

State Investment Board Update

For the fiscal year ended June 30, 2014

Employee Benefits Program Committee

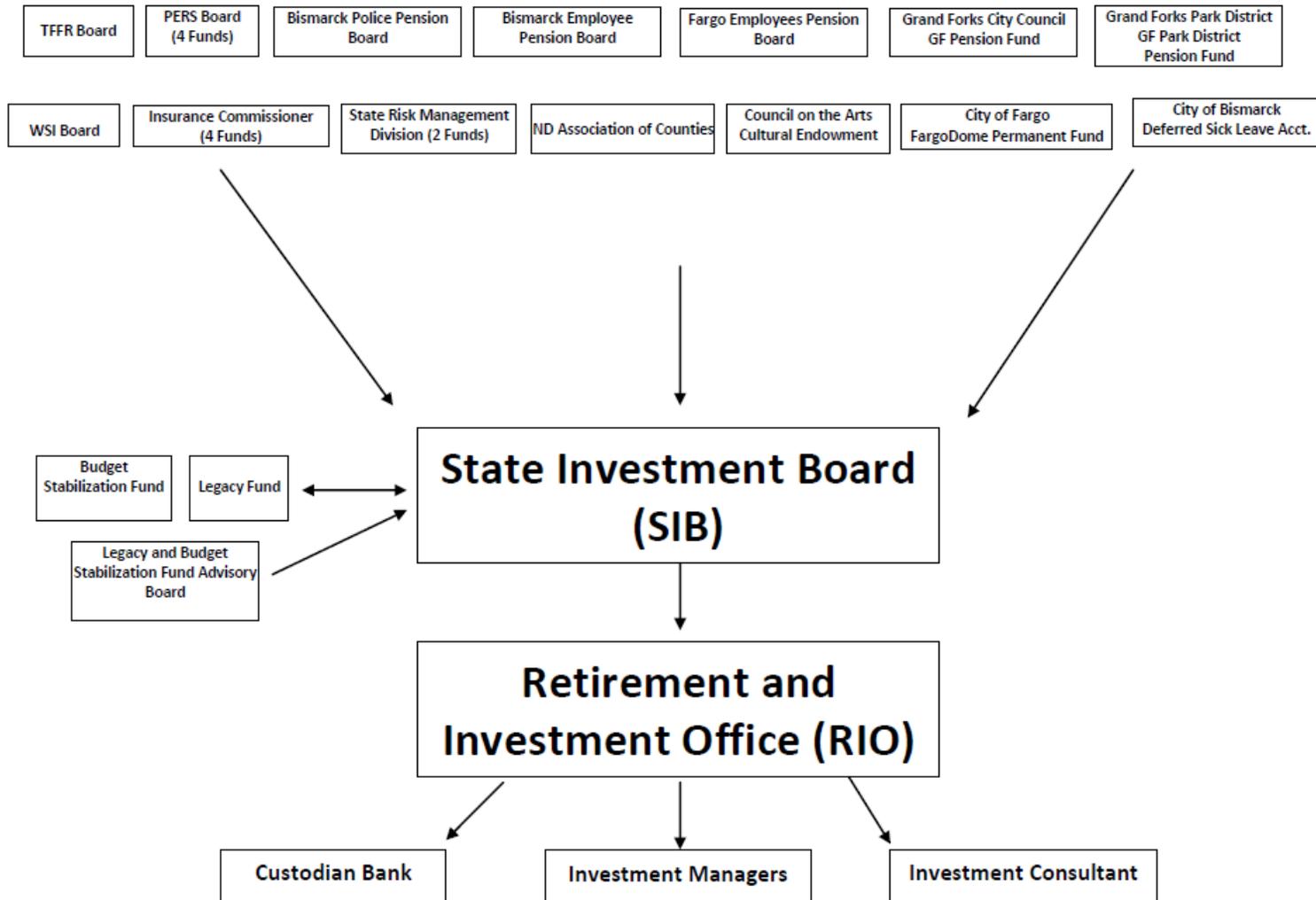
October 29, 2014

Dave Hunter, Executive Director / CIO
ND Retirement & Investment Office (RIO)
State Investment Board (SIB)

Presentation Agenda

- ▶ Organizational overview
- ▶ State Investment Board process
- ▶ Assets under management
- ▶ Fiscal year highlights and key economic indicators
- ▶ Pension investment performance and asset allocation
- ▶ Peer performance of risk and returns
- ▶ Fiscal year activity
- ▶ Segal actuarial analysis of Bill Draft No. 135
- ▶ Bill Draft No. 135

State Investment Board Process



State Investment Board Process

Client Responsibilities: (Per NDCC 21-10-02.1) The governing body of each fund (client) shall establish policies on investment goals and objectives and asset allocation that must include:

- Acceptable rates of return, liquidity and levels of risk
- Long-range asset allocation goals

State Investment Board Responsibilities: (Per NDCC 21-10):

- Implement client asset allocations
- Apply Prudent Investor Rule when investing for fund under its supervision
- Approve general types of securities for investment
- Set policies and procedures regulating securities transactions on behalf of the clients
- Select custodian servicer
- Select investment director and/or investment consulting service
- Create investment pools

State Investment Board Process

Retirement and Investment Office Staff Responsibilities (on behalf of SIB):

- Administer overall investment strategy
- Advise SIB on ways to maximize risk/return opportunities within each asset class
- Act as liaison between SIB and managers, consultant and custodian
- Monitor individual clients' investment guidelines and asset allocations
- Maintain separate accounting for client accounts

Investment Manager Responsibilities:

- Implement specific mandates or “investment missions”
- Make buy/sell decisions based on investment guidelines
- Report to RIO Staff on regular basis
- Provide education to SIB

State Investment Board Process

Custodian Bank Responsibilities:

- Safe-keep assets
- Settle trades
- Record-keeper

Investment Consultant Responsibilities:

- Performance measurement of investment managers
- Manager search assistance
- Provide education to SIB
- Special projects

State Investment Board – Client Assets Under Management

Fund Name	Market Values as of 6/30/14 ⁽¹⁾	Market Values as of 12/31/13 ⁽¹⁾	Market Values as of 6/30/13 ⁽²⁾
Pension Trust Fund			
Public Employees Retirement System (PERS)	2,332,744,038	2,204,819,633	2,000,899,336
Teachers' Fund for Retirement (TFFR)	2,061,684,912	1,970,377,031	1,810,735,455
Job Service of North Dakota Pension	97,825,769	95,276,201	90,442,764
City of Bismarck Employees Pension	78,804,326	74,832,971	68,822,847
City of Grand Forks Employees Pension	57,896,611	53,459,799	50,148,061
City of Bismarck Police Pension	34,643,204	32,887,889	30,072,819
Grand Forks Park District	5,938,993	5,653,023	5,109,311
City of Fargo Employees Pension	9,702	4,742,525	34,133,671
Subtotal Pension Trust Fund	4,669,547,558	4,442,049,072	4,090,364,264
Insurance Trust Fund			
Legacy Fund	2,215,941,142	1,695,950,111	1,194,779,193
Workforce Safety & Insurance (WSI)	1,703,987,980	1,627,545,930	1,557,719,286
Budget Stabilization Fund	586,199,881	588,744,084	401,353,181
City of Fargo FargoDome Permanent Fund	41,775,992	38,668,924	36,411,591
PERS Group Insurance Account	37,425,567	39,626,348	42,792,878
State Fire and Tornado Fund	29,223,707	28,625,262	26,633,417
Petroleum Tank Release Compensation Fund	7,092,998	6,899,622	6,839,483
State Risk Management Fund	6,948,162	6,593,046	6,187,298
State Risk Management Workers Comp Fund	5,965,322	5,654,121	5,247,448
ND Association of Counties (NDACo) Fund	3,445,373	2,894,408	2,717,444
State Bonding Fund	3,268,991	3,171,622	3,141,218
ND Board of Medical Examiners	1,889,897		
Insurance Regulatory Trust Fund	1,146,038	1,107,837	1,043,647
Bismarck Deferred Sick Leave Account	849,818	807,624	1,016,834
Cultural Endowment Fund	364,979	359,577	323,914
Subtotal Insurance Trust Fund	4,645,525,847	4,046,648,516	3,286,206,832
PERS Retiree Insurance Credit Fund	90,360,366	83,492,581	73,677,263
Total Assets Under SIB Management	9,405,433,771	8,572,190,169	7,450,248,360

⁽¹⁾ 6/30/14 and 12/31/13 market values are unaudited and subject to change.

