OREGON
STATE
TREASURY

Oregon Investment Council

July 20, 2022

Cara Samples
Chair

Tobias Read
State Treasurer

Rex Kim
Chief Investment Officer

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OREGON INVESTMENT COUNCIL

OIC

Agenda

July 20, 2022
9:00 AM

Oregon State Treasury
Investment Division
16290 SW Upper Boones Ferry Road
Tigard, OR 97224

Time	**A. Action Items**	**Presenter**	**Tab**
9:00-9:05	**1. Review & Approval of Minutes** June 1, 2022	**Cara Samples** *OIC Chair*	**1**
	2. Committee Reports	**Rex Kim** *Chief Investment Officer*	**2**
9:05-9:15	**3. Oregon Savings Growth Plan: Consultant Renewal**	**Claire Illo** *Investment Officer, Public Equity* **Louise Howard** *Senior Investment Officer, Public Equity*	**3**
9:15-10:00	**4. Common School Fund: Strategic Asset Allocation and Annual Review**	**John Hershey** *Director of Investments* **Wil Hiles** *Investment Officer, Public Equity* **Raneen Jalajel** *Associate Partner, Aon*	**4**

B. Information Items

10:00-11:00	**5. Real Estate Market Review**	**Michael Langdon** *Director of Private Markets* **Michael Acton** *Managing Director, AEW*	**5**

---------------------------BREAK------------------------

11:10-12:00	**6. Blockchain, Digital Currency**	**Maxwell Stein** *Associate, DLT & Digital Assets, BlackRock*	**6**
12:00	**7. Asset Allocation & NAV Updates** a. Oregon Public Employees Retirement Fund b. SAIF Corporation c. Common School Fund	**Rex Kim**	**7**
	8. Calendar — Future Agenda Items	**Rex Kim**	**8**
12:00	**9. Open Discussion**	**OIC Members** **Staff** **Consultants**	
12:00	**10. Public Comments**		

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OREGON STATE TREASURY

TAB 1

REVIEW & APPROVAL OF MINUTES

State of Oregon
Office of the State Treasurer

16290 SW Upper Boones Ferry Road

Tigard, Oregon 97224

OREGON INVESTMENT COUNCIL

June 1, 2022

Meeting Minutes

Members Present:	John Russell, Cara Samples, Tobias Read
Staff Present:	Rex Kim, John Hershey, Michael Langdon, David Randall, Karl Cheng, Ben Mahon, Tony Breault, Geoff Nolan, Caleb Aldridge, Dmitri Palmeteer, Amy Bates
Staff Participating Virtually:	Kenny Bao, Tyler Bernstein, Taylor Bowman, Tan Cao, Austin Carmichael, Andrew Coutu, Bradley Curran, Debra Day, Ahman Dirks, Chris Ebersole, David Elott, Alli Gordon, William Hiles, Andrew Hillis, Louise Howard, Ian Huculak, Claire Illo, Roy Jackson, Aliese Jacobsen, Kristi Jenkins, Josh Jones, Robin Kaukonen, Amanda Kingsbury, Paul Koch, Krystal Korthals, Perrin Lim, Sommer May, Eric Messer, Tim Miller, Dana Millican, Mike Mueller, Jen Plett, Aadrial Phillips, Mohammed Quraishi, Andrew Robertson, Scott Robertson, Angela Schaffers, Faith Sedberry, Mark Selfridge, Sam Spencer, Anna Totdahl, Andrey Voloshinov, Rachel Wray, Tiffany Zahas
Consultants Present:	Allan Emkin, Mika Malone, Colin Bebee, Christy Fields, Paola Nealon, (Meketa Investment Group, Inc.); Katie Comstock, Stephen Cummings, Ashely Woeste (Aon Investments); Nic DiLoretta, Thomas Martin (Aksia/TorreyCove Capital Partners LLC)
PERS Present:	Michiru Farney
Legal Counsel Present:	Steven Marlowe (Department of Justice)

Before proceeding with the OIC meeting, Chief Investment Officer Rex Kim provided a disclosure pertaining to the virtual set-up of this OIC meeting, informing those in attendance (virtual and in person) of the guidelines in which this meeting will proceed.

The June 1, 2022 OIC meeting was called to order at 9:01 am by Cara Samples, Chair.

I. 9:01 am Review and Approval of Minutes

MOTION: Chair Samples asked for approval of the April 20, 2022 OIC regular meeting minutes. Vice-Chair Russell moved approval at 9:01 am, and Treasurer Read seconded the motion which then passed by a 3/0 vote.

II. 9:01 am Committee Reports

Private Equity Committee:
None

Real Estate Committee:
None

Opportunity Committee:

April 27	Whitehorse Liquidity Partners V	$200M

Alternatives Portfolio Committee:
None

III. 9:02 am OPERF Real Assets Manager Recommendation

Ben Mahon, Senior Investment Office, and Paul Koch, Investment Officer, Alternatives; and Tom Martin, Global Head of Private Equity & Real Assets, and Nic DiLoretta, Managing Director, head of Real Assets, Akasia presented the recommendation to commit $400 million to Brookfield Infrastructure Fund V, L.P. and an initial $100 million to a co-investment side car that will invest alongside the fund.

MOTION: Chair Samples moved approval of the recommendation at 9:41. Vice-Chair Russell seconded. The motion which then passed by a 3/0 vote.

IV. 9:42 am 2022 Capital Markets Assumptions

Karl Cheng, Senior Investment Officer, Portfolio Risk & Research, introduced the topic and the presenters.

Colin Bebee, Managing Principal, Meketa, presented the Capital Market Assumptions. He outlined the process Meketa uses to arrive at its conclusions. He then discussed the outlook for 2022.

Katie Comstock, Associate Partner, Aon, then discussed the process Aon uses and its conclusions about the 2022 forecast.

V. 10:45 am Investment Policy Statement: Governance

Allan Emkin, Managing Principal, Meketa discussed the history of policy at the OIC and Treasury related to governance, and its need for updates as investments has evolved.

OIC Members discussed thresholds in the currently policy that dictate who has authority to approve commitments. They requested OST staff provide information on how effective current thresholds are, and what other options might be for setting those thresholds on an annual basis.

VI. 11:32 am OPERF Q1 Performance Review

Allan Emkin, Managing Principal, and Paola Nealon, Principal, Meketa presented the OPERF Q1 Performance Review. Topics included asset allocations, performance attribution, and looking ahead for the next quarter.

VII. 11:49 am Asset Allocation & NAV Updates

Rex Kim, Chief Investment Officer presented the asset allocation and NAV updates.

VIII. 11:53 am Calendar – Future Agenda Items

Rex Kim presented the forward calendar.

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IX. 11:54 am Open Discussion

Vice Chair Russell made some comments and asked questions about OST staff return to office. Treasurer Read provided an update on timing and process. Chair Samples spoke about the currently tight labor market.

X. 11:58 am Public Comments

Chair Samples opened the floor to public comment. There were none from in-person attendees. Public comments have also been submitted electronically and included with the public meeting book.

Ms. Samples adjourned the meeting at 11:59 am.

Respectfully submitted,
Aadrial Phillips
Executive Support Specialist

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TAB 2

COMMITTEE REPORTS

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OREGON STATE TREASURY

TAB 3

OREGON SAVINGS GROWTH PLAN

CONSULTANT RENEWAL

Extension of Oregon Savings Growth Plan General Consulting Contract

Purpose
To address the Oregon Savings Growth Plan general consulting contract, which expires on August 31, 2022.

Background
Callan LLC (Callan) was initially retained with a three-year contract that began on September 1, 2017. Under ***OST Policy INV 210: Consulting Contracts***, new contracts are awarded for three-year periods and a) can be renewed no more than twice and b) are limited to a final expiration date no more than four years beyond the contracts' original expiration date. At the end of seven years, contracts must be re-bid and a new seven-year cycle can begin. Additionally, the OIC retains the contractual right to terminate such contracts, at any time, upon written notice.

Staff Recommendation
In recognition of the contributions made by Callan, Staff proposes that the OIC extend its current contract, subject to satisfactory negotiation of all terms and conditions, for a two-year period beginning September 1, 2022.

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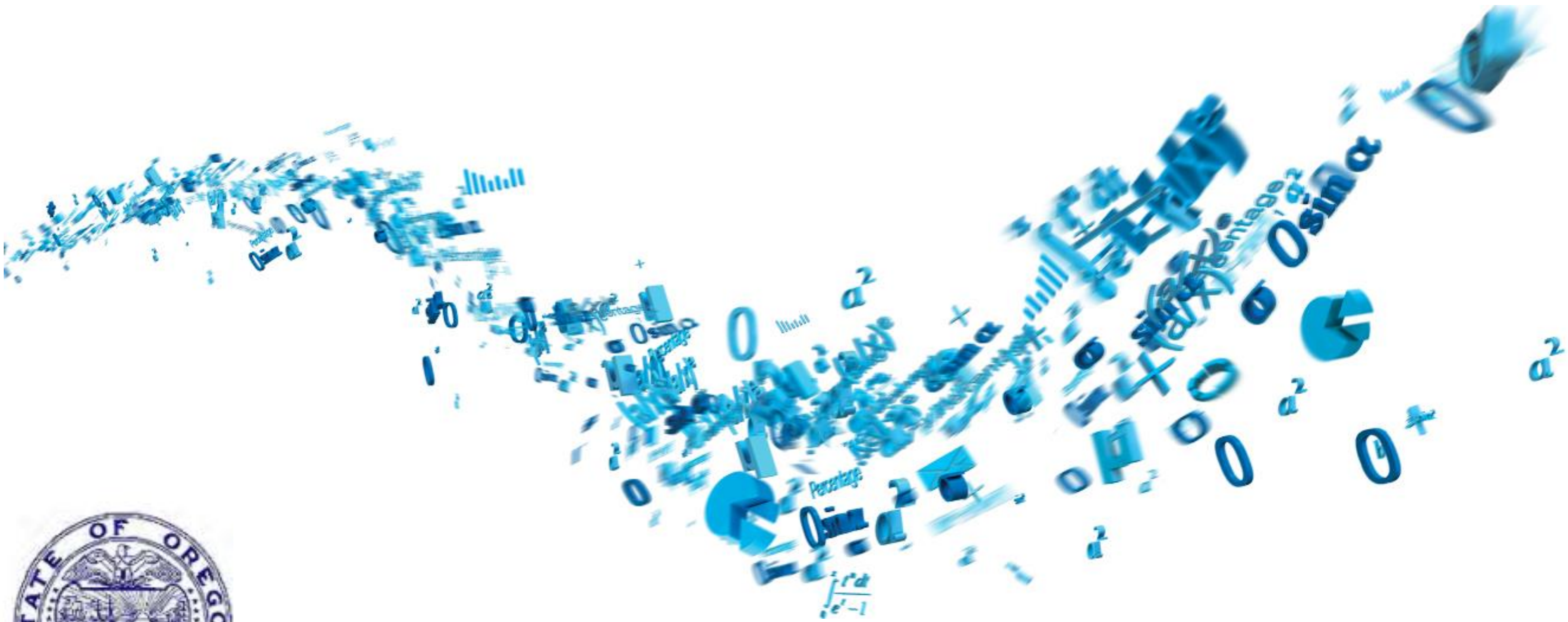
TAB 4

COMMON SCHOOL FUND PERFORMANCE REVIEW

AND STRATEGIC ASSET ALLOCATION



Oregon Common School Fund (CSF)
Asset Allocation Study

July 2022

Aon

Investment advice and consulting services provided by Aon Investments USA Inc.

Empower Results®

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Phase 1: Affirming Objectives and Key Considerations/Assumptions

Phase 1: Affirming Objectives and Key Considerations/Assumptions

Purpose of Study

- Review the Common School Fund's asset allocation in conjunction with net cash flows from spending policy, unclaimed property, PERS distributions and expenses to ascertain the impacts on purchasing power, over the next 10 years

Current Situation

- **AUM:** $2,134 million represents total Common School Fund (Legacy, Constitutional and OST funds)
- **Goal:** Goal is to have funds available into perpetuity and to maintain purchasing power over time
- **Required Return:** To maintain purchasing power, a nominal return of 7.1% is required
- **Cash Inflows:** Net unclaimed property inflows are expected to be $35 million annually growing to $46 million, over the next 10 years. PERS distributions are expected to end in 2027.
- **Restrictions:** Restricted from spending from the corpus. Given the large investment gains accumulated over time, we do not expect this to become an issue.
- **Spending policy:** 3.5% of 3-year average market value of CSF plus Department of State Land expenses
- **Return expectation:** The current portfolio is expected to generate a nominal return of 6.6% which falls short of the 7.1% required return, resulting in an expected loss of purchasing power over time.

Potential Solutions

- Increase portfolio expected returns to at or above 7.1% nominal through increased investments in private assets
- Even without portfolio changes, the portfolio should begin to stabilize after PERS distributions end in 2027

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Investment Objectives – What are We Trying to Achieve?

- The estimated return needed for the Common School Fund to preserve real purchasing power of existing corpus net of forecasted annual payout is approximately 7.1%, over next 10 years

	Annual Return
	Common School Fund
Annual Spend Rate	3.5%
Department of State Land (DSL) Expenses	1.7%
PERS Distribution (Senate Bill 1566)	1.0%
Net Unclaimed Property (UP) Receipts	(1.7%)
Inflation (Aon 10-Year forecast)	2.7%
10-Year Population Growth (school aged children)	0.0%
Nominal Return Objective[1]	**7.1%**

1) Inflation forecast using Aon Q2 2022 10 Year Capital Market Assumptions as of 3/31/2022. The components of the required return represent medians which may not perfectly sum.

Phase 2: Asset Allocation & Spending Modeling

Phase 2: Portfolio Analysis Goals

Improve Expected Return

- Increase expected returns to 7.1% or greater in order to preserve purchasing power
  - ➢Increase private assets exposure to take advantage of illiquidity premium
  - ➢Reduce bond exposure
- Be mindful of intergenerational equity (i.e., a portfolio either declining or growing by too much than required)

Reduce Expected Volatility and Left Tail Outcomes

- Reduce equity risk through diversification of return-seeking assets
- Improve the efficiency of the portfolio by enhancing the return profile at a similar or lower level of risk

Assess Private Market Capacity

- Assess if increasing private assets to as much as 30% causes undue liquidity issues in stressed environments
- The proposed portfolios with higher levels of private assets provide similar or more downside protection compared to the current portfolio

Strategic Asset Allocation Alternatives

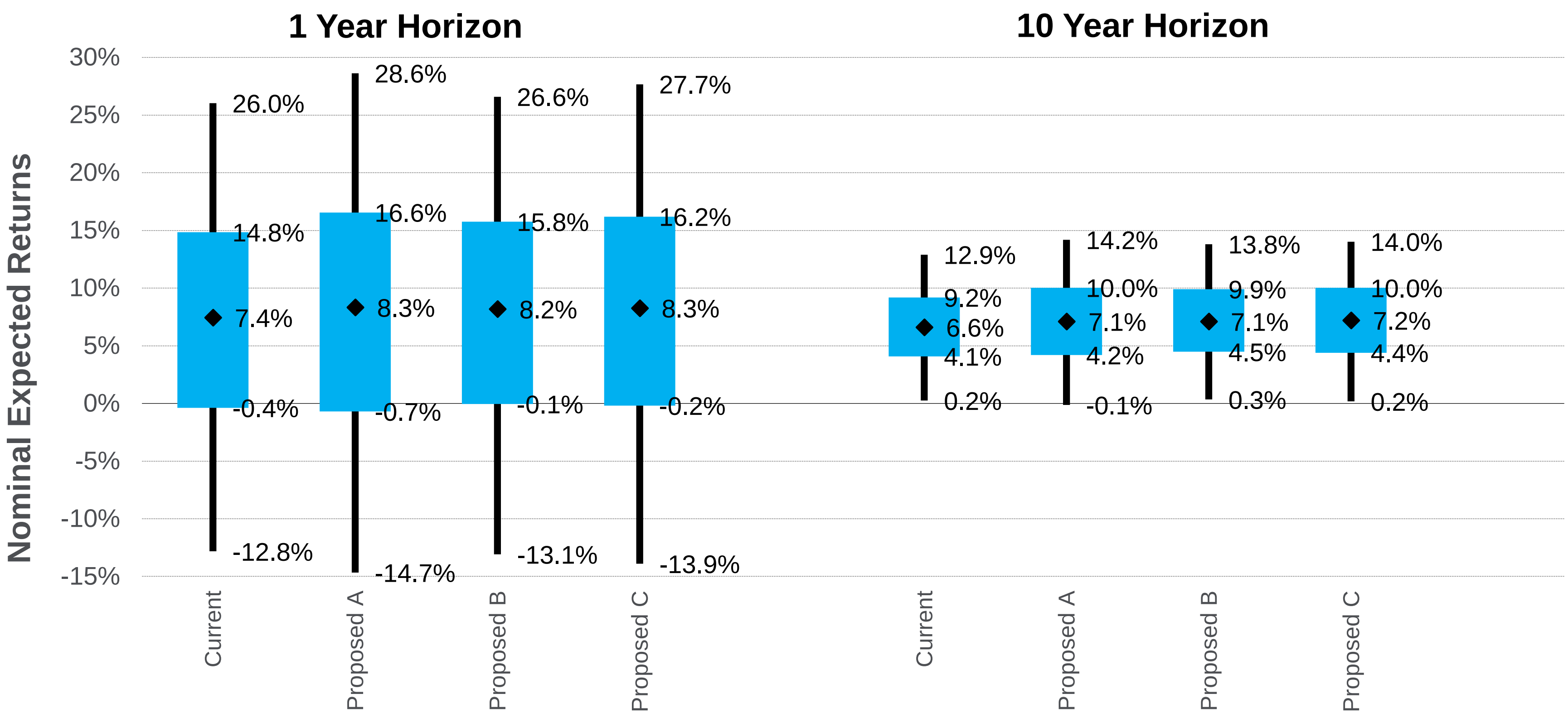
Aon 3/31/2022 10 Year Capital Market Assumptions	Current	Proposed A	Proposed B	Proposed C	NACUBO Over $1B[1]
Public Equity	45%	45%	35%	40%	37%
Private Equity	10	15	15	15	25
Total Equity	**55%**	**60%**	**50%**	**55%**	**62%**
REITs	--	--	--	--	1.5
Real Estate (Core)	10	5	10	5	2
Real Estate (Non-Core)	--	5	5	5	2
Private Real Assets	5	5	10	10	4
Total Real Assets	**15%**	**15%**	**25%**	**20%**	**9.5%**
Hedge Funds (Direct)	5	5	5	5	16
Total Liquid Alternatives	**5%**	**5%**	**5%**	**5%**	**16%**
High Yield Fixed Income	--	--	--	--	1
Private Debt	--	--	--	--	1.5
Total Return-Seeking Fixed Income	**--**	**--**	**--**	**--**	**2.5%**
Core Fixed Income	25	20	20	20	5.5
Cash/Other	--	--	--	--	4.5
Total Risk-Reducing Fixed Income	**25%**	**20%**	**20%**	**20%**	**10%**
Expected Return 10-Yr Nominal Return	**6.6%**	**7.1%**	**7.1%**	**7.2%**	**7.5%**
Expected 10-Yr Real Return	**3.8%**	**4.3%**	**4.3%**	**4.4%**	**4.7%**
Expected Risk 10-Years	**11.2%**	**12.5%**	**11.6%**	**12.0%**	**13.5%**
Sharpe Ratio	**0.39**	**0.38**	**0.42**	**0.41**	**0.38**
Illiquid (>1 Year)	**15%**	**25%**	**30%**	**30%**	**32.5%**

