: *Stakeholder meetings and engagement activities that are aligned to priority audiences and PERA objectives for the year*	• 129 meetings and engagement activities completed with PERA's priority audiences focused on legislative and policy engagement, education, and relationship building

Stakeholder Reputation:
Qualitative reputation insights from member and employer groups and the legislature
	• Reputation Insights:
	  • PERA is viewed as a major public policy and fiscal institution.
	  • Complex retirement policy creates gaps in understanding.
	  • Transparency, consistent messaging, and proactive engagement build trust.
	  • Stakeholders often reach out to us when issues arise.

Media coverage and key messages: *Increased balanced media coverage and inclusion of PERA's key messages in PERA's primary media*	• 71% of coverage was balanced • 100% of coverage that included a staff interview or statement across priority media outlets included PERA's key messages

2026 Takeaway: Together, these measures establish PERA's initial baseline for stakeholder reach, perception and communication effectiveness. Findings will inform engagement and measurement in 2027.

Data as of 10/26/26

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Goal 1 Objective C & Goal 2 Objective C



- **Goal 1 Objective C: Proactively engage in legislative education on matters relating to PERA's financial stability**
  - Initiative 1: Strengthen legislative engagement through the use of a proactive educational approach.
- **Goal 2: Objective C: Proactively build relationships with key member groups, employer groups, and the Legislature.**
  - Initiative 1: Increase consistent, proactive, and relationship-centered engagement with key stakeholder groups.

Why this matters

- Legislative understanding of PERA's financial stability supports policy
- Consistent, relationship-based engagement builds stakeholder trust and a consistent PERA message

Our Process

- Built a 2026 engagement plan to coordinate outreach with teams across PERA
- Engaged legislators, employer and member groups, and key stakeholders through briefings, one-on-one meetings, committee reports, and events
- Tracked each engagement, the lead department, and follow-ups in one central location

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Key Takeaways from Stakeholder Engagement

What we heard in 2026:

- **Continue to make PERA easier to understand:** Stakeholders want clearer, more concise information.
- **Tailor education:** Groups continue to want educational sessions built around their needs.
- **Keep showing up:** Direct, relationship-based contact is valued.

What we did in 2026:

- **Legislative & policy:** Ongoing dialogue with policymakers and other stakeholders
- **Education & information:** Briefings, webinars, and events for employer and member groups, including custom sessions on request
- **Relationship building:** Annual events and check-ins with employer, member, and community partners

In 2027, we'll apply this feedback to how we educate, communicate, and engage with stakeholders.

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Progress on the 2028-2030 Strategic Planning Cycle

For information only, no Board action is required



2028 – 2030 Strategic Plan Development Process

Internal Activities

We are here

- **Assess & Align** — July 2026 – Sept 2026
- **Environmental Scan** — Oct 2026 – March 2027
- **Strategy Development** — Apr 2027 – June 2027
- **Plan Development** — July 2027 – Aug 2027
- **Plan Approval** — Sept 2027 – Nov 2027
- **Implementation Planning** — Dec 2027

Current focus

- Gathering feedback from staff and board on previous strategic plan
- Gathering stakeholder input and identifying emerging trends
- Preparation for the March 2027 Board update

Board Activities

- **Assess & Align** — Sept 2026
  - Review approach
- **Environmental Scan** — March 2027
  - Progress update
- **Strategy Development** — Spring 2027
  - Board strategy session
- **Plan Approval** — Sept 2027 – Nov 2027
  - First reading of strategic plan
  - Approve strategic plan and budget

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Next Steps

- Complete implementation of the Year 2 Implementation Plan measures/targets
- Creation of the Year 2 Accomplishments Report
- Finalize the Year 3 Implementation Plan for 2027
- Continue the 2028 – 2030 strategic planning activities



Questions



Appendix Materials



Strategic Planning Process Scope

The Governance Manual establishes the required scope of PERA's strategic analysis

Management completes a strategic analysis of PERA, including:

- A review of the progress made in implementing the prior Strategic Plan
- Analyze the effectiveness of PERA's strategic direction, which includes the mission and vision statement and the needs of PERA plan participants and other stakeholders
- Identification of any new strategic initiatives to be undertaken in the coming planning period

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Key Enhancements for the 2028 – 2030 Planning Process

Similar overall strategic planning framework, but a matured process that will be informed by lessons learned from the 2025 – 2027 strategic plan and best practices.

- Earlier opportunities for substantive Board deliberation
- Expanded environmental scanning
- Better integration from enterprise functions
- Strategic plan timeline aligned with the budget process
- Stronger focus on implementation readiness
- An evolved partnership model with Mosaic

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2025 – 2027 Strategic Performance Management Framework

Strategic Plan	**Long-Term Direction & Strategy**	**Vision**	What do we want to become?
		Mission	Who are we and why do we exist?
		Core Values	What principles shape our culture and guide our stakeholder interactions?
		Goals	What are our strategic priorities to realize our vision?
		Aspirations	What will success look like when we achieve our strategic priority?
		Objectives	What do we need to do to achieve our priorities?
		Key Results	By the end of the strategic plan period, what will we have accomplished?
Annual Implementation Plan	**Execution**	**Initiatives**	What actions and resources are needed to accomplish the objectives?
		Measures and Targets	Who is responsible for doing what?
			When are the deadlines?
Annual Accomplishments Report	**Accountability**	**Performance Management**	How successful have we been?
			How will results be communicated to our stakeholders?

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Member Contribution Interest Rate

Patrick Lane
Chief Benefits Officer

Matt Carroll
Senior Director of Benefit Services

Koren Holden
System Actuary

Joshua Neugebauer
Assistant Director of Investment Administration

November 20, 2026

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Purpose

Approve a Member Contribution Interest Rate (Interest Rate) for 2027

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Applicable Law

C.R.S. § 24-51-101(28)(c)

"Interest means….the rate established by the board for each calendar year pursuant to the provisions of section 24-51-407 for interest on member contributions."

C.R.S. § 24-51-407(4)

"On or after July 1, 2004, member contributions shall earn interest at a rate specified by the board, compounded annually, that is in effect at the time interest is earned. In no event shall the board specify a rate pursuant to this subsection (4) that exceeds five percent."

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Interest Rate – What is it, what does it impact?

- Current Interest Rate: 3%
  - Interest Rate adopted annually by the Board
  - Has been 3% since January 1, 2009

- When a member terminates PERA employment, the following options are available:
  - Rollover/refund DB account balance, including match from employer funds, if applicable
  - Leave account balance at PERA until retirement age
  - At retirement age:
    - Rollover/refund the account balance, including a 100% match from employer funds, that has grown at the **Interest Rate**
    - Annuitize (at the actuarial assumed rate of return) the account balance, including a 100% match from employer funds, that has grown at the **Interest Rate** (money purchase calculation)
    - Receive a PERA defined benefit calculation (growth at the **Interest Rate** does not impact this calculation)

Non-Vested Member Paths to Access DB Funds

Path	Prior to Retirement Eligibility	At or After Retirement Eligibility[1]
Lump-Sum Refund or Rollover	**Member contributions plus interest with no match[2]**	**Member contributions plus interest plus 100% match**
Monthly Retirement Benefit	**N/A**	**Money Purchase Benefit[3]**

[1] Non-vested DPS Benefit Structure members never become retirement-eligible
[2] 50% match provided in the PERA Benefit Structure related to pre-January 1, 2011, contributions
[3] Unless the member has more than 60 months of contribution postings

Vested Member Paths to Access DB Funds

Path	Prior to Retirement Eligibility	At or After Retirement Eligibility
Lump-Sum Refund or Rollover	**Member contributions plus interest with 50% match**	**Member contributions plus interest plus 100% match[1]**
Monthly Retirement Benefit	**N/A**	**The larger of** • **Standard DB Benefit Calculation** • **Money Purchase Benefit[2]**

[1] In the DPS Benefit Structure, no match if termination of employment was prior to January 1, 2001
[2] In the DPS Benefit Structure, this is replaced by the Minimum Benefit Calculation

Key Principles (from Board Policy)

1. ***Competitiveness of the Interest Rate***
   Assess the market interest rate environments including inflation compared to the Member Contribution Interest Rate. Also, consider the implied interest rate achieved given employer matching plan provisions.

2. ***Effectiveness of the Interest Rate in combination with the matching amounts in the money purchase retirement calculation in providing a benefit***
   Assess the Interest Rate's effectiveness in providing a money purchase retirement benefit, while acknowledging value added through available employer matching dollars.

3. ***Impact on member behavior***
   Assess whether the Interest Rate incents inactive members to refund contributions or to leave their account with PERA and continue adding value to their future PERA benefit

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Principle #1 – Competitiveness of the Interest Rate

Listed are several examples of historical returns for less risky investments

Related Returns Over Various Time Periods

Investment	3 Yrs	5 Yrs	10 Yrs	Current Yield (9/30/2026)
U.S. 3M Treasury Bills	4.7%	3.9%	2.5%	4.1%
U.S. 2Yr Treasury Note	4.2%	3.9%	2.6%	4.9%
U.S. 10Yr Treasury Note	4.4%	3.9%	2.9%	5.3%
U.S. 30Yr Treasury Note	4.8%	4.2%	3.4%	5.6%
U.S. CPI-U (Seasonally Adj)	3.1%	4.2%	3.4%	
PERAdv Capital Preservation	2.8%	2.4%	2.2%	

as of 9/30/2026

The Member Contribution Interest Rate has been 3% since January 1, 2009

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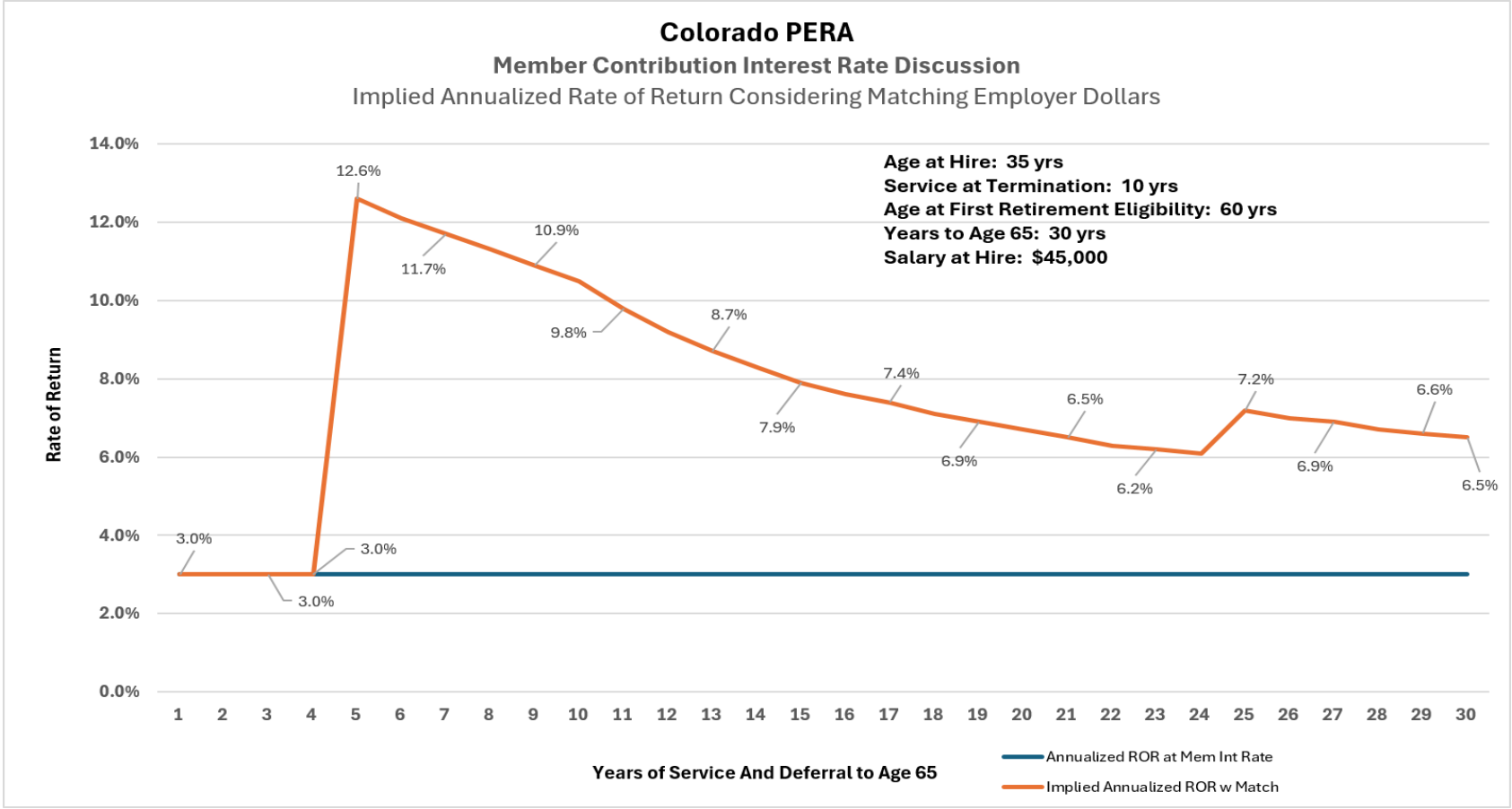
Implicit Interest Rate Achieved

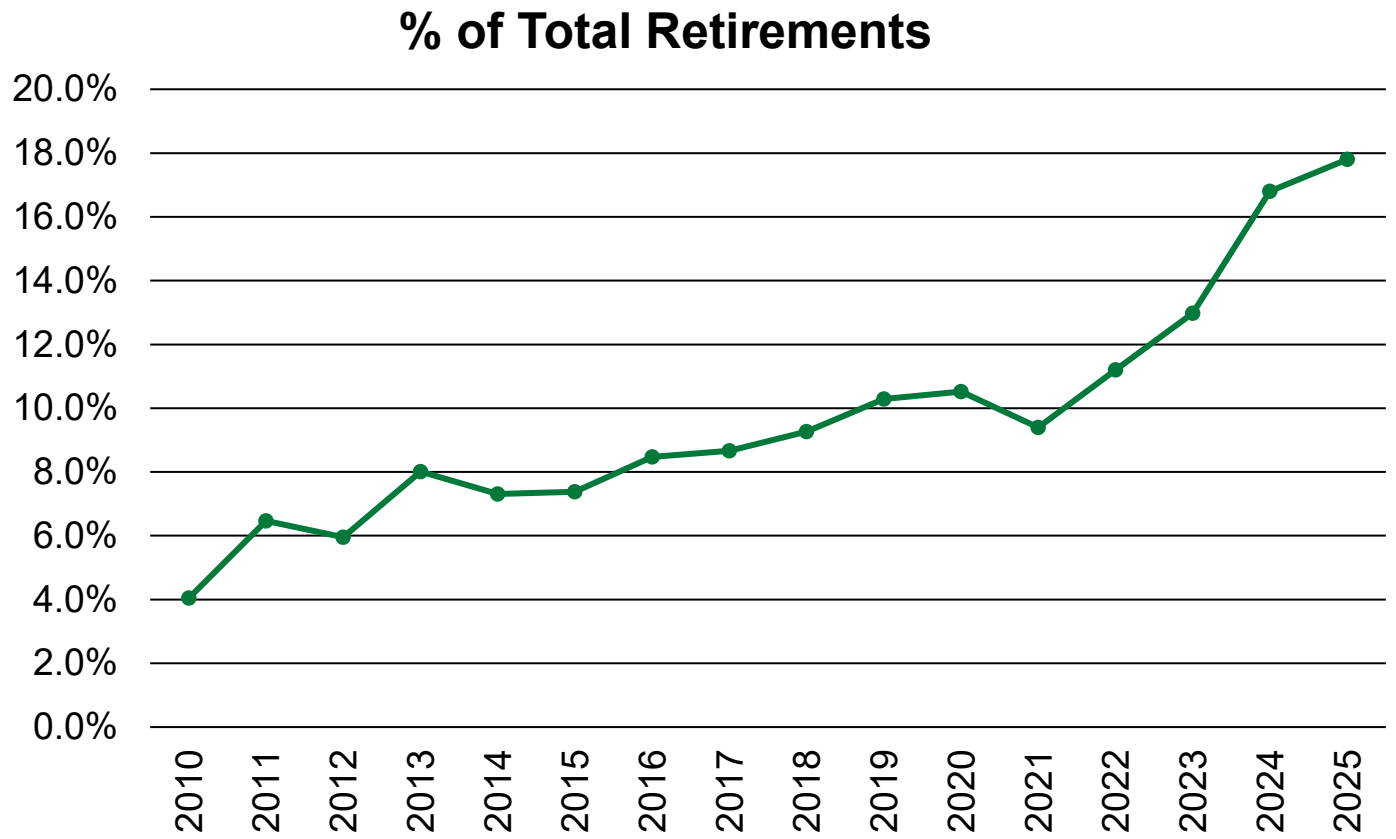
- Assumes 3% Member Contribution Interest Rate
- Implied annualized (averaged) interest rate achieved at each year through age 65
- Illustrates competitiveness of current interest rate versus market rates with consideration of employer matching dollars.



Based on available data, the typical PERA inactive member is represented by an individual hired at age 35 who has accrued 10 years of service with a PERA-covered employer.

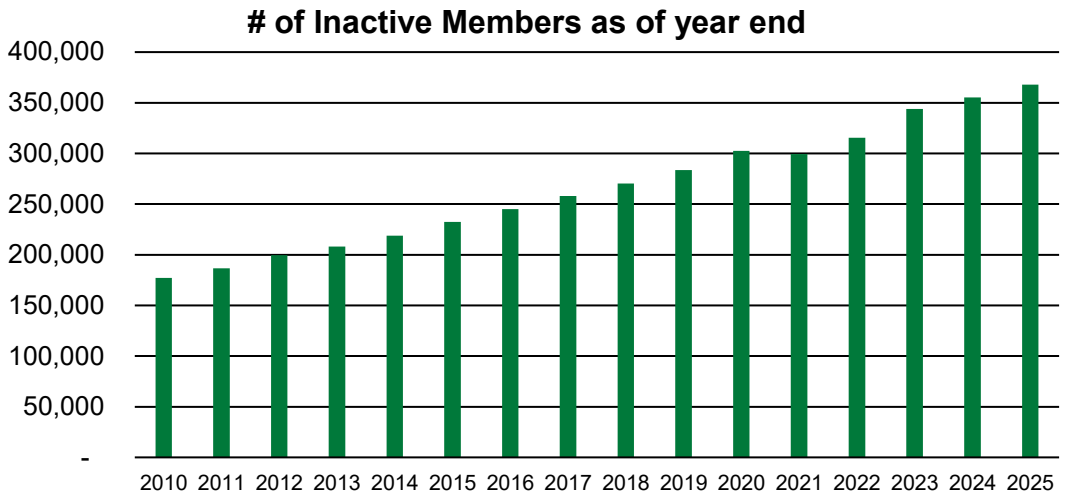
Principle #2 – Effectiveness of Interest Rate in Providing The Money Purchase Benefit

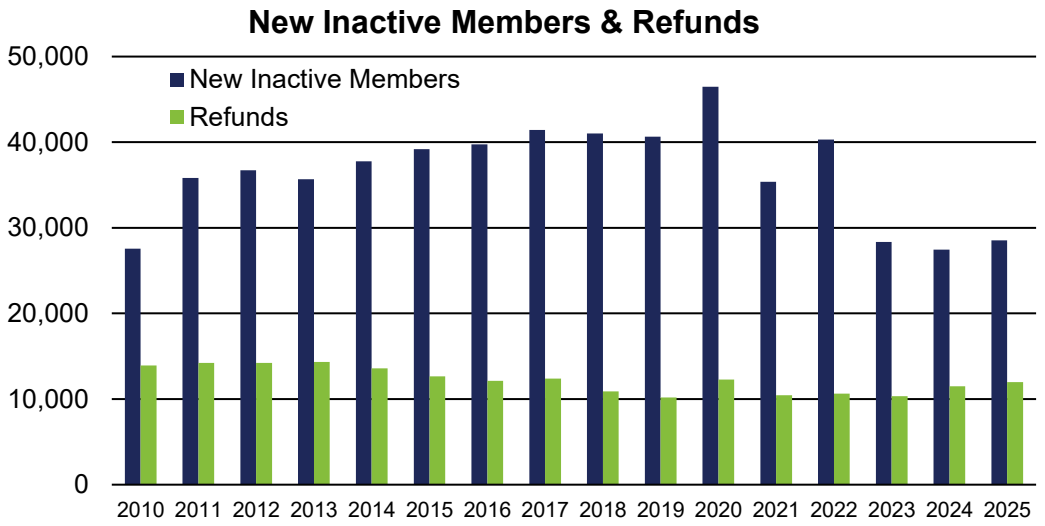
- **Are members leaving their money with PERA and ultimately receiving a money purchase benefit?**
  - PERA (generally) has seen a steady increase in the percentage of retirees receiving a money purchase benefit over recent years
  - By leaving money in the PERA plan, member accounts continue to grow and upon retirement eligibility, members are entitled to receive a 100% match on those dollars, which is annuitized using PERA's 7.25% return assumption



Principle #3 – Impact on Member Behavior

- **Is PERA seeing a steady increase in inactive members? Are they refunding or leaving their money with PERA?**
  - A money purchase benefit or a service retirement benefit is generally comparable or better when compared to other retirement options, especially considering the level of risk incurred by the member
  - What benefits do members receive for leaving money in PERA?
    - Access to survivor benefits
    - Access to an annuity using PERA's 7.25% assumed rate of return
    - Access to PERA's group healthcare at retirement and subsidy





Member Contribution Interest Rate
Cost / (Savings) for +1.0% / -1.0% Change
(Estimated Results)

Member Contribution Interest Rate Scenarios	Actuarial Accrued Liability (AAL) [$ in Millions]	Change in AAL from Baseline [$ in Millions]
Baseline at 3.0%	$97,346	N/A
Increase to 4.0%	$97,733	$387
Decrease to 2.0%	$97,041	($305)

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Member Contribution Interest Rate
Cost / (Savings) for +1.0% / -1.0% Change
(Estimated Results)

Member Contribution Interest Rate Scenarios	Actuarially Determined Contribution (ADC) [as of % of Pay]				
	State Division	School Division	Local Gov Division	Judicial Division	DPS Division
Baseline at 3.0%	18.63%	22.58%	10.16%	10.77%	7.81%
Increase to 4.0%*	19.33%	23.08%	10.68%	11.18%	8.59%
Change in ADC* [from Baseline]	0.70%	0.50%	0.52%	0.41%	0.78%
Decrease to 2.0%	18.11%	22.20%	9.75%	10.55%	7.21%
Change in ADC [from Baseline]	(0.52%)	(0.38%)	(0.41%)	(0.22%)	(0.60%)

* Increasing the Member Contribution Interest Rate to 4.0% would impact the ADCs of all five division trust funds and thus, adversely impact the annual AAP assessment, possibly accelerating the next possible “downside” AAP adjustments. For example, if adopted in 2025, the AAP result of 103.73%, would have been reduced to approximately 101.91%, with continuing and residual impact in the following years.

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Staff Recommendation

- Staff recommends the Board retain 3% as the Member Contribution Interest Rate for 2027
- Recommendation considers the combination of market rates, perceived member behavior, and impact on liabilities



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Questions?

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Appendix A

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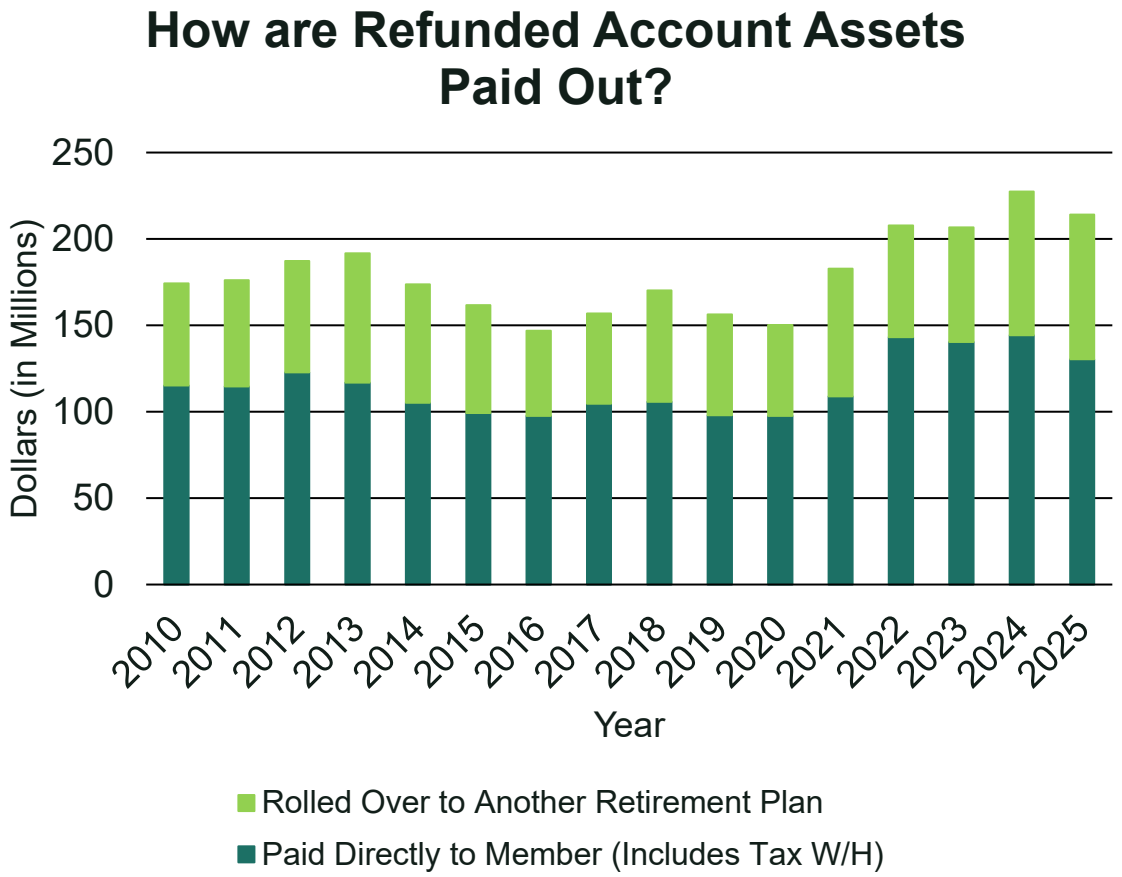
Interest Rate – Member Refund Experience

- If a member terminates PERA employment and elects to refund their PERA account, they can elect to rollover assets to another qualified retirement plan, receive the refund as a taxable payment, or a combination of the two.
- Experience shows a consistent pattern of between 33%-40% of refunded assets are rolled over to another retirement plan.
- Those rolling over are generally likely to do so either because they wish to consolidate retirement assets and/or they believe they can achieve returns higher than the Interest Rate elsewhere.



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Appendix B

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Implicit Interest Rate Achieved

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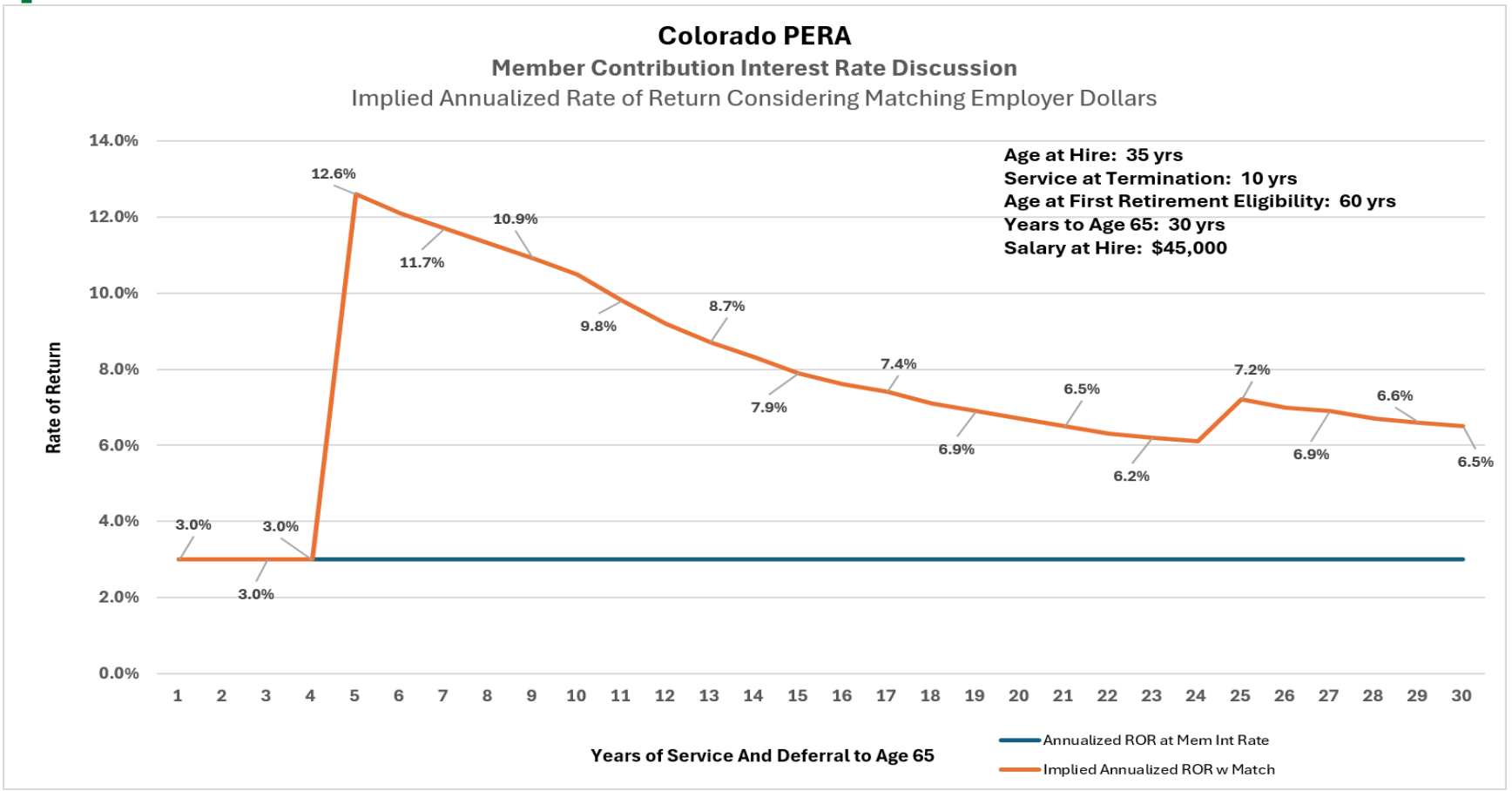
- Illustrates competitiveness of current interest rate versus market rates with consideration of employer matching dollars.



Based on available data, the typical PERA inactive member is represented by an individual hired at age 35 who has accrued 10 years of service with a PERA-covered employer.

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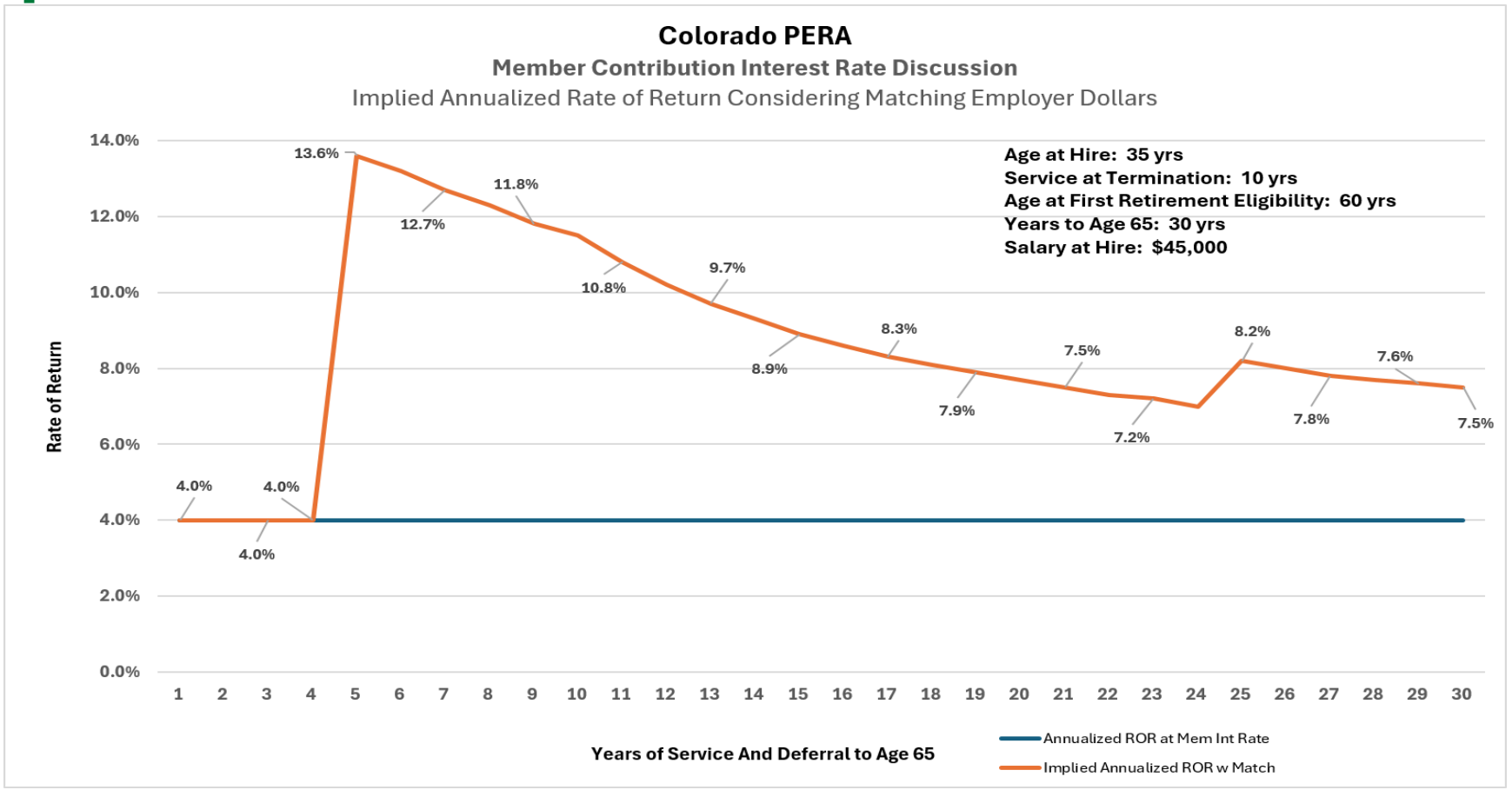

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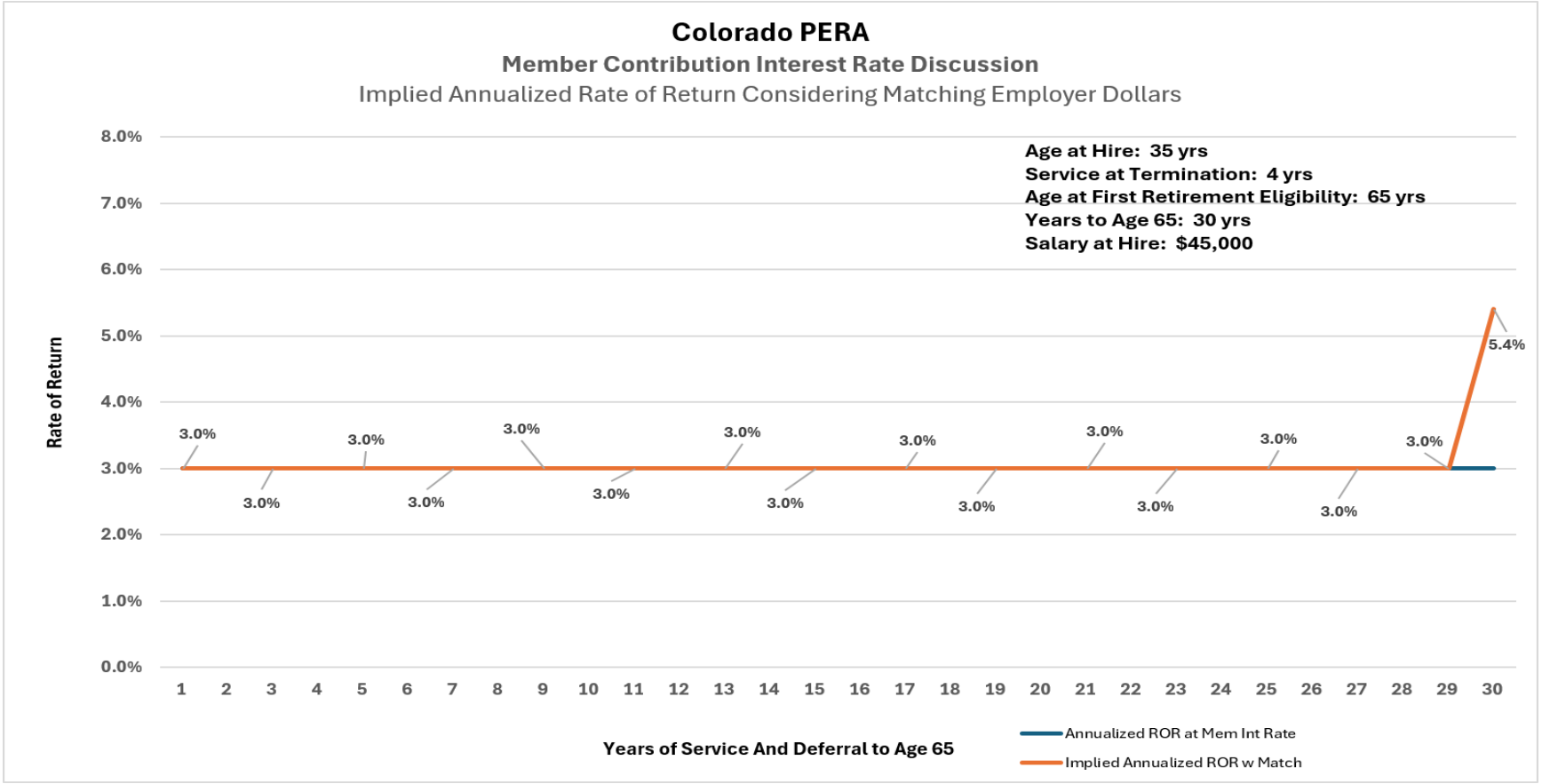

Example 2: An individual hired at age 35 who has accrued 4 years of service with a PERA-covered employer.