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

- **SIB Client Assets Under Management grew by \$1.96 billion (or 26.2%) between June 30, 2013 and 31, 2014.**
- **Net investment income was responsible for gains of 16.4% (or \$670 million) for the Pension Trust and 8.3% (\$273 million) for the Insurance Trust.**
- **Legacy assets increased by over 85% (\$1.0 billion) primarily due to tax collections, although net returns were 6.6% for the year ended June 30, 2014.**
- **As of June 30, 2014, the market value of SIB client assets approximated \$9.4 billion based on unaudited valuations.**

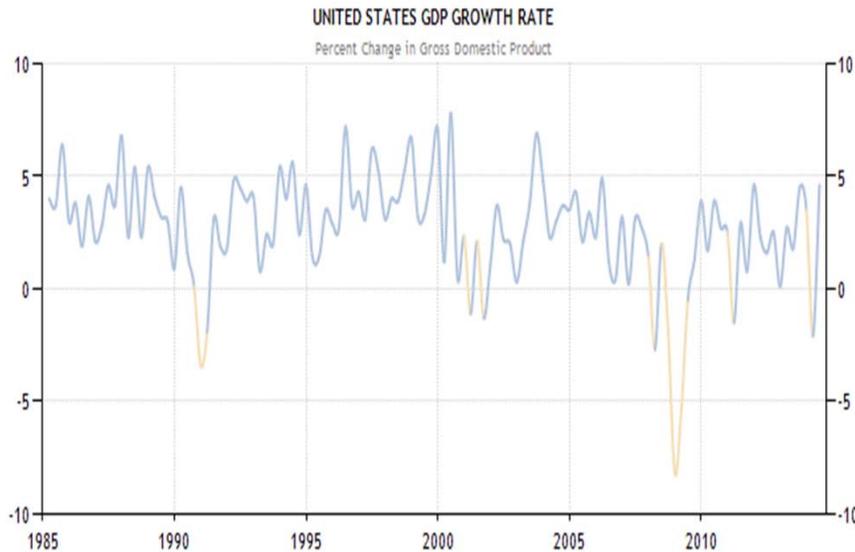
Fiscal Year Highlights and Key Economic Indicators

Overall, the global capital markets were impressive for the year ended June 30, 2014 with double digit gains for nearly all non-debt related sectors largely due to accommodative monetary policy and a rebounding US economy.

		Period Ended June 30, 2014			
Asset Class	Benchmark	1-Year	3-Years	5-Years	10-Years
Large Cap US Stocks	Russell 1000	25.35%	16.63%	19.25%	8.19%
Small Cap US Stocks	Russell 2000	23.64%	14.57%	20.21%	8.70%
Non-US Stocks (Developed)	MSCI EAFE	23.57%	8.10%	11.77%	6.93%
Non-US Stocks (Emerging)	MSCI Emerging Markets	14.68%	-0.06%	9.58%	12.30%
US Bonds	Barclays Aggregate	4.37%	3.66%	4.85%	4.93%
High Yield Bonds	Barclays Corporate High Yield	11.73%	9.48%	13.98%	9.05%
Non-US Debt	Citi Non-US World Govt	8.88%	1.03%	3.59%	4.90%
Inflation Protected	Barclays Global Inflation Linked	10.42%	4.44%	6.03%	5.81%
Real Estate	NCREIF	11.21%	11.32%	9.67%	8.63%

Recent Quarterly Indicators	2Q14	1Q14	4Q13	3Q13	2Q13	1Q13	4Q12	3Q12
GDP Growth	4.6%	-2.1%	3.5%	4.5%	1.8%	2.7%	0.1%	2.5%
Unemployment Rate	6.1%	6.7%	6.7%	7.2%	7.5%	7.5%	7.9%	7.8%
CPI	2.1%	1.5%	1.5%	1.2%	1.8%	1.5%	1.7%	2.0%
Consumer Sentiment	82.8	80.9	76.9	81.6	81.7	76.7	79.4	75.0

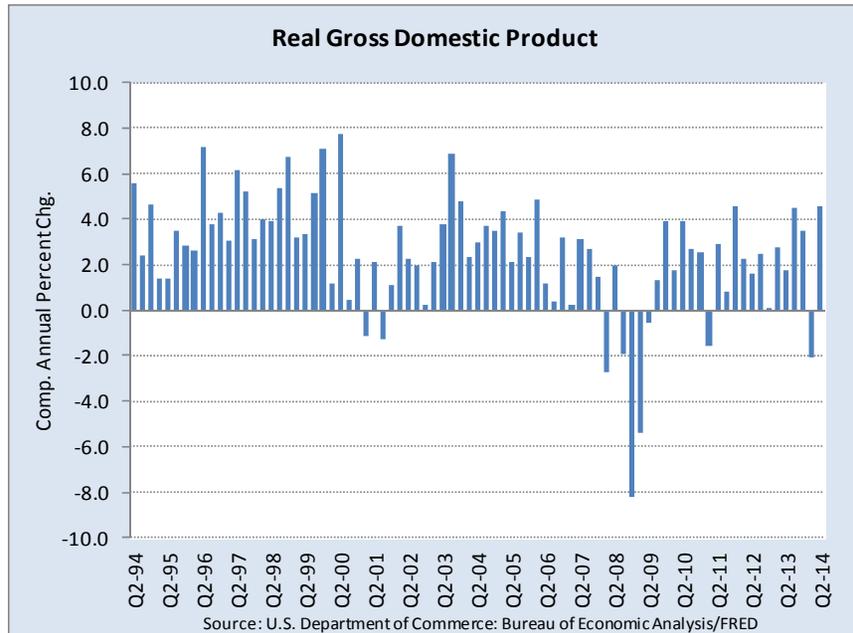
U.S Economy – GDP Growth Rates



- ▶ Quarterly GDP Growth Rates have historically been volatile.
- ▶ This volatility has continued in recent years as evidenced by the -2.1% rate in Q1/Y14 being followed by +4.6% in Q2/Y14.

U.S. Economy – GDP and Inflation

Quarter Ending June 30, 2014

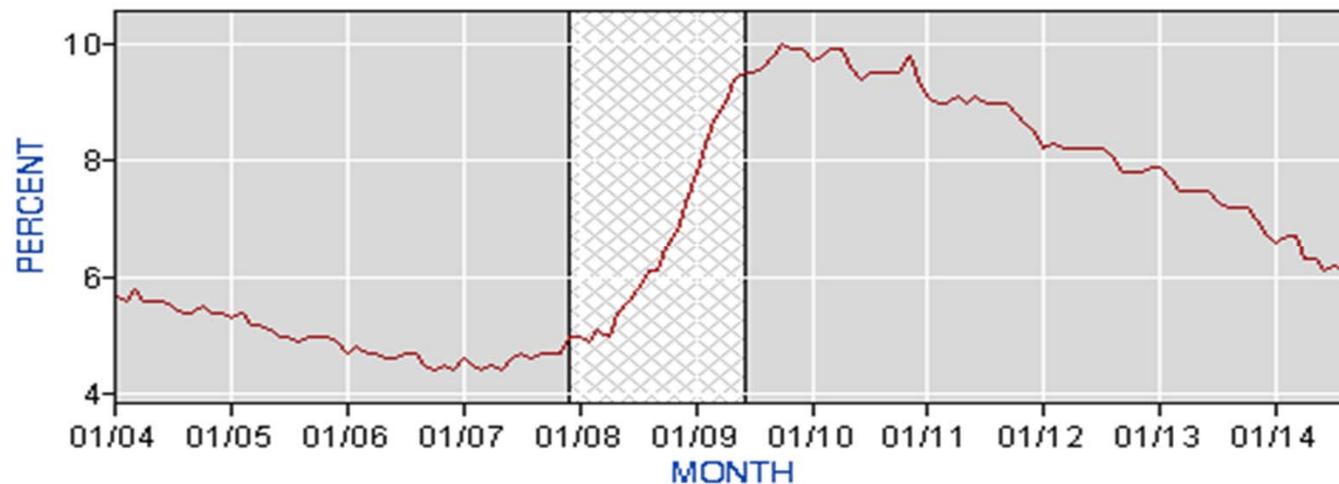


- ▶ The Federal Reserve scaled Quantitative Easing (“QE”) down to \$35B/month in June from \$55B/month in April and the QE program is slated to end in October unless there is a surprise in the economy.
- ▶ 2nd quarter GDP was up 4.6%, a dramatic improvement from -2.1% in the first quarter.
- ▶ June headline and core CPI increased over the trailing year by 2.1% and 1.9%, respectively.
- ▶ The unemployment rate declined from 6.7% in March to 6.1% in June.
- ▶ Labor market shows strength with the addition of 298,000 jobs in June, well above consensus.

Source: Callan.

U.S Labor Market Conditions

Unemployment rate (seasonally adjusted)

