



# ND STATE INVESTMENT BOARD MEETING

Friday, April 25, 2014, 8:30 a.m.  
Peace Garden Room, State Capitol  
600 E Blvd, Bismarck, ND

## REVISED AGENDA

### I. CALL TO ORDER AND ACCEPTANCE OF AGENDA

### II. ACCEPTANCE OF MINUTES (March 28, 2014)

### III. INVESTMENTS

- A. Asset and Performance Review - Mr. Hunter (enc) (30 min)
- B. WSI Asset Allocation Study - Mr. Hunter (enc) (30 min) **(Board Approval)**
- C. Westridge/WG Trading - Ms. Murtha (10 min)  
Executive Session for Attorney Consultation  
N.D.C.C. §44-04-19.1(5) and N.D.C.C. §44-04-19.2

### IV. EDUCATION

- A. Manager Searches - Mr. Hunter (enc) (30 min)
- B. Securities Litigation - Ms. Murtha (to follow) (30 min)
- C. Cost of Doing Business - Mr. Hunter (enc) (15 min)

### V. GOVERNANCE

- A. Administration
  - 1. Staff Update - Mr. Hunter (enc) (5 min)
  - 2. Board of Medical Examiners - Mr. Schulz (to follow) (5 min) **(Board Approval)**

### VI. QUARTERLY MONITORING (enc) (5 min) **(Board Acceptance)**

- A. Budget and Financial Conditions - Ms. Walcker / Ms. Flanagan
- B. Executive Limitations/Staff Relations - Mr. Hunter
- C. Investment Program - Mr. Schulz
- D. Retirement Program - Ms. Kopp
- E. Watch List - Mr. Hunter

### VII. OTHER

Next Meetings:

SIB meeting - May 23, 2014, 8:30 a.m. - State Capitol, Peace Garden Room

SIB Audit Committee meeting - May 23, 2014, 1:00 pm - State Capitol, Peace Garden Room

### VIII. ADJOURNMENT

**NORTH DAKOTA STATE INVESTMENT BOARD  
MINUTES OF THE  
MARCH 28, 2014, BOARD MEETING**

**BOARD MEMBERS PRESENT:** Drew Wrigley, Lt. Governor, Chair  
Mike Sandal, Vice Chair  
Clarence Corneil, Parliamentarian, TFFR Board  
Lance Gaebe, Land Commissioner  
Mike Gessner, TFFR Board  
Rob Lech, TFFR Board  
Howard Sage, PERS Board  
Kelly Schmidt, State Treasurer  
Cindy Ternes, Workforce Safety & Insurance designee  
Tom Trenbeath, PERS Board

**BOARD MEMBERS ABSENT:** Adam Hamm, Insurance Commissioner

**STAFF PRESENT:** Connie Flanagan, Fiscal & Investment Op Mgr  
Bonnie Heit, Assistant to the SIB  
David Hunter, ED/CIO  
Fay Kopp, Deputy ED/CRO  
Cody Schmidt, Compliance Officer  
Darren Schulz, Deputy CIO

**OTHERS PRESENT:** Jeff Engleson, Deputy Land Commissioner  
Jan Murtha, Attorney General's Office

**CALL TO ORDER:**

Lt. Governor Wrigley called the State Investment Board (SIB) meeting to order at 8:30 a.m. on Friday, March 28, 2014, at the State Capitol, Peace Garden Room, 600 E Boulevard, Bismarck, ND.

A quorum was present for the purpose of conducting business.

Commissioner Hamm was absent attending a National Association of Insurance Commissioners meeting.

**AGENDA:**

**IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. GESSNER AND CARRIED ON A VOICE VOTE TO ACCEPT THE AGENDA FOR THE MARCH 28, 2014, MEETING.**

**AYES: COMMISSIONER GAEBE, TREASURER SCHMIDT, MR. SANDAL, MS. TERNES, MR. GESSNER, MR. TRENBEATH, MR. LECH, MR. SAGE, AND LT. GOVERNOR WRIGLEY**

**NAYS: NONE**

**MOTION CARRIED**

**ABSENT: COMMISSIONER HAMM, MR. CORNEIL**

**MINUTES:**

The minutes were considered from the February 28, 2014, meeting.

**IT WAS MOVED BY MR. GESSNER AND SECONDED BY MR. SANDAL AND CARRIED ON A VOICE VOTE TO ACCEPT THE FEBRUARY 28, 2014, MINUTES AS WRITTEN.**

**AYES: MR. GESSNER, COMMISSIONER GAEBE, MR. SAGE, MS. TERNES, TREASURER SCHMIDT, MR. LECH, MR. TRENBEATH, MR. SANDAL, AND LT. GOVERNOR WRIGLEY**

**NAYS: NONE**

**MOTION CARRIED**

**ABSENT: COMMISSIONER HAMM, MR. CORNEIL**

**INVESTMENTS:**

Asset and Performance Review - Mr. Hunter stated the market value of the SIB client assets was nearing \$8.7 billion as of February 28, 2014. During the last six months of 2013, client assets under management grew by \$1.1 billion and exceeded \$8.5 billion at year-end; the Legacy Fund assets increased by over 47% primarily due to tax collections; and the Pension Trust and Insurance Trust both had gains of 10% and 3.5% respectively due to net investment income.

During the last 1, 3, and 10 year periods ending December 31, 2013, the Pension Trust generated investment returns which were in the second quartile of Callan Associates public fund sponsor database primarily due to manager selection and active management.

During the last 1, 3, and 5 year periods ending December 31, 2013, the Insurance Trust generated investment returns which were in the first or second quartile of Callan Associates public fund sponsor database on an asset allocation adjusted basis, also primarily due to manager selection and active management.

Staff also provided updates on relationship reviews, future fee savings, and upcoming projects.

Service Review - Staff conducted an on-site visit with Callan Associates on March 20, 2014, and reviewed the search process Callan will utilize when searching for an additional emerging market equity manager for the SIB program. Staff is planning to bring at least three firms before the SIB for their consideration.

Mr. Hunter also reviewed a working draft which defines each manager's mandate and the percentage of assets managed in the SIB program; i.e. market value of the assets managed, returns, standard deviation and risk, excess returns, and fees.

Watch List - Mr. Hunter and Mr. Schulz conducted an on-site review with Western Asset Management Company (WAMCO) on March 19, 2014, to discuss the Securities and Exchange Commission/US Department of Labor settlements and the turnover in personnel who have oversight of the SIB's mortgage backed securities mandate. After their review with WAMCO and taking into consideration Callan Associates views, staff recommends a search be conducted for the mortgage backed securities mandate because of the recent regulatory settlement and turnover in senior personnel who oversee the mandate.

Staff also met with PIMCO representatives on March 19, 2014, and recommend that all PIMCO strategies remain on the watch list because of significant turnover in personnel at the senior level.

Staff and Treasurer Schmidt also met with Loomis Sayles on March 11, 2014, and recommend the firm remain on the watch list until short-term performance improves.

The Board recessed at 9:50 am and reconvened at 10:05 am

Custody Review - Mr. Hunter informed the SIB staff has elected to retain Callan to conduct an in-depth trust, custodial, and securities lending review of The Northern Trust to confirm service standards and fee levels. Staff looked at five firms and opted to retain Callan primarily because they are considered an industry leader in this field and also because of their familiarity with the operations of the SIB program.

**GOVERNANCE:**

Staffing Update - Mr. Hunter provided an update on office staff. Mr. Gary Vetter, Supervisor of Information Systems, will retire on March 31, 2014, and Mr. Rich Nagel has been promoted to the position effective April 1, 2014. Candidates were interviewed for Mr. Nagel's previous position, Data Processing Coordinator III, and Mr. Hunter stated he is realizing the market to attract and retain qualified candidates is challenging at the current levels the Retirement and Investment Office (RIO) is offering. Staff will look at options to address these issues when developing their budget for the next biennium.

The Audit Supervisor position was reposted and re-readvertised in March 2014 with the closing date scheduled for March 18, 2014.

Audit Committee Update - Mr. Gessner updated the SIB on the Audit Committee's activities from their February 28, 2014, meeting. As of February 28 2014, 14 audits have been completed, two are in progress, two not in compliance reviews have been completed, and notifications to five more districts were sent out.

The Audit Supervisor position has been vacant since July 2013 and the audit 2013/14 work plan is being adjusted as necessary. The Audit Division, in the interim, is addressing activities that are of most importance to the SIB Audit Committee, RIO management, and the external auditors.

Meetings are also being coordinated between RIO staff, the Public Employees Retirement System (PERS), and the State Auditor's Office representatives to review options and timeframes for implementing the new pension reporting standards, GASB Statements No. 67 and No. 68. The entities are working through the process in a joint effort, where appropriate, in order to reduce costs and provide consistency for state and local governments, school districts, and other Teachers' Fund for Retirement (TFFR) and PERS participating employers.

**IT WAS MOVED BY MR. TRENBEATH AND SECONDED BY MR. LECH TO ACCEPT THE AUDIT COMMITTEE'S ACTIVITY REPORT.**

**AYES: MR. SAGE, MR. SANDAL, MR. CORNEIL, MR. GESSNER, MR. LECH, MR. TRENBEATH, MS. TERNES, COMMISSIONER GAEBE, TREASURER SCHMIDT, AND LT. GOVERNOR WRIGLEY**

**NAYS: NONE**

**MOTION CARRIED**

**ABSENT: COMMISSIONER HAMM**

Litigation Monitoring - Ms. Murtha reviewed with the SIB her findings on what other public pension plans are doing regarding board education and the firms retained for securities litigation monitoring. Ms. Murtha will be providing education on securities litigation monitoring to the SIB at their April 25, 2014, meeting.

Callan College - Mr. Hunter provided dates on when Callan Associates will be conducting their "Callan College" 2014 sessions. Discussion followed on having Callan representative's present portions of the "Callan College" to the full SIB at one of their regularly scheduled meetings. Mr. Hunter will visit with Callan regarding conducting sessions in Bismarck and will report back to the SIB.

**OTHER:**

The next SIB meeting is scheduled for April 25, 2014, at 8:30 am at the Peace Garden Room, State Capitol, Bismarck, ND.

The next SIB Audit Committee meeting is scheduled for May 23, 2014, at 1:00 pm at the Peace Garden Room, State Capitol, Bismarck, ND.

**ADJOURNMENT:**

With no further business to come before the SIB, Lt. Governor Wrigley adjourned the meeting at 10:40 a.m.

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Lt. Governor Wrigley, Chair  
State Investment Board

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Bonnie Heit  
Assistant to the Board

# State Investment Board

## Asset and Performance Review

April 25, 2014

Dave Hunter, Executive Director / CIO

Darren Schulz, Deputy Chief Investment Officer

ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

# Executive Summary – Project Update and Strategic Initiatives

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- **Client Assets grew by \$1.35 billion (or 18%) to approximately \$8.8 billion** between June 30, 2013 and February 28, 2014. Net investment income was responsible for gains of over 11% (\$475 million) for the Pension Trust and 5.5% for the Insurance Trust (\$180 million), while Legacy assets increased by over 55% (\$660 million). (The February 28, 2014 values are preliminary and subject to change.)
- **Emerging Market Equity (2Q)** - RIO and Callan will identify three finalists for recommendation to the SIB over the next two months.
- **Client Reporting (2Q/3Q)** - RIO is working with Callan to expand performance reporting for SIB's five largest clients. These enhancements are expected to be implemented for the reporting period ended June 30, 2014.
- **Custody Review (2Q/3Q)** - Callan will commence a custody review of Northern Trust to confirm performance standards and fee levels including a proposal to adopt a conservative securities lending program. In the interim, Northern Trust has agreed to reduce our existing fees by an estimated \$70,000/quarter.
- **Private Capital (2Q/3Q)** - RIO commenced a review of our existing Private Equity, Infrastructure, Real Estate and Timber mandates to confirm our investment approach to less liquid strategies, rationalize smaller investments with limited upside, ease administrative reporting and identify potential fee savings. RIO intends to work with Callan to identify three private capital advisory candidates to assist in this review in mid-2014.
- **Global Fixed Income (3Q/4Q)** – RIO will commence a review of our fixed income strategies with Callan so as to confirm sector allocations in light of our long-term strategic goals and strong performance.
- **Board Education (Ongoing)** - Introductory “Callan College” sessions will be presented to the SIB in July and August. Proposed topics include Asset Allocation, Capital Markets Theory, Fiduciary Role, Manager Structure and Performance Measurement. Two-day sessions will also be offered in San Francisco on October 28-29, 2014. Topics for this month will include Manager Searches, Securities Litigation and the Cost of Doing Business.
- **Watch List (Ongoing)** - Loomis, PIMCO & WAMCO will be retained on the Watch List until performance improves and/or recent firm developments are satisfactorily resolved. RIO and Callan have commenced a search with regards to the WAMCO MBS mandate.

# State Investment Board - Assets Under Management

<b>Fund Name</b>	<b>Market Values as of 2/28/14 <sup>(1)</sup></b>	<b>Market Values as of 6/30/13 <sup>(2)</sup></b>
<b>Pension Trust Fund</b>		
Public Employees Retirement System (PERS)	2,230,705,364	2,000,899,336
Teachers' Fund for Retirement (TFFR)	1,987,745,833	1,810,735,455
Job Service of North Dakota Pension	96,030,889	90,442,764
City of Bismarck Employees Pension	75,758,441	68,822,847
City of Grand Forks Employees Pension	53,430,646	50,148,061
City of Bismarck Police Pension	33,273,341	30,072,819
Grand Forks Park District	5,718,156	5,109,311
City of Fargo Employees Pension	4,645,796	34,133,671
Subtotal Pension Trust Fund	4,487,308,466	4,090,364,264
<b>Insurance Trust Fund</b>		
Legacy Fund	1,855,757,941	1,194,779,193
Workforce Safety & Insurance (WSI)	1,650,346,712	1,557,719,286
Budget Stabilization Fund	589,557,362	401,353,181
City of Fargo FargoDome Permanent Fund	39,309,239	36,411,591
PERS Group Insurance Account	39,225,120	42,792,878
State Fire and Tornado Fund	29,051,780	26,633,417
Petroleum Tank Release Compensation Fund	6,973,023	6,839,483
State Risk Management Fund	6,697,425	6,187,298
State Risk Management Workers Comp Fund	5,740,456	5,247,448
ND Association of Counties (NDACo) Fund	3,338,076	2,717,444
State Bonding Fund	3,208,737	3,141,218
Insurance Regulatory Trust Fund	1,119,344	1,043,647
Bismarck Deferred Sick Leave Account	821,329	1,016,834
Cultural Endowment Fund	364,192	323,914
Subtotal Insurance Trust Fund	4,231,510,736	3,286,206,832
PERS Retiree Insurance Credit Fund	85,338,351	73,677,263
<b>Total Assets Under SIB Management</b>	<b>8,804,157,553</b>	<b>7,450,248,360</b>

- **Client Assets Under Management grew by \$1.35 billion (or 18%) between June 30, 2013 and February 28, 2014.**
- **Net investment income was responsible for gains of 11.7% (\$475 million) for the Pension Trust and 5.5% (\$180 million) for the Insurance Trust.**
- **Legacy assets increased by over 55% (\$660 million) primarily due to tax collections.**
- **As of February 28, 2014, the market value of SIB client assets approximated \$8.8 billion based on preliminary valuations.**

<sup>(1)</sup> 2/28/14 market values are unaudited and subject to change.

<sup>(2)</sup> 6/30/13 market values as stated in the Comprehensive Annual Financial Report.

# Estimated Fiscal YTD Returns to April 14, 2014

**Note: Estimated FYTD Insurance Trust Returns > Policy Benchmark, while Estimated FYTD Pension Trust Returns < Policy Benchmark 0.1%**

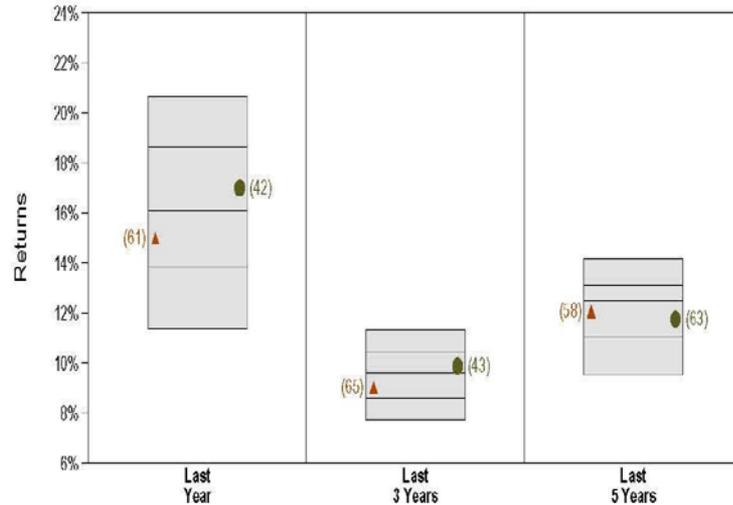
Estimated YTD Through 4/14/2014  
(Actual returns are net of fees; estimates are gross indices)

		TFFR	PERS	WSI	Legacy	Budget Stabilization	Pension Trust	Insurance Trust
<b>Market Value</b>	<b>28-Feb</b>	<b>1,987,745,833</b>	<b>2,230,705,364</b>	<b>1,650,346,712</b>	<b>1,855,757,941</b>	<b>589,557,362</b>	<b>4,487,308,466</b>	<b>4,119,809,623</b>
<b>Total Fund Actual through</b>	<b>28-Feb</b>	<b>11.86%</b>	<b>11.68%</b>	<b>8.03%</b>	<b>4.05%</b>	<b>1.31%</b>	<b>11.65%</b>	<b>5.45%</b>
<b>Total Fund Policy through</b>	<b>28-Feb</b>	<b>11.88%</b>	<b>11.78%</b>	<b>6.85%</b>	<b>3.12%</b>	<b>0.48%</b>	<b>11.75%</b>	<b>4.63%</b>
	31-Mar							
MSCI World	0.15%	16.0%	16.0%	0.0%	0.0%	0.0%	16.0%	0.0%
Russell 1000	0.64%	16.6%	16.6%	9.8%	11.4%	0.0%	16.5%	9.5%
Russell 2000	-0.68%	4.8%	4.8%	3.3%	4.3%	0.0%	4.9%	3.4%
EAFE	-0.64%	11.8%	11.1%	7.0%	11.4%	0.0%	11.1%	8.2%
Emerging Mkts	3.07%	2.8%	3.5%	0.0%	0.0%	0.0%	3.1%	0.0%
BC Agg	-0.19%	12.0%	12.0%	51.0%	26.6%	0.0%	13.1%	33.6%
BC High Yield	0.24%	5.0%	5.0%	0.0%	0.0%	0.0%	5.1%	0.0%
BC Global Agg ex US	-0.01%	5.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%
Real Estate	0.84%	20.0%	20.0%	6.0%	3.3%	0.0%	19.4%	3.9%
Private Equity	0.00%	5.0%	5.0%	0.0%	0.0%	0.0%	4.9%	0.0%
TIPS	0.27%	0.0%	0.0%	22.0%	0.8%	0.0%	0.0%	9.3%
ML 1-3Y Treasury	-0.11%	0.0%	0.0%	0.0%	42.2%	100.0%	0.0%	30.2%
T-Bill	0.00%	1.0%	1.0%	1.0%	0.0%	0.0%	1.0%	1.9%
<b>Est. MTD through</b>	<b>3/31/2014</b>	<b>0.26%</b>	<b>0.29%</b>	<b>0.01%</b>	<b>-0.10%</b>	<b>-0.11%</b>	<b>0.27%</b>	<b>-0.05%</b>
	14-Apr							
MSCI World	-1.64%	16.0%	16.0%	0.0%	0.0%	0.0%	16.0%	0.0%
Russell 1000	-2.38%	16.6%	16.6%	9.8%	11.4%	0.0%	16.5%	9.5%
Russell 2000	-4.89%	4.8%	4.8%	3.3%	4.3%	0.0%	4.9%	3.4%
EAFE	-1.01%	11.8%	11.1%	7.0%	11.4%	0.0%	11.1%	8.2%
Emerging Mkts	1.86%	2.8%	3.5%	0.0%	0.0%	0.0%	3.1%	0.0%
BC Agg	0.86%	12.0%	12.0%	51.0%	26.6%	0.0%	13.1%	33.6%
BC High Yield	0.31%	5.0%	5.0%	0.0%	0.0%	0.0%	5.1%	0.0%
BC Global Agg ex US	1.04%	5.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%
Real Estate	0.39%	20.0%	20.0%	6.0%	3.3%	0.0%	19.4%	3.9%
Private Equity	0.00%	5.0%	5.0%	0.0%	0.0%	0.0%	4.9%	0.0%
TIPS	0.81%	0.0%	0.0%	22.0%	0.8%	0.0%	0.0%	9.3%
ML 1-3Y Treasury	0.14%	0.0%	0.0%	0.0%	42.2%	100.0%	0.0%	30.2%
T-Bill	0.00%	1.0%	1.0%	1.0%	0.0%	0.0%	1.0%	1.9%
<b>Est. MTD through</b>	<b>4/14/2014</b>	<b>-0.71%</b>	<b>-0.69%</b>	<b>0.18%</b>	<b>-0.29%</b>	<b>0.14%</b>	<b>-0.69%</b>	<b>-0.05%</b>
<b>Estimated FYTD Return</b>	<b>4/14/2014</b>	<b>11.36%</b>	<b>11.23%</b>	<b>8.23%</b>	<b>3.65%</b>	<b>1.34%</b>	<b>11.17%</b>	<b>5.34%</b>
<b>Estimated FYTD Policy</b>	<b>4/14/2014</b>	<b>11.38%</b>	<b>11.33%</b>	<b>7.05%</b>	<b>2.72%</b>	<b>0.51%</b>	<b>11.27%</b>	<b>4.52%</b>
<b>Comparison to 8% return assumption pro-rated FYTD</b>		<b>6.26%</b>	<b>6.26%</b>				<b>6.26%</b>	

# Peer Performance - Pension Trust Total Fund Ranking

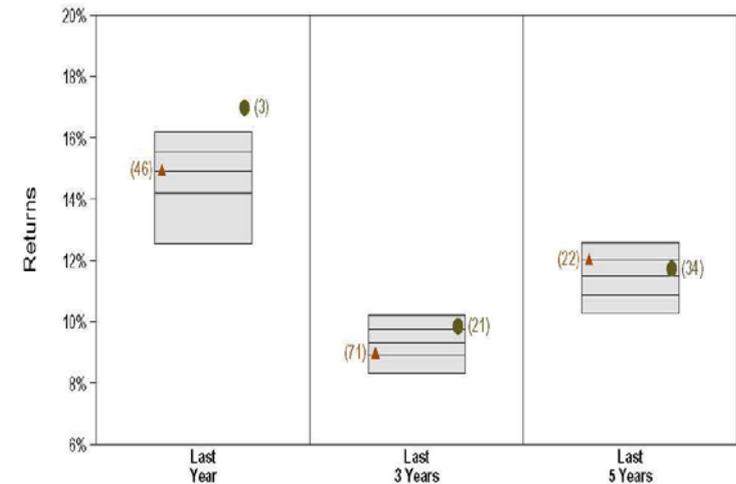
The two charts show the ranking of the Total Fund's performance relative to that of the Public Fund Sponsor Database for periods ended December 31, 2013. The left chart is a standard unadjusted ranking. In the right chart each fund in the database is adjusted to have the same historical asset allocations that of the Total Fund.

Public Fund Sponsor Database



	Last Year	Last 3 Years	Last 5 Years
10th Percentile	20.61	11.29	14.12
25th Percentile	18.62	10.44	13.11
Median	16.06	9.58	12.45
75th Percentile	13.80	8.57	11.04
90th Percentile	11.32	7.71	9.51
<b>Total Fund</b>	16.98	9.85	11.73
<b>Policy Target</b>	14.96	8.98	12.04

Asset Allocation Adjusted Ranking

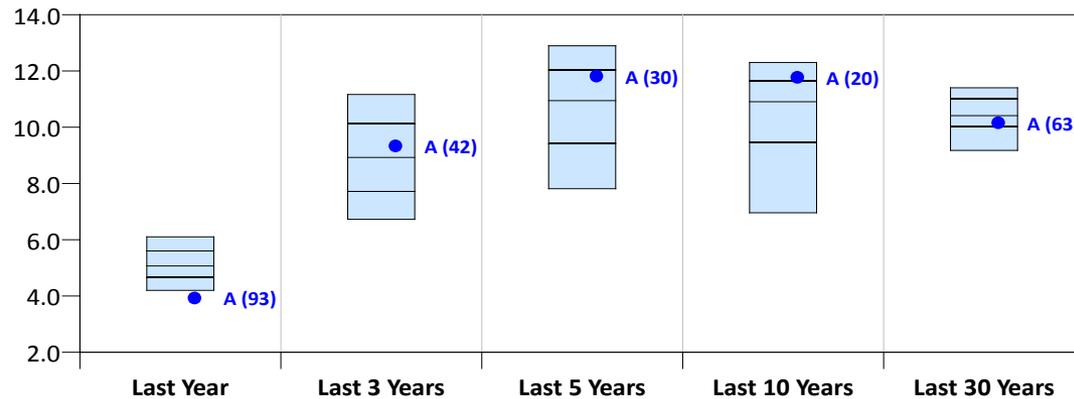


	Last Year	Last 3 Years	Last 5 Years
10th Percentile	16.18	10.20	12.57
25th Percentile	15.54	9.75	12.01
Median	14.62	9.31	11.49
75th Percentile	14.21	8.91	10.86
90th Percentile	12.55	8.31	10.27
<b>Total Fund</b>	16.98	9.85	11.73
<b>Policy Target</b>	14.96	8.98	12.04

\* Current Quarter Target = 16.4% Russell 1000 Index, 16.0% MSCI World Index, 13.1% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

# Pension Risk has declined as measured by Standard Deviation

Standard Deviation  
for Periods Ended December 31, 2013  
Group: CAI Public Fund Sponsor Database



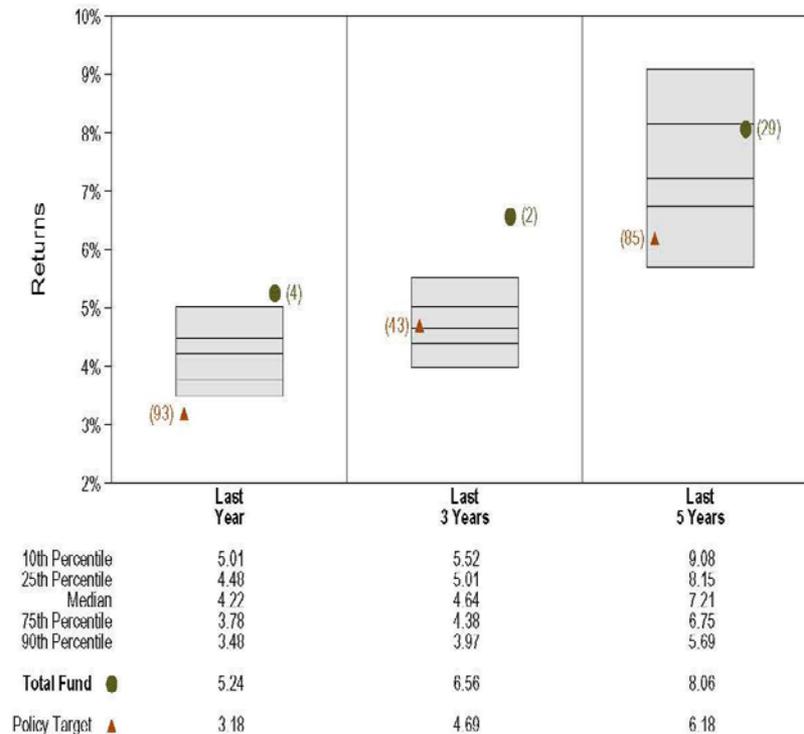
10th Percentile	6.11	11.17	12.89	12.31	11.40
25th Percentile	5.60	10.12	12.04	11.65	11.01
Median	5.07	8.93	10.95	10.91	10.42
75th Percentile	4.66	7.72	9.42	9.48	10.03
90th Percentile	4.20	6.73	7.82	6.96	9.18
Member Count	236	223	215	183	26
<b>ND Pen-Total Fund</b> ● A	<b>3.93</b>	<b>9.34</b>	<b>11.82</b>	<b>11.78</b>	<b>10.16</b>

**NOTE:** During the “Last 5 Years”, Pension Risk (as measured by standard deviation) has declined by 67% from 11.8% to 3.9%. A lower standard deviation is preferred over a higher standard deviation when comparing risk profiles. As a result, the Pension Funds peer risk rating improved to the **lowest 10%** (93<sup>rd</sup> percentile) in the “Last Year.”

# Peer Performance - Insurance Trust Total Fund Ranking

Given the material difference in the asset allocation of the Insurance Trust versus the Callan Associates Public Pension Fund database, it is inappropriate to show the unadjusted ranking for the Insurance Trust. As such, the “Asset Allocation Adjusted Ranking” is presented below for the periods ended December 31, 2013.

**Asset Allocation Adjusted Ranking**



\* Current Quarter Target = 38.8% Barclays Gov 1-3 Yr, 30.5% Barclays Aggregate Index, 9.2% Barclays GIBI Infn-Linked, 7.4% Russell 1000 Index, 6.1% MSCI EAFE Index, 2.7% 3-month Treasury Bill, 2.7% NCREIF Total Index and 2.6% Russell 2000 Index.

# Pension Trust – Calendar Year 2013

## Contribution to Relative Return

	1 Year	3 Year	5 Year
<b>Total Fund Excess Return</b>	<b>2.02%</b>	<b>0.87%</b>	<b>-0.31%</b>
<b>Asset Allocation</b>	<b>0.28%</b>	<b>-0.01%</b>	<b>-0.70%</b>
<b>Manager Selection</b>	<b>1.73%</b>	<b>0.88%</b>	<b>0.39%</b>
Global Equity	0.45%	0.00%	0.06%
Domestic Equity	0.54%	0.11%	0.13%
International Equity	0.37%	0.25%	0.48%
Private Equity	0.00%	0.00%	0.00%
Domestic Fixed Income	0.27%	0.23%	-0.09%
International Fixed Income	-0.03%	0.11%	0.27%
Real Estate	0.34%	0.25%	-0.38%
Timber	-0.44%	-0.21%	-0.20%
Infrastructure	0.23%	0.13%	0.12%
Cash Equivalents	0.00%	0.00%	0.00%

**Manager Selection** within Global, Large Cap Domestic and Developed International Equities accounted for 60% of positive relative performance followed by Real Estate at 17%.

# Insurance Trust – Calendar Year 2013

## Contribution to Relative Return

	1 Year	3 Year	5 Year
<b>Total Fund Excess Return</b>	<b>2.07%</b>	<b>1.87%</b>	<b>1.88%</b>
<b>Asset Allocation</b>	<b>0.14%</b>	<b>0.06%</b>	<b>-0.12%</b>
<b>Manager Selection</b>	<b>1.93%</b>	<b>1.81%</b>	<b>2.00%</b>
Large Cap Domestic Equity	0.19%	0.04%	-0.16%
Small Cap Domestic Equity	0.05%	0.04%	0.09%
International Equity	0.11%	0.06%	0.14%
Fixed Income	0.64%	1.09%	2.12%
Inflation Protected Assets	0.39%	-0.08%	-0.23%
Real Estate	0.25%	0.41%	-0.37%
Short Term Fixed Income	0.29%	0.26%	0.41%
Cash Equivalents	0.00%	0.00%	0.01%

**Manager Selection** was positive across all asset classes within the Insurance Trust. Fixed income contributed 31% of positive relative performance followed by Inflation Protected Assets at 19%, within which Infrastructure was a key driver.

# Investment Manager Assets Under Management (“AUM”) and Fees - Relationship Reviews Prioritized by AUM and Annual Fees Paid in Fiscal 2013

Unaudited Data Subject to Change	Avg Market Value	Investment Manager Fees Paid in FY 2013	Investment Manager Fees %	Net Manager Fees
1 J.P. MORGAN	\$1,015,200,890	\$5,811,082	0.57%	0.57%
2 BABSON	\$575,839,079	\$758,881	0.13%	0.13%
3 LA CAPITAL	\$515,772,684	\$1,086,380	0.21%	0.21%
4 WESTERN	\$502,277,941	\$894,348	0.18%	0.18%
5 CLIFTON	\$490,225,426	\$863,595	0.18% *	0.04%
6 LSV	\$487,792,473	\$2,481,730	0.51% *	0.30%
7 PIMCO	\$400,802,720	\$13,177,910	3.29% *	0.64%
8 WELLS	\$280,345,750	\$613,148	0.22%	0.22%
9 TIR	\$260,597,741	\$1,279,439	0.49%	0.49%
10 INVESCO	\$245,216,424	\$2,229,471	0.91% *	0.62%
11 BANK OF ND	\$190,480,934	\$80,718	0.04%	0.04%
12 EPOCH	\$187,755,328	\$1,412,498	0.75%	0.75%
13 LOOMIS SAYLES	\$176,536,925	\$882,685	0.50%	0.50%
14 UBS	\$127,174,470	\$577,148	0.45%	0.45%
15 CALLAN	\$119,901,922	\$834,282	0.70%	0.70%
16 DECLARATION	\$114,357,118	\$618,842	0.54%	0.54%
17 NORTHERN TRUST NTGI	\$109,202,332	\$307,640	0.28% *	0.03%
18 CAPITAL GUARDIAN	\$108,447,374	\$547,646	0.50%	0.50%
19 BRANDYWINE	\$103,743,039	\$427,726	0.41%	0.41%
20 DFA	\$101,905,746	\$687,260	0.67%	0.67%
21 STATE STREET	\$89,660,762	\$251,892	0.28%	0.28%
22 PRUDENTIAL	\$69,466,857	\$204,186	0.29%	0.29%
23 WELLINGTON	\$65,752,285	\$561,118	0.85%	0.85%
24 SEI	\$58,844,793	\$294,454	0.50%	0.50%
25 CALAMOS	\$53,732,841	\$386,180	0.72%	0.72%
26 ADAMS STREET/BRINSON	\$51,767,770	\$982,338	1.90%	1.90%
27 NORTHERN TRUST STIF	\$41,947,286	\$60,935	0.15%	0.15%
28 CREDIT SUISSE	\$40,658,091	\$665,651	1.64% *	1.11%
29 CORSAIR	\$32,490,963	\$736,920	2.27%	2.27%
30 EIG	\$32,042,116	\$365,606	1.14%	1.14%
31 RESEARCH AFFILIATES	\$31,076,018	\$138,437	0.45%	0.45%
32 CAPITAL INTL	\$28,714,648	\$768,528	2.68%	2.68%
33 MATLIN PATTERSON	\$27,338,691	-\$427,782	n.m.	n.m.
34 QUANTUM	\$18,902,357	\$896,941	4.75%	4.75%
35 PANAGORA	\$16,618,079	\$116,010	0.70%	0.70%
36 INVEST AMERICA	\$15,313,985	\$536,928	3.51%	3.51%
37 GOLDMAN SACHS	\$14,859,358	\$754,745	5.08% *	2.13%
38 VANGUARD	\$10,727,178	\$45,054	0.42%	0.42%
39 CORAL PARTNERS	\$3,759,373	\$129,958	3.46%	3.46%
40 HEARTHSTONE	\$1,458	\$566	n.m.	n.m.
<b>Pension &amp; Insurance Trusts</b>	<b>\$6,817,251,224</b>	<b>\$43,041,094</b>	<b>0.63%</b>	<b>0.43%</b>
		<b>Annual Fees**</b>	<b>Gross Fee</b>	<b>Net Fee***</b>

Note: During the last 1-, 3- and 10-year periods ended 12/31/13, the North Dakota Pension Fund Trust generated investment returns which were in the 2<sup>nd</sup> Quartile of the Callan Associates Public Fund Sponsor Database.

