State of Alaska Department of Revenue

STATE INVESTMENT REVIEW MEETING

February 14, 2023 - 10:30 a.m.

Via Computer or Mobile App	Call In (Audio Only):
Meeting ID: 272 299 754 182	Phone: 1-907-202-7104
Passcode: YXF9Hg	Code: 338 946 486#

I. Introduction

Zachary Hanna, Chief Investment Officer Adam Crum, Commissioner of Revenue

II. Internally Managed Fixed Income

Victor Djajalie, Director Internal Fixed Income Emily Howard, Portfolio Manager

- A. Fixed Income Market and Bond Investments
- **B.** Cash Equivalent Investments

III. State Investment Review

Zachary Hanna, Chief Investment Officer

- A. Economic and Market Update
- B. December 2023 Performance
- C. Non-Routine Investment update
- D. 2024 Capital Market Assumptions
- E. Initial FY25 Asset Allocation Discussion

IV. IAC Comments

Investment Advisory Council Members

V. Future Agenda Items & 2024 Calendar

Zachary Hanna, Chief Investment Officer Alysia Jones, ARMB Liaison

- VI. Other Matters for Discussion
- VII. Adjournment

VERSION - FINAL 2/08/2024

STATE INVESTMENT REVIEW

Internally Managed Fixed Income

February 2024

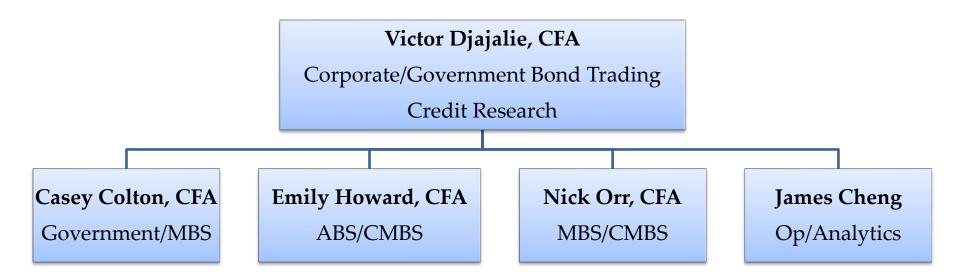
Victor Djajalie, CFA
Director of Internal Fixed Income

Emily Howard, CFA State Investment Officer

Presentation Agenda

- Portfolio Performance
- Fixed Income Market Outlook
- Portfolio Positioning

Fixed Income Investment Team



Fixed Income Assets Under Management

- We manage three fixed income investment pools for the State.
 - Short Term Investment Pool ~\$5.94 billion.
 - Intermediate Term Investment Pool ~\$0.88 billion.
 - Long Term Investment Pool ~\$0.67 billion.
- Total assets under management: ~\$7.49 billion.

Performance

As of Dec 31, 2023	Last Quarter 1	l Year	3 Year	5 Year	10 Year
Short-term Fixed Income (AY70)	1.44%	5.39%	2.33%	2.05%	1.47%
3M T-Bill	1.37%	5.01%	2.15%	1.88%	1.25%
Difference	0.07%	0.38%	0.18%	0.17%	0.22%

As of Dec 31, 2023	Last Quarter	1 Year	Since Inception
Intermediate term Fixed Income (AY72)	2.69%	4.84%	2.66%
Bloomberg US Government 1-3 year	2.55%	4.32%	2.13%
Difference	0.14%	0.52%	0.53%

As of Dec 31, 2023	Last Quarter	1 Year	3 Year	5 Year	10 Year	Since Inception
Core Bond (AY73)	6.78%	6.03%	-2.96%	1.53%	2.06%	4.69%
Bloomberg Aggregate Index	6.82%	5.53%	-3.31%	1.10%	1.81%	4.63%
Difference	-0.04%	0.50%	0.35%	0.43%	0.25%	0.06%

Fixed Income Market Outlook

10 Year Treasury Yield



• Rates sold off during the first three quarters of 2023, reaching almost 5% as the Fed maintained their hawkish monetary policy to contain stubborn inflation. Rates, however, rallied aggressively in the final 2 months of 2023 as markets priced in the end of Fed hikes and the start of Fed cuts in 2024.

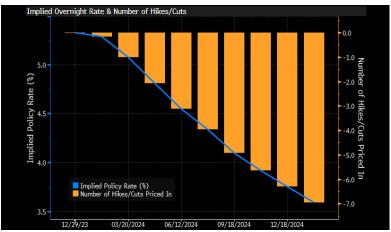
12 Month Curve Movements



- The Fed increased the fed funds rate 4x in 2023 to 5.25-5.50% after raising the rates 7x in 2022.
- The front end of the yield curve sold off significantly, inverting the yield curve.

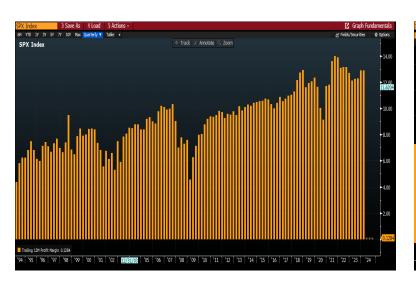
Inflation and the Fed

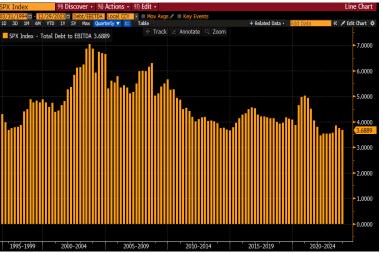




- Inflation pressure has cooled off meaningfully but appears to linger around 3% while growth has remained resilient. Market participants expect soft-landing to take place.
- Given this inflation backdrop, markets have started to price in a Fed pivot and multiple rate cuts in 2024.

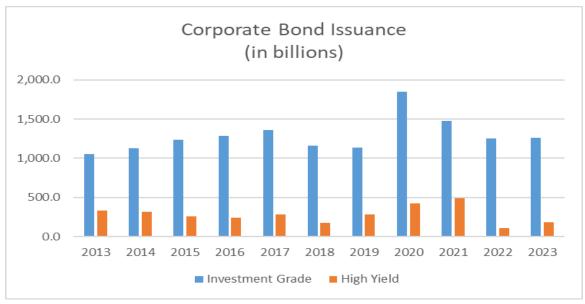
Profitability And Leverage





 Corporate fundamentals have weakened but remained solid. Prolonged restrictive monetary policy pressured revenue, earnings growth, and credit fundamentals but prudent corporate balance sheet management helped mitigate the negative impacts.

Corporate Bond Net Issuance



Source: Sifma

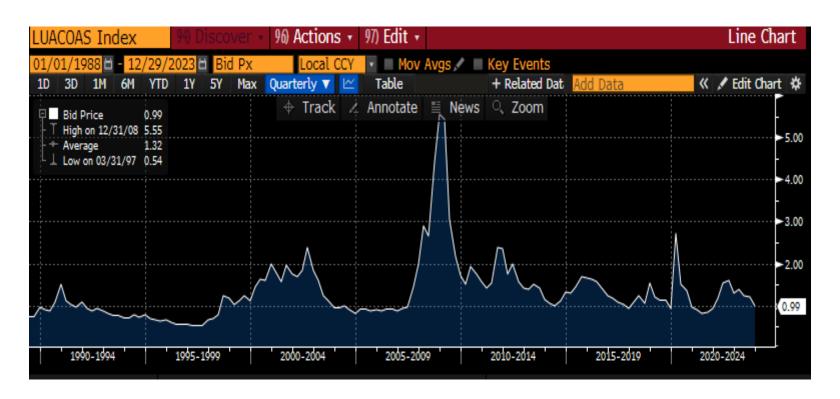
- Corporate bond issuance remained strong despite the rising rate environment.
- Lower issuance levels combined with demand for high quality US bonds continue to support the primary corporate bond market.

US Corporate Bond Yield



- Corporate bond yields rose to over 6% in 2023 from about 2% in 2021. Yields are now at 10-year highs, ending 2023 at over 5%.
- In addition to providing higher income, the higher yields provide an attractive cushion from potential widening credit spreads.

Investment Grade Corporate Spreads



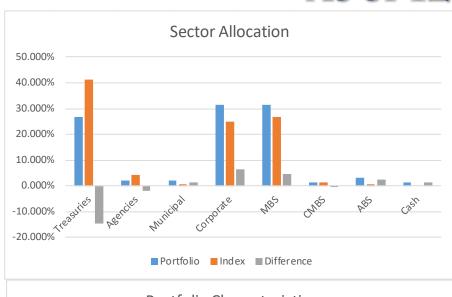
- Spreads rallied as markets bet on the end of Fed rate hikes. Investment grade spreads reached 99 bps, a level not seen since Jan 2022.
- Strong market demand for yield continues to support tight spread levels despite modestly weaker fundamentals.

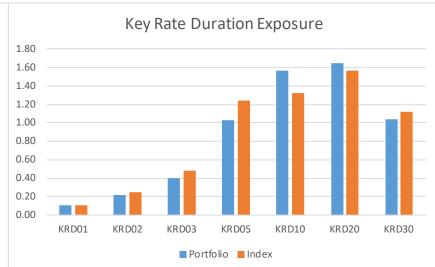
Portfolio Positioning

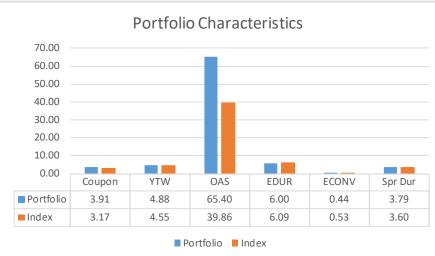
Intermediate-term Fixed Income (AY72) Dashboard As of 12/31/2023

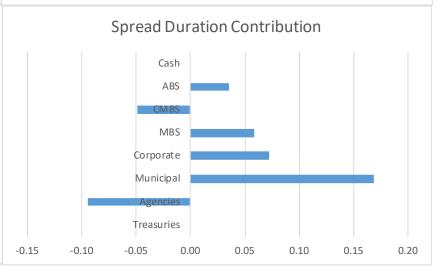


Core Bond (AY73) Dashboard As of 12/31/2023









Short-term Fixed Income (AY70) Dashboard As of 12/31/2023



Summary

- Portfolio Performance
- Fixed Income Market Outlook
- Portfolio Positioning

State Investment Review

Short-Term Fixed Income AY70

February 2024

Emily Howard, CFA State Investment Officer

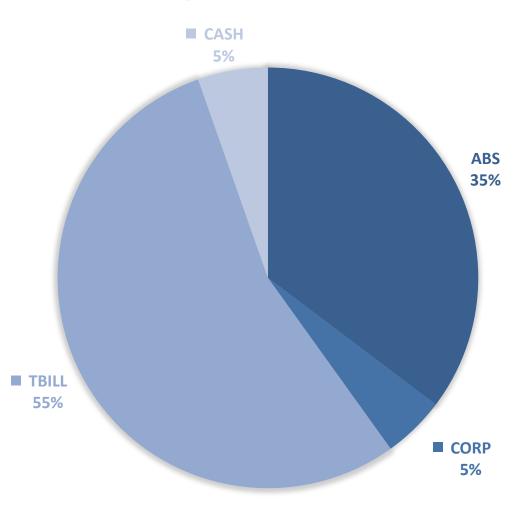
Investment Objectives

- AY70 is the Short-Term Fixed Income investment pool
- \$5.944bn assets under management as of 12/31/23
- AY70 is the only pool that invests funds on behalf of both Treasury and ARMB accounts
- Investment Objectives:
 - 1) Earn the highest possible return
 - 2) Meet significant liquidity requirements
 - 3) Take very low principal risk
- Benchmark: 3-Month U.S. Treasury Bill
- All Short-Term investment requirements are met through AY70. For example:
 - Funds just received from or awaiting disbursement to eligible ARMB beneficiaries
 - Investment cash held by participating manager accounts
 - State government obligations including payroll, school funding, vendor payables

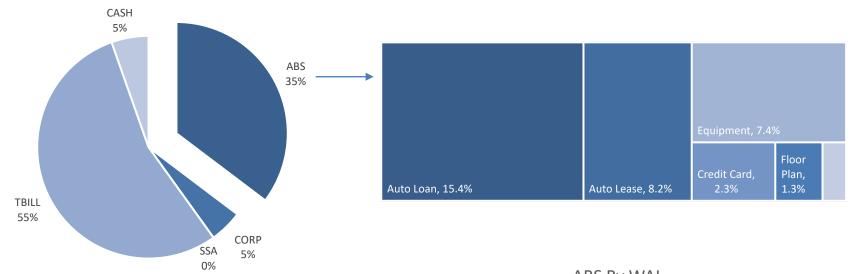
Sector Exposure as of 12/31/23; AUM \$5.944bn

•To ensure adequate liquidity, AY70 owns Treasury Bills and Overnight Repurchase Agreements (Cash)

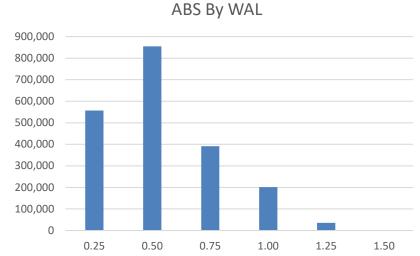
•To achieve the highest possible return, AY70 owns non-Treasury sectors such as ABS and Corporate bonds in place of Tbills



ABS Exposure in AY70 as of 12/31/23



- <1.17/3yr Weighted Average Life (fixed/floating)
- •Rated AAA
- •Public or Private Issuance



Asset Backed Securities

- Opportunity for Increased Yield → Higher Returns
 - As of 12/31, Yield to Call of AY70's ABS holdings ~5.73% vs 3mo Tbill ~5.25%
- Robust Principal Protection → AAA ratings due to Credit Enhancement
- Good liquidity in normal market conditions, less liquidity in market stress
- Risks:
 - Collateral may decrease in value
 - Timing of Cashflows is uncertain, can be either faster or slower than expected
 - Credit quality of sponsor
 - Liquidity

