

PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION
FY 2022-23 JOINT BUDGET COMMITTEE HEARING AGENDA

Thursday, December 9, 2021
11:00 am – 12:00 pm

11:00-11:15 INTRODUCTIONS AND OPENING COMMENTS

Presenter: Ron Baker, PERA Executive Director

11:15-12:00 PERA

Main Presenters:

- Ron Baker, PERA Executive Director
- Amy C. McGarrity, PERA Chief Investment Officer

Topics:

- Actuarial Assumptions: Page 2, Question 1 in the packet, Slides 5-6
- Auto Adjustments: Pages 2-3, Question 2 in the packet, Slide 9
- Retirements: Pages 3-5, Question 3 in the packet, Slide 8
- Direct Distribution: Page 5, Question 4 in the packet, Slide 7

PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION (PERA)
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1. *[Sen. Moreno]* Please discuss the change in actuarial assumptions that were made and the impact they had on PERA's liabilities.

In 2020, the Board of Trustees' reviewed PERA's actuarial assumptions through a process known as an Experience Study, which takes place every four years. This review covered the period of January 1, 2016 through December 31, 2019. The net effect of the assumption changes, as recommended by the Board's actuarial service provider, increased PERA's accrued liabilities by \$3.1 billion dollars. While some actuarial assumptions remained the same, the Board adopted the following recommendations:

- Lowering the inflation assumption from 2.40 percent to 2.30 percent.
- Lowering the payroll growth rate assumption from 3.50 percent to 3.00 percent.
- Lowering the active member growth assumption for each division. Current growth assumptions range from 1.00 percent to 1.25 percent. Newly adopted growth assumptions range from 0.25 percent to 1.00 percent.
- Changes to mortality assumptions and other demographic assumptions.

The details of the assumption changes are described in the Actuary's Certification Letter that is in the actuarial section of the 2020 PERA Comprehensive Annual Financial Report.

The net effect of these changes results in an increase in PERA's liabilities, which includes the value of current and future benefit payments. As a result of the changes in assumptions and the demographic experience in 2020, the automatic adjustment provision (AAP) goes into effect and will be implemented in July 2022.

2. *[Sen. Moreno]* Within the context of the changed assumptions, please discuss the auto adjustments that are made to employer and employee PERA contribution rates. In addition, please describe the statutory limits on the auto adjustments.

The primary intent of the AAP is to gauge the adequacy of the contributions (both employer and employee) coming into the pension trust fund against the amount required to reach full funding by 2047.

Pursuant to C.R.S. § 24-51-413, the AAP assessment is a comparison of two blended rates, weighted across all five Division Trust Funds, defined as: the "Blended Total Contribution Amount" (employer contribution rates + member contribution rate + direct distribution as a rate of pay) divided by the "Blended Total Required Contribution" (actuarially determined contribution (ADC) rate + member contribution rate), determining a resulting ratio. If the resulting ratio falls within an acceptable corridor (98 percent to 119 percent), no adjustments are made. If the resulting ratio does not achieve a minimum benchmark (less than 98 percent), adjustments are applied in an equitable manner of impact resulting in increases in contributions and a decrease in the Annual Increase (AI) cap. If the resulting ratio exceeds the acceptable corridor (120 percent or greater), adjustments are applied in an equitable manner of impact resulting in decreases in contributions and an increase in the AI cap.

Limits are placed on how much these amounts can change in a single year and cumulatively. The AAP limits for contributions and the AI are below:

- Adjustments (increases or decreases) to each of the Employer Contribution Rates and the Member Contribution Rates cannot exceed 0.50 percent in any one year, and cannot exceed more than 2.00 percent above or below standard contribution rates as set by Senate Bill 18-200.
- Adjustments to the Annual Increase (AI) cap cannot exceed 0.25 percent in any one year, and
 - o Cannot exceed a 2.00 percent AI cap maximum
 - o Cannot fall below a 0.50 percent AI cap floor