Implicit Interest Rate Achieved

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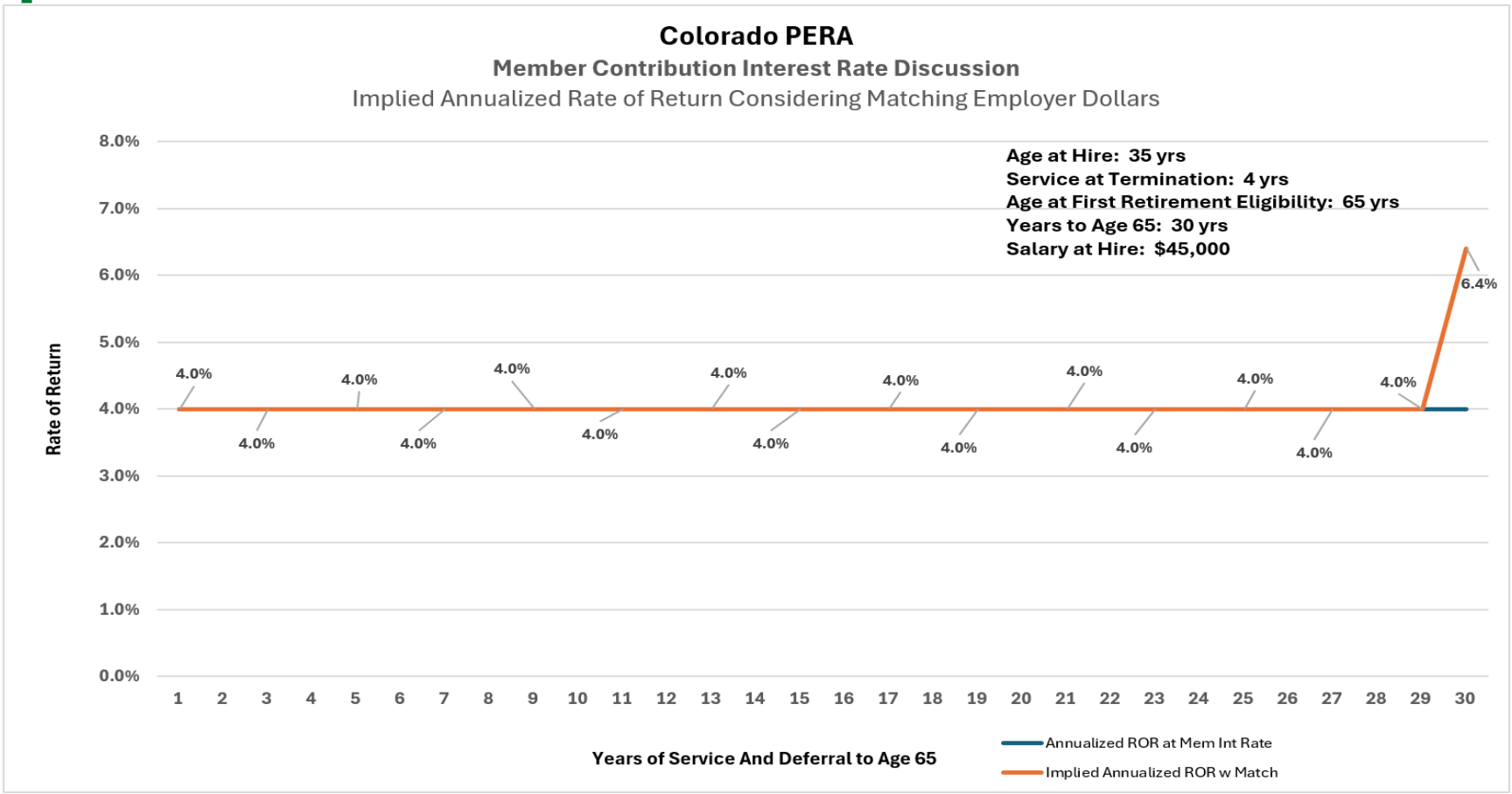

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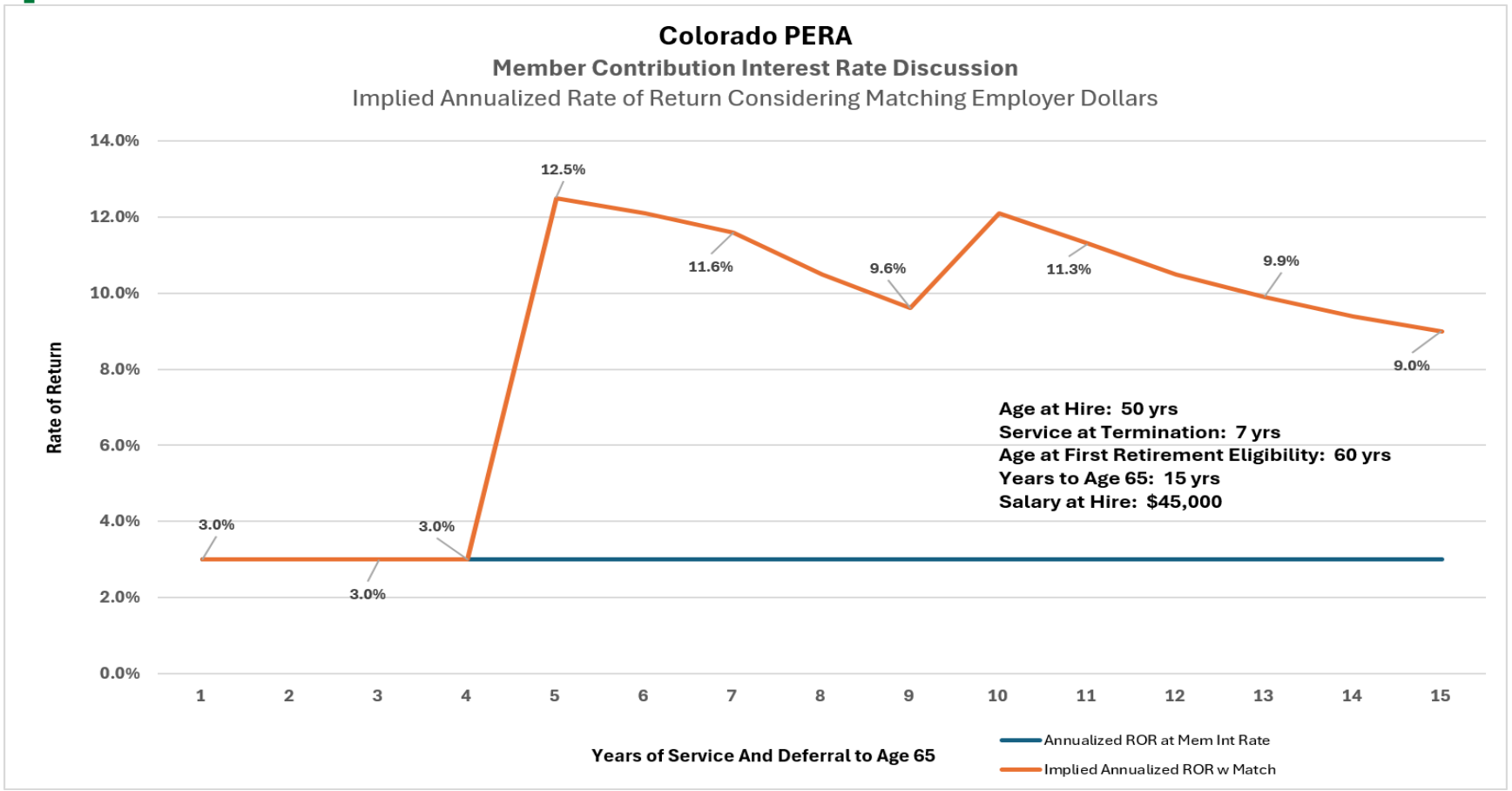
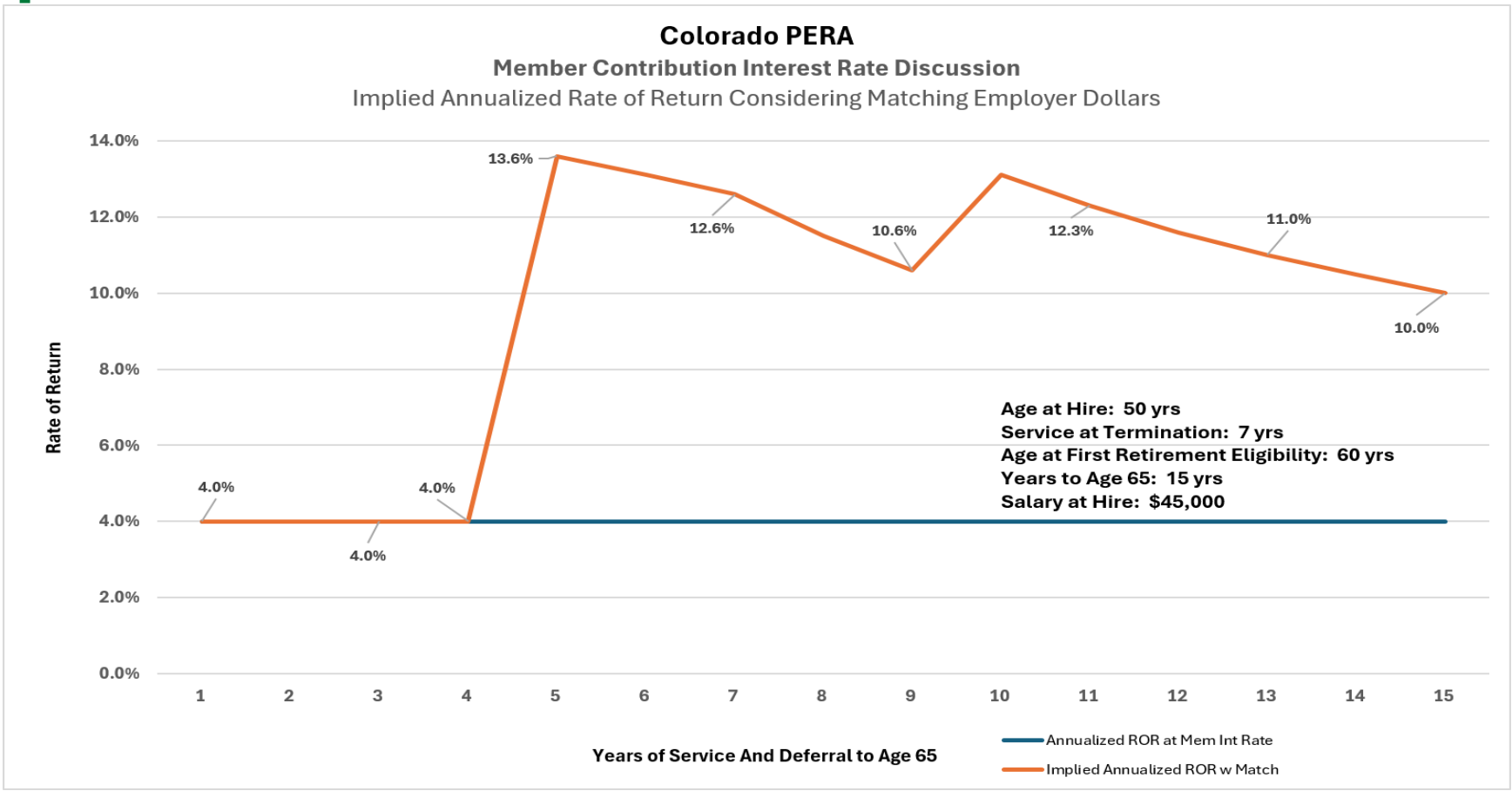


Example 3: An individual hired at age 50 who has accrued 7 years of service with a PERA-covered employer.

Implicit Interest Rate Achieved

- Assumes 4% Member Contribution Interest Rate
- Implied annualized (averaged) interest rate achieved at each year through age 65
- Illustrates competitiveness of current interest rate versus market rates with consideration of employer matching dollars.



Example 3: An individual hired at age 50 who has accrued 7 years of service with a PERA-covered employer.

Board of Trustees
Policy For Setting the Pera Member Contribution Interest Rate

I. Overview

The PERA Board of Trustees has established this policy to document the key principles used to determine the PERA member contribution interest rate [hereinafter referred to as "interest rate"].

II. Applicable Law

C.R.S. § 24-51-407(4) provides:

> *On or after July 1, 2004, member contributions shall earn interest at a rate specified by the board, compounded annually, that is in effect at the time interest is earned. In no event shall the Board specify a rate pursuant to this subsection (4) that exceeds five percent.*

The interest rate is established by the PERA Board of Trustees for each calendar year, pursuant to C.R.S. 24-51-101(28)(c).

III. Goal

A policy to guide the Board in setting the interest rate designed to reflect the Board's principles and use of the interest rate as a component of the member's benefit.

IV. Impact of interest rate on PERA members

The interest rate is a component of a member's benefit and the value of the benefit may vary based upon the interest rate. The interest rate is a component of the member's benefit in two ways:

a) Contribution totals when a member refunds their member account; and

b) Total contribution amount annuitized in the money purchase retirement benefit calculation.

V. Key Principles

The PERA Board of Trustees adopts the following principles it will consider when exercising its authority in setting the interest rate:

- Competitiveness of the interest rate
- Effectiveness of the interest rate in combination with the matching amounts in the money purchase retirement calculation in providing a benefit
- Impact on member behavior

This Policy shall be effective as of September 11, 2020.

PERA Board of Trustees Update: Enterprise Risk and Compliance

Presented by: Meg Cody, Director of Risk and Compliance

November 20, 2026

Informational Purposes Only

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Agenda

- Strategic Alignment
- 2026 Accomplishments
- Enterprise Risk and Compliance Overview
- Mission and Role
- Scope and Objectives
- Maturity and Continual Improvement
- What to Expect in 2027
- 2027 Focus: Key Partnerships
- Questions?



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Strategic Alignment

Objective B:

Enhance organizational decision-making through integrated enterprise programs

2026

Initiative 2:

Research and determine the scope and objectives of the enterprise risk and compliance office



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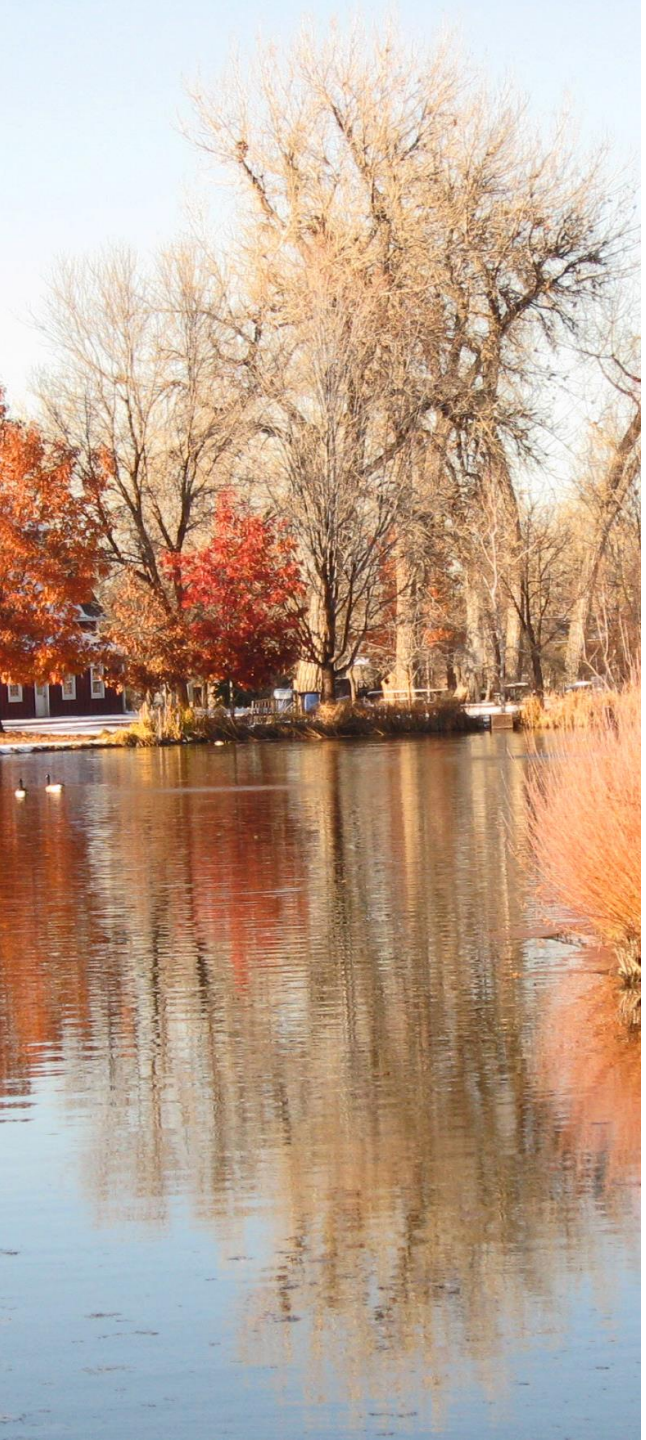

2026 Accomplishments

- Inventoried current risk and compliance practices
- Identified best paths toward enterprise risk and compliance based on peer models and industry standards
- Defined scope and objectives for the Enterprise Risk and Compliance Division
- Built Division foundations
  - We welcomed Maren Stransky, Enterprise Risk and Compliance Analyst, to the team in November 2026.

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Enterprise Risk and Compliance Overview

Enterprise Risk Management (ERM)

A coordinated, consistent, and strategic approach to uncertain outcomes (risks) that can impact achievement of strategic objectives

Why it matters:
ERM integrates risks across divisions to drive strategic decisions and enable responsible innovation.

Enterprise Compliance

An integrated, organization-wide system to ensure responsible, ethical, and sustainable operations

Why it matters:
It supports fiduciary obligations, enhances resilience, and helps to define boundaries around responsible innovation.

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Mission and Role



Mission: Protect PERA's value by ensuring that proactive ERM and compliance efforts are leveraged consistently toward organizational success, with transparency, in support of strategy, and to enhance sustainability and public trust.

First Line:
Business Operations and Management

Own and manage risk in daily operations to ensure work aligns with organizational objectives

Second Line:
Enterprise Risk and Compliance

Provide advice, monitoring, frameworks, and challenge to the First Line

Third Line:
Internal Audit

Provide independent assurance and insight

Based on the Institute of Internal Auditors' Three Lines Model

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Scope and Objectives

Direct	Proactively direct work to identify, assess, treat, monitor, and prioritize enterprise risks
Coordinate	Coordinate enterprise risk treatments (risk insurance, continuity planning)
Track	Transparently track and report enterprise risk and compliance issues
Promote	Promote risk and compliance awareness as integral parts of PERA's culture
Integrate	Integrate enterprise risk and compliance work into PERA's strategic operations
Facilitate	Actively support ownership, accountability, and ethical behavior with advice, advocacy, and education

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Maturity and Continual Improvement

Enterprise Risk Management:
(IRDMO)

Initial > **Repeatable** > Defined > Managed > Optimized

Compliance:
(UDAMO)

Underdeveloped > **Defining** > Adapting > Managing > Optimizing

Current State

- Ad hoc practices and documentation
- Reactive response
- Siloed tracking and reporting

Future State

- Consistent and measurable
- Proactive monitoring
- Centralized and consistent reporting

Goal: Move PERA's Enterprise Risk and Compliance capabilities toward maturity while maintaining the continuity of what works well now

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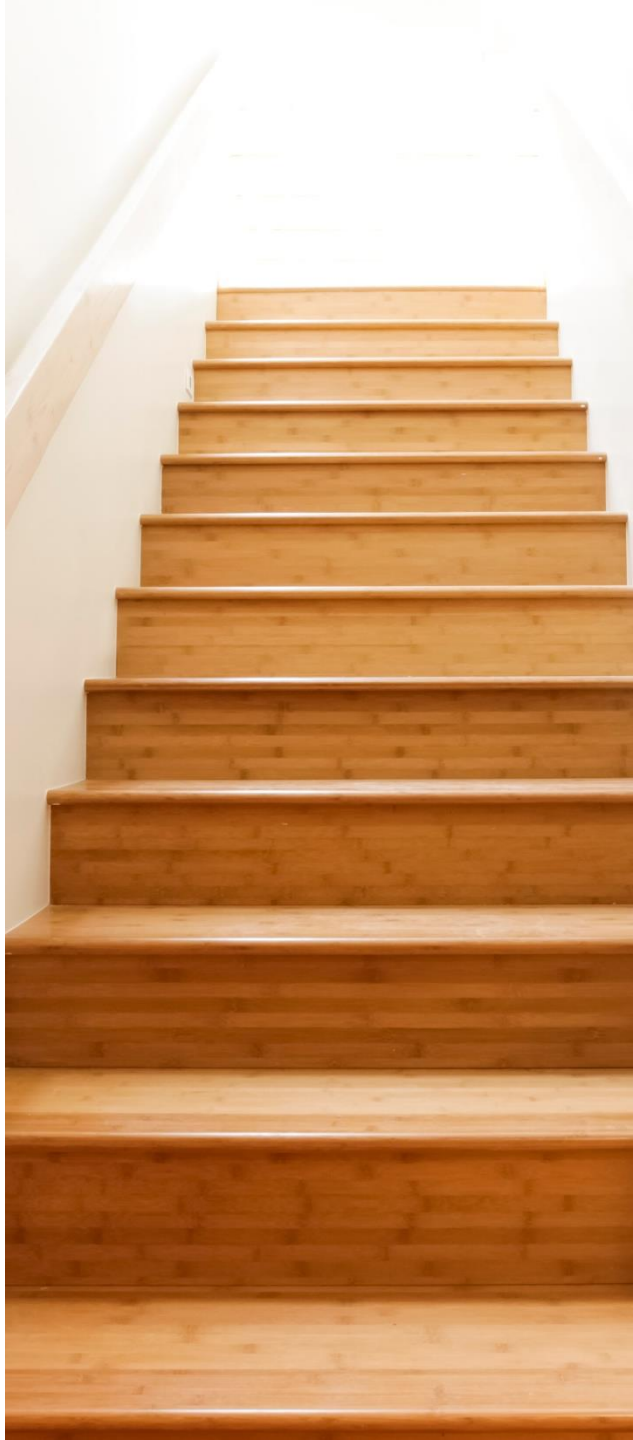
What to Expect in 2027

- Dashboards, risk registers, and heat maps
- An established reporting cadence and mechanisms built from best practices and lessons learned
- Staff engagement and training
- Integration with key partner divisions and their processes
- In November 2027, a recommendation re: including Enterprise Risk and Compliance in a Board Committee Charter



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2027 Focus: Key Partnerships

Integrating our work with key existing processes surfaces enterprise risks.

Enterprise Risks

Strategy
Apply enterprise risk and compliance tools to Strategic Plan items

Internal Audit
Embed enterprise risk review into the annual Risk Assessment

PMO
Build enterprise risk assessment into project workflows

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Questions?

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Summary of Changes to Colorado PERA Rules

Purpose of Rulemaking

Authority

The statutory authority for rulemaking by the Public Employees' Retirement Association is Colorado Revised Statute section 24-51-204(5), as amended.

Scope and Purpose

The purpose of this rulemaking is to amend 8 CCR 1502-1 (Colorado PERA Rules) as follows:

1. 1.20C is being removed pursuant to legislation that passed in 2026 (House Bill 26-1026), which provides a new statutory definition of "noncovered time."
2. 2.20F is being amended to clarify that the administrative hearing Panel's decision will be "sent" as opposed to "mailed" to allow for electronic delivery.
3. 2.30D is being amended to remove an outdated reference to the July 2012 election term.
4. 2.30F is being amended to remove the requirement that signers of the petition for Board elections provide their social security number.
5. 2.45 is being amended to indicate that a newly elected or appointed Board member will assume office on the earlier of either (1) the first of the month following the election or appointment, or (2) the first Board meeting following the election or appointment, unless otherwise specified by the Board or Chair.
6. 5.20 is being amended pursuant to legislation that passed in 2026 (House Bill 26-1026) to align with the statutory definition of noncovered time by replacing the word "employment" with "time."
7. 5.25 is being amended pursuant to legislation that passed in 2026 (House Bill 26-1026) to explain the purchase of noncovered time versus noncovered employment.
8. 9.50A(1) and (2) are being amended to specify that survivor benefits for Qualified Children cease on the last date of the month in which the school terms ends.
9. 15.05 is being amended to add definitions for the terms "Participant" meaning the PERA member or retiree, and "Alternate Payee," meaning the Participant's former spouse. This section is also being amended to spell out "Domestic Relations Order" before using the acronym "DRO."
10. 15.10 is being amended to capitalize the terms "Agreement" and "Order."
11. 15.25 is being amended to indicate that the Domestic Relations Order for PERA purposes is incorporated in the court's permanent order. This allows the member 90 days from the entry of Domestic Relations Order with the court to submit it to PERA.
12. 15.30 is being amended to clarify that payment to an Alternate Payee will begin on the next payment date after PERA receives the Alternate Payee's application, and that payment to the Alternate Payee will not be retroactive.
13. 15.70 is being added to address the consequences of death of both the Participant and the Alternate Payee. This addition codifies PERA's existing administrative practice.
14. 17.10 is being amended due to legislation that was passed in 2026 (House Bill 26-1026) which mandates employer affiliation with PERA's 457(b) plan. The amendment clarifies that any employee may enroll in the Deferred Compensation Plan in accordance with the Plan document.

Rule Amendments

1.20 Terms Used in Rules

Terms used in the Rules shall have the meaning specified:

A. Foreign employer means a person or an entity that is formed under the laws of a jurisdiction outside the United States or its Territories

B. Pay pattern means the frequency of periodic salary payments.

(1) Academic pay pattern means salary is paid over a period of at least 8 months but less than 12 months.

(2) Seasonal pay pattern means salary is paid over a period of 1 to 11 months as determined by work available.

(3) Traditional pay pattern means salary is paid over a period of 12 months.

C. ~~Noncovered employment means public or private employment with an employer in the United States, its territories, or any foreign country for which no PERA service credit was earned. Qualified service and non-qualified service shall be determined in accordance with the Internal Revenue Code, and the Internal Revenue Service Rules and Regulations.~~[Reserved]

D. Retroactive salary means salary for previous periods of employment for which payment was delayed or the rate of pay subsequently changed. Retroactive salary payments shall be considered earned in the months for which the salary should have been paid, had no delay or subsequent rate change occurred. For retroactive salary payments that are made pursuant to court orders or arbitration awards or litigation and grievance settlements, the PERA-includable salary cannot be greater than the rate of pay the member would have received had he or she been employed with the employer and/or paid at the time the services were performed. In the event that the retroactive salary payment is less than the rate of pay the member would have received had he or she been employed with the employer and/or paid at the time the services were performed, the Association shall provide partial service credit to the member by prorating the service credit in the same proportion to the salary that was actually paid versus the salary that would have been paid.

E. Qualified Children

(1). Natural children means those biological children of a member who are conceived prior to the date of death of the member and are born within the normal gestation period after the date of the death of the member.

(2). Adopted children means those for whom a petition for adoption was filed in court prior to the date of the death of the member and such petition is diligently pursued to the entry of the final decree of adoption.

(3). Qualified children shall not include natural or adopted children of a member or inactive member whose parental relationship to the child has been terminated or determined by a court not to exist prior to the death of the member or inactive member.

(4). Qualified children shall not include natural children of a member or inactive member whose parental relationship to the child is determined by a court after the death of the member or inactive member.

(5). Qualified children shall include natural or adopted children of a member or inactive member who are legally adopted by another parent after the death of the member or inactive member. This subsection (5) shall not apply to qualified children eligible for benefits pursuant to the provisions of Section 24-51-1737, C.R.S.

(6). For purposes of the DPS benefit structure, qualified children means those children who are eligible to receive survivor benefits pursuant to Section 24-51-1737, C.R.S.

F. Salary

(1) Accrued Leave Payments

(a) Payments by an employer in satisfaction of amounts owed for accrued but unused leave shall be treated as PERA salary pursuant to 24-51-101(42), C.R.S., if the following criteria are met:

- The payment by the employer of the accrued leave is made in a lump sum within 60 days after the termination of the member's employment or in periodic payments after severing employment not at the election of the member. Periodic payments must be made over consecutive pay periods and for a period not to exceed the amount of service credit awarded in association with the payment. In the event that periodic payments are made, a single benefit adjustment will be made at the end of the payment period;
- The accrued leave payments are paid at a rate not to exceed the member's

most recent rate of pay; and

- The payment is for accrued leave earned by the member pursuant to an established employer policy or employment contract and not as a result of a retroactive grant or an award by the employer.

(b) If each of the above criteria are met, consistent with longstanding PERA practice, the accrued leave payment will be treated as salary in calculating service credit and Highest Average Salary for retirement by applying the payment over the number of months as determined by the member's most recent monthly rate of pay. Additional service credit for these months will be included in the retirement benefit calculation. These months may also be used in the highest average salary calculation.

(c) Salary includes an annual lump sum payment of accrued leave, not at the election of the member, paid because the individual has accrued in excess of the maximum accumulation allowed by the employer's established leave policy.

(d) Notwithstanding anything herein to the contrary, any payout of leave made for a year the member has reached any maximum limit imposed under federal income tax law, including the limitations set forth in section 401(a)(17) of the federal Internal Revenue Code of 1986, as amended, shall not be included in the member's salary or service credit for the year paid or any future year.

(2) Cash Payments in lieu of Fringe Benefits

Cash payments in lieu of fringe benefits paid by an employer will be treated as PERA salary pursuant to section 24-51-101(42), C.R.S., if the Association determines that the payment is includable pursuant to this Rule and is in no way designed to manipulate Highest Average Salary.

(3) Performance or Merit Payments

Performance or merit payments are payments which are in addition to regular salary or which replace regular salary increases in recognition of sustained employee performance over the evaluation period. In order for performance or merit payments to be treated as PERA salary pursuant to 24-51-101(42), C.R.S., the Association must have determined that the payment is includable pursuant to this Rule and is in no way designed to manipulate Highest Average Salary. All payments shall be considered earned in the month in which the performance payment is made, except that payments to DPS members who were eligible to retire as of January 1, 2011, shall be considered earned in the months for which the performance payment was based.

(4) Contributions Under Internal Revenue Code Section 125 and 132

(a) For members who were members, inactive members, or retirees on June 30, 2019, salary shall not include amounts excluded from gross income under a cafeteria plan defined in Internal Revenue Code Section 125, or under a qualified transportation fringe benefit program defined in Internal Revenue Code Section 132(f)(4), so long as such deductions are made in equal periodic deductions through the year.

(b) For members who were not members, inactive members, or retirees on June 30, 2019, salary shall include amounts excluded from gross income under a cafeteria plan defined in Internal Revenue Code Section 125, or under a qualified transportation fringe benefit program defined in Internal Revenue Code Section 132(f)(4).

(5) Payments made by an employer for differential pay, as defined in section 414(u)(12) of the Internal Revenue Code of 1986, as amended, shall be treated as PERA salary pursuant to 24-51-101(42), C.R.S.

(6) Tips

Tips received by a member for services rendered in connection with his or her employment by an employer shall be salary pursuant to section 24-51-101(42), C.R.S.

(7) One-time payments

PERA employers pay one-time, non-base building payments to their employees as compensation for services rendered. Under section 24-51-101(42), C.R.S., payments made

to employees that are actually for services rendered can be PERA salary, but honorariums, cash awards, bonuses, and other payments enumerated in sections 24-51-101(42)(a)(II) and (b)(II), C.R.S., are not PERA salary. One-time, non-performance, and non-merit based payments paid by an employer shall be treated as PERA salary pursuant to section 24-51-101(42), C.R.S. if the employer demonstrates its intent that the payment is a salary payment rather than a bonus, and the Association determines that the payment is includable pursuant to this Rule and is in no way designed to manipulate Highest Average Salary.

G. Highest Average Salary

(1) In calculating Highest Average Salary, the Association shall sort the three or five periods of twelve consecutive months of service credit in chronological order.

(2) For a member who was a member, inactive member, or retiree on December 31, 2006, and who has an effective date of retirement on or after January 1, 2009 and has more than 36 months of earned service credit and less than 48 months of earned service credit, the Highest Average Salary shall be calculated using the highest annual salaries associated with three periods of twelve consecutive months of service credit and no annual base salary shall be used.

(3) For a member who was not a member, inactive member or retiree on December 31, 2006, and who has five years of service credit on December 31, 2019, or a member of the judicial division who does not have five years of service credit on December 31, 2019, or a member of the judicial division who was not a member, inactive member, or retiree on December 31, 2019, and who has more than 36 months of earned service credit and less than 48 months of earned service credit, the Highest Average Salary shall be calculated using the highest annual salaries associated with three periods of twelve consecutive months of service credit and no annual base salary shall be used.

(4) For a member or inactive member who does not have five years of service credit on December 31, 2019, or a member who was not a member, inactive member, or retiree on December 31, 2019, who has more than 60 months of earned service credit and less than 72 months of earned service credit, the Highest Average Salary shall be calculated using the highest annual salaries associated with five periods of twelve consecutive months of service credit and no annual base salary shall be used.

(5) For purposes of section 24-51-101(25), C.R.S., and this Rule 1.20G, the term "highest annual salaries" shall mean the salaries associated with four or six periods of twelve consecutive months of service credit that when summed together achieve the highest cumulative value. The salaries associated with each individual twelve month period of service credit shall not be considered separately from the four- or six-year cumulative total for purposes of determining which periods yield the "highest annual salaries."

(6) This Rule 1.20G shall not apply to DPS members who are eligible to retire as of January 1, 2011.

2.20 Administrative Review

A. Request for Executive Director Initial Decision

A written request for an initial decision by the Executive Director must be received by the Association within 90 days after the date on which the staff decision is sent. The staff decision shall be sent electronically through PERA's authorized secure channels or via certified mail.

B. Request for Administrative Hearing

A written request for administrative hearing, including specifics, must be received by the Association within 45 days after the date on which the notice of the initial decision is sent. The initial decision shall be made by PERA's Executive Director or the Executive Director's designee, and written notice of the initial decision shall be sent electronically through PERA's authorized secure channels or via certified mail.

C. Administrative Hearing

(1) Notification of Scheduled Administrative Hearing

The person for whom the hearing is being conducted or their attorney, if represented, and the person representing the PERA administration will be notified electronically through PERA's authorized secure channels or via certified mail of the time, date and place of the hearing no less than 45 days prior to the date of the hearing.

(2) Submission of Information Prior to the Hearing

(a) No less than 30 days prior to the date for which the hearing is scheduled, the person who requested the hearing and the person

representing the PERA administration each shall submit: (a) a statement which includes the issues presented, a brief analysis of those issues, the names of all witnesses to appear, a brief description of their expected testimony, and (b) the written information to be considered at the hearing.

(b) No less than 20 days prior to the date for which the hearing is scheduled, the person who requested the hearing and the person representing the PERA administration each shall submit: a responsive statement including, to the extent appropriate, the same elements set forth in Rule 2.20 C (2) (a) and any additional written information to be considered at the hearing. After this submission, no further written information is to be submitted unless good cause is shown for the late submission.

(3) Burden of Proof

The person who requested the hearing shall bear the burden of proof by a preponderance of the evidence at the hearing.

D. Consolidation of Administrative Appeals

Any party to an appeal may request consolidation of an executive director initial decision or administrative hearing in appropriate circumstances. The party requesting consolidation must make such request in writing no later than 30 days after the deadline for a written request for executive director initial decision or administrative hearing pursuant to Rule 2.20A or B. Within 10 days of such a request, the other party may submit a written response stating that party's position regarding consolidation. The decision to consolidate at the executive director initial decision stage will be made by the Executive Director, in their discretion; the request to consolidate at the administrative hearing stage will be made by the hearing officer in their discretion.

E. Administrative Hearing

(1) Appointment of Panel Members

The Panel shall consist of three Board members appointed by the Chair.

(2) Responsibilities of Panel

The Panel shall hear and consider the evidence and then shall issue written findings of fact, conclusions of law, and the decision. After thirty days from the date the Panel's decision is sent, the Panel's decision shall constitute final administrative action appealable under Colorado Rule of Civil Procedure 106(a)(4) unless either party chooses to appeal the decision to the PERA Board pursuant to section (F) below. Written notice of the Panel's decision shall be sent electronically through PERA's authorized secure channels or via certified mail to each person who requested the hearing or to their attorney, if represented, and to the person representing the PERA administration.

(3) Hearing Officer

An administrative law judge from the Office of Administrative Courts shall serve as a non-voting hearing officer for administrative hearings. The non-voting hearing officer shall issue pre-hearing rulings as needed and conduct the hearing.

F. Review by the Board

(1) Any party may choose to appeal the Panel's decision to the PERA Board. If any party chooses to appeal, it must submit a written request for review to the PERA Board, which must be received by the Association within 30 days after the date on which the Panel's decision is sent~~mailed~~. If no appeal is made to the PERA Board within the 30 days, the Panel's decision shall become final administrative action at the expiration of the 30 days to appeal to the PERA Board.

(2) If a request for review to the PERA Board is filed prior to the deadline, the PERA Board shall review the matter based on the existing evidentiary record. The Board's review of the matter shall be limited to issues of law and shall not include review of the factual findings by the Panel. The record for Board review shall include the written materials considered by the Panel, the findings of fact, conclusions of law, and the Panel's decision. The Board may permit briefs and oral argument, if requested by a party at the time of appeal. The three Board members who served on the Panel shall not participate in the Board's review. After review, the Board shall issue a written decision affirming, reversing, or modifying the Panel's decision. Alternatively, the Board may remand the matter to the Panel with instructions to make further factual findings on specific issues that will assist the Board in determining issues of law; however, the Board may not alter any factual findings made by the Panel. Once the Panel has conducted its additional factual findings,

the matter shall be re-submitted to the Board to issue its written decision. Written notice of the Board's final decision shall be sent electronically through PERA's authorized secure channels or via certified mail to the parties or to their attorney, if represented, within 10 days of the date on which the written decision was made.

(3) If the PERA Board reviews the Panel's decision pursuant to this Rule, the Board's decision after its review shall constitute final administrative action appealable under Colorado Rule of Civil Procedure 106(a)(4).

