

Nebraska Investment Council

First Quarter 2017 Performance Review

Aon Hewitt
Retirement and Investment

Investment advice and consulting services provided by Aon Hewitt Investment Consulting, Inc., an Aon Company.

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Total NIC Plans**As of March 31, 2017****Highlights****Total Assets by Plan**

Total Defined Benefit Plan	\$11,065,655,000
Defined Cont. & Deferred Comp.	\$1,060,353,931
Total Cash Balance Benefit	\$1,927,653,815
OSERS	\$1,160,656,407
Hartford Options	\$34,282,286
College Savings Plan	\$3,916,495,977
State Farm CSP	\$477,041,460
Health Care Endowments	\$403,156,113
50/50 Endowments	\$839,778,824
Excess Liability Fund	\$66,633,715
In-House Trusts	\$9,207,965
Internal Short-Term Liquidity Pool	\$76,832,921
Operating Investment Pool (Internal Government/Corporate)	\$3,274,395,433
Time Deposit Open Account	\$43,400,000
University of Nebraska Foundation	\$302,655,689
Total	\$24,658,199,535

Performance(%)

	1 Quarter	1 Year	3 Years	5 Years	10 Years
Major Capital Markets					
Dow Jones U.S. Total Stock Market Index	5.8	18.1	9.7	13.1	7.6
MSCI AC World ex USA Index (Net)	7.9	13.1	0.6	4.4	1.4
Bloomberg Barc. Universal	1.1	1.9	3.0	2.8	4.5
CPI	1.0	2.4	1.0	1.2	1.7

As of March 31, 2017, aggregated assets totaled \$24,658,199,535, which represented an increase of approximately \$1.6 billion from the end of the previous quarter. The significant increase in assets is a result of the addition of OSERS.

The “reflation trade” that drove global equity markets higher last quarter was bolstered in the first quarter by a continuation of improving economic fundamentals across regions. Momentum in equity markets, however, waned towards the end of the quarter as the U.S. administration’s struggles to revise healthcare reform led to more realistic expectations for pro-growth policies. U.S. equities, as measured by the Dow Jones U.S. Total Stock Market Index, gained 5.8% during the first quarter. Non-U.S. equities outperformed U.S. equities, returning 7.9% for the quarter, as measured by the MSCI AC World ex-U.S. Index. The U.S. Dollar depreciated against all major currencies despite the Fed hiking the target range for the federal funds rate to 0.75%-1.00%, a continuation of the divergent interest rate paths of the U.S. and other developed markets.

The Barclays Universal Bond Index returned 1.1% in the first quarter as the yield curve flattened over the quarter. The index has provided a return of 1.9% for the past year.

Selected* Plans
As of March 31, 2017
Asset Allocation & Performance

	Allocation Market Value (\$)	Performance(%)						
		1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Total Defined Benefit Plan	11,065,655,000	4.6	11.9	6.4	8.6	5.7	9.1	07/01/1983
Policy Benchmark		4.6	11.5	6.0	8.3	5.7	9.2	
Total Cash Balance Benefit Plan	1,927,653,815	4.6	11.8	6.4	8.6	5.7	7.8	01/01/2003
Policy Benchmark		4.6	11.5	6.0	8.3	5.7	7.8	
OSERS	1,160,656,407	3.4	5.5	1.0	4.6	4.1	9.2	12/01/1989
Policy Index		4.0	9.9	4.6	7.5	5.2	N/A	
Health Care Endowments	403,156,113	4.5	11.3	6.2	8.9	5.8	6.5	01/01/2001
Health Care Policy		4.8	12.1	6.2	8.6	5.6	5.6	
50/50 Endowments	839,778,824	2.8	9.7	5.4	7.0	5.9	7.4	01/01/1996
50/50 Endowment Policy		3.5	8.8	5.5	7.0	5.6	6.9	
Excess Liability Fund	66,633,715	1.6	2.9	3.2	3.0	5.2	5.7	07/01/1997
Performance Benchmark		1.1	1.9	3.0	2.8	4.5	5.4	
Total OIP	3,358,349,767	0.6	0.1	1.9	1.6	3.0	4.0	01/01/1997
Policy Benchmark		0.6	0.1	1.8	1.7	3.3	4.5	
Aeronautics	6,539,946	0.7	-1.7	2.3	1.8	4.2	6.2	01/01/1990
Bloomberg Barc. U.S. Treasury		0.7	-1.4	2.1	1.6	3.9	5.8	
Agricultural Development	2,668,019	0.7	-1.6	2.3	1.8	3.9	6.5	01/01/1989
Bloomberg Barc. U.S. Treasury		0.7	-1.4	2.1	1.6	3.9	6.1	

*Only includes Plans that have a total fund return. As such, Defined Contribution, Deferred Compensation, Hartford, College Savings Plans, TDOA, and University Fund N Plan are not shown.

