

Defined Benefit Investments *(Continued)*



2023 Investment Summary

(dollars in thousands)

	2023 Beginning Fair Value	Purchases	Sales and Redemptions	Increase (Decrease) in Fair Value	2023 Ending Fair Value Balance	Percent of Total Fair Value
Short-term securities	\$ 1,220,889	31,963,025	(31,860,331)	(9,058)	1,314,525	2.90
Equities	13,070,685	2,525,250	(2,468,459)	2,276,990	15,404,466	33.88
Debt securities	6,459,625	42,930,765	(42,806,283)	386,954	6,971,061	15.33
Real assets	8,613,643	780,418	(404,275)	(245,862)	8,743,924	19.23
Private equity	5,529,627	485,063	(330,728)	(68,914)	5,615,048	12.35
Absolute return	7,530,815	1,866,377	(2,227,728)	246,642	7,416,106	16.31
Totals	\$ 42,425,284	80,550,898	(80,097,804)	2,586,752	45,465,130	100.00

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 State 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.

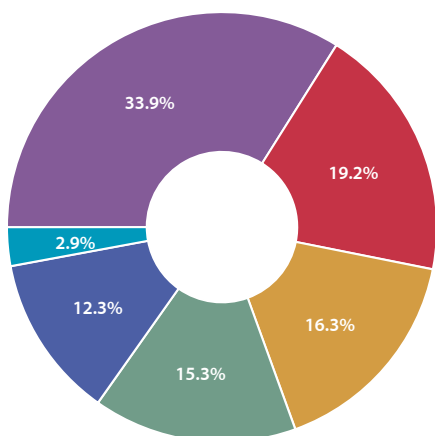
Defined Benefit Investments *(Continued)*

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, 2023



December 31,	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Equities securities	35.5%	33.9	35.2	37.8	35.1	37.7	39.9	37.1	30.8	33.9
Debt securities	15.6	15.8	15.0	14.2	16.9	17.3	13.5	12.0	15.2	15.3
Private equity	11.8	11.9	11.3	10.7	11.7	11.3	11.5	13.1	13.0	12.4
Real assets	14.0	14.9	14.7	14.8	16.6	13.9	13.3	15.3	20.3	19.2
Short-term securities	5.8	8.2	8.2	8.6	5.1	5.2	6.7	7.4	2.9	2.9
Absolute return	17.2	15.3	15.5	13.9	14.7	14.6	15.1	15.1	17.8	16.3
Total portfolio	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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.

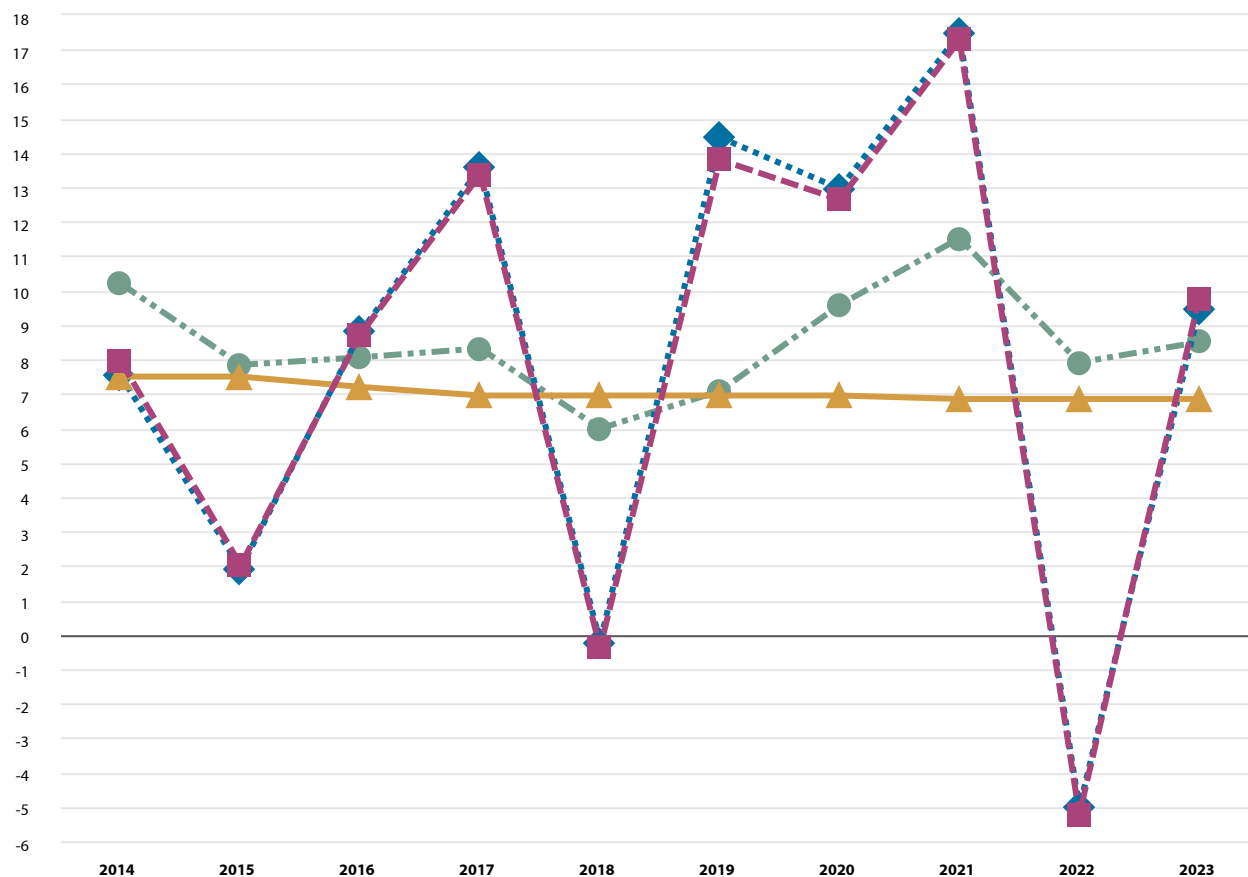
Investment return calculations are prepared using a time-weighted rate of return.

