FPPA | Fire & Police Pension Association of Colorado

COLA Task Force

November 12, 2026



Agenda

- Welcome and Introductions
- Actuarial Assumptions Review
- COLA Structures in Public Pension Funds Around the Country
- Cavanaugh McDonald (CavMac) Overview

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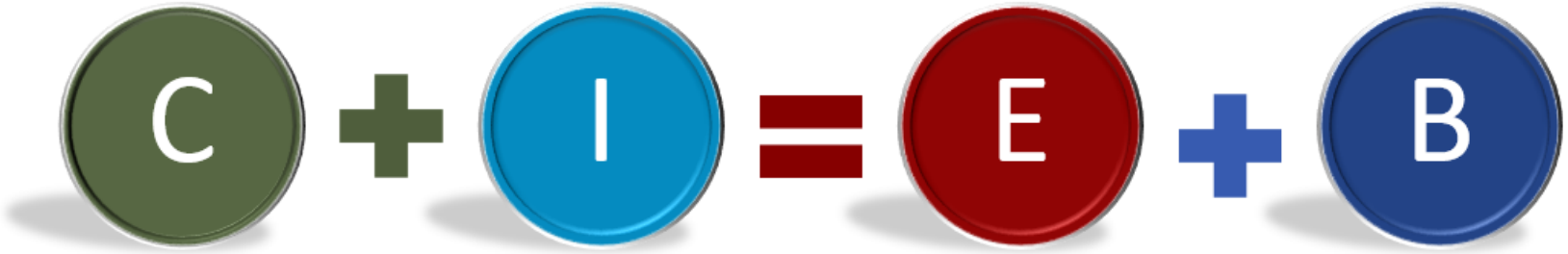
Actuarial Assumptions Overview

Fundamental Pension Funding Equation



Contributions	Investment Income	Expenses	Benefits
• Funding Policy	• Investment Strategy	• Administrative Policy	• Plan Design

"Money In = Money Out"

COLA is largely the only variable within the Board's control to respond to imbalance of the equation.

Actuarial Experience Study
What is it and why do we keep doing them?

- Regularly scheduled review of assumptions and methods:
- Valuation calculations are based on a series of assumptions about future membership behavior and economic outcomes
  - Assumptions should occasionally change to reflect
    - New information and changing knowledge
    - Changing patterns of retirements, terminations, mortality, etc.
- Why do we do it?
  - Recalibration of the funding equation – manage expectations
  - Plan sustainability will be based on Actual Contributions, Actual Investment Performance, Actual Expenses and Actual Benefits

Key assumptions used in the valuation

What Are They?

Economic

- Inflation
- **Investment Return**
- Salary Increases
- Payroll Growth Rate

Demographic

- Retirement Rates
- Disability
- Turnover
- **Mortality**
- Various Other Assumptions for Pension and Retiree Medical Plans

Who Selects Them?

Economic

- Board
- Actuary
- Other Advisors

Demographic

- Mostly Actuary
- Board Approves

★ =review today



Economic assumption setting relies more on *forecasts*, demographic more on *historical data*

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Timing of FPPA Experience Studies

