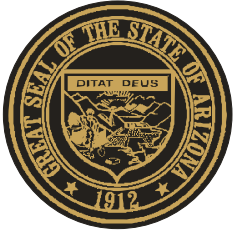


**OFFICE OF THE  
ARIZONA STATE TREASURER**



**Kimberly Yee**

**TREASURER**



**OCTOBER 2022**

**Presented To:**

**Arizona State Board of Investment**

**November 29, 2022**

STATE BOARD OF INVESTMENT

A G E N D A

November 29, 2022

1. Call to Order; Opening Remarks ..... The Honorable Kimberly Yee, Chair
2. Approval of Minutes of October 27, 2022, BOI Meeting
3. AZ 529 Arizona’s Education Savings Plan
  - a. Monthly Program and Marketing Review..... Jeffrey Ong, AZ529 Administrator
  - b. Quarterly Investment Review..... Tiffany Spudich/Susan Somers, Capital Cities
4. Investment Outlook and Summary Review of Treasurer’s Monthly Reports
  - a. State Agency Earnings Distributions ..... Dennis Stevenson, CIO  
State Agency Operating Average Invested Balances  
State Agency Investments and Performance Reports
  - b. LGIP Yield Analysis ..... Jake Richardson, Portfolio Manager  
LGIP Pools Investments and Performance Reports
  - c. Endowment Earnings Distributions .....Tim White, Director of Endowments  
Land Sales Monthly Proceeds Endowment Funds  
Endowment Investments and Performance Reports
5. Discussion and Action on the October 2022 Report
6. Proposed Investment Policy Statement Changes..... Mark Swenson, Deputy Treasurer
7. Approval of Servicing Bank Contract.....Jackie Harding, Deputy Treasurer, Operations
8. Approval of Merchant Services Contract...Jackie Harding, Deputy Treasurer, Operations
9. Treasurer’s Report .....The Honorable Kimberly Yee, Chair
10. Market Outlook..... Harry Papp, Board Member
11. Call to the Public
12. Notice of Next Meeting
13. Adjournment

**REPORT OF THE STATE TREASURER**

**FOR**

**November 29, 2022**

**TABLE OF CONTENTS**

	<u>Page</u>
Minutes of Board of Investment Meeting .....	iii-vi
Review of Treasurer’s Monthly Reports:	
A. Earnings Distribution; Investment Pools .....	1
B. Operating Monies Invested Balances .....	2
C. State Agency Pools Investments and Performance Reports .....	3-23
D. LGIP Pools Investments and Performance Reports.....	24-34
E. Earnings Distributed PLETF Funds .....	35
F. Land Sales Monthly Proceeds PLETF Funds.....	36
G. PLETF Investments and Performance Reports.....	37-56
H. AZ Endowment Trust Investments and Performance Reports.....	57-60

**Minutes of  
BOARD OF INVESTMENT MEETING  
October 27, 2022**

The regular meeting of the State Board of Investment was held on October 27, 2022, in person in the Treasury's conference room and via WebEx. Treasurer Kimberly Yee called the meeting to order at 1:00 p.m.

**Members Present:**

The Honorable Kimberly Yee, Chair, State Treasurer – via WebEx  
Harry A. Papp, CFA & Managing Partner, L. Roy Papp & Associate – via WebEx  
Beth Ford, Pima County Treasurer – via WebEx

**Designees Present:**

Ashley Ruiz, Designee for Andy Tobin, Director of Administration – via WebEx  
James McGuffin, Designee for Evans Daniels, Director of Insurance and Financial Services

**Others Present:**

Mark Swenson, Deputy Treasurer, Arizona State Treasurer's Office  
Jackie Harding, Deputy Treasurer, Arizona State Treasurer's Office  
Dennis Stevenson, Chief Financial Officer, AZ State Treasurer's Office  
Tim White, Director of Endowment, AZ State Treasurer's Office  
Jake Richardson, LGIP Portfolio Manager, Arizona State Treasurer's Office  
Eric Stivers, Financial Analyst, Arizona State Treasurer's Office  
Michael Leslein, Investment Accounting Manager, Arizona State Treasurer's Office  
Jeffrey Ong, AZ529 Administrator, Arizona State Treasurer's Office  
Nick Barnhiser, IT Director, Arizona State Treasurer's Office  
Alyssa Koury, Public Information Officer, Arizona State Treasurer's Office  
Theresa Mendoza, Administrative Assistant, Arizona State Treasurer's Office

**1. Call to Order**

Treasurer Yee called the October 27, 2022, Board of Investment meeting to order at 1:00 p.m.

**Treasurer's Comments**

Treasurer Yee welcomed the Board members and staff to the meeting.

**2. Approval of Minutes**

*Mr. Papp moved that the October 27, 2022, meeting minutes be approved as distributed. Seconded by James McGuffin. The motion carried unanimously.*

**3. AZ529 Arizona's Educational Savings Plan**

**A. Monthly Program and Marketing Review**

**Jeffrey Ong, AZ529 Program Administrator & Legislative Liaison**, reported that as of September 30, 2022, total AZ529 Plan Assets Under Management were \$1.67 billion. Total AZ529 Plan accounts were up 3.9% Year Over Year (YOY) to 99,396. Fidelity is the largest provider with 63.5% of Assets and 64.7% of Accounts. Goldman Sachs is the second largest provider holding 34.5% of Assets and 33.2% of Accounts. College Savings Bank holds the remaining 2.1% of Assets and 2.1% of Accounts. Arizona residents held 49.2% of total Assets and 55.3% of total Accounts, with the rest held by Non-Residents. See Memo.

Treasurer Yee announced the 20 winners statewide in the 3rd annual AZ529 Essay Writing Contest. The winners are 5th graders representing each one of Arizona's 15 counties and district, charter, private, Bureau of Indian Education and homeschool students. There was a total of 631 entries from across Arizona. The Award Ceremony held at the Capitol was well attended.

Marketing update for the month of September showed advertising efforts with over 426,000 total impressions, 1,600 total clicks on advertisements and an average of 37% clicks per month. Spanish speaking audience showed the highest engagement.

**4. Investment Outlook and Summary Review of the Treasurer's Monthly Reports**

**A. State Agency Earning Distributions, Average Invested Balances, and Performance Reports**

**Dennis Stevenson, Chief Financial Officer**, highlighted the results of the State Agencies performances for the month of September 2022. See memo.

**B. LGIP Yield Analysis, Pool Investments and Performance Reports**

**Jake Richardson, LGIP Portfolio Manager**, highlighted the results for the Local Government Investment Pools performance for the month of September 2022. See memo.

**C. Endowment Earnings Distributions, Land Sale Monthly Proceeds Endowment Funds, Endowment Investments and Performance Reports**

**Tim White, Director of Endowments**, reported the results and highlights for the Endowment performances for the month of September 2022. See memo.

**5. Discussion and Action: Approval of September 2022 Report**

*Mr. Papp moved the approval of the September 2022 Monthly Report. Seconded by Ms. Ashley Ruiz. The motion carried unanimously.*

## 6. Treasurer's Report

Treasurer Yee thanked the Investment team for their continued excellent work. She announced that the Treasurer's office distributed earnings of more than \$2 billion during the first 45 months of this administration to state agencies, LGIP clients and PLETF beneficiaries—a total amount of \$2,001,721,339. It is a record of distributions which breaks down to \$568.2 million for state agencies and LGIP clients and \$1.43 billion to the PLETF beneficiaries.

In the first 3 months of this fiscal year, the LGIP has earned \$26.7 million, \$10 million more and all of fiscal 2022. The same applies for State Agency pools which earned \$79.8 million in the first 3 months of this fiscal year, compared to \$66.2 million for all of last year.

LGIP assets are up 10.64% YOY to \$5.23 billion with monthly earnings \$10.2 million. Since December 31, 2018, total LGIP assets have increased 55% or \$1.85 billion.

Tim's strategy of short duration continues to pay dividends outperforming the fund's benchmark by 280 basis points for the calendar year and 10-year returns at 7.46% and the balance of \$6.8 billion. Since December 2018, the PLETF has received \$1.06 billion land sales, has paid out more than \$1.43 billion and increased in value by \$1.27 billion. That increase of 23% in market value after deposits and payouts is the direct result of our investment returns.

Since October 2020, after 24-months of operation, the AZ529 accounts have increased by 22,326 accounts and assets are up 3.1% in that same period to \$1.67 billion.

AZ529 Essay Award Ceremony congratulated the 20 winner was presented a check for \$529 to open or add to an existing AZ529 plan. The Treasurer and team promoted the essay contest, the AZ529 plan and Financial Literacy education at the Creighton Family Resource Center Community Baby Shower, the Child help Board of Directors, and Grand Canyon University's financial week. Treasurer Yee and the Investment team also presented to the Gila River Indian Community Councilmembers on the performance of the LGIP.

Treasurer Yee gave an update with her continued discussion with Morningstar regarding the Arizona's anti - BDS law and are requesting additional information and access to their system to review their work product and are waiting for their response.

## 7. Market Outlook

**Harry A. Papp, CFA & Managing Partner, L. Roy Papp & Associate, also Member of Board of Investment**, provided the Board with a brief overview and giving his insight for the market outlook noting the volatility in the markets which are very concerning regarding inflation for this entire calendar year. Mr. Papp highlighted the impact of the increase in Federal Reserve interest rates and the impact of the real-world increase of inflation.

**8. Call to the Public**

There was no public comment.

**9. Notice of Next Meeting**

Treasurer Yee announced that the next board meeting will be held on Tuesday, November 29, 2022, at 1:00 p.m.

**10. Adjournment**

*With no further business to discuss, Mr. McGuffin moved that the meeting be adjourned. Seconded by Ms. Ruiz. The motion carried unanimously. Meeting adjourned at 1:31 p.m.*

Respectfully Submitted by:

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Deborah Gomez  
Executive Assistant

Approved by:

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Kimberly Yee  
Chair

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Date

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# OFFICE OF THE ARIZONA STATE TREASURER

KIMBERLY YEE  
TREASURER



## Investment Summary | October 2022

### Overall Performance – Where We Are Now |

#### ➤ State Agency Pools:

- Total assets: \$17,009,065,846
- October earnings distributed: \$43,735,218 (+1247.97% YoY)
- General Fund earnings distributed: \$29,909,189 (+2102.74% YoY)

### Outlook |

We expect the Federal Reserve to raise the discount rate again in December. It is highly probable that they will raise at least 100-150bps or more in the foreseeable future. Two-year treasuries are over 4.5% right now and 10-year treasuries are currently 3.77%. This spread is negative. Historically, you are paid more for lending funds for a longer duration. The Fed's fear of inflation is greater than the fear of a severe recession caused by higher interest rates. The Federal Reserve Open Market Committee is cognizant of these facts and will continue to raise rates until inflation, and the yield curve inversion, are reversed or substantially diminished. We have begun adding duration selectively at nicely higher rates. Inflation is considerably above what the Federal Reserve board is comfortable with and raising interest rates is their preferred tool to temper the rate of inflation.

The U.S. economy is beginning to show signs of contraction. The University of Michigan Consumer Sentiment Index has continued to trend downward over several months and U.S. personal income was up 0.4% vs personal spending being up 0.5 % month over month. This is an indication that the consumer has net negative real net worth ongoing. Another indication of the consumers predicament is the historical drop in the savings rate. The government reported a 26% drop in excess saving over the last year. This is an indication that the consumer is using up their savings to pay the higher costs of inflation and debt expense because wage increases have not kept up with overall expenses. The Producer Price Index (+8.0% YoY) and the Consumer Price Index (+7.7% YoY) are significant signs of the inflation the American consumer is facing. The Arizona state general fund revenue for October was up 13.4% vs last year. Corporate income tax was up an astounding 59% YoY with \$292 million dollars coming into the state's coffers in one month easily reaching an all-time high for monthly revenue from this source.

The war in Ukraine continues with no serious peace talks taking place. The President of the U.S. and Premier of China met at the G20 conference this month in Malaysia with no substantial outcome. Vladimir Putin was not invited to the conference.

### Strategy: Monthly Commentary |

Our strategy continues with the addition to duration. Previously we have kept the duration of the pools low to decrease the risk of losing value and yield. We have now begun adding duration and will continue to increase it with every successive increase in rates by the Federal Reserve. With the Federal Reserve beginning to let their balance sheet decrease monthly this is, in effect, quantitative tightening that is also adding to upward pressure on interest rates. High-grade corporate bonds are increasing in both rates and issuance so they can avoid higher interest expense in the coming years. I also expect prepayment speeds to decelerate on mortgage bonds as rates increase.

Dennis Stevenson, CIO

## Alternative Scenarios |

There are several scenarios we continue to monitor which could change our expectations:

- War spreads to European nations, particularly the Baltics
- Inflation exceeds 10% for a long duration
- Europe is not able to acquire enough fuels for the coming winter
- Consumer demand evaporates due to exhaustion of federal pandemic subsidies and significant drops in home, equity, and bond portfolio values
- The current administration sanctions Saudi Arabia and causes a spike in oil prices

## State Agency Investment Pool Balances |

	October 31, 2022	October 31, 2021	YoY Change
Pool 2 FF&C	\$1,631,013,758	\$1,382,607,948	+\$248,405,810
Pool 3 Internal	\$7,554,882,691	\$6,030,867,380	+\$1,524,015,311
Pool 3 External	\$110,659,350	\$112,921,792	-\$2,262,442
Pool 4 Gov.	\$1,197,866,703	\$1,116,703,869	+\$81,162,834
Pool 10 Internal	\$580,653,908	\$485,095,213	+\$95,558,695
Pool 10 External	\$524,249,538	\$580,894,627	-\$56,645,089
Pool 12 CAWCD	\$538,728,198	\$554,548,150	-\$15,819,952
Pool 15 Operating	\$4,659,355,618	\$1,577,450,632	+\$3,081,904,986
Pool 16 ECDHB	\$211,656,082	\$252,121,883	-\$40,465,801
<b>TOTAL STATE AGENCY</b>	<b>\$17,009,065,846</b>	<b>\$12,093,211,495</b>	<b>+\$4,915,854,351</b>

# Local Government Investment Pools (LGIP) Summary

## Overall Performance – Where We Are Now |

### ➤ Local Government Investment Pools:

- Total assets: \$5,684,706,272
- Total October earnings: \$13,450,585; +2125.96% vs. Oct 2021
- Total fiscal year-to-date yields:
  - Pool 5: 2.39%; +233bps vs. October 2021
  - Pool 7: 2.15%; +214bps vs. October 2021
  - Pool 500: 1.97%; +115bps vs. October 2021
  - Pool 700: 1.26%; +99bps vs. October 2021

## Strategy: Short-term Pools 5 & 7 |

The Federal Reserve delivered another 75 basis point(bps) hike at the early November meeting. They're expecting slower rate hikes in the upcoming meetings but expressed they will be data dependent. Inflation remains near 40-year highs but did come in lower than expected from the October prints. Federal Reserve comments and inflation data pushed market expectations of a 75bp hike down to just 50bps. Pools 5 and 7 will maintain liquidity at current levels and target WAMs of 50- to 60-days.

## Strategy: Intermediate Pools 500 & 700 |

The Federal Reserve is trying to combat inflation while also trying to avoid driving the U.S. into a recession. The market is less certain that they will be able to achieve their goal of a soft landing. While October economic prints were weaker than expected, this is just one month of data and the Fed will look to future months to see if the trend continues. Pools 500 and 700 will continue their short duration strategy but have started taking more opportunities to extend past 2 years. Both pools have a strong maturity schedule leading into the end of the year which we will be able to reinvest at higher yields.

## LGIP Investment Pool Balances |

	October 31, 2022	October 31, 2021	YoY Change
Pool 5 LGIP	\$2,622,536,211	\$2,096,944,241	+\$525,591,970
Pool 7 LGIP FF&C	\$2,129,000,728	\$1,957,092,119	+\$171,908,609
Pool 500 LGIP Med.	\$634,582,294	\$631,275,816	+\$3,306,478
Pool 700 LGIP Med FF&C	\$298,587,039	\$331,420,197	-\$32,833,158
<b>TOTAL LGIP</b>	<b>\$5,684,706,272</b>	<b>\$5,016,732,373</b>	<b>+\$667,973,899</b>

# Endowment Summary

## Overall Performance – Where Are We Now | Long-Term Performance Remains Stellar

### ➤ Highlights:

- PLETF October total return: 5.38%
- **PLETF lead aggregate benchmark by +35bps in October; 1-Year outperforming benchmark +321bps**
- PLETF 10-year annualized total return: +8.12%
- Prop 123 record high monthly distributions at \$36.1MM FYTD; Projected \$432.8MM in FY23
- AETF October total return: 5.02%
- AETF inception-to-date total return: +5.31%
- **AETF lead aggregate benchmark +2bps in October; outperforming +46bps since inception**
- PLETF FY2021 10-year annualized total return 9.83% vs FY2021 NACUBO-TIAA Study of Endowments Average TRR of 8.50%: Marks Eighth Straight Year of Outperformance vs All Institutions
- PLETF Ranks in 90<sup>th</sup> Percentile vs All Public Colleges/Universities in NTSE study on 10-year annualized return

### **Big Picture:**

- PLETF fair market value: \$7,133,807,832
- Fair Market Value up +\$339.31MM MoM; down -\$697.28MM YoY net of distributions
- FYTD2023 distributions \$144.25MM; up +\$10.98MM vs FY2022
- PLETF 12-Month return -10.34% vs benchmark -13.55%
- Annualized 10-Year total return through October is 8.12% versus September at 7.46%; +66bps MoM
- PLETF Unrealized Gains: \$4.17BN
- October Realized Gains: \$25.08MM
- October TRR PLETF +5.38% vs benchmark +5.03%
- **Pool 205 Fixed Income outperforming FTSE Broad Investment Grade Index by +870bps YTD**
- 2020 January, February, March, April (2), July (2), Sept, Nov, Dec (2), 2021 Jan, May, Sept, 2022 May PLETF & AETF Rebalances Complete

## Equity Strategy: Rebalance to Risk Targets | 15 Rebalances/33 Months

In 2020/2021, the strategy of rebalancing to our risk targets was triggered ten times in the PLETF and five times in the AETF. Our 2020/2021 rebalancing strategy was responsible for generating over \$517MM in realized gains in the PLETF and over \$155K in the AETF. These profits have benefited in ensuring enough cash to continue to make distributions under Proposition 123. PLETF rebalance triggers were reached in five months for selling equities and buying fixed income assets, and triggers for selling fixed income and buying equities were reached in two months. The past two years began with global risk markets falling due to the Coronavirus shortly after we executed our first rebalancing of \$480MM (total) in February 2020 when we sold U.S. Large Cap stocks very-near the all-time highs in the S&P 500, and subsequently bought into fixed income. By February 27, 2020, we initiated another rebalancing going the other direction –selling bonds and buying stocks. Equities had dropped precipitously, and our fixed income portfolio rallied in the most massive flight to safe havens of my career. The entire U.S. Treasury curve yielded under 1% with 10's touching 0.31% and 30's hitting 0.69% intraday on May 9, 2020, creating a fantastic opportunity to sell rich bonds and buy decidedly cheaper stocks with our \$352MM (total) rebalancing. On May 25, 2020, we hit triggers again, initiating a \$517MM (total) rebalancing, selling \$258.7MM in fixed income, and buying equities. Rebalances were executed in five equal tranches at various tactical entry points. Equities rallied sharply upon Federal Reserve interventional policies, triggering a fourth rebalancing (\$310MM total) selling equities in July 2020. The equity rally continued with a

*Tim White, Director of Endowments*

fifth rebalancing (\$348MM total) in July, a sixth rebalancing (\$375MM) in November 2020, a seventh of \$437MM in December 2020, an eighth of \$402MM in May 2021, a ninth of \$400MM in September 2021 and a tenth of \$376MM in May 2022. These policy actions bring us back to original risk targets (with significant realized gains) as we continue to view our equity strategy as a long-term driver of returns for the PLETF. Exposure to U.S. equities has been a tremendous value-add over time and although markets periodically move through market correction phases, long-term equilibrium has rewarded patient, disciplined investors with positive returns that outpace inflation and build trust value in *real* terms – especially with sound rebalancing disciplines, which we employ. The AETF has similar exposure and has been rebalanced five times (May/July/November/February/May), realizing gains of \$253K with a total return inception-to-date of 5.31%. Will be proposing incremental tactical overlays in large-cap equal-weight and factor-based pools for board consideration with the goal of increasing diversification and return in the PLETF.

## Fixed Income Strategy: Maintain Liquidity | Position for Rising Rates/Inflation

As a result of strong PLETF investment returns in 2021, the Prop 123 distribution has once again increased significantly and **beginning in July 2022 will pay record distributions of \$432.8MM - up from \$399.8MM.** We had taken the opportunity resulting from equity rebalancing to reduce fixed income duration in Pool 205 and bolster necessary liquidity in Pool 123 to continue to make these increased monthly distributions in a timely manner for our K-12 education and other beneficiaries and take advantage of reinvestment at significantly higher rates. Appropriately, we maintained this defensive, short duration bias and continued opportunistically adding variable rate fixed income holdings with an eye on reallocating portfolio risk and increasing yield in light of likely interest rate increases by the Federal Reserve. This strategy has proven extremely fortuitous as the Fed has taken a very hawkish tone continuing on a tightening regime. Hence, **Pool 205 has outperformed the FTSE BIG Index benchmark YTD by a massive +870 basis points through October.** However, with risks of a recession scenario having risen somewhat, we may work to reduce our significant short duration bias, incrementally. Again, this month we put cash to work in money market cash equivalents, US Treasuries, high-grade corporate notes, SBA Floaters and US Agencies (4.16-6.17%), opportunistically adding incremental duration as the market selloff has made rates more attractive. Existing floating rate securities in the portfolio continue to reset higher as the Fed increases rates and our short cash equivalents offer dry powder to re-deploy at these much higher rates as the Fed has indicated a continued hawkish stance. We continue to look for opportunistic ways to sensibly add convexity and duration to lock in significant outperformance versus the benchmark and hedge against the scenarios of subdued inflation, Russian war/geopolitical developments, and/or an economic downturn. We will become more aggressive with duration as market conditions change. We continue to use other bond ETFs in the PLETF for diversification and in fact already added bond ETF's (BND & SPAB) with the AETF fixed income allocation. Month-end duration on Pool 205 was at 3.08 years (-0.11 MoM), outperforming substantially (+863 bps 1 YR versus benchmark) with higher rates than 12-months ago. Note the forward-looking Bloomberg Bond Yield Forecast compiled by averaging 56 wall street economist's forecasts:

Rate	Mkt Yld	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23	Q1 24	Q2 24	Q3 24	Q4 24	Q1 25
<b>United States</b>											
US 30-Year	3.90	4.17	4.12	4.00	3.88	3.74	3.63	3.54	3.51	3.51	3.61
US 10-Year	3.83	4.03	4.01	3.89	3.74	3.52	3.41	3.32	3.23	3.21	3.31
US 5-Year	4.02	4.29	4.29	4.10	3.86	3.58	3.38	3.27	3.13	3.12	3.29
US 2-Year	4.56	4.56	4.56	4.36	4.08	3.74	3.48	3.33	3.11	3.02	3.14
US 3-Month Term SOFR	4.32	4.46	4.81	4.79	4.64	4.34	4.11	3.83	3.49	3.29	3.18
Fed Funds Rate - Upper Bound	4.00	4.50	5.00	5.00	4.90	4.65	4.15	3.80	3.35	3.10	3.00
Fed Funds Rate - Lower Bound	3.75	4.25	4.73	4.73	4.63	4.40	3.90	3.53	3.12	2.84	2.75
2 Year - 10 Year Spread	-0.73	-0.53	-0.55	-0.47	-0.34	-0.22	-0.07	0.00	0.13	0.19	0.17

\*Table presented as-of 11/21/2022.

## Endowment Monthly Land Sale Proceeds |

- +\$9.92MM in October
- +\$2.17MM vs September
- +\$8.20MM YoY

## Endowment Prop 123 Distributions |

- \$36.1MM total/\$33.5MM for K-12 successfully distributed on time from Pool 123 in October
- FYTD K-12 distribution \$134.15MM; up +\$10.15MM YoY
- Pool 123 has laddered liquidity of approximately 11 months taking advantage of rising reinvestment rates

## Pool Performance |

Equity/Fixed Income Pools:

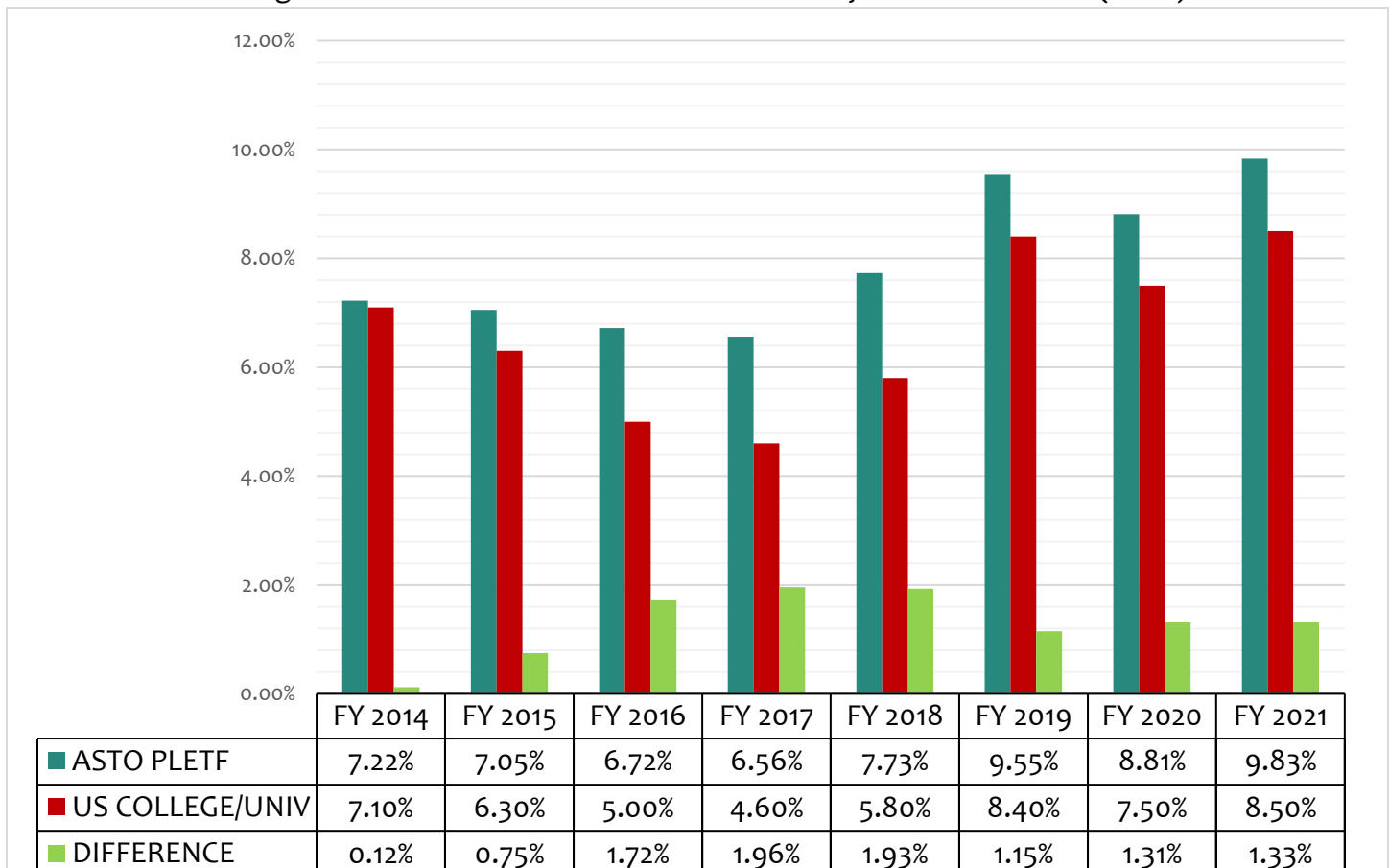
- Pool 201 Large Cap Equity lead the S&P 500 by +4bps MoM at +8.14%
- Pool 203 Mid Cap Equity lead the S&P 400 by +3bps MoM at +10.55%
- Pool 204 Small Cap Equity trailed the S&P 600 by -9bps MoM at +12.27%
- Pool 205 lead the FTSE BIG Index by +90bps MoM at -0.36%
- Pool 123 returned +0.32% for October, outperforming the LGIP benchmark by +6bps

## Long-Term PLETF Performance |

### PLETF VS US COLLEGE/UNIVERSITY ENDOWMENTS

#### 10YR ANNUALIZED AVG RETURN COMPARISON

Data gathered from historical NACUBO-TIAA Study of Endowments©(NTSE)



**EARNINGS DISTRIBUTION - INVESTMENT POOLS  
OCTOBER 2022**

<u>Recipient</u>	<u>OCTOBER 2022</u>	<u>Earnings Distributed</u>			<u>Fiscal YTD Investment Management Fees Received</u>
		<u>Fiscal YTD 22/23</u>	<u>Fiscal YTD 21/22</u>	<u>Change from Previous Year</u>	
General Fund (1)	\$29,909,189	\$82,889,730	\$5,800,065	1329.1%	
2 State Agencies - Full Faith & Credit (2)	3,347,596	9,336,748	783,379	1091.9%	\$265,986
3 State Agencies - Diversified (2) (3)	4,357,771	12,530,731	1,843,280	579.8%	2,254,882
4 State Agencies - Gov (2)	2,308,626	6,610,103	1,080,524	511.7%	220,286
5 LGIP (2)	6,510,543	19,005,539	368,501	5057.5%	452,650
7 LGIP Gov (2)	4,985,980	15,061,541	77,283	19388.8%	391,128
9A Public School Credit Enhancement (4)	0	0	0	0.0%	19,383
10 State Agencies Med/Tax-exempt non-AMT	2,124,447	6,196,665	964,558	542.4%	199,306
12 CAWCD Medium-Term	1,184,615	4,272,455	1,915,566	123.0%	108,466
16 ECDH Medium-Term	502,973	1,717,567	1,491,663	15.1%	49,571
<b>Subtotal</b>	<b>55,231,741</b>	<b>157,621,077</b>	<b>14,324,818</b>	<b>1000.3%</b>	<b>3,961,658</b>
<b>NAV POOL</b>					
500 LGIP - Med Term	1,277,332	4,245,086	1,720,789	146.7%	118,711
700 LGIP - FF&C Med Term (2)	297,715	869,238	305,586	184.4%	49,723
<b>Total</b>	<b>56,806,787</b>	<b>162,735,401</b>	<b>16,351,192</b>	<b>895.3%</b>	<b>4,130,092</b>
<b>OCTOBER 2021 TOTALS</b>	<b>\$3,844,730</b>				<b>\$2,976,744</b>

(1) Pool 15 State Agencies Operating Liquidity operating earnings are reported in General Fund  
(2) Earnings are net of operating earnings, which are reported in the General Fund  
(3) Pool 15 State Agencies Operating Liquidity operating management fees are reported in Pool 3, State Agencies Diversified (Combined)  
(4) Pool 9A represents \$80 million invested in School Funding Obligations; earnings on this investment revert to the General Fund

**OPERATING MONIES**  
**AVERAGE INVESTED BALANCE**  
Through October 31, 2022  
(in millions)

<u>Month</u>	Fiscal Year <u>2021/2022</u>	Fiscal Year <u>2021/2022</u>	Fiscal Year <u>2022/2023</u>
JULY	\$3,805	\$7,377	\$11,347
AUGUST	3,661	5,881	10,674
SEPTEMBER	3,834	6,017	10,936
OCTOBER	4,303	6,300	11,494
NOVEMBER	4,382	6,537	
DECEMBER	4,642	7,054	
JANUARY	4,903	7,523	
FEBRUARY	5,135	7,790	
MARCH	5,003	8,155	
APRIL	5,299	8,904	
MAY	6,161	10,027	
JUNE	9,167	11,660	
<b>Y-T-D Average</b>	<b>\$3,901</b>	<b>\$6,394</b>	<b>\$11,113</b>
<b>Full Year Average</b>	<b>\$5,025</b>	<b>\$7,769</b>	<b>\$11,113</b>



