ND STATE INVESTMENT BOARD MEETING

Friday, March 18, 2016, 8:30 a.m.
Peace Garden Room, State Capitol
600 E Boulevard, Bismarck, ND

AGENDA

I. CALL TO ORDER AND ACCEPTANCE OF AGENDA

II. ACCEPTANCE OF MINUTES (February 26, 2016)

III. INVESTMENTS

A. Private Equity
   1. Investment Manager Search Reference Materials - Mr. Hunter (enclosed) (5 min)
   2. Private Equity Manager Interviews *
      a. BlackRock - Lynn Baranski, Leo Chenette, Linh Pham (enclosed) (45 min)
      b. Pathway - Jim Reinhardt, Linda Chaffin, Wayne Smith (enclosed) (45 min)
   3. Board Review/Discussion of Finalists - RIO Recommendation (to follow) (15 min) **Board Action**

========================== Break from 10:20 to 10:30 a.m. ==============================

B. Northern Trust - Patti Somerville-Koulouris and Asha Bangalore (enclosed)
   1. Capital Markets Update - (25 min)
   2. Securities Lending Update - (10 min)
   3. Litigation Monitoring Update - (10 min)

C. Investment Policy Statements (no asset allocation changes) - Mr. Hunter (enclosed) (10 min) **Board Acceptance**
   1. City of Bismarck Police Pension Plan
   2. City of Bismarck Employee Pension Plan
   3. Insurance Regulatory Trust Fund
   4. Petroleum Tank Release Compensation Fund
   5. Bonding Fund
   6. Fire and Tornado Fund

IV. ADMINISTRATION

A. Executive Review Committee - Mr. Sandal (20 min)

V. BOARD EDUCATION

A. Investment Assets - Mr. Hunter (10 min)

VI. OTHER

Next Meetings:
SIB meeting - April 22, 2016, 8:30 a.m. - Peace Garden Room
SIB Audit Committee meeting - May 19, 2016, 3:00 pm - State Capitol, Peace Garden Room

VII. ADJOURNMENT

* Per NDCC 44.04.19.2 subdivision 6, the SIB will sequester all competitors during the finalist presentations.

NORTH DAKOTA STATE INVESTMENT BOARD
MINUTES OF THE
FEBRUARY 26, 2016, BOARD MEETING

MEMBERS PRESENT:	Drew Wrigley, Lt. Governor, Chair Mike Sandal, Vice Chair Lance Gaebe, Land Commissioner Mike Gessner, TFFR Board Adam Hamm, Insurance Commissioner (TLCF) Rob Lech, TFFR Board Kelly Schmidt, State Treasurer Yvonne Smith, PERS Board Cindy Ternes, WSI designee Tom Trenbeath, PERS Board
MEMBERS ABSENT:	Mel Olson, TFFR Board
STAFF PRESENT:	Eric Chin, Investment Analyst Connie Flanagan, Fiscal & Invt Op Mgr Bonnie Heit, Assist to the SIB David Hunter, ED/CIO Fay Kopp, Dep ED/CRA Terra Miller Bowley, Supvr Audit Services Cody Schmidt, Compliance Officer Darren Schulz, Dep CIO Susan Walcker, Invt Acct
GUESTS PRESENT:	Alex Browning, Callan Associates Paul Erlendson, Callan Associates Miguel Gonzalo, Adams Street Partners 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, February 26, 2016, at the State Capitol, Peace Garden Room, Bismarck, ND.

AGENDA:

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. SANDAL AND CARRIED ON A VOICE VOTE TO ACCEPT THE REVISED AGENDA FOR THE FEBRUARY 26, 2016, MEETING AS DISTRIBUTED.

AYES: MS. TERNES, COMMISSIONER HAMM, TREASURER SCHMIDT, COMMISSIONER GAEBE, MR. TRENBEATH, MR. LECH, MR. SANDAL, MS. SMITH, MR. GESSNER, AND LT. GOVERNOR WRIGLEY
NAYS: NONE
MOTION CARRIED
ABSENT: MR. OLSON

MINUTES:

IT WAS MOVED BY MR. TRENBEATH AND SECONDED BY MR. GESSNER AND CARRIED ON A VOICE VOTE TO ACCEPT THE JANUARY 22, 2016, MINUTES AS DISTRIBUTED.

AYES: COMMISSIONER HAMM, MS. TERNES, MR. SANDAL, TREASURER SCHMIDT, MR. GESSNER, MS. SMITH, COMMISSIONER GAEBE, MR. LECH, MR. TRENBEATH, AND LT. GOVERNOR WRIGLEY
NAYS: NONE
MOTION CARRIED
ABSENT: MR. OLSON

INVESTMENTS:

Asset/Performance Overview – Mr. Hunter updated the SIB on the status of the portfolios they manage on behalf of their clients as of December 31, 2015. Assets under management grew by approximately 6.9 percent or $692 million in the last year. Assets totaled $10.8 billion based on unaudited valuations as of December 31, 2015. The Pension Trust posted a net return of 0.56 percent with gains of $26 million. The Insurance Trust generated a net return of 1.03 percent with gains of $25 million. The Legacy Fund's net return was 0.91 percent and assets increased by 21 percent or $622 million.

Every Pension Trust client generated positive excess returns for the 1, 3, and 5 year periods ended December 31, 2015.

Every Non-Pension Trust client generated positive excess returns for the 5-years ending December 31, 2015, if applicable, with one exception, PERS Retiree Health Insurance Credit Fund.

Mr. Hunter also reviewed the investment work plan as of February 19, 2016. Mr. Hunter also reviewed the SIB's private equity allocation specifically Adams Street Partners mandate. Adams Street Partners is the SIB's largest private equity manager and has consistently generated the strongest returns within private equity over the past 26 years.

Adams Street Partners – Mr. Gonzalo provided an overview of the firm, review of the SIB's mandates, and also reviewed a new opportunity for the board's consideration, the 2016 Global Fund Program.

Private Equity – Mr. Schulz reviewed the SIB's opportunity to invest in Adams Street Partners 2016 Global Fund. RIO personnel is recommending the SIB invest up to $30 million to further reduce an underweight in the private equity in the pension trust which as of 9/30/15 stands at approximately 1.2% or $55 million below the target weight of 5% within the Pension Trust.

Mr. Schulz also stated RIO personnel are currently conducting due diligence on identifying another strategic private equity partner to compliment Adams Street Partners. Staff will bring forth two finalists at the SIB's March 18, 2016, meeting.

IT WAS MOVED BY COMMISSIONER GAEBE AND SECONDED BY MR. SANDAL AND CARRIED BY A ROLL CALL VOTE TO ACCEPT STAFF'S RECOMMENDATION TO COMMIT $30 MILLION TO THE ADAMS STREET PARTNERS 2016 GLOBAL FUND.

AYES: MR. LECH, TREASURER SCHMIDT, COMMISSIONER GAEBE, MR. TRENBEATH, MR. SANDAL, COMMISSIONER HAMM, MR. GESSNER, MS. SMITH, MS. TERNES, AND LT. GOVERNOR WRIGLEY
NAYS: NONE
MOTION CARRIED
ABSENT: MR. OLSON

Callan Associates – Mr. Erlendson and Mr. Browning reviewed economic and market conditions for the period ending December 31, 2015. Callan reps also reviewed investment measurement results for the Pension Trust, Insurance Trust, and Legacy Trust for the same time period. Callan also distributed a 10-year forward looking capital market assumptions charticle.

IT WAS MOVED BY MR. GESSNER AND SECONDED BY TREASURER SCHMIDT AND CARRIED BY A VOICE VOTE TO ACCEPT CALLAN'S REPORT.

AYES: COMMISSIONER HAMM, MS. TERNES, COMMISSIONER GAEBE, MR. GESSNER, MS. SMITH, MR. TRENBEATH, MR. SANDAL, MR. LECH, TREASURER SCHMIDT, AND LT. GOVERNOR WRIGLEY
NAYS: NONE
MOTION CARRIED
ABSENT: MR. OLSON

The Board recessed at 10:25 a.m. and reconvened at 10:40 a.m.

Investment Policy Statements – Mr. Hunter reviewed Investment Policy Statements (IPS) revised by the Teachers' Fund for Retirement (TFFR), City of Grand Forks Employee Pension Plan, and Park District of the City of Grand Forks Pension Plan. All three entities have approved the revisions and Mr. Hunter requested the SIB accept the following changes:

The TFFR IPS was revised to reflect a reduction of the investment return assumption from 8.0% to 7.75% effective July 1, 2015, based on the 2015 actuarial Experience Study conducted by Segal Consultants. Changes were also made to the asset allocation based on the results of an Asset Allocation Study completed by Callan Associates. The broad asset class changes reflect a 1% increase to global equity, a 1% increase to global fixed income, and a 2% decrease to global real assets.

The Boards for the City of Grand Forks Employee Pension Plan and Park District of the City of Grand Forks Pension Plan adopted revised investment performance objectives that conform to performance metrics adopted by TFFR and the Public Employees Retirement System (PERS). These changes are formative in nature and do not include any asset allocation changes.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MS. SMITH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE REVISED INVESTMENT POLICY STATEMENTS FOR THE TEACHERS' FUND FOR RETIREMENT, CITY OF GRAND FORKS EMPLOYEE PENSION PLAN, AND THE PARK DISTRICT OF THE CITY OF GRAND FORKS PENSION PLAN.

AYES: COMMISSIONER GAEBE, TREASURER SCHMIDT, MR. SANDAL, COMMISSIONER HAMM, MS. TERNES, MR. GESSNER, MR. TRENBEATH, MR. LECH, AND MS. SMITH
NAYS: LT. GOVERNOR WRIGLEY
MOTION CARRIED
ABSENT: MR. OLSON

Budget Stabilization Fund – Ms. Flanagan updated the board on the Budget Stabilization Fund. The State's revenue forecast predicts there will be a revenue shortfall and as a result, the Office of Management & Budget (OMB) is calling for a 4.05 percent reduction in General Fund spending. OMB has notified RIO they may also need to transfer assets from the Budget Stabilization Fund to the General Fund near the end of the 2015-17 biennium. The Budget Stabilization Fund's balance as of January 31, 2016, is $576,783,419. OMB is tentatively projecting a transfer of $497,591,654.

The Budget Stabilization Fund is comprised of short-term bonds, cash, and Certificate of Deposits. Treasurer Schmidt stated she does not feel that the Budget Stabilization Fund will need to be withdrawn down unless there is a cash flow issue but in the event the funds would be needed, she requested the assets be equally drawn down amongst the current investment managers of the Budget Stabilization Fund, JP Morgan, Babson, and Bank of North Dakota.

Mr. Hunter will reach out to the Legacy and Budget Stabilization Fund Advisory Board for their input.

ADMINISTRATION:

SIB Audit Committee – Ms. Miller Bowley briefed the board on the February 25, 2016, meeting of the SIB Audit Committee.

Mr. Gessner, SIB Audit Committee liaison to the SIB, stated the Audit Committee is extremely pleased with the progress of Audit Services. The work plan of the division has been streamlined and as a result, efficiencies have been realized and staff is able to focus their time on the areas at RIO, which are of greatest concern to the SIB Audit Committee, RIO Management, and the external auditors. The Board congratulated Ms. Miller Bowley and her team for their great work.

Ms. Miller Bowley stated Audit Services has completed the annual review of the Executive Director/CIO’s level of compliance with SIB Governance Manual Executive Limitation policies A-1 through A-11 for the calendar year beginning January 1, 2015 and ending December 31, 2015. Audit Services is sufficiently satisfied that the Executive Director/CIO is in compliance with the policies.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. LECH AND CARRIED BY A VOICE VOTE TO ACCEPT THE EXECUTIVE LIMITATONS AUDIT REPORT.

AYES: MR. GESSNER, COMMISSIONER GAEBE, MS. SMITH, MS. TERNES, TREASURER SCHMIDT, MR. LECH, COMMISSIONER HAMM, MR. TRENBEATH, MR. SANDAL, AND LT. GOVERNOR WRIGLEY
NAYS: NONE
MOTION CARRIED
ABSENT: MR. OLSON

Ms. Miller Bowley also informed the Board Ms. Karol Riedman, external member of the SIB Audit Committee, has accepted a position with the ND University System and is willing to continue to serve on the Committee. The Audit Committee membership has a term of one year. Ms Miller Bowley also stated Ms. Laura Schratt, wife of the current ED/CIO of RIO, is also employed at the ND University System. Both Ms. Riedman and Ms. Schratt report administratively to the agency Interim Chief of Staff and organizationally to the agency Audit Committee. Legal counsel was sought to determine if there was a conflict of interest and Ms. Murtha has advised RIO that a conflict of interest does not exist.

Executive Review Committee – SIB Governance Manual C-4, Monitoring Executive Performance, states that “at the February board meeting, the chairperson will appoint a three member committee to review the board’s evaluation and make a recommendation to the full board concerning compensation for the Executive Director/CIO.”

Executive Review Committee members are Mr. Sandal, Chair, Mr. Lech, and Lt. Governor Wrigley. The Committee is to report to the board by the May meeting with final action by the board no later than the June board meeting.

Staff Update – Mr. Hunter informed the board Mr. Len Wall has accepted the Data Processing Coordinator position with RIO effective February 16, 2016. The office is now fully staffed and thanked Mr. Richard Nagel, Supervisor of Information Systems, for expanding his duties and responsibilities in the interim.

Callan Annual Conference – Treasurer Schmidt, Mr. Lech, Ms. Smith, and Mr. Trenbeath attended Callan's Annual Conference, January 25-27, 2016, in San Francisco, CA. Attendees stated the conference was very beneficial, timely, organized, and encouraged other trustees to attend the conference.

BOARD EDUCATION:

The Board continued their review of "A Primer for Investment Trustees." Mr. Hunter reviewed Section 5, Investment Risk Tolerance.

OTHER:

The next meeting of the SIB is scheduled for March 18, 2016, at 8:30 a.m. in the Peace Garden Room.

The next meeting of the SIB Audit Committee is scheduled for May 26, 2016, at 3:00 p.m. in the Peace Garden Room.

ADJOURNMENT:

With no further business to come before the SIB, Lt. Governor Wrigley adjourned the meeting at 11:29 a.m.

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Lt. Governor Wrigley, Chair
State Investment Board

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Bonnie Heit
Assistant to the Board

Private Equity Manager Search

Callan Associates Reference Materials

March 14, 2016

Dave Hunter, Executive Director / CIO

Darren Schulz, Deputy Chief Investment Officer

ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

Private Equity (PE) - Investment Manager Search

Background:

1. Upon completing a review of our existing PE managers in late-2015, the SIB approved RIO's recommendation to engage Callan Associates to conduct a manager search to identify at least one other PE firm to complement our existing strategic partnership with Adams Street Partners.
2. After initially identifying 12 potential PE candidates, RIO and Callan selected BlackRock, Pantheon and Pathway as our top three semi-finalists. All three of these candidates were then presented to the Callan private equity search committee for approval without exception.
3. The top two candidates, BlackRock Private Equity Partners and Pathway Capital Management, will present their PE proposals to the SIB for approval on March 18, 2016.
4. **RIO deems both of these firms to be outstanding candidates and will formally recommend the SIB approve one of these managers be awarded a $100 million commitment (to be deployed over four years)** in order to reduce the current underweight position to PE in the Pension Trust.
5. **RIO will also review Callan's PE pacing model with the SIB to provide assurance that the proposed $25 million annual commitment to this new PE partner is reasonable** based on current market factors and assuming a 0% growth factor (which is deemed to be conservative).
6. **During the last six months, RIO notes that the SIB already approved two separate $30 million commitments to the 2015 and 2016 Adams Street Partners Global Fund which are incorporated into our PE pacing model analysis.**
7. Callan's Private Equity Search Evaluation Materials are provided for reference purposes and immediately follow the previously distributed background materials on PE and our current holdings.

Callan Associates – Private Equity Overview

What is it?

