State of Alaska Department of Revenue

STATE INVESTMENT REVIEW MEETING

August 14, 2023 – 10:00 a.m.

Via Computer or Mobile App	Call In (Audio Only):
Meeting ID: 243 422 017 80	Phone: 1-907-202-7104
Passcode: 2GBUf5	Code: 457 026 03#

I. Introduction

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

II. State Investments

Zachary Hanna, Chief Investment Officer

- A. June 30, 2023 Performance Commissioner's Report
- **B.** Non-Routine Investments
- C. Asset Allocation Process & 2023 Capital Market Assumptions

III. IAC Comments

Investment Advisory Council Members

- IV. Future Agenda Items & Calendar Review Zachary Hanna, Chief Investment Officer Alysia Jones, ARMB Liaison
- V. Other Matters for Discussion
- VI. Adjournment





Market Update, June 2023 Performance, and Final Fiscal Year 2024 Asset Allocations



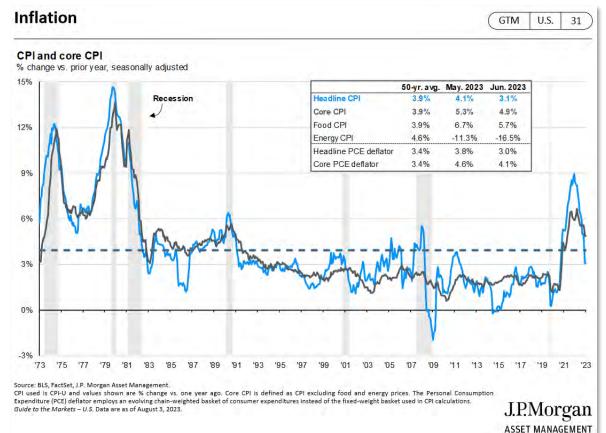
August 2023

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

Economic and Market Update

Inflation and Economic Growth

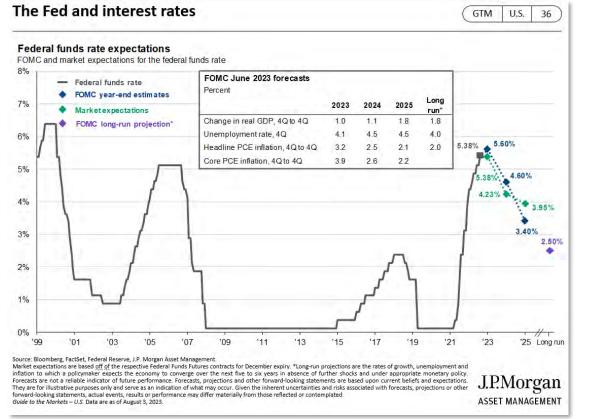
- Early in 2022, the Russia/Ukraine crisis dominated headlines and capital markets. The direct impact to equity markets was initially muted, but the effect on energy inflation and European growth was pronounced.
- Since then, inflation has dominated markets with CPI peaking at 9.1% in June 2022 before declining to 3.2% in July 2023.
- Inflation and rising interest rates have created a challenging dynamic for economic growth. The probability of a recession remains elevated and the debate between a hard or a soft landing continues.

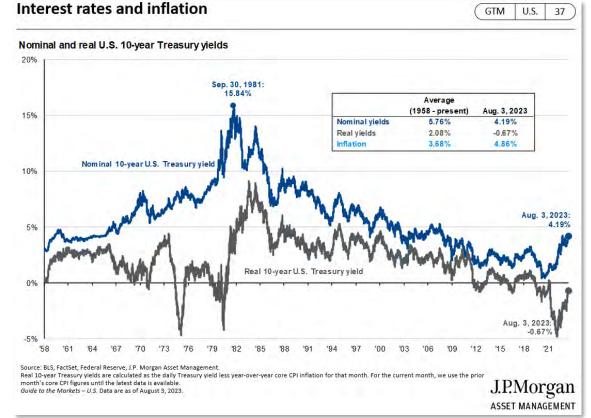


Consumer Price Index, m/m % change, seasonally adjust		one	nts																						
	-	1.1		C	0.4	2021	0	law	C.h				i.e.	1.4			22	Maria	Des	1 in	r. h			2023	las
Headline CPI, y/y	Weight	Jul 5.2%	Aug	Sep	Oct	Nov 6.9%	Dec 7 2%	Jan 7.6%	Feb	Mar 8.5%	Apr 8 2%	May 8 5%	Jun	Jul 8.4%	Aug	Sep	0ct	Nov	Dec 6.4%	Jan 6 3%	Feb	Mar 5.0%	Apr 5.0%	May	Jui 3.19
Core CPI, v/v	79.6	4.2%	3.9%	4.0%	0.270	5.0%	5.5%	C 406	6.4%	6.5%	6 1%	6.0%	5.9%	5.9%	6.3%	6.6%	5.3%	6.0%	5 704	5.5%	5.5%	5.6%	5.5%	5.3%	4.99
	15.0				-			0.1%									-		0.770						
Core svcs.ex-housing PCE, y/y*		4.4%	4.4%	4.3%	4.4%	5.0%	5.0%	4.9%	4.8%	4.7%	4.5%	4.5%	4.6%	4.0%	4.2%	4.5%	4.7%	4.4%	4.3%	4.7%	4.8%	4.6%	4.6%	4.5%	4.25
Headline CPI, m/m	100.0	0.4%	0.4%	0.4%	0.9%	0.8%	0.8%	0.6%	0.7%	1.0%	0.4%	0.9%	1.2%	0.0%	0.2%	0.4%	0.5%	0.2%	0.1%	0.5%	0.4%	0.1%	0.4%	0.1%	0.29
Core CPI, m/m	79.6	0.3%	0.2%	0.3%	0.7%	0.6%	0.7%	0.6%	0.5%	0.3%	0.5%	0.6%	D.6%	0.3%	0.6%	0.6%	0.3%	0.3%	0.4%	0.4%	0.5%	0.4%	0.4%	0.4%	0.29
Core svcs. ex-housing PCE, m/m*	-	0.5%	0.3%	0.2%	0.2%	0.6%	0.5%	0.2%	0.3%	0.5%	0.3%	0.3%	0.6%	-0.1%	0.5%	0.5%	0.4%	0.3%	0.4%	0.6%	0.3%	0.3%	0.4%	0.2%	0.2
Energy	7.0	1.7%	2.8%	1.5%	3.6%	2.6%	2.4%	0.8%	2.7%	8.2%	-1.0%	3.4%	6.9%	-4.7%	-3.9%	-1.7%	1.7%	-1.4%	-3.1%	2.0%	-0.6%	-3.5%	0.6%	-3.6%	0.6
Gasoline	3.5	2.5%	4.5%	1.5%	4.1%	4.2%	3.8%	-0.3%	4.7%	13.2%	-3.1%	3.2%	10.3%	-8.1%	-8.4%	-4.2%	3.4%	-2.3%	-7.0%	2.4%	1.0%	-4.6%	3.0%	-5.6%	1.0
Electricity	2.5	0.2%	0.7%	1.0%	1.6%	0.7%	0.9%	2.7%	-0.3%	1.7%	0.9%	1.3%	1.5%	1.5%	1.2%	0.8%	0.5%	0.5%	1.3%	0.5%	0.5%	-0.7%	-0.7%	-1.0%	0.99
Utility Gas	0.7	2.0%	1.6%	2.2%	6.7%	0.5%	0.1%	0.5%	2.0%	0.6%	2.5%	7.2%	7.5%	-3.8%	3.5%	2.2%	-3.7%	-3.4%	3.5%	6.7%	-8.0%	-7.1%	-4.9%	-2.6%	-1.7
Food	13.4	0.6%	0.4%	0.9%	0.9%	0.8%	0.6%	0.8%	1.0%	0.9%	0.8%	1.1%	1.0%	1.1%	0.8%	0.8%	0.7%	0.6%	0.4%	0.5%	0,4%	0.0%	0.0%	0.2%	0.1
Food at home	8.6	0.5%	0.4%	1.2%	1.0%	1.0%	0.6%	0.9%	1.398	1.3%	0.9%	1.3%	1.0%	1.3%	0.8%	0.7%	0.5%	0.6%	0.5%	0.4%	0.3%	-0.3%	-0.2%	0.1%	0.04
Food away from home	4.8	0.8%	0.4%	0.5%	0.8%	0.6%	0.6%	0.7%	0.4%	0.3%	0.6%	0.7%	0.9%	0.7%	0.9%	0.9%	0.9%	0.5%	0.4%	0.6%	0.6%	0.6%	0.4%	0.5%	0.49
Core goods	21.3	0.3%	0.3%	0.3%	1.3%	1.1%	1.4%	0.9%	0.3%	-0.4%	0.1%	0.6%	0.6%	0.1%	0.4%	0.0%	-0.1%	-0.2%	-0.1%	0.1%	0.0%	0.2%	0.6%	0.6%	-0.1
Apparel	2.6	0.0%	0.3%	-0.5%	1.0%	0.7%	0.9%	0.7%	0.6%	0.3%	-0.1%	0.4%	0.7%	-0.1%	0.3%	0.0%	-0.2%	0.1%	0.2%	0.8%	0.8%	0.3%	0.3%	0.3%	0.39
New vehicles	4.3	1.4%	1.2%	1.3%	1.5%	1.6%	1.8%	0.3%	0.1%	0.1%	0.4%	0.6%	0.5%	0.5%	0.8%	0.7%	0.6%	0.5%	0.6%	0.2%	0.2%	0.4%	-0.2%	-0.1%	0.09
Used cars	2.7	-0.4%	-1.3%	-0.5%	3.1%	3.2%	3.9%	1.4%	-0.6%	-3.6%	-0.7%	1.9%	0.5%	-0.8%	-0.2%	-1.1%	-1.7%	-2.0%	-2.0%	-1.9%	-2.8%	-0.9%	4.4%	4.4%	-0.5
Medical care commod	1.5	0.2%	-0.2%	0.3%	0.6%	0.1%	0.0%	0.9%	0.3%	0.2%	0.1%	0.3%	0.4%	0.6%	0.2%	-0.1%	0.0%	0.2%	0.1%	1,1%	0.1%	0.6%	0.5%	0.6%	0.29
Core services	58.2	0.3%	0.1%	0.2%	0.4%	0.4%	0.4%	0.4%	0.5%	0.6%	0.6%	0.6%	0.6%	0.4%	0.6%	0.8%	0.5%	0.5%	0.6%	0.5%	0.6%	0.4%	0.4%	0.4%	0.35
Shelter	34.6	0.5%	0.2%	0.4%	0.4%	0.5%	0.4%	0.3%	0.6%	0.5%	0.5%	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%	0.6%	0.8%	0.7%	0.8%	0.6%	0.4%	0.6%	0.4
Rent of primary res.	7.5	0.2%	0.3%	0.4%	0.4%	0.4%	0.4%	0.5%	0.6%	0.4%	0.6%	0.6%	0.8%	0.7%	0.7%	0.8%	0.7%	0,8%	0.8%	0.7%	0.8%	0.5%	0.6%	0.5%	0.5
OER	25.4	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.6%	0.7%	0.6%	0.7%	0.8%	0.6%	0.7%	0.8%	0.7%	0.7%	0.5%	0.5%	0.5%	0.4
Medical care services	6.4	0.1%	0.2%	0.0%	0.6%	0.5%	0.5%	0.5%	0.1%	0.6%	0.5%	0.4%	0.7%	0.4%	0.7%	0.8%	-0.4%	-0.5%	0.3%	-0.7%	-0.7%	-0.5%	-0.1%	-0.1%	0.09
Transportation services	5.9	-0.8%	-0.7%	-0.9%	0.0%	1.2%	0.5%	0.7%	1.1%	2.1%	2.2%	1.6%	1.8%	-0.4%	1.0%	1.9%	0.6%	0.3%	0.6%	0.9%	1.1%	1.4%	-0.2%	0.8%	0.14