Key Takeaways:

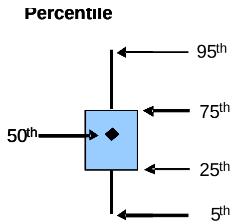
- Proposed portfolios A, B & C satisfy the 7.1% required return needed to preserve purchasing power, over the next 10 years
- Increased diversification through additional private asset exposure will reduce reliance on public equities for portfolios B & C resulting in improved risk adjusted returns

[1]2021 NACUBO-TIAA Study of Endowments, equal-weighted (136 Institutions)

Expected Nominal Return Distributions



Key Takeaways:



- Portfolios A, B & C provide higher expected returns with similar downside risk relative to the current portfolio, over the next 10 years

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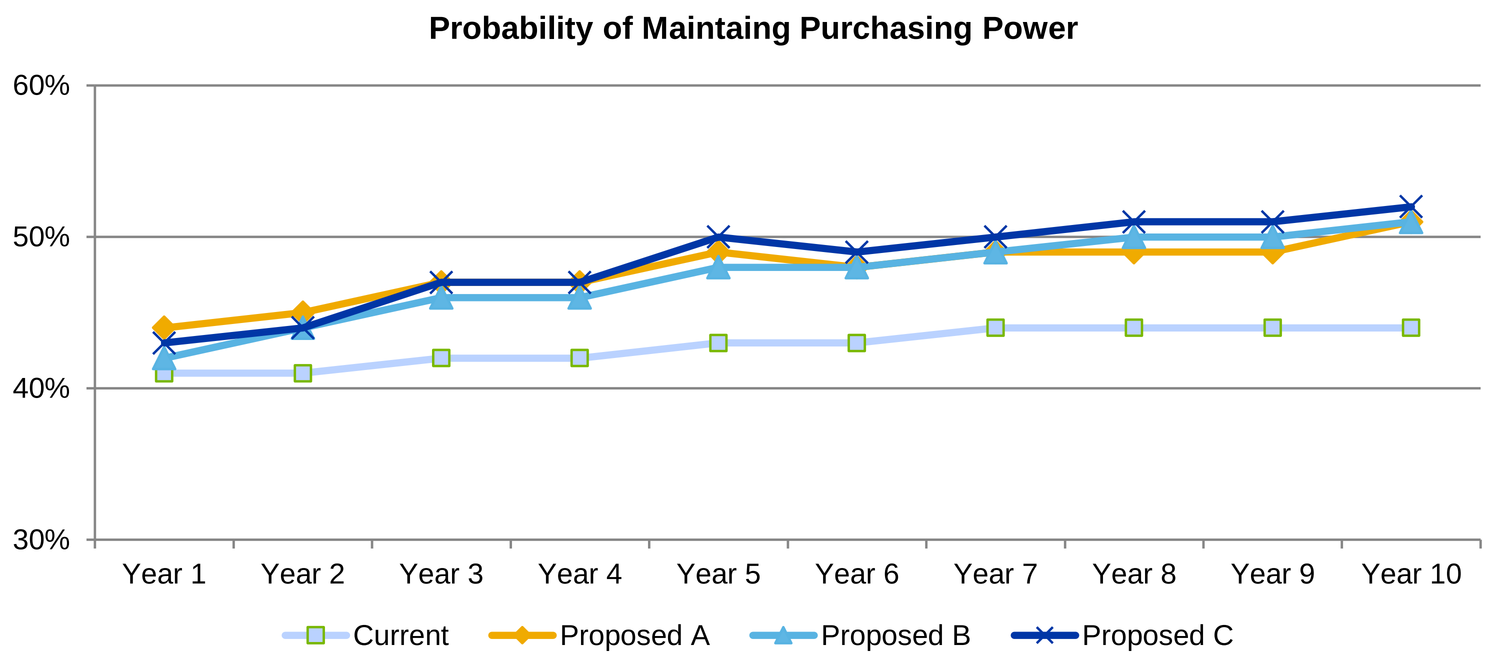
Modeling Overview

- Utilize stochastic modeling (Monte Carlo) running 1,000 simulations of portfolio returns under various economic scenarios which incorporates the spending policy, net unclaimed property receipts, PERS disbursements and expenses in order to project Total CSF market values adjusting for inflation, over the next 10 years
- **$2,134.0 million starting value of Total CSF as of 3/31/2022**
  - $898.9 million Legacy Unclaimed Property Fund
  - $1,189.7 million Constitutional Account
  - $45.4 million OST Common School Fund
- **3.5% spend based on 3-year moving average market value**
  - Spend comes from all three accounts
- **DSL expenses of $36 million growing at 2.2% annual rate**
  - Taken from Legacy Unclaimed Property Fund
- **PERS disbursements = minimum [share of unclaimed property investment earnings or unclaimed property net receipts minus operating expenses] with floor of zero**
  - Taken from Legacy Unclaimed Property Fund. PERS disbursements expected to end in 2027.
- **Net Unclaimed Property Receipts (net of OST expenses) $35 million growing to $46 million**
  - Added to the OST Common School Fund
- **2.7% 10-year inflation expectation**
- **Expected returns: 6.6% Current, 7.1% Proposed A & B, 7.2% Proposed C**

Probability of Maintaining Purchasing Power

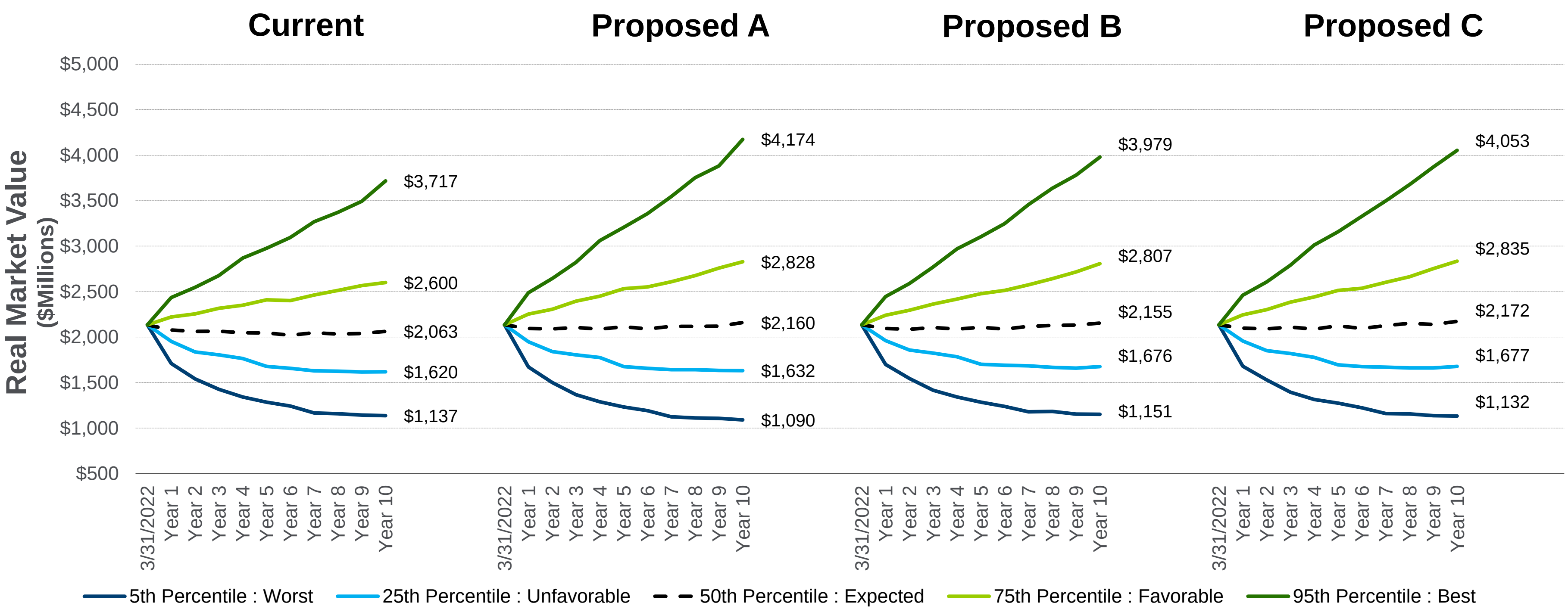


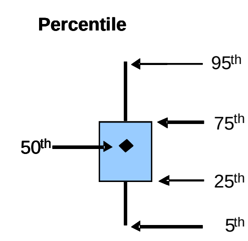
Key Takeaways:

- The goal is to increase probability of maintaining purchasing power to 50/50 or greater. The proposed portfolios (A, B & C) all reach the goal at the end of 10 years as the required return of 7.1% is met or slightly exceeded.

- The probability of maintaining purchasing power increases, over the first few years, as inflation is expected to moderate over the next 3 years. PERS payments are expected to end in year 7 which further helps increase probabilities.

Real Growth of Assets – Total CSF (Today's Dollars)

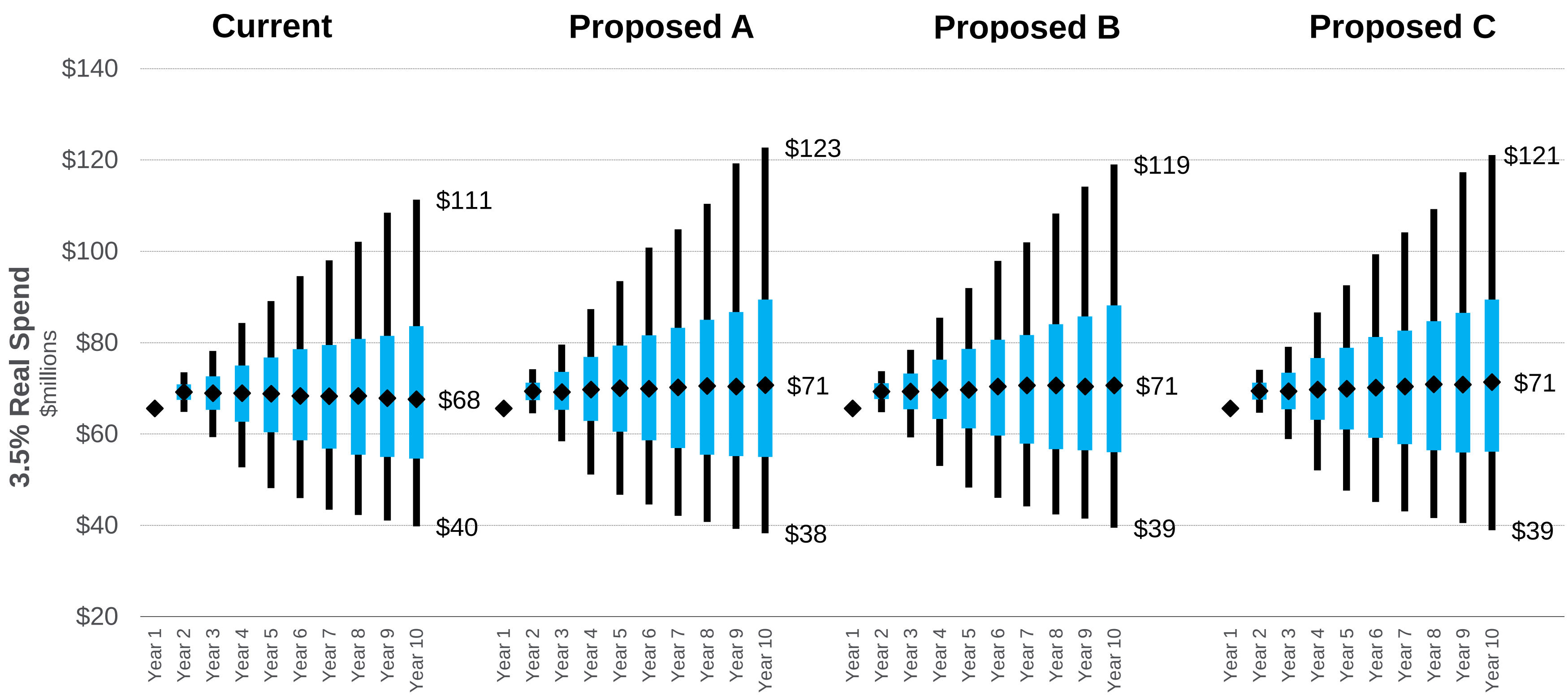




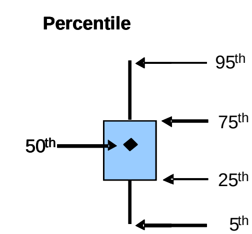
Key Takeaways:

- Since the current portfolio falls short of the required 7.1% return, we expect the real value of the portfolio to decline from $2,134 to $2,063 million (3% loss of purchasing power), over the next 10 years. In the worst case (5th percentile), real values may fall as low as $1,137 million.
- The proposed portfolios A, B & C are all expected to maintain or slightly grow purchasing power as their expected returns meet or exceed 7.1% required return while providing similar or better downside protection.

3.5% Spend (Today's Dollars)



Key Takeaways:



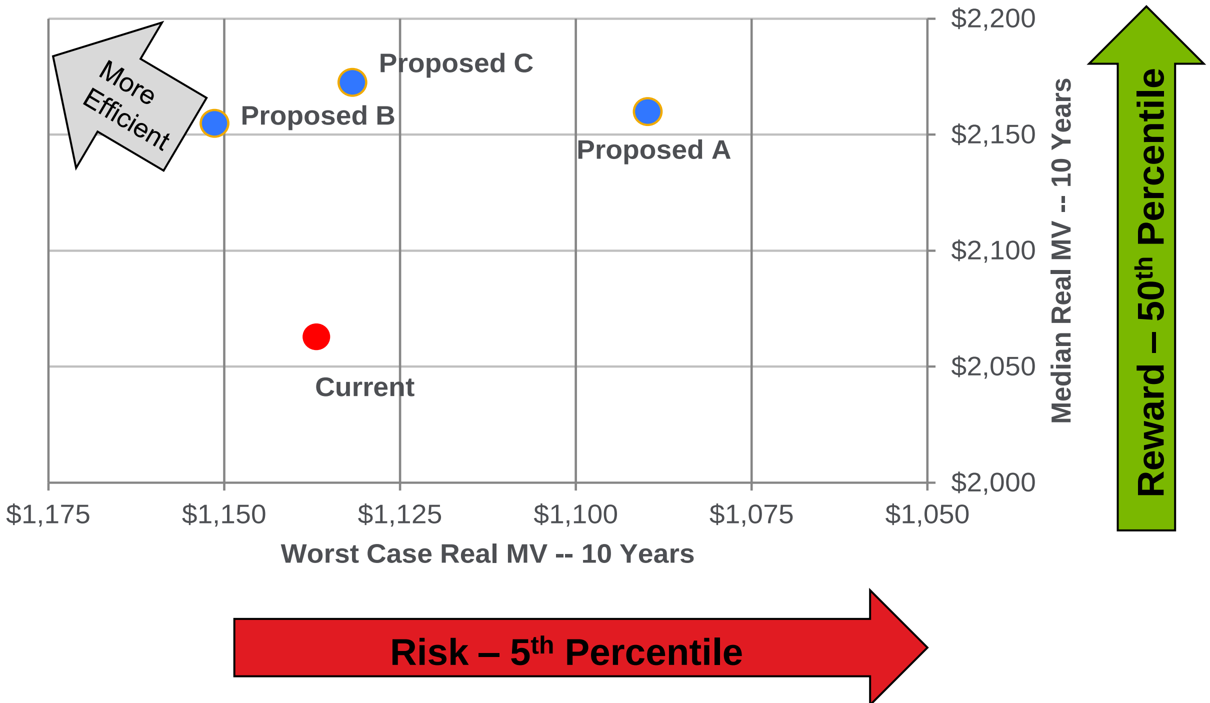
- Spend is expected to increase in the first two years, due to lower market values rolling-off the 3-year average used to calculate spending.
- For the current portfolio, annual real spend is expected to gradually decline from $69 in year 3 to $68 million at the end of 10 years, as the portfolio fails to maintain purchasing power.
- For proposed portfolios A, B & C, we expect annual real spend to gradually increase from $69 in year 3 to $71 million at the end of 10 years