2.30 Candidacy for Election to the Board

A. Any member of the Association may become a candidate for election to the Board as a representative from his or her division, by submitting a petition containing the required signatures, and a biographical summary of 150 words or less. The petition and the biographical summary must be received by the Association office by the first working day of March of the election year.

B. For candidacy to represent members in either the State, School or the Local Government Division, a candidate must submit a petition signed by no fewer than 100 members of the Division for which candidacy is declared.

C. For candidacy to represent members in the Judicial Division, the candidate must submit a petition signed by no fewer than 10 members in the Judicial Division.

D. ~~For the term effective July 1, 2012, and in accordance with Section 24-51-203, C.R.S., f~~For candidacy to represent members and retirees of the DPS Division, a candidate must submit a petition signed by no fewer than 100 members and/or retirees in the DPS Division.

E. For candidacy as a retiree, the candidate must submit a petition signed by no fewer than 50 retirees. A retiree may not become a candidate in an election if the retiree's election would result in both retiree Trustees having retired from the same Division of membership. This paragraph (E) does not apply to retirees of the DPS Division.

F. Petitions must include the signature and legible printed name of each member or retiree who signs. The signer must also provide ~~either~~ their legible address~~. or their legible Social Security number~~.

2.45 Assumption of Office

Members and retirees elected or appointed to the Board shall assume office at the earlier of (1) the first of the month following the election or appointment, or (2) the first regular Board meeting following election, or appointment, unless otherwise determined by the Board or Chair. ~~the first regular Board meeting held after July 1 of the year in which they were elected, or at the first regular meeting following certification of election or appointment, whichever is later.~~

5.20 Purchased Service Credit

Purchased service credit may qualify a member for earlier service retirement, earlier reduced service retirement or increased benefits.

A. A. Repayment of Refund

A member may purchase all or part of a period associated with a refunded member contribution account. Service credit purchased based on all or part of a period associated with a refunded member contribution account pursuant to 24-51-503, C.R.S. is considered purchased service credit not earned service credit. The purchase of service credit relating to a refunded member contribution account pursuant to 24-51-503, C.R.S., shall not count toward the ten year limit for purchases of service credit specified in 24-51-505(2)(c), C.R.S.

B. Sabbatical Leaves

(1) For periods of sabbatical leave granted before July 1, 1966, service credit is provided without payment. This provision does not apply to DPS members or retirees.

(2) A member may elect to make separate purchases of service credit associated with more than one period of sabbatical leave. A member may not purchase any service credit associated with less than the entire period of any one sabbatical leave.

C. Noncovered Time~~Employment~~

(1) A member may purchase all or part of a period of noncovered time~~employment~~ except as provided in 24-51-505, C.R.S.

(2) A member who earns less than full service credit for a period of covered employment and has concurrent noncovered time~~employment~~ may not purchase service credit for that period in excess of the credit needed to obtain full service credit for that period. A member who earns full service credit for a period of covered employment may not purchase credit for noncovered time~~employment~~ served during that period.

D. Portability

A member who has an active service credit purchase agreement and exercises portability pursuant to the provisions of Section 24-51-1747, C.R.S., may only continue to make payment on the service credit purchase agreement as long as the member selects the benefit structure under which the purchase is being completed. If the member does not choose the account for which the service credit purchase applies, then the purchase agreement will be terminated and all payments made under the purchase agreement will be returned to the member.

E. Outside Service Under the DPS Benefit Structure

(1) A DPS benefit structure retiree who used substantiated outside service to reach full service retirement eligibility may not purchase that same time under the PERA benefit structure.

(2) An inactive DPS member who has substantiated outside service may purchase that same time under the PERA benefit structure as long as the individual meets the requirements to be able to purchase that service under the PERA benefit structure. The amount of the substantiated outside service that can be used in the DPS benefit structure will be reduced by the amount of the purchase into the PERA benefit structure account.

5.25 Service Credit Purchase Cost and Application

A. The cost to purchase one month of noncovered time~~employment~~ shall be a percentage of the member's Highest Average Salary as set forth in the Table appearing on the PERA website. Such percentage shall be determined by the age of the member at the time PERA receives the member's completed service credit purchase application.

B. To purchase service credit, the member must apply using the service credit purchase application form provided by PERA.

C. The completed service credit purchase application shall contain:

(1) Documentation of salary received by the member~~;~~ if purchase is for noncovered time that is either qualified service or noncovered time during which the member was employed and under twenty-one years old.

(2) Documentation of the member's dates of employment~~;~~ if purchase is for noncovered time that is either qualified service or noncovered time during which the member was employed and under twenty-one years old.

(3) Documentation of any other pension coverage including but not limited to a mandatory defined contribution plan for such employment.

D. The Association shall have the authority to determine the adequacy of the documentation described in Rule 5.25 C.

E. Absent complete documentation, no purchase agreement shall be issued.

F. Once complete documentation has been received by the Association, the Association shall issue a service credit purchase agreement which will include the cost to purchase service credit based upon the age of the member at the time the Association receives the member's completed service credit purchase application. Failure to comply with all terms and conditions of the service credit purchase agreement will result in a breach of the agreement and the member will not be allowed to purchase service credit based on said agreement. The member's cost for any subsequent service credit purchase agreement based upon this documentation shall be recalculated and determined based upon the member's age and Highest Average Salary when a subsequent agreement is issued.

9.50 Termination of Benefits

Survivor benefits shall be terminated on the date the survivor dies or is no longer qualified to receive such benefits.

A. Qualified Children's Benefits

(1) Under the PERA benefit structure, qualified children's survivor benefits shall terminate on the date of marriage of the child, on the date the Board finds that the child is no longer incapacitated, on the last day of the month of the school term in which the child's full-time enrollment ceases, or, for disabled children age 23 or older, on the first day of the month in which the surviving spouse becomes eligible for a benefit.

(2) Under the DPS benefit structure, qualified children's survivor benefits shall terminate on the date of marriage of the child, on the date the Board finds that the child is no longer incapacitated, or on the last day of the month of the school term in which the child's full-time enrollment ceases. The benefit shall also terminate on the date that an otherwise eligible child is adopted by anyone other than the unremarried surviving spouse of the member, and in such a case eligibility of the child shall be terminated by a subsequent remarriage of said surviving spouse.

(3) Benefits shall continue during annual vacation months for which the child is not enrolled in school if the child certifies within 30 days after the end of the prior term that they are enrolled for the following term. If the child does not certify within 30 days after the end of the prior term that he or she is enrolled for the following term, that child's benefits will be suspended for those vacation months. If that child later certifies that he or she is or was enrolled in school for the following term, the Association will resume payment of benefits and shall make retroactive payments to the child for the months for which the benefits were suspended due to failure to provide the summer certification. In the case of multiple qualified children, a child who is entitled to retroactive benefits pursuant to this Rule 9.50 A. shall not be paid benefits in an amount that would cause the total amount of benefits paid to the qualified children to exceed the percentage of Highest Average Salary as provided in 24-51-908(4) or 24-51-1738 through 1740, C.R.S. The Association shall not pay benefits in excess of the amount it must pay pursuant to the statutory provisions of the Association.

B. Dependent Parent's Benefits

Dependent parent's benefits shall terminate on the date the parent remarries.

Rule 15: Domestic Relations Orders (DROs)

Rule 15 requires that the standardized form be used by the parties to a domestic relations order, as well as by the court, and includes other rules for administration of domestic relations orders. For the purposes of Rule 15, the term "member" shall include DPS members and the term "retiree" shall include DPS retirees.

15.05 Definitions

A Domestic Relations Order (DRO) for the PERA defined benefit plan, the PERA defined contribution plan, the PERA 401(k) Plan, or the PERA 457(b) Plan shall consist of: (1) The written agreement for a DRO pursuant to C.R.S. §14-10-113(6) (hereinafter "~~a~~Agreement") and (2) The domestic relations order (hereinafter "~~o~~Order").

"Participant" is the individual with an account in the PERA defined benefit plan, the PERA defined contribution plan, the PERA 401(k) Plan, and/or the PERA 457 Plan.

"Alternate Payee" is the former spouse of the Participant being awarded funds from a PERA Plan.

15.10 Standardized Forms

As specified in 14-10-113(6)(d), C.R.S., the standardized ~~a~~Agreement and ~~o~~Order forms provided by PERA must be used by the parties and by the court, for the ~~a~~Agreement and the ~~o~~Order to be valid with respect to PERA. The standardized forms must be executed voluntarily by both parties and properly completed to be a valid DRO with respect to PERA, with no changes or alterations to the provisions of the standardized forms.

15.20 Type of Plan

PERA's required plan is a "defined benefit plan" as defined in 14-10-113(6)(b)(II), C.R.S., and all payments from the Plan shall be considered payments from a defined benefit plan. PERA's defined contribution plan, PERA's voluntary plan, the 401(k) Plan, and PERA's deferred compensation plan, the 457(b) Plan, are each a "defined contribution plan" as defined in 14-10-113(6)(b)(III), C.R.S.

15.25 DRO Submission Requirements

A. The parties shall submit the ~~agreement~~DRO to PERA within 90 days ~~after~~ of the later of the entry of the decree or entry of ~~and~~ the permanent orders regarding the division of benefits of a retirement plan administered by PERA~~property distribution~~ in a proceeding for dissolution of marriage, legal separation or declaration of invalidity of marriage. ~~For the agreement to be valid with respect to PERA, the agreement and order shall be entered by the court upon or before entry of any decree of dissolution of marriage, decree of legal separation, or declaration of invalidity of marriage or within 90 days after entry of the decree and the permanent orders regarding property distribution in a proceeding for dissolution of marriage, legal separation or declaration of invalidity of marriage.~~ Certified copies of the DRO~~agreement and order shall be received by PERA within 90 days after entry of the order and agreement, but~~ must be received by PERA at least 30 days before PERA shall makes its first payment pursuant to the DRO. ~~Notwithstanding the foregoing, a person who was divorced prior to July 1, 2009 and who was a member of: (1) the state defined contribution match plan and whose assets were transferred to the 401(k) Plan pursuant to 24-51-1402(5)(a), C.R.S.; (2) the state defined contribution plan and whose assets were transferred to the PERA Defined Contribution Plan pursuant to Section 24-51-1501(2)(a); or (3) the state deferred compensation plan previously administered under Part 1 of Article 52 of Title 24, as said part existed prior to its repeal in 2009 and whose assets were transferred to the PERA 457(b) Plan pursuant to Section 24-51-1601, C.R.S.,~~

~~shall have until July 1, 2010 to submit certified copies of the agreement and the order to PERA with respect to the assets so transferred.~~

B. An existing DRO that is valid with respect to PERA may be modified only by written agreement of the parties to the DRO and approved by the court. The standardized forms provided by PERA must be used by the parties to modify a DRO. Certified copies of the agreement and order shall be submitted to and received by PERA at least 30 days before PERA shall make its first payment pursuant to the modified DRO.

15.30 Application by Alternate Payee

An ~~a~~Alternate ~~p~~Payee must make application for payment with the forms prescribed by PERA. No payment shall be made by PERA to the ~~a~~Alternate ~~p~~Payee until after all of the necessary forms have been completed and received by PERA and all other statutory, regulatory, and rule requirements for payment are satisfied. Payment to the Alternate Payee will begin on the next payment date after PERA receives the Alternate Payee's application. Payment to the Alternate Payee will not be retroactive.

15.40 Participant's Account

The member contribution account for the defined benefit plan, the defined contribution account for the defined contribution plan and the member's account for the 401(k) Plan or the 457(b) Plan shall be reduced by payments made to the alternate payee.

15.50 Review of DRO Issues

Any issue pertaining to PERA and what PERA can or cannot do pursuant to a DRO (including, but not limited to, the validity of any DRO with respect to PERA, whether PERA can make any payment pursuant to any DRO, and what the amount and timing of any payment by PERA can be) shall be resolved through PERA's administrative review process pursuant to Rule 2.20.

15.60 DPS Benefit Structure

If a member has a member contribution account under both the PERA benefit structure and the DPS benefit structure, the member shall submit a separate DRO agreement with respect to both member contribution accounts. The standardized forms provided by PERA must be used by the parties.

15.70 Consequences of Death

A. In the event of Participant's death prior to the commencement of benefit payments pursuant to the DRO, no payment will be made to the Alternate Payee and the DRO shall be considered null and void.

B. In the event of Alternate Payee's death prior to the commencement of benefit payments pursuant to the DRO, no payment will be made to the Alternate Payee and the DRO shall be considered null and void.

C. If in DRO payment status, in the event of the death of the Alternate Payee, the payment being issued to the Alternate Payee will revert to the Participant.

D. If in DRO payment status, in the event of the death of the Participant, no further payments pursuant to the DRO shall be made.

RULE 17: DEFERRED COMPENSATION PLAN (457(b) PLAN)

Rule 17 describes certain requirements of the Deferred Compensation Plan, which is a 457(b) plan established pursuant to Section 457(b) of the Internal Revenue Code of 1986, as amended. In addition to this Rule 17 and Part 16 of Article 51 of Title 24, C.R.S., the Deferred Compensation Plan, or "457 Plan", is also governed by the Deferred Compensation Plan document adopted by the Board (the "Plan document").

17.10 Enrollment in the 457(b) Plan

Any employee ~~of an employer who has affiliated with the Deferred Compensation Plan pursuant to section 24-51-1602, C.R.S.~~ may enroll in the Deferred Compensation Plan in accordance with the Plan document.

PRISM Program Update

November 20, 2026 | PERA Board Meeting

Faheem Naushad, Director of Modernization

Executive Summary

PRISM moved from portfolio selection into active discovery and execution readiness.

Overall program

ON TRACK

Key watch item

Accounting Modernization implementation behind schedule as of 11/3/2026

Portfolio is progressing

Business and technical discovery began for Rate Maintenance. Base Benefit Calculator scope and project ownership were advanced. Employer Directory discovery to begin early November.

Operating model is maturing

A 24-month rolling roadmap process was launched, and governance and reporting were strengthened.

Foundations strengthening

Data architecture and governance remained on track and are increasingly aligned to the first modernization projects.

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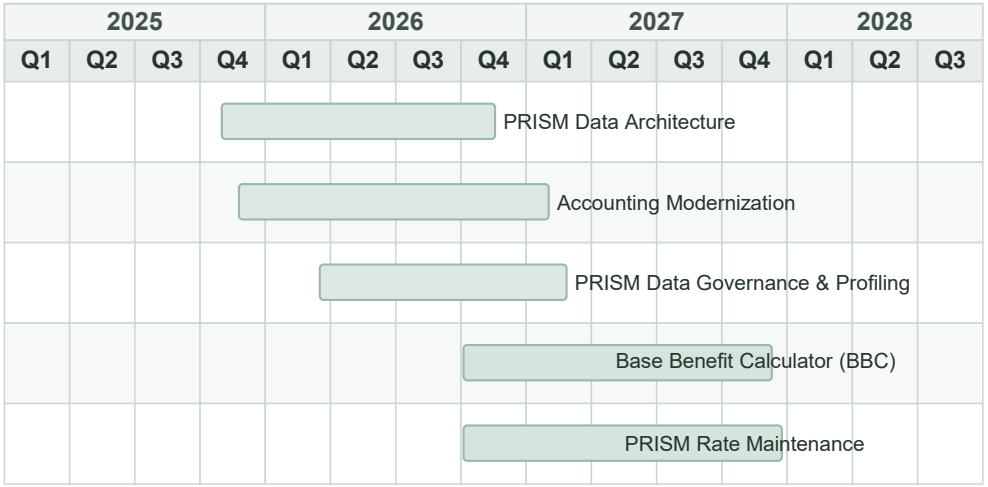
PRISM Project Status

Program Name	Program Phase	Overall Health	Schedule	Budget	Resources
PRISM	Initiation	⚠	✓	✓	✓

Current Projects	Project Phase	Overall Health	Schedule	Budget	Resources
Accounting Modernization	Development	⚠	✓	✓	⚠
PRISM Data Governance	Development	✓	✓	✓	✓
PRISM Data Architecture	Development	✓	✓	✓	✓
Base Benefit Calculator	Discovery	✓	✓	✓	✓
PRISM Rate Maintenance	Discovery	✓	✓	✓	✓
PRISM Program Enablement	Ongoing	✓	✓	✓	✓

Project Timelines

Project	Schedule health	Baseline start	Baseline finish	Start date	End date
PRISM Data Architecture	• On track	11/01/25	12/02/25	11/01/25	11/18/26
Accounting Modernization	• On track	11/25/25	02/01/27	11/25/25	02/01/27
PRISM Data Governance and Profiling	• On track	03/18/26	03/02/27	03/18/26	02/26/27
Base Benefit Calculator	• On track	10/05/26	12/10/27	10/05/26	12/10/27
PRISM Rate Maintenance	• On track	10/05/26	12/24/27	10/05/26	12/24/27



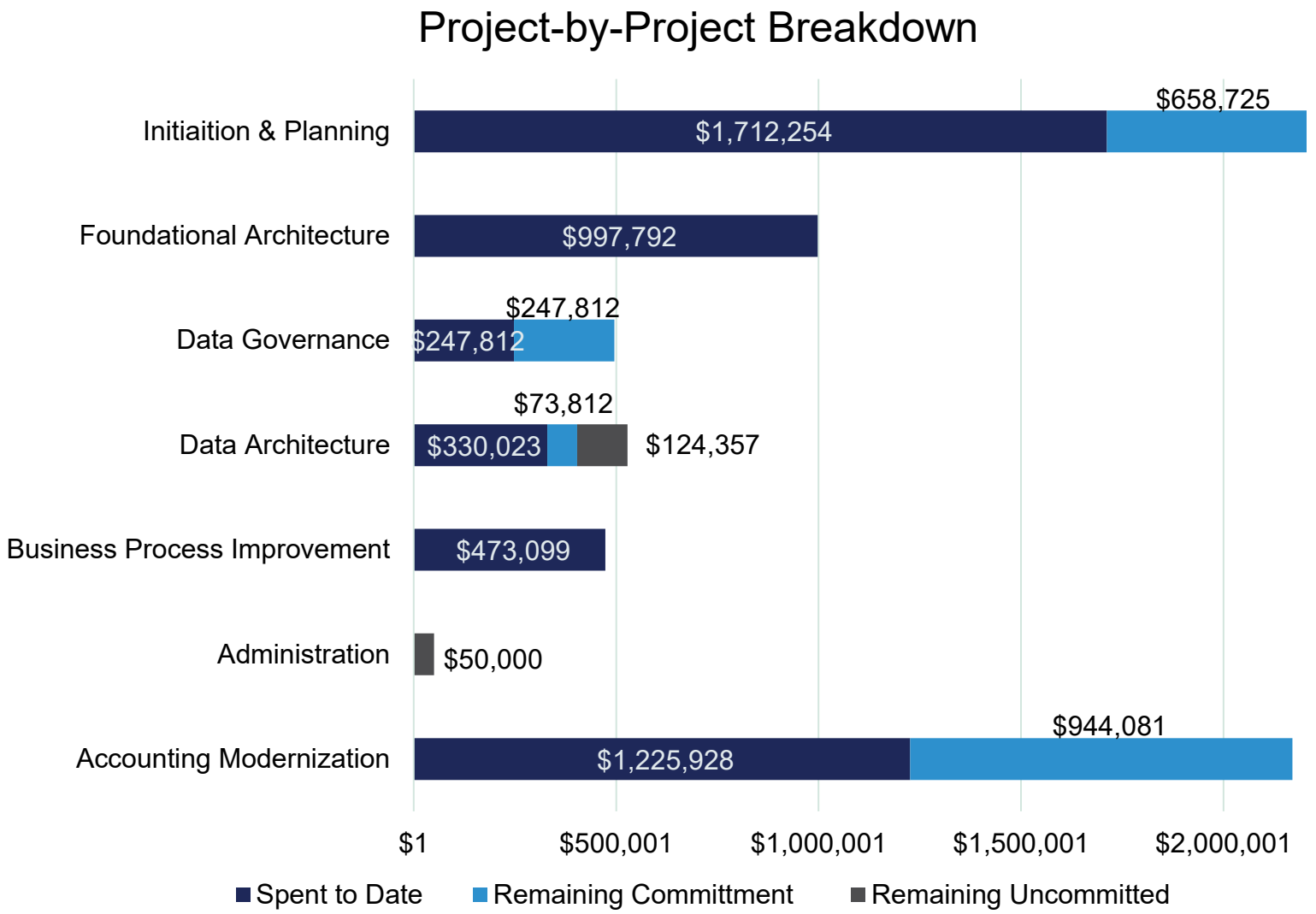
PRISM Financial Summary

Total Budget	**$7.09M**
Committed	$6.91M
Spent	$4.99M
Remaining Commitment	$1.92M
Uncommitted (available)	$0.18M

Total Program *(as of 10/15/26):*

Budget to Date:	*Actual to Date:*
*$7,090,363**	*$4,986,908**

**Since Inception*



Accomplishments Since the September Board Update

Portfolio planning

Launched the 24-month rolling roadmap process and confirmed the working sequence for the 2027 portfolio.

Execution readiness

Started business and technical discovery for Rate Maintenance and Base Benefit Calculator; refined the discovery approach for future projects.

Data foundation

Completed key data modeling related to the Rate Maintenance project and extended data architecture work through year-end.

Program controls

Strengthened risk and budget tracking, and advanced executive dashboard visibility.

Organizational readiness

Defined change management priorities around leadership alignment, communications, role clarity, readiness, and capacity.

Agile Coaching Procurement & Kickoff

Concluded procurement and onboarding of a consultant to aid in PERA's agile transformation.

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Current In-Flight Work

Program Enablement	Green	Discovery, roadmap, governance, and advancement of execution planning.
Data Architecture	Green	2026 work extended through year-end; modeling supports Rate Maintenance. Work on Data Architecture will transition into project-level workstreams.
Data Governance & Quality	Green	Playbook and quality analysis continue; staffing capacity improved. Data Governance & Quality will transition into project-level workstreams.
Accounting Modernization	Yellow	Implementation is behind schedule but remains targeted for Jan. 1, 2027. Phase-2 will continue into 2027.

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2027 Portfolio: From Selection to Discovery

The sequence is designed to prove the delivery approach, then scale it.

1

Rate Maintenance

Active business and technical discovery

+

2

Base Benefit Calculator

Scope refinement and project planning

+

3

Employer Directory

Discovery planned; outsourcing decision ahead

+

4

Employer Reporting Modernization

Engagement and discovery preparation

Projects will overlap. The 24-month rolling roadmap and project backlog are intended to keep the next priority ready as capacity becomes available.

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What Comes Next

Near-term focus is converting discovery into build-ready plans while managing capacity and delivery risk.

Board awareness

- Accounting Modernization testing and resource capacity remain active watch items
- Scope and solution choices will continue to mature through discovery

Through year-end

- Complete Rate Maintenance discovery and project planning
- Finalize Base Benefit Calculator scope and plan
- Continue Employer Directory discovery and 24-month roadmap development
- Agile training commencement
- Onboard Board PRISM Liaison

Early 2027

- Accounting Modernization Go-Live!
- Independent verification and validation (IV&V) vendor selection approach finalized
- Wave 1 Employer projects move through discovery and planning
- Apply the evolving delivery and change-management model

PRISM is positioned to enter 2027 with an approved portfolio, active discovery, stronger controls, and a clearer path to execution.

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Questions?

Appendix

Foundations Built for Delivery

Governance and visibility

- Executive Steering Committee cadence maintained
- Quarterly leadership alignment established
- Weekly stakeholder briefing continued
- Executive dashboard and SharePoint resources advanced
- Program-level risks and decisions increasingly centralized

Data and architecture

- Rate table modeling completed for upcoming work
- Participant Profile modeling completed
- Data Architecture extension executed through Dec. 31
- Data Governance playbook advanced
- Data work aligned more directly to project discovery

Delivery readiness

- Repeatable technical discovery checklist created
- Project managers assigned to initial work
- Dedicated financial tracking structures established
- Change Management operating boundaries clarified
- 2027 program charter concept initiated

COLORADO PERA

CHEIRON

Classic Values, Innovative Advice

Actuarial Audit of the December 31, 2025 Actuarial Valuations

Colorado Public Employees' Retirement Association



Presented by:

Anne Harper, FSA, EA, MAAA, Principal Consulting Actuary

Jake Libauskas, FSA, EA, MAAA, FCA, Principal Consulting Actuary

Daniel Rhodes, FSA, MAAA, FCA, Principal Consulting Actuary

November 20, 2026

Agenda



- Experience with public plan actuarial audits
- Scope of the audit
- Overall conclusions
- Valuation replication results
- Automatic Adjustment Provision and funding period projections
- Signal Light sensitivity review
- Actuarial assumptions and methods
- Recommendations

Cheiron has extensive experience performing actuarial audits for public retirement systems

- Cheiron has performed actuarial audits for some of the largest U.S. public retirement systems, including:
  - California Public Employees' Retirement System (CalPERS): $507 billion
  - California State Teachers' Retirement System (CalSTRS): $209 billion
  - Wisconsin Retirement System: $138 billion
  - New York State Teachers' Retirement System: $118 billion
- We have decades of experience providing actuarial valuation, consulting, and auditing services to large public retirement systems

Asset values are reported as of Cheiron's actuarial audit.

Scope of the audit

- **Cheiron independently audited the December 31, 2025 valuations prepared by Segal for all seven trust funds**
- Reviewed all actuarial methods and the economic and demographic assumptions
- Independently replicated the valuations on a closed-group basis
- Independently replicated the open-group funding period projections, including possible future Automatic Adjustment Provision changes
- Reviewed the investment return sensitivity in the 2026 Signal Light Report
- Reviewed the valuation reports, Signal Light Report and experience analysis

Overall conclusions

- **The Board may rely on the results of the December 31, 2025 actuarial valuations performed by Segal**
- Liabilities and normal cost rates are accurate within industry standard audit tolerances for every trust fund
- The methods and the economic and demographic assumptions are reasonable and comply with the applicable Actuarial Standards of Practice
- The funding period projections and the Signal Light sensitivity results are reasonable
- Our recommendations are refinements for future valuations and experience analyses. If adopted, none would materially change the December 31, 2025 valuation results

Our replication approach

- **We performed seven independent parallel valuations**
- Programmed the benefits from our reading of Colorado statute and PERA's published materials and applied the Board's assumptions, methods, and funding policies
- Reviewed detailed sample lives for every trust fund to confirm how assumptions and provisions are applied
- Compared member counts, liabilities, normal costs, and assets
- Compared projected funding periods and Automatic Adjustment Provision (AAP) assessments
- Tolerance: plus or minus 5% on liabilities and normal costs; plus or minus 2% on the present value of projected benefits

Differences in member data counts are immaterial

Total members valued as of December 31, 2025

Trust Fund	Segal	Cheiron	Ratio
State Division	210,831	210,883	100.0%
School Division	415,002	415,124	100.0%
Local Government Division	59,445	59,443	100.0%
Judicial Division	884	885	100.1%
Denver Public Schools (DPS) Division	46,007	46,000	100.0%
Health Care Trust Fund	294,010	293,999	100.0%
DPS Health Care Trust Fund	22,506	22,506	100.0%

Our member data counts are based on Segal's final valuation data. Ratio is Cheiron's results divided by Segal's.

Pension liabilities by component are within tolerance

All five Division Trust Funds combined ($ in millions)

Valuation Component	Segal	Cheiron	Ratio
Active members	$53,249	$53,441	100.4%
Inactive vested members	2,995	3,013	100.6%
Inactive non-vested members	867	867	100.0%
Retirees and beneficiaries	57,088	56,998	99.8%
Actuarial present value of projected benefits	**$114,198**	**$114,319**	**100.1%**
Present value of future normal costs	16,852	16,749	99.4%
Total actuarial accrued liability	**$97,346**	**$97,570**	**100.2%**

Replicating the present value of projected benefits confirms that all plan benefits are accurately being measured and assumptions are applied consistently. Replicating the actuarial accrued liability confirms the Entry Age Cost Method is applied consistently.

Ratio is Cheiron's result divided by Segal's. Every component is within 2% tolerance for present value of projected benefits and 5% tolerance for actuarial accrued liability and normal costs. Numbers may not sum due to rounding.

Pension liabilities by division are within tolerance

Total actuarial accrued liability as of December 31, 2025 ($ in millions)

Division Trust Fund	Segal	Cheiron	Ratio
State Division	$30,089	$30,151	100.2%
School Division	54,618	54,778	100.3%
Local Government Division	6,670	6,681	100.2%
Judicial Division	563	565	100.4%
Denver Public Schools Division	5,406	5,395	99.8%
Total – all Divisions	**$97,346**	**$97,570**	**100.2%**

Ratio is Cheiron's result divided by Segal's. Every division is within 5% tolerance for actuarial accrued liability. Numbers may not sum due to rounding.

Pension normal cost rates are within tolerance

Total normal cost rate as a percentage of projected covered payroll

Division Trust Fund	Segal	Cheiron	Ratio
State Division	13.43%	13.38%	99.6%
School Division	16.72%	16.69%	99.8%
Local Government Division	14.06%	13.85%	98.5%
Judicial Division	16.28%	16.72%	102.7%
Denver Public Schools Division	15.14%	15.16%	100.2%

Rates include administrative expenses of 0.45%. Ratio is Cheiron's result divided by Segal's and is derived using more significant digits than shown. Every division is within the 5% tolerance applied to normal costs.

Pension Actuarial Value of Assets are exactly the same

Actuarial Value of Assets as of December 31, 2025 ($ in millions)

Division Trust Fund	Segal	Cheiron	Ratio
State Division	$19,941	$19,941	100.0%
School Division	36,120	36,120	100.0%
Local Government Division	5,881	5,881	100.0%
Judicial Division	508	508	100.0%
Denver Public Schools Division	4,829	4,829	100.0%

Ratio is Cheiron's result divided by Segal's.

OPEB liabilities by component are within tolerance

Both Health Care Trust Funds combined ($ in millions)

Valuation Component	Segal	Cheiron	Ratio
Active members	$408	$402	98.6%
Inactive vested members	36	37	101.5%
Retirees and beneficiaries	817	804	98.4%
Actuarial present value of projected benefits	**$1,261**	**$1,243**	**98.6%**
Present value of future normal costs	111	112	101.5%
Total actuarial accrued liability	**$1,151**	**$1,131**	**98.3%**

Replicating the present value of projected benefits confirms that all plan benefits are accurately being measured and assumptions are applied consistently. Replicating the actuarial accrued liability confirms the Entry Age Cost Method is applied consistently.

Ratio is Cheiron's result divided by Segal's and is derived using more significant digits than shown. Every component is within 2% tolerance for present value of projected benefits and 5% tolerance for actuarial accrued liability and normal costs. Numbers may not sum due to rounding.

OPEB liabilities by Trust Fund are within tolerance

Total actuarial accrued liability as of December 31, 2025 ($ in millions)

Health Care Trust Fund	Segal	Cheiron	Ratio
Health Care Trust Fund	$1,098	$1,079	98.2%
DPS Health Care Trust Fund	53	52	99.4%
Total – all Health Care Trust Funds	**$1,151**	**$1,131**	**98.3%**

Ratio is Cheiron's result divided by Segal's and is derived using more significant digits than shown. Both Trust Funds are within 5% tolerance for actuarial accrued liability. Numbers may not sum due to rounding.

OPEB normal cost rates are within tolerance

Total normal cost rate as a percentage of projected covered payroll

Health Care Trust Fund	Segal	Cheiron	Ratio
Health Care Trust Fund	0.12%	0.11%	98.7%
DPS Health Care Trust Fund	0.10%	0.10%	99.6%

Ratio is Cheiron's result divided by Segal's and is derived using more significant digits than shown. Both Trust Funds are within the 5% tolerance applied to normal costs.

OPEB Actuarial Value of Assets are exactly the same

Actuarial Value of Assets as of December 31, 2025 ($ in millions)

Health Care Trust Fund	Segal	Cheiron	Ratio
Health Care Trust Fund	$800	$800	100.0%
DPS Health Care Trust Fund	85	85	100.0%

Ratio is Cheiron's result divided by Segal's.

Automatic Adjustment Provision (AAP) assessment confirms no automatic changes are triggered for 2027

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

Division Trust Fund	Blended Total Contribution Rate	Blended Total Required Contribution Rate	Ratio of Total to Required Rates
State Division	31.73%	29.81%	N/A
School Division	34.17%	33.68%	N/A
Local Government Division	24.57%	19.05%	N/A
Judicial Division	34.67%	22.41%	N/A
Total Weighted Average	**33.07%**	**31.94%**	**103.54%**

Segal calculated this ratio as 103.73% and we calculate it as 103.54%, as shown above. **Both are within the statutory corridor of 98% to 120%, so no automatic changes are triggered.**

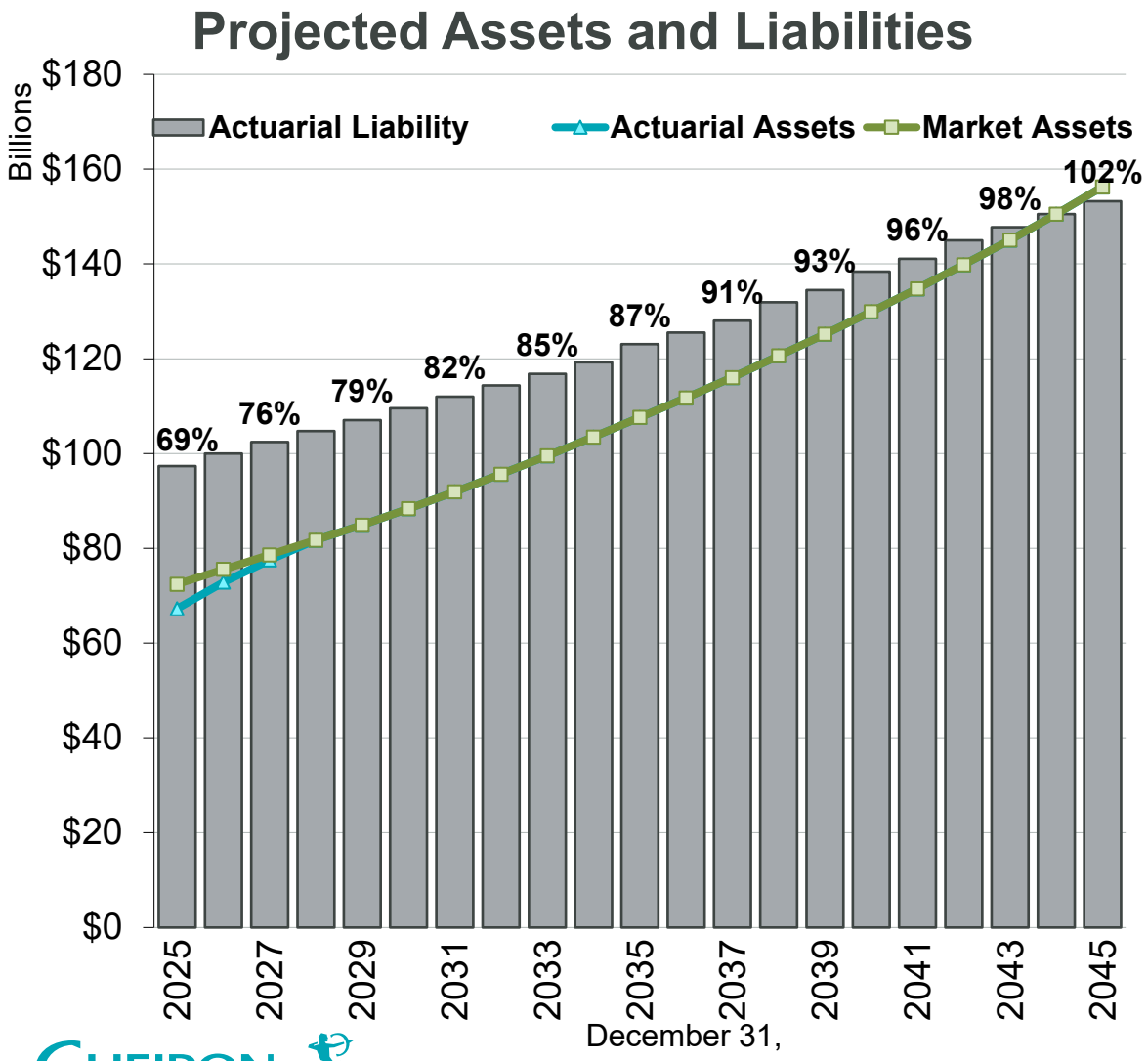
Funding period projections are within tolerance

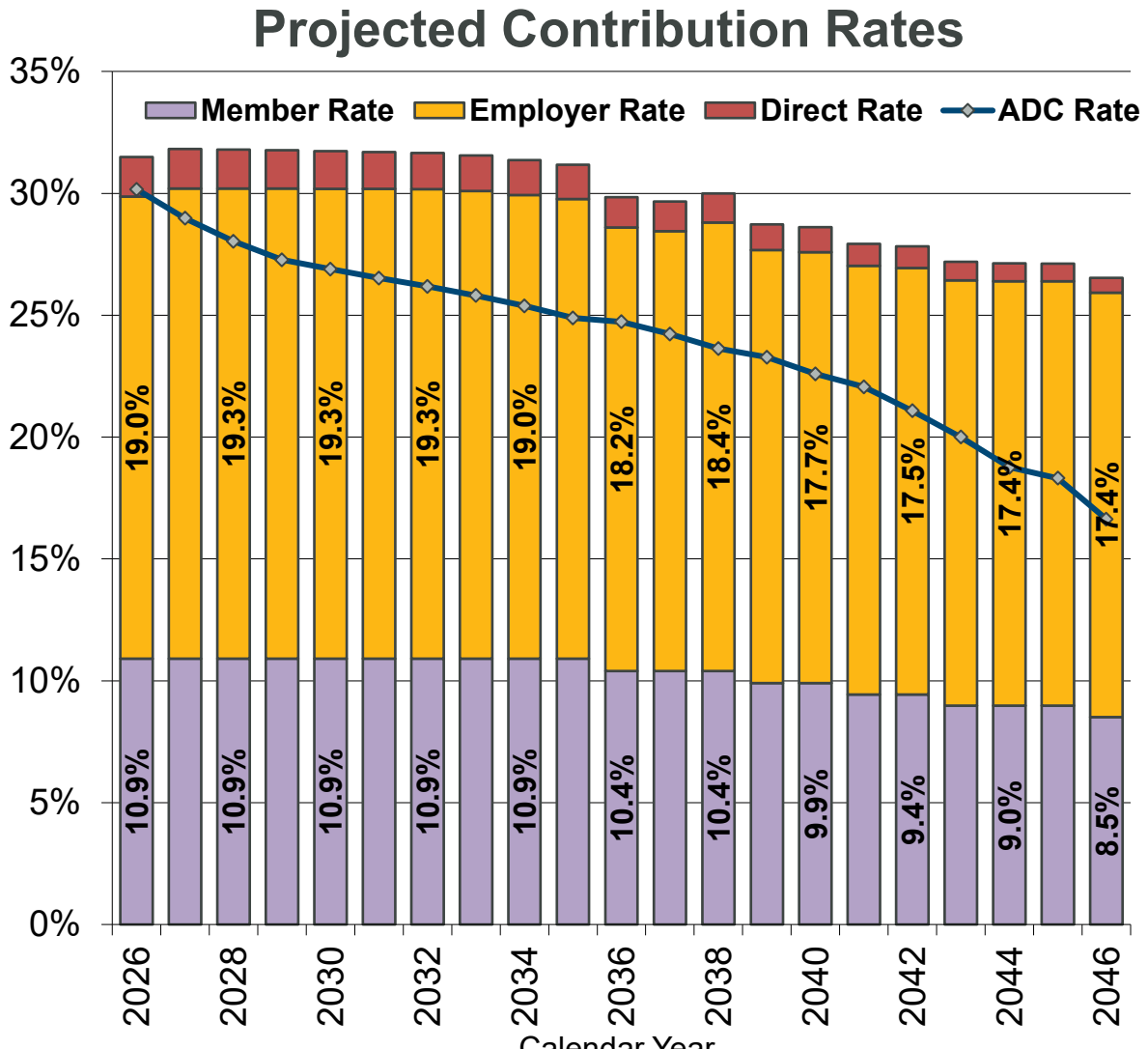
Projected years to reach 100% funded

Trust Fund	Segal	Cheiron	Difference
State Division	18	18	0
School Division	22	23	1
Local Government Division	4	4	0
Judicial Division	2	2	0
Denver Public Schools Division	5	5	0
Health Care Trust Fund	6	6	0
DPS Health Care Trust Fund	0	0	0

We match Segal's projected funding period for every division except School, which we project to reach full funding one year later. This difference is primarily due to our projection using a slightly lower projected payroll.