Interest Rates and the Federal Reserve

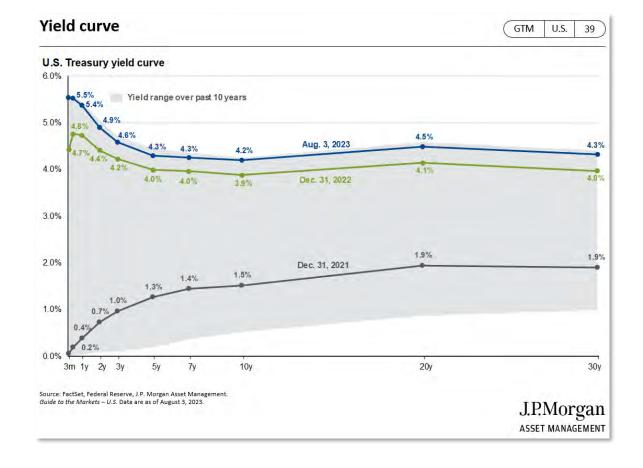
- To combat inflation, the Federal Reserve has raised interest rates from near zero at the start of 2022 to 5.50% at the end of July of 2023.
- This rapid reversal of a 40-year decline in interest rates has had a pronounced effect on capital markets.
- Repercussions such as the failure of some regional banks in early 2023 have also added to market volatility.

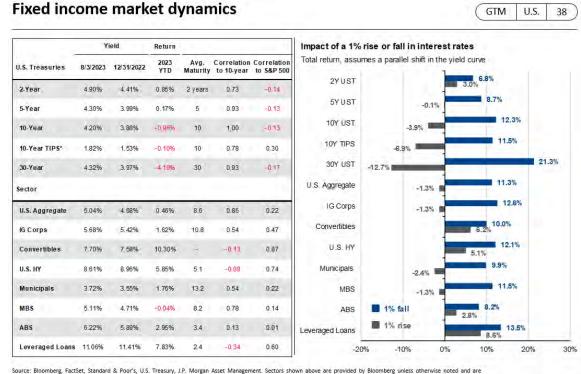




Fixed Income

- Bond yields increased dramatically in reaction to the Fed's increase in target rates.
- Most bond sectors performed poorly in 2022. Bond returns improved in 2023 with higher yields and more tempered rate increases.
- Fixed income investments remain exposed to further rate increases but are cushioned substantially by higher starting yields.