Risk/Reward of Total CSF – End of 10 Years

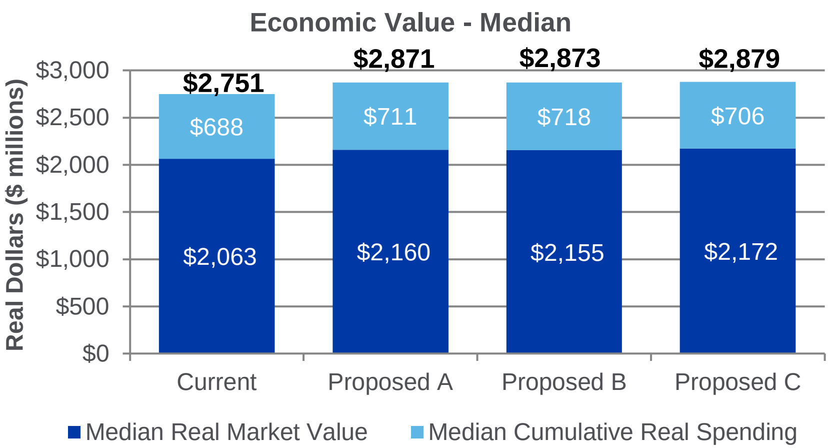
Risk/Reward Observations

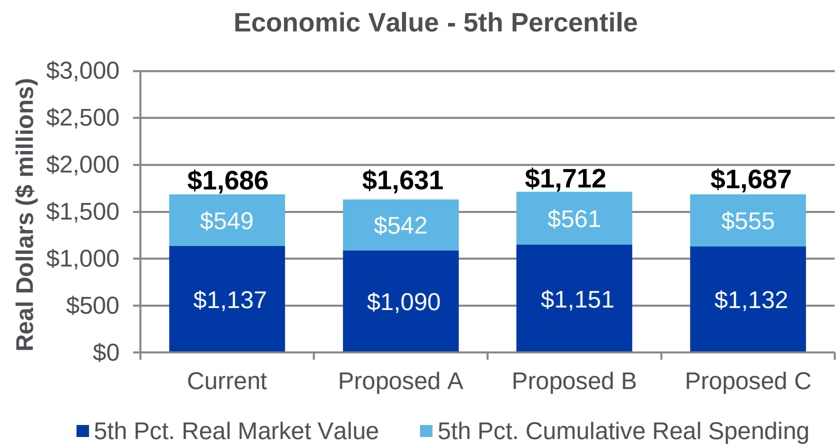
- Implementing one of the proposed strategies improves expected real projected asset values by:

Scenarios (Real Market Value)	Proposed A	Proposed B	Proposed C
Median Case Scenario (50th Percentile)	$97 million	$92 million	$110 million
Worst Case Scenario (5th Percentile)	-$47 million	$14 million	-$5 million



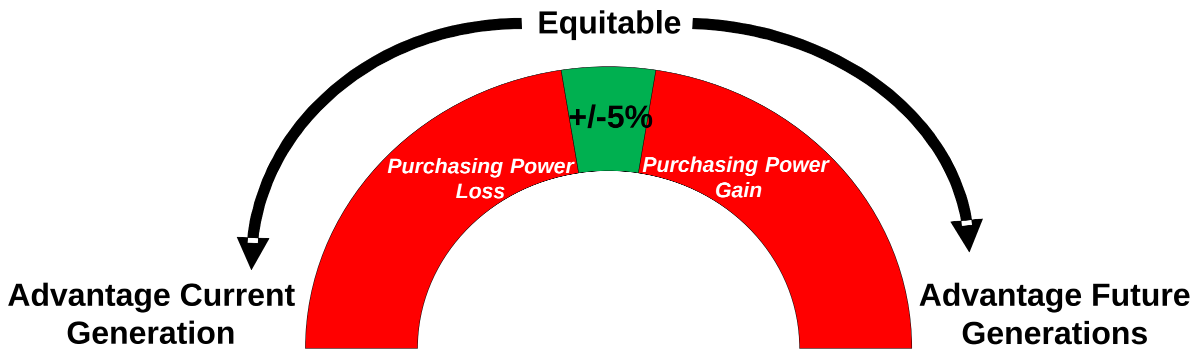
Economic Value Total CSF – End of 10 Years

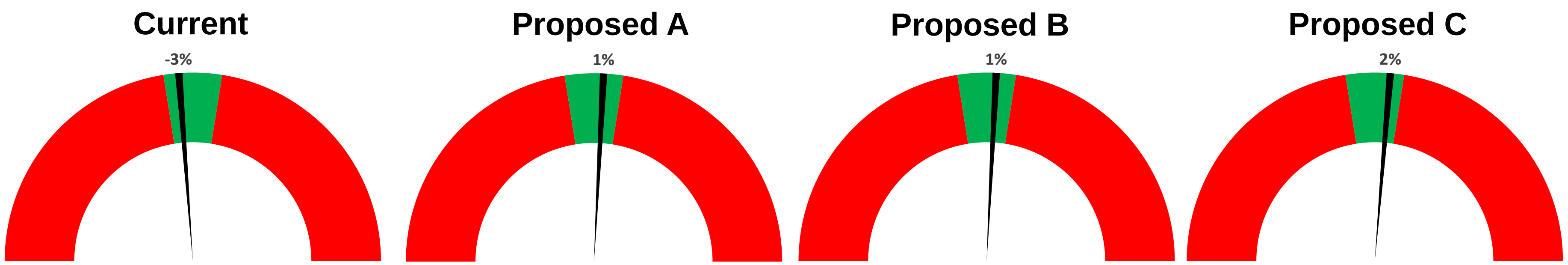




- Economic value is defined as the cumulative real spending over the next 10 year plus remaining real Endowment market value.
- For most organizations, the goal is to maximize both spending and remaining portfolio value over the investment horizon.
- The proposed portfolios (A, B & C) provide better economic value (higher cumulative spending and ending market value) in median scenarios versus the current portfolio. Proposed B & C have both higher median and 5th percentile economic values.

Intergenerational Equity – 10 Year Horizon





- Perfect intergenerational equity would maintain purchasing power without real growth or decline.
- Portfolios that are not equitable (either declining or growing too much) will need to either change spending or investment return expectations through spending policy or asset allocation.
- All the portfolios are considered reasonably equitable as none are growing or declining by more than 5%. However, there are no definitive rules around what is considered equitable.
- We chose +/-5% because it is roughly the impact of changing spending policy or expected returns by 1%, over 10 years.

Phase 3: Liquidity Analysis

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Executive Summary

- This report summarizes our analysis of the liquidity profile based on Common School Fund alternative policy allocations and various cash flow scenarios
  - Intended as a stress-testing model incorporating the spending profile of the foundation
  - Uses different scenarios for economic environments and other relevant events
  - Shows how the portfolio's liquidity profile could evolve with a given investment strategy
- We categorized investments by liquidity into four buckets
  - **Liquid**: less than 3 months needed for return of capital (e.g., publicly traded securities)
  - **Quasi-Liquid**: Typical lock-up of 3-12 months. Conservatively, we assumed a 1-year lock-up in most economic environments, 2 years in a Recession scenario, and 3 years in a Dark Skies scenario (e.g., many hedge funds, core real estate)
  - **Illiquid: Potential lock-up of 5-10 years**, depending on economic environment (e.g., closed-ended real estate, mature private equity)
  - **Illiquid: Potential lock-up of 10+ years** (e.g., typical private equity)
- This stress-testing model is intended to be a conservative approximation of the actual liquidity properties of the assets
- Not surprisingly, the portfolios are projected to deviate significantly from its target allocations in poor economic scenarios such as Dark Skies.
- All the asset allocation and spending scenarios tested are **NOT** expected to experience liquidity problems in both the Recession scenario and the Dark Skies scenario

Economic Scenarios – Description

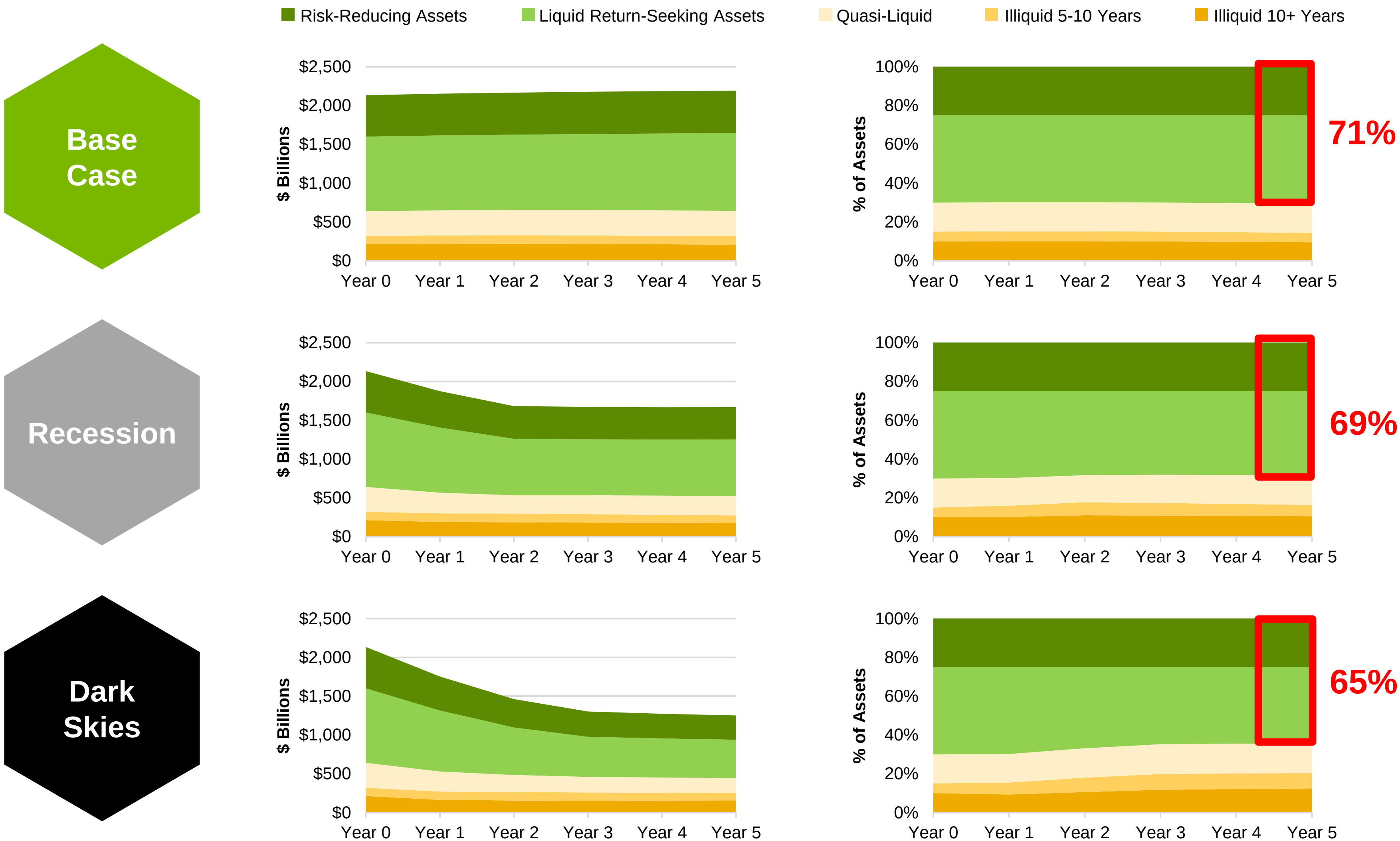
- **Base Scenario**
  - Markets perform as expected (~50th percentile)

- **Recession Scenario (~95th percentile)**
  - Somewhat pessimistic outlook for the markets (~95th percentile)
  - Return-seeking assets decline in the first two years with a modest rebound in later years

- **Dark Skies Scenario**
  - Very pessimistic outlook for markets (~99th percentile)
  - Return-seeking assets decline significantly. The value of public equities roughly splits in half over three years, without an immediate rebound

Liquidity Analysis – Economic Scenarios

Current Portfolio



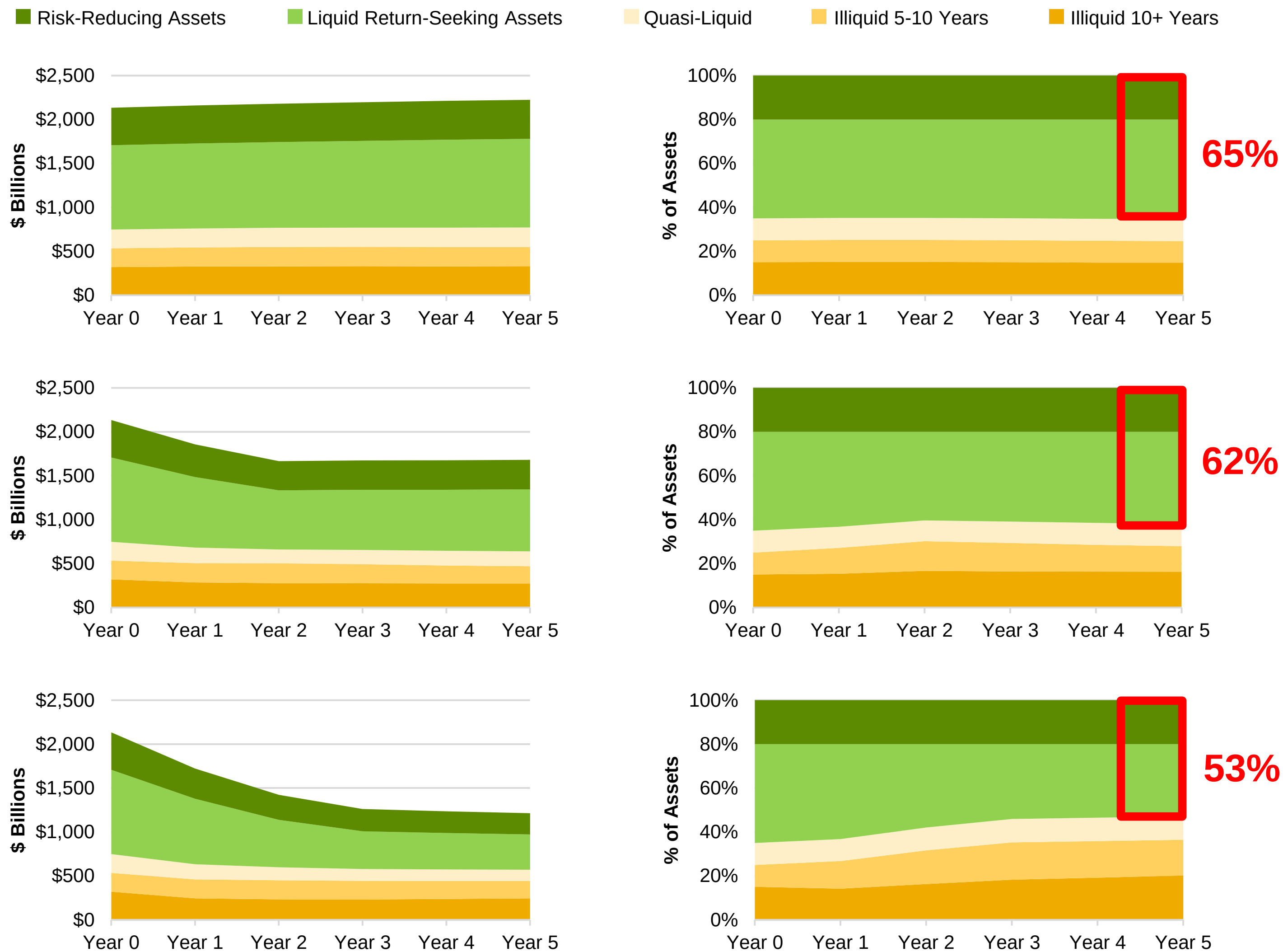
Liquidity Analysis – Economic Scenarios

Proposed Portfolio A

Base Case

Recession

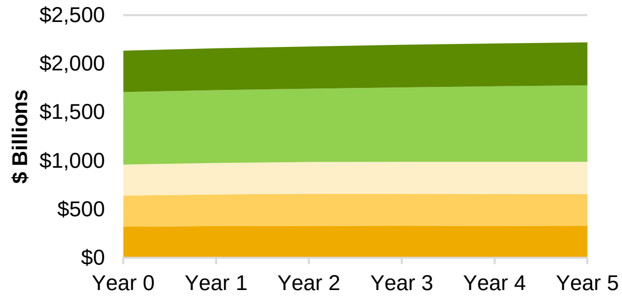
Dark Skies

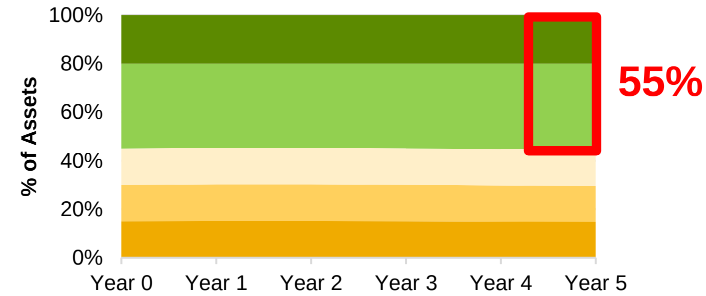


Liquidity Analysis – Economic Scenarios
Proposed Portfolio B

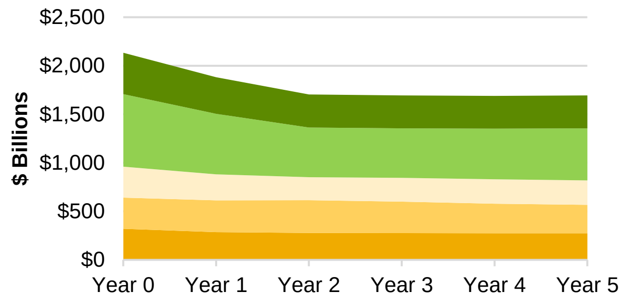
Risk-Reducing Assets | Liquid Return-Seeking Assets | Quasi-Liquid | Illiquid 5-10 Years | Illiquid 10+ Years