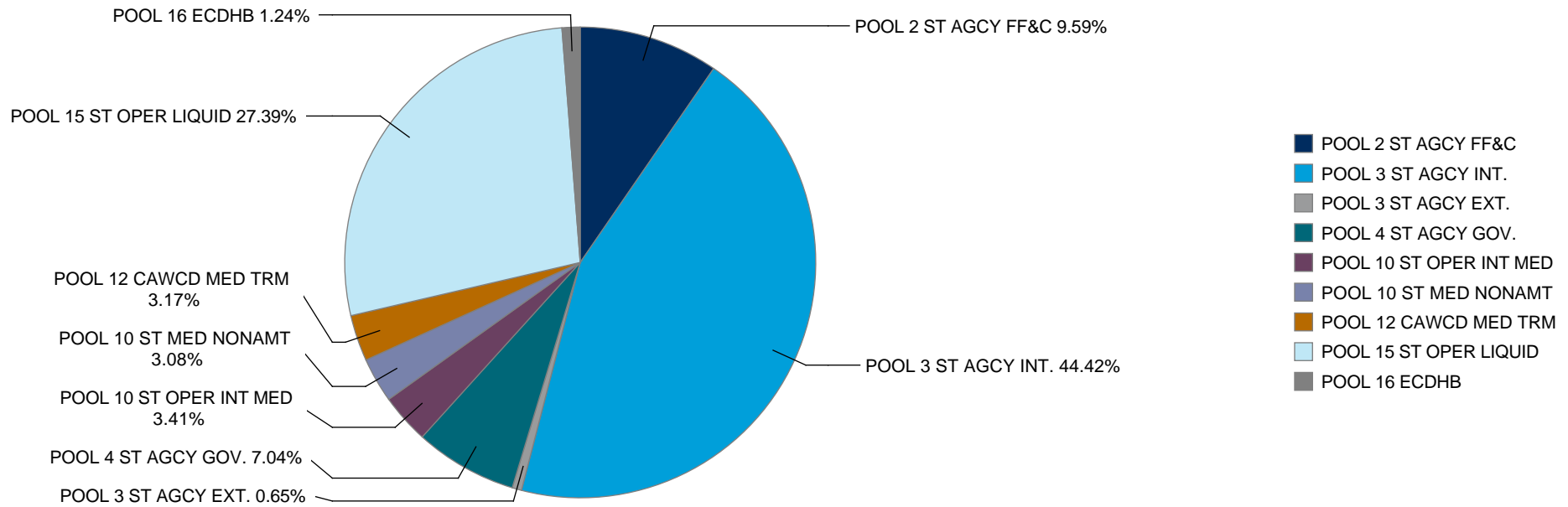
**STATE AGENCY POOLS  
PORTFOLIO EARNINGS ANALYSIS  
OCTOBER 2022**

<b>FUND</b>	<b>DESCRIPTION</b>	<b>Current Month 10/31/22</b>	<b>Prior Month 09/30/22</b>	<b>Prior Year 10/31/21</b>	<b>Net Asset Value Per Share</b>
2	STATE AGENCIES - FULL FAITH & CREDIT	\$3,584,391	\$2,603,811	\$189,168	0.980987
3	STATE AGENCIES - DIVERSIFIED				
	INTERNAL MANAGERS	18,962,380	13,549,606	1,604,998	0.980993
	EXTERNAL MANAGERS	167,117	148,119	62,522	0.971739
	<b>FUND 3 TOTAL</b>	<b>19,129,497</b>	<b>13,697,725</b>	<b>1,667,520</b>	<b>0.981164</b>
4	STATE AGENCIES - GOV	2,771,680	2,107,897	316,017	0.973007
9A	PUBLIC SCHOOL CREDIT ENHANCEMENT	251,598	190,532	15,719	0.980987
10	STATE AGENCIES MED-TERM/TAX-EX NON-AMT				
	INTERNAL MANAGERS	1,462,341	1,009,766	219,255	0.986152
	EXTERNAL MANAGERS	878,968	719,333	23,522	0.992280
	<b>FUND 10 TOTAL</b>	<b>2,341,309</b>	<b>1,729,098</b>	<b>242,777</b>	<b>0.989050</b>
12	CAWCD MEDIUM-TERM	1,184,615	1,065,825	437,356	0.917755
15	STATE AGENCIES OPERATING LIQUIDITY	13,590,133	9,405,845	36,610	1.000000
16	ECDH MEDIUM-TERM	502,973	424,798	335,304	0.913446
	<b>TOTAL STATE AGENCIES</b>	<b>\$43,356,198</b>	<b>\$31,225,530</b>	<b>\$3,240,471</b>	

**STATE AGENCY POOLS  
PORTFOLIO YIELD ANALYSIS  
OCTOBER 2022**

<b>FUND</b>	<b>DESCRIPTION</b>	<b>Current Month 10/31/22</b>	<b>Prior Month 09/30/22</b>	<b>Prior Year 10/31/21</b>
2	STATE AGENCIES - FULL FAITH & CREDIT	2.83%	2.20%	0.18%
	50% Trailing 3-mo T-bill /	3.79%	3.28%	0.22%
	50% Bloomberg Barclays 1-3 year UST			
3	STATE AGENCIES - DIVERSIFIED			
	INTERNAL MANAGERS	2.92%	2.23%	0.34%
	EXTERNAL MANAGERS	1.73%	1.58%	0.65%
	COMBINED	2.90%	2.22%	0.35%
	50% 1 month T-bill /	3.90%	3.30%	0.27%
	50% Bloomberg Barclays 1-3 year US Agg			
4	STATE AGENCIES - GOV	2.68%	2.15%	0.33%
	50% Trailing 3-mo T-bill /	3.79%	3.28%	0.22%
	50% Bloomberg Barclays 1-3 year US Gov			
9A	PUBLIC SCHOOL CREDIT ENHANCEMENT	2.83%	2.20%	0.18%
10	STATE AGENCIES MED-TERM/TAX-EXEMPT NON-AMT			
	INTERNAL MANAGERS	3.05%	2.42%	0.54%
	EXTERNAL MANAGERS	1.93%	1.56%	0.05%
	COMBINED	2.51%	1.97%	0.27%
	50% Trailing 3-mo T-bill /	3.93%	3.40%	0.27%
	50% Bloomberg Barclays 1-3 year US Agg			
12	CAWCD MEDIUM-TERM	2.40%	2.23%	0.94%
	25% S&P LGIP Index /	4.22%	3.65%	0.39%
	75% Bloomber Barclays 1-3 year US Agg			
15	STATE AGENCIES OPERATING LIQUIDITY	3.34%	2.51%	0.03%
	Trailing 3-mo T-bill	3.12%	2.63%	0.04%
16	ECDH MEDIUM-TERM	2.56%	2.23%	1.58%
	25% S&P LGIP Index /	4.22%	3.65%	0.39%
	75% Bloomber Barclays 1-3 year US Agg			

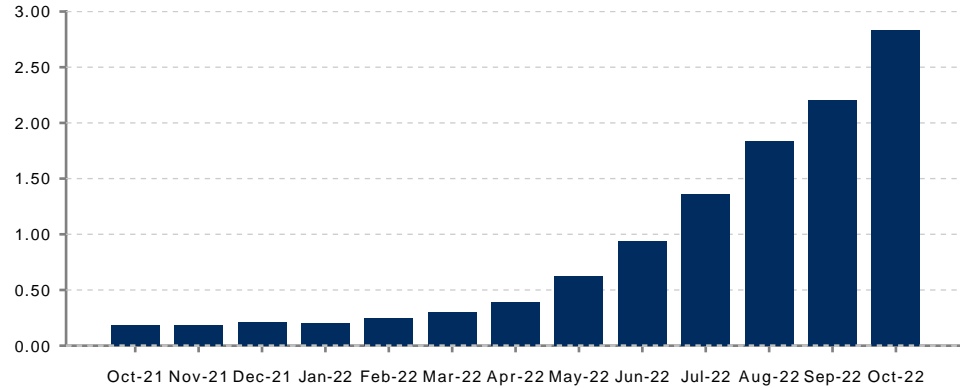
**Manager Allocation**



	Market Value	% of Portfolio
POOL 2 ST AGCY FF&C	1,631,013,758	9.59
POOL 3 ST AGCY INT.	7,554,882,691	44.42
POOL 3 ST AGCY EXT.	110,659,350	0.65
POOL 4 ST AGCY GOV.	1,197,866,703	7.04
POOL 10 ST OPER INT MED	580,653,908	3.41
POOL 10 ST MED NONAMT	524,249,538	3.08
POOL 12 CAWCD MED TRM	538,728,198	3.17
POOL 15 ST OPER LIQUID	4,659,355,618	27.39
POOL 16 ECDHB	211,656,082	1.24
<b>TOTAL STATE AGENCY</b>	<b>17,009,065,846</b>	<b>100.00</b>



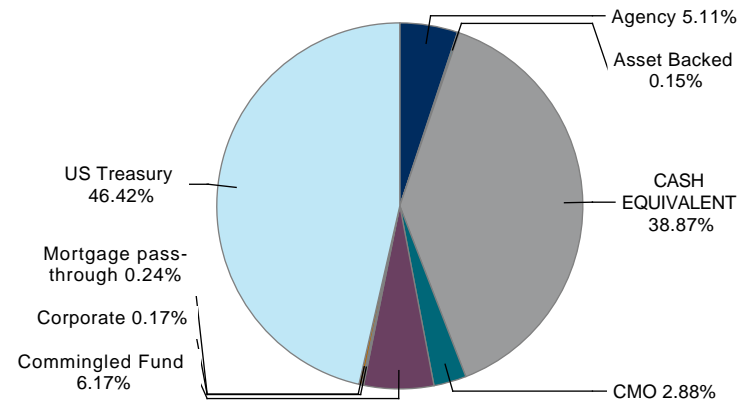
## Net Yield



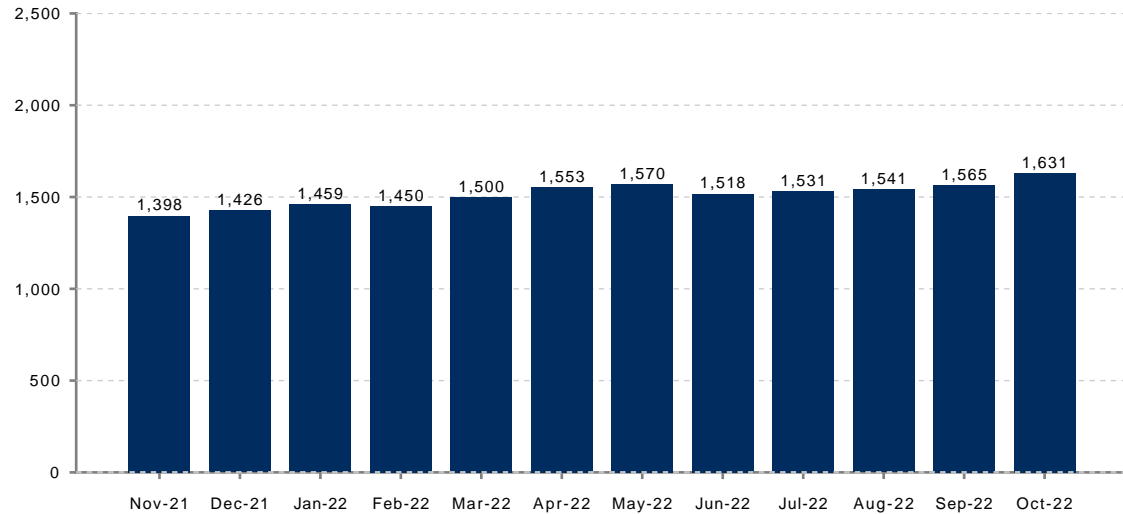
	Current Mth	Prior Mth	1 Year Ago
POOL 2 ST AGCY FF&C	2.83	2.20	0.18

## Asset Allocation

	Ending Market Value
POOL 2 ST AGCY FF&C	1,631,013,758



## Net Asset Values over Time (\$MM)

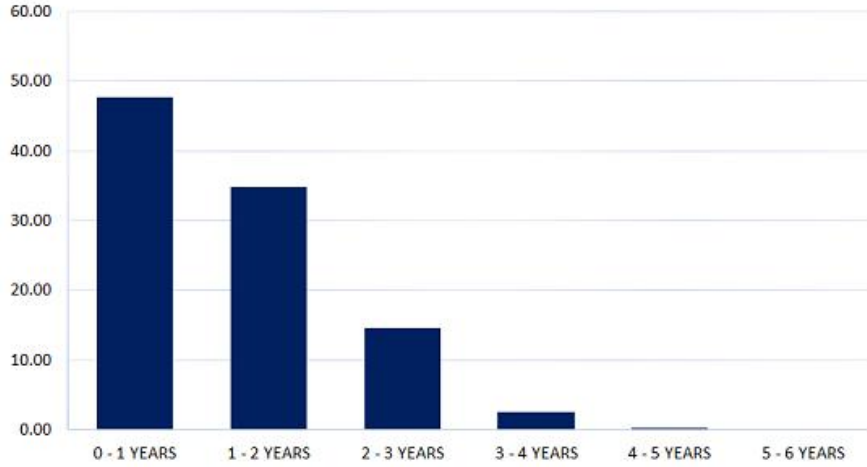


## Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 2 ST AGCY FF&C		
DAIWA CAPITAL MARKETS	350,695,696	21.50
US TREASURY N/B	220,641,390	13.53
TREASURY BILL	111,383,568	6.83
JPMORGAN US TREASURY	100,770,714	6.18
RBC CAPITAL MARKETS R	100,008,250	6.13
US TREASURY N/B	87,423,812	5.36
US TREASURY N/B	72,672,766	4.46
US TREASURY N/B	68,773,625	4.22
US TREASURY N/B	49,194,888	3.02
US TREASURY N/B	43,605,647	2.67



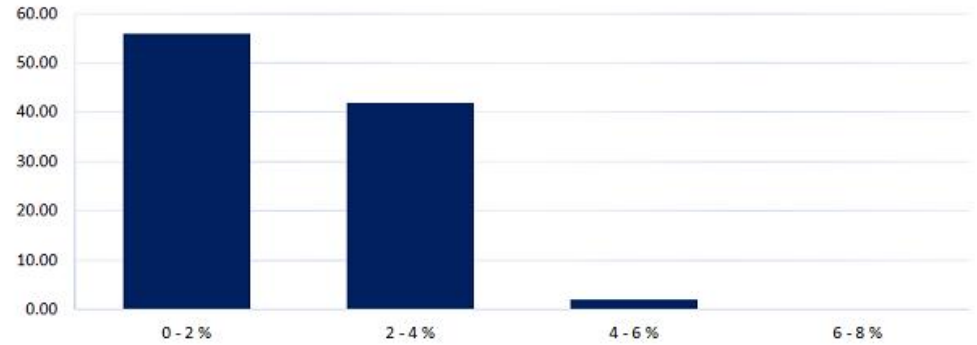
**Duration Distribution**



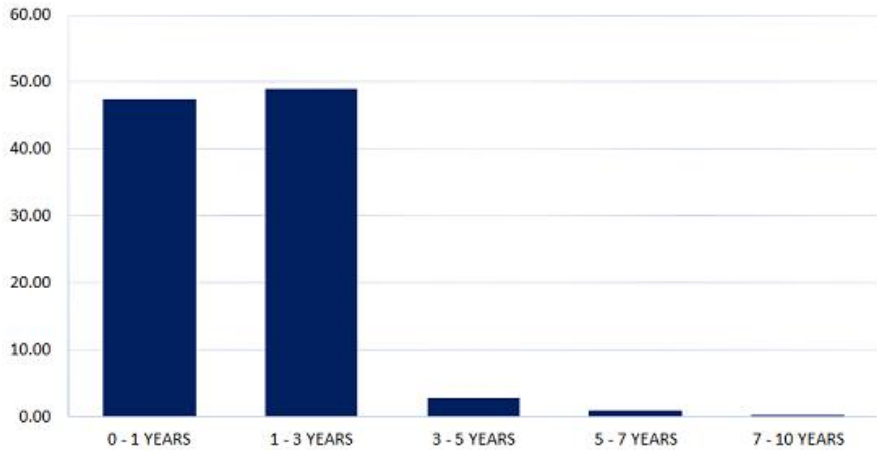
**Portfolio Level Characteristics**

	POOL 2 ST AGCY FF&C
Effective Maturity	1.20
Coupon	2.07
Effective Duration	1.12
Quality Rating (Moody's)	AAA

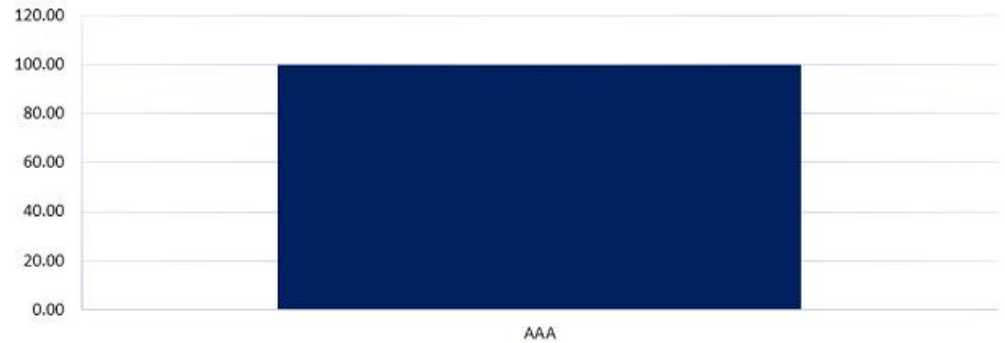
**Coupon Distribution**



**Expected Maturity Distribution**

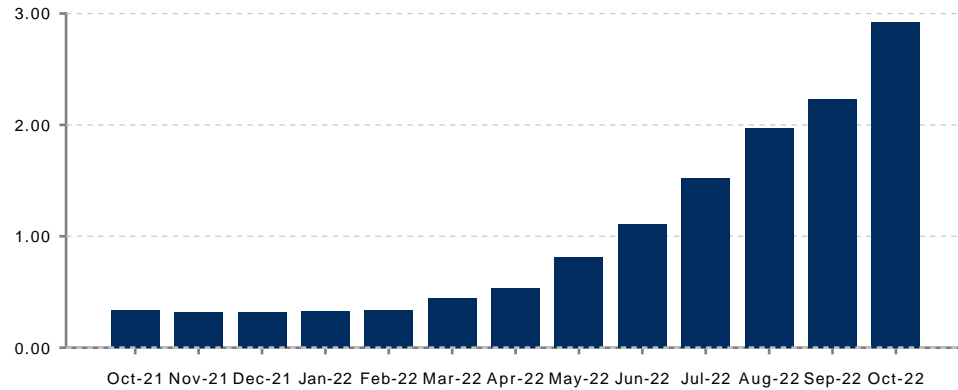


**Rating Distribution**





## Net Yield

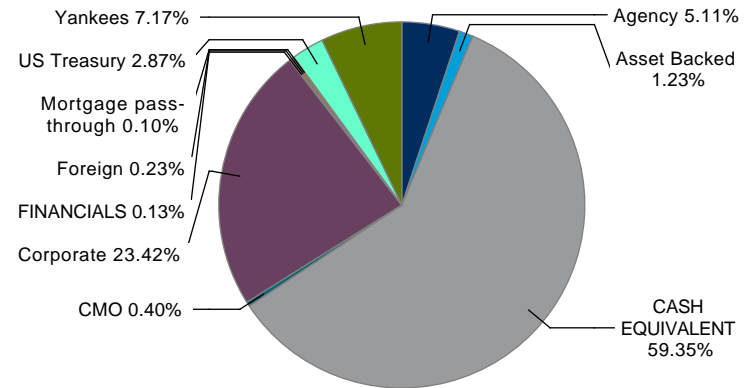


**Current Mth**      **Prior Mth**      **1 Year Ago**

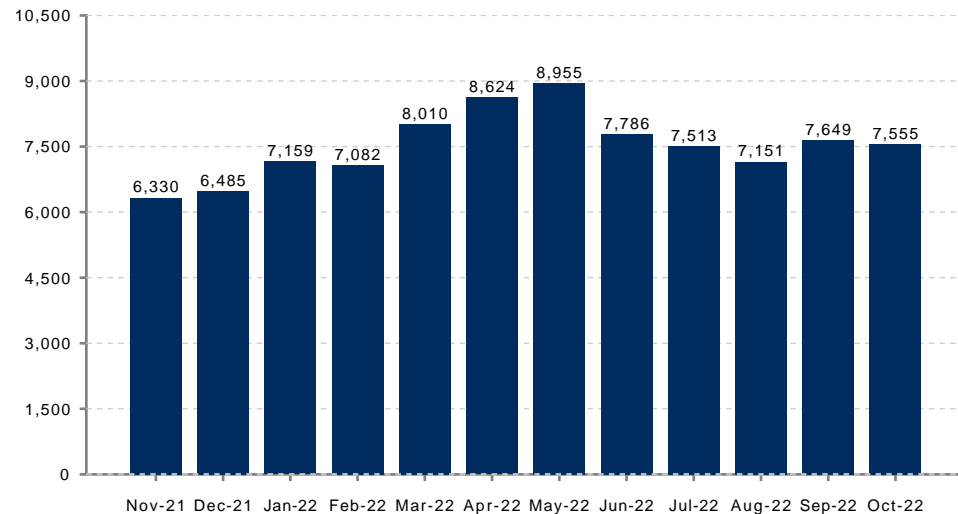
POOL 3 ST AGCY INT.	2.92	2.23	0.34
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## Asset Allocation

	Ending Market Value
POOL 3 ST AGCY INT.	7,554,882,691



## Net Asset Values over Time (\$MM)

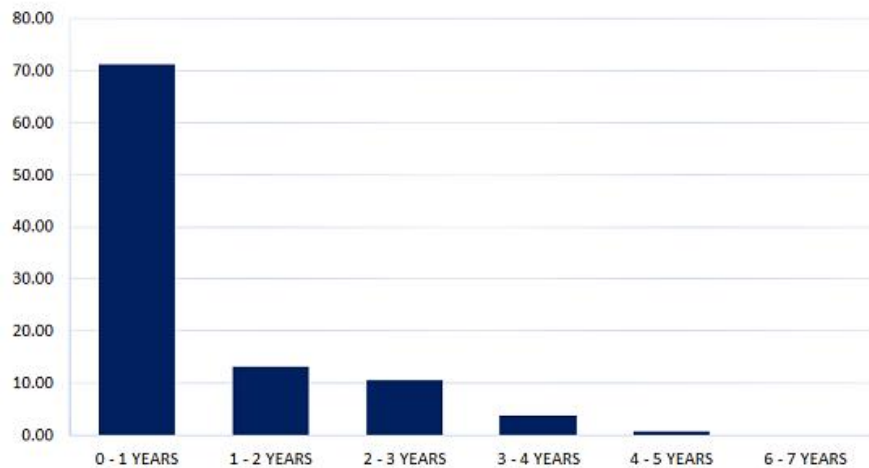


## Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 3 ST AGCY INT.		
SOUTH STREET REPO	1,008,475,347	13.35
MITSUBISHI UFJ REPO	503,389,539	6.66
BMO TRIPARTY MTGE	300,025,333	3.97
CANTOR FITZGERALD REPO	300,025,000	3.97
GOLDMAN SACHS FINANCIAL SQUARE	166,795,790	2.21
US TREASURY N/B	161,803,686	2.14
JPMORGAN US GOVERNMENT MONEY M	106,519,982	1.41
AMHERST PIERPONT	100,167,500	1.33
CANTOR FITZGERALD REPO	75,035,417	0.99
TREASURY BILL	72,491,475	0.96



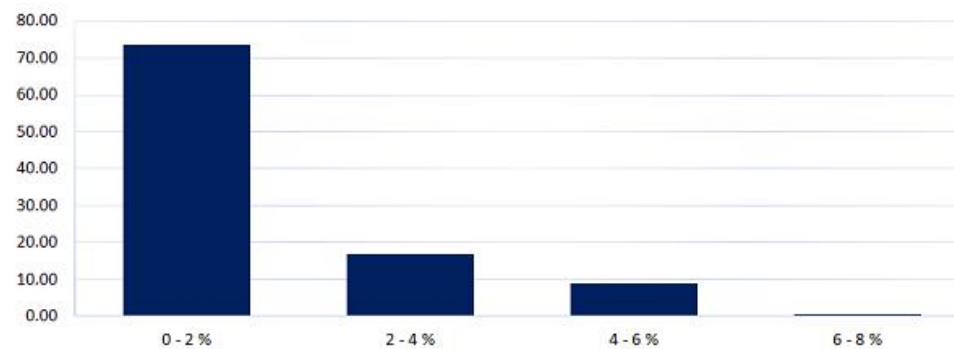
**Duration Distribution**



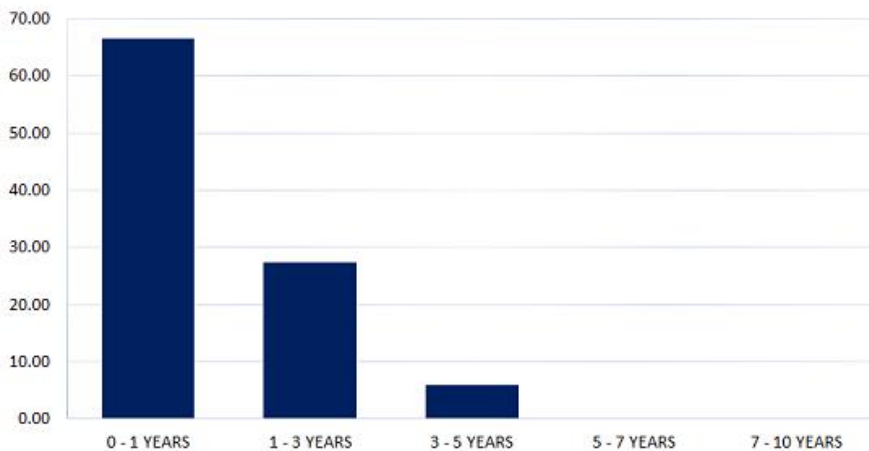
**Portfolio Level Characteristics**

	POOL 3 ST AGCY INT.
Effective Maturity	0.89
Coupon	2.85
Effective Duration	0.77
Quality Rating (Moody's)	AA-2

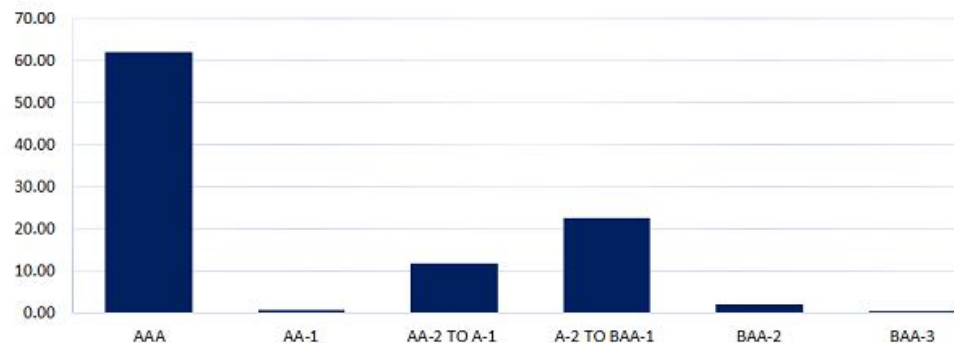
**Coupon Distribution**



**Expected Maturity Distribution**

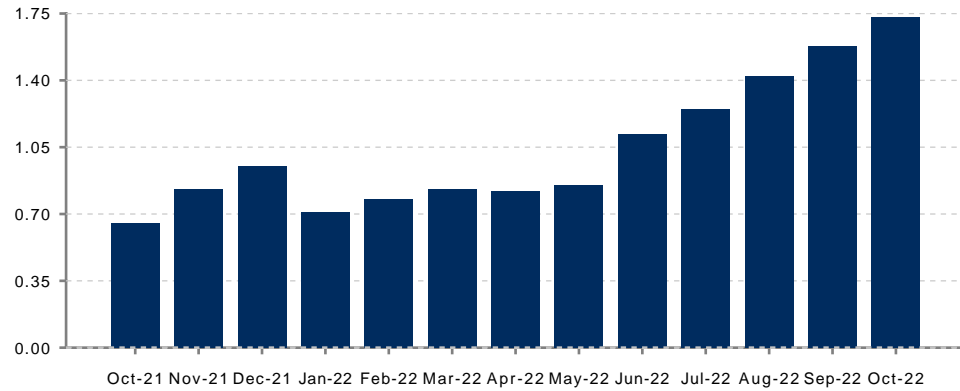


**Rating Distribution**





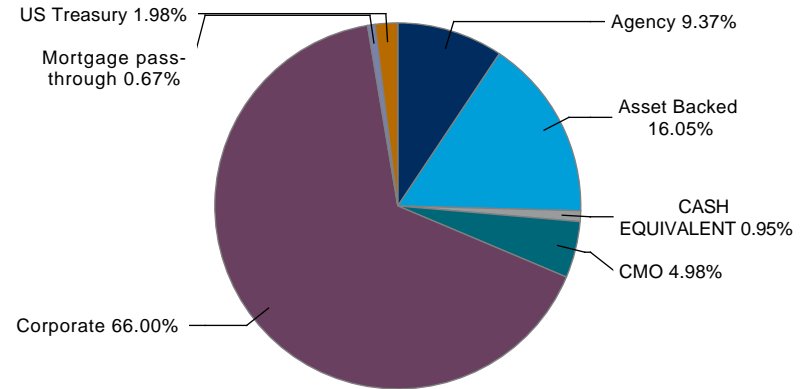
## Net Yield



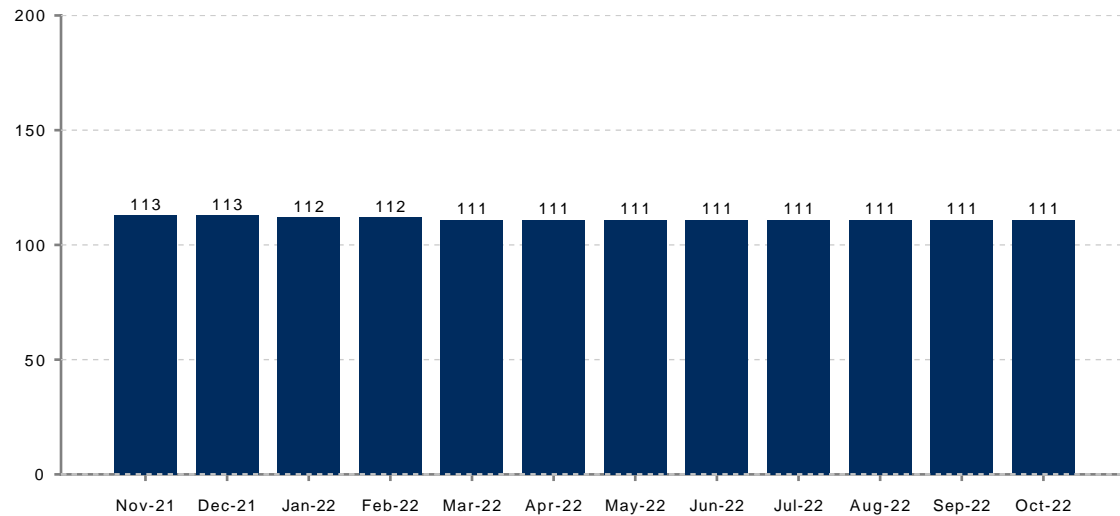
	Current Mth	Prior Mth	1 Year Ago
POOL 3 ST AGCY EXT.	1.73	1.58	0.65

## Asset Allocation

	Ending Market Value
POOL 3 ST AGCY EXT.	110,659,350



## Net Asset Values over Time (\$MM)



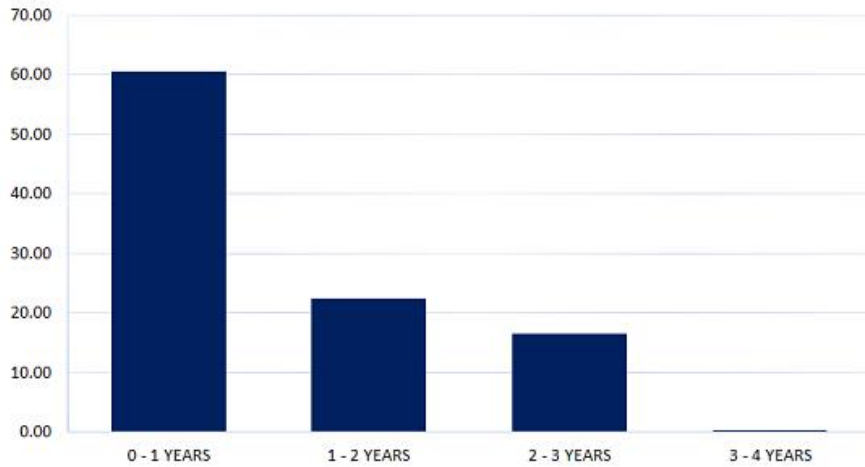
## Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 3 ST AGCY EXT.		
PUBLIC STORAGE	1,717,957	1.55
FHLMC MULTIFAMILY STRUCTURED P	1,593,920	1.44
KIMBERLY CLARK CORP	1,572,151	1.42
COLGATE PALMOLIVE CO	1,356,859	1.23
CINTAS CORPORATION NO. 2	1,304,722	1.18
ADOBE INC	1,216,115	1.10
FHLMC MULTIFAMILY STRUCTURED P	1,213,038	1.10
CITIZENS BANK NA/RI	1,209,861	1.09
SALESFORCE INC	1,204,897	1.09
GM FINANCIAL SECURITIZED TERM	1,193,194	1.08





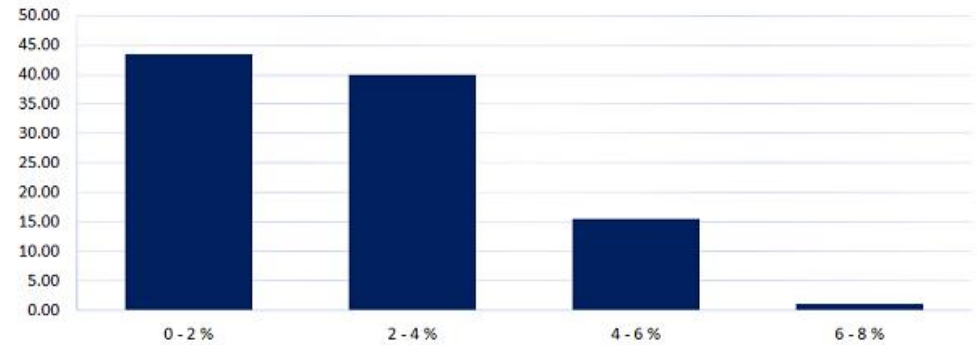
**Duration Distribution**



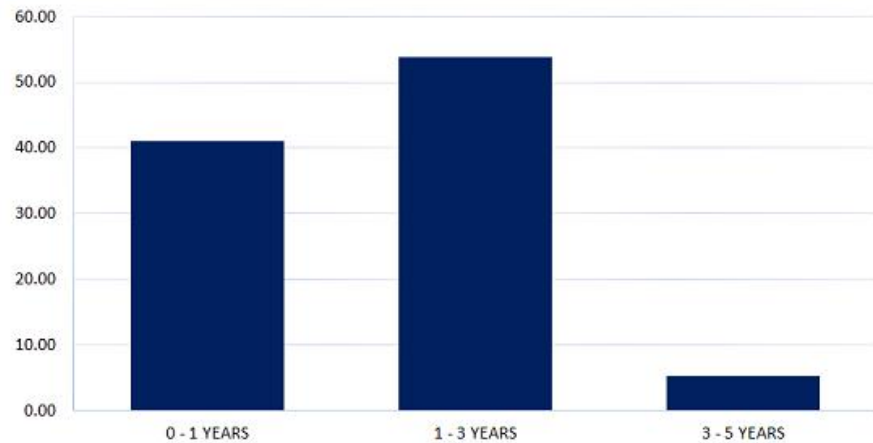
**Portfolio Level Characteristics**

	POOL 3 ST AGCY EXT.
Effective Maturity	1.38
Coupon	2.41
Effective Duration	0.99
Quality Rating (Moody's)	AA-3

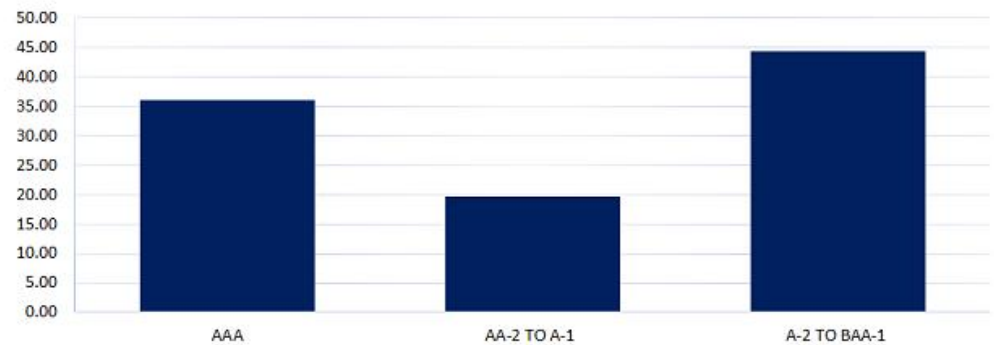
**Coupon Distribution**



**Expected Maturity Distribution**



**Rating Distribution**



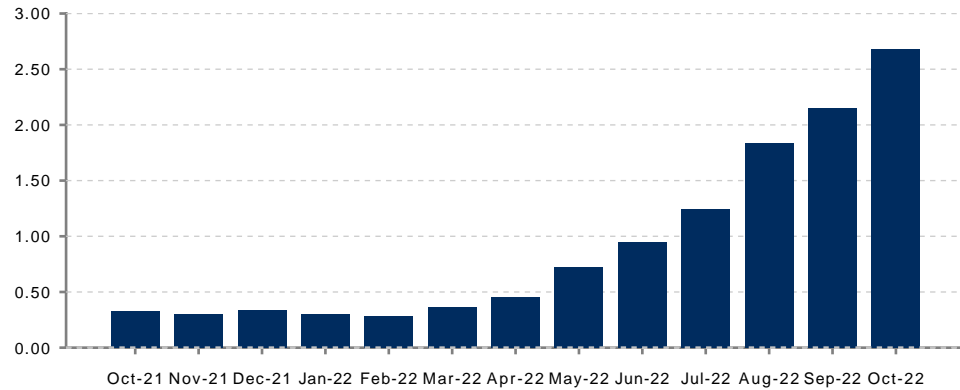
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

POOL 4 ST AGCY GOV.