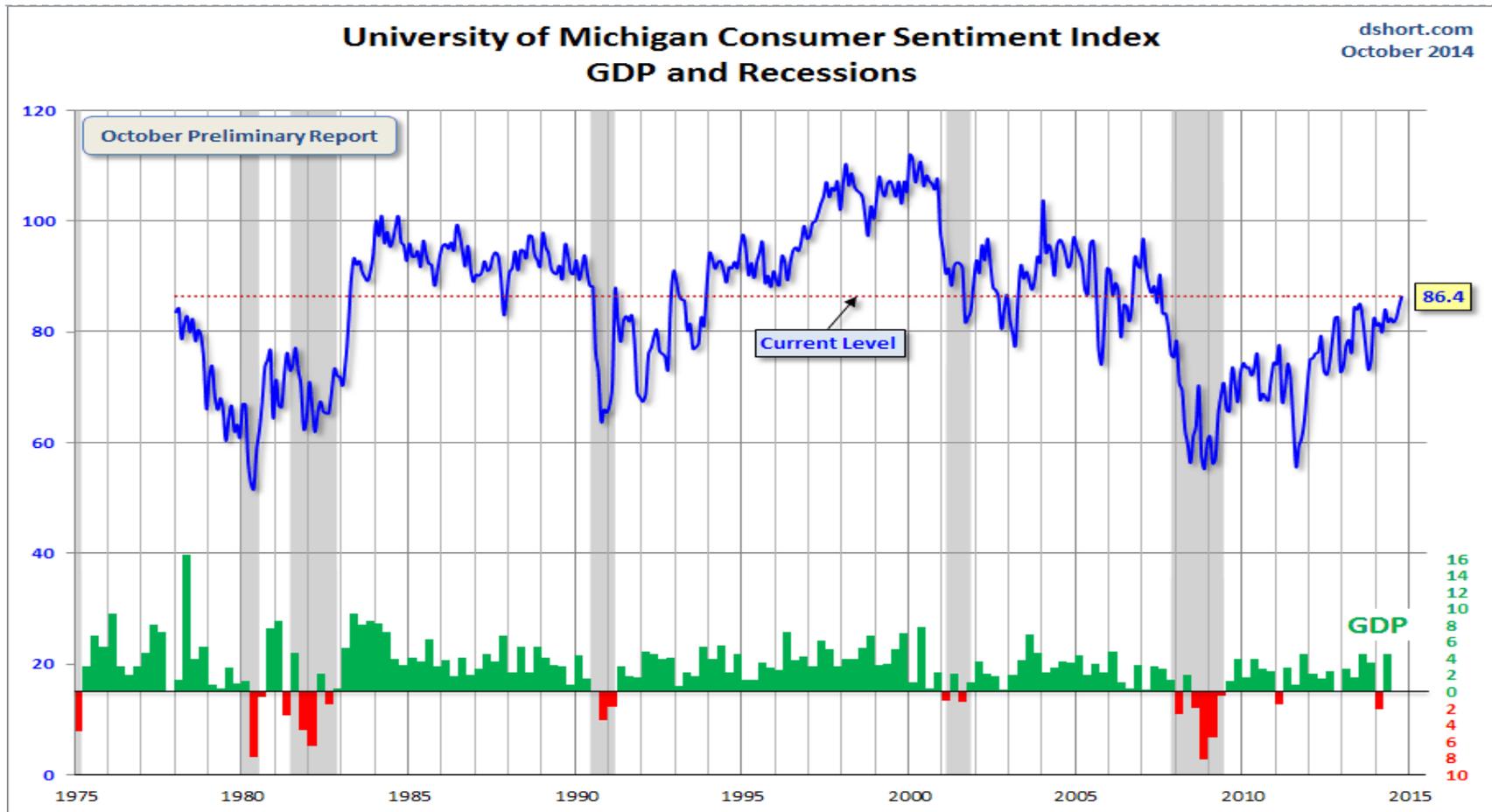


Note: Cross-hatched area represents recession.

The U.S. Unemployment Rate has declined to 5.9% as of September 2014 after peaking at 10.0% in October of 2009 before falling to 7.2% as of September 2013.

Source: U.S. Department of Labor: Bureau of Labor Statistics

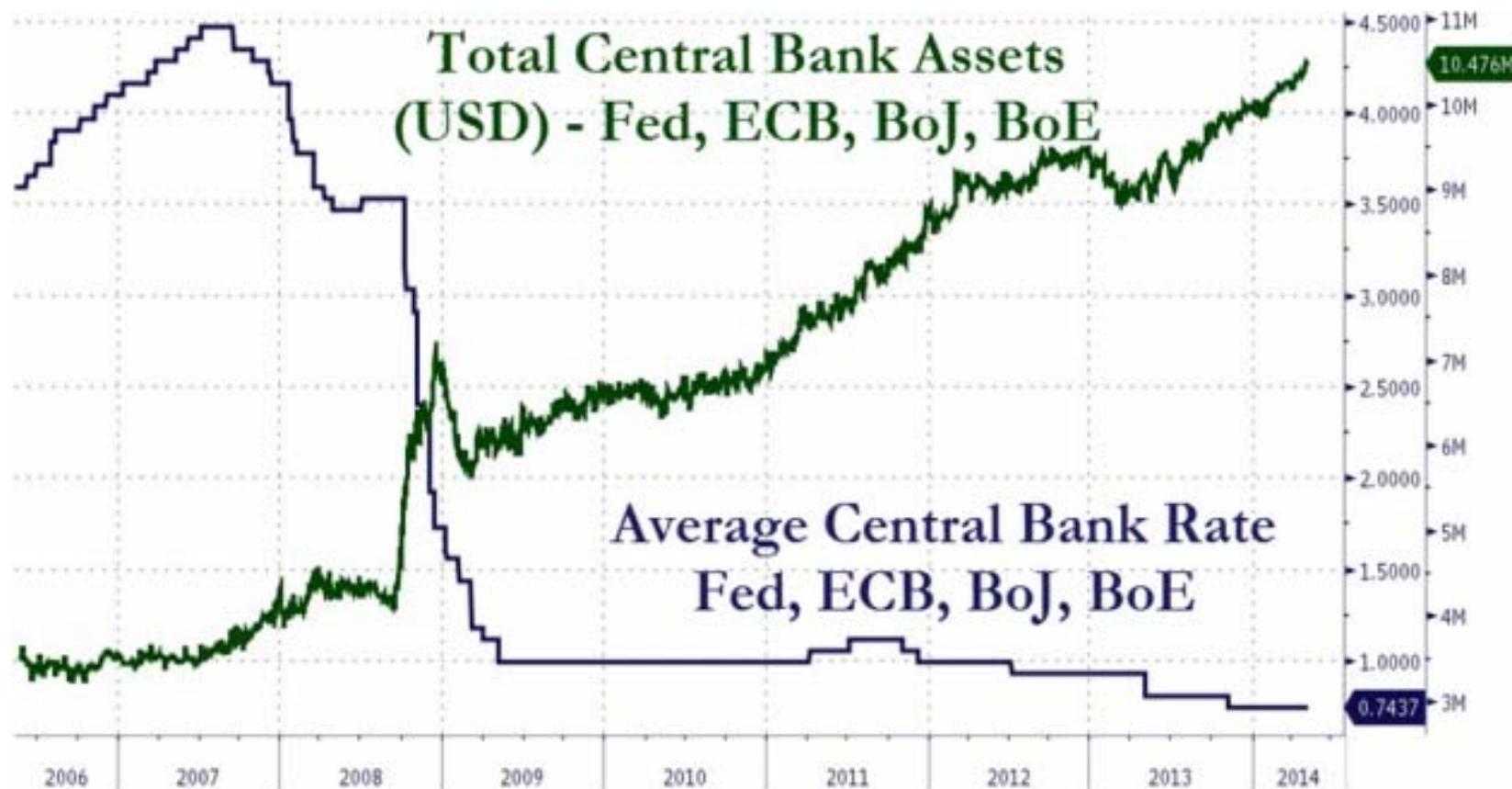
U.S Consumer Sentiment



Summary: Consumer sentiment is trending up and is now above the historical average since inception of 85.1 but slightly below the historical non-recession average of 87.4. *Source: University of Michigan*

Central Bank Balance Sheets

Since 2008, the central banks of the U.S., Europe, Japan and England have grown their assets by nearly \$7 trillion while pushing average rates below 1%.



Net investment returns for all Pension Trust Fund clients as of June 30, 2014

**ND RETIREMENT AND INVESTMENT OFFICE
ND STATE INVESTMENT BOARD
FISCAL YEAR END INVESTMENT PERFORMANCE SUMMARY
AS OF JUNE 30, 2014**