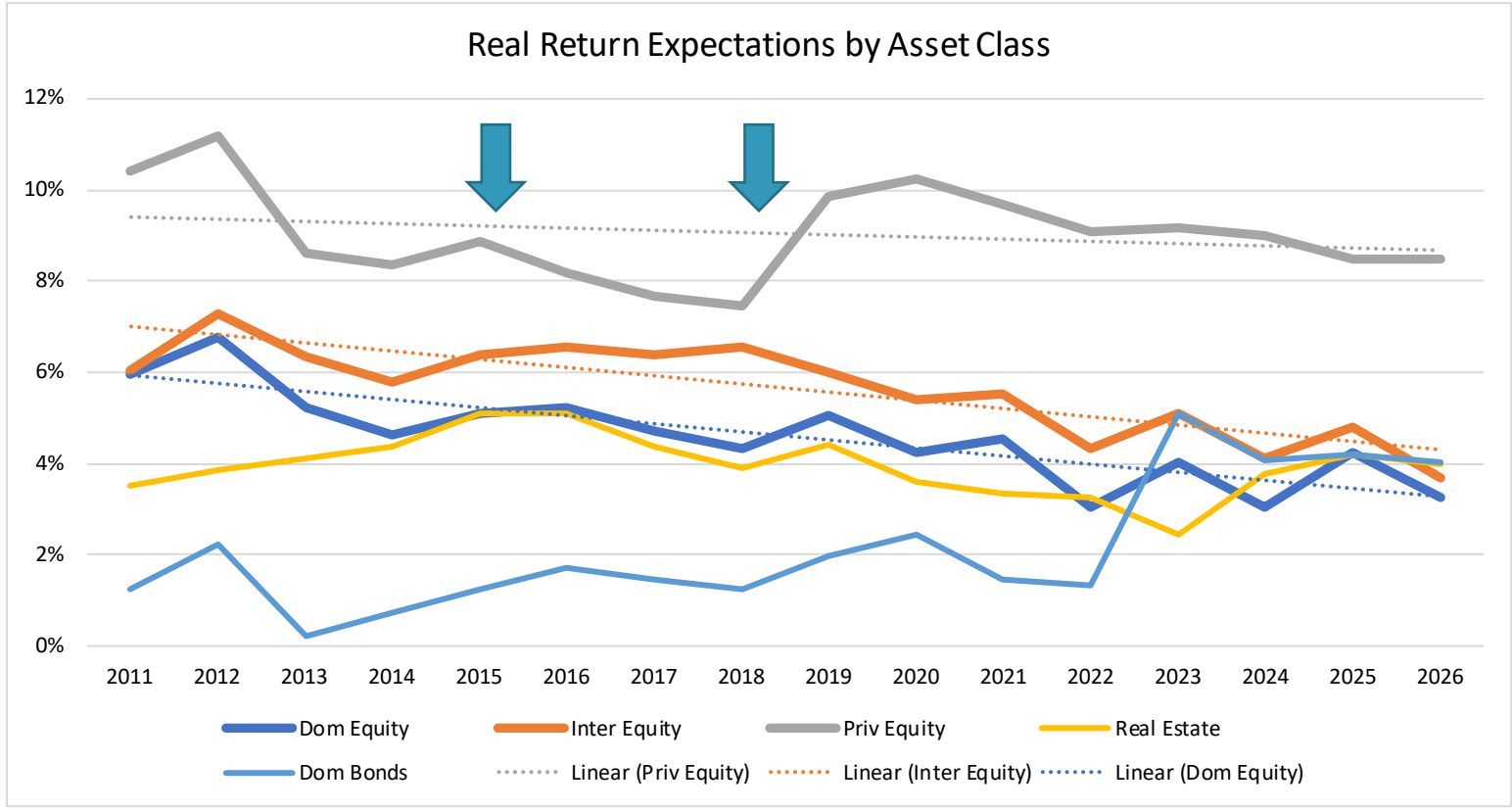
- Generally every four years
- 2011
- 2015
- 2018 –accelerated due to upcoming SWDB and SWDD task force
- 2022
- 2026

Discount Rate History

- Discount rate
  - 2011 – 7.5% (assumes returns will cover investment *and* administrative expenses)
  - 2015 – 7.5% (assumes returns will cover investment expenses only)
    - No change to current funding levels, only projections
  - 2018 – 7.0%
    - Increased liabilities for base benefits $141 million
  - 2022 – 7.0%
  - 2026 – 7.0%

Discount Rate History

- Investment consultant capital market expectations by asset class



Asset Class	Target Allocation
Cash	4 %
Fixed Income	7 %
Fixed Income Credit	5 %
Diversifiers	9 %
Long/Short Equity	6 %
Global Public Equity	38 %
Private Equity	25 %
Real Estate	3 %
Real Assets	3 %
Total	100 %