The pension Division Trust Funds are projected to be 100% funded within 20 years, in aggregate





Signal Light sensitivity review

- Colorado statute requires the Board to obtain an annual sensitivity analysis, the Signal Light Report
- We independently replicated the investment return sensitivity for each division and for the Total System
- Our distribution of 30-year investment returns matches Segal's at every percentile tested, within 0.2%
- We applied the same conservative method of counting scenarios into each color status, and consider that method reasonable
- **Our results are similar to Segal's, and in our opinion the sensitivity projections are reasonable**

Comparison of 30-year annual geometric investment return distributions

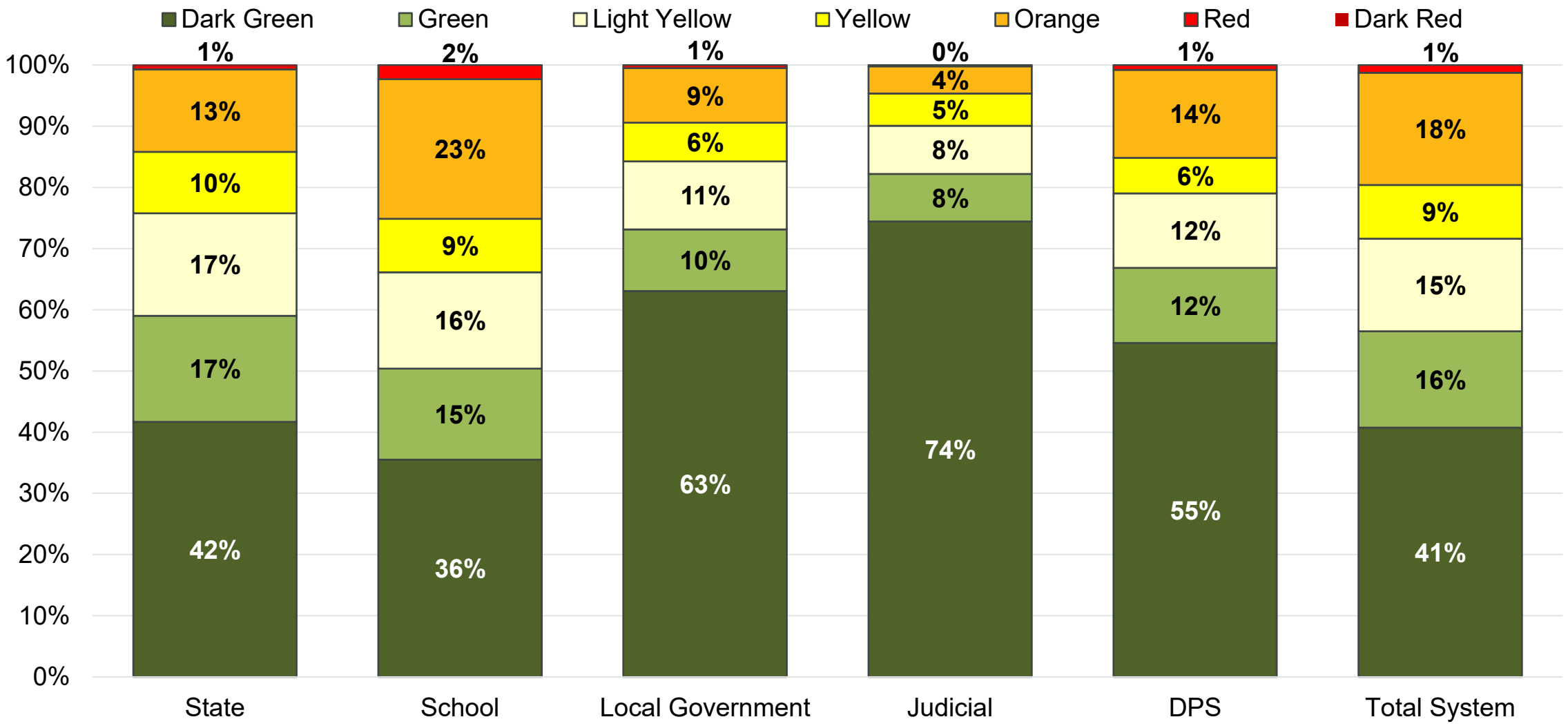
Percentile	Segal	Cheiron	Difference
95th	11.3%	11.1%	-0.2%
75th	9.1%	9.1%	0.0%
50th	7.6%	7.6%	0.0%
25th	6.1%	6.1%	0.0%
5th	4.0%	4.0%	0.0%

The distribution is based on 5,000 investment return scenarios using a 7.56% expected return and 12.35% standard deviation. Differences do not materially impact the Signal Light analysis, and some difference is expected due to differences in methodology.

Signal Light Status Definitions

Status	Definition
Dark Green	100% funded by 2041 (30 years from 2011)
Green	100% funded by 2048 (30 years from 2018)
Light Yellow	100% funded by 2058 (40 years from 2018)
Yellow	100% funded by 2068 (50 years from 2018)
Orange	Solvent but more than 50 years to reach 100% funded
Red	Insolvent after 2045 (after 20 years)
Dark Red	Insolvent by 2045 (within 20 years)

Cheiron's Signal Light investment return sensitivity results



Numbers may not sum due to rounding.

Actuarial assumptions and methods

Actuarial assumptions

- All assumptions are reasonable
- 7.25% investment return is reasonable; we independently calculate the same 53% likelihood of achievement over 20 years
- 2.30% inflation and 3.00% payroll growth are reasonable and applied consistently
- We recommend consideration of changes to how some assumptions are analyzed

Actuarial methods

- Entry Age Cost Method and asset smoothing method are reasonable and applied as described
- We recommend consideration of changes to the amortization method



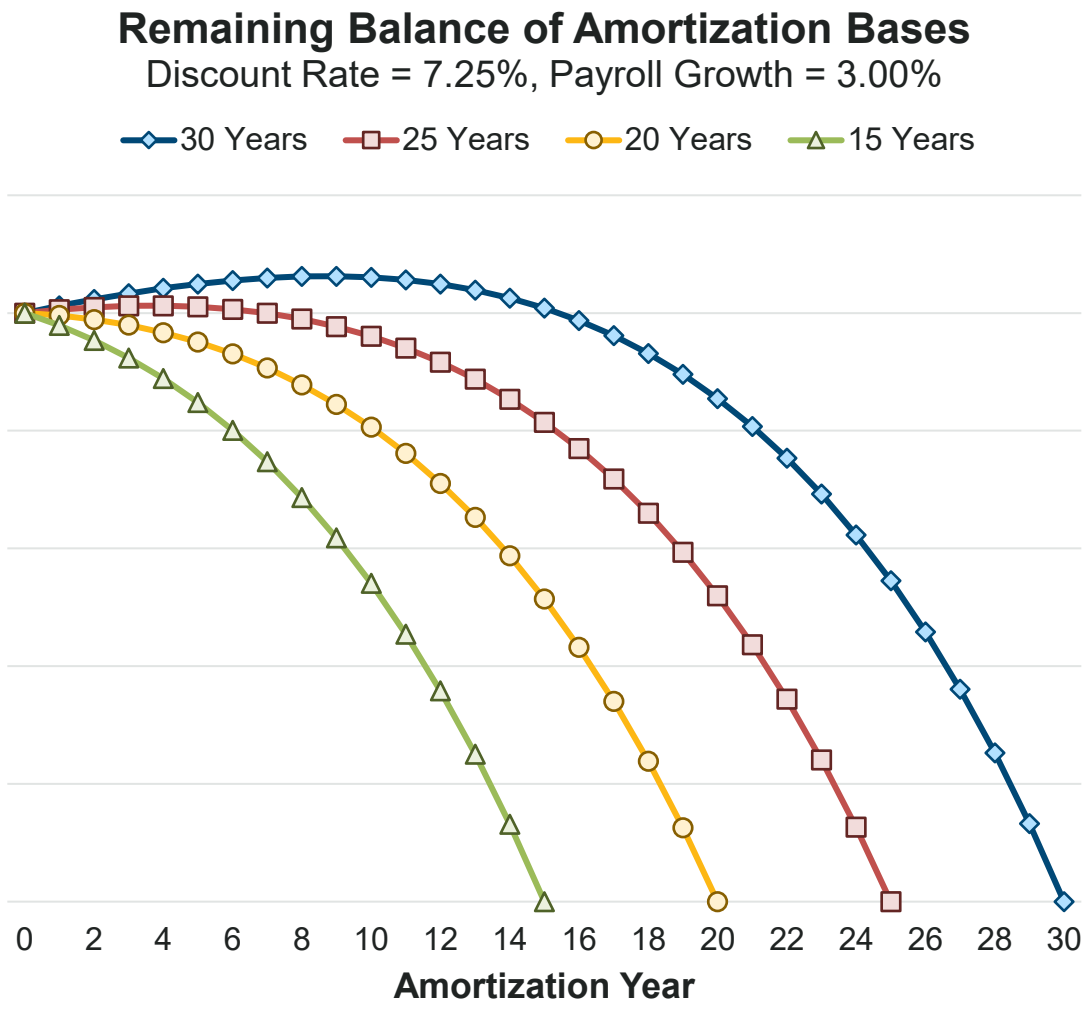
Recommendations

Overview of Recommendations

- Many technical recommendations are provided in our full report
  - Appendix C provides a summary of the recommendations
- Most important technical recommendations
  - Amortization methods used in the Board's funding policy
  - Refund assumptions
  - Retirement assumptions
  - Mortality assumptions
  - Health plan benefit receipt assumption
  - Projection assumptions
  - Actuarial communications
- We do not expect that adoption of any of these recommendations would materially change the December 31, 2025 valuation results

Board's funding policy – amortization periods

- We recommend shorter amortization periods for experience gains and losses and for assumption changes
  - Current period is 30 years
  - "Non-recommended" practice under the Conference of Consulting Actuaries "white paper"
  - Payments do not exceed interest until year 11, and the unfunded liability does not fall back to its starting level until year 16
- "Model" practice would be:
  - 15 to 20 years for experience gains and losses
  - 15 to 25 years for assumption changes
- Shorter periods pay down the unfunded liability faster but make contributions and Automatic Adjustment Provision changes more volatile



Board's funding policy – contribution differences

- We recommend the Board consider when to change the amortization of contribution surpluses and deficiencies from the remaining period on the 2017 UAAL to the period for gains and losses
  - Currently amortized over remaining period of the initial 2017 unfunded liability (i.e., 22 years as of December 31, 2025, declining each future year until 1 year remaining), which has been reasonable since most of the unfunded liability relates to the initial 2017 unfunded liability
  - However, as the initial 2017 unfunded liability becomes a smaller share of the total unfunded liability, consider when it may be appropriate to amortize contribution surpluses/deficiencies in the same manner as other experience gains and losses

Assumptions – Refunds of Contributions

- Current assumption = 35% of all vested terminating members elect a refund (0% for Judicial Division)
  - Only analyzed in aggregate
  - Reasonable based on data provided
- We recommend a more refined analysis be performed. The refund assumption may vary significantly by:
  - Service
  - Division
  - Safety vs. Non-Safety

- Compared to a deferred annuity, refunds are generally:
  - More valuable for:
    - Younger members
    - Shorter-service members
  - Significantly less valuable for:
    - Older members
    - Long-service members
- Using a single refund assumption for all members may cause liability losses even when the assumption matches the aggregate experience

Assumptions – Analysis of Retirement Rates

Current Approach

- Current rates vary by age and separates those eligible for reduced and unreduced retirement
  - Analysis combines all benefit tiers, primarily oldest benefit tier
- Rates are increased for the first 5 years of eligibility for unreduced retirement
  - Analysis double-counts the current experience for the first 5 years of eligibility for unreduced retirement

Recommended Changes

- Performing separate analysis by benefit tier and applying professional judgment
  - Newer benefit tiers are not likely to have the same retirement patterns due to having different benefit structures
  - New benefit tier experience is just emerging
- Setting rates by age and service
  - Service indicates when members become unreduced eligible and the amount of early retirement reduction
  - Reduced vs. unreduced likely captures service differences for oldest benefit tier but may not for newer benefit tiers

Assumptions – Mortality

- We recommend using a healthy annuitant or general population mortality for a beneficiary while the member is living
  - Beneficiary analysis and mortality table are based on mortality after the member dies
  - There is a known widow(er) effect increasing mortality after a spouse dies
- We recommend a separate analysis of headcount-weighted adjustments to mortality for the Health Care Trust Funds
  - The adjustments to the published headcount-weighted mortality tables were calculated based on pension benefit-weighted mortality experience and a benefit-weighted mortality table
  - The adjustments based on a headcount-weighted analysis may be different

Assumptions – Health Plan Benefit Receipt

- In OPEB experience study, Segal recommends a proposed initial benefit receipt assumption of age 60 for all terminated vested participants (PERA and DPS benefit structures)
- In OPEB valuation report, Segal states that inactive vested members are assumed to retire at age 62 (PERA benefit structure) or age 65 (DPS benefit structure)
- We recommend Segal clarify this assumption and inconsistency with pension in future valuation reports

Assumptions – Projections

Population Growth

- The open group projections assume active population growth
  - School Division = 0.75%
  - Local Government Division = 0.50%
  - State, Judicial, and DPS = 0.25%
- We recommend considering reducing the active population growth assumption to 0%
  - Colorado's school-age population is projected to shrink, which will likely affect growth in the School Division
  - Assuming growth to continue indefinitely into the future is not supported by the data

New Entrant Profile

- Segal assumes 3.0% annual payroll growth, which is reasonable
- Segal's open-group projections, however, only show payroll growing by 2.1% to 2.6% annually
  - It should grow by about 3.0% plus the population growth assumption
  - We believe this discrepancy is caused by the new entrant profile starting salaries
- We recommend Segal ensure their open group projections are reasonably consistent with the payroll growth assumption

Summary of recommendations to improve actuarial communications

- **If adopted, none of these affects the reported results. Each would improve clarity for members, employers and the public.**
- In the next Experience Study:
  - Include both headcount-weighted and benefit-weighted experience analysis
- In the (pension) Division Trust Fund valuation report:
  - Add the potential effect on future financial condition to the demographic and economic risk disclosures
  - Expand the commentary on the Low-Default-Risk Obligation Measure to help the reader understand the measure's significance

Summary of recommendations to improve actuarial communications

- **If adopted, none of these affects the reported results. Each would improve clarity for members, employers and the public.**
- In the (OPEB) Health Care Trust Fund valuation report:
  - Correct any discrepancies in the benefit receipt assumption for terminated vested employees
  - Address the pre-Medicare plans in the assumptions exhibit, adding appropriate descriptions
  - State the spousal coverage assumption once and unambiguously
  - Disclose the source and use of the Medicare Part A trend
  - Describe the Medicare plan consistently (“Medicare Advantage/Self-Funded Rx” vs “Medicare Advantage Prescription Drug / MAPD”)

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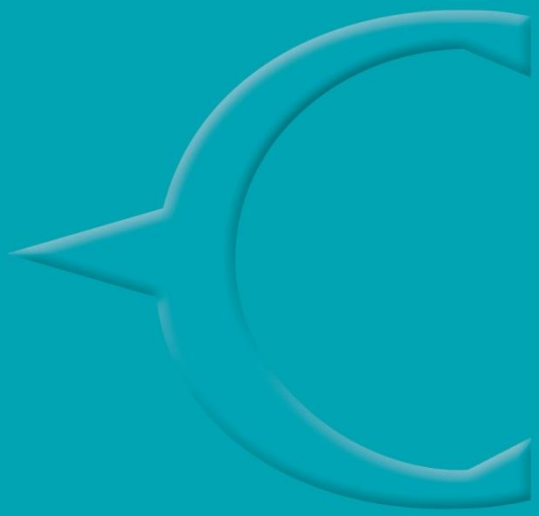
Classic Values, Innovative Advice

Questions

CHEIRON Classic Values, Innovative Advice



Colorado Public Employees' Retirement Association Actuarial Audit of the December 31, 2025 Funding Actuarial Valuations and Funding Period Projections

Produced by Cheiron

October 16, 2026

www.cheiron.us 1.877.CHEIRON (243.4766)

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COLORADO PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION
DECEMBER 31, 2025 ACTUARIAL AUDIT

SECTION I – EXECUTIVE SUMMARY

We have conducted an actuarial audit of the valuation assumptions and procedures used for the December 31, 2025 actuarial valuations, and we have concluded that Segal is accurately measuring the actuarial condition of the five pension Division Trust Funds and the two Health Care Trust Funds. In addition to this primary finding, we have some technical recommendations for Segal and PERA to consider for future valuations. None of these technical recommendations would materially affect the results of the December 31, 2025 actuarial valuation.

Key Findings and Recommendations

The main findings of our review are as follows:

- The liabilities, normal costs, and other results of the valuations as of December 31, 2025, are accurate within customary tolerances and were computed in accordance with applicable Actuarial Standards of Practice.
- The actuarial methods and the economic and demographic assumptions used in the December 31, 2025 valuations are reasonable and appear to comply with the applicable Actuarial Standards of Practice. We recommend technical changes listed in Section III of this report, for how some demographic assumptions should be analyzed and structured in the next experience analysis. However, none of these recommendations, individually or together, causes us to consider the current assumptions unreasonable.
- The most recent actuarial funding period projections, based on the December 31, 2025 funding actuarial valuation results, performed on an open-group basis, including projected future Automatic Adjustment Provision (AAP) adjustments, are accurate within customary tolerances.
- The "signal light" sensitivity projections on the investment return assumption as presented in Section 3 of PERA's 2026 Signal Light Report, based on the results of the December 31, 2025 funding actuarial valuation, are reasonable.
- For enhanced clarity, we recommend minor changes to some disclosure and documentation, concentrated in the health care trust fund valuation report and the experience analysis report, none of which is expected to have any impact on the reported results. The details of these items can be found in Sections III and VIII, of this report.
- We suggest the Board consider some modifications to the amortization policies for the Actuarially Determined Contributions to better align with recent guidance published in the Conference of Consulting Actuaries' "Actuarial Funding Policies for Public Plans" and for Segal to consider the guidance on "Reasonable Actuarially Determined Contributions" in Actuarial Standard of Practice No. 4.

Appendix C contains a complete list of our recommendations.

SECTION I – EXECUTIVE SUMMARY

Scope of the Audit

Cheiron performed an independent actuarial audit of the December 31, 2025 funding actuarial valuations of the Colorado Public Employees' Retirement Association (PERA, or the Association), prepared by PERA's actuarial service provider, Segal. Our audit covers the five pension Division Trust Funds and the two Health Care Trust Funds.

The actuarial audit services are summarized below with respect to the five pension Division Trust Funds and the two Health Care Trust Funds, as applicable:

1. Review of all actuarial methods and economic and demographic actuarial assumptions currently used within the funding actuarial valuations;
2. Review of any additional assumptions and new entrant profile data sets currently used in the annual actuarial funding period projections performed on an open-group basis;
3. Replication of the most recent funding actuarial valuation census data and results as of December 31, 2025, performed on a closed-group basis;
4. Replication of the most recent actuarial funding period projections, based on the December 31, 2025 funding actuarial valuation results, performed on an open-group basis with consideration of possible future Automatic Adjustment Provision (AAP) adjustments;
5. Review for reasonability of the "signal light" sensitivity projections on the investment return assumption as presented in Section 3 of PERA's 2026 Signal Light Report, based on the results of the December 31, 2025 funding actuarial valuation; and
6. Review of recent actuarial communications, comprising the most recent actuarial valuation reports, the Signal Light Report, and the experience analysis report.

The objective of this engagement is to independently verify the liabilities and normal costs developed by Segal as of the December 31, 2025 measurement date; to verify the projected funding periods that follow from those results; to assess whether the valuations and projections are based on reasonable actuarial assumptions and methods in compliance with the applicable Actuarial Standards of Practice (ASOPs); and to evaluate whether the actuarial communications convey the information needed by the Board, members, employers, and the public.

The industry standard tolerance level for our parallel valuation replications is plus or minus five percent (5%), applied to the actuarial accrued liabilities and normal costs. Cheiron's tolerance level for the present value of projected benefits is more stringent at plus or minus two percent (2%), to ensure that the Association's benefits are being correctly valued. Our parallel valuation results fall within these tolerance levels.

SECTION I – EXECUTIVE SUMMARY

We reviewed the valuations with reference to the ASOPs – in particular No. 4 (measuring pension obligations), No. 6 (measuring retiree group benefits obligations), No. 23 (data quality), No. 25 (credibility), No. 27 (assumptions), No. 41 (actuarial communications), No. 44 (asset valuation methods), No. 51 (assessment and disclosure of risk), and No. 56 (modeling).

Our engagement did not include a review of PERA's financial statement reporting under Governmental Accounting Standards Board (GASB) Statements No. 67, 68, 74, or 75, an audit of PERA's financial statements, a review of PERA's investment program, or a review of PERA's defined contribution plans.

The final valuation data supplied by PERA and Segal was not subject to audit or independent verification by Cheiron; such review falls outside the agreed scope of this engagement. We did perform an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with ASOP No. 23. Appendix A compares the participant data used in our parallel valuations to the statistics shown in the Segal valuation reports. The differences in the participant data were immaterial to the parallel valuation results.

SECTION I – EXECUTIVE SUMMARY

Summary of Valuation Replication Results

For purposes of assessing the overall reasonableness of Segal's results, we focused on the total actuarial accrued liability for each trust fund. Exhibit I-1 compares those amounts; the detailed comparisons by liability component are presented in Section IV.

Exhibit I-1

Total Actuarial Accrued Liability

All Trust Funds – Comparison as of December 31, 2025

Dollar Amounts in Thousands

Trust Fund	Segal	Cheiron	Ratio
State Division	$30,089,463	$30,151,448	100.2%
School Division	54,617,853	54,777,526	100.3%
Local Government Division	6,669,866	6,681,347	100.2%
Judicial Division	562,831	565,114	100.4%
Denver Public Schools (DPS) Division	5,405,699	5,394,845	99.8%
Total – All Divisions	**$97,345,712**	**$97,570,280**	**100.2%**
Health Care Trust Fund (HCTF)	1,097,981	1,078,585	98.2%
DPS Health Care Trust Fund (DPS HCTF)	52,730	52,427	99.4%
Total – All Health Care Trust Funds	**$1,150,711**	**$1,131,012**	**98.3%**

The ratio is Cheiron's result divided by Segal's. A ratio between 95% and 105% is within the tolerance established for this engagement for the actuarial accrued liability.

SECTION II – CERTIFICATION

The purpose of this report is to present the parallel actuarial valuation results as of December 31, 2025 for PERA's five Division Trust Funds and the two Health Care Trust Funds and our review of the actuarial assumptions and methods, funding period projections, the Signal Light investment return sensitivity analysis, and to provide our opinion as to whether the work performed by Segal is reasonable and satisfies applicable actuarial standards.

In preparing our report, we relied on information (some oral and some written) supplied by PERA and Segal. This information includes, but is not limited to, the plan provisions, employee data, health care premium and claims information, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech), to calculate liabilities, normal costs, and project benefit payments, and Cheiron's proprietary projection tools to prepare open-group projections. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in the assumptions or output of ProVal that would affect this report.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board, as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we collectively meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

SECTION II – CERTIFICATION

This report was prepared for PERA for the purposes described herein. We understand that PERA intends to publish this report. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user. Any distribution of this report should be made in its entirety.

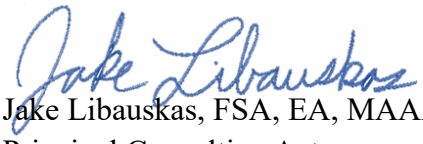
Sincerely,
Cheiron



William R. Hallmark, ASA, EA, MAAA, FCA
Consulting Actuary



Anne D. Harper, FSA, EA, MAAA
Principal Consulting Actuary



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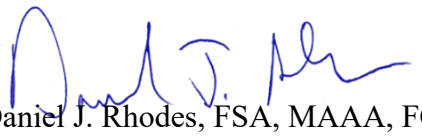

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SECTION III – TECHNICAL PROGRAMMING OBSERVATIONS

To validate that the actuarial assumptions are properly applied in projecting expected benefit payments, we reviewed detailed sample lives provided by Segal for each Division Trust Fund and each Health Care Trust Fund and corresponded with Segal on several follow-up questions. Segal responded to our requests promptly and provided the information we requested when available. We appreciate their cooperation throughout the audit process.

Availability of Experience Data

Some of the experience data we requested is unavailable because of the way Segal reviewed the assumptions. Most notably, Segal reviewed retirement experience on a benefit-weighted basis and does not have the corresponding experience on a headcount basis, and Segal analyzed the refund election experience in the aggregate across all divisions rather than separately by division or by members' years of service.

Benefit weighting is an accepted and, for some purposes, preferable approach, because it aligns the analysis with the dollars of liability the assumption is intended to measure. While benefit weighting is appropriate for calculating the present value of liabilities, it may not be appropriate for estimating the portion of the active members expected to retire and projecting liabilities. At each retirement age analyzed, benefit weighting assigns more weight to the retirement experience of long-service members than to that of short-service members. The resulting benefit-weighted retirement assumption is likely to overestimate retirements among short-service members and underestimate retirements among long-service members. While the present value may be the same, the projection of the future population and the accrual of future benefits may differ, as short-service members are more likely to delay retirement until they have accrued a more substantial retirement income. The same retirement assumptions are used in the open-group valuation, which projects PERA's population demographics, including the expected number of retirements to be replaced by new hires. In addition, the headcount exposures and decrements are needed to assess the credibility of the experience. The unavailability of headcounts limited our ability to evaluate the reasonableness of parts of Segal's retirement rate methodology and assumptions, as described in Section V.

The percentage of vested members who elect a refund of contributions, in lieu of a deferred annuity, upon termination typically varies by the members' age and years of service. The refund of contributions is usually more valuable for younger, short-service members than the deferred annuity, while the deferred annuity is usually more valuable for older, long-service members. The unavailability of the experience by members' age or years of service limited our ability in this audit to evaluate the reasonableness of Segal's single assumption for all vested members.

SECTION III – TECHNICAL PROGRAMMING OBSERVATIONS

In the next experience analysis, we recommend that Segal develop both benefit-weighted and headcount-weighted retirement experience and consider using rates that vary by age and years of service, in lieu of only the benefit-weighted approach. We believe this will be particularly important as data for the newer tiers becomes more credible. We further recommend that refund election experience be analyzed separately by division, by safety versus non-safety, and by members' years of service.

Actuarial Assumptions and Methods

The actuarial methods and the economic and demographic assumptions used in the December 31, 2025 valuations are reasonable and appear to comply with the applicable Actuarial Standards of Practice. We recommend technical changes for how some demographic assumptions should be analyzed and structured in the next experience analysis. We also recommend that the Board consider incorporating changes to the amortization methods in the next funding policy review. These recommendations are listed below with additional details provided in Sections V, VI, and VII.

- The unreduced retirement assumption may overestimate the probability of retiring within the first 5 years of when a member is eligible for unreduced retirement. See Section V for more details.
- The reduced retirement assumption is the same for all tiers based on experience from primarily the oldest tier which has the lowest early retirement reductions. This likely overestimates the probability of reduced retirement for newer tier members that will have a greater early retirement reduction. See Section V for more details.
- The mortality assumption for beneficiaries may be overestimating the probability of death while their spouse is alive since the assumption is based on post-member death experience. See Section V for more details.
- The active population growth assumptions used for the School and DPS Divisions in the open-group funding period projections do not appear to us to be consistent with the Colorado State Demography Office projections that Segal reviewed as part of its experience analysis. This assumption affects the projected funding periods and the Automatic Adjustment Provision assessment rather than the December 31, 2025 valuation results. See Section VII for more details.
- The amortization period for experience gains/(losses) and assumption changes is currently 30 years, which is a "non-recommended practice" under the guidelines in the Conference of Consulting Actuaries' "Actuarial Funding Policies and Practices for Public Pension Plans." We recommend the board consider shortening these amortization periods. See Section VI for more details.

SECTION III – TECHNICAL PROGRAMMING OBSERVATIONS

- The amortization period for contribution surpluses/(deficiencies) is currently the remaining amortization period for the initial December 31, 2017 UAAL. We recommend the board consider modifying this at some point in the future as the 2017 UAAL becomes a smaller portion of the overall UAAL. See Section VI for more details.

Division Trust Funds (Pension) – Valuation Replication

During the replication of the actuarial valuations for the five Division Trust Funds, our review of the sample lives confirmed our understanding of the application of the benefit tier structure, the highest average salary definitions applicable to each tier, the age and service eligibility conditions for reduced and unreduced retirement, the money purchase minimum benefit, the annual increase provisions, and the actuarial assumptions. We did not identify any recommended refinements to Segal's calculations.

Health Care Trust Funds (OPEB) – Valuation Replication

During the replication of the actuarial valuations for the two Health Care Trust Funds, our review of the sample lives confirmed our understanding of the benefits provided. We did not identify any recommended refinements to Segal's calculations.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Parallel Actuarial Valuation Methodology

We independently coded parallel valuations in ProVal for each of the five Division Trust Funds and each of the two Health Care Trust Funds as of December 31, 2025. The actuarial assumptions used in our replications were those used by Segal in the December 31, 2025 valuations, which we confirmed against the valuation reports, the experience analysis report, and the supporting materials provided. The benefit provisions reflected in our valuations were based on our own reading of Title 24, Article 51 of the Colorado Revised Statutes and PERA's published member and employer materials, confirmed against the summaries of plan provisions in the valuation reports. Where additional clarification was needed, we requested and received clarification from Segal.

We then compared our valuation results to those published by Segal, focusing on the actuarial present value of projected benefits, the total actuarial accrued liability, and the present value of future normal costs. The comparison tolerance for this engagement is plus or minus 5%, applied to liabilities and normal costs. We targeted a closer match (2%) for the actuarial present value of projected benefits.

A close match on the actuarial present value of projected benefits indicates that the actuarial assumptions and benefit provisions have been programmed and applied consistently; a close match on the total actuarial accrued liability indicates that the entry age normal cost method has been implemented in the same manner; and a close match on the present value of future normal costs indicates that annual benefit accruals are being measured consistently between the two valuation systems.

Because the two firms use different valuation software and make independent judgments about matters such as decrement timing, the treatment of data anomalies, and rounding, small differences in results are expected in an actuarial audit. Percentage differences can also be large where the underlying amount is small – most notably in the Judicial Division, which is by far the smallest of the five Division Trust Funds, and for components such as the present value of future normal costs that represent a small share of a trust fund's total liability. Where such a difference arises, we identify it specifically below.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Division Trust Fund (Pension) Results

The following exhibits compare our parallel pension results to Segal's December 31, 2025 valuations. Exhibits IV-1 through IV-5 present the comparison for each division trust fund and Exhibit IV-6 presents the comparison for all five divisions combined. Exhibit IV-7 compares the total normal cost rates. Exhibit IV-8 compares the actuarial value of assets. Exhibit IV-9 compares the Actuarially Determined Employer Contribution Rates. Exhibit IV-10 compares the results of the AAP assessment. All elements of the pension Division Trust Funds' parallel valuations are within tolerance.

COMPARISON OF PENSION LIABILITY MEASURES AS OF DECEMBER 31, 2025

Exhibit IV-1

State Division

Dollar Amounts in Thousands

Valuation Component	Segal	Cheiron	Ratio
Active members	$13,947,517	$14,012,502	100.5%
Inactive vested members	952,114	960,243	100.9%
Inactive non-vested members	290,543	290,543	100.0%
Retirees and beneficiaries	19,035,333	18,991,788	99.8%
Actuarial present value of projected benefits	**$34,225,507**	**$34,255,076**	**100.1%**
Present value of future normal costs	4,136,044	4,103,628	99.2%
Total actuarial accrued liability	**$30,089,463**	**$30,151,448**	**100.2%**
Active accrued liability	9,811,473	9,908,874	101.0%

The tolerance is plus or minus 2% for the actuarial present value of projected benefits and plus or minus 5% for all other components. Numbers may not sum due to rounding.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Exhibit IV-2

School Division

Dollar Amounts in Thousands

Valuation Component	Segal	Cheiron	Ratio
Active members	$32,079,360	$32,173,936	100.3%
Inactive vested members	1,473,953	1,484,799	100.7%
Inactive non-vested members	416,554	416,554	100.0%
Retirees and beneficiaries	30,829,855	30,828,237	100.0%
Actuarial present value of projected benefits	**$64,799,722**	**$64,903,526**	**100.2%**
Present value of future normal costs	10,181,869	10,126,000	99.5%
Total actuarial accrued liability	**$54,617,853**	**$54,777,526**	**100.3%**
Active accrued liability	21,897,490	22,047,936	100.7%

The tolerance is plus or minus 2% for the actuarial present value of projected benefits and plus or minus 5% for all other components. Numbers may not sum due to rounding.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Exhibit IV-3

Local Government Division

Dollar Amounts in Thousands

Valuation Component	Segal	Cheiron	Ratio
Active members	$3,254,229	$3,269,341	100.5%
Inactive vested members	361,198	359,363	99.5%
Inactive non-vested members	82,119	82,119	100.0%
Retirees and beneficiaries	4,081,643	4,060,921	99.5%
Actuarial present value of projected benefits	**$7,779,189**	**$7,771,744**	**99.9%**
Present value of future normal costs	1,109,323	1,090,397	98.3%
Total actuarial accrued liability	**$6,669,866**	**$6,681,347**	**100.2%**
Active accrued liability	2,144,906	2,178,943	101.6%

The tolerance is plus or minus 2% for the actuarial present value of projected benefits and plus or minus 5% for all other components. Numbers may not sum due to rounding.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Exhibit IV-4

Judicial Division

Dollar Amounts in Thousands

Valuation Component	Segal	Cheiron	Ratio
Active members	$255,454	$259,498	101.6%
Inactive vested members	10,145	10,091	99.5%
Inactive non-vested members	485	485	100.0%
Retirees and beneficiaries	386,218	387,117	100.2%
Actuarial present value of projected benefits	**$652,302**	**$657,190**	**100.7%**
Present value of future normal costs	89,471	92,076	102.9%
Total actuarial accrued liability	**$562,831**	**$565,114**	**100.4%**
Active accrued liability	165,983	167,421	100.9%

The tolerance is plus or minus 2% for the actuarial present value of projected benefits and plus or minus 5% for all other components. Numbers may not sum due to rounding.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Exhibit IV-5

Denver Public Schools (DPS) Division

Dollar Amounts in Thousands

Valuation Component	Segal	Cheiron	Ratio
Active members	$3,711,956	$3,725,517	100.4%
Inactive vested members	197,127	198,526	100.7%
Inactive non-vested members	76,948	76,948	100.0%
Retirees and beneficiaries	2,755,134	2,730,399	99.1%
Actuarial present value of projected benefits	**$6,741,165**	**$6,731,390**	**99.9%**
Present value of future normal costs	1,335,466	1,336,545	100.1%
Total actuarial accrued liability	**$5,405,699**	**$5,394,845**	**99.8%**
Active accrued liability	2,376,490	2,388,972	100.5%

The tolerance is plus or minus 2% for the actuarial present value of projected benefits and plus or minus 5% for all other components. Numbers may not sum due to rounding.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Exhibit IV-6

All Division Trust Funds Combined

Dollar Amounts in Thousands

Valuation Component	Segal	Cheiron	Ratio
Active members	$53,248,517	$53,440,793	100.4%
Inactive vested members	2,994,537	3,013,022	100.6%
Inactive non-vested members	866,649	866,649	100.0%
Retirees and beneficiaries	57,088,183	56,998,462	99.8%
Actuarial present value of projected benefits	**$114,197,885**	**$114,318,926**	**100.1%**
Present value of future normal costs	16,852,173	16,748,646	99.4%
Total actuarial accrued liability	**$97,345,712**	**$97,570,280**	**100.2%**
Active accrued liability	36,396,343	36,692,147	100.8%

The tolerance is plus or minus 2% for the actuarial present value of projected benefits and plus or minus 5% for all other components. Amounts may not sum from the individual division exhibits due to rounding.