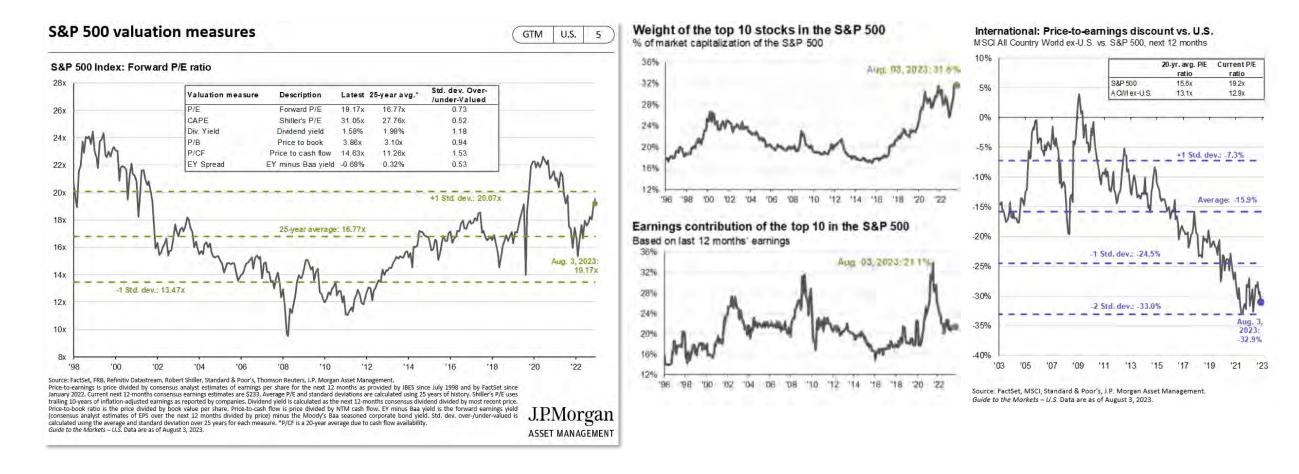




Source: Bloomberg, FactSet, Standard & Poors, U.S. Tressury, J.P. Morgan Asset Management. Sectors shown above are provided by Bloomberg unless otherwise noted and are represented by U.S. Aggregates; MS: U.S. Aggregates Securitied – MSS; ASS: J.P. Morgan Asset Management. Sectors Shown above are provided by Bloomberg unless otherwise noted and are represented by U.S. Aggregates Securitied – MSS; ASS: J.P. Morgan Asset Management. Sectors Shown above are provided by Bloomberg Unless otherwise noted and are represented by U.S. Aggregates Securitied – MSS; ASS: J.P. Morgan Asset Management. Sectors Shown above are provided by Bloomberg Unless otherwise noted and are more recent month-end and its based on U.S. portion of Bloomberg Global Convertibles. U.S. Convertibles Convertibles (Sector yields) as of reflect yield-to-worst. Convertibles will be assed on U.S. portion of Bloomberg Global Convertibles. Correlations are based on 15-years of monthly returns for all sectors unless stated on tertweise therwise. Paster performance is not indicative of future results. "1D-Year TIPS yields and calculations are based on 15-years of monthly returns for all sectors unless stated on tertweise therwise. Paster performance is not indicative of future results. "1D-Year TIPS yields and calculations are based on no-the-run real yields. 1D-Year TIPS correlations are based on monthly returns for all sectors unless stated on Monthly returns for all sectors unless stated on Monthly returns for all sectors unless stated on Monthly returns ince 2011 due to data availability. Guide to the Markers – U.S. Data are as of August 3, 2023.

Equity Markets

- U.S. equities are now back to more elevated valuations driven largely by a concentrated group of technology-oriented companies.
- International equities have outperformed recently but valuations remain much lower than in the U.S.
- Corporate profits are exposed to slowing growth and inflation and may not price in a potential recession.



Capital Market Performance Update

- Investment performance was challenging for both stocks and bonds in 2022, but most of the poor performance was concentrated in the first half of the year.
- Equities strongly rebounded in FY2023 with U.S. Equities up 19% and International Equity up 13%. Most of the strong performance occurred in the second half of the fiscal year.
- Cash equivalents benefited from high yields and outperformed longer duration fixed income.

2018	2019	2020	2021	2022	2022-H2	2023-H1	FY2023	2023-Q2
Cash	Broad U.S.	Broad U.S.	REITs	Cash	High Yield	Broad U.S.	Broad U.S.	Broad U.S.
Equivalents	Equity	Equity		Equivalents		Equity	Equity	Equity
1.9%	31.0%	20.9%	41.3%	1.5%	3.5%	16.2%	19.0%	8.4%
Core U.S.	REITs	TIPS	Broad U.S.	High Yield	International	International	International	International
Fixed Income			Equity		Equity	Equity	Equity	Equity
0.0%	28.7%	11.0%	25.7%	(11.2%)	3.0%	9.5%	12.7%	2.4%
TIPS	International	International	International	TIPS	Broad U.S.	High Yield	High Yield	High Yield
	Equity	Equity	Equity		Equity			
(1.3%)	21.5%	10.7%	7.8%	(11.8%)	2.4%	5.4%	9.1%	1.7%
High Yield	High Yield	Core U.S.	TIPS	Core U.S.	Cash	REITs	Cash	REITs
		Fixed Income		Fixed Income	Equivalents		Equivalents	
(2.1%)	14.3%	7.5%	6.0%	(13.0%)	1.3%	3.0%	3.6%	1.2%
REITs	Core U.S.	High Yield	High Yield	International	Core U.S.	Cash	Core U.S.	Cash
	Fixed Income			Equity	Fixed Income	Equivalents	Fixed Income	Equivalents
(4.0%)	8.7%	7.1%	5.3%	(16.0%)	(3.0%)	2.3%	(0.9%)	1.2%
Broad U.S.	TIPS	Cash	Cash	Broad U.S.	TIPS	Core U.S.	TIPS	Core U.S.
Equity		Equivalents	Equivalents	Equity		Fixed Income		Fixed Income
(5.2%)	8.4%	0.7%	0.0%	(19.2%)	(3.2%)	2.1%	(1.4%)	(0.8%)
International	Cash	REITs	Core U.S.	REITs	REITs	TIPS	REITs	TIPS
Equity	Equivalents		Fixed Income					
(14.2%)	2.3%	(5.1%)	(1.5%)	(24.9%)	(7.1%)	1.9%	(4.4%)	(1.4%)

Commissioner's Report

June 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)	\$791,893	5					\$791,893
2013B Tax Exempt Education (AY3Z)	\$199,427	,					\$199,427
2016A - 2012 Transporation Bond Act (AY3Y)	\$1,616,107	•					\$1,616,107
2016B - 2012 Transportation Bond Act (AY3Q)	\$56,470,365	;					\$56,470,365
Alaska Higher Education Investment (AY3L)	\$6,011,825	\$151,807,356	\$108,215,464		\$94,966,375	\$19,394,117	\$380,395,138
Alaska Mental Health Trust Reserve (AY2L)	\$964,964	\$21,535,060	\$16,374,661		\$15,088,289		\$53,962,974
ASLC Investment Fund (AY3S)	\$3,138,906	\$24,028,530	\$61,235,174		\$14,922,232	\$3,265,113	\$106,589,955
Constitutional Budget Reserve Fund (AY19)	\$2,619,931,069)					\$2,619,931,069
Education Endowment Fund (AY3G)	\$16,171	\$409,404	\$291,840		\$256,070	\$52,343	\$1,025,828
EVOS Habitat Investment (AY2H)	\$25,808,103	5		\$46,518,568			\$72,326,671
EVOS Research Investment (AY02)	\$15,832,936	;		\$28,538,483			\$44,371,419
GeFONSI I (AY01)	\$1,885,660,473	5		\$256,521,560			\$2,142,182,033
GeFONSI II (AY3F)	\$938,384,369	\$67,463,325		\$535,178,809	\$32,918,711		\$1,573,945,214
Illinois Creek Mine Reclamation (AY9J)	\$21,794	\$548,731	\$391,207		\$343,244	\$70,097	\$1,375,074
International Airports 2006 Non-AMT (AY9X)	\$970,208	;					\$970,208
International Airports Repair & Replacement Fund (AY05)	\$500,226	;					\$500,226
International Airports Revenue Fund (AY04)	\$157,018,004			\$27,298,814			\$184,316,817
International Airports Series 2002 Reserve Account (AY2E)	\$15,396,812	2					\$15,396,812
International Airports Series 2003 Reserve (AY2U)	\$10,946,409)					\$10,946,409
Investment Loss Trust Fund (AY28)	\$3,450,146	;					\$3,450,146
PCE Endowment Fund (AY13)	\$946,862,400)					\$946,862,400
Permanent Fund Dividend Holding Account (AY2G)	\$44,358,737	,					\$44,358,737
Public School Trust Fund (AY08)	\$12,033,685	\$303,865,924	\$216,609,924		\$190,089,941	\$38,820,155	\$761,419,628
RHIF LTC Insurance (AY11)	\$22,236,231	\$195,293,209	\$376,435,373		\$137,221,233	\$31,137,134	\$762,323,180
RHIF Major Medical (AY03)	\$19,601,509)					\$19,601,509

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)	1.58%	39.91%	28.45%		24.97%	5.10%
Alaska Mental Health Trust Reserve (AY2L)	1.79%	39.91%	30.34%		27.96%	
ASLC Investment Fund (AY3S)	2.94%	22.54%	57.45%		14.00%	3.06%
Constitutional Budget Reserve Fund (AY19)	100.00%					
Education Endowment Fund (AY3G)	1.58%	39.91%	28.45%		24.96%	5.10%
EVOS Habitat Investment (AY2H)	35.68%			64.32%		
EVOS Research Investment (AY02)	35.68%			64.32%		
GeFONSI I (AY01)	88.03%			11.97%		
GeFONSI II (AY3F)	59.62%	4.29%		34.00%	2.09%	
Illinois Creek Mine Reclamation (AY9J)	1.58%	39.91%	28.45%		24.96%	5.10%
International Airports 2006 Non-AMT (AY9X)	100.00%					
International Airports Repair & Replacement Fund (AY05)	100.00%					
International Airports Revenue Fund (AY04)	85.19%			14.81%		
International Airports Series 2002 Reserve Account (AY2E)	100.00%					
International Airports Series 2003 Reserve (AY2U)	100.00%					
Investment Loss Trust Fund (AY28)	100.00%					
PCE Endowment Fund (AY13)	100.00%					
Permanent Fund Dividend Holding Account (AY2G)	100.00%					
Public School Trust Fund (AY08)	1.58%	39.91%	28.45%		24.97%	5.10%
RHIF LTC Insurance (AY11)	2.92%	25.62%	49.38%		18.00%	4.08%
RHIF Major Medical (AY03)	100.00%					

