

## Defined Benefit Investments *(Continued)*



### 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 investor rule.” The prudent investor 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.

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.

### 2021 Investment Summary

	<i>(dollars in thousands)</i>					
	2021 Beginning Fair Value	Purchases	Sales and Redemptions	Increase (Decrease) in Fair Value	2021 Ending Fair Value Balance	Percent of Total Fair Value
Short-term securities	\$ 2,631,822	34,353,284	(33,610,800)	(3,527)	3,370,779	7.40 %
Equities	15,669,072	4,654,716	(4,412,467)	1,001,364	16,912,685	37.14
Debt securities	5,318,719	29,143,838	(28,835,389)	(170,438)	5,456,730	11.98
Real assets	5,232,310	1,701,615	(781,551)	796,491	6,948,865	15.26
Private equity	4,535,107	1,059,436	(680,891)	1,059,954	5,973,606	13.12
Absolute return	5,920,978	4,115,751	(3,455,001)	293,280	6,875,008	15.10
<b>Totals</b>	<b>\$ 39,308,008</b>	<b>75,028,640</b>	<b>(71,776,099)</b>	<b>2,977,124</b>	<b>45,537,673</b>	<b>100.00 %</b>

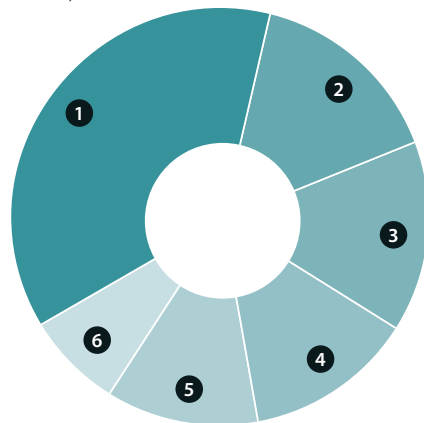
## Defined Benefit Investments *(Continued)*

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.

### Defined Benefit Systems Investments at Fair Value

December 31, 2021



- 1 Equity Securities 37.14%
- 2 Real Assets 15.26%
- 3 Absolute Return 15.10%
- 4 Private Equity 13.12%
- 5 Debt Securities 11.98%
- 6 Short Term 7.40%

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. 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.