SRP ~70% invested in grey, orange and blue **BOLD** downward trending lines

Cannot invest more heavily in fixed income or real estate to earn higher returns

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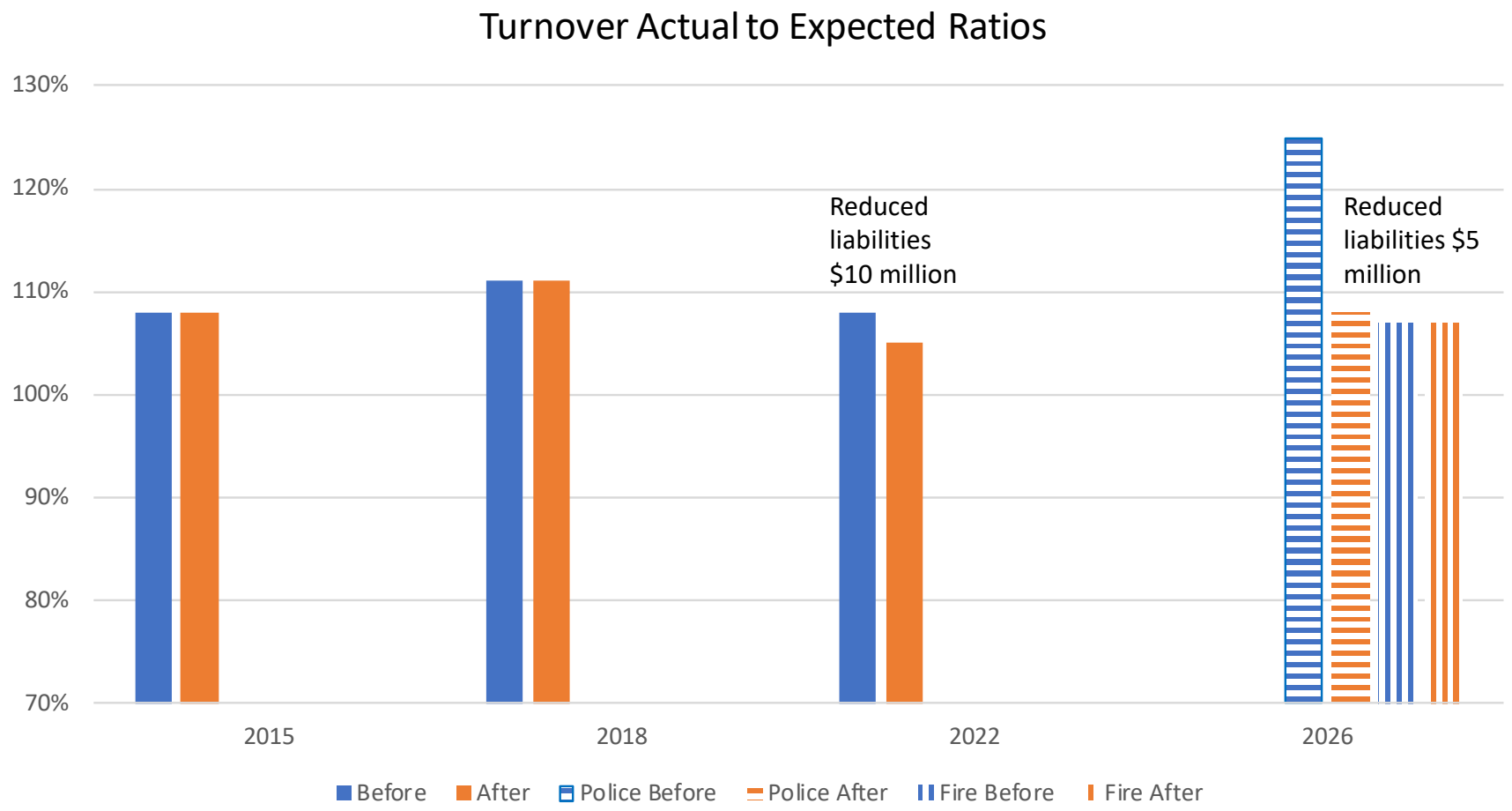
Mortality Assumption History

- Not sufficient data to develop FPPA specific assumption
  - What little data there is suggests living longer than assumption
- **At each experience study, GRS has moved mortality assumption to most recently published standard table available from the Society of Actuaries**
  - 2011: RP-2000 with Scale AA
  - 2015: RP-2014 Blue Collar with Scale BB
    - **$24 million increase in liability**
  - 2018: RP-2014 (No Blue Collar) with MP-2017
    - **Exact number unknown, but caused increase**
  - 2022: Pub-2010 for Public Safety with MP-2020
    - **$73 million increase in liability**
  - 2026: Pub-2016 for Public Safety with MP-2020
    - **$15 million increase in liability**
- **If you look to other public safety systems at the same timeframes, you will find most of them using the same tables.**
- **People keep living longer, especially retired public safety. Even as we've built in improvement, longevity has improved FASTER than the assumed improvement. It costs more to pay the same level of benefits.**

Turnover Assumption History

- Career benefits are the most expensive
  - Turnover determines the expected portion of actives making it to retirement
- Reflects leaving SRP active employment, not just the specific employer
- Actual/expected ratio
  - 100% right on target
  - For turnover > 100% target to allow for re-employment
- But generally, the actuarial process doesn't move to 100%+ each experience study
  - Don't necessarily assume most recent data is fully credible
  - Temporary factors
    - Economic factors
    - Covid
    - Etc.

