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An integrated vision for a sustainable future

Annual Report for the  
PERAPlus 401(k)/457 and PERA DC Plans

Public Employees' Retirement Association of Colorado

*For the Year Ended December 31, 2019*





July 2020

**Dear Plan Participant:**

I am pleased to present the *Annual Report for the PERAPlus 401(k)/457 and PERA DC Plans*, collectively known as the Capital Accumulation Plans (CAPs), for the year ended December 31, 2019. Inside, you will find the financial statements and rates of return for the funds.

The *Annual Report* for the CAPs is an unaudited summary of the fiduciary net position and changes in fiduciary net position for the CAPs. CliftonLarsonAllen LLP, the independent accounting firm which conducted the annual PERA audit that includes the CAPs gave an unqualified opinion on the financial statements in Colorado PERA's 2019 *Comprehensive Annual Financial Report (CAFR)*. A copy of the *CAFR* is available on PERA's website at [www.copera.org](http://www.copera.org).



Ron Baker  
Executive Director

On December 31, 2019:

- The PERAPlus 401(k) Plan had a fiduciary net position of \$3,672,807,000 with 68,920 participant accounts.
- The PERAPlus 457 Plan had a fiduciary net position of \$989,599,000 with 18,919 participant accounts.
- The PERA DC Plan had a fiduciary net position of \$265,940,000 with 6,939 participant accounts.

Voya Institutional Plan Services, LLC (Voya) is the service provider for the PERAPlus 401(k)/457 and PERA DC Plans.

**Plan Changes**

The following changes were made to the CAPs in 2019:

- In the third quarter of 2019, quarterly statements were made available exclusively online and no longer mailed to participants.
- In the fourth quarter of 2019, the assets in the PERAdvantage 2020 Fund were transferred to the PERAdvantage Income Fund and the PERAdvantage 2020 Fund was eliminated. The PERAdvantage 2065 Fund was added in the first quarter of 2020.
- In the PERAdvantage SRI Fund, BlackRock replaced the equity allocation to Northern Trust Investments and TIAA-CREF replaced the fixed income allocation to J.P. Morgan Asset Management.
- In the PERAdvantage U.S. Small and Mid Cap Stock Fund, TimeSquare Capital Management and BlackRock were removed as managers. Dimensional Fund Advisors was retained as a manager, but the investment style changed from value to core, and a PERA managed portfolio was added. The fund began participating in securities lending.
- Fund fact sheets are now produced in-house at PERA.

*Continued on the next page*

### **PERAPlus 401(k) Plan Design**

The 401(k) Plan was established on January 1, 1985, under state law and Section 401(k) of the Internal Revenue Code (IRC) and is amended periodically. A copy of *PERA's 401(k) and Defined Contribution Plan and Trust Document* is available from PERA. Plan participation is voluntary and contributions are separate from those that PERA members make to their Defined Benefit member accounts, and the PERAPlus 457 and PERA DC Plans. Investment options in the PERAPlus 401(k) Plan are identical to those in the PERAPlus 457 and PERA DC Plans.

### **PERAPlus 457 Plan Design**

The 457 Plan was established by PERA on July 1, 2009, under state law and Section 457 of the IRC and is amended periodically. It is a continuation of the State of Colorado Deferred Compensation Plan. A copy of *The PERA Deferred Compensation Plan* document is available from PERA. Plan participation is voluntary and contributions are separate from those that PERA members make to their Defined Benefit member accounts, and the PERAPlus 401(k) and PERA DC Plans. Investment options in the PERAPlus 457 Plan are identical to those in the PERAPlus 401(k) and PERA DC Plans.

### **PERA Defined Contribution (DC) Plan Design**

PERA's DC Plan was established on January 1, 2006, under state law and Section 401(a) of the IRC, and is amended periodically. Its purpose is to offer a defined contribution alternative to the PERA Defined Benefit Plan. A copy of *PERA's 401(k) and Defined Contribution Plan and Trust Document* is available from PERA. Investment options in the PERA DC Plan are identical to those in the PERAPlus 401(k)/457 Plans. DC Plan participant contributions are separate from those that are made to the PERAPlus 401(k)/457 Plans.

### **More Information**

If you have additional questions about the PERAPlus 401(k)/457 or PERA DC Plans, call 1-800-759-7372 and select the PERAPlus/DC Plan option, or access the Plan websites through [www.copera.org](http://www.copera.org).

*Ron Baker*  
*Colorado PERA Executive Director*

## PLAN FEES

(As of March 31, 2020)

The CAPs charge an administrative flat fee of \$1.00 per month to all participants. If you participate in multiple plans, you will pay \$1.00 per month for each plan.

Participants will also pay a Plan administration asset-based fee of up to 0.03% on each underlying PERAdvantage portfolio. This fee is automatically built into the total asset-based fee as shown in the chart below. Fees reduce the investment option's rate of return (see page 5). There are no other shareholder-type fees that apply.

Fund	Total Asset-Based Fee	
	Percentage	Per \$1,000
PERAdvantage Capital Preservation Fund	0.24%	\$2.40
PERAdvantage Fixed Income Fund	0.21%	\$2.10
PERAdvantage Real Return Fund	0.20%	\$2.00
PERAdvantage SRI Fund	0.23%	\$2.30
PERAdvantage U.S. Large Cap Stock Fund	0.08%	\$0.80
PERAdvantage U.S. Small and Mid Cap Stock Fund	0.19%	\$1.90
PERAdvantage International Stock Fund	0.30%	\$3.00
PERAdvantage Target Retirement Date Funds	0.10%	\$1.00

If you have a Self-Directed Brokerage Account (SDBA), you will pay an annual \$50 Self-Directed Brokerage fee. Additional trading fees charged by TD Ameritrade may apply. There is no asset-based fee charged because PERA receives revenue sharing from TD Ameritrade. Investments with revenue sharing reduce the asset-based administrative fee by the amount of such revenue sharing.

There is a \$75 nonrefundable loan application fee for each loan you take from your PERAPlus 401(k) or PERAPlus 457 Plan account. The interest rate for loans is the prime rate as quoted in *The Wall Street Journal* on the last business day of the prior month, plus 1%.

If you enroll in the Voya Professional Management program, you will pay a fee of approximately \$4.17 per every \$10,000 in your account. Fees are proportionately lower for accounts with balances over \$100,000.

A complete fee schedule is available on the Plan websites, accessible through [www.copera.org](http://www.copera.org). Fees and expenses are only one of several factors that participants should consider when making investment decisions. The cumulative effect of fees and expenses can substantially reduce the growth of a participant's account.

## QUALIFIED DEFAULT INVESTMENT ALTERNATIVE

Plan participants who do not actively direct how their contributions are invested will have their money automatically invested in the Plan's Qualified Default Investment Alternative (QDIA), the PERAdvantage Target Retirement Date fund based on their date of birth and expected retirement at age 65 (see table below). Participants may move all or a portion of their money out of the QDIA into any other fund(s) in the Plan. They may also choose to have future contributions invested in another fund.

Fund	Date of Birth Range
PERAdvantage Income Fund	December 31, 1957, or earlier
PERAdvantage 2025 Fund	January 1, 1958–December 31, 1962
PERAdvantage 2030 Fund	January 1, 1963–December 31, 1967
PERAdvantage 2035 Fund	January 1, 1968–December 31, 1972
PERAdvantage 2040 Fund	January 1, 1973–December 31, 1977
PERAdvantage 2045 Fund	January 1, 1978–December 31, 1982
PERAdvantage 2050 Fund	January 1, 1983–December 31, 1987
PERAdvantage 2055 Fund	January 1, 1988–December 31, 1992
PERAdvantage 2060 Fund	January 1, 1993–December 31, 1997
PERAdvantage 2065 Fund	January 1, 1998, or later

## **RATES OF RETURN**

The rates of return presented in this report are as of December 31, 2019, and are net of investment manager fees and asset-based Plan administrative fees. Current returns are available on the Plan websites. These funds commenced as of October 1, 2011. As of October 1, 2011, performance is calculated using net asset values (NAV). Actual historic performance prior to October 1, 2011, does not exist.

### **Simulated Performance**

The simulated performance, presented on page 5 in italics for the 10-year returns, is intended to provide an indication of how the funds may have performed in the past. The simulated performance is based on the composite performance of institutional accounts managed by the managers with investment strategies similar to those expected to be implemented by the managers in the funds or on the actual historical returns of the underlying portfolios used by the fund. To produce the simulated returns, the managers' composite returns were combined in accordance with the target asset allocation and rebalanced quarterly. Past performance, whether actual or simulated, does not guarantee future results.

### **PERAdvantage Capital Preservation Fund**

The PERAdvantage Capital Preservation Fund is a fund for which the return is fixed. The return is an annualized crediting rate that is established at the beginning of each quarter and credited to the participant's account on a daily basis. You may access the most recent crediting rate on the Plan websites. In certain extreme circumstances, there may be a limit on your ability to withdraw from this fund or you may be limited to withdrawing your funds at the lesser of book value or market value. Extreme circumstances could include, but are not limited to, fund subscription and redemption activity, a sharp decline in the market value of the fixed income investments, or a deterioration in the credit worthiness of the stable value provider.

## RATES OF RETURN *(continued)*

Fund/Benchmark	4th Quarter 2019	Year 2019	5-Year	10-Year
<b>PERAdvantage Capital Preservation Fund</b>	<b>0.6%</b>	<b>2.3%</b>	<b>2.0%</b>	<b>2.3%</b>
Hueller Stable Value Index (Equal Wtd Avg)	0.6%	2.5%	2.1%	2.2%
<b>PERAdvantage Fixed Income Fund</b>	<b>0.2%</b>	<b>9.0%</b>	<b>3.0%</b>	<b>4.0%</b>
Bloomberg Barclays U.S. Agg Bond Index	0.2%	8.7%	3.1%	3.8%
<b>PERAdvantage Real Return Fund</b>	<b>2.8%</b>	<b>12.0%</b>	<b>2.4%</b>	<b>2.9%</b>
Real Return Custom Index <sup>1</sup>	2.8%	12.2%	2.5%	3.1%
<b>PERAdvantage SRI Fund</b>	<b>5.4%</b>	<b>19.6%</b>	<b>6.5%</b>	<b>7.3%</b>
SRI Fund Custom Index <sup>2</sup>	5.3%	20.2%	6.5%	8.0%
<b>PERAdvantage U.S. Large Cap Stock Fund</b>	<b>9.7%</b>	<b>33.3%</b>	<b>11.7%</b>	<b>13.5%</b>
MSCI USA Large Cap Index <sup>3</sup>	9.4%	31.0%	11.4%	13.5%
<b>PERAdvantage U.S. Small and Mid Cap Stock Fund</b>	<b>6.9%</b>	<b>28.4%</b>	<b>7.7%</b>	<b>12.1%</b>
MSCI USA SMID Cap Index <sup>4</sup>	7.5%	28.5%	9.1%	12.7%
<b>PERAdvantage International Stock Fund</b>	<b>11.2%</b>	<b>24.5%</b>	<b>5.9%</b>	<b>6.4%</b>
MSCI ACWI ex-USA Index	8.9%	21.5%	5.5%	5.0%
<b>PERAdvantage Income Fund</b>	<b>3.6%</b>	<b>15.6%</b>	<b>5.1%</b>	<b>6.0%</b>
BlackRock LifePath® Retirement Index	3.6%	15.6%	5.2%	6.1%
<b>PERAdvantage 2025 Fund</b>	<b>4.8%</b>	<b>18.6%</b>	<b>6.2%</b>	<b>7.3%</b>
BlackRock LifePath® 2025 Index	4.8%	18.5%	6.3%	7.5%
<b>PERAdvantage 2030 Fund</b>	<b>5.9%</b>	<b>20.8%</b>	<b>6.8%</b>	<b>7.9%</b>
BlackRock LifePath® 2030 Index	5.9%	20.7%	6.9%	8.0%
<b>PERAdvantage 2035 Fund</b>	<b>6.9%</b>	<b>22.8%</b>	<b>7.4%</b>	<b>8.4%</b>
BlackRock LifePath® 2035 Index	6.9%	22.7%	7.4%	8.5%
<b>PERAdvantage 2040 Fund</b>	<b>7.8%</b>	<b>24.7%</b>	<b>7.9%</b>	<b>8.9%</b>
BlackRock LifePath® 2040 Index	7.8%	24.6%	7.9%	9.0%
<b>PERAdvantage 2045 Fund</b>	<b>8.4%</b>	<b>26.0%</b>	<b>8.2%</b>	<b>9.2%</b>
BlackRock LifePath® 2045 Index	8.4%	25.9%	8.2%	9.3%
<b>PERAdvantage 2050 Fund</b>	<b>8.7%</b>	<b>26.6%</b>	<b>8.4%</b>	<b>9.5%</b>
BlackRock LifePath® 2050 Index	8.7%	26.5%	8.3%	9.5%
<b>PERAdvantage 2055 Fund</b>	<b>8.7%</b>	<b>26.6%</b>	<b>8.4%</b>	<b>N/A</b>
BlackRock LifePath® 2055 Index	8.7%	26.6%	8.3%	9.7%
<b>PERAdvantage 2060 Fund</b>	<b>8.7%</b>	<b>26.6%</b>	<b>8.3%</b>	<b>N/A</b>
BlackRock LifePath® 2060 Index	8.7%	26.6%	8.3%	N/A

Performance is net of management and administrative fees. Performance is calculated using time-weighted net asset values (NAV). All performance is calculated by RVK, Inc.