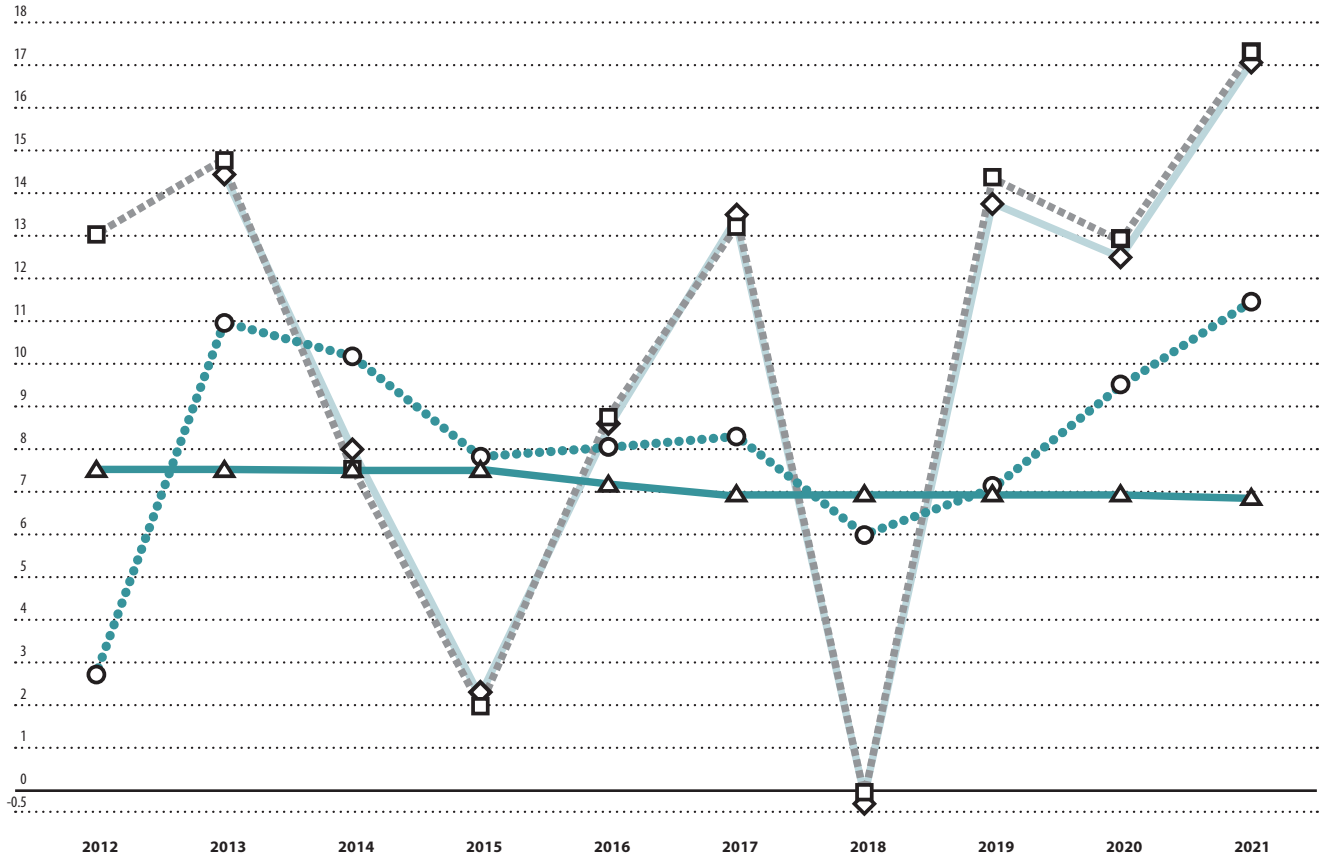
The allocation of assets as reported to the board are as follows: Equity securities 37.5%, Debt securities 18.6%, Absolute return 15.7%, Private equity 13.2% and Real assets 15.0%. These allocation percentages differ from investment asset percentages presented in the MD&A and Statement of Fiduciary Net 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,	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Equities securities	36.2 %	37.5	35.5	33.9	35.2	37.8	35.1	37.7	39.9	37.1
Debt securities	17.9	16.0	15.7	15.8	15.0	14.2	16.9	17.3	13.5	12.0
Private equity	11.3	11.0	11.8	11.9	11.3	10.7	11.7	11.3	11.5	13.1
Real assets	13.5	12.2	14.0	14.9	14.7	14.8	16.6	13.9	13.3	15.3
Short-term securities	5.9	6.6	5.8	8.2	8.2	8.6	5.1	5.2	6.7	7.4
Absolute return	15.2	16.7	17.2	15.3	15.6	13.9	14.6	14.6	15.1	15.1
Total portfolio	100.0 %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Defined Benefit Investments (Continued)

## 10-Year Total Pension Investment Rates of Return

(in percents)



(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
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
2021	45,538	11.52	17.46	6.85	17.28

- (1) **Smoothed Expected Rate of Return** consists of investment income in excess or shortfall of the expected 6.85% 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 2021, 17.29% 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.