Turnover Assumption History



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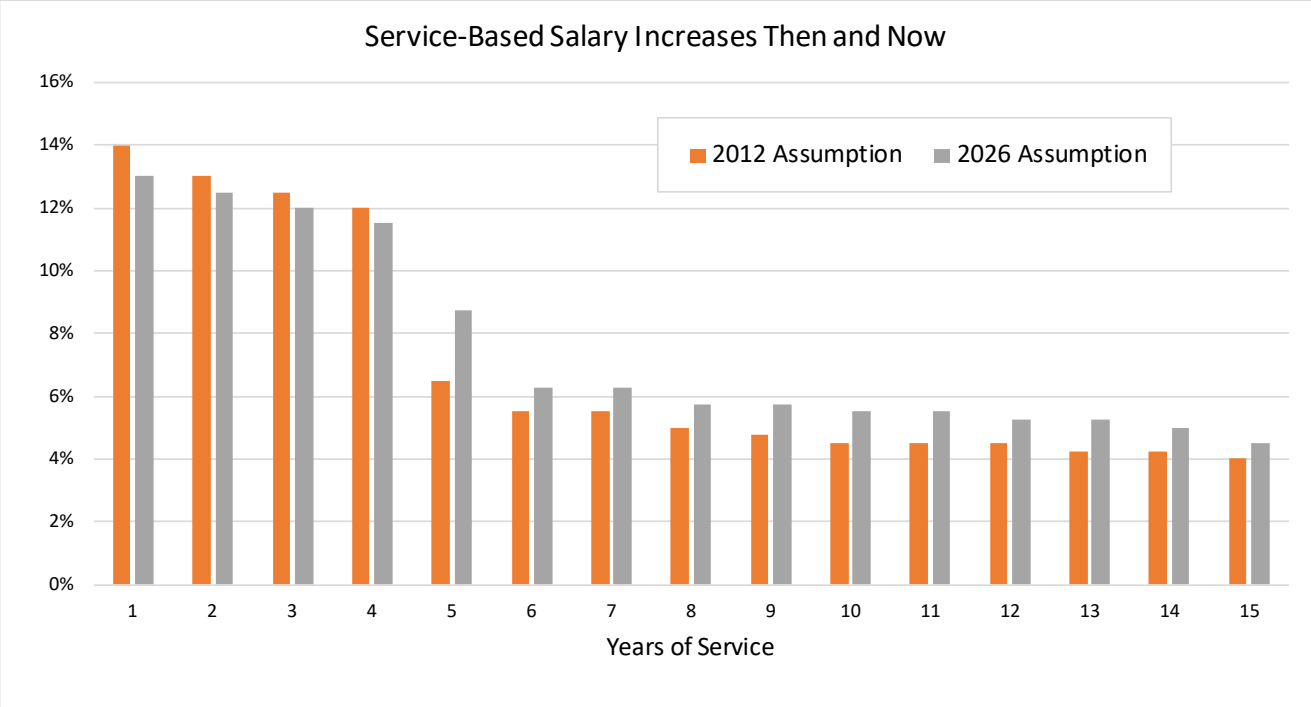
Salary assumption

- Used to project salary from today to projected retirement where it is used to determine benefits
  - Higher salary increase -> higher final average salary at retirement -> higher cost
- Big driver in plan normal cost

Salary assumption history

- 2015: Very small changes to service-based component
- 2018: Increased base increase by 0.25% for everyone, slight modification to service-based component
- 2022: Increased service-based portion 0.5% in first 4 years, 0.25% years 5-14
- 2026: Increased base increase by 0.25% for everyone



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History of Assumption Change Impact on Plan Liabilities
$ in millions