ABS Structure – Low Principal Risk

Principal Payments

A Tranches

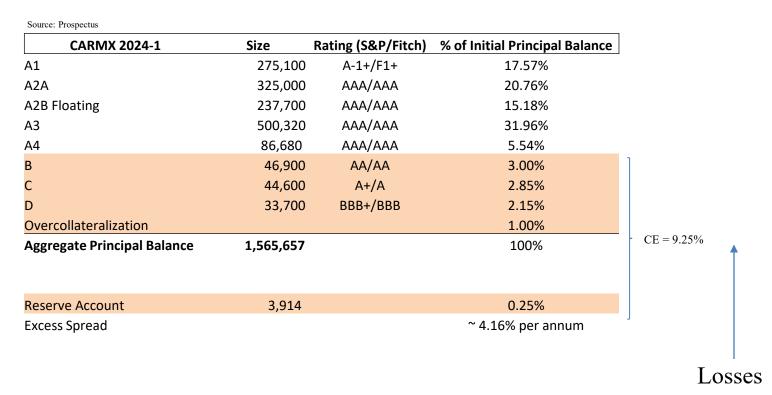
Subordinated Tranches B, C, D

Credit Enhancement: Reserve Account, Overcollateralization, Excess Spread

Principal Losses

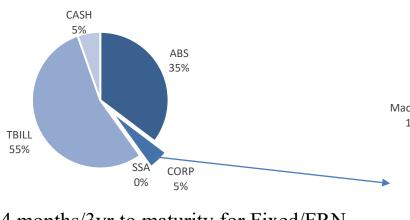
Auto Loan: General Structure

Principal Payments

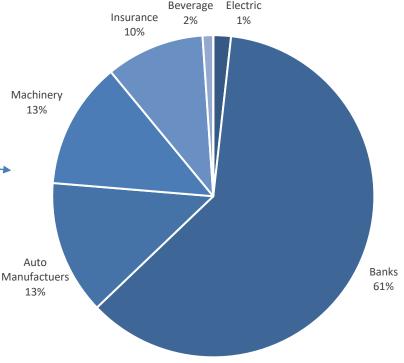


- Bonds are backed by the principal balance on a pool of auto loans
- Subordinated Tranches → Lower Credit Enhancement → Lower Ratings
- Hard Credit Enhancement for A tranches is 9.25%
- Rating Agency Loss Expectations: S&P = 2.90%; Fitch = 2.80%

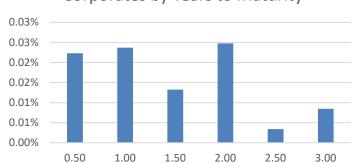
Corporate Exposure in AY70 as of 12/31/23



- Limit: <14 months/3yr to maturity for Fixed/FRN
 - $\sim 97\%$ floating as of 12/31/23
- Credit Rating: Long Term at least "A3", Short Term at least "P1" or equivalent
- Concentration limits: if the corporate bond is rated AAA, it may be no more than 1% of the portfolio. Lower ratings have lower concentration limits.
- Risks:
 - Credit Downgrade
 - Spread widening
 - Liquidity



Corporates by Years to Maturity



Developments of Note LIBOR Transition

- AY70 Floating Rate Exposure as of 12/31/23:
 - 97% of Corporates
 - 17% of ABS
- LIBOR was discontinued for most tenors as of December 2021. US Dollar 1-month and 3-month tenors were discontinued in June 2023.
- SOFR (Secured Overnight Financing Rate) is the widely adopted LIBOR replacement
 - SOFR is based on overnight transactions in the USD Treasury repo market
 - The Treasury Repo market is based on "risk free" transactions, so SOFR has been a less than natural fit for pricing products that contain inherent credit risk

Investment Performance December 31, 2023

As of Dec 31, 2023	3 Month	1 Year	3 Year	5 Year	10 Year
Short-term Fixed Income (AY70)	1.44%	5.39%	2.33%	2.05%	1.47%
3 Month T-bill	1.37%	5.01%	2.15%	1.88%	1.25%
	0.07%	0.38%	0.18%	0.17%	0.22%



State Investment Review:

- Economic and Market Update
- December 2023 Performance
- Non-Routine Investment Update
- 2024 Capital Market Assumptions
- Initial FY25 Asset Allocation Discussion



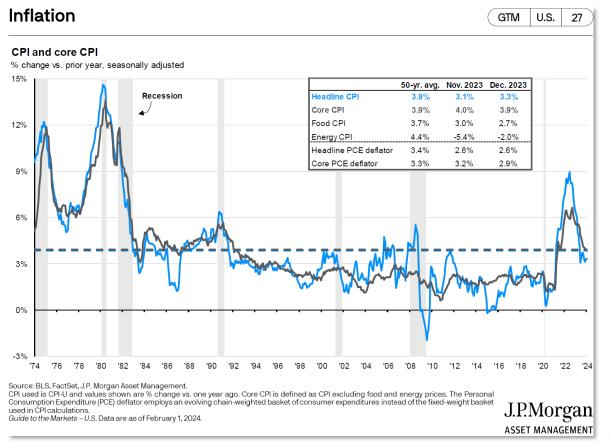
February 2024

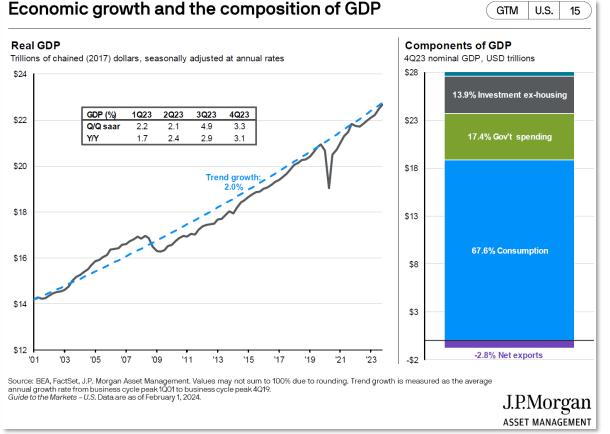
Zachary Hanna, CFA
Chief Investment Officer, Treasury Division
Alaska Department of Revenue

Economic and Market Update

Inflation and Economic Growth

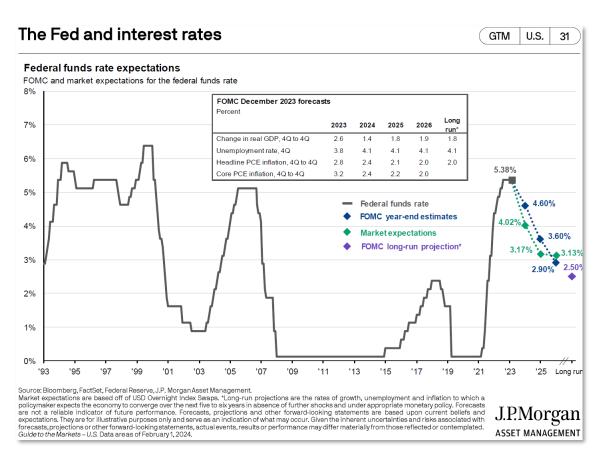
- Inflation has dominated markets since 2022, peaking at 9.1% in June and declining to 3.3% in December of 2023.
- Economic growth has slowed but remains relatively strong.
- As inflation has moderated, the potential for further interest rate increases and the associated drag on economic growth has decreased.

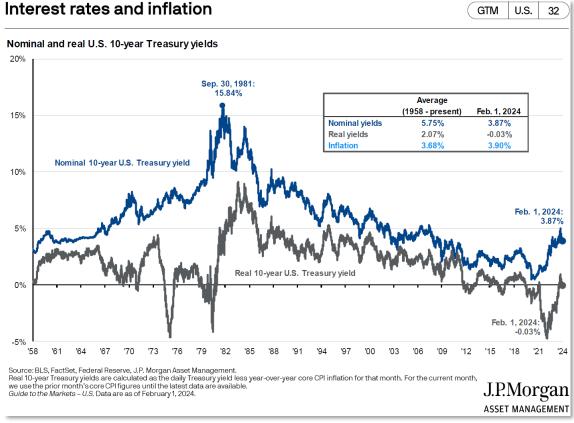




Interest Rates and the Federal Reserve

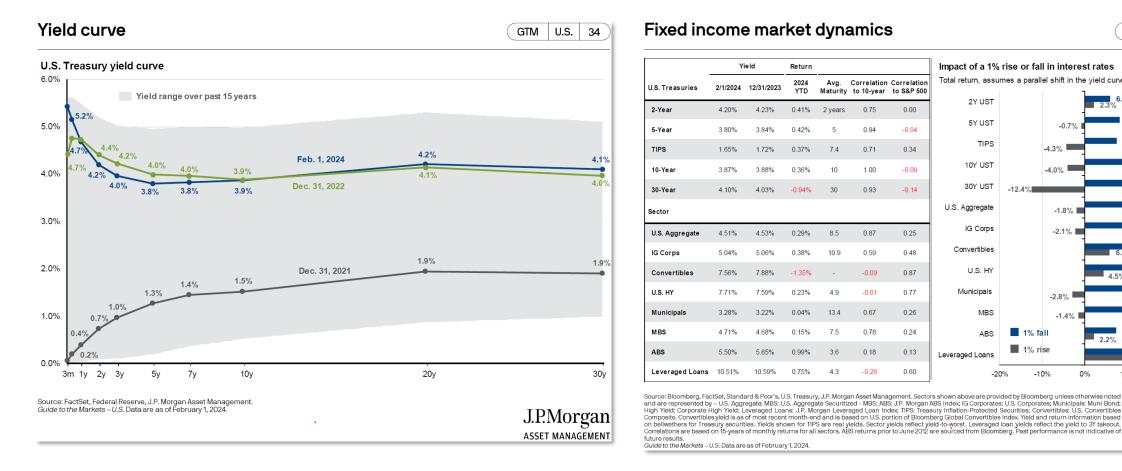
- To combat inflation, the Federal Reserve has raised interest rates from near zero in 2022 to 5.50% in July of 2023.
- Notably the Fed has made no further changes to rates at the last four meetings.
- The market expects rate decreases in 2024 as long as inflation continues to moderate.





Fixed Income

- Bond yields increased dramatically in reaction to the Fed's increase in rates into 2023.
- Most bond sectors performed very poorly in 2022, but bond returns improved in 2023 with higher yields and more tempered rate increases.
- Forward expectations for fixed income investments are strong with high starting yields and an expectation of moderating interest rates.



Yield Impact of a 1% rise or fall in interest rates Total return, assumes a parallel shift in the Avg. Correlation Correlation 2/1/2024 12/31/2023 Maturity to 10-year to S&P 500 2Y UST 2-Year 4.20% 5Y UST 3.80% TIPS 1.65% 10Y UST 10-Year 30Y UST 30-Year 10.8% U.S. Aggregate Sector 4.51% U.S. Aggregate Convertibles IG Corps Municipals U.S. HY 3.28%

0.13

Leveraged Loans

5.50%

30%

J.P.Morgan

ASSET MANAGEMENT

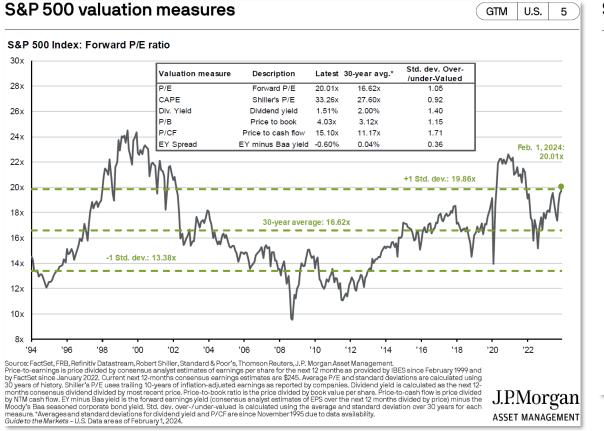
GTM

U.S.

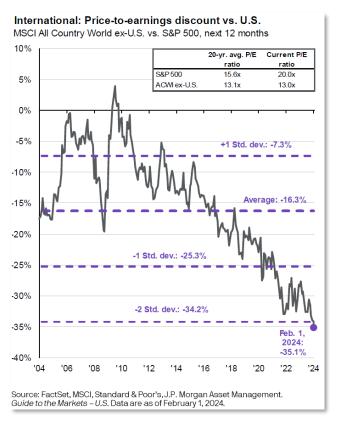
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Equity Markets

- U.S. equities have returned to more elevated valuations as markets rebounded in anticipation of moderating interest rates and inflation.
- Domestic equity returns and valuations remain driven by the largest technology corporations resulting in more concentrated equity indexes.
- International equity valuations remain much lower than in the U.S.







Capital Market Performance Update

- After a challenging 2022, calendar year
 2023 performance was strong, but
 volatile across most asset classes.
- Capital markets have been focused on the interplay of inflation, interest rates, and economic growth.
- As inflation has moderated, the potential for further interest rate increases and the associated drag on economic growth has decreased.
- As a result, equity markets recovered strongly from the correction of 2022 and both core U.S. fixed income and cash equivalents benefited from high yields.