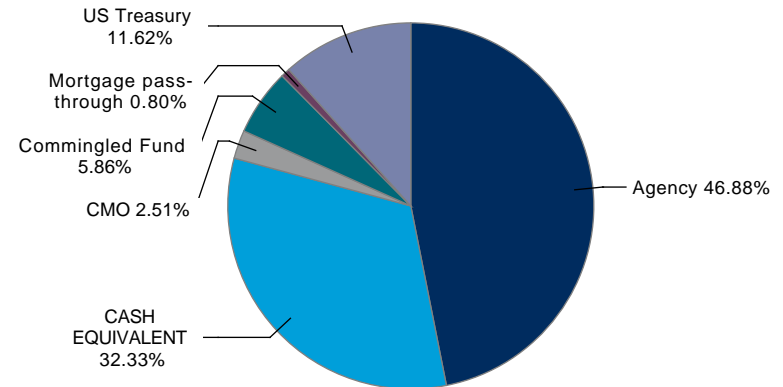
## Net Yield



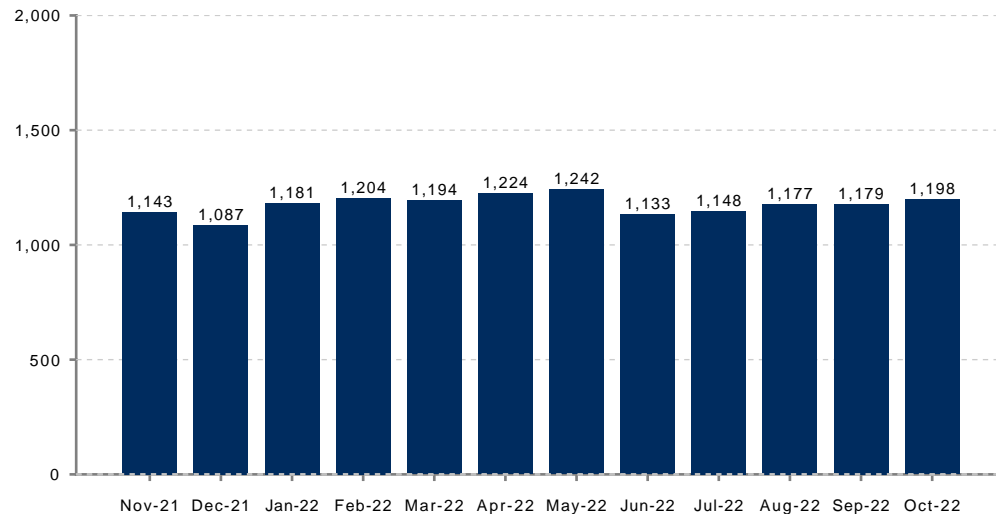
	Current Mth	Prior Mth	1 Year Ago
POOL 4 ST AGCY GOV.	2.68	2.15	0.33

## Asset Allocation

	Ending Market Value
POOL 4 ST AGCY GOV.	1,197,866,703



## Net Asset Values over Time (\$MM)

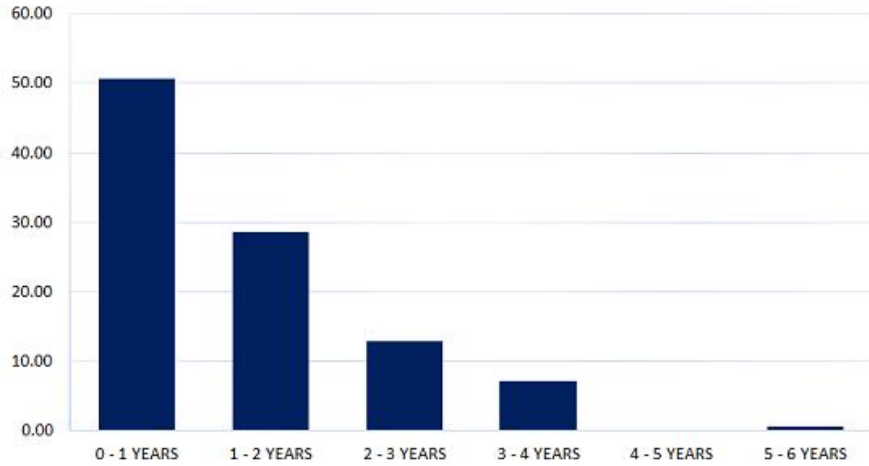


## Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 4 ST AGCY GOV.		
SOUTH STREET REPO	240,308,544	20.06
JPMORGAN US GOVERNMENT MONEY M	70,589,686	5.89
GOLDMAN SACHS FINANCIAL SQUARE	50,441,656	4.21
US TREASURY N/B	48,448,511	4.04
FEDERAL FARM CREDIT BANK	39,935,568	3.33
US TREASURY N/B	33,981,148	2.84
CANTOR FITZGERALD REPO	30,032,358	2.51
CANTOR FITZGERALD REPO	25,011,806	2.09
FEDERAL HOME LOAN BANK	24,820,294	2.07
FEDERAL HOME LOAN BANK	24,675,276	2.06



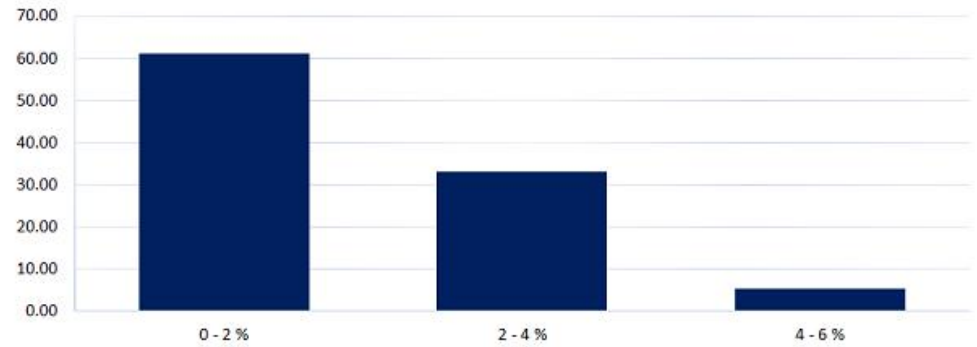
**Duration Distribution**



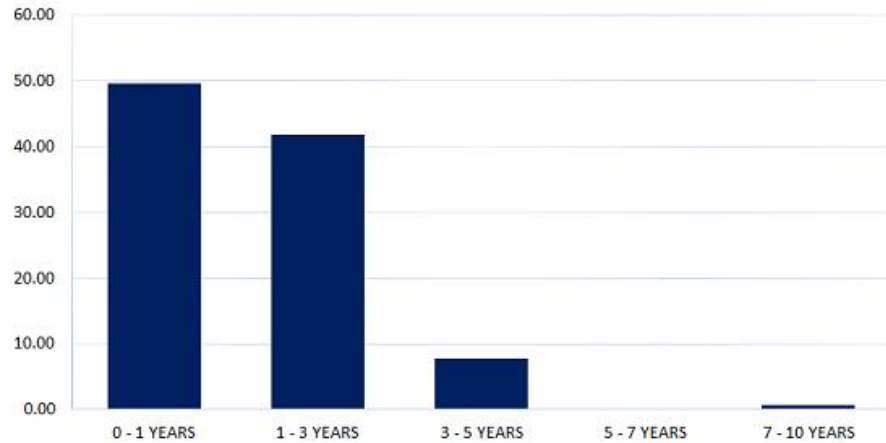
**Portfolio Level Characteristics**

	POOL 4 ST AGCY GOV.
Effective Maturity	1.20
Coupon	2.19
Effective Duration	1.14
Quality Rating (Moody's)	AAA

**Coupon Distribution**



**Expected Maturity Distribution**

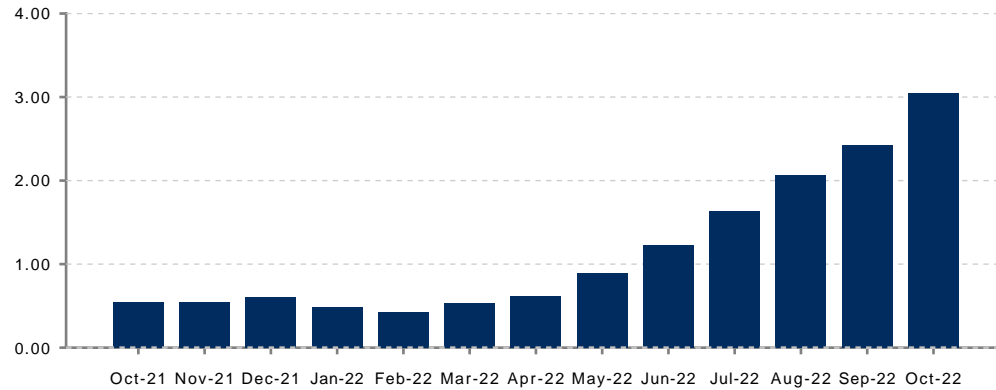


**Rating Distribution**





### Net Yield

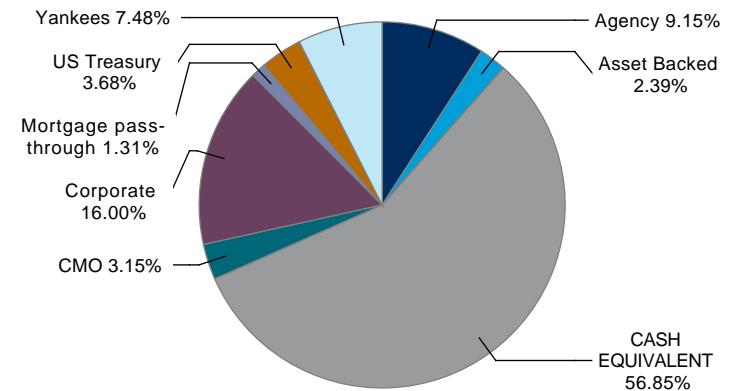


**Current Mth**    **Prior Mth**    **1 Year Ago**

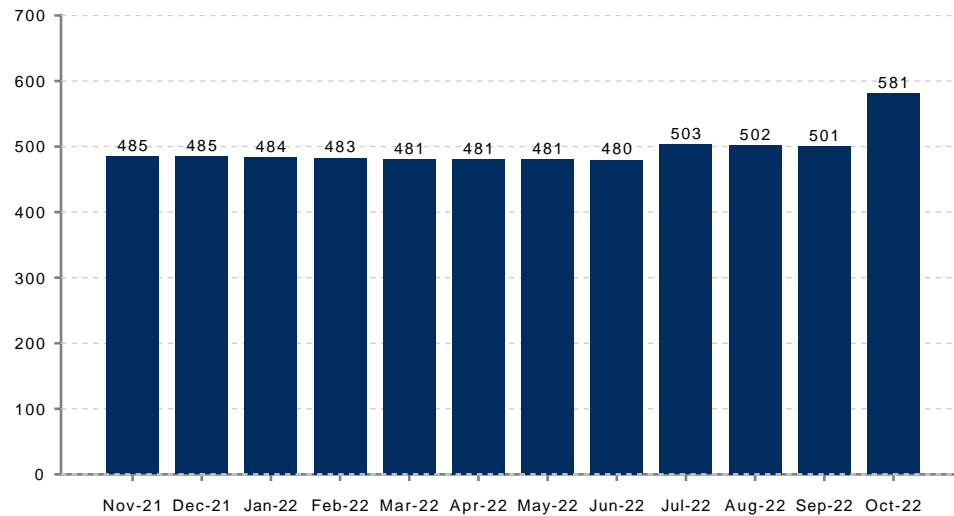
ST OF AZ POOL 10 ST OPER INT MED	3.05	2.42	0.54
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### Asset Allocation

POOL 10 ST OPER INT MED	Ending Market Value
	580,653,908



### Net Asset Values over Time (\$MM)

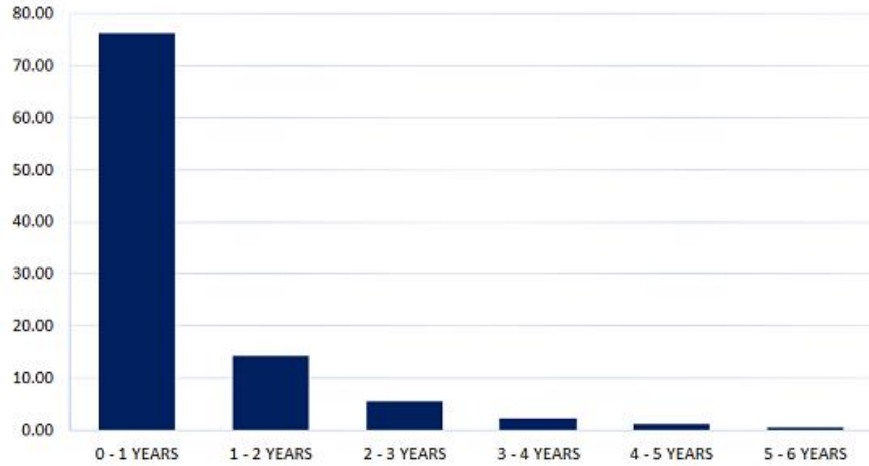


### Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 10 ST OPER INT MED		
TREASURY BILL	22,226,989	3.83
SOUTH STREET REPO	18,617,631	3.21
BANK OF NOVA SCOTIA	10,084,191	1.74
CANTOR FITZGERALD REPO	10,004,722	1.72
FREDDIE MAC	9,745,186	1.68
WALMART INC	8,036,347	1.38
APPLE INC	6,967,147	1.20
TORONTO DOMINION BANK	5,970,459	1.03
VICTORY RECEIVABLES	5,935,235	1.02
THUNDER BAY FNDNG LLC	5,613,978	0.97



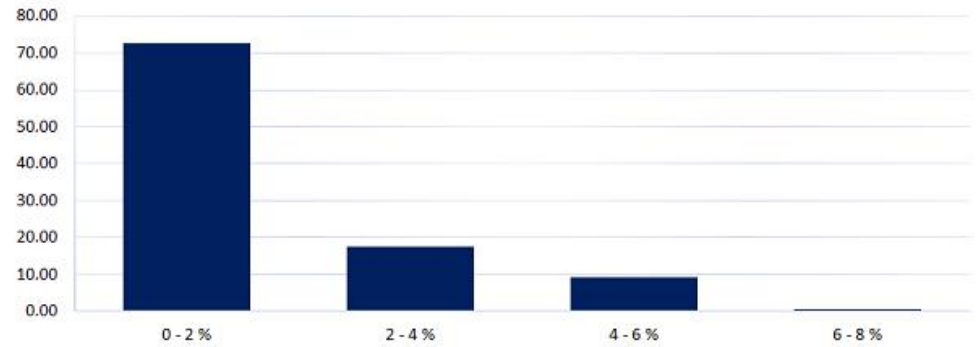
**Duration Distribution**



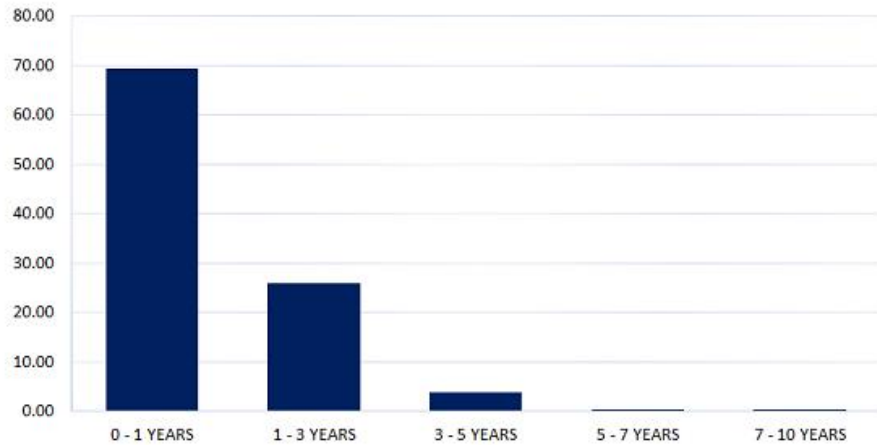
**Portfolio Level Characteristics**

	POOL 10 ST OPER INT MED
Effective Maturity	0.92
Coupon	2.87
Effective Duration	0.72
Quality Rating (Moody's)	AA-1

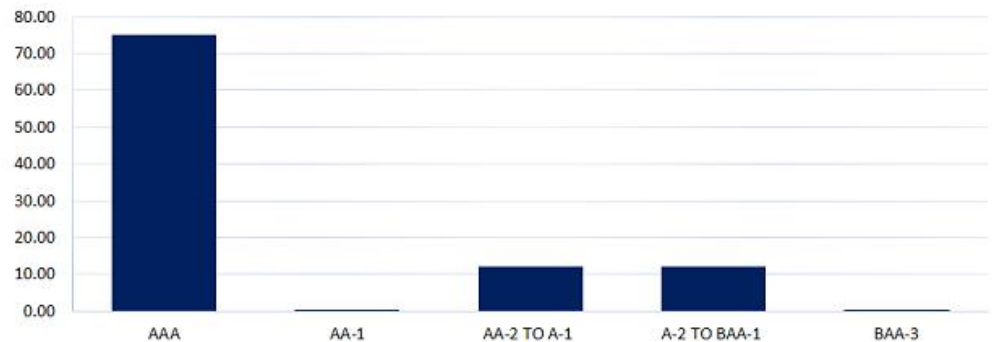
**Coupon Distribution**



**Expected Maturity Distribution**



**Rating Distribution**



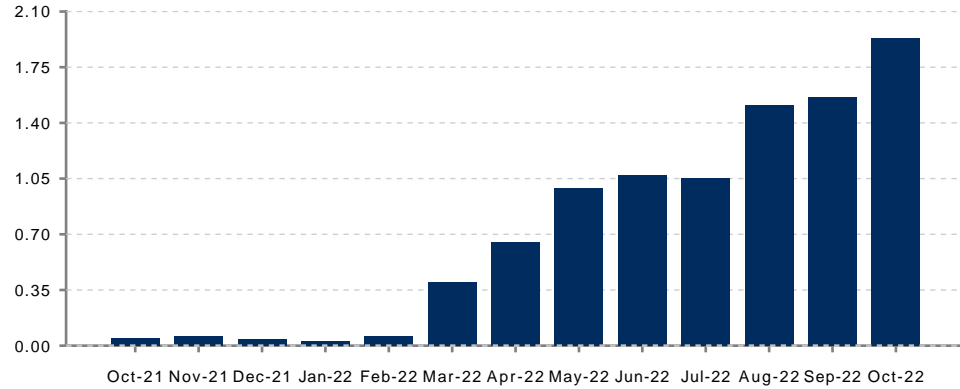
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

POOL 10 ST MED NONAMT



## Net Yield



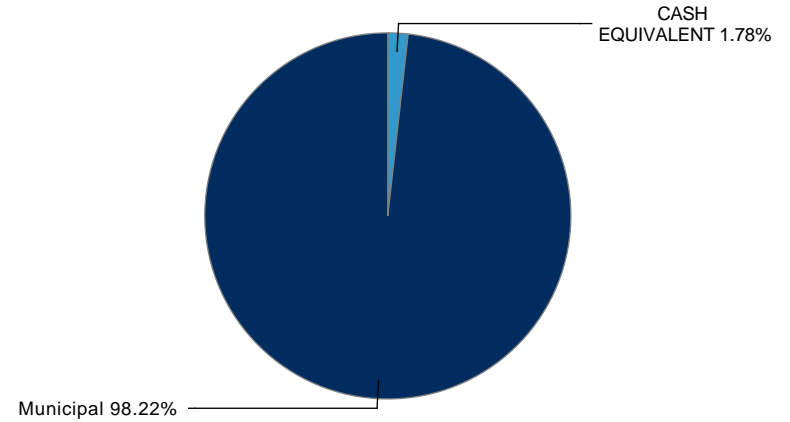
	Current Mth	Prior Mth	1 Year Ago
POOL 10 ST MED NONAMT	1.93	1.56	0.05

## Asset Allocation

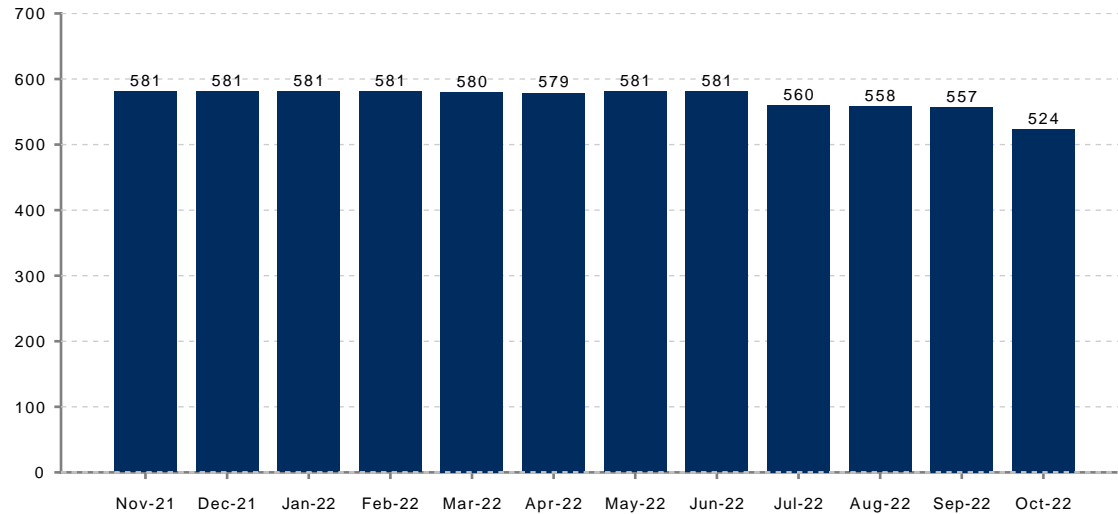
POOL 10 ST MED NONAMT

Ending Market Value

524,249,538



## Net Asset Values over Time (\$MM)

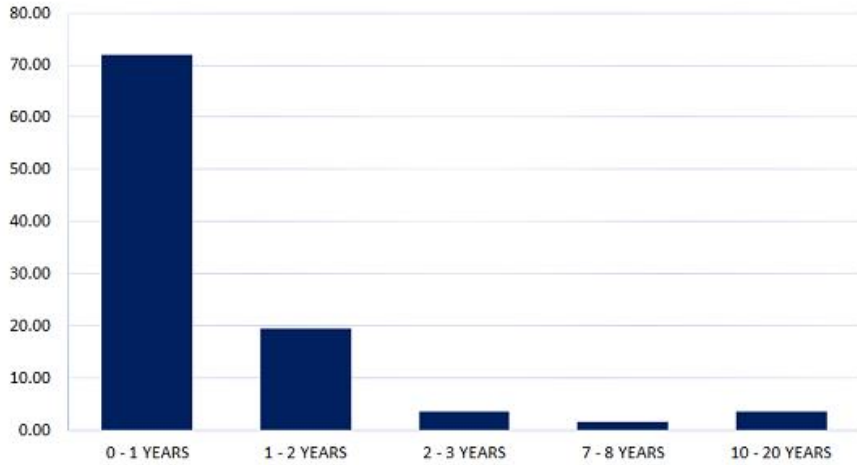


## Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 10 ST MED NONAMT		
PORT TACOMA WA REVEN	25,298,817	4.83
LOUDOUN CNTY VA INDL	24,521,630	4.68
BALTIMORE CNTY MD	23,018,350	4.39
GEORGIA ST	20,701,353	3.95
DENVER CITY CNTY CO	20,528,986	3.92
SAINT PAUL MN HSG RED	20,223,313	3.86
INDIANA ST FIN AUTH HOS	20,035,655	3.82
WISCONSIN ST HLTH ED	17,483,246	3.33
AUSTIN TX WTR WSTWT	17,323,826	3.30
ORANGE CNTY FL HLTH F	17,155,168	3.27



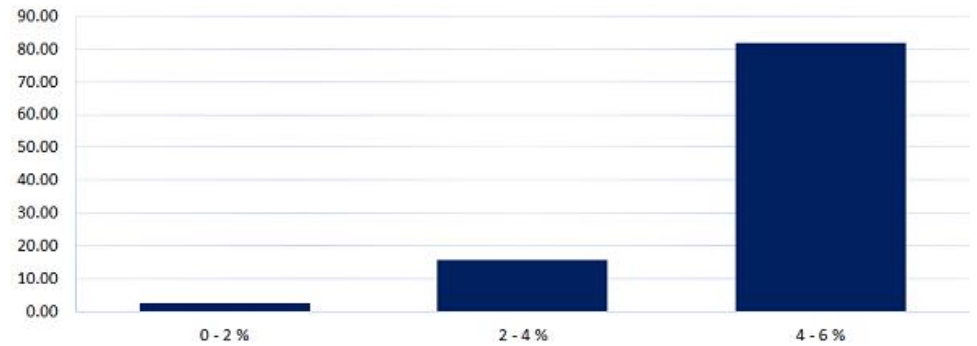
**Duration Distribution**



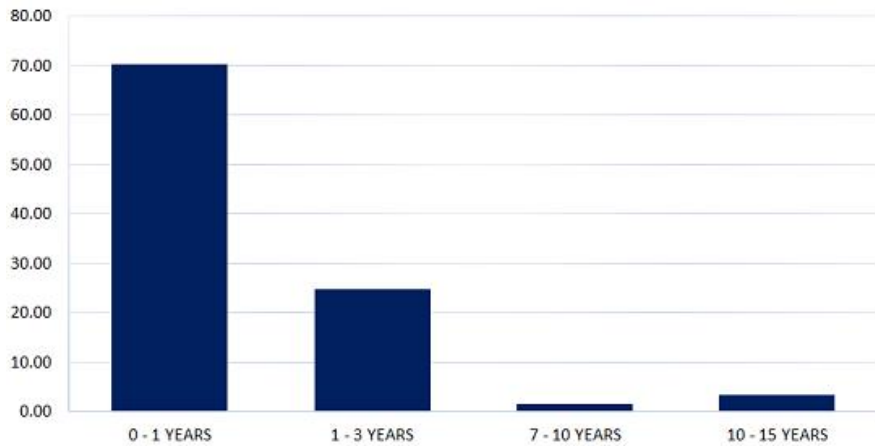
**Portfolio Level Characteristics**

	POOL 10 ST MED NONAMT
Effective Maturity	1.13
Coupon	4.38
Effective Duration	1.07
Quality Rating (Moody's)	AA-1

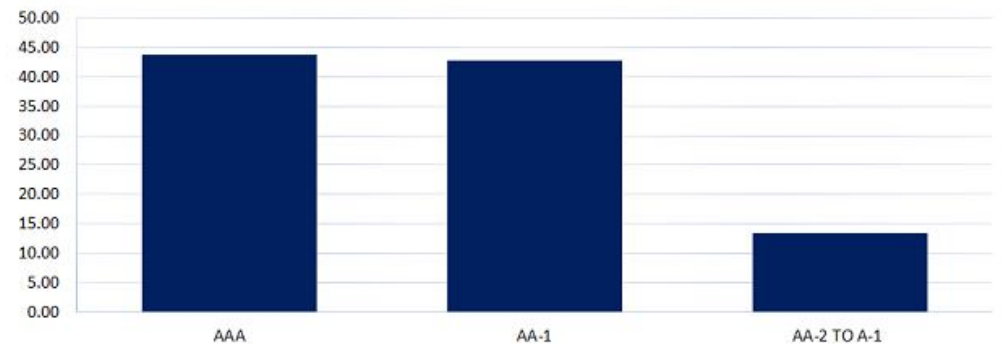
**Coupon Distribution**



**Expected Maturity Distribution**

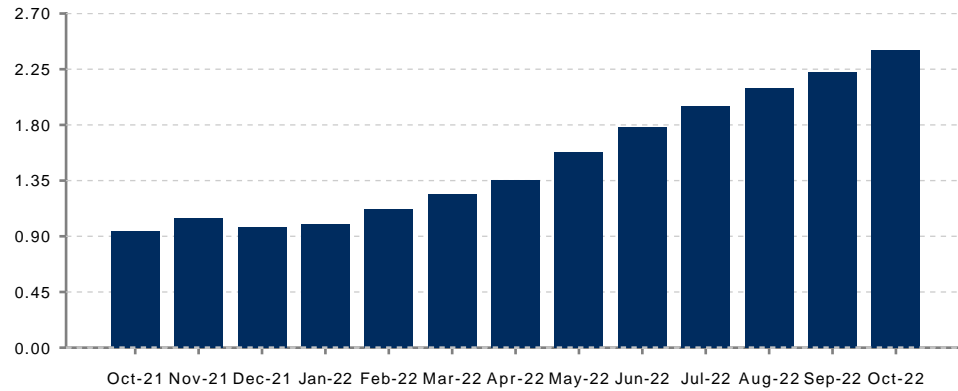


**Rating Distribution**





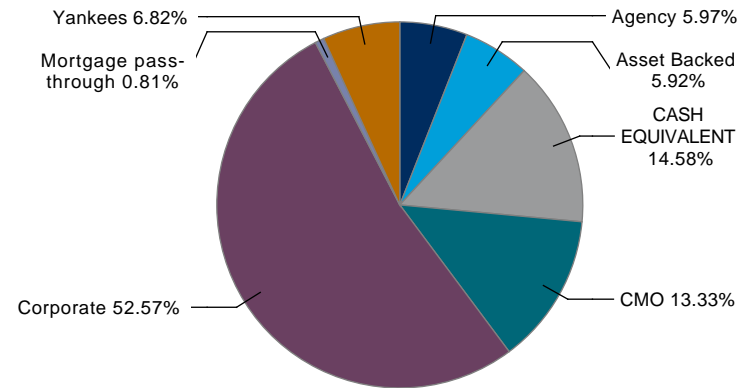
### Net Yield



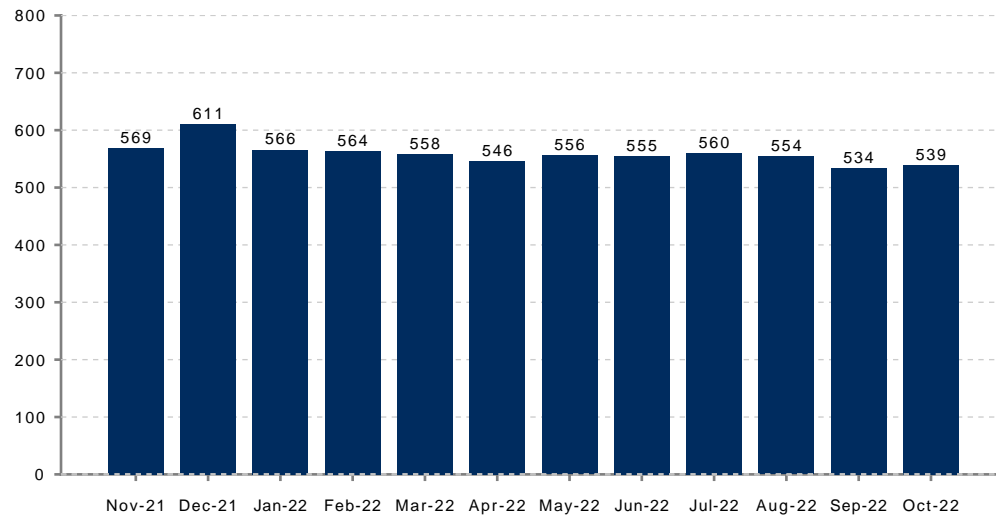
	Current Mth	Prior Mth	1 Year Ago
POOL 12 CAWCD MED TRM	2.40	2.23	0.94