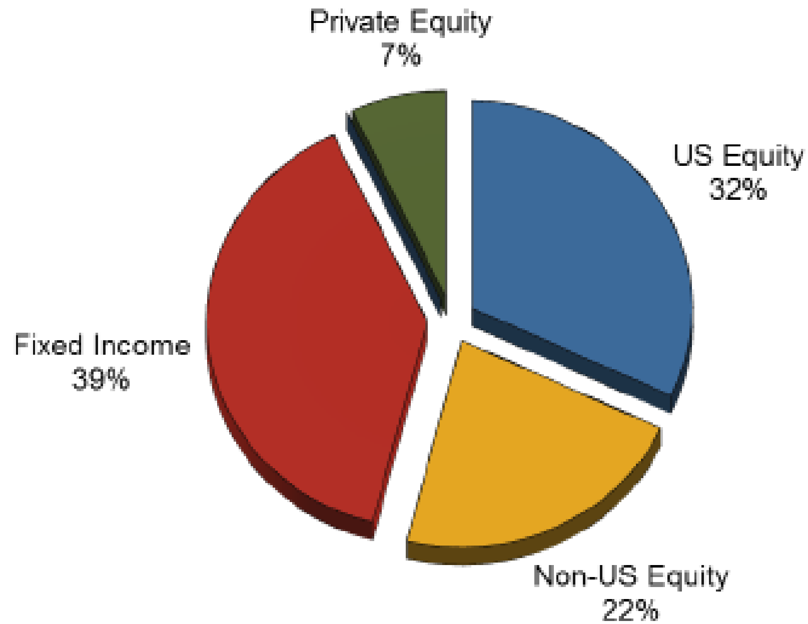
- Private equity is defined as private, unregistered investments in operating companies typically accessed through limited partnership companies.
- Partnership structure:
  - A general partner (GP) who manages the assets and who has unlimited liability for actions of the fund.
    - *The GP collects a fee for managing the fund, which typically takes the form of a management fee plus a percentage of profits.*
  - Limited partners (LPs) whose liabilities are limited to the capital commitments made and who have little participation in the partnership's management.
- Private equity investments are characterized by very long investment horizons.
- Private equity = private corporate finance investments.
- Five key strategies:
  - Venture capital
  - Buyouts
  - Special situations
  - Subordinated debt
  - Distressed debt
- Key benefit sought is high rate of return, other benefits such as diversification are secondary.
- The primary drawbacks are illiquidity and program complexity.
- Usage by institutional investors is becoming very common, especially among larger funds.

Callan Associates – Private Equity

Strategies and Benefits

- Generally invest in one or more of five types of strategies:
  - Venture capital
  - Buyouts
  - Special situations
  - Subordinated debt
  - Distressed debt
- Typically 5%-10% of portfolio.
- Returns above stocks and bonds.
  - Huge variation between best and worst-performing funds.
  - Huge variation between vintage years.
  - Median is typically not good enough to beat S&P 500.
- Moderate diversifier due to valuation based accounting.

Example Asset Allocation with Private Equity



Callan's Capital Market Expectations

2015 Capital Market Expectations: Return and Risk

Summary of Callan's Long-Term Capital Market Projections (2015-2024)

Asset Class	Index	PROJECTED RETURN 1-Year Arithmetic	PROJECTED RETURN 10-Year Geometric*	PROJECTED RISK Standard Deviation	Projected Yield
Equities					
Broad Domestic Equity	Russell 3000	9.15%	7.60%	19.00%	2.00%
Large Cap	S&P 500	8.90%	7.50%	18.30%	2.20%
Small/Mid Cap	Russell 2500	10.15%	7.85%	22.95%	1.40%
International Equity	MSCI World ex USA	9.25%	7.50%	20.20%	3.00%
Emerging Markets Equity	MSCI Emerging Markets	11.45%	7.90%	27.95%	2.50%
Global ex-US Equity	MSCI ACWI ex USA	9.80%	7.80%	21.45%	2.90%
Fixed Income					
Defensive	Barclays Govt 1-3	2.75%	2.75%	2.25%	2.80%
Domestic Fixed	Barclays Aggregate	3.05%	3.00%	3.75%	4.00%
Long Duration	Barclays Long G/C	4.70%	4.10%	11.40%	5.50%
TIPS	Barclays TIPS	3.10%	3.00%	5.30%	4.00%
High Yield	Barclays High Yield	5.60%	5.05%	11.45%	7.00%
Non-US Fixed	Citi Non-USD World Govt	3.15%	2.75%	9.40%	3.80%
Emerging Market Debt	JMP EMBI Global Diversified	5.40%	4.90%	10.65%	6.40%
Other					
Real Estate	Callan Real Estate	7.35%	6.15%	16.50%	5.00%
Infrastructure	S&P Global Infrastructure	8.90%	7.35%	19.00%	3.00%
Private Equity	TR Post Venture Cap	13.55%	8.50%	33.05%	0.00%
Hedge Funds	Callan Hedge FoF	5.40%	5.10%	8.85%	0.00%
Commodities	DJ-UBS Commodity	4.65%	3.05%	18.25%	2.00%
Cash Equivalents	90-Day T-Bill	2.00%	2.00%	0.90%	2.00%
Inflation	CPI-U	2.25%	2.25%	1.50%	

*Geometric returns are derived from arithmetic returns and associated risk (standard deviation).

Private Equity offers the highest Projected Return (and Risk)

Callan's Key Considerations:

1. **Higher Fees and less liquid than public equity;**
2. **Implementation is a key risk and requires a long time horizon and continual investment; and**
3. **Requires greater oversight than most public investments and is more difficult to monitor and value.**

Callan | Knowledge. Experience. Integrity.

2015 Asset Allocation and Liability Study: Phase I

Private Equity Performance Summary

Pension Trust Private Equity
As of September 30, 2015
($ in millions)

#	Adams Street Partnerships (ASP)	Vintage Year	Commitment	Unfunded Commitment	Net Asset Value	% Total Pension	Internal Rates of Return (IRR) – Net Returns: 1-year	3-years	5-years	10-years	Inception
1	1998 BPF Trust Subscription	1998	$ 23.7	$ 0.9	$ 2.1	0.0%	(5.9%)	2.9%	6.4%	10.6%	5.0%
2	1999 BPF Non-U.S. Trust Subscription	1999	$ 24.5	$ 0.6	$ 4.0	0.1%	9.7%	6.4%	6.7%	16.8%	12.0%
3	1999 BPF Trust Subscription	1999	$ 24.5	$ 1.1	$ 3.1	0.1%	(4.8%)	4.1%	7.4%	10.5%	6.0%
4	ASP 2008 Non-US Fund	2008	$ 10.0	$ 2.1	$ 7.7	0.2%	12.3%	13.7%	11.2%	-	9.3%
5	ASP 2010 Direct Fund	2010	$ 1.5	$ 0.1	$ 1.6	0.0%	14.4%	18.7%	16.6%	-	15.3%
6	ASP 2010 Emerging Markets Fund	2010	$ 1.5	$ 0.5	$ 1.2	0.0%	18.3%	14.6%	-	-	10.5%
7	ASP 2010 Non-US Developed Fund	2010	$ 4.5	$ 1.6	$ 2.5	0.1%	4.5%	6.9%	6.8%	-	6.4%
8	ASP 2010 US Fund	2010	$ 7.5	$ 2.8	$ 5.4	0.1%	18.6%	16.6%	15.7%	-	16.0%
9	Brinson Venture Partnership Fund III	1993	$ 3.0	$ -	$ -	0.0%	-	10.8%	21.9%	27.3%	29.6%
10	BVCF III	1993	$ 3.0	$ -	$ -	0.0%	-	-	(2.9%)	(7.4%)	40.4%
11	BVCF IV	1999	$ 25.0	$ -	$ 3.8	0.1%	2.7%	31.5%	39.1%	26.1%	7.7%
12	Direct Co-Investment	2006	$ 20.0	$ 0.9	$ 10.5	0.2%	13.1%	19.7%	14.5%	-	5.8%
13	Institutional Venture Capital Fund II	1989	$ 5.0	$ -	$ -	0.0%	-	-	(12.1%)	17.9%	21.3%
	Total ASP Private Equity		$ 153.7	$ 10.5	$ 41.9	0.9%	8.9%	14.5%	12.8%	13.6%	11.0%
	Non-ASP Primary Fund Partnerships										
11	Capital International Private Equity Fund V	2007	$ 35.0	$ 5.6	$ 11.9	0.3%	(31.1%)	(12.0%)	(0.4%)	-	0.8%
12	Capital International Private Equity Fund VI	2011	$ 35.0	$ 13.8	$ 13.8	0.3%	(26.2%)	(19.4%)	-	-	(19.3%)
13	Coral Momentum Fund	2002	$ 25.0	$ -	$ -	0.0%	(13.9%)	(41.6%)	(32.4%)	(19.6%)	(18.5%)
14	Coral Partners V	1998	$ 40.0	$ -	$ -	0.0%	-	-	5.8%	18.5%	(5.6%)
15	Coral Partners V - Supplemental	2001	$ 2.0	$ -	$ -	0.0%	-	-	(46.6%)	(13.9%)	(10.2%)
16	Corsair III	2007	$ 25.0	$ 2.7	$ 13.7	0.3%	(13.5%)	(5.2%)	(3.9%)	-	(4.6%)
17	Corsair III - ND Investors LLC	2008	$ 11.2	$ 0.3	$ 11.7	0.3%	1.2%	2.7%	2.0%	-	1.0%
18	Corsair IV	2010	$ 25.0	$ 12.5	$ 16.4	0.4%	18.1%	17.0%	8.8%	-	7.0%
19	EIG Energy Fund XIV	2007	$ 45.0	$ 3.1	$ 14.7	0.3%	(37.5%)	(15.3%)	(6.0%)	-	2.5%
20	Hearthstone MSII	1999	$ 3.5	$ 3.5	$ (0.1)	(0.0%)	18.6%	175.5%	(100.0%)	(18.8%)	27.5%
21	Hearthstone MSIII	2003	$ 35.0	$ 35.2	$ 0.1	0.0%	22.8%	-	-	85.3%	25.2%
22	InvestAmerica (Lewis and Clark Fund)	2002	$ 7.5	$ 0.8	$ 2.7	0.1%	(31.0%)	(10.1%)	0.0%	2.1%	2.2%
23	L&C II	2009	$ 15.0	$ 1.4	$ 9.5	0.2%	(14.1%)	(8.5%)	(7.7%)	-	(8.5%)
24	Matlin Patterson Global Opportunities	2002	$ 25.3	$ -	$ 0.0	0.0%	(0.0%)	(1.8%)	10.6%	12.3%	16.7%
25	Matlin Patterson Global Opportunities II	2004	$ 40.6	$ 0.0	$ 1.6	0.0%	26.6%	(1.4%)	(34.3%)	(24.1%)	(23.9%)
26	Matlin Patterson Global Opportunities III	2007	$ 40.0	$ 4.1	$ 26.9	0.6%	1.3%	3.2%	17.2%	-	4.9%
27	Quantum Energy Partners IV	2007	$ 15.0	$ 2.0	$ 6.4	0.1%	(36.5%)	4.4%	12.7%	-	7.1%
28	Quantum Resources	2006	$ 15.0	$ 1.4	$ 0.0	0.0%	(55.6%)	(15.3%)	16.0%	-	2.9%
	Total - Non-ASP Private Equity		$ 440.2	$ 86.4	$ 129.5	2.8%	(16.6%)	(5.5%)	(0.9%)	(0.4%)	(0.4%)
	Total - Private Equity		$ 593.9	$ 96.9	$ 171.4	3.8%	(10.7%)	(0.6%)	2.7%	4.0%	3.8%

Source: Adams Street

Returns are reviewed, but not audited.

Summary: The private equity portfolio within the Pension Trust can largely be divided into two groups:

1) **the Adams Street Partnerships which have generally performed in line with expectations with a net IRR of 12.8% in the last 5-years and 11.0% since inception**; and

2) **the Non-ASP Partnerships which have generally performed below expectations with a net IRR of -0.9% in the last 5-years and -0.4% since inception (with a few positive exceptions).**

Key Takeaway: Promote the development of *strategic partnerships* like ASP to leverage a “best ideas” approach while increasing pricing leverage.

Callan

March 18, 2016

North Dakota State Investment Board

Private Equity Fund-of-Funds
Semi-Finalist Candidates

Callan Associates Inc.
600 Montgomery Street, Suite 800
San Francisco, CA 94111
415-974-5060
www.callan.com

The following investment evaluation was compiled by Callan Associates Inc. from information provided by the candidate general partner(s) and other sources believed to be reliable. Unless otherwise noted, performance figures reflect a commingled fund or discretionary accounts. All written comments in this report are objectively stated and are based on facts gathered in good faith.

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North Dakota State Investment Board
Private Equity Fund-of-Funds Search Semi-Finalist Candidates
March 18, 2016

Background

North Dakota pension funds have been investing in private equity for decades. The implementation combined commitments to direct partnership investments managed in-house, and fund-of-funds[1] managed by Adams Street Partners. In 2015, NDSIB made the decision that all future private equity commitments would be made through fund-of-funds. NDSIB retained Callan to assist NDSIB Staff in a search for a second fund-of-funds manager to further diversify the portfolio alongside Adam Street Partners. The mandate for both managers is a Global Core approach, diversified by strategy, geography, and vintage year. At present, Adams Street manages approximately 25% of the private equity assets, while the direct partnership investments represent 75% of the portfolio's value. As the direct investments liquidate during the next seven to ten years, it is anticipated that the liquidated proceeds will be directed to Adams Street and the newly hired firm such that each firm will manage approximately 50% of the total private equity portfolio going forward.

Search Process

Strategic Planning: In the strategic planning process, Callan and Staff developed a commitment pacing model for NDSIB to achieve and maintain its 6% private equity target[2]. The model indicates that the new manager should be investing approximately $25 million per year to underlying partnerships. Since most private equity fund-of-funds vehicles commit to partnership investments over three years for vintage year diversification purposes, the nominal award is approximately $75 million. The specific amount of the award will be adjusted based on the finalist's specific investment pattern. Callan and Staff also developed *Description of Mandate* and *Search Evaluation Criteria* documents to guide the search process (see appendix pages 20-22), and reviewed and customized Callan's questionnaire materials. After the search materials were released, Staff issued a clarification to the Mandate and Criteria documents (see appendix page 23).

Candidate Identification: Callan has been monitoring the fund-of-funds universe for over 20 years and tracks the universe of providers. After reviewing Callan's comprehensive listing of fund-of-funds providers, Callan and Staff identified a candidate pool of 12 potential global core providers to screen. The firms were qualified as having investable products available within NDSIB's search window. The search invited providers to propose both commingled fund-of-funds vehicles and customized fund-of-one[3] vehicles. All 12 candidates that received questionnaire packages provided responses. The responding firms were:

1. Abbott Capital
2. BlackRock Private Equity Partners
3. Grosvenor Private Markets
4. Hamilton Lane Advisors
5. KKR Customized Portfolio Solutions
6. Mesirow Private Equity
7. Neuberger Berman Private Equity
8. Pantheon Ventures
9. Pathway Capital Management
10. Portfolio Advisors
11. Public Pension Capital
12. RCP Advisors

[1] A fund-of-funds is commingled vehicle that combines capital from multiple investors to invest in a diversified portfolio of private equity partnership investments.
[2] The private equity target was increased from 5% to 6% after the search was initiated.
[3] A Fund-of-one is a single limited partner investment vehicle (as opposed to a commingled vehicle).

Callan and Staff reviewed all 12 questionnaire responses. Callan assembled a quantitative analysis that focused on historical track records, including annual investment count, dollar volume, and relative return results that examined both the total return and distributed-capital return (a liquidity measure). Candidate returns were benchmarked against the returns of the Thomson/Cambridge Private Equity Database, and were evaluated relative to each other. Callan also calculated the fee schedules for all respondents to ensure proposals were competitively priced. Staff and Callan also reviewed other common qualitative and quantitative manager search-related factors, including:

- Organizational considerations
- Staffing structure, qualifications, and stability
- Assets under management
- Lines of business
- Client base
- Investment philosophy and process
- Diversification of the proposed portfolio
- Historical diversification information
- Historical investment return information
- Proposed vehicle options
- Fee proposals

Staff and Callan identified three firms that met the search criteria broadly, and were among the firms with the most attractive historical performance. The three semi-finalist firms were:

1. BlackRock Private Equity Partners
2. Pantheon Ventures
3. Pathway Capital Management

Onsite visits were conducted by Staff at all three semi-finalist firms' offices, with Callan joining one of the meetings. Callan has previously conducted in-depth evaluation of, and has client overlap with, all three firms. Callan's Manager Search Committee reviewed the search process and the three semi-finalist candidates. After the onsite visits, Staff selected two candidates to present to the NDSIB Board for consideration and selection as the finalist.