2018	2019	2020	2021	2022	2023	FY24YTD	2023-Q4
Cash	Broad U.S.	Broad U.S.	REITs	Cash	Broad U.S.	Broad U.S.	REITs
Equivalents	Equity	Equity		Equivalents	Equity	Equity	
1.9%	31.0%	20.9%	41.3%	1.5%	26.0%	8.4%	18.0%
Core U.S. Fixed	REITs	TIPS	Broad U.S.	High Yield	International	REITs	Broad U.S.
Income			Equity	11.811 11616	Equity	112112	Equity
0.0%	28.7%	11.0%	25.7%	(11.2%)	15.6%	8.1%	12.1%
TIPS	International	International	International	TIPS	High Yield	High Yield	International
	Equity	Equity	Equity	5			Equity
(1.3%)	21.5%	10.7%	7.8%	(11.8%)	13.4%	7.7%	9.8%
High Yield	High Yield	Core U.S. Fixed	TIPS	Core U.S. Fixed	REITs	International	High Yield
		Income		Income		Equity	
(2.1%)	14.3%	7.5%	6.0%	(13.0%)	11.4%	5.6%	7.2%
REITS	Core U.S. Fixed	High Yield	High Yield			Core U.S. Fixed	Core U.S. Fixed
112113	Income	THEIR HEIG	THEIT HEIG	Equity	Income	Income	Income
(4.00()		7.40/	F 20/				
(4.0%)	8.7%	7.1%	5.3%	(16.0%)	5.5%	3.4%	6.8%
Broad U.S.	TIPS	Cash	Cash	Broad U.S.	Cash	Cash	TIPS
Equity		Equivalents	Equivalents	Equity	Equivalents	Equivalents	
(5.2%)	8.4%	0.7%	0.0%	(19.2%)	5.0%	2.7%	4.7%
International	Cash	REITs	Core U.S. Fixed	REITs	TIPS	TIPS	Cash
Equity	Equivalents		Income				Equivalents
(14.2%)	2.3%	(5.1%)	(1.5%)	(24.9%)	3.9%	2.0%	1.4%

Performance:

Commissioner's Report

December 2023

Market Value

Plan Name	Cash Equivalents	Domestic Equity	Fixed Income	Interm. Fixed Income	Int'l Equity	REITs	Market Value
2008 Transportation Project Government Bonds (AY2Q)	\$814,441						\$814,441
2013B Tax Exempt Education (AY3Z)	\$187,160						\$187,160
2016A - 2012 Transporation Bond Act (AY3Y)	\$960,445						\$960,445
2016B - 2012 Transportation Bond Act (AY3Q)	\$51,127,388						\$51,127,388
Alaska Higher Education Investment (AY3L)	\$3,408,719	\$156,479,986	\$114,769,989		\$98,139,405	\$20,988,124	\$393,786,223
Alaska Mental Health Trust Reserve (AY2L)	\$435,183	\$20,066,948	\$15,746,054		\$14,104,152		\$50,352,337
ASLC Investment Fund (AY3S)	\$899,917	\$25,772,910	\$67,219,712		\$16,056,022	\$3,685,959	\$113,634,520
Constitutional Budget Reserve Fund (AY19)	\$2,746,998,737						\$2,746,998,737
Education Endowment Fund (AY3G)	\$11,849	\$543,290	\$398,510		\$340,697	\$72,864	\$1,367,208
EVOS Habitat Investment (AY2H)	\$22,387,419			\$45,763,683			\$68,151,102
EVOS Research Investment (AY02)	\$10,485,511			\$21,398,865			\$31,884,376
GeFONSI I (AY01)	\$1,299,870,829			\$229,590,111			\$1,529,460,939
GeFONSI II (AY3F)	\$955,007,461	\$70,161,680		\$545,425,542	\$34,322,466		\$1,604,917,148
Illinois Creek Mine Reclamation (AY9J)	\$12,566	\$580,601	\$425,876		\$364,168	\$77,891	\$1,461,102
International Airports Repair & Replacement Fund (AY05)	\$514,237						\$514,237
International Airports Revenue Fund (AY04)	\$180,501,330			\$33,265,690			\$213,767,019
International Airports Series 2002 Reserve Account (AY2E)	\$15,835,219						\$15,835,219
International Airports Series 2003 Reserve (AY2U)	\$11,258,097						\$11,258,097
Investment Loss Trust Fund (AY28)	\$3,548,385						\$3,548,385
Permanent Fund Dividend Holding Account (AY2G)	\$66,402,758						\$66,402,758
Public School Trust Fund (AY08)	\$6,744,540	\$309,582,777	\$227,062,989		\$194,160,863	\$41,523,369	\$779,074,537
RHIF LTC Insurance (AY11)	\$6,766,919	\$209,479,266	\$415,448,712		\$147,564,934	\$35,064,773	\$814,324,603
RHIF Major Medical (AY03)	\$20,378,096						\$20,378,096

Actual Allocation

Plan Name	Cash Equivalents	Domestic Equity	Fixed Income	Interm. Fixed Income	Int'l Equity	REITs
2008 Transportation Project Government Bonds (AY2Q)	100.00%					
2013B Tax Exempt Education (AY3Z)	100.00%					
2016A - 2012 Transporation Bond Act (AY3Y)	100.00%					
2016B - 2012 Transportation Bond Act (AY3Q)	100.00%					
Alaska Higher Education Investment (AY3L)	0.87%	39.74%	29.15%		24.92%	5.33%
Alaska Mental Health Trust Reserve (AY2L)	0.86%	39.85%	31.27%		28.01%	
ASLC Investment Fund (AY3S)	0.79%	22.68%	59.15%		14.13%	3.24%
Constitutional Budget Reserve Fund (AY19)	100.00%					
Education Endowment Fund (AY3G)	0.87%	39.74%	29.15%		24.92%	5.33%
EVOS Habitat Investment (AY2H)	32.85%			67.15%		
EVOS Research Investment (AY02)	32.89%			67.11%		
GeFONSI I (AY01)	84.99%			15.01%		
GeFONSI II (AY3F)	59.51%	4.37%		33.98%	2.14%	
Illinois Creek Mine Reclamation (AY9J)	0.86%	39.74%	29.15%		24.92%	5.33%
International Airports Repair & Replacement Fund (AY05)	100.00%					
International Airports Revenue Fund (AY04)	84.44%			15.56%		
International Airports Series 2002 Reserve Account (AY2E)	100.00%					
International Airports Series 2003 Reserve (AY2U)	100.00%					
Investment Loss Trust Fund (AY28)	100.00%					
Permanent Fund Dividend Holding Account (AY2G)	100.00%					
Public School Trust Fund (AY08)	0.87%	39.74%	29.15%		24.92%	5.33%
RHIF LTC Insurance (AY11)	0.83%	25.72%	51.02%		18.12%	4.31%
RHIF Major Medical (AY03)	100.00%					

Target Allocation

Plan Name	Cash Equivalents	Domestic Equity	Fixed Income	Interm. Fixed Income	Int'l Equity	REITs
2008 Transportation Project Government Bonds (AY2Q)	100.00%					
2013B Tax Exempt Education (AY3Z)	100.00%					
2016A - 2012 Transporation Bond Act (AY3Y)	100.00%					
2016B - 2012 Transportation Bond Act (AY3Q)	100.00%					
Alaska Higher Education Investment (AY3L)	1.00%	39.00%	30.00%		25.00%	5.00%
Alaska Mental Health Trust Reserve (AY2L)	1.00%	39.00%	32.00%		28.00%	
ASLC Investment Fund (AY3S)	1.00%	22.00%	60.00%		14.00%	3.00%
Constitutional Budget Reserve Fund (AY19)	100.00%					
Education Endowment Fund (AY3G)	1.00%	39.00%	30.00%		25.00%	5.00%
EVOS Habitat Investment (AY2H)	35.00%			65.00%		
EVOS Research Investment (AY02)	35.00%			65.00%		
GeFONSI I (AY01)	85.00%			15.00%		
GeFONSI II (AY3F)	61.00%	4.00%		33.00%	2.00%	
Illinois Creek Mine Reclamation (AY9J)	1.00%	39.00%	30.00%		25.00%	5.00%
International Airports Repair & Replacement Fund (AY05)	100.00%					
International Airports Revenue Fund (AY04)	85.00%			15.00%		
International Airports Series 2002 Reserve Account (AY2E)	100.00%					
International Airports Series 2003 Reserve (AY2U)	100.00%					
Investment Loss Trust Fund (AY28)	100.00%					
Permanent Fund Dividend Holding Account (AY2G)	100.00%					
Public School Trust Fund (AY08)	1.00%	39.00%	30.00%		25.00%	5.00%
RHIF LTC Insurance (AY11)	1.00%	25.00%	52.00%		18.00%	4.00%
RHIF Major Medical (AY03)	100.00%					

Relative Allocation

Plan Name	Cash Equivalents	Domestic Equity	Fixed Income	Interm. Fixed Income	Int'l Equity	REITs
2008 Transportation Project Government Bonds (AY2Q)	0.00%					
2013B Tax Exempt Education (AY3Z)	0.00%					
2016A - 2012 Transporation Bond Act (AY3Y)	0.00%					
2016B - 2012 Transportation Bond Act (AY3Q)	0.00%					
Alaska Higher Education Investment (AY3L)	-0.13%	0.74%	-0.85% 🚫		-0.08%	0.33%
Alaska Mental Health Trust Reserve (AY2L)	-0.14%	0.85% 🚫	-0.73%		0.01%	
ASLC Investment Fund (AY3S)	-0.21%	0.68%	-0.85% 🚫		0.13%	0.24%
Constitutional Budget Reserve Fund (AY19)	0.00%	•				
Education Endowment Fund (AY3G)	-0.13%	0.74%	-0.85% 🚫		-0.08%	0.33%
EVOS Habitat Investment (AY2H)	-2.15% 😵	•		2.15% 🚫		
EVOS Research Investment (AY02)	-2.11% 🚫			2.11% 🚫		
GeFONSI I (AY01)	-0.01%			0.01%		
GeFONSI II (AY3F)	-1.49% 🚫	0.37%		0.98% 🚫	0.14%	
Illinois Creek Mine Reclamation (AY9J)	-0.14%	0.74%	-0.85% 🚫		-0.08%	0.33%
International Airports Repair & Replacement Fund (AY05)	0.00%	•				
International Airports Revenue Fund (AY04)	-0.56%			0.56%		
International Airports Series 2002 Reserve Account (AY2E)	0.00%					
International Airports Series 2003 Reserve (AY2U)	0.00%					
Investment Loss Trust Fund (AY28)	0.00%					
Permanent Fund Dividend Holding Account (AY2G)	0.00%					
Public School Trust Fund (AY08)	-0.13%	0.74%	-0.85% 🚫		-0.08%	0.33%
RHIF LTC Insurance (AY11)	-0.17%	0.72%	-0.98% 🚫		0.12%	0.31%
RHIF Major Medical (AY03)	0.00%	•				

DOR Commissioner's Report: Net Pool Performance for Month Ending 12/31/2023

Pool Performance (Net of Fee)	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
Cash Equivalents	0.49%	1.44%	2.85%	5.39%	2.33%	2.05%	1.92%	1.47%
Fixed Income - Short Term	1.20%	2.69%	3.46%	4.84%				
Fixed Income - Core US	3.82%	6.78%	3.44%	6.03%	-2.96%	1.53%	1.57%	2.06%
Fixed Income - Core Plus	4.26%	7.44%	4.19%	7.69%				
Equity - Broad US*	5.32%	12.12%	8.51%	26.05%	8.65%	15.17%	12.78%	
Equity - REITS	8.92%	18.04%	8.22%	10.83%				
Equity - Global ex-US*	4.99%	9.69%	5.57%	15.62%	1.61%	7.11%	6.33%	
Benchmark Performance	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
Cash Equivalents	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%
Fixed Income - Short Term	1.15%	2.55%	3.29%	4.32%				
Fixed Income - Core US	3.83%	6.82%	3.37%	5.53%	-3.31%	1.10%	1.29%	1.81%
Fixed Income - Core Plus	3.83%	6.82%	3.37%	5.53%				
Equity - Broad US*	5.30%	12.07%	8.43%	25.96%	8.54%	15.16%	12.81%	
Equity - REITS	8.86%	17.98%	8.15%	11.36%				
Equity - Global ex-US*	5.02%	9.75%	5.61%	15.62%	1.55%	7.08%	6.33%	
Relative Performance (Net of Fee)	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
Cash Equivalents	0.02%	0.07%	0.15%	0.37%	0.18%	0.17%	0.18%	0.22%
Fixed Income - Short Term	0.05%	0.14%	0.18%	0.53%				
Fixed Income - Core US	-0.01%	-0.04%	0.07%	0.50%	0.36%	0.42%	0.28%	0.25%
Fixed Income - Core Plus	0.43%	0.63%	0.82%	2.16%				
Equity - Broad US*	0.01%	0.05%	0.08%	0.09%	0.10%	0.01%	-0.03%	
Equity - REITS	0.05%	0.06%	0.07%	-0.52%				
Equity - Global ex-US*	-0.03%	-0.06%	-0.05%	0.01%	0.06%	0.03%	0.00%	