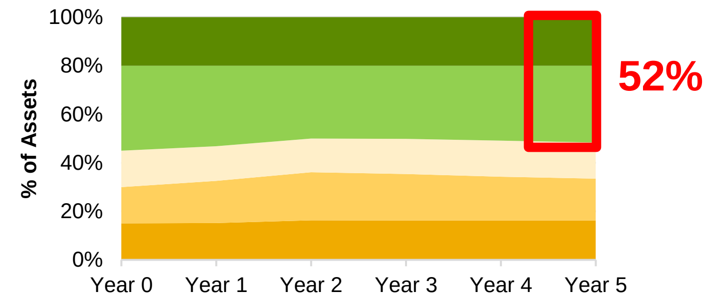
Base Case



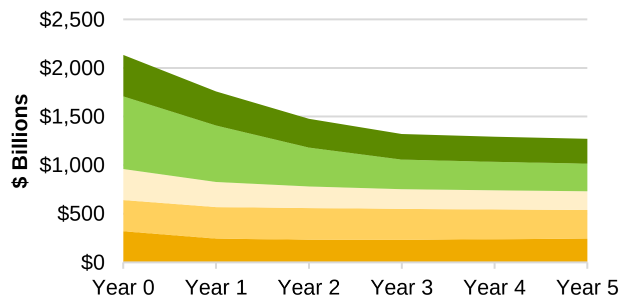


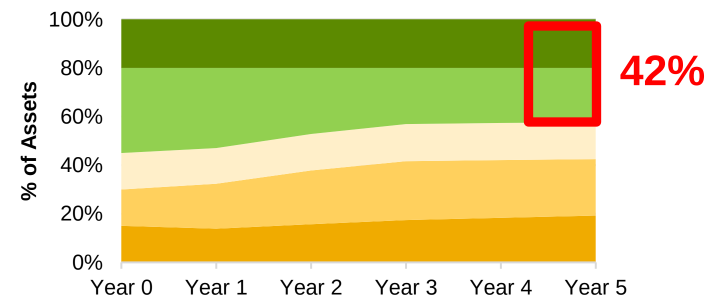
Recession





Dark Skies





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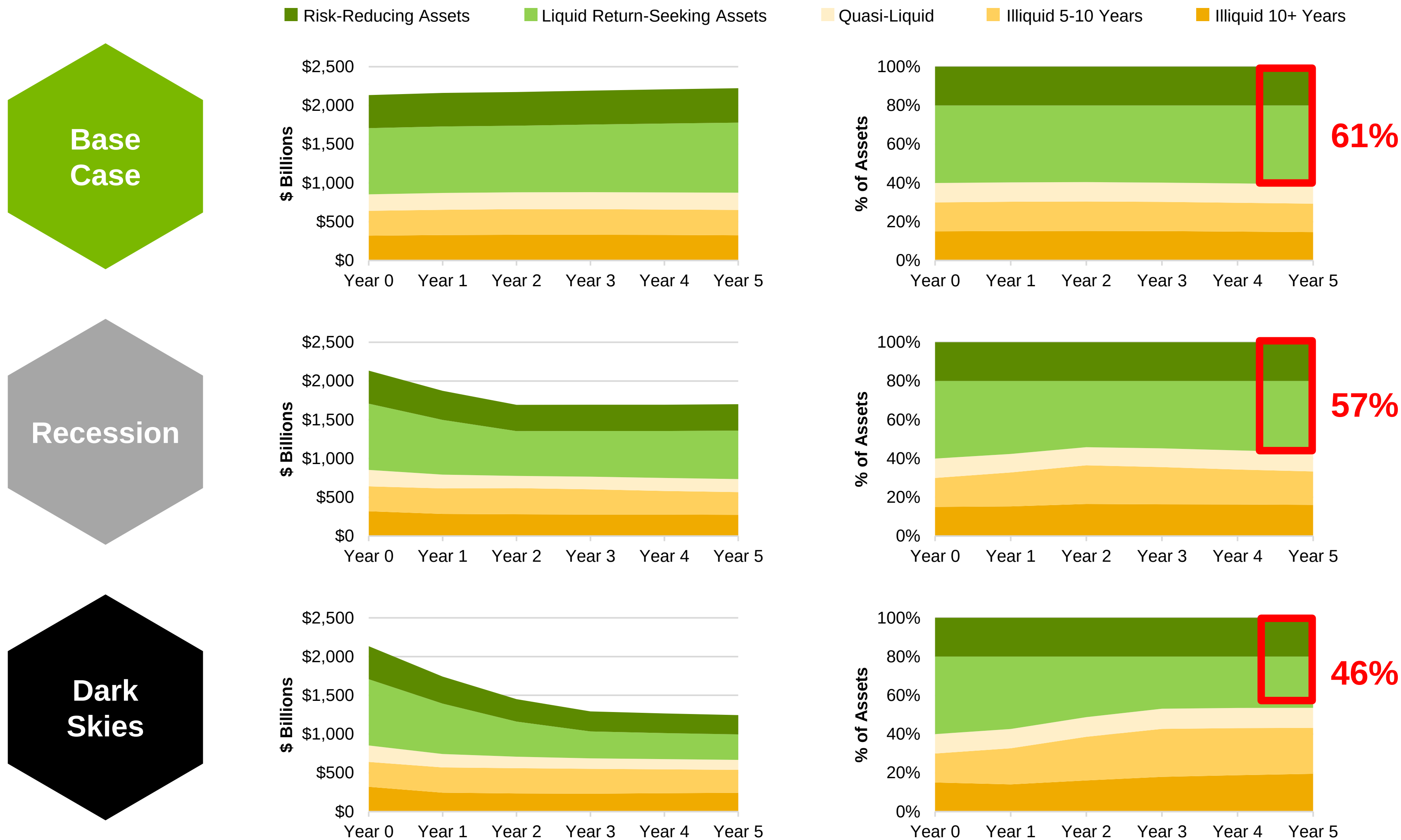
Liquidity Analysis – Economic Scenarios

Proposed Portfolio C



Conclusion

Investment Policy - Observations and Recommendations

Observations

- Current portfolio expected nominal return of 6.6% falls short of the 7.1% required to preserve the purchasing power of the CSF
- The value of the CSF is expected to decline (in today's dollars) from $2,134 to $2,063 million (3% loss of purchasing power), over the next 10 years. In the most pessimistic scenario, values may fall to $1,137 million
- Annual 3.5% spend is expected to peak (in today's dollars) at $69 million in year 3 and then gradually decline to $68 million, at the end of 10 years. In the most pessimistic scenario, spend may fall to $40 million
- Purchasing power is expected to stabilize after 2027 when PERS payments end
- Current allocation is well diversified across public and private assets

Recommendations

- Increase portfolio expected returns at or above 7.1% in order to maintain purchasing power, over the next 10 years:
  - Consider increasing private assets (private equity, real assets and real estate)
  - Consider reducing public equity and bond exposure
- Additional private assets are not expected to cause liquidity issues in stressed markets
- Reassess required return after PERS payments end in 2027 as it may allow for lower allocations to risk assets to maintain intergenerational equity

Appendix – Modeling Assumptions Detail

Summary of Assumptions – Required Rate of Return Inputs[1]

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10-Yr Average
Spending Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	**3.5%**
Inflation	4.9%	3.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	**2.7%**
DSL Expenses	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.8%	1.8%	1.7%	1.7%	**1.7%**
PERS Distributions	1.6%	1.6%	1.6%	1.7%	1.8%	1.8%	--	--	--	--	**1.0%**
Net UP Receipts Less OST Expenses	(1.6%)	(1.6%)	(1.6%)	(1.7%)	(1.8%)	(1.8%)	(1.8%)	(1.8%)	(1.8%)	(1.8%)	**(1.7%)**
Required Return	**10.1%**	**8.4%**	**7.4%**	**7.4%**	**7.4%**	**7.4%**	**5.7%**	**5.7%**	**5.6%**	**5.6%**	**7.1%**

1) Represents median results from 5,000 simulations using current portfolio

Assumptions – Annual Spending Rate + DSL Annual Expense

- First Year Payout (3/31/22 to 3/31/23) of the CSF will be based on:
  - Annual Spend Rate: 3.5% of 3-year average market values

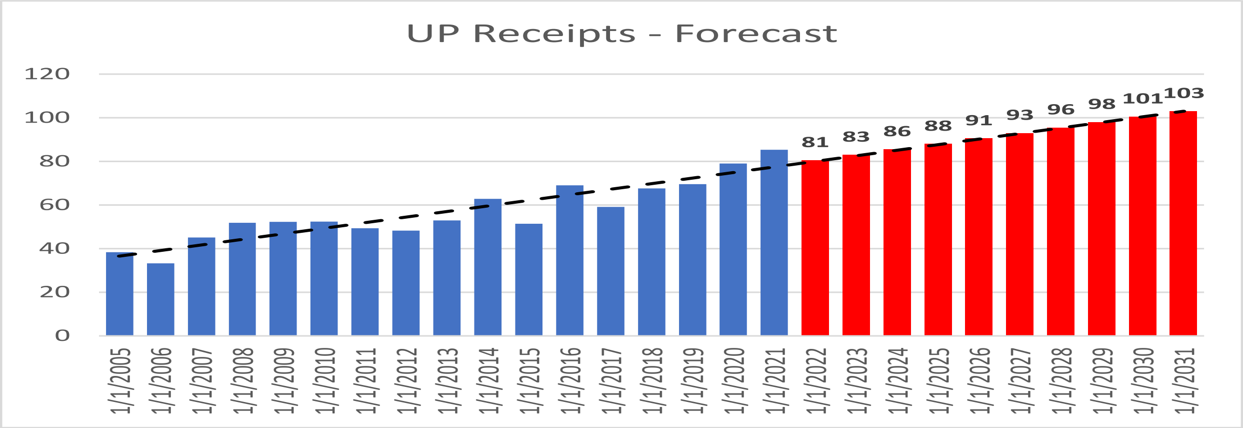
2022 Annual Spend Rate	CSF Market Value ($ millions)
3/31/2022	$2,134.0
3/31/2021	$2,109.9
3/31/2020	$1,653.7
3-Year Average	**$1,965.9**
Annual Spend Rate (%)	**3.5%**
Annual Spend Rate ($)	**$68.8**

- DSL Annual Expense = $36 million growing at 2.2% rate

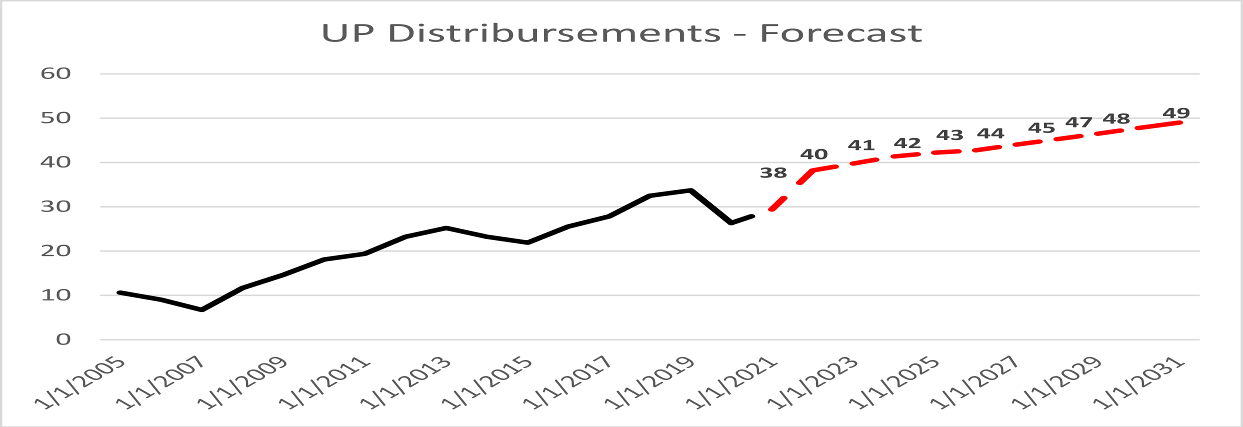
- Total Annual Payout: $68.8 + $36.0 = $104.8 million spend in first year of projection

Assumptions – Unclaimed Property Cash Flow

- **Unclaimed Property Receipts**
  - Assume unclaimed property receipts continue to follow the historical trendline. Projected to grow from $81 to $103 million, over the next 10 years



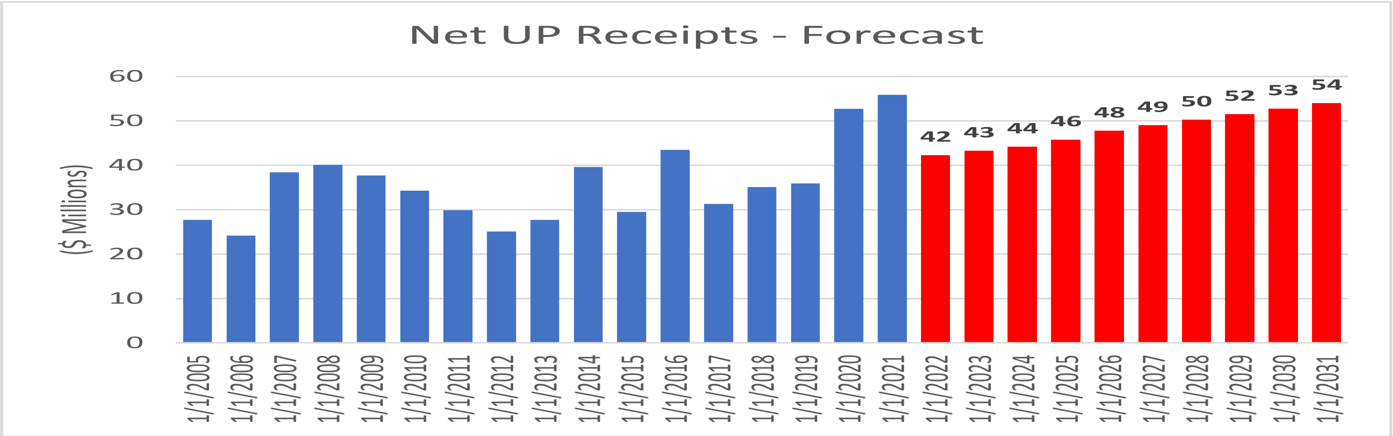
- **Unclaimed Property Disbursements**
  - Assume unclaimed property disbursements are based on 50% of 5-year rolling average of Unclaimed Property receipts



Assumptions – Unclaimed Property Cash Flow Cont'd

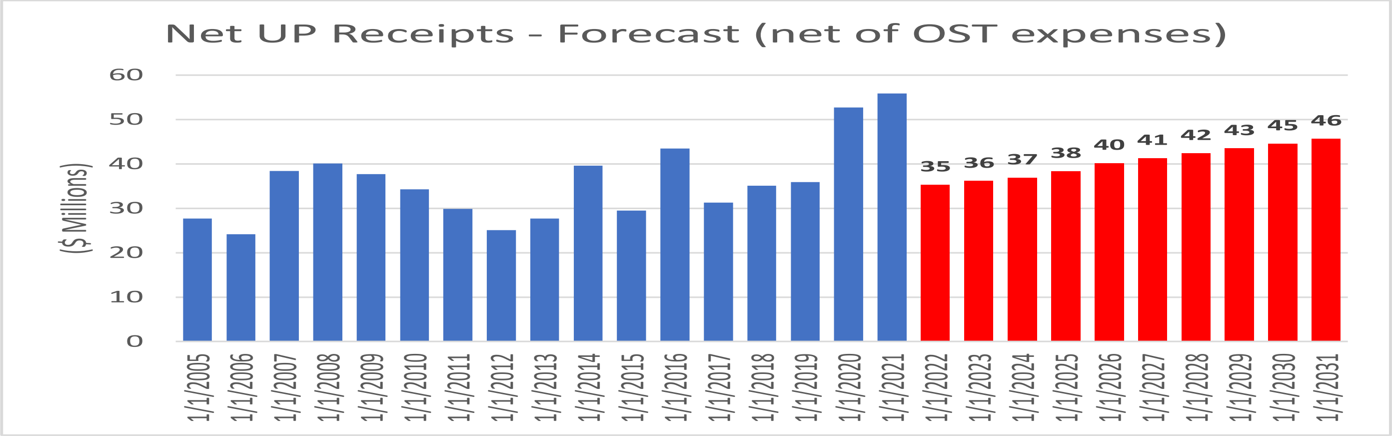
Net Unclaimed Property Receipts

– Assume net unclaimed property receipts grow from $42 to $54 million, over the next 10 years



Net Unclaimed Property Receipts (Net of OST Expenses)

– Assume net unclaimed property receipts are net of OST expenses ($7 million growing at inflation). This reduces the cash inflows. As a result, net unclaimed property receipts are expected to grow from $35 to $46 million, over the next 10 years. This is a 1.7% positive annual impact on portfolio growth, over the next 10 years.



Assumptions – PERS Distribution (Senate Bill 1566)

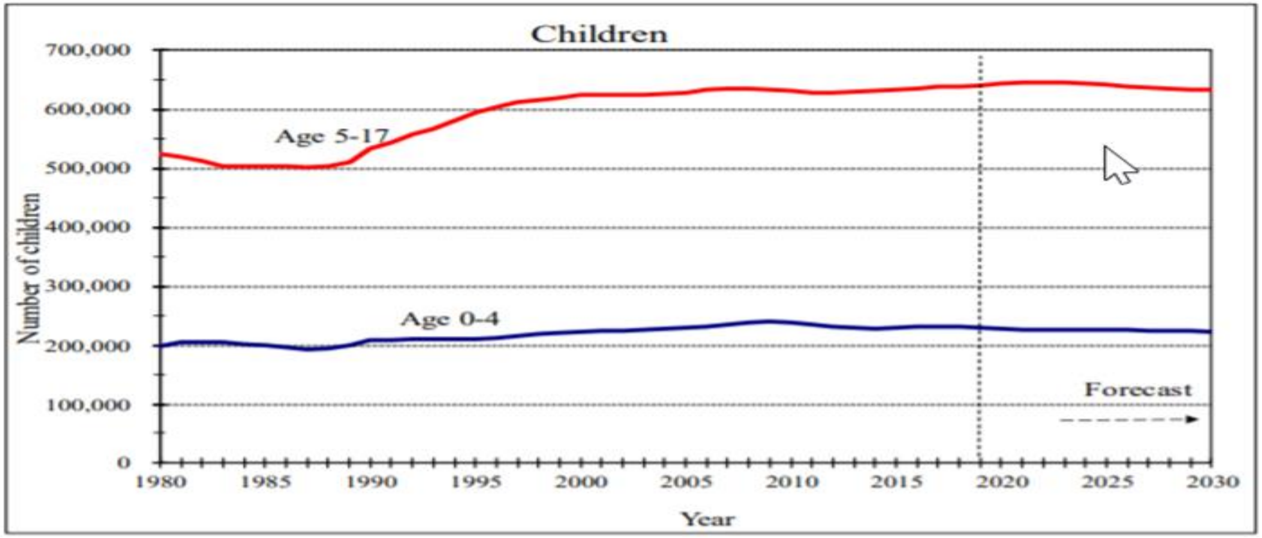
- **PERS Disbursement**
  - *Annual PERS disbursement = minimum [share of unclaimed property investment earnings or unclaimed property net receipts minus operating expenses] with floor of zero*
  - Aon's investment returns are net of investment fees, so no need to subtract fees
  - *Share of unclaimed property investment earnings = Legacy Acct. Market Value/CSF Market Value*
    - The actual calculation has historically been calculated as Unclaimed Property Corpus/CSF at cost, however staff has indicated it should be based on CSF market value
    - CSF at cost is difficult to forecast because it depends on income, bond maturities and may be subject to manipulation through realized gains
  - PERS payments expected to end in 2027
  - PERS payments are expected to have a -1.0% annual impact on portfolio growth, over the next 10 years