TOTAL NORMAL COST RATE COMPARISON AS OF DECEMBER 31, 2025

Exhibit IV-7

Division Trust Funds

Division Trust Fund	Segal	Cheiron	Ratio
State Division	13.43%	13.38%	99.6%
School Division	16.72%	16.69%	99.8%
Local Government Division	14.06%	13.85%	98.5%
Judicial Division	16.28%	16.72%	102.7%
Denver Public Schools (DPS) Division	15.14%	15.16%	100.2%

The tolerance is plus or minus 5% for the normal cost rates. Rates are a percentage of projected covered payroll and include administrative expenses of 0.45%.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

COMPARISON OF ACTUARIAL VALUE OF ASSETS AS OF DECEMBER 31, 2025

Exhibit IV-8

Division Trust Funds

Dollar Amounts in Thousands

Division Trust Fund	Segal	Cheiron	Ratio
State Division	$19,940,826	$19,940,826	100.0%
School Division	36,120,320	36,120,320	100.0%
Local Government Division	5,881,391	5,881,391	100.0%
Judicial Division	508,352	508,352	100.0%
DPS Division	4,829,466	4,829,466	100.0%

COMPARISON OF ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION RATES AS OF DECEMBER 31, 2025

Exhibit IV-9

Division Trust Funds

Division Trust Fund	Segal	Cheiron	Ratio
State Division	18.63%	18.66%	100.2%
School Division	22.58%	22.68%	100.4%
Local Government Division	10.16%	10.01%	98.6%
Judicial Division	10.77%	11.41%	105.9%
DPS Division	7.81%	7.77%	99.5%

The 5.9% difference for the Judicial Division is within tolerance since this is a leveraged calculation that is net of member contributions. Rates are a percentage of projected covered payroll and net of member contribution rates.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

COMPARISON OF AUTOMATIC ADJUSTMENT PROVISION (AAP) ASSESSMENT AS OF DECEMBER 31, 2025

Exhibit IV-10

Cheiron's AAP Assessment

Dollar Amounts in Thousands

Division Trust Fund	Unfunded Actuarial Accrued Liability	Blended Total Contribution Rate	Blended Total Required Contribution Rate	Ratio of Total to Required Rates
State Division	$10,210,622	31.73%	29.81%	N/A
School Division	18,657,206	34.17%	33.68%	N/A
Local Government Division	799,956	24.57%	19.05%	N/A
Judicial Division	56,762	34.67%	22.41%	N/A
DPS Division	N/A	N/A	N/A	N/A
Total Weighted Average	**$29,724,546**	**33.07%**	**31.94%**	**103.54%**

Weighted average is based on each division's UAAL. Blended contribution rates are those applicable for 2027 and include member contribution rates. Numbers may not sum due to rounding.

Automatic changes to contributions and benefits are triggered when the ratio of the Blended Total Contribution Rate to the Blended Total Required Contribution Rate is less than 98% or greater than 120%. Segal calculated this ratio as 103.73%, and we calculated it as 103.54%, as shown in the exhibit above. Therefore, both our assessment and Segal's determine that no automatic changes are triggered as of December 31, 2025.

Reconciliation of Items Outside Tolerance – Division Trust Funds

There are no items outside of tolerance to reconcile. Our replication of the Judicial Division's Actuarially Determined Employer Contribution Rate is 5.9% greater than Segal's, as footnoted on the prior page. However, that is a leveraged calculation since it is net of member contributions, so it can result in deviations greater than 5% and still be considered within tolerance.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Health Care Trust Fund (OPEB) Results

The following exhibits compare our health care trust fund results to Segal's December 31, 2025 valuations. Exhibits IV-11 and IV-12 present the comparison for each health care trust fund and Exhibit IV-13 presents the comparison for the two funds combined. Exhibit IV-14 compares the total normal cost rates. Exhibit IV-15 compares the Actuarial Value of Assets. Exhibit IV-16 compares the Actuarially Determined Employer Contribution Rates. All elements of the Health Care Trust Funds' parallel valuations are within tolerance.

Because health care benefits do not depend on the level of a member's retirement income, these valuations appropriately use headcount-weighted mortality rates and a separate set of coverage and premium assumptions, as discussed in Section V.

COMPARISON OF OPEB LIABILITY MEASURES AS OF DECEMBER 31, 2025

Exhibit IV-11

Health Care Trust Fund (HCTF)

Dollar Amounts in Thousands

Valuation Component	Segal	Cheiron	Ratio
Active members	$382,792	$377,788	98.7%
Inactive vested members	33,622	34,173	101.6%
Retirees and beneficiaries	784,805	771,398	98.3%
Actuarial present value of projected benefits	**$1,201,219**	**$1,183,359**	**98.5%**
Present value of future normal costs	103,238	104,774	101.5%
Total actuarial accrued liability	**$1,097,981**	**$1,078,585**	**98.2%**
Active accrued liability	279,554	273,014	97.7%

The tolerance is plus or minus 2% for the actuarial present value of projected benefits and plus or minus 5% for all other components. Numbers may not sum due to rounding.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Exhibit IV-12

DPS Health Care Trust Fund (DPS HCTF)

Dollar Amounts in Thousands

Valuation Component	Segal	Cheiron	Ratio
Active members	$25,126	$24,566	97.8%
Inactive vested members	2,362	2,354	99.7%
Retirees and beneficiaries	32,625	33,017	101.2%
Actuarial present value of projected benefits	**$60,113**	**$59,937**	**99.7%**
Present value of future normal costs	7,383	7,510	101.7%
Total actuarial accrued liability	**$52,730**	**$52,427**	**99.4%**
Active accrued liability	17,744	17,056	96.1%

The tolerance is plus or minus 2% for the actuarial present value of projected benefits and plus or minus 5% for all other components. Numbers may not sum due to rounding.

Exhibit IV-13

All Health Care Trust Funds Combined

Dollar Amounts in Thousands

Valuation Component	Segal	Cheiron	Ratio
Active members	$407,918	$402,354	98.6%
Inactive vested members	35,984	36,527	101.5%
Retirees and beneficiaries	817,430	804,415	98.4%
Actuarial present value of projected benefits	**$1,261,332**	**$1,243,296**	**98.6%**
Present value of future normal costs	110,621	112,284	101.5%
Total actuarial accrued liability	**$1,150,711**	**$1,131,012**	**98.3%**
Active accrued liability	297,298	290,070	97.6%

The tolerance is plus or minus 2% for the actuarial present value of projected benefits and plus or minus 5% for all other components. Numbers may not sum due to rounding.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

TOTAL NORMAL COST RATE COMPARISON AS OF DECEMBER 31, 2025

Exhibit IV-14
Health Care Trust Funds

Trust Fund	Segal	Cheiron	Ratio
Health Care Trust Fund (HCTF)	0.12%	0.11%	98.7%
DPS Health Care Trust Fund (DPS HCTF)	0.10%	0.10%	99.6%

Rates are a percentage of projected covered payroll.

COMPARISON OF ACTUARIAL VALUE OF ASSETS AS OF DECEMBER 31, 2025

Exhibit IV-15
Health Care Trust Funds
Dollar Amounts in Thousands

Trust Fund	Segal	Cheiron	Ratio
Health Care Trust Fund (HCTF)	$800,330	$800,330	100.0%
DPS Health Care Trust Fund (DPS HCTF)	84,799	84,799	100.0%

COMPARISON OF ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION RATES AS OF DECEMBER 31, 2025

Exhibit IV-16
Health Care Trust Funds

Trust Fund	Segal	Cheiron	Ratio
Health Care Trust Fund (HCTF)	0.32%	0.32%	99.4%
DPS Health Care Trust Fund (DPS HCTF)	(0.09%)	(0.09%)	106.4%

The 6.4% difference for the DPS HCTF is within tolerance since this is a leveraged calculation with the negative unfunded actuarial liability. Rates are a percentage of projected covered payroll.

SECTION IV – PARALLEL ACTUARIAL VALUATION RESULTS

Reconciliation of Items Outside Tolerance – Health Care Trust Funds

There are no items outside of tolerance to reconcile. Our replication of the DPS Health Care Trust Fund's Actuarially Determined Employer Contribution Rate is 6.4% greater than Segal's, as footnoted on the prior page. However, that is a leveraged calculation since it has a negative unfunded actuarial liability, so it can result in deviations greater than 5% and still be considered within tolerance.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

The December 31, 2025 valuations were prepared using the actuarial assumptions adopted by the Board based on the January 1, 2020 through December 31, 2023 Actuarial Experience Review. We reviewed the economic and demographic assumptions used in the valuations and the analysis supporting them. The additional assumptions used only in the open-group funding period projections are reviewed separately in Section VII.

In our opinion, the assumptions used in the December 31, 2025 valuations are reasonable, and the methodology used to select them is generally appropriate and consistent with the guidance in ASOP No. 27 and, for those specific to the Health Care Trust Funds, ASOP No. 6. We do not find any of the assumptions unreasonable. Our comments below are limited to refinements in analysis, structure, and disclosure that we suggest be considered for the next experience analysis.

Economic Assumptions

The principal economic assumption used in the December 31, 2025 valuations is an investment return, and therefore discount rate, of 7.25% per year, net of investment expenses. The valuations also rely on economic assumptions for price inflation, individual salary increases, and aggregate payroll growth.

- **Investment return.** The 7.25% annual investment return assumption is reasonable, and the methodology used to analyze it is sound.

  Segal used a building blocks approach, which includes the 2.30% price inflation assumption plus a 4.95% real rate of return above inflation. Segal's analysis is based on PERA's target asset allocation and the 2024 Horizon Survey of Capital Market assumptions. Based on their analysis, the expected real rate of return is 5.15%, so there is a margin for adverse experience and a 53% confidence level of meeting the assumption over a 20-year period. We performed a similar analysis using the 2026 Horizon Survey of Capital Market assumptions and calculated a 53% confidence level of meeting the assumption over a 20-year period.

  Capital market assumptions anticipate lower returns over a 10-year period than a 20-year period, and about 45% of PERA's total present value of benefits are expected to be paid over the next 10 years. Therefore, we recommend that Segal consider giving some weight to return expectations over a shorter period in the next experience study. The 7.25% investment return assumption remains reasonable when we assign a 50/50 weighting to the 10-year and 20-year return expectations with a 50% confidence level, based on our analysis using the 2026 Horizon Survey of Capital Market assumptions.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

- **Price inflation.** The 2.30% price inflation assumption is reasonable, and the methodology used to analyze it is sound.

  The price inflation assumption is applied consistently across the real rate of return, salary, and payroll growth building blocks. Segal's analysis reviewed several independent reference points, including the average expectation from investment consultants in the Horizon Survey of Capital Market Assumptions, the Social Security Administration's 75-year intermediate projection, US Treasury break-even rates for various bond durations, and expectations from professional forecasters surveyed by the Federal Reserve Bank of Philadelphia.

- **Salary increases.** The assumption for individual salary increase rates is reasonable, and the methodology used to analyze it is reasonable.

  Segal reviewed the experience using both age and service and determined that age is the strongest relationship for all divisions except Judicial. Public retirement systems often use service-based salary-increase assumptions because collective bargaining agreements typically include step or longevity pay increases that are based on years of experience. However, age-based rates are also reasonable.

  Segal's analysis attempts to remove the effect of inflation from the salary increases observed during the experience period, so that the remaining increase represents the real, service-based component of pay growth. The difficulty is that the two series being netted against one another are not necessarily aligned in time. The Consumer Price Index for All Urban Consumers (CPI-U) measures inflation as it occurs, whereas public sector pay increases respond to inflation only after a lag – typically once a collective bargaining agreement is renegotiated or a legislative or board action on compensation takes effect. Subtracting CPI-U from salary increases over the same period, therefore, is unlikely to isolate the real component. In a period when inflation rises and then falls, as it did during the recent experience study period, the mismatch can materially distort the apparent real increase in either direction, depending on how the inflation pattern interacts with collective bargaining cycles.

  We recognize that there is no single accepted solution to this problem for multiple employer plans. One approach is to consider a longer period of experience, so more collective bargaining cycles are included, and short-term fluctuations in inflation have less of an impact. Another approach is to use the increase in average pay as an estimate of the across-the-board pay increases, typically composed of inflation plus real wage growth. Segal may want to consider reviewing the experience with one or more of these approaches to verify that the methodology used to set the assumption is not overly affected by the lag between inflation and its appearance in a salary increase.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

- **Payroll growth.** The 3.00% annual payroll growth assumption is reasonable, and the methodology used to analyze it is sound.

  The payroll growth assumption is based on 2.30% price inflation plus a 0.70% real wage growth assumption. This assumption is used only to calculate the UAL amortization payments as part of the actuarially determined employer contribution rates. Therefore, it has an indirect impact on the valuation, as it affects the calculation of the Automatic Adjustment Provision.

  While the 3% payroll growth assumption is reasonable, the average annual projected payroll growth in the open-group valuation ranges from 2.1% to 2.6% over the next 30 years, varying by division and including the impact of the active population growth assumption. We would expect the projected payroll in an open-group valuation that assumes a level active population to be reasonably similar to the payroll growth assumption. Since PERA's open-group valuations assume an increase in the active population, we would have expected the projected payrolls to be correspondingly greater than the 3% payroll growth assumption.

Demographic Assumptions

- **Retirement rates.** The retirement rates are reasonable for the December 31, 2025 valuation. However, we recommend that the retirement analysis in the next experience study be conducted separately by benefit tier and by age and years of service in lieu of separate assumptions based on age and unreduced versus reduced retirement eligibility.

  If additive rates are maintained for the first five years a member is eligible for unreduced retirement, we recommend removing the experience from the first five years of eligibility for unreduced retirement from the primary analysis of retirement rates. That experience should be analyzed separately to determine the additive rates and should not be included twice.

  In addition, for the newer tiers, there may not be sufficient experience on which to set retirement rates. We recommend applying professional judgment, particularly for reduced retirement rates, to reflect differences in early retirement reductions across tiers, rather than applying the observed rates for the oldest tier to all tiers.

  Our comments on the methodology used to analyze the assumptions for both the unreduced and reduced retirement rates are addressed below.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

Unreduced retirement rates. Segal's unreduced retirement assumption has two components: a set of base rates developed from PERA's own experience, and a set of additional rates applied during the first five years in which a member is eligible for an unreduced benefit. The additional rates are intended to capture the elevated retirement rate commonly observed when members first become eligible for an unreduced benefit.

Our concern with Segal's methodology is that the base rates were themselves derived from PERA experience that already includes members who were in their first five years of unreduced eligibility. Additional rates on top of rates that already reflect that behavior likely double-count the effect, so the combined assumption overstates the proportion of members expected to retire in the first five years of unreduced retirement eligibility.

We discussed this with Segal. Segal's rationale is that the experience is drawn predominantly from members in the oldest benefit tier, who can attain unreduced eligibility as early as age 50 with 30 years of service, and that this experience is therefore not indicative of the behavior of members in later tiers, who first attain unreduced eligibility between ages 55 and 64. The additional rates are intended to bridge that gap.

We understand the concern, but do not believe the data support the conclusion. Fewer than 30% of members in the oldest tier attain unreduced eligibility before age 55. Therefore, the large majority of PERA's unreduced retirement experience at ages 55 and above is the experience of members who were themselves at or near first eligibility within that age range, which is precisely the behavior the additional rates are intended to model.

Because an unreduced benefit commencing earlier is more valuable than the same benefit commencing later, assuming more retirements at first unreduced eligibility than actually occur will generally increase the Actuarial Liability and normal cost and is expected to produce recurring liability gains as members work past their assumed retirement dates. Therefore, the liabilities reported in the closed-group valuation may be somewhat higher than those produced by a more refined assumption. However, the open-group valuation may assume too many retirements among legacy-tier members, which would overestimate the rate at which they are replaced by new hires in the newest benefits tier.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

Reduced retirement rates. The reduced retirement rates are the same for members of every benefit tier. As with the unreduced rates, the supporting experience comes predominantly from the oldest tier.

Members in the newer tiers are subject to a larger benefit reduction for retiring at specific ages because it takes longer to qualify for an unreduced benefit. A member who gives up more benefits by retiring early would be expected to be less likely to do so. Applying the oldest tier's rates to members in newer tiers, therefore, appears likely to overstate reduced retirement for those members.

The early retirement reduction for the newer tiers is actuarially equivalent, so the impact of a modified assumption may not be significant on the current valuation. However, the current assumption may underestimate the future working lifetime and future service for members in the newer tiers, which may affect the open-group projections.

- **Refund of contributions.** The assumed level of contribution refunds appears reasonable based on the information available, but we have some concerns about the methodology used to analyze the assumption.

  When a vested member terminates employment before retirement, the member chooses between a refund of member contributions with interest and a deferred annuity payable at retirement age. The valuation assumes that 35% of all vested terminating members elect the refund. That single percentage is applied to every division, to safety and non-safety members alike, and to members at every age and length of service.

  A refund of member contributions with interest is generally more valuable than a deferred annuity for a young, short-service member, and generally less valuable for an older, long-service member whose deferred annuity reflects many years of accrual and a shorter period until commencement. Election behavior in public retirement systems consistently reflects that difference: short-service members elect refunds at higher rates than long-service members. A single rate applied across all service levels will likely overstate refund elections among long-service members and understate them among short-service members. This may be causing liability losses even when the 35% assumption aligns with experience in aggregate.

  Segal reviewed the refund experience for all divisions combined. As a result, the experience needed to determine whether the assumption should vary by service, by division, or between safety and non-safety members was not developed and was not available to us.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

We note that the valuations show recurring liability losses from the termination decrement for most divisions. The gain and loss analysis is not presented in enough detail to attribute those losses to any particular component of the termination assumption.

We recommend that Segal analyze the refund election experience separately by division, separately for safety and non-safety members, and by service, and consider recommending an assumption that varies by years of service, division, and safety vs non-safety.

- **Termination rates.** The termination rates assumption is reasonable and the methodology used to analyze it is sound.

  The assumption uses service-based rates for members with fewer than five years of service and age-based rates for members with five or more years of service. The service-based rates are unisex, while some age-based rates differ between males and females. We reviewed Segal's analysis and recommendations and determined that they are reasonable.

- **Disability rates.** The disability incidence assumption is reasonable, and the methodology used to analyze it is sound.

  The assumption uses unisex, age-based rates with different rates for Safety officers, State and Local Government Divisions (non-safety officers), and School, Judicial, and DPS Divisions. We reviewed Segal's analysis and recommendations and determined that they are reasonable.

- **Mortality – base table.** The base mortality assumption is reasonable, but we have some concerns about the methodology used to analyze the assumption.

  Segal adjusted PERA's observed mortality experience to remove the effect of the COVID-19 pandemic, using excess mortality factors published by the Centers for Disease Control and Prevention (CDC) for the State of Colorado. Professional judgment is often required to either adjust or ignore mortality experience during the COVID-19 pandemic. However, excess mortality measured across Colorado's general population is unlikely to be representative of PERA's covered population. Members and benefit recipients of a large public retirement system generally have better access to health care and higher rates of health insurance coverage than the population at large and differ from it in occupational and socioeconomic composition. In our experience with other public retirement systems, the covered populations experienced meaningfully lower excess mortality during the pandemic period than the general populations of the same states.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

If the adjustment removes more excess deaths from the observed experience than actually occurred among PERA members, the adjusted experience will appear to live longer than PERA's true underlying experience, and the mortality rates set from that experience will be lower than necessary. Lower mortality rates mean longer assumed lifetimes and benefits paid over a longer period, resulting in higher liabilities. Therefore, the current assumption may be more conservative (i.e., higher liabilities) than an alternative assumption based on a different method for accounting for experience during the COVID-19 pandemic.

We do not expect the next experience study to include mortality experience during a global pandemic. We recommend that, as additional post-pandemic experience accumulates, future analysis place greater weight on recent years for which no adjustment is required, which will reduce the sensitivity of the assumption to this judgment.

- **Mortality – base table for beneficiaries.** Beneficiary mortality is based on the Society of Actuaries' Pub-2010 Contingent Survivor mortality table, adjusted using PERA's own beneficiary experience. Both the published table and Segal's supporting analysis are constructed exclusively from experience observed after the member's death. That is the correct basis for valuing a survivor benefit already in payment. However, the same rates are also applied to the spouse of a living member, in valuing the joint-and-survivor forms of payment. Mortality among the recently widowed is elevated relative to otherwise similar individuals whose spouse is living, which is often described as the widower effect. A table built entirely from post-member death experience, therefore, likely overstates the probability of death for a spouse while the member is still alive.

  Overstating the probability that a spouse predeceases the member reduces the measured value of the survivor benefit and therefore slightly understates the liability. The effect on total liability is not significant. The same beneficiary mortality is also used to compute the Option 2 and Option 3 joint-and-survivor conversion factors, so a member electing a joint-and-survivor form may be charged less than the actuarial value of that option.

  We recommend that a healthy annuitant or general population mortality basis be used for a beneficiary while the member is living, with a change to the contingent survivor basis upon the member's death; or, alternatively, that Segal document why a single basis is used and demonstrate that the difference is not material. We recommend the same refinement be reflected in the Option 2 and Option 3 factors when those factors are next reviewed.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

- **Mortality – future improvement.** The mortality improvement assumption is reasonable and the methodology used to analyze the assumption is reasonable.

  The mortality improvement assumption is based on the 2024 Adjusted Scale MP-2021, which is a variation of Scale MP-2021, the most recent mortality improvement scale published by the Society of Actuaries. The adjustments attempt to account for the lack of mortality improvement during the COVID-19 pandemic. However, it has yet to be determined what the long-term impact that the COVID-19 pandemic will have on future mortality rates.

- **Spouse assumption.** The assumptions regarding member spouses are reasonable and the methodology used to analyze the assumption is reasonable.

  Male spouses are assumed to be two years older than female spouses. 100% of active members (80% for DPS Division) are assumed to be married. 100% of spouses are assumed to be the opposite gender. Given the limited available data, we agree that these are reasonable and similar to the assumptions used for other public retirement systems.

Health Care Trust Fund Assumptions

Many of the assumptions used in the health care trust fund valuations – the rates of retirement, termination, and disability, and the economic assumptions – are the same as those used in the pension valuations, and our comments above apply to both. The observations in this subsection are specific to the health care trust funds.

- **Basis of the mortality adjustment factors.** The same mortality adjustment factors are applied to both the pension and the health care trust fund mortality assumptions. Those factors, however, were derived from benefit-weighted pension experience, while the health care trust fund valuations appropriately use headcount-weighted mortality rates, since a health care subsidy does not depend on the level of a member's retirement income. An adjustment factor is specific to the base table and the weighting basis against which it was measured. Because higher-benefit members tend to live longer, benefit-weighted mortality is generally lighter than headcount-weighted mortality for the same population, so a factor derived on one basis is not necessarily the correct factor for the other. We cannot determine the direction of any resulting bias without the headcount-weighted experience, which was not available to us, and we would expect the effect to be small relative to the health care trust fund liabilities. We recommend that Segal derive separate mortality adjustment factors for the health care trust funds from headcount-weighted experience or, alternatively, demonstrate through analysis that the difference between the two bases is not material for these plans and disclose that conclusion.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

- **Health care cost trend.** The assumptions regarding the health care cost trend are reasonable, and the methodology used to analyze the assumptions is reasonable.

  The health care cost trend assumption is reviewed annually rather than as part of the experience study, due to the changing nature of health care costs. Due to the fixed nature of the subsidies, no trends are applied to the subsidies, but trends are applied to the overall premiums, which reflect the expectation that member contributions increase directly with increases in premiums. We agree that this approach is reasonable.

- **Spouse information.** The assumptions regarding member spouses are reasonable, and the methodology used to analyze the assumptions is reasonable.

  The spouse assumption for future retirees is only relevant under the PERA benefit structure, under which surviving spouses of retirees receiving a joint and survivor pension can continue to receive an explicit subsidy upon the retiree's death. For future retirees, 60% of male retirees who are eligible for a subsidy are assumed to have a female surviving spouse, while 35% of female retirees who are eligible for a subsidy are assumed to have a male surviving spouse. Male spouses of female retirees are assumed to be one year older, while female spouses of male retirees are assumed to be three years younger. We reviewed Segal's analysis and recommendations and determined that these assumptions are reasonable.

- **Health care participation.** The assumptions regarding health care participation are reasonable, and the methodology used to analyze the assumptions is reasonable.

  Assumptions for enrollment by age and elections by age for both current active and current terminated vested members were reduced as part of the most recent experience study which is consistent with PERA's experience from 2020 to 2023. We believe these assumptions to be reasonable and appropriate based on our review of Segal's analysis.

  The experience study proposed an initial benefit receipt age of 60 for all terminated vested members. However, the valuation report discloses an assumption that currently terminated vested members will retire at age 62 (PERA benefit structure) or age 65 (DPS benefit structure) with an unreduced pension benefit. This assumption is not discussed in the experience study report and appears inconsistent with the assumption from the pension valuation. We recommend that Segal clarify which assumption applies to current terminated vested members.

SECTION V – REVIEW OF ACTUARIAL ASSUMPTIONS

Overall Assessment of the Actuarial Assumptions

Overall, the actuarial assumptions used in the December 31, 2025 valuations are reasonable and comply with the applicable Actuarial Standards of Practice. Our recommendations concern how several of the demographic assumptions are analyzed, structured, and documented, and are most appropriately addressed in the next experience analysis.

It is worth stating plainly what our observations do and do not imply when taken together. They do not point in a single direction. Our comments on the additive unreduced retirement rates and on the excess mortality adjustment suggest that certain liabilities may currently be measured somewhat higher than a refined analysis might produce, while our comments on the reduced retirement rates, the refund election assumption, and beneficiary mortality point the other way. It would not be correct to read this section as showing that PERA's liabilities are systematically overstated or systematically understated. We have not quantified the individual or combined effects, because doing so would require the analysis we are recommending Segal perform. Most importantly, none of these observations, individually or collectively, caused our parallel valuations to fall outside the tolerance levels established for this engagement, which is the test of whether the reported results may be relied upon.

SECTION VI – REVIEW OF ACTUARIAL FUNDING METHODS

We reviewed the actuarial funding methods used in the December 31, 2025 funding actuarial valuations. In our opinion, the actuarial cost method, the asset valuation method, and the approach used to determine each division's funding period are each reasonable and consistent with the applicable ASOPs and with PERA's statutory funding framework, and we verified that each was applied as described.

PERA's contribution rates are set in statute, and the actuarial valuation measures how long those statutory contributions will take to fully fund each division. That measure is the funding period, and the statutory objective is to fully fund each division by December 31, 2047. The actuarial valuation also compares the statutory contribution rates to actuarially determined contribution rates using the Board's funding policy. The Automatic Adjustment Provision can adjust contributions and benefits if PERA's statutory contribution rates are either insufficient or overly sufficient when compared to the actuarially determined contribution rates. The Board's funding policy includes the following methods.

Actuarial Cost Method

The techniques to allocate the total present value of projected benefits to each year (normal cost), including all past years (actuarial accrued liability). Both the pension and the health care trust fund valuations use the Entry Age Actuarial Cost Method on an individual basis, with the normal cost determined as a level percentage of compensation from entry age to assumed exit. The entry age method is the method used by the majority of large public retirement systems, and its application here is reasonable and consistent with that standard. We verified through our parallel valuations that this method was applied as described.

Asset Valuation Method

The Actuarial Value of Assets equals the Market Value of Assets minus unrecognized investment gains or losses, which are recognized evenly over a four-year period. The annual investment gain or loss is determined by subtracting the expected market value investment return from the actual market value investment return. Annual investment gains or losses are recognized at the rate of 25% per year. Since investment gains or losses are recognized over a sufficiently short period, it is reasonable not to include a corridor around the market value of assets. We verified through our parallel valuations that this method was applied as described and is reasonable.

SECTION VI – REVIEW OF ACTUARIAL FUNDING METHODS

Amortization Method

Under the Board's funding policy, the initial UAAL as of December 31, 2017 is amortized over a closed 30-year period; any increase (or decrease) in the UAAL existing as of December 31, 2017 is amortized over the remaining period of the initial 30-year period; changes in the UAAL arising from actuarial experience gains or losses or assumption changes are amortized over separate closed 30-year periods; and changes in the UAAL arising from future benefit enhancements or reductions are amortized over the anticipated duration of payment of the benefit enhancement or reduction but no greater than 25 years.

According to the second edition of the Conference of Consulting Actuaries' Actuarial Funding Policies and Practices for Public Pension Plans ("Funding Policies and Practices White Paper 2.0"), using 30-year amortization periods is a "non-recommended practice." We recommend that the Board consider shortening the amortization period for actuarial experience gains or losses and assumption changes.

Selecting an amortization period requires balancing two competing objectives: maintaining generational equity (demographic matching) and managing contribution volatility. Long amortization periods help control the volatility of actuarially determined contributions, making budgets and the Automatic Adjustment Provision more stable. However, they can also pass costs on to future generations, particularly if the amortization payments do not cover the interest on the amortization base (negative amortization). An amortization period of 30 years (using a 7.25% discount rate and 3.00% amortization payment increases as PERA does) effectively pays off no portion of the initial amortization base for over 15 years.

Short amortization periods pay off the amortization base quickly but can result in much more volatile actuarially determined contributions, resulting in more frequent changes (both up and down) under the Automatic Adjustment Provision.

To balance these competing objectives, the Funding Policies and Practices White Paper 2.0 suggests an amortization period of 15 to 20 years for experience gains or losses and 15 to 25 years for assumption changes. Periods longer than 20 years start to incur some negative amortization and shorter than 15 years produces contributions that are often viewed as too volatile. The Funding Policies and Practices White Paper 2.0 allows a longer amortization period for assumption changes because an assumption change is viewed as capitalizing the future gains or losses that would occur without the assumption change.

SECTION VI – REVIEW OF ACTUARIAL FUNDING METHODS

Contribution surpluses or deficiencies (i.e., actual contributions being greater or less than expected contributions using the actuarially determined contribution rates) have been amortized over the remaining period of the initial 30-year period. This has been reasonable because most of the UAAL relates to the initial 2017 UAAL. However, as the initial 2017 UAAL continues to be amortized and gradually becomes a smaller portion of the total UAAL, we recommend that the Board monitor this dynamic and consider when it may be appropriate to amortize contribution surpluses/deficiencies in the same manner as other experience gains or losses.

Reasonable Actuarially Determined Contribution (ASOP 4)

Actuarial Standard of Practice No. 4 requires the calculation and disclosure of a reasonable Actuarially Determined Contribution (ADC), whether or not that contribution is the amount actually contributed. The reasonable ADC is an important benchmark to compare against PERA's statutorily required contribution rates.

Segal's reasonable ADC generally complies with ASOP 4, but the method used to amortize the UAAL may not be considered reasonable. The amortization method should amortize the UAAL over a reasonable time period, which requires professional judgement that considers, among other factors, the source of the UAAL and the length of time until the amortization payments exceed interest on the UAAL. Some of the alternative ADC's disclosed in the ACFR may be more consistent with these requirements.

PERA's amortization method uses a 30-year amortization period for future experience gains and losses and impacts of future assumption changes. Under a 30-year amortization schedule, the amortization payment does not exceed interest on the UAAL until the 11th year, which means that the UAAL is expected to grow for the first 10 years of the 30-year period. Furthermore, the UAAL does not decrease to the original UAAL until the 16th year. In other words, no progress to pay down the original UAAL is made until the 16th year of the 30-year period. Therefore, we believe that a 30-year amortization period is too long to be considered reasonable for UAAL changes due to future experience gains and losses and assumption changes. However, the 30-year amortization period may be considered reasonable when amortizing the large legacy UAAL due to it being a one-time occurrence that may require long-term structural financing changes for the plan sponsor.

A 20-year amortization period results in amortization payments exceeding interest on the UAAL in the first year, which means that progress towards paying down the original UAAL would occur in the first year. This is a more reasonable amortization period for amortizing future experience gains and losses and impacts of future assumption changes.

SECTION VI – REVIEW OF ACTUARIAL FUNDING METHODS

A 25-year amortization period results in amortization payments exceeding interest on the UAAL starting in year 6 and the UAAL declining back to the original UAAL in the 7th year. This is an alternative reasonable amortization period for the impact of future assumption changes.

SECTION VII – REVIEW OF FUNDING PERIOD PROJECTIONS AND SIGNAL LIGHT REPORTING

The key valuation results reviewed in Section IV measure PERA's obligations for its current members as of December 31, 2025, on a closed-group basis, assuming no future hires. The funding period projections take the additional step of modeling PERA as an ongoing system on an open-group basis, with new employees continuing to be hired in future years. That step requires additional assumptions not used in the closed-group valuation, including an assumption about how the active population size will change and a profile of the age, service, gender, and pay characteristics of members who will be hired in the future.

Replication of the Funding Period Projections

We independently constructed open-group projections for each division trust fund from the December 31, 2025 valuation results, using Segal's stated projection assumptions, the new entrant profile provided to us, and PERA's statutory contribution schedule, and reflecting possible future adjustments under the Automatic Adjustment Provision. Exhibit VII-1 compares the projected number of years to reach 100% funding.

Exhibit VII-1

Projected Funding Period Comparison

Years to Reach 100% Funded, Based on the December 31, 2025 Valuation

Division Trust Fund	Segal	Cheiron	Difference
State Division	18	18	0
School Division	22	23	1
Local Government Division	4	4	0
Judicial Division	2	2	0
DPS Division	5	5	0

We match Segal's projected funding period exactly for most divisions, except that we project the School Division to reach 100% funded one year later. This difference is primarily due to our projection using a slightly lower projected payroll, resulting in slightly lower contributions over the projection period. The ultimate payroll difference is 3%, which is within tolerance. The exhibits on the next page show the projected assets, liabilities, and funded ratio as well as projected contribution rates and ADC rates for all five Division Trust Funds in aggregate over the next 20 years.

SECTION VII – REVIEW OF FUNDING PERIOD PROJECTIONS AND SIGNAL LIGHT REPORTING

Exhibit VII-2

Projection of Assets and Liabilities

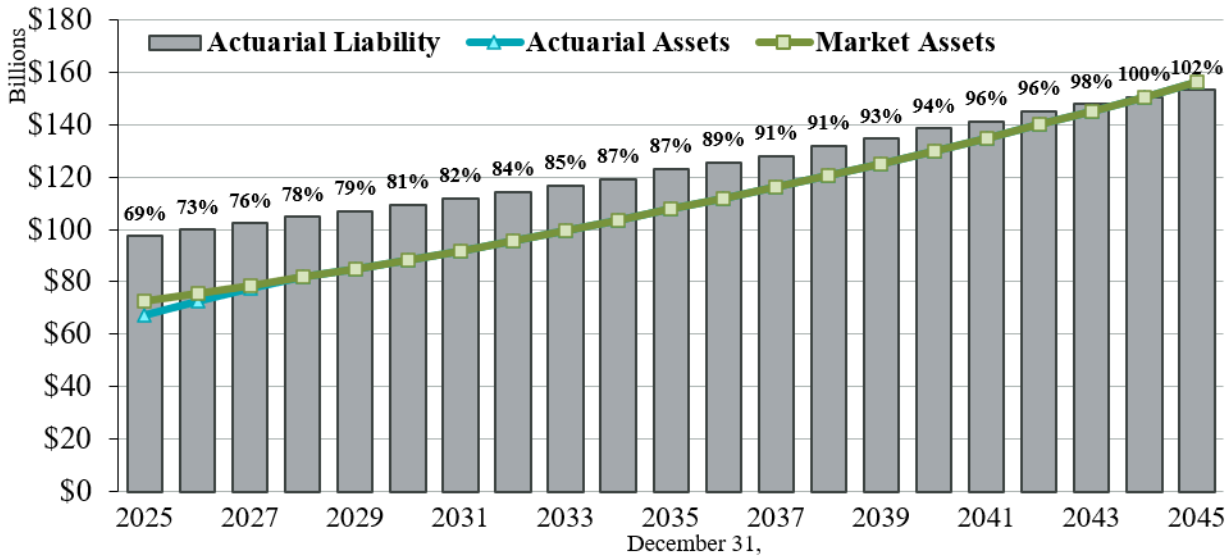
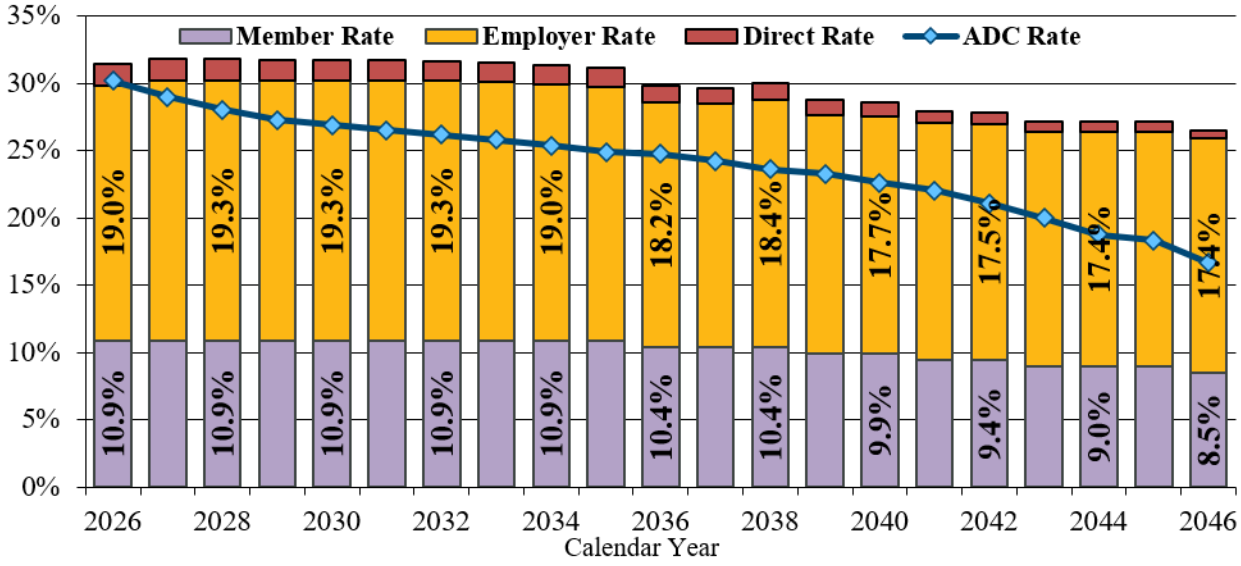


Exhibit VII-3

Projection of Contribution Rates and ADC Rates



We also matched Segal's six-year projected period for full funding of the Health Care Trust Fund. We note that the DPS Health Care Trust Fund is already more than 100% funded.

