STATE OF ALASKA
DEPARTMENT OF REVENUE

Exxon Valdez Oil Spill Trust

Asset Allocation Review

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Asset Allocation

as of March 31, 2019

Performance

EVOS Fund Performance:

Performance as of March 31, 2019					
($ millions)	Value	1 Yr	3 Yr	5 Yr	10 yr
EVOS Research Investment (AY02)	$100.30	4.06%	8.61%	6.75%	11.20%
EVOS Habitat Investment (AY2H)	$83.30	4.00%	8.61%	6.79%	11.18%
Benchmark		4.47%	8.76%	6.39%	10.82%

State Investment Pool Performance:

Performance as of March 31, 2019				
($ millions)	1 Yr	3 Yr	5 Yr	10 yr
Cash & Cash Equivalents	2.34%	1.48%	1.03%	0.87%
Index: 3 Month T Bill	2.12%	1.20%	0.75%	0.43%
Broad Market Fixed Income	4.48%	2.10%	2.90%	4.07%
Index: Bloomberg Barclays Aggregate Index	4.48%	2.03%	2.74%	3.77%
Domestic Equity	8.73%	13.34%	10.28%	15.94%
Index: Russell 3000	8.77%	13.49%	10.36%	16.00%
International Equity	-4.19%	7.49%	4.23%	10.80%
Index: MSCI ACWI ex-US	-4.22%	7.83%	2.65%	9.13%

Capital Market Assumptions

2019 Callan Capital Market Projections

Risk and return: 2019–2028

		PROJECTED RETURN			PROJECTED RISK		2018 - 2027	
Asset Class	**Index**	**1-Year Arithmetic**	**10-Year Geometric***	**Real**	**Standard Deviation**	**Projected Yield**	**10-Year Geometric***	**Standard Deviation**
Equities								
Broad U.S. Equity	Russell 3000	8.50%	7.15%	4.90%	17.95%	2.00%	6.85%	18.25%
Large Cap	S&P 500	8.25%	7.00%	4.75%	17.10%	2.10%	6.75%	17.40%
Small/Mid Cap	Russell 2500	9.55%	7.25%	5.00%	22.65%	1.55%	7.00%	22.60%
Global ex-U.S. Equity	MSCI ACWI ex USA	9.20%	7.25%	5.00%	21.10%	3.10%	7.00%	21.00%
Non-U.S. Equity	MSCI World ex USA	8.70%	7.00%	4.75%	19.75%	3.25%	6.75%	19.70%
Emerging Markets Equity	MSCI Emerging Markets	10.70%	7.25%	5.00%	27.45%	2.65%	7.00%	27.45%
Fixed Income								
Short Duration	Bloomberg Barclays 1-3 Yr G/C	3.40%	3.40%	1.15%	2.10%	3.25%	2.60%	2.10%
U.S. Fixed	Bloomberg Barclays Aggregate	3.75%	3.75%	1.50%	3.75%	3.85%	3.00%	3.75%
Long Duration	Bloomberg Barclays Long G/C	4.25%	3.75%	1.50%	10.65%	4.80%	3.00%	10.95%
TIPS	Bloomberg Barclays TIPS	3.80%	3.75%	1.50%	5.05%	3.90%	3.00%	5.25%
High Yield	Bloomberg Barclays High Yield	5.75%	5.35%	3.10%	10.35%	7.75%	4.75%	10.35%
Non-U.S. Fixed	Bloomberg Barclays Glbl Agg ex US	1.80%	1.40%	-0.85%	9.20%	2.35%	1.40%	9.20%
Emerging Market Debt	EMBI Global Diversified	5.40%	5.05%	2.80%	9.50%	6.00%	4.50%	9.60%
Other								
Real Estate	NFI-ODCE	7.30%	6.25%	4.00%	15.70%	4.75%	5.75%	16.35%
Private Equity	Cambridge Private Equity	12.40%	8.50%	6.25%	29.30%	0.00%	7.35%	32.90%
Hedge Funds	Callan Hedge FOF Database	5.75%	5.50%	3.25%	8.85%	2.50%	5.05%	9.15%
Commodities	Bloomberg Commodity	4.75%	3.20%	0.95%	18.00%	2.50%	2.65%	18.30%
Cash Equivalents	90-Day T-Bill	2.50%	2.50%	0.25%	0.90%	2.50%	2.25%	0.90%
Inflation	CPI-U		2.25%		1.50%		2.25%	1.50%

Note that return projections for public markets assume index returns with no premium for active management.