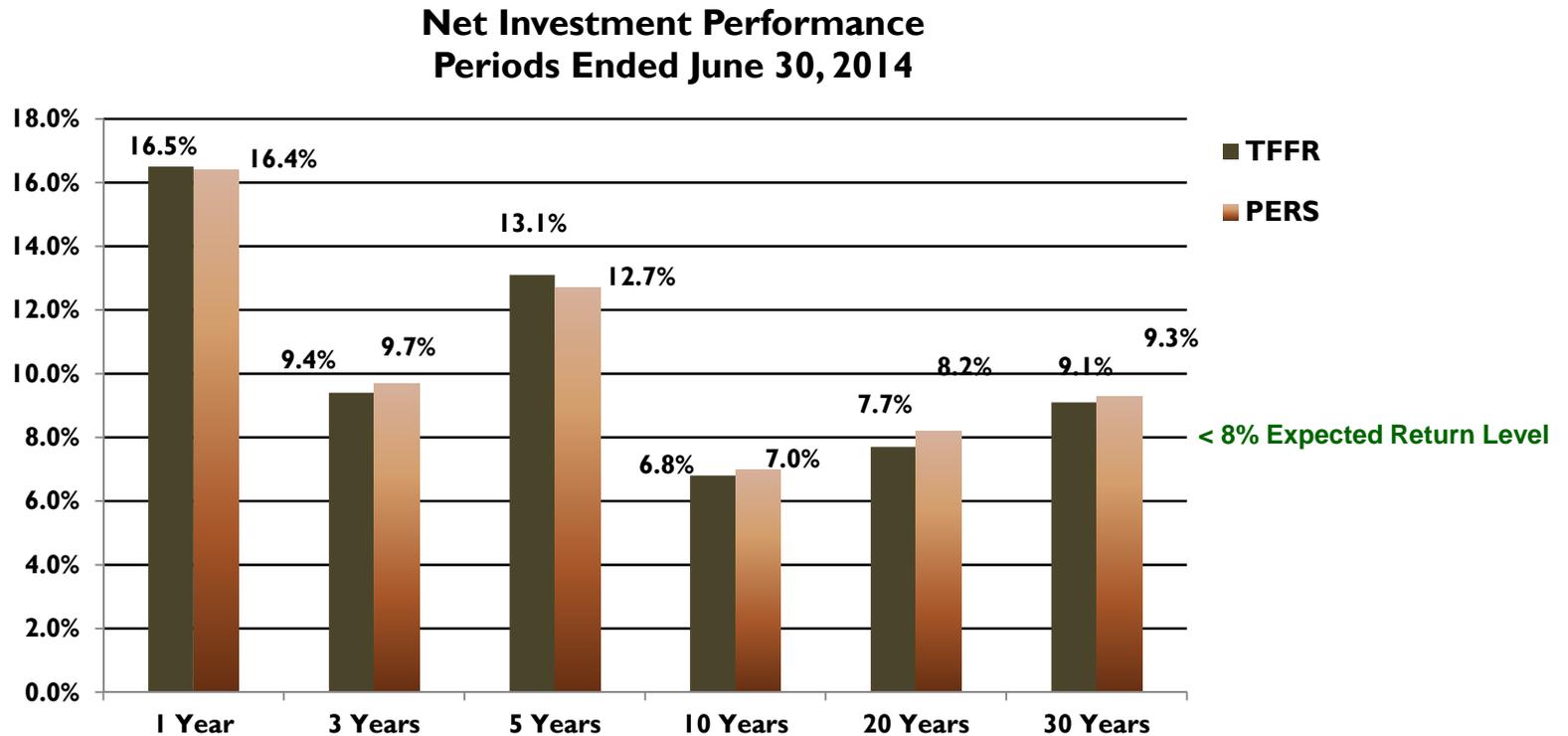
Fund Name	Market Values as of 6/30/14	Investment Performance (net of fees)										
		Fiscal Years ended June 30						Periods ended 6/30/14 (annualized)				
		2014	2013	2012	2011	2010	2009	3 Years	5 Years	10 Years	20 Years	30 Years
Pension Trust Fund												
Teachers' Fund for Retirement (TFFR)	2,061,684,912	16.53%	13.57%	-1.12%	24.05%	13.87%	-27.44%	9.38%	13.07%	6.84%	7.73%	9.11%
Public Employees Retirement System (PERS)	2,332,744,038	16.38%	13.44%	-0.12%	21.27%	13.67%	-24.50%	9.66%	12.70%	7.01%	8.18%	9.34%
City of Bismarck Employees Pension	78,804,326	14.56%	12.41%	1.57%	20.32%	12.74%	-20.61%	9.36%	12.15%	6.99%	8.08%	*
City of Bismarck Police Pension	34,643,204	15.27%	13.03%	1.31%	21.10%	13.30%	-22.59%	9.69%	12.61%	6.98%	7.96%	*
Job Service of North Dakota Pension	97,825,769	13.54%	11.71%	3.09%	16.39%	13.63%	-16.62%	9.35%	11.58%	7.28%	9.22%	*
City of Fargo Employees Pension **	9,702	8.42%	13.90%	0.97%	21.58%	14.82%	-24.88%	7.63%	11.72%	*	*	*
City of Grand Forks Employees Pension	57,896,611	16.33%	14.01%	1.09%	21.64%	13.91%	*	10.27%	13.19%	*	*	*
Grand Forks Park District	5,938,993	16.44%	14.43%	0.86%	20.98%	*	*	10.36%	*	*	*	*
Subtotal Pension Trust Fund	<u>4,669,547,555</u>											

* These funds do not have the specified periods of history under SIB management.

** The City of Fargo Employees Pension withdrew its assets from SIB management in fiscal 2014.

Note: Asset allocation largely drives investment performance. Each fund has a unique allocation that takes into consideration return objectives, risk tolerance, liquidity constraints, and unique circumstances. Such considerations must be taken into account when comparing investment returns. **All figures are preliminary and subject to revision.**

TFFR and PERS net investment returns have exceeded the key 8% actuarial rate of return assumption over the last 30 years.



TFFR and PERS generated net returns of 13.1% and 12.7%, respectively, during the past five years.

TFFR and PERS net returns have approximated 9.1% and 9.3%, respectively, during the last 30 years.

Note: Investment returns are deemed to be materially accurate, but are unaudited and subject to change.

Executive Summary: TFFR and PERS Investment Overview

TFFR and PERS net investment returns were 16.5% and 16.4%, respectively, for the year ended June 30, 2014.

- Asset allocation decisions are consistently the largest drivers of investment returns although active management is important and has produced \$30 million of incremental income for TFFR and PERS in the past fiscal year. On an overall basis, SIB clients have received a \$2 return of every \$1 paid out for investment management fees in fiscal 2014.
- The plans' public equity investments posted the largest sector returns of over 23% during the last year, while real estate posted a near 17% return followed by infrastructure (up 9.5%) and fixed income (up 8%). The two weakest performing sectors were private equity (up 4%) and timber (up 2.6%).

Portfolio volatility (or risk), as measured by standard deviation, has declined significantly in recent years.

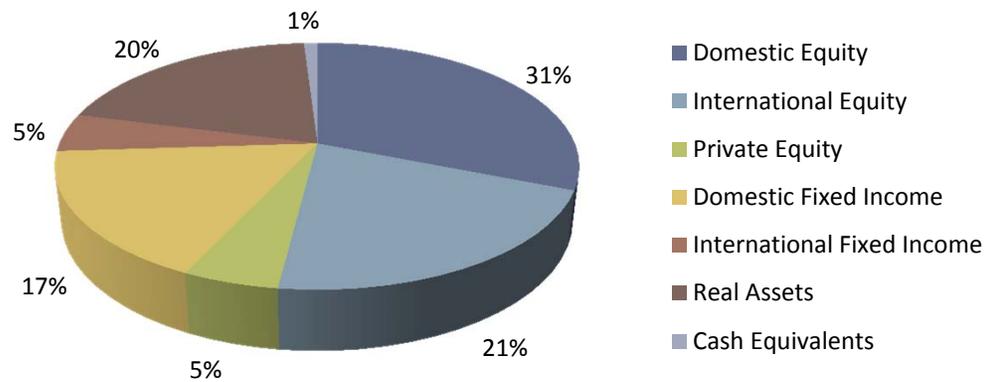
- The standard deviation of the TFFR and PERS portfolios has declined during the past decade and resides in the 3rd quartile as of June 30, 2014 (noting that a lower standard deviation is preferred). The plans ability to demonstrate above average returns while employing less risk than most other plans is noteworthy.

The Retirement and Investment Office regularly meets with our investment advisors to ensure we obtain competent and prudent professional investment services at a competitive price.

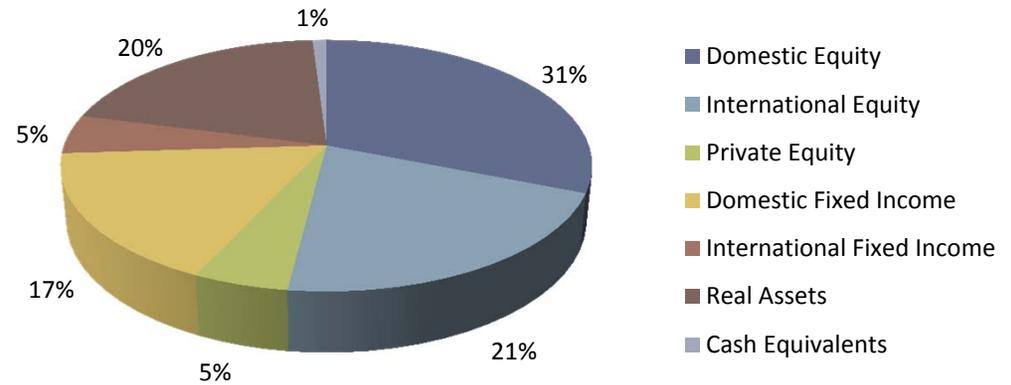
- Investment management fees as a percentage of assets under management declined by 14% within the Pension Trust and 30% within the Insurance Trust during the last fiscal year.

Pension Asset Allocation

TFFR Target Allocation



PERS Target Allocation



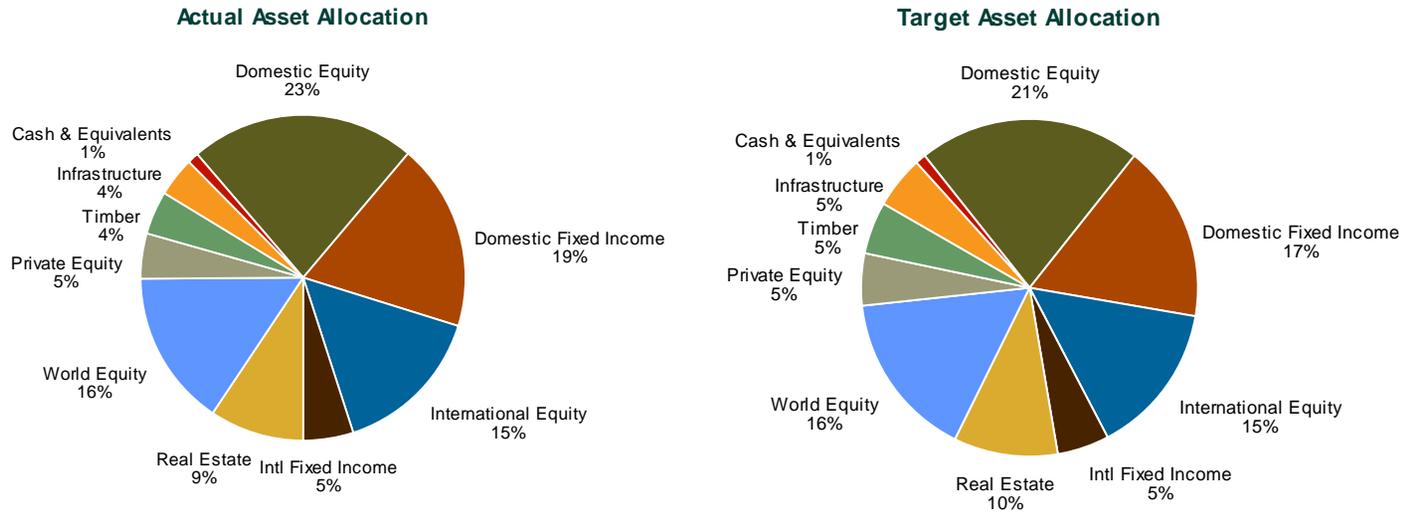
TFFR Asset Allocation As of 6/30/14

	Market Value	Allocation		Δ
		Actual	Policy	
TOTAL FUND	2,061,684,912	100.0%	100.0%	0.0%
GLOBAL EQUITIES	1,188,486,633	57.6%	57.0%	0.6%
GLOBAL FIXED INCOME	482,785,176	23.4%	22.0%	1.4%
GLOBAL REAL ASSETS	370,371,494	18.0%	20.0%	-2.0%
Total Cash Equivalents	20,041,610	1.0%	1.0%	0.0%

NOTE: Monthly market values are preliminary and subject to change.