Plan Performance (Net of Fee)	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
2008 Transportation Project Government Bonds (AY2Q)	0.49%	1.44%	2.85%	5.39%	2.34%	2.05%	1.92%	1.47%
2013B Tax Exempt Education (AY3Z)	0.49%	1.44%	2.85%	5.39%	2.34%	2.05%	1.92%	1.47%
2016A - 2012 Transporation Bond Act (AY3Y)	0.49%	1.44%	2.85%	5.39%	2.34%	2.04%	1.91%	1.47%
2016B - 2012 Transportation Bond Act (AY3Q)	0.49%	1.44%	2.85%	5.39%	2.34%	2.05%	1.92%	
Alaska Higher Education Investment (AY3L)	4.96%	10.14%	6.27%	16.45%	3.18%	8.98%	7.74%	6.74%
Alaska Mental Health Trust Reserve (AY2L)	4.74%	9.67%	6.08%	16.91%	2.92%	8.23%	7.21%	6.40%
ASLC Investment Fund (AY3S)	4.50%	8.73%	5.15%	11.66%				
Constitutional Budget Reserve Fund (AY19)	0.49%	1.44%	2.85%	5.39%	2.34%	2.79%	2.52%	2.15%
Education Endowment Fund (AY3G)	4.96%	10.15%	6.26%	16.44%	3.18%			
EVOS Habitat Investment (AY2H)	0.95%	2.24%	3.24%	5.03%	0.92%	6.64%	6.37%	6.05%
EVOS Research Investment (AY02)	0.95%	2.24%	3.25%	5.04%	1.12%	6.89%	6.53%	6.15%
GeFONSI I (AY01)	0.60%	1.62%	2.94%	5.34%	1.53%	1.80%	1.68%	1.34%
GeFONSI II (AY3F)	1.02%	2.45%	3.34%	6.22%	1.24%	2.70%		
Illinois Creek Mine Reclamation (AY9J)	4.96%	10.14%	6.26%	16.43%	3.18%	8.96%	7.71%	6.04%
International Airports Repair & Replacement Fund (AY05)	0.49%	1.44%	2.85%	5.39%	2.34%	2.05%	1.92%	1.47%
International Airports Revenue Fund (AY04)	0.59%	1.63%	2.93%	5.31%	1.52%	2.39%	2.27%	1.90%
International Airports Series 2002 Reserve Account (AY2E)	0.49%	1.44%	2.85%	5.39%	2.34%	2.05%	1.92%	1.47%
International Airports Series 2003 Reserve (AY2U)	0.49%	1.44%	2.85%	5.39%	2.34%	2.05%	1.92%	1.47%
Investment Loss Trust Fund (AY28)	0.49%	1.44%	2.85%	5.39%	2.34%	2.05%	1.92%	1.47%
Permanent Fund Dividend Holding Account (AY2G)	0.49%	1.43%	2.83%	5.38%	2.31%	2.03%	2.01%	1.52%
Public School Trust Fund (AY08)	4.96%	10.14%	6.26%	16.43%	3.18%	8.97%	7.41%	6.46%
RHIF LTC Insurance (AY11)	4.63%	9.11%	5.40%	14.59%	1.56%	6.88%	5.86%	5.29%
RHIF Major Medical (AY03)	0.49%	1.44%	2.85%	5.39%	2.34%	2.05%	1.92%	1.47%

DOR Commissioner's Report: Net Plan Performance for Month Ending 12/31/2023

Benchmark Performance	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
2008 Transportation Project Government Bonds (AY2Q)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%
2013B Tax Exempt Education (AY3Z)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%
2016A - 2012 Transporation Bond Act (AY3Y)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%
2016B - 2012 Transportation Bond Act (AY3Q)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	
Alaska Higher Education Investment (AY3L)	4.94%	10.10%	6.16%	16.14%	3.03%	8.89%	7.68%	6.63%
Alaska Mental Health Trust Reserve (AY2L)	4.72%	9.63%	5.97%	16.56%	2.69%	7.99%	7.01%	6.12%
ASLC Investment Fund (AY3S)	4.45%	8.66%	4.95%	11.02%				
Constitutional Budget Reserve Fund (AY19)	0.47%	1.37%	2.70%	5.01%	2.15%	2.60%	2.35%	1.95%
Education Endowment Fund (AY3G)	4.94%	10.10%	6.16%	16.14%	3.03%			
EVOS Habitat Investment (AY2H)	0.91%	2.14%	3.08%	4.57%	0.55%	6.42%	6.21%	5.73%
EVOS Research Investment (AY02)	0.91%	2.14%	3.08%	4.57%	0.82%	6.69%	6.40%	5.86%
GeFONSI I (AY01)	0.57%	1.55%	2.79%	4.91%	1.35%	1.61%	1.51%	1.14%
GeFONSI II (AY3F)	0.99%	2.35%	3.21%	5.81%	1.15%	2.60%		
Illinois Creek Mine Reclamation (AY9J)	4.94%	10.10%	6.16%	16.14%	3.03%	8.89%	7.68%	5.95%
International Airports Repair & Replacement Fund (AY05)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%
International Airports Revenue Fund (AY04)	0.57%	1.55%	2.79%	4.91%	1.35%	2.24%	2.08%	1.68%
International Airports Series 2002 Reserve Account (AY2E)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%
International Airports Series 2003 Reserve (AY2U)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%
Investment Loss Trust Fund (AY28)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%
Permanent Fund Dividend Holding Account (AY2G)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%
Public School Trust Fund (AY08)	4.94%	10.10%	6.16%	16.14%	3.03%	8.86%	7.38%	6.36%
RHIF LTC Insurance (AY11)	4.60%	9.05%	5.24%	14.31%	1.42%	6.73%	5.78%	5.12%
RHIF Major Medical (AY03)	0.47%	1.37%	2.70%	5.01%	2.15%	1.88%	1.73%	1.25%

DOR Commissioner's Report: Net Plan Performance for Month Ending 12/31/2023

Relative Performance (Net of Fee)	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
2008 Transportation Project Government Bonds (AY2Q)	0.02%	0.07%	0.15%	0.38%	0.18%	0.17%	0.19%	0.22%
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2016A - 2012 Transporation Bond Act (AY3Y)	0.02%	0.07%	0.15%	0.38%	0.18%	0.16%	0.18%	0.22%
2016B - 2012 Transportation Bond Act (AY3Q)	0.02%	0.07%	0.15%	0.38%	0.18%	0.17%	0.19%	
Alaska Higher Education Investment (AY3L)	0.02%	0.04%	0.11%	0.31%	0.15%	0.10%	0.05%	0.11%
Alaska Mental Health Trust Reserve (AY2L)	0.02%	0.04%	0.11%	0.35%	0.23%	0.24%	0.20%	0.28%
ASLC Investment Fund (AY3S)	0.05%	0.07%	0.20%	0.63%				
Constitutional Budget Reserve Fund (AY19)	0.02%	0.07%	0.15%	0.38%	0.18%	0.19%	0.17%	0.20%
Education Endowment Fund (AY3G)	0.02%	0.04%	0.11%	0.30%	0.15%			
EVOS Habitat Investment (AY2H)	0.03%	0.11%	0.16%	0.47%	0.37%	0.23%	0.16%	0.32%
EVOS Research Investment (AY02)	0.03%	0.11%	0.16%	0.47%	0.30%	0.20%	0.13%	0.28%
GeFONSI I (AY01)	0.03%	0.07%	0.15%	0.42%	0.19%	0.18%	0.18%	0.19%
GeFONSI II (AY3F)	0.03%	0.10%	0.14%	0.41%	0.09%	0.10%		
Illinois Creek Mine Reclamation (AY9J)	0.02%	0.04%	0.10%	0.29%	0.15%	0.07%	0.03%	0.09%
International Airports Repair & Replacement Fund (AY05)	0.02%	0.07%	0.15%	0.38%	0.18%	0.17%	0.19%	0.22%
International Airports Revenue Fund (AY04)	0.02%	0.08%	0.15%	0.40%	0.17%	0.16%	0.19%	0.21%
International Airports Series 2002 Reserve Account (AY2E)	0.02%	0.07%	0.15%	0.38%	0.18%	0.17%	0.19%	0.22%
International Airports Series 2003 Reserve (AY2U)	0.02%	0.07%	0.15%	0.38%	0.18%	0.17%	0.19%	0.22%
Investment Loss Trust Fund (AY28)	0.02%	0.07%	0.15%	0.38%	0.18%	0.17%	0.19%	0.22%
Permanent Fund Dividend Holding Account (AY2G)	0.02%	0.07%	0.13%	0.36%	0.16%	0.15%	0.28%	0.27%
Public School Trust Fund (AY08)	0.02%	0.03%	0.10%	0.29%	0.15%	0.11%	0.04%	0.09%
RHIF LTC Insurance (AY11)	0.04%	0.05%	0.16%	0.28%	0.14%	0.15%	0.08%	0.17%
RHIF Major Medical (AY03)	0.02%	0.07%	0.15%	0.38%	0.18%	0.17%	0.19%	0.22%

DOR Commissioner's Report: External Management Fees as of Month Ending 12/31/2023

Plan Fees for the Last Year

Plan	Fee as a %
2008 Transportation Project Government Bonds (AY2Q)	0.0000%
2013B Tax Exempt Education (AY3Z)	0.0000%
2016A - 2012 Transporation Bond Act (AY3Y)	0.0000%
2016B - 2012 Transportation Bond Act (AY3Q)	0.0000%
Alaska Higher Education Investment (AY3L)	0.0198%
Alaska Mental Health Trust Reserve (AY2L)	0.0205%
ASLC Investment Fund (AY3S)	0.0287%
Constitutional Budget Reserve Fund (AY19)	0.0000%
Education Endowment Fund (AY3G)	0.0200%
EVOS Habitat Investment (AY2H)	0.0000%
EVOS Research Investment (AY02)	0.0000%
GeFONSI I (AY01)	0.0000%
GeFONSI II (AY3F)	0.0006%
Illinois Creek Mine Reclamation (AY9J)	0.0198%
International Airports Repair & Replacement Fund (AY05)	0.0000%
International Airports Revenue Fund (AY04)	0.0000%
International Airports Series 2002 Reserve Account (AY2E)	0.0000%
International Airports Series 2003 Reserve (AY2U)	0.0000%
Investment Loss Trust Fund (AY28)	0.0000%
Permanent Fund Dividend Holding Account (AY2G)	0.0000%
Public School Trust Fund (AY08)	0.0197%
RHIF LTC Insurance (AY11)	0.0249%
RHIF Major Medical (AY03)	0.0000%

Commissioner's Report: Top GeFONSI Accounts for Month Ending: 12/31/2023

Program	Account Name	End Balance
GeFONSI I	General Fund	\$815,958,739.50
	Alaska Clean Water Fund	\$159,245,873.13
	Alaska Drinking Water Fund	\$92,528,049.97
	Fish & Game Fund	\$56,576,844.39
	Public Advocacy Trust	\$51,572,261.94
GeFONSI II	Statutory Budget Reserve Fund	\$388,437,351.74
	Regional Ed Attendance Area School Fund	\$145,920,408.88
	National Petroleum Reserve Fund	\$108,162,488.98
	Highway Equipment Working Capital Fund For Operating Appropriations	\$98,748,599.04
	Community Revenue Sharing Fund	\$72,405,274.43
	Sum of 5 Largest GeFONSI I and II Funds	\$1,989,555,892.00

Non-Routine Investments

Non-Routine Investments

- The Department of Revenue is presented periodically with non-routine investment opportunities that fall outside the scope of its existing investment opportunity set.
- The state does not currently have any non-routine investments, and none are presently contemplated by investment staff.
- Non-routine investment process summary:
 - Document the investment opportunity and determine if it merits further diligence and/or
 if it is more suitable for other funding sources.
 - Seek legal advice on DOR eligibility.
 - Seek guidance from external auditors.
 - Use an impartial external expert to evaluate the opportunity and to provide an opinion on the investment.
 - Seek advice from the Investment Advisory Council.
 - Notify the Office of Management and Budget.
 - Complete diligence and investment documentation.
 - Inform the Chairs of the Senate and House Finance Committees of any decision to move forward with an investment.

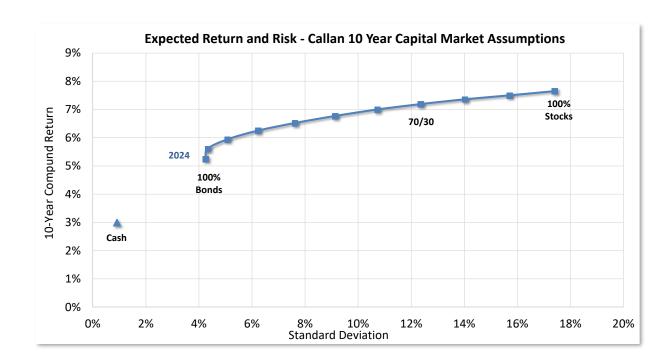
Questions?

Investment Policy and

Asset Allocation Process

State Investment Policy and Asset Allocation Process

- The Commissioner of Revenue is the fiduciary for over \$8 billion in state assets across 100+ accounts pooled into over 25 funds with similar assets or mandates.
- Setting investment policies and asset allocations are key fiduciary duties for these funds.
- Treasury staff reviews and makes recommendations on the investment policy and asset allocation of each fund at least annually.
- Each investment program is designed to balance fund investment objectives, risk tolerance, and other attributes:
 - Time horizon
 - Nominal or real return objectives
 - Cashflows, liquidity, and income needs
 - Capacity for loss or volatility over short, medium, and longer time horizons
- Performance, investment policy, and asset allocations are discussed quarterly in a transparent process with an independent investment advisory committee.