DOR Commissioner's Report: Market Values for Month Ending 6/30/2023

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%	43.00%	30.00%		26.00%	
ASLC Investment Fund (AY3S)	10.00%	21.00%	54.00%		12.00%	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 2006 Non-AMT (AY9X)	100.00%					
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%					
PCE Endowment Fund (AY13)	1.00%	39.00%	30.00%		25.00%	5.00%
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%	35.00%	37.00%		22.00%	5.00%
RHIF Major Medical (AY03)	100.00%					

Relative Allocation

Plan Name	Cash Equivalents	Domestic Equi	ty	Fixed Income	9	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)	0.58% 🔶	0.91%	8	-1.55%	8			-0.03%	•	0.10%	
Alaska Mental Health Trust Reserve (AY2L)	0.79% 🔇	-3.09%	8	0.34%	▲ □		_	1.96%	8		
ASLC Investment Fund (AY3S)	-7.06% 🔇	1.54%	8	3.45%	8			2.00%	8	0.06%	
Constitutional Budget Reserve Fund (AY19)	0.00% 🔵		_		_		_				4
Education Endowment Fund (AY3G)	0.58% 🔶	0.91%	8	-1.55%	8		_	-0.04%	•	0.10%	
EVOS Habitat Investment (AY2H)	0.68% 🔶		_		_	-0.68%	•				4
EVOS Research Investment (AY02)	0.68% 🔶		_		_	-0.68%	•				4
GeFONSI I (AY01)	3.03% 🔇		_		_	-3.03%	8				
GeFONSI II (AY3F)	-1.38% 🔇	0.29%	▲ ¯		_	1.00%	8	0.09%	•		4
Illinois Creek Mine Reclamation (AY9J)	0.58% 🔶	0.91%	8	-1.55%	8		_	-0.04%	•	0.10%	
International Airports 2006 Non-AMT (AY9X)	0.00% 🌑		_		_		_				
International Airports Repair & Replacement Fund (AY05)	0.00% 🔵		_		_		_				4
International Airports Revenue Fund (AY04)	0.19% 🔵		_		_	-0.19%	•				
International Airports Series 2002 Reserve Account (AY2E)	0.00% 🌑		_		_		_				4
International Airports Series 2003 Reserve (AY2U)	0.00% 🔵		_		_		_				4
Investment Loss Trust Fund (AY28)	0.00% 🌑		_		_		_				
PCE Endowment Fund (AY13) *	99.00% 😢	-39.00%	8	-30.00%	8		_	-25.00%	8	-5.00%	8
Permanent Fund Dividend Holding Account (AY2G)	0.00% 🔶		_		_		_				4
Public School Trust Fund (AY08)	0.58% 🔇	0.91%	8	-1.55%	8			-0.03%	8	0.10%	8
RHIF LTC Insurance (AY11)	1.92% 🌑	-9.38%	8	12.38%	8		_	-4.00%	8	-0.92%	8
RHIF Major Medical (AY03)	0.00%		_		_		_				1

DOR Commissioner's Report: Net Pool Performance for Month Ending 6/30/2023

Pool Performance (Net of Fee)	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
Cash Equivalents	0.49%	1.30%	4.01%	4.01%	1.42%	1.71%	1.56%	1.20%
Fixed Income - Short Term	-0.35%	-0.22%						
Fixed Income - Core US	-0.11%	-0.59%	-0.06%	-0.06%	-3.59%	1.14%	0.73%	1.74%
Fixed Income - Core Plus	0.56%	0.00%	3.32%	3.32%				
Equity - Broad US*	6.82%	8.39%	19.01%	19.01%	13.95%	11.39%	12.80%	
Equity - REITS	4.79%	0.67%	-4.82%	-4.82%				
Equity - Global ex-US*	4.46%	2.47%	12.70%	12.70%	7.33%	3.58%	6.16%	
Benchmark Performance	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
Cash Equivalents	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
Fixed Income - Short Term	-0.50%	-0.58%						
Fixed Income - Core US	-0.36%	-0.84%	-0.94%	-0.94%	-3.96%	0.77%	0.44%	1.52%
Fixed Income - Core Plus	-0.36%	-0.84%	-0.94%	-0.94%				
Equity - Broad US*	6.83%	8.39%	18.95%	18.95%	13.89%	11.39%	12.86%	
Equity - REITS	5.36%	1.20%	-4.39%	-4.39%				
Equity - Global ex-US*	4.49%	2.44%	12.72%	12.72%	7.22%	3.52%	6.34%	
Relative Performance (Net of Fee)	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
Cash Equivalents	0.03%	0.13%	0.41%	0.41%	0.15%	0.15%	0.19%	0.22%
Fixed Income - Short Term	0.16%	0.36%						
Fixed Income - Core US	0.25%	0.26%	0.87%	0.87%	0.38%	0.38%	0.28%	0.22%
Fixed Income - Core Plus	0.92%	0.84%	4.26%	4.26%				
Equity - Broad US*	-0.01%	0.00%	0.05%	0.05%	0.06%	0.00%	-0.06% 🔶	
Equity - REITS	-0.56% 🔶	-0.53%	-0.44%	-0.44%			▼	
Equity - Global ex-US*	-0.03%	0.04%	-0.02%	-0.02%	0.11%	0.06%	-0.18% 🔶	

DOR Commissioner's Report: Net Plan Performance for Month Ending 6/30/2023

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%	1.31%	4.01%	4.01%	1.42%	1.71%	1.56%	1.20%
2013B Tax Exempt Education (AY3Z)	0.49%	1.31%	4.01%	4.01%	1.42%	1.71%	1.56%	1.20%
2016A - 2012 Transporation Bond Act (AY3Y)	0.49%	1.31%	4.01%	4.01%	1.42%	1.69%	1.55%	1.20%
2016B - 2012 Transportation Bond Act (AY3Q)	0.49%	1.31%	4.01%	4.01%	1.42%	1.71%	1.56%	
Alaska Higher Education Investment (AY3L)	4.05%	3.78%	10.37%	10.37%	6.71%	6.43%	7.41%	7.16%
Alaska Mental Health Trust Reserve (AY2L)	4.12%	4.13%	11.61%	11.61%	5.52%	5.87%	6.86%	6.92%
ASLC Investment Fund (AY3S)	2.24%	2.02%	6.41%	6.41%				
Constitutional Budget Reserve Fund (AY19)	0.49%	1.31%	4.01%	4.01%	1.42%	2.34%	2.14%	1.90%
Education Endowment Fund (AY3G)	4.05%	3.78%	10.36%	10.36%	6.71%			
EVOS Habitat Investment (AY2H)	-0.05%	0.32%	6.52%	6.52%	3.91%	5.03%	6.55%	6.98%
EVOS Research Investment (AY02)	-0.05%	0.32%	8.69%	8.69%	4.41%	5.26%	6.71%	7.07%
GeFONSI I (AY01)	0.37%	1.08%	3.56%	3.56%	0.70%	1.46%	1.27%	1.07%
GeFONSI II (AY3F)	0.55%	1.11%	3.61%	3.61%	0.79%	2.05%		
Illinois Creek Mine Reclamation (AY9J)	4.05%	3.78%	10.36%	10.36%	6.71%	6.41%	7.38%	5.71%
International Airports 2006 Non-AMT (AY9X)	0.49%	1.31%	4.01%	4.01%	1.42%	1.71%	1.56%	1.20%
International Airports Repair & Replacement Fund (AY05)	0.49%	1.31%	4.01%	4.01%	1.42%	1.71%	1.56%	1.20%
International Airports Revenue Fund (AY04)	0.37%	1.08%	3.51%	3.51%	0.68%	1.92%	1.88%	1.63%
International Airports Series 2002 Reserve Account (AY2E)	0.49%	1.31%	4.01%	4.01%	1.42%	1.71%	1.56%	1.20%
International Airports Series 2003 Reserve (AY2U)	0.49%	1.31%	4.01%	4.01%	1.42%	1.71%	1.56%	1.20%
Investment Loss Trust Fund (AY28)	0.49%	1.31%	4.01%	4.01%	1.42%	1.71%	1.56%	1.20%
PCE Endowment Fund (AY13)	3.32%	3.06%	9.59%	9.59%	3.00%	4.17%	5.76%	6.45%
Permanent Fund Dividend Holding Account (AY2G)	0.49%	1.31%	3.95%	3.95%	1.40%	1.73%	1.65%	1.25%
Public School Trust Fund (AY08)	4.05%	3.78%	10.35%	10.35%	6.71%	6.46%	6.93%	6.56%
RHIF LTC Insurance (AY11)	3.54%	3.25%	9.16%	9.16%	3.52%	5.10%	5.26%	5.46%
RHIF Major Medical (AY03)	0.49%	1.31%	4.01%	4.01%	1.42%	1.71%	1.56%	1.20%

