



Helping Oregon keep its promises to our public servants

Every day I come to work, I'm focused on how my team can ensure that Oregon keeps its promise to our valuable public sector workers, by seeking strong and stable investment returns.

As our public servants have committed their careers to making Oregon stronger and safer, Oregon has made a commitment as well: a more secure retirement.

Treasury is working — and excelling — when it comes to investing the Oregon Public Employees Retirement Fund. This is your money — collectively there are about 367,000 beneficiaries, according to the PERS agency — and we are managing it for your sole and exclusive benefit.

At the end of 2018, the pension fund stood at \$75 billion. And industry rankings show Oregon consistently beats its peers in terms of long-term investment performance.

The fund is paying benefits that average about \$2,800 a month to retired workers who spent their entire careers teaching our children, providing essential social services, protecting our collective quality of life, and keeping our communities safer.

The long-term success of our investment program is paying dividends. An amazing 75 cents of every dollar in pension benefits come from investment performance. That's money that doesn't need to come from any other source.

I have had the privilege to serve as your Treasurer for the past two years, and I am proud of our team's continued efforts to drive the investment program ever more effectively and efficiently.

Last year, we revamped the structure of the Individual Ac-

OREGON STATE TREASURER TOBIAS READ



count Program to better align age and risk exposure, which protected late-career workers from losses during the sharp drawdown in equity markets during 2018's fourth quarter. We also expanded our internal investment capacity, which has already resulted in millions in higher net returns. Finally, we recently initiated formal research efforts focused on the identification and management of Environmental, Social and Governance risks, which in turn will allow us to advance our portfolios' sustainability and resiliency.

At the same time, we are always looking to improve, and the Oregon Investment Council — on which I serve — is setting a high bar for principled and thoughtful leadership.

We are building for our future, and for yours. By investing for the long term and making smart decisions, we are protecting your retirement security while also meeting taxpayer expectations for good government.

As always, thanks for everything you do, for Oregon.



Oregon Public Employees Retirement Fund

75.0 billion

Dec. 31, 2018

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Oregon pension fund returns ranked at top of class among peers for the past decade

Over the past decade, the investment performance for the Oregon Public Employees Retirement Fund ranked first among U.S. public pension peers on gross returns, according to an annual industry report.

The top-of-class showing followed a series of strategic changes – authorized by the Oregon Investment Council and implemented by Treasury’s investment division – that both boosted returns and improved the diversification profile of the fund, which totaled \$75.1 billion as of Dec. 31, 2018.

Over the past decade, Oregon’s average annual investment return was tops among public fund peers according to rankings recently published by the Wilshire Trust Universe Comparison Service in its annual investment performance survey. That peer group included 46 other U.S. public funds, all with assets in excess of \$10 billion.

From 2009 to 2018, Oregon’s pension fund realized an average annual net return – which means gross returns minus fees – of 9.46 %.

For 2018, a year in which most global financial markets registered negative results, Oregon’s pension fund posted an annual net return of +0.48 %, placing its single-year performance within the same peer group’s top 10 %. These terrific results represent an important milestone in our ongoing efforts to balance the fund’s competing objectives of short-term resilience and long-term sustainability. Our top rankings also reinforce Oregon’s reputation as an elite institutional investor.

Treasury and the Oregon Investment Council began fortifying fund diversification over eight years ago with the intro-

CHIEF INVESTMENT OFFICER JOHN SKJERVEM



duction of an “Alternatives Portfolio” allocation in 2011.

Designed to pursue return streams that are less correlated to movements in global stock and bond markets, the Alternatives Portfolio today comprises nearly 10 percent of total fund capital, and includes investments in areas such as infrastructure, agriculture, timberland and television royalties.

More recently, Treasury’s investment team reconstituted portions of the fund’s allocation to listed equities by moving several billion dollars into defensive or “low volatility” stock strategies.

The investment division also capitalized on recent budget authorizations from the Oregon State Legislature that have enabled Treasury to modernize the investment division’s operating procedures and improve its risk management efforts.

Reform that works: Pension fund gains millions due to new investment capacity

Several years ago, Treasury proposed a plan to Oregon legislators with the goal of reducing investment management fees and expenses.

The upshot: when you reduce the cost of managing a pension fund, more money stays in the pension fund.

The strategy called for “insourcing” more investment activities at the State Treasury, while simultaneously lowering the fund’s dependence on external providers.

Legislators agreed, and Treasury ramped up to handle the additional workload by adding personnel in investment analysis, operations, risk and

+ \$149 Million
Net return impact to pension fund
2016-2018

research and legal and compliance.