<sup>1</sup> Index consists of 70% State Street Real Asset Strategy DC Index (25% Bloomberg Roll Select Commodity Index, 25% S&P Global LargeMidCap Commodity and Resources Index, 10% S&P Global Infrastructure Index, 15% Dow Jones U.S. Select REIT Index, 25% Bloomberg Barclays U.S. TIPS Index)/30% Bloomberg Barclays U.S. TIPS Index.

<sup>2</sup> Prior to October 2019, the SRI Custom Index consisted of 60% MSCI World ESG Leaders Index (Net) and 40% Bloomberg Barclays U.S. Government Bond Index. After October 2019, the SRI Custom Index consists of 60% MSCI ACW ESG Focus Index (Net) and 40% Bloomberg Barclays U.S. Government Bond Index.

<sup>3</sup> MSCI USA Large Cap Index represents the Russell 1000 Index through December 31, 2018, and the MSCI USA Large Cap Index from January 1, 2019, forward.

<sup>4</sup> MSCI USA SMID Cap Index represents the Russell 2500 Index through December 31, 2018, and the MSCI USA Small Cap Index from January 1, 2019, forward.

Note: The 10-year returns in italics reflect simulated performance.

## STATEMENTS OF FIDUCIARY NET POSITION

As of December 31, 2019 (Unaudited)

(Dollars in Thousands)

### ASSETS

Investments, at fair value	401(k) Plan	457 Plan	DC Plan
PERAdvantage Capital Preservation Fund	\$279,117	\$156,289	\$12,279
PERAdvantage Fixed Income Fund	297,757	81,783	12,179
PERAdvantage Real Return Fund	18,361	7,454	1,434
PERAdvantage Socially Responsible Investment (SRI) Fund	18,994	6,831	1,401
PERAdvantage U.S. Large Cap Stock Fund	1,572,591	250,832	48,498
PERAdvantage U.S. Small and Mid Cap Stock Fund	199,670	120,547	24,881
PERAdvantage International Stock Fund	305,227	103,117	22,751
PERAdvantage Income Fund	241,486	57,015	14,376
PERAdvantage 2025 Fund	161,931	43,077	10,353
PERAdvantage 2030 Fund	135,174	32,285	13,531
PERAdvantage 2035 Fund	117,716	31,720	13,538
PERAdvantage 2040 Fund	85,155	24,002	16,827
PERAdvantage 2045 Fund	57,636	14,548	25,478
PERAdvantage 2050 Fund	40,561	9,275	20,918
PERAdvantage 2055 Fund	24,633	5,271	12,562
PERAdvantage 2060 Fund	8,243	3,643	3,029
TD Ameritrade Self-Directed Brokerage Account	34,361	24,312	5,566
<b>Total investments, at fair value</b>	<b>3,598,613</b>	<b>972,001</b>	<b>259,601</b>
<b>Other plan assets</b>			
Cash and short-term investments	10,302	1,674	4,143
Interest receivable	33	5	7
Benefit receivable	6,671	4,356	2,427
Participant loans receivable	58,257	11,902	—
<b>Total other plan assets</b>	<b>75,263</b>	<b>17,937</b>	<b>6,577</b>
<b>Total assets</b>	<b>3,673,876</b>	<b>989,938</b>	<b>266,178</b>
<b>LIABILITIES</b>			
Amount due to combined investment fund	(493)	(169)	(67)
Accounts payable	(129)	(54)	(32)
Advance deposits	(447)	(116)	(139)
<b>Total liabilities</b>	<b>(1,069)</b>	<b>(339)</b>	<b>(238)</b>
<b>Fiduciary net position restricted for defined contribution pension plans, and held in trust for deferred compensation benefits</b>	<b>\$3,672,807</b>	<b>\$989,599</b>	<b>\$265,940</b>



## STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

For the Year Ended December 31, 2019 (Unaudited)

(Dollars in Thousands)

ADDITIONS	401(k) Plan	457 Plan	DC Plan
<b>Contributions</b>			
Employers	\$5,701	\$32	\$15,184
Members	140,519	64,151	12,967
<b>Total contributions</b>	<b>146,220</b>	<b>64,183</b>	<b>28,151</b>
<b>Investment income adjusted for fair value appreciation or (depreciation)</b>			
PERAdvantage Capital Preservation Fund	6,534	3,678	276
PERAdvantage Fixed Income Fund	23,834	6,325	923
PERAdvantage Real Return Fund	1,962	762	140
PERAdvantage SRI Fund	3,093	1,071	201
PERAdvantage U.S. Large Cap Stock Fund	409,615	63,508	12,103
PERAdvantage U.S. Small and Mid Cap Stock Fund	45,824	27,875	5,781
PERAdvantage International Stock Fund	60,483	20,446	4,396
PERAdvantage Income Fund	19,555	4,336	1,011
PERAdvantage 2020 Fund	15,005	3,675	1,032
PERAdvantage 2025 Fund	24,081	6,406	1,600
PERAdvantage 2030 Fund	22,159	5,174	2,215
PERAdvantage 2035 Fund	21,086	5,512	2,486
PERAdvantage 2040 Fund	15,855	4,286	3,209
PERAdvantage 2045 Fund	11,088	2,714	5,102
PERAdvantage 2050 Fund	7,977	1,849	4,224
PERAdvantage 2055 Fund	4,947	1,100	2,371
PERAdvantage 2060 Fund	1,446	672	516
TD Ameritrade Self-Directed Brokerage Account	5,481	4,449	884
Short-term interest income	249	41	89
<b>Net investment income</b>	<b>\$700,274</b>	<b>\$163,879</b>	<b>\$48,559</b>
<b>Other additions</b>			
Revenue sharing	49	26	6
Participant loan interest	2,359	548	—
Miscellaneous	35	4	15
<b>Total other additions</b>	<b>2,443</b>	<b>578</b>	<b>21</b>
<b>Total additions</b>	<b>848,937</b>	<b>228,640</b>	<b>76,731</b>
<b>DEDUCTIONS</b>			
Benefits paid	(213,010)	(55,317)	(15,445)
Plan expenses	(3,592)	(1,188)	(997)
Other deductions	(1,656)	(759)	(135)
<b>Total deductions</b>	<b>(218,258)</b>	<b>(57,264)</b>	<b>(16,577)</b>
<b>Net increase/(decrease) in fiduciary net position</b>	<b>\$630,679</b>	<b>\$171,376</b>	<b>\$60,154</b>

## ANALYSIS OF PLAN ADMINISTRATIVE INCOME/(EXPENSE)

For the Year Ended December 31, 2019 (Unaudited)

(Dollars in Thousands)

	401(k) Plan	457 Plan	DC Plan
<b>Plan income</b>			
Administrative fees	\$2,583	\$640	\$178
Loan and other fees	159	57	9
Short-term interest income from operations	249	41	89
Revenue sharing	49	26	6
Forfeitures	—	—	1,130
<b>Total plan income</b>	<b>3,040</b>	<b>764</b>	<b>1,412</b>
<b>Plan expense</b>			
Consulting and Subscription fees	(171)	(46)	(12)
Recordkeeping fees	(1,007)	(493)	(346)
Custodial fees	(187)	(50)	(13)
PERA administrative expense	(2,227)	(599)	(626)
<b>Total plan expense</b>	<b>(3,592)</b>	<b>(1,188)</b>	<b>(997)</b>
<b>Net plan administrative income/(expense)</b>	<b>(\$552)</b>	<b>(\$424)</b>	<b>\$415</b>

## REVIEWING YOUR INVESTMENTS

You may review or change your investment mix by calling 1-800-759-7372 and selecting the PERAPlus/DC Plan option or by accessing your account online. To access your account online, go to [www.copera.org](http://www.copera.org) and click the "Member/Retiree Login" button. After you enter your User ID and password and gain access to your account, click on either "PERAPlus 401(k) Account Access," "PERAPlus 457 Account Access," or "PERA DC Plan Account Access" on the top of the page or under the "Benefit Programs" menu. Once on the Plan's website, you may generate a statement, which will show your Personal Investment Performance and the funds in which you are invested.

To help you better understand the investment options available to you, this *Annual Report* includes the fund fact sheets (beginning on page 9) as of December 31, 2019, for all funds currently available. Current fund fact sheets can be found on the Plan websites. Disclosure information applicable to all PERA Advantage funds is found on page 25. Risk definitions can be found on the Plan websites.

## SELF-DIRECTED BROKERAGE ACCOUNT

The Self-Directed Brokerage Account (SDBA) allows you to select from numerous mutual funds and/or other types of securities, such as stocks and bonds, for an additional fee (see page 3). This *Annual Report* does not include rates of return on the investments available to participants using the SDBA with TD Ameritrade. More information can be found on the Plan websites.

# PERAdvantage Capital Preservation Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
Hueler Stable Value Index	Low	10/1/2011	\$447.8	0.03%	0.21%	0.24%

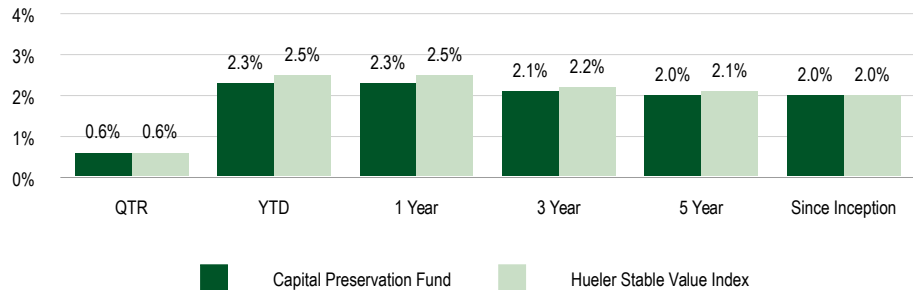
4Q

2019

### Investment Objective & Strategy

The fund seeks to provide consistent investment income with a stable net asset value primarily by investing in a portfolio of high-quality, medium-term fixed income securities. This fund invests in securities issued by the U.S. Government or one of its agencies, including agency mortgage bonds, as well as high-grade corporate bonds. Since the underlying investments fluctuate in market value, the portfolio is paired with an insurance contract to provide a more stable return.