## Pension and Insurance Fee Summary\*

\*Preliminary and Subject to Change

	Forecast Fiscal 2014	----- Fiscal Year Ended -----		
		6/30/2013	6/30/2012	6/30/2011
Pension Trust	0.69%	0.79%	0.71%	0.81%
Insurance Trust	<u>0.39%</u>	<u>0.40%</u>	<u>0.42%</u>	<u>0.34%</u>
<b>Total</b>	<b>0.55%</b>	<b>0.63%</b>	<b>0.61%</b>	<b>0.66%</b>

\* - Performance Fees were \$14 million in aggregate for FY 2013.

\*\* - Annual Fees excludes \$1.6 million in Custodian, Investment Consultant and Service Fees for the Pension and Insurance Trusts.

\*\*\* - Net Investment Management Fees excludes the impact of Performance Fees.

# Active versus Passive Management – Estimated Impact

## Estimated Impact of Active Management versus Passive Management

Estimated Impact Ranges from \$44 million to \$88 million per year (or \$440 million to \$880 million over the next 10 years)

Preliminary Data Subject to Change (as of March 28, 2014)

Base Case	TFFR Experience	PERS Experience	
\$ 8,800,000,000 0.50%	\$ 8,800,000,000 <b>0.80%</b>	\$ 8,800,000,000 <b>1.00%</b>	AUM Assumption at June 30, 2014 (AUM approx. at Feb. 28, 2014) Net Excess Return of Active Management after Fees
<b>\$ 44,000,000</b>	<b>\$ 70,400,000</b>	<b>\$ 88,000,000</b>	<b>Net Savings / Year</b>
\$ 8,800,000,000 1.05%	\$ 8,800,000,000 1.35%	\$ 8,800,000,000 1.55%	AUM Assumption at June 30, 2014 Gross Excess Return of Active Management before Fees (0.55%)
\$ 92,400,000	\$ 118,800,000	\$ 136,400,000	Gross Savings
<b>0.55%</b>	<b>0.55%</b>	<b>0.55%</b>	<b>Estimated Fees (%) noting that Fiscal 2013 Fees were 63 bps (0.63%)</b>
\$ 48,400,000	\$ 48,400,000	\$ 48,400,000	Estimated Fees (\$) per year
\$ 44,000,000	\$ 70,400,000	\$ 88,000,000	Net Savings per Year
\$ 88,000,000	\$ 140,800,000	\$ 176,000,000	Net Savings per Biennium
<b>\$ 440,000,000</b>	<b>\$ 704,000,000</b>	<b>\$ 880,000,000</b>	<b>Net Savings over Next 10 Years (no AUM growth)</b>
<b>\$ 3,320,000</b>	<b>\$ 3,320,000</b>	<b>\$ 3,320,000</b>	<b>Index fee cost impact if estimated at approximately 4 bps (0.04%)</b>
\$ 95,040,000	\$ 147,840,000	\$ 183,040,000	Net Savings per Biennium
<b>\$ 475,200,000</b>	<b>\$ 739,200,000</b>	<b>\$ 915,200,000</b>	<b>Net Savings over Next 10 Years (no AUM growth)</b>

### Minimum Estimated Impact of Active Management:

Estimate is based on \$8.8 billion of assets under management as of June 30, 2014, with no asset growth (conservative) and no discounting of the cash flows (non-conservative). We also assume that index funds would be available for all asset classes with an average cost of 4 bps (0.04%), which is conservative.

### Historical Long-Term "Excess Return" Methodology:

If we assume the 8% expected return for TFFR and PERS was based on either an index return assumption or an active management return assumption net of fees, then TFFR and PERS have generated an estimated 0.80% to 1.00% of "excess return" over the last 30 years (i.e. TFFR 8.8% and PERS 9.0% net return for 30 years ended 12/31/13).

MANAGER	% Total MV (12-31-13)	Market Value 12/31/2013	Returns				Standard Deviation (Risk)				Excess Returns <sup>1</sup>				FEES	
			1 Yr	3 Yr	5 Yr	Inception	1 Yr	3 Yr	5 Yr	Inception	1 Yr	3 Yr	5 Yr	Inception	FY13	
<b>ADAMS ST/BRINSON</b>	<b>0.60%</b>	<b>\$ 50,811,329</b>													<b>\$ 982,338</b>	
PEN Adams St 2003		\$ 797,578	19.84	7.98	6.16	6.42	6.30	7.96	11.82	11.04	--	--	--	--		
PEN Adams St 2010 Dir Fd		\$ 1,130,451	13.53	10.50	--	4.65	9.37	7.54	--	9.00	--	--	--	--		
PEN Adams St 2010 Non-US Fd		\$ 1,659,810	7.71	3.08	--	(11.92)	4.70	9.23	--	23.34	--	--	--	--	\$ 203,933	4.1497%
PEN Adams St 2010 US Fd		\$ 3,248,826	9.40	10.69	--	11.29	3.76	3.45	--	8.56	--	--	--	--		
PEN Adams St Dir Co-Invest.		\$ 16,666,477	16.98	12.47	5.85	2.17	8.19	8.79	15.13	13.46	--	--	--	--	\$ 326,898	1.8954%
PEN Adams St 2008 Fd		\$ 5,398,819	10.80	7.39	1.52	(2.30)	5.29	7.15	11.61	11.78	--	--	--	--	\$ 101,696	2.3456%
PEN Adams St 2010 Non-US Em		\$ 472,829	(4.41)	(14.81)	--	(14.81)	1.09	9.26	--	9.26	--	--	--	--		
PEN Adams St BVCF		\$ 5,309,330	40.21	44.24	53.40	13.75	19.31	18.54	48.87	33.83	--	--	--	--	\$ 205,334	4.7132%
PEN Adams St Non US		\$ 555,639	20.18	23.07	13.72	16.03	11.19	16.48	19.16	20.32	--	--	--	--	\$ 60,982	0.7276%
PEN Adams St 1999		\$ 869,492	13.70	10.07	4.02	4.21	8.83	9.99	13.38	12.93	--	--	--	--	\$ 55,787	0.8925%
PEN Adams St 2000		\$ 3,007,408	(1.52)	7.39	5.33	4.55	4.31	6.26	10.39	9.95	--	--	--	--		
PEN Adams St 2001		\$ 3,044,348	14.05	11.82	7.28	4.86	8.81	6.61	11.09	9.04	--	--	--	--		
PEN Adams St 2002		\$ 1,898,781	7.71	12.47	7.78	7.54	6.09	7.02	15.00	14.19	--	--	--	--		
PEN Adams St 1998 Partner		\$ 120,110	11.10	2.03	0.98	3.78	9.25	11.36	9.99	16.22	--	--	--	--	\$ 27,708	0.4433%
PEN Adams St 2000 Non US		\$ 1,064,903	(5.58)	0.33	(0.12)	8.03	4.79	7.51	16.04	14.89	--	--	--	--		
PEN Adams St 2001 Non US		\$ 553,673	20.38	4.46	(0.35)	2.68	15.01	14.88	20.74	17.06	--	--	--	--		
PEN Adams St 2002 Non US		\$ 1,975,187	2.20	7.33	1.47	12.24	5.97	7.24	18.40	18.34	--	--	--	--		
PEN Adams St 2004 Non US		\$ 1,149,636	6.30	5.36	0.63	6.05	4.78	7.99	15.58	13.86	--	--	--	--		
PEN Adams St 2003 Non US		\$ 1,888,032	17.93	12.26	10.35	13.70	11.45	13.45	21.09	19.51	--	--	--	--		
<b>BABSON</b>	<b>9.52%</b>	<b>\$ 805,685,372</b>													<b>\$ 752,994</b>	
INS Budget Stab.		\$ 233,633,209	2.05	--	--	2.58	1.07	--	--	0.78	1.68	--	--	2.09	\$ 210,409	0.1420%
INS Legacy		\$ 572,052,163	1.32	--	--	2.09	0.58	--	--	0.64	0.94	--	--	1.65	\$ 542,585	0.1279%
<b>BRANDYWINE</b>	<b>1.24%</b>	<b>\$ 105,136,244</b>													<b>\$ 427,726</b>	
PEN Intl Fixed Pool		\$ 105,136,244	(3.31)	6.77	11.05	8.32	3.43	4.59	8.41	7.66	(0.71)	4.38	7.14	3.29	\$ 427,726	0.4123%
<b>CALLAN</b>	<b>1.70%</b>	<b>\$ 144,190,081</b>													<b>\$ 834,282</b>	
PEN Small Cap Equity		\$ 144,190,081	45.22	17.54	23.77	9.61	7.21	21.51	22.87	23.77	6.40	1.87	3.69	1.62	\$ 834,282	0.6958%
<b>CAPITAL GUARDIAN</b>	<b>2.41%</b>	<b>\$ 203,896,834</b>													<b>\$ 547,646</b>	
PEN Intl Equity		\$ 104,833,612	25.58	9.35	12.8	8.9	9	16.79	18.33	18.48	2.80	1.18	0.36	3.02	\$ 307,729	0.4838%
INS Intl Equity		\$ 99,063,222	23.09	8.79	12.85	6.74	9.59	17.43	18.6	21.29	0.31	0.63	0.41	1.33	\$ 239,917	0.5350%
<b>CAPITAL INT'L</b>	<b>0.38%</b>	<b>\$ 32,066,217</b>													<b>\$ 768,528</b>	
PEN Fund V		\$ 19,933,331	(5.31)	6.65	3.63	1.47	14.87	19.00	22.48	20.72	--	--	--	--	\$ 249,362	1.0845%
PEN Fund VI		\$ 12,132,886	(21.85)	--	--	(19.27)	12.49	--	--	19.24	--	--	--	--	\$ 519,166	9.0755%
<b>CLIFTON</b>	<b>4.53%</b>	<b>\$ 383,497,978</b>													<b>\$ 690,827</b>	
PEN Enhanced S&P		\$ 153,616,924	30.96	--	--	15.16	7.94	--	--	16.16	(1.43)	--	--	(0.18)	\$ (139,667)	-0.1214%
PEN Enhanced Small Cap		\$ 113,466,879	38.61	16.84	--	19.82	8.27	20.36	--	20.31	(0.21)	1.17	--	1.45	\$ 665,402	0.5897%
INS Large Cap		\$ 61,095,620	31.23	16.43	19.83	19.83	7.70	15.49	18.11	18.11	(1.16)	0.25	1.89	1.89	\$ 35,780	0.1041%
INS Small Cap		\$ 55,318,555	38.39	16.79	22.73	22.73	8.14	20.41	22.95	22.95	(0.43)	1.12	2.65	2.65	\$ 129,312	0.4284%
<b>CORAL PARTNERS</b>	<b>0.03%</b>	<b>\$ 2,506,298</b>													<b>\$ 129,958</b>	
PEN Fund V		\$ -	--	--	--	--	--	--	--	--	--	--	--	--	\$ -	0%
PEN Momentum		\$ 2,506,298	(0.10)	(15.92)	(17.77)	(14.81)	23.57	28.51	28.15	24.41	--	--	--	--	\$ 129,958	3.6027%
PEN Supplemental (V)		\$ -	--	--	--	--	--	--	--	--	--	--	--	--	\$ -	0%
<b>CORSAIR</b>	<b>0.42%</b>	<b>\$ 35,441,666</b>													<b>\$ 736,920</b>	
PEN Fund III		\$ 12,336,631	0.61	(1.38)	2.24	(8.81)	9.08	8.66	23.79	38.07	--	--	--	--	\$ 200,022	1.6835%
PEN Fund III ND Investors		\$ 11,610,720	8.70	4.36	2.18	1.81	11.45	6.67	5.27	4.92	--	--	--	--	\$ 100,000	0.9241%
PEN Fund IV		\$ 11,494,315	15.41	(1.89)	--	(3.65)	12.72	14.69	--	13.77	--	--	--	--	\$ 436,897	4.4635%

Please note all data is preliminary and subject to change

MANAGER	% Total MV (12-31-13)	Market Value 12/31/2013	Returns				Standard Deviation (Risk)				Excess Returns <sup>1</sup>				FEES	
			1 Yr	3 Yr	5 Yr	Inception	1 Yr	3 Yr	5 Yr	Inception	1 Yr	3 Yr	5 Yr	Inception	FY13	
<b>CREDIT SUISSE</b>	<b>0.57%</b>	<b>\$ 48,329,577</b>													<b>\$ 665,651</b>	
PEN Infrastructure		\$ 32,219,725	10.36	--	--	13.42	8.62	--	--	12.23	8.91	--	--	11.85	\$ 300,000	1.1068%
PEN Infrastructure Performance															\$ 143,767	0.5304%
INS Infrastructure		\$ 16,109,852	10.36	--	--	13.42	8.62	--	--	12.23	13.56	--	--	11.17	\$ 150,000	1.1068%
INS Infrastructure Performance															\$ 71,884	0.5304%
<b>DECLARATION</b>	<b>1.43%</b>	<b>\$ 120,658,558</b>													<b>\$ 618,842</b>	
PEN Total Return		\$ 65,482,387	3.18	--	--	6.75	3.23	--	--	3.25	2.91	--	--	6.41	\$ 350,673	0.5860%
INS Total Return		\$ 27,180,857	--	--	--	(0.02)	--	--	--	0.00	--	--	--	(0.08)		
INS Fixed Pool (Hyperion)		\$ 27,995,314	(0.39)	5.39	--	6.32	2.42	3.08	--	2.89	(0.75)	1.90	--	2.66	\$ 268,169	0.4919%
<b>DFA</b>	<b>1.60%</b>	<b>\$ 135,371,002</b>													<b>\$ 687,260</b>	
PEN Intl Equity		\$ 75,782,268	33.25	10.81	17.80	4.89	15.30	22.13	26.84	28.43	9.20	3.86	2.06	2.88	\$ 380,923	0.6566%
PEN Emerging Markets		\$ 33,574,344	(0.74)	(1.14)	20.52	11.36	10.66	20.82	29.51	29.81	1.86	0.92	5.72	3.71	\$ 235,763	0.7113%
INS Intl Equity		\$ 26,014,390	33.19	10.80	17.79	4.89	15.30	22.13	26.84	28.43	9.14	3.84	2.05	2.87	\$ 70,574	0.6566%
<b>EIG</b>	<b>0.28%</b>	<b>\$ 23,768,236</b>													<b>\$ 365,606</b>	
PEN Private Equity		\$ 23,768,236	(4.08)	3.07	8.09	8.83	5.55	6.13	6.6	7.94	--	--	--	--	\$ 365,606	1.1410%
<b>EPOCH</b>	<b>3.52%</b>	<b>\$ 298,075,759</b>													<b>\$ 1,412,498</b>	
PEN Global Equity		\$ 298,075,759	33.33	--	--	23.83	4.90	--	--	10.18	6.65	--	--	2.70	\$ 1,412,498	0.7523%
<b>GOLDMAN SACHS</b>	<b>0.16%</b>	<b>\$ 13,939,572</b>													<b>\$ 754,745</b>	
PEN 2006		\$ 3,254,184	18.49	5.67	7.64	2.31	7.07	17.06	31	25.91	11.06	(3.62)	(11.32)	(6.69)	\$ 79,011	1.7892%
PEN Fund V		\$ 10,685,388	13.8	16.81	14.63	10.98	8.26	13.64	13.8	13.37	6.36	7.51	(4.33)	1.04	\$ 237,582	2.2749%
PEN Fund V Performance															\$ 438,152	4.1955%
<b>INVESCO</b>	<b>3.20%</b>	<b>\$ 271,063,623</b>													<b>\$ 2,229,471</b>	
PEN Core		\$ 150,348,150	16.67	13.18	2.78	7.67	2.83	3.77	11.81	7.96	5.69	1.26	(2.90)	(1.86)	\$ 535,996	0.3986%
PEN Fund II		\$ 23,596,823	18.76	25.96	(13.88)	(17.21)	14.61	11.15	40.70	37.69	7.79	14.05	(19.57)	(20.77)	\$ 220,089	0.5939%
PEN Fund III		\$ 23,299,114	19.08	--	--	15.57	13.92	--	--	11.41	8.10	--	--	4.88	\$ 211,994	0.8444%
PEN Fund III Performance															\$ 711,563	2.8344%
PEN Asia		\$ 27,375,071	(3.23)	(2.13)	(29.60)	(29.60)	13.49	10.64	35.59	35.59	(14.21)	(14.04)	(35.28)	(35.28)	\$ 425,096	2.4929%
INS Core		\$ 46,444,465	16.68	--	--	13.13	2.83	--	--	4.29	5.70	--	--	2.24	\$ 124,733	0.3956%
<b>INVEST AMERICA</b>	<b>0.19%</b>	<b>\$ 16,278,312</b>													<b>\$ 536,928</b>	
PEN Lewis & Clark		\$ 6,121,587	17.77	10.58	6.72	2.31	9.99	7.83	11.35	19.48	--	--	--	--	\$ 161,928	2.5570%
PEN Lewis & Clark II		\$ 10,156,725	(4.18)	(5.04)	--	(8.08)	6.66	5.64	--	10.19	--	--	--	--	\$ 375,000	4.1754%
<b>J.P. MORGAN</b>	<b>14.22%</b>	<b>\$ 1,203,131,321</b>													<b>\$ 5,811,081</b>	
PEN Emerging Mkts		\$ 24,167,365	(4.16)	(1.97)	14.16	7.59	8.37	17.76	23.80	25.33	(1.56)	0.09	(0.63)	0.63	\$ 267,068	0.8266%
PEN Special & Strategic		\$ 138,048,498	16.75	15.48	4.16	7.06	0.79	1.62	11.37	6.83	5.77	3.56	(1.52)	(0.50)	\$ 1,166,108	0.9578%
PEN Alternative		\$ 4,830,997	3.74	14.44	(5.64)	(2.09)	21.72	16.52	21.75	17.55	(7.24)	2.53	(11.32)	(8.67)	\$ 9,924	0.1156%
PEN Greater China		\$ 18,542,454	18.00	7.31	3.32	1.60	21.21	14.63	12.12	11.75	7.02	(4.61)	(2.36)	(1.96)	\$ 257,839	1.1536%
PEN Greater Europe		\$ 21,783,773	(10.06)	0.00	--	0.00	19.03	0.00	--	0.00	(21.04)	0.00	--	0.00	\$ 507,367	8.1907%
PEN IIF		\$ 103,454,777	8.92	8.48	2.54	3.23	7.13	4.90	11.01	11.02	7.47	6.37	0.27	1.42	\$ 1,038,863	1.0797%
PEN Asian		\$ 30,153,439	(2.67)	4.29	(0.07)	(0.07)	6.45	13.70	12.44	12.13	(4.12)	2.18	(2.35)	(1.30)	\$ 593,925	2.5830%
INS Infrastructure		\$ 70,785,692	8.97	8.49	6.23	6.23	7.18	4.93	6.87	6.87	12.16	3.65	0.07	0.07	\$ 710,166	1.0789%
INS Income & Growth		\$ 68,314,703	20.12	24.12	(1.73)	2.18	6.80	7.25	22.00	18.12	9.14	12.20	(7.41)	(4.40)	\$ 782,774	1.0923%
INS JPM Budget Stab.		\$ 231,118,808	0.47	--	--	1.22	0.69	--	--	0.64	0.10	--	--	0.73	\$ 137,677	0.0957%
INS JPM Legacy		\$ 491,930,815	0.51	--	--	1.06	0.71	--	--	0.62	0.14	--	--	0.62	\$ 339,371	0.0801%

Please note all data is preliminary and subject to change

MANAGER	% Total MV (12-31-13)	Market Value 12/31/2013	Returns				Standard Deviation (Risk)				Excess Returns <sup>1</sup>				FEES	
			1 Yr	3 Yr	5 Yr	Inception	1 Yr	3 Yr	5 Yr	Inception	1 Yr	3 Yr	5 Yr	Inception	FY13	
<b>LA CAPITAL</b>	<b>7.91%</b>	<b>\$ 669,183,643</b>													<b>\$ 1,211,599</b>	
PEN Enhanced		\$ 220,364,788	35.95	16.63	19.02	5.13	7.46	15.56	17.90	18.00	2.84	0.33	0.43	1.01	\$ 462,177	0.2654%
PEN Structured		\$ 291,808,128	35.78	16.41	19.84	9.88	7.75	16.77	17.68	16.76	2.30	(0.04)	(0.55)	1.02	\$ 544,481	0.2133%
INS Enhanced		\$ 61,892,534	36.31	16.60	19.49	8.96	7.37	15.58	17.76	16.81	3.20	0.30	0.90	1.18	\$ 94,014	0.2717%
INS Structured		\$ 95,118,193	36.11	16.48	20.41	9.88	7.81	16.82	17.57	16.99	2.63	0.03	0.02	1.21	\$ 110,927	0.2143%
<b>LOOMIS SAYLES</b>	<b>2.43%</b>	<b>\$ 205,217,094</b>													<b>\$ 882,685</b>	
PEN High Yield Bond		\$ 205,217,094	6.73	9.21	19.38	9.03	5.98	9.9	13.39	13.78	(0.71)	(0.08)	0.42	0.46	\$ 882,685	0.5000%
<b>LSV</b>	<b>7.75%</b>	<b>\$ 655,399,912</b>													<b>\$ 1,753,455</b>	
PEN Global Equity		\$ 459,486,393	--	--	--	20.77	--	--	--	7.50	--	--	--	3.19	\$ 334,952	0.1640%
PEN Global Equity Performance															\$ 1,031,280	0.5049%
INS Large Cap Equity		\$ 92,851,525	41.41	19.08	19.70	8.85	7.97	19.01	20.97	19.24	8.89	3.02	3.03	2.69	\$ 158,764	0.2968%
INS Intl Equity		\$ 103,061,994	25.83	9.58	13.22	5.79	11.86	17.36	22.08	21.14	3.05	1.42	0.78	0.26	\$ 228,459	0.4828%
<b>MATLIN PATTERSON</b>	<b>0.32%</b>	<b>\$ 27,226,013</b>													<b>\$ (427,782)</b>	
PEN Fund I		\$ 11,987	(6.26)	0.00	0.00	0.00	6.26	0	0	0	--	--	--	--	\$ -	0.0000%
PEN Fund II		\$ 1,490,463	(11.53)	(51.69)	(42.10)	(27.27)	10.97	37.49	32.72	28.9	--	--	--	--	\$ (115)	-0.0071%
PEN Fund III		\$ 25,723,563	9.87	42.32	13.76	7.26	14.24	52.15	49.59	44.25	--	--	--	--	\$ (427,667)	-1.6642%
<b>NORTHERN TRUST</b>	<b>6.87%</b>	<b>\$ 580,875,539</b>													<b>\$ 368,575</b>	
PEN STIF		\$ 38,019,348	0.06	0.10	0.17	3.05	0.02	0.03	0.08	1.28					\$ 60,935	0.1453%
PEN Large Cap Equity Perf.		\$ 110,481,138	36.88	18.20	19.30	4.14	8.97	15.66	17.90	17.97	4.49	2.02	1.36	0.37	\$ 279,317	0.3215%
PEN Intl Equity (World Ex US)		\$ 242,082,438	--	--	--	0.00	--	--	--	0.00	--	--	--	0.00		
PEN Emerging Markets		\$ 73,325,015	(2.55)	--	--	5.50	11.81	--	--	11.03	0.05	--	--	(1.57)	\$ 28,323	0.1269%
INS STIF		\$ 116,967,600														
<b>PIMCO</b>	<b>4.87%</b>	<b>\$ 411,967,758</b>													<b>\$ 11,102,281</b>	
PEN DISCO II		\$ 79,645,241	12.04	--	--	24.36	3.73	--	--	10.40	14.06	--	--	22.93	\$ 910,633	0.9275%
PEN DISCO II Performance															\$ 4,547,704	4.6318%
PEN Unconstrained		\$ 88,809,606	(2.15)	--	--	2.85	2.36	--	--	3.96	(2.43)	--	--	2.51	\$ 573,267	0.8988%
PEN MBS		\$ 161,911,557	(2.13)	--	--	0.45	2.38	--	--	2.63	(0.72)	--	--	0.12	\$ 264,474	0.1736%
PEN BRAVO (BRAVO II)		\$ 5,000,000	--	--	--	(1.67)	--	--	--	0.00	--	--	--	(5.24)		
INS DISCO II		\$ 71,601,354	12.06	--	--	24.02	3.74	--	--	10.20	14.08	--	--	22.59	\$ 801,829	0.9275%
INS DISCO II Performance															\$ 4,004,374	4.6319%
INS BRAVO (BRAVO II)		\$ 5,000,000	--	--	--	(1.67)	--	--	--	0.00	--	--	--	(1.53)		
<b>PRUDENTIAL</b>	<b>1.16%</b>	<b>\$ 98,398,744</b>													<b>\$ 204,186</b>	
INS Fixed Pool		\$ 98,398,744	(1.33)	5.97	9.08	6.97	3.91	3.46	4.66	4.44	0.69	2.71	4.64	2.05	\$ 204,186	0.2944%
<b>QUANTUM</b>	<b>0.21%</b>	<b>\$ 17,729,799</b>													<b>\$ 483,991</b>	
PEN Energy Partners		\$ 8,779,832	28.98	24.80	10.70	(17.18)	15.76	14.04	18.75	37.83	--	--	--	--	\$ 431,985	4.8218%
PEN Energy Resources		\$ 8,949,967	3.51	36.33	(17.29)	(36.64)	10.04	55.41	58.38	88.5	--	--	--	--	\$ 52,006	0.5230%
<b>RESEARCH AFF.</b>	<b>0.66%</b>	<b>\$ 56,090,755</b>													<b>\$ 138,437</b>	
INS Small Cap Equity		\$ 56,090,755	44.26	18.07	23.69	7.91	5.96	20.88	23.37	25.41	5.44	2.39	3.61	1.16	\$ 138,437	0.4455%
<b>SEI</b>	<b>0.99%</b>	<b>\$ 83,707,124</b>													<b>\$ 294,454</b>	
PEN Small Cap Equity		\$ 214,542	(1.37)	47.09	34.54	10.06	9.98	216.76	167.04	107.64	(40.20)	31.42	14.45	1.87	\$ -	0.0000%
PERS Prefunded Health		\$ 83,492,582	19.23	10.98	13.89	7.69	3.65	9.94	12.32	10.37	2.12	0.92	1.47	--	\$ 294,454	0.5040%

Please note all data is preliminary and subject to change

MANAGER	% Total MV (12-31-13)	Market Value 12/31/2013	Returns				Standard Deviation (Risk)				Excess Returns <sup>1</sup>				FEES	
			1 Yr	3 Yr	5 Yr	Inception	1 Yr	3 Yr	5 Yr	Inception	1 Yr	3 Yr	5 Yr	Inception	FY13	
<b>STATE STREET</b>	<b>2.77%</b>	<b>\$ 233,941,146</b>													<b>\$ 3,301</b>	
PEN Domestic Fixed Pool		\$ 61,023,451	--	--	--	(5.25)	--	--	--	0.85	--	--	--	(0.01)	\$ 992	0.0076%
INS Fixed Pool		\$ 172,917,695	--	--	--	0.30	--	--	--	0.41	--	--	--	(0.02)	\$ 2,309	0.0076%
<b>TIR</b>	<b>2.96%</b>	<b>\$ 250,615,246</b>													<b>\$ 1,279,438</b>	
PEN Teredo		\$ 73,052,113	(4.61)	1.40	4.56	10.22	8.73	7.09	7.22	10.89	(14.29)	(4.88)	1.88	3.29	\$ 457,494	0.5943%
PEN Springbank		\$ 120,392,935	(2.98)	(3.35)	(4.97)	7.97	1.57	2.70	7.11	20.92	(12.66)	(9.64)	(7.66)	(0.54)	\$ 314,322	0.2561%
INS Timber		\$ 57,170,198	5.19	0.58	2.37	2.25	6.73	5.29	6.05	5.90	8.38	(4.26)	(3.80)	(2.32)	\$ 507,622	0.8341%
<b>UBS</b>	<b>1.22%</b>	<b>\$ 103,601,569</b>													<b>\$ 285,672</b>	
PEN Intl Fixed Income		\$ 103,601,569	(4.35)	1.37	2.95	6.79	6.97	5.48	8.38	9.07	(1.27)	(0.36)	(0.56)	--	\$ 285,672	0.2985%
<b>VANGUARD</b>	<b>0.30%</b>	<b>\$ 25,492,527</b>													<b>\$ 45,054</b>	
INS Intl Equity Pool		\$ 25,492,527	30.78	7.59	17.73	12.82	9.45	19.67	24.39	22.75	6.74	0.63	1.99	1.30	\$ 45,054	0.4200%
<b>WELLINGTON</b>	<b>1.02%</b>	<b>\$ 85,921,548</b>													<b>\$ 561,118</b>	
PEN Intl Equity		\$ 85,921,548	36.35	13.75	21.31	12.44	10.55	16.96	22.41	21.69	12.30	6.80	5.56	1.17	\$ 561,118	0.8534%
<b>WELLS</b>	<b>4.46%</b>	<b>\$ 376,922,085</b>													<b>\$ 613,148</b>	
INS Fixed Income		\$ 376,922,085	-0.75	6.73	10.99	7.31	4.41	3.78	6.1	5.51	1.30	1.26	0.56	0.74	\$ 613,148	0.2187%
<b>WESTERN</b>	<b>8.08%</b>	<b>\$ 683,215,330</b>													<b>\$ 894,348</b>	
PEN Domestic Fixed Income		\$ 109,189,859	(1.99)	3.15	7.34	7.46	2.68	2.78	5.00	5.10	(0.57)	0.73	3.65	0.47	\$ 182,317	0.1771%
INS Fixed Income		\$ 375,615,203	(1.03)	5.21	9.33	7.40	2.68	2.87	4.90	4.91	1.00	1.95	4.89	0.86	\$ 376,703	0.1794%
INS TIPS		\$ 198,410,268	(4.95)	3.71	5.18	4.18	8.33	5.78	6.21	5.97	(1.76)	(1.13)	(0.98)	(1.25)	\$ 335,329	0.1771%
<b>Total MV 12-31-13</b>		<b>\$ 8,459,353,811</b>														<b>0.6272</b>

<sup>1</sup> Excess Returns for Private Equity are assumed to be zero given the absence of a widely accepted benchmark for these diverse strategies.

No Longer Active 12-31-13			
PEN	Clifton - Developed Int'l	\$ 172,768	0.0874%
PEN	LSV - Domestic Equity	\$ 441,745	0.3563%
PEN	LSV - Int'l Equity	\$ 286,530	0.4875%
PEN	State St. - Developed Int'l	\$ 248,591	0.5383%
PEN	Panagora - Emerging	\$ 116,010	0.6981%
PEN	Pimco Distressed	\$ 25,652	
PEN	Pimco Perf.	\$ 2,049,978	
PEN	UBS - Emerging	\$ 291,475	0.9266%
PEN	Calamos	\$ 386,180	0.7187%
PEN	BND F.I.	\$ 24,323	0.0672%
INS	BND F.I.	\$ 56,395	0.0667%
INS	Babson B Loans	\$ 5,886	0.1681%

Please note all data is preliminary and subject to change

# **Workforce Safety and Insurance Investment Update & Recommendations**

April 17, 2014

Dave Hunter, Executive Director/Chief Investment Officer

Darren Schulz, Deputy Chief Investment Officer

ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

# WSI Asset Allocation Recommendation

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- ▶ The WSI Board commenced an Asset Liability Study in 2013 by working with its actuary, investment consultant and staff.
- ▶ The results were presented to the WSI Board on April 16.
  - Callan presented three options for consideration plus the **Current Mix**.
  - **Callan and RIO ranked Mix 2 the highest** based on WSI's desire to increase inflation protection and the belief that North Dakota's long term inflation trends will likely remain higher than national levels.
  - All three new options and the Current Mix were deemed reasonable, however, the incremental inflation protection provided by Mix 2 was viewed to be superior without causing any significant increase in investment risk or volatility over the long-term.

**Actions:** The WSI Board approved the recommendation on April 16. As such, we now seek **approval from the State Investment Board**.