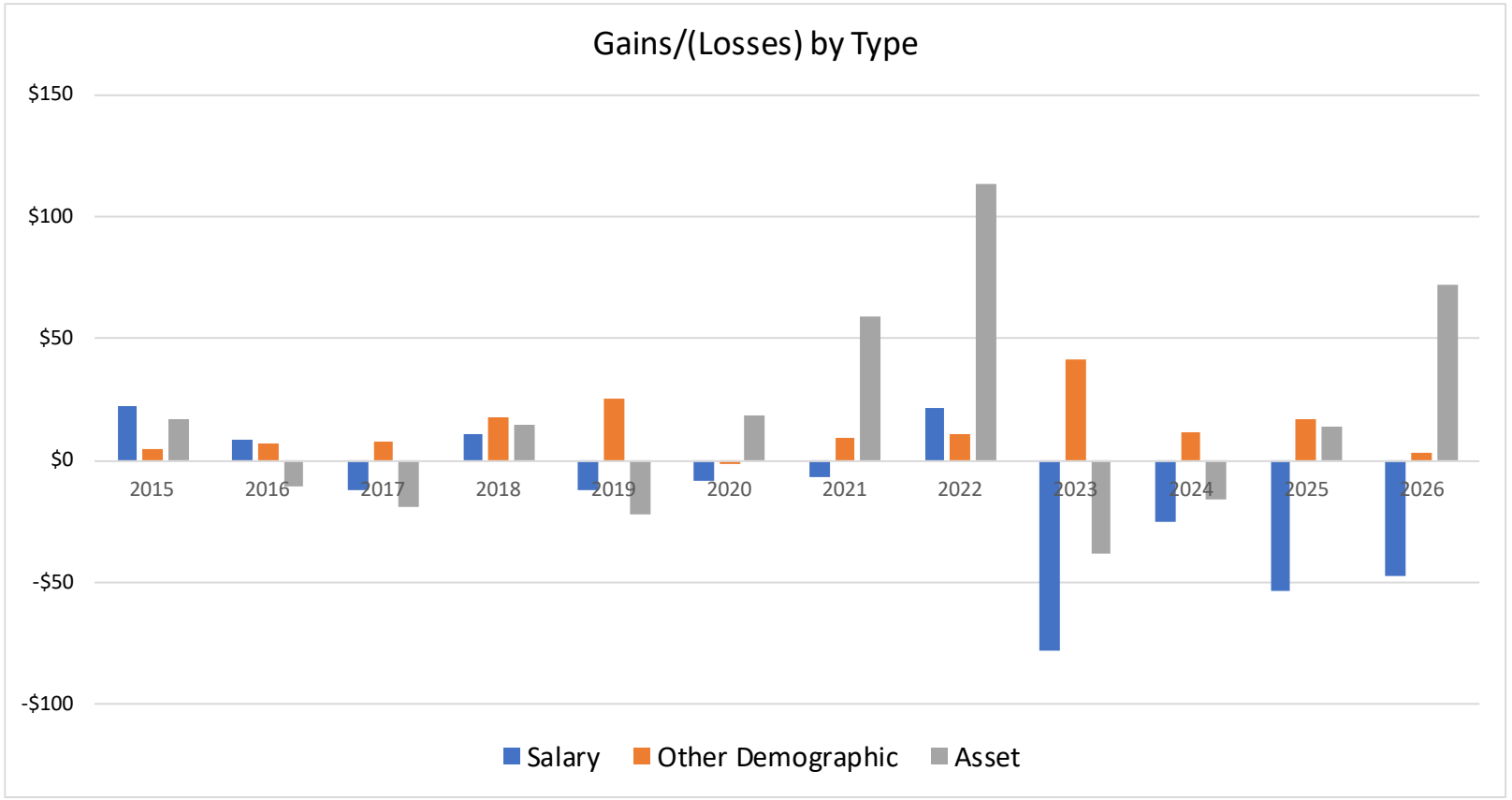
- The bulk of the SRP's assumption change impacts since the first member task force have been from **industry-wide changes** (green) to mortality and investment expectations
  - >$250 million
- Some impact from salary assumptions
  - But most salary impact has been from actual experience, not assumption changes
- Other Demographic was a small net gain

Study Year	Discount Rate Change	Mortality Change	Salary	Other Demographic
2015	$0.00	$23.56	$0.00	$7.14
2018	$140.79	-$25*		
2022	$0.00	$73.08	-$2.43	-$12.54
2026	$0.00	$14.73	$29.10	$15.79

*Detail not available in individual categories from 2018 study. Summary notes salary change had almost no impact. Mortality changes were an increase to liabilities so Other likely accounted for a more than $25 million gain.

History of Gains/Losses

- Mortality is not a big ticket item in observable gains and losses for SRP at this point (other = largely retirement, termination, disability, other)



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Public Pension Fund COLA Structures

Various Types of COLAs

- COLA design isn't one single choice—it's really several independent design "dials" that get combined.
- A plan's COLA is described by independent choices:
  - Funding requirements
  - Whether other options are available
- Common approaches to a COLA:
  - No COLA, Simple, Compounding
  - Fixed-rate vs. Variable ("up-to" vs. inflation-linked)
  - Automatic vs. Ad hoc vs. Affordability-based
  - Lump Sum or 13th Check

No COLA

Definition: The plan has no built-in benefit increase. Benefits stay flat for life.