Due to time considerations, Callan prepared the Manager Search Book prior to Staff's completion of the onsite visits. Therefore, information on the three semi-finalist candidates is included even through only two firms will be selected by Staff to present to the Board.

Fund-of-Funds and Fund-of-Ones

At Staff's direction, both commingled fund-of-funds and fund-of-one vehicle proposals were solicited. Each has unique considerations.

Fund-of-Funds commingle a number of investors' capital in a vehicle to achieve economies of scale. Key considerations of fund-of-funds include:

- *Priority for allocations to hard-to-access partnerships*. Because managers' commingled products are generally longstanding investors in access-constrained partnerships, the vehicles receive allocation priority to hard-to-access partnerships. New investors in the fund-of-funds receive allocations to the "close-to-new-investor" partnerships, even though they would not likely receive an allocation outside the fund-of-funds vehicle. There is also a safety-in-numbers consideration that one is not potentially being allocated different investments than other important clients.

- *The strategy is well-defined*. The private placement memorandum pre-defines the parameters of commingled vehicle programs, and reviewing the investment programs of prior flagship products provides insight into the portfolio structure of the future vehicles. Generally, less oversight of the portfolio and manager is required by Staff regarding both strategy and allocation of investments.

- *Commingled fund fees can be higher.* At a certain point, managers may be willing to give fee breaks to clients in fund-of-one vehicles that would not be available to investors in a fund-of-funds vehicle. To a moderate degree however, the potentially higher fees of a fund-of-funds vehicle may be offset by the sharing of the vehicle's expenses (such as fund formation, tax, audit, legal, custodial, and administrative expenses) with other investors.

Fund-of-Ones are single limited partner vehicles. Key considerations of fund-of-one vehicles include:

- *Ability to tailor allocations*. At the outset of the program, investors can direct the manager to adjust certain strategy exposures either to increase the allocation where practicable within the manager's business, or eliminate strategy or geography types. After the vehicle closes, the investor and manager should generally continue to interact regarding strategy, but the investors legal standing is reduced to that of a limited partner. The investor's limited partner status does not permit any discretion for the investor in the management of the assets; similar to a fund-of-funds, the manager has full discretion for all decisions.

- *Lower Fees*. Because fund-of-ones require relatively large commitments to be suitably diversified, managers may provide lower fee schedules for the vehicles compared to fund-of-funds vehicles. To a moderate degree however, the lower fee is offset by the investor incurring the entirely of certain vehicle expenses (such as fund formation, tax, audit, legal, custodial, and administrative expenses).

- *Greater interaction and monitoring is required.* Because a customized vehicle is considered a new investor in any underlying partnership, access-constrained partnerships may not be readily available, or allocations may be greatly reduced. Staff will need to assess how the manager is implementing its investment allocation policy on an ongoing basis to ensure that the fund-of-one is receiving its share of high quality investments. To the degree that the vehicle's strategy customization has an ongoing element, greater interaction with the manager will required by staff.

Semi-Finalist Firms

BlackRock Private Equity Partners: Blackrock Private Equity Partners (PEP) was founded in 1999 when Merrill Lynch hired Russ Steenberg to begin a private equity fund-of-funds and co-investment[4] business. Russ Steenberg was

[4] Co-investments are investments made directly into an operating company that is also being invested in by a private equity partnership. The fund-of-funds manager is jointly investing in the transaction, but has a passive, minority stake where the fund-of-funds manager does not have involvement with the ongoing management of the investment.

previously co-head of private capital at AT&T investment management. In 2006, Merrill Lynch Investment Managers was acquired by BlackRock and PEP became a wholly owned subsidiary of publicly-traded BlackRock. In 2012, BlackRock acquired the entire private markets team of Swiss Re, Swiss Re Private Equity Partners AG, and merged the team with PEP. PEP states that all Swiss Re employees were retained in the group, which approximately doubled PEP's headcount.

The PEP team has 116 employees, across private equity offices located in Princeton (NJ), London, Zurich, and Hong Kong. PEP receives some support services, such as human resources, information technology, and compliance from the parent company.

PEP manages commingled fund-of-funds vehicles, direct co-investment vehicles, and also manages fund-of-ones and advisory accounts for clients covering a wide array of private equity and private market mandate types. A key focus of the firm is co-investments. All investment professionals work on both primary and co-investment evaluations. BlackRock also includes secondary[5] investing in certain mandates. While all investment professionals work on secondaries, PEP has a small team that leads and coordinates the secondary projects. Assets under management (uncalled commitments plus net asset value) are approximately $12 billion.

Pantheon: Pantheon Ventures was founded in 1992 as the private equity division of GT Management. In 1988, the division was acquired by its employees. Pantheon operated as an independent boutique until 2004, when it was acquired by Russell Investments, a wholly owned subsidiary of Northwestern Mutual Life. In 2010, Russell Investments sold Pantheon to Affiliated Managers Group (AMG), a publicly-traded company that specializes in managing various investment boutiques. Currently AMG owns 74% of Pantheon, and 26% is owned by Pantheon's Partners and Principals.

The firm has 201 employees, with offices in London, San Francisco, New York, London, Hong Kong, Bogotá, and Seoul. Pantheon manages fund-of-funds, secondary funds, and a publicly traded fund-of-funds listed on the London Stock Exchange. It has also recently initiated co-investment funds. Each product is managed by a dedicated team. Assets under management (uncalled commitments plus net asset value) are approximately $30 billion.

Pathway: Pathway Capital Management was founded in 1991 by three private equity consulting professionals from Wilshire Associates. The firm is structured as a Delaware limited partnership and 100% employee-owned. Pathway's first non-discretionary program was initiated in 1991 and began discretionary asset management in 1993.

The firm has 123 employees, with offices in Irvine (CA), West Warwick (RI), London, and Hong Kong. Pathway manages commingled fund-of-funds vehicles and also manages fund-of-one and advisory accounts for clients. The firm's historical focus has been on primary partnership investments, and it initiated secondary and co-investment fund products in recent years. The products are managed by dedicated teams. Assets under management (uncalled commitments plus net asset value) are approximately $31 billion.

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[5] Secondary investments are the purchase of an existing partnership interest from the original investor after the partnership has been formed and operating for a period of time (is no longer a newly-formed "blind pool" investment).

APPENDIX

Semi-Finalist Comparisons

Track Record Analysis

Historical track record data is provided through June 30, 2015.

Yearly Fund and Commitment Investment Rate

The top portion of the following table shows the number of primary partnership commitments that each semi-finalist has made since 2000 (15.5 years). The bottom portion shows the dollar amounts committed to the partnerships in each of the years. The track record covers the tech recession, leverage boom, financial crisis, and subsequent recovery, encompassing more than a full business cycle.

Pantheon and Pathway's track records reflect partnership investments made as singular enterprises. BlackRock's track record is a combination of U.S. domiciled BlackRock and that of its 2012 acquisition of the Europe-based private markets team of Swiss Re. The acquisition approximately doubled the size of the BlackRock team. The Swiss Re NAV represented approximately 43% of the total NAV of the recently-combined organization. The composite represents the combined history of both organizations. The year 2013 was the first full year of integrated operation. More information on the components of the BlackRock track record is provided at the end of the performance section.

Vintage Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2Q15
# Investments																
BlackRock	36	27	15	26	26	75	76	67	55	13	18	17	23	19	44	16
Pantheon	31	21	14	11	30	37	45	54	38	17	14	28	28	26	25	23
Pathway	20	16	5	11	13	25	35	19	25	7	8	19	11	18	26	20
$ Committed ($000)																
BlackRock	595,946	510,698	234,201	240,532	187,812	1,076,661	1,641,543	1,270,533	1,371,066	192,439	198,062	184,036	314,020	353,875	678,875	240,317
Pantheon	450,812	298,503	316,832	366,376	718,325	1,211,042	1,761,558	2,795,142	2,384,434	587,262	534,669	957,251	863,855	507,705	424,979	331,576
Pathway	1,014,030	855,184	362,500	1,629,374	1,392,597	2,749,142	5,106,281	3,939,573	3,834,136	1,065,350	1,292,546	2,698,313	2,077,760	2,102,190	2,976,102	2,479,670

The following table shows the total commitments made by each semi-finalist firm since 2000, and the yearly average over the period:

Vintage Year	Since 00	Average
# Investments		
BlackRock	553	36
Pantheon	442	29
Pathway	278	18
$ Committed		
BlackRock	9,290,616	599,395
Pantheon	14,510,320	936,150
Pathway	35,574,749	2,295,145

Observations:

- All firms have had a strong, consistent presence in the marketplace and make sufficient annual commitments to be diversified within any specific vintage year. Dollar volumes are institutional in nature and sufficient to achieve good diversification.

- BlackRock has on average committed the least amount of capital each year (~600mm), and on average has made the most commitments. The larger partnership count could be related to two historical organizations acting independently, but the number of commitments in the last few years has been maintained at the historical composite's level.

- Pantheon places between BlackRock and Pathway in both dollar volume and number of investments, averaging close to $1 billion annually and 30 partnerships.

- Pathway is significantly larger and makes fewer commitments. Part of the reason for fewer commitments is that Pathway invests in developed markets only. Both BlackRock and Pathway have emerging markets in their history, which typically involve a greater number of smaller investments.

TVPI Benchmarking

The following table shows the "Total Value to Paid-In" (TVPI) ratio for each manager by vintage year. The calculation adds together cumulative distributions and current net asset value (NAV) to determine the current total value generated by the investments. It then divides the total value by the amount that has been paid-in.

Notionally, for every dollar paid-in to Pantheon's 2003 investments (TVPI of 2.23x) $1.23 of profit has been created. As another example, Blackrock's 15 partnership investments made in 2002 generated a collective "77 cents on the dollar" through June 30, 2015.

The table is divided into sections. The left box represents "mature years" (2000-2010) and the middle represents "immature" years (2011-2Q15), where the development of the underlying partnerships is too nascent to be considered meaningful for benchmarking. The right-most box shows the cap-weighted TVPI return generated over the entire 15.5 year period.

The vintage year TVPI's are color coded using a "stop-light" configuration. Green means that the vintage year's return achieved upper quartile performance against the Thomson/Cambridge Global All Private Equity Partnerships database. Yellow represents second quartile, and orange means the return is below median. The quartile cut-off points for the database are shown in the bottom portion of the table. Generally, having more green and less orange is preferable.

Vintage Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2Q15	Since 00
TVPI											<--- Mature Years	To Early for Meaningful Benchmarks --->					
BlackRock	1.62	1.65	1.77	1.63	1.73	1.49	1.49	1.63	1.37	1.53	1.40	1.50	1.17	1.12	0.99	0.90	1.50
Pantheon	1.73	1.77	1.71	2.23	1.86	1.54	1.48	1.50	1.61	1.52	1.48	1.33	1.17	1.02	1.00	0.95	1.55
Pathway	1.66	1.79	1.93	1.92	1.64	1.55	1.45	1.49	1.48	1.70	1.36	1.28	1.27	1.15	0.99	0.97	1.48
Cambridge Benchmarks: Global All Private Equity 6/30/15																	
TVPI - Upper	1.73	2.12	2.06	2.02	1.89	1.85	1.83	1.83	1.78	1.91	1.67	1.54	1.33	1.19	1.07	NA	1.75
TVPI - Median	1.22	1.56	1.54	1.54	1.48	1.46	1.45	1.50	1.44	1.53	1.41	1.25	1.17	1.05	0.98	NA	1.34

TVPI = (Distributions + NAV)/Paid-In   Quartile Key: First | Second | < Median

Observations:

- All of the managers' "Since 2000" TVPI returns rank second quartile, and cluster near the second quartile's mid-point of 1.55x.

The following table provides a summary ranking of the semi-finalists' cumulative track records since 2000 using several calculations. The rankings show calculations for cumulative periods: 1) since inception, and 2) for the mature-only period (2000-2010). The ranking also shows both cap-weighted and equal-weighted calculations. The left two boxes shows a cap-weighted return, where each year's contribution to the total return is weighted by the amount of committed dollars that were cumulative paid-in to the investments. The right two boxes show an equal-weighted average across the years (as if the same dollar amount was committed in each year). The equal-weighted average is shown as Callan believes that it provides insight regarding the outcome of partnership-selection (without the influence of capital weighting). The color coding highlights first, second, and third ranked positions.

Cumulative TVPI Comparisons

All 00	Mature 00	Avg 00	Avg Mat
Cap-Weighted		Equal-Weighted	
Pantheon	Pantheon	Pantheon	Pantheon
BlackRock	Pathway	Pathway	Pathway
Pathway	BlackRock	BlackRock	BlackRock
1.55	1.59	1.49	1.68
1.50	1.56	1.48	1.63
1.48	1.52	1.43	1.57

Observations:

- The high and low returns are within 4% to 7% of each other depending on the calculation.
- Pantheon's cumulative total returns are higher across all measures over the track record period.
- Except for the full period cap-weighted return, Pathway's returns are ranked second.
- Blackrock's second rank in the All 00 metric indicates that its immature year valuations (2011-2Q15) are generally higher than Pathway's on a cap-weighted basis.

DPI Benchmarking

The following table shows the "Distributed to Paid-In" (DPI) ratio for each manager by vintage year. DPI is used to measure both the absolute liquidity of a portfolio and also the relative speed at which the liquidity is achieved. The calculation divides the cumulative distributions by the amount that has been paid-in. DPI is a component of TVPI and shows how much of the total value created has been returned in the form of cash.

Notionally, for every dollar paid-in to Pantheon's 2000 investments (DPI of 1.98x), 98 cents of profit have been returned in cash. The TVPI of that year is 2.23x, ($1.23 of profit) so the remaining 25 cents of profit represent unrealized NAV.

Similar to the TVPI analysis, we have color coded the DPI vintage year results against the Thomson/Cambridge Global All Private Equity database. Green represents first quartile, yellow second quartile, and orange means the return is below median. The quartile cut-off points for the database are shown in the bottom portion of the table.

Vintage Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2Q15	Since 00
DPI										<--- Mature Years		To Early for Meaningful Benchmarks --->					
BlackRock	1.52	1.58	1.67	1.47	1.41	1.08	0.92	0.85	0.66	0.48	0.29	0.34	0.11	0.09	0.02	0.03	0.94
Pantheon	1.64	1.62	1.60	1.98	1.55	1.04	0.96	0.81	0.70	0.35	0.36	0.21	0.05	0.03	0.01	0.00	0.86
Pathway	1.60	1.73	1.80	1.74	1.49	1.25	0.95	0.99	0.71	0.82	0.34	0.32	0.15	0.11	0.01	0.00	0.89
Cambridge Benchmarks: Global All Private Equity 6/30/15																	
DPI - Upper	1.65	1.95	1.97	1.74	1.51	1.33	1.17	1.14	0.96	0.84	0.54	0.26	0.13	0.03	0.00	NA	1.19
DPI - Median	1.08	1.37	1.33	1.37	1.00	0.97	0.83	0.62	0.58	0.50	0.27	0.06	0.02	0.00	0.00	NA	0.59

DPI = Distributions/Paid-In   Quartile Key: First | Second | < Median

Observations:

- All of the managers' "Since 2000" DPI returns rank second quartile, and cluster near the second quartile's mid-point of 0.89x.

The following table provides a summary of the semi-finalists' cumulative DPIs: 1) since inception, and 2) for the mature-only period (2000-2010). The left two boxes show a cap-weighted return, where each year's contribution to the total DPI is weighted by the amount of committed dollars that were cumulative paid-in to the investments. The right two boxes show an equal-weighted average across the years (as if the same dollar amount was committed in each year). The equal-weighted average is shown as Callan believes that provides insight regarding the outcome of partnership-selection (without the influence of capital weighting).