- ▶ Based on the broad asset allocation framework adopted in 2011, the TFFR Total Fund was slightly **overweight to Global Equities (0.6%) and Global Fixed Income (1.4%)** and **underweight to Global Real Assets (-2.0%)** as compared to its target asset allocation on June 30, 2014.

PERS – Actual versus Target Asset Allocations as of June 30, 2014



	<u>Allocation</u>			
	Market Value	Actual	Policy	Δ
TOTAL FUND	2,332,746	100.0%	100.0%	0.0%
GLOBAL EQUITIES	1,347,864	57.8%	57.0%	0.8%
GLOBAL FIXED INCOME	549,555	23.6%	22.0%	1.6%
GLOBAL REAL ASSETS	408,626	17.5%	20.0%	-2.5%
Total Cash Equivalents	26,701	1.1%	1.0%	0.1%

NOTE: Market values are deemed to be materially accurate but unaudited and subject to change.

➤ Based on the broad asset allocation framework adopted in 2011, the PERS Total Fund was slightly **overweight to Global Equities (0.8%) and Global Fixed Income (1.6%)** and an **underweight to Global Real Assets (-2.5%)** as compared to its target asset allocation on June 30, 2014.



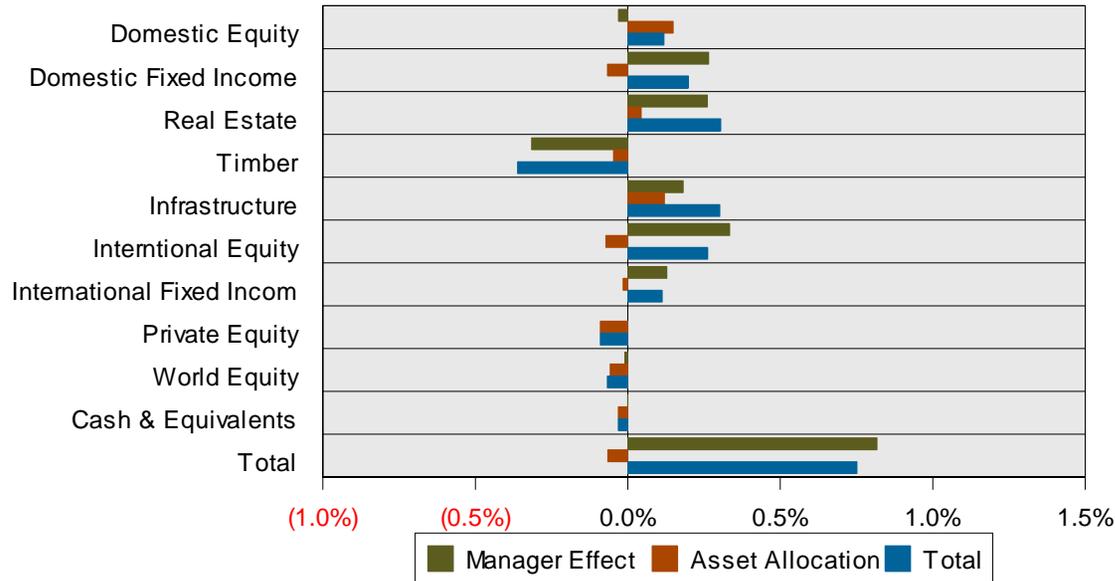
PERS Asset Class & Total Fund Investment Performance Year Ended June 30, 2014

	Actual Return	Benchmark	
Global Equity	22.22%	21.86%	0.36%
US Equity	25.13%	25.02%	0.11%
International Equity	23.07%	21.36%	1.71%
World Equity	23.25%	24.05%	-0.80%
Private Equity	4.07%	4.07%	0.00%
Global Fixed Income	8.03%	7.17%	0.86%
US Investment Grade Fixed Income	5.64%	4.37%	1.27%
US High Yield	13.51%	11.72%	1.79%
International Fixed Income	8.58%	9.42%	-0.84%
Global Real Assets	11.40%	8.57%	2.83%
Real Estate	16.77%	11.21%	5.56%
Timber	2.62%	9.92%	-7.30%
Infrastructure	9.50%	2.04%	7.46%
Total Fund			
PERS "Actual Return"	16.72%	15.67%	1.05%

- Each of the three major asset class sectors generated above benchmark returns during the past year.
- Global equity managers performed in line with expectations overall, however, the emerging market equity sector was restructured during the past year due to an extended period of weak returns versus the index and peers.
- Global fixed income managers exceeded overall expectations although one of our two international fixed income managers materially underperformed last year.
- Global real assets generated strong overall returns in the last fiscal year with real estate and infrastructure posting outstanding performance. This was partially offset by our Timber investments that are based in the southeastern U.S. and have yet to fully recover from the impact on the Great Financial Crisis on this regions housing sector.

PERS – Investment returns for the four years ended June 30, 2014

Four Year Annualized Relative Attribution Effects



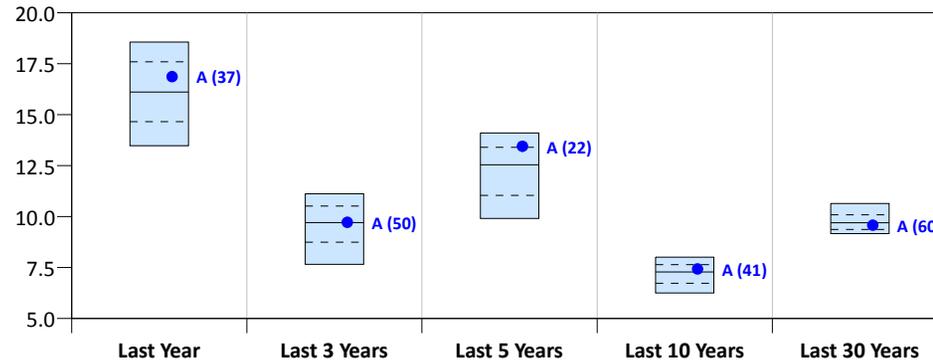
Four Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	30%	29%	20.38%	20.20%	(0.03%)	0.15%	0.12%
Domestic Fixed Income	21%	21%	7.48%	5.82%	0.27%	(0.07%)	0.20%
Real Estate	8%	8%	16.27%	12.65%	0.26%	0.04%	0.31%
Timber	4%	3%	-	-	(0.31%)	(0.05%)	(0.36%)
Infrastructure	3%	3%	-	-	0.18%	0.12%	0.30%
Intemntional Equity	16%	16%	12.73%	10.48%	0.33%	(0.07%)	0.26%
Intemational Fixed Incom	5%	5%	7.31%	5.01%	0.13%	(0.02%)	0.11%
Private Equity	5%	5%	7.60%	7.60%	0.00%	(0.09%)	(0.09%)
World Equity	7%	7%	-	-	(0.01%)	(0.06%)	(0.07%)
Cash & Equivalents	1%	1%	0.09%	0.10%	(0.00%)	(0.03%)	(0.03%)
Total			12.81%	12.06%	+ 0.82%	+ (0.07%)	0.75%

TFFR Peer Return Ranking – June 30, 2014

The chart below displays the ranking of TFFR performance relative to that of the Callan Public Fund Sponsor Database for periods ended June 30, 2014, without any adjustment for the historical asset allocations (versus other public fund sponsors).