The allocation of assets as reported to the board are as follows: Equity securities 33.9%, Debt securities 15.3%, Absolute return 16.3%, Private equity 12.4% and Real assets 19.2%. 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.

Defined Benefit Investments *(Continued)*

10-Year Total Pension Investment Rates of Return

(in percents)



(dollars in millions)

	Total Investment Portfolio Fair Value	(1) Smoothed Expected Rate of Return	(2) Fair Value Rate of Return	(3) Actuarial Assumed Interest Rate	(4) Money Weighted Rate of Return
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
2022	42,425	7.91	(5.04)	6.85	(5.23)
2023	45,465	8.50	9.44	6.85	9.76

- (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 2023, 9.27% 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 or Return** is calculated as the internal rate of return on pension plan investments, net of investment expenses.

Defined Benefit Investments *(Continued)*

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

Year Ended December 31, 2023

Investment Option Comparative Index	1 Year	3 Year	5 Year	10 Year
Global Equity*	21.73%	6.46%	11.79%	7.99%
FTSE Global All Cap Index	21.59	5.47	11.50	7.77
Global Debt Securities*	6.07	(2.62)	1.93	2.56
Fund Benchmark	5.52	(3.01)	1.32	2.22
<i>Benchmark consisting of:</i>				
60% Bloomberg U.S. Aggregate Bond Index				
15% Bloomberg Global Aggregate Bond Index Hedged				
25% Bloomberg World Government Inflation-Linked Bond Index Hedged				
Real Assets**	0.04	11.74	7.76	9.30
U.S. Consumer Price Index + 5%	8.33	10.79	9.21	7.76
Private Equity	3.20	14.91	19.94	17.70
Private Equity Benchmark				
Russell 3000 + 2.5%	28.51	11.19	17.91	14.13
Absolute Return	6.19	6.56	6.62	5.12
3-month Treasury Bills + 5.0%	10.02	7.15	6.88	6.25
Short Term	2.60	2.94	3.16	1.93
3 Month Treasury Bills	5.01	2.15	1.88	1.25
Total Fund***	9.44	6.87	9.55	7.85
Fund Benchmark	15.04	5.63	9.52	7.36
<i>Benchmark consisting of:</i>				
35% FTSE Global All Cap Index				
15% 3-month Treasury Bill + 5%				
18% 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	11.70	5.95	9.35	7.36
Inflation	3.32	5.78	4.20	2.75

(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 9.27%, 6.70%, 9.39% and 7.68% for 1, 3, 5 and 10 year periods.

Defined Benefit Investments *(Continued)*

List of Largest Assets Held

December 31, 2023

Largest Equity Holdings*

Description	<i>(By Fair Value)</i>	
	Shares	Fair Value
Microsoft Corp.	979,505	\$ 368,333,060
Apple Inc.	1,741,576	335,305,627
Alphabet Inc.	1,458,580	204,487,460
Amazon Inc.	1,169,490	177,692,311
Nvidia Corp.	298,614	147,879,625
United Healthcare Group	175,719	92,510,782
Meta Inc.	261,228	92,464,263
Visa Inc.	319,453	83,169,589
Tesla Inc.	325,871	80,972,426
S&P Global Inc.	172,559	76,015,691

Largest Debt Securities Holdings

Description	<i>(By Fair Value)</i>	
	Par Value	Fair Value
United States Treasury Note 4.875% 11/30/2025	\$ 79,470,000	\$ 80,311,265
GIC FLTG RT 30/09/2041	59,987,000	64,581,518
FNMA Pool 2.0% 01/01/2051	70,414,873	57,906,787
United States Treasury Note 2.375% 02/15/2042	72,735,000	56,028,680
United States Treasury Note 3.125% 11/15/2033	56,693,000	55,572,428
MFC iShares iBoxx	693,563	53,674,841
United States Treasury Note 4.5% 11/15/2033	36,206,000	38,089,843
Korea (Republic of) 4.25% 10/12/2032	45,286,300,000	38,007,748
United States Treasury Note 1.5% 02/15/2025	39,030,000	37,668,524
United States Treasury Note 2.85% 01/15/2046	43,195,000	34,738,229

*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.

Schedule of Fees and Commissions

Year Ended December 31, 2023

Broker Commission Fees

Broker	Commissions
Morgan Stanley	\$ 395,234
Instinet	257,295
Instinet Europe Limited	198,890
Cowen	183,746
Gordan Haskett Capital	113,576
Goldman	107,299
Jefferies	82,400
Direct Trading Institutional	65,623
J. P. Morgan	60,507
UBS Securities	56,299
Other	1,161,281
Total	\$ 2,682,151

Schedule of Investment Fees and Commissions

Investment advisor fees:*	
Absolute return	\$ 7,212,141
Equity securities	33,435,093
Debt securities	8,213,898
Private equity	19,758,450
Real assets	30,590,422
Short term	208,530
Total investment advisor fees	99,418,534
Investment brokerage fees	2,682,151
Total fees and commissions	\$ 102,100,685

*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, 2023, Utah Retirement Systems recaptured approximately \$139,934 from the gross commission charges. This recaptured sum was used to cover or offset the \$81,651 in investment expenses that otherwise would have been paid for with investment funds.