### Asset Allocation

	Ending Market Value
POOL 12 CAWCD MED TRM	538,728,198



### Net Asset Values over Time (\$MM)

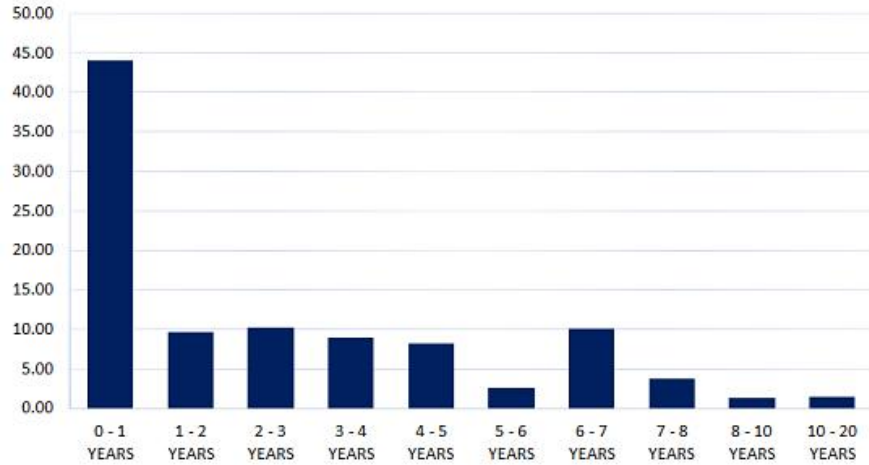


### Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 12 CAWCD MED TRM		
SOUTH STREET REPO	12,501,069	2.32
CROWN POINT CAP CO.	9,965,378	1.85
NVIDIA CORP	9,737,768	1.81
MORGAN STANLEY	9,700,271	1.80
BANK OF AMERICA CORP	9,578,069	1.78
PHILLIPS 66	7,825,952	1.45
INTERCONTINENTALEXCHANGE	6,737,824	1.25
ALPHABET INC	6,319,690	1.17
AMERICAN EXPRESS CO	5,870,675	1.09
FORD CREDIT AUTO OWNER TRUST/F	5,723,199	1.06



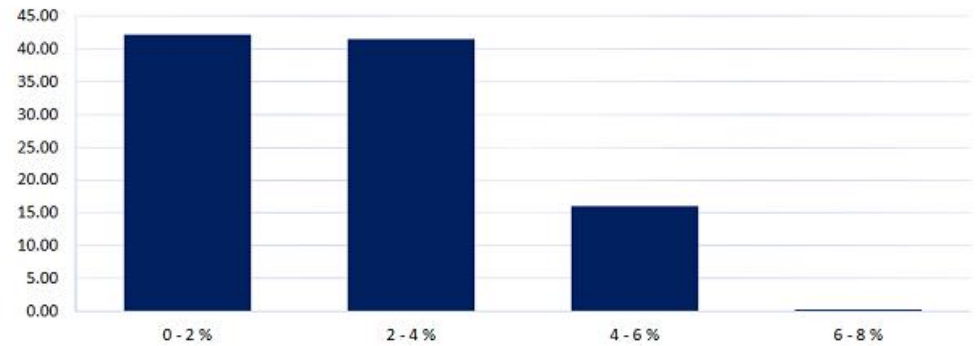
**Duration Distribution**



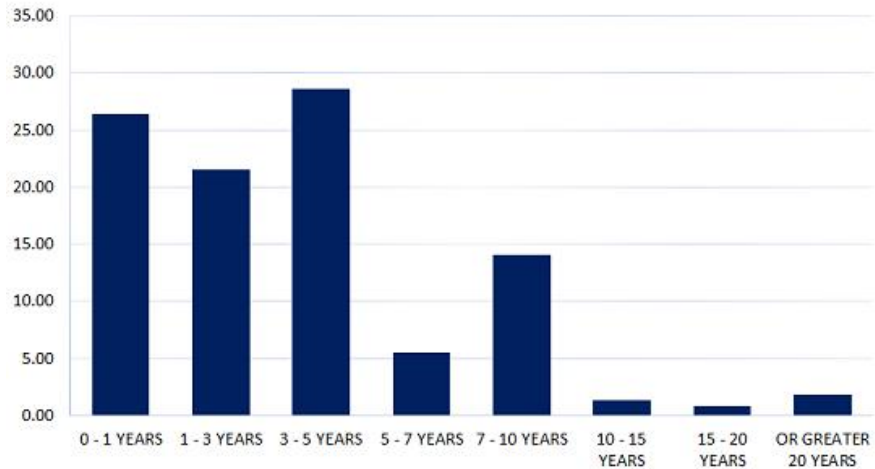
**Portfolio Level Characteristics**

	POOL 12 CAWCD MED TRM
Effective Maturity	3.94
Coupon	2.76
Effective Duration	2.55
Quality Rating (Moody's)	AA-3

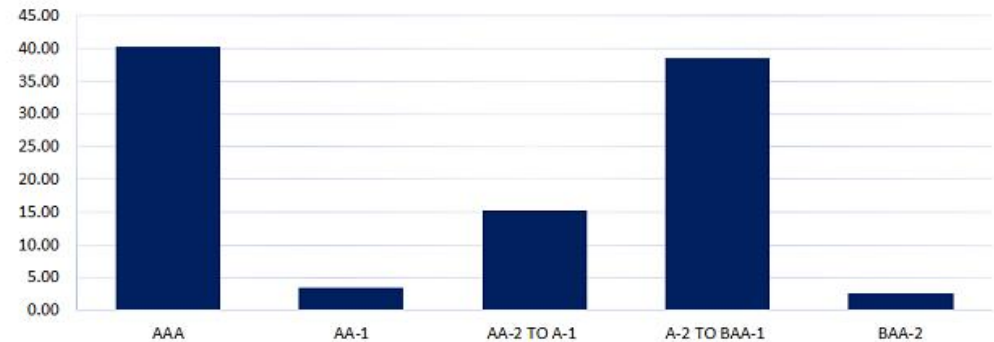
**Coupon Distribution**



**Expected Maturity Distribution**



**Rating Distribution**



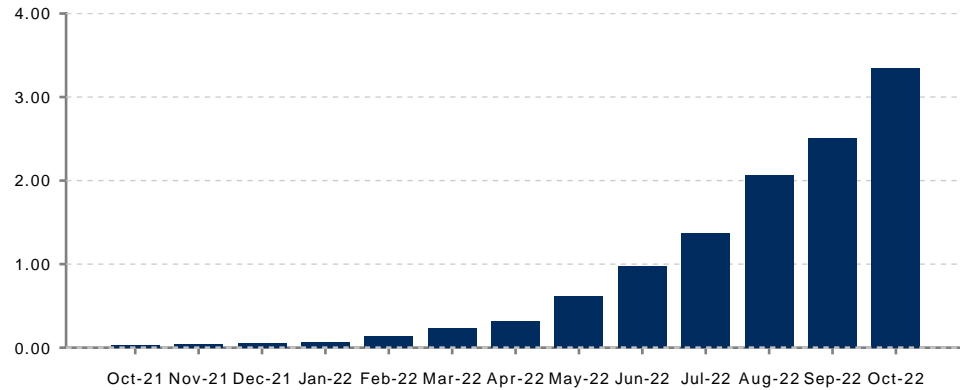
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

POOL 15 ST OPER LIQUID



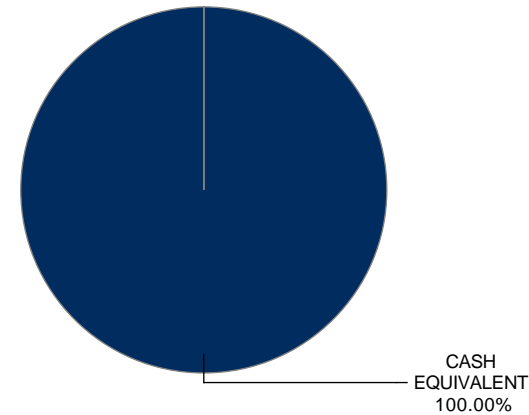
## Net Yield



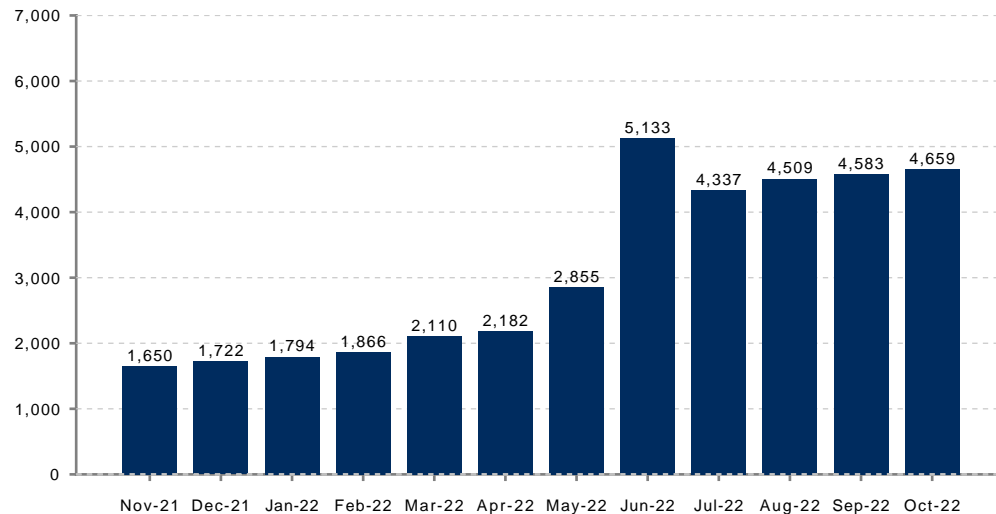
	Current Mth	Prior Mth	1 Year Ago
ST of AZ POOL 15 ST OPER LIQUIDITY	3.34	2.51	0.03

## Asset Allocation

	Ending Market Value
POOL 15 ST OPER LIQUID	4,659,355,618



## Net Asset Values over Time (\$MM)

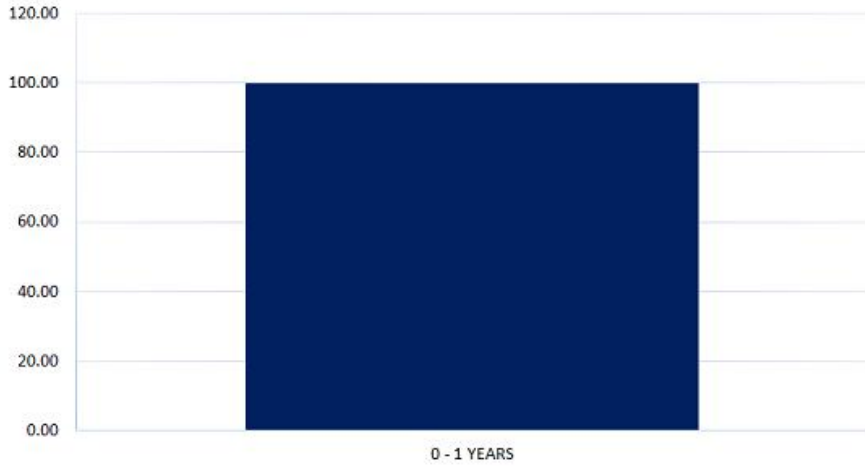


## Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 15 ST OPER LIQUID		
AMHERST PIERPONT	800,066,667	17.17
CANTOR FITZGERALD REPO	700,058,917	15.02
GOLDMAN SACHS FINANCIAL SQUARE	206,318,531	4.43
JPMORGAN US GOVERNMENT MONEY M	156,437,303	3.36
SOUTH STREET REPO	113,712,610	2.44
MSILF GOVERNMENT PORTFOLIO	70,978,446	1.52
AMHERST PIERPONT	70,117,250	1.50
AMHERST PIERPONT	50,053,625	1.07
TREASURY BILL	49,996,220	1.07
CANTOR FITZGERALD REPO	40,018,889	0.86



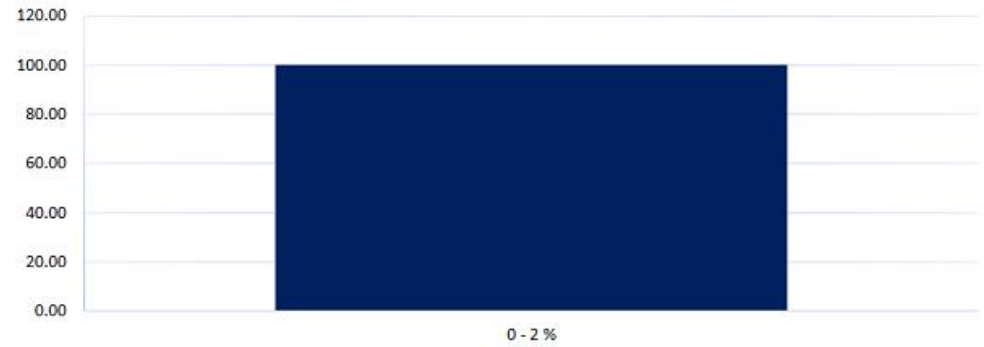
**Duration Distribution**



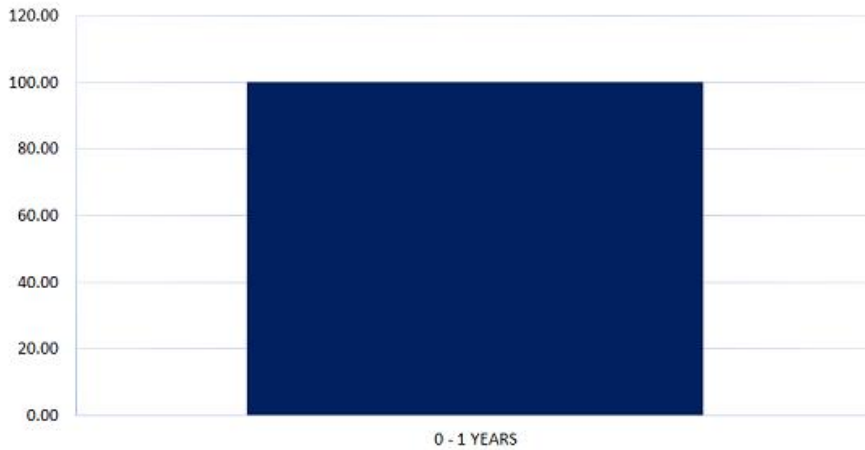
**Portfolio Level Characteristics**

	POOL 15 ST OPER LIQUID
Effective Maturity	0.09
Coupon	3.47
Effective Duration	0.09
Quality Rating (Moody's)	AA-1

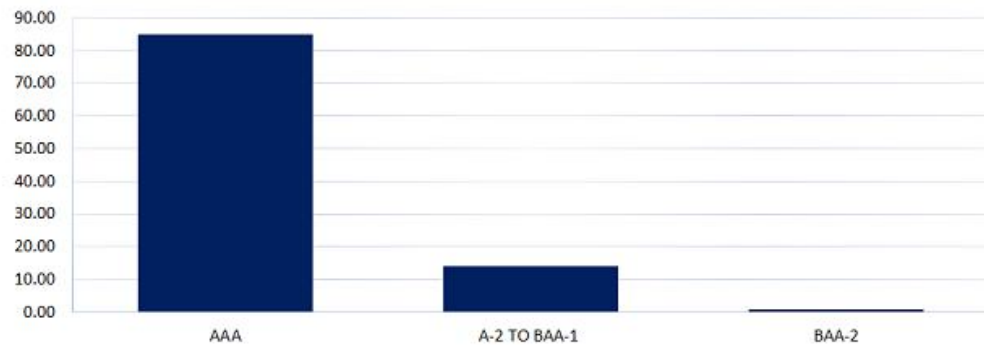
**Coupon Distribution**



**Expected Maturity Distribution**

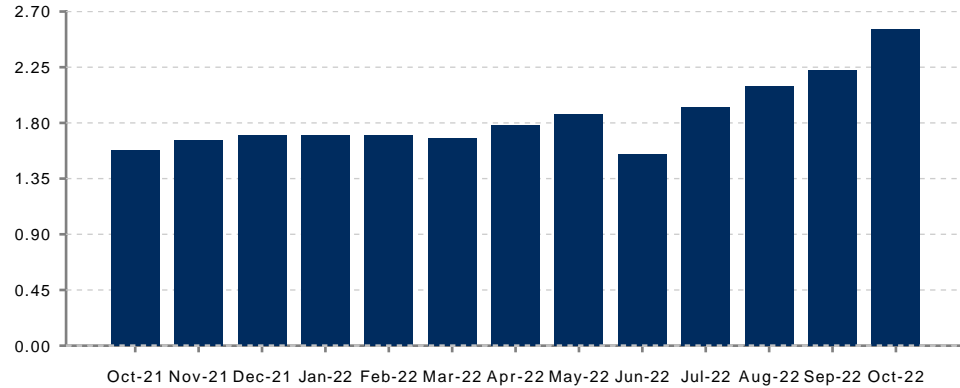


**Rating Distribution**





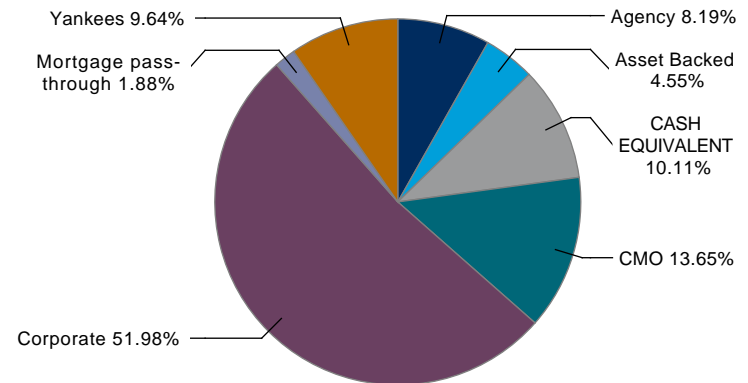
## Net Yield



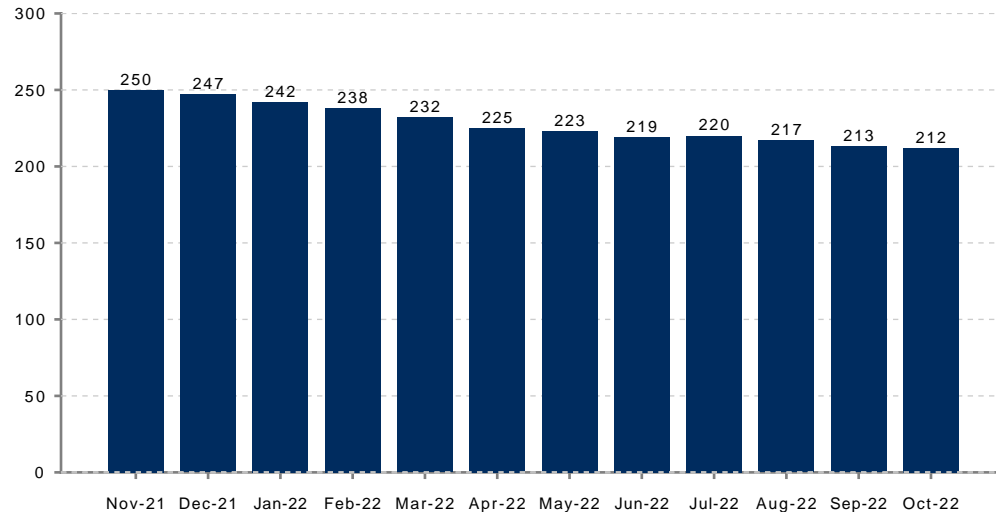
	Current Mth	Prior Mth	1 Year Ago
POOL 16 ECDHB	2.56	2.23	1.58

## Asset Allocation

	Ending Market Value
POOL 16 ECDHB	211,656,082



## Net Asset Values over Time (\$MM)

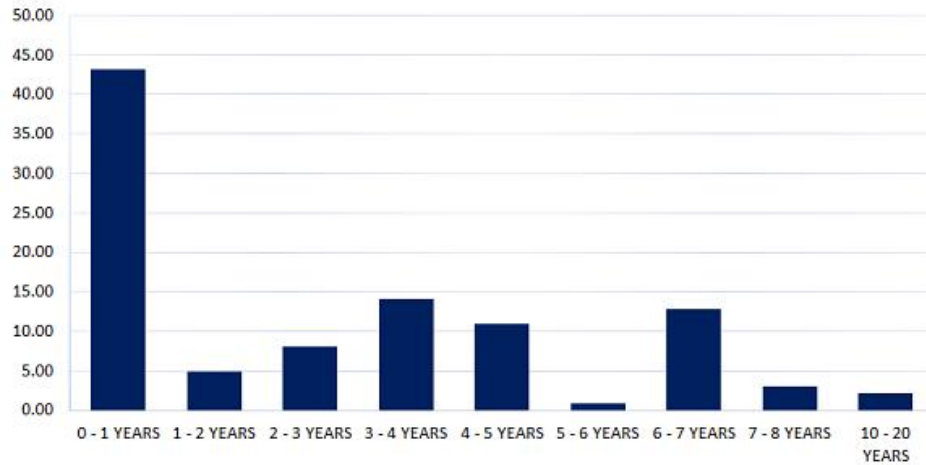


## Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 16 ECDHB		
SOUTH STREET REPO	6,500,556	3.07
GOVERNMENT NATIONAL MORTGAGE A	5,291,766	2.50
BANK OF NOVA SCOTIA	5,042,095	2.38
MOUNTCLIFF	5,000,000	2.36
HARLEY-DAVIDSON FND CP	4,992,507	2.36
BANK OF MONTREAL	4,988,803	2.36
BANK OF NY MELLON CORP	4,965,232	2.35
GOLDMAN SACHS GROUP INC	4,962,364	2.34
CITIGROUP GLOBAL MKTS INC S	4,951,993	2.34
GOLDMAN SACHS GROUP INC	4,929,031	2.33



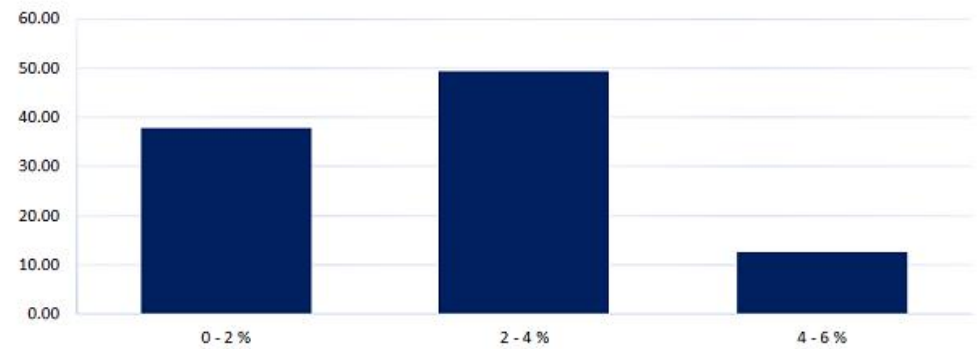
**Duration Distribution**



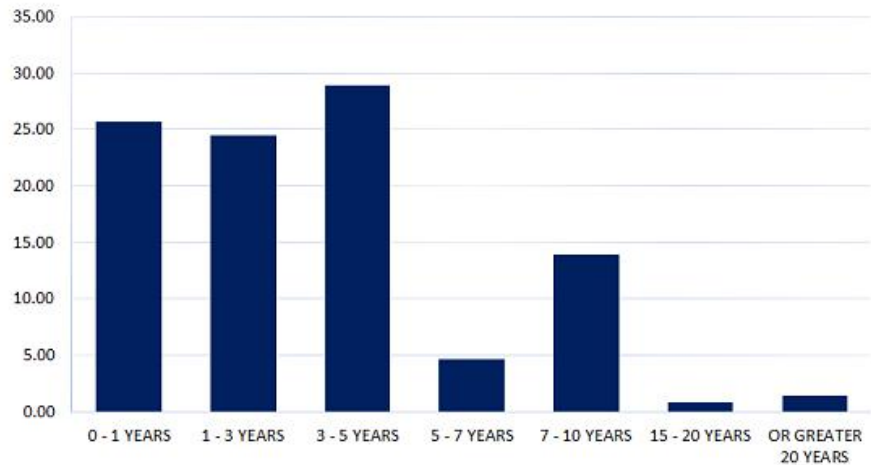
**Portfolio Level Characteristics**

	POOL 16 ECDHB
Effective Maturity	3.66
Coupon	2.76
Effective Duration	2.80
Quality Rating (Moody's)	AA-3

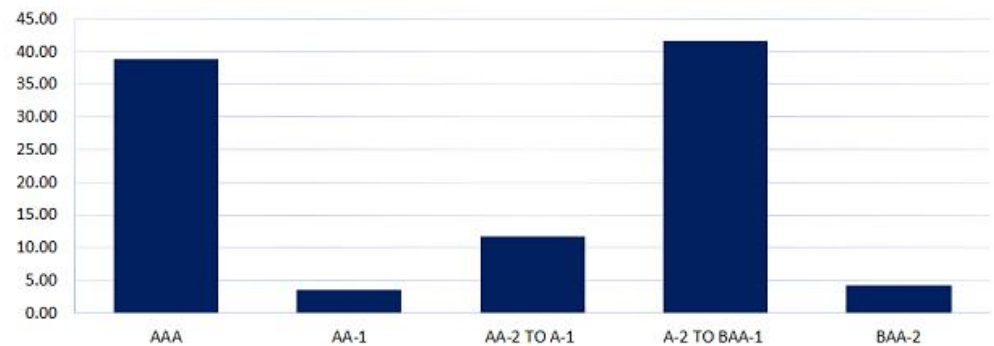
**Coupon Distribution**



**Expected Maturity Distribution**



**Rating Distribution**



**LGIP & LGIP- GOV  
PORTFOLIO YIELD ANALYSIS  
OCTOBER 2022**

**NET EARNINGS**

<b>FUND</b>	<b>DESCRIPTION</b>	<b>Current Month 10/31/22</b>	<b>Prior Month 09/30/22</b>	<b>Prior Year 10/31/21</b>	<b>Net Asset Value Per Share</b>
5	LGIP	\$6,741,205	\$5,045,791	\$92,422	1.000000
7	LGIP - GOV (1)	4,985,990	3,833,504	25,081	1.000000
	<b>TOTAL LGIP &amp; LGIP-GOV</b>	<b>\$11,727,194</b>	<b>\$8,879,295</b>	<b>\$117,502</b>	

**YIELDS**

<b><u>MONTHLY</u></b>		<b>Current Month 10/31/22</b>	<b>Prior Month 09/30/22</b>	<b>Prior Year 10/31/21</b>
5	LGIP (NET)	3.15%	2.53%	0.05%
	S&P LGIP Index	2.66%	2.08%	0.03%
7	LGIP - GOV (NET) (1)	2.93%	2.34%	0.02%
	Trailing 3-mo T-bill	3.12%	2.63%	0.04%

**FISCAL YEAR TO DATE**

5	LGIP (NET)	2.39%	2.13%	0.06%
	S&P LGIP Index	1.92%	1.67%	0.04%
7	LGIP - GOV (NET) (1)	2.15%	1.89%	0.01%
	Trailing 3-mo T-bill	2.33%	2.07%	0.03%

(1) The LGIP-GOV Pool consists of only securities explicitly backed by the full faith & credit of the US Government.