	2022	2023	2024	2025	2026	2027	2028	2029	2030	10-Yr Average
PERS Distribution (Median) $	35.3	36.1	36.9	38.3	40.2	41.3	--	--	--	
% of CSF Portfolio	1.7%	1.7%	1.6%	1.7%	1.7%	1.7%	--	--	--	1.0%

10-Year Oregon Population Growth (School Aged Children)

- Assume 0.0% 10-year population growth of school aged children

10-Year Oregon Population Growth (school aged children)



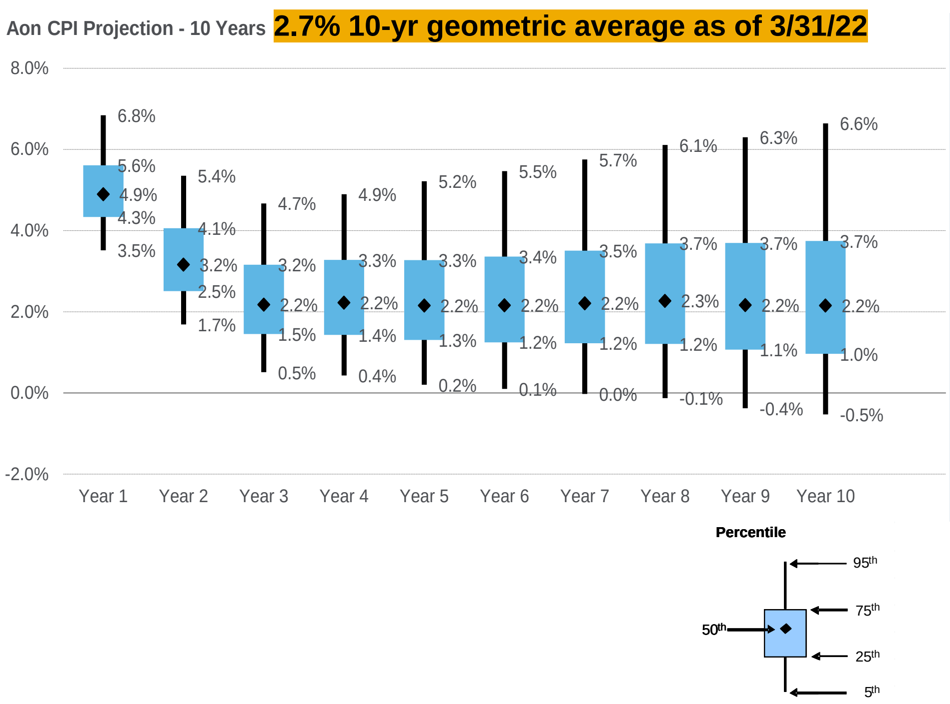
Source: U.S. Bureau of Census; and Oregon Office of Economic Analysis.

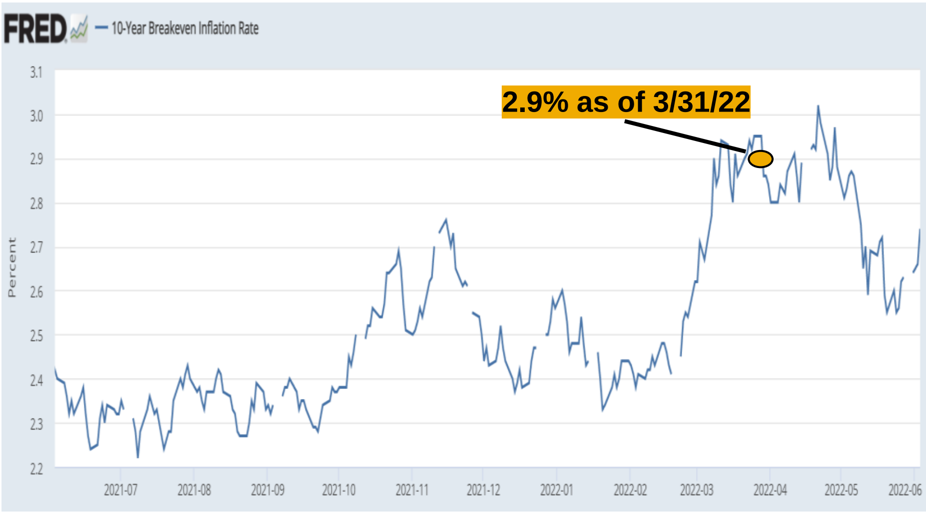
Empower Results®

Aon Inflation Expectations

Aon uses macroeconomic survey firm Consensus Economics to estimate inflation

- Aon does not rely solely on implied breakeven inflation rates as the basis for setting inflation assumptions
- We believe that breakeven inflation is not an unbiased estimator of future inflation expectations
- We believe an inflation risk premium "IRP" exists that tends to overstate inflation expectations based on breakeven rates
  - Bond investors uncertain about future inflation will demand positive IRP
  - Supply and demand for inflation-protected bonds will impact breakeven rates without actual changes to long-term inflation expectations
  - Lower liquidity for inflation-protected bonds will lower breakeven rates during "flights to quality" without any immediate changes to inflation expectations





10 Year Projections of CSF Market Value and Legacy Account Balances – Current Portfolio (Nominal Values)

Current Portfolio	3/31/22	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Legacy Account MV[2]	$ 899	$ 862	$ 837	$ 805	$ 755	$ 717	$ 665	$ 636	$ 610	$ 586	$ 561
Constitutional MV[2]	$ 1,190	$ 1,236	$ 1,278	$ 1,325	$ 1,356	$ 1,401	$ 1,436	$ 1,464	$ 1,503	$ 1,558	$ 1,605
OST MV[2]	$ 45	$ 84	$ 124	$ 167	$ 211	$ 259	$ 309	$ 362	$ 415	$ 476	$ 543
Total CSF MV[2,3]	**$ 2,134**	**$ 2,182**	**$ 2,242**	**$ 2,299**	**$ 2,322**	**$ 2,372**	**$ 2,410**	**$ 2,457**	**$ 2,525**	**$ 2,630**	**$ 2,725**
UP Share of Inv. Earnings[1,2]	**42.1%**	**39.7%**	**37.5%**	**35.0%**	**32.6%**	**30.2%**	**27.7%**	**26.0%**	**24.2%**	**22.5%**	**20.8%**

Proposed A	3/31/22	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Legacy Account MV[2]	$ 899	$ 868	$ 847	$ 818	$ 774	$ 742	$ 692	$ 671	$ 641	$ 626	$ 606
Constitutional MV[2]	$ 1,190	$ 1,245	$ 1,292	$ 1,347	$ 1,382	$ 1,440	$ 1,476	$ 1,511	$ 1,569	$ 1,639	$ 1,680
OST MV[2]	$ 45	$ 84	$ 126	$ 169	$ 214	$ 265	$ 315	$ 371	$ 424	$ 489	$ 556
Total CSF MV[2,3]	**$ 2,134**	**$ 2,198**	**$ 2,268**	**$ 2,338**	**$ 2,368**	**$ 2,445**	**$ 2,484**	**$ 2,555**	**$ 2,657**	**$ 2,757**	**$ 2,843**
UP Share of Inv. Earnings[1,2]	**42.1%**	**39.7%**	**37.5%**	**35.1%**	**32.7%**	**30.4%**	**28.0%**	**26.2%**	**24.6%**	**22.9%**	**21.2%**

Proposed B	3/31/22	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Legacy Account MV[2]	$ 899	$ 869	$ 845	$ 814	$ 772	$ 736	$ 686	$ 675	$ 648	$ 625	$ 609
Constitutional MV[2]	$ 1,190	$ 1,247	$ 1,296	$ 1,351	$ 1,388	$ 1,440	$ 1,476	$ 1,524	$ 1,580	$ 1,638	$ 1,691
OST MV[2]	$ 45	$ 84	$ 125	$ 169	$ 214	$ 265	$ 317	$ 371	$ 428	$ 491	$ 559
Total CSF MV[2,3]	**$ 2,134**	**$ 2,200**	**$ 2,266**	**$ 2,332**	**$ 2,373**	**$ 2,437**	**$ 2,479**	**$ 2,576**	**$ 2,674**	**$ 2,761**	**$ 2,850**
UP Share of Inv. Earnings[1,2]	**42.1%**	**39.7%**	**37.4%**	**35.1%**	**32.6%**	**30.3%**	**27.8%**	**26.1%**	**24.4%**	**22.7%**	**21.2%**

Proposed C	3/31/22	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Legacy Account MV[2]	$ 899	$ 870	$ 847	$ 818	$ 776	$ 744	$ 692	$ 679	$ 649	$ 628	$ 610
Constitutional MV[2]	$ 1,190	$ 1,247	$ 1,294	$ 1,349	$ 1,390	$ 1,447	$ 1,483	$ 1,529	$ 1,586	$ 1,647	$ 1,691
OST MV[2]	$ 45	$ 84	$ 126	$ 169	$ 215	$ 265	$ 316	$ 372	$ 427	$ 492	$ 562
Total CSF MV[2,3]	**$ 2,134**	**$ 2,201**	**$ 2,267**	**$ 2,336**	**$ 2,381**	**$ 2,455**	**$ 2,496**	**$ 2,587**	**$ 2,673**	**$ 2,772**	**$ 2,848**
UP Share of Inv. Earnings[1,2]	**42.1%**	**39.7%**	**37.5%**	**35.1%**	**32.7%**	**30.4%**	**27.9%**	**26.2%**	**24.5%**	**22.8%**	**21.2%**

1) **UP share of investment earnings calculated at the end of each year is applied to the following year's PERS calculation**
2) **Represents median results from 5,000 simulations using current portfolio allocation**
3) **The sum of Legacy, Constitutional and OST accounts may not exactly sum to Total CSF because medians are not additive**

Capital Market Assumptions

- What are they?
  - Aon's asset class return, volatility and correlation assumptions
  - Long-term (10-year), forward-looking assumptions
    - These are separate from our Medium Term views
  - Best estimates (50/50 probability of better or worse long-term results than expected)
  - Market returns: no active management value added or fees (other than hedge funds and private equity, where traditional passive investments are not available)
  - Produced quarterly by Global Asset Allocation Team

Capital Market Assumptions: Methodology

Aon

Frequency of updates	Quarterly
Time horizon	10 (and 30) years
Methodology	Building block
Building blocks (equities)	Earnings yield and normalized payout ratio, inflation, GDP growth, and valuation adjustment
Interest rate forecasting	Current market pricing and fair value
Inflation	Consensus forecasts and inflation risk premium
Volatility and correlations	Historical data, implied volatilities and judgment

Q2 2022 Assumptions (10-Year): Expected Returns and Risks

		10-yr	10-yr	10-yr
	Equity	**Expected Real Return[1]**	**Expected Nominal Return[1]**	**Expected Volatility**
1	Large Cap U.S. Equity	3.5%	6.3%	17.0%
2	Small Cap U.S. Equity	3.7%	6.5%	23.0%
3	Global Equity	4.3%	7.1%	18.0%
4	International Developed Equity	4.6%	7.4%	20.5%
5	Emerging Markets Equity	5.1%	7.9%	24.0%
	Fixed Income			
6	Cash (Gov't)	-0.4%	2.3%	1.0%
7	Cash (LIBOR)	-0.1%	2.6%	1.0%
8	TIPS	-0.7%	2.0%	3.5%
9	Core Fixed Income (Market Duration)	0.2%	2.9%	4.0%
10	Core Plus Bonds			
11	Long Duration Bonds – Gov't / Credit	0.9%	3.6%	9.0%
12	Long Duration Bonds – Credit	1.2%	3.9%	9.5%
13	Long Duration Bonds – Gov't	0.3%	3.0%	9.5%
14	High Yield Bonds	1.6%	4.3%	10.5%
15	Bank Loans	2.5%	5.3%	7.0%
16	Non-US Developed Bonds (0% Hedged)	-0.6%	2.1%	10.0%
17	Non-US Developed Bonds (50% Hedged)	-0.2%	2.5%	5.5%
18	Non-US Developed Bonds (100% Hedged)	-0.1%	2.6%	3.0%
19	Short Govt Bonds	-0.3%	2.4%	1.5%
20	Short Corporate Bonds	0.1%	2.8%	2.0%
21	Intermediate Govt Bonds	-0.3%	2.4%	3.0%
22	Intermediate Corporate Bonds	0.3%	3.0%	3.5%
23	25-year Government Bond	0.1%	2.8%	11.5%
24	Emerging Market Bonds (Sovereign USD)	2.4%	5.2%	11.0%
25	Emerging Market Bonds (Corporate USD)	1.9%	4.6%	11.0%
26	Emerging Market Bonds (Sovereign Local)	2.8%	5.6%	13.0%
	Alternative Investments			
27	Broad Hedge Funds[2]	2.4%	5.2%	9.0%
28	Broad Hedge Funds[2](Buy List)	3.7%	6.5%	9.0%
29	Hedge Fund-of-Funds[3]	1.1%	3.8%	9.0%
30	Hedge Fund-of-Funds[3] (Buy List)	2.2%	5.0%	9.0%
31	eLDI	1.6%	4.3%	5.0%
32	Real Estate (Core)	2.8%	5.6%	15.0%
33	U.S. REITs	3.0%	5.8%	18.5%
34	Commodities	2.4%	5.2%	17.0%
35	Private Equity	6.4%	9.3%	25.0%
36	Infrastructure	5.3%	8.1%	14.5%
37	Multi Asset Credit	3.0%	5.8%	9.0%
38	ILS	2.2%	5.0%	5.5%
39	Equity Insurance Risk Premium - High Beta	2.6%	5.4%	11.0%
40	Equity Insurance Risk Premium - Low Beta	2.0%	4.8%	5.0%
41	Private Debt -Direct Lending	5.1%	7.9%	16.5%
42	Alternative Risk Premia (ARP)	3.8%	6.6%	9.5%
43	Closed-End Real Assets	5.6%	8.5%	15.5%
44	U.S. Inflation	0.0%	2.7%	1.5%

1) All expected returns are geometric (long-term compounded; rounded to the nearest decimal) and net of investment fees
2) Fund of hedge funds
3) Diversified portfolio of Direct hedge fund investments