### Performance as of 12/31/2019



### Principal Risks

Loss of Money, Not FDIC Insured, Active Management, Suitability, Issuer, Nondiversification, U.S. Government Obligations, Mortgage-Backed and Asset-Backed Securities, Fixed Income Securities

### Annual Returns

	2019	2018	2017	2016	2015
Capital Preservation Fund	2.3%	2.0%	1.9%	1.9%	1.9%
Hueler Stable Value Index	2.5%	2.2%	2.0%	1.8%	1.8%

### Fund Information

#### Subadvisor

Subadvisor	Target Allocation
Great West Stable Value	100%

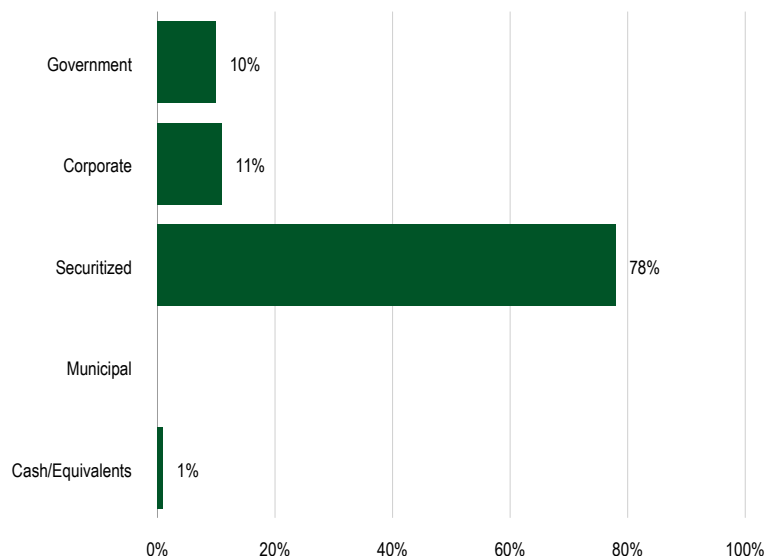
#### Portfolio Metrics

Avg Eff Duration	2.91
Avg Eff Maturity	3.83
Avg Credit Quality	AA+
Avg Wtd Coupon	2.91
Avg Wtd Price	102.4

#### Credit Quality

AAA	14.8%
AA	75.7%
A	9.4%
BBB	0.1%
High Yield	0.0%

#### Sectors



\*As of previous quarter end

# PERAdvantage Fixed Income Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BB Barclays US Agg Bond Idx	Low	10/1/2011	\$391.8	0.03%	0.18%	0.21%

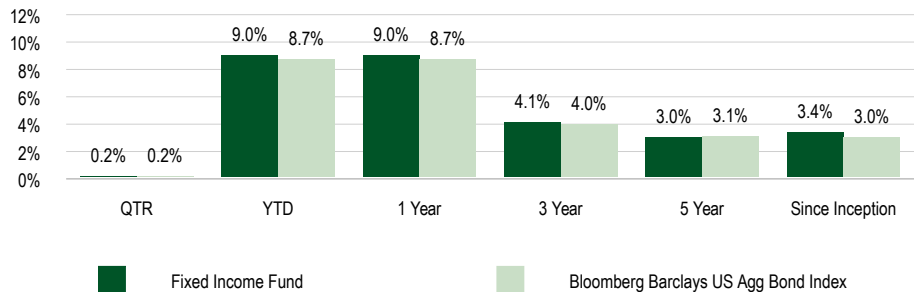
**4Q**

**2019**

### Investment Objective & Strategy

The fund seeks to generate income, preserve capital, and provide long-term capital appreciation by investing in a diversified portfolio of fixed income instruments. The fund primarily invests in investment grade debt securities, but may invest a portion of its assets in high-yield securities. The fund may invest in derivative instruments or in mortgage- or asset-backed securities. The fund combines active and passive management.

### Performance as of 12/31/2019



### Principal Risks

Loss of Money, Not FDIC Insured, Active Management, Index Correlation/Tracking Error, Suitability, Multimanager, U.S. Government Obligations, Mortgage-Backed and Asset-Backed Securities, Fixed Income Securities

### Annual Returns

	2019	2018	2017	2016	2015
<b>Fixed Income Fund</b>	9.0%	(0.2)%	3.7%	2.6%	0.3%
<b>BB Barclays US Agg Bond Index</b>	8.7%	0.0%	3.5%	2.7%	0.6%

### Fund Information

#### Subadvisors

Subadvisor	Target Allocation
Wells Fargo Asset Management	50%
BlackRock Core Alpha	25%
BlackRock Index	25%

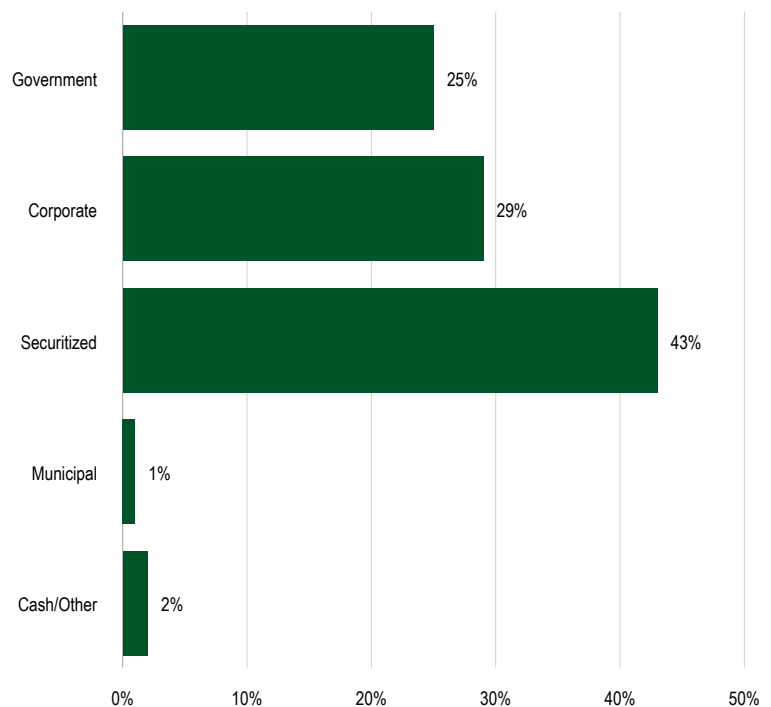
#### Portfolio Metrics

Avg Eff Duration	5.8
Avg Eff Maturity	7.3
Avg Credit Quality	AA
Avg Wtd Coupon	3.4
Avg Wtd Price	106.1
Total # of Bond Holdings	10,839

#### Credit Quality

AAA	66.1%
AA	3.3%
A	12.2%
BBB	17.1%
High Yield	1.3%
Not Rated	0.2%

#### Sectors



\*As of previous quarter end

# PERAdvantage Real Return Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
Custom Index**	Moderate	10/1/2011	\$27.2	0.03%	0.17%	0.20%

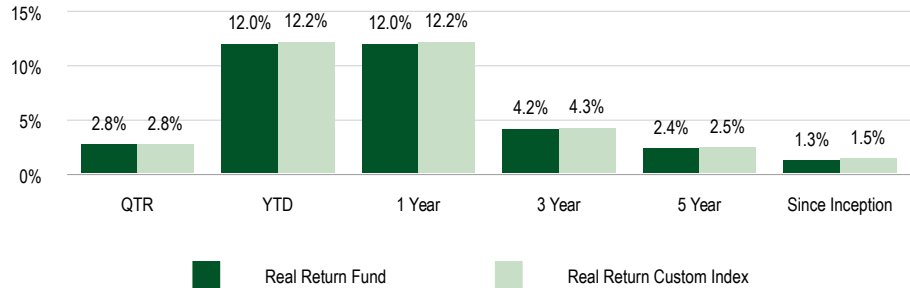
4Q

2019

## Investment Objective & Strategy

The fund seeks to provide broad exposure to real assets and Treasury Inflation Protected Securities (TIPS) and to produce a return over a full market cycle that exceeds the rate of inflation. The fund invests in U.S. TIPS, Real Estate Investment Trusts (REITs), commodities, and global natural resources and infrastructure stocks.

## Performance as of 12/31/2019



## Principal Risks

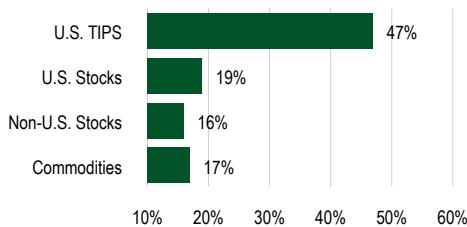
Loss of Money, Not FDIC Insured, Active Management, Index Correlation/Tracking Error, Suitability, Multimanager, Equity Securities, Foreign Securities, Inflation-Protected Securities, Commodity, Real Estate

## Annual Returns

	2019	2018	2017	2016	2015
Real Return Fund	12.0%	(5.5)%	6.8%	11.1%	(10.4)%
Real Return Custom Index**	12.2%	(5.3)%	6.9%	11.4%	(10.4)%

## Fund Information

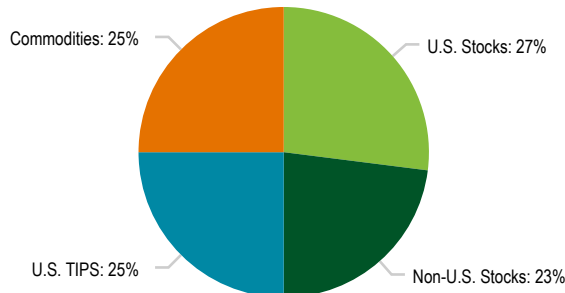
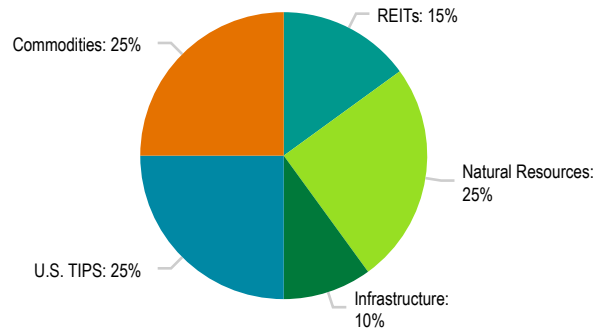
### Portfolio Analysis



Subadvisors	Target Allocation
SSgA Real Assets Strategy	70%
SSgA U.S. TIPS Index	30%

Top 10 Real Assets Holdings	% of Assets
Nutrien Ltd	1.3%
Exxon Mobil Corp	1.2%
Archer Daniels Midland Co	1.2%
Prologis Inc REIT	1.2%
Corteva Inc	1.0%
BHP Group Ltd	1.0%
Simon Property Group Inc REIT	0.9%
Chevron Corp	0.9%
U.S. TIPS 04/22	0.9%
U.S. TIPS 04/21	0.9%
Total # of Stock Holdings	375
Total # of Bond Holdings	41

### Real Assets Strategy



\*As of previous quarter end

\*\*70% State Street Real Asset Strategy DC Index (25% Bloomberg Roll Select Commodity Index, 25% S&P Global LargeMidCap Commodity and Resources Index, 10% S&P Global Infrastructure Index, 15% Dow Jones U.S. Select REIT Index, 25% Bloomberg Barclays U.S. TIPS Index) / 30% Bloomberg Barclays U.S. TIPS Index

Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
Custom Index**	Moderate	10/1/2011	\$27.2	0.02%	0.24%	0.26%

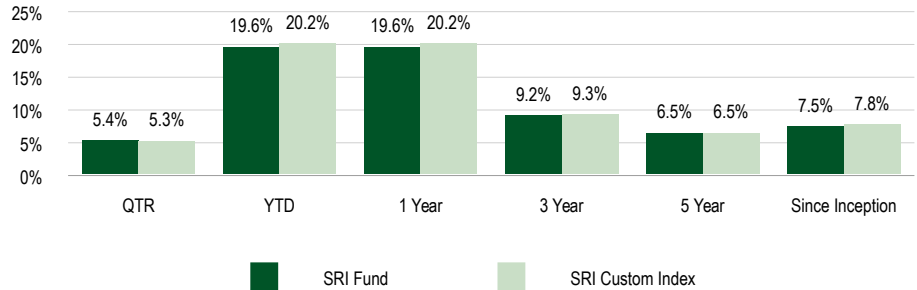
4Q

2019

### Investment Objective & Strategy

The fund seeks to invest in a portfolio of developed and emerging market stocks screened on environmental, social, and governance (ESG) factors, and fixed income securities across the investment grade that demonstrate ESG leadership. The equity portion seeks to replicate the return of the MSCI ACWI ESG Focus Index. The fixed income portion invests in U.S. dollar securities and may invest a significant portion of its assets in corporate bonds or mortgage-backed securities.