**LGIP & LGIP- GOV MEDIUM TERM POOLS  
PORTFOLIO YIELD ANALYSIS  
OCTOBER 2022**

**NET EARNINGS**

<b>FUND</b>	<b>DESCRIPTION</b>	<b>Current Month 10/31/22</b>	<b>Prior Month 09/30/22</b>	<b>Prior Year 10/31/21</b>	<b>Net Asset Value Per Share</b>
500	LGIP - MED TERM POOL	\$1,277,332	\$1,071,018	\$413,813	0.991212
700	LGIP - FF&C MED TERM POOL	446,059	267,469	72,944	0.978300
	<b>TOTAL LGIP MEDIUM TERM POOLS</b>	<b>\$1,723,391</b>	<b>\$1,338,487</b>	<b>\$486,757</b>	

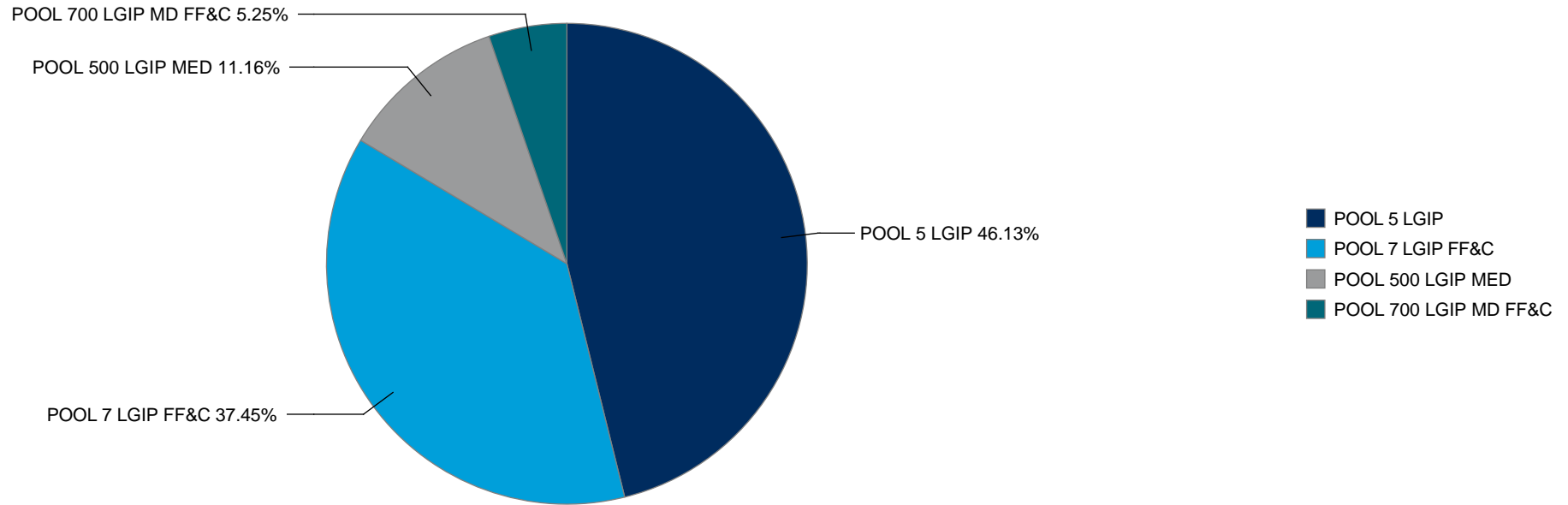
**YIELDS**

<b><u>MONTHLY</u></b>		<b>Current Month 10/31/22</b>	<b>Prior Month 09/30/22</b>	<b>Prior Year 10/31/21</b>
500	LGIP - MED TERM (NET)	2.37%	2.03%	0.77%
	20% S&P LGIP Index /	4.33%	3.75%	0.41%
	80% Bloomberg Barclays 1-3 year US Agg			
700	LGIP - FF&C MED TERM (NET)	1.78%	1.30%	0.26%
	20% Trailing 3-mo T-bill /	4.19%	3.67%	0.33%
	80% Barclay 1-3 year UST			

**FISCAL YEAR TO DATE**

500	LGIP - MED TERM (NET)	1.97%	1.83%	0.82%
	20% S&P LGIP Index /	3.53%	3.27%	0.31%
	80% Bloomberg Barclays 1-3 year US Agg			
700	LGIP - FF&C MED TERM (NET)	1.26%	1.09%	0.27%
	20% Trailing 3-mo T-bill /	3.41%	3.15%	0.23%
	80% Bloomberg Barclays 1-3 year UST			

Manager Allocation

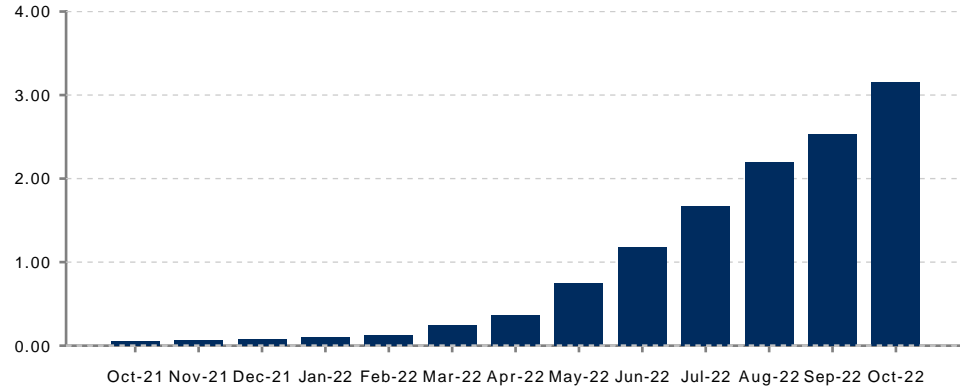


	Market Value	% of Portfolio
POOL 5 LGIP	2,622,536,211	46.1
POOL 7 LGIP FF&C	2,129,000,728	37.5
POOL 500 LGIP MED	634,582,294	11.2
POOL 700 LGIP MD FF&C	298,587,039	5.3
TOTAL LGIP	5,684,706,272	100.0





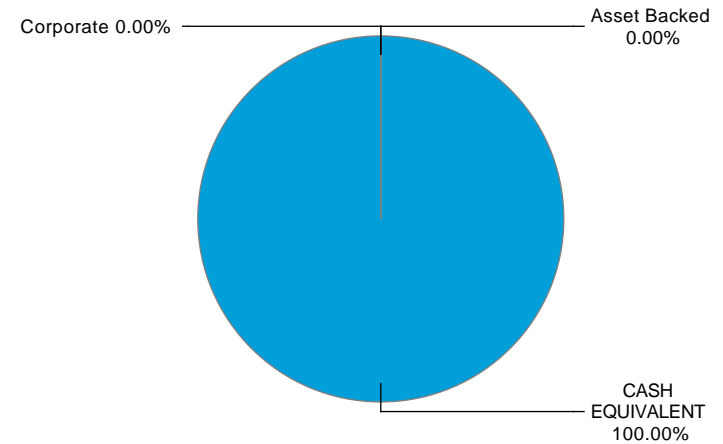
## Net Yield



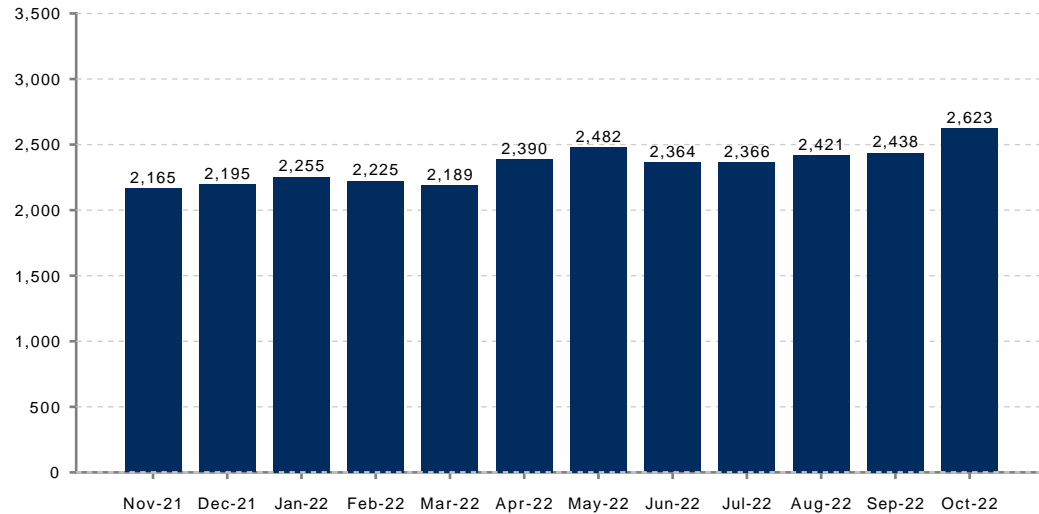
	Current Mth	Prior Mth	1 Year Ago
POOL 5 LGIP	3.15	2.53	0.05

## Asset Allocation

	Ending Market Value
POOL 5 LGIP	2,622,536,211



## Net Asset Values over Time (\$MM)

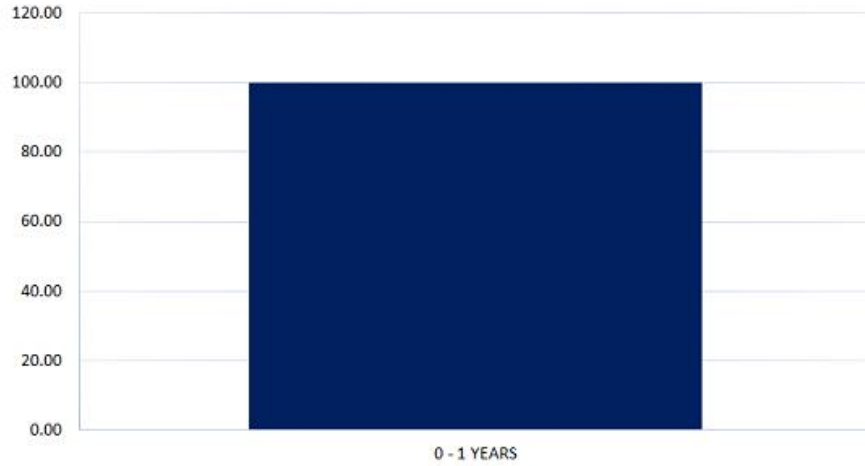


## Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 5 LGIP		
BANK OF AMERICA REPO	150,012,417	5.72
CREDIT AGRICOLE REPO	148,565,145	5.66
TD SECURITIES	100,008,194	3.81
MITSUBISHI UFJ REPO	96,659,961	3.69
HERSHEY FOODS CORP	29,994,833	1.14
BEDFORD ROW FDG CORP	25,026,236	0.95
NATIONAL SECS CLEARING	25,000,000	0.95
CHARIOT FNDG LLC	25,000,000	0.95
CHARIOT FNDG LLC	25,000,000	0.95
EXXON MOBIL CORP	25,000,000	0.95



**Duration Distribution**



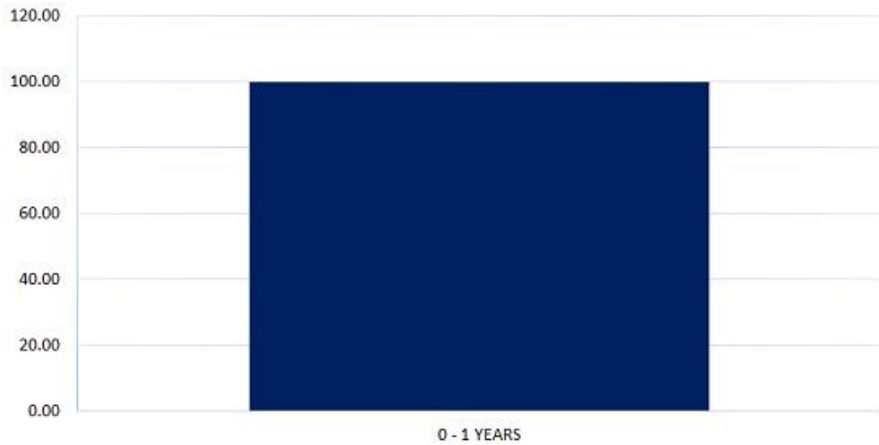
**Portfolio Level Characteristics**

	POOL 5 LGIP
Effective Maturity	0.12
Coupon	3.05
Effective Duration	0.12
Quality Rating (Moody's)	AAA

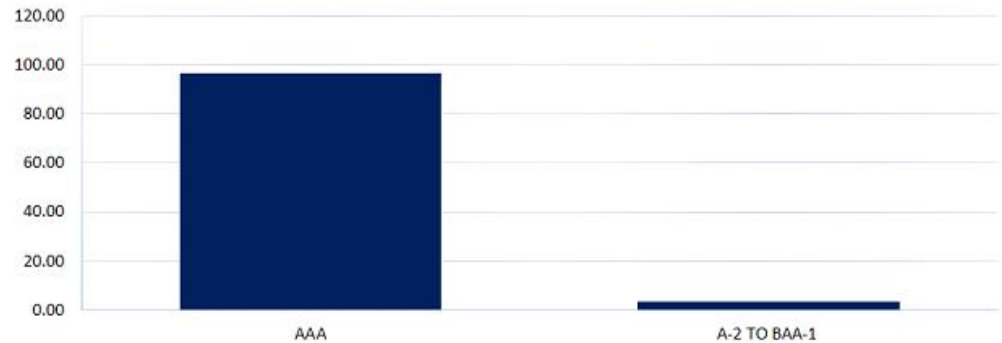
**Coupon Distribution**



**Expected Maturity Distribution**

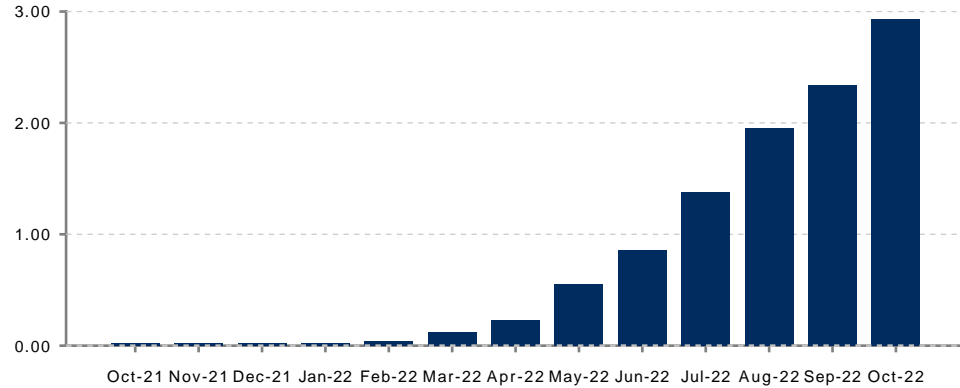


**Rating Distribution**





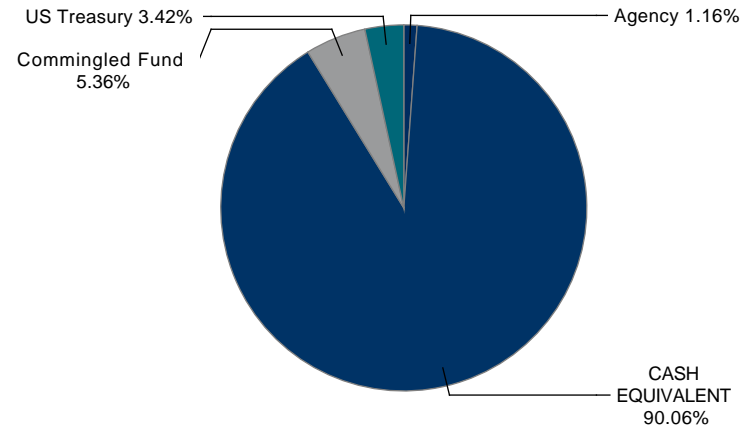
**Net Yield**



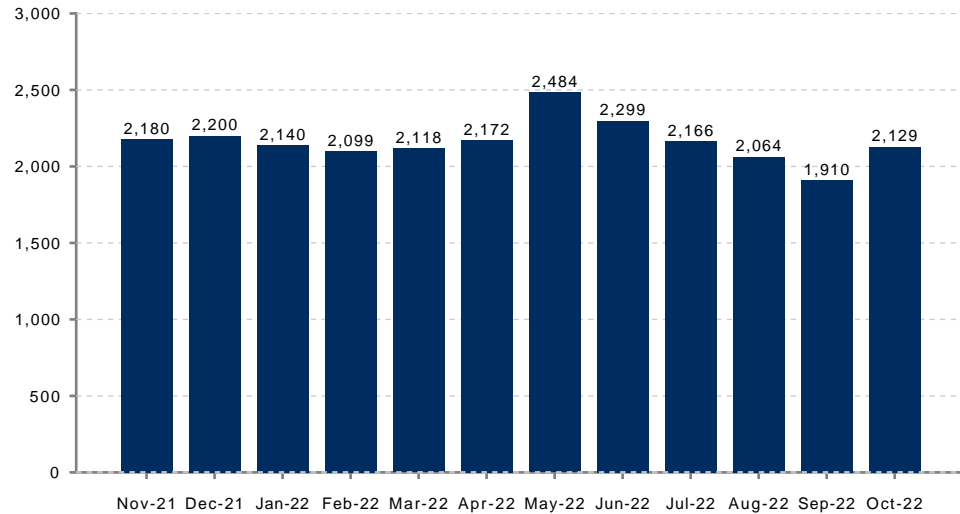
	Current Mth	Prior Mth	1 Year Ago
POOL 7 LGIP FF&C	2.93	2.34	0.02

**Asset Allocation**

	Ending Market Value
POOL 7 LGIP FF&C	2,129,000,728



**Net Asset Values over Time (\$MM)**

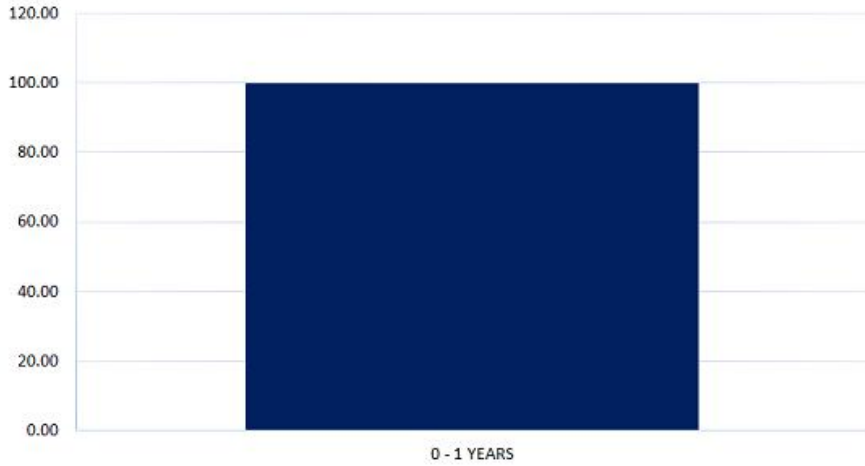


**Top 10 Holdings**

Security Name	Ending Market Value	% of Portfolio
POOL 7 LGIP FF&C		
SUNTRUST BKS INC DTC CP GENERIC CUSIP	500,042,083	23.49
CREDIT AGRICOLE REPO	351,476,244	16.51
AMHERST PIERPONT	140,231,000	6.59
CANTOR FITZGERALD REPO	100,059,333	4.70
CANTOR FITZGERALD REPO	100,010,194	4.70
AMHERST PIERPONT	95,100,436	4.47
WESTERN ALLIANCE CDARS	72,636,819	3.41
GOLDMAN SACHS FINANCIAL SQUARE	65,860,458	3.09
JPMORGAN US TREASURY PLUS MONE	50,647,949	2.38
CANTOR FITZGERALD REPO	50,281,264	2.36



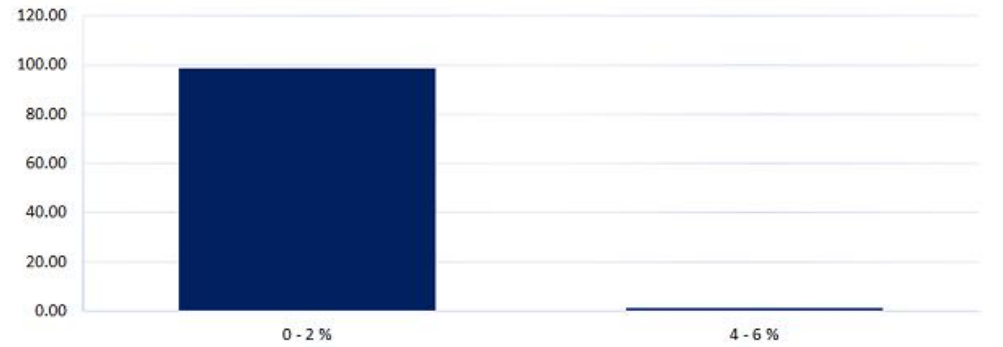
**Duration Distribution**



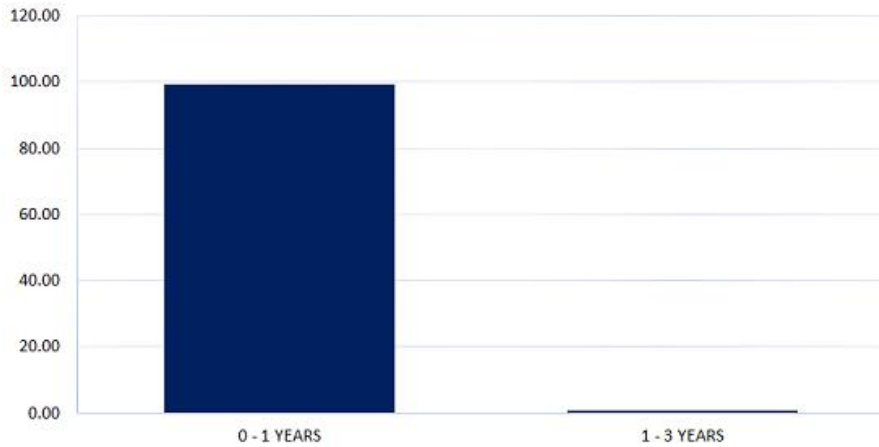
**Portfolio Level Characteristics**

	POOL 7 LGIP FF&C
Effective Maturity	0.08
Coupon	1.18
Effective Duration	0.09
Quality Rating (Moody's)	AAA

**Coupon Distribution**



**Expected Maturity Distribution**

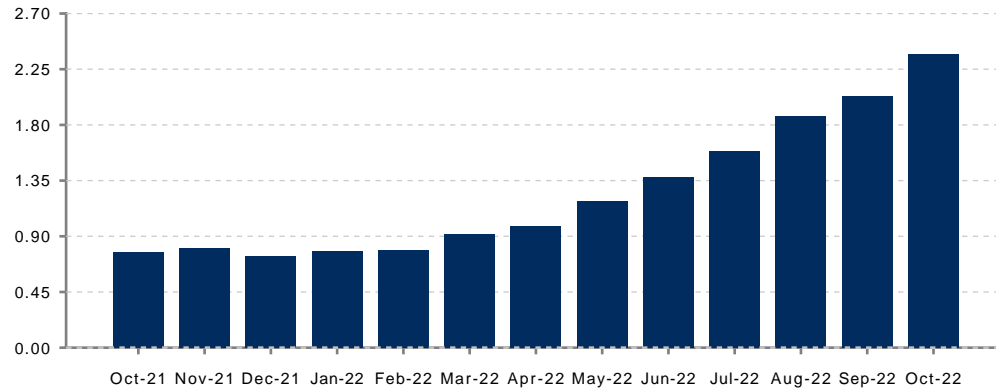


**Rating Distribution**





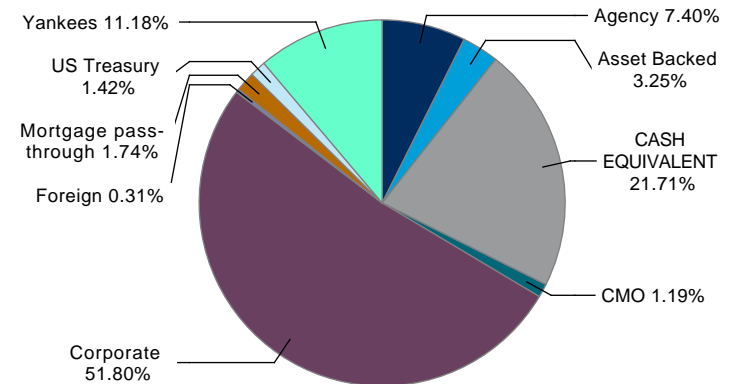
**Net Yield**



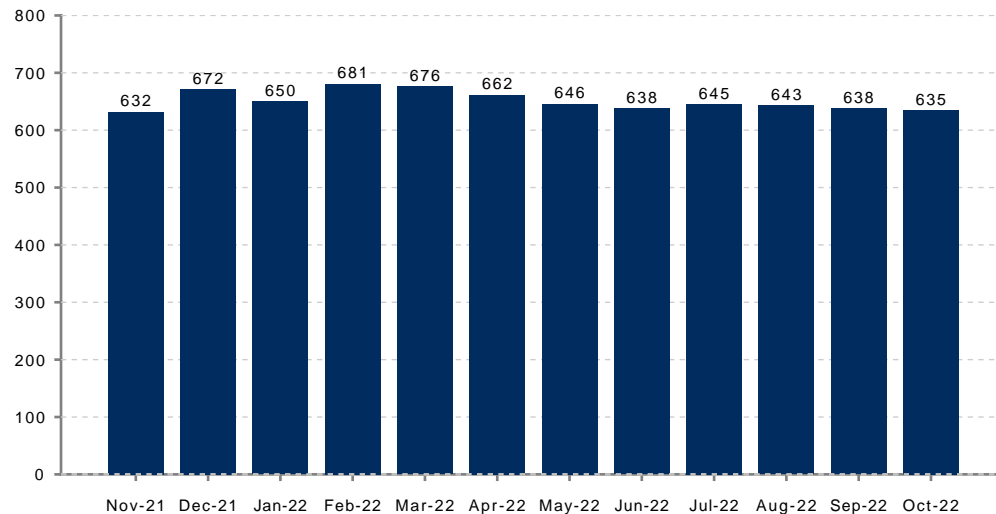
	Current Mth	Prior Mth	1 Year Ago
POOL 500 LGIP MED	2.37	2.03	0.77

**Asset Allocation**

	Ending Market Value
POOL 500 LGIP MED	634,582,294



**Net Asset Values over Time (\$MM)**

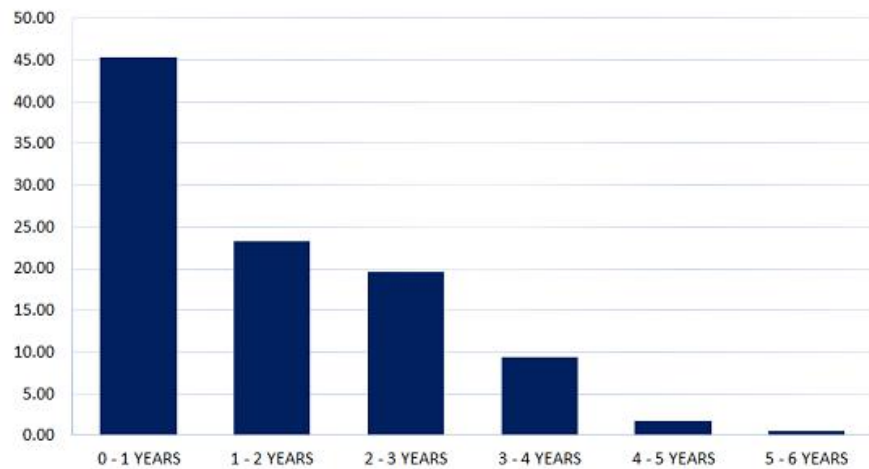


**Top 10 Holdings**

Security Name	Ending Market Value	% of Portfolio
POOL 500 LGIP MED		
ROYAL BK OF CANADA	5,025,447	0.79
US BANK NA CINCINNATI	5,022,304	0.79
ROYAL BANK OF CANADA	5,021,467	0.79
BANK OF MONTREAL-	5,017,189	0.79
AMERICAN HONDA FINANCE	5,016,643	0.79
ROYAL BANK OF CANADA	5,012,526	0.79
ROYAL BANK OF CANADA	5,009,238	0.79
HARLEY-DAVIDSON FND CP	4,999,521	0.79
VW CR INC	4,996,775	0.79
VERIZON COMMNTN INC	4,996,597	0.79



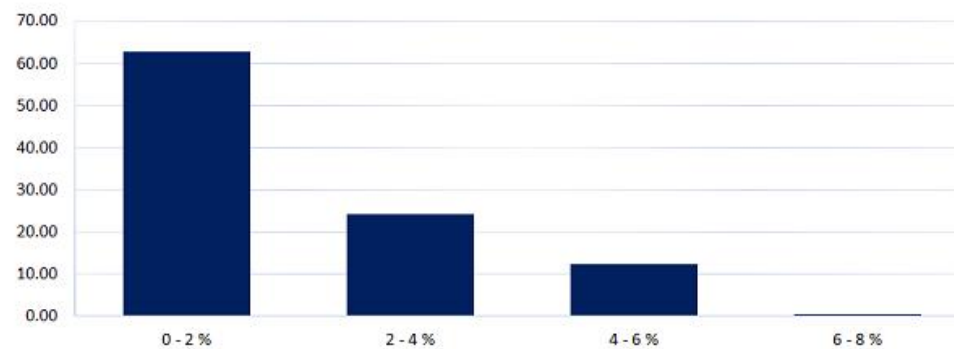
**Duration Distribution**



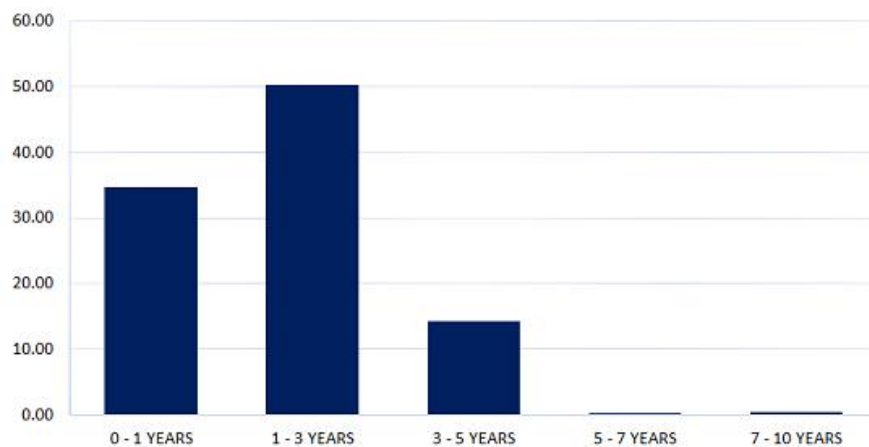
**Portfolio Level Characteristics**

	POOL 500 LGIP MED
Effective Maturity	1.71
Coupon	2.48
Effective Duration	1.37
Quality Rating (Moody's)	AA-3

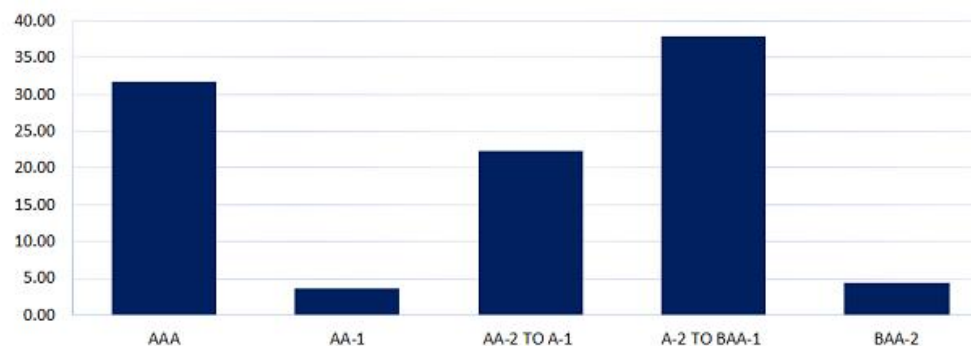
**Coupon Distribution**



**Expected Maturity Distribution**

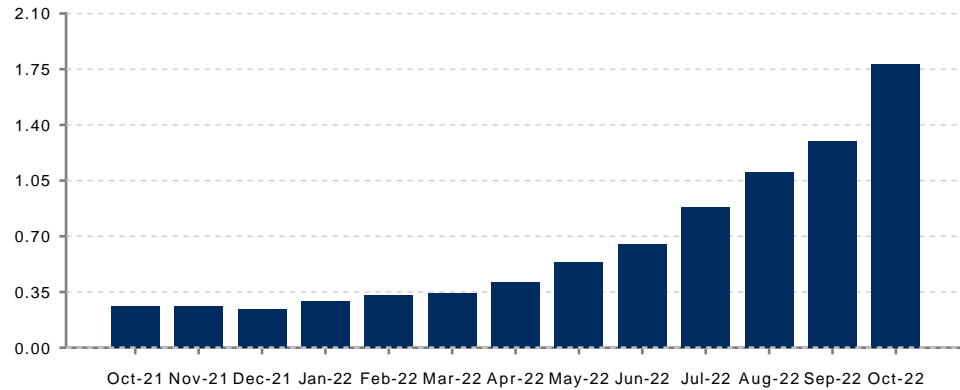


**Rating Distribution**





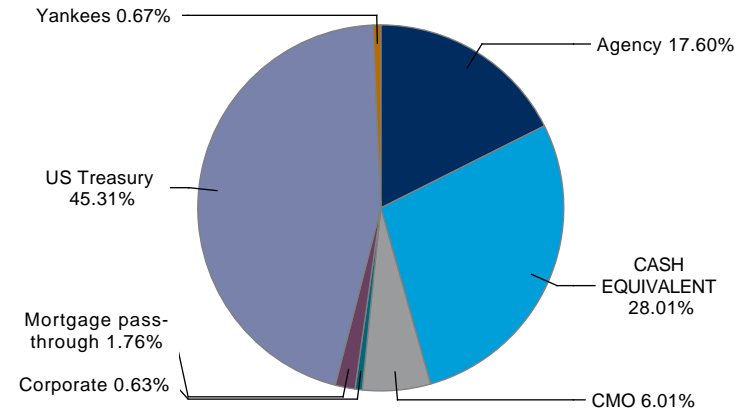
## Net Yield



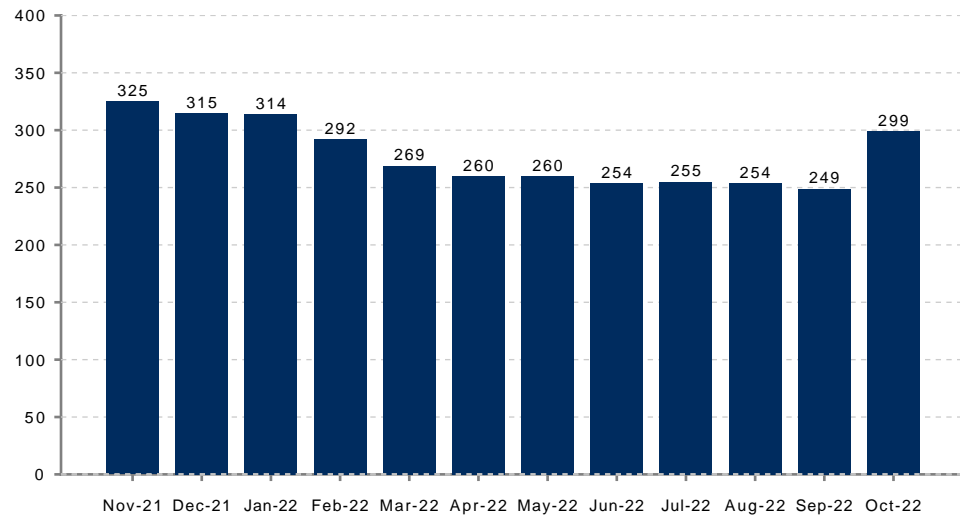
	Current Mth	Prior Mth	1 Year Ago
POOL 700 LGIP MD FF&C	1.78	1.30	0.26

## Asset Allocation

	Ending Market Value
POOL 700 LGIP MD FF&C	298,587,039



## Net Asset Values over Time (\$MM)

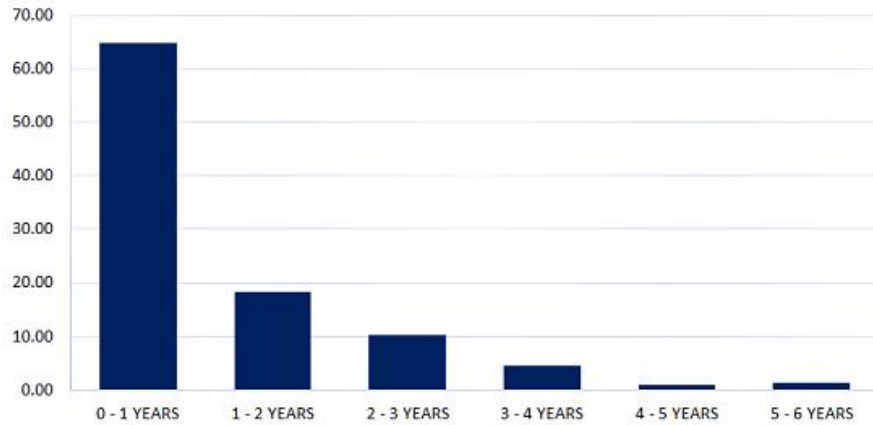


## Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 700 LGIP MD FF&C		
SOUTH STREET REPO	46,003,999	15.41
US TREASURY N/B	11,929,601	4.00
AMHERST PIERPONT	10,016,500	3.35
US TREASURY N/B	9,977,576	3.34
INT DEVELOPMENT FIN CORP	5,006,616	1.68
AMHERST PIERPONT	5,005,286	1.68
US TREASURY N/B	4,952,655	1.66
US TREASURY N/B	4,934,445	1.65
INT DEVELOPMENT FIN CORP	4,931,300	1.65
US TREASURY N/B	4,793,527	1.61