Q2 2022 Assumptions (10-Year): Expected Nominal Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
1 Large Cap U.S. Equity	1.00	0.93	0.97	0.81	0.73	0.08	0.08	-0.03	0.02	-0.01	0.07	-0.13	0.59	0.44	0.06	0.06	-0.01	0.44	0.66	0.54	0.34	0.65	0.46	0.62	0.35	0.01	0.05	-0.07	0.04	-0.13	0.42	0.60	0.66	0.53	0.45	0.36	0.59	0.01	0.51	0.93	0.32	0.19	0.07	0.52	0.07
2 Small Cap U.S. Equity		1.00	0.93	0.75	0.68	0.07	0.07	-0.03	0.02	-0.02	0.06	-0.13	0.56	0.42	0.05	0.04	-0.01	0.41	0.62	0.50	0.33	0.61	0.41	0.60	0.34	0.00	0.05	-0.07	0.04	-0.13	0.39	0.53	0.62	0.49	0.43	0.34	0.55	0.01	0.47	0.86	0.30	0.18	0.07	0.50	0.07
3 Global Equity			1.00	0.91	0.83	0.07	0.07	-0.04	0.02	-0.02	0.07	-0.14	0.64	0.47	0.19	0.16	-0.01	0.47	0.65	0.52	0.36	0.64	0.48	0.63	0.35	-0.01	0.05	-0.08	0.04	-0.14	0.46	0.64	0.64	0.52	0.48	0.38	0.63	0.01	0.49	0.90	0.32	0.20	0.07	0.54	0.08
4 International Equity				1.00	0.76	0.04	0.04	-0.03	0.01	-0.02	0.06	-0.13	0.59	0.44	0.41	0.36	-0.03	0.43	0.56	0.45	0.35	0.54	0.49	0.56	0.31	-0.03	0.02	-0.09	0.03	-0.13	0.43	0.62	0.55	0.45	0.45	0.36	0.59	0.00	0.41	0.75	0.29	0.18	0.06	0.50	0.09
5 Emerging Markets Equity					1.00	0.06	0.06	-0.03	0.02	-0.01	0.08	-0.13	0.65	0.47	0.19	0.17	-0.01	0.47	0.46	0.37	0.32	0.50	0.35	0.53	0.29	-0.01	0.04	-0.07	0.04	-0.13	0.45	0.55	0.46	0.37	0.41	0.38	0.62	0.01	0.37	0.68	0.27	0.20	0.07	0.46	0.07
6 Gov Cash						1.00	0.98	0.49	0.42	0.21	0.20	0.21	0.11	-0.08	0.09	0.24	0.57	0.14	-0.02	-0.02	0.13	0.08	0.20	0.08	0.11	0.85	0.72	0.54	0.43	0.16	0.05	0.01	-0.02	-0.02	0.12	-0.16	0.04	0.22	0.34	0.15	0.18	0.26	0.36	0.15	0.40
7 LIBOR Cash							1.00	0.47	0.42	0.21	0.20	0.21	0.11	-0.06	0.08	0.23	0.56	0.15	-0.02	-0.01	0.13	0.08	0.19	0.08	0.11	0.83	0.73	0.53	0.44	0.16	0.05	0.01	-0.02	-0.01	0.12	-0.15	0.05	0.23	0.33	0.15	0.18	0.27	0.36	0.15	0.38
8 TIPS								1.00	0.54	0.45	0.41	0.45	0.05	-0.11	0.04	0.11	0.25	0.14	-0.12	-0.09	0.03	-0.01	0.11	-0.02	0.03	0.61	0.52	0.60	0.49	0.40	-0.01	-0.03	-0.12	-0.09	0.02	-0.14	-0.01	0.11	0.13	0.01	0.06	0.37	0.48	0.03	0.25
9 Core Fixed Income (Market Duration)									1.00	0.84	0.85	0.71	0.29	0.17	0.14	0.28	0.56	0.48	0.05	0.04	0.05	0.02	0.04	0.02	0.04	0.76	0.81	0.89	0.97	0.64	0.16	0.13	0.04	0.04	0.04	0.09	0.26	0.10	0.13	0.05	0.08	0.83	0.98	0.05	0.01
10 Long Duration Bonds – Gov't / Credit										1.00	0.96	0.92	0.19	0.09	0.13	0.24	0.45	0.38	0.03	0.03	0.00	-0.01	-0.02	-0.01	0.01	0.49	0.51	0.70	0.74	0.90	0.09	0.11	0.03	0.03	0.00	0.04	0.17	0.05	0.05	0.01	0.04	0.74	0.81	0.01	-0.13
11 Long Duration Bonds – Credit											1.00	0.78	0.41	0.33	0.13	0.23	0.44	0.54	0.19	0.16	0.04	0.05	0.00	0.06	0.05	0.44	0.53	0.62	0.79	0.76	0.22	0.20	0.19	0.16	0.05	0.25	0.38	0.05	0.09	0.08	0.06	0.84	0.87	0.06	-0.11
12 Long Duration Bonds – Gov't												1.00	-0.14	-0.27	0.11	0.21	0.41	0.10	-0.22	-0.17	-0.05	-0.09	-0.05	-0.12	-0.05	0.50	0.42	0.73	0.58	0.99	-0.11	-0.04	-0.21	-0.17	-0.07	-0.25	-0.14	0.05	-0.01	-0.10	-0.01	0.51	0.61	-0.08	-0.15
13 High Yield Bonds													1.00	0.86	0.19	0.20	0.12	0.77	0.64	0.51	0.25	0.40	0.38	0.44	0.26	0.08	0.22	0.00	0.33	-0.16	0.61	0.59	0.63	0.51	0.32	0.70	0.92	0.02	0.33	0.56	0.23	0.56	0.42	0.37	0.14
14 Bank Loans														1.00	0.09	0.08	0.01	0.59	0.69	0.56	0.18	0.29	0.22	0.35	0.19	-0.17	0.16	-0.23	0.29	-0.26	0.59	0.44	0.69	0.55	0.23	0.83	0.85	-0.02	0.20	0.40	0.15	0.49	0.35	0.27	0.02
15 Non-US Developed Bond (0% Hedged)															1.00	0.96	0.29	0.21	0.07	0.06	0.00	0.03	0.45	0.00	0.00	0.12	0.12	0.12	0.13	0.10	0.21	0.54	0.07	0.06	0.04	0.07	0.27	0.03	0.06	0.07	0.07	0.15	0.14	0.03	0.10
16 Non-US Developed Bond (50% Hedged)																1.00	0.54	0.25	0.06	0.05	0.02	0.03	0.42	0.00	0.01	0.28	0.27	0.26	0.27	0.19	0.21	0.50	0.06	0.05	0.04	0.05	0.27	0.06	0.10	0.07	0.08	0.25	0.26	0.04	0.13
17 Non-US Developed Bond (100% Hedged)																	1.00	0.24	0.00	0.00	0.04	0.01	0.08	-0.01	0.04	0.63	0.61	0.56	0.55	0.37	0.09	0.11	0.00	0.00	0.03	-0.06	0.11	0.13	0.17	0.04	0.09	0.43	0.52	0.04	0.16
18 Hard Emerging Market Bonds																		1.00	0.56	0.45	0.18	0.29	0.24	0.31	0.18	0.21	0.37	0.21	0.51	0.08	0.68	0.61	0.55	0.45	0.23	0.47	0.79	0.04	0.26	0.41	0.18	0.61	0.58	0.26	0.04
19 Hedge Funds Universe																			1.00	0.73	0.22	0.42	0.32	0.41	0.23	-0.15	0.06	-0.23	0.14	-0.20	0.58	0.53	0.99	0.72	0.29	0.57	0.69	-0.01	0.32	0.61	0.20	0.30	0.18	0.34	0.03
20 Hedge Funds Buy List																				1.00	0.17	0.35	0.26	0.33	0.19	-0.12	0.05	-0.18	0.11	-0.15	0.46	0.43	0.72	0.99	0.23	0.46	0.56	-0.01	0.25	0.49	0.16	0.24	0.15	0.27	0.02
21 Core Real Estate																					1.00	0.43	0.11	0.32	0.19	0.08	0.10	0.02	0.06	-0.06	0.15	0.11	0.21	0.17	0.96	0.14	0.21	0.03	0.21	0.33	0.13	0.10	0.06	0.85	0.08
22 REITs																						1.00	0.28	0.43	0.24	0.02	0.05	-0.03	0.04	-0.09	0.27	0.36	0.42	0.34	0.47	0.23	0.38	0.01	0.34	0.61	0.21	0.13	0.05	0.48	0.06
23 Commodities																							1.00	0.14	0.10	0.14	0.12	0.05	0.06	-0.06	0.27	0.49	0.32	0.26	0.17	0.16	0.38	0.04	0.28	0.44	0.18	0.11	0.05	0.18	0.36
24 Private Equity																								1.00	0.32	0.01	0.06	-0.06	0.05	-0.12	0.27	0.20	0.41	0.33	0.37	0.28	0.38	0.01	0.33	0.59	0.21	0.15	0.07	0.45	0.07
25 Infrastructure																									1.00	0.07	0.08	0.01	0.06	-0.05	0.15	0.10	0.22	0.19	0.22	0.15	0.21	0.03	0.20	0.34	0.14	0.11	0.07	0.64	0.07
26 Short Govt Bonds																										1.00	0.85	0.90	0.72	0.41	0.02	0.00	-0.15	-0.12	0.07	-0.22	0.01	0.19	0.25	0.07	0.13	0.49	0.66	0.09	0.26
27 Short Corporate Bonds																											1.00	0.77	0.88	0.34	0.13	0.08	0.06	0.05	0.09	0.05	0.20	0.17	0.25	0.11	0.13	0.64	0.80	0.11	0.20
28 Intermediate Govt Bonds																												1.00	0.80	0.65	-0.02	-0.01	-0.23	-0.18	0.00	-0.25	-0.05	0.12	0.12	-0.02	0.06	0.59	0.77	0.01	0.07
29 Intermediate Corporate Bonds																													1.00	0.51	0.19	0.15	0.13	0.11	0.06	0.19	0.32	0.10	0.15	0.08	0.09	0.83	0.98	0.07	0.04
30 25-year Government Bond																														1.00	-0.11	-0.05	-0.20	-0.15	-0.07	-0.24	-0.15	0.04	-0.02	-0.11	-0.02	0.47	0.55	-0.08	-0.17
31 Corporate Emerging Market Bonds																															1.00	0.58	0.57	0.46	0.21	0.48	0.72	0.01	0.22	0.39	0.16	0.34	0.24	0.23	0.06
32 Local Emerging Market Bonds																																1.00	0.53	0.43	0.20	0.36	0.72	0.00	0.30	0.54	0.20	0.28	0.19	0.21	0.00
33 Broad Hedge Funds - without fees (Universe)																																	1.00	0.72	0.29	0.57	0.69	0.00	0.32	0.61	0.20	0.30	0.18	0.33	0.03
34 Broad Hedge Funds - without fees (BuyList)																																		1.00	0.23	0.46	0.55	-0.01	0.25	0.49	0.16	0.24	0.15	0.27	0.02
35 Private Real Estate (Non-Core)																																			1.00	0.18	0.28	0.02	0.26	0.43	0.16	0.12	0.07	0.89	0.08
36 Private Debt - Direct Lending																																				1.00	0.69	-0.04	0.13	0.32	0.10	0.38	0.25	0.21	-0.01
37 Multi Asset Credit																																					1.00	0.01	0.30	0.55	0.22	0.53	0.40	0.32	0.08
38 ILS																																						1.00	0.08	0.03	0.04	0.06	0.09	0.03	0.09
39 EIRP - Low Beta																																							1.00	0.50	0.21	0.17	0.14	0.30	0.16
40 EIRP - High Beta																																								1.00	0.31	0.20	0.10	0.50	0.10
41 ARP																																									1.00	0.12	0.09	0.19	0.09
42 eLDI																																										1.00	0.88	0.14	-0.01
43 Core Plus Bonds																																											1.00	0.08	0.01
44 Closed-End Real Assets																																												1.00	0.10
45 Inflation																																													1.00

Empower Results®

July 20, 2022

Common School Fund Annual Review

John Hershey
Director of Investments

Wil Hiles
Investment Officer

Louise Howard
Senior Investment Officer

OREGON STATE TREASURY

Agenda

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		OIC Investment and Management Beliefs Mapping																	
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Asset Allocation	6					■	■												
Total Fund Performance	7						■	■	■	■	■	■	■	■					
Global Equity Performance	8-9						■	■			■	■	■	■					
Fixed Income Performance	10						■				■	■	■	■					
Private Equity Performance	11						■	■	■	■			■	■					
Real Estate Performance	12						■		■	■			■	■					
Alternatives Performance	13						■		■	■			■	■					
Strategic Priorities	14					■	■		■	■	■	■	■	■					
Total Fund NAV	15																		

LEGEND: OIC INVESTMENT AND MANAGEMENT BELIEFS

1 **THE OIC SETS POLICY AND IS ULTIMATELY RESPONSIBLE FOR THE INVESTMENT PROGRAM**
- A. Investment management is dichotomous -- part art and part science.
- B. The OIC is a policy-setting council that largely delegates investment management activities to the OST and qualified external fiduciaries.
- C. The OIC is vested with the authority to set and monitor portfolio risk. Both short-term and long-term risks are critical.
- D. To exploit market inefficiencies, the OIC should be long term, contrarian, innovative, andopportunistic in its investment approach.

2 **ASSET ALLOCATION DRIVES RISK AND RETURN**
- A. Asset allocation is the OIC's primary policy tool for managing the investment program's long-term risk/return profile.
- B. Portfolio construction, including diversification and correlation considerations, is essential to maximizing risk-adjusted returns.

3 **THE EQUITY RISK PREMIUM WILL BE REWARDED**
- A. Over the long-term, equity-oriented investments provide reliable return premiums relative to risk-free investments.

4 **PRIVATE MARKET INVESTMENTS CAN ADD SIGNIFICANT VALUE AND REPRESENT A CORE OIC/OST COMPETENCY**
- A. The OIC can capitalize on its status as a true, long-term investor by making meaningful allocations to illiquid, private market investments.
- B. Dispersion in private market investment returns is wide; accordingly, top-quartile manager selection, diversification across vintage year, strategy type, and geography, and careful attention to costs are

5 **CAPITAL MARKETS HAVE INEFFICIENCIES THAT CAN BE EXPLOITED**
- A. Inefficiencies that can be exploited by active management may exist in certain segments of the capital markets.
- B. Passive investment management in public markets will outperform the median active manager in those markets over time.

6 **COSTS DIRECTLY IMPACT INVESTMENT RETURNS AND SHOULD BE MONITORED AND MANAGED CAREFULLY**
- A. All fees, expenses, commissions, and transaction costs should be diligently monitored and managed in order to maximize net investment returns.
- B. External incentive structures should be carefully evaluated to ensure proper alignment with investment program objectives.

7 **FAIR AND EFFICIENT CAPITAL MARKETS ARE ESSENTIAL FOR THE LONG-TERM INVESTMENT SUCCESS**
- A. The OIC recognizes that the quality of regulation and corporate governance can affect the long-term value of its investments.
- B. The OIC also recognizes that voting rights have economic value.

8 **THE INTEGRATION OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) FACTORS, SIMILAR TO OTHER INVESTMENT FACTORS, MAY HAVE A BENEFICIAL IMPACT ON THE ECONOMIC OUTCOME OF AN INVESTMENT AND AID IN THE ASSESSMENT OF RISKS ASSOCIATED WITH THAT INVESTMENT**
- A. The consideration of ESG factors within the investment decision-making framework is importantin understanding the near-term and long-term impacts of investment decisions.
- B. Over time, there has been an evolution of multi-factor, or more holistic approaches, to identify opportunities and remediate risks, in a large globally-diversified investment portfolio.

9 **DIVERSITY, IN ALL ASPECTS, IS ACCRETIVE TO MEETING OIC OBJECTIVES**
- A. By embracing and enhancing diversity and inclusion efforts, the OIC ensures that the investment program will be exposed to and informed by a wide range of perspectives, ideas and opinions.

OREGON STATE TREASURY

Investment Objectives

To generate returns to support the Department of Education for current and future generations

Common School Fund Investment Policy - The Oregon Investment Council ("OIC") formulates policies for the investment and reinvestment of funds under the control and administration of the Department of State Lands ("DSL"), known as the Common School Fund (the "Fund"). This policy provides guidance to Oregon State Treasury ("OST") staff and advisors regarding approved asset classes, asset allocation, and reporting requirements for the Fund.

The investment objective for the Fund is to maximize risk-adjusted return, while remaining consistent with Fund goals as established by DSL's board (the "State Land Board"). The OIC has approved the following asset classes to meet the Fund's investment objective: 1) Global Equity; 2) Private Equity; 3) Fixed Income; 4) Real Estate; 5) Alternatives; and 6) Cash (each as defined in the policy). The policy will outline the strategic role of each asset class and provide further guidance to OST staff on the investment program.

Common School Fund Distribution Policy Objective – The Common School Fund distributes 3.5% of the average three trailing years NAV to the Department of State Lands which in turn distributes those funds to the Department of Education to support the State’s K-12 education programs. In addition, with the passage of SB 1566, certain funds (subject to a formula) are distributed to the State to pay down some of the unfunded PERS liability.

Executive Summary

Key Takeaways…

1. Focus on updating the Fund via new investment policies and asset allocation study
2. Building out of private market asset classes towards target allocation is in process, but slower than hoped
3. Team working well together amongst themselves and with the consultants

2021 Year in Review – Priorities

OST Staff made progress on several initiatives set out in the 2021 CSF Annual Review, but more work required

- Work with consultants and OIC on policy updates. Work continues, but slowly
- Work with consultant on Asset Allocation study
- Work with private markets teams on pacing studies
- Work with asset class teams on portfolio construction and investment manager composition

OREGON STATE TREASURY

Total Fund Asset Allocation

Global Equity currently overweight, as Alternatives Portfolio builds towards its target allocation, while Fixed Income, Private Equity, and Real Estate are all within range. <u>Current</u> asset allocation expected return is low at 6.6%

Asset Class	Benchmark	Market Value	Current Allocation	Target Allocation	Active Weight	Approved Range
Global Equity	MSCI ACWI IMI (Net)	$1.1B	51.8%	45%	6.8%	40% - 50%
Private Equity	Russell 3000 + 300 bps	$210.0M	9.8%	10%	-0.2%	8% - 12%
Fixed Income	Bloomberg US Aggregate Bond Index	$487.5M	22.8%	25%	-2.2%	20% - 30%
Real Estate	NCREIF ODCE QTR Lag (Net)	$190.1M	8.9%	10%	-1.1%	0% - 12%
Alternatives	CPI + 4%	$117.4M	5.5%	10%	-4.5%	0% - 12%
Cash	N/A	$23.0M	1.1%	0%	1.1%	0% - 3%
Total Fund	**Policy Benchmark**	**$2.1B**	**100%**			

Total Fund	Target Allocation
10-Year Expected Return (Geometric Mean)	6.6%
10-Year Expected Standard Deviation	11.2%

OREGON STATE TREASURY

Policy Benchmark: From February 1, 2012 to June 30, 2016, policy benchmark was 30% Russell 3000, 30% MSCI ACWI ex US Net, 30% BC Universal Index, and 10% Russell 3000+300 bps QTR lag. From July 1, 2016 to December 31, 2017, policy benchmark was 30% Russell 3000, 30% MSCI ACWI ex US Net, 30% BC US Aggregate, and 10% Russell 3000+300 bps QTR lag. From January 1, 2018 to current, policy benchmark is dynamically weighted and uses each asset class' value relative to the total market value as its percentage of the total policy benchmark.
Source: Asset Allocation and Performance provided by State Street, as of March 31, 2022; Expected Return and Risk, Aon Capital Market Assumptions.

Total Fund Performance

Investment performance for the past 12 months has been mixed. A strong first nine months, followed by negative Q1'22

- For the quarter ended March 31, 2022, the Common School Fund (Total Fund) posted a -3.4% return, underperforming its policy benchmark by 0.9%
- The Total Fund is outperforming its policy benchmark over the 1-year period by 1.1%, while slightly underperforming its policy benchmark over longer, trailing time periods
- Real estate provided both strong absolute and relative returns during the quarter, and Alternatives provided positive absolute returns, while public equity, private equity and fixed income all experienced losses in absolute terms

	Market Value	3 Months	1 Year	3 Years	5 Years	10 Years
Total Fund	$2.1B	-3.4%	8.4%	10.0%	8.8%	8.5%
Policy Benchmark		-2.5%	7.3%	10.8%	9.5%	8.7%
Excess Return		**-0.9%**	**1.1%**	**-0.8%**	**-0.6%**	**-0.2%**

OREGON STATE TREASURY

Policy Benchmark: From February 1, 2012 to June 30, 2016, policy benchmark was 30% Russell 3000, 30% MSCI ACWI ex US Net, 30% BC Universal Index, and 10% Russell 3000+300 bps QTR lag. From July 1, 2016 to December 31, 2017, policy benchmark was 30% Russell 3000, 30% MSCI ACWI ex US Net, 30% BC US Aggregate, and 10% Russell 3000+300 bps QTR lag. From January 1, 2018 to current, policy benchmark is dynamically weighted and uses each asset class' value relative to the total market value as its percentage of the total policy benchmark.
Source: State Street, as of March 31, 2022.

Global Equity Performance

Fed talk fueled negative sentiment in equity markets, which ultimately led to the first down quarter in a couple years. Long standing tilts to value and size contributed to relative performance, starting in late 2020

- For the quarter ended March 31, 2022, the Global Equity portfolio outperformed its benchmark and continues to outperform over longer, trailing time periods
- U.S. Large/Mega Cap Value stocks led in the first quarter, as the broad U.S. stock market (S&P 500) fell -4.6%, while developed international countries (represent by the MSCI ACWI Ex US Index) fell -4.8% and emerging markets also lagged, returning -7.0% during the quarter
- Federal Reserve talk led to negative sentiment in equity markets, which ultimately led to the first down quarter in a couple years. The Fed hiked 25 bps in March, while quantitative tightening also induced market volatility
- European stocks fell -5.4% during the quarter on concerns of the region's dependence on Russian oil and gas, as Russia's invasion and war on Ukraine continued
- Within emerging markets, Chinese companies fell nearly 14% on slowing economic activity and Russia struggled from imposed sanctions and investability concerns, while Brazil (+16.0%) benefitted from rising commodity prices

	Market Value	3 Months	1 Year	3 Years	5 Years	10 Years
Global Equity	$1.1B	-4.9%	7.5%	13.9%	11.5%	10.5%
MSCI ACWI IMI (Net)		-5.5%	6.3%	13.5%	11.4%	10.0%
Excess Return		**0.6%**	**1.2%**	**0.4%**	**0.1%**	**0.5%**

Source: State Street, as of March 31, 2022.