The Defined Benefit, Cash Balance Benefit, Excess Liability Fund, Total OIP, Aeronautics, and Agricultural Development Funds approximated or outperformed their respective benchmarks during the quarter. It is also noteworthy that the majority of the asset pools have matched or exceeded their policy benchmarks over the trailing three-, five-, and ten-year periods.

All Plans – Actual vs. Policy Allocation

	Defined Benefit Plan				Cash Balance Benefit			
	Actual	Policy	Difference	Policy Ranges	Actual	Policy	Difference	Policy Ranges
U.S. Equity	35.4%	30.5%	4.9%	25.5% - 35.5%	35.6%	30.5%	5.1%	25.5% - 35.5%
Non-U.S. Equity	10.4%	13.5%	-3.1%	8.5% - 18.5%	10.4%	13.5%	-3.1%	8.5% - 18.5%
Global Equity	15.9%	15.0%	0.9%	10.0% - 20.0%	15.8%	15.0%	0.8%	10.0% - 20.0%
Fixed Income	27.5%	30.0%	-2.5%	25.0% - 35.0%	27.8%	30.0%	-2.2%	25.0% - 35.0%
Real Estate	6.1%	6.0%	0.1%	1.0% - 11.0%	5.7%	6.0%	-0.3%	1.0% - 11.0%
Private Equity*	4.7%	5.0%	-0.3%	0.0% - 10.0%	4.6%	5.0%	-0.4%	0.0% - 10.0%

	Health Care Endowment				50/50 Endowment			
	Actual	Policy	Difference	Policy Ranges	Actual	Policy	Difference	Policy Ranges
U.S. Equity	37.4%	40.0%	-2.6%	35.0% - 45.0%	27.0%	25.0%	2.0%	20.0% - 30.0%
Non-U.S. Equity	15.2%	15.0%	0.2%	10.0% - 20.0%	8.8%	10.0%	-1.2%	5.0% - 15.0%
Global Equity	13.3%	10.0%	3.3%	5.0% - 15.0%	5.1%	5.0%	0.1%	0.0% - 10.0%
Fixed Income	21.8%	25.0%	-3.2%	20.0% - 30.0%	47.3%	50.0%	-2.7%	45.0% - 55.0%
Real Estate	5.5%	5.0%	0.5%	0.0% - 10.0%	4.7%	5.0%	-0.3%	0.0% - 10.0%
Private Equity*	6.9%	5.0%	1.9%	0.0% - 10.0%	7.1%	5.0%	2.1%	0.0% - 10.0%

- The intermediate-term Private Equity policy allocation is 4% for the Defined Benefit and Cash Balance Benefit Plans.
- The long-term target allocation to Real Estate within the DB and CBB Plans is 7.5% and will be funded from U.S. Equity over time.

As of March 31, 2017, the asset class allocations within each portfolio were within permissible ranges with one exception. (The allocation to U.S. Equity within the CBB Plan was slightly above the top-end of the policy range as of quarter-end.) In some cases, the U.S. equity allocation is above its policy target, which is largely a result of the relative outperformance U.S. equities have experienced of late. It should also be noted that the U.S. equity allocation will serve as a source of funding for additional alternative investments in the DB and CBB Plans.