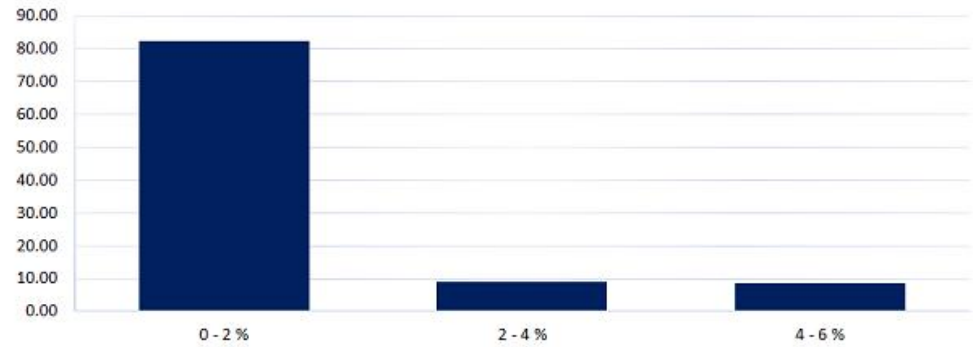
**Duration Distribution**



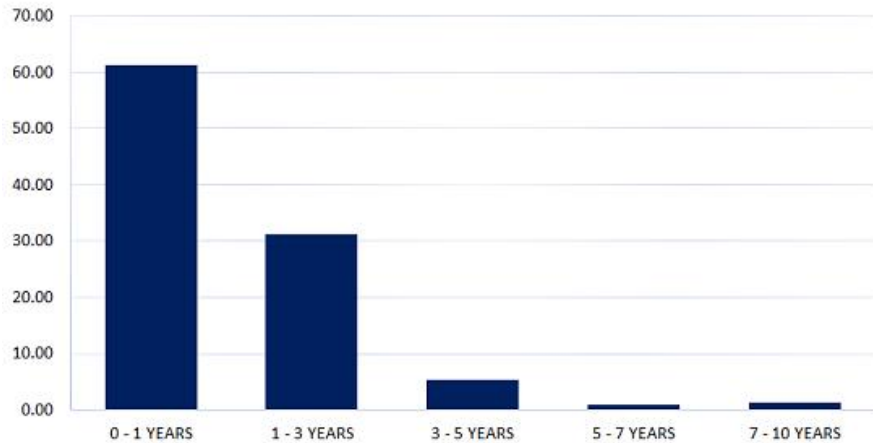
**Portfolio Level Characteristics**

	POOL 700 LGIP MD FF&C
Effective Maturity	1.08
Coupon	1.23
Effective Duration	0.96
Quality Rating (Moody's)	AAA

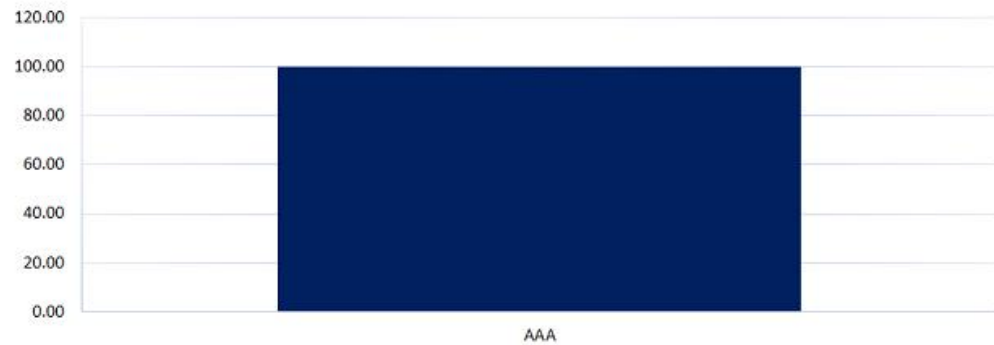
**Coupon Distribution**



**Expected Maturity Distribution**



**Rating Distribution**





**EARNINGS DISTRIBUTED  
PERMANENT LAND ENDOWMENT TRUST FUND  
OCTOBER 2022**

**Distributed in Current Month**

Recipient	OCTOBER 2022	Fiscal YTD 22/23	Fiscal YTD 21/22	Fiscal YTD Change
101 A & M Colleges	\$78,874	\$315,496	\$301,769	\$13,726
102 State Hospital	64,988	259,951	231,117	28,834
103 Leg., Exec., & Jud.	66,232	264,929	252,349	12,580
104 Military Institute	4,494	17,978	17,022	956
105 Miners Hospital	197,693	790,774	735,894	54,880
107 Normal School ASU/NAU	38,010	152,042	140,288	11,754
108 Penitentiaries	128,768	515,073	487,413	27,660
109 Permanent Common School	33,537,213	134,148,850	124,001,082	10,147,768
110 School for Deaf & Blind	48,526	194,103	180,841	13,262
111 School of Mines	90,376	361,502	344,904	16,598
112 State Charitable-Pioneers Home	494,453	1,977,813	1,775,976	201,837
112 State Charitable-Corrections	247,227	988,906	887,988	100,919
112 State Charitable-Youth Treatment	247,227	988,906	887,988	100,919
113 University Fund	190,133	760,532	679,678	80,854
114 U of A Land - 1881	629,397	2,517,587	2,353,307	164,281
<b>Total</b>	<b>\$36,063,611</b>	<b>\$144,254,443</b>	<b>\$133,277,615</b>	<b>\$10,976,828</b>

**Land Sales Monthly Proceeds  
Permanent Land Endowment Trust Fund**

<b>Month</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>January</b>	\$2,960,815	\$809,822	\$30,671,107	\$34,028,510	\$77,327,332	\$65,776,496	
<b>February</b>	1,103,303	744,295	875,823	2,362,463	17,814,405	107,134,375	
<b>March</b>	3,045,043	8,296,029	997,479	13,103,761	3,772,571	5,230,088	
<b>April</b>	78,134,289	22,707,772	12,816,140	6,837,496	4,099,129	95,870,019	
<b>May</b>	27,642,672	16,234,823	590,432	3,656,783	88,763,368	109,978,359	
<b>June</b>	2,451,110	6,799,100	3,654,938	3,379,021	2,001,347	105,071,646	
<b>July</b>	13,838,188	27,835,379	4,356,585	19,069,989	37,347,276	14,023,708	
<b>August</b>	5,746,802	6,932,754	10,038,331	6,378,777	12,016,036	707,901	
<b>September</b>	19,937,751	8,293,343	1,201,114	3,851,950	13,865,289	7,754,529	
<b>October</b>	480,710	24,823,636	5,075,858	72,432,497	1,724,181	9,922,724	
<b>November</b>	9,500,048	42,245,892	9,161,341	3,119,856	1,487,524		
<b>December</b>	3,869,818	2,283,305	15,116,940	29,134,954	1,252,026		
<b>Calendar Year</b>	168,710,549	168,006,150	94,556,089	197,356,057	261,470,483	521,469,845	-
<b>Fiscal Year (July 1st to June 30th)</b>	163,553,318	108,965,158	162,020,229	108,318,203	327,766,175	556,753,315	32,408,862

**NET REALIZED CAPITAL GAINS / LOSSES - PERM LAND ENDOW TRUST FUND**

<u><b>Endowment Fund</b></u>	<b>October 2022</b> <u><b>NET GAIN(LOSS)</b></u>	<b>October 2021</b> <u><b>NET GAIN(LOSS)</b></u>
----- Fixed Income Pool	(\$318,538)	(\$507,511)
500 Large-Cap Fund	10,608,466.40	11,502
400 Mid-Cap Fund	10,800,281.40	(1,236,603)
600 Small-Cap Fund	3,987,540.60	9,072,363
<b>Totals</b>	\$25,077,751	\$7,339,751

<u><b>Endowment Fund</b></u>	<b>2022/2023</b> <u><b>FISCAL YEAR TO DATE</b></u> <u><b>GAINS(LOSSES)</b></u>	<b>2021/2022</b> <u><b>FISCAL YEAR TO DATE</b></u> <u><b>GAINS(LOSSES)</b></u>
Fixed Income Pool	(\$1,295,285)	(\$2,398,286)
500 Large-Cap Fund	9,472,758.95	181,094,675
400 Mid-Cap Fund	14,511,661.86	(359,306)
600 Small-Cap Fund	11,667,077.42	14,839,858
<b>Totals</b>	\$34,356,214	\$193,176,941

**PERM LAND ENDOWMENT TRUST FUND FIXED-INCOME POOLS  
PURCHASES & SALES  
OCTOBER 2022**

**I. Endowment Funds Purchases**

<u>POOL</u>	<u>SECURITY DESCRIPTION</u>	<u>RATE</u>	<u>MATURITY</u>	<u>WAL YEARS (1)</u>	<u>PAR VALUE</u>	<u>PURCHASE COST</u>	<u>YIELD</u>	<u>MOODY'S RATING</u>
205	ANGELSEA	5.00	04/26/2023	NA	10,000,000	9,754,167	5.13%	P-1
205	CITIGROUP GLOBAL	6.00	10/20/2027	NA	10,000,000	10,000,000	6.00%	A2
205	CUMMINS	3.60	11/28/2022	NA	15,000,000	14,932,500	3.62%	P-1
205	FANNIE MAE	3.06	06/25/2024	1.51	5,078,205	4,938,753	4.83%	Aaa
205	FHLMC MULTIFAMILY	2.95	02/25/2027	2.23	2,687,883	2,580,664	4.82%	Aaa
205	GTA	3.45	11/15/2022	NA	15,000,000	14,954,000	3.46%	P-1
205	HARLEY-DAVIDSON	4.15	11/14/2022	NA	10,000,000	9,964,264	4.16%	P-3
205	McCORMICK	3.68	11/15/2022	NA	15,000,000	14,958,600	3.69%	P-2
205	NORTHERN TRUST	6.13	11/02/2032	NA	10,000,000	9,964,600	6.17%	A2
205	SBA POOL	3.75	10/25/2032	5.44	10,000,000	9,981,250	3.70%	Aaa
205	SOUTHERN COMPANY	5.70	10/15/2032	NA	10,000,000	9,989,200	5.71%	Baa2
205	UNITED HEALTH	5.30	02/15/2030	NA	20,000,000	19,970,600	5.33%	A3
205	UNITED HEALTH	5.35	02/15/2033	NA	20,000,000	19,926,600	5.40%	A3
205	U.S. TREASURY	0.00	04/13/2023	NA	5,000,000	4,895,990	4.28%	P-1
205	U.S. TREASURY	4.13	09/30/2027	NA	5,000,000	4,950,195	4.35%	Aaa
205	U.S. TREASURY	3.88	09/30/2029	NA	5,000,000	4,887,500	4.25%	Aaa
205	USAA	4.91	04/16/2029	NA	7,000,000	6,999,305	4.91%	Aaa
123	ANGELSEA	5.00	04/26/2023	NA	15,000,000	14,631,250	5.13%	P-1
123	AT&T	4.75	01/20/2023	NA	10,000,000	9,886,528	4.80%	P-2
123	HARLEY-DAVIDSON	4.00	11/10/2022	NA	15,000,000	14,953,333	4.01%	P-3
123	HARLEY-DAVIDSON	5.00	01/27/2023	NA	25,000,000	24,684,028	5.06%	P-3
123	McCORMICK	3.68	11/15/2022	NA	25,000,000	24,931,000	3.69%	P-2
123	SHERWIN WILLIAMS	3.38	10/25/2022	NA	13,700,000	13,684,565	3.38%	A3
123	UNITED HEALTH	3.30	11/01/2022	NA	25,000,000	24,938,125	3.31%	P-2
<b>TOTAL ENDOWMENT FUNDS PURCHASES</b>					<b><u>\$303,466,088</u></b>	<b><u>\$301,357,016</u></b>		

**II. Endowment Funds Sales**

<u>POOL</u>	<u>SECURITY DESCRIPTION</u>	<u>MATURITY</u>	<u>PAR VALUE</u>	<u>NET PROCEEDS</u>	<u>SALES GAINS/(LOSSES)</u>	<u>MOODY'S RATING</u>
<b>TOTAL ENDOWMENT FUNDS SALES</b>						
			<b><u>\$0</u></b>	<b><u>\$0</u></b>	<b><u>\$0</u></b>	

(1) WAL is the weighted average life of the security based on the Bloomberg calculation at the time the trade is executed. The calculation is used only with mortgage-backed pass-through/CMO securities.

**PERMANENT LAND ENDOWMENT TRUST FUND  
EQUITY FUNDS PURCHASES & SALES  
OCTOBER 2022**

**I. Equity Fund Purchases**

	<u>SHARES</u>	<u>PURCHASE COST</u>	<u>COMMISSIONS</u>
400 Mid-Cap Fund	847,940	\$33,378,068	\$5,954
500 Large-Cap Fund	335,983	18,133,748	2,520
600 Small-Cap Fund	624,967	10,129,540	4,332
<b>TOTAL EQUITY PURCHASES</b>	<b><u>1,808,890</u></b>	<b><u>\$61,641,356</u></b>	<b><u>\$12,806</u></b>

**II. Equity Funds Sales**

	<u>SHARES</u>	<u>SALES AMOUNT</u>	<u>COMMISSIONS</u>
400 Mid-Cap Fund	671,861	\$30,058,481	\$4,683
500 Large-Cap Fund	164,813	15,518,798	1,236
600 Small-Cap Fund	178,642	7,653,222	933
<b>TOTAL EQUITY SALES</b>	<b><u>1,015,316</u></b>	<b><u>\$53,230,500</u></b>	<b><u>\$6,853</u></b>

**PERMANENT LAND ENDOWMENT TRUST FUND**  
**INVESTMENTS OUTSTANDING**  
**OCTOBER 31, 2022**  
(In Thousands)

State Treasurer's Report  
November 29, 2022  
Page 40

FUND NAME OF FUND	SHARES OUTSTANDING	BOOK VALUE	MARKET VALUE	UNREALIZED GAINS (LOSSES)	<b>Mkt Value/ Book Value</b>
101 A & M Colleges					
<i>Shares in Equity Pools</i>	\$304	\$2,140	\$8,186	\$6,047	
<i>Shares in Fixed Income Pools</i>	3,019	2,162	5,262	3,100	
Total	3,324	4,301	13,448	9,147	<b>3.127</b>
102 State Hospital					
<i>Shares in Equity Pools</i>	302	3,582	8,129	4,547	
<i>Shares in Fixed Income Pools</i>	3,135	3,095	5,464	2,368	
Total	3,437	6,678	13,593	6,915	<b>2.036</b>
103 Leg., Exec., & Jud					
<i>Shares in Equity Pools</i>		1,876	6,679	4,803	
<i>Shares in Fixed Income Pools</i>	2,687	1,927	4,683	2,757	
Total	2,687	3,802	11,362	7,560	<b>2.988</b>
104 Military Institute					
<i>Shares in Equity Pools</i>	16	129	443	314	
<i>Shares in Fixed Income Pools</i>	183	129	320	191	
Total	200	258	762	504	<b>2.955</b>
105 Miners Hospital					
<i>Shares in Equity Pools</i>	822	7,826	22,122	14,296	
<i>Shares in Fixed Income Pools</i>	8,233	7,428	14,347	6,919	
Total	9,055	15,254	36,469	21,215	<b>2.391</b>
107 Normal School ASU/NAU					
<i>Shares in Equity Pools</i>	162	1,570	4,350	2,780	
<i>Shares in Fixed Income Pools</i>	1,669	1,432	2,909	1,477	
Total	1,831	3,002	7,259	4,257	<b>2.418</b>
108 Penitentiaries					
<i>Shares in Equity Pools</i>	504	4,325	13,560	9,235	
<i>Shares in Fixed Income Pools</i>	5,151	4,272	8,977	4,705	
Total	5,655	8,597	22,537	13,940	<b>2.622</b>

**PERMANENT LAND ENDOWMENT TRUST FUND**  
**INVESTMENTS OUTSTANDING**  
**OCTOBER 31, 2022**  
(In Thousands)

State Treasurer's Report  
November 29, 2022  
Page 41

NAME OF FUND	SHARES OUTSTANDING	BOOK VALUE	MARKET VALUE	UNREALIZED GAINS (LOSSES)	<b>Mkt Value/ Book Value</b>
109 Permanent Common School					
<i>Shares in Equity Pools</i>	149,816	1,419,474	4,032,263	2,612,789	
<i>Shares in Fixed Income Pools</i>	1,501,724	1,333,929	2,616,978	1,283,049	
<b>Total</b>	<u>1,651,540</u>	<u>2,753,402</u>	<u>6,649,241</u>	<u>3,895,838</u>	<b>2.415</b>
110 School for Deaf & Blind					
<i>Shares in Equity Pools</i>	184	1,596	4,943	3,347	
<i>Shares in Fixed Income Pools</i>	2,107	1,693	3,671	1,978	
<b>Total</b>	<u>2,290</u>	<u>3,290</u>	<u>8,614</u>	<u>5,325</u>	<b>2.619</b>
111 School of Mines					
<i>Shares in Equity Pools</i>	343	2,572	9,222	6,650	
<i>Shares in Fixed Income Pools</i>	3,528	2,619	6,147	3,528	
<b>Total</b>	<u>3,870</u>	<u>5,191</u>	<u>15,369</u>	<u>10,178</u>	<b>2.961</b>
112 State Charitable					
<i>Shares in Equity Pools</i>	4,637	48,632	124,809	76,177	
<i>Shares in Fixed Income Pools</i>	45,307	42,382	78,954	36,572	
<b>Total</b>	<u>49,944</u>	<u>91,014</u>	<u>203,763</u>	<u>112,749</u>	<b>2.239</b>
113 University Fund					
<i>Shares in Equity Pools</i>	946	12,411	25,467	13,056	
<i>Shares in Fixed Income Pools</i>	9,766	9,987	17,020	7,033	
<b>Total</b>	<u>10,713</u>	<u>22,398</u>	<u>42,486</u>	<u>20,089</u>	<b>1.897</b>
114 U Of A Land - 1881					
<i>Shares in Equity Pools</i>	2,427	23,804	65,334	41,530	
<i>Shares in Fixed Income Pools</i>	25,002	21,671	43,570	21,898	
<b>Total</b>	<u>\$27,429</u>	<u>\$45,476</u>	<u>\$108,904</u>	<u>\$63,428</u>	<b>2.395</b>
<b>TOTALS - ALL FUNDS</b>					
<i>Shares in Equity Pools</i>	160,463	1,529,937	4,325,507	2,795,570	
<i>Shares in Fixed Income Pools</i>	1,611,513	1,432,726	2,808,301	1,375,576	
<b>Grand Total</b>	<u>\$1,771,976</u>	<u>\$2,962,662</u>	<u>\$7,133,808</u>	<u>\$4,171,145</u>	
<b>PRIOR YEAR:</b>					
<b>OCTOBER 2021 BALANCES</b>	<b>\$1,746,015</b>	<b>\$2,716,293</b>	<b>\$7,831,091</b>	<b>\$5,114,798</b>	

**PERMANENT LAND ENDOWMENT TRUST FUND  
INVESTMENTS OUTSTANDING  
OCTOBER 31, 2022**

State Treasurer's Report  
November 29, 2022  
Page 42

**ASSET ALLOCATION PERCENTAGE**

	SHARES OUTSTANDING	BOOK VALUE	MARKET VALUE	<b>OCTOBER 2021 MARKET VALUE</b>
<i>Equity Pools</i>	9.06%	51.64%	60.63%	<b>60.76%</b>
<i>Fixed Income Pools</i>	90.94%	48.36%	39.37%	<b>39.24%</b>
<b>Total</b>	100.00%	100.00%	100.00%	<b>100.00%</b>



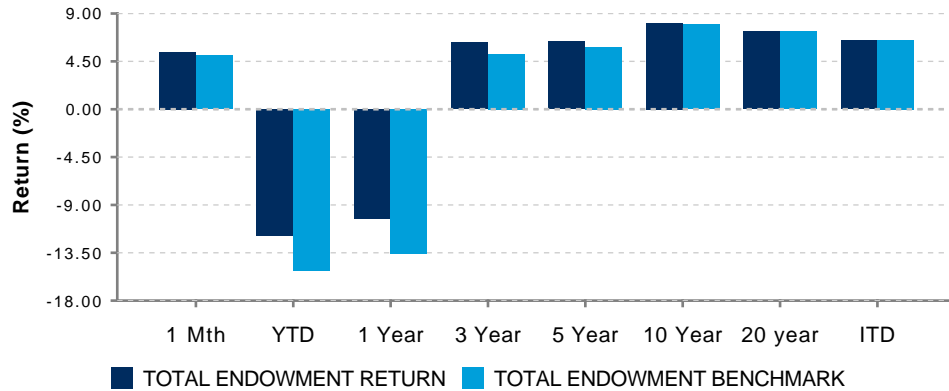
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

## Total Endowment Summary



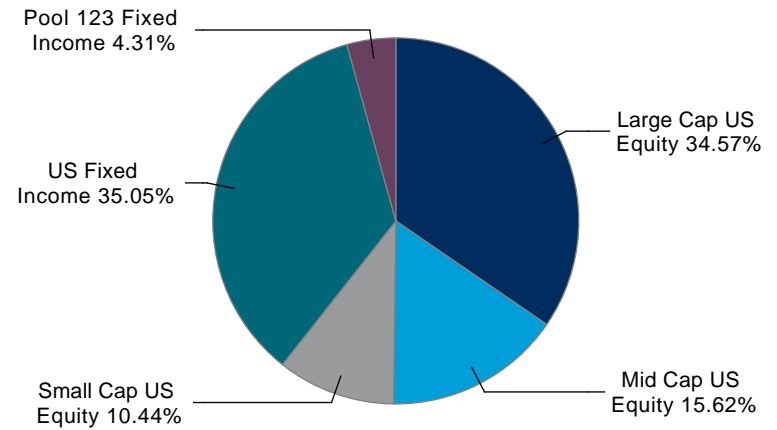
### Performance



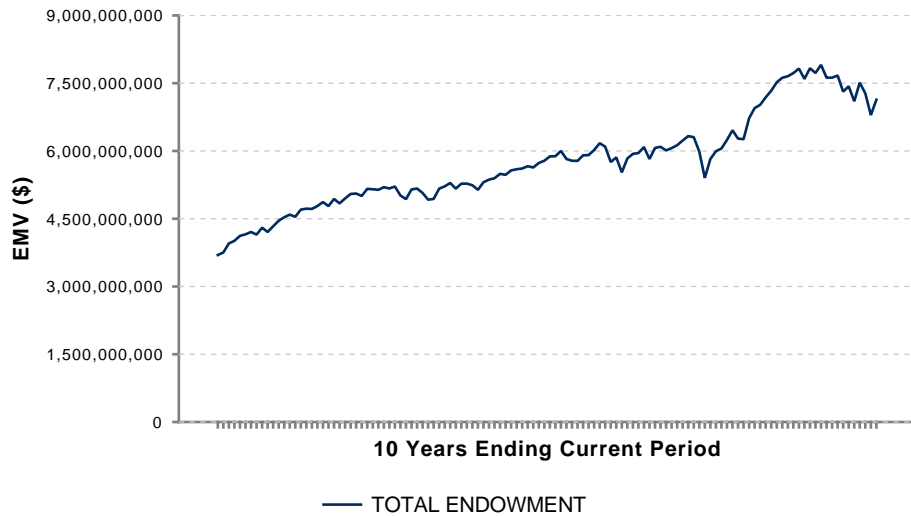
	1 Mth	YTD	1 Year	3 Year	5 Year	10 Year	20 Year	ITD	Incept Date
TOTAL ENDOWMENT RETURN	5.38	-11.92	-10.34	6.26	6.37	8.12	7.32	6.47	07/99
TOTAL ENDOWMENT BENCHMARK	5.03	-15.15	-13.55	5.21	5.86	7.97	7.31	6.51	07/99
	0.35	3.23	3.21	1.05	0.51	0.15	0.01	-0.04	

### Asset Allocation

	Ending Market Value
TOTAL ENDOWMENT RETURN	7,133,807,832

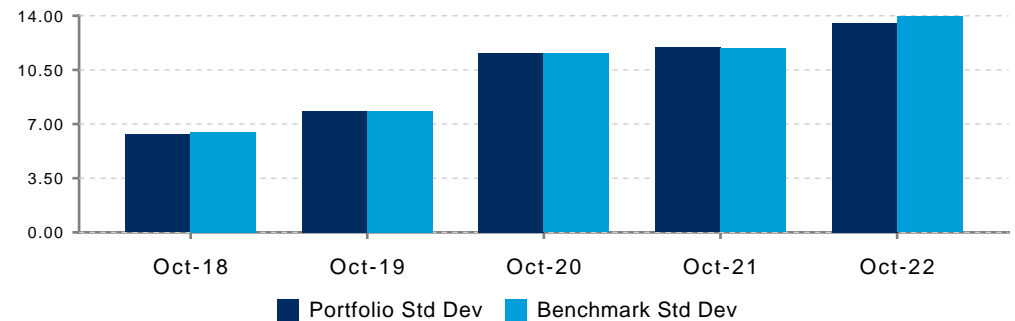


### Ending Market Value



### 3 Year Risk Statistics

	Return	Portfolio Std Dev	Benchmark Std Dev	Sharpe Ratio	Beta	Tracking Error	Information Ratio
TOTAL ENDOWMENT RETURN	6.26	13.51	13.96	0.42	0.97	0.98	1.08



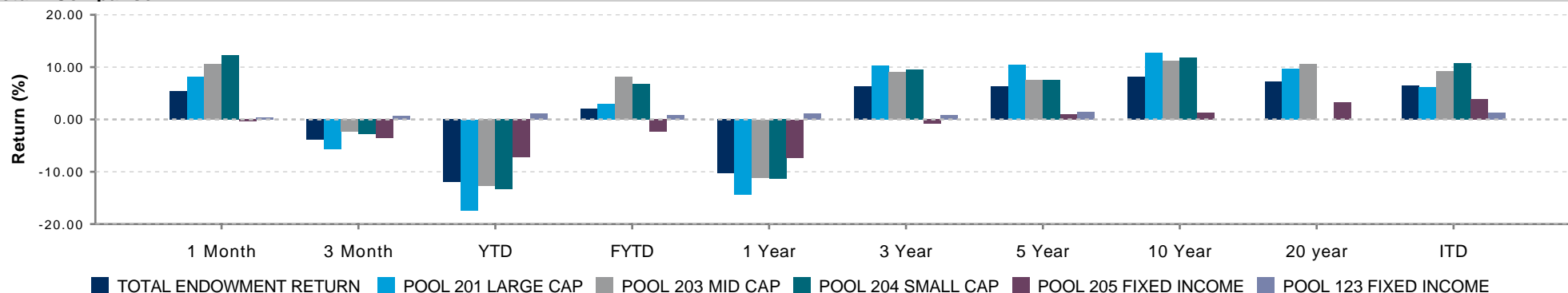
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

Total Returns Net Mgr



## Return Comparison



	Market Value	Actual Weight	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	10 Year	20 Year	ITD	Inc Date
TOTAL ENDOWMENT RETURN	7,133,807,832	100.00	5.38	-3.84	-11.92	2.05	-10.34	6.26	6.37	8.12	7.32	6.47	Jul-01-99
TOTAL ENDOWMENT BENCHMARK			5.03	-5.59	-15.15	0.55	-13.55	5.21	5.86	7.97	7.31	6.51	Jul-01-99
			0.35	1.75	3.23	1.49	3.21	1.05	0.51	0.15	0.01	-0.04	
ST OF AZ POOL 201 LARGE CAP	2,466,339,852	34.57	8.14	-5.73	-17.38	2.94	-14.37	10.28	10.45	12.77	9.75	6.13	Jul-01-99
S&P 500 INDEX (DAILY)			8.10	-5.86	-17.70	2.82	-14.61	10.22	10.44	12.79	9.81	6.53	Jul-01-99
			0.04	0.13	0.32	0.12	0.24	0.07	0.01	-0.02	-0.06	-0.40	
ST OF AZ POOL 203 MID CAP	1,114,162,246	15.62	10.55	-2.40	-12.76	8.12	-11.13	9.13	7.51	11.28	10.58	9.18	Aug-01-01
S&P 400 MIDCAP INDEX (DAILY)			10.52	-2.76	-13.27	7.80	-11.54	9.20	7.47	11.23	10.72	9.17	Aug-01-01
			0.03	0.36	0.50	0.32	0.41	-0.06	0.04	0.05	-0.14	0.01	
ST OF AZ POOL 204 SMALL CAP	745,004,583	10.44	12.27	-2.83	-13.36	6.76	-11.39	9.56	7.55	11.86		10.77	Mar-01-11
S&P SM 600 TR			12.37	-3.18	-13.66	6.52	-11.81	8.96	7.11	11.61		10.57	Mar-01-11
			-0.09	0.35	0.30	0.24	0.42	0.60	0.44	0.25		0.21	
POOL 205 FIXED INCOME	2,500,685,929	35.05	-0.36	-3.59	-7.23	-2.32	-7.31	-0.82	0.99	1.31	3.26	3.95	Jul-01-99
FTSE BIG (DAILY)			-1.26	-8.15	-15.93	-6.01	-15.94	-3.80	-0.54	0.74	3.10	3.86	Jul-01-99
			0.90	4.56	8.70	3.69	8.63	2.98	1.53	0.57	0.15	0.09	
POOL 123 FIXED INCOME	307,615,221	4.31	0.32	0.68	1.16	0.82	1.15	0.84	1.38			1.27	Jun-01-16
ASTO-POOL 5 BENCHMARK			0.26	0.66	1.03	0.80	1.04	0.68	1.24			1.12	Jun-01-16
			0.06	0.03	0.13	0.02	0.11	0.16	0.14			0.15	

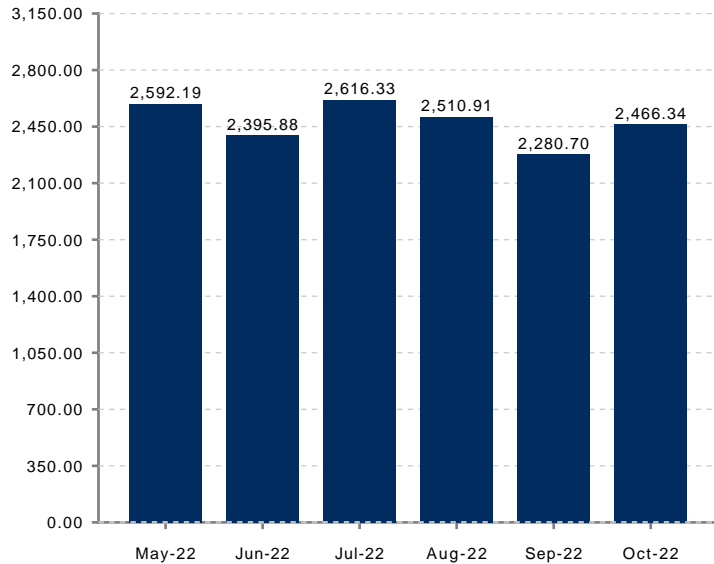
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

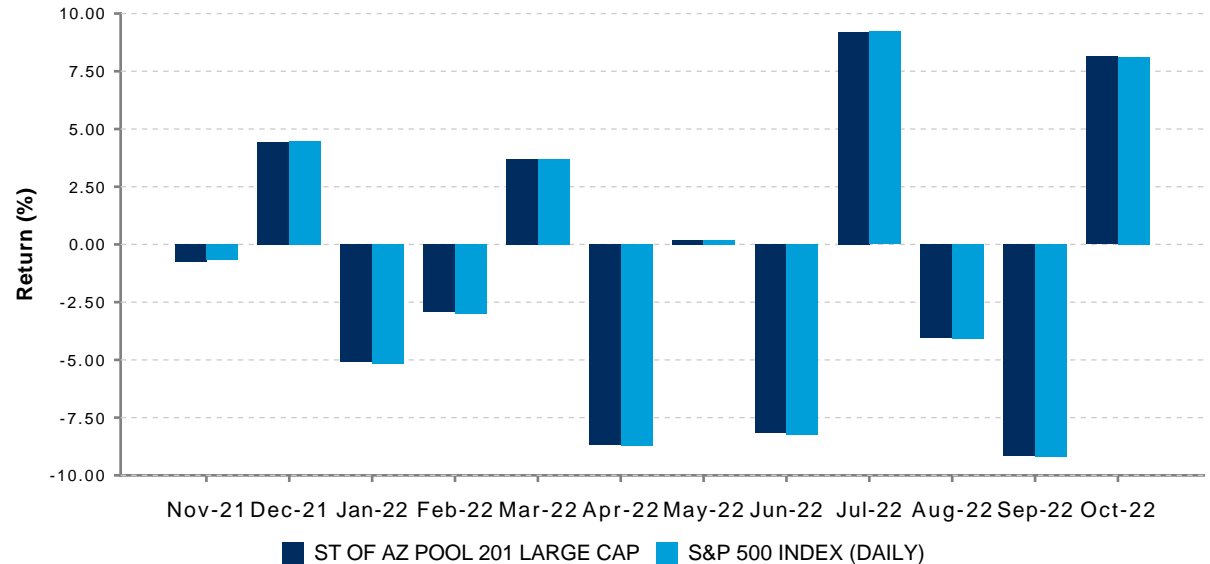
ST OF AZ POOL 201 LARGE CAP



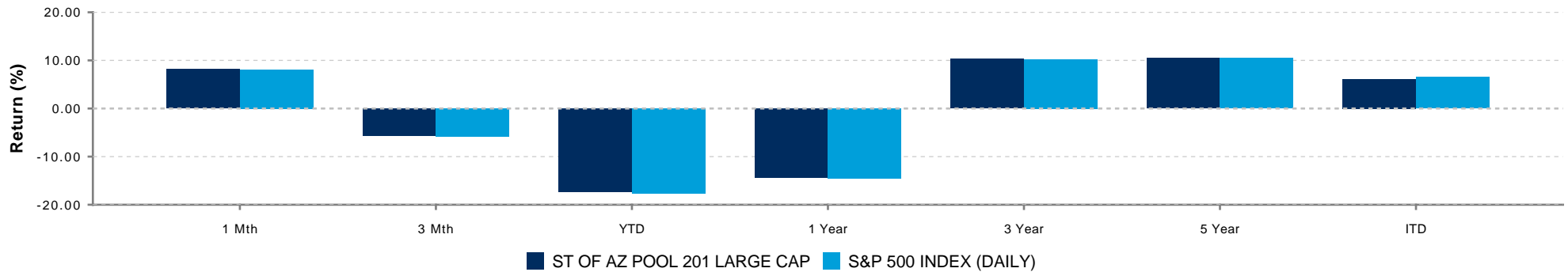
## Net Asset Values over Time (\$MM)