Cumulative DPI Comparisons

All 00	Mature 00	Avg 00	Avg Mat
Cap-Weighted		Equal-Weighted	
BlackRock	Pathway	Pathway	Pathway
Pathway	BlackRock	Pantheon	Pantheon
Pantheon	Pantheon	BlackRock	BlackRock
0.93	1.08	0.88	1.22
0.89	1.00	0.81	1.15
0.86	0.96	0.78	1.08

Observations:

- There is slightly more variability in the outcome of the cumulative DPI measures, with the high and low returns being within 8% to 13% of each other depending on the calculation.
- Pathway has generally been more liquid than Pantheon and BlackRock over the track record period. This is likely because Pantheon and BlackRock have more international and particularly emerging markets investments. Non-US liquidity did not recover to a high a degree after the financial crisis.
- Blackrock's first rank in the All 00 metric indicates that its immature years DPI (2011-2Q15) are generally higher than Pantheon's or Pathway's on a cap-weighted basis.

IRR Benchmarking

The following table shows the Internal Rate of Return (IRR[6]) for each manager by vintage year. The calculation shows the average annual percentage return since inception taking into account the size and timing of the individual cash flows and the ending NAV.

Callan generally prefers the TVPI as a measure of wealth creation; however, the IRR can be instructive as it combines both wealth generated and the time-value of money. Weaknesses of the IRR are that the calculation can be highly sensitive to large cash flows over short time periods (hence the "not meaningful" labels provided by the managers in the immature years). Over longer periods, the IRR percentage return tends to become relatively static, and the percentage return figure can be heavily influenced by results that occurred during the early-years of the calculation period (the early-years' percentage return tends to become "baked-in").

The vintage year IRRs are color coded using a "stop-light" configuration. Green means that the vintage year's return achieved upper quartile performance against the Thomson/Cambridge Global All Private Equity Partnerships database. Yellow represents second quartile, and orange means the return is below median. The quartile cut-off points for the database are shown in the bottom portion of the table. Generally, having more green and less orange is preferable.

Vintage Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2Q15	Since 00
IRR																	
BlackRock	12.07%	15.32%	15.47%	13.92%	12.84%	8.12%	8.10%	11.71%	10.11%	15.68%	13.88%	23.76%	11.82%	12.03%	NM	NM	10.79%
Pantheon	12.59%	15.01%	16.58%	21.75%	14.01%	8.77%	7.96%	9.97%	14.19%	14.09%	16.17%	14.90%	10.98%	2.59%	NM	NM	11.80%
Pathway	12.95%	20.65%	19.43%	23.18%	14.35%	10.04%	8.13%	11.21%	12.52%	18.11%	13.43%	12.99%	17.35%	NM	NM	NM	12.78%
Cambridge Benchmarks: Global All Private Equity 6/30/15																	
IRR - Upper	11.99%	19.63%	22.75%	16.98%	13.56%	13.01%	13.82%	15.20%	17.97%	22.88%	23.13%	22.63%	20.22%	18.01%	12.77%	NA	16.96%
IRR - Median	3.31%	8.43%	10.48%	9.50%	7.84%	7.50%	7.72%	9.95%	11.10%	15.71%	13.23%	11.88%	11.73%	5.37%	-3.31%	NA	8.75%

IRR = Dollar-Weighted Annualized Quartile Key: First Second < Median

Observations:

- All of the managers' returns rank second quartile, and the cumulative IRR returns are close to the second quartile's mid-point of 12.85%.

BlackRock Composite Commentary

Having reviewed the various private equity return calculations, it is relevant to review the nature of BlackRock's two-firm composite track record. The table below shows the "Since 2000" return for both the original BlackRock team ("BR Legacy") and the Swiss Re team ("SR Legacy") whose last commitments as a standalone organization terminated at the end of 2012. It also shows BlackRock's composited track record alongside Pantheons' and Pathway's comparable figures.

[6] The IRR is the CFA Institute recommended return calculation for private equity investments and portfolios. The IRR considers the timing and amount of the contributions and distributions of into and out of the investment and the investments terminal value to impute an annualized return over the life of the project. A dollar-weighted return is considered the appropriate calculation for private equity because private equity partnerships and portfolios typically have negative returns early in their lives when little capital is work and positive return later in their development when more dollars are at work in the portfolio. Most other asset classes (such as public equity and fixed income) use Time-Weighted Returns (TWRs), which equal weight and link periodic (e.g., quarterly) return calculations. The TWR is equal-weighted and does not give any consideration to the amount of capital at work across the time periods linked in the calculation.

Cap-Weighted Returns - Since 2000 as of June 30, 2015 (15.5 years)

Measure	BR Legacy	SR Legacy	BR+SR	Pantheon	Pathway
TVPI	**1.61**	**1.39**	**1.50**	**1.55**	**1.48**
DPI	**0.96**	**0.91**	**0.94**	**0.86**	**0.89**
IRR	**12.1%**	**9.2%**	**10.8%**	**11.8%**	**12.8%**

It is evident that the Swiss Re Legacy track record has lower total returns than the other candidates, albeit all three measures (TVPI, DPI and IRR) do rank within the second quartile of the Thomson/Cambridge database.

In considering BlackRock's candidacy, there should be some level of conviction that the Black Rock Legacy team will be able to improve the performance of the Swiss Re Legacy team's partnership selection in the future by applying its investment process to all future investments.

Fee Schedules

The following table compares the fee schedules of the three semi-finalists for a $75 million commitment. In the table, we calculate the projected dollar amounts for each component of the fee (annual management fee and carried interest) and the total fees paid. The table also shows an average annual basis point calculation based on the commitment amount (not NAV).

The carried interest will vary depending on the level of profitability. Callan has assumed that the investments will ultimately return a TVPI of 1.60x, which would equate to a net IRR in the low-double digits (approximately 12%-14% depending on the specific cash flows).

	BlackRock			Pantheon			Pathway		
Year	Mgmt Fee	Carry	Total	Mgmt Fee	Carry	Total	Mgmt Fee	Carry	Total
1	262,500	0	**262,500**	137,500	0	**137,500**	151,875	0	**151,875**
2	262,500	0	**262,500**	275,000	0	**275,000**	303,750	0	**303,750**
3	262,500	0	**262,500**	412,500	0	**412,500**	455,625	0	**455,625**
4	110,670	0	**110,670**	412,500	0	**412,500**	607,500	0	**607,500**
5	150,675	0	**150,675**	412,500	0	**412,500**	607,500	0	**607,500**
6	175,079	192,857	**367,936**	412,500	88,532	**501,032**	607,500	0	**607,500**
7	182,875	192,857	**375,732**	412,500	88,532	**501,032**	607,500	0	**607,500**
8	160,781	192,857	**353,638**	385,000	88,532	**473,532**	607,500	0	**607,500**
9	133,219	192,857	**326,076**	330,000	88,532	**418,532**	546,750	0	**546,750**
10	96,469	192,857	**289,326**	247,500	88,532	**336,032**	486,000	0	**486,000**
11	59,719	192,857	**252,576**	165,000	88,532	**253,532**	425,250	0	**425,250**
12	32,156	192,857	**225,013**	82,500	88,532	**171,032**	364,500	0	**364,500**
13	0	0	**0**	0	0	**0**	303,750	0	**303,750**
14	0	0	**0**	0	0	**0**	243,000	0	**243,000**
15	0	0	**0**	0	0	**0**	182,250	0	**182,250**
Total fee	1,889,143	1,350,000	**3,239,143**	3,685,000	619,725	**4,304,725**	6,500,250	0	**6,500,250**
Yearly Avg.	125,943	90,000	**215,943**	245,667	41,315	**286,982**	433,350	0	**433,350**
Avg. Bps	0.17%	0.12%	**0.29%**	0.33%	0.06%	**0.38%**	0.58%	0.00%	**0.58%**

Carried Interest

<u>BlackRock</u>: The carried interest for BlackRock is <u>gross</u> of all vehicle fees and expenses. BlackRock also provides a preferred return (or hurdle rate) to investors of 8% before it is entitled to receive carried interest. The carried interest calculation is subject to a full catch-up after the hurdle rate is achieved.

<u>Pantheon</u>: Pantheon's offers a pool that combines secondaries and co-investments. Investors are able to either opt-in or opt-out of the pool. Callan did not model the pool as part of the investment program. If NDSIB were to opt-in to the pool an additional 10% carry would be levied. Pantheon's carry is <u>net</u> of vehicle fees and expenses. Pantheon provides a preferred return (or hurdle rate) to investors of 8% before it is entitled to receive carried interest. The carried interest calculation is subject to a full catch-up after the hurdle rate is achieved.

<u>Pathway</u>: Pathway includes both secondaries and co-investments in its vehicle, but does not charge any carried interest on those investments.

The following table provides a perspective on the relative placement of the semi-finalists' fees within the range of fees proposed by the respondent pool, which generally reflects of the fee range of the broader fund-of-funds manager universe.

All Candidates - Rank by Total Fee (Mgmt and Carry)

Fee Ranking	$ Mgt Fee	BP	$ Carry	BP	$ Total	BP
BlackRock	**1,889,143**	**0.17%**	**1,350,000**	**0.12%**	**3,239,143**	**0.29%**
Pantheon	**3,685,000**	**0.33%**	**619,725**	**0.33%**	**4,304,725**	**0.38%**
Manager #3	4,706,484	0.42%	0	0.00%	4,706,484	0.42%
Manager #4	6,295,949	0.56%	0	0.00%	6,295,949	0.56%
Manager #5	5,911,325	0.53%	390,887	0.03%	6,302,212	0.56%
Manager #6	5,742,168	0.51%	675,000	0.06%	6,417,168	0.57%
Pathway	**6,500,250**	**0.58%**	**0**	**0.00%**	**6,500,250**	**0.58%**
Manager #8	5,918,491	0.53%	842,689	0.07%	6,761,180	0.60%
Manager #9	3,857,585	0.34%	2,341,995	0.21%	7,740,486	0.69%
Manager #10	6,562,500	0.58%	2,296,875	0.20%	8,859,375	0.79%
Manager #11	2,325,000	0.21%	6,584,464	0.24%	8,909,464	0.79%
Average		0.43%		0.12%		**0.57%**
Median		0.51%		0.07%		**0.57%**

<u>Observations</u>:

- BlackRock's proposed annual management fee is significantly below current market pricing. Much of the firm's total compensation is reliant on carried interest which will be heavily dependent on market conditions. Including the carried interest, Blackrock's fee proposal is significantly less than what other qualified providers were willing to charge. In fee structures where carried interest is a large component of return, investors need to consider whether there may be any potential impacts—to both the manager and the investor—if the portfolio does not perform sufficiently for the manager to achieve the level of compensation it desired at the outset. This is particularly the case with private equity, where the relationship cannot be easily terminated.

- Pantheon recently reduced fees for its commingled products in order to position itself as one of the lower cost providers in the industry. It is also extending public funds, including NDSIB, additional cost discounts relative to other client types (called its P4 program). Callan did not model Pantheon's optional secondary and co-investment pool into the fee structure. If NDSIB opts into that pool there will be an additional net carried interest charged of 10% of the pool's profits, subject to an 8% hurdle rate.

- Pathway's fees are higher than the other two semi-finalists, but approximate the average and median of the fees proposed by the other fund-of-funds candidates. Except for BlackRock, the range of fees reflect current market pricing.

Comparative Total Private Equity Staffing

Staffing

Position	Pantheon	Pathway	Blackrock
Sr. Investment Professionals	48	21	14
Jr. Investment Professionals	23	22	18
Other Sr. Non-Inv. Professionals	28	11	0
Monitoring and Support	41	34	12
Marketing/Client Service	38	5	25
Other	23	30	47
Total	**201**	**123**	**116**

- All candidates have sufficient staffing to carry out their proposed investment programs.
- Pantheon has the largest number of investment professionals, and the largest number of senior professionals.
- Pathway has the second largest private equity staffing and number of investment professionals.
- BlackRock's HR, IT, and "Other Professionals" functions are covered by the parent organization.

Historical Private Equity Investments by Strategy (Since 2005 - 10.5 years)

BlackRock - Historical Portfolio

Strategy	# Inv	Total $ (mil)	%
Early-Stage VC	61	508	5%
Later-Stage VC/Growth	27	287	3%
Multi-Stage VC	66	705	6%
Small Buyouts	190	3,915	35%
Larger Buyouts	34	1,212	11%
Industry-focused	0	0	0%
Restructuring/Distressed	37	747	7%
Subordinated Debt	0	0	0%
Secondary Purchases	38	426	4%
Co-Investments	102	3,105	28%
Other (Please Specify)	13	295	3%
Totals	**568**	**11,198**	**100%**
#GPs	**243**		

Subdebt is included in Restructuring,
Other = Infrastructure and Natural Resources

Summary

VC/Growth	13%
BO	46%
SS/Debt	9%
Sec	4%
Co-Inv	28%
Total	100%

- BlackRock has historically invested more in venture than is evident in its model portfolio's allocation of 4%, but remains less than most of the other semi-finalists (Pantheon is similar).
- The firm's significant business model emphasis on co-investments is evident.

Pantheon - Historical Portfolio

Strategy	# Inv	Total $ (mil)	%
Early-Stage VC	52	849	4%
Later-Stage VC	8	208	1%
Multi-Stage VC	24	572	3%
Growth Equity	52	1,090	5%
Small Buyouts	118	3,257	16%
Larger Buyouts	68	3,612	18%
Industry-focused	13	400	2%
Restructuring/Distressed	12	381	2%
Subordinated Debt	8	214	1%
Secondary Purchases	134	8,289	40%
Co-Investments	68	1,608	8%
Other (Please Specify)	0	0	0%
Totals	**557**	**20,480**	**100%**
#GPs	**189**		

Summary

VC/Growth	13%
BO	34%
SS/Debt	5%
Sec	40%
Co-Inv	8%
Total	100%

- Pantheon's historical investments closely reflect its proposed portfolio. The overweight in secondaries is due to a separate commingled product and team that has raised significant capital over time.

Pathway - Historical Portfolio

Strategy	# Inv	Total $ (mil)	%
Early-Stage VC	17	1,323	4%
Later-Stage VC/Growth	15	2,240	7%
Multi-Stage VC	25	2,876	9%
Small Buyouts	18	692	2%
Medium Buyouts	49	8,296	27%
Larger Buyouts	26	6,148	20%
Restructuring/Distressed	17	2,760	9%
Subordinated Debt	5	126	0%
Secondary Purchases	17	239	1%
Co-Investments	10	216	1%
Special Situations	41	6,033	19%
Other (Please Specify)	0	0	0%
Totals	**240**	**30,949**	**100%**
#GPs	**98**		

Special Situations includes industry focused and other special equity funds

Summary

VC/Growth	21%
BO	49%
SS/Debt	29%
Sec	1%
Co-Inv	1%
Total	100%

- Pathway's historical portfolio reflects the strategy ranges in its model portfolio.

Model Portfolios by Strategy

Following are the model portfolios by strategy diversification proposed by each candidate for the NDSIB mandate:

BlackRock - Model Portfolio by Strategy

Strategy Type	# Inv	Total $ (mil)	%
Primary Funds	20-30	56.3	75%
Buyout Funds	10-15	42.2	56%
Venture Capital Funds	0-5	2.8	4%
Special Situations Funds	5-10	11.3	15%
Secondary Investments	5-10	9.4	13%
Direct Co-Investments	10-15	9.4	13%
Total Investments	30-55	75.1	100%

- BlackRock's proposed model portfolio strategy allocations reflect those of its commingled fund-of-funds, but BlackRock is proposing a fund-of-one vehicle.
- Venture/growth is significantly underweight (4%) versus the market opportunity set and other semi-finalist proposals.
- The portfolio is diversified by number of partnerships, and places a heavy emphasis on corporate finance strategies, co-investments and secondaries.
- While the co-investment and secondary allocations reflect approximately 25% of the model portfolio, BlackRock's proposal allows for up to 40% and it used 30% in modeling its fee proposal.

