

Outline of Investment Policies

The governing body of the Utah Retirement Systems (Systems) is the seven member Utah State Retirement Board (Board). The Board is composed of the Utah State Treasurer, who serves as an ex-officio member, and six trustees who are appointed by the Governor. Four board members are appointed for their investment expertise, and two members are appointed to represent employee and employer interests.

The Board has statutory authority to pool pension assets in the Utah Retirement Investment Fund (Fund). Statutes also establish that this Fund will be invested in accordance with the "prudent person rule." The prudent person rule requires all members of the Board and investment staff to discharge their duties solely in the interest of Systems' participants and beneficiaries and with the care, skill, prudence, and diligence that they would exercise in the conduct of their own affairs. To this end, a Statement of Investment Policy and Performance Objectives has been created for the Fund and adopted by the Board. The purpose of this Statement is to:

- Outline the expected return and risk profile for the Fund;
- Establish the target asset allocation mix and acceptable rebalancing ranges;
- Describe plan and manager policies and objectives for performance evaluation;
- Communicate investment performance standards to investment managers.

The primary investment objectives are to preserve Fund assets and generate an appropriate level of risk-adjusted return to meet future pension obligations. The Systems periodically complete an asset allocation and liability study to determine the optimal portfolio diversification to meet those obligations.

The Systems' investment portfolio includes strategic, long-term commitments in the following asset classes: Equities, Debt Securities, Real Assets, Private Equity, and Absolute Return. Asset allocation is reviewed in conjunction with the plan liabilities at least every five years.

The Board's policy is to establish a long-term strategic asset allocation that manages overall expected portfolio risk (volatility) and maximizes expected return without unduly constraining the discretionary, tactical decision-making process of the investment managers.

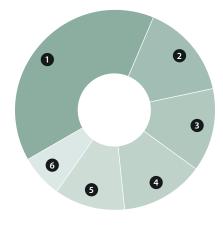
2020 Investment Summary

(dollars in thousands)	2020 Beginning Fair Value	Purchases	Sales and Redemptions	Increase (Decrease) in Fair Value	2020 Ending Fair Value Balance	Percent of Total Fair Value
Short-term securities	\$ 1,855,786	30,232,096	(29,454,593)	(1,467)	2,631,822	6.70%
Equities	13,435,570	4,796,675	(4,394,985)	1,831,812	15,669,072	39.86
Debt securities	6,176,498	25,605,913	(26,628,628)	164,936	5,318,719	13.53
Real assets	4,947,658	848,340	(833,648)	269,960	5,232,310	13.31
Private equity	4,012,872	582,171	(321,926)	261,990	4,535,107	11.54
Absolute return	5,183,620	2,698,645	(2,199,978)	238,691	5,920,978	15.06
Totals	\$ 35,612,004	64,763,840	(63,833,758)	2,765,922	39,308,008	100.00%



Defined Benefit Systems Investments at Fair Value

December 31, 2020



- 1 Equity Securities (39.9%)
- 2 Absolute Return (15.1%)
- 3 Debt Securities (13.5%)
- 4 Real Assets (13.3%)
- 5 Private Equity (11.5%)
- 6 Short Term (6.7%)

To implement the asset allocation plan, the Executive Director, supported by the Board, staff, and consultant, selects appropriate money management experts to invest the Fund assets. This selection process includes the creation of specific search criteria, completion and documentation of analysis, and due diligence on potential candidates, and interviews completed by the staff and/or Board. It is not the staff or Board's intention to be involved with the day-to-day decisions made by external investment managers. Internal investment staff also manages segments of the portfolio.

All managers are expected to communicate with the staff at least quarterly.

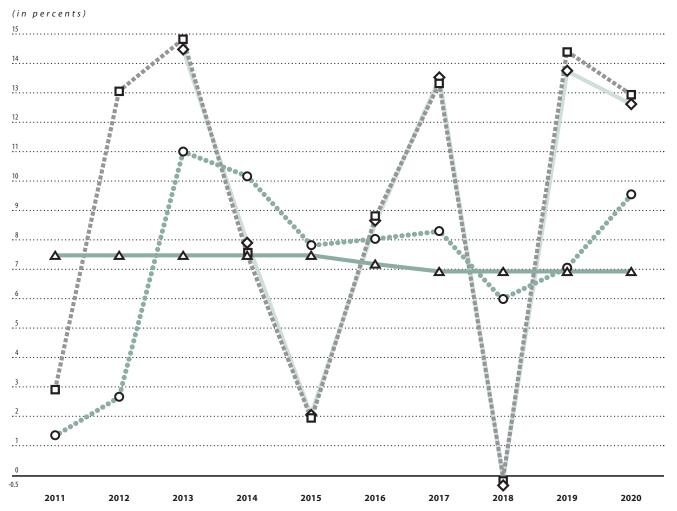
Managers' portfolios are evaluated both against appropriate market indices and similar manager style groups. The investment policy outlines appropriate benchmarks.