## Defined Benefit Investments *(Continued)*

### Comparative Investment Results <sup>(1)(2)(3)</sup>

Year Ended December 31, 2021

Investment Option Comparative Index	1 Year	3 Year	5 Year	10 Year
<b>Global Equity*</b>	<b>18.23 %</b>	<b>19.59 %</b>	<b>13.21 %</b>	<b>12.24 %</b>
FSTE Global All Cap Net Index	18.06	20.15	14.05	11.98
<b>Global Debt Securities*</b>	<b>0.45</b>	<b>6.17</b>	<b>4.45</b>	<b>3.91</b>
Fund Benchmark	0.21	5.46	4.00	3.41
<i>Benchmark consisting of:</i>				
60% Bloomberg U.S. Aggregate Bond Index				
15% Bloombergs Global Aggregate Bond Index Hedged				
25% Bloomberg World Government Inflation-Linked Bond Index Hedged				
<b>Real Assets**</b>	<b>21.53</b>	<b>8.17</b>	<b>9.36</b>	<b>9.72</b>
U.S. Consumer Price Index + 5%	12.81	8.82	8.08	7.12
<b>Private Equity</b>	<b>56.88</b>	<b>36.90</b>	<b>29.37</b>	<b>21.86</b>
Private Equity Benchmark				
Russell 3000 + 2.5%	28.19	28.56	20.67	18.93
<b>Absolute Return</b>	<b>7.95</b>	<b>7.11</b>	<b>5.80</b>	<b>5.56</b>
3-month Treasury Bills + 5.0%	5.05	5.99	6.14	5.63
<b>Short Term</b>	<b>(0.02)</b>	<b>2.31</b>	<b>1.93</b>	<b>1.07</b>
3 Month Treasury Bills	0.05	0.99	1.14	0.63
<b>Total Fund***</b>	<b>17.46</b>	<b>14.94</b>	<b>11.48</b>	<b>10.28</b>
Fund Benchmark	12.63	14.59	10.93	9.43
<i>Benchmark consisting of:</i>				
37% FTSE Global All Cap Index				
16% 3-month Treasury Bill + 5%				
15% CPI-W+5%				
12% Bloomberg U.S. Aggregate Bond Index				
12% Russell 3000 Index + 2.5%				
5% Bloomberg World Government Inflation-Linked Bond Index Hedged				
3% Bloomberg Global Aggregate Bond Index Hedged				
CAI Public Fund — Very Large Database Median	16.28	15.00	11.53	10.07
<b>Inflation</b>	<b>7.81</b>	<b>3.82</b>	<b>3.08</b>	<b>2.12</b>

(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.

\*Global 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 17.29%, 14.78%, 11.31% and 10.09% for 1, 3, 5 and 10 year periods.

## Defined Benefit Investments *(Continued)*

### List of Largest Assets Held

December 31, 2021

#### ▶▶ Largest Equity Holdings\*

Description	<i>(By Fair Value)</i>	
	Shares	Fair Value
Apple	1,994,976	\$ 354,247,888
Microsoft	974,041	327,589,469
Amazon	55,945	186,359,651
Alphabet	59,039	171,038,345
Tesla	104,526	110,460,986
Alphabet	36,169	104,658,257
Meta Platforms	305,428	102,730,708
Nvidia	308,364	90,692,936
United Healthcare Group	177,409	89,084,155
Embraer	17,813,025	79,375,095

#### ▶▶ Largest Debt Securities Holdings

Description	<i>(By Fair Value)</i>	
	Par Value	Fair Value
FNMA Single Family Mortgage 0% 2/2022	\$ 246,127,000	\$ 248,093,513
United States Treasury Bond 1.75% 8/15/2041	53,885,000	52,411,582
United States Treasury Note .625% 11/15/2024	42,910,000	42,678,689
Gate SME Ser 144A 12/15/2025	38,069,496	42,563,068
GNMA 2% 1/15/2051	40,006,000	40,387,308
CRC CF 5/4/2026	39,000,000	38,668,500
United States Treasury Bond 3.125% 5/15/2048	29,960,000	37,590,438
FNMA Single Family Mortgage 3.0% 1/2022	35,940,000	37,249,844
United States Treasury Bond 3.125% 11/15/2041	28,790,000	34,702,071
FNMA Single Family Mortgage 0% 1/2022	31,681,960	32,818,434

\*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, 2021

#### ▶▶ Broker Commission Fees

Broker	Total Commission Fees
Morgan Stanley	\$ 408,615
Instinet	249,489
Goldman Sachs	168,495
Cowen	143,932
Jefferies	132,304
UBS Warburg	116,646
Sanford C Bernstein	116,205
HSBC Securities	105,347
Citigroup	58,657
Daiwa	49,204
All others	970,398
<b>Total</b>	<b>\$ 2,519,292</b>

#### ▶▶ Schedule of Investment Fees and Commissions

Investment advisor fees:*	
Absolute return	\$ 7,085,203
Equity securities	39,104,454
Debt securities	8,637,633
Private equity	6,087,881
Real assets	13,061,839
Short term	816,146
<b>Total investment advisor fees</b>	<b>74,793,156</b>
Investment brokerage fees	2,519,292
<b>Total fees and commissions</b>	<b>\$ 77,312,448</b>

\*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, 2021, Utah Retirement Systems recaptured approximately \$9,401 from the gross commission charges. This recaptured sum was used to cover or offset the \$8,000 in investment expenses that otherwise would have been paid for with investment funds.