Requirements: None—there is nothing to grant.

Examples: Texas ERS/LECOS, Alabama ERS, City of Austin Police Officers Retirement and Pension Fund

Year	Monthly	Annual	Increase
1	$1,000	$12,000	$0 / 0.0%
2	$1,000	$12,000	$0 / 0.0%
3	$1,000	$12,000	$0 / 0.0%
5	$1,000	$12,000	$0 / 0.0%
10	$1,000	$12,000	$0 / 0.0%
15	$1,000	$12,000	$0 / 0.0%
20	$1,000	$12,000	$0 / 0.0%

Simple, Fixed-Rate COLA

Definition: A benefit increase applied **only to the original benefit**, so the dollar increase is the same every year.

Requirements: Often capped and/or tied to inflation.

Example: Arizona Public Safety Personnel Retirement System: Tier 1

Year	Monthly	Annual	Increase
1	$1,000	$12,000	$0 / 0.0%
2	$1,020	$12,240	$20.00 / 2.0%
3	$1,040	$12,480	$20.00 / 2.0%
5	$1,080	$12,960	$20.00 / 2.0%
10	$1,180	$14,160	$20.00 / 2.0%
15	$1,280	$15,360	$20.00 / 2.0%
20	$1,380	$16,560	$20.00 / 2.0%

In this example the increase is capped at 2%

Compounding, Fixed-Rate COLA

Definition: Set percentage paid each period, independent of inflation. A fixed-rate COLA is a set number, e.g. 3%/yr.

Requirements: Usually automatic; cost is locked regardless of inflation or funded status.

Examples: Illinois State Teachers' Retirement System, CalPERS

Year	Monthly	Annual	Increase
1	$1,000	$12,000	$0 / 0.0%
2	$1,030	$12,360	$30.00 / 3.0%
3	$1,061	$12,731	$30.90 / 3.0%
5	$1,126	$13,506	$32.78 / 3.0%
10	$1,305	$15,657	$38.00 / 3.0%
15	$1,513	$18,151	$44.05 / 3.0%
20	$1,754	$21,042	$51.07 / 3.0%

In this example the increase is an annual fixed rate of 3%.

Simple/Compound COLA Tied to Inflation

Definition: A benefit increase applied to the **already-adjusted (running) benefit**, so the dollar increase grows each year.

Similar to the Simple or Compound Fixed Rate examples.

- Annual COLA rate may fluctuate
- Example: tied to inflation, capped at 3%

Example: Illinois State University Retirement System: 50% of the CPI-U, up to a Maximum of 3%, non-compounded.

Ad Hoc / Plan Affordability Based COLA

Definition: Granted at Board's discretion, or only when plan can afford it; not guaranteed.

Requirements: Paid based on what the plan can afford while maintaining a set funded status.

Example: Fire & Police Pension Association of Colorado (FPPA)

Year	Monthly	Annual	Increase
1	$1,000	$12,000	$0 / 0.0%
2	$1,003	$12,032	$2.70 / 0.27%
3	$1,008	$12,093	$5.01 / 0.50%
5	$1,017	$12,202	$5.06 / 0.50%
10	$1,058	$12,698	$10.48 / 1.0%
15	$1,129	$13,545	$16.68 / 1.5%
20	$1,234	$14,808	$24.20 / 2.0%

Annual increases are based on maintaining a fully-funded status. COLAs were capped using the greater of CPI-W and 3.0%

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Funded-Status-Adjusted COLA w/ Contribution Flexing

Definition: A COLA that moves up/down based on whether the plan is ahead/behind funding targets. Paired with contribution rates that flex based on funded status.

Requirements: Funded status projections (ahead/behind targets).

Example: Colorado PERA

Year	Funded Status Scenario	COLA	Monthly	Annual
1	Baseline	0%	$1,000	$12,000
2	Ahead of target	1.00%	$1,010	$12,120
3	Further ahead	1.25%	$1,022.50	$12,270
5	At ceiling	2.00%	$1,055	$12,660
10	Behind target	0.50% (floor)	$1,080	$12,960
15	Recovering	1.00%	$1,130	$13,560
20	Back ahead	1.50%	$1,205	$14,460

PERA shares the risk—when funding weakens, both retirees (lower COLAs) and workers/employers (increased contributions) absorb part of the impact, rather than letting a fixed, guaranteed COLA compound regardless of ability to pay.

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Lump Sum / 13th Check

Definition: A one-time payment that does not permanently raise the ongoing monthly benefit.

Requirements: Usually granted ad hoc when funds allow.