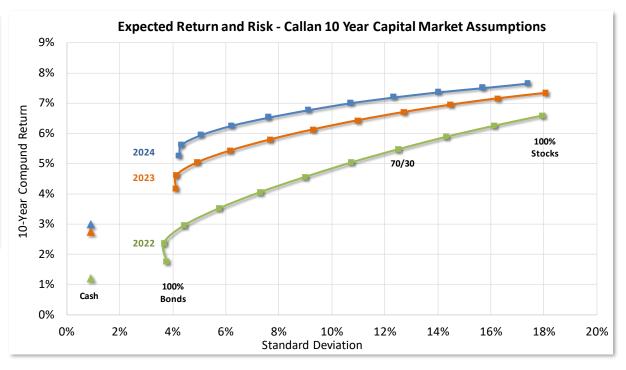


Fund - Account	Assets (12/31/2023)	Risk Tolerance
Short-Term Funds	\$170,298,000	Lowest
CBRF	\$2,746,999,000	
GeFONSI	\$1,551,196,000	
International Airport	\$214,281,000	
GeFONSI II	\$1,604,917,000	
Retiree Long-Term Care	\$814,325,000	
Public School Trust	\$779,075,000	
AK Higher Education	\$393,786,000	
Illinois Creek Mine	\$1,461,000	₩
Education Endowment	\$1,367,000	Highest
Total	\$8,277,705,000	

Risk Tolerance Assessment

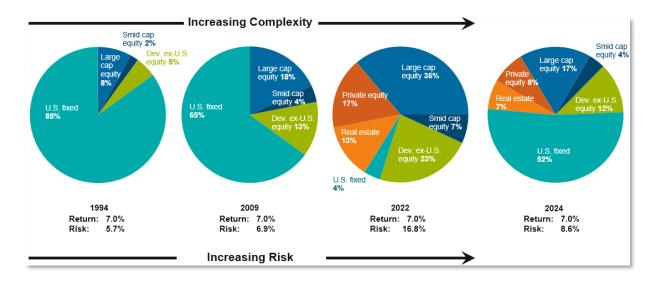
General Risk Tolerance Assessment	Time Horizon	Probability of Loss (1yr)	Magnitude of Potential Loss	Discussion
Low	Short - Less than 1 year	< 1%	< 0.4%	Unwilling to risk material short-term volatility because of the immediate need for the invested funds. Minimizing exposure of principal to loss is very important.
Moderate	Short to Intermediate - 1 to 2 years	< 5%	< 1.5%	Willing to assume an average amount of market risk and volatility to achieve higher returns.
Moderate-High	Intermediate - 2 to 6 years	< 10%	< 5%	Willing to assume an above average amount of risk, volatility and loss of principal to achieve higher returns.
High - 5% Return Target	Long - Greater than 6 years	> 10%	< 20%	Willing to tolerate an amount of risk, volatility and loss of principal to achieve stated return target over long time periods.
High - Endowment	Long - Greater than 6 years	> 10%	< 20%	Willing to assume a material amount or risk, volatility and loss of principal to take advantage or higher return opportunities.

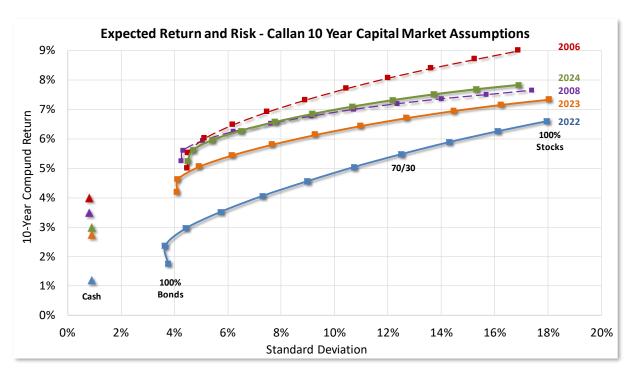
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GeFONSI	\$1,551,196,000	
International Airport	\$214,281,000	
GeFONSI II	\$1,604,917,000	
Retiree Long-Term Care	\$814,325,000	
Public School Trust	\$779,075,000	
AK Higher Education	\$393,786,000	
Illinois Creek Mine	\$1,461,000	♦
Education Endowment	\$1,367,000	Highest
Total	\$8,277,705,000	



Asset Allocation

- Callan is an investment consultant that annually develops 10-year capital market assumptions for clients including the Alaska Retirement Management Board and the Alaska Permanent Fund Corporation. DOR uses these assumptions for independence and consistency.
- Return expectations have generally fallen over the past 30 years as interest rates, growth, and inflation expectations declined. Forward return expectations have now increased due to inflation, higher starting interest rates and the pullback in equity markets.
- Treasury staff evaluates Callan's capital market assumptions and current market conditions to develop an asset allocation approach for each state fund.
- The goal is to maximize return or minimize risk consistent with investment objectives and risk tolerance using a combination of modern portfolio theory and account specific constraints and characteristics.





2024 Capital Market Assumption Update

- In January, Callan released their 10-year capital market assumptions for 2024. Forward return expectations increased due to higher starting interest rates and the pullback in equity markets.
- Staff selects a subset of these asset classes for use in state funds based on risk, return, diversification, complexity, and cost.
- DOR is currently using Broad U.S. Equities, International Equities, Government 1-3 Fixed Income, Broad U.S.
 Fixed Income, U.S. REITs, and Cash Equivalents for state funds.
- For some portfolios, staff also invests up to 30% of the fixed income allocation in a tactical bond portfolio that opportunistically invests in high yield, TIPS, and other fixed income asset classes in a risk-managed fashion.
- Only liquid registered investments are used since State funds were not allowed to purchase unregistered investments, including alternative investments, prior to 2021 due to the SEC's definition of accredited investor – a definition that did not apply to the retirement funds and APFC. Even with the SEC change, illiquid investments are still problematic for State funds subject to annual legislative changes.

Asset Classes	2024 10-Year Geometric Return	2023 10-Year Geometric Return	Return Change	Real Return	Standard Deviation	Correlation to Domestic Equity
Broad U.S. Equity	7.65%	7.35%	0.30%	5.2%	17.4%	1.00
Large Cap U.S. Equity	7.50%	7.25%	0.25%	5.0%	17.0%	1.00
Small/Mid Cap U.S. Equity	7.70%	7.45%	0.25%	5.2%	22.0%	0.91
International Equity	7.65%	7.45%	0.20%	5.2%	21.4%	0.79
Developed ex-U.S. Equity	7.50%	7.25%	0.25%	5.0%	20.2%	0.73
Emerging Market Equity	7.70%	7.45%	0.25%	5.2%	25.6%	0.85
Cash Equivalents	3.00%	2.75%	0.25%	0.5%	0.9%	-0.03
Government 1-3 year Bonds	4.25%	3.80%	0.45%	1.8%	2.4%	0.04
Core U.S. Fixed Income	5.25%	4.25%	1.00%	2.8%	4.3%	0.08
TIPS	5.05%	4.00%	1.05%	2.6%	5.4%	-0.03
Emerging Market Sovereign Debt	6.35%	6.25%	0.10%	3.9%	10.7%	0.61
High Yield	6.80%	6.25%	0.55%	4.3%	11.8%	0.75
Core Real Estate	6.00%	5.75%	0.25%	3.5%	14.0%	0.34
REITs	7.15%	6.90%	0.25%	4.7%	25.6%	0.77
Private Equity	8.75%	8.50%	0.25%	6.3%	27.6%	0.80
Private Credit	7.40%	7.00%	0.40%	4.9%	15.7%	0.68
Hedge Funds	6.05%	5.55%	0.50%	3.6%	8.2%	0.59
Inflation	2.50%	2.50%	0.00%		1.6%	
70/30 Portfolio	7.11%	6.71%	0.40%	4.6%		

Initial FY25

Asset Allocation Discussion

Using December 31, 2023, Assets

State Asset Allocation Approach for FY2025

- Evaluate the current attributes of each fund to identify the best balance of risk and return.
- Use Callan's capital market assumptions and Modern Portfolio Theory to arrive at asset allocations.
- Set short-term return expectations using current yields (YTW) for short-term and moderate risk profiles.
- Emphasize diversification in a particularly uncertain market.

Proforma FY2025 table uses Callan's long-term CMA's for all risk profiles for

Frotorina i 12025 table uses Callan s long-t	CITII CIVIA 3 IO	i dii iisk pi oiii	C3 101			
comparability						
Asset Classes	Low	Moderate	Moderate +	All SOA	Higher Risk	Highest Risk
Broad U.S. Equity			4.0%	8.8%	25.0%	39.0%
Global ex-U.S. Equity			2.0%	5.7%	18.0%	25.0%
U.S. REITs				1.1%	4.0%	5.0%
Core U.S. Fixed Income				9.4%	52.0%	30.0%
Short Duration Gov't/Credit		15.0%	33.0%	9.6%		
Cash Equivalents	100%	85.0%	61.0%	65.4%	1.0%	1.0%
Total	100%	100%	100%	100%	100%	100%
Optimization Results:						
Expected Return	3.00%	3.18%	3.77%	4.26%	6.74%	7.25%
Expected Return - Real/After Inflation	0.50%	0.68%	1.27%	1.76%	4.24%	4.75%
Risk - Standard Deviation	0.90%	0.93%	1.52%	2.94%	8.86%	12.48%
Sharpe Ratio	(0.00)	0.20	0.51	0.43	0.42	0.34
Risk Statistics:						
10% Probable Downside Return - 1 Year	1.4%	1.6%	1.1%	-0.9%	-8.8%	-14.6%
5% Probable Downside Return - 1 Year	1.1%	1.3%	0.6%	-1.8%	-11.5%	-18.5%
5% Probable Downside Return - 3 Year	1.9%	2.1%	2.0%	0.8%	-3.8%	-7.6%
5% Probable Downside Return - 5 Year	2.2%	2.3%	2.4%	1.5%	-1.4%	-4.3%
Probability of Loss - 1 Year	0.0%	0.0%	0.6%	7.4%	22.3%	28.1%
Prob. Return < -1%	0.0%	0.0%	0.1%	3.7%	19.1%	25.4%
Prob. Return < -5%	0.0%	0.0%	0.0%	0.1%	9.3%	16.3%
Prob. Return < -10%	0.0%	0.0%	0.0%	0.0%	2.9%	8.3%
Prob. Return < -20%	0.0%	0.0%	0.0%	0.0%	0.1%	1.4%
Probability of Loss - 10 Year	0.0%	0.0%	0.0%	0.0%	0.8%	3.3%
Asset Time Horizon Estimate	0.3	0.5	1.2	1.9	5.9	5.9
Dollars: (\$Millions)						
Assets	2,917.3	1,765.5	1,604.9	8,277.7	814.3	1,175.7
Expected Annual Earnings	87.4	56.1	60.5	352.2	54.9	85.3
1-Year 10% Probable Return (10% cVaR)	41.3	27.5	17.8	(74.5)	(71.7)	(172.2)
1-Year 5% Probable Return (5% cVaR)	33.3	22.4	10.3	(149.3)	(93.9)	(217.3)
3-Year 5% Probable Return (5% cVaR)	56.2	36.7	31.5	62.7	(31.0)	(89.4)
5-Year 5% Probable Return (5% cVaR)	63.2	41.1	38.1	127.9	(11.7)	(50.0)

Lowest Risk Tolerance Funds

Short Term Funds

Short-Term Funds Investment Policy

The Department manages several funds that have high liquidity requirements necessitating investment entirely in shortterm fixed income. The following funds are covered by this policy:

AY03 - Retiree Health Insurance Fund

AY05 - International Airport Repair and Replacement Fund

AY28 - Investment Loss Trust Fund

AY2E - 2002 Series Reserve Account

AY2G - Permanent Fund Dividend Holding Account

AY2Q - 2008 Transportation Project GO Bonds

AY2U - 2003 Series Reserve Account

AY3A - International Airports 2010-A

AY3B - International Airports 2010-B

AY3V - 2010-C GO Bonds

AY3Y - 2013-C GO Bonds

AY3Z - 2013-B GO Bonds

AY9X - 2006B Non-AMT Construction Fund

AY9Y - 2006 Series Variable Rate

AY3Q - FY 2017 2016B - 2012 Transportation Bond

Investment Topic	Proposed Policy	Current Policy	
Investment Objective	Very low exposure to principal loss. Modest current income requirement. Little inflation protection needed. High liquidity requirement.	No Change	
Risk Tolerance	Low	No Change	
Policy Risk/Loss Range	4%	No Change	
Time Horizon	Short	No Change	
Asset Allocation	Broad U.S. Equity International Equity Short Duration Govt/Credit Core U.S. Fixed Income Cash Equivalents 100%	100%	
Expected Return - Short-Term	5.01%	2.39% (short-term)	
Risk - Standard Deviation	0.90%	0.90%	
Probability of Loss - 1 Year 5% Probable Downside Return (5% cVaR)	0.0% 3.2%	0.4% 0.5%	

The proposed policy is effective July 1, 2023:

June 20, 2023 Date

Cash History	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Expected ST Return	5.01%	2.39%	0.05%	0.17%	1.93%	2.25%	2.25%	2.25%	2.25%	2.25%
Expected Volatility	0.90%	0.90%	0.05%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%
10% cVaR	3.40%	0.80%	0.00%	-1.41%	0.35%	0.67%	0.67%	0.67%	0.67%	0.67%

State of Alaska Asset Allocation

Asset Classes	FY23	FY24
Broad U.S. Equity		
Global ex-U.S. Equity		
US REITS		
Short Duration Gov't/Credit		
Core U.S. Fixed Income		
Cash Equivalents	100%	100%
Total	100%	100%
Optimization Results:		
Expected Return - Short-Term	2.39%	5.01%
Risk - Standard Deviation	0.90%	0.90%
Sharpe Ratio	0.14	(0.00)

Risk Statistics:

10% Probable Downside Return - 1 Year	0.8%	3.4%
5% Probable Downside Return - 1 Year	0.7%	3.2%
5% Probable Downside Return - 3 Year		3.9%
5% Probable Downside Return - 5 Year		4.2%
Probability of Loss - 1 Year	0.3%	0.0%
Prob. Return < -1%	0.0%	0.0%
Probability of Loss - 10 Year	0.0%	0.0%
Asset Time Horizon Estimate	0.5	0.3

Dollars: (\$Millions)

Assets	154.3
Expected Annual Earnings	7.7
1-Year 10% Probable Return (10% cVaR)	5.3
1-Year 5% Probable Return (5% cVaR)	4.9
3-Year 5% Probable Return (5% cVaR)	6.1
5-Year 5% Probable Return (5% cVaR)	6.4



AY19: CBRF Investment Policy

The investment policies for the Constitutional Budget Reserve Fund (CBRF) have changed over the years as the balance and the expected uses of the CBRF have changed. Declining production of Alaska North Slope crude oil and the inconsistency of future prices are still a concern. The CBRF is the state's "savings account" and as such is responsible for covering fluctuations in the general fund.