### Performance as of 12/31/2019



### Principal Risks

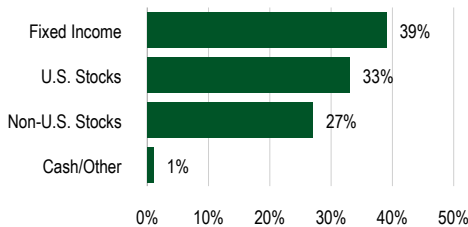
Loss of Money, Not FDIC Insured, Active Management, Index Correlation/Tracking Error, Suitability, Multimanager, Equity Securities, Foreign Securities, U.S. Government Obligations, Mortgage-Backed and Asset-Backed Securities

### Annual Returns

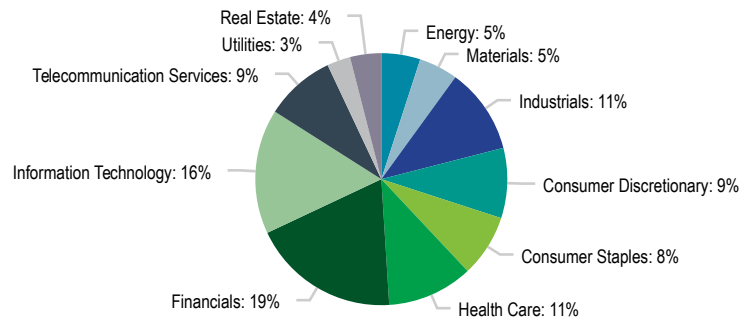
	2019	2018	2017	2016	2015
<b>SRI Fund</b>	19.6%	(4.0)%	13.4%	5.1%	0.1%
<b>SRI Custom Index**</b>	20.2%	(4.1)%	13.2%	4.9%	(0.1)%

## Fund Information

### Portfolio Analysis



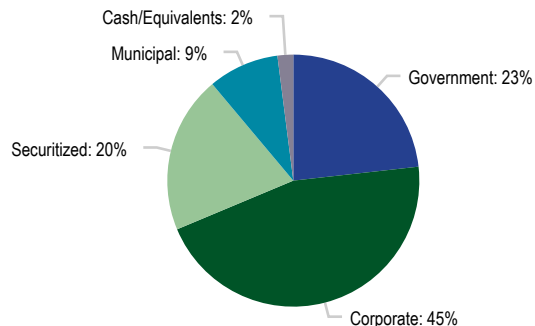
### Equity Sectors



Subadvisors	Target Allocation
BlackRock ACWI ESG Focus Index	60%
TIAA-CREF Social Choice Bond	40%

Top 10 Equity Holdings	% of Assets
Apple Inc	2.7%
Microsoft Corp	2.6%
Amazon.com Inc	1.4%
Facebook Inc A	1.0%
Alphabet Inc Class C	0.9%
Alphabet Inc A	0.8%
Johnson & Johnson	0.8%
Procter and Gamble Co	0.8%
Alibaba Group Holding Ltd ADR	0.8%
Visa Inc Class A	0.7%
<b>Total # of Stock Holdings</b>	<b>524</b>
<b>Total # of Bond Holdings</b>	<b>967</b>

### Fixed Income Sectors



\*As of previous quarter end  
 \*\*60% MSCI ACWI ESG Focus Index / 40% Bloomberg Barclays U.S. Government Bond Index

# PERAdvantage U.S. Large Cap Stock Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin. Fee*	Inv. Mgmt. Fee*	Total Fee*
MSCI USA Large Cap Index	High	10/1/2011	\$1,872.2	0.03%	0.05%	0.08%

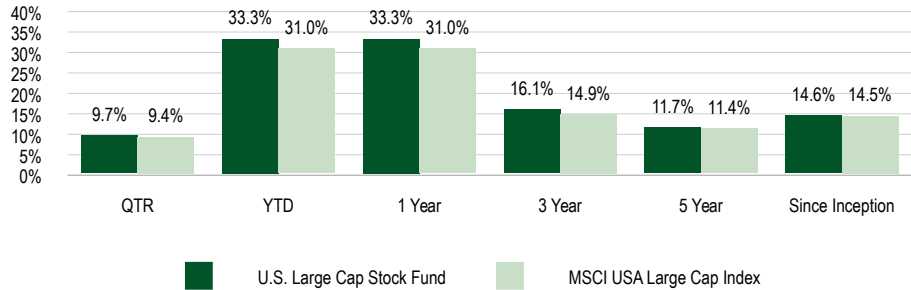
4Q

2019

## Investment Objective & Strategy

The fund seeks to provide long-term capital appreciation and dividend income primarily by investing in the common stock of companies located in the United States with large market capitalizations. This fund invests in a wide array of U.S. stocks with market capitalizations similar to those found in the MSCI USA Large Cap Index. The fund combines active and passive management.

## Performance as of 12/31/2019



## Principal Risks

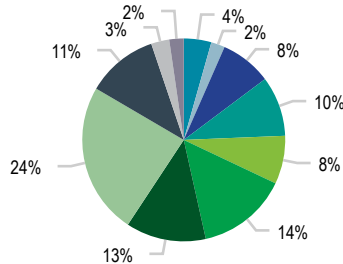
Loss of Money, Not FDIC Insured, Active Management, Index Correlation/Tracking Error, Suitability, Multimanager, Equity Securities

## Annual Returns

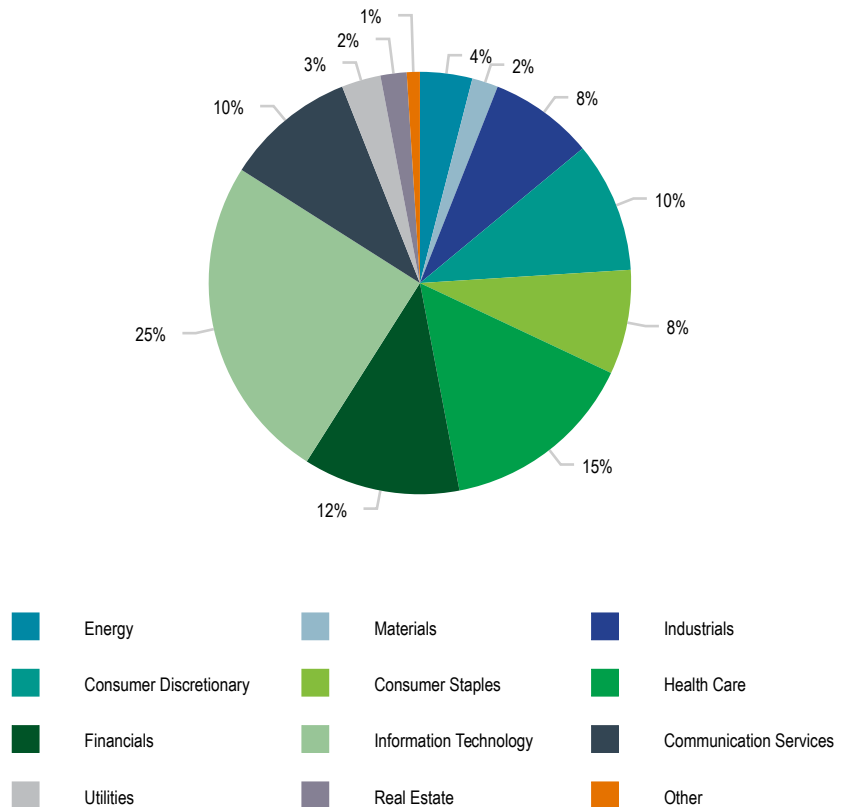
	2019	2018	2017	2016	2015
U.S. Large Cap Stock Fund	33.3%	(4.5)%	22.8%	10.1%	0.9%
MSCI USA Large Cap Index	31.0%	(4.8)%	21.7%	12.1%	0.9%

## Fund Information

### Benchmark Sectors



### Fund Sectors



Subadvisors	Target Allocation
PERA Large Cap Index	60%
PERA Large Cap Core	40%

Top 10 Holdings	% of Assets
Apple Inc	5.8%
Microsoft Corp	5.2%
Alphabet Inc	3.9%
Amazon.com Inc	3.8%
JPMorgan Chase & Co	2.4%
Facebook Inc	2.4%
Johnson & Johnson	1.8%
Visa Inc	1.7%
UnitedHealth Group Inc	1.6%
Merck & Co Inc	1.5%
Total # of Stock Holdings	303

\*As of previous quarter end

Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
MSCI USA SMID Cap Index	High	10/1/2011	\$345.3	0.03%	0.15%	0.18%

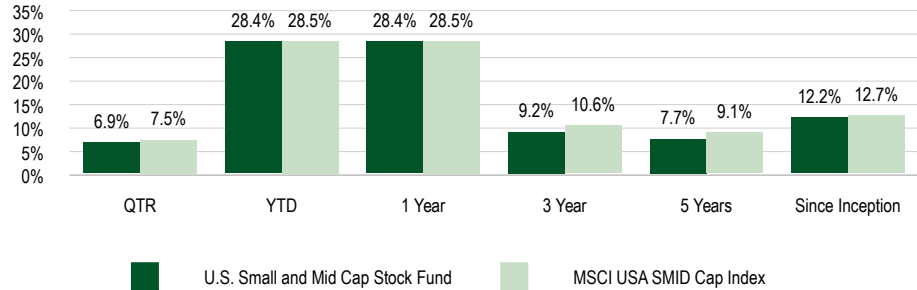
4Q

2019

### Investment Objective & Strategy

The fund seeks to provide long-term capital appreciation and dividend income primarily by investing in the common stock of companies located in the United States with small and mid-market capitalizations. This fund invests in a wide array of stocks with market capitalizations similar to those found in the MSCI USA SMID Cap Index.

### Performance as of 12/31/2019



### Principal Risks

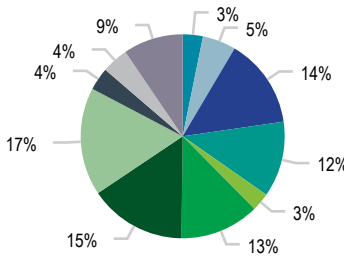
Loss of Money, Not FDIC Insured, Active Management, Index Correlation/Tracking Error, Suitability, Multimanager, Equity Securities

### Annual Returns

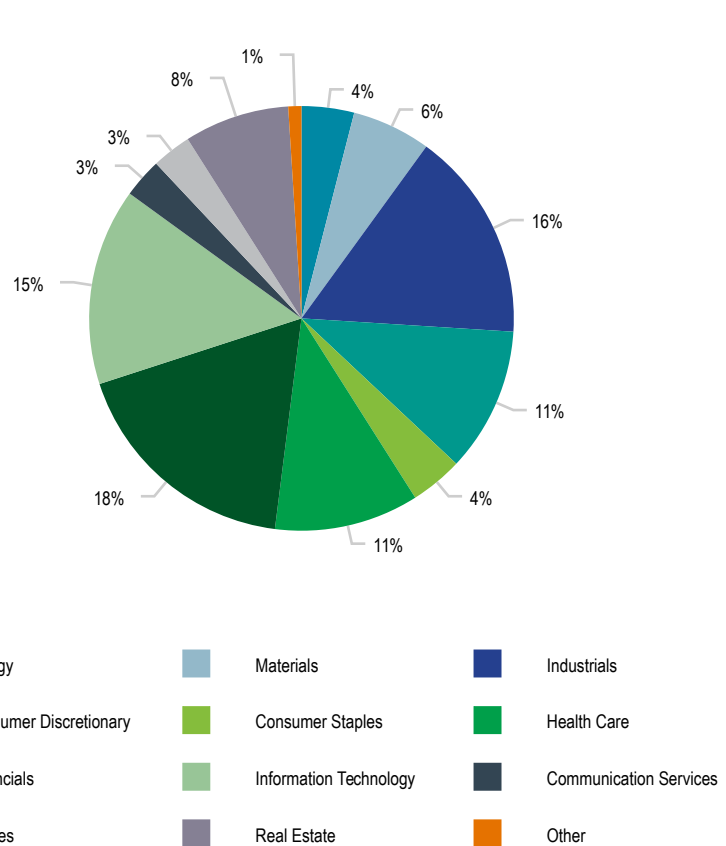
	2019	2018	2017	2016	2015
U.S. Small and Mid Cap Stock Fund	28.4%	(12.5)%	15.9%	16.7%	(4.4)%
MSCI USA SMID Cap Index	28.5%	(10.0)%	16.8%	17.6%	(2.9)%