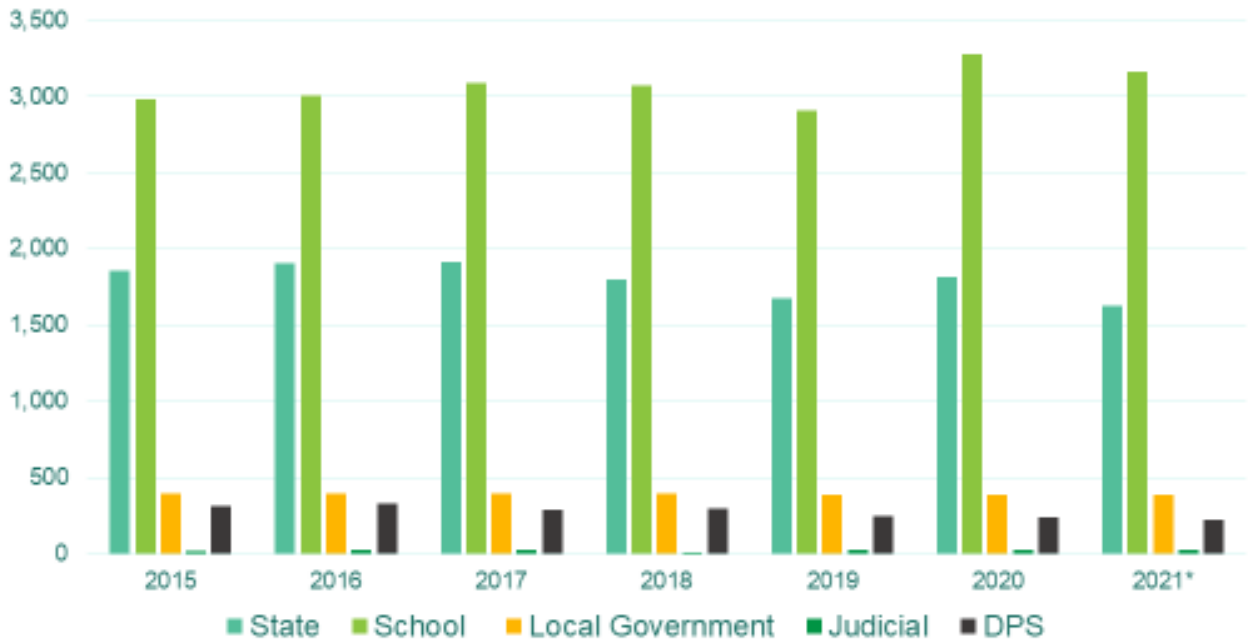
Based on the results of the AAP assessment which utilized the December 31, 2020, actuarial valuation performed for funding purposes, effective July 1, 2022, each of the member and employer contribution rates will increase 0.50 percent, with no adjustment to the \$225 million (actual dollars) direct distribution.

Further information regarding the AAP and methodology used can be found in more detail in actuarial section of the 2020 PERA Comprehensive Annual Financial Report.

3. *[Sen. Moreno]* What is the year-over-year change in retirements in each of the divisions for the past five years?

The information requested on number of retirements per division by year since 2015 is included below, as well as total active membership data per division over this same period.