Defined Benefit & Cash Balance Benefit Plans

As of March 31, 2017

Asset Allocation & Performance

	Allocation			Performance(%)						
	Market Value \$	%	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Total Defined Benefit Plan	\$11,065,655,000	100.0	4.6 (33)	10.0 (21)	11.9 (27)	6.4 (2)	8.6 (11)	5.7 (15)	9.1	07/01/1983
Policy Benchmark			4.6 (34)	9.4 (36)	11.5 (34)	6.0 (14)	8.3 (19)	5.7 (16)	9.2	
Total U.S. Equity	\$3,917,524,881	35.4	5.5 (42)	15.2 (43)	18.0 (41)	9.9 (14)	13.3 (10)	7.5 (25)	9.7	07/01/1983
Dow Jones U.S. Total Stock Market			5.8 (25)	15.1 (45)	18.1 (40)	9.7 (17)	13.1 (13)	7.6 (23)	10.6	
Total Non-U.S. Equity	\$1,154,946,557	10.4	8.1 (62)	14.9 (15)	13.3 (32)	1.4 (58)	5.1 (58)	0.9 (91)	5.5	10/01/1991
MSCI All Country World ex-U.S. IMI*			8.0 (68)	13.8 (36)	13.0 (39)	0.8 (77)	4.7 (70)	1.7 (65)	5.8	
Total Global Equity	\$1,756,005,587	15.9	7.3 (38)	13.6 (44)	14.3 (43)	5.1 (48)	9.0 (53)	4.7 (49)	7.0 (30)	09/01/2005
MSCI All Country World IMI*			6.8 (47)	14.2 (39)	15.4 (34)	5.1 (48)	8.5 (65)	4.1 (63)	6.1 (59)	
Total Fixed Income	\$3,043,460,370	27.5	1.4 (44)	1.1 (39)	3.5 (41)	3.1 (47)	3.1 (48)	5.1 (26)	8.1	07/01/1983
Barclays Universal Bond Index*			1.1 (63)	-0.6 (72)	1.9 (72)	3.0 (54)	2.8 (55)	4.5 (50)	8.0	
Total Real Estate	\$671,262,613	6.1	1.7	5.6	7.8	11.4	10.6	3.8	6.9	12/01/2004
Performance Benchmark			1.5	5.3	7.4	10.5	10.6	6.7	8.8	
Total Private Equity	\$515,333,580	4.7	5.3	13.7	14.0	11.9	11.7	7.6	3.0	09/01/2005
Dow Jones U.S. Total Stock Market + 3%			6.6	17.6	21.6	12.9	16.5	10.8	11.6	
Total Cash	\$7,121,413	0.1								

	Allocation			Performance(%)						
	Market Value (\$)	%	1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
Total Cash Balance Benefit Plan	1,927,653,815	100.0	4.6 (34)	11.8 (29)	6.4 (2)	8.6 (11)	5.7 (16)	7.8 (26)	01/01/2003	
Policy Benchmark			4.6 (34)	11.5 (34)	6.0 (14)	8.3 (19)	5.7 (16)	7.8 (25)		
Total U.S. Equity	686,257,947	35.6	5.5 (42)	18.0 (41)	9.9 (14)	13.3 (10)	7.5 (25)	9.8 (7)	01/01/2003	
Dow Jones U.S. Total Stock Market			5.8 (25)	18.1 (40)	9.7 (17)	13.1 (13)	7.6 (23)	9.9 (6)		
Total Non-U.S. Equity	200,604,048	10.4	8.1 (62)	13.3 (32)	1.4 (58)	5.1 (58)	0.9 (90)	7.7 (77)	01/01/2003	
MSCI All Country World ex-U.S. IMI*			8.0 (68)	13.0 (39)	0.8 (77)	4.7 (70)	1.7 (65)	8.4 (57)		
Total Global Equity	305,002,709	15.8	7.3 (38)	14.3 (43)	5.1 (48)	9.0 (53)	5.1 (36)	7.4 (23)	09/01/2005	
MSCI All Country World IMI*			6.8 (47)	15.4 (34)	5.1 (48)	8.5 (65)	4.1 (63)	6.1 (59)		
Total Fixed Income	535,896,057	27.8	1.4 (44)	3.4 (43)	3.1 (47)	3.1 (48)	5.0 (26)	4.8 (55)	01/01/2003	
Barclays Universal Bond Index*			1.1 (63)	1.9 (72)	3.0 (54)	2.8 (55)	4.5 (50)	4.6 (59)		
Total Real Estate	110,384,149	5.7	1.7	7.8	11.4	10.6	3.9	7.0	12/01/2004	
Performance Benchmark			1.5	7.4	10.5	10.6	6.4	8.8		
Total Private Equity	89,508,905	4.6	5.3	14.0	11.9	11.7	7.6	3.0	09/01/2005	
Dow Jones U.S. Total Stock Market + 3%			6.6	21.6	12.9	16.5	10.8	11.6		

*Denotes a performance benchmark is a splice of more than one index. Descriptions can be found in the appendix of this report.