### Fund Information

#### Benchmark Sectors



#### Fund Sectors



Subadvisors	Target Allocation
PERA Small Cap Core	50%
Dimensional Fund Advisors Mid Cap Core	50%

Top 10 Holdings	% of Assets
Community Bank System Inc	1.0%
Exponent Inc	0.9%
Terreno Realty Corp	0.9%
Barnes Group Inc	0.9%
Vail Resorts Inc	0.9%
Graco Inc	0.9%
QTS Realty Trust Inc	0.8%
Chegg Inc	0.8%
RBC Bearings Inc	0.8%
Columbia Banking System Inc	0.8%
Total # of Stock Holdings	370

\*As of previous quarter end



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
MSCI ACWI Ex-USA Index	High	10/1/2011	\$431.1	0.03%	0.27%	0.30%

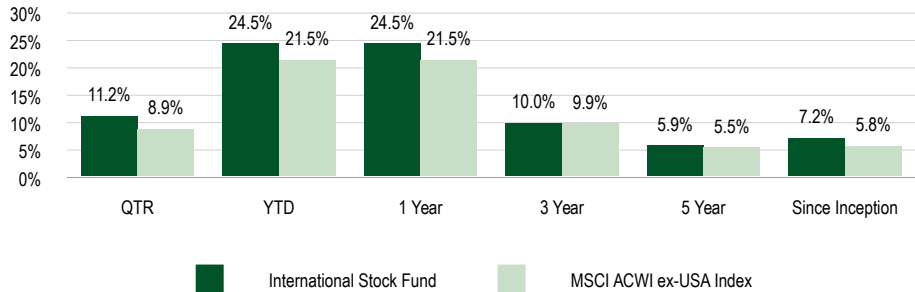
**4Q**

**2019**

### Investment Objective & Strategy

The fund seeks to provide long-term capital appreciation and dividend income primarily by investing in the common stock of companies located outside the United States. The fund invests in a wide array of international stocks similar to those found in the MSCI All Countries World Index (ACWI) ex-USA Index.

### Performance as of 12/31/2019



### Principal Risks

Loss of Money, Not FDIC Insured, Active Management, Index Correlation/Tracking Error, Suitability, Multimanager, Equity Securities, Foreign Securities

### Annual Returns

	2019	2018	2017	2016	2015
<b>International Stock Fund</b>	24.5%	(16.1)%	27.4%	6.5%	(5.8)%
<b>MSCI ACWI Ex-USA Index</b>	21.5%	(14.2)%	27.2%	4.5%	(5.7)%

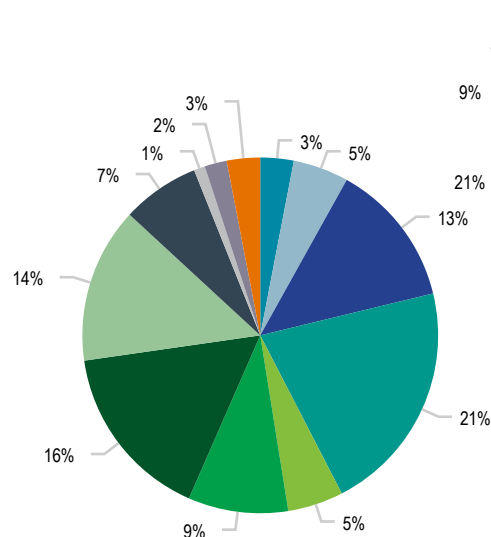
### Fund Information

Subadvisors	Target Allocation
Schroders International Alpha	60%
PERA International Multi Factor	40%

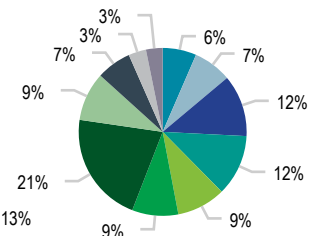
Regions	% of Assets
Europe Developed	47.0%
Emerging Markets	26.5%
Asia Pacific Developed	19.5%
Other	2.6%
United States	2.3%
North America	2.1%

Top 10 Holdings	% of Assets
Roche Holding AG	3.0%
Samsung Electronics Co Ltd	2.6%
Taiwan Semiconductor Manufacturing Co	2.5%
Alibaba Group Holding Ltd	2.4%
Nestle SA	2.0%
Schneider Electric SE	1.8%
Tencent Holdings Ltd	1.8%
AIA Group Ltd	1.8%
SAP SE	1.6%
GlaxoSmithKline PLC	1.4%
<b>Total # of Stock Holdings</b>	<b>751</b>

### Fund Sectors



### Benchmark Sectors



- Energy
- Consumer Discretionary
- Financials
- Utilities
- Materials
- Consumer Staples
- Information Technology
- Real Estate
- Industrials
- Health Care
- Communication Services
- Other

\*As of previous quarter end

# PERAdvantage Income Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BR LifePath Retirement Index	Low	10/1/2011	\$313.1	0.03%	0.07%	0.10%

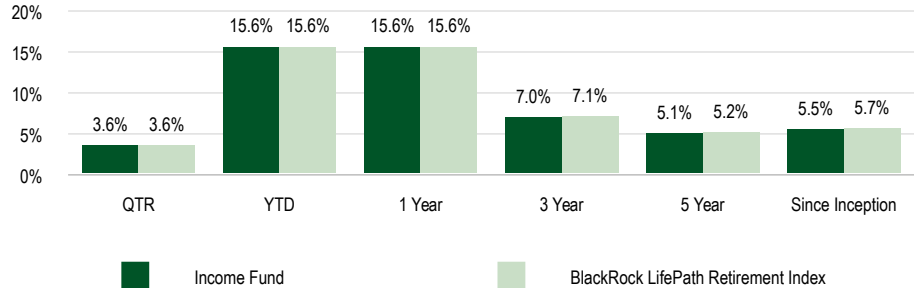
4Q

2019

### Investment Objective & Strategy

The fund seeks income, with some investment in stocks for potential capital appreciation. The fund is designed for participants who are close to, or already retired. This portfolio is designed to provide those who are withdrawing money from their plan with an appropriate blend of income and inflation protection. By investing in the fund you may capture diversified investment opportunities without having to manage multiple funds or worry with the day-to-day management of your money.

### Performance as of 12/31/2019



### Principal Risks

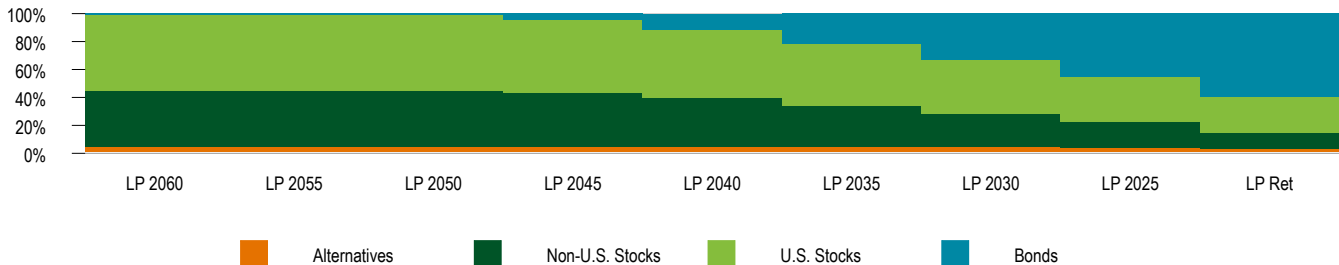
Loss of Money, Not FDIC Insured, Index Correlation/Tracking Error, Suitability, Active Strategy, Asset Allocation, Underlying Fund, Equity Securities, Foreign Securities, Fixed Income Securities, Alternative Investments

### Annual Returns

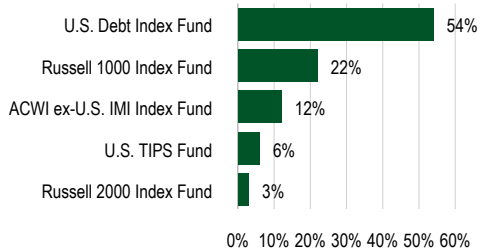
	2019	2018	2017	2016	2015
Income Fund	15.6%	(3.6)%	9.9%	6.1%	(1.4)%
BR LifePath Retirement Index	15.6%	(3.5)%	10.0%	6.2%	(1.1)%

### Fund Information

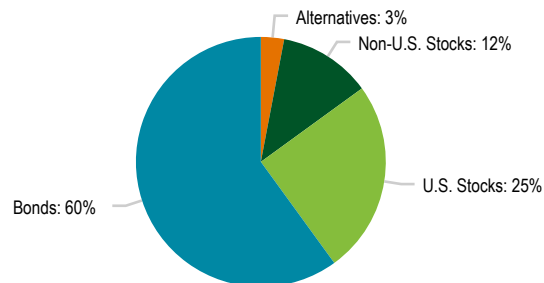
### Target Retirement Date Series Glidepath



### Top 5 Holdings



### Portfolio Analysis



### Subadvisor

### Target Allocation

BlackRock 100%

\*As of previous quarter end

# PERAdvantage 2025 Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BlackRock LifePath 2025 Index	Low	10/1/2011	\$215.4	0.03%	0.07%	0.10%

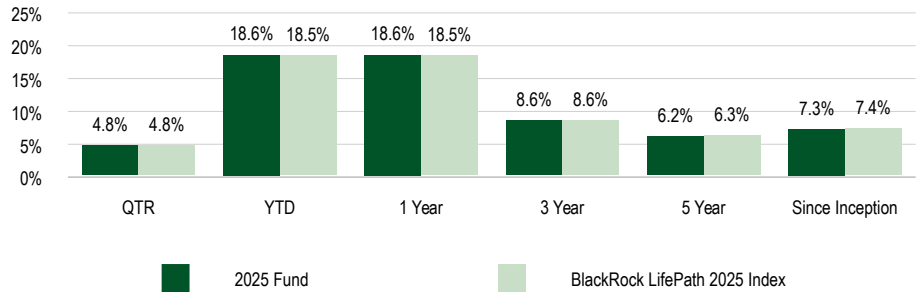
4Q

2019

### Investment Objective & Strategy

The fund seeks a combination of current income and capital appreciation, with a greater emphasis on appreciation. The fund will automatically adjust the underlying asset allocation to become more conservative over time and is designed for participants who expect to retire around 2025, at which time the fund will reach its most conservative risk level and be blended into the PERAdvantage Income Fund. By investing in a single target retirement date fund you may capture diversified investment opportunities without having to manage multiple funds.