Global Equity Performance

Long standing risk premia (style factor) exposures contributed to positive relative performance beginning in September 2020 and continuing for the LTM ending Q1'22

- This table illustrates the Global Equity portfolio's excess performance attribution by portfolio construction (e.g. the combination of market capitalization, style factor exposures, and geographic active weights), manager selection (relative to their passive benchmarks) and residual factors (such as market timing like fundings and liquidations)
- Over the trailing 5-year period, portfolio construction has detracted, while manager selection and residual factors have contributed to performance
- Global Equity active management (manager selection), which includes style tilts to the Value and Size Premia have contributed to performance over the last two year, previously serving as a headwind to performance

Time Period	MSCI ACWI IMI	Manager Benchmarks	Managers	Total Global Equity	Portfolio Construction	Manager Selection	Residual	Excess Return
	A	B	C	D	E = B – A	F = C – B	G = D – C	H = D- A
5 Years	**11.4%**	**10.9%**	**11.2%**	**11.5%**	**-0.5%**	**0.3%**	**0.3%**	**0.1%**
Year 1	15.0%	13.3%	14.0%	15.7%	-1.8%	0.7%	1.7%	0.6%
Year 2	1.9%	1.7%	0.5%	0.5%	-0.2%	-1.1%	0.0%	-1.3%
Year 3	-12.7%	-13.0%	-15.2%	-15.2%	-0.2%	-2.2%	0.0%	-2.4%
Year 4	57.6%	57.8%	62.5%	62.2%	0.2%	4.8%	-0.3%	4.6%
Year 5	6.3%	5.9%	7.5%	7.5%	-0.4%	1.5%	0.0%	1.2%

OREGON STATE TREASURY

Source: OST and State Street, as of March 31, 2022.

Fixed Income Performance

Negative 1 year performance as investors reacted very poorly in 2022 to the Fed's plans to raise rates to tame inflation.

- While 2021 saw upward moves in interest rates in 1Q21, 2Q21 saw the first emerging signs of inflation with a yearly inflation print of 5.4% while at the same time the jobs reports were coming in a bit weaker than expected. For most of the remainder of the year, the debate around inflation was whether it was transitory or more lasting. That said, rates remained relatively calm in the remainder of 2021 until earlier this year.
- Interest rates then experienced historically large increases and volatility that have continued into June 2022 given changing expectations of Fed rate increases and fears of inflation. Earlier this year, the Fed had to do an "about face" on its views of inflation being transitory. The Russian invasion of Ukraine only exacerbated the widening in credit spreads and increased market volatility.
- As an illustration, 10-year treasury rates moved from ~1.5% at YE21 to ~3.3% on 6/21/22. Investment grade corporate credit spreads widened through mid-June across all credit quality cohorts with the blended index moving +52bps. These rate & credit spread moves led to significant negative performance across most fixed income asset classes and credit quality cohorts.
- A significant risk factor that US fixed income markets are working through is their focus on Fed rate hikes and whether the Fed's focus on beating inflation is going to lead to a recession. Continued supply chain issues, strong labor markets, wage increases, increasing food & energy prices are all impacting inflation with May YoY inflation coming in above expectations at 8.6%.

	Market Value	3 Months	1 Year	3 Years	5 Years	10 Years
Fixed Income	$487.5M	-6.8%	-4.7%	2.1%	2.6%	3.0%
Bloomberg US Agg Bond Index		-5.9%	-4.2%	1.7%	2.1%	2.4%
Excess Return		**-0.8%**	**-0.5%**	**0.4%**	**0.5%**	**0.6%**

Source: State Street, as of March 31, 2022.

Private Equity Performance

Strong performance driven by portfolio company operating performance and mark up in valuations. Relative performance generally lags public equity benchmarks in bull stock markets as valuation appraisals lag by one quarter

- For the quarter ended March 31, 2022, the Private Equity (PE) portfolio underperformed its benchmark by -10.3% and is underperforming over medium- and longer-term time periods (3-, 5- and 10-years)
- PE returns remained strong on an absolute basis through 2021, though the second half of the year experience downward pressure with the looming specter of inflation, higher interest rates, and slowing quantitative easy (QE)
- Performance was driven by two of CSF's venture capital Fund-of-Funds that contributed more than $6.2 million in value accretion in Q4 '21
- Merger & Acquisition (M&A) deal volume ($5.1 trillion at ~40k transactions) ended well ahead of 2020's pace by ~50%, making 2021 a record year, however pacing through Q1 '22 was lagging Q1 '21
- PE sponsors represented 41% of deal volume in '21 and continued that representation through Q1 '22 with most activity occurring in developed markets
- 2022 will most likely lag 2021 on the fundraising and deployment fronts as well as exit volumes with firmly ensconced inflationary pressure, interest rate increases, and continued geo-political unrest being the primary culprits
- Through Q1 '22, there are at least nine funds targeting funds in excess of $20b, up from seven for the entire year of '21, however macro headwinds could disrupt this trend

	Market Value	3 Months	1 Year	3 Years	5 Years	10 Years
Private Equity	$210.0M	-0.2%	37.8%	23.6%	19.3%	16.8%
Russell 3000 + 300 bps Qtr Lag		10.1%	29.4%	29.5%	21.5%	19.8%
Excess Return		**-10.3%**	**8.4%**	**-5.9%**	**-2.2%**	**-3.0%**

OREGON STATE TREASURY

Source: State Street, as of March 31, 2022.

Real Estate Performance

As the new portfolio allocation builds out, most implementation focus has been on a diversified portfolio of low risk/low return “core” real estate across all main property types (office, logistics, retail, and multi-family) in open end fund structures

- For the quarter ended March 31, 2022, the Real Estate portfolio outperformed its benchmark by 1.5% and continues to outperform over the trailing 1- and 3-year periods
- The Real Estate portfolio is currently comprised of three managers – Morgan Stanley Prime (42.4%), RREEF America II (42.9%), and Walton Street (14.6%)
- Core Funds (Morgan Stanley Prime and RREEF America II) provided total net returns of 9.6% and 10.6%, respectively, with cumulative distributions of $1.3 million
  - Quarterly income returns for the funds were ~1%, with the balance of return coming from appreciation
  - Both funds benefited from heavy allocations to the industrials sector (28% for Morgan Stanley Prime and 38% for RREEF America II), which posted a market-wide return of 43% of the trailing twelve-month period
- Walton Street Core-Plus provided a strong total net return of 19.0% in Q4, as the fund called capital for the first time in Q3 2021, which includes the payment of accrued fund-level expenses as well as the write-up of the portfolio from its original acquisition

	Market Value	3 Months	1 Year	3 Years	5 Years	10 Years
Real Estate	$190.1M	9.2%	22.9%	9.7%	N/A	N/A
NCREIF ODCE QTR Lag (Net)		7.7%	21.0%	8.2%	N/A	N/A
Excess Return		**1.5%**	**1.9%**	**1.5%**	**N/A**	**N/A**

OREGON STATE TREASURY

Source: State Street, as of March 31, 2022.

Alternatives Performance

Strong absolute LTM return, with no excess return. Bifurcation of the asset class recommended in the Asset Allocation study

- For the quarter ended March 31, 2022, the Alternatives portfolio underperformed its benchmark, while performing in-line over the trailing year and underperforming more significantly over the 3-year period
- Medium-term (3-year) underperformance can almost entirely be attributed to pronounced long/short Value style factor exposures within Diversifying Strategies (namely BlackRock Style Advantage and JPMorgan Systematic Alpha, the latter of which already being fully liquidated)
- The Alternatives portfolio is currently comprised of 4 managers – 2 Diversifying Strategies (40% BlackRock Style Advantage and 60% Bridgewater Optimal), which make up the majority (79%) of the portfolio, and 2 Real Assets strategies (72% Brookfield Infrastructure IV and 28% Stonepeak Infrastructure IV), which comprise the remaining 21%
- The Alternatives portfolio is still early in its lifecycle (initial funding in 2018), with long-term target allocations of 50% Diversifying Strategies and 50% Real Assets

	Market Value	3 Months	1 Year	3 Years	5 Years	10 Years
Alternatives	$117.4M	1.8%	12.9%	-3.3%	N/A	N/A
CPI + 4%		4.1%	12.9%	8.3%	N/A	N/A
Excess Return		**-2.3%**	**0.0%**	**-11.6%**	**N/A**	**N/A**

OREGON STATE TREASURY

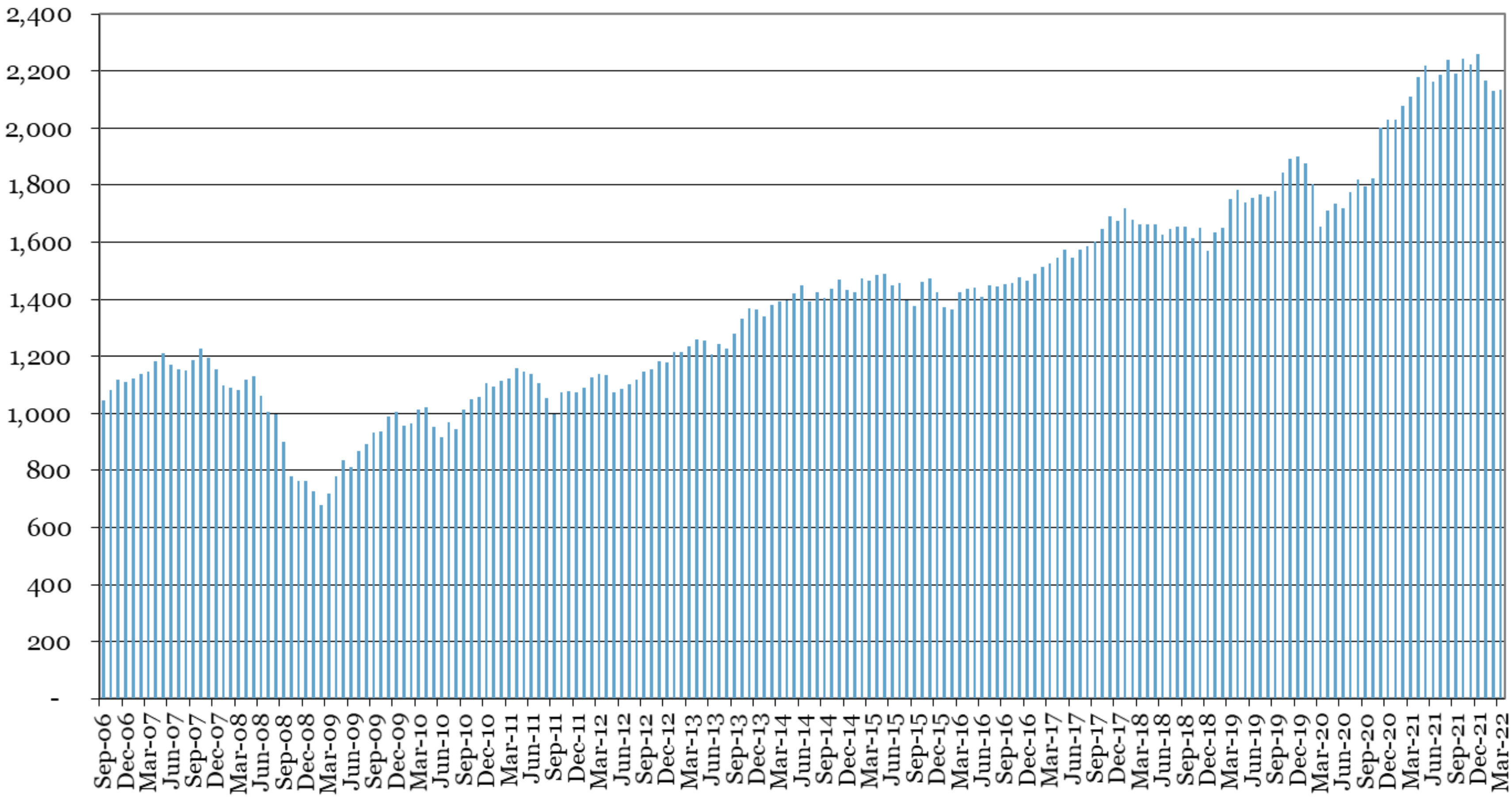
Source: State Street, as of March 31, 2022.

Strategic Priorities 2022

A busy stretch continues for the Common School Fund as numerous transitions and projects are underway

- Finalize Policy Updates and develop Guidelines
- Finalize Asset Allocation Study and allocate towards targets
- Work with Private Markets teams to refresh Pacing Studies
- Work with each asset class to review portfolio construction and investment manager composition

Total Fund NAV ($ Millions)



OREGON STATE TREASURY

Source: State Street, as of March 31, 2022.

CSF Team

John Hershey
Director of Investments
Tenure: 2008

As the Director of Investments, John works with the Chief Investment Officer to help manage over $100 billion of assets across multiple funds managed by the Oregon State Treasury (OST), including OPERF and the Common School Endowment, amongst others.
- A member of the Investment Division's senior leadership team which is responsible for setting the overall strategic direction for the Investment Division including the implementation of the various investment portfolios managed by the Oregon State Treasury;
- Responsible for co-managing the $2.1 billion Common School Endowment, with a particular emphasis on the Fund's alternative investments;
- Until recently becoming the Director of Investments, was the Director of Alternative Investments with overall responsibility for the $30 billion Alternatives Program inclusive of the Private Equity, Real Estate, Alternatives, and Opportunity Portfolios, which combined represents approximately, 45% of the OPERF portfolio. Duties included Chairing the ATL, an internal investment committee for the Alternatives Program. Continues to serve on the investment committee and attend all private market Committee Meetings (Private Equity, Real Estate, Alternatives, and Opportunity);
- Conceived and developed the Alternatives Portfolio, inclusive of Infrastructure, Natural Resource, and Diversifying Strategies, currently targeted at 15% of the OPERF portfolio;
- Currently Vice Chair of the Institutional Limited Partners Association (ILPA), a 5,000+ person trade association representing institutional investors managing in excess of $2 trillion in private assets under management.

Education: BA University of California, Davis; MBA University of Chicago

Wil Hiles
Investment Officer
Tenure: 2016

As Investment Officer, Wil supports the Public Equity team's day-to-day activities surrounding OPERF by serving as a key contact for internal groups, external investment managers, the custodian bank, and other third-party providers. Wil also assists in overseeing the Oregon Common School Fund and the Oregon Savings Growth Plan.
- Monitors and evaluates current and prospective investment managers;
- Evaluates portfolio structure and makes recommendations to improve risk-adjusted returns;
- Coordinates new account fundings, terminations, portfolio transitions, and cash raise activity;
- Assist in overseeing proxy voting and commission recapture programs;
- Conducts market research and analysis;
- Serves as internal equity portfolio manager and trader.

Education: BA in Finance from Linfield College; Master of Science in Finance (MSF) from Pacific University

Louise Howard
Senior Investment Officer
Tenure: 2022

As Senior Investment Officer, Louise leads the Public Equity team on the oversight of the OPERF public equity portfolio, the Common School Endowment, and the Oregon Savings Growth Plan.
- Leads the oversight of the $25 billion OPERF public equity program comprised of a mix of 34 internal and external investment strategies;
- Directs the management of five internally managed portfolios totaling approximately $9.6 billion;
- Leads the monitoring and evaluation efforts for the external and prospective investment managers;
- Evaluates portfolio structure and makes recommendations to improve risk-adjusted returns,
- Responsible for managing and coordinating the liquidity needs of OPERF by liquidating public equity assets for pension payments and private market capital calls;
- Participates in private market Committee Meetings (Real Estate, Private Equity, Alternative, and Opportunistic).

Education & Certifications: BA University of New Orleans, MBA University of New Orleans, CFA Charterholer, CAIA Charterholder

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Tobias Read
Oregon State Treasurer

350 Winter St NE, Suite 100
Salem, OR 97301-3896

oregon.gov/treasury

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TAB 5

REAL ESTATE MARKET REVIEW

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TAB 6

BLOCKCHAIN, DIGITAL CURRENCY

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TAB 7

ASSET ALLOCATION & NAV UPDATES

Asset Allocations at May 31, 2022

			Regular Account					Target Date Funds	Variable Fund	Total Fund
OPERF	**Policy**	**Target[1]**	**$ Thousands**	**Pre-Overlay**	**Overlay**	**Net Position**	**Actual**	**$ Thousands**	**$ Thousands**	**$ Thousands**
Public Equity	25.0-35.0%	30.0%	22,156,468	23.2%	(1,163,979)	20,992,489	21.9%	1,161,204	331,681	22,485,374
Private Equity	15.0-27.5%	20.0%	26,646,338	27.8%		26,646,338	27.8%			26,646,338
Total Equity	**45.0-55.0%**	**50.0%**	**48,802,806**	**51.0%**	**(1,163,979)**	**47,638,827**	**49.8%**			**49,131,712**
Opportunity Portfolio	**0-5%**	**0.0%**	**2,479,174**	**2.6%**		**2,479,174**	2.6%			**2,479,174**
Fixed Income	**15-25%**	**20.0%**	**15,273,434**	**16.0%**	**3,767,195**	**19,040,629**	19.9%	2,192,555		**21,233,184**
Risk Parity	**0.0-3.5%**	**2.5%**	**2,016,211**	**2.1%**		**2,016,211**	2.1%			**2,016,211**
Real Estate	**7.5-17.5%**	**12.5%**	**12,341,885**	**12.9%**	**(700)**	**12,341,185**	12.9%			**12,341,185**
Real Assets	**2.5-10.0%**	**7.5%**	**7,315,482**	**7.6%**		**7,315,482**	7.6%			**7,315,482**
Diversifying Strategies	**2.5-10.0%**	**7.5%**	**4,811,338**	**5.0%**		**4,811,338**	5.0%			**4,811,338**
Cash[2]	**0-3%**	**0.0%**	**2,640,804**	**2.8%**	**(2,602,516)**	**38,288**	0.0%		6,938	**45,226**
TOTAL OPERF		**100%**	**$ 95,681,134**	**100.0%**	**$ -**	**$ 95,681,134**	**100.0%**	**$ 3,353,758**	**$ 338,619**	**$ 99,373,511**

[1]Targets established in October 2021. Interim policy benchmark effective October 1, 2021, consists of: 30% MSCI ACWI IMI Net, 20% Bloomberg U.S. Aggregate, 20% Russell 3000+300bps (1 quarter lagged), 12.5% NCREIF ODCE net (1 quarter lagged), 7.5% CPI+400bps, 7.5% HFRI FOF Conservative & 2.5% S&P Risk Parity - 12% Target Volatility.