SECTION VII – REVIEW OF FUNDING PERIOD PROJECTIONS AND SIGNAL LIGHT REPORTING

Active Population Growth Assumption

The projections assume that the active population of the School Division grows by 0.75% per year, the active population of the Local Government Division by 0.50% per year, and the active population of the State, Judicial, and DPS Divisions by 0.25% per year.

The assumption of active population growth affects projected payroll, which directly impacts future contributions, since most statutory contributions are expressed as a percentage of pay. Assuming the active population will increase results in higher projected payroll, higher projected contribution dollars, and a shorter projected funding period.

Segal reviewed the Colorado Department of Local Affairs State Demography Office – 2022 Population Summary as part of their experience analysis. That publication noted that "between 2020 and 2030, [Colorado's] under-18 population is projected to shrink by 10,300, as a result of slowing birth rates since 2007." The school-age population is the principal driver of demand for the teaching and support workforce that makes up the School and DPS Divisions.

Segal's analysis included a review of the historical changes in the active population for each division over the past five and 10 years. Based on their analysis, the State Division's active population has declined over both the five- and 10-year periods, while the School and Judicial Divisions' active populations have increased over both periods. The active population of the Local Government and DPS Divisions has increased over the 10-year period and declined over the five-year period.

It is uncommon among public retirement systems to assume an indefinitely increasing active population, and the analysis does not appear to support this assumption for at least some of the divisions.

We recommend that Segal consider the school-age population projection when reviewing the School and DPS Division in their next experience analysis, and consider recommending a level active population, a 0% growth rate, for all divisions.

SECTION VII – REVIEW OF FUNDING PERIOD PROJECTIONS AND SIGNAL LIGHT REPORTING

New Entrant Profile

The new entrant profile determines the age, service, gender, and pay characteristics assigned to the members assumed to be hired in each future year and therefore impacts the future demographics of each division and the normal cost rate applicable to future hires in the projections. Segal disclosed the new entrant profile for each division in the December 31, 2025 actuarial valuation report.

We used the same new entrant profiles and replicated Segal's projected normal costs and payrolls to within a reasonable threshold. However, the average annual projected payroll growth ranges from 2.1% to 2.6% over the next 30 years in the open-group valuation, varying by division and including the impact of the active population growth assumption.

The long-term average annual payroll growth in an open group projection that assumes a level active population should be similar to the payroll growth assumption. For an open group projection that assumes an increasing active population, such as PERA's, the long-term average annual payroll growth should be similar to the payroll growth assumption plus the assumed increase in the active population. For example, the School Division assumes 0.75% active population growth and 3% payroll growth, so the open group payroll projection should be reasonably close to 3.75%. However, the School Division's average annual payroll growth is 2.4% over the next 30 years. The difference may be due to the starting salaries used in the new entrant profile.

The payroll growth in the open group projections being less than expected results in a more conservative projection since it assumes lower payroll and therefore lower contribution amounts.

We recommend that Segal consider the consistency of the long-term payroll projections with the payroll growth and active population growth assumptions when determining the new entrant profile.

Signal Light Reporting – Sensitivity on the Investment Return Assumption

Section 24-51-204(7.5) of the Colorado Revised Statutes requires the Board to obtain an annual sensitivity analysis to determine, from an actuarial perspective, when model assumptions are meeting targets and achieving sustainability. That analysis is presented in PERA's Signal Light Report. Our engagement includes a review for reasonability of the sensitivity projections on the investment return assumption presented in Section 3 of the 2026 Signal Light Report, which is based on the December 31, 2025 valuation.

SECTION VII – REVIEW OF FUNDING PERIOD PROJECTIONS AND SIGNAL LIGHT REPORTING

Signal Light reporting exists to translate a technical projection into a form that policymakers can act on. Both its underlying mechanics and its presentation are therefore relevant to our review, and we have considered both. Signal Light reporting assigns a color to certain outcomes to indicate their desirability. Exhibit VII-4 provides a description of the colors and how they are defined.

Exhibit VII-4
Signal Light Status Definitions

Status	Definition
Dark Green	100% funded by 2041 (30 years from 2011)
Green	100% funded by 2048 (30 years from 2018)
Light Yellow	100% funded by 2058 (40 years from 2018)
Yellow	100% funded by 2068 (50 years from 2018)
Orange	Solvent but more than 50 years to reach 100% funded
Red	Insolvent after 2045 (after 20 years)
Dark Red	Insolvent by 2045 (within 20 years)

We replicated the Signal Light Results based on investment return sensitivity, and our results are similar to Segal's. The analysis uses a stochastic projection of 5,000 investment return scenarios. There are several ways a scenario can be counted in a certain status. We used the same conservative counting methodology as Segal, which is disclosed in the Signal Light Report, and consider that methodology reasonable.

Exhibit VII-5 compares the distribution of 30-year geometric investment returns using the same expected return (7.56%) and standard deviation (12.35%). The differences shown on the next page do not materially impact the Signal Light Reporting analysis and some difference is expected due to differences in the distribution methodologies. Segal's investment return scenarios are based on a normal distribution, and our scenarios are based on a log-normal distribution.

SECTION VII – REVIEW OF FUNDING PERIOD PROJECTIONS AND SIGNAL LIGHT REPORTING

Exhibit VII-5

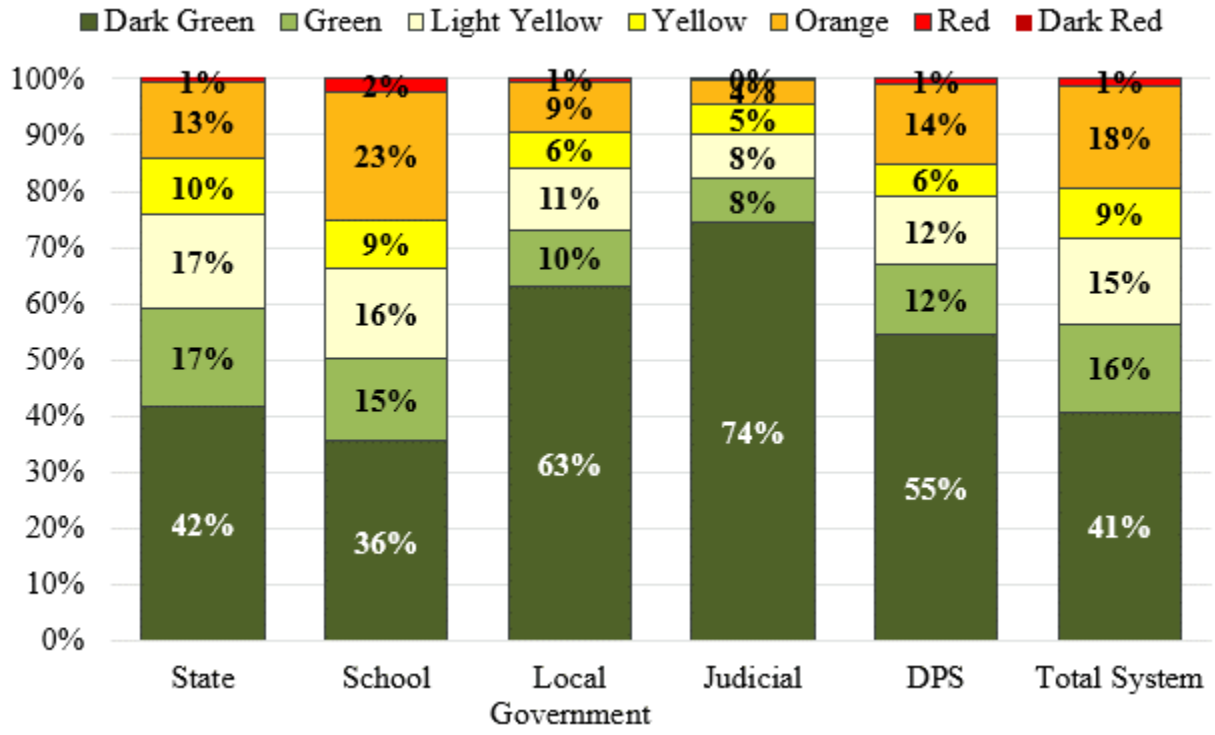
Comparison of Distribution of 30-Year Annual Geometric Investment Returns

Percentile	Segal	Cheiron	Difference
95th	11.3%	11.1%	-0.2%
75th	9.1%	9.1%	0.0%
50th	7.6%	7.6%	0.0%
25th	6.1%	6.1%	0.0%
5th	4.0%	4.0%	0.0%

Exhibit VII-6 shows our results of the Signal Light Results based on the investment return sensitivity for each division and for the Total System (i.e., all five Division Trust Funds in aggregate).

Exhibit VII-6

Cheiron's Signal Light Results based on Investment Return Sensitivity



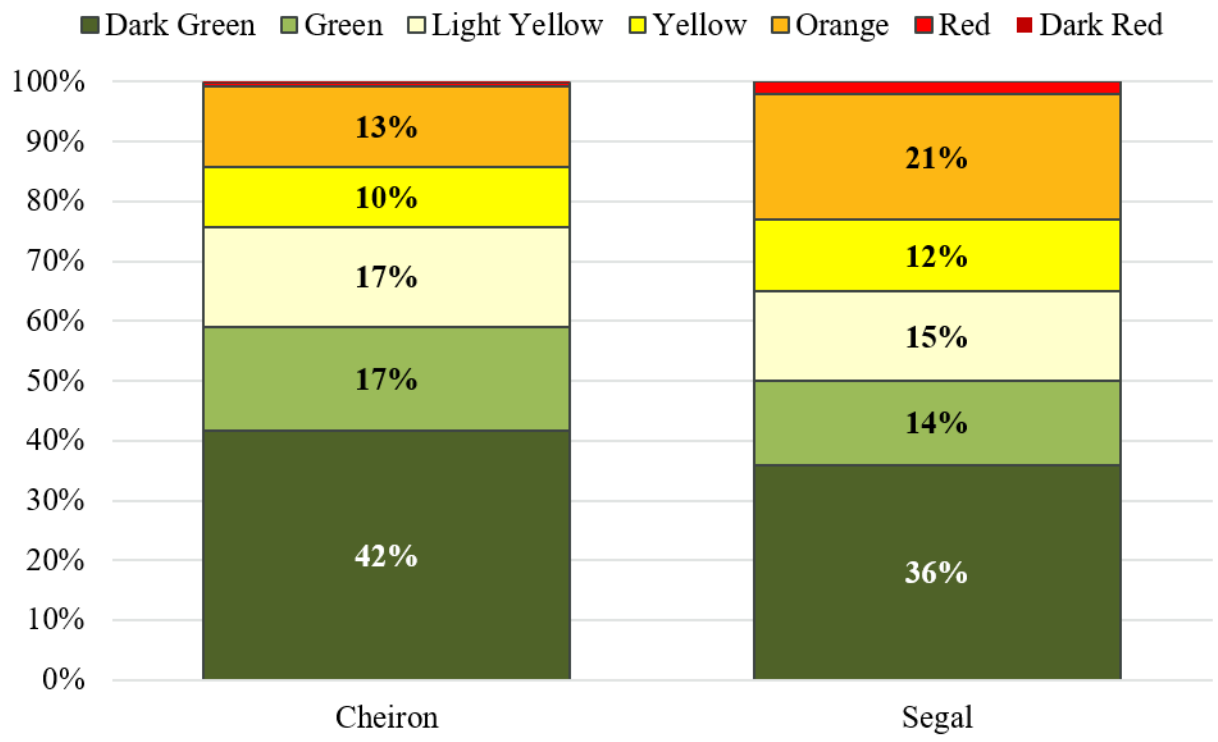
Note: percentages for each stacked bar may not sum to 100% due to rounding

SECTION VII – REVIEW OF FUNDING PERIOD PROJECTIONS AND SIGNAL LIGHT REPORTING

Exhibits VII-7 and VII-8 provide a comparison of the Signal Light Results for the State Division and School Division, respectively. A comparison for the other divisions would show similar differences.

Exhibit VII-7

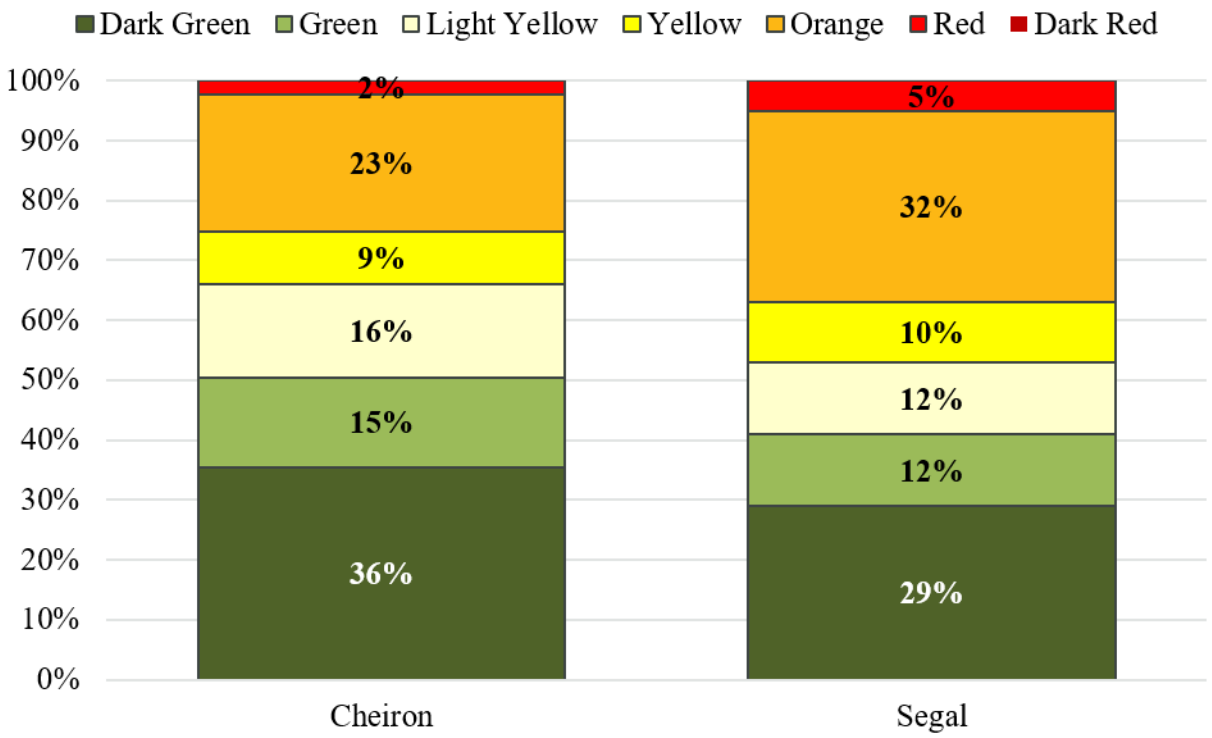
Comparison of Signal Light Results – State Division



SECTION VII – REVIEW OF FUNDING PERIOD PROJECTIONS AND SIGNAL LIGHT REPORTING

Exhibit VII-8

Comparison of Signal Light Results – School Division



SECTION VII – REVIEW OF FUNDING PERIOD PROJECTIONS AND SIGNAL LIGHT REPORTING

Exhibit VII-9 compares the probability of meeting the legislative goal of full funding by 2048.

Exhibit VII-9

Signal Light Status – Probability of 100% Funded by 2048

Division Trust Fund	Segal	Cheiron	Difference
State Division	50%	59%	9%
School Division	41%	51%	10%
Local Government Division	65%	73%	8%
Judicial Division	75%	82%	7%
DPS Division	57%	67%	10%
All Divisions Combined	46%	57%	11%

Given the sensitivity of these results to minor changes in the underlying projections and methodologies, we do not consider these differences to be material. For example, some stochastic projection models treat each year's investment returns as independent and identically distributed while other models may apply varying degrees of mean reversion. The counting methodology used by Segal requires the funded ratio to remain above 100% for 2048 and all years thereafter to be considered "Green." Consequently, the number of scenarios that fall into the "Green" status will depend on how many years after 2048 the funded ratio must remain above 100%, and that probability will also depend on the degree of mean reversion in the stochastic model. Therefore, the Signal Light result differences shown should not be considered material as they could easily be caused by common differences in stochastic projection models.

SECTION VIII – REVIEW OF ACTUARIAL COMMUNICATIONS

Actuarial communications, including actuarial valuation reports, experience analyses, and presentations to a board, are subject to ASOP No. 41, which also incorporates required disclosures from other relevant standards. In our opinion, the December 31, 2025 valuation reports, the experience analysis report, and the Signal Light Report comply with the relevant Actuarial Standards of Practice and communicate the information the Board and other intended users need. A more detailed discussion of compliance with significant recent revisions to the standards follows, together with the disclosure refinements we recommend.

The recommendations in this section are refinements, several of them editorial. None affects the reported results. We include them because clarity in a published actuarial report is itself valuable: PERA's valuation reports are read by members, employers, legislators, and the public, and an ambiguity that an actuary can resolve by inference is an ambiguity that another intended user may not.

Experience Analysis Report

- **Representation of credentials.** The cover letter to the OPEB experience analysis report states that the signing actuaries are Enrolled Actuaries. We were not able to confirm that representation from the published actuarial directory. This may well be an editorial oversight in a template rather than a substantive matter, and it does not bear on the quality of the work since the Qualification Standards applicable to a public plan actuarial opinion do not require enrollment. We nonetheless recommend that the description of each signing actuary's credentials be confirmed, since a misstatement of credentials in a published document is easily avoided and awkward to correct later.
- **Traceability of the analysis.** As discussed in Section III, we recommend the experience analysis present both headcount-weighted and benefit-weighted experience and retain the underlying exposures and decrements by division, age band, and service band, so that a recommended rate can be traced to the experience supporting it.

Pension Valuation Reports

ASOP No. 4 requires disclosure of a Low-Default-Risk Obligation Measure (LDROM) along with commentary on its significance with respect to funded status, contributions, and benefit security. The LDROM requirement only applies to pension plans at this time, although an exposure draft of a revised ASOP 6 concerning OPEB plans including an LDROM requirement has recently been issued.

SECTION VIII – REVIEW OF ACTUARIAL COMMUNICATIONS

The December 31, 2025 actuarial valuation report of the five Division Trust Funds include the disclosure of LDROM. However, the commentary on its significance simply states that "LDROM does not provide information on funded status, plan contributions, or the security of participant benefits" because plan assets are not invested in an all-bond portfolio. This commentary does not help the intended user understand the significance of LDROM.

We recommend the commentary provide general observations on funded status, contributions, and benefit security if plan assets were invested exclusively in low-default-risk securities, similar to other publicly available Segal valuation reports.

Page 118 of the December 31, 2025 actuarial valuation report for the five Division Trust Funds notes that the Signal Light report is pursuant to Section 24-51-614, C.R.S. We believe the correct reference is to Section 24-51-204(7.5), C.R.S.

OPEB Valuation Reports

Our specific recommendations on the health care trust fund valuation report are set out below:

- **Description of the Medicare plan offering.** The member enrollment exhibit refers to a "Medicare Advantage / Self-Funded Rx" arrangement, while other parts of the report refer to a Medicare Advantage Prescription Drug (MAPD) plan. While the distinction may not ultimately affect how the plan is valued, we recommend Segal use one consistent description and confirm that the valuation treatment corresponds to it.
- **Pre-Medicare disclosure in the assumptions exhibit.** The actuarial assumptions exhibit does not address the pre-Medicare plans. Segal notes in the plan summary exhibit that the pre-Medicare premiums are provided by PERA and are estimated to cover the full cost of benefits and administrative fees based on group-specific pre-Medicare retiree experience, and we have no reason to disagree with that treatment. We nonetheless recommend that the assumptions exhibit state this explicitly, so that a reader can see that the pre-Medicare benefit has been considered and understand why no separate claims cost assumption is required. We also recommend the note describing the basis of the pre-Medicare premiums in the plan summary exhibit identify whether the estimate is PERA's or Segal's, and that its wording be revised for clarity.

SECTION VIII – REVIEW OF ACTUARIAL COMMUNICATIONS

- **Spousal coverage assumption.** The spouse participation assumption is described inconsistently within the valuation report. One exhibit describes the assumed percentages as the proportion of retirees electing spousal coverage (suggesting this is the percentage at the time of retirement), while another describes them as the proportion of spouses having a surviving spouse who continues the benefit (suggesting this is the percentage at the time of retiree death). These are different assumptions with different effects on the measured liability. Segal confirmed that the first interpretation is correct. We recommend that Segal state the assumption once, in terms of the event to which the percentage applies, and cross-reference that statement from the other exhibit.
- **Detail of plan provisions.** The summary of plan provisions provides detailed information for some benefits, such as prescription drug copayments, and little or none for others, such as inpatient, emergency, and outpatient cost sharing. No detail is provided for the pre-Medicare options. We recommend a consistent level of detail across benefit categories and coverage tiers.
- **Medicare Part A trend.** We were not able to determine from the report where the Medicare Part A trend rates are used. We compared the disclosed rates to the Hospital Insurance projections in the 2025 Medicare Trustees Report and did not find a direct correspondence. It appears that this assumption is only used to compare the Medicare Part A premium to the implicit subsidy resulting from the difference in premiums between the "with" and "without" Part A plans. We recommend that Segal disclose the source of the assumption, explain how the source projections were translated into the rates used, and more clearly explain how the assumption is used.

Board Presentation Materials

We reviewed the presentation materials accompanying the valuation reports. Taken by itself, the presentation does not appear to contain the disclosures ASOP No. 41 requires of an actuarial communication, in particular a statement of the scope and intended purpose of the work and an acknowledgment of the qualifications of the actuaries responsible for it.

We recognize that presentation materials are ordinarily delivered alongside the valuation report, and that a reader present at the meeting has the report available. In practice, however, presentation slides circulate independently of the report to which they relate, and PERA's Board materials are published. A short disclosure block, or an explicit cross-reference identifying the report on which the presentation relies and the actuaries responsible for it, would address the point without adding length. We recommend that such a disclosure be included.

SECTION VIII – REVIEW OF ACTUARIAL COMMUNICATIONS

Assessment and Disclosure of Risk (ASOP 51)

ASOP No. 51 requires the identification, assessment, and disclosure of risks that may reasonably be anticipated to significantly affect a plan's future financial condition. The requirements on assessment and disclosure of risk in ASOP 51 only apply to pension plans at this time although an exposure draft of a revised ASOP 6 concerning OPEB plans including a risk identification, assessment, and disclosure requirement has recently been issued.

The Signal Light Report provides extensive risk assessments through stochastic projections of several variables, including investment returns, payroll increases, and demographic experience. We strongly support and encourage the continued production of this annual detailed risk assessment for a system the size of PERA.

The December 31, 2025 actuarial valuation report for the pension trust funds includes a Risk section that identifies the risks and includes some assessments and disclosures. ASOP 51 states that risk assessments should include the potential effects of the risks on the plan's future financial condition. The risk assessment for "Demographic Risk" and "Economic and Other Related Risks" do not include the potential effect on the plan's future financial condition.

ASOP 51 allows for either qualitative or quantitative assessments of the risks. Ordinarily we would recommend these risks be assessed quantitatively for a retirement system the size of PERA; however, due to the detailed risk assessments included in the Signal Light Report, we believe qualitative assessments in the actuarial valuation report are reasonable.

We recommend future actuarial valuation reports include an assessment of the potential effect on the plan's future financial condition for all risks identified.

APPENDIX A – COMPARISON OF MEMBER DATA

In reviewing the data, we compared the participant counts we used in our parallel valuations, which is based on Segal's final valuation data, with the statistics shown in the Segal valuation reports. The purpose of this comparison is to confirm that both firms valued the same population, so that any difference in the liability results reflects the valuation of the benefits rather than a difference in who was valued. The differences in the participant data shown below were immaterial to the parallel valuation results.

Summary of Participant Data as of December 31, 2025

Exhibit A-1

State Division

Member Status	Segal	Cheiron	Difference
Active members	55,422	55,422	0
Inactive vested members	9,962	9,962	0
Inactive non-vested members	99,547	99,547	0
Service retirees	42,161	42,209	(48)
Disability retirees	2,644	2,651	(7)
Survivors and beneficiaries	1,095	1,092	3
Total members	**210,831**	**210,883**	**(52)**

Counts reported in Segal's valuation report compared to the counts used in our parallel valuation.

Exhibit A-2

School Division

Member Status	Segal	Cheiron	Difference
Active members	134,040	134,035	5
Inactive vested members	25,096	25,096	0
Inactive non-vested members	173,884	173,884	0
Service retirees	77,912	78,027	(115)
Disability retirees	2,574	2,591	(17)
Survivors and beneficiaries	1,496	1,491	5
Total members	**415,002**	**415,124**	**(122)**

Counts reported in Segal's valuation report compared to the counts used in our parallel valuation.

APPENDIX A – COMPARISON OF MEMBER DATA

Exhibit A-3

Local Government Division

Member Status	Segal	Cheiron	Difference
Active members	12,772	12,766	6
Inactive vested members	3,155	3,155	0
Inactive non-vested members	33,740	33,740	0
Service retirees	9,008	9,013	(5)
Disability retirees	558	558	0
Survivors and beneficiaries	212	211	1
Total members	**59,445**	**59,443**	**2**

Counts reported in Segal's valuation report compared to the counts used in our parallel valuation.

Exhibit A-4

Judicial Division

Member Status	Segal	Cheiron	Difference
Active members	353	353	0
Inactive vested members	30	30	0
Inactive non-vested members	12	12	0
Service retirees	463	464	(1)
Disability retirees	14	14	0
Survivors and beneficiaries	12	12	0
Total members	**884**	**885**	**(1)**

Counts reported in Segal's valuation report compared to the counts used in our parallel valuation.

APPENDIX A – COMPARISON OF MEMBER DATA

Exhibit A-5

Denver Public Schools (DPS) Division

Member Status	Segal	Cheiron	Difference
Active members	16,104	16,104	0
Inactive vested members	3,473	3,473	0
Inactive non-vested members	19,025	19,025	0
Service retirees	6,972	6,973	(1)
Disability retirees	291	289	2
Survivors and beneficiaries	142	136	6
Total members	**46,007**	**46,000**	**7**

Counts reported in Segal's valuation report compared to the counts used in our parallel valuation.

Exhibit A-6

Health Care Trust Fund (HCTF)

Member Status	Segal	Cheiron	Difference
Active members	202,587	202,576	11
Inactive vested members	38,243	38,243	0
Retirees and Survivors	53,180	53,180	0
Total members	**294,010**	**293,999**	**11**

Counts reported in Segal's valuation report compared to the counts used in our parallel valuation.

Exhibit A-7

DPS Health Care Trust Fund (DPS HCTF)

Member Status	Segal	Cheiron	Difference
Active members	16,104	16,104	0
Inactive vested members	3,473	3,473	0
Retirees enrolled in coverage	2,929	2,929	0
Total participants	**22,506**	**22,506**	**0**

Counts reported in Segal's valuation report compared to the counts used in our parallel valuation.

APPENDIX B – GLOSSARY OF TERMS

Actuarial Accrued Liability

The portion of the actuarial present value of projected benefits that will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension and retiree health costs, such as mortality, withdrawal, disability, retirement, changes in compensation, health care cost trend, and rates of investment return.

Actuarial Cost Method

A procedure for determining the actuarial present value of plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an Actuarial Accrued Liability.

Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

Actuarial Valuation

The determination, as of a specified date, of the normal cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related actuarial present values for a plan.

Actuarial Value of Assets

The value of cash, investments, and other property belonging to a plan as used by the actuary for the purpose of an actuarial valuation.

Actuarially Determined Contribution

The contribution that results from applying the plan's actuarial cost method, assumptions, and amortization approach. Where contribution rates are set in statute, as at PERA, the Actuarially Determined Contribution and the contribution actually made may differ.

Annual Increase

The post-retirement increase applied to PERA benefits, subject to statutory limits and to adjustment under the Automatic Adjustment Provision.

APPENDIX B – GLOSSARY OF TERMS

Automatic Adjustment Provision

The statutory mechanism, enacted by Senate Bill 18-200, under which member contributions, employer contributions, the annual increase, and the State's direct distribution are adjusted within specified limits when PERA's funding progress falls outside a defined corridor.

Benefit-Weighted and Headcount-Weighted Experience

Two ways of measuring demographic experience. Benefit-weighted analysis weights each member by the size of the member's benefit, so that the result reflects dollars of liability. Headcount-weighted analysis counts each member equally. Neither is universally preferable; the appropriate basis depends on the assumption being set and on the benefit being valued.

Closed Group and Open Group

A closed-group measurement includes only members covered on the valuation date. An open-group projection also includes members assumed to be hired in the future and therefore requires assumptions about population growth and about the characteristics of future hires.

Credibility

The degree to which a body of observed experience is large enough to be relied upon in setting an assumption. Where experience is not fully credible, an actuary will ordinarily temper the indicated assumption toward a broader benchmark.

Direct Distribution

The annual payment made by the State of Colorado to PERA under Senate Bill 18-200, which reduces the unfunded actuarial accrued liability of the eligible division trust funds.

Entry Age Normal Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

Experience Analysis (Experience Study)

A periodic analysis comparing a plan's actual demographic and economic experience to the assumptions used in its valuations, from which the actuary develops recommended assumption changes.

APPENDIX B – GLOSSARY OF TERMS

Funded Ratio

The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

Funding Period

The number of years projected to be required for a division trust fund to reach a 100% funded ratio under the statutory contribution schedule and the current actuarial assumptions.

New Entrant Profile

The assumed age, service, gender, and pay characteristics of the members assumed to be hired in each future year of an open-group projection.

Normal Cost

That portion of the actuarial present value of plan benefits and expenses that is allocated to a valuation year by the actuarial cost method.

Other Postemployment Benefits (OPEB)

Postemployment benefits other than pensions. At PERA, these are the retiree health care subsidies provided through the two health care trust funds.

Parallel Valuation

A valuation performed independently by an auditing actuary, using the same data, assumptions, and plan provisions, in order to test whether the reported results follow from those inputs. Small differences between a parallel valuation and the original are expected and are not errors.

Present Value of Projected Benefits

The actuarial present value of all benefits expected to be paid to current members in respect of both past and future service.

Signal Light Reporting

The annual sensitivity analysis required by section 24-51-204(7.5) of the Colorado Revised Statutes, which reports the projected dates on which each division trust fund reaches full funding and the likelihood of achieving those dates under a range of possible investment and demographic outcomes.

APPENDIX B – GLOSSARY OF TERMS

Unfunded Actuarial Accrued Liability

The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. It is an appropriate measure for assessing the need for, or amount of, future contributions, but is not appropriate for assessing the sufficiency of plan assets to settle the plan's benefit obligation in the event of a plan termination.

APPENDIX C – SUMMARY OF RECOMMENDATIONS

Actuarial Assumptions

Investment Return

We recommend Segal consider giving some weight to return expectations over a shorter period in the next experience study.

Retirement Rates

We recommend the retirement analysis in the next experience study be conducted separately by benefit tier and by age and years of service in lieu of separate assumptions based on age and unreduced versus reduced retirement eligibility.

If additive rates are maintained for the first five years a member is eligible for unreduced retirement, we recommend removing the experience from the first five years of eligibility for unreduced retirement from the primary analysis of retirement rates. That experience should be analyzed separately to determine the additive rates and should not be included twice.

In addition, for the newer tiers, there may not be sufficient experience on which to set retirement rates. We recommend applying professional judgment, particularly for reduced retirement rates, to reflect differences in early retirement reductions across tiers, rather than applying the observed rates for the oldest tier to all tiers.

Refund of Contributions

We recommend that Segal analyze the refund election experience separately by division, separately for safety and non-safety members, and by service, and consider recommending an assumption that varies by years of service, division and safety vs. non-safety.

Mortality – Base Table

We recommend that, as additional post-pandemic experience accumulates, future analysis place greater weight on recent years for which no adjustment is required.

Mortality – Base Table for Beneficiaries

We recommend that a healthy annuitant or general population mortality basis be used for a beneficiary while the member is living, with a change to the contingent survivor basis upon the member's death; or, alternatively, that Segal document why a single basis is used and demonstrate that the difference is not material. We recommend the same refinement be reflected in the Option 2 and Option 3 factors when those factors are next reviewed.

APPENDIX C – SUMMARY OF RECOMMENDATIONS

Mortality – base table for Health Care Trust Funds

We recommend that Segal derive separate mortality adjustment factors for the Health Care Trust Funds from headcount-weighted experience or, alternatively, demonstrate through analysis that the difference between the two bases is not material for these plans and disclose that conclusion.

Health Care Participation

The experience study proposed an initial benefit receipt age of 60 for all terminated vested members. However, the valuation report discloses an assumption that currently terminated vested members will retire at age 62 (PERA benefit structure) or age 65 (DPS benefit structure) with an unreduced pension benefit. This assumption is not discussed in the experience study report and appears inconsistent with the assumption from the pension valuation. We recommend that Segal clarify which assumption applies to current terminated vested members.

Active Population Growth

We recommend that Segal consider the school-age population projection when reviewing the School and DPS Division in their next experience analysis, and consider recommending a level active population, a 0% growth rate, for all divisions.

New Entrant Profile

We recommend that Segal consider the consistency of the long-term payroll projections with the payroll growth and active population growth assumptions when determining the new entrant profile.

Actuarial Methods

Amortization Method

According to the second edition of the Conference of Consulting Actuaries' Actuarial Funding Policies and Practices for Public Pension Plans ("Funding Policies and Practices White Paper 2.0"), using 30-year amortization periods is a "non-recommended practice." We recommend that the Board consider shortening the amortization period for actuarial experience gains or losses and assumption changes.

APPENDIX C – SUMMARY OF RECOMMENDATIONS

Contribution surpluses or deficiencies (i.e., actual contributions being greater or less than expected contributions using the actuarially determined contribution rates) have been amortized over the remaining period of the initial 30-year period. This has been reasonable because most of the UAAL relates to the initial 2017 UAAL. However, as the initial 2017 UAAL continues to be amortized and gradually becomes a smaller portion of the total UAAL, we recommend that the Board monitor this dynamic and consider when it may be appropriate to amortize contribution surpluses/deficiencies in the same manner as other experience gains or losses.

Actuarial Communications

Experience Analysis Report

We recommend that the description of each signing actuary's credentials be confirmed, since a misstatement of credentials in a published document is easily avoided and awkward to correct later.

We recommend the experience analysis present both headcount-weighted and benefit-weighted experience and retain the underlying exposures and decrements by division, age band, and service band, so that a recommended rate can be traced to the experience supporting it.

Pension Valuation Report

We recommend future actuarial valuation reports include an assessment of the potential effect on the plan's future financial condition for all risks identified.

We recommend the commentary provide general observations on funded status, contributions, and benefit security if plan assets were invested exclusively in low-default-risk securities, similar to other publicly available Segal valuation reports.

OPEB Valuation Report

The member enrollment exhibit refers to a "Medicare Advantage / Self-Funded Rx" arrangement, while other parts of the report refer to a Medicare Advantage Prescription Drug (MAPD) plan. While the distinction may not ultimately affect how the plan is valued, we recommend Segal use one consistent description and confirm that the valuation treatment corresponds to it.

APPENDIX C – SUMMARY OF RECOMMENDATIONS

The actuarial assumptions exhibit does not address the pre-Medicare plans. Segal notes in the plan summary exhibit that the pre-Medicare premiums are provided by PERA and are estimated to cover the full cost of benefits and administrative fees based on group-specific pre-Medicare retiree experience, and we have no reason to disagree with that treatment. We nonetheless recommend that the assumptions exhibit state this explicitly, so that a reader can see that the pre-Medicare benefit has been considered and understand why no separate claims cost assumption is required. We also recommend the note describing the basis of the pre-Medicare premiums in the plan summary exhibit identify whether the estimate is PERA's or Segal's, and that its wording be revised for clarity.

The spouse participation assumption is described inconsistently within the valuation report. We recommend that Segal state the assumption once, in terms of the event to which the percentage applies, and cross-reference that statement from the other exhibit.

The summary of plan provisions provides detailed information for some benefits, such as prescription drug copayments, and little or none for others, such as inpatient, emergency, and outpatient cost sharing. No detail is provided for the pre-Medicare options. We recommend a consistent level of detail across benefit categories and coverage tiers.

We recommend that Segal disclose the source of the Medicare Part A trend rate assumption, explain how the source projections were translated into the rates used, and more clearly explain how the assumption is used.

BOARD PRESENTATION MATERIALS

We recommend adding a short disclosure block, or an explicit cross-reference identifying the report on which the presentation relies and the actuaries responsible for it.



Classic Values, Innovative Advice

101 North Wacker Drive
Suite 1800
Chicago, IL 60606-1722
segalco.com

November 9, 2026

Board of Trustees
Public Employees' Retirement Association of Colorado
1301 Pennsylvania Street
Denver, CO 80203-8236

Re: Comments Related to Actuarial Review of Segal Work for COPERA

Dear Trustees:

Earlier in 2026, the Colorado Public Employees' Retirement Association (COPERA) Board of Trustees retained Cheiron, Inc. (Cheiron) to perform an independent review of our December 31, 2025, funding actuarial valuations and funding period projections. As part of this process, Cheiron also reviewed the investment return sensitivity analysis presented in the 2026 Signal Light Report; the actuarial experience review report for the four-year period from January 1, 2020, through December 31, 2023, dated January 3, 2025; and related actuarial communications.

Cheiron has completed their review, and we have received a copy of their report dated October 16, 2026. The Executive Summary states: "We have conducted an actuarial audit of the valuation assumptions and procedures used for the December 31, 2025 actuarial valuations, and we have concluded that Segal is accurately measuring the actuarial condition of the five pension Division Trust Funds and the two Health Care Trust Funds."

We are pleased that the auditor was able to validate our work. Cheiron has made a number of comments and technical suggestions related to their review. They would not materially affect the results of the valuation, and we will consider those suggestions during the upcoming actuarial work cycle.

Following are the comments and suggestions raised by Cheiron in their report (paraphrased, where appropriate), as well as our responses.

Actuarial Assumptions

Investment Return

- **We recommend Segal consider giving some weight to return expectations over a shorter period [considering both 10-year and 20-year investment return expectations] in the next experience study.** We will consider this recommendation, including the appropriate weighting of shorter-term return expectations, when reviewing the investment return assumption as part of the next experience study.