# Agenda / RIO Recommendation

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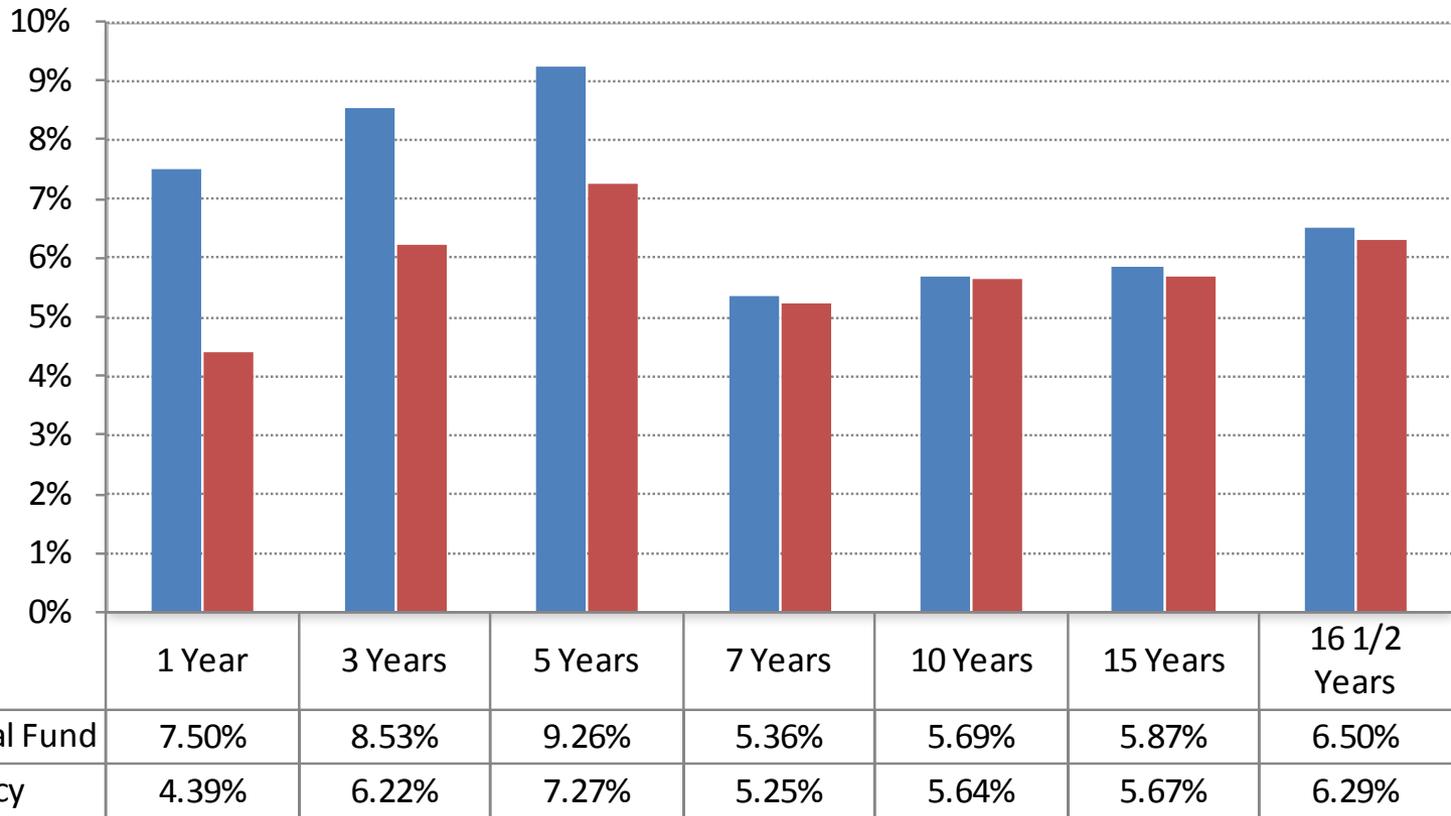
## ▷ WSI's Current Portfolio

- Investment Performance
- WSI Policy Returns
- Actual versus Target Allocations
- Key Return Drivers / Rationale

## ▷ RIO Ranking and Recommendation

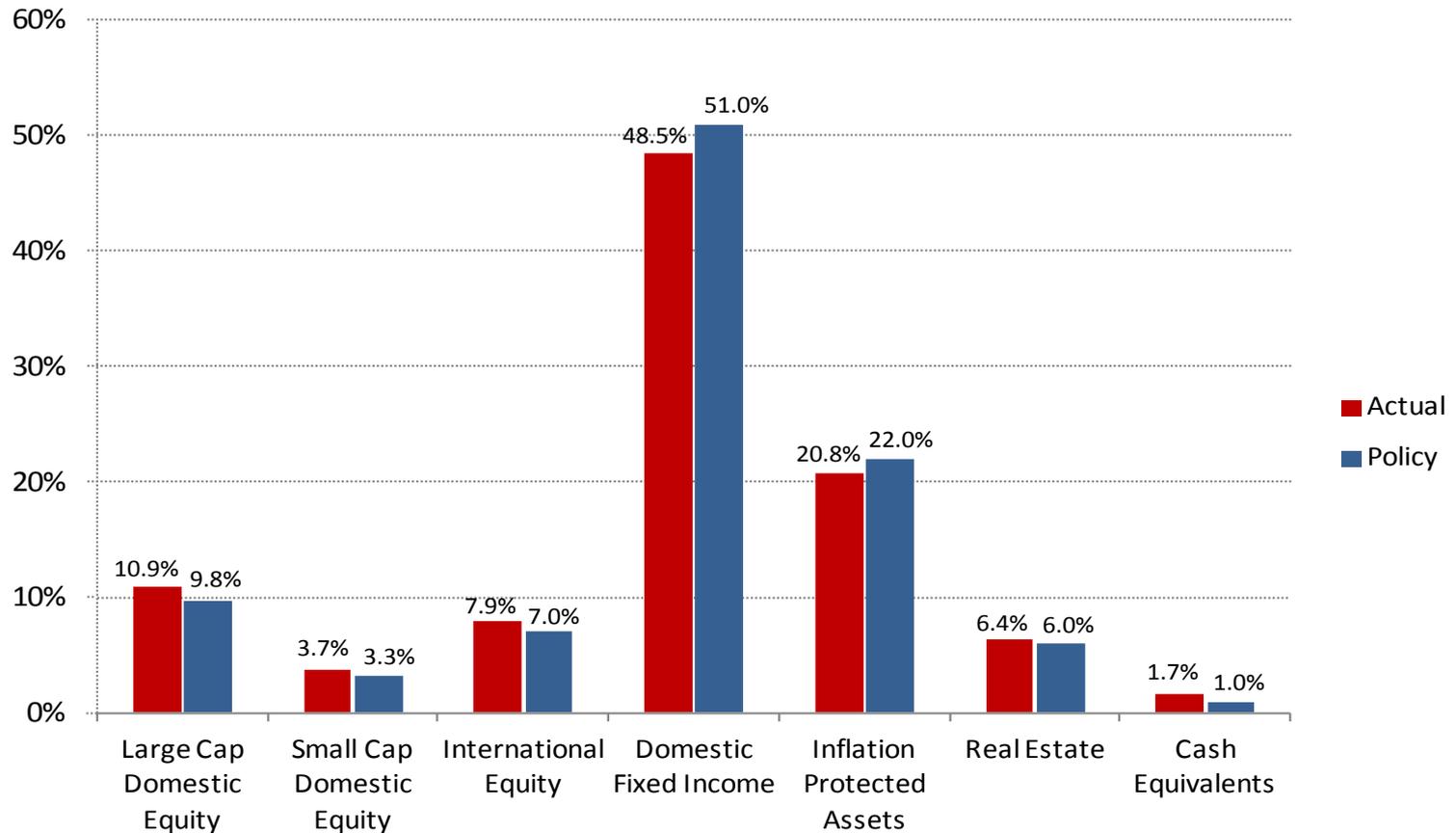
- **Mix 2** is ranked highest if WSI believes that North Dakota's long-term inflation trends remain higher than national trends.
- **Mix 1** is ranked highest if WSI wants more predictable (i.e. less volatile) investment outcomes, with less anticipated inflation protection.
- The **Current Mix** has served WSI well in the past and all three options are viable alternatives.

# Net Investment Performance – Annualized For Periods Ending December 31, 2013



**Actual Net Investment Returns** have exceeded “**WSI Policy Returns**” for the 1-, 3-, 5-, 7-, 10- and 15-year periods ended December 31, 2013, and since inception.

# WSI Actual vs. Target Asset Allocation As of 12/31/13



**Actual** allocations were overweight to equities and cash, while underweight to fixed income and inflation protected assets relative to **Target** allocations.

# One Year Return Ending 12/31/13 (Net of Fees)

## Actual WSI Returns by Asset Class versus Benchmark

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	WSI	Benchmark	Relative
Total Fund	7.50%	4.39%	3.11%
Large Cap Domestic Equity	36.78%	33.11%	3.67%
Small Cap Domestic Equity	41.48%	38.82%	2.66%
International Equity	25.89%	22.78%	3.11%
Domestic Fixed Income	0.15%	-2.02%	2.17%
Inflation Protected Assets	0.17%	-3.19%	3.36%
Real Estate	18.76%	10.98%	7.78%
Cash Equivalents	0.12%	0.07%	0.05%

- ▷ Key Strengths – Manager Selection within Sub-Asset Class Allocations:
  - ▷ Manager Selection was outstanding during the past year. As highlighted on the following page, SIB's decision to allow active Domestic Fixed Income managers the flexibility to move away from the core Barclays Aggregate Bond Index was beneficial.
  - ▷ This decision was as much a Sub-Asset Class decision as Manager Selection.
  - ▷ The key driver behind this decision was SIB's understanding that the 30-year Bull Market for Fixed Income was coming to an end in 2012 or 2013.

# Fiscal Year Ending 12/31/13

## Contribution to Relative Return

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	1 Year	3 Year
<b>Total Fund Excess Return</b>	<b>3.11%</b>	<b>2.31%</b>
<b>Asset Allocation</b>	<b>0.42%</b>	<b>0.06%</b>
<b>Manager Selection</b>	<b>2.69%</b>	<b>2.25%</b>
Large Cap Domestic Equity	0.33%	0.04%
Small Cap Domestic Equity	0.08%	0.05%
International Equity	0.20%	0.07%
Domestic Fixed Income	0.95%	1.67%
Inflation Protected Assets	0.63%	-0.21%
Real Estate	0.50%	0.63%
Cash Equivalents	0.00%	0.00%

**One Year Manager Selection** within Domestic Fixed Income was responsible for 30% of the “above benchmark” returns followed by Inflation Protected Assets at 20% (predominantly Infrastructure) and Real Estate at 16%.

**Three Year Manager Selection** within Domestic Fixed Income was responsible for 72% of the “above benchmark” returns followed by Real Estate at 27%.

# Portfolio Optimization

## Callan's Comparison of the Current and Proposed Asset Allocations

Asset Class	Current	Minimum	Maximum	Mix 1	Mix 2	Mix 3
US Broad Fixed Income	51%	0%	100%	57%	53%	48%
Private Real Estate	6%	6%	100%	6%	6%	6%
Diversified Real Assets	22%	0%	100%	15%	15%	20%
US Large Cap Equity	9.7%	0%	100%	9.7%	12%	12%
US Small Cap Equity	3.3%	0%	100%	3.3%	4%	4%
International Equity (Developed)	7%	0%	100%	8%	9%	9%
Cash Equivalents	1%	1%	1%	1%	1%	1%
<b>Totals</b>	<b>100%</b>			<b>100%</b>	<b>100%</b>	<b>100%</b>
Allocation to Fixed Income (with TIPS)	59%			63%	59%	56%
Allocation to Other Real Assets (Real Estate, Timber, Infrastructure)	21%			16%	16%	19%
Allocation to Equity	20%			21%	25%	25%
Compounded 10-Year Geometric Return	5.15%			5.00%	5.21%	5.36%
Standard Deviation of Return	6.32%			6.03%	6.67%	6.99%
Average Yield	3.56%			3.60%	3.53%	3.50%

- ▶ Mix 1 is closer to peer group. Reduces current allocation to TIPS within Diversified Real Assets.
  - ▶ The justification for reducing the real assets exposure is from the recent observed lack of correlation between North Dakota's inflation rate and the national inflation rate.
- ▶ Mixes 2 and 3 both increase the equity allocation, funded either from TIPS or nominal bonds. The implication of moving from the Current Mix to either **Mix 2 or Mix 3** is higher expected returns, greater volatility or returns, and lower current yields.

Source: Callan Associates 2013/14 Asset Liability Study for WSI

# Current and Proposed Asset Allocation Assumptions

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## ▷ Review of “Current Mix” Assumptions:

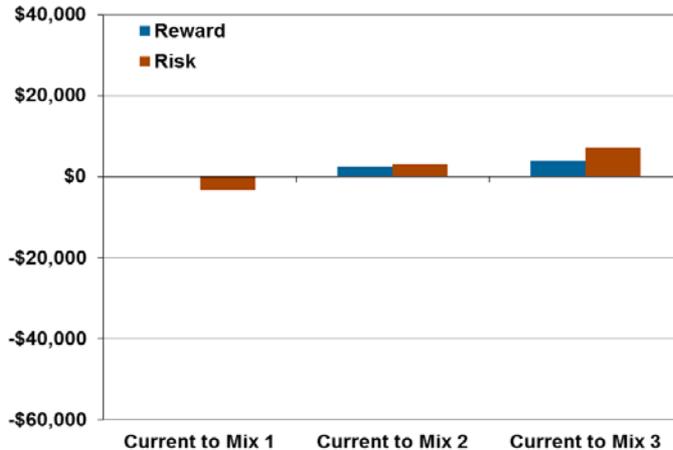
- ▷ **WSI’s historically strong investment performance** was based on the Asset Allocations **approved** by the Board. The Current Mix includes 20% Equity, 51% Fixed Income, 22% Inflation Protected, 6% Real Estate and 1% Cash.
- ▷ The **Equity** allocation (of 20%) is segmented into 9.75% U.S. Large Cap, 3.25% U.S. Small Cap and 7% International Equity.
- ▷ Inflation Protected Assets (of 22%) include 13% Global Inflation Linked Securities (including “TIPS”), 5% Infrastructure and 4% Timber.

## ▷ Callan’s “Proposed” Asset Allocation Assumptions:

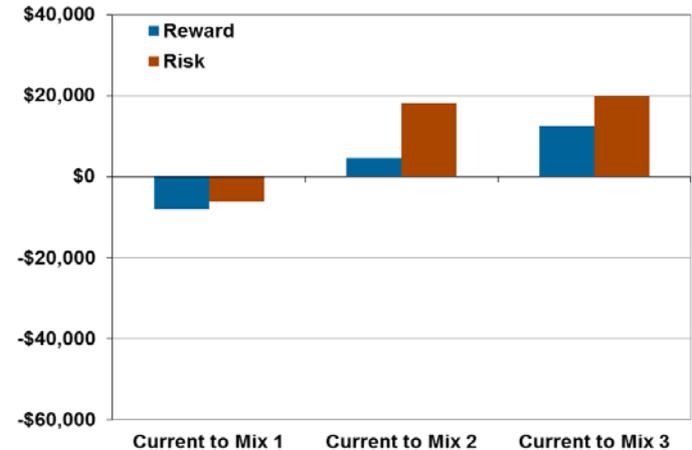
- ▷ **Mix 2** would increase Equity (by 5%) to 25% and Fixed Income (by 2%) to 53%, while reducing Diversified Real Assets (by 7%) to 15%.
- ▷ **Mix 1** would increase Equity (by 1%) to 21% and Fixed Income (by 6%) to 57%, while also reducing Diversified Real Assets (by 7%) to 15%.
- ▷ Real Estate and Cash are held at 6% and 1%, respectively, under all scenarios.

## Real Cumulative Investment Income – Risk/Reward Tradeoff

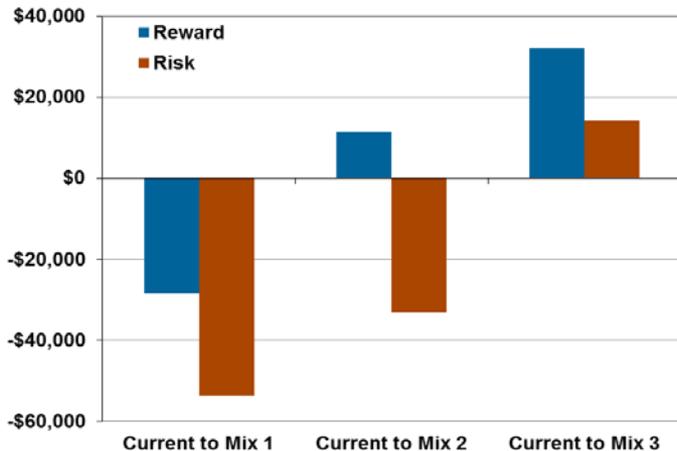
Year 3



Year 5



Year 10



- ▶ **Reward** (blue bars) measures the difference between the expected case (50<sup>th</sup> percentile).
- ▶ **Risk** (brown bars) measures the increase in worse-case scenario (97.5<sup>th</sup> percentile).
- ▶ A favorable tradeoff is one where reward is greater than risk (the blue bar is higher than brown bar).
- ▶ Analysis over a 5-10 year horizon favors Mix 2
  - ▶ Mix 3 does well relative to cumulative income.

# The WSI Board approved the Callan and RIO recommendation to adopt Mix 2.

Asset Class	Current	Mix 2	Change
US Broad Fixed Income	51%	53%	2%
Private Real Estate	6%	6%	0%
Diversified Real Assets	22%	15%	-7%
US Large Cap Equity	9.7%	12%	2%
US Small Cap Equity	3.3%	4%	1%
International Equity (Developed)	7%	9%	2%
Cash Equivalents	1%	1%	0%
<b>Totals</b>	<b>100%</b>	<b>100%</b>	
Allocation to Fixed Income (with TIPS)	59%	59%	
Allocation to Other Real Assets (Real Estate, Timber, Infrastructure)	21%	16%	
Allocation to Equity	20%	25%	
Compounded 10-Year Geometric Return	5.15%	5.21%	
Standard Deviation of Return	6.32%	6.67%	
Average Yield	3.56%	3.53%	

- ▶ The Current Policy Mix is favored if WSI wants to maintain the current level of inflation protection, given the inflation-sensitivity in the liabilities.
- ▶ **Mix 2 is favored if WSI believes that North Dakota's long-term inflation trends may remain higher than national trends. Mix 2 puts more in equity than real assets by reducing the TIPS allocation.**

Source: Callan Associates 2013/14 Asset Liability Study for WSI

## Next Steps: Decisions and Implementation

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1. WSI's new policy will be submitted to the North Dakota State Investment Board ("SIB") for acceptance.
  - ▶ The revised Investment Policy Statement is attached for **SIB approval** (as approved by the WSI Board on April 16, 2014).
2. Once adopted, Callan will assist SIB staff with implementation:
  - ▶ WSI and SIB should mutually agree upon an effective date for implementation of the new WSI policy.
3. Callan will provide the SIB with a performance report for the WSI fund:
  - ▶ The Insurance Trust performance report currently aggregates results for WSI and 13 other funds.
  - ▶ The new report will exclusively evaluate WSI's performance.

Source: [Callan Associates 2013/14 Asset Liability Study for WSI](#)

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# Manager Search Process

April 15-16, 2014

# Rationale for a Manager Search

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- New Allocation to an Asset Class
- Expansion of an Existing Asset Allocation Structure
- Replacement of an Existing Manager
  - Performance Issues
  - Organizational Issues
  - Deviation from Investment Strategy or Style

# Manager Search

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## Why Do Most Plan Sponsors Use a Consultant in Their Manager Search Projects?

- Independent and objective third party.
- Adherence to a consistent search process that maintains clear, written guidelines to govern the search, which helps plan sponsor reduce fiduciary liability.
- Consistency will allow for a fair, repeatable process that will serve the organization as a whole, no matter the individuals involved at certain time periods.
- A resource that is committed to conducting manager due diligence.
  - Computer database availability.
  - Continuity over time.
  - Help ensure ERISA safe harbor protection.

# Factors in the Search Process

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- Every search should be unique.
- Client defined search specifics will narrow candidate universe (plan type, size, continuing managers, risk preferences, etc.).
- Searches are conducted through a series of steps:
  - Client-Driven Considerations
  - Screening Criteria
  - Quantitative review
  - Qualitative Assessment
  - Search Review by Senior Policy Committee
  - Document semi-finalist candidates for Client
  - Identify Finalists
  - Interview Finalists
  - Select Firm

# Other Consultants Approach

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## Factors Considered

- Consultant A: Specific rankings for each product and organization
  - Idea generation
  - Portfolio construction
  - Implementation
  - Business management
    - Recently added ESG as part of the ranking process
- Consultant B: “Preferred lists” refreshed every 12 – 18 months
  - Scoring based on multiple quantitative criteria and a qualitative opinion
  - Quantitative:
    - *Net of fee alpha returns*
    - *Rolling periods*
    - *Information ratios and upside/downside capture*
    - *Contrarian Indicator*
  - Qualitative opinion
    - *Have you done it?*
    - *Why can you keep doing it?*
    - *Who is going to do it?*

# How do Consultants Collect the Data?

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## General Information

- Organizational statistics
- Product specific information
- Annual questionnaire

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## Performance Database

- Quarterly rates of return
- 1,049 organizations; 4,082 different funds; all mutual funds
- Updated quarterly from money managers

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## Money Manager Visit Reports – On-site

- Qualitative impressions of money manager’s philosophy, style, investment process
- Verification of Information
- Visits to money manager’s offices by Global Manager Research staff and consultants
- Average of 500 visits per year

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## Money Manager Visit Reports – In-House

- Qualitative impressions of money manager’s philosophy, style, investment process
- Verification of Information
- Visits by money managers to Callan’s four offices
- Average of 1,000 visits per year

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## Mutual Client Relationships

- Qualitative impressions of money manager’s philosophy, style, investment process
- Verification of Information
- Active evaluation of Callan’s performance evaluation work with clients

# Step No. 1: Client-Driven Considerations in a Search

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**Search considerations are client-specific and depend on a variety of items:**

- Purpose (i.e., search rationale)
- Active vs. Passive
- Choice of Benchmark
- Acceptance of Style Drift
- Size Spectrum
- Risk Tolerance
  - Benchmark Aware/Unaware
  - Concentration
- Specialty Management
  - Small Cap
  - Currency
  - Distressed Debt

## Step No. 2: Develop Appropriate Screening Criteria

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- Manager Type
- Investment Style
- Investment Vehicle
- Managed Assets
- Size of Professional Staff
- Years of Experience
- Geographic Location
- Involvement With Other Businesses
- Flexibility of Individual Portfolio Managers
- Security Analysis Orientation
- Risk Levels
- Capitalization Levels
- In-House Research Emphasis
- Use of Cash Equivalents
- Use of ADRs, 144As, and futures and/or options
- Historical Performance Criteria
- Experience and Education of Professionals
- Financial Well Being of Firm
- Client-Servicing Capabilities
- Fees
- Organizational Ownership
- Informational Technology

# Investment Manager Evaluation

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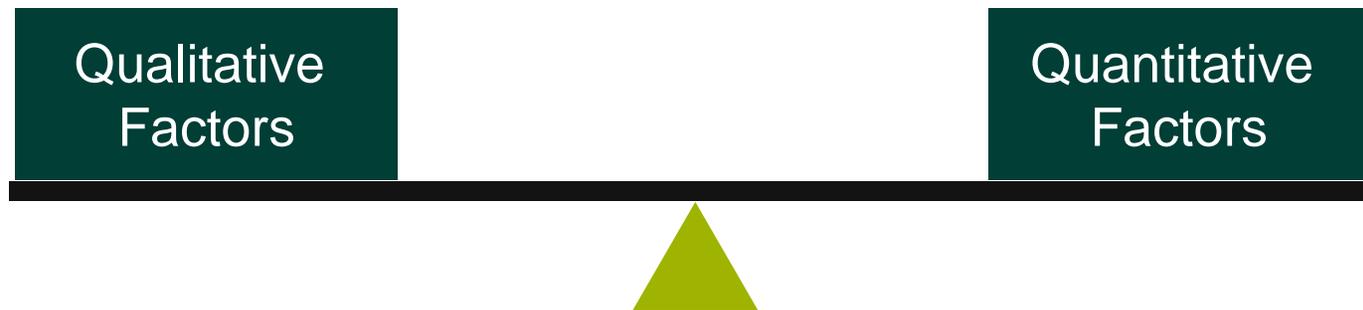
## A Combination of Qualitative and Quantitative Analysis

- Quantitative research:
  - Consistency of investment performance
  - Analyzing the portfolios
    - *Return-based style analysis*
    - *Traditional holdings based analysis*
    - *MSCI's "Z-score" methodology*
- Qualitative research: Kicking the tires
  - Requires ongoing interaction with managers to understand their philosophy, process and people.
  - It is instructive to know how managers view themselves.
  - Observe how the “key” people interact with one another.
  - Confirm that the “marketing” pitch and confirms to “reality.”

# Objectives of Quantitative and Qualitative Screens

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- Compare/contrast candidate information.
- Weigh quantitative and qualitative factors to find the appropriate balance.
- Take into account recent developments.
- Identify approximately 12 surviving candidates.



## Step No. 3:

### Conduct Quantitative Screening from Available Database

- Many consultants maintain their own proprietary database.
  - Only available through a consultant/client relationship.
- Shared Databases are available.
  - eVestment Alliance, PSN, Mobius, Morningstar (especially of DC related Searches)

#### Callan's "Universe" of Managers

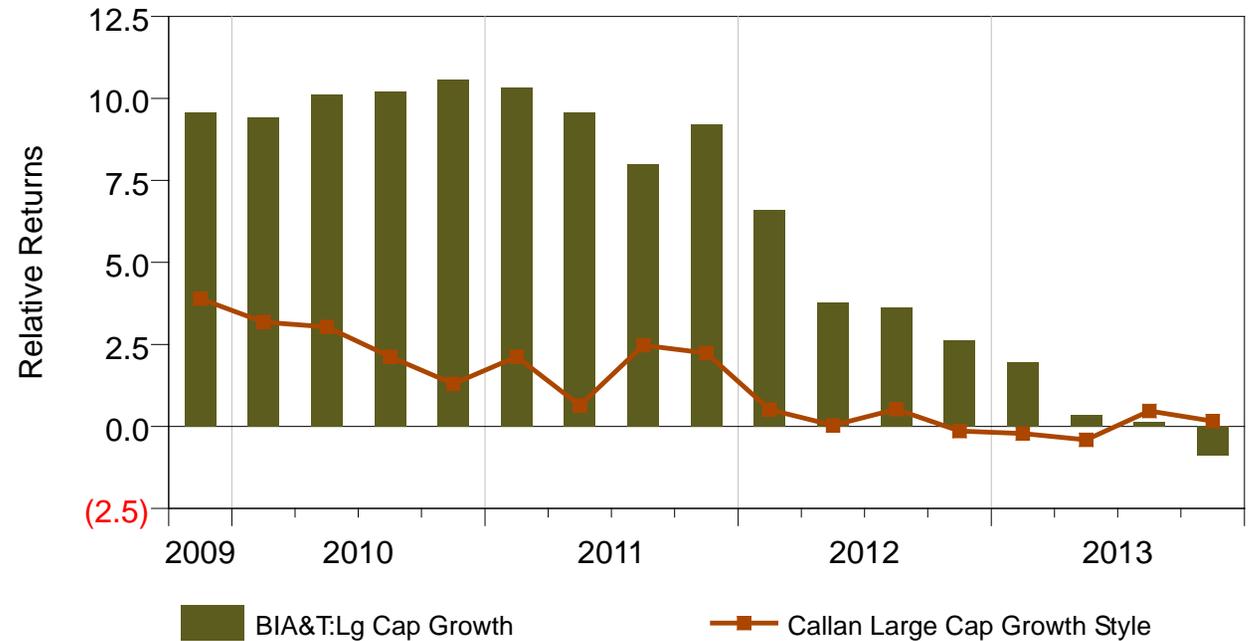
Database Groups	Organizations	Products
Domestic Equity	706	2,896
Domestic Fixed-Income	294	1,467
Domestic Balanced	80	422
International Equity	287	903
Global Equity	237	509
Emerging Market Equity	172	407
International Fixed-Income	38	70
Global Fixed Income	71	209
Emerging Market Debt	67	166
International /Global Balanced	33	64
Currency	22	45
Real Estate	62	194
Hedge Funds	122	270
Derivatives / Alternative Investments	24	26
<b>Total</b>	<b>1485</b>	<b>7648</b>

As of December 31, 2013

# Historical Performance Assessment

- GIPS compliant composite return data
- Benchmark and Style-Group Comparisons
- Annual, cumulative, rolling three-year (**consistency**) return data
- Rising and falling market-cycle returns—**expectations**
- Risk-adjusted returns (e.g., Sharpe Ratios)
- Other risk measures (e.g., Information ratio, downside risk, alpha, standard deviation)

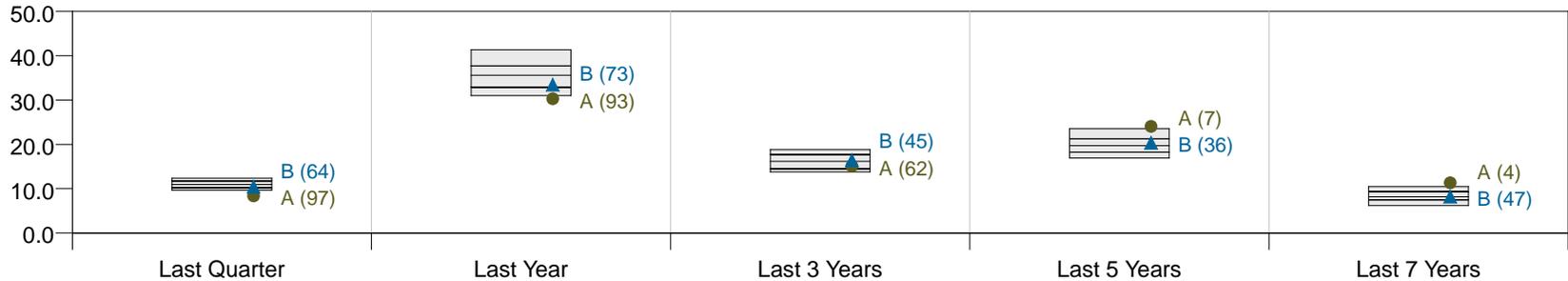
Rolling Three Year Relative Returns vs S&P 500 Index



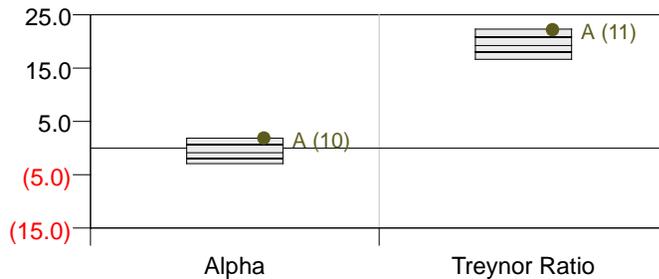
# Historical Performance Assessment

## What Consultants and Clients Utilize

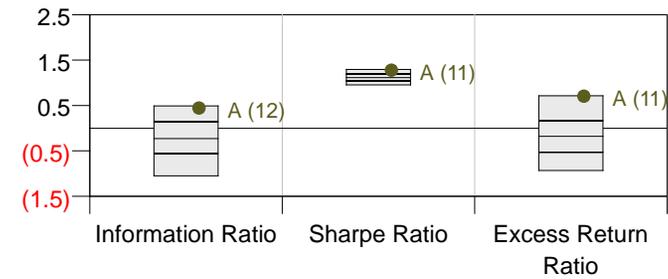
### Performance vs. Callan Large Cap Growth Style (Bottom Charts: Five-Year Period)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
10th Percentile	12.38	41.37	18.81	23.52	10.49
25th Percentile	11.81	37.70	17.76	21.26	9.30
Median	10.98	35.60	16.18	19.72	8.18
75th Percentile	10.15	32.93	14.53	18.24	7.53
90th Percentile	9.68	31.02	13.83	16.93	6.20
Manager A ● A	8.38	30.30	15.14	24.10	11.34
Russell:1000 Growth ▲ B	10.44	33.48	16.45	20.39	8.24



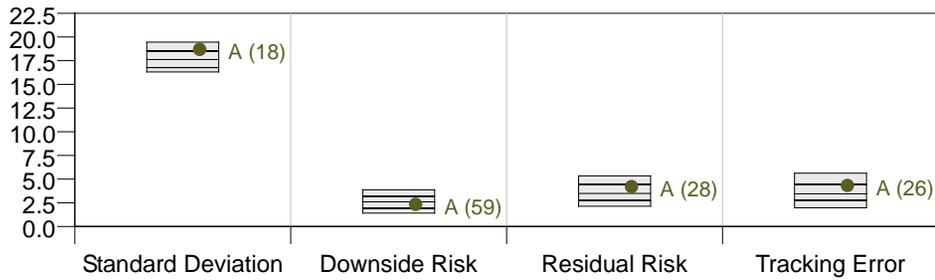
	Alpha	Treynor Ratio
10th Percentile	1.88	22.33
25th Percentile	0.67	20.88
Median	(0.85)	19.25
75th Percentile	(1.91)	18.07
90th Percentile	(2.90)	16.68
Manager A ● A	1.89	22.21



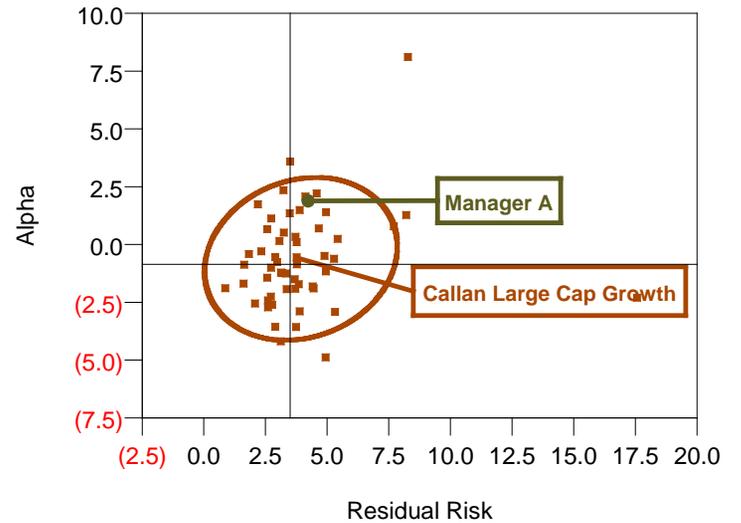
	Information Ratio	Sharpe Ratio	Excess Return Ratio
10th Percentile	0.49	1.30	0.72
25th Percentile	0.15	1.19	0.17
Median	(0.23)	1.11	(0.18)
75th Percentile	(0.56)	1.05	(0.52)
90th Percentile	(1.05)	0.96	(0.93)
Manager A ● A	0.45	1.28	0.71