Pantheon - Model Portfolio by Strategy

Strategy Type	# Inv	Total $ (mil)	%
Venture Capital	9	5.2	7%
Growth Equity	2	5.8	8%
Small Buyout	6	13.3	18%
Mid Buyout	8	14.4	19%
Large Buyout	4	8.7	12%
Mega Buyout	2	3.9	5%
Special Situations	3	8.7	12%
Secondaries	TBD	7.5	10%
Co-Investments	TBD	7.5	10%
Total Investments	34	75	100%

- Pantheon's model portfolio has good detail and is well-diversified by strategy and cap-size: 15% venture/growth, 55% buyout across the cap-spectrum, and special situations.
- Secondaries and co-investments are an opt-in pool.
- Pantheon's model portfolio is a tailored allocation within their commingled platform, so NDSIB can adjust the weighting as it desires.
- The model portfolio's primary partnership allocations reflect a design that Callan developed for another plan sponsor.
- NDSIB also has the option to invest in Pantheon's pre-packaged Global Select fund-of-funds strategy, which is more concentrated and has a larger component in secondaries and co-investments.

Pathway - Model Portfolio by Strategy

Strategy Type	# Inv	Total $ (mil)	%
All Buyouts	12-14	33-53	45-70%
All Venture Capital	4-6	7-19	10-25%
Special Situations	6-8	7-30	10-40%
Total Primaries	25-30	75	100%
Secondary	≤5	≤15	≤20%
Co-Investments	≤20	≤12	≤15%
Total Investments	40-50	75	100%

SS = Industry Focused, Debt-Related, Hybrid

- Pathway determines the strategy allocation of its fund-of-funds within broad but pre-specified ranges.
- It states that it attempts to reflect the market opportunity set over time rather than introduce any firm top-down ideas.
- Based on history, the mix is typically 20% venture/growth, 50% buyouts, and 35% special situations (industry specific, flexible equity, and distressed). Pathway does not invest in mezzanine debt strategies.

Model Portfolios by Geography

Following are the model portfolios by geography diversification proposed by each candidate for the NDSIB mandate:

All firms have portfolios that include both U.S. and international exposures. BlackRock and Pantheon invest in emerging markets and Pathway does not.

BlackRock - Model Portfolio by Geography

Region	# Inv	Total $ (mil)	%
N America (US/Canada)	18-25	30-41.3	40-55%
Developed International	12-22	22.5-33.8	30-45%
Emerging Markets	0-7	0-11.3	0-15%
Other (footnote type)	0	0	0%
Total Investments	30-55	75	100%

- BlackRock is suggesting the smallest U.S. allocation (potentially less than half) and has the largest international allocation.
- At least 30% will be in developed international.
- Emerging markets are expected to be a component of the portfolio as the firm has historically invested in developing Asia.
- It is likely that the newly acquired Swiss Re team will be strongly involved in the non-US portion of the portfolio.

Pantheon - Model Portfolio by Geography

Region	# Inv	Total $ (mil)	%
N America (US/Canada)	21	39	52%
Developed International	8	15	20%
Emerging Markets	5	6	8%
Other (footnote type)	TBD	15	20%
Total Investments	34-48	75	100%

Other is Secondaries and Co-Investments

- Pantheon's geographic proposal appears to have only slightly more than half in the U.S. (52%) but the (optional) co-investment and secondary allocations will have a strong U.S. orientation.
- Assuming that that the secondary and co-investments will be at least 60% U.S.—which reflects historical norms—the non-U.S. allocation should be expected to be 35% or less.
- Pantheon's proposal includes emerging markets.

Pathway - Model Portfolio by Geography

Region	# Inv	Total $ (mil)	%
N America (US/Canada)	20-30	52-75	≥70%
Developed International	6-12	12-18	≤30%
Emerging Markets	0	0	0%
Other (footnote type)	0	0	0%
Primary Partnerships	25-30	75	100%

- Pathway is proposing a developed-markets-focused portfolio—primarily U.S. (70%) with most of the remainder expected to be in Europe.
- The firm has invested in Australia in the past, and actively monitors Asia and the other emerging markets regions. Pathway reserves the right to make emerging markets investments should it find candidates it considers suitable for it strategy.

Product and Account Types

All candidates have significant asset bases and a good balance of uncalled capital and NAV.

BlackRock

Account Type	# Accounts	Uncalled	NAV ($ mil)	Uncalled+NAV	%
Fund-of-funds	19	837	5,176	6,013	**50%**
Direct Co-Investments	3	230	267	497	**4%**
Separate Accounts:					
Discretionary	27	3,113	2,291	5,405	**45%**
Non-Discretionary	0	0	0	0	**0%**
Fund-of-Ones	0	0	0	0	**0%**
Total PE Accounts	49	4,181	7,734	11,915	**100%**

- BlackRock has a balance of fund-of-funds and discretionary accounts.
- A meaningful portion of the separate account assets are in co-investments (overall NAV is 30% co-investments).

Pantheon

Account Type	# Accounts	Uncalled	NAV ($ mil)	Uncalled+NAV	%
Fund-of-funds	31	5,878	12,125	18,003	**58%**
Direct Co-Investments	0	0	0	0	**0%**
Separate Accounts:					
Discretionary	18	1,831	2,514	4,345	**14%**
Non-Discretionary	8	129	91	220	**1%**
Monitoring & PIP	8	3,495	4,782	8,277	**27%**
Total PE Accounts	65	11,333	19,512	30,845	**100%**

- Pantheon is primary focused on discretionary management with most of its AUM in commingled fund-of-funds.
- Its next largest lines of business are a publicly traded fund-of-funds (PIP), and third-party monitoring and reporting.

Pathway

Account Type	# Accounts	Uncalled	NAV ($ mil)	Uncalled+NAV	%
Fund-of-funds	8	743	943	1,686	**6%**
Direct Co-Investments	0	0	0	0	**0%**
Separate Accounts:					
Discretionary	11	4,859	8,293	13,152	**44%**
Non-Discretionary	6	1,925	2,702	4,627	**15%**
Fund-of-Ones	33	3,868	6,830	10,698	**35%**
Total PE Accounts	58	11,395	18,768	30,163	**100%**

- Pathway's assets are concentrated in separate accounts and fund-of-ones.
- It is newer to the commingled fund business, but is emphasizing the fund-of-funds effort for future growth.
- PCM is de-emphasizing its non-discretionary business, which was once significant.

Client Types

All firms have diversified asset bases with significant public fund experience—measured by both number of clients and AUM.

BlackRock

Investor/Client Type	# Clients	Uncalled	NAV ($ mil)	Uncalled+NAV	%
Public Pension Plans	104	997	2,118	3,115	**26%**
Corporate Pension Plans	154	447	1,539	1,986	**17%**
Foundations and Endowments	57	5	280	285	**2%**
Financial Institutions (Banks, Ins.)	124	1,528	1,839	3,367	**28%**
Other (HNW Individuals, T-H)	131	1,204	1,959	3,163	**27%**
Total Clients	570	4,181	7,734	11,915	**100%**

- BlackRock's largest asset bases are financial institutions and high net worth (HNW) followed closely by public funds.
- The large HNW component comes from raising a large portion of its commingled FOF through brokerage houses, most notably its former-owner Merrill Lynch.

Pantheon

Investor/Client Type	# Clients	Uncalled	NAV ($ mil)	Uncalled+NAV	%
Public Pension Plans	85	3,719	6,098	9,817	**32%**
Corporate Pension Plans	130	4,054	7,775	11,829	**38%**
Foundations and Endowments	53	156	427	583	**2%**
Financial Institutions (Banks, Ins.)	32	2,428	2,934	5,362	**17%**
Other (HNW Individuals, TH, PIP)	76	976	2,279	3,255	**11%**
Total Clients	376	11,333	19,513	30,846	**100%**

- Pantheon's largest client base is corporate funds followed closely by public funds.

Pathway

Investor/Client Type	# Clients	Uncalled	NAV ($ mil)	Uncalled+NAV	%
Public Pension Plans	19	9,591	14,194	23,785	**79%**
Corporate Pension Plans	23	1,032	3,315	4,347	**14%**
Foundations and Endowments	13	40	78	118	**0%**
Financial Institutions (Banks, Ins.)	11	380	721	1,101	**4%**
Other (HNW Individuals, TH)	20	353	459	812	**3%**
Total Clients	86	11,396	18,767	30,163	**100%**

- Pathway's assets are dominated by public funds, and they have a small representation in the E&F area.

Candidate Considerations and Vehicles Summary

- All semi-finalists are institutional-quality firms, with strong processes, diversified client bases, and established track records.
- All three semi-finalists' investment performance ranks second quartile by all measures (TVPI, DPI, and IRR) versus the Thomson/Cambridge private equity peer database.
- BlackRock and Pantheon include allocations to emerging markets. Pathway's strategy is developed markets focused.
- Pantheon's and Pathway's investment practices are primarily oriented toward primary partnership investments. BlackRock's investment practice has a strong co-investment focus, which may influence strategy allocation and primary partnership selection toward fund types that are more likely to generate co-investment opportunities (e.g., more buyout and corporate finance, less venture capital).
- There are differences in the fee schedules charged by each semi-finalist firm.

Proposed Vehicles and Fundraising Status

- At Staff's direction, the NDSIB search solicited both comingled fund-of-funds and single-investor fund-of-one proposals.
- BlackRock is proposing a fund-of-one vehicle. NDSIB could elect to invest in BlackRock's commingled fund-of-funds which is currently being formed, but the fee would approximately double. As highlighted in the "Fund-of-Funds and Fund-of-Ones" discussion on page 2. Fund-of-Ones require more Staff interaction and monitoring over time. Certain vehicle-related expenses (such as annual tax, audit) are more costly than commingled vehicle since the expenses are not distributed across multiple investors.
- Pantheon is proposing a customized vehicle within its commingled platform. The vehicle combines features of a fund-of-funds and a fund-of-one. The operational and accounting platform that allows for the flexibility is new and relatively complex, so there may be minor operational challenges that need to be worked out over time. Because the vehicle resides within a commingled platform the "priority for allocations to hard-to-access partnerships" considerations (discussed on page 3) are not an issue with Pantheon's platform. The platform is also designed to alleviate the higher vehicle-specific expenses associated with fund-of-ones. Pantheon also raises Annual Global Programs that are available to NDSIB that have a more concentrated strategy and smaller primary partnerships allocation.
- Pathway is proposing its commingled Private Equity Fund-of-Funds 8 (PPEF 8). The vehicle is about to have its final close (Pathway is extending its final close date through April to accommodate a potential investment by NDSIB). The vehicle has been making investments and capital has been drawn, so PPEF 8's investment program will develop more quickly than a vehicle that is yet to be formed. PPEF 8 has closed on $379 million of commitments from 13 investors. The vehicle has committed $228 million to 23 primary commitments, 1 secondary investment and 5 co-investments. The vehicle has drawn $28 million from investors. Pathway has also offered to create a customized fund-of-one option for NDSIB.

Description of Mandate
North Dakota State Investment Board
Private Equity Fund-of-Funds Search

North Dakota State Investment Board (NDSIB) has retained Callan Associates to assist in the evaluation and prospective selection of a private equity primary partnerships fund-of-funds manager.

NDSIB has total pension assets of approximately $4.6 billion, with a 5% private equity target. The current net asset value (NAV) of the private equity portfolio is approximately 4.9%. NDSIB began investing in private equity in 1998. NDSIB has one existing fund-of-funds manager that represents approximately 1% of the private equity portfolio NAV. NDSIB also has a portfolio of direct partnerships that represents approximately 3% of the private equity portfolio NAV. The direct partnerships span vintage years from 1999 to 2011, and the portfolio is being gradually liquidated. NDSIB plans to discontinue the direct investment program and direct future assets to a fund-of-funds program. The existing fund-of-funds manager pursues a global broad-market strategy, and NDSIB is seeking to add a second fund-of-funds manger with a similar mandate to eventually manage approximately 50% of the private equity assets. While commingled fund-of-funds vehicles are preferred, NDSIB may also consider separate accounts or fund-of-one proposals.

As further outlined in the accompanying Search Evaluation Criteria, the broad-market mandate is for a manager that will invest in a diverse portfolio of primary partnership interests that capture all major private equity strategy types—both in the U.S. and internationally. The fundamental mandate is for a portfolio of primary partnership investments, although a moderate (preferably less than 25%) amount of secondary and/or direct co-investments are also allowed.

NDSIB’s new manager will be charged with committing approximately $25 million in each vintage year for the next three to four years, so the award for this mandate is expected to be approximately $75 million, assuming a commitment is made to a commingled fund-of-funds vehicle that deploys commitments over three to four subsequent vintage years. If the selected manager employs a fundraising model that is more frequent than every three years, NDSIB may scale its commitment appropriately to achieve its $25 million per vintage year exposure goal. NDSIB anticipates hiring a single manager.

Other Email attachments are:

1) The NDSIB Fund-of-Funds Manager Search Evaluation Criteria
2) Private Equity Fund-of-Funds Manager Search Questionnaire (MS Word document)
3) A Fund-of-Funds Performance Excel Spreadsheet (with four tabs)

The completed questionnaire materials are due back by close of business **Tuesday, November 17, 2015**. Delivery information is provided at the end of the questionnaire. When completing the questionnaire, include the question with the corresponding response. Please limit the written questionnaire response, excluding attachments, to <u>no more than 30 pages</u>. Please return the completed Performance spreadsheet <u>in Excel format</u>.

It is anticipated that the commitment to the selected fund-of-funds will be closed within the first quarter of 2016. Please do not hesitate to call Gary Robertson (415-274-3037) or Michael Bise (415-291-4127) if you have any questions regarding this assignment or your questionnaire response.

In responding to the RFP, the Manager acknowledges that it is doing so at its own cost and agrees to abide by the decisions of NDSIB.

NORTH DAKOTA STATE INVESTMENT BOARD
SEARCH EVALUATION CRITERIA
PRIVATE EQUTY FUND-OF-FUNDS

Investment Product Description: The North Dakota State Investment Board (NDSIB) seeks to implement its previously approved asset allocation strategy and evaluate for hire managers with a broadly diversified private equity fund-of-funds strategy. Candidates should have an established investment strategy of investing predominantly in proven “top-tier” private equity partnerships. The manager will employ a diversified mix of private equity strategies, including buyouts, special situations/corporate finance (such as subordinated debt and restructuring) strategies and venture capital. A moderate component of international is sought. Modest allocations to secondary and/or direct co-investment may also be considered. The key considerations driving the search and selection will be organizational experience, strategy diversification, and top-tier access.

Evaluation Criteria:

1. *Organization:* The candidate firms will be evaluated for organizational structure, personnel and staffing, systems and infrastructure resources, ownership and succession planning, and organizational stability. The firm must be a Registered Investment Advisor under the Investment Company Act of 1940.

2. *Experience:* The manager must have significant experience (at least 5 years) making the specific types of investments intended for the private equity program.

3. *Asset Base*: The manager must have significant discretionary private equity assets under management. A discretionary assets under management amount of at least $1 billion is preferred.

4. *Client Base*: The manager must have experience managing assets for institutional tax-exempt institutions, with preference given to managers that have public pension plans in their client base.

5. *Access to Recognized Top Tier Partnerships*: The manager must exhibit historical investor relationships with partnerships generally recognized as being among the best in the industry.

6. *Investment Breadth and Experience*: Demonstrated experience addressing the broad spectrum of private equity strategies.

    A. Candidates should demonstrate, at a minimum, the capability to address meaningful allocations across all major strategy types. Candidates addressing broader market coverage (e.g., distressed/restructuring funds, subordinated debt, special situations, secondaries) will be given preference.

    B. A moderate international target (approximately 35% or less) limited primarily to Western Europe will be viewed as desirable.

7. *Investment Strategy:* The investment strategy should be predominantly (at least 75%) targeted to investments in primary partnership interests. Funds with modest allocations to other strategies (i.e., secondaries) will also be considered, recognizing that primary partnerships are the key investments sought.

8. *Indications of Performance*: Tenure in the business such that an indication of historical performance sufficient to demonstrate above median returns compared to the Thomson/Cambridge Private Equity database must be evidenced. Performance will not be the primary decision point, but is an element that will be reviewed.

9. *Unrelated Business Income Tax (UBIT):* It is not anticipated that the ability to shield NDSIB from UBIT will be a critical factor in the selection process; however, limiting potential UBIT exposure may be a consideration.

10. *Allocation Policy:* The manager's investment allocation policy should not disadvantage new clients' ability to access high quality partnerships with which the manager has a legacy relationship.