## Monthly Returns



## Rates of Return

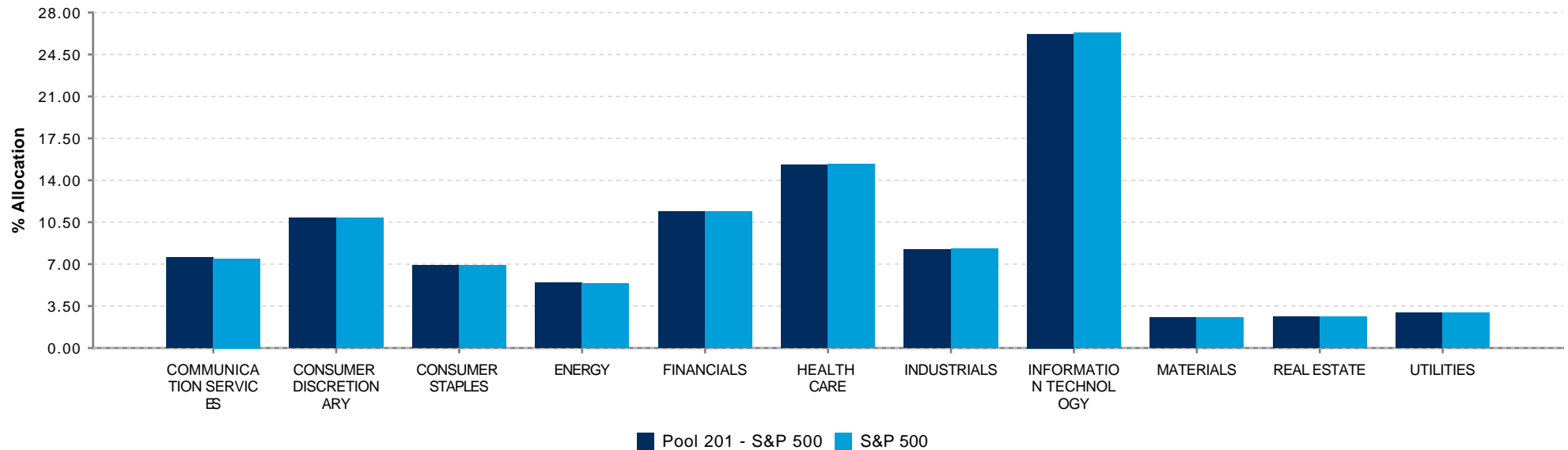


	1 Mth	3 Mth	YTD	1 Year	3 Year	5 Year	ITD	Oct 31 2020	Oct 31 2021	Oct 31 2022
ST OF AZ POOL 201 LARGE CAP	8.14	-5.73	-17.38	-14.37	10.28	10.45	6.13	9.59	42.92	-14.37
S&P 500 INDEX (DAILY)	8.10	-5.86	-17.70	-14.61	10.22	10.44	6.53	9.71	42.91	-14.61
	0.04	0.13	0.32	0.24	0.07	0.01	-0.40	-0.12	0.01	0.24

# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

ST OF AZ POOL 201 LARGE CAP  
Sector Allocation vs S&P 500



	Fund Weight	Benchmark Weight	Relative Weight
ST OF AZ POOL 201 LARGE CAP	100.00	100.00	0.00
COMMUNICATION SERVICES	7.55	7.46	0.08
CONSUMER DISCRETIONARY	10.86	10.86	-0.00
CONSUMER STAPLES	6.92	6.93	-0.01
ENERGY	5.46	5.36	0.10
FINANCIALS	11.36	11.39	-0.02
HEALTH CARE	15.30	15.32	-0.01
INDUSTRIALS	8.21	8.26	-0.05
INFORMATION TECHNOLOGY	26.21	26.28	-0.07
MATERIALS	2.53	2.53	-0.01
REAL ESTATE	2.64	2.64	-0.01
UTILITIES	2.96	2.96	-0.00

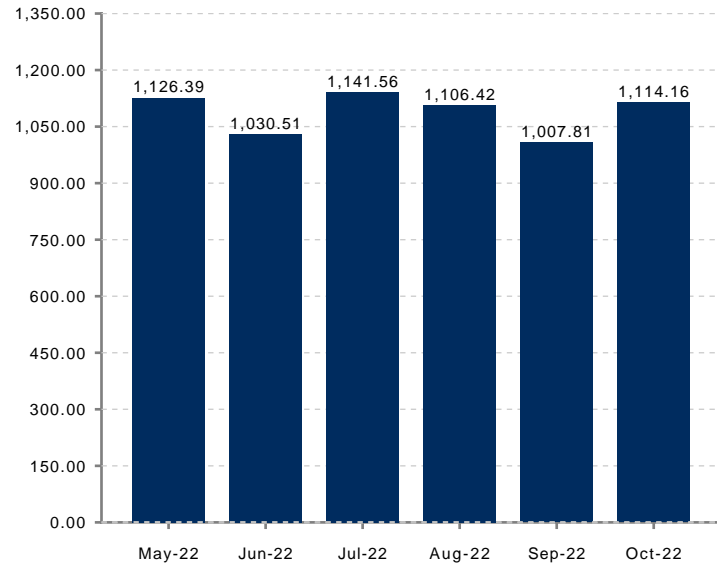
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

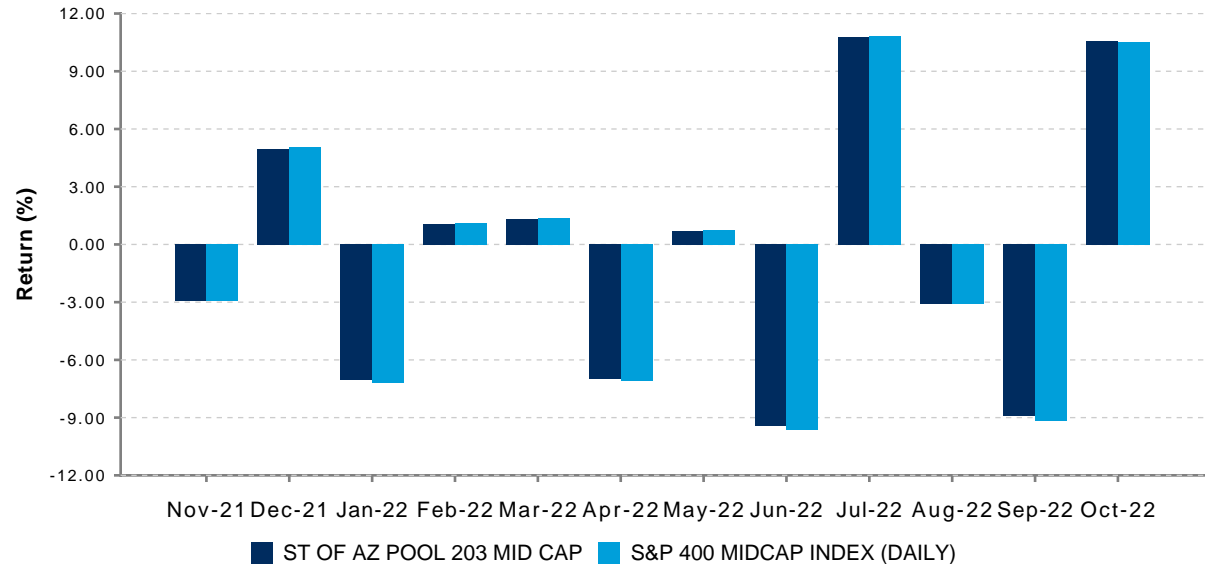
ST OF AZ POOL 203 MID CAP



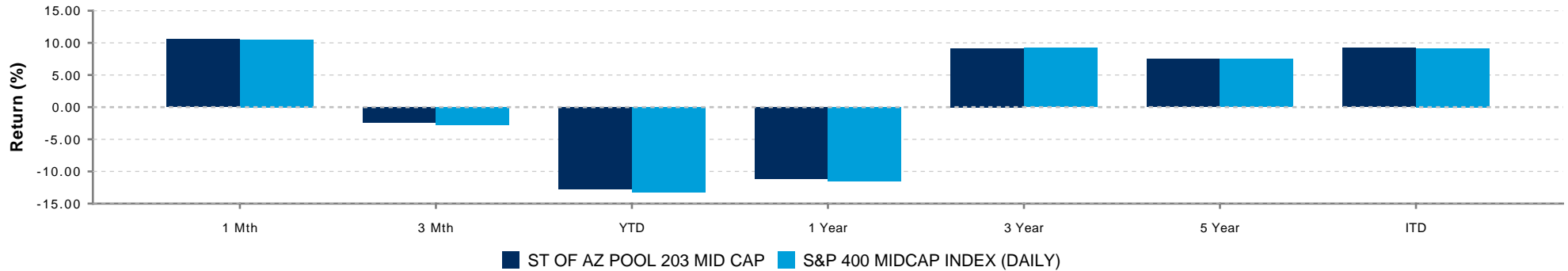
## Net Asset Values over Time (\$MM)



## Monthly Returns



## Rates of Return

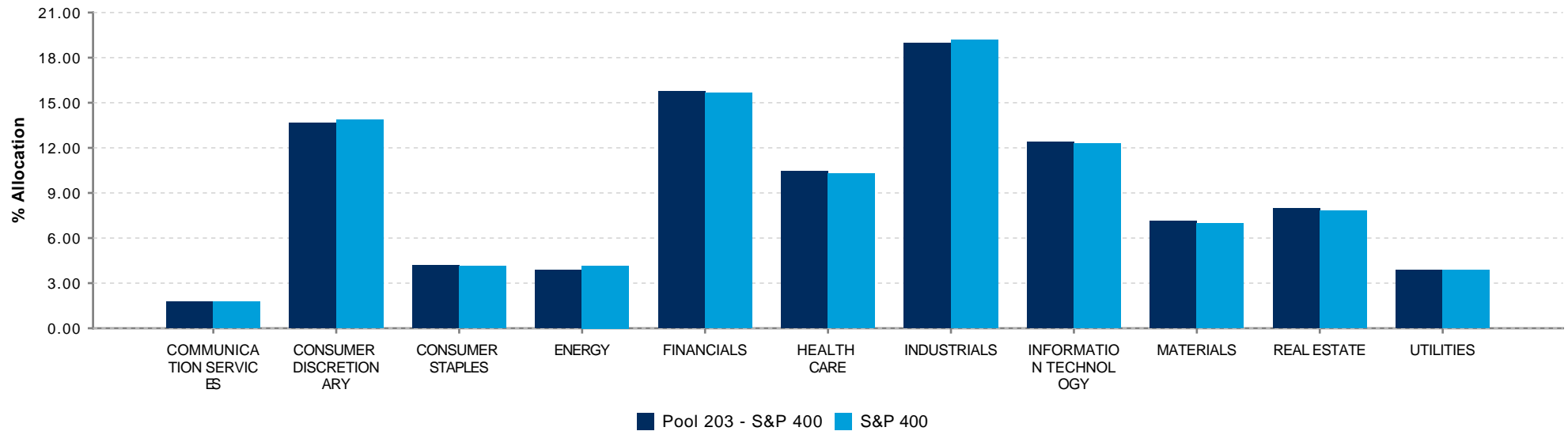


	1 Mth	3 Mth	YTD	1 Year	3 Year	5 Year	ITD	Oct 31 2020	Oct 31 2021	Oct 31 2022
ST OF AZ POOL 203 MID CAP	10.55	-2.40	-12.76	-11.13	9.13	7.51	9.18	-1.49	48.45	-11.13
S&P 400 MIDCAP INDEX (DAILY)	10.52	-2.76	-13.27	-11.54	9.20	7.47	9.17	-1.15	48.90	-11.54
	0.03	0.36	0.50	0.41	-0.06	0.04	0.01	-0.34	-0.45	0.41

# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

ST OF AZ POOL 203 MID CAP  
Sector Allocation vs S&P MID CAP 400



	Weight Fund	Weight Benchmark	Weight Relative
ST OF AZ POOL 203 MID CAP	100.00	100.00	0.00
COMMUNICATION SERVICES	1.78	1.77	0.01
CONSUMER DISCRETIONARY	13.64	13.86	-0.22
CONSUMER STAPLES	4.17	4.14	0.03
ENERGY	3.87	4.16	-0.29
FINANCIALS	15.77	15.67	0.10
HEALTH CARE	10.45	10.28	0.16
INDUSTRIALS	18.97	19.18	-0.21
INFORMATION TECHNOLOGY	12.39	12.31	0.08
MATERIALS	7.11	6.95	0.16
REAL ESTATE	7.96	7.81	0.15
UTILITIES	3.89	3.86	0.03

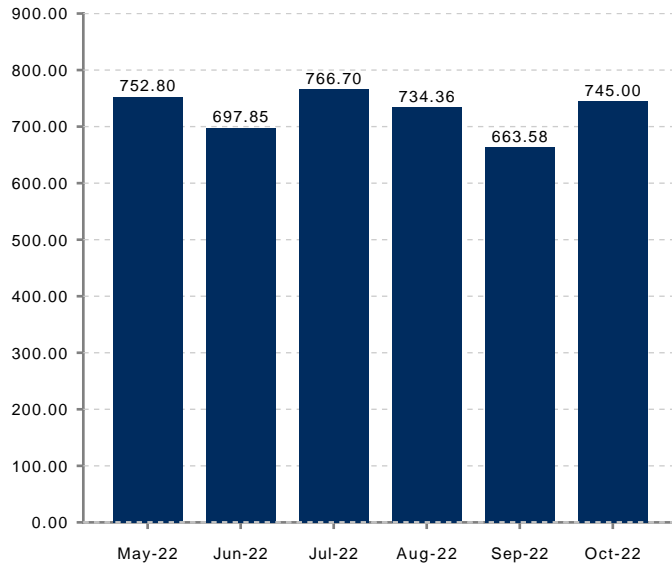
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

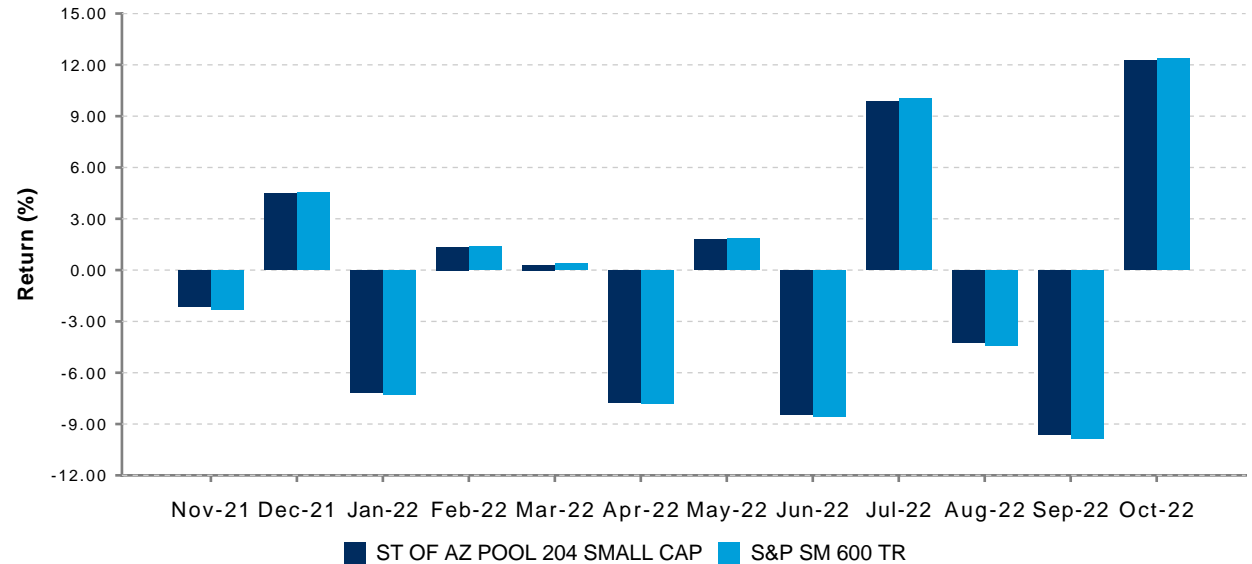
ST OF AZ POOL 204 SMALL CAP



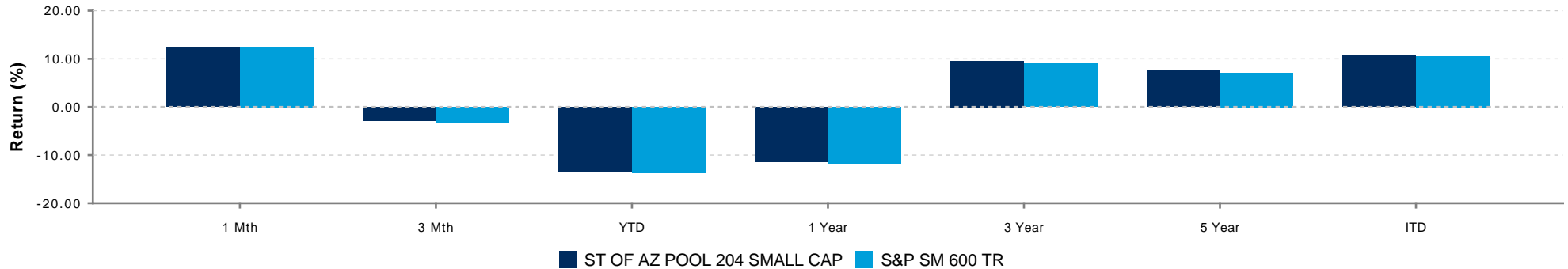
## Net Asset Values over Time (\$MM)



## Monthly Returns



## Rates of Return

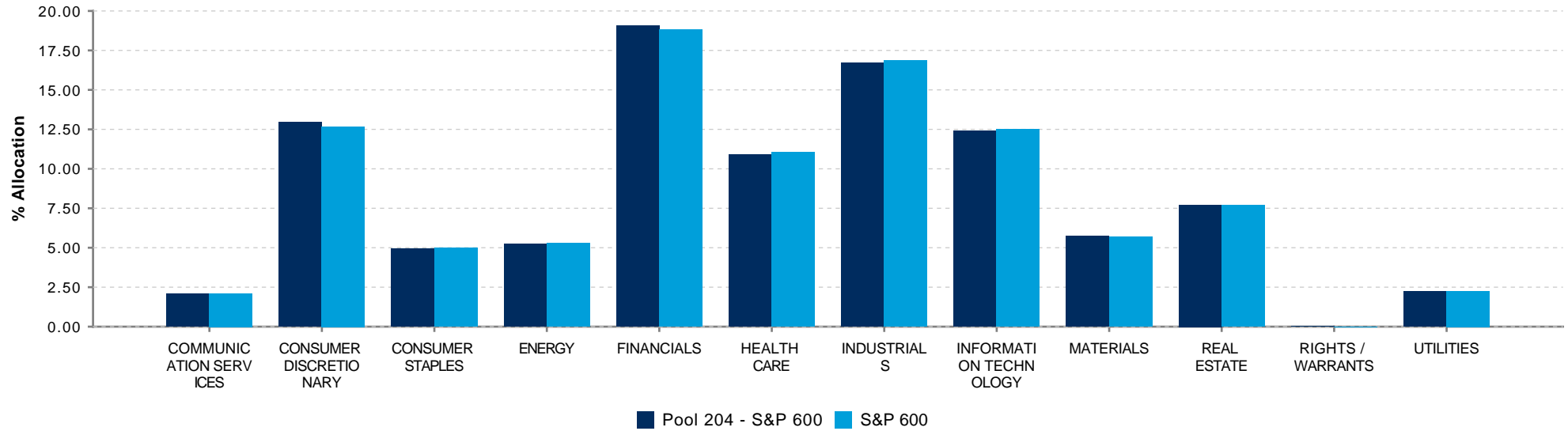


	1 Mth	3 Mth	YTD	1 Year	3 Year	5 Year	ITD	Oct 31 2020	Oct 31 2021	Oct 31 2022
ST OF AZ POOL 204 SMALL CAP	12.27	-2.83	-13.36	-11.39	9.56	7.55	10.77	-6.44	58.64	-11.39
S&P SM 600 TR	12.37	-3.18	-13.66	-11.81	8.96	7.11	10.57	-7.72	58.94	-11.81
	-0.09	0.35	0.30	0.42	0.60	0.44	0.21	1.27	-0.30	0.42

# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

ST OF AZ POOL 204 SMALL CAP  
Sector Allocation vs S&P SMALLCAP 600



	Weight Fund	Weight Benchmark	Weight Relative
ST OF AZ POOL 204 SMALL CAP	100.00	100.00	0.00
COMMUNICATION SERVICES	2.09	2.11	-0.02
CONSUMER DISCRETIONARY	12.95	12.68	0.27
CONSUMER STAPLES	4.95	5.00	-0.05
ENERGY	5.24	5.29	-0.05
FINANCIALS	19.08	18.82	0.26
HEALTH CARE	10.92	11.03	-0.11
INDUSTRIALS	16.69	16.87	-0.18
INFORMATION TECHNOLOGY	12.39	12.51	-0.12
MATERIALS	5.72	5.71	0.01
REAL ESTATE	7.72	7.71	0.01
RIGHTS / WARRANTS	0.01	0.00	0.01
UTILITIES	2.24	2.26	-0.02



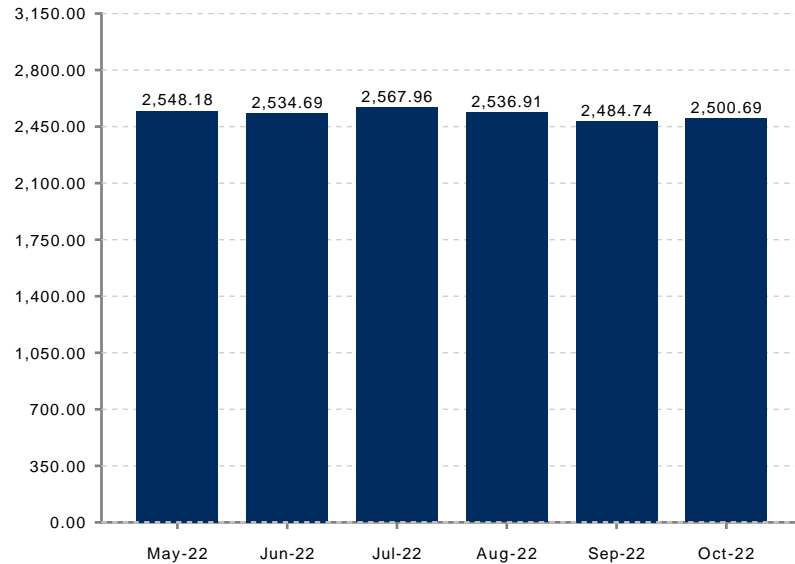
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

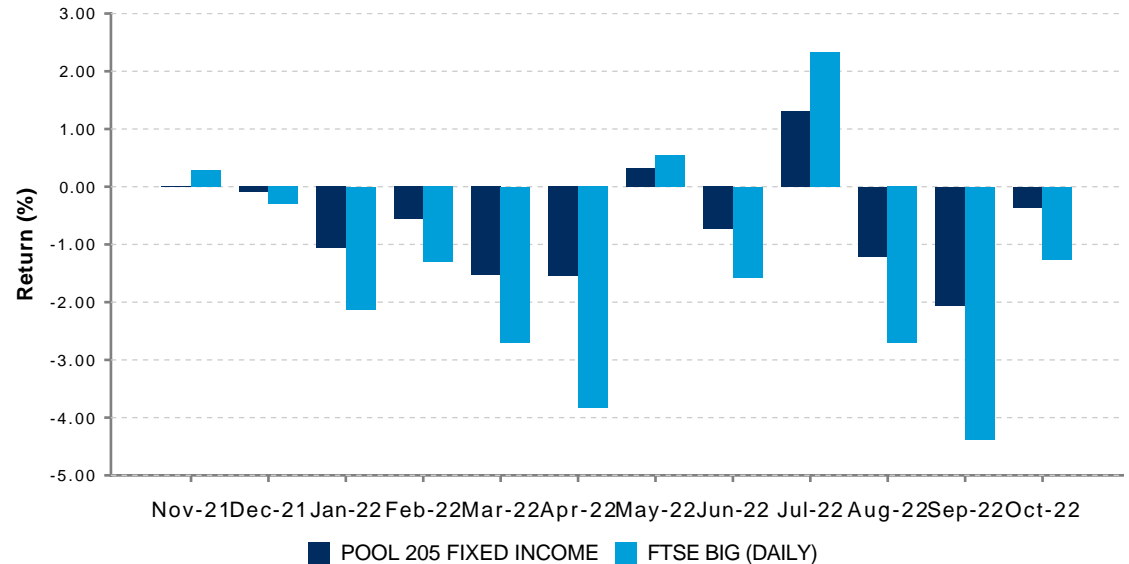
POOL 205 FIXED INCOME



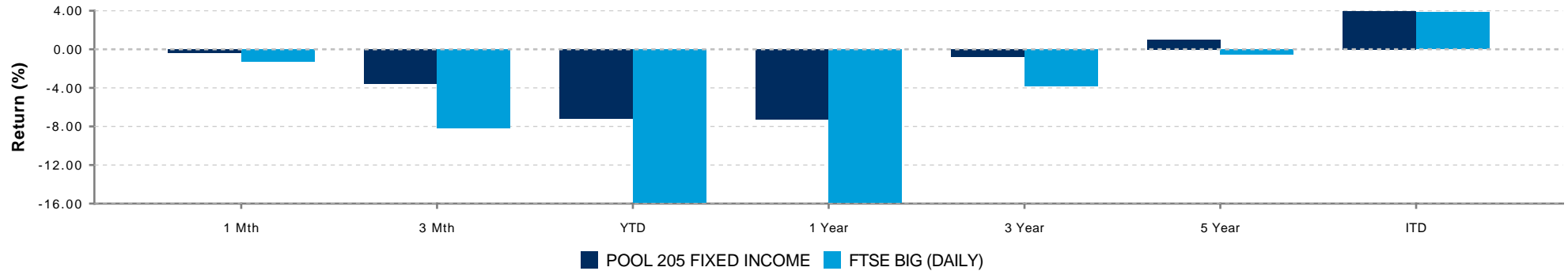
## Net Asset Values over Time (\$MM)



## Monthly Returns



## Rates of Return

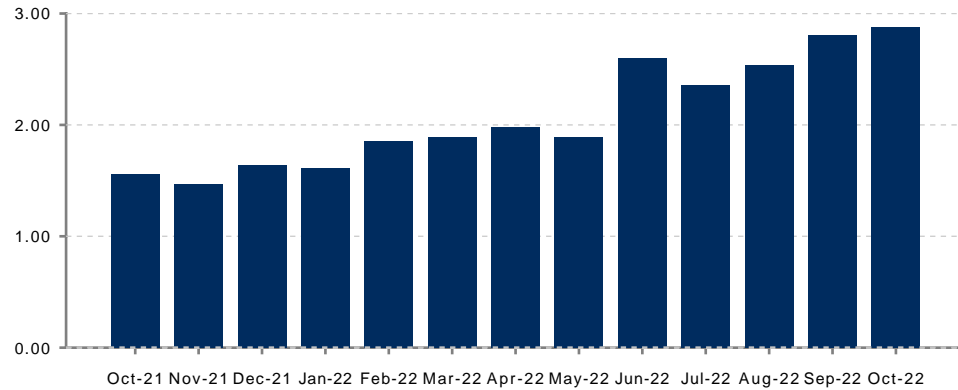


	1 Mth	3 Mth	YTD	1 Year	3 Year	5 Year	ITD	Oct 31 2022	Oct 31 2021	Oct 31 2020
POOL 205 FIXED INCOME	-0.36	-3.59	-7.23	-7.31	-0.82	0.99	3.95	-7.31	0.05	5.20
FTSE BIG (DAILY)	-1.26	-8.15	-15.93	-15.94	-3.80	-0.54	3.86	-15.94	-0.38	6.32
	0.90	4.56	8.70	8.63	2.98	1.53	0.09	8.63	0.43	-1.12

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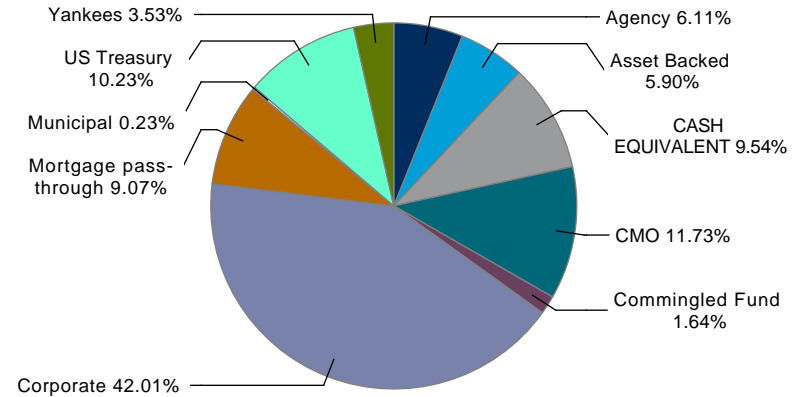
### Net Yield



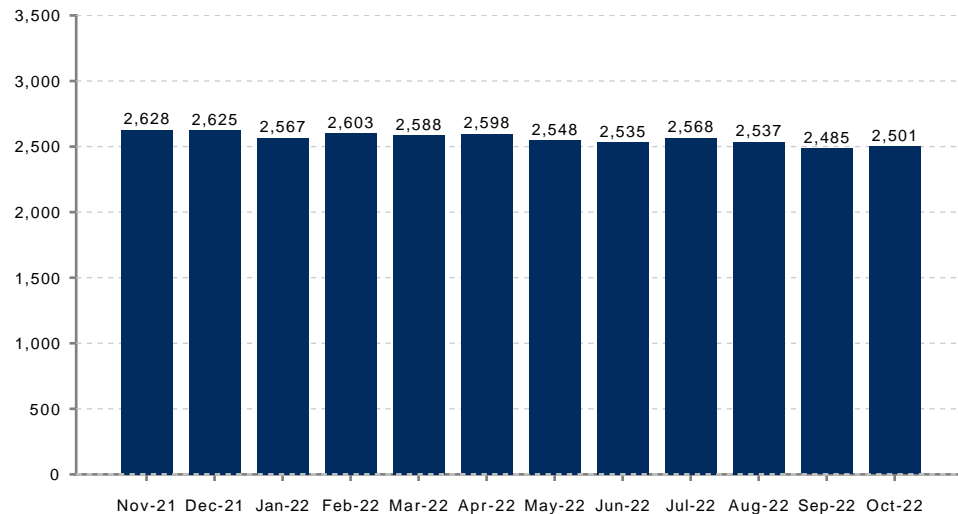
	Current Mth	Prior Mth	1 Year Ago
POOL 205 FIXED INCOME	2.88	2.81	1.56

### Asset Allocation

	Ending Market Value
POOL 205 FIXED INCOME	2,500,685,929



### Net Asset Values over Time (\$MM)

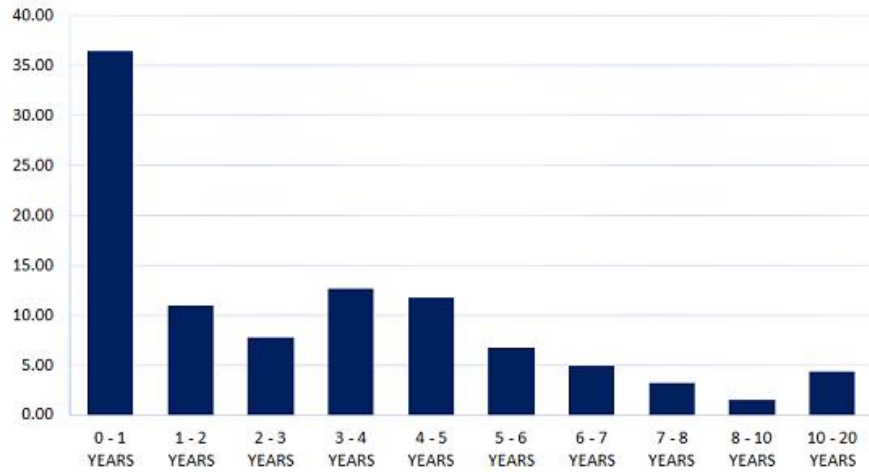


### Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
POOL 205 FIXED INCOME		
NVIDIA CORP	34,081,971	1.36
ISHARES TIPS BOND ETF	30,131,989	1.20
BOEING CO	29,618,940	1.18
BANK OF MONTREAL	24,596,027	0.98
US TREASURY N/B	24,117,570	0.96
US TREASURY N/B	21,917,391	0.88
UNITEDHEALTH GROUP INC	20,052,986	0.80
MERCK + CO INC	20,045,815	0.80
UNITEDHEALTH GROUP INC	19,970,248	0.80
PARKER HANNIFIN CORP	19,721,631	0.79