# Historical Risk Assessment

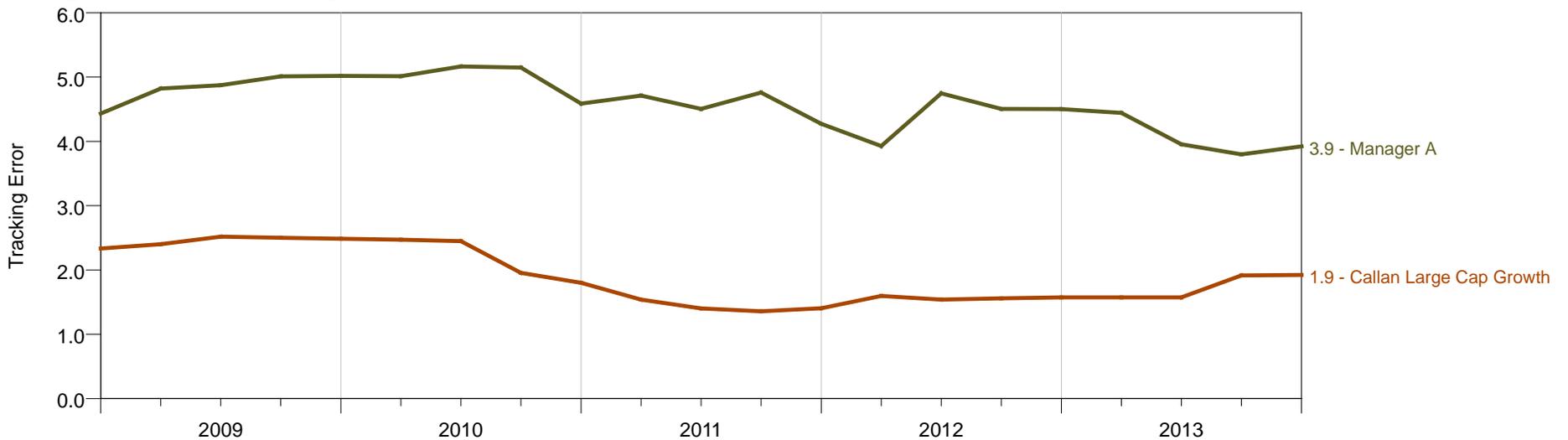
## What Consultants and Clients Utilize



	Standard Deviation	Downside Risk	Residual Risk	Tracking Error
10th Percentile	19.47	3.87	5.36	5.63
25th Percentile	18.54	3.22	4.45	4.42
Median	17.64	2.60	3.50	3.47
75th Percentile	16.79	1.93	2.73	2.75
90th Percentile	16.31	1.43	2.14	1.99
Manager A ● A	18.70	2.35	4.22	4.35



## Rolling 12 Quarter Tracking Error vs Russell 1000 Growth Index



# Quantitative Portfolio Characteristics

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Certain Quantitative Portfolio Characteristic (“PCR”) Data Can Also be Very Helpful

## Stocks

- Z-Scores
- P/E Ratio
- Price-to-Book Value Ratio
- Earnings Per Share Growth Rate (Short and Long)
- Dividend Yield
- Market Capitalization
- Internal Growth Rate

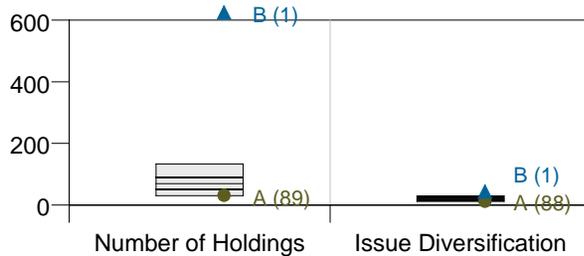
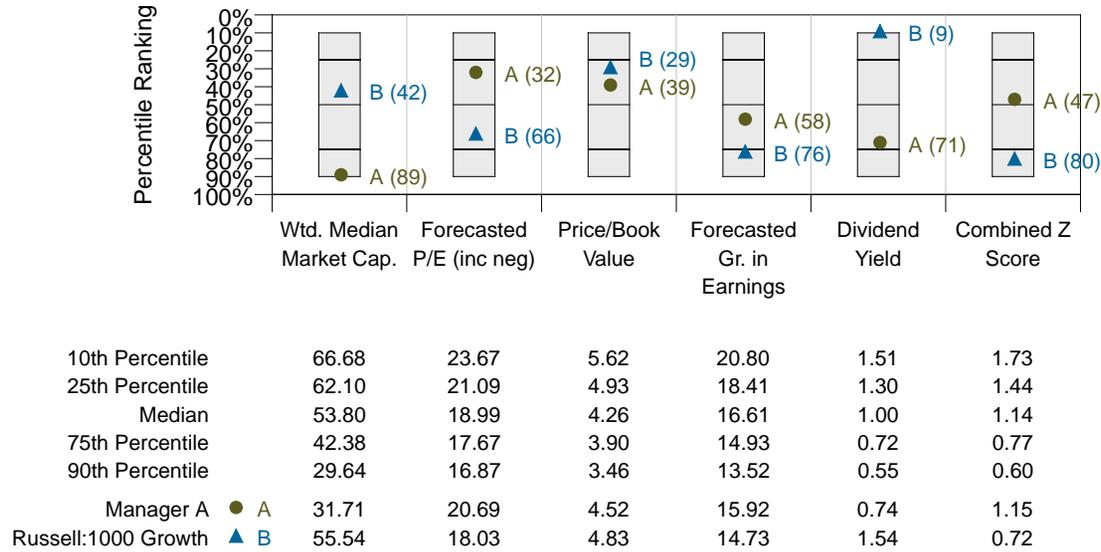
## Bonds

- Type
- Credit Quality
- Duration
- Maturity
- Yield to Worst
- Convexity

# Historical Portfolio Characteristics

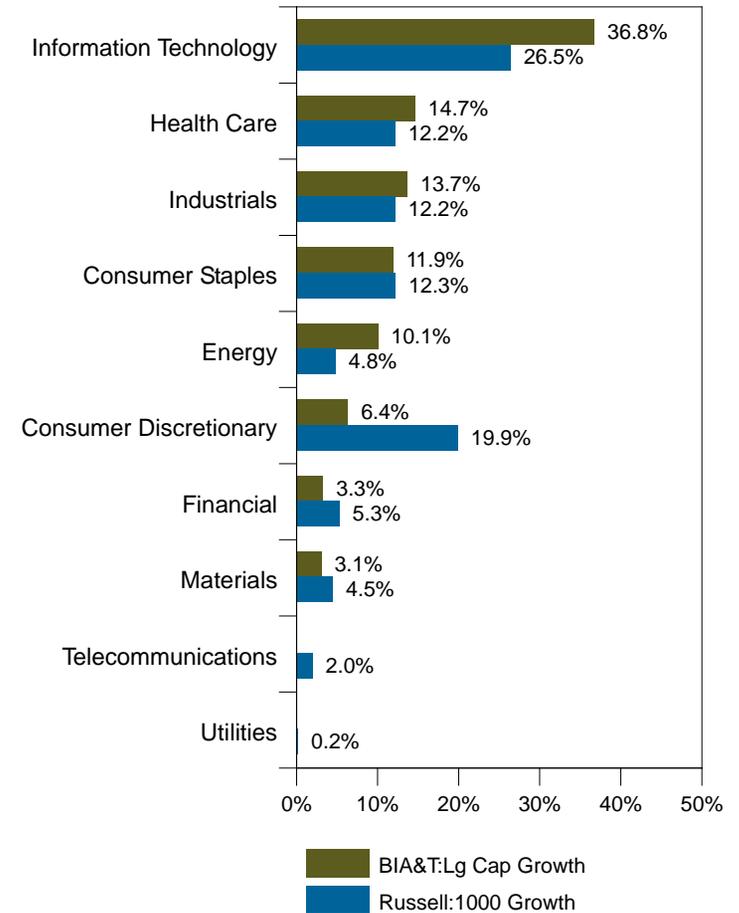
## Do PCRs Match Investment Philosophy and Performance Pattern?

### Portfolio Characteristics against Callan Large Cap Growth Style



	Number of Holdings	Issue Diversification
10th Percentile	133.50	30.15
25th Percentile	90.00	24.35
Median	69.50	20.42
75th Percentile	51.50	15.95
90th Percentile	30.50	11.81
Manager A ● A	32.00	12.49
Russell:1000 Growth ▲ B	625.00	44.14

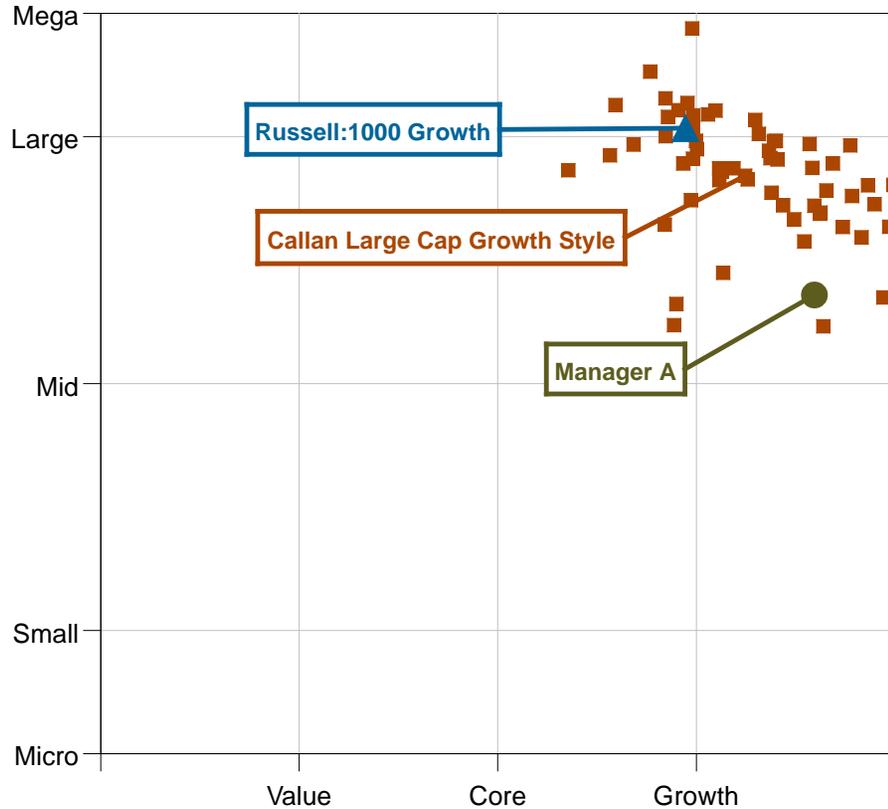
### Sector Allocations



# Historical Portfolio Characteristics

## Do PCRs Match Investment Philosophy and Performance Pattern?

Average Style Map vs. Callan Large Cap Growth Style  
Three-Year Holdings



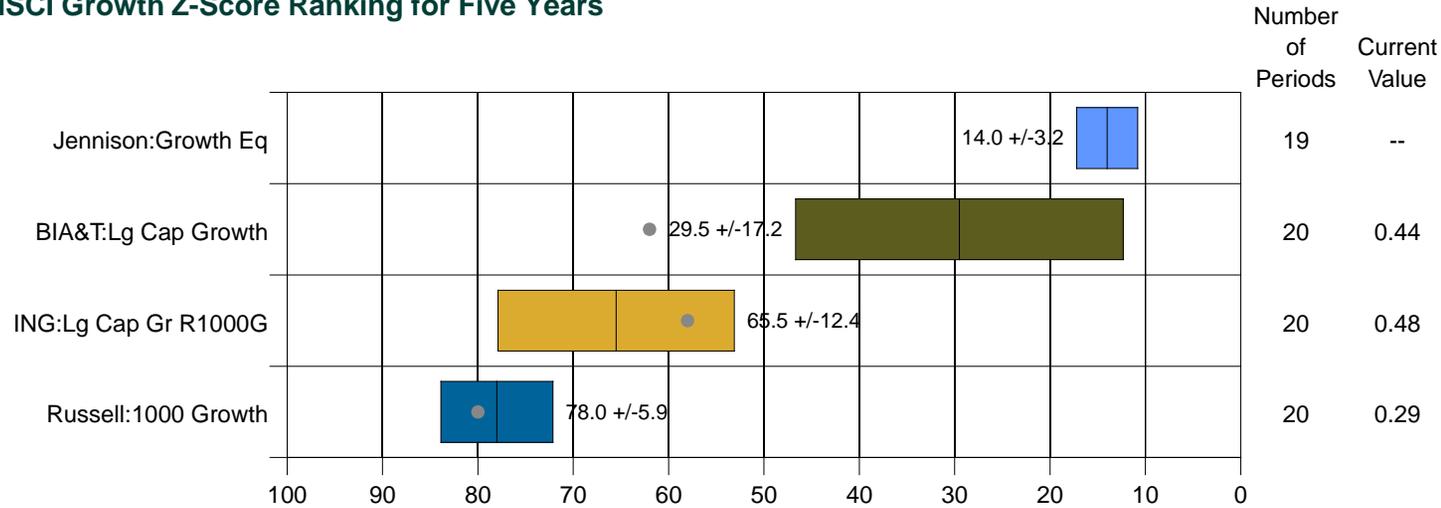
Average Style Exposure Matrix  
Three-Year Holdings

Large	0.4%	7.6% (2)	60.3% (18)	68.2% (21)
	4.7% (17)	29.8% (72)	45.5% (98)	80.0% (187)
Mid	--	6.2% (2)	25.6% (9)	31.8% (12)
	1.2% (35)	6.1% (130)	11.8% (172)	19.0% (336)
Small	--	--	--	--
	0.1% (12)	0.4% (27)	0.5% (24)	1.0% (63)
Micro	--	--	--	--
	0.0%	0.0% (1)	0.0% (1)	0.0% (1)
Total	0.4%	13.8% (5)	85.8% (27)	100.0% (32)
	6.0% (64)	36.3% (229)	57.7% (294)	100.0% (587)
	Value	Core	Growth	Total

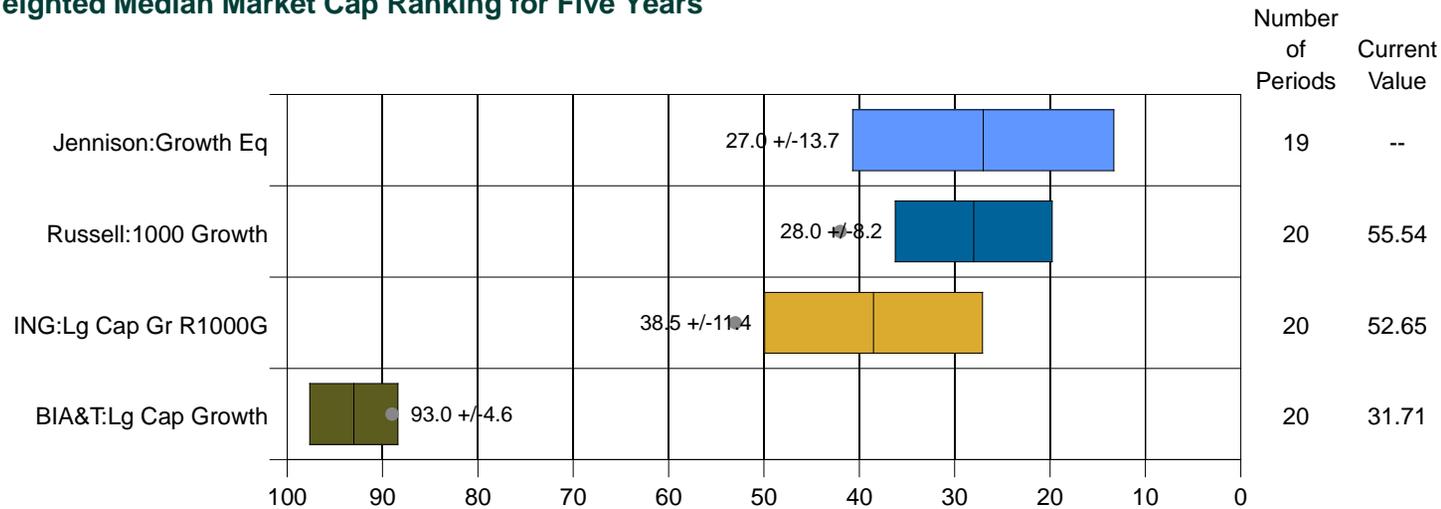
# Historical Portfolio Characteristics

## Do PCRs Match Investment Philosophy and Performance Pattern?

### MSCI Growth Z-Score Ranking for Five Years



### Weighted Median Market Cap Ranking for Five Years



# Step No. 4: Conduct Qualitative Screening

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## What Qualitative Factor Matters the Most

### **PEOPLE!!!**

1. Who are the “idea generators?”
2. Intelligence, creativity, and innovation
3. Tenure working together
4. Depth of resources – “star” system or team effort
5. Integrity
6. Stability
7. Organizational culture

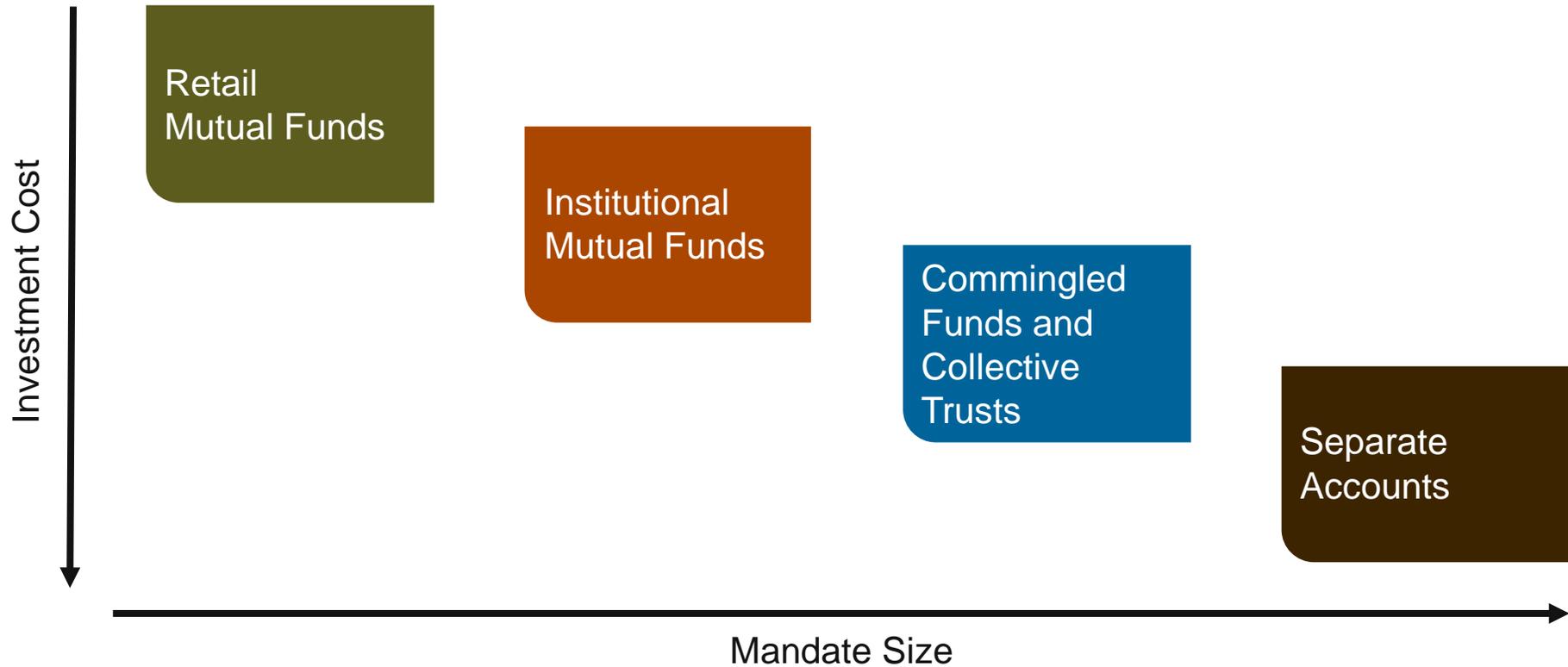
# Other Important Qualitative Factors

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- Investment Philosophy:
  - Clearly articulated?
  - Based on sound theory and empirical evidence?
- Investment Strategies:
  - Top down? Bottom up?
  - Sector based? Thematic?
- Research Orientation:
  - Quantitative? Qualitative?
  - Fundamental price/value framework?
- Decision-Making Process:
  - Central Research? Committee/PM Team-driven? Star PM? “Blackbox?”
- Cultural and Environmental Values
- Risk Controls:
  - What tools or strategies does the manager use to control risk?

# Speaking of Fees...Vehicle Expense Comparison

Vehicle Decisions Can Have Important Cost Impacts to the Client



## Step No. 5: Review by Senior Decision Makers

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**Objective is to identify approximately six Semi-Finalists.**

## Step No. 6: Prepare Search Review Book for Client

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- Contains detailed information about each semi-finalist and comparative performance information.
- Book serves as tool to help identify the finalists.

## Step No. 7: Identify Finalists

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- Field consultant works with client to select finalist managers (typically three to four) for consideration.
- Schedule interviews.

## Step No. 8: Interview Finalists

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- Schedule interview in client's office or on site and conduct manager due diligence on site.
- What to look for during a finalist interview:
  - Enthusiasm and energy
  - Understanding of client's specific situation
  - Focus on client's specific interests and needs
  - Cogent description of investment process—who makes what decisions when?
  - Excellent listening skills
  - Excellent Q&A skills
  - Excellent time-management skills
  - Harmony among multiple presenters

## Step No. 9: Manager Selection

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- Development of written plan that assigns accountabilities during the transition.
- Discretion is the client's responsibility (with a possible assist from a consultant).
- Execute a contract and make sure manager receives a copy of the investment policy statement including a clear understanding of benchmarks and peer expectations.
- Develop transition plan:
  - Date by which transition will be complete.
  - Identity of transition broker (if any).
  - Create documentation of process for files.
- Establish reporting and client service protocol.

**Why was a manager hired is the best question to keep in mind when monitoring a portfolio?**

# Cost Considerations for Manager Termination and Transitions

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**What explicit (and hidden) costs are associated with manager terminations and transitions?**

- Portfolio transfers can be costly.
- Accountabilities need to be placed with specific parties.
- Primary direct costs, primary indirect costs, and primary timing risks.
- Benefits of a well-developed transition (portfolio restructuring) plan.



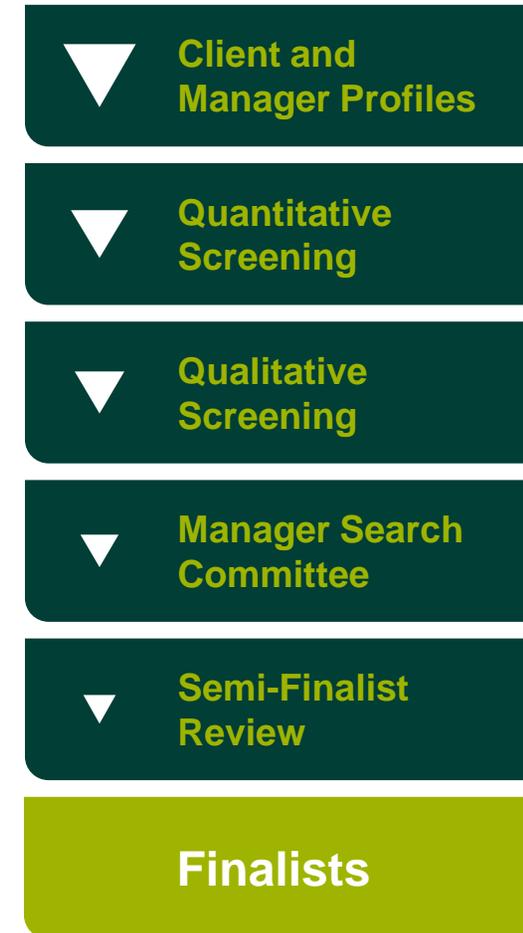
## Appendix

# Manager Search Process Overview

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- The Process:
  - Every search starts from scratch, no “Approved” or “Buy” lists
  - Backed by extensive due diligence and accumulated knowledge of specialist and generalist consultants
  - Disciplined and Consistent
  - Client driven, customized
  - Utilizes peer review—Manager Search Committee to ensure quality control
- The Outcome:
  - The identification of the managers and products that are the best fit for the investment program and the specific mandate.
- Client Cooperation:
  - All parts of this process are transparent and client involvement is encouraged. Any part of this process can be used to supplement a client’s existing search process.

## Manager Search Process



# Vehicle Comparison

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## Mutual Funds

- Benefits
  - SEC registered funds
  - Tickers and public disclosures
  - Performance and price quotes readily available from third parties
  - Branded funds
- Challenges
  - Higher, more rigid fee structures
  - Not customizable
  - May be subject to manager trading restrictions
  - No ERISA exclusivity—open to the public

## Collective Trusts

- Benefits
  - Potentially lower and more flexible fee structure
  - Increases investment opportunities
  - ERISA exclusivity
- Challenges
  - Not a registered product; no prospectus
  - Third party opinions may not be readily available
  - May not be as well supported by record keeper
  - May or may not be a branded product

# Vehicle Comparison

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## Separate Accounts

- Benefits
  - Lower fee structure
  - Customizable
  - Multi-manager approach may be used
  - Provides the ability to leverage DB investment strategies
  - ERISA exclusivity
- Challenges
  - Complexity of operating the funds
  - Investment manager oversight
  - Communication

Org. Name	Total Org Assets for 12/31/13	Total Org Assets for 12/31/12	Total Product Assets for 12/31/13	Total Product Assets for 12/31/12	Avg. of Number of Holdings for 12 Quarters Ended 12/31/13	Avg. of Wtd. Average Market Cap. for 12 Quarters Ended 12/31/13	Avg. of Wtd. Median Market Cap. for 12 Quarters Ended 12/31/13	Avg. of Emerging Markets for 12 Quarters Ended 12/31/13	Avg. of Tracking Error vs. MSCI:Emer for 12 Quarters Ended 12/31/13	Avg. of 12 Qtr Standard Deviation for 12 Quarters Ended 12/31/13	Relative Matrix Score vs. CAI:Emer Mkt Style	Relative Matrix Score vs. CAI:Emer Mkt Style	Up Market Captive vs. MSCI:Emer 12/31/13	Up Market Captive vs. MSCI:Emer 12/31/13	Up Market Captive vs. MSCI:Emer 12/31/13	Down Market Captive vs. MSCI:Emer 12/31/13	Down Market Captive vs. MSCI:Emer 12/31/13	Down Market Captive vs. MSCI:Emer 12/31/13	Relative Returns vs. MSCI:Emer 12/31/13	Avg. of 12 Qtr Relative Returns vs. MSCI:Emer 12/31/13	Avg. of 12 Qtr Information Ratio vs. MSCI:Emer 12/31/13	Avg. of 12 Qtr Alpha vs. MSCI:Emer 12/31/13	Returns for 4 Quarters Ended 12/31/13	Returns for 16 Quarters Ended 12/31/13	Returns for 20 Quarters Ended 12/31/13	Effective Annual Fee for a 50,000,000 Mandate for 12/31/13	Effective Annual Fee for a 100,000,000 Mandate for 12/31/13	Effective Annual Fee for a 250,000,000 Mandate for 12/31/13
Dimensional Fund Adviso	337,781	261,794	3,995	3,463	2,851	1.3	1.0	99	7.67	29.15	100	100	121	124	90	98	88	90	1.74	3.02	0.44	2.84	(0.57)	6.29	20.75	0.82	0.82	0.82
J.P. Morgan Asset Manag	1,598,074	1,426,401	21,025	19,730	63	40.1	24.3	91	3.60	24.39	85	85	90	89	87	94	91	87	(1.73)	1.20	0.45	1.33	(3.95)	4.02	14.69	1.30	1.30	1.30
Callan Database Compos MSCI Inc.	100,090	71,776	3,627	3,681	97	34.4	14.5	93	3.49	26.15	50	53	97	97	97	98	95	94	2.57	(0.05)	0.06	0.13	0.25	3.59	15.33	0.95	0.95	0.85
					819	34.5	16.0	100	-	25.86	50	100	100	100	100	100	100	100	-	-	-	-	(2.27)	3.12	15.15			
1 AQR Capital Managemen	98,770	79,711	5,068	2,225	231	34.7	13.0	100	2.40	26.08	100	100	127	125		98	96		4.92	3.24	1.73	3.10	2.54	6.55	19.69	0.85	0.85	0.81
2 Axiom International Investors LLC		8,612	2,079	1,443	74	38.2	15.6	90	2.93	28.23	100	100	125	120		92	92		6.72	4.27	1.58	4.28	4.30	7.74	20.36	0.95	0.93	0.85
3 Columbia Management In	321,500	297,826	2,919	1,969	103	28.9	14.9	88	2.91	25.23	86	86	105	103		89	87		2.26	1.47	0.56	1.59	(0.05)	5.66	17.80	0.80	0.73	0.65
4 Franklin Templeton Inves	879,139	781,769	8,327	9,444	63	38.0	26.4	78	3.66	26.56	100	95	109	111	97	101	101	96	(0.30)	0.50	0.23	0.74	(2.56)	3.91	16.82	0.95	0.95	0.86
5 Harding Loevner LP	36,302	24,711	6,182	3,859	77	33.0	13.5	92	3.63	25.60	75	65	98	99	112	94	81	79	8.08	1.00	0.28	0.94	5.63	7.80	17.87	0.97	0.97	0.80
6 MFS Investment Managei	412,159	321,417	3,947	3,240	129	33.3	12.6	88	3.21	25.80	55	55	96	97	96	100	95	96	(1.59)	(0.28)	0.25	0.15	(3.82)	4.73	15.48	0.95	0.93	0.85
7 Morgan Stanley Investme	311,551	281,494	12,649	11,755	155	31.1	13.8	92	3.62	26.14	65	55	90	84	79	96	76	73	3.32	0.48	0.13	0.28	0.97	5.07	16.08	0.80	0.80	0.76
8 Quantitative Managemen	109,743	86,273	6,143	4,722	291	34.8	13.5	98	1.62	26.67	100	100	113	111	114	100	98	99	0.37	1.39	0.79	1.24	(1.90)	5.09	17.08	0.65	0.63	0.58
9 Schroder Investment Management No	344,545	19,321	18,505	131	46.9	21.5	97	2.24	25.53		85	75	103	101	116	98	98	96	1.98	0.80	0.47	0.84	(0.33)	3.90	15.68	1.00	1.00	0.85
10 William Blair & Company	61,979	49,613	757	296	59	38.8	22.3	98	5.18	24.87	86	86		97	90		77	82	3.78	1.65	0.41	2.01	1.42	6.03	18.21	0.78	0.69	0.57

# NORTH DAKOTA STATE INVESTMENT BOARD

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Securities Litigation Monitoring - Topic Overview

April 25, 2014

# TOPICS FOR DISCUSSION

What is Securities Litigation Monitoring?

What is the current Board practice?

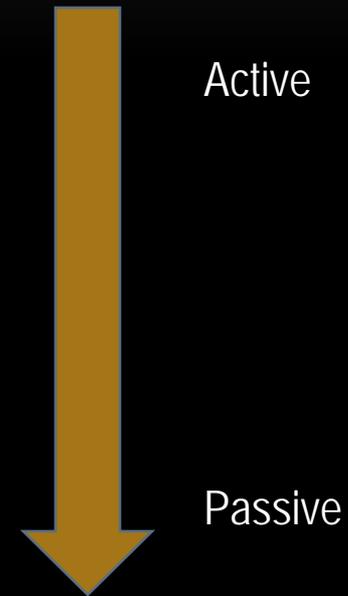
What options are available to amend this practice?

# WHAT IS SECURITIES LITIGATION MONITORING?

- Reviewing information on markets and legal systems in an attempt to identify possible or pending litigation involving your investments.
- Active v. Passive Securities Litigation Monitoring:
  - When do you want the information?
  - What do you do with the information received?
  - Why?
- Ends: Collection of money owed as a result of investment.

# LITIGATION TIMELINE

- Event
- Investigation
- Disclosure
- Evaluation of claims
- Filing of claims
- Joining of claims (depending on type of action brought)
- Resolution of action
- Monies collected



# CURRENT PRACTICE

- Passive Monitoring
    - Filing proof of claim after certification of class in domestic actions
  - Informal Policy
    - Developed as a result of discussions at prior Board meetings
    - Not directly addressed in Governance Manual
  - Custodian Bank Oversight
    - Northern Trust provides litigation monitoring & claim filing service as custodian.
-

# NORTHERN TRUST: PROCESS

- Subscription to services that provide daily monitoring of domestic and some foreign litigation jurisdiction legal filings.
  - Identification of filings relevant to your investments.
  - Periodic reporting of relevant filings with online access of up-to-date information available.
  - Preparation and filing of proof of claim in domestic actions, unless notified by you of decision to opt-out or otherwise not file on your behalf.
  - Posting disbursements to your accounts.
  - Optional Service: Coordination with outside vendors hired by you to provide additional services.
-

# NORTHERN TRUST: NON- U.S. LITIGATION MONITORING

"ISS Governance Services, a leading financial risk management firm, is our primary source of global class action information.

The United States continues to be the primary venue for class action activity worldwide (approximately 97% of class actions take place in the U.S.). For class actions settled through the U.S. courts where a U.S. claims administrator is appointed, Northern Trust notifies clients, files claims, and posts proceeds.

Class action activity is still low, although growing, in non-U.S. jurisdictions. For class actions outside the U.S. courts, Northern Trust passes along notifications to clients as we receive them. Enhancements are in progress to add these non-U.S. class actions to our reporting capabilities.

We have expanded our class actions service offering to file claims in Canada and the Netherlands since 2011, whenever the claim filing occurs after a court settlement and custodians can file on behalf of clients. We will continue to expand global notification and claim filing services in 2014.