A new analysis shows our strategy is working well, and saving millions as expected. You can see the report, which was submitted to the Legislature in February, at this [link](#).

The savings are net of all costs related to the investment division’s new oper-

ating capabilities and additional staff.

In addition, Treasury’s insourcing initiative has produced another major benefit: internally-managed pension fund assets are generating returns that match or exceed corresponding investment benchmarks.

Together, net savings due to lower fees – more than \$1 million a month – combined with above-benchmark investment performance has resulted in an additional \$149 million in additional pension fund capital between 2016 and 2018.

And it’s not one-time good news. The savings continue to accrue monthly!

New Target Date Fund framework delivered as expected in late 2018 market downturn

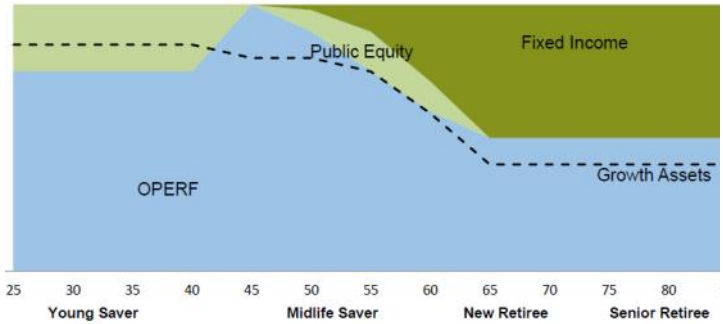
The Oregon Investment Council cares about you and your financial future. As fiduciaries for the pension fund and other state-managed retirement accounts, the Council is committed to serving the best investment interests of all PERS members.

That’s why the Council made the decision in 2017 to realign the investment approach used in the Individual Account Program, the defined contribution portion of PERS members’ retirement benefit. IAP accounts receive employees’ 6% annual contribution, but, unlike the pension fund, there is no investment or benefit payment guarantee. In other words, in IAP, members bear all investment risks.

Previously, IAP assets were invested identically for every participant, independent of age or individual retirement horizon.

That approach did not comport with industry best practice which uses age as a proxy for risk tolerance and suggests investors’ portfolios become increasingly conservative as retirement approaches.

The Council chose an automatic risk-adjusting framework for the IAP, known as a Target-Date Fund. In this framework, younger workers gain more exposure to higher risk growth investments, such as stocks, while older workers increasingly give up that growth exposure in exchange for



lower account balance volatility as they near and enter retirement.

In 2018, IAP participants’ inaugural experience with Target-Date Funds, the new framework worked exactly as designed and intended.

Younger workers participated in the bull market that prevailed during the year’s first nine months, while older workers were protected from the brunt of the market downturn during the year’s final quarter.

In addition, every single tier within the IAP’s Target-Date Fund structure outperformed its corresponding industry peer group. The complete list of 2018 IAP Target-Date Fund returns is included on page 6.

YOUR QUESTIONS & ANSWERS

What is the investment mix for IAP Target Date Funds?

With a target-date fund, your money is spread across many different investment types, and that mix evolves over time. The objective for each fund is to achieve a higher total return over time, while incurring an appropriate level of risk that is consistent with the fund’s asset mix. The custom target date format includes exposure at every tier to the Oregon Public Employees Retirement Fund, and evolving exposures to index funds from State Street Global Advisors (SSGA). The levels change gradually. Five year targets are shown for illustrative purposes.

	IAP 2060 Age 25	IAP 2055 Age 30	IAP 2050 Age 35	IAP 2045 Age 40	IAP 2040 Age 45	IAP 2035 Age 50	IAP 2030 Age 55	IAP 2025 Age 60	IAP 2020 & RETIRE Age 65+
Oregon Public Employees Retirement Fund (Diversified trust fund)	75.00%	75.00%	75.00%	75.00%	100.0%	90.00%	75.00%	60.00%	50.00%
Domestic Equity (SSGA Russell All-Cap Index)	15.00%	15.00%	15.00%	15.00%	—	5.10%	9.85%	7.65%	—
International Equity (SSGA All-Cap Equity Ex U.S. Index)	10.00%	10.00%	10.00%	10.00%	—	2.90%	5.10%	3.60%	—
Core Bond (SSGA U.S. Bond Index)	—	—	—	—	—	2.00%	7.70%	16.30%	18.65%
Inflation-Protected Securities (SSGA 1-10 Year U.S. TIPS Index)	—	—	—	—	—	—	2.35%	8.15%	12.05%
Short-Duration Bond (SSGA U.S. Short Term Government/ Credit Bond Index)	—	—	—	—	—	—	—	4.30%	19.30%

Investment Council: Diversity improves long-term investment performance

The Oregon Investment Council has amended its overarching management values and beliefs to highlight its commitment to diversity and inclusion.