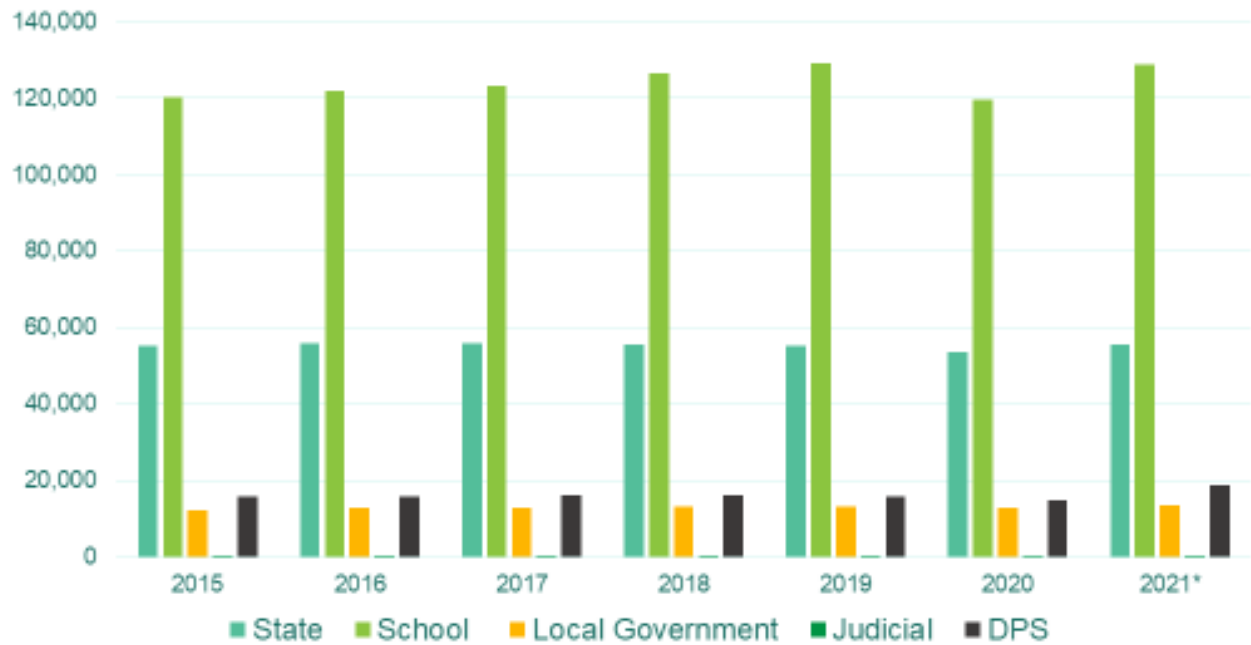
Retirements Per Year by Division



	State	School	Local Government	Judicial	DPS	TOTAL
2015	1,853	2,976	393	20	312	5,554
2016	1,906	3,005	392	27	330	5,660
2017	1,915	3,090	396	24	285	5,710
2018	1,797	3,072	393	8	296	5,566
2019	1,672	2,909	387	27	244	5,239
2020	1,818	3,272	390	25	237	5,742
2021*	1,627	3,158	386	25	221	5,417

* Through October 2021

Active Members Per Year by Division



	State	School	Local Government	Judicial	DPS	TOTAL
2015	55,291	120,239	12,176	334	15,929	203,969
2016	55,725	121,945	12,736	335	15,950	206,691
2017	55,686	122,990	12,770	332	15,991	207,769
2018	55,511	126,333	13,260	332	16,148	211,584
2019	55,252	128,938	13,086	339	15,679	213,294
2020	53,643	119,421	12,757	344	14,693	200,858
2021*	55,358	128,706	13,347	351	18,692	216,454

* Through September 2021

4. [Sen. Moreno] How did the missed \$225 million direct distribution payment in 2020 affect retirees' COLA adjustments?

Any modifications to the amount of contributions to PERA has an impact on the AAP calculation. While a reduction increases the likelihood the AAP will be triggered, thus reducing the AI for retirees, the direct distribution payment to PERA that was suspended for FY2020-21 did not, in isolation, trigger the AAP that was announced in 2021 with the release of the annual report for the year ended December 31, 2020.

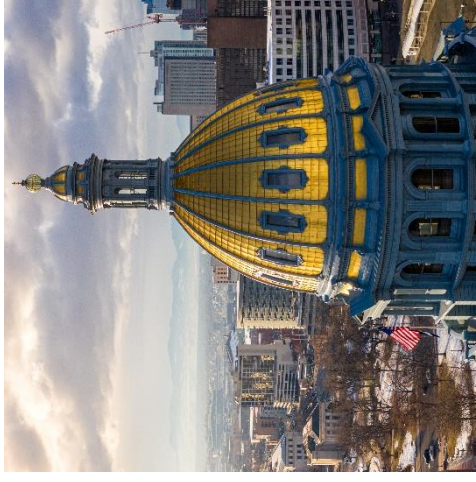


Joint Budget Committee

December 9, 2021

Ron Baker, Executive Director

Amy C. McGarrity, Chief Investment Officer



Public Employees' Retirement Association of Colorado (PERA)