Following is a general overview of the status of class action activity in various markets:

## **COUNTRIES WITH CLASS ACTION ACTIVITY**

The countries that currently allow securities class actions (or a similar procedure) and that have seen at least one filed are Australia, Canada, Israel, Netherlands, Nigeria, Taiwan, and Germany.

## **COUNTRIES THAT ALLOW CLASS ACTIONS BUT HAVE HAD NO ACTIVITY**

The countries that currently allow (or will allow within the near future) securities class actions (or a similar procedure) but have not yet had one filed are South Korea, Sweden, Italy, Denmark, and Norway.

## **COUNTRIES THAT MAY ALLOW CLASS ACTIONS IN THE NEAR FUTURE**

Countries that do not currently allow securities class actions but may in the near future include France and India."

# LITIGATION MONITORING: AVAILABLE OPTIONS

- Continue Passive Monitoring in Practice
- Expand Passive Monitoring Service to include additional vendors that provide additional oversight and foreign market coverage.
  - Difficulties associated with non-U.S. Litigation
- Move toward more Active Monitoring
  - Determine extent of active role and minimum participation considerations
  - Identify types of services and potential vendors to meet criteria
  - Implement change.

# FIDUCIARY CONSIDERATIONS: THE IMPORTANCE OF POLICY

- Safeguarding Fund Assets
- Lessons from Larson v. JPMorgan Chase & Co., 530 F. 3d 578, C.A.7 (Ill.), 2008.
- Often seen quote from U.S. Department of Labor:

“Not only is a fiduciary not prohibited from serving as lead plaintiff, the Secretary believes that a fiduciary has an affirmative duty to determine whether it would be in the interest of the plan participants to do so.”

and

“It may not only be prudent to initiate litigation, but also a breach of a fiduciary’s duty to not pursue a valid claim.”

- Source: Memorandum of Law as Amicus Curiae in Support of the Florida State Board of Administration’s Appointment as lead plaintiff in In re Telxon Corp. Securities Litigation, 67 F. Supp.2d 803 (N.D. Ohio, 1999).

# NEXT STEPS..

- Education
  - Discussion
  - Policy development
    - Identify areas of Litigation Monitoring coverage and non-coverage in relation to asset allocation.
    - Discuss policy considerations applicable to monitoring current assets.
    - Develop and implement Policy.
-



AGENDA ITEM IV.C.

CALLAN  
INVESTMENTS  
INSTITUTE

Survey

# 2013 Cost of Doing Business Survey

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U.S. Funds and Trusts

# Table of Contents

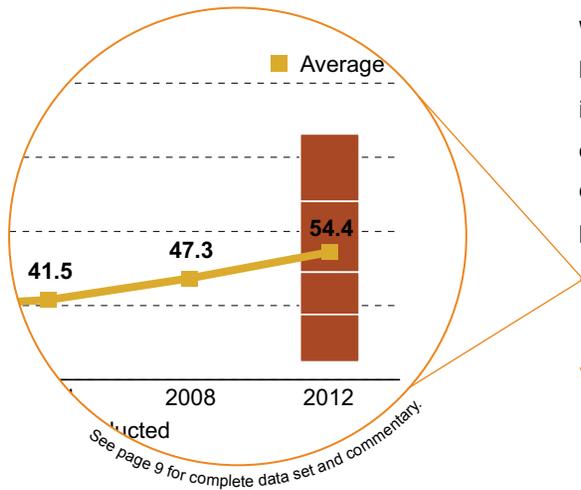
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# Executive Summary

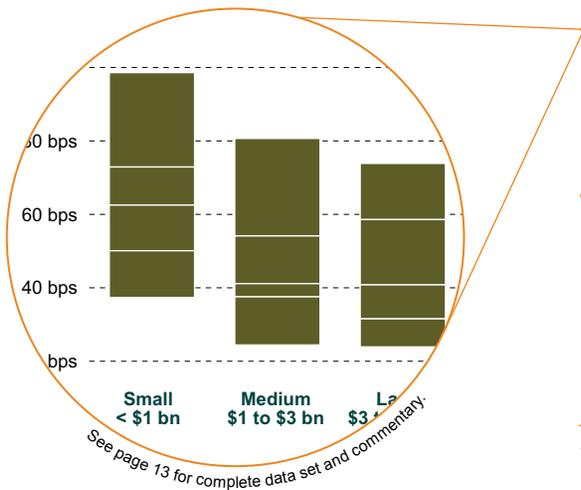
Monitoring and controlling costs is a primary fiduciary responsibility for all funds and trusts. In this survey, Callan compares the costs of administering and operating funds and trusts across all types of tax-exempt and tax-qualified organizations in the U.S. We identify practices and trends to help institutional investors manage expenses.

We fielded this survey in April and May of 2013. The results incorporate responses from 49 fund sponsors representing \$219 billion in assets. In this report, we include comparisons with four similar surveys Callan conducted over the past 15 years to identify enduring, long-term trends in fund/trust management and expenses. Major long-term trends identified include rising external investment management fees and non-investment management external advisor fees, alongside falling custody costs. Allocations have steadily shifted out of U.S. equity and into non-U.S. and global equities, real estate, hedge funds, and private equity since 1998. Other key findings include:



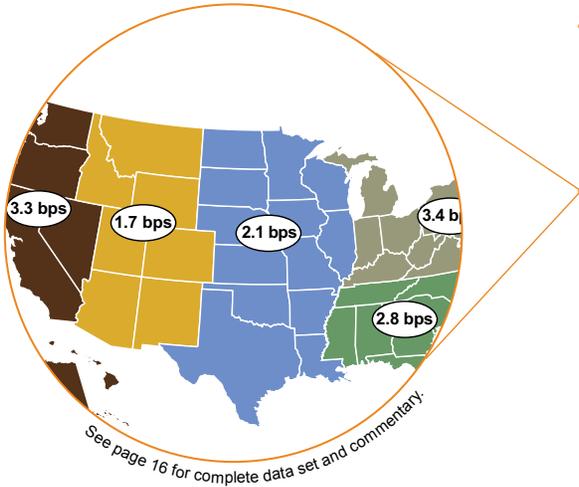
In 2012, funds spent an average of 54 basis points of total assets to operate their funds. Average total fund expenses have climbed more than 50% since 1998, when Callan first collected this data.

- External investment management fees represent the lion's share of total fund expenses at 90%. This figure has grown steadily over time, from 83% in 1998. The increase can largely be attributed to growing allocations to more expensive alternative asset classes, namely hedge funds and private equity.
- More assets flowed to hedge funds and private equity, as the percentage of funds invested in and the average allocations to these asset classes grew. Hedge fund and private equity fees saw modest declines at the median over the last four years, while averages were fairly static. Real estate fees saw little change and the average allocation remained around 6%.
- Not surprisingly, smaller funds—defined as those with less than \$1 billion in total assets—pay a premium (65 basis points, on average) to administer their funds relative to mid-sized and larger funds. Conversely, there is little difference between total expenses for the medium (47 basis points) and large funds (48.5 basis points) that responded to our survey. This can be attributed to differences in asset allocation, as large funds tend to invest in more expensive strategies.
- External investment management fees are the primary driver of total fund expenses. These fees have risen 55% over 15 years. Non-investment management external advisor fees,<sup>1</sup> which are the second largest average expense for U.S. funds, have increased 115% since 1998. However, at 5% of total fund expenses, changes in this area have a more modest impact than external investment management fees.



<sup>1</sup> Other external advisors include investment consultants, actuaries, legal advisors, and other types of service providers.

# Executive Summary (continued)



- U.S. equity fees relative to total fund size declined 14% (to 33.5 basis points, on average) since 2008. Non-U.S. equity fees fell nearly 20%, while the average spent on non-U.S. fixed income increased 54%. U.S. fixed income fees crept up 12%, potentially because of investors' willingness to pay more for yields in higher-octane areas of the bond market (e.g., core plus, high yield, bank loans, opportunistic) during this period.

Funds and trusts in the Northeast and Pacific regions of the U.S. pay the most—on average 3.4 and 3.3 basis points, respectively, relative to total fund size—to compensate investment-related staff, reflecting the higher cost of living in these regions. Compensation data across 11 positions reveal base salaries generally dictate total pay levels at fund sponsor organizations, although cash bonuses and non-cash compensation are part of total pay for around 25% to 35% of employees.

# Methodology and Definitions

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## METHODOLOGY

Callan emailed questionnaires to a broad sample of institutional fund sponsors in the U.S. Responses reflect data for periods ending December 31, 2012, and were collected in April and May of 2013. We compiled all responses in a database and supplemented them with qualitative analysis and industry information to yield the trends reported in this document.

Callan conducted similar, independent surveys in 1999, 2002, 2005, and 2009 to obtain a broad sampling of cost trends in the marketplace. Throughout this report we comment on relevant differences between the 2013 survey and previous surveys.

## DEFINITIONS

**Alternative Investments (Alternatives):** Includes private investment funds meeting the definition of an investment company, such as hedge funds, private equity funds, real estate funds, venture capital funds, commodity funds, offshore fund vehicles, fund-of-funds, and bank common/collective trust funds (excluding public market asset classes).

**Fund/Trust:** Tax-exempt and/or tax-qualified funds including multi-employer funds, endowments and foundations, corporate retirement funds, and public retirement funds.

**Investment-Related Expenses:** All expenses related to administering, operating, and/or managing fund assets. Included are custodial expenses, external investment management fees, external advisor fees (e.g., accounting, legal, consulting), compensation, travel, and education costs for those professionals involved with administering, operating, and/or internally managing fund assets and other operating expenses. Benefits administration fees are not included.

**Non-Investment Manager External Advisors:** Fund/trust advisors from outside the organization that conduct performance monitoring and reporting, auditing, legal and account services, etc., such as consultants, actuaries, and other service providers.

# Respondent Group Profile

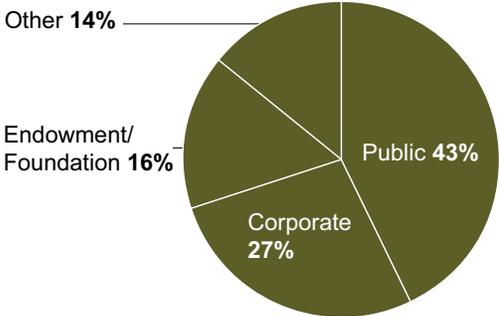
Survey results incorporate responses from 49 funds and trusts, including public (43%), corporate (27%), endowment/foundation (16%), and “other” fund types (14%). “Other” includes operating funds, group trusts, Taft-Hartley funds, and a prepaid college tuition plan.

The majority of funds that accrue benefits for employees (public, corporate, and multi-employer/Taft-Hartley/union plans) are open to all employees (54%) and 22% are partially closed.

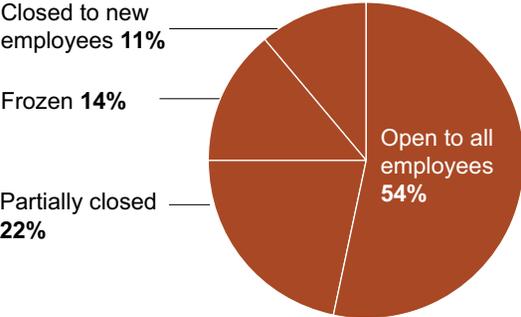
“Partially closed” funds could be open to certain types of employees but not others, or offer limited benefits to one group of employees in comparison to another. Funds that are “frozen” are closed to new employees with no accrual of benefits for existing employees.

Seventy-four percent of the assets represented by this respondent group are retirement assets.

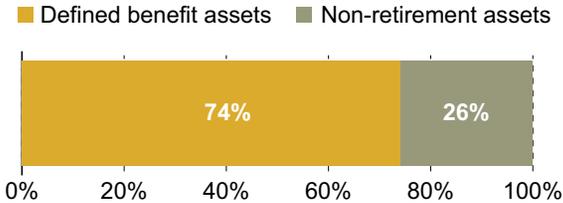
## By Fund Type



## By Fund Status\*



## By Asset Type



\*Applies to the 74% of respondents with defined benefit assets.  
 Note: Charts in this report may not sum to 100% due to rounding.

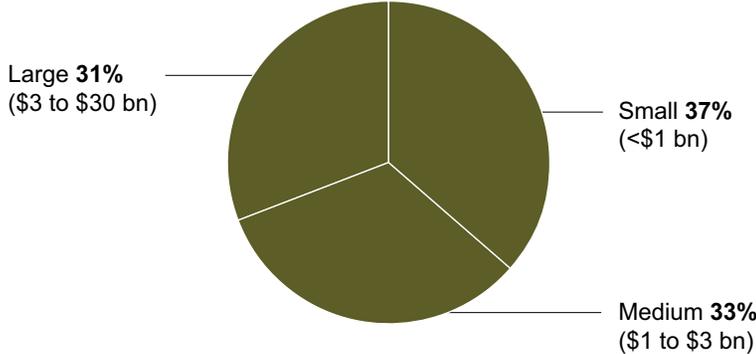
# Respondent Group Profile (continued)

Segregated by size, 37% of respondents have less than \$1 billion in total fund assets and are defined as “small” funds for the purposes of this report. One-third of funds are “medium” with \$1 to \$3 billion in assets. The remaining 31% have \$3 to \$30 billion and are described as “large” funds throughout this report.

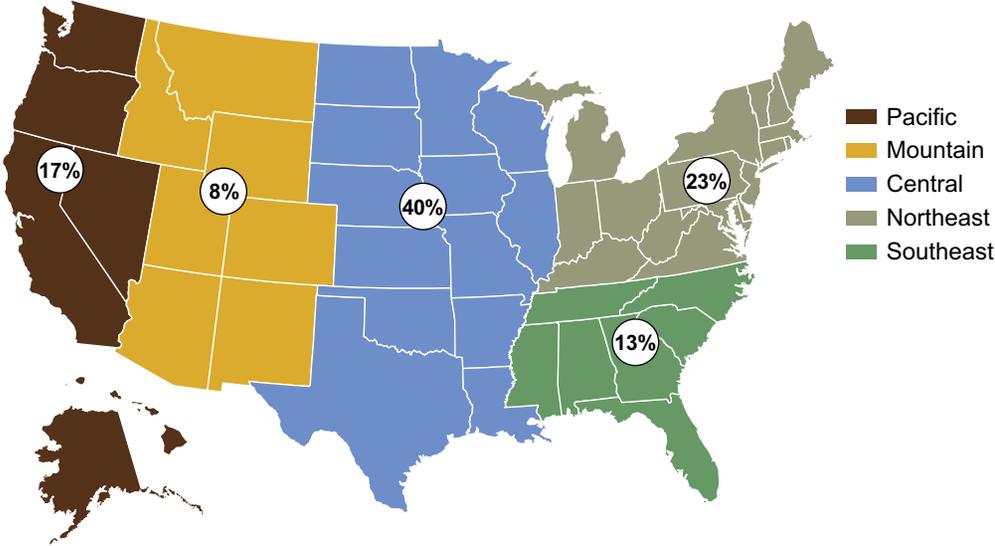
This fund sponsor respondent group is weighted more to larger funds when compared to the fund sponsor marketplace as a whole as represented by Standard & Poor’s Money Market Directory plan sponsor database. Approximately 77% of funds in the database have less than \$1 billion in assets compared to 37% in this survey.

Respondents are primarily located in the Central (40%) and Northeast (23%) regions of the U.S. We note regional differences in fund expenses throughout this report where relevant. Region has the largest impact on compensation when compared to other fund expenses.

## Respondents by Fund Size



## Respondents by Location



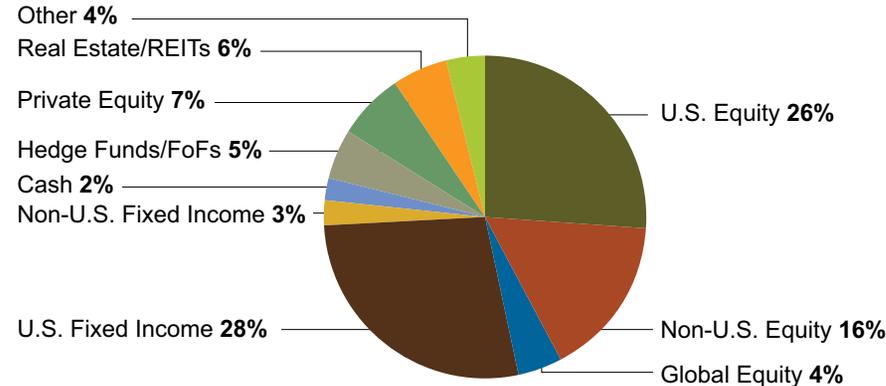
# Respondent Group Profile (continued)

Survey respondents collectively had \$219 billion in assets as of December 31, 2012. U.S. fixed income held the greatest percentage of respondent assets at 28%, on average, followed by U.S. equity (26%).

We compare average asset allocations from *Cost of Doing Business Survey* respondents over time in the area chart to reveal long-term asset allocation trends for U.S. funds and trusts. Since 1998, average U.S. equity allocations have declined substantially while non-U.S. and global equities, hedge funds, private equity, and real estate gained assets. The average U.S. fixed income allocation fluctuated slightly, but ended the 15-year period where it began in 1998 at 28%.

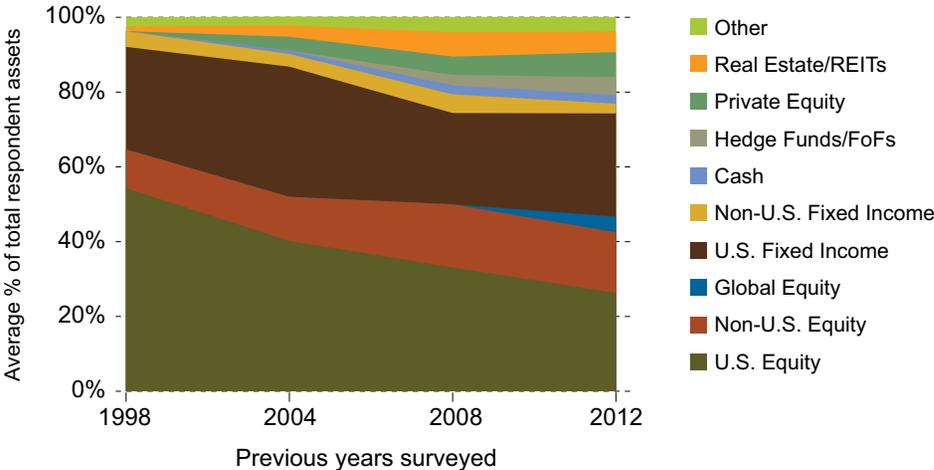
At the end of 2012, 100% of survey respondents held U.S. fixed income, and nearly all (98%) included U.S. equity in their portfolios. A healthy 86% had non-U.S. equity allocations, and 73% invested in real estate. Allocations to private equity were less common, with 57% of respondents in this asset class. Thirty-seven percent held hedge funds and non-U.S. fixed income, while 35% had at least a portion of their assets in global equity.

## Average Respondent Assets by Asset Class



Total Respondent Assets = \$219 billion

## Average Respondent Asset Allocations (including historical surveys)

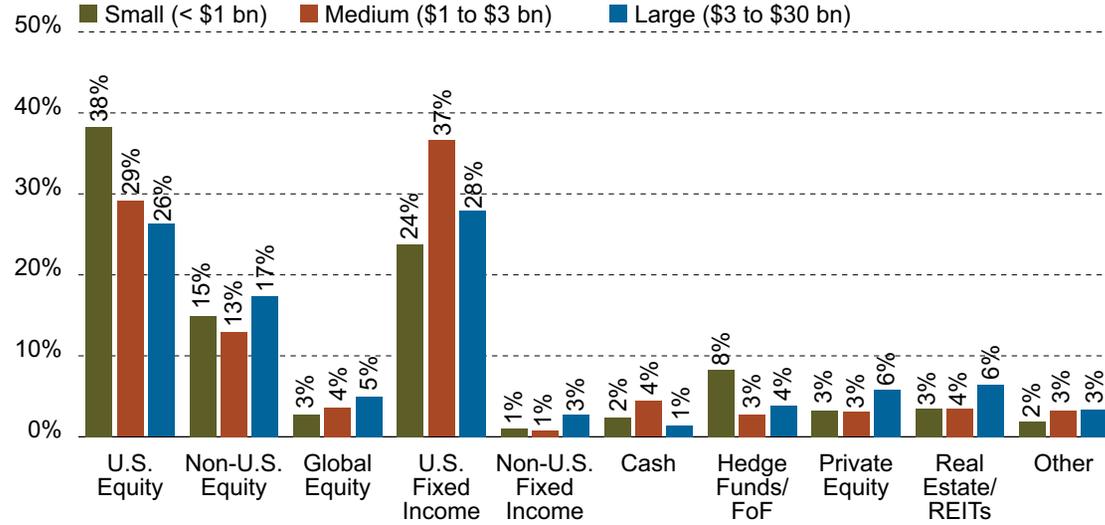


# Respondent Group Profile (continued)

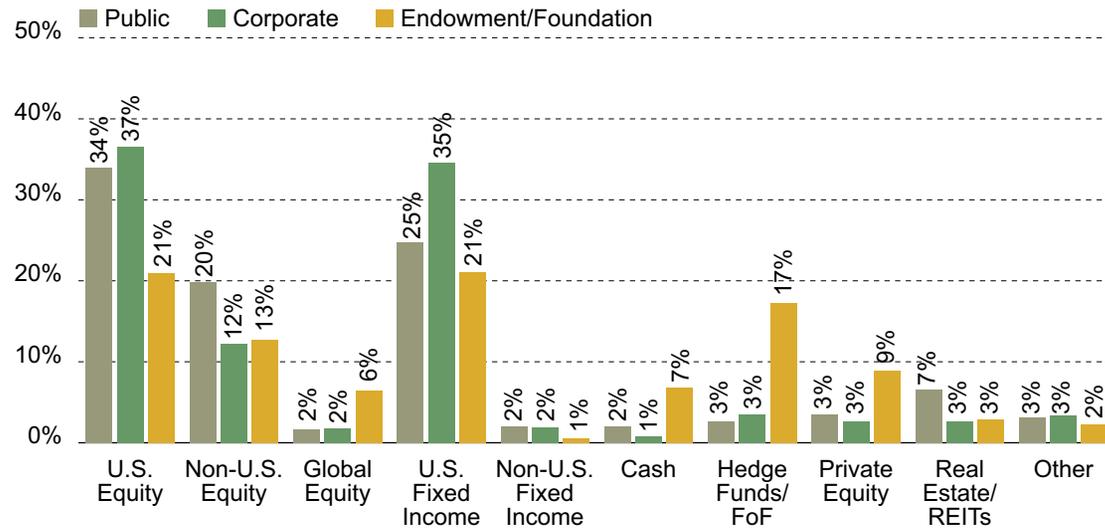
Respondents' asset allocations vary by fund size and type. The top chart reveals distinct trends by fund size as of December 31, 2012. The smallest funds held more U.S. equity and hedge funds than their larger counterparts. Medium funds held the greatest percentage of U.S. fixed income, while large funds had the greatest percentage of non-U.S. and global equities, non-U.S. fixed income, private equity, and real estate.

The bottom chart reveals allocations by fund type. Public funds held more non-U.S. equity and real estate. Corporate funds held the highest percentage of U.S. fixed income—an indication of the adoption of liability-driven investment structures—and U.S. equity. Endowments/foundations had the largest allocations to global equity, hedge funds, private equity, and cash.

## Average Respondent Asset Allocations by Fund Size



## Average Respondent Asset Allocations by Fund Type



# Investment-Related Expenses

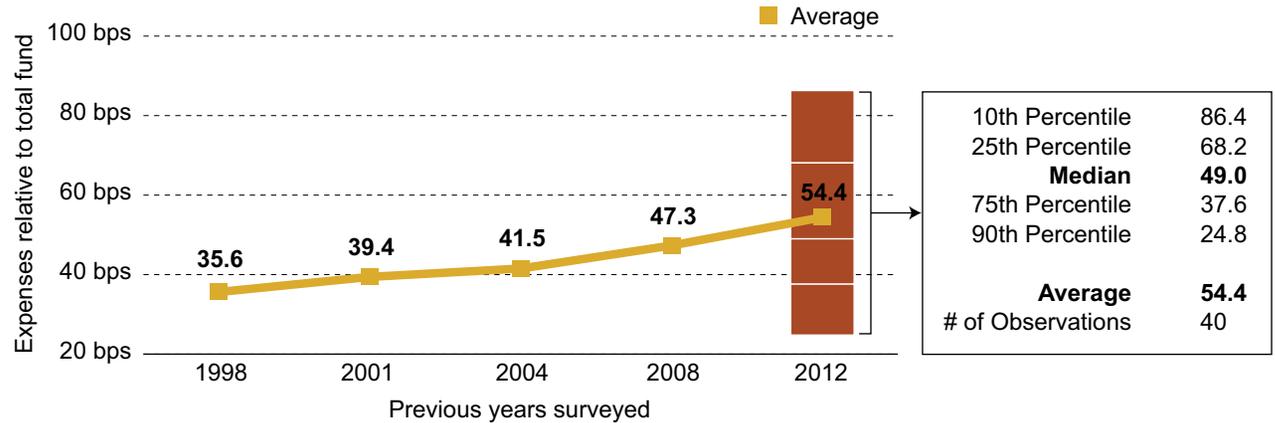
In 2012, funds spent more than 54 basis points, on average, of total assets to operate or manage their funds. Average total fund expenses have climbed more than 50% since Callan first collected this data in 1998.

External investment management fees represent the lion's share of total fund expenses at 90%. This figure has also grown steadily over time, from 83% in 1998. The increase can largely be attributed to growing allocations to more expensive alternative asset classes, namely hedge funds and private equity. We examine fees by asset class in greater detail later in this report.

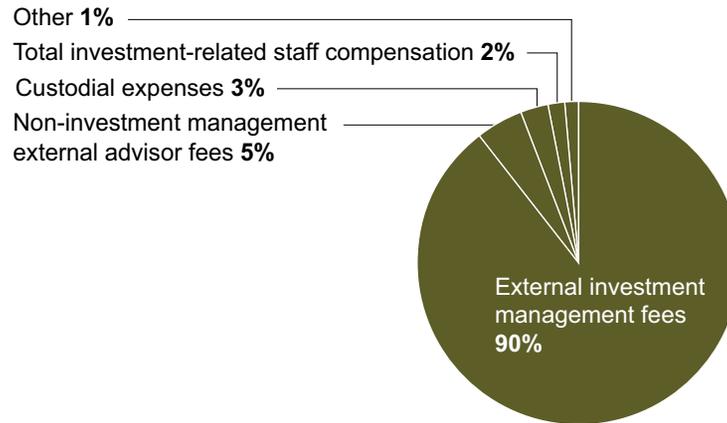
The second-largest expense allocation is non-investment manager external advisor fees at 5%, followed by custodial expenses (3%). Non-investment manager external advisor fees are paid to any fund/trust advisors from outside the organization that conduct performance measurement and monitoring, auditing, legal, accounting, or other services. These could be consultants, actuaries, or other types of service providers.

Many factors influence expenses, including fund size, the percent invested in active versus passive management, the number of managers and their mandate sizes, and the percent allocated to alternative assets. In this report we present several of these factors in isolation to highlight what impact, if any, they might have on total expenses.

## Total Expenses over Time



## Major Expenses – 2012 Average Responses



# Investment-Related Expenses (continued)

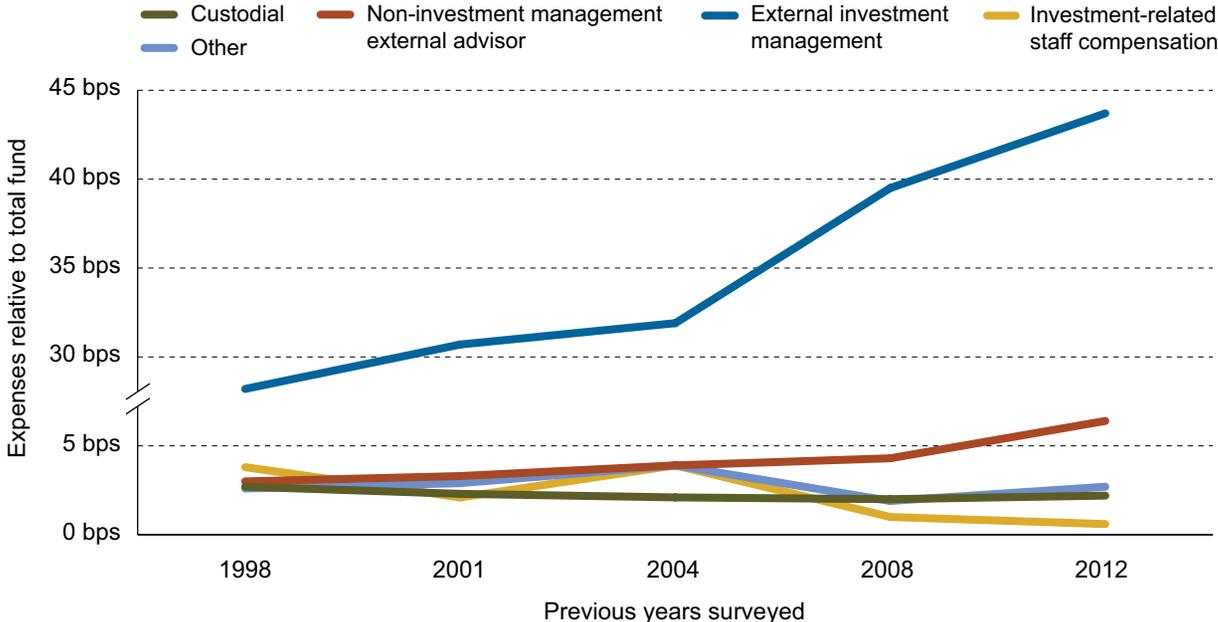
External investment management fees are the primary driver of total fund expenses. Since Callan first conducted this survey 15 years ago, external investment management fees have risen 55%.

Non-investment management external advisor fees, which are the second-largest expense for most U.S. funds, have also increased over time, rising 115% since 1998. This includes a 50% increase from 2008 to 2012. Other external advisors include investment consultants, actuaries, legal advisors, and other types of service providers.

As detailed on the following page, 42% of funds report operational expenses have increased due to risk management efforts following the financial crisis. Callan's 2013 Risk Management Survey revealed 12% of fund sponsors employ a separate provider (consultant or advisor) for risk management.

Custodial and compensation-related expenses were flat over the last 15 years. Custodial expenses actually landed 20% lower in 2012 (2.2 basis points) than where Callan assessed them in 1998 (2.7 basis points).

## Expense Components over Time

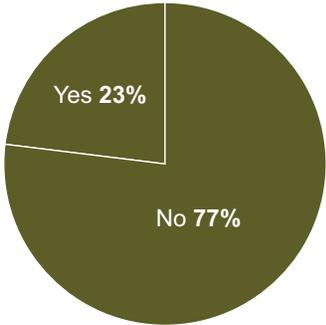


# Investment-Related Expenses (continued)

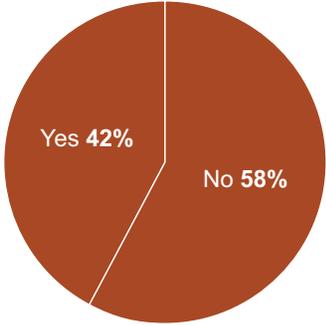
Less than one-quarter (23%) of respondents indicate that new regulations have led to increased operational expenses. Fund sponsors specifically note that the following regulations have bumped up costs: Dodd-Frank, Sarbanes-Oxley, GASB 67 and 68, the Moving Ahead for Progress in the 21st Century Act's effect on PBGC premiums, and the GAAP accounting and disclosure changes. By fund type, around twice as many corporate funds (33%) felt this impact as public funds (16%) and endowments/foundations (14%).

Risk management efforts have affected expenses for more funds. Forty-two percent of respondents indicate operational expenses increased due to risk management efforts, which can include adding in-house personnel (e.g., chief risk officers), purchasing third-party software or risk management systems, or hiring external consultants. Responses were similar across fund types. For more detail on how institutional investors are handling risk management, see Callan's *2013 Risk Management Survey*.

## Have operational expenses increased due to additional regulations?



## Have operational expenses increased due to risk management efforts?

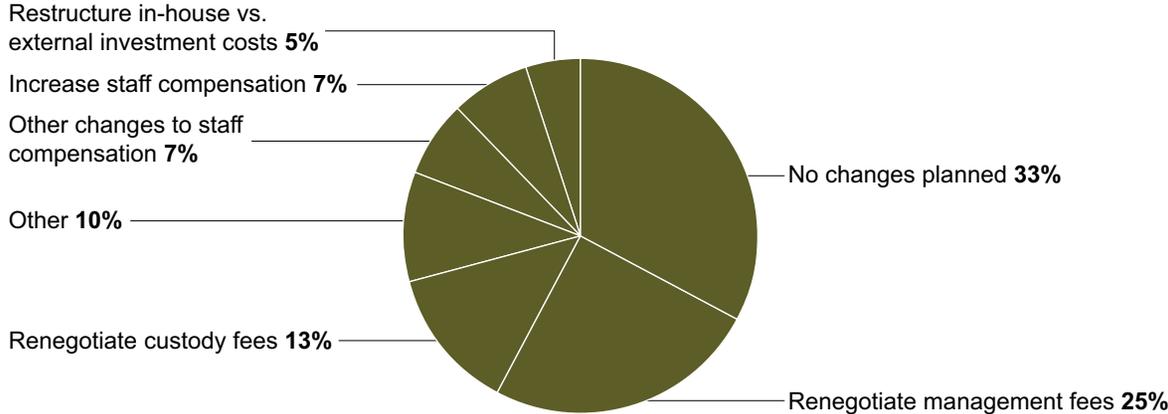


# Investment-Related Expenses (continued)

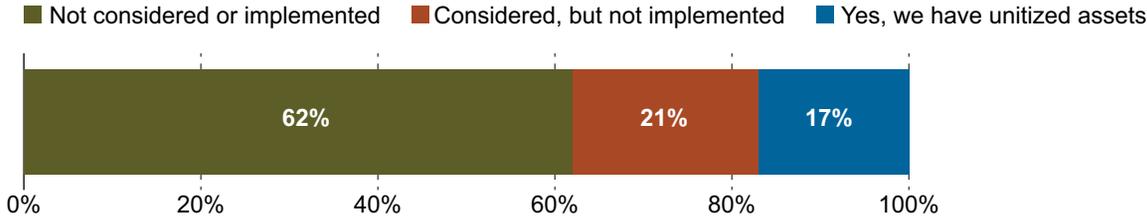
Two-thirds of funds expect to make changes during the next two years that will impact fund costs. Consistent with our prior survey, renegotiating fees—either management (25%) or custody (13%)—is the most frequently cited change. Staff compensation changes account for nearly 15% of responses. “Other” changes include restructuring external managers, benefits administration system implementation, and tracking incentive fees paid for alternative investments.