DOR Commissioner's Report: Net Plan Performance for Month Ending 6/30/2023

Benchmark Performance	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year
2008 Transportation Project Government Bonds (AY2Q)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
2013B Tax Exempt Education (AY3Z)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
2016A - 2012 Transporation Bond Act (AY3Y)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
2016B - 2012 Transportation Bond Act (AY3Q)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	
Alaska Higher Education Investment (AY3L)	3.97%	3.70%	9.98%	9.98%	6.59%	6.37%	7.35%	7.10%
Alaska Mental Health Trust Reserve (AY2L)	4.02%	4.00%	11.12%	11.12%	5.28%	5.68%	6.72%	6.57%
ASLC Investment Fund (AY3S)	2.00%	1.75%	5.47%	5.47%				
Constitutional Budget Reserve Fund (AY19)	0.46%	1.17%	3.59%	3.59%	1.27%	2.17%	1.95%	1.71%
Education Endowment Fund (AY3G)	3.97%	3.70%	9.98%	9.98%	6.59%			
EVOS Habitat Investment (AY2H)	-0.17%	0.03%	5.59%	5.59%	3.54%	4.81%	6.44%	6.62%
EVOS Research Investment (AY02)	-0.17%	0.03%	7.92%	7.92%	4.10%	5.07%	6.63%	6.76%
GeFONSI I (AY01)	0.31%	0.91%	3.11%	3.11%	0.54%	1.30%	1.10%	0.88%
GeFONSI II (AY3F)	0.48%	0.91%	3.34%	3.34%	0.73%	1.98%		
Illinois Creek Mine Reclamation (AY9J)	3.97%	3.70%	9.98%	9.98%	6.59%	6.37%	7.35%	5.62%
International Airports 2006 Non-AMT (AY9X)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
International Airports Repair & Replacement Fund (AY05)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
International Airports Revenue Fund (AY04)	0.31%	0.91%	3.10%	3.10%	0.54%	1.79%	1.67%	1.42%
International Airports Series 2002 Reserve Account (AY2E)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
International Airports Series 2003 Reserve (AY2U)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
Investment Loss Trust Fund (AY28)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
PCE Endowment Fund (AY13)	3.97%	3.70%	9.98%	9.98%	3.15%	4.30%	5.85%	6.36%
Permanent Fund Dividend Holding Account (AY2G)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%
Public School Trust Fund (AY08)	3.97%	3.70%	9.98%	9.98%	6.59%	6.41%	6.88%	6.48%
RHIF LTC Insurance (AY11)	3.53%	3.23%	8.76%	8.76%	3.42%	5.01%	5.16%	5.30%
RHIF Major Medical (AY03)	0.46%	1.17%	3.59%	3.59%	1.27%	1.55%	1.37%	0.98%

DOR Commissioner's Report: Net Plan Performance for Month Ending 6/30/2023

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)	0.03%	0.14% 🔵	0.42% 🔵	0.42% 🔵	0.15% 🔵	0.16% 🔵	0.19% 🔵	0.22% 🔵
2013B Tax Exempt Education (AY3Z)	0.03%	0.14% 🔵	0.42% 🔵	0.42% 🔵	0.15% 🔵	0.16% 🔵	0.19% 🔵	0.22% 🔵
2016A - 2012 Transporation Bond Act (AY3Y)	0.03% 🔵	0.14% 🔵	0.42% 🔵	0.42% 🔵	0.15% 🔵	0.14% 🔵	0.18% 🔵	0.21% 🔵
2016B - 2012 Transportation Bond Act (AY3Q)	0.03% 🔵	0.14% 🔵	0.42% 🔵	0.42% 🔵	0.15% 🔵	0.16% 🔵	0.19% 🔵	
Alaska Higher Education Investment (AY3L)	0.08%	0.08% 🔵	0.38% 🔵	0.38% 🔵	0.12% 🔵	0.06% 🔵	0.05% 🔵	0.06% 🔵
Alaska Mental Health Trust Reserve (AY2L)	0.10% 🔵	0.13% 🔵	0.49% 🔵	0.49% 🔵	0.23% 🔵	0.19% 🔵	0.14% 🔵	0.36% 🔵
ASLC Investment Fund (AY3S)	0.24%	0.27% 🔵	0.93% 🔵	0.93% 🔵				
Constitutional Budget Reserve Fund (AY19)	0.03%	0.14% 🔵	0.42% 🔵	0.42% 🔵	0.15% 🔵	0.17% 🔵	0.19% 🔵	0.19% 🔵
Education Endowment Fund (AY3G)	0.08%	0.08% 🔵	0.38% 🔵	0.38% 🔵	0.12% 🔵			
EVOS Habitat Investment (AY2H)	0.12%	0.29% 🔵	0.93% 🔵	0.93% 🔵	0.37% 🔵	0.22% 🔵	0.11% 🔵	0.36% 🔵
EVOS Research Investment (AY02)	0.12% 🔵	0.29% 🔵	0.76% 🔵	0.76% 🔵	0.31% 🔵	0.19% 🔵	0.07% 🔵	0.32% 🔵
GeFONSI I (AY01)	0.05% 🔵	0.17% 🔵	0.45% 🔵	0.45% 🔵	0.16% 🔵	0.16% 🔵	0.17% 🔵	0.19% 🔵
GeFONSI II (AY3F)	0.07%	0.21% 🔵	0.26%	0.26%	0.06% 🔵	0.07% 🔵		
Illinois Creek Mine Reclamation (AY9J)	0.08%	0.08% 🔵	0.38% 🔵	0.38% 🔵	0.12% 🔵	0.04% 🔵	0.03% 🔵	0.10% 🔵
International Airports 2006 Non-AMT (AY9X)	0.03%	0.14% 🔵	0.42%	0.42% 🔵	0.15% 🔵	0.16% 🔵	0.19% 🔵	0.22% 🔵
International Airports Repair & Replacement Fund (AY05)	0.03%	0.14% 🔵	0.42% 🔵	0.42% 🔵	0.15% 🔵	0.16% 🔵	0.19% 🔵	0.22% 🔵
International Airports Revenue Fund (AY04)	0.05% 🔵	0.18% 🔵	0.41% 🔵	0.41% 🔵	0.14% 🔵	0.13% 🔵	0.20% 🔵	0.21% 🔵
International Airports Series 2002 Reserve Account (AY2E)	0.03%	0.14% 🔵	0.42% 🔵	0.42% 🔵	0.15% 🔵	0.16% 🔵	0.19% 🔵	0.22%
International Airports Series 2003 Reserve (AY2U)	0.03%	0.14% 🔵	0.42% 🔵	0.42% 🔵	0.15% 🔵	0.16% 🔵	0.19% 🔵	0.22% 🔵
PCE Endowment Fund (AY13) *	-0.65% 😢	-0.64% 😢	-0.39% 😢	-0.39% 😢	-0.15% 😢	-0.12% 🔇	-0.09% 😢	0.09% 🔵
Permanent Fund Dividend Holding Account (AY2G)	0.03%	0.14%	0.35%	0.35% 🔵	0.13% 🔵	0.17% 🔵	0.27%	0.26% 🔵
Public School Trust Fund (AY08)	0.08%	0.08%	0.37% 🔵	0.37%	0.12%	0.05% 🔵	0.05% 🔵	0.08%
RHIF LTC Insurance (AY11)	0.01%	0.02% 🔵	0.40% 🔵	0.40% 🔵	0.10% 🔵	0.09% 🔵	0.10% 🔵	0.16% 🔵
RHIF Major Medical (AY03)	0.03%	0.14% 🔵	0.42% 🔵	0.42% 🔵	0.15% 🔵	0.16% 🔵	0.19% 🔵	0.22%