11. *Fees:* Management fees, expenses and other economic considerations must be institutional in composition and amount. Generally, proposals without incentive compensation components are preferred to those with profit participation.

12. *Terms and Conditions:* Products will be reviewed for investor rights, sustainable and responsible investment, and other governance provisions. Funds with stronger investor governance provisions will be preferred. Other preferred terms include investment periods of approximately 3 years, legal lives of 15 years or less, quarterly distributions, and quarterly reporting.

Description of Mandate and Search Evaluation Criteria Update
North Dakota State Investment Board
Private Equity Fund-of-Funds Search
October 29, 2015

Callan

Overview: The North Dakota State Investment Board (NDSIB) has received a number of inquiries regarding its Private Equity Fund-of-Funds search. In an effort to answer these questions and clarify the scope of the search please see the information below.

Investment Product Structure: As stated in the *Description of Mandate* document dated October 21, 2015, the NDSIB is seeking a second Private Equity Manager to allocate approximately $25 million in each vintage year for the next three to four years. For this mandate, the NDSIB is evaluating **both** advisory structures (i.e. separate accounts, fund of one, etc.) and commingled fund-of-funds. The NDSIB has **not** yet established a preferred structure. If a candidate manager offers a viable advisory structure and a commingled fund-of-funds, the NDSIB welcomes submissions for **both** products. In the event that the submission will include both structures please limit the written response to no more than 45 pages.

Moreover, preference will be given to products and strategies that accompany the NDSIB's existing mandate with Adam Street Partners. Conceptually, the NDSIB is seeking a product that diversifies business and strategy risk from its existing private equity mandate, but one that also produces a stand-alone attractive risk/return profile.

Updates to Evaluation Criteria: Please note that the NDSIB has revised certain criteria in the *Search Evaluation Criteria* document dated October 21, 2015.

3. *Asset Base*: The manager must have significant discretionary and/or advisory private equity assets under management. A total amount of discretionary and advisory assets under management of at least $1 billion is preferred.

6. *Investment Breadth and Experience*: Demonstrated experience addressing the broad spectrum of private equity strategies.

   B. Candidates should demonstrate the ability to implement a global private equity program. While the NDSIB has not established rigid geographic guidelines, it is seeking a manager that can identify, access, and capitalize on opportunities across different geographic regions.

7. *Investment Strategy:* The NDSIB is seeking a manager that can invest across the major Private Equity asset classes including primaries, secondaries, and co-investments. The NDSIB prefers a manager that can evaluate the relative attractiveness of the different asset classes, and construct a prudent portfolio accordingly.

11. *Fees:* Management fees, expenses, and other economic considerations must be institutional in composition and amount. Proposals with and without incentive compensation components will be evaluated. Compensation structures that align the interests of the management company with the NDSIB are preferred.

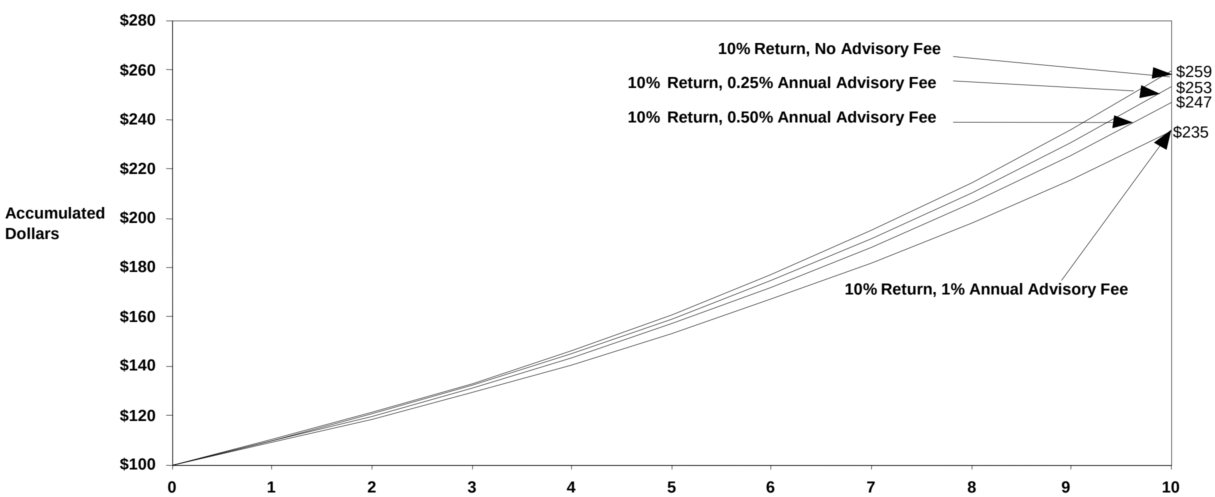
Please do not hesitate to contact Dave Hunter, Darren Schulz, or Eric Chin at **701-328-9885** if you have any questions or if you require additional information.

Disclosure Statement

The preceding report has been prepared for the exclusive use of the North Dakota State Investment Board. Unless otherwise noted, performance returns contained in this report do not reflect the deduction of investment advisory fees. The returns in this report will be reduced by the advisory fees and any other expenses incurred in the management of an investment account. The investment advisory fees applicable to the advisors listed in this report are described in Part II of each advisor's form ADV.

The following graphical and tabular example illustrates the cumulative effect of investment advisory fees on a $100 investment growing at 10% over ten years. Fees are assumed to be paid monthly.

The Cumulative Effect of Advisory Fees



Accumulated Dollars at End of Years

	1	2	3	4	5	6	7	8	9	10
No Fee	110.0	121.0	133.1	146.4	161.1	177.2	194.9	214.4	235.8	259.4
25 Basis Points	109.7	120.4	132.1	145.0	159.1	174.5	191.5	210.1	230.6	253.0
50 Basis Points	109.5	119.8	131.1	143.5	157.1	172.0	188.2	206.0	225.5	246.8
100 Basis Points	108.9	118.6	129.2	140.7	153.3	166.9	181.8	198.0	215.6	234.9

10% Annual Return Compounded Monthly, Annual Fees Paid Monthly.

Of the investment manager candidates listed in this report, the firms specified below do business with Callan as of the date of the most recent quarter end. Given the complex corporate and organizational ownership structures of investment management firms, parent and affiliate firm relationships are not listed here. The client list below may include names of parent companies who allow their affiliates to use some of the services included in their client contract (e.g., educational services including published research and attendance at conferences and workshops). Affiliates will not be listed if they don't separately contract with Callan. Parent company ownership of the firms included in this report and any relationship with Callan can be provided at your request. A list of Callan's investment manager clients as of the most recent quarter end is attached for your reference. Because Callan's clients list of investment managers changes periodically, the above information may not reflect recent changes. Clients are welcome to request a list of Callan's investment manager clients at any time.

In no way do these affiliations affect the outcome or process by which Callan's investment manager searches are conducted.

Firm	Does Business with Callan*	Does Not Do Business with Callan*
BlackRock	X	
Pantheon Ventures		X
Pathway Capital Management		X

*Based upon Callan manager clients as of the most recent quarter end.

Callan

Annual List as of December 31, 2015

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

Manager Name
1607 Capital Partners, LLC
Aberdeen Asset Management
Acadian Asset Management, Inc.
Advisory Research
Affiliated Managers Group
AllianceBernstein
Allianz Global Investors U.S. LLC
Allianz Life Insurance Company of North America
AlphaOne Investment Services
American Century Investment Management
Analytic Investors
Apollo Global Management
AQR Capital Management
Ares Management
Ariel Investments
Aristotle Capital Management
Artisan Partners Limited
Atlanta Capital Management Co., L.L.C.
AXA Rosenberg Investment Management
Babson Capital Management LLC
Bailard
Baillie Gifford Overseas Limited
Baird Advisors
Bank of America
Baring Asset Management
Baron Capital Management
Barrow Hanley Mewhinney & Strauss, LLC
BlackRock
Blue Vista Capital Management
BMO Asset Management
BNP Paribas Investment Partners
BNY Mellon Asset Management
Boston Company Asset Management, LLC (The)
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC

Manager Name
Brown Brothers Harriman & Company
Cadence Capital Management
Calamos Advisors
Capital Group
CastleArk Management, LLC
Causeway Capital Management
Champlain Investment Partners
Channing Capital Management, LLC
Charles Schwab Investment Management
Chartwell Investment Partners
ClearBridge Investments, LLC (fka ClearBridge Advisors)
Cohen & Steers
Columbia Management Investment Advisors, LLC
Columbus Circle Investors
Corbin Capital Partners
Cornerstone Investment Partners, LLC
Cramer Rosenthal McGlynn, LLC
Crawford Investment Council
Credit Suisse Asset Management
Crestline Investors Inc.
Cutwater Asset Management
DDJ Capital Management
DE Shaw Investment Management LLC
Delaware Investments
DePrince, Race & Zollo, Inc.
Deutsche Asset & Wealth Management
Diamond Hill Investments
Donald Smith & Company, Inc.
Duff & Phelps Investment Mgmt.
Eagle Asset Management, Inc.
EARNEST Partners, LLC
Eaton Vance Management
EnTrust Capital Inc.
Epoch Investment Partners
Fayez Sarofim & Company
Federated Investors

Manager Name
Fidelity Institutional Asset Management
Fir Tree Partners
First Eagle Investment Management
First Hawaiian Bank Wealth Management Division
First State Investments
Fisher Investments
FLAG Capital Management
Fort Washington Investment Advisors, Inc.
Franklin Templeton Institutional
Fred Alger Management Co., Inc.
Fuller & Thaler Asset Management
GAM (USA) Inc.
Garcia Hamilton & Associates
GE Asset Management
Goldman Sachs Asset Management
Grand-Jean Capital Management
GMO (fka Grantham, Mayo, Van Otterloo & Co., LLC)
Great Lakes Advisors, LLC
Gresham Investment Management, LLC
Guggenheim Investments Asset Management (fka Security Global)
Hampshire Companies (The)
Harbor Capital
Harding Loevner LP
Harrison Street Real Estate Capital
Hartford Funds
Hartford Investment Management Co.
Henderson Global Investors
Hotchkis & Wiley
HSBC Global Asset Management
Income Research & Management
Insight Investment Management
Institutional Capital LLC
INTECH Investment Management
Invesco
Investec Asset Management
Janus Capital Group (fka Janus Capital Management, LLC)
Jensen Investment Management
J.P. Morgan Asset Management
KeyCorp
Kopernik Global Investors
Lazard Asset Management
LMCG Investments (fka Lee Munder Capital Group)
Legal & General Investment Management America
Lincoln National Corporation
Logan Circle Partners, L.P.
The London Company
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
Lyrical Partners
MacKay Shields LLC
Mackenzie Investments
Man Investments
Manulife Asset Management
Martin Currie
Marvin & Palmer Associates, Inc.
MFS Investment Management

Manager Name
MidFirst Bank
Millstreet Capital Management
Mondrian Investment Partners Limited
Montag & Caldwell, Inc.
Morgan Stanley Investment Management
Mount Lucas Management LP
Mountain Lake Investment Management LLC
MUFG Union Bank, N.A.
Neuberger Berman, LLC (fka, Lehman Brothers)
Newton Capital Management
Northern Lights Capital Group
Northern Trust Asset Management
Nuveen Investments Institutional Services Group LLC
OFI Global Asset Management
Old Mutual Asset Management
Opus Capital Management
Pacific Investment Management Company
Palisade Capital Management LLC
PanAgora Asset Management
Paradigm Asset Management
Parametric Portfolio Associates
Peregrine Capital Management, Inc.
PineBridge Investments (formerly AIG)
Pinnacle Asset Management
Pioneer Investment Management, Inc.
PNC Capital Advisors, LLC (fka Allegiant Asset Mgmt)
Polen Capital Management
Principal Global Investors
Private Advisors
Prudential Investment Management, Inc.
Putnam Investments, LLC
Pyramis Global Advisors
Pzena Investment Management, LLC
RBC Global Asset Management (U.S.) Inc.
Regions Financial Corporation
Riverbridge Partners LLC
Rothschild Asset Management, Inc.
Royce & Associates
RS Investments
Russell Investment Management
Sankaty Advisors, LLC
Santander Global Facilities
Schroder Investment Management North America Inc.
Scout Investments
SEI Investments
SEIX Investment Advisors, Inc.
Smith Affiliated Capital Corporation
Smith Graham and Company Investment Advisors, L.P.
Smith Group Asset Management
Standard Life Investments
Standish (fka, Standish Mellon Asset Management)
State Street Global Advisors
Stone Harbor Investment Partners, L.P.
Systematic Financial Management
T. Rowe Price Associates, Inc.
Taplin, Canida & Habacht
TIAA-CREF
TCW Asset Management Company
Thompson, Siegel & Walmsley LLC

Manager Name
Timberland Investment Resources
Tocqueville Asset Management
UBS Asset Management
UBS Investment Bank
USAA Real Estate Company
Van Eck Global
Versus Capital Group
Victory Capital Management Inc.
Vontobel Asset Management
Voya Investment Management (fka ING)

Manager Name
Waddell & Reed Asset Management Group
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Capital Management
Wells Fargo Private Bank
Western Asset Management Company
Westwood Management Corp.
William Blair & Co., Inc.

BlackRock

BlackRock Private Equity Partners

Strategic Partnership Proposal

Presented to North Dakota State Investment Board

Lynn Baranski, Managing Director, CIO of BlackRock's Private Equity Partners

Leo Chenette, Managing Director, Senior Strategist, BlackRock Private Equity Partners

Linh Pham, Vice President, US & Canada Institutional Client Business

18 March 2016

Table of contents

BlackRock Introduction

NDSIB Objectives

- Partner with strategic private equity funds-of-funds manager that complements existing private equity program

- Commit approximately $30 million in each vintage year for the next three to four years, expected total commitment of approximately $100 million

- Pursue a global broad-market portfolio that will invest in a diverse portfolio of primary partnership interests, and moderate amount of secondary and/or co-investments, that capture all major private equity strategy types—both in the U.S. and internationally

BlackRock Alternatives — At a glance

Our scale helps us deliver sourcing, performance, and solutions to help clients achieve objectives

- **580+ professionals** dedicated solely to alternatives, across 19 global investment centers
- **30+ years** creating and managing alternatives portfolios; the platform has grown to address client challenges
- **$4.0bn committed** to 200+ co-investments since 1999 across the full spectrum of private market opportunities[1]
- **675+ deals sourced** by our Hedge Fund Solutions team from 150+ different sources, with $2bn committed to trades with top potential — representing 12.5% of deals considered[2]
- **2,300+ opportunities sourced** by BlackRock Private Equity since 2000, with a 5% selection rate
- **135+ and 360** relationships with hedge fund programs and general partners, respectively
- **Single point of contact** delivers alternatives solutions with the backing of the world's largest asset manager
- **BlackRock's strong governance and scale** enable our investment teams to focus solely on investing and benefit from accessing more deals, research, and insight than they would as independent businesses
- **$128bn[2] in alternatives client assets** including invested and committed capital across hedge funds, private credit, private equity, and real assets

Notes: 1) Includes co-investment commitments across our Hedge Fund Solutions and Private Equity Solutions teams. PE data as of June 30, 2015 and includes commitments since 1999. HF data as of September 30, 2015 and includes commitments since 2006. 2) Data as of December 31, 2015 3) AUM is as of December 31, 2015 and includes invested and committed capital. $128bn represents total assets under management across BlackRock Alternatives, including $21bn in currencies and commodities. All dollar figures are in US dollars.