Financial planning by the administration and the legislature is highly dependent upon the CBRF balance maintaining stability and high liquidity. Given the short-term expected requirement for these funds, a cash equivalent investment program is warranted.

Investment Topic	Proposed Policy	Current Policy	
Investment Objective	Very low exposure to principal loss. Little inflation protection needed. High liquidity requirement.	No Change	
Risk Tolerance	Low	No Change	
Policy Risk/Loss Range	<1%	No Change	
Time Horizon	Short	No Change	
Asset Allocation	Broad U.S. Equity International Equity Short Duration Govt/Credit Core U.S. Fixed Income Cash Equivalents 100%	100%	
Expected Return - Short-Term	5.01%	2.39% (short-term)	
Risk - Standard Deviation	0.90%	0.90%	
Probability of Loss - 1 Year 5% Probable Downside Return (5% cVaR)	0.0% 3.2%	0.4%	

The proposed policy is effective July 1, 2023:

Approved

June 20, 2023 Date

CBRF History	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Expected ST Return	5.01%	2.39%	0.05%	0.17%	2.32%	2.89%	2.89%	2.89%	2.89%	2.38%
Expected Volatility	0.90%	0.90%	0.05%	0.90%	1.23%	1.64%	1.62%	1.59%	1.58%	1.58%
10% cVaR	3.40%	0.80%	-0.04%	-1.41%	0.16%	0.01%	0.05%	0.10%	0.12%	-0.40%
Assets (billions)	2.7	2.6	0.9	1.1	2.0	1.8	2.4	3.9	7.3	10.1

State of Alaska Asset Allocation

Asset Classes	FY23	FY24
Broad U.S. Equity		
Global ex-U.S. Equity		
US REITS		
Short Duration Gov't/Credit		
Core U.S. Fixed Income		
Cash Equivalents	100%	100%
Total	100%	100%
Optimization Results:		
Expected Return - Short-Term	2.39%	5.01%
Risk - Standard Deviation	0.90%	0.90%
Sharpe Ratio	0.14	(0.00)
Risk Statistics:		
		/

10% Probable Downside Return - 1 Year	0.8%	3.4%
5% Probable Downside Return - 1 Year	0.7%	3.2%
5% Probable Downside Return - 3 Year		3.9%
5% Probable Downside Return - 5 Year		4.2%
Probability of Loss - 1 Year	0.3%	0.0%
Prob. Return < -1%	0.0%	0.0%
Probability of Loss - 10 Year	0.0%	0.0%
Asset Time Horizon Estimate	0.5	0.3

Dollars: (\$Millions)

Assets	2,619.9
Expected Annual Earnings	131.2
1-Year 10% Probable Return (10% cVaR)	89.8
1-Year 5% Probable Return (5% cVaR)	82.5
3-Year 5% Probable Return (5% cVaR)	103.1
5-Year 5% Probable Return (5% cVaR)	109.4

Low Risk Tolerance Funds

GeFONSI I and II – Top 30 Participants of Each as of 12/31/23

		Ending	Cum.			Ending	Cum.
GF	Fund Name	Balance	%/Total	GF	Fund Name	Balance	%/Total
GFI	General Fund	\$815,958,739.50	51%	GFII	Statutory Budget Reserve Fund	\$388,437,352	24%
GFI	Alaska Clean Water Fund	\$159,245,873.13	61%	GFII	Regional Ed Attendance Area School Fund	\$145,920,409	33%
GFI	Alaska Drinking Water Fund	\$92,528,049.97	67%	GFII	National Petroleum Reserve Fund	\$108,162,489	40%
GFI	Fish & Game Fund	\$56,576,844.39	71%	GFII	Highway Equipment Working Capital Fund For Operating Ap	\$98,748,599	46%
GFI	Public Advocacy Trust	\$51,572,261.94	74%	GFII	Community Revenue Sharing Fund	\$72,405,274	51%
GFI	Oil & Hazardous Substance Release Response Account	\$46,668,884.17	77%	GFII	Disaster Relief Fund	\$72,310,720	55%
GFI	Exxon Valdez Settlement	\$39,693,037.52	79%	GFII	Public Education Fund	\$67,760,639	60%
GFI	Renewable Energy Grant Fund	\$27,648,877.02	81%	GFII	School Construction Fund	\$60,639,226	63%
GFI	Oil & Hazardous Substance Release Prevention Account	\$20,146,442.91	82%	GFII	Commercial Fishing Revolving Loan Fund	\$56,356,554	67%
GFI	Vaccine Assessment Fund	\$19,545,758.51	84%	GFII	State Insurance Catastrophe Reserve	\$55,895,258	70%
GFI	Group Health And Life Insurance Fund	\$18,956,225.93	85%	GFII	General Fund Investment Fund	\$53,940,286	74%
GFI	DVA Retiree Health	\$18,505,461.63	86%	GFII	Alaska Comprehensive Health Insurance Fund	\$49,465,032	77%
GFI	PFD Trust	\$17,684,692.51	87%	GFII	Alaska Marine Highway System Fund	\$44,990,817	80%
GFI	AIA Passenger Facility Charge Revenue Fund Application #2	\$16,747,807.13	88%	GFII	Alaska Marine Highway System Vessel Replacement Fund	\$43,582,051	82%
GFI	Mental Health Trust Income Settlement Account	\$12,305,058.79	89%	GFII	Commercial Vessel Passenger Tax Account	\$40,910,124	85%
GFI	MHT Settlement Deferred Maintenance	\$8,232,651.35	89%	GFII	Major Maintenance Grant Fund	\$38,105,947	87%
GFI	Bulk Fuel Loans Fund	\$7,931,209.16	90%	GFII	Fisheries Enhancement Revolving Loan Fund	\$37,437,428	90%
GFI	School Trust Land Sales-GF Portion	\$7,921,535.32	90%	GFII	Alaska Public Building Fund	\$28,440,096	91%
GFI	Bulk Fuel Bridge Loan Fund	\$7,867,955.11	91%	GFII	Alaska Capital Income Fund	\$20,776,717	93%
GFI	Railbelt Energy Fund	\$7,722,455.61	91%	GFII	Alaska Seafood Marketing Institute	\$17,214,197	94%
GFI	Memorial Education Revolving Loan Fund	\$7,546,615.23	92%	GFII	Information Services Fund	\$16,367,743	95%
GFI	Alaska Drinking Water Administrative Operating Account	\$7,200,497.57	92%	GFII	Alaska Fishermen's Fund	\$12,804,442	96%
GFI	Oil & Gas Tax Credit Fund	\$6,404,028.94	93%	GFII	Agricultural Revolving Loan Fund	\$12,433,477	96%
GFI	Alaska Clean Water Administrative Operating Account	\$6,303,947.74	93%	GFII	Unclaimed Property	\$8,993,828	97%
GFI	Mental Health Trust	\$6,291,472.87	93%	GFII	Deposits, Suspense & Miscellaneous	\$6,858,882	97%
GFI	Commercial Passenger Vessel Environmental Compliance Fu	\$5,901,779.69	94%	GFII	Clean Air Protection Fund	\$5,615,860	98%
GFI	Rural Development Initiative Fund	\$5,757,744.31	94%	GFII	Second Injury Fund	\$4,976,854	98%
GFI	FIA Passenger Facility Charge Revenue Fund	\$5,401,662.22	95%	GFII	Alcohol & Other Drug Abuse Treatment & Prevention	\$4,651,510	98%
GFI	Mariculture RLF	\$5,346,577.78	95%	GFII	Employee Assistance & Training Program Account	\$4,371,952	99%
GFI	Election Fund	\$5,225,559.04	95%	GFII	Alaska Tech & Vocational Education Programs	\$3,435,084	99%

GeFONSI

AY01: GeFONSI Investment Policy

The General Fund constitutes the largest element of the General Fund and Other Non-Segregated Investments (GeFONSI) fund. Much of the money in the fund has been appropriated and a material loss could affect the state's ability to fulfill its obligations. Treasury expects much of the money in the pool to be spent in less than one year. Accordingly, the allocation should allow minimal exposure to principal loss. Equities are not recommended for the GeFONSI.

Investment Topic	Current Policy		
Investment Objective	Minimal exposure to principal loss. Maximize current income within moderate risk tolerance. Minimal inflation protection needed. High liquidity requirement.	No Change	
Risk Tolerance	Moderate	No Change	
Policy Risk/Loss Range	1 - 5%	No Change	
Time Horizon	Short to Intermediate	No Change	
Asset Allocation	Broad U.S. Equity International Equity Short Duration Govt/Credit 15% ±10% Core U.S. Fixed Income Cash Equivalents 85% ±10%	15% ±10% 85% ±10%	
Expected Return - Short-Term	5.00%	2.51% (short-term)	
Risk - Standard Deviation	0.93%	0.90%	
Probability of Loss - 1 Year 5% Probable Downside Return (5% cVaR)	0.0% 3.1%	0.3% 0.7%	

The proposed policy is effective July 1, 2023:

yed June 20, 2023
Ved Date

GeFONSI History	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Expected ST Return	5.00%	2.51%	0.27%	0.44%	1.91%	2.38%	2.38%	2.36%	2.30%	2.30%
Expected Volatility	0.93%	0.90%	0.57%	1.16%	0.93%	1.08%	1.08%	1.08%	1.08%	1.08%
10% cVaR	3.40%	0.90%	-0.70%	-1.60%	0.28%	0.48%	0.48%	0.46%	0.40%	0.40%

State of Alaska Asset Allocation

State of Alaska Asset Allocation				
Asset Classes	FY23	FY24	2/3 ST	ST
Broad U.S. Equity				
Global ex-U.S. Equity				
US REITS				
Short Duration Gov't/Credit	15%	15%	33%	
Core U.S. Fixed Income				
Cash Equivalents	85%	85%	67%	100%
Total	100%	100%	100%	100%
Optimization Results:				
Expected Return - Short-Term	2.51%	5.00%	5.00%	5.01%
Expected Return - Real/After Inflation		2.50%	2.50%	2.51%
Risk - Standard Deviation	0.90%	0.93%	1.10%	0.90%
Sharpe Ratio	0.14	(0.01)	(0.01)	(0.00)
Risk Statistics:				
10% Probable Downside Return - 1 Year	0.9%	3.4%	3.1%	3.4%
5% Probable Downside Return - 1 Year	0.7%	3.1%	2.7%	3.2%
5% Probable Downside Return - 3 Year		3.9%	3.7%	3.9%
5% Probable Downside Return - 5 Year		4.1%	4.0%	4.2%
Probability of Loss - 1 Year	0.3%	0.0%	0.0%	0.0%
Prob. Return < -1%	0.0%	0.0%	0.0%	0.0%
Probability of Loss - 10 Year	0.0%	0.0%	0.0%	0.0%
Asset Time Horizon Estimate	0.5	0.5	8.0	0.3
Dollars: (\$Millions)				
Assets		2,142.2	2,142.2	2,142.2
Expected Annual Earnings		107.2	107.1	107.3
1-Year 10% Probable Return (10% cVaR)		72.3	65.8	73.4
1-Year 5% Probable Return (5% cVaR)		66.2	58.5	67.5
3-Year 5% Probable Return (5% cVaR)		83.6	79.1	84.3
5-Year 5% Probable Return (5% cVaR)		88.9	85.4	89.5
,				

International Airport Revenue Fund

AY04: International Airport Revenue Fund Investment Policy

The Revenue Fund maintains a significant balance and the investment earnings on that balance are a revenue source for the airport system. Airport management and airline representatives want to keep fees as stable and low as practical. Relatively stable investment earnings assist the airport system and the airlines in meeting that goal.

Beginning October 2000, the Revenue Fund contained receipts from passenger facility charges collected at the Anchorage and Fairbanks International Airports. All the airport systems' revenue and expenses flow through the Revenue Fund. This includes normal operating transactions and most repair and maintenance projects. This subjects the Revenue Fund to the possibility of relatively significant cash inflows and outflows.

Investment Topic	Proposed Policy			
Investment Objective	Minimal exposure to principal loss. Maximize current income within moderate risk tolerance. Minimal inflation protection needed. High liquidity requirement.	No Change		
Risk Tolerance	Moderate	No Change		
Policy Risk/Loss Range	1 - 5%	No Change		
Time Horizon	Short to Intermediate	No Change		
Asset Allocation	Broad U.S. Equity International Equity Short Duration Govt/Credit 15% ±10% Core U.S. Fixed Income Cash Equivalents 85% ±10%	15% ±10% 85% ±10%		
Expected Return - Short-Term	5.00%	2.51% (short-term)		
Risk - Standard Deviation	0.93%	0.90%		
Probability of Loss - 1 Year 5% Probable Downside Return (5% cVaR)	0.0% 3.1%	0.3% 0.7%		

The proposed policy is effective July 1, 2023:

Approved Date

State 6	of	Alaska	Asset	ΑII	ocation
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Asset Classes	FY23	FY24	2/3 ST	ST
Broad U.S. Equity				
Global ex-U.S. Equity				
US REITS				
Short Duration Gov't/Credit	15%	15%	33%	
Core U.S. Fixed Income				
Cash Equivalents	85%	85%	67%	100%
Total	100%	100%	100%	100%
Optimization Results:				
Expected Return - Short-Term	2.51%	5.00%	5.00%	5.01%
Expected Return - Real/After Inflation		2.50%	2.50%	2.51%
Risk - Standard Deviation	0.90%	0.93%	1.10%	0.90%
Sharpe Ratio	0.14	(0.01)	(0.01)	(0.00)
Risk Statistics:				
10% Probable Downside Return - 1 Year	0.9%	3.4%	3.1%	3.4%
5% Probable Downside Return - 1 Year	0.7%	3.1%	2.7%	3.2%
5% Probable Downside Return - 3 Year		3.9%	3.7%	3.9%
5% Probable Downside Return - 5 Year		4.1%	4.0%	4.2%
Probability of Loss - 1 Year	0.3%	0.0%	0.0%	0.0%
Prob. Return < -1%	0.0%	0.0%	0.0%	0.0%
Probability of Loss - 10 Year	0.0%	0.0%	0.0%	0.0%
Asset Time Horizon Estimate	0.5	0.5	8.0	0.3
Dollars: (\$Millions)				
Assets		184.3	184.3	184.3
Expected Annual Earnings		9.2	9.2	9.2
1-Year 10% Probable Return (10% cVaR)		6.2	5.7	6.3
1-Year 5% Probable Return (5% cVaR)		5.7	5.0	5.8
3-Year 5% Probable Return (5% cVaR)		7.2	6.8	7.3
5-Year 5% Probable Return (5% cVaR)		7.6	7.3	7.7

GeFONSI II

AY3F: GeFONSI II Investment Policy

GeFONS! II is comprised of funds that do not benefit from positive investment returns, nor bear the risk of loss in the event of negative returns. The General Fund benefits, or is harmed, by these returns. GeFONSI II is invested more aggressively than is the GeFONSI. The premise for the higher risk posture is that over the course of several years the General Fund will generate more total return, despite having a higher risk of loss in any given year.