[2] Includes cash held in the policy implementation overlay program.

SAIF	**Policy**	**Target**	**$ Thousands**	**Actual**
Total Equity	**7-13%**	**10.0%**	**456,130**	**10.1%**
Fixed Income	**80-90%**	**85.0%**	**3,739,049**	**82.9%**
Real Estate	**0-7%**	**5.0%**	**287,856**	**6.4%**
Cash	**0-3%**	**0.0%**	**29,426**	**0.7%**
TOTAL SAIF			**$ 4,512,461**	**100.0%**

CSF	**Policy**	**Target**	**$ Thousands**	**Actual**
Global Equities	40-50%	45.0%	1,088,121	49.4%
Private Equity	8-12%	10.0%	214,986	9.8%
Total Equity	**58-62%**	**55.0%**	**1,303,107**	**59.2%**
Fixed Income	**20-30%**	**25.0%**	**561,784**	**25.5%**
Real Estate	**0-12%**	**10.0%**	**202,507**	**9.2%**
Alternative Investments	**0-12%**	**10.0%**	**124,517**	**5.7%**
Cash	**0-3%**	**0.0%**	**10,610**	**0.5%**
TOTAL CSF			**$ 2,202,526**	**100.0%**

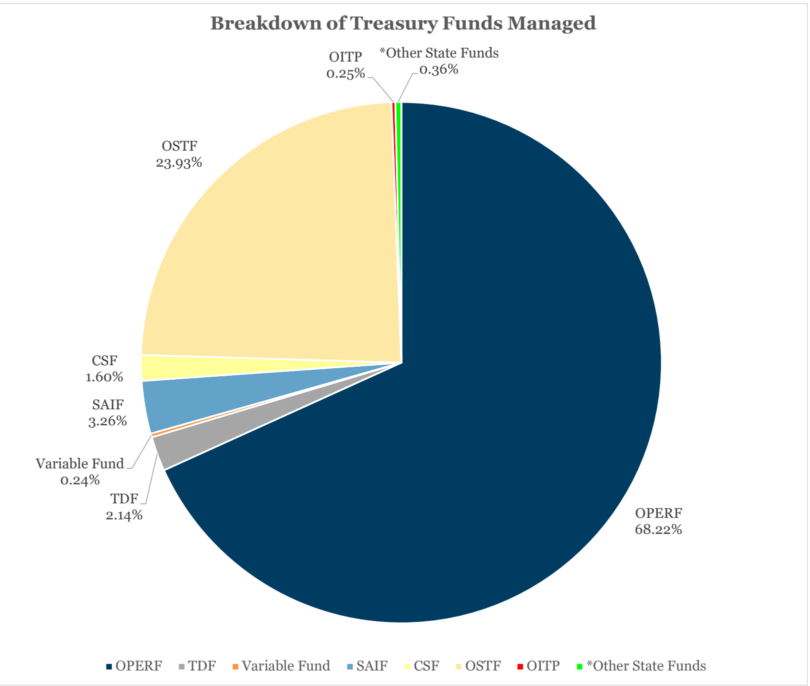
SOUE	**Policy**	**Target**	**$ Thousands**	**Actual**
Global Equities	**0-65%**	**N/A**	2,108	**75.7%**
Fixed Income	**35-100%**	**N/A**	674	**24.2%**
Cash	**0-3%**	**N/A**	2	**0.1%**
TOTAL SOUE			**$ 2,784**	**100.0%**

WOUE	**Policy**	**Target**	**$ Thousands**	**Actual**
Global Equities	**30-65%**	**55.0%**	1,078	**55.7%**
Fixed Income	**35-60%**	**40.0%**	748	**38.7%**
Cash	**0-25%**	**5.0%**	108	**5.6%**
TOTAL WOUE			**$ 1,934**	**100.0%**

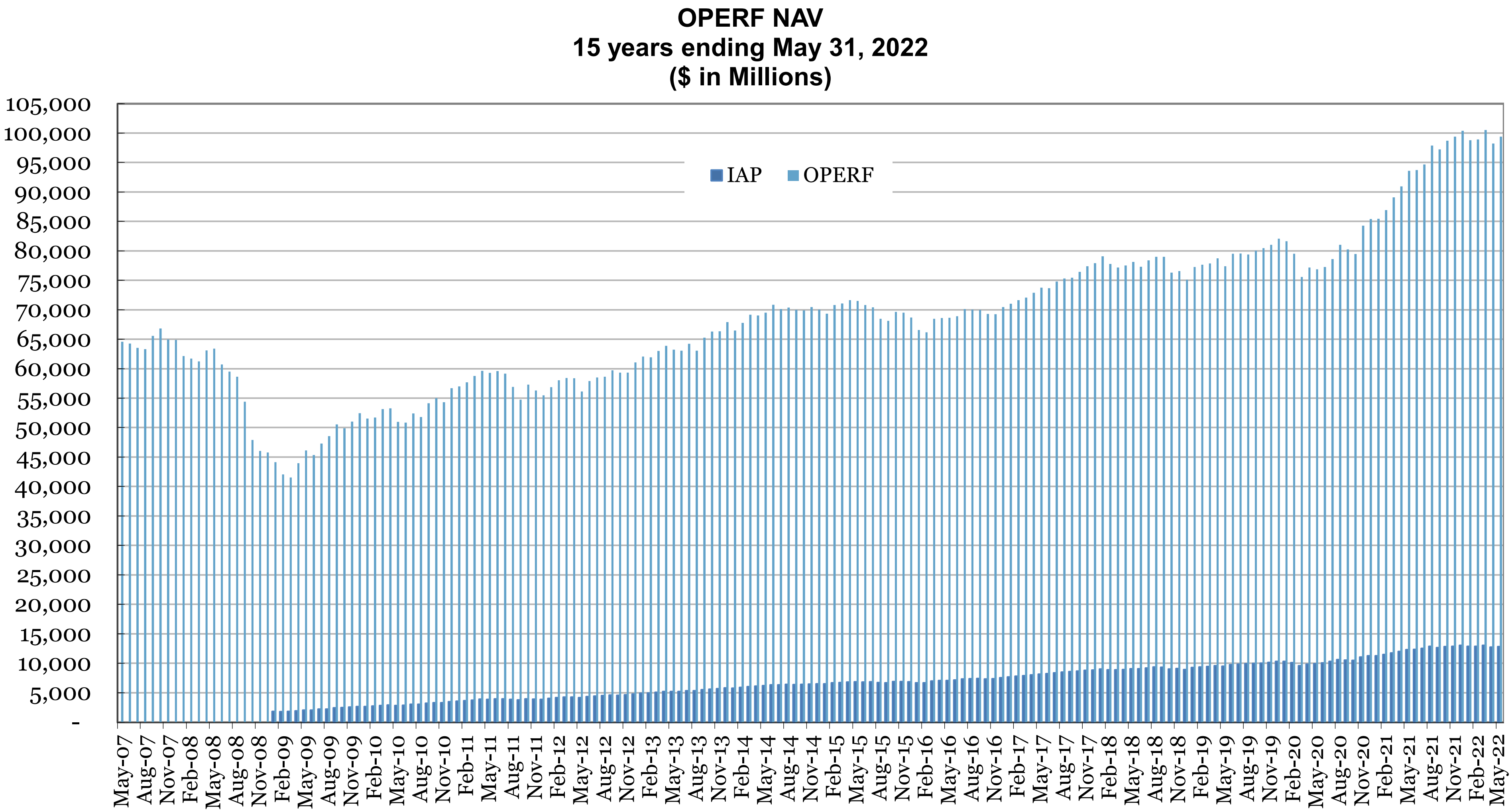
OSTF, OITP & Other State Funds*	**$ Thousands**	**Actual**
OSTF	32,871,287	**93.9%**
OITP	349,116	**1.0%**
DAS Insurance Fund	165,726	**0.5%**
DCBS Operating Fund	184,687	**0.5%**
DCBS Workers Benefit Fund	148,116	**0.4%**
DCHS - Elderly Housing Bond Sinking Fund	1,424	**0.0%**
DCHS - Other Fund	14,464	**0.0%**
Oregon Lottery Fund	112,903	**0.3%**
DVA Bond Sinking Fund	76,148	**0.2%**
ODOT Fund	536,627	**1.5%**
OLGIF	236,064	**0.7%**
OPUF	315,190	**0.9%**
Total OSTF & Other State Funds	**$ 35,011,752**	**100.0%**

Total of All Treasury Funds** **$ 137,345,603**

**Balances of the funds include OSTF or OITP investments, which is why total does not foot.



*Other State Funds include DAS Insurance Fund, DCBS Operating Fund, DCBS Workers Benefit Fund, DCHS - Elderly Housing Bond Sinking Fund, DCHS - Other Fund, Oregon Lottery Fund, DVA Bond Sinking Fund, ODOT Fund, OLGIF, & OPUF.


OPERF NAV
15 years ending May 31, 2022
($ in Millions)
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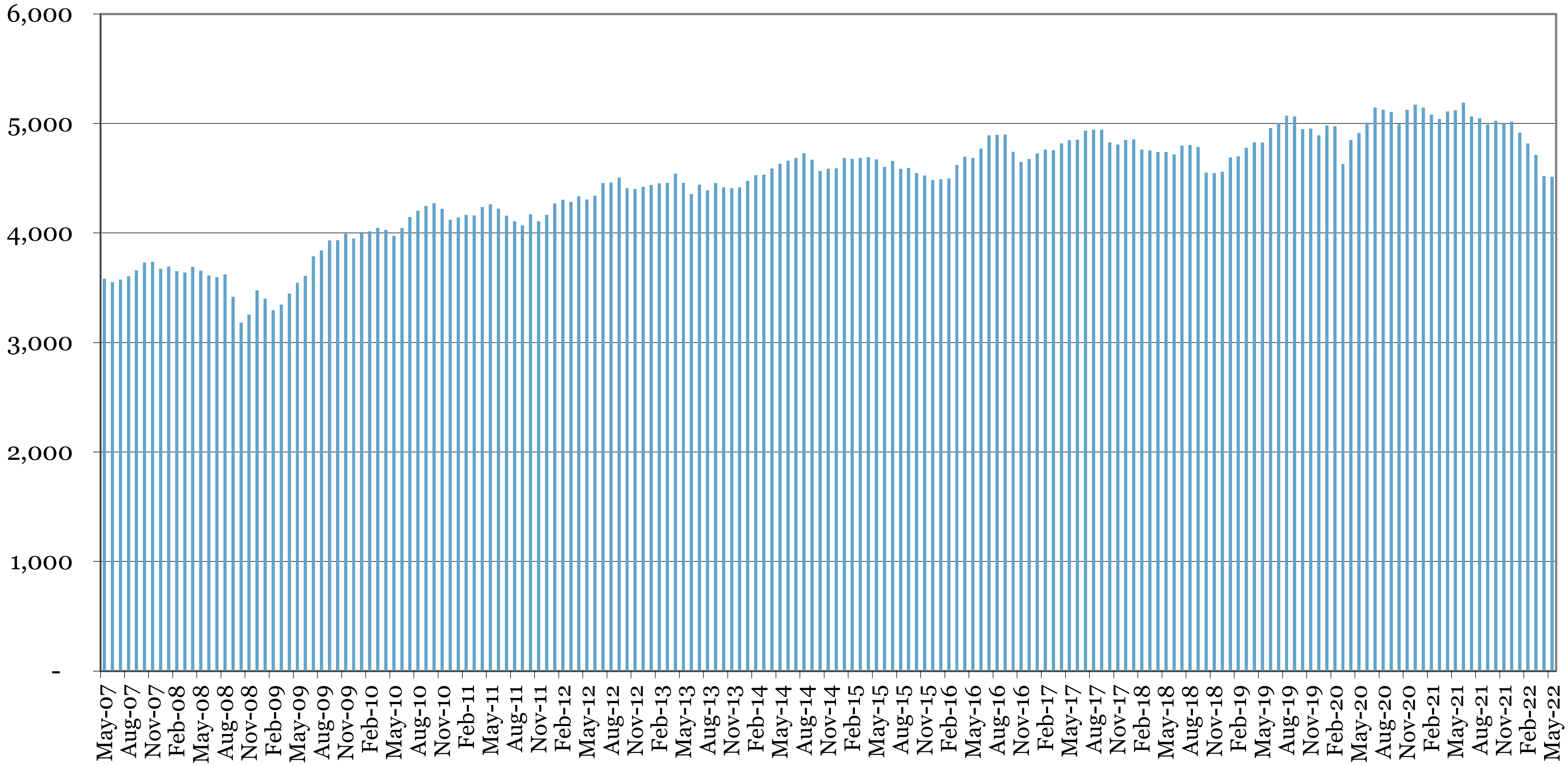
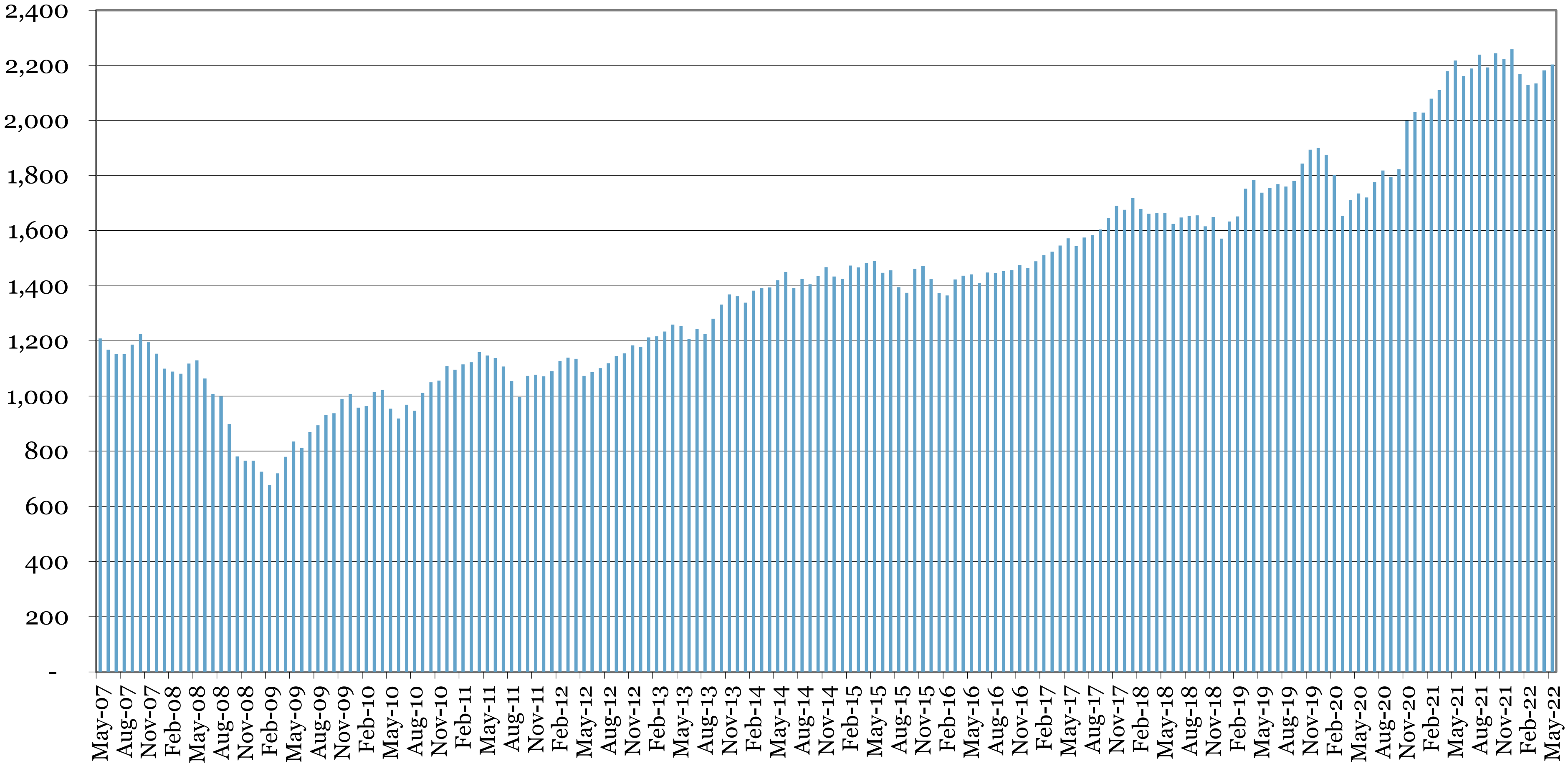
SAIF NAV
15 years ending May 31, 2022
($ in Millions)



CSF NAV
15 years ending May 31, 2022
($ in Millions)



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OREGON STATE TREASURY

TAB 8

CALENDAR – FUTURE AGENDA ITEMS

2022/23 OIC Forward Calendar and Planned Agenda Topics

September 7, 2022	OPERF Preliminary Asset/Liability Q2 OPERF Performance
October 26, 2022	OPERF Asset/Liability Study SAIF Annual Review OSGP Annual Review
December 7, 2022	Q3 OPERF Performance Public Equity Portfolio Review Fixed Income Portfolio Review
January 25, 2023	Private Equity Portfolio Review Opportunity Portfolio Review 2024 OIC Calendar Approval
March 8, 2023	Q4 OPERF Performance Individual Account Program (IAP) Review Real Estate Portfolio Review Real Assets Portfolio Review
April 20, 2023	Diversifying Strategies Portfolio Review
May 31, 2023	Q1 OPERF Performance
July 19, 2023	Common School Fund Annual Review

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TAB 9

OPEN DISCUSSION

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TAB 10

PUBLIC COMMENTS

Public comments can now be found at the OIC website at:

https://www.oregon.gov/treasury/invested-for-oregon/pages/oregon-investment-council.aspx