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).
Source: Callan

Asset Allocation Mix Alternatives

	Constraints		Asset Mix Alternatives										Current
Asset Classes	**Min**	**Max**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mix**
Domestic Equities	0%	100%	24.6%	27.0%	29.3%	31.7%	34.1%	36.5%	38.8%	41.2%	43.6%	45.9%	35%
International Equities	0%	100%	16.5%	18.1%	19.7%	21.3%	22.9%	24.5%	26.1%	27.7%	29.3%	30.9%	22%
Fixed Income	0%	100%	59.0%	55.0%	51.0%	47.0%	43.1%	39.1%	35.1%	31.1%	27.2%	23.2%	43%
Cash	0%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%
Total			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Projected 10 Year Return			**5.6%**	**5.8%**	**5.9%**	**6.1%**	**6.2%**	**6.4%**	**6.5%**	**6.6%**	**6.7%**	**6.8%**	6.2%
Expected Risk (Standard Deviation)			7.6%	8.3%	9.0%	9.7%	10.5%	11.2%	11.9%	12.7%	13.4%	14.1%	10.5%
Sharpe Ratio			0.41	0.40	0.38	0.37	0.36	0.35	0.00	0.32	0.32	0.31	0.35

Short-term Possible Outcomes

Short Term Possible Outcomes - 1 Year Projections	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5	Mix 6	Mix 7	Mix 8	Mix 9	Mix 10
Top Decile	15.43%	16.47%	17.52%	18.57%	19.63%	20.69%	21.76%	22.82%	23.89%	24.95%
Top Quartile	10.80%	11.42%	12.04%	12.66%	13.28%	13.90%	14.52%	15.14%	15.76%	16.37%
Mean	5.65%	5.80%	5.95%	6.09%	6.23%	6.36%	6.49%	6.61%	6.72%	6.83%
Bottom Quartile	0.50%	0.19%	-0.14%	-0.48%	-0.82%	-1.18%	-1.55%	-1.92%	-2.31%	-2.70%
Bottom Decile	-4.14%	-4.87%	-5.62%	-6.39%	-7.17%	-7.97%	-8.78%	-9.61%	-10.44%	-11.28%
Probability of Negative Return	22.98%	24.29%	25.49%	26.58%	27.57%	28.48%	29.31%	30.07%	30.78%	31.43%

Range of possible returns between the 10th and 90th percentile of a normal distribution. Chart reflects table above with break points at 10%, 25%, and the mean.

Longer-term Possible Outcomes

Long Term Possible Outcomes - 10 Year Projections	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5	Mix 6	Mix 7	Mix 8	Mix 9	Mix 10
Top Decile	8.74%	9.17%	9.61%	10.04%	10.47%	10.89%	11.32%	11.74%	12.15%	12.56%
Top Quartile	7.28%	7.58%	7.87%	8.17%	8.46%	8.75%	9.03%	9.31%	9.58%	9.85%
Mean	5.65%	5.80%	5.95%	6.09%	6.23%	6.36%	6.49%	6.61%	6.72%	6.83%
Bottom Quartile	4.02%	4.03%	4.02%	4.01%	4.00%	3.98%	3.95%	3.91%	3.87%	3.82%
Bottom Decile	2.55%	2.43%	2.29%	2.15%	1.99%	1.83%	1.66%	1.48%	1.30%	1.11%
Probability of Negative Return	0.97%	1.38%	1.86%	2.40%	2.98%	3.61%	4.26%	4.93%	5.62%	6.31%

Range of possible returns between the 10th and 90th percentile of a normal distribution. Chart reflects table above with break points at 10%, 25%, and the mean.