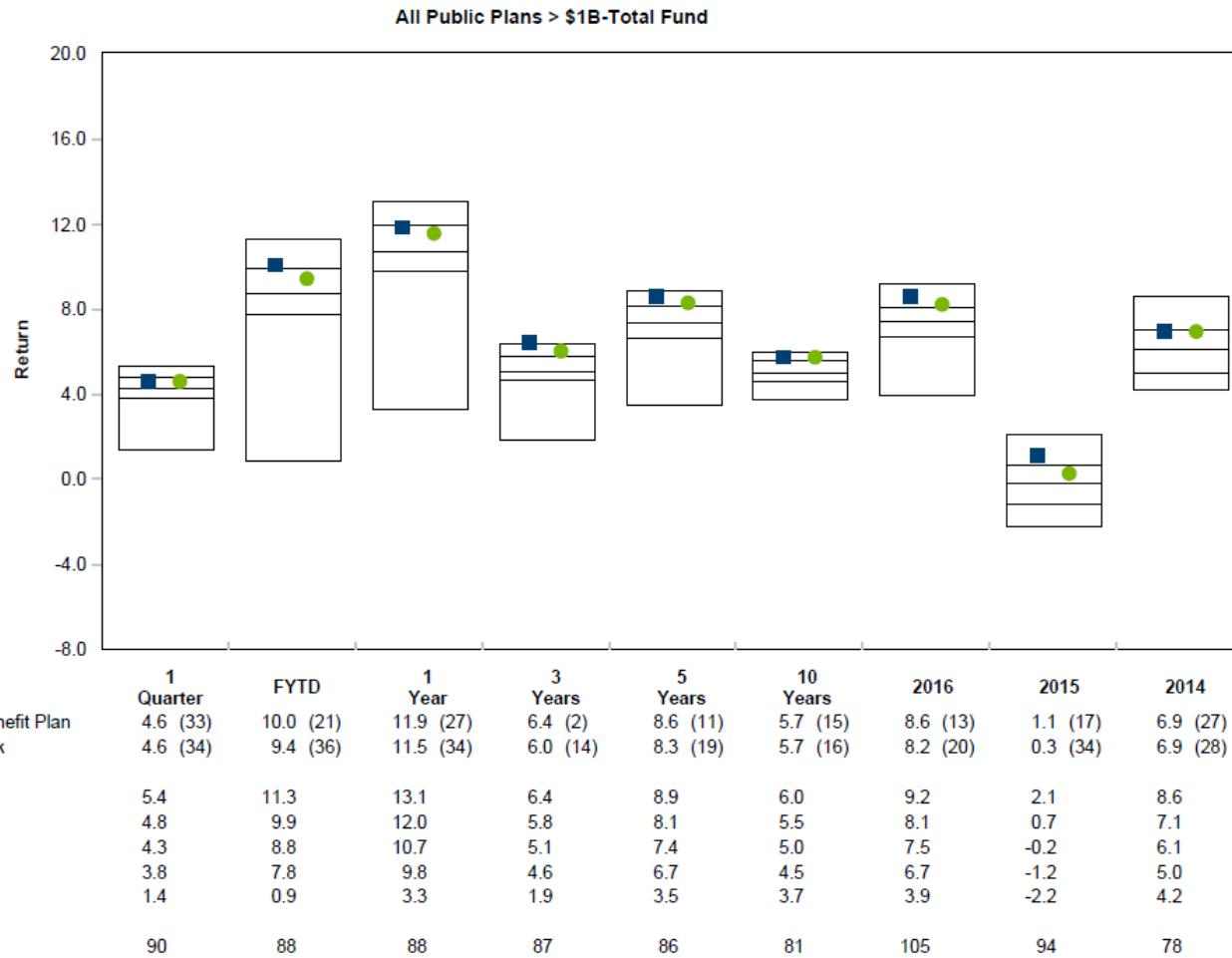
Note: The Total Fixed Income market value for the Cash Balance Benefit plan includes the CBB-GICS & Money Market.

The Defined Benefit Plan and the Cash Balance Benefit Plan performed in-line with the policy benchmark during the quarter. Total fund peer rankings are favorable across all trailing periods. The equity component of each Plan, in particular the U.S. equity exposure, has been the main driver of absolute performance in recent years.