Investment return calculations are prepared using a time-weighted rate of return.

The allocation of assets as reported to the board are as follows: Equity securities 40.0%, Debt securities 19.8%, Absolute return 15.5%, Private equity 11.7% and Real assets 13.0%. These allocation percentages differ from investment asset percentages presented in the MD&A and Statement of Fiduciary Net Position as a result of different methodologies used to categorize investment assets and the impact of derivatives for investment purposes versus financial statement presentation purposes. For investment purposes the impact of derivatives used to rebalance the defined portfolio are expressed using the notional value of those derivatives.

December 31,	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Equities securities	35.2%	36.2	37.5	35.5	33.9	35.2	37.8	35.1	37.7	39.9
Debt securities	19.4	17.9	16.0	15.7	15.8	15.0	14.2	16.9	17.3	13.5
Private equity	10.8	11.3	11.0	11.8	11.9	11.3	10.7	11.7	11.3	11.5
Real assets	13.9	13.5	12.2	14.0	14.9	14.7	14.8	16.6	13.9	13.3
Short-term securities	4.9	5.9	6.6	5.8	8.2	8.2	8.6	5.1	5.2	6.7
Absolute return	15.8	15.2	16.7	17.2	15.3	15.6	13.9	14.6	14.6	15.1
Total portfolio	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

10-Year Total Pension Investment Rates of Return



(dollars in millions)

		••••			-
	Total Investment Portfolio Fair Value	(1) Smooth Expected Rate of Return	(2) Fair Value Rate of Return	(3) Actuarial Assumed Interest Rate	(4) Money Weighted Rate of Return
2011	\$ 20,796	1.34%	2.89%	7.50%	_
2012	22,871	2.66	13.10	7.50	_
2013	25,765	11.03	14.89	7.50	14.55%
2014	26,955	10.20	7.52	7.50	7.94
2015	27,086	7.84	1.92	7.50	2.02
2016	29,017	8.06	8.79	7.20	8.73
2017	32,125	8.32	13.57	6.95	13.38
2018	31,376	5.99	(0.22)	6.95	(0.38)
2019	35,612	7.08	14.45	6.95	13.80
2020	39,308	9.58	12.96	6.95	12.64

- (1) Smoothed Expected Rate of Return consists of investment income in excess or shortfall of the expected 6.95% on fair value smoothed over a 5-year period with 20% of a year's excess or shortfall being recognized each year beginning with the current year.
- (2) Fair Value Rate of Return consists of cash income plus gains and losses due to changes in fair value, whether realized or unrealized (before deduction of investment fees). (For 2020, 12.85% net of fees.)
- (3) Actuarial Assumed Interest Rate is the assumed rate of return on the fair value of assets, and is used in establishing retirement contribution rates and in determining current benefit reserve requirements.
- (4) Money Weighted Rate of Return is calculated as the internal rate of return on pension plan investments, net of investment expenses.

Comparative Investment Results (1)(2)(3)

Year Ended December 31, 2020

Investment Option Comparative Index	1 Year	3 Year	5 Year	10 Year
Global Equity*	15.54%	9.02%	11.83%	9.92%
FSTE Global All Cap Net Index	16.21	9.72	12.12	9.58
Global Debt Securities*	9.32	6.02	5.31	4.66
Fund Benchmark	7.80 dex	5.49	4.92	4.21
Real Assets**	0.86	4.98	7.42	8.93
U.S. Consumer Price Index + 5.0%	6.45	6.85	6.94	6.68
Private Equity	36.73	24.71	20.31	18.14
Private Equity Benchmark Russell 3000 + 2.5%	24.10	17.32	18.13	16.44
Absolute Return	8.12	5.21	5.45	4.87
3-Month Treasury Bills + 5.0%	5.67	6.61	6.20	5.64
Short Term	1.51	3.09	2.06	1.08
3-Month Treasury Bills	0.67	1.61	1.20	0.64
Total Fund***	12.96	8.89	9.79	8.82
Fund Benchmark		9.39	9.93	8.45
CAI Public Fund — Very Large Database Median	11.48	8.46	9.87	8.53
Inflation	1.45	1.84	1.94	1.67

⁽¹⁾ Investment measurement services provided by Callan Associates Inc.