The six-member Council establishes policy and determines asset allocation for the investment program managed by the Oregon State Treasury.

To help guide day-to-day decision-making and investment priorities, the Council has adopted and occasionally revises a set of [investment and management beliefs](#). These statements articulate the Council's primary investment philosophy, from managing risks to seeking cost efficiencies to improving corporate governance practices.

At the council's Jan. 31 meeting, members explicitly articulated that diversity and inclusion are aligned with its imperative to pursue positive, risk-adjusted and sustainable investment outcomes – officially reflecting in policy what has become an increasingly standard business practice at Treasury.

"Finding returns means seeing things that others don't," said State Treasurer Tobias Read, a member of the Council. "If we are not serious about diversity, we risk losing out."

CORPORATE GOVERNANCE DIRECTOR
JENNIFER J. PEET



"We are investing in a diverse world, and diverse perspectives will help ensure we are making good decisions and recognizing the best opportunities," said Council Chair Rukaiyah Adams, chief investment officer for Meyer Memorial Trust in Portland.

"If you want to achieve long-term financial and investment success, a commitment to diversity and inclusion must be embedded in your business practices."

You can learn more by following this link: <https://www.oregon.gov/newsroom/Pages/NewsDetail.aspx?newsid=3128>

OREGON INVESTMENT COUNCIL

Patricia Moss of Bend appointed by governor

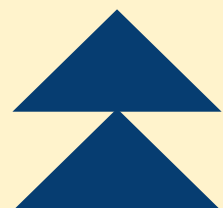


Patricia Moss was appointed by Gov. Kate Brown on Nov. 20 to the Oregon Investment Council. Ms. Moss was confirmed by the Oregon Senate in December 2018 and her term will expire in December 2020.

Ms. Moss served as CEO of Cascade Bancorp and Bank of the Cascades from 1998 to 2012, and prior to that time served as the company's Chief Financial Officer and Chief Operating Officer.

She has served on several public boards and one private company board, ranging from banks, mutual funds, natural resources, health care, utilities and construction as well as multiple non-profit boards. She is a past chair of the Oregon Growth Fund Board.

Ms. Moss has served as a board member or chairman for Central Oregon Community College, St. Charles Medical Center, Bend Chamber of Commerce, Oregon State University Advisory Board, and several other community roles and fund raising campaigns. She earned a Bachelor of Science in Business from Linfield College in McMinnville.



Responsible investing: Treasurer says more attention needed on 'social' risk factors

As a long-term institutional investor, the Oregon Treasury wants companies to be successful now — but also years from now.

That's why Treasurer Tobias Read is urging major investors and corporations alike to do a better job identifying and also quantifying certain risks that go beyond financial statement ratios and metrics.

These risks are known as "social" risk factors, and fall broadly into the realm of how you treat workers, customers, and the public. Social risk factors include issues such as consumer protection, public safety, and even data security. For example, what is the likely cost of a cybersecurity breach, and, conversely, what is the potential value (both quantitatively and qualitatively) of avoiding such a breach?

At the end of the day, bottom lines will be enhanced – or they will suffer – depending on whether or not companies do the right things, he said. If companies don't protect the safety of their workers or the online identity of their customers, the financial impacts to shareholders could be severe. Conversely, companies with strong safety and customer-oriented cultures will over time attract the best and brightest workers, increasing the likelihood of long-term investment success, he said.

A challenge for investors is that while these risks seem both common and straight forward, no standardized, measurement and monitoring methods currently exist. As a result, evidence-based decision making relative to social risk factors is difficult to impossible.

"We need to proactively and effectively measure, track, quantify, and engage on a set of agreed-upon metrics that can guide institutional investors," Read said.



Part of the obligation of long-term shareholders is to ask tough questions of companies to ensure they are operating sustainably and addressing an array of risks, which will improve long-term share performance, Treasurer Read says. He sat on a panel in March and posed questions to executives from Uber.

BREWING INTEREST IN CLIMATE ACTION

Deschutes Brewery, Hopworks Urban Brewery, Ninkasi Brewing Company, and Widmer Brothers Brewing are among beer industry leaders to join the Brewery Climate Declaration, which was spearheaded by investor groups to highlight climate-related opportunities and risks.