Total Defined Benefit Plan

As of March 31, 2017

Plan Sponsor Peer Group Analysis

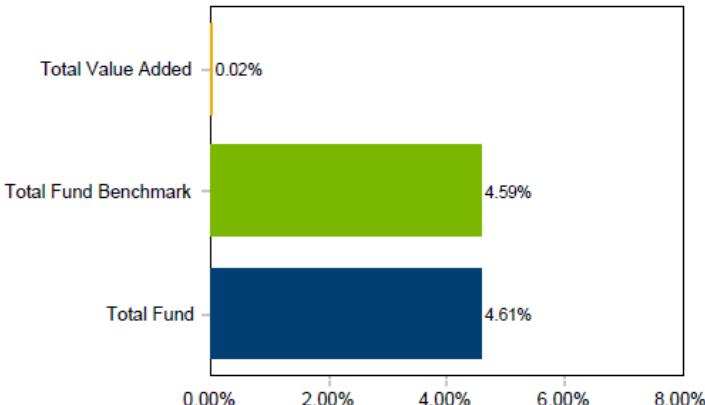


Total Defined Benefit Plan

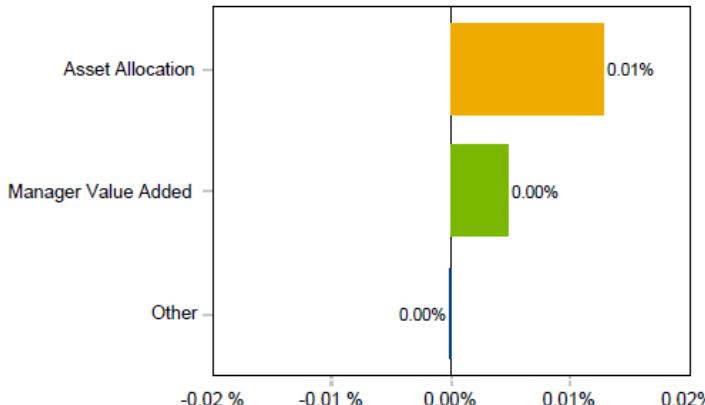
1 Quarter Ending March 31, 2017

Total Fund Attribution

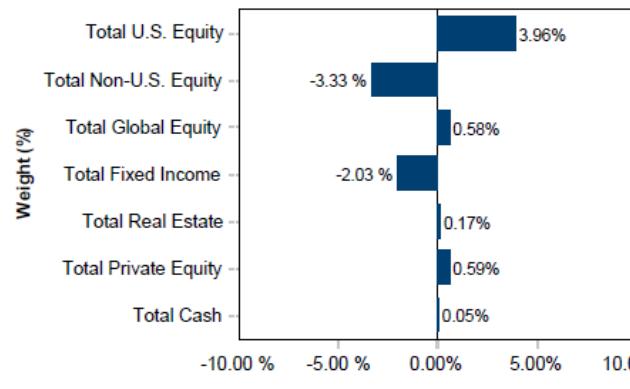
Total Fund Performance



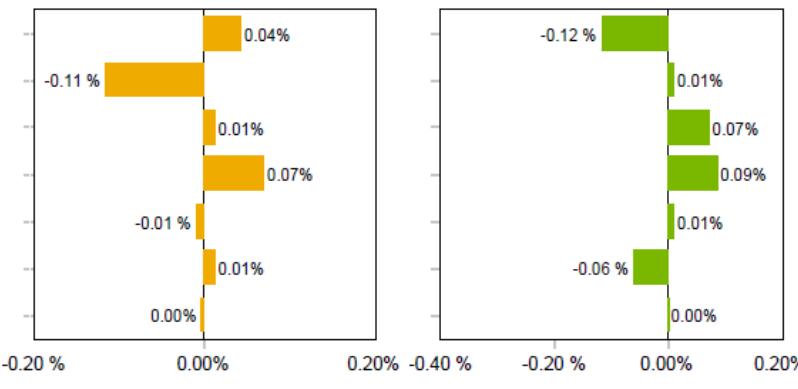
Total Value Added: 0.02%



Total Asset Allocation: 0.01%



Total Manager Value Added: 0.00%



■ Average Active Weight

■ Asset Allocation Value Added

■ Manager Value Added

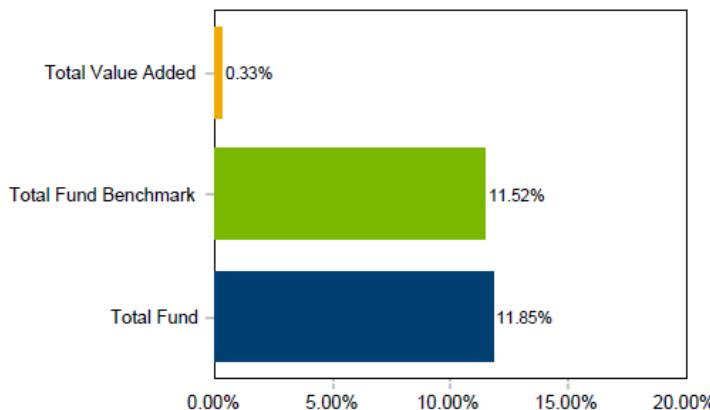
During the first quarter, the Plan's underlying managers had no impact (net-of-fees) on absolute performance while the overweight and underweight asset class positions had a slightly positive impact in aggregate, adding 0.01% to absolute performance.