BlackRock Alternatives’ value proposition

Seek to deliver sourcing, performance, and solutions to help clients achieve their investment targets

Strong sourcing

BlackRock’s scale enables portfolio managers to source a broader range of investments, influence better terms, and negotiate better pricing

- BlackRock’s global network at all seniority levels across traditional and alternative investments
- Extensive relationships with underwriters
- Professionals with diverse and complementary backgrounds
- Global Capital Markets Group
  Originates actionable investment opportunities

Differentiated performance

BlackRock’s information advantage results from combining our deep talent bench across asset classes and technology to obtain investment insight

- Global investment teams focused solely on investing and sourcing uncorrelated sources of return
- Firm-wide daily global investor call
- BlackRock Investment Institute
- Global Trading Platform

Breadth of solutions

BlackRock has extensive expertise and experience managing liquid and illiquid alternative investments to help investors achieve desired outcomes

- Consultancy approach without emphasis toward any product
- Broad spectrum of offerings affords flexibility to customize portfolios to solve for specific client objectives
- We have been investing in alternatives for more than 30 years
- Continually grown investment capabilities in response to, and in anticipation of, client needs

Strength of operational infrastructure

- Aladdin® systems
  Risk reporting, analytics, portfolio management, trade execution, and operational processing
- BlackRock Solutions
  Extensive advisory services and technology
- Risk & Quantitative Analysis Group
  Independent risk oversight function
- Legal & Compliance
- Operations & Administration

NDSIB Proposal Summary

Global core private equity program for North Dakota State Investment Board

- A globally diversified core private equity program investing across primary funds, secondary investments and direct co-investments
- A dedicated investment and client service team for North Dakota SIB to provide access to knowledge and education on private equity markets:

Dedicated Team

Investments:
- Craig Payne, Managing Director
- Michael Sorensen, Director

Client Service:
- Linh Pham, Vice President
  ICB Relationship Manager
- Leo Chenette, Managing Director
  PEP Product Strategist

Achieving a Strategic Partnership between North Dakota SIB and BlackRock

High Touch Service Model
- GP introductions
- Research sharing
- Thought pieces
- On-going market and portfolio updates
- Transparent reporting

- Access to BlackRock's extensive global deal flow and asset selection
- Emphasis on disciplined portfolio construction and rigorous bottom-up due diligence
- Attractive fee proposal
  - *Competitive fees and carried interest than a direct private equity fund*

Proposed investment strategy: Global core private equity program

Investment objective

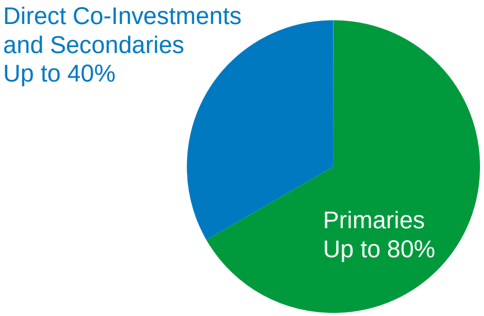
- Outperformance of public equity benchmark with a defensive risk profile reflected in lower volatility than public equity

Strategy

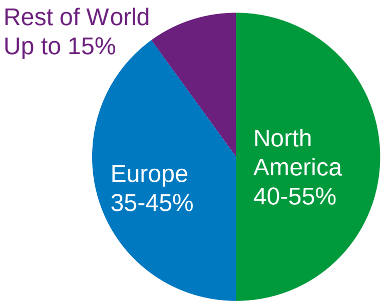
- Global core program with a focus on primary fund investments across regions and diversification across multiple vintage years
- Portfolio of leading PE managers intending to generate superior performance through operational improvements within their portfolio companies
- Active portfolio management through opportunistic secondary purchases and direct co-investments in an attempt to reduce the “J-curve” effect, seeking to improve IRR performance and the cash-flow profile

Target allocation[1]

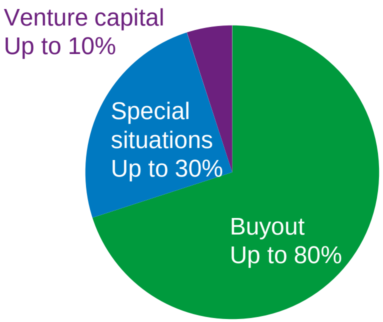
Investment type



Geography (primaries only)



Strategy (primaries only)



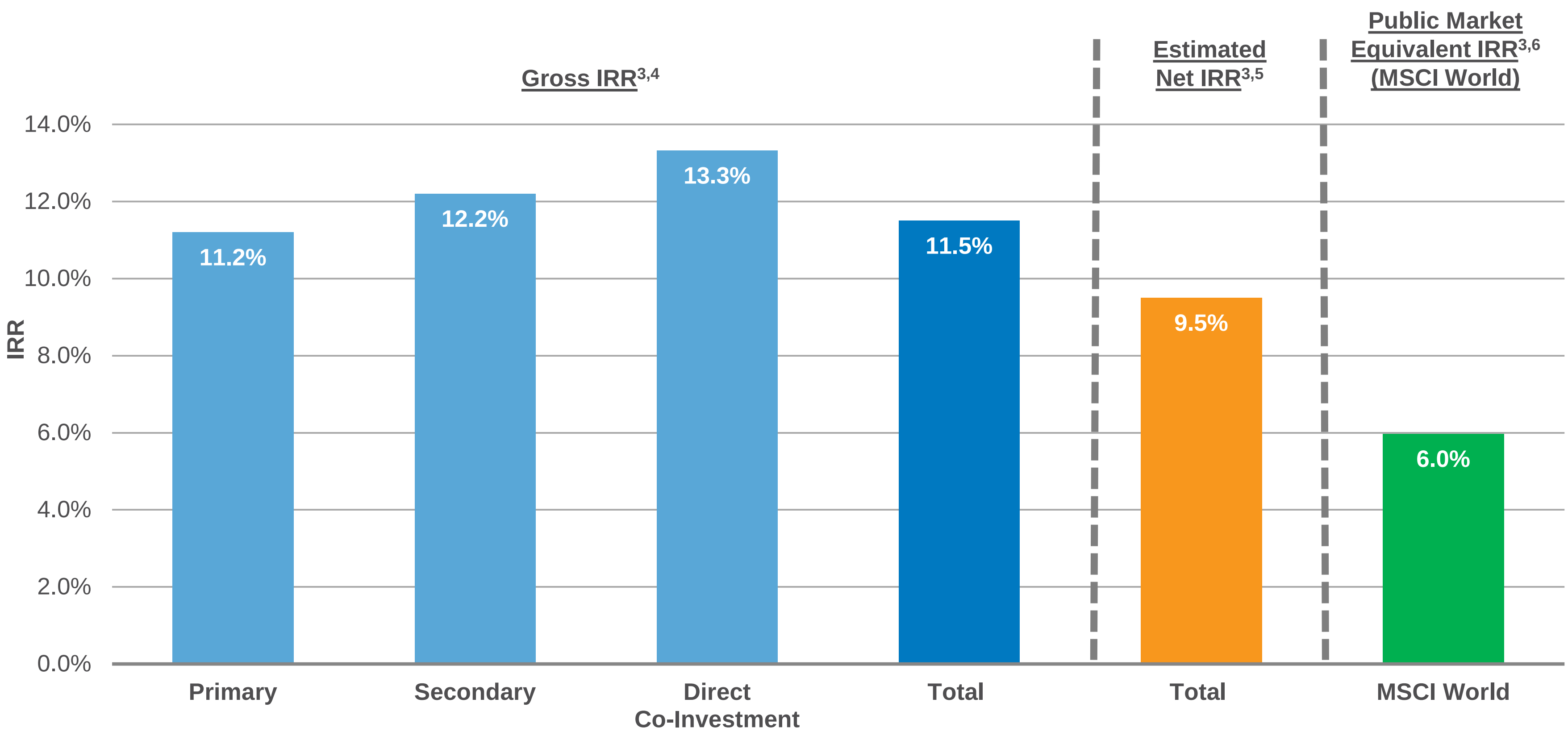
- No venture capital co-investments
- Buyout includes growth[2] and special situations includes natural resources/energy, distressed, mezzanine debt, etc.

1 The proposed program’s allocation strategy and target depend upon a variety of factors, including prevailing market conditions and investment availability. These charts are illustrative only and do not necessarily show the ultimate portfolio composition of the Fund. The Investment Manager intends to implement the target fund allocation, however no guarantee is given that the target allocation ranges will be met. The actual portfolio composition of the Fund may significantly differ from the chart shown in the graphs above.

2 Growth investments are typically minority investments without leverage in relatively mature companies that seek capital for further expansion.

PEP's global core commingled fund series track record (1/2)
Strong returns with 11.5% gross IRR (est. net IRR 9.5%)

PEP global core commingled fund series track record summary as of 30 June 2015



As of 30 June 2015. ***Past performance is not indicative of future results. The returns shown do not predict the returns of the Proposed Program.*** The performance information provided above represents all investments made by PEP since inception for its core commingled funds (DivPEP I-V and PEP II-VI) since 2000. These investments were made as part of the overall investment program of the relevant fund or account, some of which had investment mandates broader than that respective category. The nature of the investments and the amount and timing of them were influenced by the prior investments made by, and the guidelines of, those funds or accounts. As such, no client received the above returns. See "***Disclosures for PEP's global core commingled fund series investments – Track Record performance***" for important disclosures and more information about prior fund performance, including the calculation of IRR.

PEP's global core commingled fund series track record (2/2)

Gross PME Outperformance of 5.5% and in all 14 vintage years (est. net IRR 9.5%)

PEP's global core commingled fund series track record by vintage year as of 30 June 2015					
Vintage year[1]	Total committed capital ($m)	Gross MOIC[2]	Gross IRR[3,4]	PME IRR[3,6] (MSCI World)	PME Outperformance
2000	$212	1.65x	9.5%	6.3%	3.2%
2001	359	1.93x	21.5%	10.9%	10.6%
2002	198	2.07x	26.0%	17.0%	9.0%
2003	198	1.76x	18.4%	10.5%	7.9%
2004	165	1.99x	21.8%	9.9%	11.9%
2005	856	1.52x	8.6%	3.6%	5.0%
2006	1,170	1.49x	8.2%	4.1%	4.1%
2007	1,118	1.60x	9.6%	4.8%	4.8%
2008	1,116	1.35x	9.1%	9.0%	0.1%
2009	115	1.57x	17.0%	11.5%	5.5%
2010	162	1.44x	14.1%	11.2%	2.9%
2011	223	1.48x	20.0%	12.8%	7.2%
2012	182	1.37x	21.7%	11.5%	10.2%
2013	276	1.18x	14.7%	7.6%	7.1%
2014	498	n/m	n/m	n/m	n/m
2015	92	n/m	n/m	n/m	n/m
All	**$6,937**	**1.54x**	**11.5%**	**6.0%**	**5.5%**
		Total Estimated Net IRR[3,5]	**9.5%**		

As of 30 June 2015. ***Past performance is not indicative of future results. The returns shown do not predict the returns of the Proposed Program.*** The performance information provided above represents all investments made by PEP since inception for its core commingled funds (DivPEP I-V and PEP II-VI) since 2000. These investments were made as part of the overall investment program of the relevant fund or account, some of which had investment mandates broader than that respective category. The nature of the investments and the amount and timing of them were influenced by the prior investments made by, and the guidelines of, those funds or accounts. As such, no client received the above returns. See "***Disclosures for PEP's global core commingled fund series investments – Track Record performance***" for important disclosures and more information about prior fund performance, including the calculation of IRR.

Unique advantages to partnering with BlackRock PEP through a separate account

Separate accounts offer several distinct advantages to large, sophisticated investors, providing a greater level of transparency, control and customization

Key attributes	BlackRock PEP Separate Account	Industry Commingled Fund of Funds
Guidelines	Customized and amendable investment guidelines	Guidelines are fixed to all investors in the fund
Cost	Lower fee impact through customized pricing models	Standardized pricing models on primaries, secondaries and co-investments
Structuring	Account tailored with regard for client's structural needs (tax, regulatory, etc.)	Uniform approach to structuring of the commingled fund
Governance	Client controls governance (e.g. termination rights)	All governance decisions executed by Manager in respect of commingled fund investors
Investment Period	Client can control investment pace through option to suspend investment period	Investment periods are standardized for all fund investors

Why partner with PEP?
High level of investment customization and interaction

Key Elements of a Strategic Partnership with BlackRock PEP

Global sourcing & economies of scale

- One of the best-of-breed for sourcing, selection, terms, pricing
- Access to deal flow from other large separate accounts
- Ability to leverage global BlackRock network
- PEP and its partners have committed over $45 billion committed to more than 360 GPs which can benefit PEP with increased deal flow which may not be available individually[1]

Portfolio analysis & research

- Provide guidance and insight into client's overall private equity program
  - Pacing
  - Cash flow models
  - Portfolio construction
  - Strategic planning
- Customized reporting
- Detailed valuation analysis

Customized Structure

- Higher degree of client involvement in the design and understanding of the portfolio
- Tailored exposure — complements a client's existing portfolio
- Accommodates investor restrictions and preferences (e.g., Statutory, SRI compliance)
- Structured to suit client's needs

Enhanced client service & research

- Achieve deeper, more strategic dialogue with BlackRock PEP
- Formal monthly (or more often) update calls and quarterly portfolio reviews
- Open-door policy — frequent contact between our organizations with full BlackRock PEP team access
- Shared research, due diligence, market intelligence
- GP introductions

1 As of 31 March 2013. It should not be assumed that Private Equity Partners will continue to receive investment opportunities in the future. The foregoing is our thesis on the potential benefits of allowing PEP to represent our clients in their co-investment relationships with GPs, but there is no guarantee of success.

BlackRock Private Equity Partners (PEP)

A top global alternative investment solutions provider

BlackRock Alternative Investors (BAI): $114 billion in AUM

Over 20 years of alternative investment management experience

BlackRock Alternative Investors (BAI)
Matt Botein (Co-Head and CIO), Mark McCombe (Co-Head & Chairman)

Hedge Funds		Private Equity	Real Assets		Opportunistic	Commodities & Currencies
Direct Hedge Fund Strategies	Hedge Fund Solutions	Private Market Investment Solutions	Real Estate	Infrastructure	Special Opportunities	Commodities & Currencies

BlackRock Private Equity Partners (PEP)
$21.7 billion in LP commitments[1]

Team

- Founded and headed by Russ Steenberg since 1999
- Managing Directors average 22 years of private market investment experience[2]
- 32 global investment professionals[2]

Private Markets Investments

- Investments across primary funds, secondaries and direct co-investments spanning the private markets spectrum
- Committed to over 360 GPs[3]
- $4.2 billion committed to 163 direct co-investments[3]

All data as of 30 Septebmer 2015 unless otherwise noted.
1 As of 14 January 2016. A portion of the total investor commitments remains subject to drawdown.
2 As of 18 January 2016.
3 Includes investments made by senior investment professionals prior to joining BlackRock.