**Returns
for Periods Ended June 30, 2014
Group: CAI Public Fund Sponsor Database**



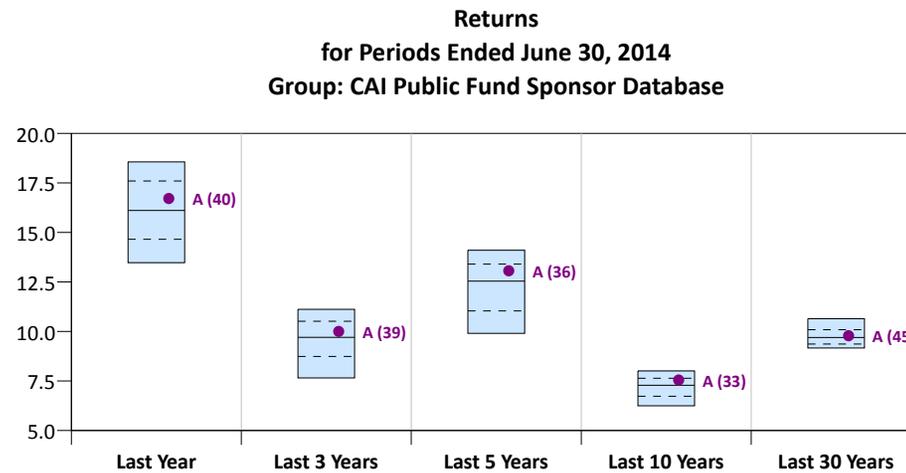
Note: The peer ranking for the “Last 30 Years” is less meaningful than the other periods due to the limited member count (i.e. 28).

10th Percentile	18.6	11.1	14.1	8.0	10.6
25th Percentile	17.6	10.5	13.4	7.6	10.1
Median	16.1	9.7	12.5	7.3	9.7
75th Percentile	14.7	8.7	11.0	6.7	9.4
90th Percentile	13.5	7.7	9.9	6.2	9.2
Member Count	222	213	200	174	28
Total Fund-TFFR ● A	16.9	9.7	13.5	7.4	9.6

Gross Returns: TFFR generated 2nd quartile returns for the 1-, 3-, and 10-year periods ended June 30, 2014 based on the Callan Associates Public Fund Sponsor Database (unadjusted basis). TFFR generated 1st quartile returns over the last 5 years.

PERS Peer Return Ranking – June 30, 2014

The chart below displays the ranking of PERS performance relative to that of the Callan Public Fund Sponsor Database for periods ended June 30, 2014, without any adjustment for the historical asset allocations (versus other public fund sponsors).



Note: The peer ranking for the “Last 30 Years” is less meaningful than the other periods due to the limited member count (i.e. 28).

10th Percentile	18.6	11.1	14.1	8.0	10.6
25th Percentile	17.6	10.5	13.4	7.6	10.1
Median	16.1	9.7	12.5	7.3	9.7
75th Percentile	14.7	8.7	11.0	6.7	9.4
90th Percentile	13.5	7.7	9.9	6.2	9.2
Member Count	222	213	200	174	28
Total Fund-PERS ● A	16.7	10.0	13.1	7.6	9.8

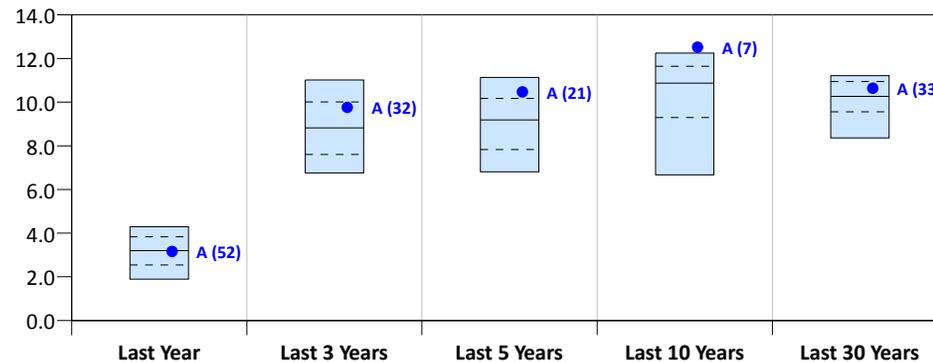
Gross Returns: PERS generated 2nd quartile returns for the 1-, 3-, 5- and 10-year periods ended June 30, 2014 based on the Callan Associates Public Fund Sponsor Database (unadjusted basis).

TFFR Peer Risk Ranking – June 30, 2014

The chart below displays the ranking of TFFR risk relative to that of the Callan Public Fund Sponsor Database for periods ended June 30, 2014.

Standard Deviation
for Periods Ended June 30, 2014
Group: CAI Public Fund Sponsor Database

Standard deviation is used to measure investment (or portfolio) volatility whereas a lower standard deviation is generally preferred over a higher standard deviation.



Note: The peer ranking for the "Last 30 Years" is less meaningful than the other periods due to the limited member count (i.e. 28).

10th Percentile	4.3	11.0	11.1	12.3	11.2
25th Percentile	3.8	10.0	10.2	11.6	11.0
Median	3.2	8.8	9.2	10.9	10.3
75th Percentile	2.5	7.6	7.8	9.3	9.6
90th Percentile	1.9	6.8	6.8	6.7	8.4
Member Count	222	213	200	174	28
Total Fund-TFFR	● A 3.2	9.8	10.5	12.5	10.6

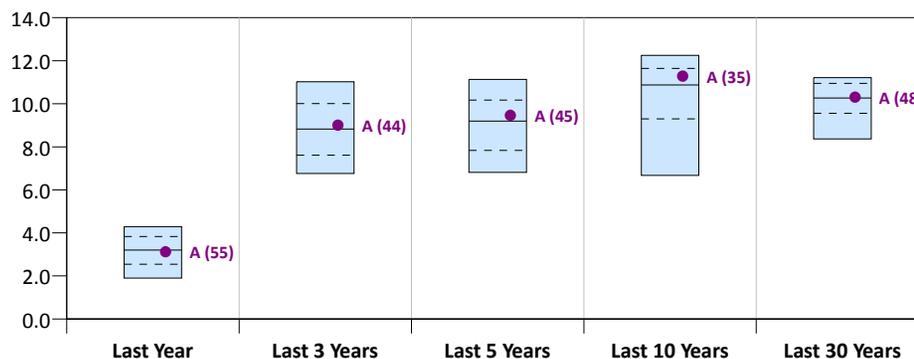
Portfolio volatility, as measured by standard deviation, has declined significantly in recent years. The standard deviation rank of the TFFR plan declined from the 1st and 2nd quartile for the 3-, 5-, and 10-year periods to the 3rd quartile for the past year.

PERS Peer Risk Ranking – June 30, 2014

The chart below displays the ranking of PERS risk relative to that of the Callan Public Fund Sponsor Database for periods ended June 30, 2014.

**Standard Deviation
for Periods Ended June 30, 2014
Group: CAI Public Fund Sponsor Database**

Standard deviation is used to measure investment (or portfolio) volatility whereas a lower standard deviation is generally preferred over a higher standard deviation.

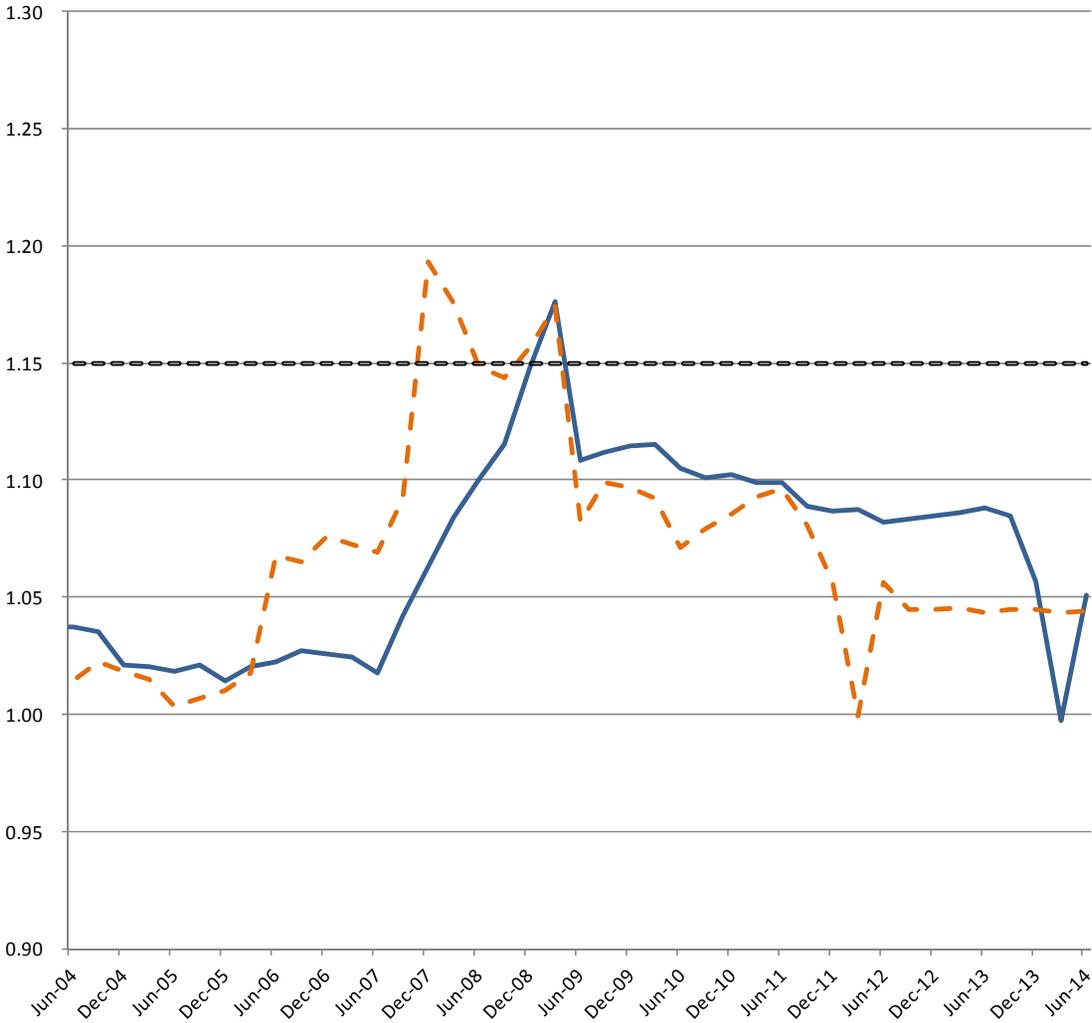


Note: The peer ranking for the “Last 30 Years” is less meaningful than the other periods due to the limited member count (i.e. 28).