Total Defined Benefit Plan

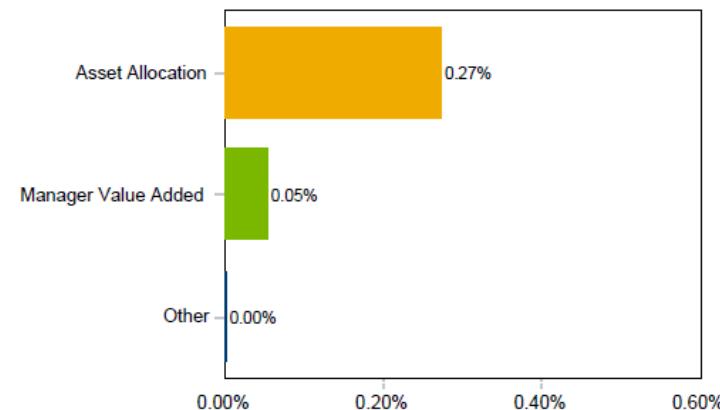
1 Year Ending March 31, 2017

Total Fund Attribution

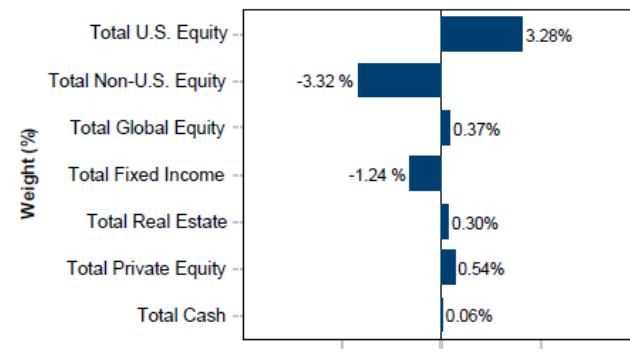
Total Fund Performance



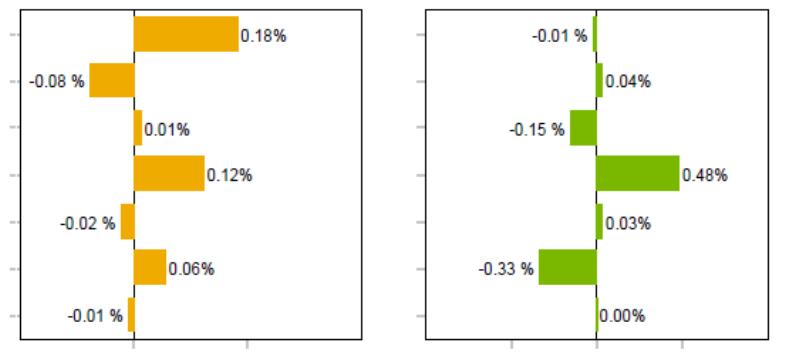
Total Value Added: 0.33%



Total Asset Allocation: 0.27%



Total Manager Value Added: 0.05%



■ Average Active Weight

■ Asset Allocation Value Added

■ Manager Value Added

One-year attribution indicates that the Fund's 0.33% of outperformance during the period was primarily due to added value from asset allocation. Over the past year, the Plan's overweight and underweight asset class positions contributed 0.27% to absolute performance while the Plan's underlying manager performance was also favorable, adding 0.05% (net-of-fees).

Total Defined Cont. & Deferred Comp.