Retirement Rates

- **We recommend the retirement analysis in the next experience study be conducted separately by benefit tier and by age and years of service in lieu of separate assumptions based on age and unreduced versus reduced retirement eligibility.** We reviewed retirement experience by benefit tier as part of the last experience study but concluded that distinguishing between reduced and unreduced retirement eligibility was appropriate for this plan. However, because the available experience was limited, we did not present separate results by benefit tier in the report. We will include this analysis in the next experience study.
- **We recommend removing the experience from the first five years of eligibility for unreduced retirement from the primary analysis of retirement rates [if additive rates are maintained for the first five years a member is eligible for unreduced retirement].** The additive rates apply to members hired after December 31, 2006, who generally become eligible for unreduced retirement benefits at later ages than members hired before January 1, 2007. Because there was limited retirement experience for these members, the additive rates were developed primarily based on professional judgment. We will review these rates and modify them as appropriate in the next experience study as additional experience becomes available.
- **We recommend [for the newer tiers], applying professional judgment, particularly for reduced retirement rates, to reflect differences in early retirement reductions across tiers, rather than applying the observed rates for the oldest tier to all tiers.** We will consider this recommendation when reviewing the retirement rates as part of the next experience study.

Refund of Contributions

- **We recommend that Segal analyze the refund election experience separately by division, separately for safety and non-safety members, and by service, and consider recommending an assumption that varies by years of service, division and safety vs. non-safety.** We will consider this recommendation when reviewing the refund of contributions assumption as part of the next experience study, including analyzing potential differences by division, safety status, and years of service.

Mortality – Base Table

- **We recommend that, as additional post-pandemic experience accumulates, future analysis place greater weight on recent years for which no adjustment is required.** We will review the base mortality rates and modify them as appropriate in the next experience study as additional post-pandemic experience becomes available.

Mortality – Base Table for Beneficiaries

- **We recommend that a healthy annuitant or general population mortality basis be used for a beneficiary while the member is living, with a change to the contingent survivor basis upon the member's death; or, alternatively, that Segal document why a single basis is used and demonstrate that the difference is not material. We recommend the same refinement be reflected in the Option 2 and Option 3 factors when those factors are next reviewed.** We will consider this recommendation in the next experience study, including reviewing the mortality basis used for beneficiaries and considering if any related refinements to the Option 2 and Option 3 factors are appropriate.

Mortality – Base Table for Health Care Trust Funds

- **We recommend that Segal derive separate mortality adjustment factors for the Health Care Trust Funds from headcount-weighted experience or, alternatively, demonstrate through analysis that the difference between the two bases is not material for these plans and disclose that conclusion.** We will consider this recommendation when evaluating the mortality experience as part of the next experience study.

Health Care Participation

- **We recommend that Segal clarify which assumption applies to current terminated vested members [age of 60 for all terminated vested members or age 62 (PERA benefit structure) or age 65 (DPS benefit structure)].** We will review and clarify the assumptions applied to current terminated vested members in the next OPEB valuation report.

Active Population Growth

- **We recommend that Segal consider the school-age population projection when reviewing the School and DPS Division in their next experience analysis, and consider recommending a level active population, a 0% growth rate, for all divisions.** We will review the active population growth assumptions for the School and DPS Divisions in the next experience study and will consider the school-age population projections and the appropriateness of a 0% growth assumption.

New Entrant Profile

- **We recommend that Segal consider the consistency of the long-term payroll projections with the payroll growth and active population growth assumptions when determining the new entrant profile.** We will review the long-term payroll projections, including considering the consistency of the projections with the payroll growth and active population growth assumptions, when determining the new entrant profiles as part of the next experience study.

Actuarial Methods

Amortization Method

- **We recommend that the Board consider shortening the amortization period for actuarial experience gains or losses and assumption changes.** We will consider this recommendation to the PERA Board during the next review of the funding policy.
- **We recommend that the Board monitor this dynamic and consider when it may be appropriate to amortize contribution surpluses/deficiencies in the same manner as other experience gains or losses.** We will consider this recommendation to the PERA Board during the next review of the funding policy.

Actuarial Communications

Experience Analysis Report

- **We recommend that the description of each signing actuary's credentials be confirmed, since a misstatement of credentials in a published document is easily avoided and awkward to correct later.** We will confirm and accurately reflect each signing actuary's credentials in the next experience study report.
- **We recommend the experience analysis present both headcount-weighted and benefit-weighted experience and retain the underlying exposures and decrements by division, age band, and service band, so that a recommended rate can be traced to the experience supporting it.** We will consider this recommendation in the next experience study.

Pension Valuation Report

- **We recommend future actuarial valuation reports include an assessment of the potential effect on the plan's future financial condition for all risks identified [including the risk assessment for "Demographic Risk" and "Economic and Other Related Risks"].** We will consider providing an assessment of the potential effects of "Economic and Other Related Risks" and "Demographic Risk" pertaining to COPERA in the next actuarial valuation report.
- **We recommend the commentary provide general observations on funded status, contributions, and benefit security if plan assets were invested exclusively in low-default-risk securities, similar to other publicly available Segal valuation reports.** We will consider including this commentary in the next actuarial valuation report.

OPEB Valuation Report

- **We recommend Segal use one consistent description [for Medicare Advantage Prescription Drug (MAPD) plan] and confirm that the valuation treatment corresponds to it.** We will review the description of the Medicare Advantage Prescription Drug (MAPD) plan for consistency and confirm that the valuation treatment corresponds with that description in the next OPEB valuation report.

- **We recommend that the assumptions exhibit state this explicitly, so that a reader can see that the pre-Medicare benefit has been considered and understand why no separate claims cost assumption is required. We also recommend the note describing the basis of the pre-Medicare premiums in the plan summary exhibit identifying whether the estimate is PERA's or Segal's, and that its wording be revised for clarity.** We will clarify the treatment of the pre-Medicare plans, including the basis and source of the pre-Medicare premiums and why a separate claims cost assumption is not required, in the next OPEB valuation report.
- **We recommend that Segal state the [the spouse participation] assumption once, in terms of the event to which the percentage applies, and cross-reference that statement from the other exhibit.** We will clarify the spouse participation assumption and present it consistently throughout the next OPEB valuation report.
- **We recommend that Segal provide a consistent level of detail across benefit categories and coverage tiers, [including the pre-Medicare plan options].** We will review the summary of plan provisions and provide a more consistent level of detail across benefit categories and coverage tiers in the next OPEB valuation report.
- **We recommend that Segal disclose the source of the Medicare Part A trend rate assumption, explain how the source projections were translated into the rates used, and more clearly explain how the assumption is used.** We will provide additional information regarding the source, development, and application of the Medicare Part A trend rate assumption in the next OPEB valuation report.

Board Presentation Materials

- **We recommend adding a short disclosure block, or an explicit cross-reference identifying the report on which the presentation relies and the actuaries responsible for it.** We will consider adding an appropriate disclosure or an explicit cross-reference to future Board presentation materials identifying the report on which the presentation relies and the actuaries responsible for that report.

Segal

Closing Comments

We are very pleased with the results of the audit, particularly the auditors' successful validation of our December 31, 2025, funding actuarial valuations and funding period projections, the 2026 Signal Light Report, and the actuarial experience review report for the four-year period from January 1, 2020, through December 31, 2023. We appreciate the auditors' thorough work, professional approach, and helpful suggestions and recommendations. We will continue to consider their recommendations as part of the December 31, 2026, actuarial valuation process and the next experience study and will implement those that are appropriate and in the best interest of COPERA.

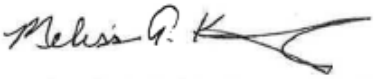
Sincerely,



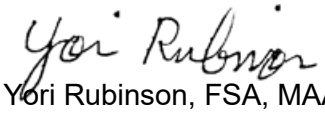
Brad Ramirez, FSA, FCA, MAAA, EA
Vice President & Consulting Actuary



Matthew Strom, FSA, MAAA, EA
Senior Vice President & Actuary



Melissa Krumholz, FSA, MAAA
Vice President & Actuary



Yori Rubinson, FSA, MAAA
Vice President & Actuary

cc: Koren Holden

2027 Funding Policy Review Plan

November 20, 2026

Koren Holden – System Actuary

Bill Detweiler – Actuary

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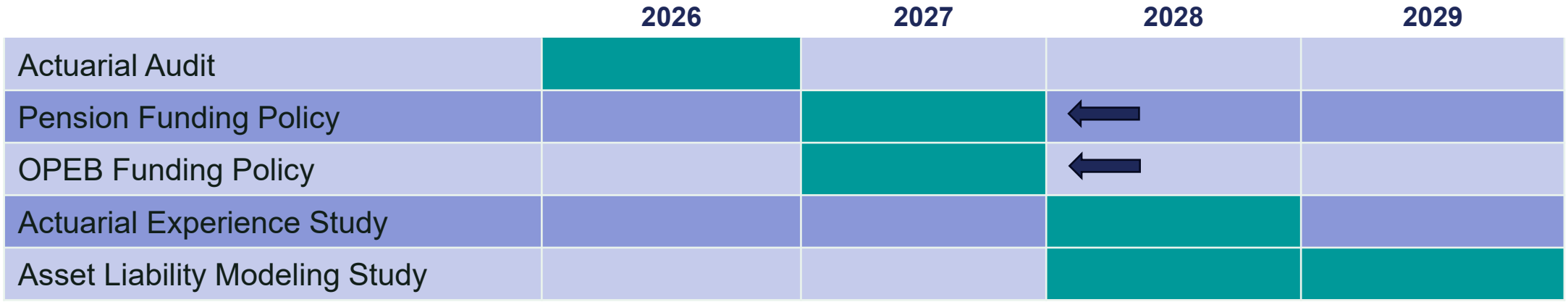
2027 Funding Policy Review

Governance Processes (Actuarial Topics)



At the September 2026 Board Meeting, the following changes were agreed upon regarding the periodic **Review of the Pension and OPEB Funding Policies**:

- ✓ Accelerated the next review by one year—from 2028 to 2027, as illustrated above.
- ✓ Four-year (rather than a five-year) review cadence.

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2027 Funding Policy Review

PERA's Funding Structure

Colorado General Assembly

- Plan Sponsor
- Law
  Statutory Contribution Rates

Colorado PERA Board of Trustees

- Plan Administrator
- Funding Policy
  Actuarially Determined Contribution Rates (ADC)

Funding Policy is a formal statement of the Board's funding objectives and guidance consistent with those objectives

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2027 Funding Policy Review

Purposes of a Funding Policy

Help Achieve and Sustain the Long-term Financial Health of a Pension or OPEB Plan

(Supports Goal 1 of PERA's Strategic Plan)

Responsible Governance

(Ties to PERA's Governance Manual)

Guide the Board when Considering whether to Pursue, Support, or Oppose Proposed Legislation

Comply with Actuarial Standards of Practice (ASOPs)

Recommended by Government Finance Officers Association (GFOA)

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2027 Funding Policy Review

Background/History

November 2007 – *Statement of Funding Policy* (combined Pension and OPEB) - Adopted

March 2015 – *Defined Benefit Pension Plan Funding Policy* - Adopted

- More Formal, Complete Structure
- Detail on Actuarial Metrics to guide calculation of ADC
- Consistency/Compliance with new GASB 67/68 Standards
- Initialized Legacy UAAL as of December 31, 2014

January 2018 – *Defined Benefit OPEB Plan Funding Policy* - Adopted

- Create Separate Policy for OPEB
- Consistency/Compliance with new GASB 74/75 Standards
- *Defined Benefit Pension Plan Funding Policy* Amended to align with adoption

November 2018 – *Defined Benefit Pension Plan Funding Policy* - Amended

- Align with SB 18-200 Legislation
- Reinitialized Legacy UAAL as of December 31, 2017

January 2024 – Both Funding Policies Amended

- First Formal Scheduled Review
- Updating PERA law references and clean-up language Clean-Up Language

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2027 Funding Policy Review

Focus for 2027 Funding Policy Review

Amortization Method:
Consider Shorter Amortization Periods

- Minimize loss of intergenerational equity
- Avoid negative amortization
- Comply with numerous recommendations and industry standards

Clean-Up Language

- Updating PERA law references
- Condensing and simplifying where appropriate

- ❖ Current Funding Policy is generally up to date and appropriate
- ❖ Not planning to overhaul or change structure

Appendix

- ❖ List of Resources
- ❖ Current Funding Policy Structure

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2027 Funding Policy Review

Proposed Structure/Timeline Summary

January Board Meeting

Discuss Basics of a Funding Policy
- ✓ Funding Goals
- ✓ Annual Actuarial Metrics
- ✓ Funding Valuation Elements
- ✓ Surplus Management

March Board Meeting

Deep Dive on Major Funding Valuation Elements
- ✓ Actuarial Cost Method, Asset Valuation Method, Amortization Method, Surplus Management
- ✓ Study various amortization periods
- ✓ Determining an ADC

September Board Planning Meeting

Amortization Period Modeling
- ✓ Modeling with Segal projection modeler
- ✓ Review of red-line documents based on Board comments & conversations during study period

November Board Meeting

Adoption of Revised Funding Policies
- ✓ Review of final proposed red-line, based on Board feed-back & conversation during September planning meeting

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Questions?

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Appendix

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2027 Funding Policy Review

Resources – Will be Posted To Boardvantage

- Conference of Consulting Actuaries (CCA) – Actuarial Funding Policies and Practices for Public Pension Plans (August 2024, Edition 2)
- Government Finance Officers Association (GFOA) Pension and OPEB Plan Funding – Best Practice (June 2026)
- National Association of State Retirement Administrators (NASRA) – Overview of Public Pension Plan Amortization Policies (April 2022)
- American Academy of Actuaries (AAA) – Issue Brief: 'Surplus' Considerations for Public Pension Plans (April 2024)
- Segal – A Roadmap to Full Funding for Public Pension Plans (September 2026)
- Gabriel, Roeder, Smith & Company (GRS) – A Comprehensive Funding Policy: The Recommended Instrument for Navigating Public Plan Funding (December 2023)
- Cheiron - Actuarial Audit (October 2026)
- Buck - Actuarial Audit (October 2022)
- GRS - Assumption Review (September 2021)
- Experience and Expertise of Actuarial Service Provider (Segal) and PERA Staff Actuaries

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2027 Funding Policy Review

Current Funding Policy Structure

I. Introduction
- Purpose

II. Background
- History
- Important statutory initiatives

III. Funding Goals
- Preservation of the Defined Benefit Plan Structure
- Demonstration of transparency and accountability
- Achievement of actuarial funded ratio greater than or equal to 110%
- Dedication to balance between contribution rate stability and intergenerational equity
- Dedication to the systematic reduction of the UAAL

IV. Annual Actuarial Metrics
- Funded ratios
- Funding period
- Contribution rate comparison
- Actuarial projections

V. Funding Valuation Elements
- Actuarial Cost Method
- Asset Valuation Method
- Amortization Method
- Actuarial Assumptions

VI. Governance Policy/Processes
- Actuarial Valuation
- Experience Analysis
- Actuarial Audit
- Asset Liability Study
- Funding Policy Review

VII. Glossary of Funding Policy Terms

COLORADO PERA®

Legislative Update

Andrew Roth
Chief Executive Officer/Executive Director

Michael Steppat
Director of Public & Government Affairs

November 20, 2026

COLORADO PERA



Agenda

- Overview of Legislative Process
- Looking Ahead to 2027 Legislative Session
  - Potential Issues
- Additional Updates
  - Timeline of Reporting to Legislative Oversight Committees
  - Legislator & Stakeholder Engagement

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Overview of Legislative Process

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Legislative Process

Balance of Power

House of Representatives	Senate
65 Representatives	35 Senators
(49 Democrats - 16 Republicans)	(24 Democrats - 11 Republicans)
• elected every two years and limited to serving eight consecutive years	• elected to four-year terms and limited to serving two consecutive terms
• approximately 88,800 residents per district	• approximately 165,000 residents per district

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Legislative Process

Two different 'seasons'

Legislative Session	Interim Period
January – May	*June – December*
Annual period when the legislature meets to consider bills. It begins no later than the second Wednesday in January and lasts up to 120 calendar days.	The rest of the year during which lawmakers often shift their focus to planning for the next session or upcoming elections.



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Legislative Process

How PERA Participates

- PERA operates by authority of the Colorado General Assembly and is administered under Title 24, Article 51 of the Colorado Revised Statutes.
- The ability to provide retirement and other benefits to the employees of more than 400 government agencies and public entities in the state of Colorado is a result of changes in both state and federal law over the past nearly 100 years.
- PERA actively participates in the legislative process and engages on issues that affect the organization to pursue legislative and other public policy outcomes that align with the organization's priorities and protect the sustainability of the fund.
- The PERA Board of Trustees has a 'Legislative Policy' to provide a framework for taking positions on legislative matters, enable timely action, and inform internal and external stakeholders of PERA's circumstances and position.[1]

[1]The Legislative Policy and other board policies can be found in the PERA Board of Trustees' Governance Manual

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Looking Ahead to 2027 Legislative Session

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2027 Legislative Session

The First Regular Session of the Seventy-sixth General Assembly will convene on January 11th , 2027, and is scheduled to adjourned sine die on May 10th, 2027



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2027 Legislative Session

Key Themes & Issues

- State budget pressures and competing fiscal priorities
- Tax policy, TABOR and the state's long-term revenue structure
- Post-election outcomes, a new governor and new legislative agenda
- Labor relations, collective bargaining and worker protections
- Healthcare, Medicaid and rural hospital sustainability
- Housing affordability and the overall cost of living
- Energy, water, transportation and environmental policy

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2027 Legislative Session

Potential Issues

Governor's Budget Request

The Governor is statutorily required to submit a balanced budget proposal for consideration by the General Assembly no later than November 1st each year outlining spending priorities for the state's next fiscal year.

- Statewide Request R-09: Reduction of AED/SAED Contributions by One Percent
  - A request submitted as part of the proposal included a change in statute to implement a one-time reduction in the Amortization Equalization Disbursement (AED) and Supplemental Amortization Equalization Disbursement (SED) by 0.5% each, for a total contribution rate reduction of 1.0%, to help balance the FY 2027-28 budget.
  - The impact is projected to be approximately $44.2 million in less contributions to PERA for FY 2027-28 and $179 million over time.
- Statewide Request R-12: Pinnacol
  - If Pinnacol becomes a private entity, then it cannot continue to be part of PERA both for current employees and future employees, and so with a conversion there would be a requirement for Pinnacol to disaffiliate from PERA.

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2027 Legislative Session

Potential Issues

Clarification on Staff Hired under Critical Shortage

- Under current state law, PERA retirees who return to work in an eligible role at an eligible school district can work beyond the current working after retirement limits without a reduction in their benefit, if the district determines there is a critical shortage of qualified people to fill those roles.
- The Rural School Alliance reached out to PERA regarding potential legislation on employers hiring staff on non-probationary status.

Investment-related

- Private Equity
- Anti-BDS Provisions from HB16-1284
- Investment Incentive Compensation Policy

Other Topics

- Suspension of Interim Committee Meetings & Other Requirements

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2027 Legislative Session

Potential Issues

PERA-initiated

- Statutory “Clean-Up” Bill
- Trustee Disclosure Requirements

Additional Updates

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Additional Updates

Timeline of Reporting to Legislative Oversight Committees

Legislative Audit Committee	Annual hearing for the release and consideration of PERA's annual financial audit results.	*August 10, 2026*
Joint Budget Committee	Annual budget-cycle hearing with an update from PERA on financial condition and investment performance, along with any other state fiscal-related implications for the State's FY2027-28 budget.	*December 8, 2026*
Joint Finance Committee	Committees of reference and have legislative oversight responsibility of PERA, SMART ACT requirements are met through the annual actuarial valuation report and ACFR, as well as check-in on PERA's financial condition and investment performance ahead of the 2027 session.	*TBD* *(January 2027)*
Pension Review Commission & Subcommittee	The Commission is composed of legislators and charged with the study, review and development of proposed legislation relating to PERA on numerous subjects and the Subcommittee is composed of both legislators & public members which is responsible for reviewing PERA's overall financial health and reduction of unfunded liability, making recommendations, and commissioning an 'independent review' of PERA's assumptions every four years.	**N/A*



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**No meetings or other requirements pursuant to House Bill 26-1331 but may resume in 2027.*

Additional Updates

Legislator & Stakeholder Engagement

Recent & Upcoming Meetings

- Governor-elect Phil Weiser
- Members of the Joint Budget Committee
- Members of the House and Senate Finance Committees
- Legislative Leadership
- Other PERA-interested Legislators
- Stakeholder Groups

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Questions & Discussion

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Chief Executive Officer/ Executive Director's Report

Andrew Roth

Chief Executive Officer/Executive Director

November 2026

COLORADO PERA®

Agenda

- PERA Financials
- PERA Membership
- PERA Activities October – November 2026
- CEO/ED Activities October – November 2026
- Pension Industry Trends
- Social Security and the 120th Congress
- Discussion/Questions

COLORADO PERA®

PERA Financial Recap

As of September 2026

$75,279,580 net position as of December 31, 2025

(in thousands of dollars; does not include defined contribution plans)

Contributions $3,530,834		Investments $5,519,268		Benefits and Other Deductions ($4,663,080)	
Employer – Pension – Regular	$1,454,469	Net Change in Fair Value	$4,401,157	Pension Benefits	($4,325,009)
Employer – Pension – AED	$444,970	Interest	$543,133	Health Care Benefits	($69,390)
Employer – Pension – SAED	$126,130	Dividend	$508,261	Disability/Life Insurance	($3,002)
Employer – Health Care	$83,405	Real Estate/Private Equity/ Alternatives	$207,194	Refunds	($201,652)
Nonemployer	$225,000	Securities Lending	($237)	Other	($3,582)
Member	$1,119,705	Investment Expense	($140,240)	Administrative Expense	($60,445)
Plan Transfer	$0				
Purchased Service	$71,616				
Employer Disaffiliation	$0				
Other Additions	$5,539				

$79,666,602 net position as of September 30, 2026

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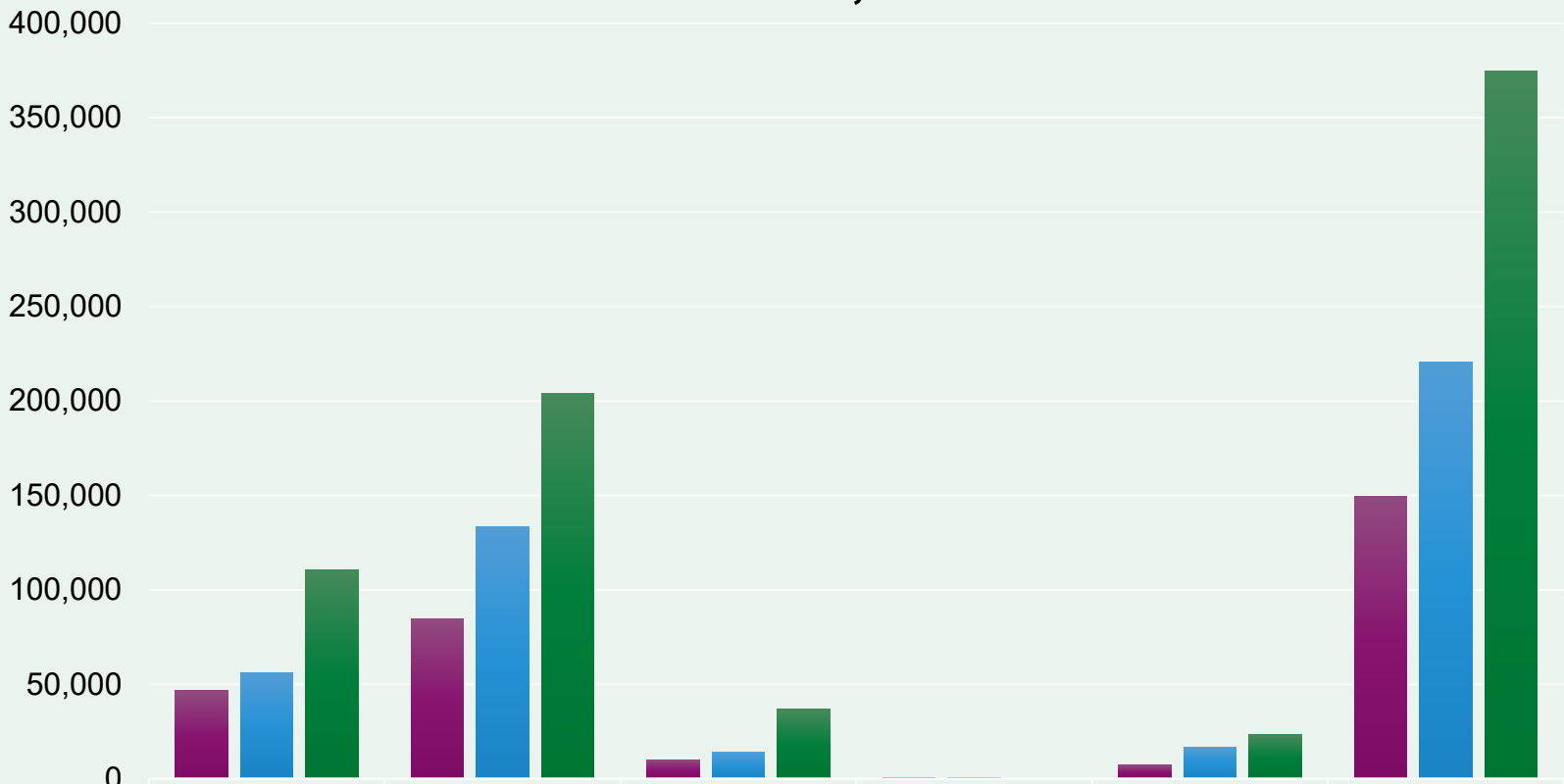
PERA Membership

As of September 30, 2026

Total: 744,732



	State	School	Local Gov't	Judicial	DPS	Total
Benefit Recipients	46,548	84,677	10,035	501	7,501	149,262
Active Members	56,271	133,516	13,853	356	16,841	220,837
Inactive Members	110,523	204,229	36,627	43	23,211	374,633

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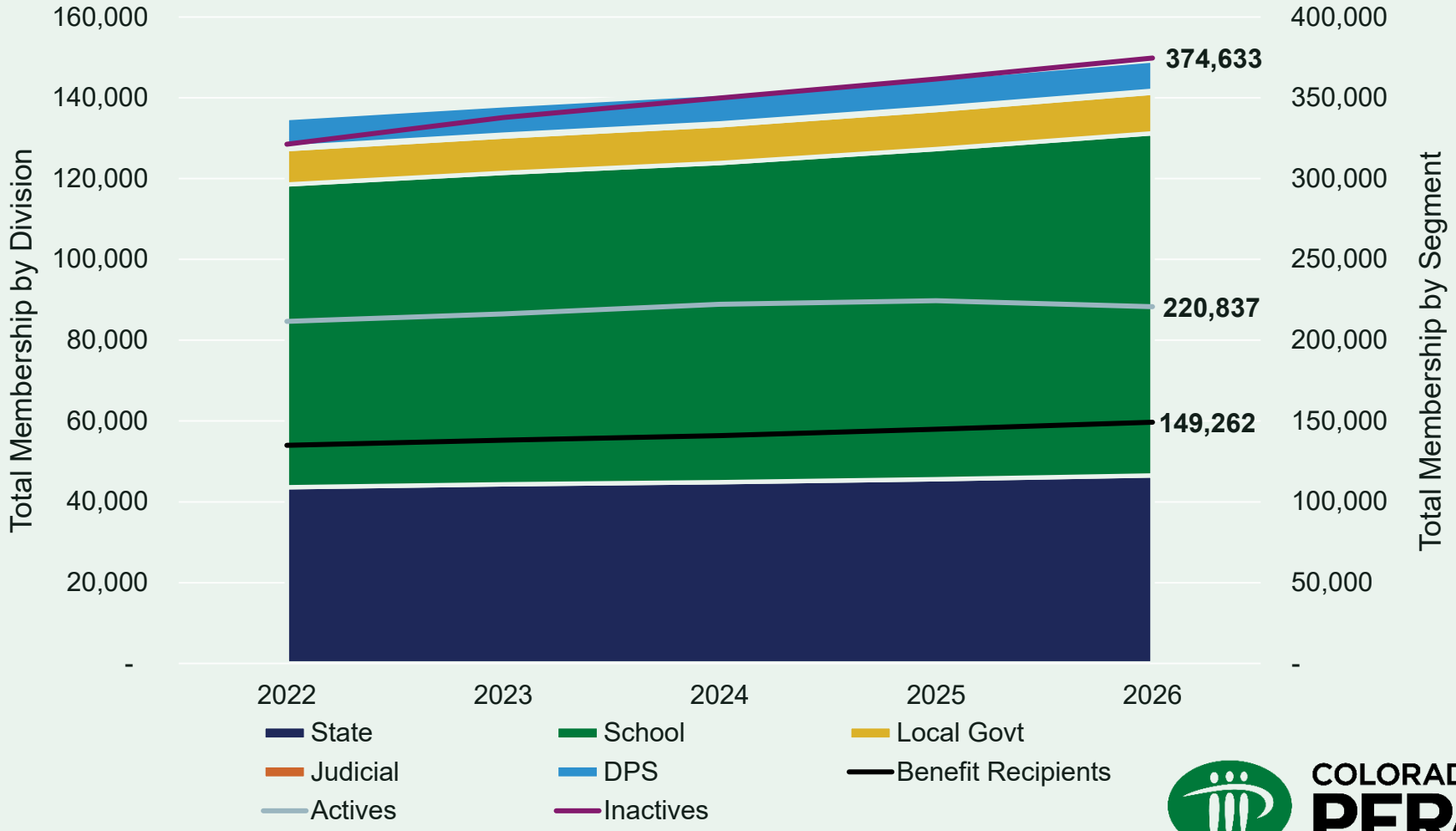
PERA Membership Last Five Years

September Totals 2022-2026



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PERA Activities October-December

- Customer Service Week
- Executive Team Coaching Session with VIM
- Top Workplace Lunch
- PERA All-Employee Engagement Survey with Gallup
- Hiring Processes Completed: General Counsel, CAE

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CEO/ED Activities October - November

» CII Fall Conference

» CII Board and Policy Committee Meetings

» Great Education Colorado Luncheon

» Coffee with the CEO

» Meetings with Legislators

» Meetings with Trustees

» NIRS Retirement in America Podcast

» Stanford Institutional Investors Forum

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Pension Industry Trends

“Benefit Adequacy”

- An industry term that is becoming more mainstream
- More specific and meaningful than “Retirement Security”
- For example, a pension fund can be 100% funded and yet the benefits provided to members may be inadequate
- Speaks to the adequacy of the benefit to support a career member in retirement

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Social Security Legislation

Main Pieces of Legislation to Watch moving into the 120th Congress

- Social Security 2100 Act
  - HR 9519 (Larson, D-CT); Companion bill is S. 5042 (Blumental, D-CT)
  - Referred to House Ways and Means
  - Envisions a number of specific changes, including eliminating the payroll tax cap, taxing investment income, and consolidating the trust funds along with other items
- PROMISE Act of 2026 (S. 4979)
  - Bipartisan with multiple sponsors
  - Senate Committee on Finance
  - Bill promotes a bipartisan process for developing legislation to shore up SS for at least 50 years
- Bipartisan Social Security Commission Act
  - HR 9187; sponsored by Cole-OK (R) and Suozzi-NY (D)
  - Establishes a commission on long term SS solvency

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Social Security and the 120th Congress

- Strengthening Social Security Act
  - HR 9296 Sanchez (D-CA)
  - Would increase payroll taxes on earnings above the current taxable wage cap and modify benefit formulas to increase benefits for certain retirees
- Social Security Caregiver Credit Act
  - HR 8409/S 4396 Schneider (D-IL) and Murphy (D-CT)
  - Would provide up to five years of Social Security earnings credits for qualifying unpaid family caregivers

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Questions?

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Market & Portfolio Update

Amy C. McGarrity
Chief Investment Officer
November 20, 2026

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Today's Key Topics

Total Fund Performance

Market Performance – Rates, Inflation, and AI

Watching Into Year End

Strategic and Operational Priorities

ISMP Dashboard

Upcoming Investment Committee and Board Items

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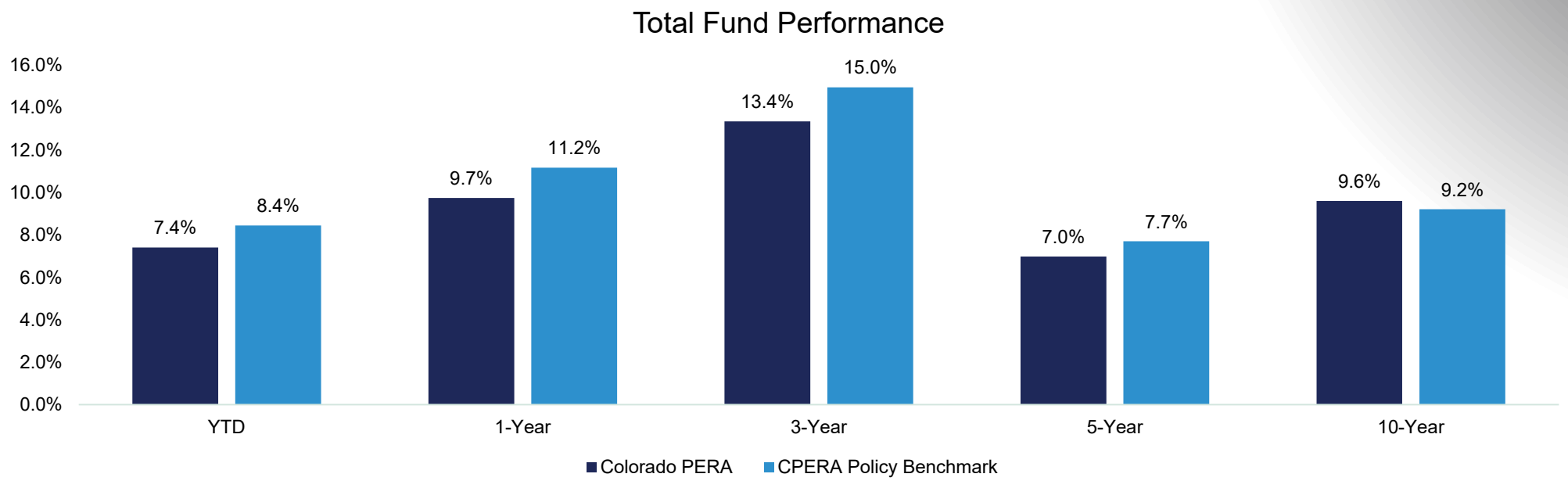
Total Fund Performance

as of September 30, 2026

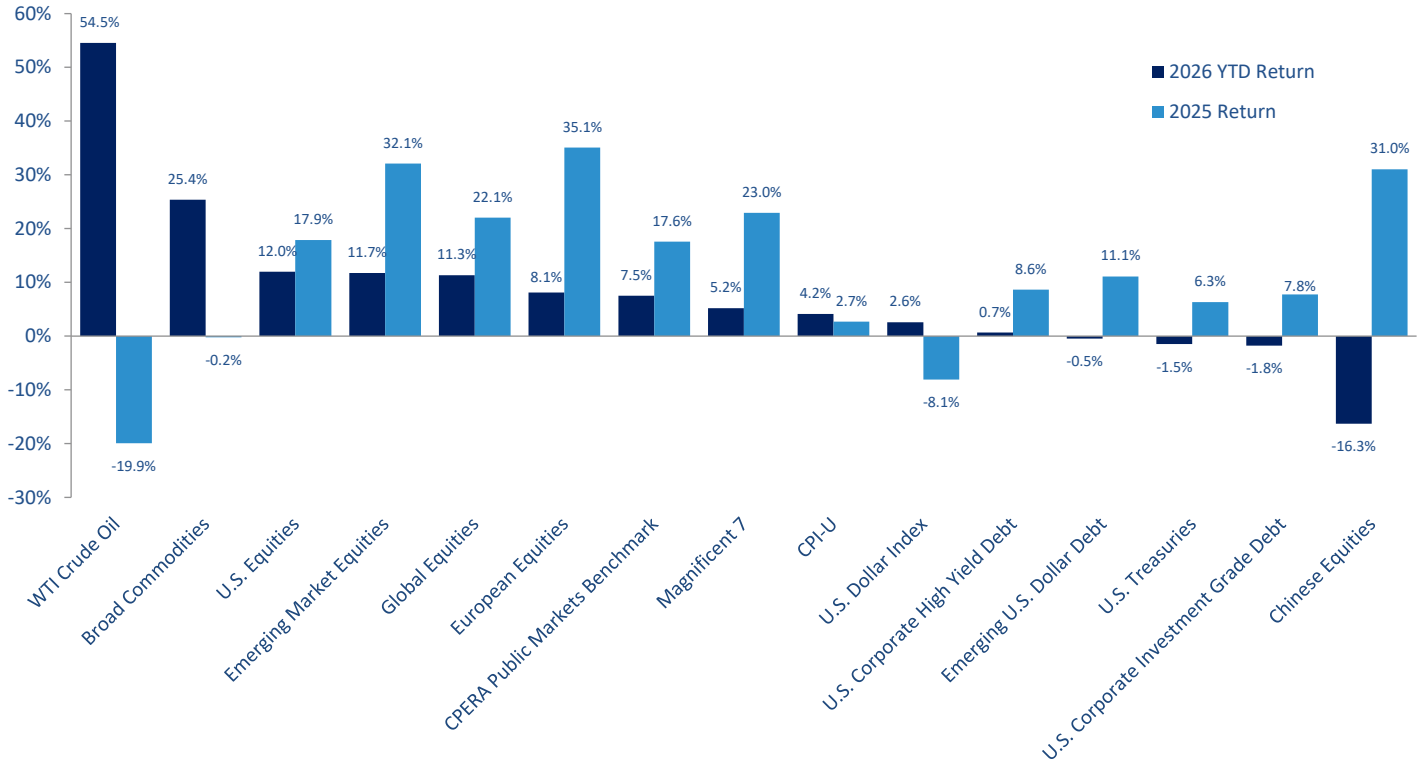
The Fund returned 7.4% year to date and 9.7% over one year, trailing the policy benchmark over shorter periods.
Ten-year performance of 9.6% remains ahead of the benchmark, reflecting lagged private markets marks in nearer-term comparisons.