10th Percentile	4.3	11.0	11.1	12.3	11.2
25th Percentile	3.8	10.0	10.2	11.6	11.0
Median	3.2	8.8	9.2	10.9	10.3
75th Percentile	2.5	7.6	7.8	9.3	9.6
90th Percentile	1.9	6.8	6.8	6.7	8.4
Member Count	222	213	200	174	28
Total Fund-PERS ● A	3.1	9.0	9.5	11.3	10.3

Portfolio volatility, as measured by standard deviation, has declined significantly in recent years. The standard deviation rank of the PERS plan declined from the 2nd quartile for the last 3-, 5- and 10-year periods to the 3rd quartile for the past year.

Relative Standard Deviation Relative to Policy Benchmark 10 Years Ended 6/30/2014



TFFR's standard deviation remains within investment guidelines of 1.15 (or 115% of the policy benchmark over the last 5 years).

- TFFR Rolling 20 Quarters
- - - TFFR Rolling 12 Quarters
- - - Reference

TFFR's standard deviation for the 5-years ended June 30, 2014 was 10.5%, slightly in excess of its policy benchmark.

Active management has generated \$30 million of excess return

	1 Yr Ended 6/30/2014	3 Yrs Ended 6/30/2014	5 Yrs Ended 6/30/2014	Risk (Std.Dev.) 5 Yrs End. 6/30/2014
PUBLIC EMPLOYEES RETIREMENT SYSTEM (PERS)				
\$ 2,332,744,038				115% Limit
Total Fund Return - Net	16.38%	9.66%	12.70%	9.5%
Policy Benchmark Return	15.67%	9.35%	12.33%	9.0%
Attribution Analysis				105%
Asset Allocation	0.15%	-0.06%		Actual Risk /
Manager Selection	0.56%	0.37%		Policy Risk
Total Relative Return	0.71%	0.31%	0.37%	
TEACHERS' FUND FOR RETIREMENT (TFFR)				
\$ 2,061,684,912				115% Limit
Total Fund Return - Net	16.53%	9.38%	13.07%	10.5%
Policy Benchmark Return	15.74%	8.73%	12.23%	10.0%
Attribution Analysis				105%
Asset Allocation	0.23%	0.18%		Actual Risk /
Manager Selection	0.56%	0.47%		Policy Risk
Total Relative Return	0.79%	0.65%	0.83%	

Risk: Investment performance has been achieved while adhering to prescribed risk management guidelines which limit portfolio risk (as measured by standard deviation) to 115% of policy, as the actual level of **105%** is within the approved limit.

- Active management has generated \$30 million of incremental income for the fiscal year ended June 30, 2014.

- This translates into a return of \$2 for every \$1 paid for investment management fees during the past fiscal year.

- PERS generated **0.71%** of excess return during the past year. Based on average invested assets of \$2.16 billion, this translates into \$15.3 million of incremental plan income.

- TFFR generated **0.79%** of excess return for the last year. Based on \$1.93 billion on average assets, this translated into \$15.2 million of additional investment income.

Investment expenses as a % of invested assets declined by 14% for the Pension Trust and 23% for SIB Clients overall in the last year

Comparison of Investment Management Fees and Expenses for the fiscal years ended June 30, 2013 and 2014

	Pension Investment Pool			Insurance Investment Pool & Individual Investment Account			All State Investment Board Clients		
	Assets under management (Average)	Fees	Basis points	Assets under management (Average)	Fees	Basis points	Assets under management (Average)	Fees	Basis points
Fiscal Year Ended June 30, 2013:									
Investment manager fees	\$ 4,036,387,762	\$ 31,292,634	78	\$ 2,868,924,799	\$ 11,776,238	41	\$ 6,905,312,561	\$ 43,068,872	62
Total investment expenses		\$ 1,031,504	3		\$ 602,856	2		\$ 1,634,360	2
	\$ 4,036,387,762	\$ 32,324,138	80	\$ 2,868,924,799	\$ 12,379,094	43	\$ 6,905,312,561	\$ 44,703,232	65
Fiscal Year Ended June 30, 2014:									
Investment manager fees	\$ 4,470,165,619	\$ 29,750,027	67	\$ 4,162,072,107	\$ 11,753,282	28	\$ 8,632,237,726	\$ 41,503,309	48
Total investment expenses		\$ 1,071,465	2		\$ 658,703	2		\$ 1,730,168	2
	\$ 4,470,165,619	\$ 30,821,492	69	\$ 4,162,072,107	\$ 12,411,985	30	\$ 8,632,237,726	\$ 43,233,477	50
Decline in Investment Manager Expenses during last year (basis points)			11			13			15
Decline in Investment Manager Expenses during last year (basis points %)			14%			31%			23%

Notes: Preliminary data is deemed to be materially accurate, but unaudited and subject to change. Amounts in the table above may not foot due to rounding.

Summary:

Investment management fees and expenses as a % of total SIB client assets under management declined to approximately **50 bps** in fiscal 2014 (versus **65 bps** in fiscal 2013). This 23% reduction was driven by a significant decline in performance fees between years, a 25% increase in average assets under management and RIO's continuing efforts to secure structural fee savings with investment managers. From a basis point perspective, Pension Trust investment expenses declined by 14% (or 11 bps) in fiscal 2014.

A basis point is equal to one one-hundredth of one percent (or 0.01%) such that 100 basis points is equivalent to 1%.

Historical Market Returns - Asset Class

Asset Class	Represented by	Periods Ended June 30, 2014			
		1 Year	3 Year	5 Years	10 Years
Large Cap US Stocks	Russell 1000	25.35%	16.63%	19.25%	8.19%
Small Cap US Stocks	Russell 2000	23.64%	14.57%	20.21%	8.70%
Non-US Stocks (Developed)	MSCI EAFE	23.57%	8.10%	11.77%	6.93%
Non-US Stocks (Emerging)	MSCI Emerging Mkts	14.68%	-0.06%	9.58%	12.30%
US Bonds	BC Aggregate	4.37%	3.66%	4.85%	4.93%
High Yield Bonds	BC High Yield Credit	11.73%	9.48%	13.98%	9.05%
Non-US Sovereign Debt	Citi World Gov't Bond ex US	8.88%	1.03%	3.59%	4.90%
Inflation Protected	BC Global Inflation Linked	10.42%	4.44%	6.03%	5.81%
Real Estate	NCREIF Property	11.21%	11.32%	9.67%	8.63%
Timber	NCREIF Timberland	9.92%	6.73%	3.33%	8.35%
Cash	3 Month T-Bill	0.05%	0.07%	0.11%	1.63%
PERS Total Fund (Callan Actual Gross)		16.72%	10.00%	13.06%	7.55%
PERS Total Fund (Net)		16.38%	9.66%	12.70%	7.01%
PERS Total Fund Policy		15.67%	9.35%	12.33%	7.48%
Job Service Total Fund (Net)		13.55%	9.36%	11.58%	7.28%
Job Service Total Fund Policy		13.02%	8.31%	10.60%	6.69%
Retiree Health Total Fund (Net)		16.52%	11.13%	14.30%	6.68%
Retiree Health Total Fund Policy		16.33%	10.24%	12.72%	6.93%
TFFR Total Fund (Callan Actual Gross)		16.87%	9.72%	13.45%	7.43%
TFFR Total Fund (Net)		16.53%	9.38%	13.07%	6.84%
TFFR Total Fund Policy		15.73%	8.73%	12.23%	7.48%

Source: Callan

Asset Class Performance

Periods Ending June 30, 2014

- ▶ Emerging markets ranked 1st for the last quarter, up 6.7%
- ▶ S&P 500 gained 5.2% for the quarter and 24.6% for the trailing year
- ▶ Barclays Aggregate rose 2.0% for the quarter and 4.4% for the trailing year
- ▶ International equities lagged domestic equities over every time period shown

As of 10/15/14	FYTD	YTD
S&P 500	-4.74%	2.40%
Russell 2000	-10.09%	-6.90%
EAFE	-12.53%	-7.75%
EM	-6.17%	0.15%
BC Agg	2.15%	6.08%

Periodic Table of Investment Returns
for Periods Ended June 30, 2014

Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
MSCI:Emer Markets 6.7%	S&P:600 Small Cap 25.5%	S&P:600 Small Cap 16.8%	S&P:600 Small Cap 22.0%	MSCI:Emer Markets 12.3%
S&P:500 5.2%	S&P:500 24.6%	S&P:500 16.6%	S&P:500 18.8%	S&P:600 Small Cap 9.9%
MSCI:EAFE US\$ 4.1%	MSCI:EAFE US\$ 23.6%	MSCI:EAFE US\$ 8.1%	MSCI:EAFE US\$ 11.8%	S&P:500 7.8%
S&P:600 Small Cap 2.1%	MSCI:Emer Markets 14.7%	Barclays:Aggregate Index 3.7%	MSCI:Emer Markets 9.6%	MSCI:EAFE US\$ 6.9%
Barclays:Aggregate Index 2.0%	Barclays:Aggregate Index 4.4%	3 Month T-Bill 0.1%	Barclays:Aggregate Index 4.9%	Barclays:Aggregate Index 4.9%
3 Month T-Bill 0.0%	3 Month T-Bill 0.1%	MSCI:Emer Markets (0.1%)	3 Month T-Bill 0.1%	3 Month T-Bill 1.6%