Defined Benefit Plan

Stable benefit payments to over 128,000 retired public employees

Defined Contribution Plan

Choice available to State and Local Government employees

Voluntary Investment Program

PERAPlus 401(k) and 457 Plans



Health Benefits Program

Active and retired member coverage

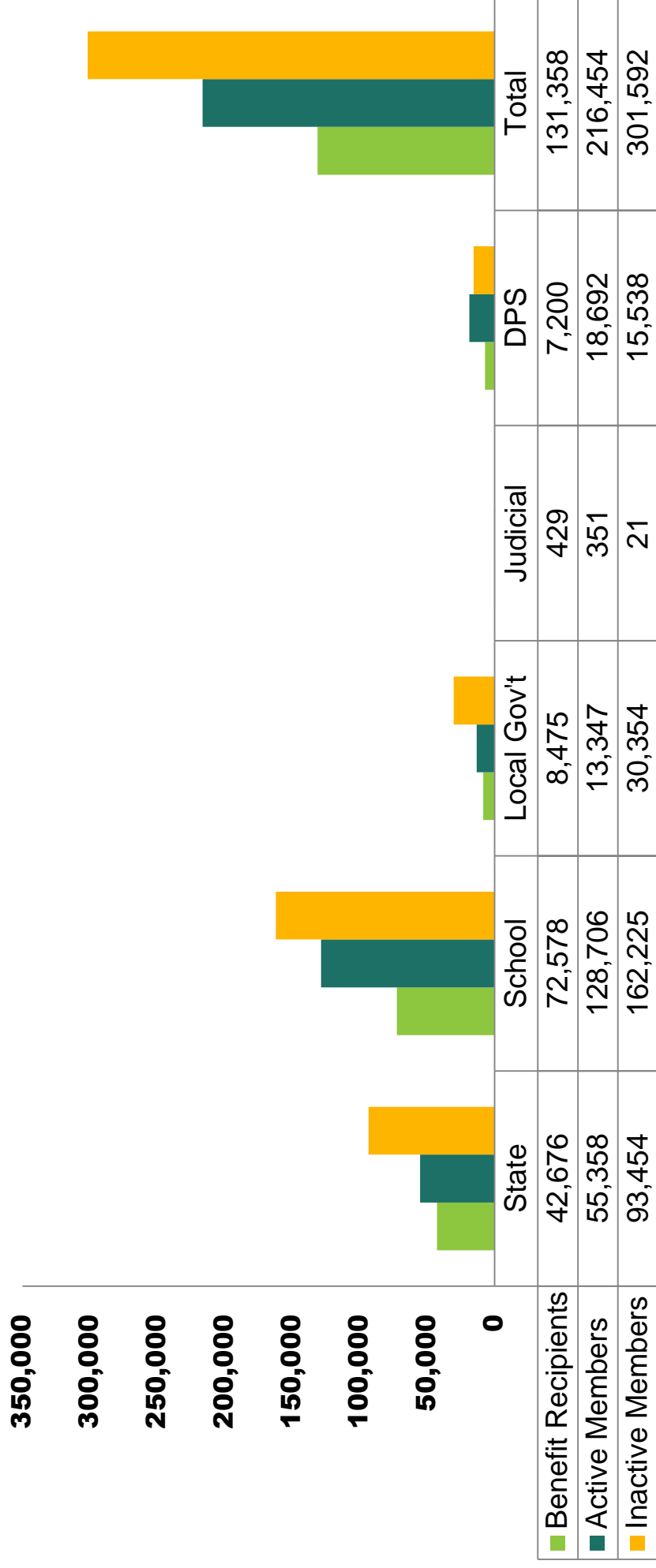


PERACARE

PERA Provides for 1 in 10 Coloradans

As of September 30, 2021

Total: 649,404

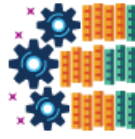




ASSETS UNDER MANAGEMENT (FNP)

\$58 billion

(DIVISION TRUST FUNDS)



MEMBERS ACTIVELY CONTRIBUTING TO PERA

200,858



TOTAL COVERED PARTICIPANTS
(IN PERACARE HEALTH BENEFITS PROGRAM)

59,794



RETIREES AND BENEFIT RECIPIENTS

128,133



INVESTED IN COLORADO-BASED COMPANIES, PARTNERSHIPS, AND ASSETS

\$808.4 million



NET RATE OF RETURN

17.4%



EMPLOYERS

410



FUNDED STATUS

62.8%



ANNUAL RETIREMENT BENEFIT PAYMENTS

\$4.8 billion

(DIVISION TRUST FUNDS)



30-YEAR RATE OF RETURN

9.1%

(ANNUALIZED, GROSS-OF-FEES)

2020 in Review

Summary of Valuation Highlights

» Effective Amortization Periods

Trust Fund	December 31, 2020	December 31, 2019
State Division	33 years	27 years
School Division	43 years	28 years
Local Government Division	29 years	22 years
Judicial Division	13 years	16 years
DPS Division	16 years	25 years

★ Segal

» Asset Return

- Market value of assets returned approximately 17.4% for the year ended December 31, 2020
- ## » Unfunded Actuarial Accrued Liability (UAAL)
- The actuarial accrued liability (AAL) increased from \$78.2 billion (as of December 31, 2019) to \$83.3 billion (as of December 31, 2020)
 - The UAAL increased from \$29.8 billion to \$31.0 billion. The \$1.2 billion results from:
 - » Increase of \$5.1 billion due to change in the AAL, \$3.1 billion of which is due to the adoption of revised actuarial assumptions
 - » Decrease of \$3.9 billion due to change in the actuarial value of assets

Experience Study: Periodic and Comprehensive Review

» Overview

- Purpose
- How assumptions are set
- Actuarial Assumptions: Economic and Demographic