As of March 31, 2017

Asset Allocation & Performance

	Allocation		Performance(%)							
	Market Value (\$)	%	1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
Total Defined Cont. & Deferred Comp.	1,060,353,931	100.0								
DFA Small Cap <i>Russell 2000 Index</i>	59,571,956	5.6	1.0 2.5	22.5 26.2	7.7 7.2	13.5 12.4	8.3 7.1	9.8 8.1	01/01/2001	
Russell 1000 Growth Index Fund <i>Russell 1000 Growth Index</i>	50,976,215	4.8	8.9 8.9	15.7 15.8	11.3 11.3	13.4 13.3	9.2 9.1	4.5 4.4	10/01/1999	
Russell 1000 Value Index Fund <i>Russell 1000 Value Index</i>	44,517,632	4.2	3.3 3.3	19.2 19.2	8.7 8.7	13.2 13.1	6.0 5.9	7.0 6.9	10/01/1999	
U.S. Equity Index Fund <i>S&P 500 Index</i>	176,605,514	16.7	6.1 6.1	17.1 17.2	10.4 10.4	13.3 13.3	7.6 7.5	6.8 6.7	01/01/1998	
BlackRock All-Country World ex-U.S. Index Fund <i>MSCI AC World ex USA Index (Net)</i>	31,780,691	3.0	8.0 7.9	13.3 13.1	0.6 0.6	4.4 4.4	1.5 1.4	5.0 4.9	07/01/2005	
U.S. Debt Index Fund <i>Blmbg. Barc. U.S. Aggregate</i>	17,367,193	1.6	0.8 0.8	0.4 0.4	2.7 2.7	2.4 2.3	4.3 4.3	5.1 5.0	01/01/1998	
T. Rowe Stable Value <i>Performance Benchmark</i>	126,122,015	11.9	0.4 0.4	1.7 1.8	1.6 1.8	1.7 1.8	2.7 2.7	4.4 3.4	01/01/1997	
SSga STIF <i>Barclays 90-Day T-Bill Index</i>	8,270,449	0.8	0.2 0.1	0.6 0.4	0.3 0.2	0.2 0.2	0.8 0.7	2.2 2.1	01/01/1998	
Conservative Premixed <i>Conservative Policy</i>	41,156,669	3.9	2.0 2.0	5.0 4.6	3.9 3.7	4.5 4.3	4.8 4.5	4.9 4.7	10/01/1999	
Moderate Premixed <i>Moderate Policy</i>	399,222,157	37.6	3.2 3.3	9.0 8.9	5.5 5.5	7.2 7.0	6.0 5.7	5.8 5.6	10/01/1999	
Aggressive Premixed <i>Aggressive Policy</i>	86,000,848	8.1	4.4 4.6	13.1 13.3	6.8 6.7	9.5 9.2	6.4 6.1	6.0 5.9	10/01/1999	
Investor Select Fund <i>Performance Benchmark</i>	18,762,593	1.8	4.4 4.4	10.2 10.9	5.8 6.0	8.4 8.2	6.1 5.5	6.9 6.4	10/01/2005	

The Fund options offered to participants span the risk / return spectrum, which is consistent with best practices.

Watchlist

Plan/Fund	Status as of 1Q 2017	Trigger Event	AHIC Comment
<i>Defined Benefit & CBB</i> IronBridge	Yellow	Performance	Continue to monitor
<i>Deferred Contribution & Deferred Compensation Plan</i> None			
<i>Hartford Plan</i> Goldman Sachs Mid-Cap Value Munder Mid-Cap Core Growth Hartford Small Company HLS	Yellow Yellow Yellow	Performance Performance Performance	Continue to monitor Continue to monitor Continue to monitor
<i>College Savings Plans</i> Vanguard Equity Income	Yellow	Performance	Continue to monitor

Status	Number of Criteria Met	Suggested Action
Green	Less than 2	Active – No action required
Yellow	2 to 3	Active – On “closely monitored” list
Orange	4	Closed – all allocations to the fund must be stopped, but
Red	Greater than 4	Closed Out – All invested balances must be moved to another active

Funds listed under the College Savings Plan section register “Yellow” in at least one of the three underlying plans

Three funds (Hartford Capital Appreciation HLS, Oakmark Equity & Income, and Oppenheimer Value Fund) were removed from the watch list during the quarter. Removal of these funds was triggered by favorable performance factors as of late. One new fund was added to the watch list this quarter due to performance reasons (Munder Mid-Cap Core Growth). No action is recommended at this time.

OSERS – Summary of Transition Activity During 1Q

	Allocation as of 12/31/16 (\$ MM)	Allocation as of 12/31/16 (%)	Allocation as of 3/31/17 (\$)	Allocation as of 3/31/17 (%)	Transition Year 1 Target	Long-Term Target Asset Allocation
U.S. Equity	\$152.9	13.4%	\$255.4	22.0%	22.5%	29.0%
Non-U.S. Equity	--	--	85.9	7.4	10.5	13.5
Global Equity	210.5	18.5	94.7	8.2	11.5	15.0
Fixed Income (Core)	130.6	11.5	\$209.7	18.1	25.0	21.5
Fixed Income (RS)	--	--	--	--	--	8.5
Hedge Funds	103.2	9.1	106.4	9.2	30.5	--
Real Assets	170.1	14.9	41.2	3.5		--
Real Estate	240.1	21.1	243.7	21.0		7.5
Private Equity	117.3	10.3	123.6	10.7	--	5.0
Cash	15.7	1.4	--	--		--
Total Fund	\$1,139.8	100.0%	\$1,160.7	100.0%	100.0%	100.0%