### Performance as of 12/31/2019



### Principal Risks

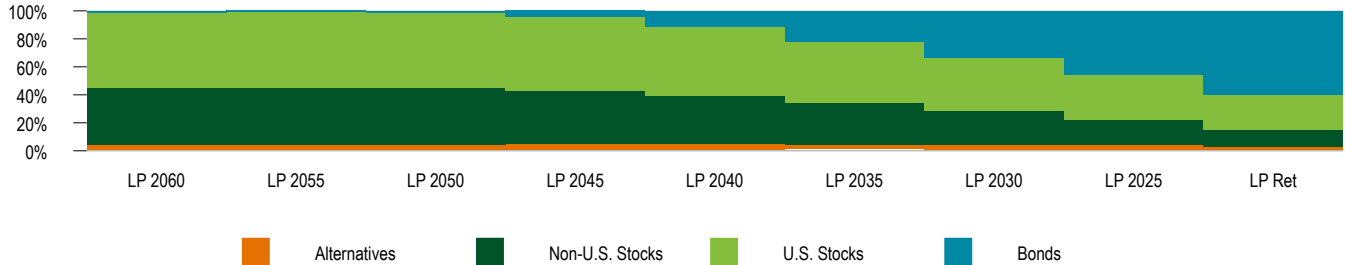
Loss of Money, Not FDIC Insured, Index Correlation/Tracking Error, Suitability, Active Strategy, Asset Allocation, Underlying Fund, Equity Securities, Foreign Securities, Fixed Income Securities, Alternative Investments

### Annual Returns

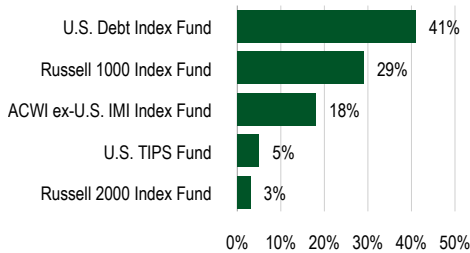
	2019	2018	2017	2016	2015
<b>2025 Fund</b>	18.6%	(4.9)%	13.7%	7.2%	(1.6)%
<b>BlackRock LifePath 2025 Index</b>	18.5%	(4.9)%	13.7%	7.2%	(1.5)%

### Fund Information

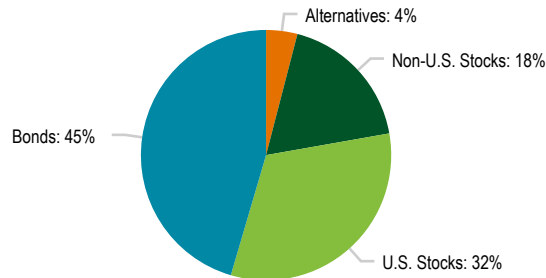
### Target Retirement Date Series Glidepath



### Top 5 Holdings



### Portfolio Analysis



### Subadvisor

BlackRock

### Target Allocation

100%

\*As of previous quarter end

# PERAdvantage 2030 Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BlackRock LifePath 2030 Index	Moderate	10/1/2011	\$181.2	0.03%	0.07%	0.10%

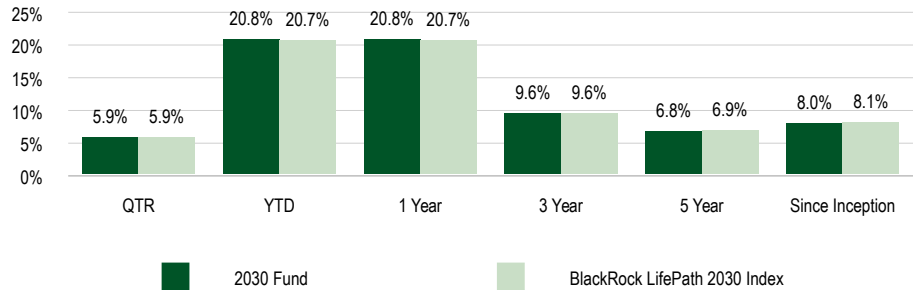
4Q

2019

### Investment Objective & Strategy

The fund seeks a combination of current income and capital appreciation, with a greater emphasis on appreciation. The fund will automatically adjust the underlying asset allocation to become more conservative over time and is designed for participants who expect to retire around 2030, at which time the fund will reach its most conservative risk level and be blended into the PERAdvantage Income Fund. By investing in a single target retirement date fund you may capture diversified investment opportunities without having to manage multiple funds.

### Performance as of 12/31/2019



### Principal Risks

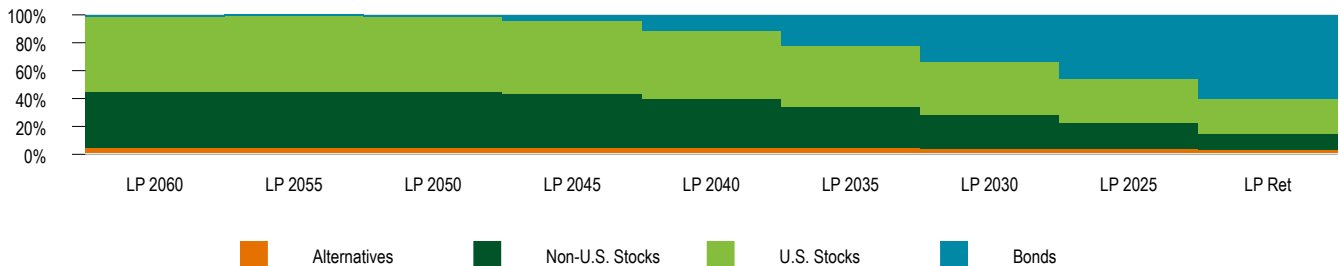
Loss of Money, Not FDIC Insured, Index Correlation/Tracking Error, Suitability, Active Strategy, Asset Allocation, Underlying Fund, Equity Securities, Foreign Securities, Fixed Income Securities, Alternative Investments

### Annual Returns

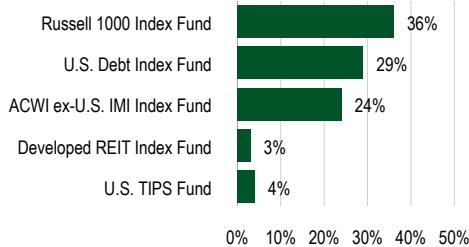
	2019	2018	2017	2016	2015
<b>2030 Fund</b>	20.8%	(5.8)%	15.6%	7.7%	(1.8)%
<b>BlackRock LifePath 2030 Index</b>	20.7%	(5.8)%	15.6%	7.6%	(1.6)%

## Fund Information

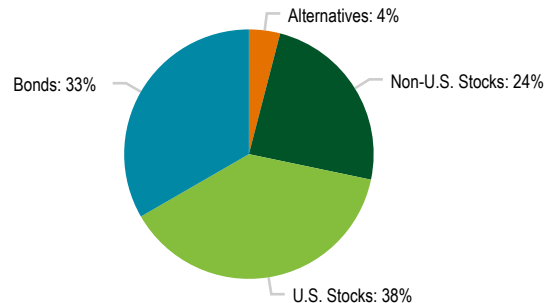
### Target Retirement Date Series Glidepath



### Top 5 Holdings



### Portfolio Analysis



### Subadvisor

BlackRock

### Target Allocation

100%

\*As of previous quarter end

# PERAdvantage 2035 Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BlackRock LifePath 2035 Index	Moderate	10/1/2011	\$162.9	0.03%	0.07%	0.10%

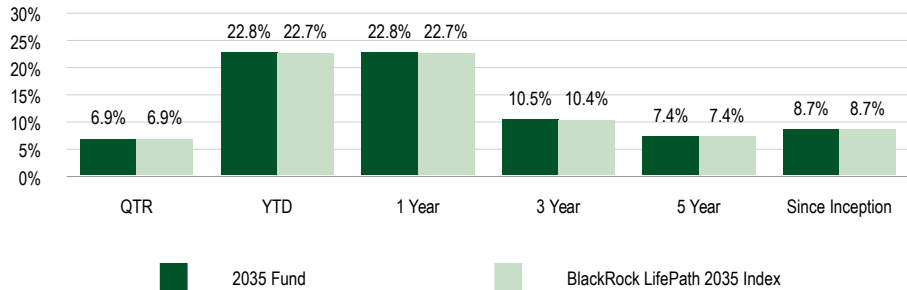
4Q

2019

### Investment Objective & Strategy

The fund seeks a combination of current income and capital appreciation, with a greater emphasis on appreciation. The fund will automatically adjust the underlying asset allocation to become more conservative over time and is designed for participants who expect to retire around 2035, at which time the fund will reach its most conservative risk level and be blended into the PERAdvantage Income Fund. By investing in a single target retirement date fund you may capture diversified investment opportunities without having to manage multiple funds.

### Performance as of 12/31/2019



### Principal Risks

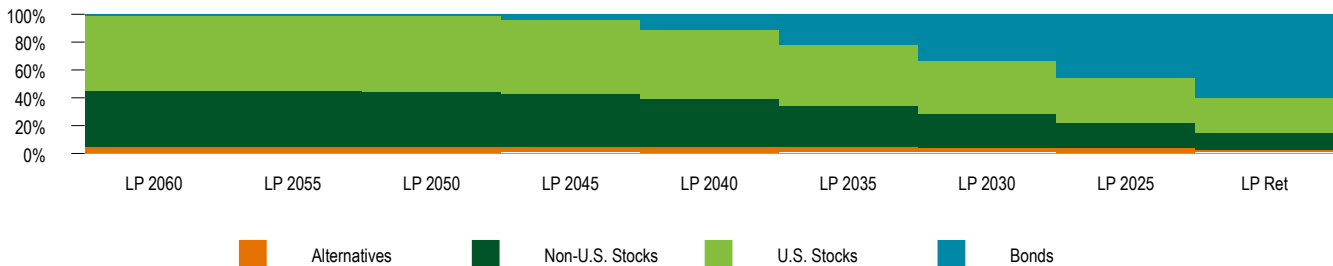
Loss of Money, Not FDIC Insured, Index Correlation/Tracking Error, Suitability, Active Strategy, Asset Allocation, Underlying Fund, Equity Securities, Foreign Securities, Fixed Income Securities, Alternative Investments

### Annual Returns

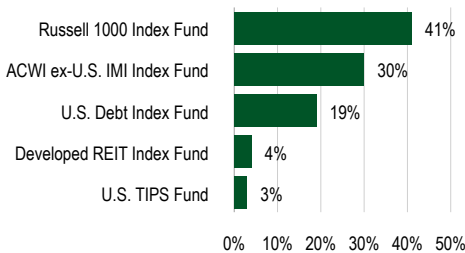
	2019	2018	2017	2016	2015
<b>2035 Fund</b>	22.8%	(6.5)%	17.5%	8.2%	(1.9)%
<b>BlackRock LifePath 2035 Index</b>	22.7%	(6.6)%	17.5%	8.1%	(1.8)%

### Fund Information

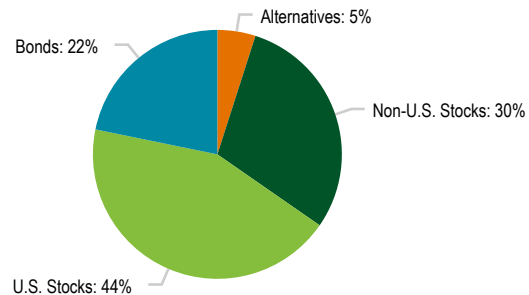
### Target Retirement Date Series Glidepath



### Top 5 Holdings



### Portfolio Analysis



### Subadvisor

BlackRock

### Target Allocation

100%

\*As of previous quarter end

Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BlackRock LifePath 2040 Index	High	10/1/2011	\$125.6	0.03%	0.07%	0.10%

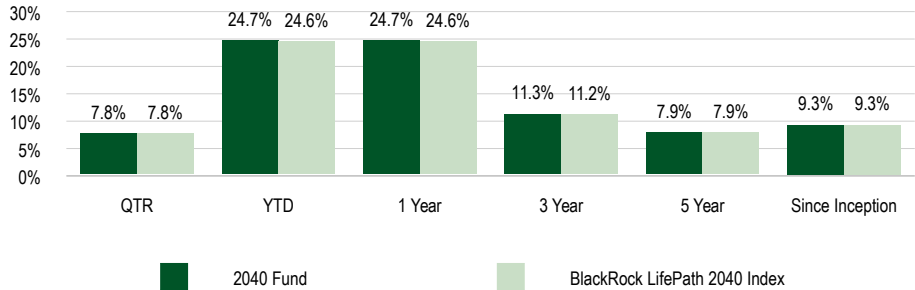
**4Q**

**2019**

### Investment Objective & Strategy

The fund seeks a combination of current income and capital appreciation, with a greater emphasis on appreciation. The fund will automatically adjust the underlying asset allocation to become more conservative over time and is designed for participants who expect to retire around 2040, at which time the fund will reach its most conservative risk level and be blended into the PERAdvantage Income Fund. By investing in a single target retirement date fund you may capture diversified investment opportunities without having to manage multiple funds.