Investment Topic	Proposed Policy				nt Policy	
Investment Objective	Tolerate moderate exposure to modestly higher returns.	Tolerate moderate exposure to principal loss to target modestly higher returns.				
Risk Tolerance	Moderate-High			No	Change	
Policy Risk/Loss Range	5 - 10%			No	Change	
Time Horizon	Intermediate			No	Change	
Asset Allocation	Broad U.S. Equity International Equity Short Duration Govt/Credit Core U.S. Fixed Income Cash Equivalents	4% 2% 33% 61%	- 4%/+5% - 2%/+5% ±10%	4% 2% 33% 61%		
Expected Return - Short-Term		5.24%		3.01% (short-term)	
Risk - Standard Deviation		1.51%		1	.39%	
Probability of Loss - 1 Year 5% Probable Downside Return (5% cVaR)		0.0% 2.1%			5% 0.2%	

The proposed policy is effective July 1, 2023:

- TRICKL	Approved		-	June 20, 2023 Date					
GeFONSI II History	2024	2023	2022	2021	2020	2019	2018		
Expected ST Return	5.24%	3.01%	0.91%	0.94%	2.37%	3.38%	3.38%		
Expected Volatility	1.51%	1.39%	1.37%	1.47%	1.61%	2.63%	2.58%		
10% cVaR	3.40%	0.90%	-1.50%	-1.64%	-0.46%	-1.24%	-1.15%		

State of Alaska Asset Allocation

FY23	FY24	GF I	Gen. Fund
4%	4%		4%
2%	2%		2%
			0%
33%	33%	15%	49%
			0%
61%	61%	85%	149%
100%	100%	100%	204%
3.01%	5.24%	5.00%	10.46%
	2.74%	2.50%	7.96%
1.39%	1.51%	0.93%	2.26%
0.45	0.15	(0.01)	2.41
0.6%	2.6%	3.4%	6.5%
0.2%	2.1%	3.1%	5.8%
	3.4%	3.9%	7.8%
	3.8%	4.1%	8.4%
1.5%	0.0%	0.0%	0.0%
0.2%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%
1.2	1.2	0.5	2.1
	1,573.9	1,573.9	1,508.1
	82.4	78.8	157.7
	40.7	53.2	97.8
	33.4	48.7	87.3
	54.1	61.4	117.1
	60.5	65.3	126.3
	4% 2% 33% 61% 100% 3.01% 1.39% 0.45 0.6% 0.2% 1.5% 0.2% 0.0%	4% 4% 2% 2% 2% 33% 33% 33% 33% 33% 33% 33% 3	4% 4% 2% 2% 33% 33% 15% 61% 61% 85% 100% 100% 100% 3.01% 5.24% 5.00% 2.74% 2.50% 1.39% 1.39% 1.51% 0.93% 0.45 0.15 (0.01) 0.6% 2.6% 3.4% 3.4% 3.9% 3.8% 4.1% 1.5% 0.0% 0.0% 0.2% 0.0% 0.0% 0.0% 0.0% 0.0% 1.2 1.2 0.5 1,573.9 1,573.9 82.4 78.8 40.7 53.2 33.4 48.7 54.1 61.4

Higher Risk Tolerance Funds

Retiree LTC Insurance

AY11: Retiree LTC Insurance Investment Policy

Effective July 1, 1997, the Department of Administration established the Group Health and Life Insurance Fund and the Retiree Health Insurance Fund. The Retiree Health Insurance Fund is further broken down into three plans: 1) medical, 2) dental, vision and audio, and 3) long term care.

The Retiree Long-Term Care Plan consists of premiums paid for retiree long term care. While many retirees are paying premiums into the plan today, at present only a small percentage of the premiums are needed for claims payments. Per the analysis, Actuarial Valuation of the State of Alaska Long-Term Care Program as of June 2021, conducted by Lewis & Ellis, Inc., the actuarial assumed net investment earnings assumption is 5.25%.

Investment Topic	Proposed Policy	Current Policy			
Investment Objective	ent Objective To match the fund's assumed actuarial rate of return while minimizing risk				
Risk Tolerance	Hìgh		No Change		
Policy Risk/Loss Range	>10%		No Change		
Time Horizon	Long		No Change		
Asset Allocation	International Equity 18% U.S. REITs 4% Core U.S. Fixed Income 52% *may include up to 13% in tactical fixed Income	±5% ±5% ±3% ±5%	35% ±5% 22% ±5% 5% ±3% 37% ±5% 1% - 1%/+2%		
Expected Return - Long-Term	6.14%		5.27%		
Risk - Standard Deviation	8.87%		11.14%		
Probability of Loss - 1 Year 10% Probable Downside Return (10% cVaR)	24.4% -9.4%		31.8% -14.3%		

The proposed policy is effective July 1, 2023:

ALKE	Approved				June 20, 20 Date	023				3-Year 5% Pr 5-Year 5% Pr
LTC	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Expected LT Return	6.14%	5.27%	5.10%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%
Expected Volatility	8.87%	11.14%	10.50%	8.08%	6.02%	8.17%	8.15%	7.52%	7.28%	7.27%
10% cVaR	-9.40%	-14.30%	-13.50%	-8.93%	-5.32%	-9.09%	-9.05%	-7.95%	-7.53%	-7.51%

State of Alaska Asset Allocation

Asset Classes	FY23	FY24	5% Return	70/30
Broad U.S. Equity	35%	25%	13%	70%
Global ex-U.S. Equity	22%	18%	9%	
US REITS	5%	4%	2%	
Short Duration Gov't/Credit				
Core U.S. Fixed Income	37%	52%	75%	30%
Cash Equivalents	1%	1%	1%	
Total	100%	100%	100%	100%
Optimization Results:				
Expected Return - Long-Term	5.27%	6.14%	5.26%	6.71%
Expected Return - Real/After Inflation		3.64%	2.76%	4.21%
Risk - Standard Deviation	11.14%	8.87%	5.37%	12.71%
Sharpe Ratio	0.37	0.38	0.47	0.31
Risk Statistics:				
10% Probable Downside Return - 1 Year	-14.3%	-9.4%	-4.2%	-15.6%

10% Probable Downside Return - 1 Tear	-14.5/0	-9.4/0	-4.2/0	-13.0%
5% Probable Downside Return - 1 Year	-17.7%	-12.1%	-5.8%	-19.5%
5% Probable Downside Return - 3 Year		-4.4%	-1.1%	-8.4%
5% Probable Downside Return - 5 Year		-2.0%	0.3%	-5.0%
Probability of Loss - 1 Year	31.8%	24.4%	16.4%	29.9%
Prob. Return < -5%	17.8%	10.4%	2.8%	17.9%
Prob. Return < -10%	8.5%	3.4%	0.2%	9.4%
Prob. Return < -20%	1.2%	0.2%	0.0%	1.8%
Probability of Loss - 10 Year	6.7%	1.4%	0.1%	4.8%
Asset Time Horizon Estimate	5.9	5.9	5.9	6.0

Dollars: (\$Millions)

Assets	762.3	762.3	762.3
Expected Annual Earnings	46.8	40.1	51.1
1-Year 10% Probable Return (10% cVaR)	(71.8)	(31.7)	(119.0)
1-Year 5% Probable Return (5% cVaR)	(92.6)	(44.3)	(148.8)
3-Year 5% Probable Return (5% cVaR)	(33.7)	(8.6)	(64.3)
5-Year 5% Probable Return (5% cVaR)	(15.5)	2.3	(38.3)

Highest Risk/Endowment Profile Funds

AY08: Public School Trust Fund Investment Policy

The Public School Trust Fund is a fund dedicated to the benefit of Alaska's public schools. The central objective is to provide "increasing returns from capital appreciation and net income over long-term periods to the fund's current beneficiaries." The fund may be invested "on the basis of probable total rate of return to promote the long-term generation of capital appreciate and income."

On July 1 of each year, the commissioner shall determine the monthly average market value of the fund for the previous five fiscal years preceding the previous fiscal year. The legislature may appropriate not more than five percent of the amount determined by the commissioner. Pending signature by the governor, the appropriated amount may be expended the following fiscal year.

Investment Topic	Proposed Policy	Current Policy	
Investment Objective	High exposure of principal to loss in return for higher expected Longer-term returns. Limited current incom-requirement. Limited inflation protection needed. Moderate liquidity requirement.	No Change	
Risk Tolerance	High	No Change	
Policy Risk/Loss Range	>10%	No Change	
Time Horizon	Long	No Change	
Asset Allocation	Broad U.S. Equity 39% ±5% International Equity 25% ±5% U.S. REITS 5% ±3% Core U.S. Fixed Income 30% ±5% *may include up to 7% in tactical fixed income Cash Equivalents 1% - 1%/+2%	39% ±5% 25% ±5% 5% ±5% 30% ±5%	
Expected Return - Long-Term	6.83%	5.60%	
Risk - Standard Deviation	12.65%	12.41%	
Probability of Loss - 1 Year 10% Probable Downside Return (10% cVaR)	29.5% -15.4%	32.6% -16.2%	

The proposed policy is effective July 1, 2023:

Approved June 20, 2023

Approved Date

High Risk History	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Expected LT Return	6.83%	5.60%	5.62%	6.37%	6.58%	6.20%	6.21%	6.55%	6.73%	6.73%
Expected Volatility	12.65%	12.41%	12.50%	12.60%	12.50%	12.70%	12.70%	12.95%	13.23%	13.23%
10% cVaR	-15.40%	-16.20%	-16.40%	-15.74%	-15.36%	-16.09%	-16.08%	-16.18%	-16.49%	-16.49%

State of Alaska Asset Allocation

State of Alaska Alaset Alliocation			
Asset Classes	FY23	FY24	70/30
Broad U.S. Equity	39%	39.0%	70%
Global ex-U.S. Equity	25%	25.0%	
US REITS	5%	5.0%	
Short Duration Gov't/Credit		***************************************	
Core U.S. Fixed Income	30%	30.0%	30%
Cash Equivalents	1%	1.0%	
Total	100%	100%	100%
Optimization Results:			
Expected Return - Long-Term	5.60%	6.83%	6.71%
Expected Return - Real/After Inflation		4.33%	4.21%
Risk - Standard Deviation	12.41%	12.65%	12.71%
Sharpe Ratio	0.35	0.32	0.31
Risk Statistics:			
10% Probable Downside Return - 1 Year	-16.2%	-15.4%	-15.6%
5% Probable Downside Return - 1 Year	-20.0%	-19.3%	-19.5%
5% Probable Downside Return - 3 Year	20.070	-8.2%	-8.4%
5% Probable Downside Return - 5 Year		-4.8%	-5.0%
Probability of Loss - 1 Year	32.6%	29.5%	29.9%
Prob. Return < -1%	29.7%	26.8%	27.2%
Prob. Return < -2%	27.0%	24.3%	24.7%
Prob. Return < -3%	24.4%	21.9%	22.3%
Prob. Return < -4%	22.0%	19.6%	20.0%
Prob. Return < -5%	19.6%	17.5%	17.9%
Prob. Return < -10%	10.4%	9.2%	9.4%
Prob. Return < -20%	2.0%	1.7%	1.8%
Probability of Loss - 10 Year	7.7%	4.4%	4.8%
Asset Time Horizon Estimate	5.9	5.9	6.0
D. H. (As et H:)			
Dollars: (\$Millions)		2 004 4	2 224 4
Assets		2,091.1	2,091.1
Expected Annual Earnings		142.9	140.2
1-Year 10% Probable Return (10% cVaR)		(321.5)	(326.4)
1-Year 5% Probable Return (5% cVaR)		(402.9)	(408.2)
3-Year 5% Probable Return (5% cVaR)		(172.2)	(176.4)

Highest Risk/Endowment Profile Funds - Continued

AY3L: Alaska Higher Education Investment Policy

The Alaska Higher Education Investment Fund was established to make grants and scholarship payments to qualified postsecondary institutions for students. The Legislature may appropriate up to seven percent of the fund's prior June 30 market value balance each year.