Defined benefit (DB) and defined contribution (DC) plan administration remains largely separate at organizations that host both types of retirement plans, potentially leaving a source of expense reduction untapped. Only 17% of funds that have both DB and DC plans have unitized their assets. Another 21% of respondents have considered this option to reduce costs.

## What is the biggest change you anticipate your fund/trust making over the next one to two years with respect to costs?



## If you have a defined contribution (DC) plan, have you considered unitizing the DB assets on the DC side for cost savings?



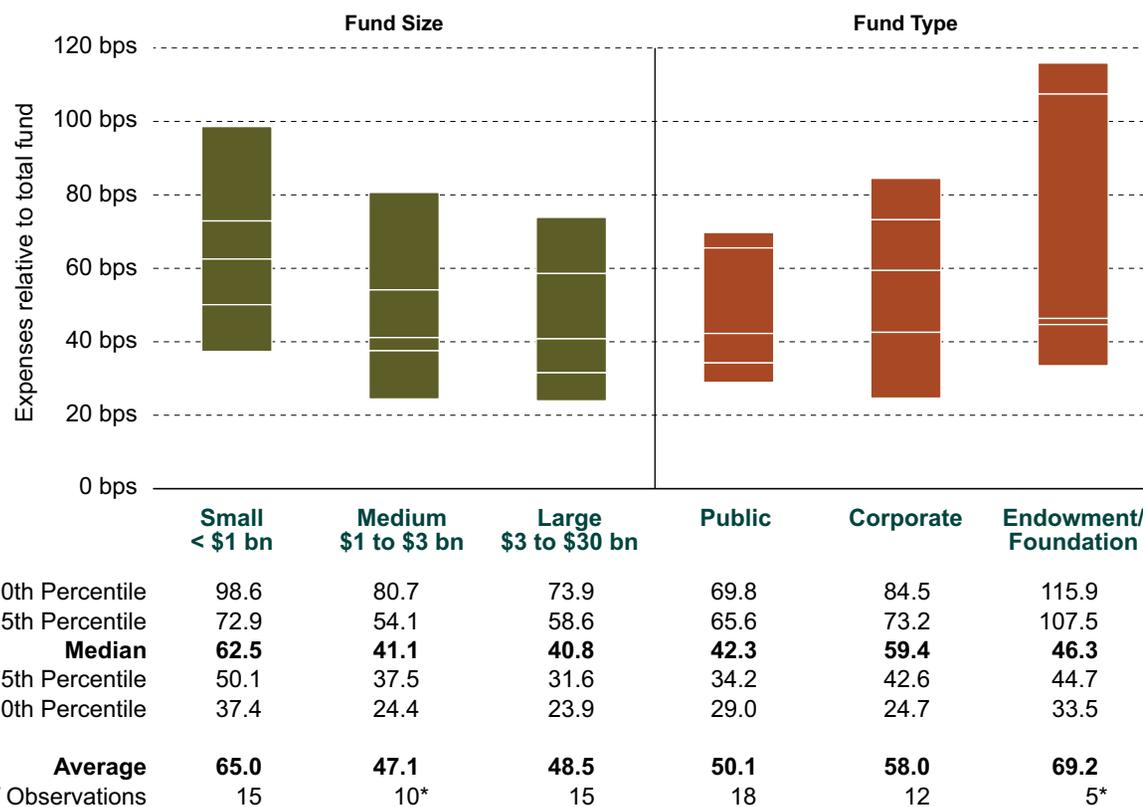
## Investment-Related Expenses (continued)

We examine total fund expenses by fund size and type in this exhibit. Not surprisingly, smaller funds—defined as those with less than \$1 billion in total assets—pay a premium to administer their funds relative to mid-sized and larger funds. Conversely, there is little difference between total expenses for the medium and large funds that responded to our survey.

Cost differentials across fund size can be largely attributed to the scaling of investment management fees; larger funds benefit from the application of lower investment management fees because of larger individual account sizes. Large funds in this survey actually pay more in total external investment management fees than their medium-sized counterparts due to larger allocations to more expensive alternative asset classes. However, total fund expenses are comparable, as the largest funds experience economies of scale in their cost of doing business.

Examining total fund expenses by fund type, we note that endowments/foundations pay the most, on average, within the widest range of expenses. This is due to certain endowment/foundation respondents that allocate a considerable amount to alternatives; one respondent has more than 60% in hedge funds and private equity. Corporate funds also pay a premium relative to public funds, largely stemming from higher fees paid to non-investment management external advisors. Page 15 reveals more detail on individual fund expenses by fund size and type.

### Total Fund Expenses by Fund Size and Type



\*Note the small sample size.

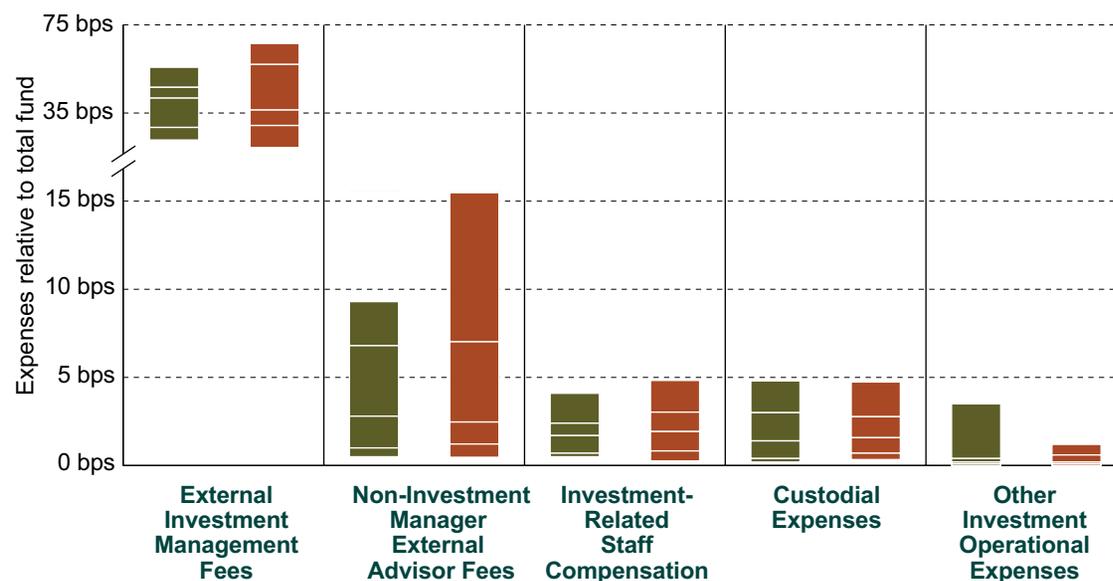
## Investment-Related Expenses (continued)

Several factors influence fund expenditures on asset administration and management, including size of allocation to alternative assets (especially hedge funds and private equity), fund size, and percent of fund managed internally and/or passively. These factors directly impact investment management costs, which are the single largest component of overall fund expenses.

Since 2008, custodial expenses and investment-related compensation increased modestly. Average external investment management fees increased and the range of responses widened by 14 basis points. As shown later in this report, average external investment management fees declined for U.S. and non-U.S. equities while other asset classes held steady or increased. However, the percentage of funds invested in private equity and hedge funds (more expensive asset classes) grew, reflecting the broader trend of new and increasing allocations to alternative assets at the expense of publicly traded assets. Subsequently, the need for external support to advise, educate, manage, and monitor these more complex investments is growing.

This year's survey respondents used less internal management and had smaller passive allocations than in previous years, contributing to growing external investment management fees.

### Major Expense Categories



	External Investment Management Fees		Non-Investment Manager External Advisor Fees		Investment-Related Staff Compensation		Custodial Expenses		Other Investment Operational Expenses	
	2008	2012	2008	2012	2008	2012	2008	2012	2008	2012
10th Percentile	56.3	67.1	9.3	15.5	4.1	4.7	4.8	4.7	3.5	1.2
25th Percentile	47.2	57.6	6.8	7.0	2.4	3.0	3.0	2.8	0.4	0.6
<b>Median</b>	<b>42.3</b>	<b>36.9</b>	<b>2.8</b>	<b>2.5</b>	<b>1.7</b>	<b>1.9</b>	<b>1.4</b>	<b>1.6</b>	<b>0.2</b>	<b>0.2</b>
75th Percentile	29.0	29.9	1.0	1.2	0.7	0.8	0.4	0.7	0.1	0.1
90th Percentile	23.3	19.9	0.5	0.5	0.5	0.3	0.2	0.3	0.0	0.0
<b>Average</b>	<b>39.5</b>	<b>43.7</b>	<b>4.3</b>	<b>6.4</b>	<b>1.9</b>	<b>2.7</b>	<b>2.0</b>	<b>2.2</b>	<b>1.0</b>	<b>0.6</b>
# of Observations	47	40	41	39	35	31	43	35	34	27

## Investment-Related Expenses (continued)

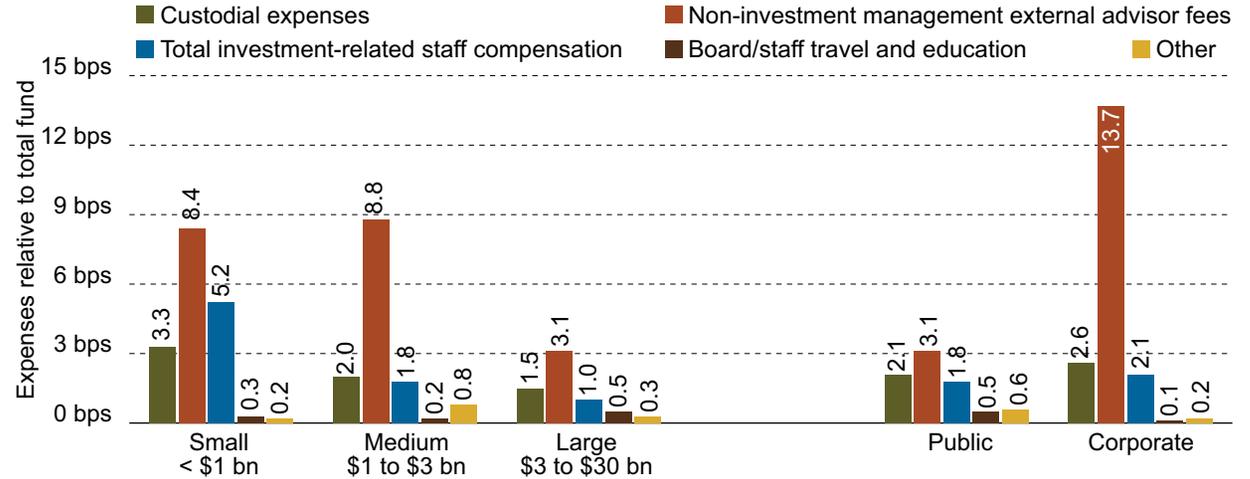
We display five smaller expense categories by fund size and type in the top chart, and the largest fund expense—external investment management fees—relative to total fund expenses in the bottom chart. While large funds pay slightly more for board and staff travel and education, they enjoy economies of scale in other categories.

Corporate funds pay a notably higher percentage of fund assets to non-investment management external advisors—such as investment consultants, accountants, actuaries, etc.—than their public counterparts. Many corporate funds are subject to ERISA and must comply with related regulatory and legislative requirements, such as Sarbanes-Oxley. Frequent interactions with the DOL and IRS, including periodic audits, can prove costly. Fund size is also a factor: Public funds surveyed have more than three times the assets as corporate respondents, on average.

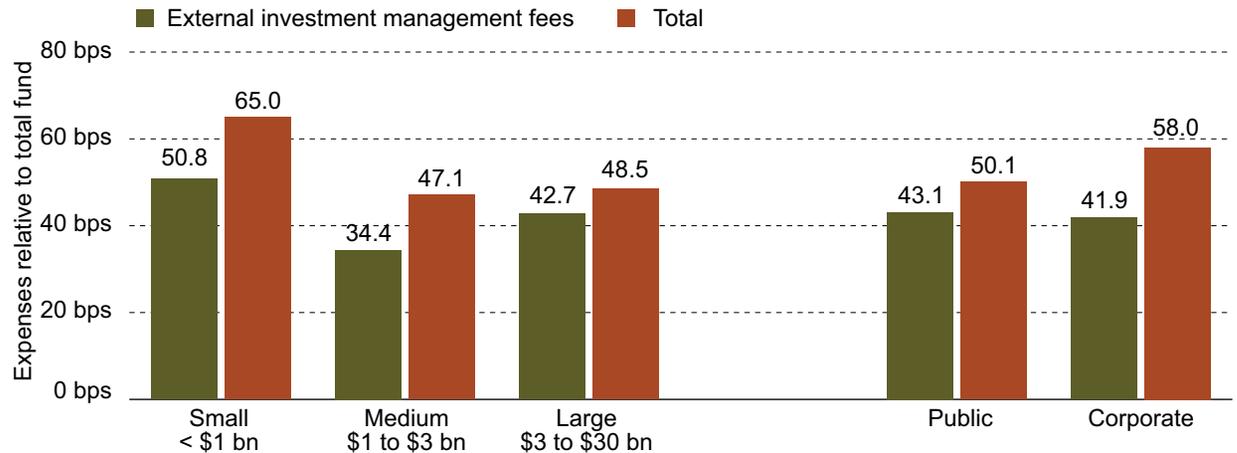
While corporate funds pay more than twice as much, on average, than public funds for other aspects of fund administration (16.1 basis points and 7.0 basis points, respectively), they spend slightly less on external investment management fees. These fees make up 72% of total fund expenses for corporate funds compared to 86% for their public counterparts.

Large funds surveyed hold more alternatives, non-U.S./global equities, and non-U.S. fixed income than their medium counterparts, resulting in a greater portion of total fund assets spent on investment management fees.

### Average Fund Expenses by Fund Size and Fund Type



### Average Investment Fees vs. Total Fund Expenses by Fund Size and Fund Type



# Investment-Related Expenses (continued)

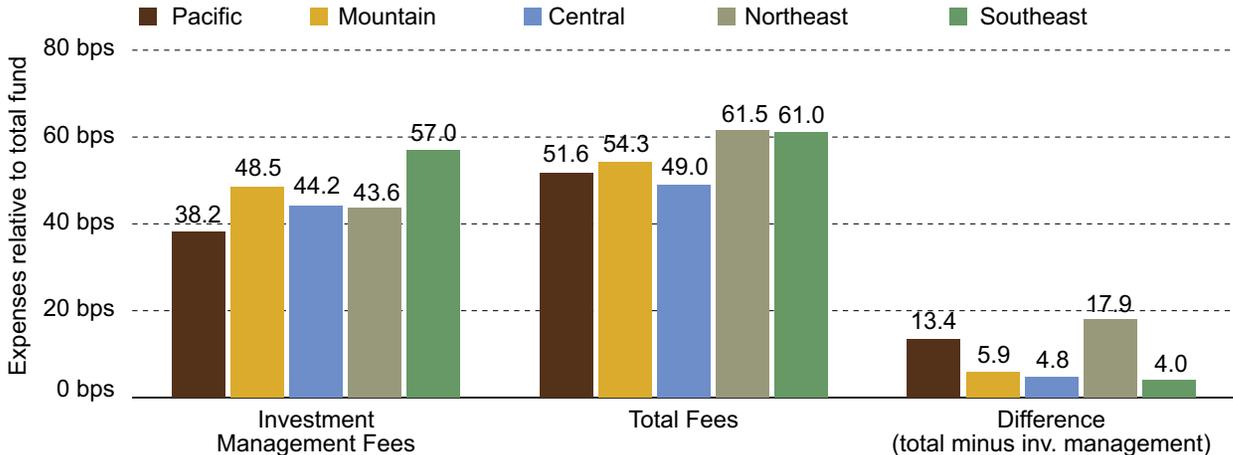
On the previous page we observed differences in management and total fees paid by fund size and type. On this page we examine expenses relative to total fund size by region.

Investment management fees reflect asset allocation choices, such as the ratio of alternative versus traditional asset classes, active versus passive, and fund size. Funds in the Southeast pay the greatest percentage of total fund assets in external investment management fees. Seventy-one percent of Southeastern funds surveyed have less than \$1 billion in assets. They also have larger-than-average allocations to hedge funds (8%) and private equity (5%) than the respondent group as a whole.

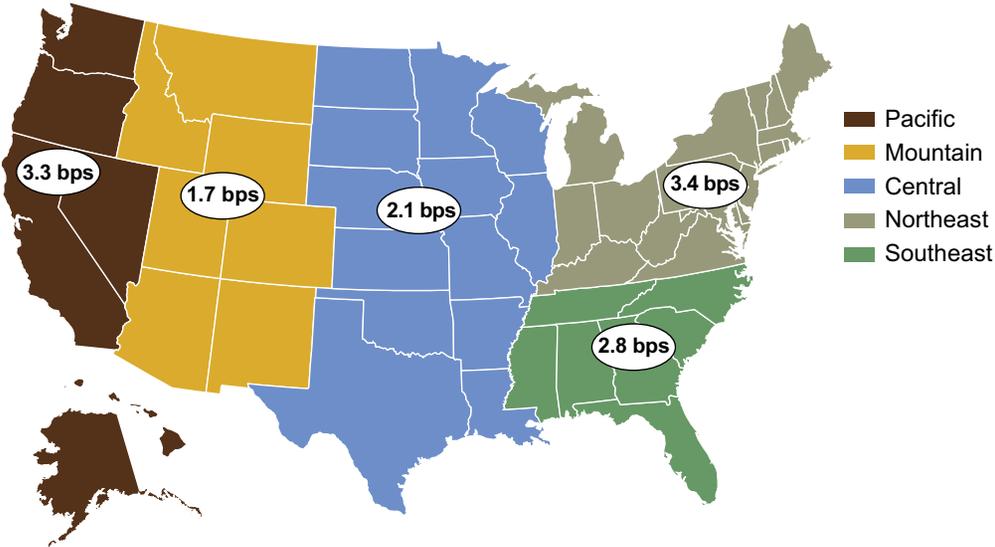
The difference in fees reveals that funds and trusts in the Pacific and Northeast regions pay a larger portion of total assets for other fund expenses, largely on account of non-investment management external advisor fees and compensation.

The map reveals average staff compensation expenses in basis points relative to the total fund size. Funds and trusts in the Northeast and Pacific regions pay the most in compensation expenses, reflecting the higher cost of living in these regions.

## Regional Impact on Expenses (averages)



## Average Total Investment-Related Staff Compensation by Region



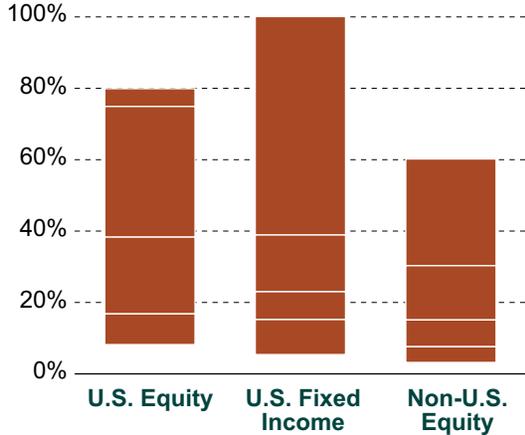
# Investment-Related Expenses (continued)

The majority of respondents (69%) indicate at least a portion of their assets are passively managed. About three-quarters of public funds and endowments/foundations hold passive investments, compared to 69% of corporate funds. On average, funds allocate 25% of their total portfolios to passive investments, up slightly from 2008 (21%).

U.S. equity attracts the greatest passive allocations (45% of the total allocation to this asset class, on average) among respondents that utilize passive investment strategies, followed by U.S. fixed income (35%) and non-U.S. equity (24%). Passive allocations to U.S. equity have grown relative to 2008, when the average passive allocation was 35% for survey respondents.

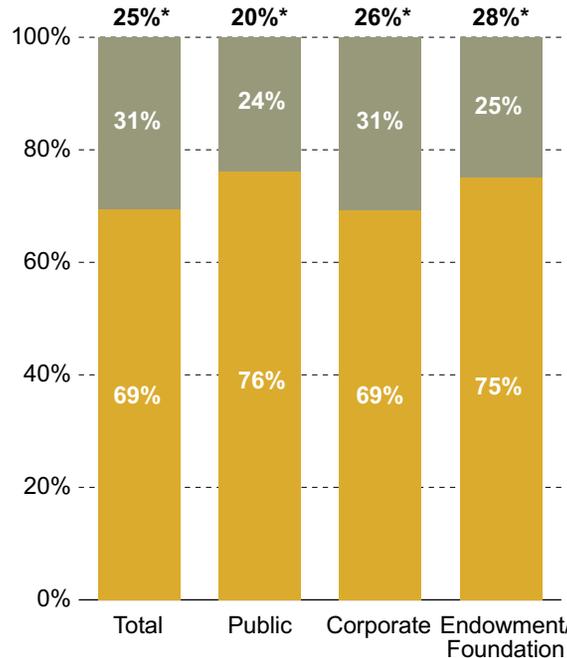
Just 14% of respondents manage at least a portion of their assets internally. Internally managed assets are most often in U.S. equity or U.S. fixed income. A similar percentage of small and large funds report using internal management.

## Average Passive Allocation (as a % of total allocation to the asset class)



	U.S. Equity	U.S. Fixed Income	Non-U.S. Equity
10th Percentile	80	100	60
25th Percentile	75	39	30
<b>Median</b>	<b>38</b>	<b>23</b>	<b>15</b>
75th Percentile	17	15	8
90th Percentile	8	5	3
<b>Average</b>	<b>45</b>	<b>35</b>	<b>24</b>
# of Observations	32	22	20

## Passively Managed Assets



\* Average % of portfolio managed passively (when not 100% active)

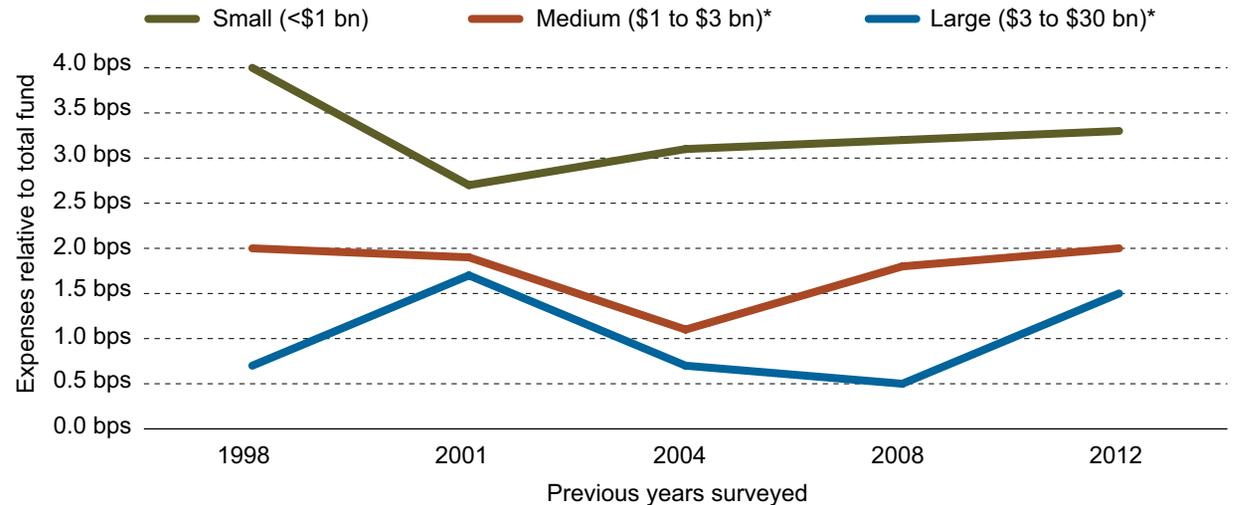
## Investment-Related Expenses (continued)

Custody costs ticked up 8% from 2008 to 2012, but over the last 15 years have declined 20%. Factors affecting custody costs include sizes and types of mandates, custodial services utilized, and servicing requirements, although a significant portion of these costs are fixed.

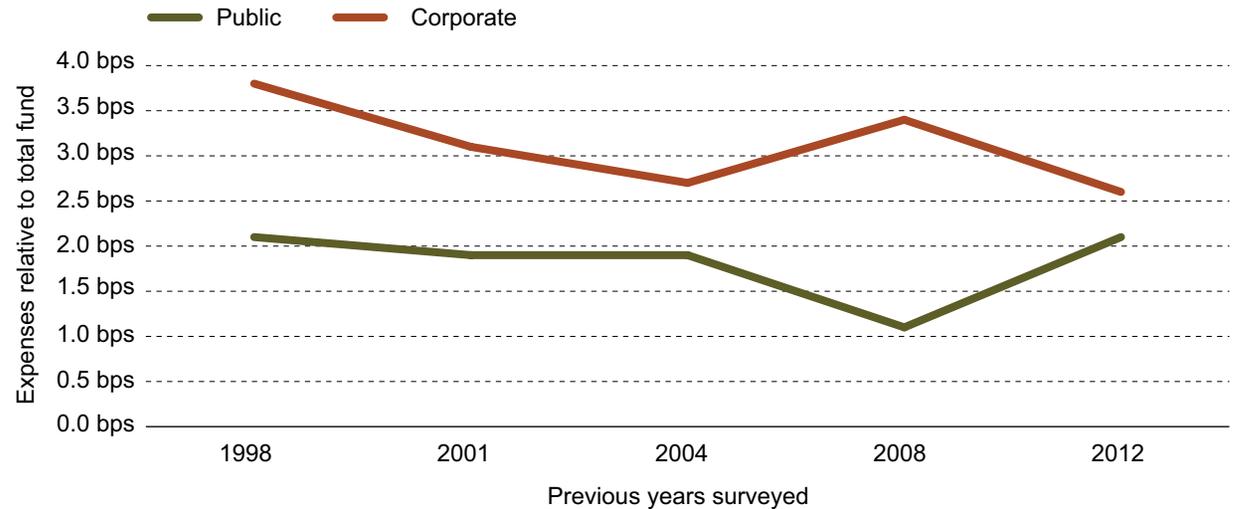
The custody cost differential between smaller funds and larger funds is relatively significant (1.8 basis points), indicating that fund size matters a great deal here.

On average, corporate funds paid more for custodial/record-keeping services (2.6 basis points) than public funds (2.1 basis points) in 2012, although the difference diminished relative to 2008.

### Average Custody Costs by Fund Size



### Average Custody Costs by Fund Type

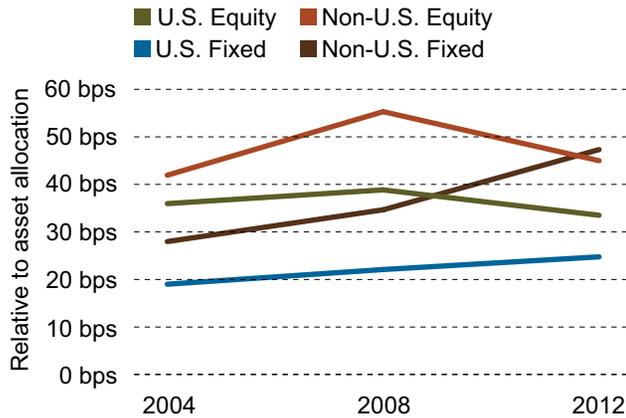


\*For surveys produced prior to 2012, medium funds were defined as those with \$1 to \$10 billion in assets, and large funds as those with more than \$10 billion.

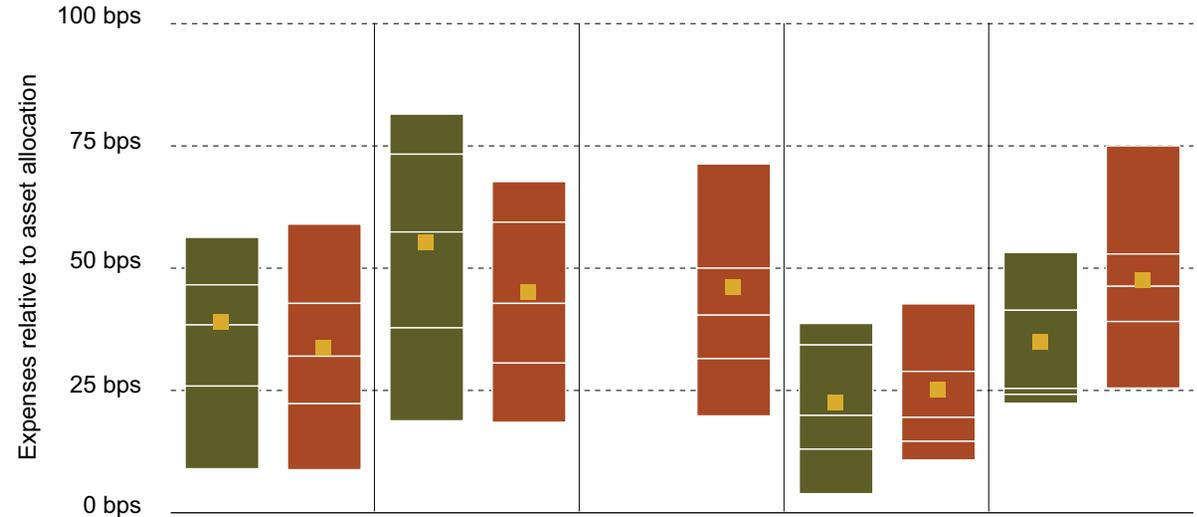
# External Investment Management

This chart examines fees for publicly traded equities and fixed income in basis points relative to individual asset allocation size. Since 2008, average fees declined for equities but increased for fixed income both in U.S. and international categories (see line chart below). This could be evidence of investors' willingness to pay more for yields in higher-octane areas of the bond market (e.g., core plus, high yield, bank loans, opportunistic).

As allocations to U.S. equity dipped and the average passive allocation in the asset class increased, fees relative to total fund size correspondingly declined 14% (to 33.5 basis points, on average). Non-U.S. equity fees also fell nearly 20%, while non-U.S. fixed income fees increased alongside a growing percentage of funds invested in the asset class.



## Investment Management Fees for Traditional Assets



	U.S. Equity		Non-U.S. Equity		Global Equity		U.S. Fixed Income		Non-U.S. Fixed Income	
	2008	2012	2008	2012	2008*	2012	2008	2012	2008	2012
10th Percentile	56.3	58.8	81.5	67.5		71.3	38.7	42.7	53.2	75.0
25th Percentile	46.6	42.7	73.3	59.3		50.0	34.3	28.9	41.4	52.9
<b>Median</b>	<b>38.4</b>	<b>31.9</b>	<b>57.4</b>	<b>42.7</b>		<b>40.4</b>	<b>19.9</b>	<b>19.5</b>	<b>25.4</b>	<b>46.4</b>
75th Percentile	25.9	22.2	37.8	30.6		31.5	13.0	14.5	24.2	39.1
90th Percentile	9.0	8.8	18.8	18.5		19.8	3.9	10.8	22.4	25.5
<b>Average</b> <span style="color: yellow;">■</span>	<b>38.9</b>	<b>33.5</b>	<b>55.4</b>	<b>45.1</b>		<b>46.1</b>	<b>22.1</b>	<b>24.8</b>	<b>34.7</b>	<b>47.4</b>
# of Observations	47	41	46	33		13	47	42	8**	14
Average Allocation	33%	26%	17%	16%		4%	24%	28%	5%	3%
% of Respondents Invested	98%	98%	98%	86%		35%	98%	100%	17%	37%

\*Non-U.S. and global equities were combined in 2008.

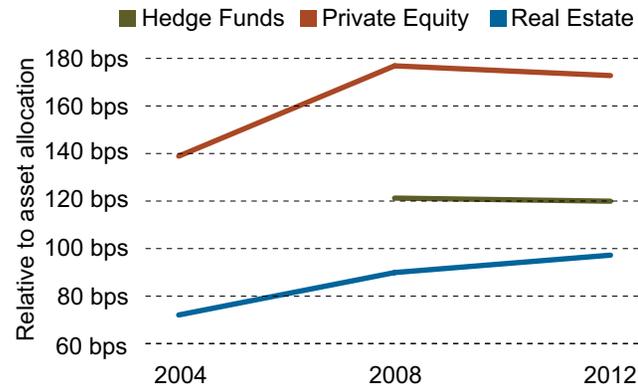
\*\*Note the small sample size.

# External Investment Management (continued)

This chart examines total fees for alternative asset classes (management plus incentive fee, where relevant) in basis points relative to individual asset allocation size. Alternative assets are subject to significantly higher fees than their more traditional counterparts.

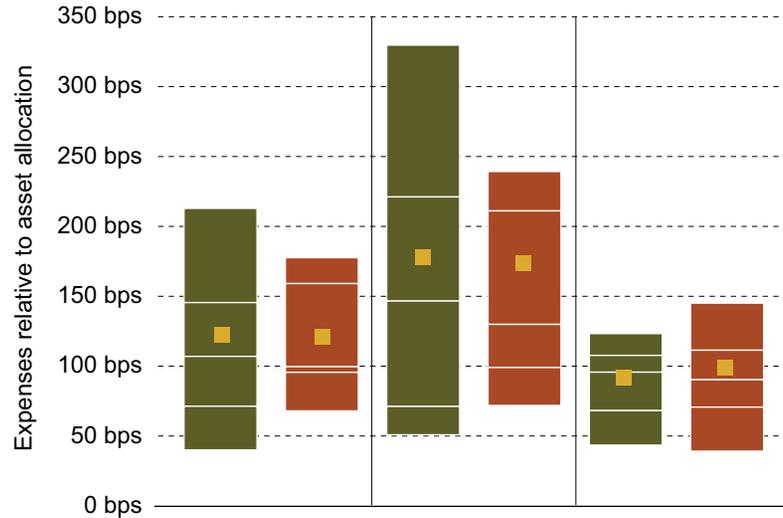
Hedge funds and private equity saw modest declines in fees at the median while averages were fairly static. Both asset classes saw a greater percentage of funds invested and larger average allocations in 2012 than in 2008. Real estate fees saw little change over the last four years.