⁽²⁾ Total rates of return include cash income plus gains and losses due to changes in fair value, where realized or unrealized.

⁽³⁾ Investment return calculations were prepared using a time-weighted return except private equity which is prepared using a dollar weighted return.

stGlobal equity and fixed income returns are reported at gross for comparability to the benchmarks which are reported as gross of fees. All other returns are reported a net of fees.

^{**}The non real estate portion of Real Assets only reflects returns for years 1, 3 and 5. Year 10 is for real estate only using a NCREIF Total Index Benchmark.

^{***}Total fund return is blended based upon gross returns for global equity and fixed income and net returns for Real Assets, Absolute Return, Short Term and Private Equity. Total fund net return is 12.85%, 8.74%, 9.62% and 8.63% for 1,3,5 and 10 year periods.

List of Largest Assets Held

December 31, 2020

Largest Equity Holdings*

(By Fair Value)

Description	Shares	Fair Value
Apple Inc.	2,396,476	\$ 317,988,400
Microsoft Corp.	1,111,941	247,317,917
Amazon Inc.	62,975	205,105,167
Alphabet Inc.	87,800	153,848,878
Facebook Inc.	357,028	97,525,768
Tesla Inc.	110,000	77,623,700
Taiwan Semiconductor Inc.	3,544,637	66,860,901
Johnson & Johnson Inc.	391,592	61,628,749
JP Morgan Chase Inc.	450,369	57,228,389
Visa Inc.	251,085	54,919,822

Largest Debt Securities Holdings

(By Fair Value)

(2	,	
Description	Par Value	Fair Value
United States Treasury Note 1.5% Due 2/15/2020	\$ 63,220,000	66,882,315
United States Treasury Bond 1.125% Due 8/15/2040	48,620,000	46,029,466
United States Treasury Note .625% Due 11/30/2027	44,625,000	44,618,027
Gate SME CLO SER 144A FLTG 15/12/2025	38,069,496	43,789,796
Federal National Mortgage Assocation 2% 2/15/2051	39,720,816	41,191,900
United States Treasury Bond 3.125% Due 5/15/2048	29,960,000	40,216,619
United States Treasury Bond 3.125% Due 11/15/2041	28,790,000	37,653,046
United States Treasury Bond 1.25% Due 5/15/2050	38,345,000	34,786,105
United States Treasury Inflation Indexed .75% 7/15/2028	27,783,000	33,513,857

^{*}As required by SEC Rule 13F, a list of publicly traded equity securities held by Utah Retirement Systems is available online through the SEC Electronic Data Gathering, Analysis, and Retrieval (EDGAR) website. This list is also available upon request.

Schedules of Fees and Commissions

Year Ended December 31, 2020

Broker Commission Fees

Broker	Total Commission Fees	
Morgan Stanley	\$	618,930
Cowen		460,318
Instinet		234,272
Jefferies		219,774
Goldman Sachs		214,920
HSBC		175,147
Citigroup		110,992
UBS		110,811
Liquidnet		95,797
CLSA		90,069
All Others	1	,320,013
Total	\$ 3	3,651,043

Schedule of Investment Fees and Commissions

Investment advisor fees:*	
Absolute return	\$ 3,612,516
Equity	31,011,662
Debt securities	13,689,543
Private equity	3,692,996
Real assets	11,264,001
Short term	499,425
Total investment advisor fees	63,770,143
Investment brokerage fees	3,651,043
Total fees and commissions	\$ 67,421,186

*Represents fees that are invoiced and paid directly by URS. These numbers do not represent all management, performance, carried interest, or other fees charged directly by investment advisors. These and other investment related fees are netted from returns.

Utah Retirement Systems uses a commission recapture program as part of its trading strategies. During the year ending December 31, 2020, Utah Retirement Systems recaptured approximately \$92,016 from the gross commission charges. This recaptured sum was used to cover or offset the \$9,124 in investment expenses that otherwise would have been paid for with investment funds.