Investment Topic	Current Policy	
Investment Objective	High exposure of principal to loss in return for high expected Longer-term returns. Limited current increquirement. Limited inflation protection needed. Moderate liquidity requirement.	come
Risk Tolerance	High	No Change
Policy Risk/Loss Range	>10%	No Change
Time Horizon	Long	No Change
Asset Allocation	Broad U.S. Equity 39% \pm 5% International Equity 25% \pm 5% U.S. REITS 5% \pm 3% Core U.S. Fixed income 30% \pm 5% *may include up to 7% in tactical fixed income Cash Equivalents 1% - 1%/-	39% ±5% 25% ±5% 5% ±5% 30% ±5% 1% - 1%/+2%
Expected Return - Long-Term	6.83%	5.60%
Risk - Standard Deviation	12.65%	12.41%
Probability of Loss - 1 Year 10% Probable Downside Return (10% cVaR)	29.5% -15.4%	32.6% -16.2%

The proposed policy is effective July 1, 2023

June 20, 2023
oved Date

AY9J: Illinois Creek Mine Reclamation Investment Policy

The Illinois Creek Gold Mine is a remote gold mine located on state land approximately 51 miles south of Galena, Alaska. Construction of the gold mine began in June, 1996. The companies responsible for the mine dissolved, the financier abandoned its ownership rights, and the State of Alaska inherited operating responsibility for the mine in July 1999. Following reclamation of the mine by American Reclamation Group, the State now assumes responsibility to monitor the site and to fix unexpected post-reclamation problems. To fund the post-closure monitoring and any potential maintenance, this trust fund was created. The Department of Revenue will manage the fund and Department of Natural Resources will withdraw funds for monitoring and reclamation obligations.

Investment Topic	estment Topic Proposed Policy			
Investment Objective	Maximize return while still being able to fund uncertain maintenance expenditures (amoun size)			
Risk Tolerance	High	No Change		
Policy Risk/Loss Range	>10%	No Change		
Time Horizon	Long	No Change		
Asset Allocation	Broad U.S. Equity 39% ± International Equity 25% ± U.S. REITS 5% ± Core U.S. Fixed Income 30% ± *may Include up to 7% in tactical fixed income Cash Equivalents 1% -	5% 25% ±5% 3% 5% ±5%		
Expected Return - Long-Term	6.83%	5.60%		
Risk - Standard Deviation	12.65%	12.41%		
Probability of Loss - 1 Year 10% Probable Downside Return (10% cVaR)	29.5% -15.4%	32.6% -16.2%		

The proposed policy is effective July 1, 2023

Approved

June 20, 2023

Date

Highest Risk/Endowment Profile Funds - Continued

AY3G: Education Endowment Investment Policy

AS 43.23.063(b)(2) directs the commissioner to invest in a manner likely to achieve at least a four percent nominal return over a five-year period.

On July 1 of each year, the "commissioner shall determine the fund balance for the previously closed fiscal year, including the earnings of the fund" and "when the average market value for the fiscal year exceeds \$1,000,000,000, transfer 4.5% of the average fiscal-year-end market value of the balance of the fund for the last five fiscal years, including the fiscal year just ended, and including any unrealized gains and losses."

Investment Topic	Current Policy		
Investment Objective	High exposure of principal to loss in return for higher expected Longer-term returns. Limited current income requirement. Limited inflation protection needed. Moderate liquidity requirement.	No Change	
Risk Tolerance	High	No Change	
Policy Risk/Loss Range	>10%	No Change	
Time Horizon	Long	No Change	
Asset Allocation	Broad U.S. Equity 39% ±5% International Equity 25% ±5% U.S. REITS 5% ±3% Core U.S. Fixed Income 30% ±5% *may include up to 7% in tactical fixed income Cash Equivalents 1% - 1%/+2%	39% ±5% 25% ±5% 5% ±5% 30% ±5%	
Expected Return - Long-Term	6.83%	5.60%	
Risk - Standard Deviation	12.65%	12.41%	
Probability of Loss - 1 Year 10% Probable Downside Return (10% cVaR)	29.5% -15.4%	32.6% -16.2%	

The proposed policy is effective July 1, 2023:

June 20, 2023

State Asset Allocation Approach for FY2025 Summary

- Evaluate the current attributes of each fund to identify the best balance of risk and return.
- Use Callan's capital market assumptions and Modern Portfolio Theory to arrive at asset allocations.
- Set short-term return expectations using current yields (YTW) for short-term and moderate risk profiles.
- Emphasize diversification in a particularly uncertain market.

2024 Table uses Callan's long-term CMA's for all risk profiles for comparability

2024 Table uses Callan's long-term CIMA's	or all risk pro	l	arability			
Asset Classes	Low	Moderate	Moderate +	All SOA	Higher Risk	Highest Risk
Broad U.S. Equity		4.0%		8.8%	25.0%	39.0%
Global ex-U.S. Equity			2.0%	5.7%	18.0%	25.0%
U.S. REITs				1.1%	4.0%	5.0%
Core U.S. Fixed Income				9.4%	52.0%	30.0%
Short Duration Gov't/Credit		15.0%	33.0%	9.6%		
Cash Equivalents	100%	85.0%	61.0%	65.4%	1.0%	1.0%
Total	100%	100%	100%	100%	100%	100%
Optimization Results:						
Expected Return	3.00%	3.18%	3.77%	4.26%	6.74%	7.25%
Expected Return - Real/After Inflation	0.50%	0.68%	1.27%	1.76%	4.24%	4.75%
Risk - Standard Deviation	0.90%	0.93%	1.52%	2.94%	8.86%	12.48%
Sharpe Ratio	(0.00)	0.20	0.51	0.43	0.42	0.34
Risk Statistics:						
10% Probable Downside Return - 1 Year	1.4%	1.6%	1.1%	-0.9%	-8.8%	-14.6%
5% Probable Downside Return - 1 Year	1.1%	1.3%	0.6%	-1.8%	-11.5%	-18.5%
5% Probable Downside Return - 3 Year	1.9%	2.1%	2.0%	0.8%	-3.8%	-7.6%
5% Probable Downside Return - 5 Year	2.2%	2.3%	2.4%	1.5%	-1.4%	-4.3%
Probability of Loss - 1 Year	0.0%	0.0%	0.6%	7.4%	22.3%	28.1%
Prob. Return < -1%	0.0%	0.0%	0.1%	3.7%	19.1%	25.4%
Prob. Return < -5%	0.0%	0.0%	0.0%	0.1%	9.3%	16.3%
Prob. Return < -10%	0.0%	0.0%	0.0%	0.0%	2.9%	8.3%
Prob. Return < -20%	0.0%	0.0%	0.0%	0.0%	0.1%	1.4%
Probability of Loss - 10 Year	0.0%	0.0%	0.0%	0.0%	0.8%	3.3%
Asset Time Horizon Estimate	0.3	0.5	1.2	1.9	5.9	5.9
Dollars: (\$Millions)						
Assets	2,917.3	1,765.5	1,604.9	8,277.7	814.3	1,175.7
Expected Annual Earnings	87.4	56.1	60.5	352.2	54.9	85.3
1-Year 10% Probable Return (10% cVaR)	41.3	27.5	17.8	(74.5)	(71.7)	(172.2)
1-Year 5% Probable Return (5% cVaR)	33.3	22.4	10.3	(149.3)	(93.9)	(217.3)
3-Year 5% Probable Return (5% cVaR)	56.2	36.7	31.5	62.7	(31.0)	(89.4)
5-Year 5% Probable Return (5% cVaR)	63.2	41.1	38.1	127.9	(11.7)	(50.0)

Comparison of FY2024 to Proforma FY2025

Proforma FY25 table uses Callan's long-term CMA's for all risk profiles for comparability

FIGIOITIIA F123 table uses callali s long	CIVIA 3 I	or an risk proi	nes for compa	lability		
Asset Classes	Low	Moderate	Moderate +	All SOA	Higher Risk	Highest Risk
Broad U.S. Equity			4.0%	8.8%	25.0%	39.0%
Global ex-U.S. Equity			2.0%	5.7%	18.0%	25.0%
U.S. REITs				1.1%	4.0%	5.0%
Core U.S. Fixed Income				9.4%	52.0%	30.0%
Short Duration Gov't/Credit		15.0%	33.0%	9.6%		
Cash Equivalents	100%	85.0%	61.0%	65.4%	1.0%	1.0%
Total	100%	100%	100%	100%	100%	100%
Optimization Results:						
Expected Return	3.00%	3.18%	3.77%	4.26%	6.74%	7.25%
Expected Return - Real/After Inflation	0.50%	0.68%	1.27%	1.76%	4.24%	4.75%
Risk - Standard Deviation	0.90%	0.93%	1.52%	2.94%	8.86%	12.48%
Sharpe Ratio	(0.00)	0.20	0.51	0.43	0.42	0.34
Risk Statistics:						
10% Probable Downside Return - 1 Year	1.4%	1.6%	1.1%	-0.9%	-8.8%	-14.6%
5% Probable Downside Return - 1 Year	1.1%	1.3%	0.6%	-1.8%	-11.5%	-18.5%
5% Probable Downside Return - 3 Year	1.9%	2.1%	2.0%	0.8%	-3.8%	-7.6%
5% Probable Downside Return - 5 Year	2.2%	2.3%	2.4%	1.5%	-1.4%	-4.3%
Probability of Loss - 1 Year	0.0%	0.0%	0.6%	7.4%	22.3%	28.1%
Prob. Return < -1%	0.0%	0.0%	0.1%	3.7%	19.1%	25.4%
Prob. Return < -5%	0.0%	0.0%	0.0%	0.1%	9.3%	16.3%
Prob. Return < -10%	0.0%	0.0%	0.0%	0.0%	2.9%	8.3%
Prob. Return < -20%	0.0%	0.0%	0.0%	0.0%	0.1%	1.4%
Probability of Loss - 10 Year	0.0%	0.0%	0.0%	0.0%	0.8%	3.3%
Asset Time Horizon Estimate	0.3	0.5	1.2	1.9	5.9	5.9
Dollars: (\$Millions)						
Assets	2,917.3	1,765.5	1,604.9	8,277.7	814.3	1,175.7
Expected Annual Earnings	87.4	56.1	60.5	352.2	54.9	85.3
1-Year 10% Probable Return (10% cVaR)	41.3	27.5	17.8	(74.5)	(71.7)	(172.2)
1-Year 5% Probable Return (5% cVaR)	33.3	22.4	10.3	(149.3)	(93.9)	(217.3)
3-Year 5% Probable Return (5% cVaR)	56.2	36.7	31.5	62.7	(31.0)	(89.4)
5-Year 5% Probable Return (5% cVaR)	63.2	41.1	38.1	127.9	(11.7)	(50.0)

FY24 table uses Callan's long-term CMA's for all risk profiles for comparability

Asset Classes	Low	Moderate	Moderate +	All SOA	High Risk	Endowment
Broad U.S. Equity			4.0%	12.0%	25.0%	39.0%
Global ex-U.S. Equity			2.0%	7.6%	18.0%	25.0%
U.S. REITs				1.5%	4.0%	5.0%
Core U.S. Fixed Income				9.1%	52.0%	30.0%
Short Duration Gov't/Credit		15.0%	33.0%	9.5%		
Cash Equivalents	100%	85.0%	61.0%	60.3%	1.0%	1.0%
Total	100%	100%	100%	100%	100%	100%
Expected Return	2.75%	2.90%	3.44%	4.24%	6.14%	6.83%
Expected Return - Real/After Inflation	0.25%	0.40%	0.94%	1.74%	3.64%	4.33%
Risk - Standard Deviation	0.90%	0.93%	1.51%	3.91%	8.87%	12.65%
Sharpe Ratio	(0.00)	0.16	0.46	0.38	0.38	0.32
Risk Statistics:						
10% Probable Downside Return - 1 Year	1.2%	1.3%	0.8%	-2.6%	-9.4%	-15.4%
5% Probable Downside Return - 1 Year	0.9%	1.0%	0.3%	-3.8%	-12.1%	-19.3%
5% Probable Downside Return - 3 Year	1.7%	1.8%	1.6%	-0.4%	-4.4%	-8.2%
5% Probable Downside Return - 5 Year	1.9%	2.0%	2.1%	0.6%	-2.0%	-4.8%
Probability of Loss - 1 Year	0.1%	0.1%	1.1%	13.9%	24.4%	29.5%
Prob. Return < -1%	0.0%	0.0%	0.2%	9.0%	21.0%	26.8%
Prob. Return < -5%	0.0%	0.0%	0.0%	0.9%	10.4%	17.5%
Prob. Return < -20%	0.0%	0.0%	0.0%	0.0%	0.2%	1.7%
Probability of Loss - 10 Year	0.0%	0.0%	0.0%	0.0%	1.4%	4.4%
Asset Time Horizon Estimate	0.3	0.5	1.2	2.2	5.9	5.9
Dollars: (\$Millions)						
Assets	2,774.2	2,326.5	1,573.9	9,528.1	762.3	2,091.1
Expected Annual Earnings	76.2	67.4	54.2	404.1	52.1	142.9
1-Year 10% Probable Return (10% cVaR)	32.4	29.5	12.5	(249.8)	(117.2)	(321.5)
1-Year 5% Probable Return (5% cVaR)	24.7	22.9	5.2	(364.4)	(146.9)	(402.9)
3-Year 5% Probable Return (5% cVaR)	46.5	41.7	25.9	(39.6)	(62.8)	(172.2)

State of Alaska Department of Revenue

2024 State Investment Review Meeting Schedule

February 14, 2024 @ 10:30 AM (Videoconference)

- 1. December 31, 2023, Performance
- 2. 2024 Capital Market Assumptions and asset class discussion
- 3. Fixed Income Investments

May 08, 2024 @ 10:00 AM (Videoconference)

- 1. March 31, 2024, Performance
- 2. FY2025 Asset Allocation Discussion

August 14, 2024 @ 10:00 AM (Videoconference)

- 1. June 30, 2024, Performance
- 2. Equity Investments
- 3. FY2024 Asset Allocation Discussion

November 06, 2024 @ 10:00 AM (Videoconference)

- 1. September 30, 2024, Performance
- 2. Middle Office Update

Potential Discussion Topics:

- Endowment-Oriented Accounts, Asset Allocation, and Spending Policy
- Positioning for inflation
- What are reasonable investment objectives?

Updated: 08/01/2023