- More than half of the portfolio (\$600+ million) transitioned during Q1, mostly during the second half of March
 - 12 new mandates funded, 9 terminated
- Transition activity overseen by SSgM; eye towards efficiency / cost minimization
 - Cost of transition was in-line with the range presented in SSgM pre-trade analysis
- The bulk of the “Year 1” transition activity has been completed
 - As additional liquidity becomes available the actual allocations to U.S. Equity, Non-U.S. Equity, Global Equity, and Fixed Income will be increased towards there Year 1 transition target
- It will be several years before the Long-Term Target allocation is reached

The table above summarizes the OSERS transition activity / progress towards the new target allocation to date in 2017.

Defined Benefit & Cash Balance Benefit Fees

Manager	Assets (\$ in dollars)	Total Fee (\$ in dollars)	Total Fee (bps)
DFA – U.S. Small Cap	\$488,437,770	\$1,807,220	37
BlackRock Russell 1000 Index	\$4,115,269,746	\$555,561	1
BlackRock World ex-U.S. IMI	\$798,587,526	\$319,435	4
Baillie Gifford Emerging Markets	\$220,207,378	\$1,211,141	55
Gryphon	\$336,755,701	\$1,683,779	50
Acadian Global Equity	\$198,394	\$0	--
Arrowstreet	\$631,055,434	\$3,029,066	48
MFS Global Equity	\$410,385,671	\$1,895,982	46
Ironbridge	\$289,982,723	\$1,690,599	58
Mondrian	\$366,106	\$0	--
BlackRock All Country World IMI	\$518,948,026	\$103,790	2
Wellington Global Equity	\$210,071,942	\$1,680,576	80
BlackRock Core Plus	\$459,739,110	\$928,673	20
PIMCO Total Return	\$621,885,251	\$1,629,339	26
BlackRock Bond Index	\$703,024,595	\$140,605	2
Wellington Global	\$328,973,844	\$1,151,408	35
Loomis Sayles Multi-Sector Full Discretion	\$180,426,494	\$618,863	34
Loomis Sayles Bank Loans	\$301,901,564	\$1,258,930	42
Franklin Templeton	\$304,781,497	\$1,432,473	47
Neuberger Berman	\$534,062,127	\$854,499	16
Total RE ¹	\$781,646,762	\$7,889,018	103
Total PE ²	\$604,842,485	\$8,443,629	147
Annual Fee Paid to Nebraska Investment Council	--	\$1,535,390	1
Total DB/CBB	\$12,841,550,145	\$39,859,975	31

1. Total Fee (in dollars) of trailing 12-month period as of 12/31/2016.

2. Total Fee (in dollars) of trailing 12-month period as of 9/30/2016.

Fees remain extremely competitive for both the Defined Benefit Plan and the Cash Balance Plan. The total fee as of March 31, 2017, is 31 basis points (0.31%) annually.

Total Defined Cont. & Deferred Comp**As of March 31, 2017****Fee Schedule****

	Market Value As of 03/31/2017 \$000	% of Portfolio	Estimated Annual Fee \$000	Estimated Annual Fee (%)
Total Defined Cont. & Deferred Comp.	1,060,354	100.00	855	0.08
DFA Small Cap	59,572	5.62	220	0.37
Russell 1000 Growth Index Fund	50,976	4.81	10	0.02
Russell 1000 Value Index Fund	44,518	4.20	9	0.02
U.S. Equity Index Fund	176,606	16.66	26	0.02
BlackRock All-Country World ex-U.S. Index Fund	31,781	3.00	32	0.10
U.S. Debt Index Fund	17,367	1.64	5	0.03
T. Rowe Stable Value	126,122	11.89	164	0.13
SSgA STIF	8,270	0.78	-	0.00
Conservative Premixed	41,157	3.88	25	0.06
Moderate Premixed	399,222	37.65	240	0.06
Aggressive Premixed	86,001	8.11	60	0.07
Investor Select Fund	18,763	1.77	64	0.34

** In addition to the fees listed above, \$128,637 (~1 bp on assets) in annual fees are paid to the Nebraska Investment Council.

The fees for the funds within the DC Plans are extremely favorable, ranging from 0.02% to 0.37% per annum. The DFA Small Cap Fund fee is 0.37%, which ranks very favorably relative to other active small cap managers.