DOR Commissioner's Report: External Management Fees as of Month Ending 6/30/2023

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)	0.0197%
Alaska Mental Health Trust Reserve (AY2L)	0.0201%
ASLC Investment Fund (AY3S)	0.0269%
Constitutional Budget Reserve Fund (AY19)	0.0000%
Education Endowment Fund (AY3G)	0.0198%
EVOS Habitat Investment (AY2H)	0.0044%
EVOS Research Investment (AY02)	0.0032%
GeFONSI I (AY01)	0.0000%
GeFONSI II (AY3F)	0.0006%
Illinois Creek Mine Reclamation (AY9J)	0.0197%
International Airports 2006 Non-AMT (AY9X)	0.0000%
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%
PCE Endowment Fund (AY13)	0.0196%
Permanent Fund Dividend Holding Account (AY2G)	0.0000%
Public School Trust Fund (AY08)	0.0197%
RHIF LTC Insurance (AY11)	0.0221%
RHIF Major Medical (AY03)	0.0000%

Commissioner's Report: Top GeFONSI Accounts for Month Ending: 6/30/2023

Program	Account Name	End Balance
GeFONSI I	General Fund	\$1,508,137,036.81
	Alaska Clean Water Fund	\$144,565,479.13
	Alaska Drinking Water Fund	\$82,369,476.80
	Public Advocacy Trust	\$48,128,162.53
	Fish & Game Fund	\$46,388,934.47
GeFONSI II	Statutory Budget Reserve Fund	\$443,662,365.36
	Regional Ed Attendance Area School Fund	\$139,297,952.88
	National Petroleum Reserve Fund	\$104,818,089.46
	Community Revenue Sharing Fund	\$94,301,232.93
	Highway Equipment Working Capital Fund For Operating Appropriations	\$90,047,436.39
	Sum of 5 Largest GeFONSI I and II Funds	\$2,701,716,166.76

Non-Routine Investments

Non-Routine Investments

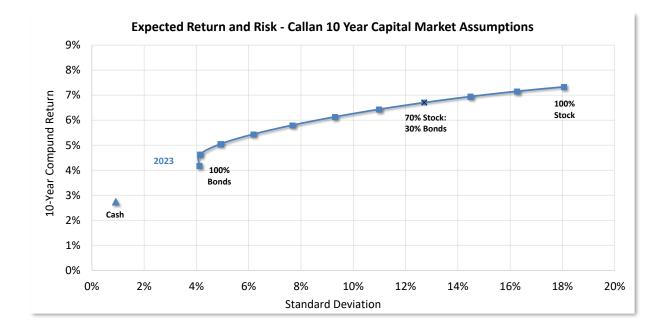
- The Department of Revenue is presented periodically with non-routine investment opportunities that fall outside the scope of its existing investment opportunity set.
- The state does not currently have any non-routine investments, and none are presently contemplated by investment staff.
- <u>Non-routine investment process summary:</u>
 - 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.

Investment Policy and

Asset Allocation Process

State Investment Policy and Asset Allocation Process

- The Commissioner of Revenue is the fiduciary for over \$9 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.

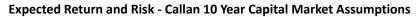


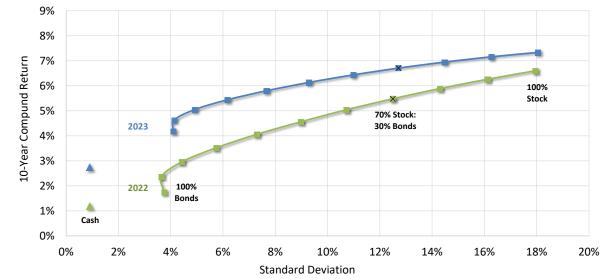
Fund - Account	Assets (6/30/2023)	Risk Tolerance
Short-Term Funds	\$154,301,839	Lowest
CBRF - AY19	\$2,619,931,069	
GeFONSI - AY01	\$2,142,182,033	
International Airport - AY04	\$184,316,817	
GeFONSI II - AY3F	\$1,573,945,214	
Retiree LTC - AY11	\$762,323,180	
PCE Endowment - AY13	\$946,862,400	
Public School Trust Fund - AY08	\$761,419,628	
AK Higher Education - AY3L	\$380,395,138	
Illinois Creek Mine - AY9J	\$1,375,074	\checkmark
Education Endowment - AY3G	\$1,025,828	Highest
Total	\$9,528,078,220	

Risk Tolerance Assessment

General Risk Tolerance		Probability of Loss	Magnitude of	
Assessment	Time Horizon	(1yr)	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.

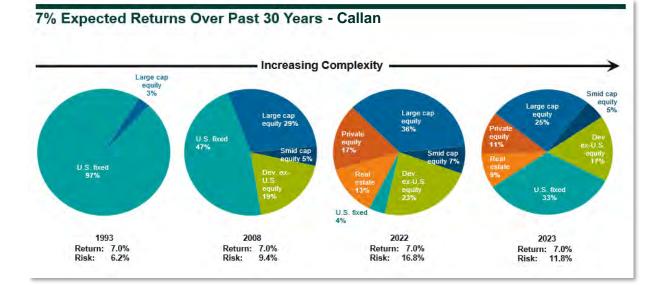
Fund - Account	Assets (6/30/2023)	Risk Tolerance
Short-Term Funds	\$154,301,839	Lowest
CBRF - AY19	\$2,619,931,069	
GeFONSI - AY01	\$2,142,182,033	
International Airport - AY04	\$184,316,817	
GeFONSI II - AY3F	\$1,573,945,214	
Retiree LTC - AY11	\$762,323,180	
PCE Endowment - AY13	\$946,862,400	
Public School Trust Fund - AY08	\$761,419,628	
AK Higher Education - AY3L	\$380,395,138	
Illinois Creek Mine - AY9J	\$1,375,074	¥
Education Endowment - AY3G	\$1,025,828	Highest
Total	\$9,528,078,220	

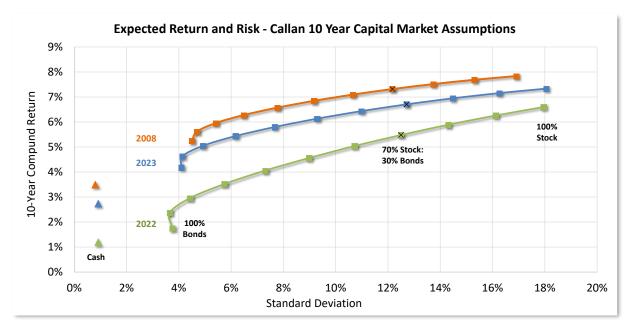




Asset Allocation

- 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.