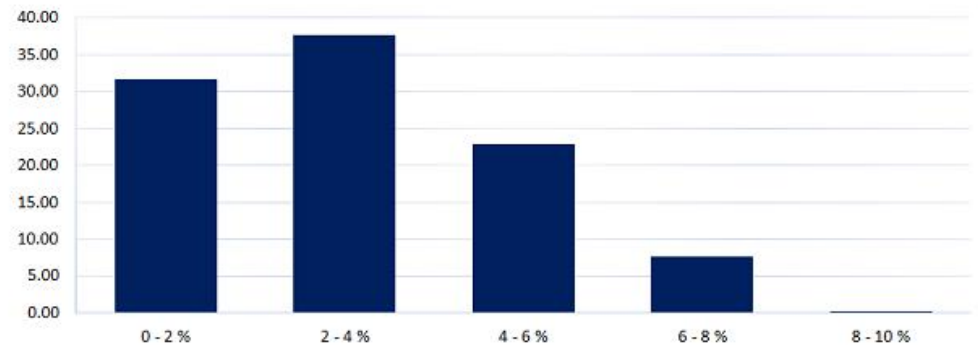
**Duration Distribution**



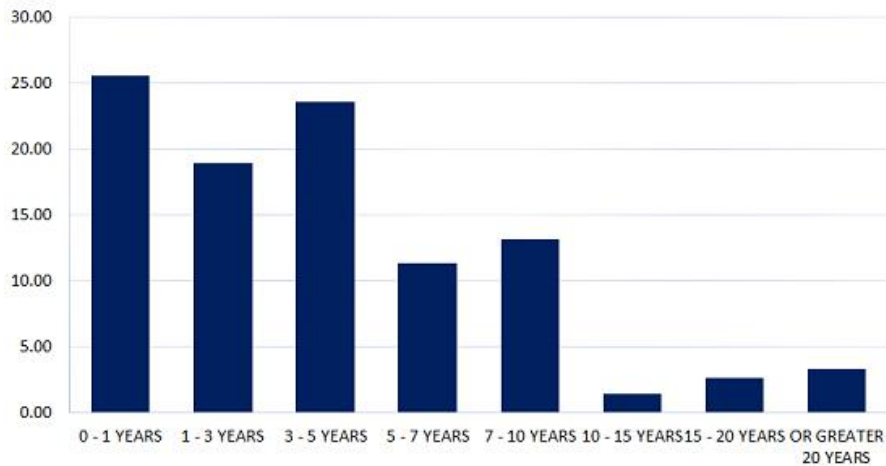
**Portfolio Level Characteristics**

	POOL 205 FIXED INCOME
Effective Maturity	4.82
Coupon	3.32
Effective Duration	3.05
Quality Rating (Moody's)	AA-2

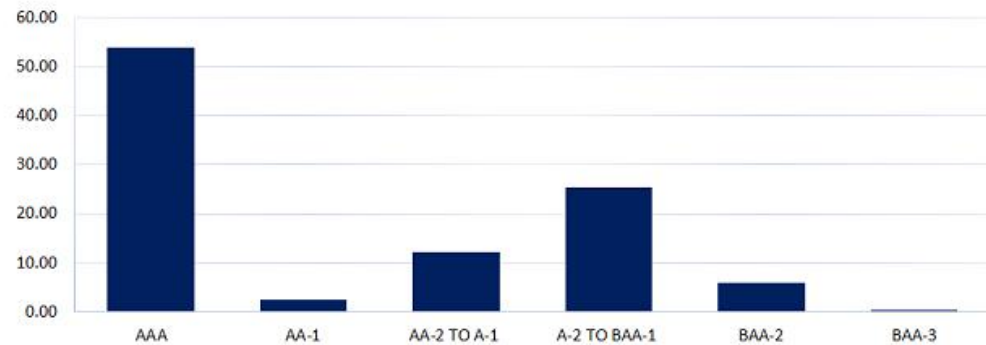
**Coupon Distribution**



**Expected Maturity Distribution**

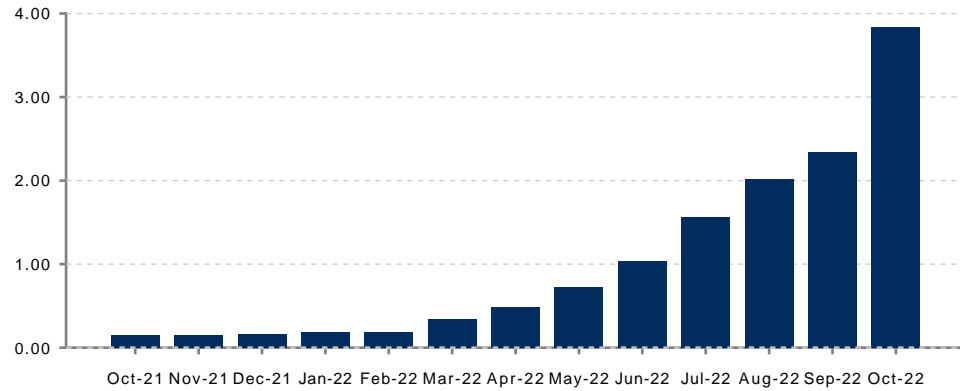


**Rating Distribution**





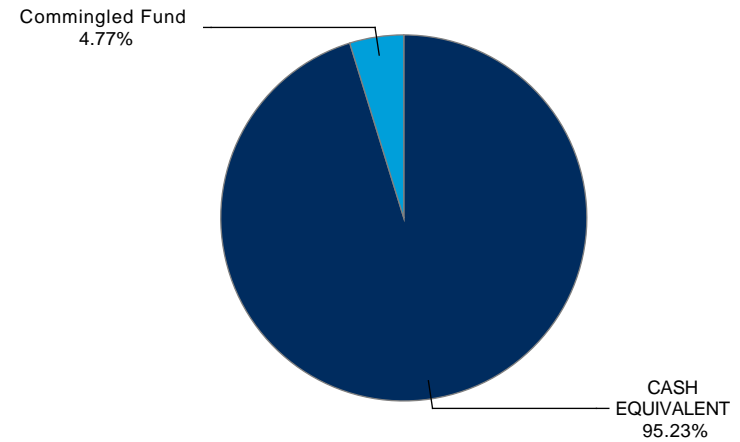
### Net Yield



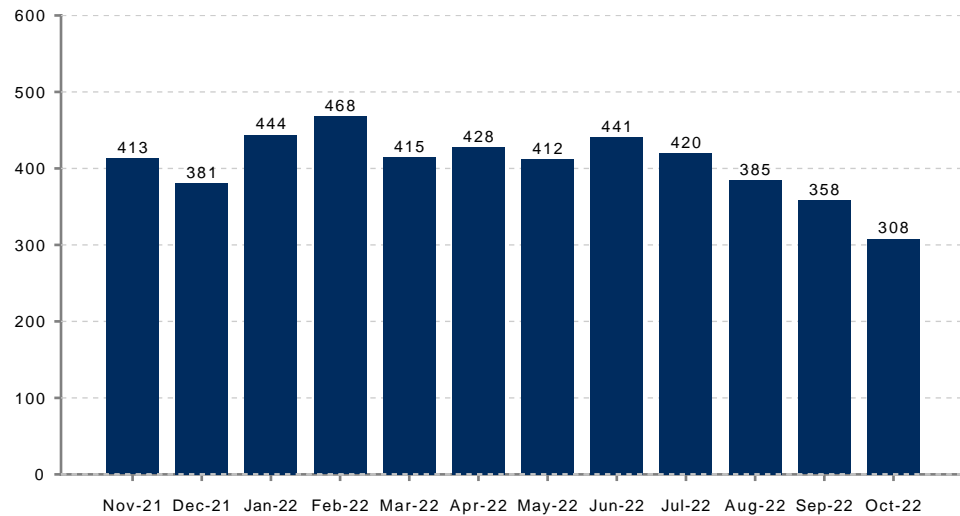
	Current Mth	Prior Mth	1 Year Ago
ST OF AZ POOL 123 ST FIXED INC	3.84	2.34	0.15

### Asset Allocation

	Ending Market Value
ST OF AZ POOL 123 ST FIXED INC	307,615,221



### Net Asset Values over Time (\$MM)

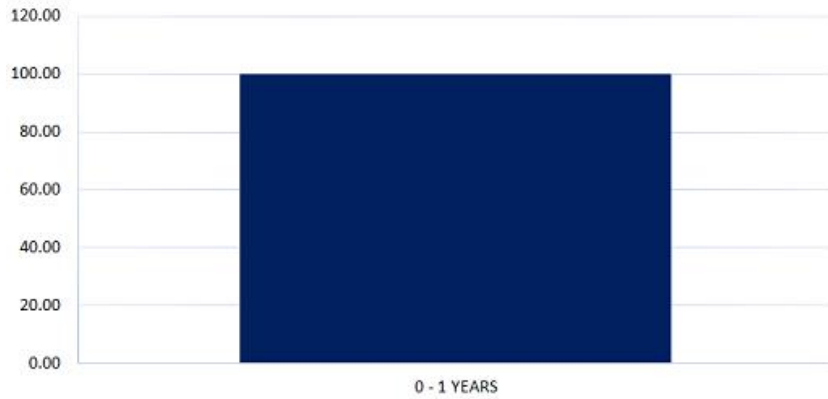


### Top 10 Holdings

Security Name	Ending Market Value	% of Portfolio
ST OF AZ POOL 123 ST FIXED INC		
CONCORD MIN CPTL CO	14,918,333	4.85
FAIRWAY FINANCE CORP	17,689,577	5.75
HARLEY-DAVIDSON FND CP	14,985,000	4.87
HARLEY-DAVIDSON FND CP	24,697,917	8.03
HONEYWELL INTERNATN'	14,999,487	4.88
ILA FINANCIAL SQUARE GOVT	15,648,292	5.09
MCCORMICK & COMPANY	24,964,222	8.12
MOUNTCLIFF	23,484,921	7.63
MOUNTCLIFF	15,000,000	4.88
UNITED HEALTHCARE CO	25,000,000	8.13



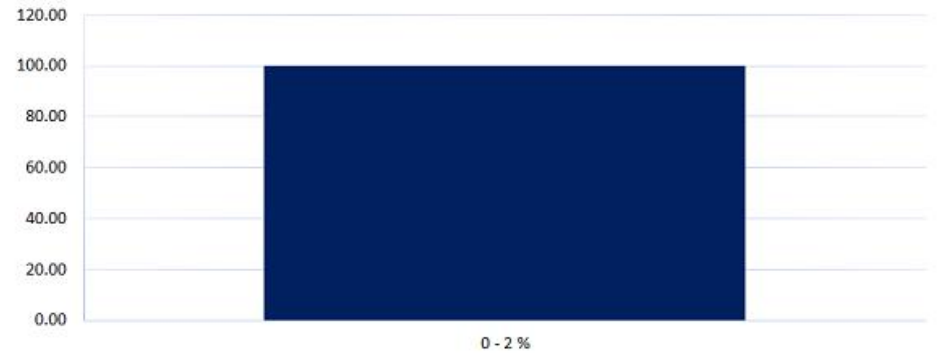
**Duration Distribution**



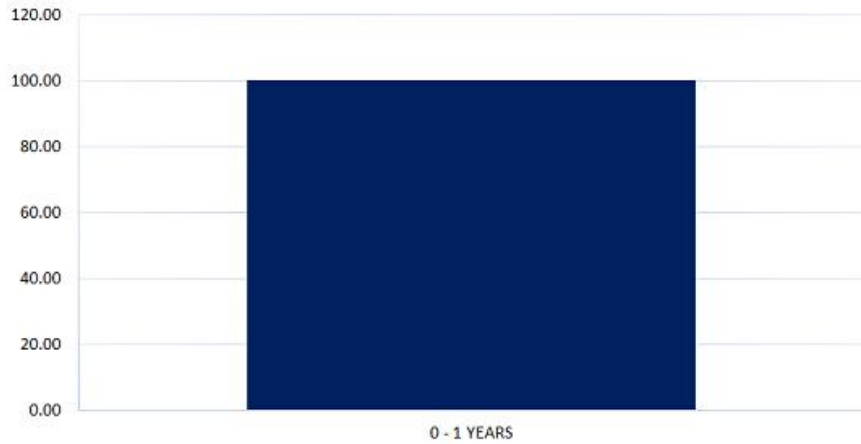
**Portfolio Level Characteristics**

	POOL 123 ST
Effective Maturity	0.11
Coupon	3.39
Effective Duration	0.11
Quality Rating (Moody's)	AA-2

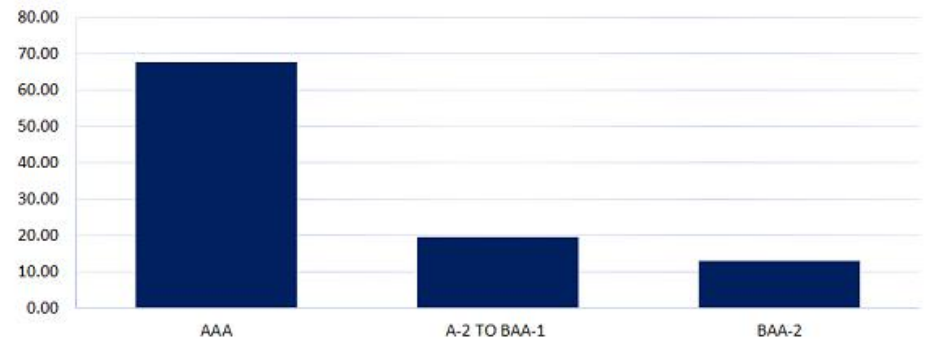
**Coupon Distribution**



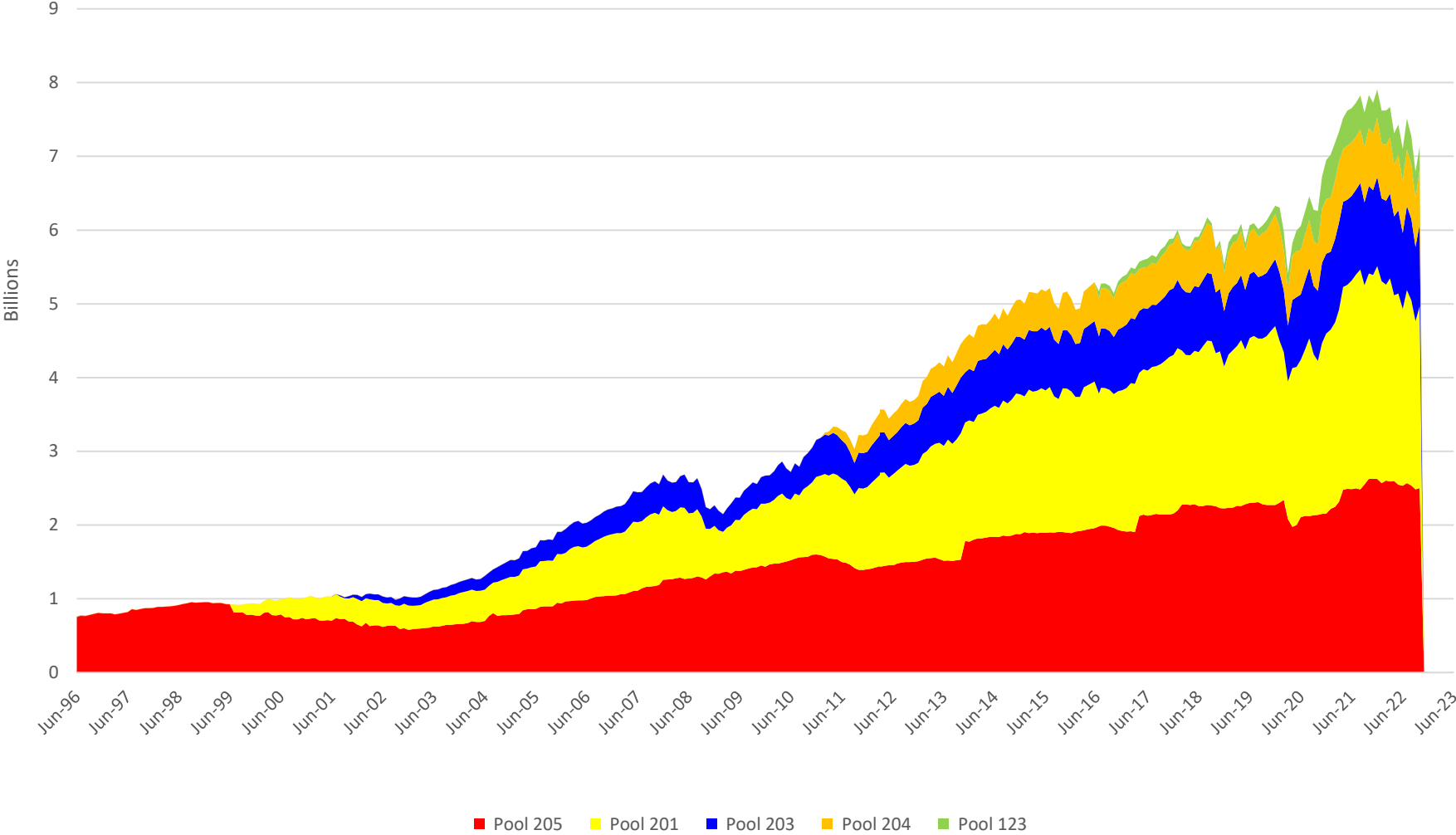
**Expected Maturity Distribution**



**Rating Distribution**



# Permanent Land Endowment Trust Fund Market Value



## ARIZONA ENDOWMENT TRUST FUND

### NET REALIZED CAPITAL GAIN/(LOSS)

**October 2022**

**October 2021**

Current Month	\$0	\$0
Year-to-date	0	0

### MONTHLY PROCEEDS

**FY 22/23**

July	\$2,890,699
August	456,739
September	536,566
October	718,758
November	
December	
January	
February	
March	
April	
May	
June	

<b>TOTAL</b>	<b><u><u>\$4,602,763</u></u></b>
--------------	----------------------------------

### ASSET ALLOCATION

	<b><u>SHARES OUTSTANDING</u></b>	<b><u>BOOK VALUE</u></b>	<b><u>MARKET VALUE</u></b>	<b><u>UNREALIZED GAIN / (LOSS)</u></b>
<i>Fixed Income Pools</i>	1,708,710	\$21,803,716	\$20,135,590	(\$1,668,126)
<i>Equity Pools</i>	2,789,645	\$32,705,574	31,732,295	(\$973,279)
<b>TOTAL</b>	<b><u><u>4,498,355</u></u></b>	<b><u><u>\$54,509,289</u></u></b>	<b><u><u>\$51,867,885</u></u></b>	<b><u><u>(\$2,641,405)</u></u></b>



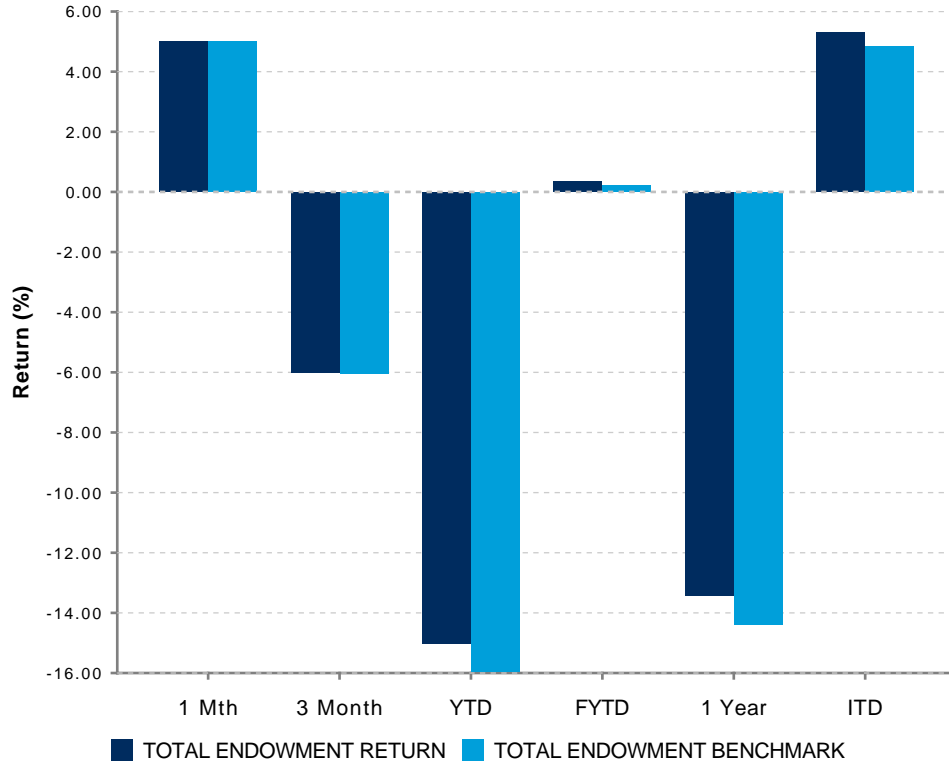
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

## Arizona Endowment Trust Fund Summary



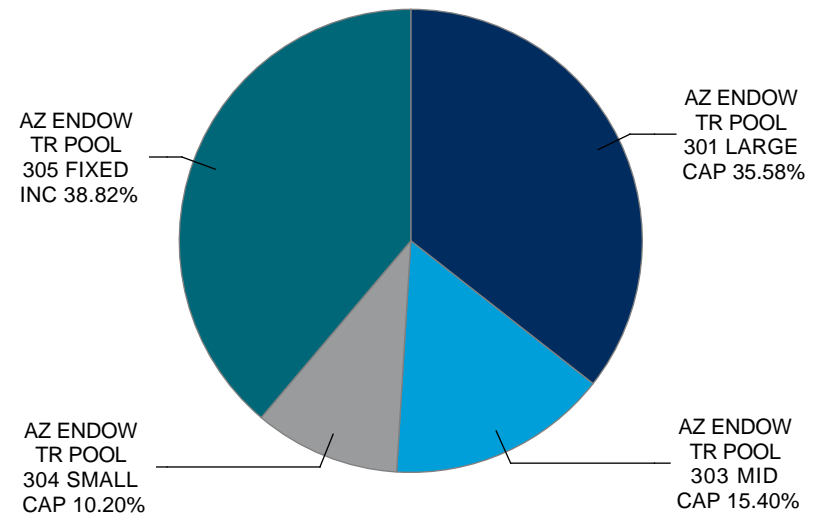
### Performance



	1 Mth	3 Mth	YTD	FYTD	1 Year	ITD	Incept Date
TOTAL ENDOWMENT RETURN	5.02	-6.00	-15.02	0.35	-13.43	5.31	09/19
TOTAL ENDOWMENT BENCHMARK	4.99	-6.05	-15.96	0.22	-14.40	4.85	09/19
	0.02	0.04	0.95	0.12	0.97	0.46	

### Asset Allocation

	Ending Market Value
TOTAL ENDOWMENT RETURN	51,867,885



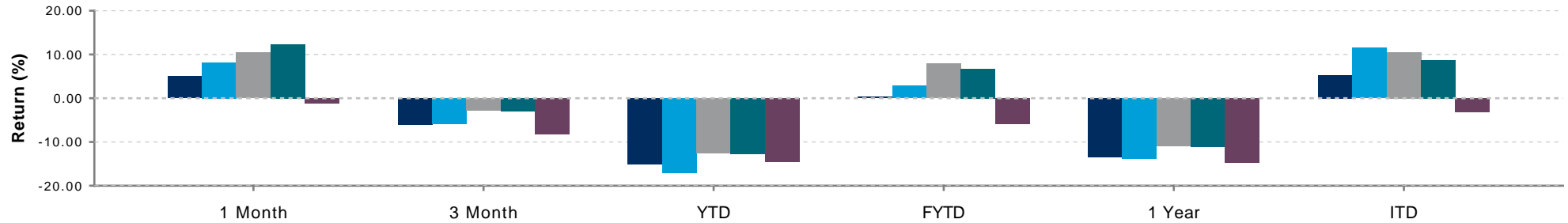
# OFFICE OF THE ARIZONA STATE TREASURER

October 31, 2022

Total Returns Net Mgr



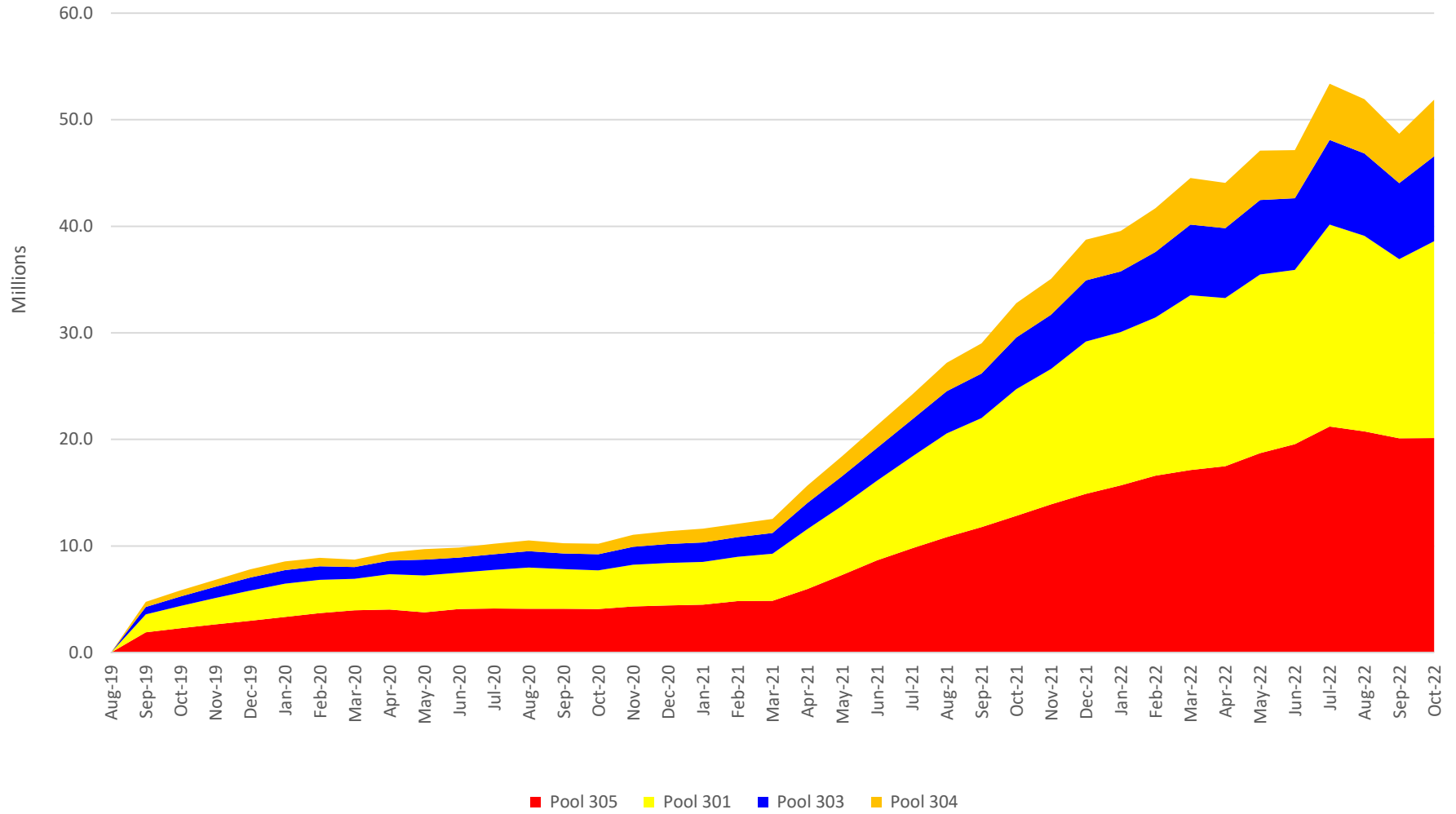
## Return Comparison



■ TOTAL ENDOWMENT RETURN 
 ■ AZ ENDOW TR POOL 301 LARGE CAP 
 ■ AZ ENDOW TR POOL 303 MID CAP 
 ■ AZ ENDOW TR POOL 304 SMALL CAP 
 ■ AZ ENDOW TR POOL 305 FIXED INC

	Market Value	Actual Weight	1 Mth	3 Mth	YTD	FYTD	1 Year	ITD	Inc Date
TOTAL ENDOWMENT RETURN	51,867,885	100.00	5.02	-6.00	-15.02	0.35	-13.43	5.31	Sep-01-19
TOTAL ENDOWMENT BENCHMARK			4.99	-6.05	-15.96	0.22	-14.40	4.85	Sep-01-19
			0.02	0.04	0.95	0.12	0.97	0.46	
AZ ENDOW TR POOL 301 LARGE CAP	18,453,141	35.58	8.14	-5.80	-17.06	2.85	-13.83	11.52	Sep-01-19
S&P 500 INDEX (DAILY)			8.10	-5.86	-17.70	2.82	-14.61	11.04	Sep-01-19
			0.04	0.07	0.64	0.04	0.78	0.47	
AZ ENDOW TR POOL 303 MID CAP	7,986,058	15.40	10.47	-2.72	-12.60	7.90	-10.86	10.53	Sep-01-19
S&P 400 MIDCAP INDEX (DAILY)			10.52	-2.76	-13.27	7.80	-11.54	10.12	Sep-01-19
			-0.04	0.03	0.67	0.10	0.68	0.41	
AZ ENDOW TR POOL 304 SMALL CAP	5,293,096	10.20	12.34	-3.07	-12.76	6.70	-11.07	8.71	Sep-01-19
S&P SM 600 TR			12.37	-3.18	-13.66	6.52	-11.81	10.26	Sep-01-19
			-0.03	0.11	0.90	0.19	0.75	-1.55	
AZ ENDOW TR POOL 305 FIXED INC	20,135,590	38.82	-1.22	-8.15	-14.63	-5.84	-14.68	-3.08	Sep-01-19
FTSE BIG (DAILY)			-1.26	-8.15	-15.93	-6.01	-15.94	-3.68	Sep-01-19
			0.04	0.01	1.30	0.17	1.26	0.60	

## Arizona Endowment Trust Fund Market Value



# Arizona's Education Savings Plan (AZ529) October 2022 Summary

## Overall Performance – Where We Are Now |

### ➤ AZ529, Arizona's Education Savings Plan:

- Total assets: \$1,732,316,110 (-14.4% YoY)
  - Total Arizona resident assets: \$855,087,511 (49.4%)
  - Total non-resident assets: \$877,228,599 (50.6%)
- Total accounts: 99,675 (+3.8% YoY)
  - Total Arizona resident accounts: 55,258 (55.4%)
  - Total non-resident accounts: 44,417 (44.6%)

## Fidelity AZ529, Arizona's Education Savings Plan | Direct Sold

Fidelity remains the largest AZ529 provider, holding 63.7% of total assets and 64.9% of total accounts. Total Fidelity AZ529, Arizona's Education Savings Plan assets in October were down 8.2% YoY to \$1,103,287,422 with total accounts up 11.2% YoY to 64,678. Arizona residents held 72.9% of total assets and 80.5% of total accounts, with the rest held by non-residents.

## Goldman Sachs 529 Plan | Advisor Sold

Goldman Sachs remains the second largest AZ529 provider, holding 34.3% of total assets and 33.1% of total accounts. Total Goldman Sachs 529 Plan assets in October were down 23.1% YoY to \$595,035,452, with total accounts down 6.6% YoY to 33,000. Arizona residents held 6.8% of total assets and 7.1% of total accounts, with the rest held by non-residents. Ascensus/Goldman Sachs assumed control of Ivy InvestEd accounts on June 13, 2022.

## College Savings Bank Plan | Closed Plan

College Savings Bank (CSB) remains the smallest AZ529 provider, holding 2% of total assets and 2% of total accounts. Total CSB Plan assets in October were down 27.2% YoY to \$33,993,236 with total accounts down 22.3% YoY to 1,997. Arizona residents held 30.2% of total assets and 44.7% of total accounts, with the rest held by non-residents. As of February 1, 2022, CSB is no longer accepting deposits to existing accounts.

## AZ529 Plan Assets |

	October 31, 2022	October 29, 2021	YoY Change
<b>Fidelity AZ529, Arizona's Education Savings Plan</b>	\$1,103,287,422	\$1,202,410,226	-8.2%
<b>*Goldman Sachs 529 Plan</b>	\$595,035,452	\$773,629,309	-23.1%
<b>College Savings Plan</b>	\$33,993,236	\$46,700,858	-27.2%
	<b>\$1,732,316,110</b>	<b>\$2,022,740,393</b>	<b>-14.4%</b>

\*Ascensus/Goldman Sachs assumed control of Ivy InvestEd accounts on June 13, 2022.

## AZ529 Plan Accounts |

	October 31, 2022	October 29, 2021	YoY Change
<b>Fidelity AZ529, Arizona's Education Savings Plan</b>	64,678	58,181	+11.2%
<b>*Goldman Sachs 529 Plan</b>	33,000	35,423	-6.8%
<b>College Savings Plan</b>	1,997	2,571	-22.3%
<b>TOTAL AZ529 ACCOUNTS</b>	<b>99,675</b>	<b>96,175</b>	<b>+3.6%</b>

\*Ascensus/Goldman Sachs assumed control of Ivy InvestEd accounts on June 13, 2022.

\*Ivy account data prior to June conversion was normalized for a more accurate YOY comparison.