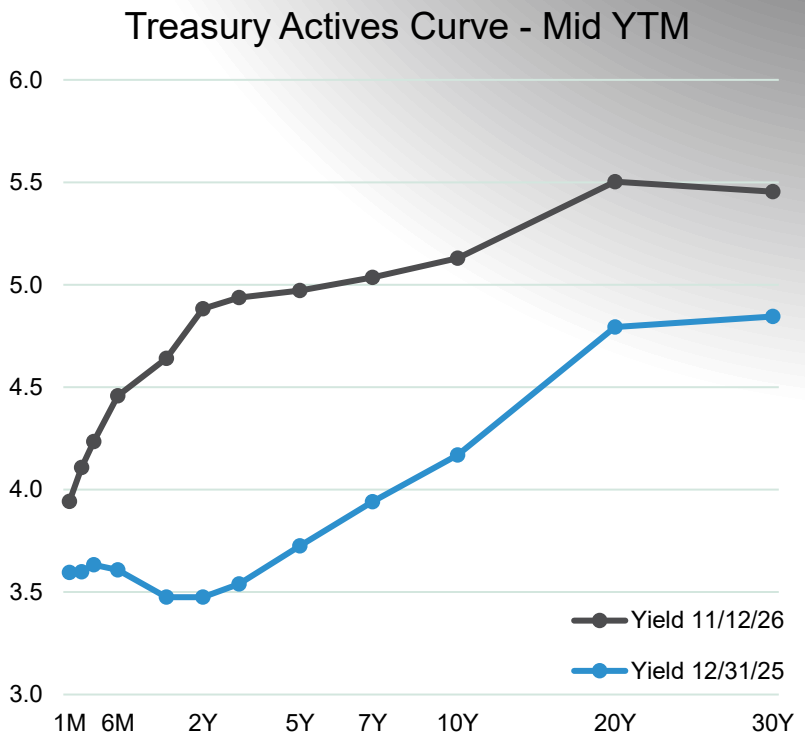


Returns are presented annualized, time-weighted, and net of external management and custody fees, and may be lagged, preliminary, and unaudited. The Total Fund, Global Equity, and Fixed Income performance is through 9/30/2026. Private Equity performance and benchmark is through 6/30/2026 and may have lags of 3 to 9 months. The Real Estate performance and benchmark data is through 6/30/2026. Alternatives performance and benchmark components may have lags of up to 6 months. Therefore, the Total Fund performance numbers represent estimates only at this time.

Markets and Rates: 2026 Year to Date

Commodities and global equities are positive YTD, Chinese equities being the exception.
Fixed income is neutral to slightly negative YTD.





All returns are presented in unhedged USD terms. Treasury actives curve, mid yield to maturity, 11/12/2026 vs. 12/31/2025.
YTD as of 11/12/2026
CPI-U YTD as of 10/31/2026

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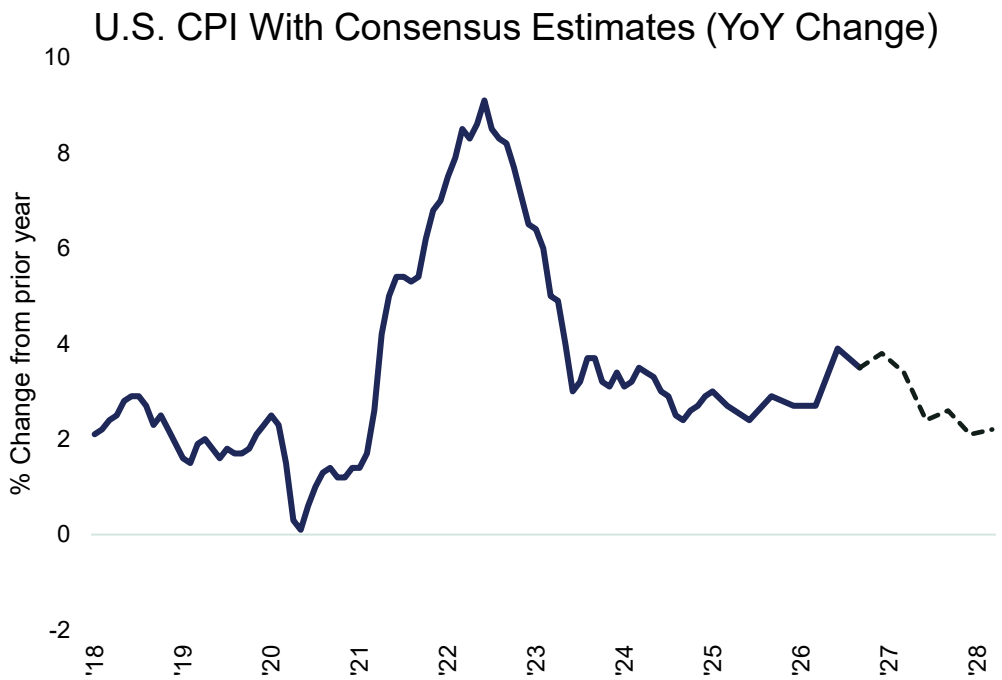
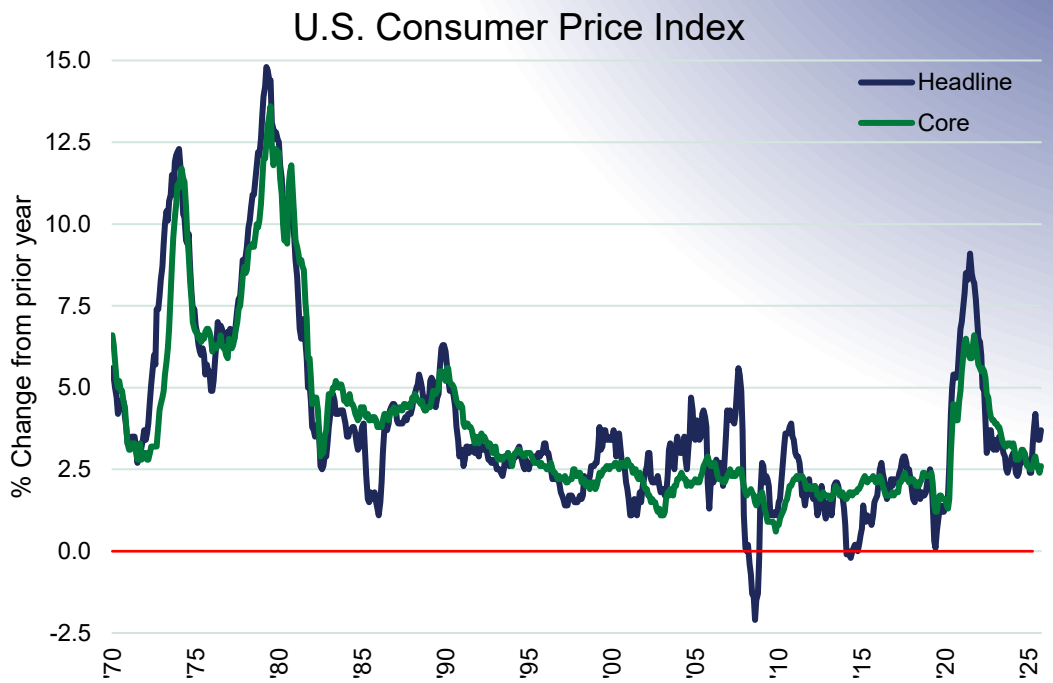
Inflation and the Path Ahead

Headline CPI accelerated to 3.7% in September, led by energy, and the Fed responded with a rate hike in September with consensus expecting one more rate hike in December, with normalization toward the mid-2% range over the next 18 months.





Sources: U.S. Bureau of Labor Statistics; consensus economist surveys; Federal Reserve, November 2026

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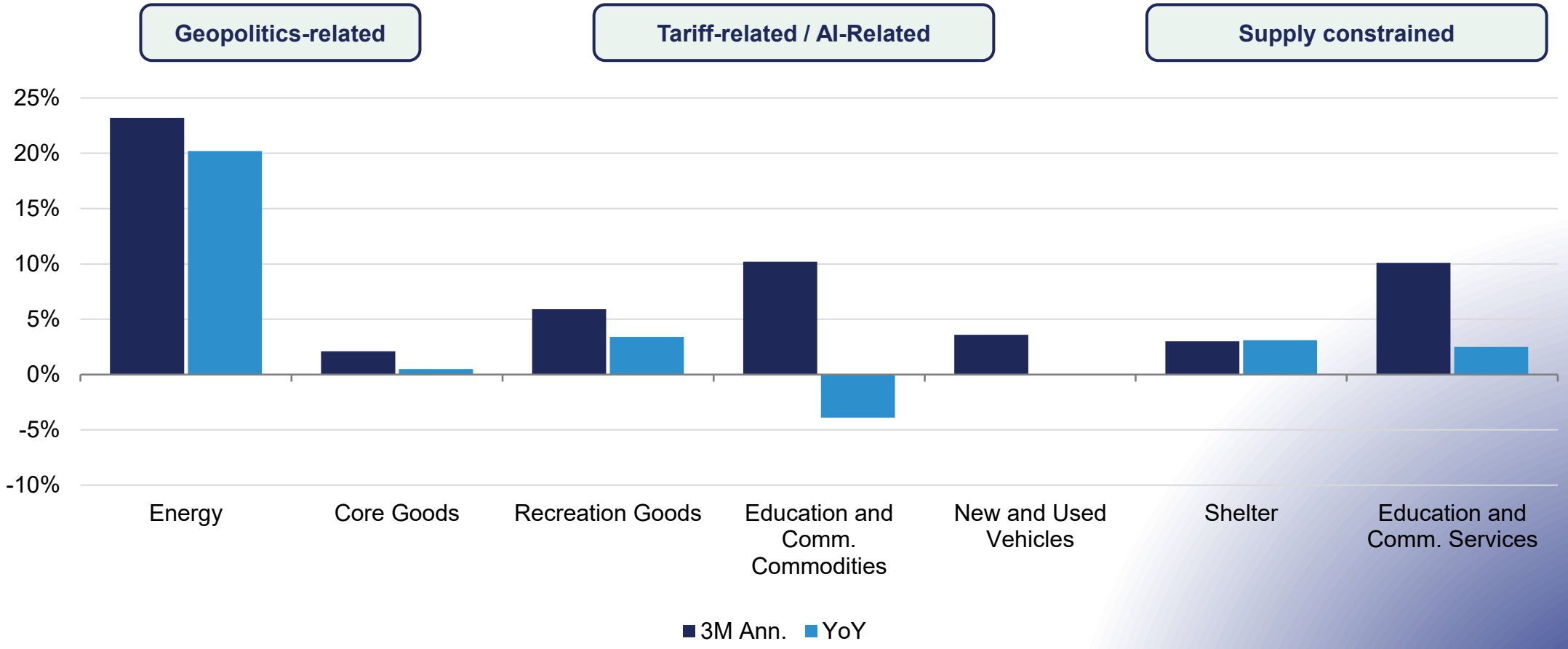
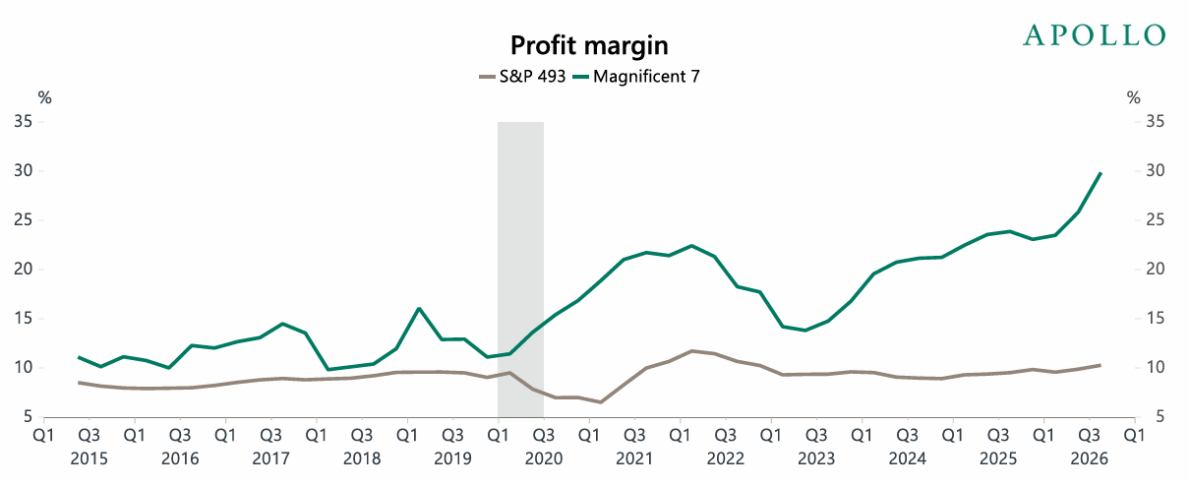
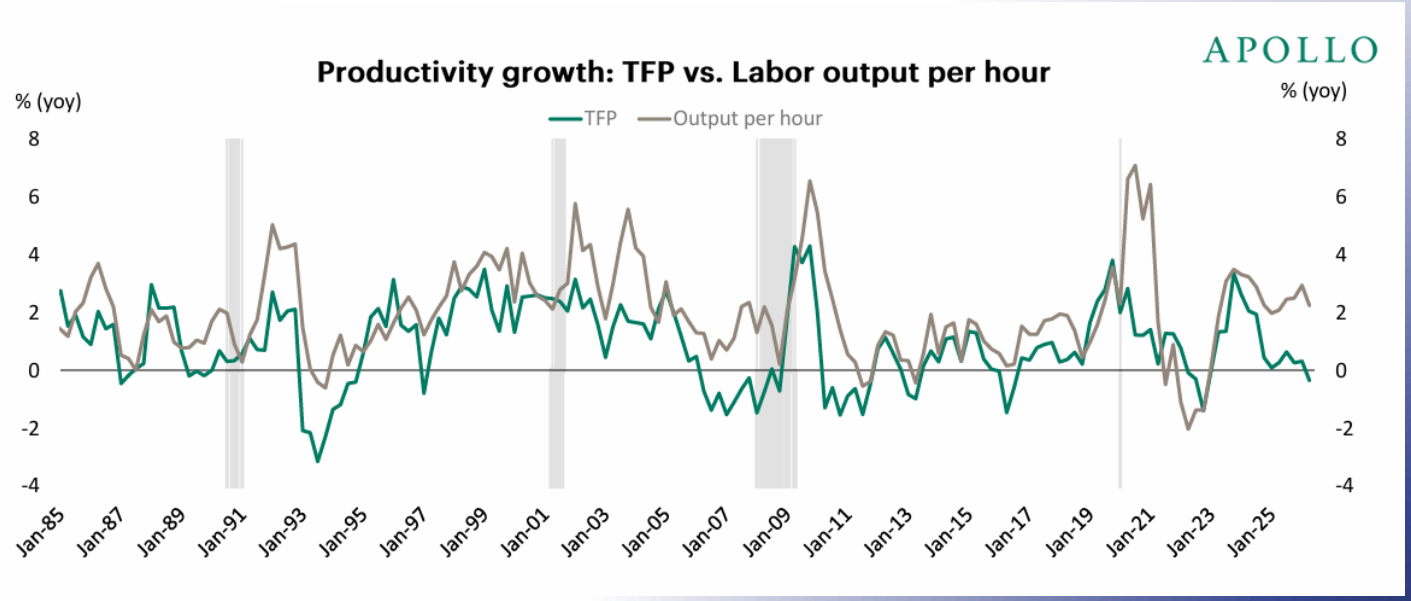
CPI Components: 3M Ann. Vs. YoY



Source: BlackRock as of 9/30/2026

AI Impact

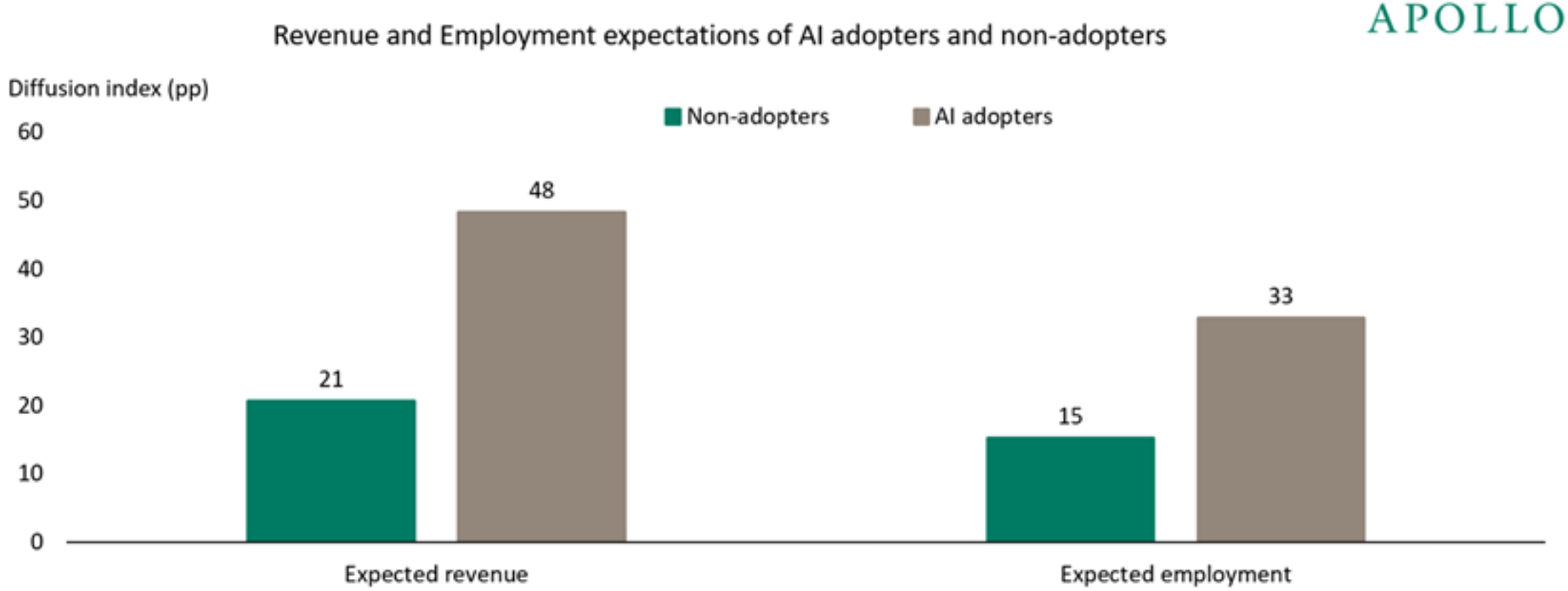




Sources (top slide): Bloomberg, Macrobond, Apollo Chief Economist.
Sources (bottom slide): Federal Reserve Bank of San Francisco, U.S. Bureau of Labor Statistics, Apollo Chief Economist.
Note: Total Factor Productivity (TFP) is the utilization adjusted series from the San Francisco Fed (Fernald, 2014), adjusted for cyclical variations in factor utilization.

AI adopters expect more revenue and employment growth

APOLLO



Sources: Federal Reserve Bank of New York, Apollo Chief Economist
Note: Diffusion Index = percent of firms expecting an increase minus percent expecting a decrease over the next 12 months.

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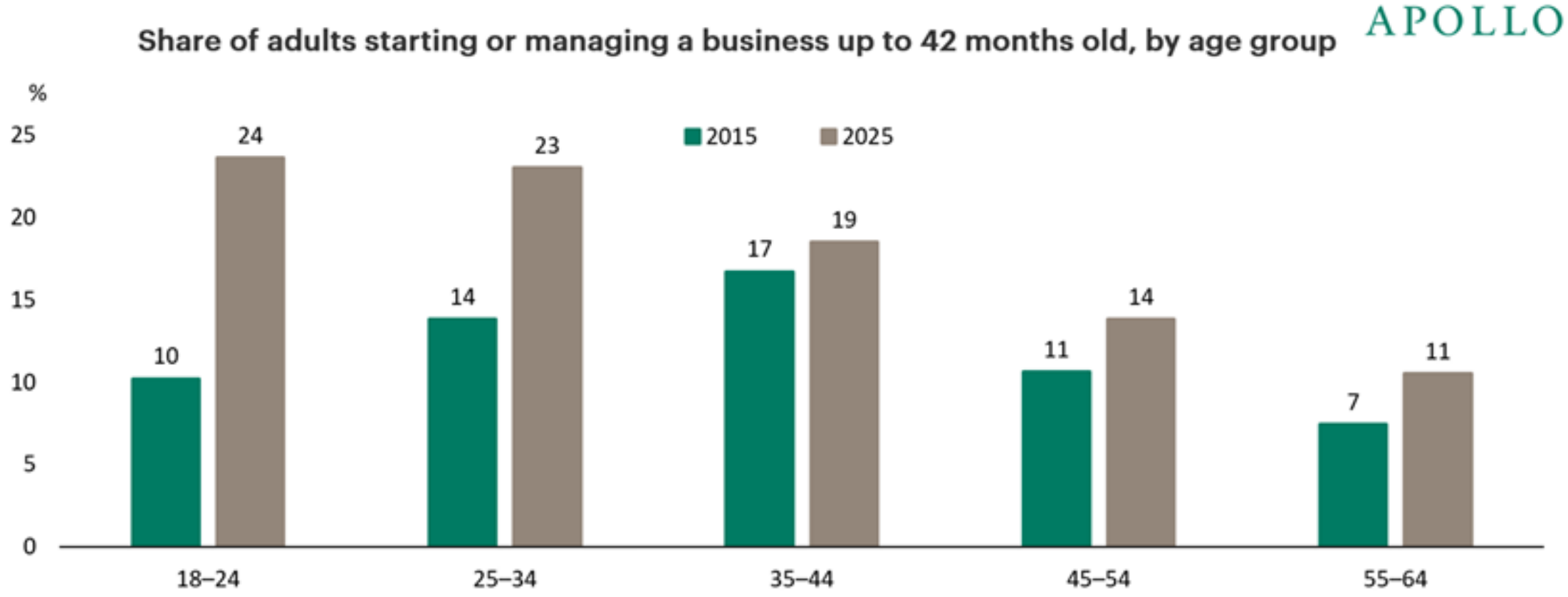
Rise in entrepreneurial activity across age groups



Sources: GEM Global Entrepreneurship Monitor, Apollo Chief Economist

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What We Are Watching Into Year-End

- **Rates and Inflation**
- **AI Theme Concentration and Risk**
- **Debt and Deficits**
- **Private Markets Liquidity**

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Strategic and Operational Priorities



ISMP and Technology Roadmap



Production Backlog



Succession Planning and Talent Acquisition

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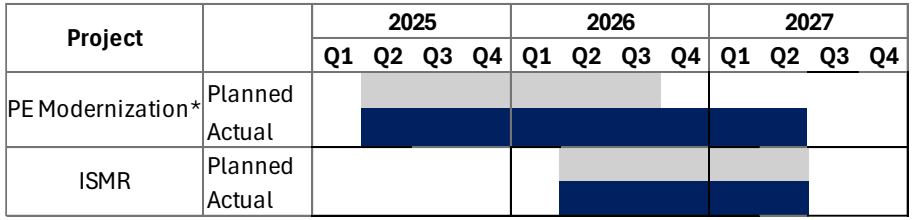
ISMP Dashboard

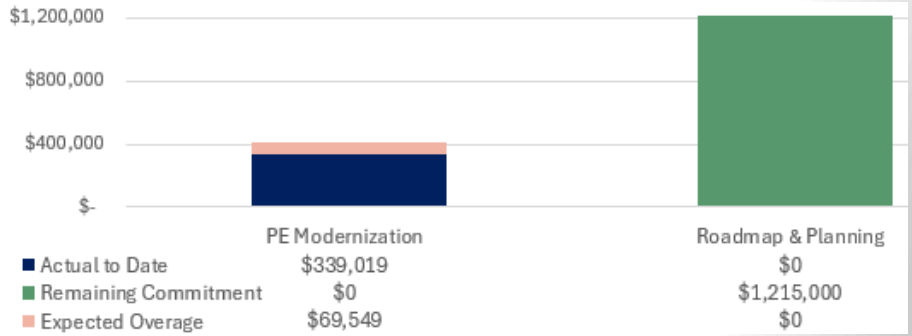
Program Name	Project Phase	Overall Health	Schedule	Budget	Resources
Investment Systems Modernization Program (ISMP)	PE Modernization	At Risk	On Target	On Target Will allocate from ISMR to PE Modernization	Allocated
Current Projects	**Project Goals**	**Overall Health**	**Schedule**	**Budget**	**Resources**
Private Equity (PE) Modernization	Onboard Private Equity to FundHub (unified private markets system) and develop required reporting functionality in Power BI	At Risk	Delayed Vendor is developing critical component functionality	Over Budget Projected total 2026 cost is $409k, $271k over budget due to external vendor critical component development	Allocated
Investment Systems Modernization Roadmap (ISMR)	Engage with an independent advisory firm to support development of multi-year roadmap	On Target	On Target Consultant engaged; work is progressing	On Target $1,215,000 budgeted for Roadmap & Planning	Allocated

Project Timeline



* Project is anticipated to extend through Q2 2027

2026 Projects Estimated Commitments to Actual*



* As of 10/31/26; PE Modernization Expected Overage is the vendor servicing fee Nov-Dec 2026

Total Program (as of 10/31/26):
*Budget to Date: $4,094,505**
*Actual to Date: $3,080,523**

**Since 2024*

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Notable Investment Committee and Board Meeting Items

(subject to change)

November 2026

Investment Committee:
- Investment Committee Charter (A)
- Combined Investment Fund Statement of Investment Policy (A)
- Cost Reports (I)
- Investment Operations Overview (I)

Board Meeting:
- Investment Compensation Discussion/Budget (A)

January 2027

Board Meeting:
- Investment Committee Charter (A)
- Combined Investment Fund Statement of Investment Policy Approval (A)

March 2027

Investment Committee:
- Compliance Reports (I)
- Proxy Reports (I)
- Asset Class Overview (I)

Board Meeting:
- *No Items Currently Planned*

June 2027

Investment Committee:
- Educational Workshop (I)
- Asset Class Overview (I)

Board Meeting:
- Investment Performance Presentation (I)

September 2027

Planning Session:
- Educational Session (I)
- Fireside Chat (I)

A: Action I: Information Navy: Board meeting Light: Investment Committee

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Questions?

Appendix

ASSET CLASS	STRATEGY
Global Equity	Portfolio retains higher quality bias. No material sector or geographic overweights or underweights relative to the benchmark.
Fixed Income	The portfolio is biased to be overweight spread product, take on limited duration risk, and generate the majority of outperformance from security selection and asset allocation. Short term dislocations may cause volatility in performance; however, long term the portfolio is expected to outperform the benchmark.
Private Equity	Higher interest rates continue to subdue investment activity as managers anticipate possible rate hikes in the near term. New commitment activity focused on re-ups and select high-quality new managers. Slower fundraising market continues to allow for seasoned primary opportunities.
Real Estate	Transaction activity has slowed as liquidity tightens due to increases in interest rates. Political and economic uncertainty continues to temper the market. Portfolio remains overweight to industrial and multifamily assets which continue to show strong fundamentals and stable income. Office and select retail exposures are conservatively managed amid a cautious market shaped by elevated rates.
Alternatives	Private Credit continues to offer attractive yields from senior direct loans, which offer a significant spread premium over public fixed income. Additionally, certain asset-backed credit strategies, such as leasing also appear to offer good value, as banks continue to retrench from traditional finance activities. The AI investment cycle continues to benefit a range of infrastructure strategies including digital infrastructure and power & energy.

Sources and References

Colorado PERA Total Fund and asset allocation data: internal performance reporting as of 6/30/2026 and 9/30/2026
Market and index returns: Bloomberg data as of 11/12/2026
Treasury yield curve: Bloomberg, data as of 11/12/2026
Inflation data: U.S. Bureau of Labor Statistics, consensus economist surveys, Federal Reserve, November 2026
CPI components: BlackRock, Bureau of Labor Statistics as of 9/30/2026
AI and entrepreneurial activity: Bloomberg, Macrobond, Apollo Chief Economist, Federal Reserve Bank of San Francisco/New York, U.S. Bureau of Labor Statistics, GEM Global Entrepreneurship Monitor

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Exhibit A – Agenda

Board of Trustees Meeting

Raymond “Doc” Heath Memorial Boardroom
1301 Pennsylvania Street
Denver, Colorado

Friday January 29, 2027
8:00 a.m.

All times are approximate and for reference only. Items designated for Information are appropriate for Action if the Board wishes to take action.

1. Approval of Consent Agenda

(Governance Item) Action
Presented by: Chair, Board of Trustees

a. **January 29, 2027, Board Meeting Agenda**
b. **November 20, 2026, Board Meeting Minutes**
c. **Board Education Compliance Report**
d. **Resolution for Limited Signature Authorization for Chief Audit Executive**
e. **Resolution for Signature Authorization**

2. Public Comment

(Governance Item) Information
Presented by: Chair, Board of Trustees

3. 2027 Committee Assignments

(Governance Item) Action
Presented by: Chair, Board of Trustees

4. Fiduciary Consultant Review

(Governance Item) Information/Action
Presented by: PERA General Counsel

a. **Fiduciary Consultant Review Presentation**

5. Committee Reports

(Governance Item) Information/Action

Audit Committee
Presented by: Chairman, Audit Committee

Benefits Committee
Presented by: Chair, Benefits Committee

Compensation & Budget Committee
Presented by: Chair, Compensation & Budget Committee
a. Compensation & Budget Charter

Governance Committee
Presented by: Chair, Governance Committee
a. 2027 CEO/Executive Director Performance Evaluation Criteria
b. Board Governing Philosophy

Investment Committee
Presented by: Chair, Investment Committee
a. Biennial Combined Investment Fund (CIF) Statement of Investment Policy Review (SIP)
b. Investment Committee Charter

6. Strategic Plan Update

(Strategic Plan Item) Information
Presented by: Andrew Roth, PERA Chief Executive Officer/Executive Director; Annalise Anderson, PERA Director of Strategy
a. Strategic Plan Update Presentation

7. PRISM Update

(Strategic Plan Item) Information
Presented by: Faheem Naushad, PERA Director of Modernization
a. PRISM Update Presentation

8. Legislative Update

(Governance Item) Information
Presented by: Andrew Roth, PERA Chief Executive Officer/Executive Director; Michael Steppat, PERA Director of Public and Government Affairs
a. Legislative Update Presentation

9. Staff Reports

(Governance Item) Information
a. Chief Executive Officer/Executive Director Update
Presented by: Andrew Roth, PERA Chief Executive Officer/Executive Director
b. Market and Portfolio Update

Presented by: Amy C. McGarrity, PERA Chief Investment Officer

c. Chief Administrative Officer Update
Presented by: Jeremy Hill, PERA Chief Administrative Officer

d. Legal Update
Presented by: PERA General Counsel

10. Board Announcements

(Governance Item) Information
Presented by: Chair Board of Trustees

a. Board Performance Evaluation Survey

b. Executive Director/CEO Performance Evaluation Survey

11. 2027 (Committee) Board Meeting Dates

(Governance Item) Information
Presented by: Chair Board of Trustees

- March (25) 26, 2027
- June 8, 2027 (Audit)
- June (24) 25, 2027
- September 15-17 or 22-24, 2027, Planning Session - Location TBD
- November 3, 2027 (Compensation & Budget)
- November (18) 19, 2027

Exhibit A – March 26, 2027, Board Meeting Agenda Draft
Exhibit B – PERA Board 2027 Workplan

The Board may convene in Closed Executive Session pursuant to, but not limited to, the following:

A. Colorado Open Meetings Law, Section § 24-6-402(4)(a): Purchase, acquisition, lease, transfer, or sale of any real, personal, or other property interest;
B. Colorado Open Meetings Law, Section § 24-6-402(4)(b): Conferences with an attorney for the local public body for the purposes of receiving legal advice on specific legal questions;
C. Colorado Open Meetings Law, Section § 24-6-402(4)(c): Matters required to be kept confidential by federal or state law or rules and regulations.
D. Colorado Open Meetings Law, Section § 24-6-402(4)(d): Specialized details of security arrangements or investigations, including defenses against terrorism, both domestic and foreign, and including where disclosure of the matters discussed might reveal information that could be used for the purpose of committing, or avoiding prosecution for, a violation of the law;

E. Colorado Open Meetings Law, Section § 24-6-402(4)(e)(I): Determining positions relative to matters that may be subject to negotiations; developing strategy for negotiations; and instructing negotiators;
F. Colorado Open Meetings Law, Section § 24-6-402(4)(f)(I): Personnel matters except if the employee who is the subject of the session has requested an open meeting, or if the personnel matter involves more than one employee, all of the employees have requested an open meeting.
G. Colorado Open Meetings Law, Section § 24-6-402(4)(g): Consideration of any documents protected by the mandatory nondisclosure provisions of the “Colorado Open Records Act”, part 2 of article 72

PERA Board of Trustees

2026 Workplan

A: Action - Action item. Seeking Board decision on recommendation/motion.
I: Information - Information item. Seeking direction and discussion, no action required.
C: Consent - Routine item. No committee discussion required.
* - Executive Session Item.

	January 23rd	March 20th	June 25th	September 23-25th	November 20th
Board/ Stakeholder Relations	Public Comment (I)	Public Comment (I)	Public Comment (I)	Public Comment (I)	Public Comment (I)
Board Governance	Committee Assignments (A) Governance Consultant Review (A)	Board Election (A)	Board Election Results (A) Board Planning Session Topics (I) Anti-BDS Annual Report (C/A)	Board Officer Election Process (I) Proposed 2027 Board/Committee Meeting Dates (A)	Board Officer Election (A) 2027 Board Election Calendar (I) Calendar Year 2027 Committee Preferences (I) 2027 Board Workplan (I)
Performance Evaluation/ Oversight	Committee Reports (A/I) Staff Reports (I) PRISM System Update (I)	Committee Reports (A/I) Staff Reports (I) PRISM System Update (I) Cybersecurity Update* (I) HR Update (I)	Committee Reports (A/I) • CEO Evaluation* (A) • ACFR (A) Staff Reports (I) PRISM System Update (I) Investment Performance Report (I)	Committee Reports (A/I) Staff Reports (I) PRISM System Update (I) Cybersecurity Update* (I) Board Discussion (I) Annual Board/CEO Discussion* (I)	Committee Reports (A/I) • Annual Summary Report on Audit Committee Governance Activities • 2027 Budget Approval (A) Staff Reports (I) PRISM System Update (I)

PERA Board of Trustees

2026 Workplan

A: Action - Action item. Seeking Board decision on recommendation/motion.
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* - Executive Session Item.

	January 23rd	March 20th	June 25th	September 23-25th	November 20th
Funding		Selection of Actuarial Auditor (A)	Actuarial Valuation Report (I)		Actuarial Audit Results (I) Member Contribution Interest Rate (A)
Strategic Plan	Strategic Plan Update (I) Board Election Process and Board Succession Planning (I/A)	Strategic Plan Update (I)	Strategic Plan Update (I)	Strategic Plan Update (I) Board Election Process and Board Succession Planning (I/A) PERA Succession Planning Discussion (I)	Strategic Plan Update (I)
Board Education	Board Education Compliance (C/A)			Board Education Topics (I)	Budget Workshop (I)
Legislative	Legislative Update (I)	Legislative Update (I)	Legislative Update (I)	Legislative Update (I)	Legislative Update (I)
Legal			Rulemaking Process (I)	Rulemaking Hearing (A)	

Activities related to periodic significant events will appear on the appropriate year's workplan.

PERA Board of Trustees
2027 Workplan (Draft)

A: Action - Action item. Seeking Board decision on recommendation/motion.
I: Information - Information item. Seeking direction and discussion, no action required.
C: Consent - Routine item. No committee discussion required.
***** - Executive Session Item.

	January 29th	March 26th	June 25th	September	November 19th
Board/ Stakeholder Relations	Public Comment (I)	Public Comment (I)	Public Comment (I)	Public Comment (I)	Public Comment (I)
Board Governance	2027 Committee Assignments (A) Fiduciary Consultant Review (A)	Board Election (A)	Board Election Results (A) Board Planning Session Topics (I) Anti-BDS Annual Report (C/A)	Board Officer Election Process (I) Proposed 2028 Board/Committee Meeting Dates (A)	Board Officer Election (A) 2027 Board Election Calendar (I) Calendar Year 2027 Committee Preferences (I) 2027 Board Workplan (I)
Performance Evaluation/ Oversight	Committee Reports (A/I) Staff Reports (I) • CEO Update • Market & Portfolio Update • CAO Update • CTO Update • Legal Update PRISM System Update (I)	Committee Reports (A/I) Staff Reports (I) • CEO Update • Market & Portfolio Update • CBO Update • Legal Update PRISM System Update (I) Cybersecurity Update* (I) HR Update (I)	Committee Reports (A/I) • CEO Evaluation* (A) • ACFR (A) Staff Reports (I) • CEO Update • Deputy Exec Dir. Update • Market & Portfolio Update • Legal Update PRISM System Update (I) Investment Performance Report (I)	Committee Reports (A/I) Staff Reports (I) • CEO Update • Market & Portfolio Update • CHRO Update • CBO Update • Legal Update PRISM System Update (I) Cybersecurity Update* (I) Board Discussion (I) Annual Board/CEO Discussion* (I)	Committee Reports (A/I) • Annual Summary Report on Audit Committee Governance Activities • 2027 Budget Approval (A) Staff Reports (I) • CEO Update • Market & Portfolio Update • Legal Update PRISM System Update (I)

PERA Board of Trustees
2027 Workplan (Draft) *(Cont.)*

A: Action - Action item. Seeking Board decision on recommendation/motion.
I: Information - Information item. Seeking direction and discussion, no action required.
C: Consent - Routine item. No committee discussion required.
***** - Executive Session Item.

	January 23rd	March 20th	June 25th	September 23-25th	November 20th
Funding			Actuarial Valuation Report (I)		Member Contribution Interest Rate (A)
Strategic Plan	Strategic Plan Update (I)	Strategic Plan Update (I)	Strategic Plan Update (I)	Strategic Plan Update (I)	Strategic Plan Update (I)
Board Education	Board Education Compliance (C/A)			Board Education Topics (I)	2027 Budget Overview (I)
Legislative	Legislative Update (I)	Legislative Update (I)	Legislative Update (I)	Legislative Update (I)	Legislative Update (I)
Legal			Rulemaking Process (I)	Rulemaking Hearing (A)	

Activities related to periodic significant events will appear on the appropriate year's workplan.