2023 Capital Market Assumptions

- In January, Callan released their 10-year capital market assumptions for 2023. 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 25% 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. Staff is recommending increasing the maximum allocation to this fund to 30%.
- 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	10-Year Geometric Return	Return Change	Standard Deviation	Correlation to Domestic Equity	Real Return
Broad U.S. Equity	7.35%	0.75%	18.05%	1.00	4.85%
Large Cap U.S. Equity	7.25%	0.75%	17.75%	1.00	4.75%
Small/Mid Cap U.S. Equity	7.45%	0.75%	22.15%	0.92	4.95%
International Equity	7.45%	0.65%	21.25%	0.80	4.95%
Developed ex-U.S. Equity	7.25%	0.75%	20.15%	0.75	4.75%
Emerging Market Equity	7.45%	0.55%	25.70%	0.82	4.95%
Cash Equivalents	2.75%	1.55%	0.90%	-0.06	0.25%
Government 1-3 year Bonds	3.80%	2.30%	2.30%	0.04	1.30%
Core U.S. Fixed Income	4.25%	2.50%	4.10%	0.02	1.75%
TIPS	4.00%	2.75%	5.30%	-0.07	1.50%
Emerging Market Sovereign Debt	5.85%	2.25%	10.65%	0.66	3.35%
High Yield	6.25%	2.35%	11.75%	0.76	3.75%
Core Real Estate	5.75%	0.00%	14.20%	0.44	3.25%
REITs	6.90%	0.70%	20.90%	0.79	4.40%
Private Equity	8.50%	0.50%	27.60%	0.80	6.00%
Hedge Funds	5.55%	1.45%	8.45%	0.68	3.05%
Inflation	2.50%	0.25%			
70/30 Portfolio	6.71%	1.23%			

Asset Allocation Discussion

Using June 30, 2023, Assets

State Asset Allocation Approach for FY2024

- 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.
- Due to the Fed's effort in combating inflation by raising short-term interest rates, yields on short-term fixed income exceed longer-term capital market expectations for those asset classes.

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)

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

Low 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 short-term fixed income. The following funds are covered by this policy:

AY03 - Retiree Health Insurance Fund	AY3B - International Airports 2010-B
AY05 - International Airport Repair and Replacement Fund	AY3V-2010-C GO Bonds
AY28 - Investment Loss Trust Fund	AY3Y - 2013-C GO Bonds
AY2E - 2002 Series Reserve Account	AY3Z - 2013-B GO Bonds
AY2G - Permanent Fund Dividend Holding Account	AY9X - 2006B Non-AMT Construction Fund
AY2Q - 2008 Transportation Project GO Bonds	AY9Y - 2006 Series Variable Rate
AY2U - 2003 Series Reserve Account	AV3Q - FY 2017 2016B - 2012 Transportation Bond
AY3A - International Airports 2010-A	

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:

AL	/					June	20, 2023			
-mine	Approve	ed			-	-	Date	-		
Cash History	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Expected ST Return	0.05%	0.17%	1.93%	2.25%	2.25%	2.25%	2.25%	2.25%	2.00%	2.75%
Expected Volatility	0.05%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%
10% cVaR	0.00%	-1.41%	0.35%	0.67%	0.67%	0.67%	0.67%	0.67%	0.42%	1.17%

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

CBRF

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% 0.5%

The proposed policy is effective July 1, 2023:

Approved

June 20, 2023 Date

CBRF History	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Expected ST Return	0.05%	0.17%	2.32%	2.89%	2.89%	2.89%	2.89%	2.38%	2.30%	3.01%
Expected Volatility	0.05%	0.90%	1.23%	1.64%	1.62%	1.59%	1.58%	1.58%	2.06%	2.31%
10% cVaR	-0.04%	-1.41%	0.16%	0.01%	0.05%	0.10%	0.12%	-0.40%	-1.32%	-1.04%
Assets (billions)	0.9	1.1	2.0	1.8	2.4	3.9	7.3	10.1	6.1	5.8

Asset ClassesBroad U.S. EquityGlobal ex-U.S. EquityUS REITSShort Duration Gov't/CreditCore U.S. Fixed IncomeCash EquivalentsTotalOptimization Results:Expected Return - Short-TermDisk. Standard Deviation	FY23 100% 100%	FY24 100% 100%
Global ex-U.S. EquityUS REITSShort Duration Gov't/CreditCore U.S. Fixed IncomeCash EquivalentsTotalOptimization Results:Expected Return - Short-Term	100%	
US REITS Short Duration Gov't/Credit Core U.S. Fixed Income Cash Equivalents Total Optimization Results: Expected Return - Short-Term	100%	
Short Duration Gov't/CreditCore U.S. Fixed IncomeCash EquivalentsTotalOptimization Results:Expected Return - Short-Term	100%	
Core U.S. Fixed IncomeCash EquivalentsTotalOptimization Results:Expected Return - Short-Term	100%	
Cash EquivalentsTotalOptimization Results:Expected Return - Short-Term	100%	
Total Optimization Results: Expected Return - Short-Term	100%	
Optimization Results: Expected Return - Short-Term		100%
Expected Return - Short-Term		
	(
Diale. Changeland Deviation	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

Moderate Risk Tolerance Funds

GeFONSI I and II – Top 30 Participants of Each 3/31/23

GF Fund Name	Ending Balance	Cum. %/Total	GF Fund Name	Ending Balance	Cum. %/Total
GFI General Fund	\$1,177,913,884	-	GFII Statutory Budget Reserve Fund	\$445,597,760	-
GFI Alaska Clean Water Fund	\$140,693,419		GFII Regional Ed Attendance Area School Fund	\$153,154,334	
GFI Alaska Drinking Water Fund	\$80,538,361		GFII National Petroleum Reserve Fund	\$95,446,127	
GFI Public Advocacy Trust	\$47,448,129		GFII Public Education Fund	\$94,980,513	
GFI Fish & Game Fund	\$46,404,295		GFII Highway Equipment Working Capital Fund For Operating Appropriations	\$94,525,311	
GFI Oil & Hazardous Substance Release Response Account	\$45,022,566		GFII Disaster Relief Fund	\$86,083,602	60%
GFI Exxon Valdez Settlement	\$34,881,218	85%	GFII Community Revenue Sharing Fund	\$66,415,320	64%
GFI Renewable Energy Grant Fund	\$26,670,831	86%	GFII School Construction Fund	\$61,139,726	68%
GFI DVA Retiree Health	\$21,806,069	87%	GFII Alaska Comprehensive Health Insurance Fund	\$49,846,818	71%
GFI Group Health And Life Insurance Fund	\$21,569,908	89%	GFII Commercial Fishing Revolving Loan Fund	\$49,750,967	74%
GFI Vaccine Assessment Fund	\$19,325,276	90%	GFII Alaska Marine Highway System Vessel Replacement Fund	\$44,089,338	77%
GFI PFD Trust	\$17,710,099	91%	GFII Major Maintenance Grant Fund	\$43,017,204	79%
GFI Oil & Hazardous Substance Release Prevention Account	\$14,211,174	91%	GFII Alaska Capital Income Fund	\$41,448,451	82%
GFI Bulk Fuel Loans Fund	\$12,606,236	92%	GFII General Fund Investment Fund	\$38,694,934	84%
GFI AIA Passenger Facility Charge Revenue Fund Application #2	\$12,179,433	93%	GFII Alaska Marine Highway System Fund	\$38,456,577	87%
GFI Bulk Fuel Bridge Loan Fund	\$8,357,437	93%	GFII Fisheries Enhancement Revolving Loan Fund	\$37,567,276	89%
GFI Railbelt Energy Fund	\$7,869,004	93%	GFII Deposits, Suspense & Miscellaneous	\$34,565,713	91%
GFI School Trust Land Sales-GF Portion	\$7,614,809	94%	GFII State Insurance Catastrophe Reserve	\$26,089,866	93%
GFI Memorial Education Revolving Loan Fund	\$7,127,691	94%	GFII Alaska Public Building Fund	\$19,826,237	94%
GFI Alaska Drinking Water Administrative Operating Account	\$6,306,710	95%	GFII Alaska Seafood Marketing Institute	\$16,217,895	95%
GFI Election Fund	\$5,625,942	95%	GFII Alaska Fishermen's Fund	\$12,807,083	96%
GFI Alaska Clean Water Administrative Operating Account	\$5,306,029	95%	GFII Information Services Fund	\$12,570,827	97%
GFI Rural Development Initiative Fund	\$5,228,909	95%	GFII Agricultural Revolving Loan Fund	\$12,475,255	97%
GFI Mariculture RLF	\$5,094,655	96%	GFII Unclaimed Property	\$7,686,434	98%
GFI ATIB Repayment Account	\$4,643,382	96%	GFII Second Injury Fund	\$6,888,356	98%
GFI Small Business Economic Development Revolving Loan Fund 4	\$4,439,020	96%	GFII Commercial Vessel Passenger Tax Account	\$6,291,238	99%
GFI Alaska Capstone Avionics Revolving Loan Fund	\$4,224,664	96%	GFII Large Passenger Vessel Gambling Tax Account	\$4,475,816	99%
GFI MHT Settlement Deferred Maintenance	\$4,027,098	97%	GFII Recidivism Reduction Fund	\$3,103,260	99%
GFI Google Cost Sharing Fund	\$3,820,082	97%	GFII Employee Assistance & Training Program Account	\$2,962,462	99%
GFI Four Cent Per Barrel Of Oil Produced Surcharge	\$3,584,494	97%	GFII Alaska Tech & Vocational Education Programs	\$2,338,628	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	Proposed Policy	Current Policy No Change	
Investment Objective	Minimal exposure to principal loss. Maximize current income within moderate risk tolerance. Minimal inflation protection needed. High liquidity requirement.		
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