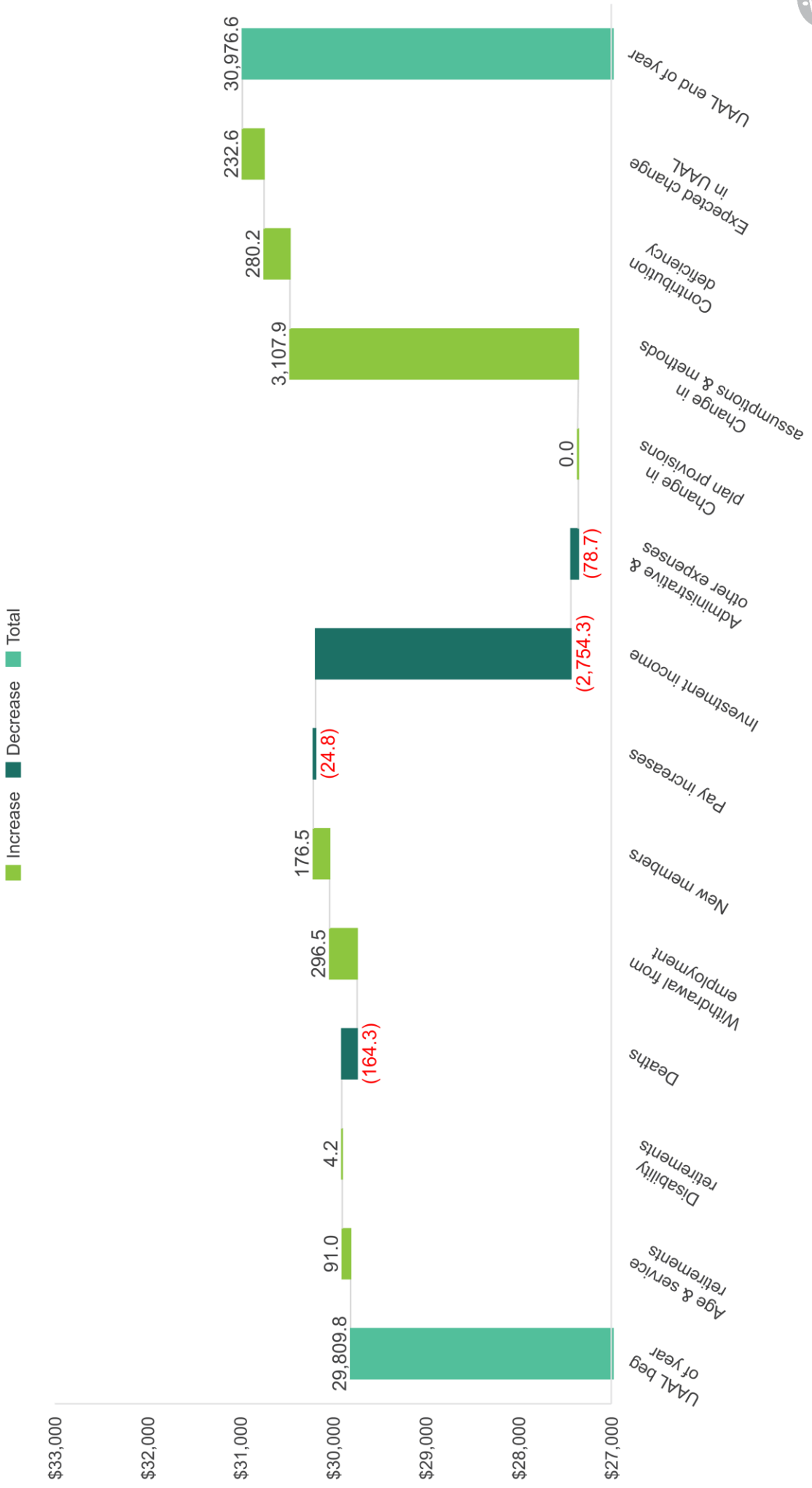
» Recent Board Action

- Adopted new assumptions
 - ✓ Mortality tables
 - ✓ Salary scale
 - ✓ Headcount growth



Reconciliation of UAAL

As of December 31, 2020



Membership – Active Pension

Item	State		Local		Denver	
	Division General	State Division Troopers	School Division	Local Government Division	Judicial Division	Public Schools Division
December 31, 2020:						
Number	52,152	1,491	119,421	12,743	344	14,693
Average age	45.6	39.0	44.7	44.7	54.6	41.0
Average service	9.1	7.8	9.1	7.7	12.7	7.2
Average payroll	\$56,950	\$79,896	\$43,092	\$54,713	\$159,244	\$52,498
December 31, 2019:						
Number	54,380	872	128,938	13,086	339	15,679
Average age	45.4	42.1	44.6	44.0	55.3	40.8
Average service	8.7	12.7	8.4	7.5	13.1	6.6
Average payroll	\$53,542	\$96,170	\$39,588	\$52,047	\$157,603	\$46,959
Change						
Number	-4.1%	+71.0%	-7.4%	-2.6%	+1.5%	-6.3%
Average payroll	+6.4%	-16.9%	+8.9%	+5.1%	+1.0%	+11.8%