2018 PROXY VOTES



88,791

Total proposals considered

9,453

Corporate annual meetings

2019 RESPONSIBLE SHAREHOLDER PRIORITIES



DIRECT ENGAGEMENT



REGULATORY ADVOCACY



ESG RISK RESEARCH

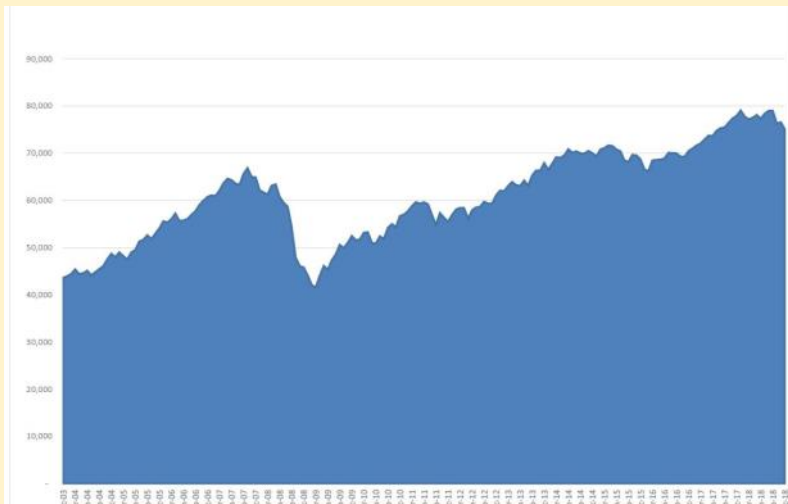


COALITION BUILDING

With the goal of enhancing long-term share performance, Treasury will support efforts in 2019 to protect shareholder rights, improve corporate board diversity, enhance investor disclosure practices, especially regarding climate-related risks and opportunities, and seek to ensure executive compensation is aligned with shareholder objectives.

PERFORMANCE SYNOPSIS — YEAR-END 2018 RESULTS

OREGON PUBLIC EMPLOYEES RETIREMENT FUND, 2003-18



The **Oregon Public Employees Retirement Fund (OPERF)** is a public trust fund that belongs to beneficiaries of Oregon’s public employee retirement system, including teachers, public safety workers, and other state and local government employees. By law, OPERF assets must be invested with the goal of maximizing investment returns on a risk-adjusted basis. The Oregon Investment Council (OIC) sets investment policy and oversees overall fund performance, while Oregon State Treasury investment staff are responsible for all daily fund management activities.

To increase the likelihood of successful, sustainable investment performance, OPERF capital is diversified across a wide array of asset classes, markets, and investment strategies including public company stocks, real estate, bonds, private equity, and alternatives like timberland and agriculture.

Depending on initial hire date, PERS-covered workers are impacted differently by OPERF performance. “Tier 1” workers (hired before 1996) have some investment guarantees no matter what happens in financial markets, while most other PERS members earn “realized” or actual returns.

HOW IS THE OPERF REGULAR ACCOUNT DIVERSIFIED?

PUBLIC EQUITY (33.7% or \$24.4 billion)

Shares of public companies in the United States and abroad.

FIXED INCOME (21.1% or \$15.3 billion)

Income-generating investments such as corporate and government bonds.

OPPORTUNITY PORTFOLIO (2.3% or \$1.6 billion)

Tactical or episodic investments designed to enhance returns and improve overall diversification.

PRIVATE EQUITY (22.1% or \$16.0 billion)

Ownership interests in privately-held companies, buyout funds and venture capital investments.

CASH RESERVES (0.3% or \$249 million)

Cash from employer contributions and investment distributions, dividends and income held in the Oregon Short Term Fund to pay benefits or re-invest.

REAL ESTATE (11.2% or \$8.1 billion)

Ownership interests in real property assets in the United States and abroad.

ALTERNATIVES (9.3% or \$6.7 billion)

Less correlated public market strategies and ownership interests in real assets such as infrastructure, timberland, mining, agriculture and royalties.