Examples: Baton Rouge City Parish Employees' Retirement System, Colorado FPPA

Year	Monthly	Permanent Increase	One-Time Payment
1	$1,000	$0	$600
2	$1,000	$0	$0
3	$1,000	$0	$1,000
5	$1,000	$0	$400
10	$1,000	$0	$1,800
15	$1,000	$0	$2,200
20	$1,000	$0	$200

“Purchasing a COLA”

Definition: Plan participants select an actuarially equivalent benefit option upon retirement that includes a fixed, compounding COLA.

Examples: Wyoming, Texas ERS

COLA Purchase: Single Life Annuity			
Ret Age	**1% COLA**	**2% COLA**	**3% COLA**
50	90%	80%	70%
55	90%	81%	72%
60	91%	83%	75%
65	92%	85%	77%

Single Life Annuity at Age 55	
Optional Form	**Monthly Benefit**
SLA	$1,000
SLA – 1%	$900
SLA – 2%	$810
SLA – 3%	$720

Members may also participate in any ad hoc COLAs granted under the plan/COLA Policy

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Investment Performance w/ Shared Contributions

Definition: COLA that rises and falls with the plan's investment performance and funded status. The COLA amount varies (up or down).

Requirements: Investment Performance Test, Funded Status Condition, Floor Protection, Automatic Mechanism

Example: Wisconsin Retirement System

Year	Investment-Performance Scenario	Adjustment Applied	Monthly Benefit	Annual
1	Baseline (floor)	0.00%	$1,000.00	$12,000
2	Strong returns	4.00%	$1,040.00	$12,480
3	Strong returns	2.50%	$1,066.00	$12,792
5	Mixed returns	1.00%	$1,085.00	$13,020
10	Market downturn	-3.00%	$1,025.00	$12,300
15	Recovery	3.00%	$1,110.00	$13,320
20	Strong returns	2.00%	$1,170.00	$14,040

Floor protection: adjustments can be clawed back in down years, but not usually below the original base benefit

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Floor / Minimum Percentage of Inflation

Definition: Pays a certain increase until purchasing power hits a minimum threshold. Then maintains that purchasing power threshold.

Higher of

- A 1.5% annual compounding COLA, or
- A COLA which would provide 65% of the purchasing power that the Member's original benefit could purchase at the time of retirement

Example: Seattle City Employees Retirement System

Additional Options for Consideration

- **Waiting Period**
  - Can be age-based (ex: no increase until a certain age)
  - Can be years-based (ex: in retirement for a number of years)
- **Prorating / Weighting**
  - Higher percentages granted based on years in retirement
  - Higher percentages granted to Members with lesser benefits
  - Higher percentages based on address (metro vs. rural, state)
- **Other**
  - 457, Statewide Money Purchase Plan, Additional Savings, etc.

Suggestions for FPPA to Explore? 1/2

Type suggestions from Task Force meeting here (slide 1):

Suggestions for FPPA to Explore? 2/2

Type suggestions from Task Force meeting here (slide 2):