Automatic Adjustment Provision

Item	State Division		School Division		Local Government Division		Judicial Division		Denver Public Schools Division		Total Weighted Average
1	Unfunded actuarial accrued liability as of December 31, 2020 (\$ in millions)	\$11,077.5	\$17,951.0	\$ 995.9	\$ 101.8	\$ 850.5					\$30,976.6
2	Member contribution rate	10.58%	10.50%	8.50%	12.85%	10.50%					10.47%
3	Employer contribution rate	19.44%	19.33%	12.55%	19.72%	7.69%					18.83%
4	Actuarially determined employer contribution rate	23.45%	24.54%	12.72%	15.56%	9.25%					23.32%
5	Direct distribution rate										2.13%
6	Blended total contribution rate: 2 + 3 + 5										31.43%
7	Blended total required contribution: 2 + 4										33.79%
8	Ratio of blended total contribution rate to blended total required contribution: 6 ÷ 7										93.02%

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

» As of December 31, 2020, this ratio is equal to 93.02%

FUNDED STATUS

PROJECTED YEARS TO REACH FULL FUNDING
AFTER THE AUTOMATIC ADJUSTMENT PROVISION
TAKES EFFECT

SCHOOL DIVISION
22 YEARS



STATE DIVISION
20 YEARS



LOCAL GOVERNMENT DIVISION
8 YEARS



JUDICIAL DIVISION
7 YEARS



DENVER PUBLIC
SCHOOLS DIVISION
7 YEARS



2020 Financial Status



PERA's Investment Program



INTERNAL AND EXTERNAL MANAGEMENT EXPENSES

\$189.5 million



ASSETS MANAGED IN-HOUSE BY PERA STAFF

63%



SAVINGS IN 2020 DUE TO INTERNAL INVESTMENT MANAGEMENT

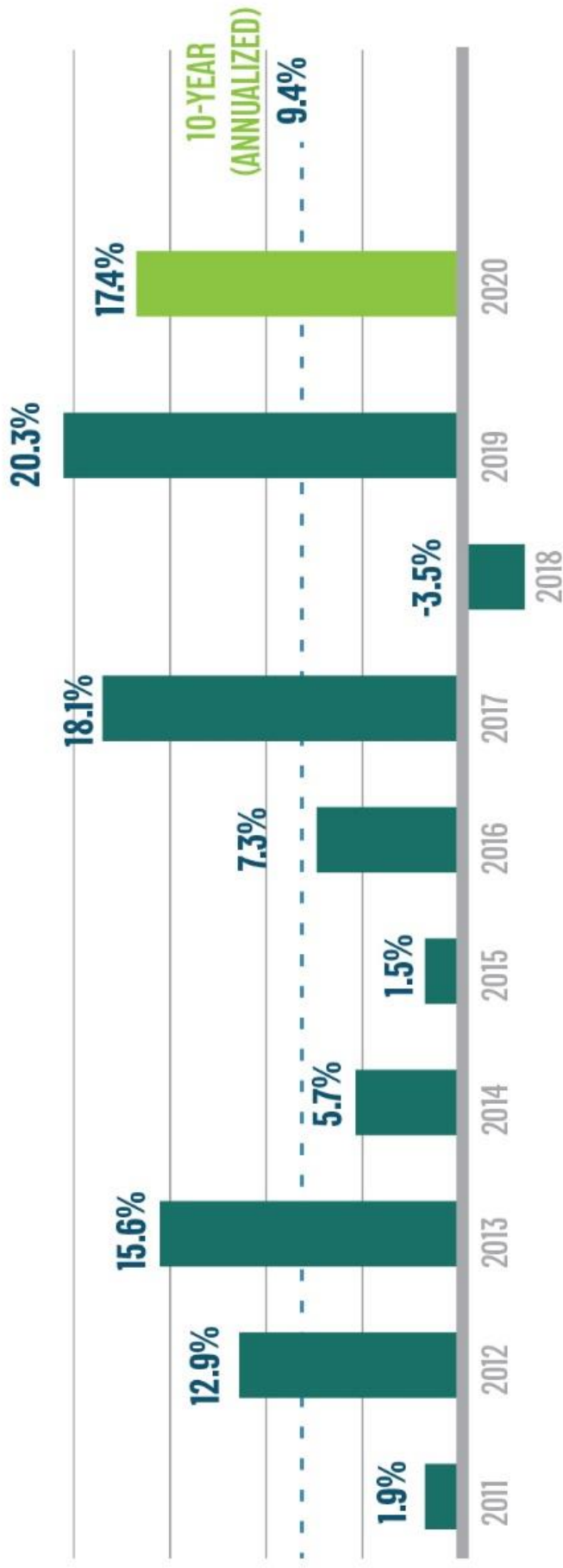
\$60 million



BASIS POINTS OF TOTAL ASSETS SPENT ON MANAGEMENT

32.3

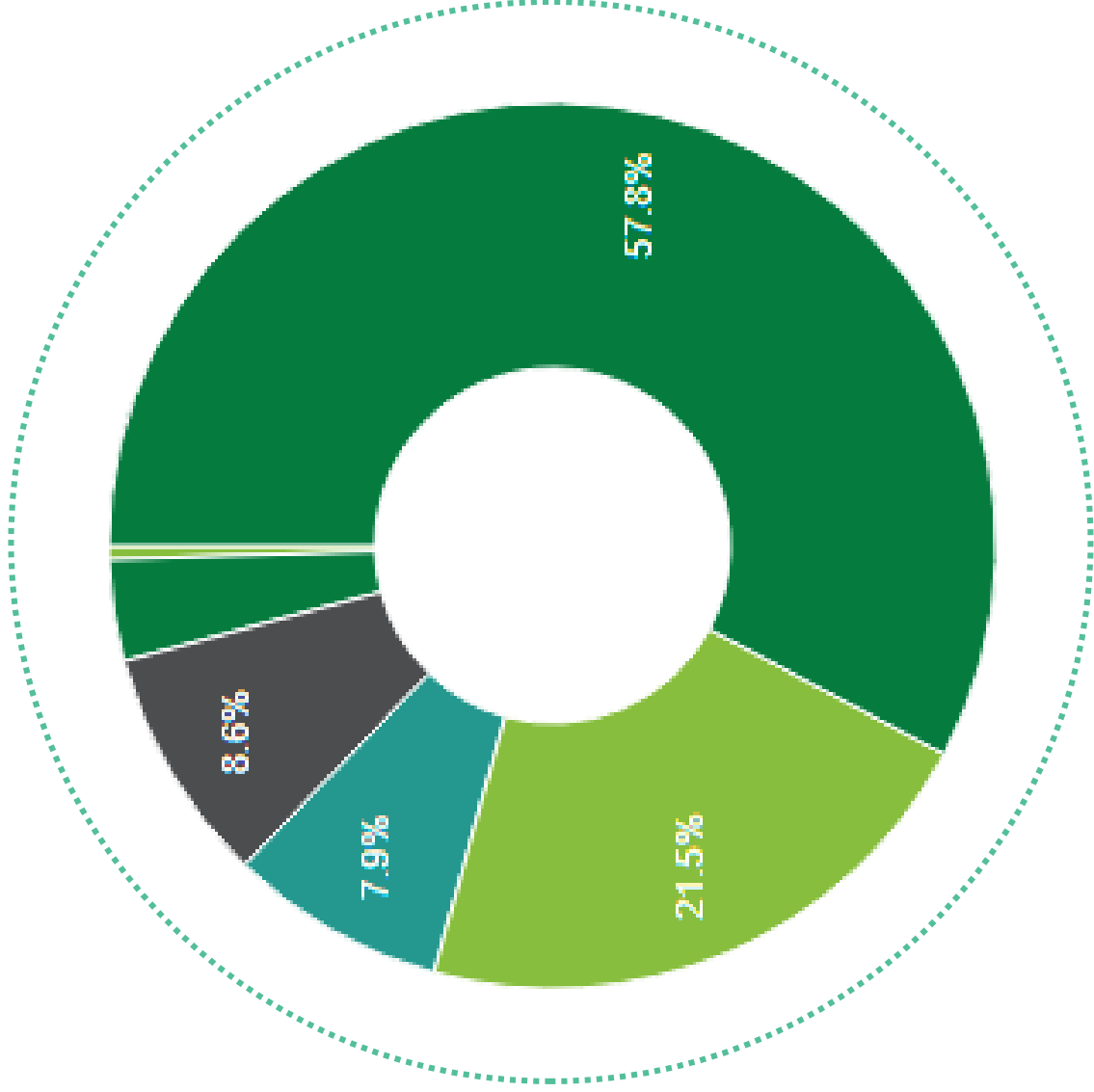
RATE OF RETURN OVER 10 YEARS (NET-OF-FEES)