June 20, 2023

Date

GeFONSI History	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Expected ST Return	0.27%	0.44%	1.91%	2.38%	2.38%	2.36%	2.30%	2.30%	2.14%	2.87%
Expected Volatility	0.57%	1.16%	0.93%	1.08%	1.08%	1.08%	1.08%	1.08%	1.28%	1.33%
10% cVaR	-0.70%	-1.60%	0.28%	0.48%	0.48%	0.46%	0.40%	0.40%	-0.11%	0.54%

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	0.8	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
· · ·		83.6	79.1	84.3
3-Year 5% Probable Return (5% cVaR)		0.50	79.1	84.5

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	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:

Approved

June 20, 2023 Date

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	0.8	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

GeFONSI 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 ioss in any given year.

Investment Topic	Proposed Policy			Curre	nt Policy
Investment Objective	Tolerate moderate exposure to modestly higher returns.	No Change			
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	2% 33%	- 4%/+5% - 2%/+5% ±10% ±10%		- 4%/+5% - 2%/+5% ±10% ±10%
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%).2%

June 20, 2023 Date

The proposed policy is effective July 1, 2023:

		Approved			
GeFONSI II History	2022	2021	2020	2019	2018
Expected ST Return	0.91%	0.94%	2.37%	3.38%	3.38%
Expected Volatility	1.37%	1.47%	1.61%	2.63%	2.58%
10% cVaR	-1.50%	-1.64%	-0.46%	-1.24%	-1.15%

State of Alaska Asset Allocation

Asset Classes	FY23	FY24	GF I	Gen. Fund
Broad U.S. Equity	4%	4%		4%
Global ex-U.S. Equity	2%	2%		2%
US REITS				0%
Short Duration Gov't/Credit	33%	33%	15%	49%
Core U.S. Fixed Income				0%
Cash Equivalents	61%	61%	85%	149%
Total	100%	100%	100%	204%
Optimization Results:				
Expected Return - Short-Term	3.01%	5.24%	5.00%	10.46%
Expected Return - Real/After Inflation		2.74%	2.50%	7.96%
Risk - Standard Deviation	1.39%	1.51%	0.93%	2.26%
Sharpe Ratio	0.45	0.15	(0.01)	2.41
Risk Statistics:				
10% Probable Downside Return - 1 Year	0.6%	2.6%	3.4%	6.5%
5% Probable Downside Return - 1 Year	0.2%	2.1%	3.1%	5.8%
5% Probable Downside Return - 3 Year		3.4%	3.9%	7.8%
5% Probable Downside Return - 5 Year		3.8%	4.1%	8.4%
Probability of Loss - 1 Year	1.5%	0.0%	0.0%	0.0%
Prob. Return < -1%	0.2%	0.0%	0.0%	0.0%
Probability of Loss - 10 Year	0.0%	0.0%	0.0%	0.0%
Asset Time Horizon Estimate	1.2	1.2	0.5	2.1
Dollars: (\$Millions)				
Assets		1,573.9	1,573.9	1,508.1
Expected Annual Earnings		82.4	, 78.8	157.7
1-Year 10% Probable Return (10% cVaR)		40.7	53.2	97.8
1-Year 5% Probable Return (5% cVaR)		33.4	48.7	87.3
3-Year 5% Probable Return (5% cVaR)		54.1	61.4	117.1
5-Year 5% Probable Return (5% cVaR)		60.5	65.3	126.3

High 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	To match the fund's assumed actuarial rate of return while minimizing risk	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 25% $\pm 5\%$ International Equity 18% $\pm 5\%$ U.S. REITs 4% $\pm 3\%$ Core U.S. Fixed Income 52% $\pm 5\%$ *may include up to 13% in tactical fixed incomeCash Equivalents 1% $- 1\%/+2\%$	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:

Approved

June 20, 2023 Date

LTC	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Expected LT Return	5.10%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.00%	5.00%
Expected Volatility	10.50%	8.08%	6.02%	8.17%	8.15%	7.52%	7.28%	7.27%	7.63%	6.23%
10% cVaR	-13.50%	-8.93%	-5.32%	-9.09%	-9.05%	-7.95%	-7.53%	-7.51%	-8.39%	-5.93%

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%
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.
Expected Annual Earnings		46.8	40.1	51.
		(71.8)	(31.7)	(119.
1-Year 10% Probable Return (10% cVaR)				
1-Year 10% Probable Return (10% cVaR) 1-Year 5% Probable Return (5% cVaR)				
1-Year 10% Probable Return (10% cVaR) 1-Year 5% Probable Return (5% cVaR) 3-Year 5% Probable Return (5% cVaR)		(92.6) (33.7)	(44.3) (8.6)	(148. (64.

High 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 No Change	
Investment Objective	High exposure of principal to loss in return for expected Longer-term returns. Limited curr requirement. Limited inflation protection ne Moderate liquidity requirement.		
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% ± 3%	39% ± 5% 25% ± 5% 5% ± 5% 30% ± 5% 1% - 1%/+2%
Expected Return - Long-Term	6.83%	2707 - 270	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

High Risk History 2022 2021 2020 2019 2018 2017 2016 2015 2014 2013 6.58% 6.55% 6.73% 6.73% 6.25% Expected LT Return 5.62% 6.37% 6.20% 6.21% 6.25% Expected Volatility 12.50% 12.60% 12.50% 12.70% 12.70% 12.95% 13.23% 13.23% 11.80% 10.55% 10% cVaR -16.40% -15.74% -15.36% -16.09% -16.08% -16.18% -16.49% -16.49% -14.46% -12.27%

State of Alaska Asset Allocation

State of Alaska Asset Allocation			
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		-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
Dollars: (\$Millions)			
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
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High 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.

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	Proposed Policy	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 Aliocation	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% 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 Date

Investment Topic	Proposed Policy	Current Policy		
Investment Objective	Maximize return while still being able to fund uncertain maintenance expenditures (amount and size)	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% $\pm 5\%$ 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%	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:

Approved

June 20, 2023 Date

High 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	Proposed Policy	Current Policy
Investment Objective	High exposure of principal to loss in return for hig expected Longer-term returns. Limited current in requirement. Limited inflation protection needed Moderate liquidity requirement.	ncome
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%	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 Date

State Asset Allocation Approach for FY2024 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.
- Due to the Fed's effort in combating inflation by raising short-term interest rates, yields on short-term fixed income exceed longer-term capital market expectations for those asset classes.
- Staff has evaluated each portfolio and is comfortable with the recommendations.

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)

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

Questions?

State of Alaska Department of Revenue

2023 State Investment Review Meeting Schedule

February 17, 2023 @ 10:00 AM (Videoconference)

- 1. December 31, 2022 Performance
- 2. FY2023 Capital Market Assumptions

May 10, 2023 @ 10:30 AM (Videoconference)

- 1. March 31, 2023 Performance
- 2. FY2024 Asset Allocation Discussion Asset Allocation Process & 2023 Capital Market Assumptions

August 14, 2023 @ 10:00 AM (Videoconference)

- 1. June 30, 2023 Performance
- 2. FY2024 Asset Allocation Discussion

November 8, 2023 @ 10:00 AM (Videoconference)

1. September 30, 2023 Performance

Potential Discussion Topics:

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