### Performance as of 12/31/2019



### Principal Risks

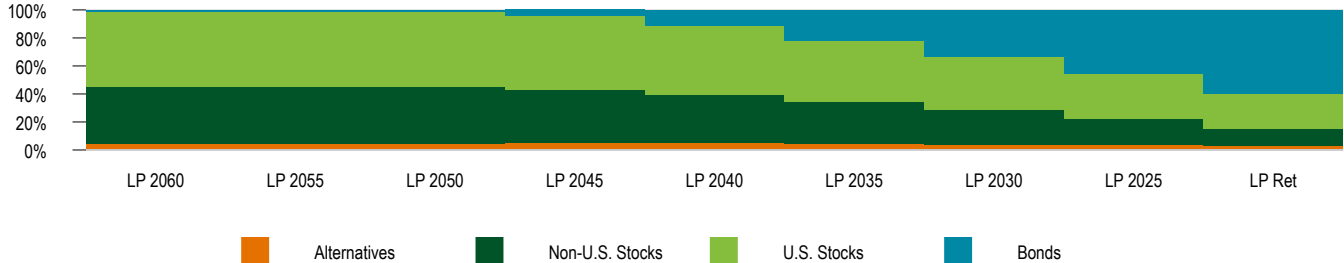
Loss of Money, Not FDIC Insured, Index Correlation/Tracking Error, Suitability, Active Strategy, Asset Allocation, Underlying Fund, Equity Securities, Foreign Securities, Fixed Income Securities, Alternative Investments

### Annual Returns

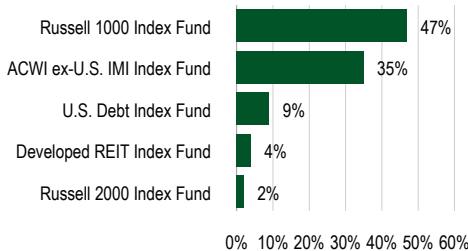
	2019	2018	2017	2016	2015
<b>2040 Fund</b>	24.7%	(7.3)%	19.2%	8.6%	(2.1)%
<b>BlackRock LifePath 2040 Index</b>	24.6%	(7.3)%	19.1%	8.4%	(2.0)%

### Fund Information

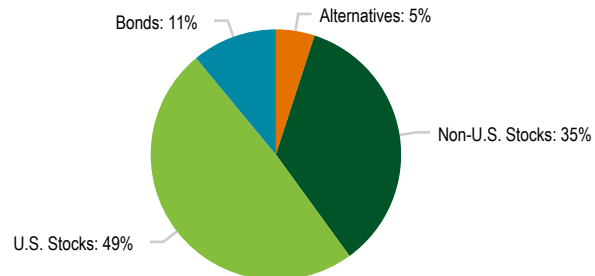
### Target Retirement Date Series Glidepath



### Top 5 Holdings



### Portfolio Analysis



### Subadvisor

BlackRock

### Target Allocation

100%

\*As of previous quarter end

Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BlackRock LifePath 2045 Index	High	10/1/2011	\$97.7	0.03%	0.07%	0.10%

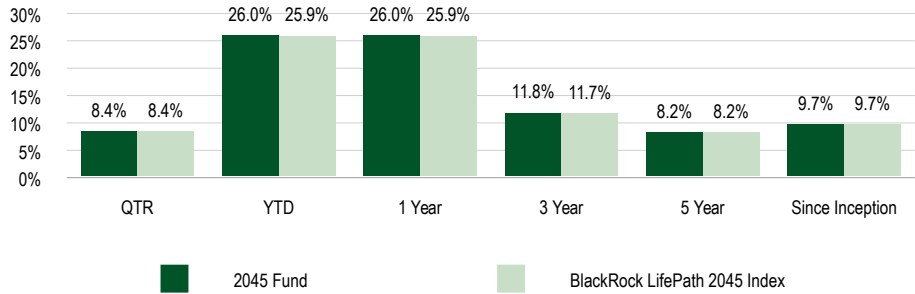
**4Q**

**2019**

### Investment Objective & Strategy

The fund seeks capital appreciation, with a minor emphasis on current income. The fund will automatically adjust the underlying asset allocation to become more conservative over time and is designed for participants who expect to retire around 2045, at which time the fund will reach its most conservative risk level and be blended into the PERAdvantage Income Fund. By investing in a single target retirement date fund you may capture diversified investment opportunities without having to manage multiple funds.

### Performance as of 12/31/2019



### Principal Risks

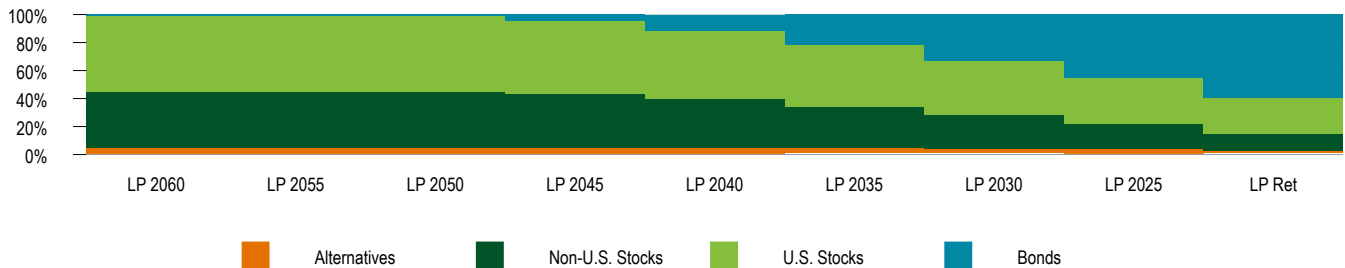
Loss of Money, Not FDIC Insured, Index Correlation/Tracking Error, Suitability, Active Strategy, Asset Allocation, Underlying Fund, Equity Securities, Foreign Securities, Fixed Income Securities, Alternative Investments

### Annual Returns

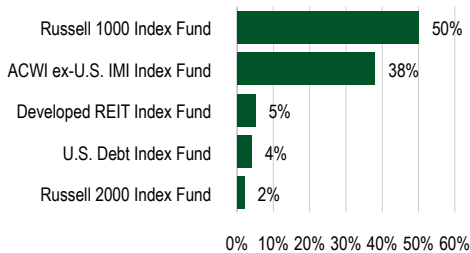
	2019	2018	2017	2016	2015
<b>2045 Fund</b>	26.0%	(7.9)%	20.3%	8.8%	(2.2)%
<b>BlackRock LifePath 2045 Index</b>	25.9%	(8.0)%	20.2%	8.7%	(2.1)%

### Fund Information

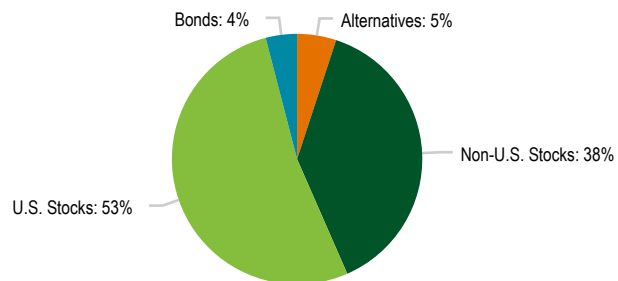
### Target Retirement Date Series Glidepath



### Top 5 Holdings



### Portfolio Analysis



### Subadvisor

BlackRock

### Target Allocation

100%

\*As of previous quarter end

# PERAdvantage 2050 Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BlackRock LifePath 2050 Index	High	10/1/2011	\$70.7	0.03%	0.07%	0.10%

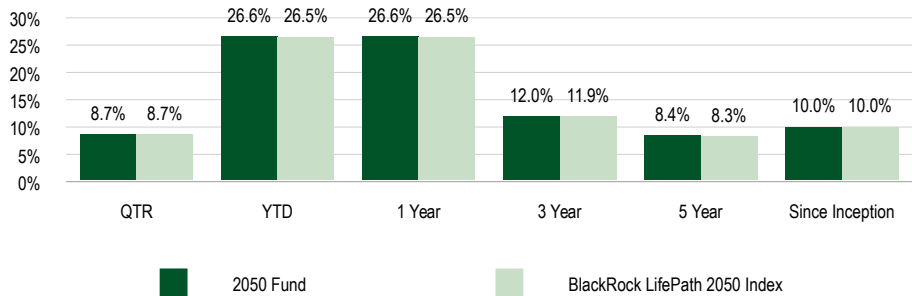
4Q

2019

### Investment Objective & Strategy

The fund seeks capital appreciation, with a minor emphasis on current income. The fund will automatically adjust the underlying asset allocation to become more conservative over time and is designed for participants who expect to retire around 2050, at which time the fund will reach its most conservative risk level and be blended into the PERAdvantage Income Fund. By investing in a single target retirement date fund you may capture diversified investment opportunities without having to manage multiple funds.

### Performance as of 12/31/2019



### Principal Risks

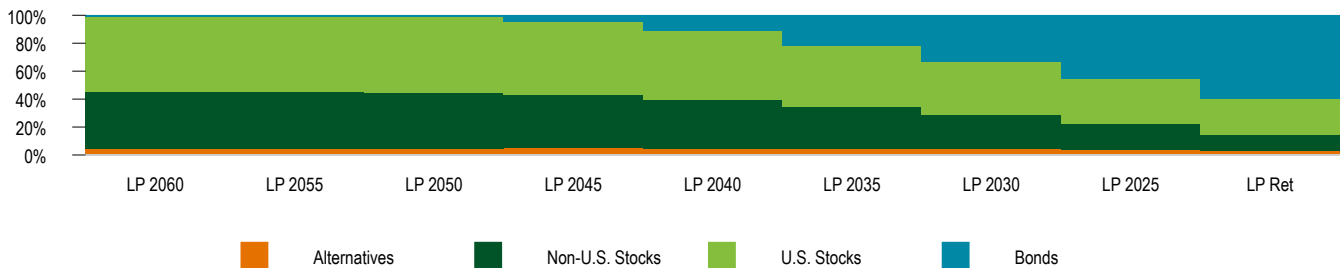
Loss of Money, Not FDIC Insured, Index Correlation/Tracking Error, Suitability, Active Strategy, Asset Allocation, Underlying Fund, Equity Securities, Foreign Securities, Fixed Income Securities, Alternative Investments

### Annual Returns

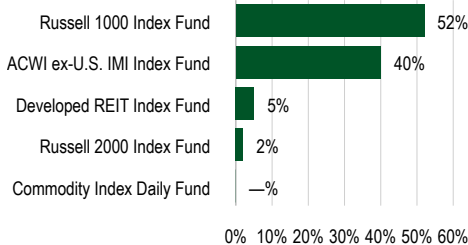
	2019	2018	2017	2016	2015
<b>2050 Fund</b>	26.6%	(8.1)%	20.7%	8.9%	(2.2)%
<b>BlackRock LifePath 2050 Index</b>	26.5%	(8.3)%	20.6%	8.7%	(2.1)%

### Fund Information

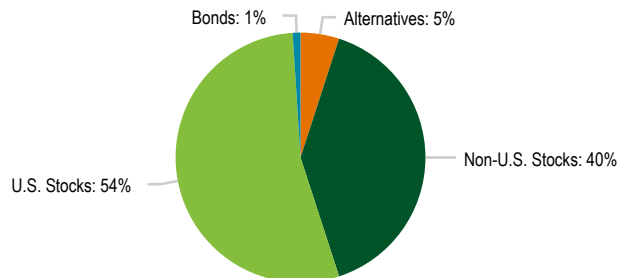
### Target Retirement Date Series Glidepath



### Top 5 Holdings



### Portfolio Analysis



### Subadvisor

BlackRock

### Target Allocation

100%

\*As of previous quarter end



# PERAdvantage 2055 Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BlackRock LifePath 2055 Index	High	10/1/2011	\$42.5	0.03%	0.07%	0.10%

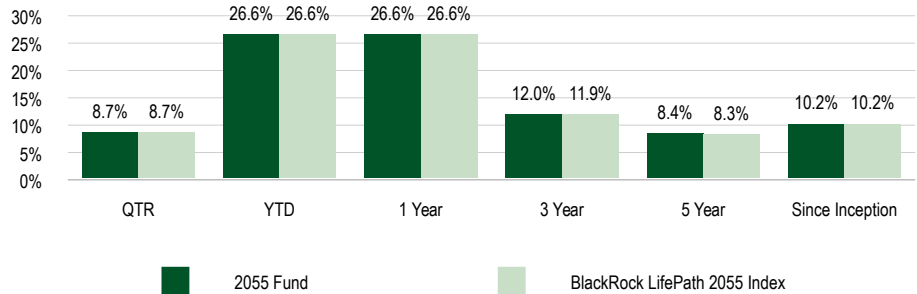
4Q

2019

### Investment Objective & Strategy

The fund seeks capital appreciation, with a minor emphasis on current income. The fund will automatically adjust the underlying asset allocation to become more conservative over time and is designed for participants who expect to retire around 2055, at which time the fund will reach its most conservative risk level and be blended into the PERAdvantage Income Fund. By investing in a single target retirement date fund you may capture diversified investment opportunities without having to manage multiple funds.