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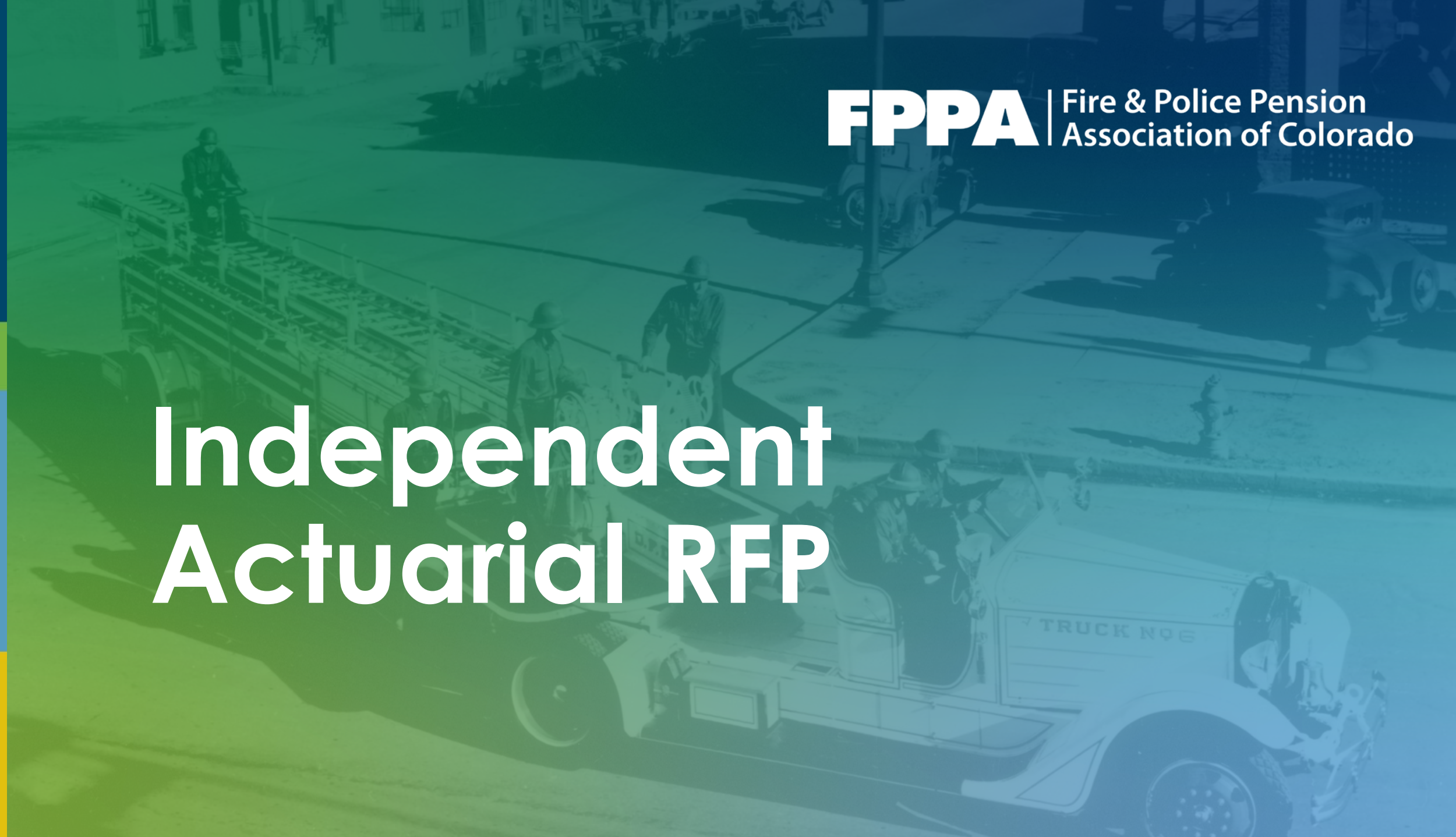
Independent Actuarial RFP



Purpose

- Provide the Board with an independent actuarial perspective regarding
  - Funding, actuarial assumptions, valuation methodology, and COLA framework
- Scope
  - An independent actuarial valuation of the Statewide Retirement Plan (SRP) as of January 1, 2027;
  - Independent recommendations regarding actuarial assumptions and actuarial methods for the SRP; and
  - An evaluation of the design and long-term sustainability of the SRP's COLA policy.

Process

- Issued RFP on July 28, 2026
- Evaluation Committee
- Scoring Matrix
  - Organizational qualifications and personnel;
  - Experience performing comparable public pension work;
  - Demonstrated understanding of the requested services;
  - Independence and potential conflicts of interest;
  - Overall quality and completeness of the proposal; and
  - Proposed fees

Finalists / Interviews

- Finalists
  - CavMac, Cheiron, and Segal
- Interviews
  - Approach to valuation replication and independent review;
  - Maintenance of independence from FPPA's current actuary;
  - Experience evaluating COLA policies;
  - Development of actuarial assumptions, including the discount rate;
  - Balancing collaboration with independence; and
  - Qualifications and experience that distinguish the firm from its competitors

Board Authorization

- Several factors distinguished CavMac, including:
  - Demonstrated experience conducting independent actuarial reviews and audits of large public pension systems;
  - A clear and practical approach to the requested valuation, assumption review, and COLA analysis;
  - Strong interview performance and communication style;
  - Relevant public pension and public safety plan experience;
  - Favorable references; and
  - Competitive pricing relative to the proposed scope of services

Next Steps

- Contract with CavMac signed on October 27, 2026
- Match the January 1, 2026 Valuation Report
- Review most recent experience study
- Send January 1, 2027 valuation data next year
- Prepare independent actuarial valuation report
  - Funding, assumptions, methodologies
  - COLA Policy
- GRS and CavMac Reports available to the Task Force

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This plain language presentation is intended for informational purposes only.

Official interpretations or determinations are based upon the statutes and Rules & Regulations that govern FPPA's Plans.