INVESTMENT RETURNS

PUBLIC EMPLOYEES RETIREMENT FUND

Regular Account Balance: \$75.1 Billion (Dec. 31, 2018)

1-year	3-year	5-year	10-year
+0.5%	+7.5%	+6.3%	+9.5%

VARIABLE ACCOUNT

Balance: \$467.5 Million (Dec. 31, 2018)

1-year	3-year	5-year	10-year
-9.7%	+6.9%	+4.6%	+10.0%

INDIVIDUAL ACCOUNT PROGRAM—TARGET DATE FUNDS

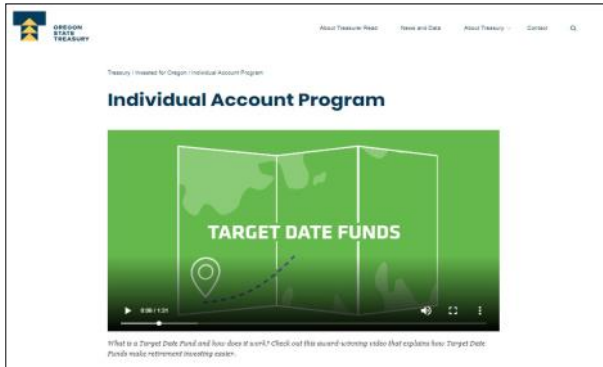
In 2018, all PERS members’ IAP accounts were shifted into one of several Target Date Funds, which better align members’ age and investment risk tolerance. Following this shift, younger workers have more exposure to growth-oriented investments (such as stocks), while workers at or near retirement age will incur less volatility in their IAP account balances.

The IAP is an account balance-based, defined contribution-style retirement program for active PERS members. This benefit is different from and in addition to your PERS pension benefit (Tier 1, Tier 2 or OPSRP).

The below-listed returns reflect net investment performance for all Target Date Funds in 2018. Earnings credited to member accounts [by the PERS Board](#) may be different, due to PERS’ internal cost calculations.

	2018 RETURN	PEER MEDIAN	BIRTH YEAR
IAP 2060 Target Date Fund	-1.95%	-8.7%	1993 -
IAP 2055 Target Date Fund	-2.01%	-8.6%	1988-1992
IAP 2050 Target Date Fund	-2.02%	-8.6%	1983-1987
IAP 2045 Target Date Fund	-2.03%	-8.3%	1978-1982
IAP 2040 Target Date Fund	-0.40%	-8.0%	1973-1977
IAP 2035 Target Date Fund	-0.21%	-7.3%	1968-1972
IAP 2030 Target Date Fund	-0.80%	-6.5%	1963-1967
IAP 2025 Target Date Fund	-0.69%	-5.4%	1958-1962
IAP 2020 Target Date Fund	+0.20%	-4.5%	1953-1957
Retirement Allocation	+0.38%	-3.4%	Before 1953

HELPING OREGONIANS BE MORE FINANCIALLY SECURE



Do you want access to more information about Oregon Treasury investment performance, the Individual Account Program, or empowerment savings plans that help you prepare for college or disability-related costs? Check out Oregon Treasury's improved website at www.Oregon.gov/Treasury.

National settlement recoups \$430,399 for Oregon pension fund

Oregon was part of a national settlement involving a number of financial industry giants for wrongly manipulating a key interest rate on international short-term loans.

The wrongdoing came at the expense of consumers worldwide, as well as large institutional investors such as the Oregon Public Employees Retirement Fund.

The participating global banks pleaded guilty and paid major fines -- and a coalition of state attorneys general subsequently entered negotiations to recoup losses, on behalf of State Treasurers and state-managed investments.

In a settlement announced in October with Germany-based Deutsch Bank AB, the Oregon pension fund recouped \$430,399. The settlement was announced by Treasurer Tobias Read and Attorney General Ellen Rosenblum.

Deutsch Bank is one of several global banks that admitted to manipulating the London Interbank Offered Rate, or LIBOR, until the practice was shut down amid the Global Financial Crisis. Settlement talks are ongoing with several of them.

Barclays reached an earlier LIBOR-manipulation settlement with Oregon, worth \$305,578.

WHO TO CONTACT

<p>I have questions about my PERS benefits or retirement options.</p> <p>Public Employees Retirement System www.Oregon.gov/PERS 888-320-7377</p>	<p>I have questions about the IAP and my personal account balance.</p> <p>Public Employees Retirement System www.Oregon.gov/PERS 888-320-7377</p>	<p>I would like to know more about the Oregon Savings Growth Plan.</p> <p>http://www.oregon.gov/pers/osgp/pages/index.aspx osgpcustsvc.PERS@state.or.us 888-320-7377</p>
<p>I have questions about the Oregon Investment Council.</p> <p>Oregon State Treasury Communications and Stakeholder Relations www.Oregon.gov/Treasury 503-378-4000</p>	<p>I would like to communicate with the State Treasurer.</p> <p>Office of the State Treasurer www.Oregon.gov/Treasury Oregon.Treasurer@ost.state.or.us 503-378-4329</p>	<p>I would like to be notified by email when Invested for You is available.</p> <p>Visit this link and sign up for GovDelivery</p>



OREGON STATE TREASURY

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