2020 Investment Performance

PERA's Asset Allocation

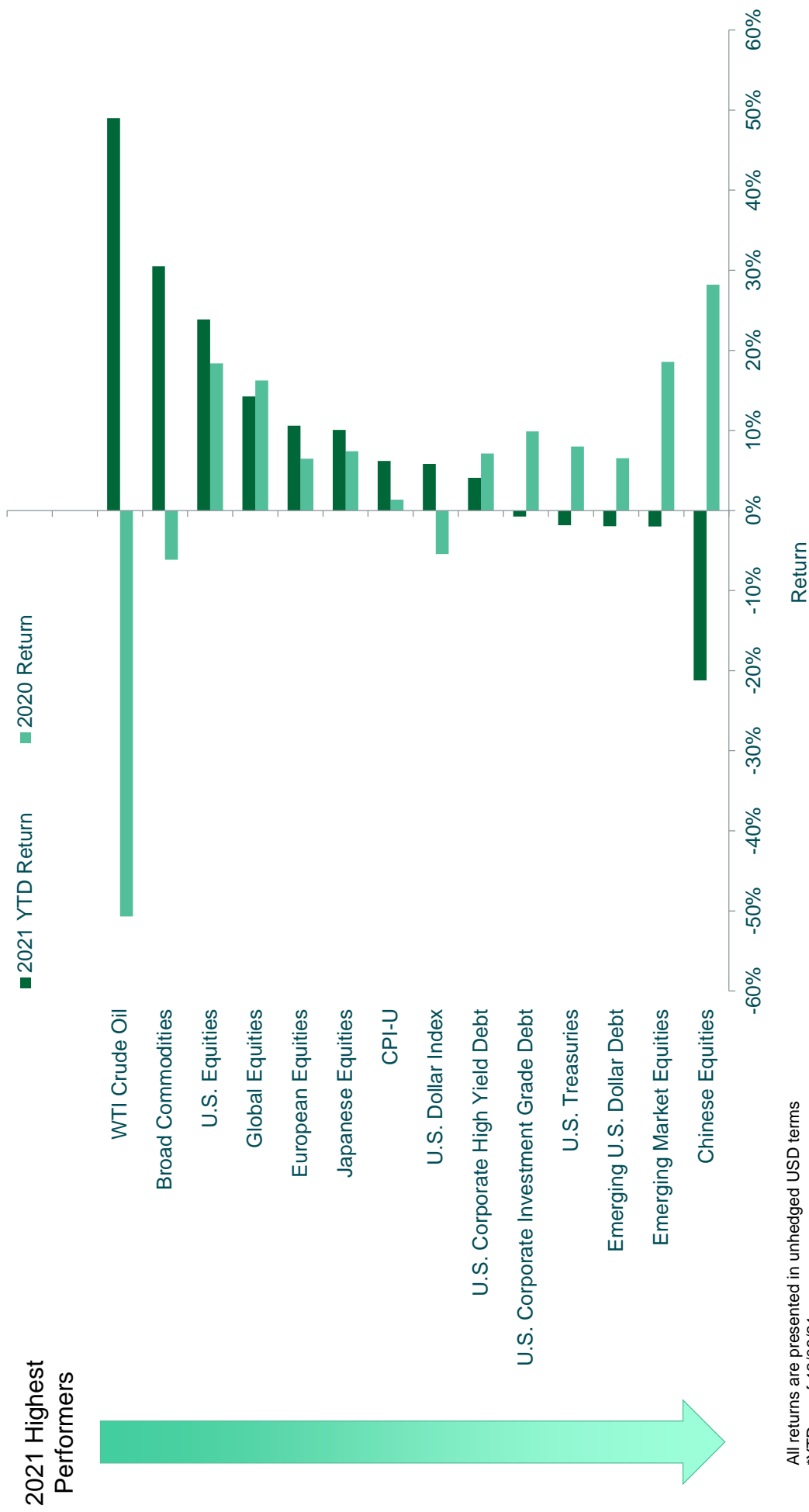
As of December 31,
2020



- Global Equity 57.8%
- Fixed Income 21.5%
- Private Equity 7.9%
- Real Estate 8.6%
- Alternatives 3.7%
- Cash 0.5%

Market Performance: 2021 YTD* vs. 2020 Calendar Year

“Risk assets” moving higher YTD with commodities and oil reversing course from last year



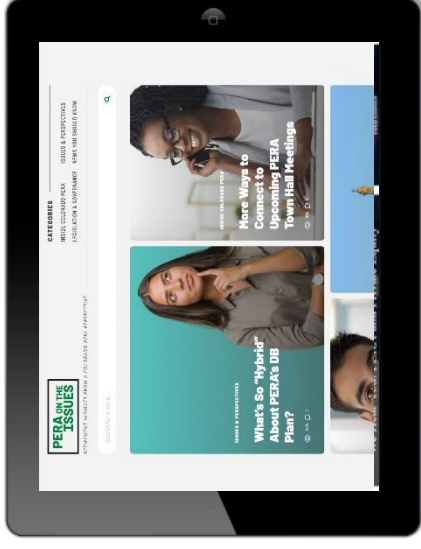
All returns are presented in unhedged USD terms

*YTD as of 12/06/21

**CPI-U as of 10/31/21

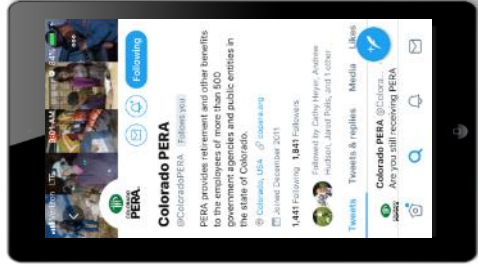
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