The line chart below reveals average fees over time relative to total fund size for alternatives. We note increases for private equity and real estate from 2004 to 2008, as allocations became more common and sizable. Average fees changed marginally from 2008 to 2012 across the three asset classes.



Note: Data for hedge funds first collected in 2008.

## Investment Management Fees for Alternative Assets\*



	Hedge Funds		Private Equity		Real Estate	
	2008	2012	2008	2012	2008	2012
10th Percentile	213.2	177.9	330.0	239.6	123.6	145.4
25th Percentile	145.8	159.5	221.4	211.4	108.0	111.7
<b>Median</b>	<b>107.3</b>	<b>99.9</b>	<b>146.9</b>	<b>130.2</b>	<b>96.0</b>	<b>90.7</b>
75th Percentile	71.6	95.9	71.5	99.3	68.5	71.0
90th Percentile	40.4	68.3	51.2	72.2	43.8	39.5
<b>Average</b>	<b>121.3</b>	<b>120.0</b>	<b>177.1</b>	<b>173.0</b>	<b>89.9</b>	<b>97.2</b>
# of Observations	8**	14	18	24	36	28
Average Allocation	3%	5%	5%	7%	7%	6%
% of Respondents Invested	27%	37%	40%	57%	75%	73%

\*Includes direct investments as well as fund-of-funds.  
 \*\*Note the small sample size.

# External Investment Management (continued)

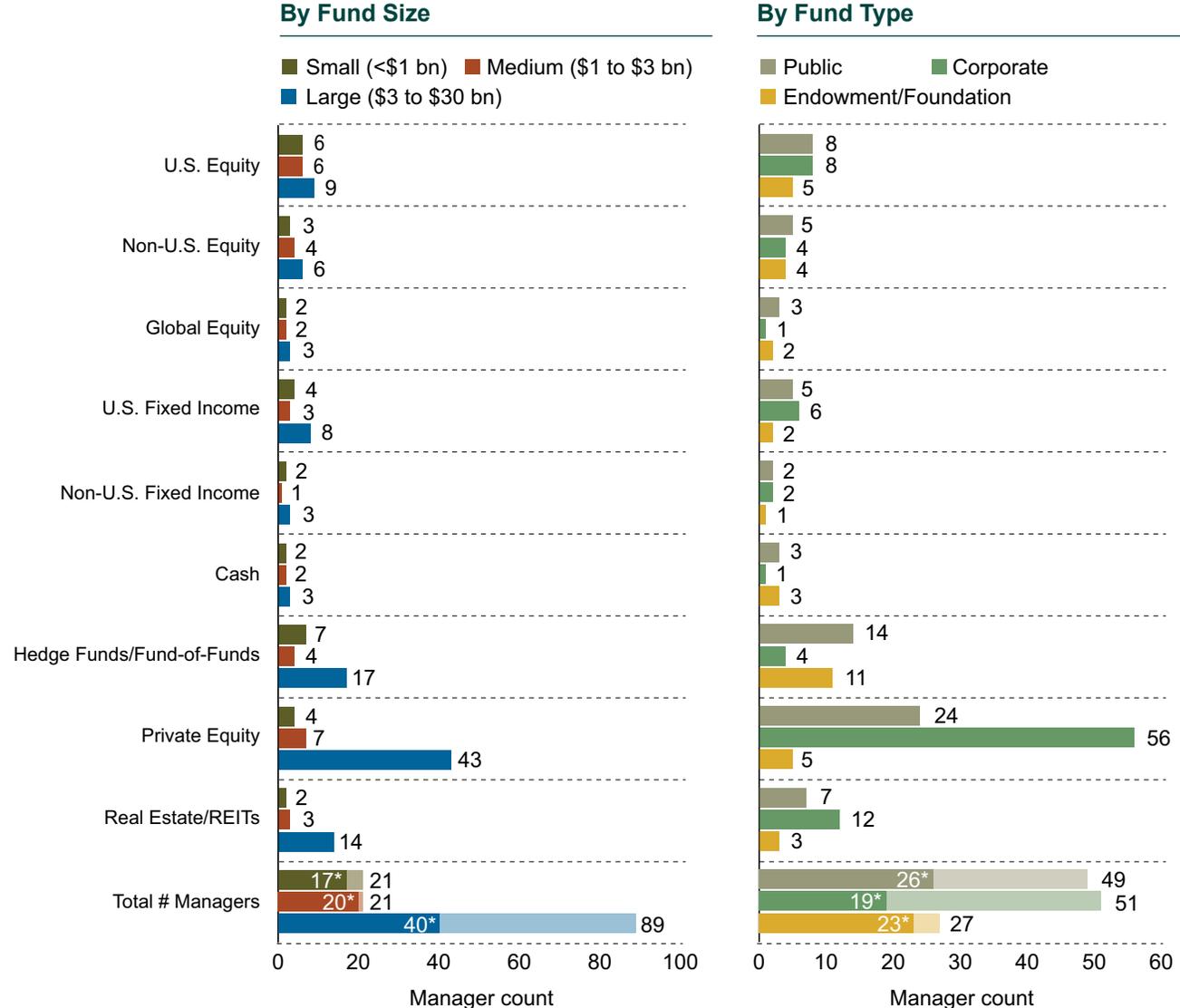
These charts display the average number of external investment managers employed across nine asset classes by fund size and fund type.

Funds generally employ more external managers for hedge funds and private equity than traditional equities and fixed income. On average, survey respondents had seven external U.S. equity managers and five external U.S. fixed income managers.

Manager counts are skewed toward the high end in hedge funds, private equity, and real estate because the counts reflect funds that invest directly in partnerships as well as in funds-of-funds. For funds that invest directly, fund staff is essentially a fund-of-funds manager with more than 150 direct investments, in some cases.

Totals at the bottom are displayed unadjusted (including funds that invest directly) and modified (funds that invest directly in hedge funds, private equity, and real estate are removed from calculation).

## Average Number of External Investment Managers



\*Totals adjusted to remove direct investors in hedge funds, private equity, and real estate.

# Compensation

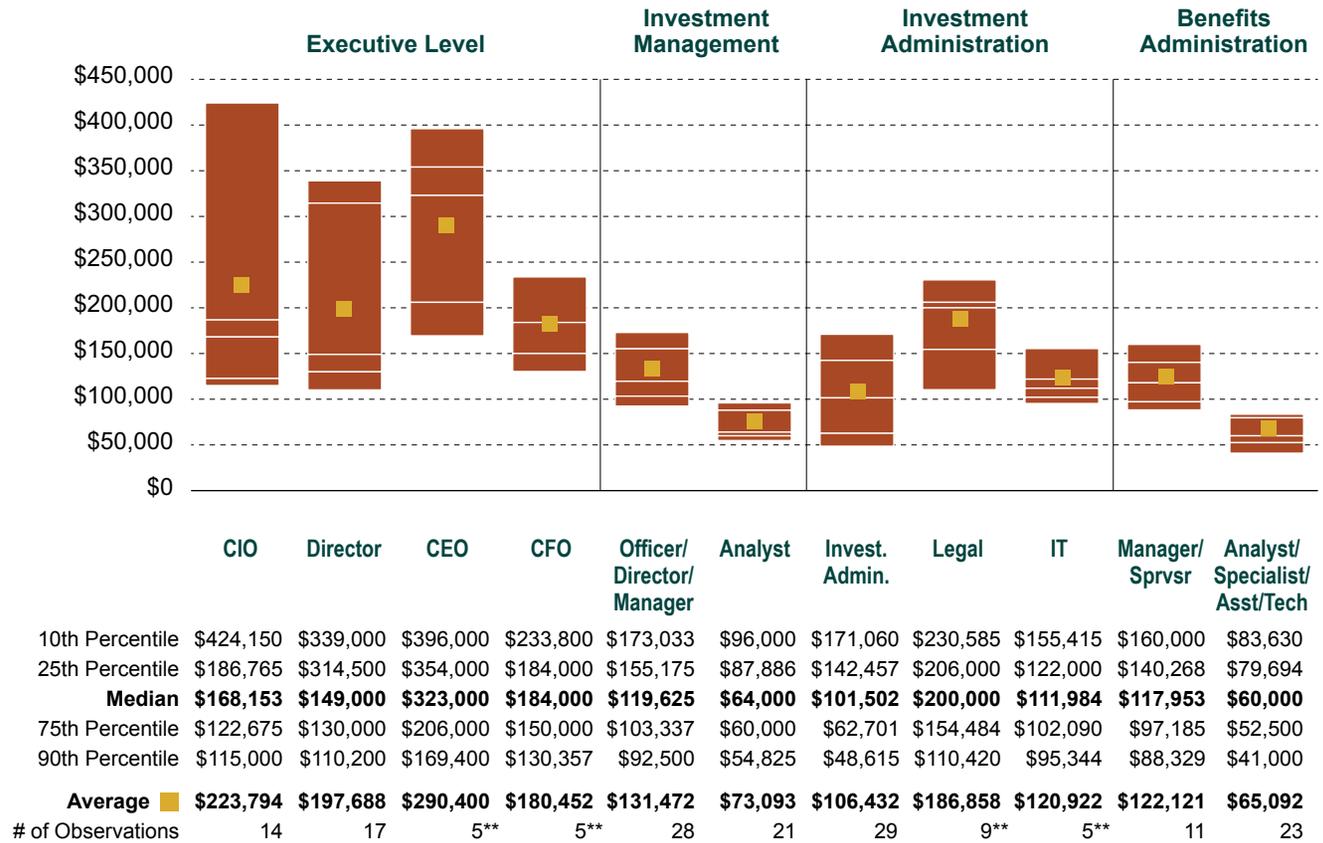
These charts illustrate the distribution of total annual compensation across a number of positions. The figures include base salary plus bonus and/or non-cash compensation, where applicable. Base salaries generally dictate total pay levels at fund sponsor organizations, although cash bonuses and non-cash compensation are part of total pay for around 25% to 35% of employees captured in the survey.

Investment management includes those who manage investments internally, as well as those who select and/or supervise external investment managers. Employees with investment administration roles include performance analysis and reporting duties, while benefits administration manages enrollment, benefits determination, and payments, for example.

Compensation levels vary the most at the executive level. For example, the range between the tenth and ninetieth percentiles is more than \$300,000, compared to ranges closer to \$100,000 or less for non-executive roles.

Investment management functions are the only positions that specialize in certain asset classes. At the officer/director/manager level, average total compensation was comparable for individuals who specialized in public and private markets at \$142,000; those who do not specialize in an asset class (cover the total fund) were paid around 70% of what their specialized counterparts earned (\$101,000, on average). There was no difference in pay for analysts that specialized in public or private markets and those that did not.

## Total 2012 Compensation by Function\*



\* Compensation data is primarily for public funds: executive level, 66% public, 22% corporate; investment management, 84% public, 8% corporate; investment administration, 77% public, 9% corporate; benefits administration, 91% public, 0% corporate. The remaining percentages reflect responses for endowments/foundations, Taft-Hartley plans, and other fund types.

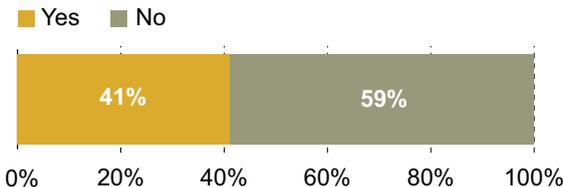
\*\* Note the small sample size.

# Staffing

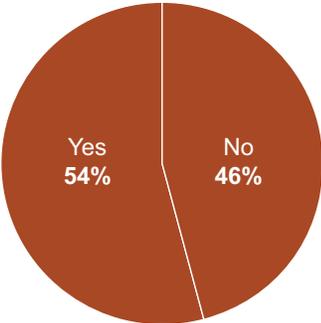
The majority of funds (59%) do not pay staff compensation from the fund or trust. Public funds are more likely than other fund types to pay compensation from the fund, and a handful of corporate funds use this methodology. Only one endowment/foundation indicated it pays compensation from the fund. Funds that pay pension-related staff compensation generally do so directly from the fund.

It is not uncommon for fund staff to also oversee other responsibilities. Large organizations (those with between \$3 and \$30 billion in assets) are more likely to dedicate fund staff exclusively to the day-to-day management of the fund. The defined benefit plans with exclusively dedicated staff are mostly open to all employees; a few are partially closed and one frozen plan maintains exclusively dedicated staff.

## Is compensation for pension-related staff charged back to the plan in any way, either directly or indirectly?



## Are fund staff involved with the day-to-day management of the pension plan also responsible for other activities? (e.g., related to finance, treasury, other retirement plans, etc.)



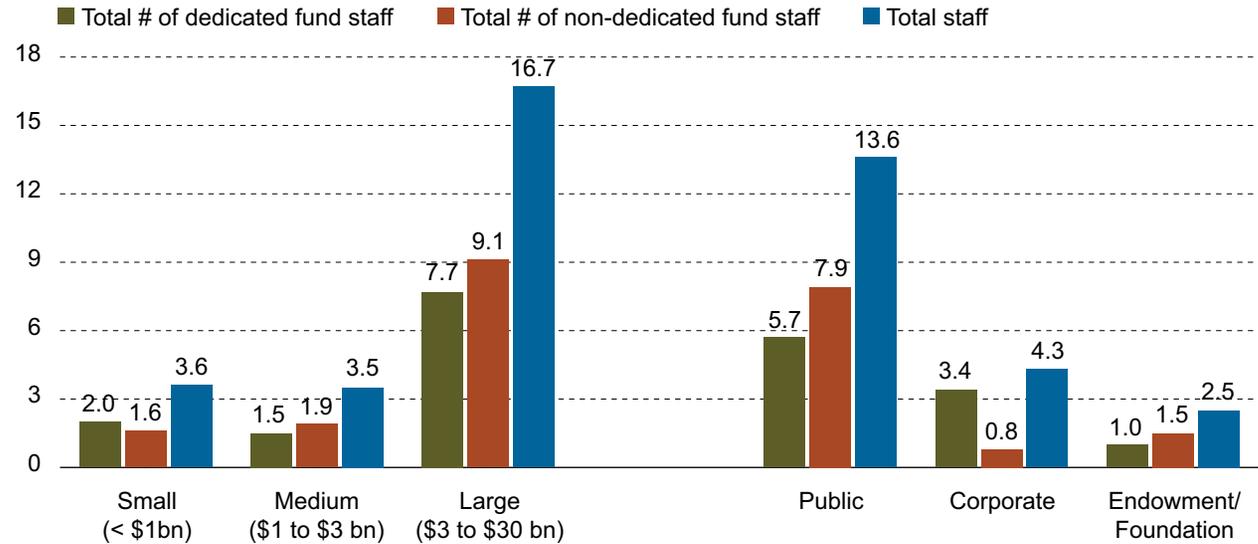
# Staffing (continued)

Fund size and type influence the total number of staff overseeing the fund or trust. Not surprisingly, the largest funds employ the greatest number of staff: eight dedicated employees (those that have few, if any, responsibilities beyond fund management) and nine non-dedicated employees (that also have substantial responsibilities beyond the fund's management), for a total of 17, on average. Small and medium funds generally have a comparable number of employees at around two dedicated and two non-dedicated employees.

Public funds employ the greatest number of staff. While many of the public funds surveyed are also large funds (have between \$3 and \$30 billion in assets), several small public funds employed more than twice the average number of employees as their corporate and endowment/foundation counterparts of similar size.

For defined benefit plans, fund status also influences staff count. Those that are open or partially closed have larger staffs (12 total individuals, on average) than their closed and frozen counterparts (3).

## Average Staff Count by Fund Size and Fund Type



## Total Respondent Group Distributions

	Total # of dedicated fund staff	Total # of non-dedicated fund staff	Total staff
10th Percentile	9.5	7.1	19.9
25th Percentile	4.3	3.0	7.3
<b>Median</b>	<b>2.0</b>	<b>1.0</b>	<b>3.5</b>
75th Percentile	1.0	0.0	2.0
90th Percentile	0.0	0.0	1.0
<b>Average</b>	<b>4.0</b>	<b>4.5</b>	<b>8.5</b>
# of Observations	40	40	40

# Oversight

Nearly all survey respondents are “governed” by a board of directors/trustees and/or investment committee as the primary decision-making body. Slightly more respondents have a board of directors/trustees that controls the fund (47%) versus an investment committee (44%).

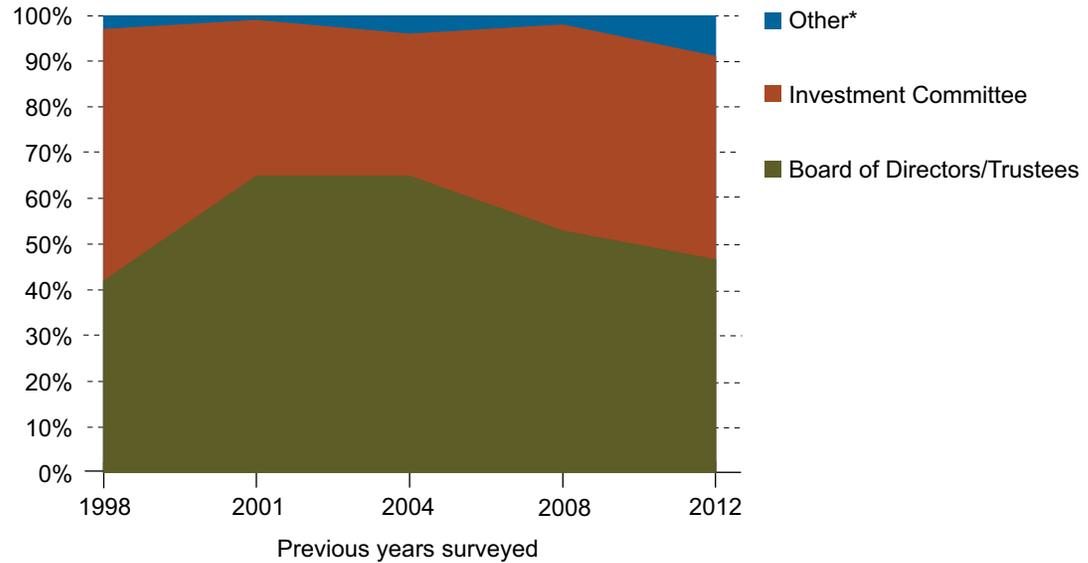
Prevalence of “Other” primary oversight bodies (9%) increased in 2012 relative to previous years Callan conducted this survey. This is the first year that outsourced chief investment officers have been listed as in control of respondent funds.

Public funds typically have boards of directors/trustees as the primary investment decision-making body (70%), whereas corporate funds usually have an investment committee oversee the fund (77%). Endowments/foundations are roughly evenly split between the two.

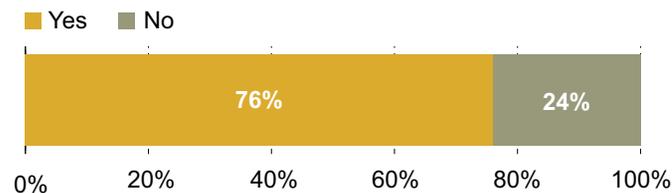
Change in fund/trust oversight bodies over time is more reflective of the survey respondent types than specific trends in oversight; a smaller percentage of corporate funds responded to the survey in 2001 and 2004 than other years Callan conducted the survey, thus a smaller percentage of organizations were controlled by investment committees in those years.

Approximately three-quarters of funds/trusts with boards also have investment committees to provide additional fiduciary oversight, up from half in 2008.

## Who controls these funds?



## If your fund/trust has a board of directors/trustees, is there also an investment committee (or similarly structured committee) that handles regular fiduciary duties?



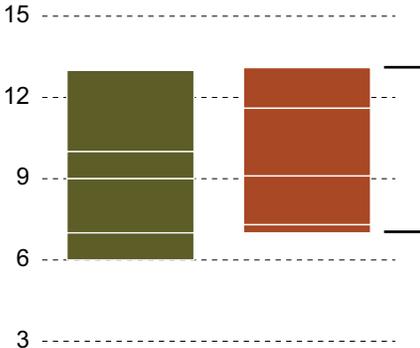
\*Other includes treasurer, controller, CFO, management pension committee, and outsourced CIO

# Oversight – Board of Directors/Trustees

Looking at funds/trusts with boards, the data reveal an average of nine board members. Board size has remained consistent over the past 12 years. More than half (70%) of these decision makers are from outside the organization, up from 60% in 2008.

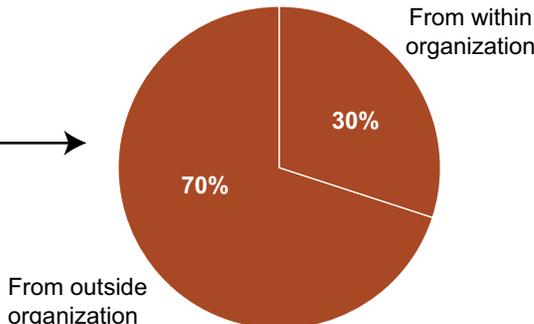
Fewer board members were compensated for their work in 2012 (32%) than in 2008 (44%).

## Total Number of Board Members



	2008	2012
10th Percentile	13	13
25th Percentile	10	12
<b>Median</b>	<b>9</b>	<b>9</b>
75th Percentile	7	7
90th Percentile	6	7
<b>Average</b>	<b>9</b>	<b>10</b>
# of Observations	32	34

## Board Makeup (median responses)



- There is no correlation between fund size and number of board members.
- 93% of board members are voting members.
- Fund sponsors hold an average of eight board meetings per year, down from 11 in 2008.
- 32% of board members are compensated for their efforts: \$15,140 is the average annual pay of those who receive compensation.
- Of the funds with boards, 76% indicate their fund has an investment committee that handles regular fiduciary duties.
- 95% of public fund respondents have a board of directors/trustees, whereas only 38% of corporate respondents have one.

# Oversight – Investment Committee

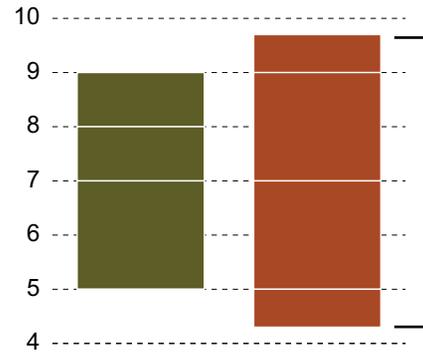
For funds with investment committees, 60% of the members are from within the organization, up from around half in 2008 and 2004.

When the committee chairman is from within the organization, it is most frequently the CFO (46%). Other internal titles that chair the committee include CIO, treasurer, assistant treasurer, director of investments and pensions, and an appointed plan sponsor member. Elected employee members are also vice chairmen, as is one deputy CIO.

Internal committee members are most frequently senior employees from treasury, human resources, and executive-level positions (e.g., CEO, CFO, CRO, etc.). Many committees also include members from legal, investments, finance, and business line presidents. One respondent indicated retirees are on the committee.

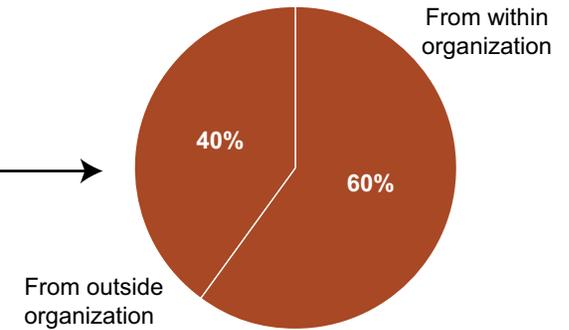
Only 6% of investment committee members are compensated explicitly for their efforts on the committee (i.e., in addition to annual compensation for those from within the organization), down from 24% in 2008. The dollar amount of compensation is shrinking, as well. When they were paid, committee members received an average of \$1,050 in 2012, down from \$1,560 in 2008.

## Total Number of Investment Committee Members



	2008	2012
10th Percentile	9	10
25th Percentile	8	9
<b>Median</b>	<b>7</b>	<b>7</b>
75th Percentile	5	5
90th Percentile	5	4
<b>Average</b>	<b>7</b>	<b>7</b>
# of Observations	34	34

## Investment Committee Makeup (median responses)



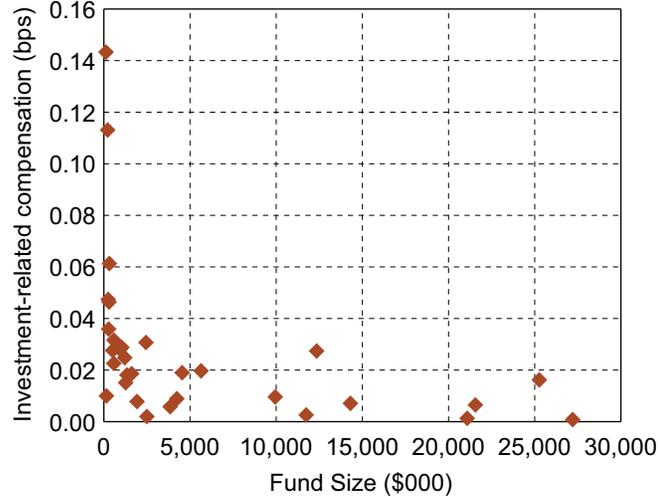
- 94% of investment committee members vote.
- Investment committees meet an average of eight times per year.
- 6% of organizations compensate investment committee members for their efforts; \$1,050 is the average annual pay of those who receive compensation.

# Correlations

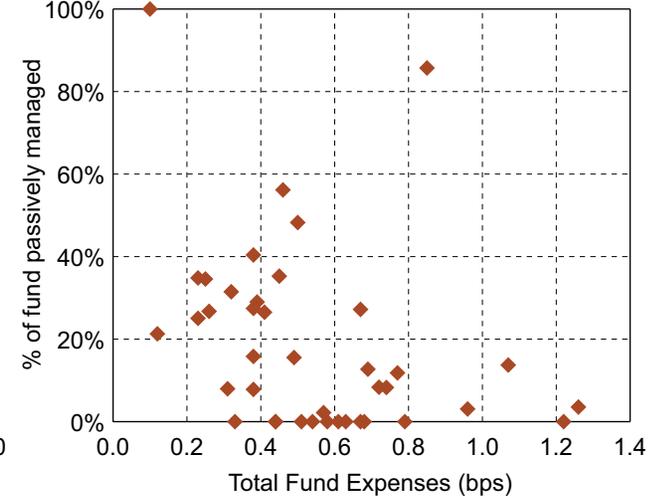
There is a positive correlation (+0.57) between the size of the fund and the total number of dedicated fund staff. Weaker, negative correlations also exist between the fund size and total investment compensation paid relative to fund size (-0.40), as well as the percent of the fund managed passively and total fund expenses relative to fund size (-0.34).

We display correlations among eight various factors in the table that reiterate findings covered in other sections of this report. For example, allocations to hedge funds and private equity are strongly correlated to higher investment management and total fees.

**Total Investment-Related Compensation to Fund Size (bps) = -0.40**



**% of Fund Passively Managed to Total Fund Expenses = -0.34**



Correlations	Total Fees	Investment Management Fees	Total Spent on Fund Compensation
Fund size	-0.07	0.03	-0.40
Percent passive	-0.34	-0.42	-0.13
Number of external investment managers	0.31	0.41	-0.15
Percent allocated to hedge funds/fund-of-funds	0.58	0.70	0.66
Percent allocated to private equity	0.48	0.69	0.04

# Returns by Fee Levels

For the respondents in our survey, correlations are neither strong nor consistent between the amount spent on fees and returns over 1-, 3-, 5-, and 10-year periods ended December 31, 2012. Our analysis is limited in that we collected asset allocations exclusively for December 31, 2012, and do not know when respondents began investing in individual asset classes.

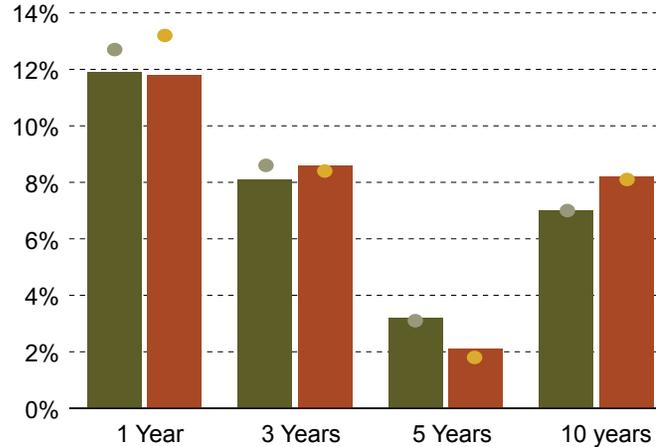
We divided respondents into four groups by most to least external investment management fees paid (in basis points relative to total fund size) in 2012. We display average and median returns for the top and bottom quartiles over various time periods in the bar charts in both absolute terms (top chart) and relative to each respondent fund's designated benchmark (bottom chart).

For average absolute returns, those that paid the least (bottom quartile) outperformed the top quartile during one- and five-year periods. Funds that paid the most relative to their size (top quartile) "won" over 3- and 10-year periods. Looking at median absolute returns, the top quartile surpassed the bottom over 1- and 10-year periods, but lagged during three and five years.

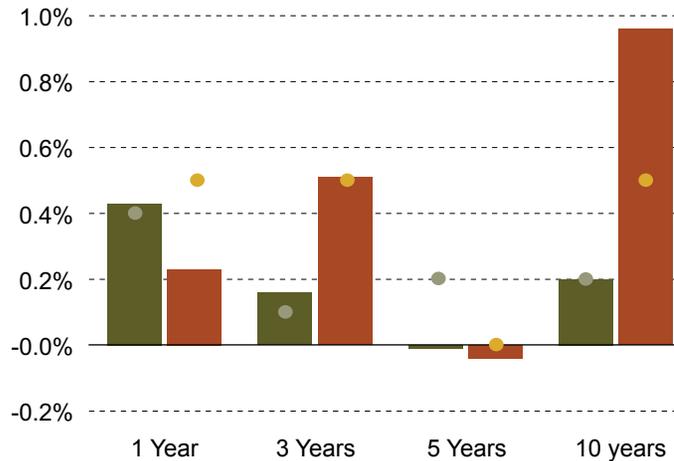
A look at performance relative to each fund's benchmark reveals the top quartile won in 3- and 10-year periods, on average, and in all time periods but five years at the median.

## Do higher asset management fees translate into higher returns?

### Absolute Returns by Fee Level



### Relative Returns\* by Fee Level



\* Returns are relative to benchmarks unique to each fund as provided by survey respondents. Note: Performance for funds and benchmarks for periods ended Dec. 31, 2012.

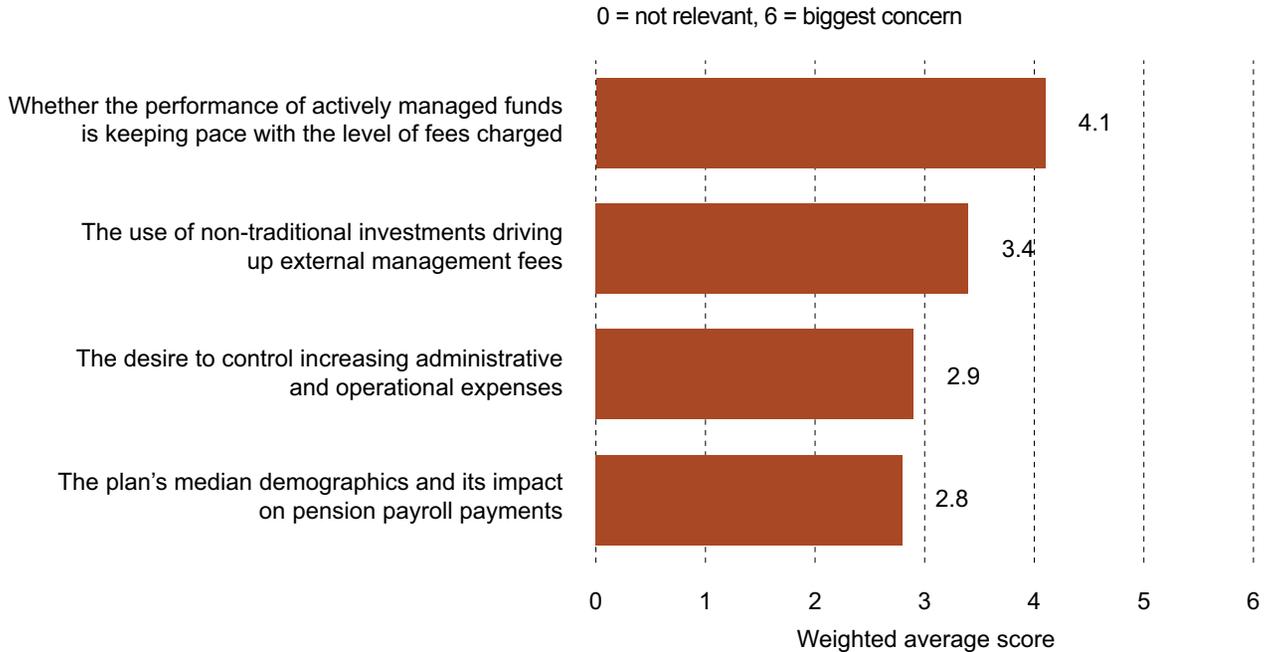
# Most Frequently Cited Cost Concerns

Consistent with sentiments expressed in the other four *Cost of Doing Business Surveys* that Callan has conducted over the past 15 years, this year's respondents' greatest cost-related concern is whether the performance of their actively managed funds is keeping pace with the level of fees charged. New or increasing use of non-traditional investments driving up external management fees ranked second.