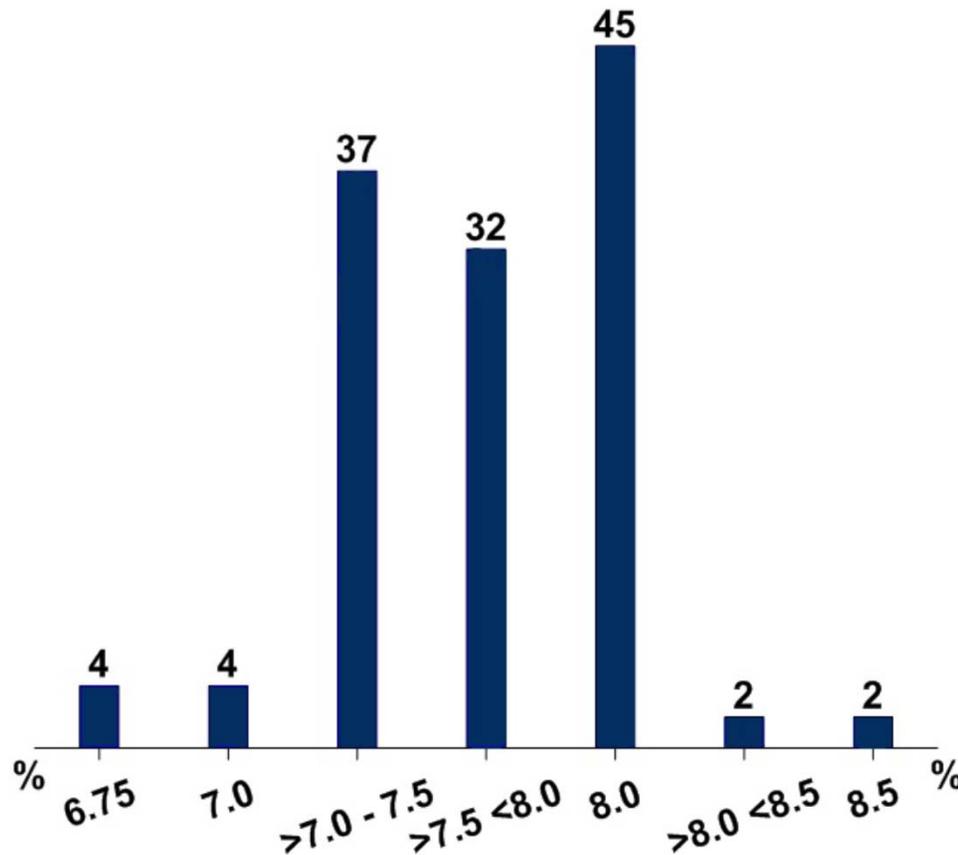
Source: Callan.

Fiscal Year SIB Activity

- ▶ Completed a review of our Global and Emerging Market Equity portfolios in the Pension Trust resulting in a reduction of mandates and managers.
- ▶ Began an 18 month implementation plan for the Legacy Fund asset allocation with full implementation targeted by January 31, 2015.
- ▶ Assisted Workforce Safety & Insurance (“WSI”) with an asset-liability study and a new asset allocation policy which was implemented in mid-2014.
- ▶ Renegotiated investment management and custody fees throughout the year resulting in a decrease in overall investment fees between years (to 0.50% from 0.65%).
- ▶ Callan was engaged to complete a review of our custody, trust and investment management services.
- ▶ Client level reporting was enhanced for the Legacy Fund, PERS, TFFR, WSI and Budget Stabilization Fund so as to more accurately capture and report intra-month fund flows.
- ▶ RIO expects to be fully staffed by mid-November 30 and has hired five new professionals during the past year in audit, compliance, information systems and investments (2).

NASRA Issue Brief Excerpts: Public Pension Plan Investment Returns (Updated April 2014)

Distribution of investment return assumptions

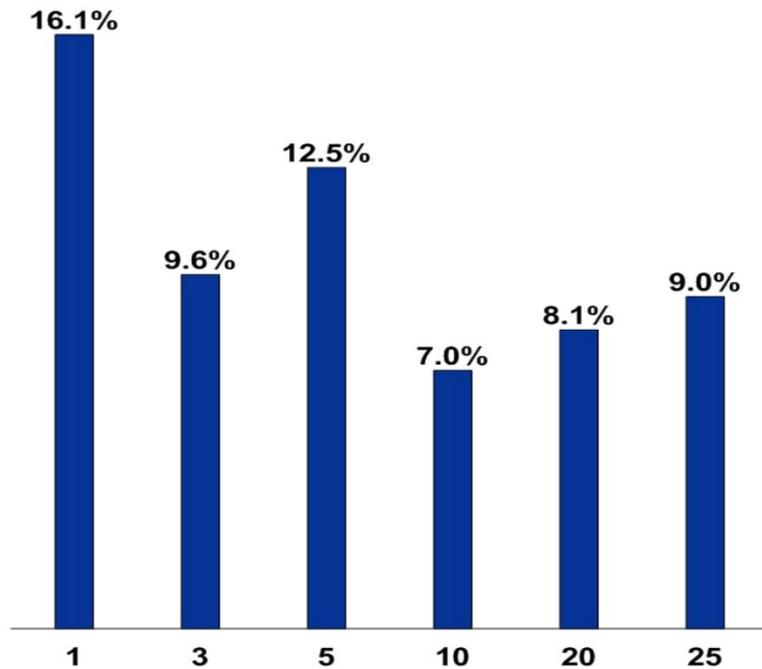


Source: Public Fund Survey, Dec. 2013

- The National Association of State Retirement Administrators conducted a Public Fund Survey in December of 2013 which revealed use of the following investment return assumptions.
- The 8% return expectation ranked 1st (36%) with over 90% of the respondents being in the > 7.0% to 8.0% range.

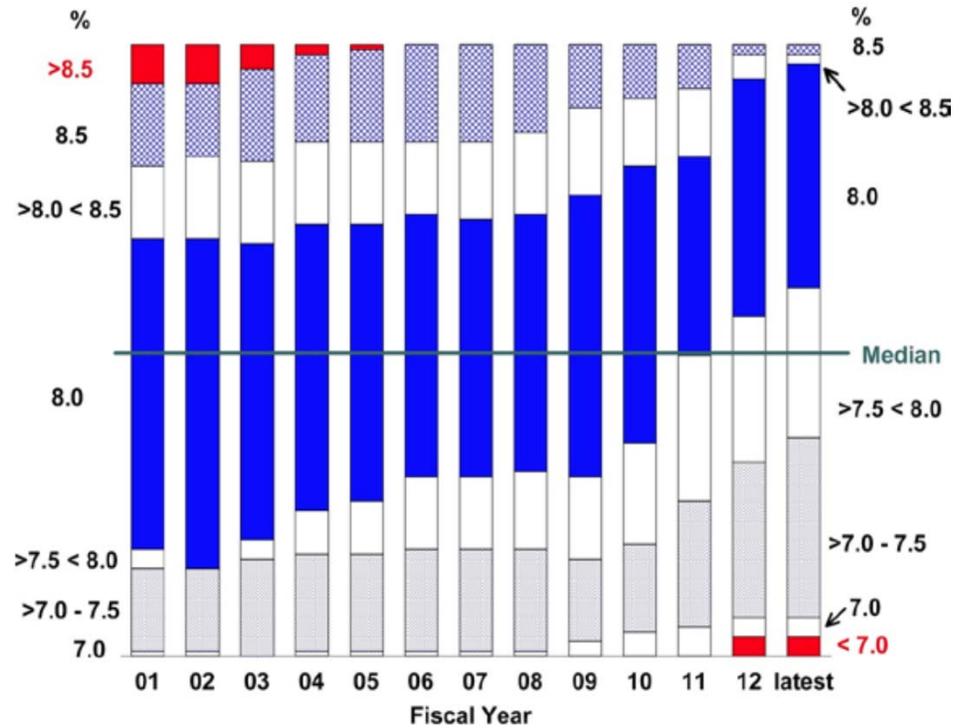
NASRA Issue Brief Excerpts: Public Pension Plan Investment Returns (Updated April 2014)

Median public pension annualized investment returns periods ended 12/31/2013



Note: The North Dakota State Investment Board client investment returns in this presentation are generally as of the periods ended June 30, 2014.
 Source: *Public Fund Survey*

Change in distribution of public pension return assumptions, FY 01 to Dec. 2013



Note: Investment return assumptions for public pension plans have been declining during the past decade with the average investment return being **7.72%** as of December 31, 2013. Source: *Public Fund Survey*

Contact Information

▶ **Phone:**

701-328-9889 or

1-800-952-2970 (outside Bismarck/Mandan)

▶ **Mailing Address**

ND Retirement and Investment Office

1930 Burnt Boat Drive, P.O. Box 7100

Bismarck, ND 58507-7100

▶ **E-mail Address:**

rio@nd.gov or djhunter@nd.gov

▶ **Website Address:**

www.nd.gov/rio