### Performance as of 12/31/2019



### Principal Risks

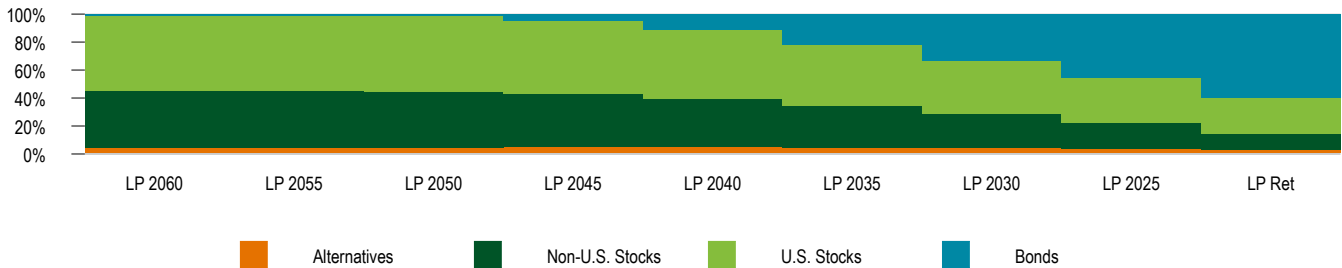
Loss of Money, Not FDIC Insured, Index Correlation/Tracking Error, Suitability, Active Strategy, Asset Allocation, Underlying Fund, Equity Securities, Foreign Securities, Fixed Income Securities, Alternative Investments

### Annual Returns

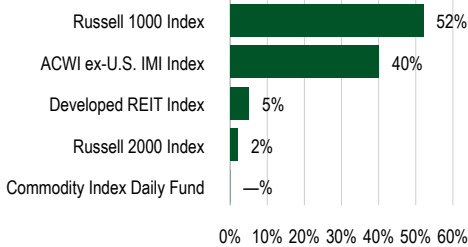
	2019	2018	2017	2016	2015
2055 Fund	26.6%	(8.2)%	20.6%	8.9%	(2.2)%
BlackRock LifePath 2055 Index	26.6%	(8.3)%	20.6%	8.7%	(2.1)%

## Fund Information

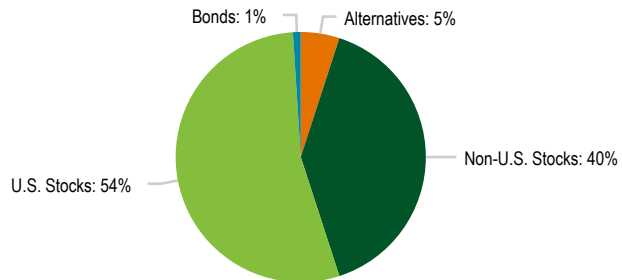
### Target Retirement Date Series Glidepath



### Top 5 Holdings



### Portfolio Analysis



### Subadvisor

BlackRock

### Target Allocation

100%

\*As of previous quarter end

# PERAdvantage 2060 Fund



Benchmark	Volatility and Risk	Fund Inception Date	Total Fund Assets (\$M)	Admin Fee*	Inv. Mgmt. Fee*	Total Fee*
BlackRock LifePath 2060 Index	High	2/2/2015	\$14.9	0.03%	0.07%	0.10%

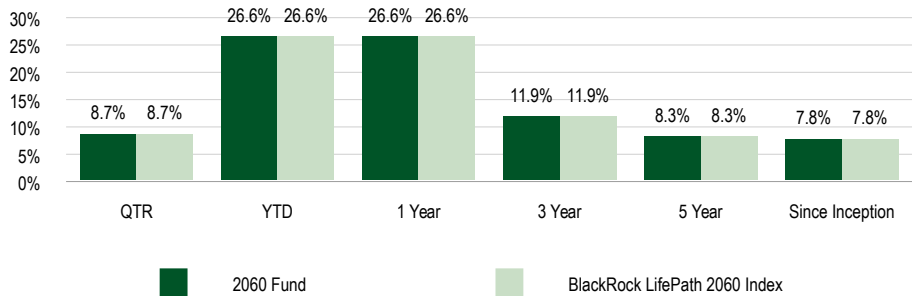
4Q

2019

### Investment Objective & Strategy

The fund seeks capital appreciation, with a minor emphasis on current income. The fund will automatically adjust the underlying asset allocation to become more conservative over time and is designed for participants who expect to retire around 2060, at which time the fund will reach its most conservative risk level and be blended into the PERAdvantage Income Fund. By investing in a single target retirement date fund you may capture diversified investment opportunities without having to manage multiple funds.

### Performance as of 12/31/2019



### Principal Risks

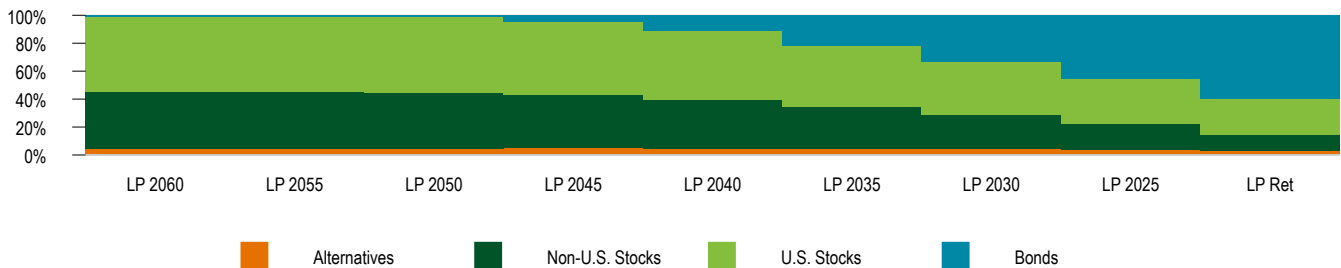
Loss of Money, Not FDIC Insured, Index Correlation/Tracking Error, Suitability, Active Strategy, Asset Allocation, Underlying Fund, Equity Securities, Foreign Securities, Fixed Income Securities, Alternative Investments

### Annual Returns

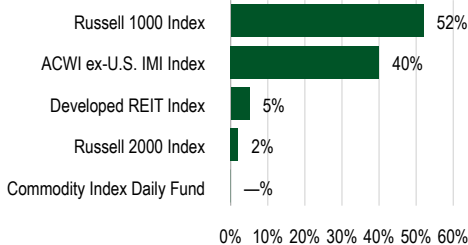
	2019	2018	2017	2016	2015
<b>2060 Fund</b>	26.6%	(8.2)%	20.6%	8.8%	(2.4)%
<b>BlackRock LifePath 2060 Index</b>	26.6%	(8.3)%	20.6%	8.7%	(2.1)%

### Fund Information

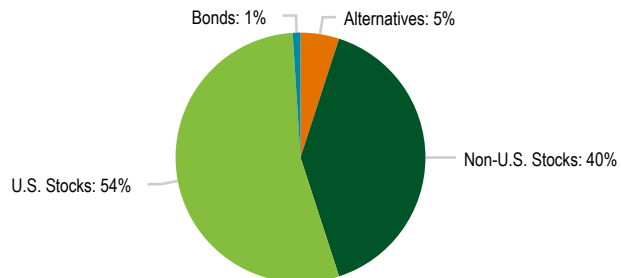
### Target Retirement Date Series Glidepath



### Top 5 Holdings



### Portfolio Analysis



### Subadvisor

BlackRock

### Target Allocation

100%

\*As of previous quarter end

## Important Disclosures

The information provided in this fact sheet and disclosure statement should not be considered a recommendation to purchase or sell a particular Fund. Investment objectives, risks, fees, and expenses of the Fund should be considered before purchasing or selling a particular Fund. Colorado PERA (PERA) has made every effort to ensure the information presented is accurate and current. More information about PERAdvantage Funds, including prices, performance, and benchmark information, is available on the Plan websites, accessible through [www.copera.org](http://www.copera.org), or by calling 1-800-759-7372.

PERAdvantage Fund investors own units in a portfolio that invests in securities appropriate for the asset class and do not have direct ownership of the securities in the Fund. PERAdvantage Funds are not mutual funds. Prospectuses are not required and prices are not available in local publications. The Funds are privately offered and are only available to members. PERA is a governmental plan and is exempted by state and federal law from registration with the SEC.

PERAdvantage Funds may have multiple managers and portfolios underlying the Fund. PERA has determined the mix of assets among the managers for each Fund. However, at any given point in time, the actual allocation among the managers may vary due to market movements and the Fund's cash flows. PERA maintains a rebalancing policy to ensure the assets under management by each manager do not materially diverge from the target asset allocation. Manager allocations and individual managers may change in order to best meet the investment objective of each of the PERAdvantage Funds. Historical performance may reflect different allocations to the same or different managers and benchmarks may change to best match investment objectives.

Plan administrative fees pay for recordkeeping, custodial services, consulting, and internal PERA administrative expenses. The administrative fee consists of a flat \$1 per month per participant per plan and an asset-based fee of up to 0.03 percent on each underlying PERAdvantage Fund. Underlying managers charge an investment management fee, which varies among the managers, and may change at any time.

The performance data provided represents past performance and does not guarantee future results. The Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution. Principal value and investment return will fluctuate, so an investor's shares may be worth more or less than the original value when sold. Portfolio statistics and allocations may change over time.

Performance is net of administrative and management fees and calculated using time-weighted net asset values. Returns for periods greater than one year are annualized. Performance prior to 01/01/2020 is calculated by RVK, Inc. and by Callan LLC thereafter, and begins the first full month after initial funding. PERAdvantage Funds commenced on 10/01/2011.

Each Fund's performance is compared with that of an index, which is a passively managed portfolio of specified securities, and does not reflect any initial or ongoing expenses. A Fund's portfolio may differ significantly from the securities in the index. Fund benchmark listed represents the current benchmark and while historical performance is linked to the current benchmark, historical performance may differ from the listed benchmark due to changes in benchmark composition over time.

The PERAdvantage International Stock fund uses fair value pricing, which may cause the fund's performance to differ from that of its benchmark.

Securities Lending: Certain PERAdvantage Funds engage in securities lending activities, which may expose them to certain risks. These risks primarily come from the inability of the borrower to return the borrowed security, or potential losses from the reinvested collateral.



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This report provides information about the PERAPlus 401(k)/457 and PERA DC Plans. Your rights, benefits, and obligations as a Colorado PERA member are governed by Title 24, Article 51 of the Colorado Revised Statutes, the Rules of the Colorado Public Employees' Retirement Association, the *401(k) and Defined Contribution Plan and Trust Document*, and the *PERA Deferred Compensation Plan*, which take precedence over any interpretations in this report.