Additional comments from survey respondents suggest organizations also have cost concerns regarding:

- Market conditions, volatility in particular
- The rising costs of retaining top fund management personnel
- Increasing fees for non-investment management external advisors
- Continued low interest rates, which inflate the plan's liabilities and negatively impact funded status

## Rank the relevance of the issues or concerns your fund/trust faces regarding cost on a scale from 0 to 6.



# WRS UPDATE

Spring/Summer 2014

## INSIDE:

- 2 Lawmakers continue gradual contribution increases to three pension plans
- 3 Spring RAIN is coming
- 3 What are you doing in retirement?
- 4 Pension plan can help volunteer EMTs save more for retirement

## WRS' strong investment performance continues in 2013



The Wyoming Retirement System portfolio produced an impressive return for 2013 on an absolute basis and relative to the benchmark.

The investment return for the system for the full year was 13.3 percent net of fees, exceeding the Assumed Investment Return (AIR) of 7.75 percent by 5.55 percent. Over the last three years, WRS' compounded annual rate of return was 8.4 percent, or 0.65 percent above the AIR.

Additionally, the five-year compounded annual investment return was 12.2 percent or 4.45 percent above the AIR. As of year-end 2013, combined pension plan assets were \$7.46 billion, an increase of \$688 million net of distributions over year-end 2012.

The global stock market dominated headlines in 2013 by posting some of the largest gains in recent history as fundamentals improved somewhat and investors regained confidence. However, most of the investment gains last year were attributable to more monetary easing by developed world central banks and less to fundamental economic improvements.

Last year also provided an unexpected spike in interest rates that sent most fixed income strategies into negative return territory for the year. Concerns about rising interest rates will likely make growth difficult for fixed income in the coming year. A summary of how each asset class contributed to WRS' 2013 return follows.

### Equity (Stocks)

The equity portion of the WRS portfolio returned 24.3 percent, outperforming the comparative benchmark<sup>i</sup> by 1.5 percent. Domestic stocks had the strongest returns of most major investment categories in 2013

with the S&P 500 increasing 32.4 percent for the year. International developed stocks in markets such as Europe and Japan increased 22.8 percent. Emerging market stocks produced a negative 2.6 percent return in 2013 as some of the fastest growing developing economies started to slow from their previous rapid pace of growth.

### Bonds

Because bond values fall as interest rates rise, 2013 was a difficult year for fixed income markets. Despite the challenging backdrop,

of WRS' managers struggled to post positive returns due to the negative performance of many of their underlying asset classes and the defensive nature of their portfolios.

### Real Assets

WRS' real asset allocation, or allocation to tangible assets, delivered a 4.7 percent return versus its benchmark<sup>iv</sup> return of 5.4 percent. The best performing category within this asset class in 2013 was infrastructure funds which produced a 10.1 percent return. Real estate funds also produced strong returns of 9.0 percent. Natural resources funds, which

were hurt by declining commodity prices, produced a negative 8.3 percent return.

### Tactical Cash

Tactical cash returned 1.0 percent, outperforming the relevant benchmark<sup>v</sup> by 1.0 percent. WRS held a considerable amount in cash in 2013 to continue to limit the volatility of the overall portfolio while providing liquidity for future investment opportunities.

### Investing Integrity

The WRS investment process is based on thorough, conservative due diligence and is designed with a number of checks and balances to ensure integrity and excellence. Portfolio construction is based on strategic asset allocation targets and bands approved by the WRS Board. The Board delegates authority to the investment staff to tactically adjust exposure within those bands to dynamically position the portfolio for changing investment environments. The investment staff identifies and recommends investment managers to the executive director, who approves all new managers in conjunction with the chief investment officer. An investment consultant provides strategic and technical advice to the Board and staff and serves as an additional compliance check. 

<sup>i</sup>MSCI ACWI

<sup>ii</sup>Barclays Multiverse

<sup>iii</sup>60% MSCI ACWI plus 40% Barclays Multiverse

<sup>iv</sup>(50% CPI + 5% ) plus (50% LIBOR + 4%)

<sup>v</sup>90 day T-Bill

## WRS asset allocation comparison and 2013 return

	12/31/2012 Asset Allocation	12/31/2013 Asset Allocation	12/31/2013 WRS Return vs Benchmark
<b>Total Fund</b>	<b>100%</b>	<b>100%</b>	<b>13.3% vs. 12.9%</b>
<b>Stock (Equities)</b>	<b>53.8%</b>	<b>55.1%</b>	<b>24.3% vs. 22.8%</b>
International	22.7%	21.1%	
Domestic	25.7%	25.4%	
Emerging Markets	5.5%	8.6%	
<b>Bonds (Fixed Income)</b>	<b>24.7%</b>	<b>24.2%</b>	<b>2.6% vs. -2.2%</b>
Emerging Markets	1.3%	2.8%	
Core Bonds	23.4%	21.4%	
<b>Global Tactical Asset Allocation</b>	<b>10.6%</b>	<b>9.7%</b>	<b>4.5% vs. 12.2%</b>
<b>Real Assets</b>	<b>8.6%</b>	<b>8.4%</b>	<b>4.7% vs. 5.4%</b>
<b>Tactical Cash</b>	<b>2.3%</b>	<b>2.6%</b>	<b>1.0% vs. 0.0%</b>

WRS' bond exposure generated a return of 2.6 percent, outperforming the benchmark<sup>ii</sup> by 4.8 percent. WRS' outperformance was attributable mostly to exposures to high-yield and private debt strategies that earned high interest rates, more than offsetting the valuation losses caused by higher interest rates. Lower-yielding core bond strategies suffered greater losses.

### Global Tactical Asset Allocation (GTAA)

GTAA is comprised of funds that shift investments among global asset classes to take advantage of arising opportunities while not taking large bets within any one asset class. They typically provide substantial downside protection when equity markets decline due to the diversification of the underlying holdings and the flexible nature of their investment strategy. In 2013, the GTAA portion of the portfolio returned 4.5 percent, well below its benchmark<sup>iii</sup> return of 12.2 percent. Several

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## CalPERS Cut \$80M in Investment Expenses in Two Years

*The largest US public pension plan spent \$136 million less than the benchmark costs following its cost effectiveness initiative.*

(April 15, 2014) — The California Public Employees' Retirement System (CalPERS) reported a drop of nearly \$80 million in its investment operation costs over the last two fiscal years.

According to the investment office's reports, CalPERS spent almost \$1.3 billion to manage its portfolio for the fiscal year 2012 to 2013 and was able to cut down on costs by reducing external management fees, minimizing the number of external consultants, and bringing management functions in-house.

"CalPERS has gone to great lengths to understand the role of costs in its portfolio and how best to mitigate their impact," said Henry Jones, CalPERS board member and investment committee chair. "It's nice to see positive results from our efforts."

The \$285 billion fund was also lauded by CEM, a provider of benchmarking information, for being "cost-advantaged" when measured against its peers. CEM found CalPERS' expenses were \$136 million—or 5.8 basis points (bps)—less than the benchmark cost.

"CalPERS actual cost of 53.5 bps is less than the benchmark cost of 59.2 bps due to internal management of public assets, passive management of equities, and lesser use of fund-of-funds than its peers," the report said.

However, the Sacramento-based pension plan's cost advantage has not resulted in higher value add, according to CEM's data.

The fund recorded weak performance of 1.2% in total fund return over the last five years and the net value added was -3%. As a remedy, the investment office recommended program changes that deliver more value for cost, such as restructuring portfolios and investing in risk management and control capabilities.

"The CalPERS investment office strives to always be acutely aware of costs, cost-drivers, and effective cost-management strategies," said Ted Eliopoulos, CalPERS' interim CIO. "The recognition from CEM and our own internal findings tell us that we're on the right path, but cost-effectiveness is something that we must continue to diligently monitor in all areas of our operations."

The new initiative will rely heavily on transition from external to internal management and scaling back on fees paid on private asset fund investments, CalPERS said.

"Cost effectiveness accomplishments [could] afford CalPERS the ability to reinvest a portion of the cost savings to self-fund the target staffing and the increased portfolio management service infrastructure," the report said.

**Related Content:** CalPERS Remembers a CIO, Commits to Next Generation

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## **NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE**

### **Staffing Update**

**April 17, 2014**

During the past four months, the RIO team has been successful in filling three vacant positions, promoting from within to eliminate a future vacancy in Information Technology and posting for the Audit Supervisor and IT Coordinator positions. We have also revised our organizational chart to more accurately reflect observed reporting lines from a functional perspective.

The RIO Executive Team understands the importance of proper staffing levels as the success of the Agency is critically dependent on the interaction and effectiveness of our outstanding staff.

- Rich Nagel assumed the role of RIO's Information Technology Supervisor effective April 1, 2014.
- RIO's IT Coordinator vacancy has been filled. An offer of employment has been accepted by Michael Dewitt. Mr. Dewitt's first day with RIO will be April 28, 2014, contingent upon a successful background check.
- RIO's Audit Supervisor position was posted on December 31, 2013. To expand the applicant pool, the position was reposted and re-advertised in March 2014. Application closing date was March 18. Two applicants met minimum qualifications. One applicant withdrew their application and a phone interview with an out of state applicant was conducted. Staff determined the individual did not possess the depth of audit experience needed. The position will be posted again in May 2014.
- The Investment Analyst position is scheduled to be posted in June. Staff will be meeting with HRMS on April 30, 2014, to determine the Investment Analyst Job Description (Classified / Non-Classified).
- Annual performance reviews will commence in April and are expected to be discussed with staff in May prior to being finalized in June.

**ND BOARD OF MEDICAL EXAMINERS FUND**  
**INVESTMENT POLICY STATEMENT**

**1. PLAN CHARACTERISTICS AND FUND CONSTRAINTS**

The North Dakota State Board of Medical Examiners (the Board) was established in 1890 to protect the citizens of the state by regulating the practice of medicine. The Board licenses physicians, physician assistants, genetic counselors and fluoroscopy technicians and disciplines them if they violate the state's medical practice act. The North Dakota State Board of Medical Examiners is governed by NDCC Chapter 43-17.

The North Dakota State Board of Medical Examiners Fund (the Fund) is an unrestricted operating reserve set aside to provide a margin of safety and stability in the North Dakota State Board of Medical Examiners' operating activities, and provide flexibility to pursue capital projects as needed.

**2. FUND GOALS**

The investment objectives of the Fund reflect a low risk tolerance and short-term liquidity needs. Operating considerations shape the Fund's policies and priorities as outlined below:

Objective #1: Investment income is needed as a funding source. This will be achieved through a diversified portfolio of high quality fixed income, equities and real estate.

Objective #2: Growth of capital is needed to preserve the real purchasing power of Fund assets. Capital growth is sought through investment in equities and/or equity substitutes.

Objective #3: Sufficient liquidity will be maintained to meet known or anticipated financial obligations. Cash equivalent investments shall be used to achieve this objective.

**3. RESPONSIBILITIES AND DISCRETION OF THE STATE INVESTMENT BOARD (SIB)**

The ND Board of Medical Examiners (Board) has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The Board is responsible for establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 of the North Dakota Century Code (NDCC) is hereby delegated to the SIB, who must

establish written policies for the operation of the investment program, consistent with this investment policy.

The SIB may delegate investment responsibility to professional money managers. Where a money manager has been retained, the SIB's role in determining investment strategy and security selection is supervisory, not advisory.

At the discretion of the SIB, the Fund's assets may be pooled with other funds. In pooling funds, the SIB may establish whatever asset class pools it deems necessary with specific quality, diversification, restrictions, and performance objectives appropriate to the prudent investor rule and the objectives of the funds participating in the pools.

The SIB is responsible for establishing criteria, procedures, and making decisions with respect to hiring, keeping, and terminating money managers. SIB investment responsibility also includes selecting performance measurement services, consultants, report formats, and frequency of meetings with managers.

The SIB will implement changes to this policy as promptly as is prudent.

#### **4. RISK TOLERANCE**

The Board's risk tolerance with respect to the management of the Fund's asset is low. The Board is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to maintain principal value over time.

#### **5. INVESTMENT OBJECTIVES**

The Board's investment objectives are expressed in terms of reward and risk expectations relative to investable, passive benchmarks. The Fund's policy benchmark is comprised of policy mix weights of appropriate asset class benchmarks as set by the SIB.

1. The fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
2. The fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
3. The risk-adjusted performance of the fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

#### **6. POLICY ASSET MIX**

Asset allocation policy is critical because it defines the basic risk and return characteristics of the investment portfolio. Asset allocation targets are established using an asset allocation analysis designed to assist the Board in determining an acceptable volatility target for the fund and an optimal asset allocation policy mix. This analysis estimates the potential impact of various asset class mixes on key measures of total Fund risk.

After consideration of all the inputs and a discussion concerning risk tolerance, the Board approves the appropriate policy asset mix for the Fund.

<u>Asset Class</u>	<u>Policy Target(%)</u>
Large Cap Domestic Equity	11
Small Cap Domestic Equity	3
International Equity	7
Domestic Fixed Income	12
Real Estate	2
Short-Term Fixed Income	65
Cash Equivalents	0

While the Board recognizes fluctuations in market values will lead to short-term deviations from policy targets, the Board does not intend to engage in tactical asset allocation. Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

## 7. RESTRICTIONS

While the SIB is responsible for establishing specific quality, diversification, restrictions, and performance objectives for the investment vehicles in which the Fund's assets will be invested, it is understood that:

- a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
- b. Derivatives use will be monitored to ensure that undue risks are not taken by the money managers.
- c. No transaction shall be made which threatens the tax exempt status of the Fund.
- d. All assets will be held in custody by the SIB's master custodian or such other custodians as are acceptable to the SIB.
- e. No unhedged short sales or speculative margin purchases shall be made.
- f. Social investing is prohibited unless it meets the exclusive benefit rule, and it can be substantiated that the investment provides an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

For the purpose of this document, social investing is defined as the consideration of socially responsible criteria in the investment or commitment of public fund money for the purpose of obtaining an effect other than a maximized return to the Fund.

- g. Economically targeted investing is prohibited unless the investment meets the Exclusive Benefit Rule.

For the purpose of this document economically targeted investment is defined as an investment designed to produce a competitive rate of return commensurate with risk involved, as well as to create collateral economic benefits for a targeted geographic area, group of people, or sector of the economy.

Also, for the purpose of this document, the Exclusive Benefit Rule is met if the following four conditions are satisfied:

- (1) The cost does not exceed the fair market value at the time of investment.
- (2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.

- (3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
- (4) The safeguards and diversity that a prudent investor would adhere to are present.

Where investment characteristics, including yield, risk, and liquidity are equivalent, the Board's policy favors investments which will have a positive impact on the economy of North Dakota.

**8. INTERNAL CONTROLS**

A system of internal controls must be in place by the SIB to prevent losses of public funds arising from fraud or employee error. Such controls deemed most important are the separation of responsibilities for investment purchases from the recording of investment activity, custodial safekeeping, written confirmation of investment transactions, and established criteria for investment manager selection and monitoring. The annual financial audit must include a comprehensive review of the portfolio, accounting procedures for security transactions and compliance with the investment policy.

**9. EVALUATION AND REVIEW**

Investment management of the Fund will be evaluated against the Fund's investment objectives. Emphasis will be placed on five year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the Investment Policy Statement for achieving those objectives.

Performance reports will be provided to the BCEPP Board periodically, but not less than annually. Such reports will include asset returns and allocation data as well as information regarding all significant and/or material matters and changes pertaining to the investment of the Fund, including, but not limited to:

- 1. A list of the advisory services managing investments for the SIB.
- 2. A list of investments at market value, compared to previous reporting period, of each account managed by each advisory service.
- 3. Earnings, percentage earned, and change in market value of each account's investments.
- 4. Comparison of the performance of each account managed by each advisory service to other accounts under the SIB's control and to generally accepted market indicators.
- 5. All material legal or legislative proceedings affecting the SIB.
- 6. Compliance with this investment policy statement.

**Approved by:**

**ND BOARD OF MEDICAL EXAMINERS**

**STATE INVESTMENT BOARD**

\_\_\_\_\_

\_\_\_\_\_

**David Hunter**  
**Executive Director/CIO**

**Date:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**BUDGETING / FINANCIAL CONDITION**

AS OF MARCH 31, 2014

	2013-2015 BUDGET	ADJUSTED APPROPRIATION	BIENNIUM TO DATE ACTUAL	EXPENDITURES		
				BUDGET AVAILABLE	% BUDGET AVAILABLE	% OF BIENNIUM REMAINING
SALARIES AND BENEFITS	\$ 3,772,504.00	\$ 3,772,504.00	\$ 1,097,724.81	\$ 2,674,779.19	70.90%	62.50%
ACCRUED LEAVE PAYMENTS	71,541.00	71,541.00	37,143.58	34,397.42	48.08%	62.50%
OPERATING EXPENDITURES	973,324.00	973,324.00	262,603.93	710,720.07	73.02%	62.50%
CONTINGENCY	82,000.00	82,000.00	61,987.33	20,012.67	24.41%	62.50%
TOTAL	<u>\$ 4,899,369.00</u>	<u>\$ 4,899,369.00</u>	<u>\$ 1,459,459.65</u>	<u>3,439,909.35</u>	<u>70.21%</u>	<u>62.50%</u>

## EXPENDITURE REPORT

**QUARTER ENDED MARCH 31, 2014**

	INVESTMENT	RETIREMENT	QUARTERLY TOTALS	FISCAL YEAR TO - DATE	BIENNIUM TO - DATE
<u>CONTINUING APPROPRIATIONS</u>					
INVESTMENT EXPENDITURES (SEE ATTACHED DETAIL)	\$ 5,956,530.71	\$ 0.00	\$ 5,956,530.71	\$ 16,621,302.67	\$ 16,621,302.67
MEMBER CLAIMS					
1. ANNUITY PAYMENTS	0.00	39,179,673.25	39,179,673.25	117,963,990.73	117,963,990.73
2. REFUND PAYMENTS	0.00	985,400.16	985,400.16	3,638,738.99	3,638,738.99
TOTAL MEMBER CLAIMS	0.00	40,165,073.41	40,165,073.41	121,602,729.72	121,602,729.72
OTHER CONTINUING APPROPRIATIONS	47,356.76	44,857.57	92,214.33	230,541.94	230,541.94
TOTAL CONTINUING APPROPRIATIONS	6,003,887.47	40,209,930.98	46,213,818.45	138,454,574.33	138,454,574.33
<u>BUDGETED EXPENDITURES</u>					
1. SALARIES & BENEFITS					
SALARIES	139,268.72	161,066.80	300,335.52	806,806.49	806,806.49
OVERTIME/TEMPORARY	650.00	0.00	650.00	2,950.00	2,950.00
TERMINATION SALARY & BENEFITS	0.00	0.00	0.00	0.00	0.00
FRINGE BENEFITS	43,793.01	64,056.79	107,849.80	287,968.32	287,968.32
TOTAL SALARY & BENEFITS	183,711.73	225,123.59	408,835.32	1,097,724.81	1,097,724.81
2. ACCRUED LEAVE PAYMENTS	822.08	15,619.56	16,441.64	37,143.58	37,143.58
3. OPERATING EXPENDITURES					
DATA PROCESSING	2,346.72	19,518.33	21,865.05	53,921.40	53,921.40
TELECOMMUNICATIONS - ISD	805.80	1,930.41	2,736.21	7,673.54	7,673.54
TRAVEL	3,317.16	980.95	4,298.11	20,650.78	20,650.78
IT - SOFTWARE/SUPPLIES	0.00	0.00	0.00	2,244.00	2,244.00
POSTAGE SERVICES	735.38	17,134.11	17,869.49	36,608.03	36,608.03
IT - CONTRACTUAL SERVICES	330.32	12,861.62	13,191.94	44,004.71	44,004.71
BUILDING/LAND RENT & LEASES	6,588.33	13,143.96	19,732.29	59,496.87	59,496.87
DUES & PROF. DEVELOPMENT	512.46	1,159.75	1,672.21	10,691.21	10,691.21
OPERATING FEES & SERVICES	1,141.70	2,458.27	3,599.97	6,775.28	6,775.28
REPAIR SERVICE	0.00	25.00	25.00	94.25	94.25
PROFESSIONAL SERVICES	432.78	1,672.17	2,104.95	7,544.00	7,544.00
INSURANCE	155.97	331.44	487.41	613.53	613.53
OFFICE SUPPLIES	81.94	504.73	586.67	1,121.64	1,121.64
PRINTING	784.86	1,413.83	2,198.69	9,491.09	9,491.09
PROFESSIONAL SUPPLIES & MATERIALS	343.21	345.39	688.60	943.60	943.60
MISCELLANEOUS SUPPLIES	280.45	58.00	338.45	511.00	511.00
IT EQUIPMENT UNDER \$5000	0.00	(1,445.96)	(1,445.96)	219.00	219.00
OTHER EQUIPMENT UNDER \$5000	0.00	(612.80)	(612.80)	0.00	0.00
TOTAL OPERATING EXPENDITURES	17,857.08	71,479.20	89,336.28	262,603.93	262,603.93
3. CONTINGENCY	1,387.00	0.00	1,387.00	61,987.33	61,987.33
TOTAL BUDGETED EXPENDITURES	203,777.89	312,222.35	516,000.24	1,459,459.65	1,459,459.65
TOTAL EXPENDITURES	\$ 6,160,308.60	\$ 40,477,295.76	\$ 46,729,818.69	\$ 139,914,033.98	\$ 139,914,033.98

**INVESTMENT EXPENDITURE DETAIL**

**FEES PAID DURING THE QUARTER ENDED MARCH 31, 2014**

**FOR QUARTER ENDED 9/30/13**

**PENSION DEVELOPED INTERNATIONAL EQUITY POOL**

State Street		12,993.60
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**PENSION INVESTMENT GRADE FIXED INCOME POOL**

PIMCO	71,363.04	
State Street	4,921.95	
TOTAL PENSION INVESTMENT GRADE FIXED INCOME	<hr/>	76,284.99

**PENSION LARGE CAP EQUITY POOL**

Northern Trust		108,470.98
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**PENSION REAL ESTATE**

JP Morgan (Special & Strategic)		315,511.09
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**PENSION EMERGING MARKETS**

Northern Trust		12,072.98
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**INSURANCE FIXED INCOME POOL**

Declaration	70,605.00	
State Street	11,769.28	
TOTAL INSURANCE FIXED INCOME	<hr/>	82,374.28

**BUDGET STABILIZATION SHORT TERM FIXED**

Babson	68,462.86	
JP Morgan	38,206.62	
TOTAL BUDGET STABILIZATION SHORT TERM FIXED	<hr/>	106,669.48

**LEGACY FUND SHORT TERM FIXED**

Babson	214,598.67	
JP Morgan	121,583.21	
TOTAL LEGACY FUND SHORT TERM FIXED	<hr/>	336,181.88

**CUSTODIAN**

Northern Trust		271,850.75
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**CONSULTANT**

Callan		<hr/> 82,353.41
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<b>TOTAL FOR QUARTER ENDED 9/30/13</b>		<b>1,404,763.44</b>
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**FOR QUARTER ENDED 12/31/13**

**PENSION DEVELOPED INTERNATIONAL EQUITY POOL**

Capital Guardian	92,468.85	
Clifton - EAFE Index	43,328.00	
State Street	10,915.91	
Wellington	177,076.39	
TOTAL PENSION INTERNATIONAL EQUITY	<hr/>	323,789.15

**INVESTMENT EXPENDITURE DETAIL**

**FEES PAID DURING THE QUARTER ENDED MARCH 31, 2014**

**PENSION GLOBAL EQUITY POOL**

Epoch	456,845.35	
LSV	115,950.00	
TOTAL PENSION GLOBAL EQUITY	<hr/>	572,795.35

**PENSION BELOW INVESTMENT GRADE FIXED**

Loomis Sayles		256,521.37
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**PENSION INVESTMENT GRADE FIXED INCOME POOL**

PIMCO	71,320.79	
State Street	5,757.51	
Western Asset	43,279.23	
TOTAL PENSION INVESTMENT GRADE FIXED INCOME	<hr/>	120,357.53

**PENSION INFRASTRUCTURE POOL**

JP Morgan		283,306.52
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**PENSION LARGE CAP EQUITY POOL**

Northern Trust	272,023.04	
LA Capital	228,396.97	
TOTAL PENSION LARGE CAP EQUITY	<hr/>	500,420.01

**PENSION REAL ESTATE**

Invesco		149,341.30
TOTAL PENSION REAL ESTATE		

**PENSION INTERNATIONAL FIXED INCOME**

Brandywine	108,115.81	
UBS	75,692.35	
TOTAL PENSION INTERNATIONAL FIXED INCOME	<hr/>	183,808.16

**PENSION EMERGING MARKETS**

JP Morgan	46,497.98	
Northern Trust	12,769.94	
PanAgora	24,133.42	
UBS	39,801.87	
TOTAL PENSION EMERGING MARKETS	<hr/>	123,203.21

**PENSION PRIVATE EQUITY**

Adams Street Partners		27,301.00
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**PENSION CASH**

Northern Trust		16,583.92
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**INSURANCE FIXED INCOME POOL**

Declaration	41,249.00	
Prudential	71,379.12	
State Street	14,213.25	
Wells	198,557.23	
Western Asset	129,977.26	
TOTAL INSURANCE FIXED INCOME	<hr/>	455,375.86

**INVESTMENT EXPENDITURE DETAIL**

**FEES PAID DURING THE QUARTER ENDED MARCH 31, 2014**

**INSURANCE LARGE CAP EQUITY POOL**

LA Capital	68,149.82	
LSV	67,211.00	
TOTAL INSURANCE LARGE CAP	<hr/>	135,360.82

**INSURANCE SMALL CAP EQUITY POOL**

Research Affiliates		49,643.57
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**INSURANCE INT'L EQUITY**

Capital Guardian	106,871.54	
LSV	115,115.00	
TOTAL INSURANCE INT'L EQUITY	<hr/>	221,986.54

**INSURANCE INFLATION PROTECTED**

JP Morgan	193,843.62	
Western Asset	78,643.23	
TOTAL INSURANCE INFLATION PROTECTED	<hr/>	272,486.85

**INSURANCE REAL ESTATE**

Invesco	46,133.13	
JP Morgan	216,550.00	
TOTAL INSURANCE REAL ESTATE	<hr/>	262,683.13

**BUDGET STABILIZATION SHORT TERM FIXED**

Babson	81,166.08	
JP Morgan	46,551.77	
TOTAL BUDGET STABILIZATION SHORT TERM FIXED	<hr/>	127,717.85

**LEGACY FUND SHORT TERM FIXED**

Babson	190,430.80	
JP Morgan	106,617.57	
TOTAL LEGACY FUND SHORT TERM FIXED	<hr/>	297,048.37

**PERS RETIREE HEALTH INSURANCE CREDIT FUND**

SEI		55,874.80
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**CONSULTANT**

Adams Street	36,871.00	
Callan	79,290.96	
TOTAL CONSULTANT	<hr/>	116,161.96

<b>TOTAL FOR QUARTER ENDED 12/31/13</b>		<b>4,551,767.27</b>
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<b>TOTAL FEES PAID DURING QUARTER ENDED 3/31/2014</b>		<b>5,956,530.71</b>
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# **NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE**

## **QUARTERLY MONITORING REPORT**

**Quarter Ended March 31, 2014**

### **STAFF RELATIONS**

The Executive Limitation “Staff Relations” deals with the treatment of staff at RIO. The executive director “shall not cause or allow any condition or any communication which is unfair, undignified, or disrespectful.” This Executive Limitation lists six specific limitations that range from personnel policies to exit interviews. All the limitations are intended to protect staff from unfair, undignified, or disrespectful treatment by management.

**During the past quarter, there were no exceptions to this Executive Limitation.**

Rich Nagel began his duties as Supervisor of Information Services effective April 1, 2014.

Michael Dewitt has accepted the position of IT Coordinator and will begin his employment on April 28, 2014, contingent upon a successful background check.

The Audit Supervisor position has been posted three times since December 31, 2013, and is scheduled to be advertised again in May 2014.

The Investment Analyst position will be addressed on April 30, 2014, with HRMS staff to determine the job description (classified/non-classified). Staff’s goal is to post the position in June 2014.

**Quarterly Report on Ends  
Q3:FY14**

Investment Program

Continuing due diligence conducted on following:

Capital Group	Ashmore	Blackrock
Capital International	Northern Trust	PIMCO
Western Asset	LSV	
LA Capital	Loomis Sayles	
TIR	Goldman Sachs	
LSV	Babson	

Staff continued to work with Declaration Management & Research to transition the separate account mortgage mandate within the insurance trust to the Total Return Bond Fund. The transition to the Total Return Bond Fund will be completed in April.

The conversion of the pension trust PIMCO Unconstrained Bond institutional mutual fund to a separate account was completed in March.

At the February SIB meeting, the State Investment Board placed PIMCO and Western Asset on Watch due to recent organizational changes at both firms and regulatory settlements at Western Asset.

At the February SIB meeting, the State Investment Board approved a plan to perform a custody review of Northern Trust. Callan Associates was retained to perform the review.

With the assistance of Callan, Staff initiated an emerging market equity search for the pension trust.

Staff continued to progress with the implementation of the new strategic asset allocation for the Legacy Fund, which is expected to be completed in January 2015.

Staff attended meetings with the following entities: TFFR Board, Workforce Safety & Insurance, NDPERS Investment Subcommittee, FargoDome Authority, and the Legislative Government Finance Committee.

Staff continues to conduct preliminary due diligence on possible managers/products for future consideration.

Staff continues to monitor each client's asset allocation monthly and makes rebalancing decisions based on rebalancing policy and cash flow requirements.

## **Quarterly Monitoring Report on TFFR Ends Quarter Ended March 31, 2014**

### **Retirement Program**

This report highlights exceptions to normal operating conditions.

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- TFFR Board approved one legislative proposal to be considered in the 2015 session. The bill draft contains only minor technical changes to effective dates to comply with federal statutes. The proposal was submitted to the Employee Benefits Programs Committee by the April 1, 2014 deadline.
- Staff from TFFR, PERS, and the State Auditor's Office continues to formulate a collaborative plan to implement the new GASB pension reporting standards. A focus group meeting will be held this summer to gain feedback in preparation for full training workshops that will be provided to TFFR and PERS employers and their auditors later this fall.

## Watch List as of April 17, 2014

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**Western Asset Management Company (“WAMCO”)** - After an onsite visit on March 19, 2014, and extended discussion with the consultant community, Staff **advised** the SIB that on March it will engage Callan to commence a search for the WAMCO MBS mandate given the recent “Regulatory Settlement” and significant management turnover in this area. Staff **advised** the SIB that the Global Inflation Linked and U.S. Core mandate will remain on the watch list, as **previously approved** by the SIB (and noted by Callan). The latter mandate has been a top performer for over 20 years.

**Pacific Investment Management Company (“PIMCO”)** – After positive onsite meetings on March 19, 2014, with our portfolio managers and PIMCO’s new CEO (Douglas Hodge), Staff continues to **recommend** that all PIMCO strategies remain on the watch list until further notice including Agency MBS (\$172 million), Unconstrained Bond (\$93 million), DiSCO II (\$154 million) and BRAVO II (11 million).

**Loomis, Sayles (“Loomis”)** – After a meeting in RIO offices on March 11, 2014, and discussion with Callan, Staff **recommends** that Loomis remain on the watch list until short-term performance improves.

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# NDSIB Watch List

<b>Western Asset TIPS (Ins.)</b>		\$234,120,409		
	Returns	Index <sup>5</sup>	Excess	
1 Year	(4.95)	(3.19)	(1.76)	
3 Year	3.71	4.84	(1.13)	
5 Year	5.18	6.16	(0.98)	
Inception*	4.41	5.75	(1.34)	

*\*Funded 05/18/2004*

<b>Western Domestic (Pen.)</b>		\$115,312,594		
	Returns	Index <sup>4</sup>	Excess	
1 Year	(1.99)	(1.41)	(0.57)	
2 Year	0.68	0.57	0.11	

*\*Current Mandate started April 2012*

<b>Western Domestic (Ins.)</b>		\$440,089,408		
	Returns	Index <sup>2</sup>	Excess	
1 Year	(1.03)	(2.02)	1.00	
3 Year	5.21	3.26	1.95	
5 Year	9.33	4.44	4.89	
Inception*	6.78	5.88	0.90	

*\*Funded April 1997*

<b>Loomis Sayles HY (Pen.)</b>		\$217,520,401		
	Returns	Index <sup>1</sup>	Excess	
1 Year	6.73	7.44	(0.71)	
3 Year	9.21	9.30	(0.08)	
5 Year	19.38	18.96	0.42	
Inception*	9.24	8.72	0.52	

*\*Funded 4/5/2004*

<b>PIMCO Disco II* (Ins.)</b>		\$73,013,237		
	Returns	Index <sup>2</sup>	Excess	
1 Year	12.06	(2.02)	14.08	
2 Year	23.18	2.17	21.01	

*\*Funded 10/07/2011*

<b>PIMCO MBS* (Pen.)</b>		\$172,302,574		
	Returns	Index <sup>4</sup>	Excess	
1 Year	(2.13)	(1.41)	(0.72)	
Inception*	1.33	1.27	0.06	

*\*Funded 3/31/2012*

<b>PIMCO Bravo II* (Pen.)</b>		\$5,673,384.00		
	Returns	Index <sup>1</sup>	Excess	
Inception	11.99	7.46	4.53	

*\*Funded 10/01/2013*

<b>PIMCO Bravo II* (Ins.)</b>		\$5,675,824.00		
	Returns	Index <sup>2</sup>	Excess	
Inception	11.99	2.84	9.15	

*\*Funded 10/22/2013*

<b>PIMCO Disco II* (Pen.)</b>		\$81,215,738		
	Returns	Index <sup>2</sup>	Excess	
1 Year	12.04	(2.02)	14.06	
2 Years	27.79	1.05	26.74	
Inception*	23.50	2.17	21.32	

*\*Funded 7/7/08*

<b>PIMCO Unconstrained* (Pen.)</b>		\$92,864,433		
	Returns	Index <sup>3</sup>	Excess	
1 Year	(2.15)	0.28	(2.43)	
2 Year	2.88	0.34	2.54	

*\*Funded 3/12/2012*

## Market Values as of 2-28-2014

- <sup>1</sup> Barclays High Yield 2%
- <sup>2</sup> Barclays Aggregate
- <sup>3</sup> Libor 3-Month
- <sup>4</sup> Barclays Mortgage Index
- <sup>5</sup> Barclays Global Inflation Linked