PEP platform and investments
Global reach with local heritage and expertise

BlackRock PEP: 119 professionals across three regions dedicated to private market investments

Americas	Europe	Asia

Americas

- $9.1 billion committed to investments[1]
- 15 Investment Professionals[2]
- 12 Investor Relations[2]
- 41 Operations[2,3]

Europe

- $3.8 billion committed to investments[1]
- 12 Investment Professionals[2]
- 11 Investor Relations[2]
- 22 Operations[2,3]

Asia

- $1.3 billion committed to investments[1]
- 5 Investment Professionals[2]
- 1 Investor Relations[2]

1 As of 30 September 2015
2 As of 18 January 2016
3 Includes Finance, Legal, Fund Accounting, Fund Administration and Operations
Grey dots represent BlackRock locations as of 20 November 2015

Experienced team with deep direct investment expertise

32 global investment professionals covering the Americas, Europe, and Asia

- Supported by a dedicated team of 86 investor relations, operations, fund accounting, administration, and legal professionals

Unique, team-wide corporate finance expertise drives deeper fundamental research and risk management

PEP Leadership Team

Russ Steenberg, Global Head of PEP, MD (33/16)*

Lynn Baranski, CIO, MD (24/14)*

Americas

Stephen Kelly, COO, MD (26/16)*
Arslan Mian, MD (20/11)*
Craig Payne, MD (19/10)*
Muhammad Mian, Director (13/5)
Andrew Farris, Director (14/7)
Michael Sorensen, Director (12/5)
Kamal Maruf, Director (12/5)
+6 additional investment professionals

Europe

Nathalie von Niederhaeusern, MD (19/16)*
Mei Friedman, MD (16/4)
Raja Hussain, Director (12/6)
Joscha Boehm, Director (11/5)
+8 additional investment professionals

Asia

Jay Park, MD (22/14)*
Peter Martisek, Director (11/9)
Yan Yang, Director (12/4)
Zhan Yang, Director (9/5)
+1 additional investment professional

Supported by Global Product Strategy Team

Leveraging the Power of the BlackRock Platform

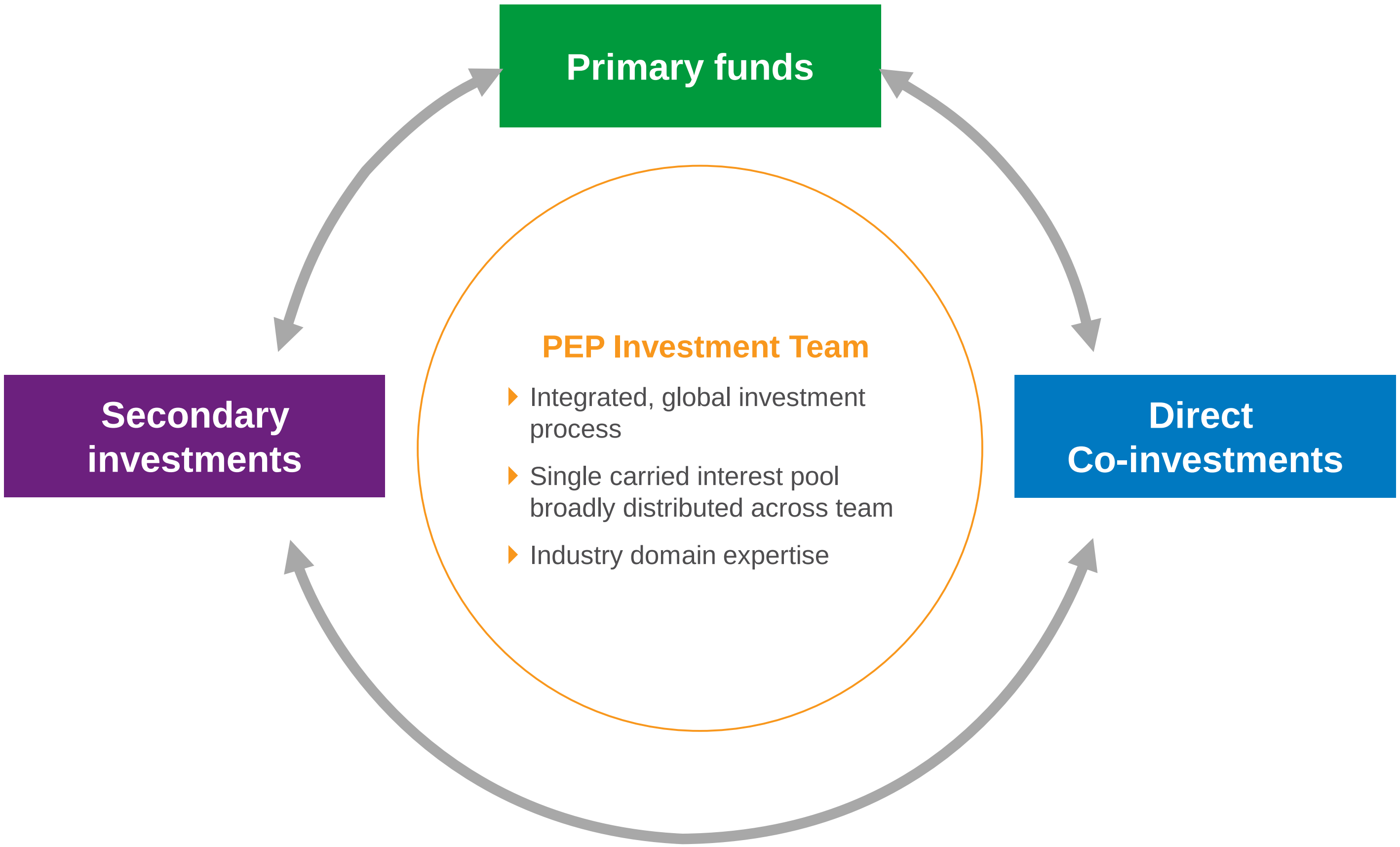
Global Investment Teams	Risk & Quantitative Analysis	BlackRock Solutions	BlackRock Investment Institute
+1,850 investment professionals with specialties across all asset classes**	+500 professionals partner with investment teams to monitor and analyze risk**	Proprietary Aladdin® platform integrates portfolio management, risk analytics, trading and operations	Internal forum facilitates idea sharing and debates economic implications

All data as of 18 January 2016 unless otherwise noted.
Years of private equity and related experience/years at BlackRock PEP (including time at predecessor firms) as of 18 January 2016
* Internal Investment Committee members
** As of 30 September 2015

Investment platform designed to maximize knowledge sharing, process consistency and teamwork

Investment professionals cover their GP relationships across primary funds, direct co-investments and secondary investments

Domain expertise of individual professionals guides due diligence team assignments and GP coverage



Implementation
Two-step approval process with senior executive involvement

Executive Investment Committee ensures consistent application of BlackRock's superior due diligence resources to all reviewed opportunities

PEP Internal Investment Committee

Russ Steenberg
Managing Director
Global Head of PEP

Lynn Baranski
Managing Director
CIO

Stephen Kelly
Managing Director
COO

Arslan Mian
Managing Director
Americas

Nathalie von Niederhaeusern
Managing Director
Europe

Jay Park
Managing Director
Asia

Craig Payne
Managing Director
Americas

Executive Investment Committee

Robert Kapito
President and Director of BlackRock, Inc.

Ken Wilson
Vice Chairman of BlackRock, Inc.

Matt Botein
Managing Director and Co-Head of BlackRock Alternative Investors

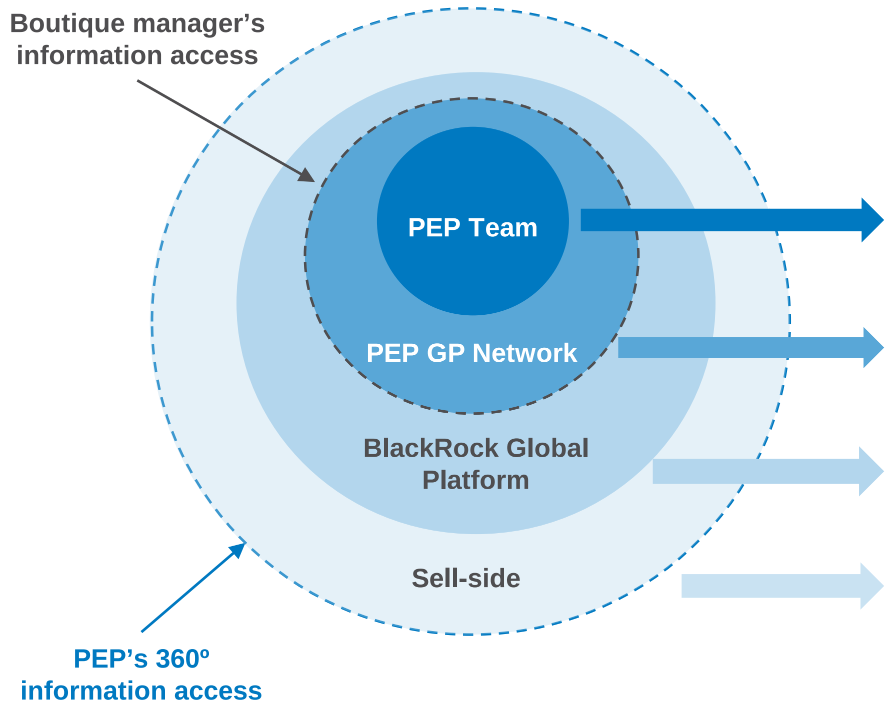
Eugene McDonald
Senior Investment Advisor to PEP

Russ Steenberg
Managing Director
Global Head of PEP

As of 2 February 2016. Investment committees are subject to change at any time.

BlackRock information advantage:
Unique access to extensive global due diligence resources

BlackRock information advantage sources



PEP Team:
32 investment professionals; MDs average 22 years of experience[1]

PEP GP Network:
Committed to over 360 GPs[2]

BlackRock Global Platform:
802 research analysts and portfolio managers across Asia, Europe, and Americas[3]

Sell side:
Largest publicly-traded asset manager; Platinum accounts with major banks and placement firms

BlackRock platform provides an information advantage in an information business

1 As of 18 January 2016
2 As of 30 September 2015; includes investments made by senior investment professionals prior to joining BlackRock
3 Reflects total fixed income and equity investment professionals as of 30 September 2015

Monitoring and risk management

Extensive investment monitoring and risk management leveraging BlackRock platform

- Investment team meets with General Partners 3 to 4 times or more per year

- Comprehensive quarterly review of progress of deals
- Performance reviewed and compared to original expectations

- PEP senior leaders seek to serve on the boards of underlying funds and direct co-investments to ensure accountability and alignment with fund strategies

- Access to other BlackRock thought leaders, subject matter experts and research

- Valuation of direct co-investments is produced by an independent third party

- Ongoing monitoring of both potential and existing deals for both funds and direct co-investments

- Helps to determine and understand underlying fund investments, quartile rankings and how PEP funds compare to industry benchmarks

Risk management and due diligence processes seek to mitigate, but cannot eliminate risk, nor do they imply low risk

The BlackRock PEP advantage

Alignment of interest	▸ Truly independent fiduciary — no proprietary trading or investment banking ▸ Alignment of financial interests with LPs • BlackRock and its employees have committed over $500 million to PEP vehicles alongside limited partners[1] • Subject to regulatory restrictions, PEP professionals are expected to make capital commitments representing material portion of net worth
Focus on strategic partnerships	▸ Solutions-oriented approach to strategic partnerships ▸ $14.3 billion committed to customized separate accounts for large institutional pension sponsors, insurance companies, and family offices[2] ▸ Provide a broad range of services including staff training/education, knowledge sharing, and introduction to leading GPs
Senior executive involvement	▸ PEP's Executive Investment Committee currently consists of five senior BLK executives, including: • Rob Kapito, President • Ken Wilson, Vice Chairman • Matt Botein, Co-Head of BAI • Russ Steenberg, Head of PEP • Gene McDonald, Senior Adviser to PEP
Culture of risk management	▸ Firm founded upon rigorous risk management principles ▸ Empowered, independent risk and compliance professionals help ensure client interests are protected ▸ BlackRock Solutions® provides independent risk management and enterprise investment services for over $15 trillion in assets • Proprietary PE risk factor and PME attribution adds value to our investment due diligence and monitoring processes

1 Please note that employee commitments may decrease and not necessarily continue at this pace due to recent regulatory restriction changes, e.g. The Dodd Frank Wall Street and Consumer Protection Act
2 A portion of the total investor commitments remains subject to drawdown. Includes total separate account commitments under management as of 14 January 2016

Appendix

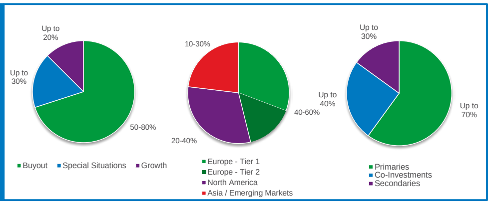
16 years experience sponsoring customized separate accounts: $14.3 billion of PEP's LP commitments

Client name[1]	Vintage year[3]	Commitments ($m)	Strategy
EMEA Insurance Company I	n/a	$5,208[2]	Diversified investments
Teacher Retirement System of Texas	2009	1,700	Direct co-investments *[Evergreen Program[4]]*
U.S Insurance Company I	2013	1,100	Direct co-investments, secondaries and primary funds
New Jersey Division of Investment	2006	900	Direct co-investments, secondaries and primary funds *[Evergreen Program[5]]*
Asian Sovereign Wealth Fund I	2015	650	Primary funds and direct co-investments
U.S. Corporate Pension I	2007	611	Direct co-investments, secondaries and primary funds
EMEA Sovereign Wealth Fund I	2014	500	Direct co-investments
EMEA Family Office I	2000	355	Core diversified portfolio
EMEA Private Investor I	2012	350	Direct co-investments
New Mexico Educational Retirement Board	2009	300	Direct co-investments, secondaries and primary funds
EMEA Family Office II	2015	300	Direct co-investments
EMEA Insurance Company II	2004	255[2]	Diversified investments
U.S Sovereign Wealth Fund I	2014	200[2]	Direct co-investments
U.S Insurance Company II	2015	200	Direct co-investments
EMEA Corporate Pension I	2016	200	Direct co-investments, secondaries and primary funds
EMEA Corporate Pension II	2007	160[2]	Direct co-investments, secondaries and primary funds
EMEA Insurance Company III	2012	155[2]	Direct co-investments and core diversified portfolio
U.S Public Pension IV	2014	150	Direct co-investments
EMEA Public Pension I	2014	126	Direct co-investments
U.S Family Office I	2006	125	Core diversified portfolio
U.S Insurance Company III	2006	125	Core diversified portfolio
U.S Family Office II	2006	113	Core diversified portfolio
EMEA Corporate Pension III	2014	101	Secondaries and primary funds *[Evergreen Program]*
U.S Taft Hartley	2014	100	Core diversified portfolio
U.S. Family Office IV	2016	100	Direct co-investments
EMEA Public Pension II	2015	93[2]	Direct co-investments and core diversified portfolio
U.S Family Office III	2015	75	Direct co-investments
U.S. Public Pension V	2015	75	Direct co-investments
Total		**$14,327**	

Data as of 14 January 2016
1 Some names have been redacted for confidentiality purposes
2 Includes commitments to custom separate accounts and commingled programs
3 Reflects year of initial closing with respect to each client's initial commitment
4 $1,050m in total LP commitments to client's evergreen vehicle
5 $800m in total LP commitments to client's evergreen vehicle

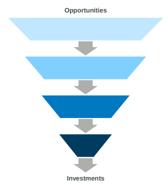
Services (1/2)
Comprehensive set of services available for private equity clients

Strategy planning & review



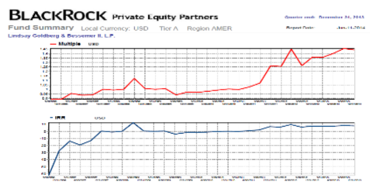
- Investment strategy and portfolio construction
- Commitment plan & cash flow / NAV model
- Implementation plan including focus areas

Investment management



- Sourcing of investment opportunities
- Screening & commercial due diligence (DD)
- Legal and tax DD
- Investment Committee review
- Portfolio construction & active monitoring

Investment monitoring



- Ongoing contact with GPs
- Continuous performance & risk assessment
- Benchmarking
- Active participation on GP advisory & company boards
- Systematic quarterly valuation & portfolio reviews

Investment reporting

- Quarterly investment reporting package
- Consolidated client portfolio overviews
- Customized client account statements
- Ad-hoc analyses

Administration & accounting

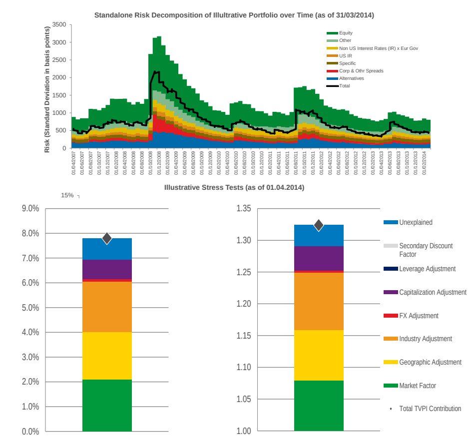
Administration:
- Ongoing administration services
- Execution of payments

Accounting:
- Cash management
- Financial reportings (quarterly & annual)

For illustrative purposes only

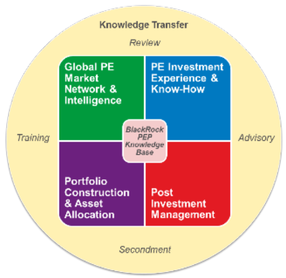
Services (2/2)
Comprehensive set of services available for private equity clients

Risk management & analytics



- In context of client's Private Equity portfolios:
  - Customized portfolio analyses, e.g. concentration, volatility, etc.
- Quantitative analyses:
  - Performance attribution
  - Risk factor modelling
  - Portfolio construction using proprietary portfolio risk tool (PRT)
- In context of client's overall portfolio:
  - Holistic risk analysis & reporting
  - Periodic portfolio breakdown in underlying risk factors (based on benchmarks)
  - Illustrative stress-tests of the overall portfolio (based on benchmarks)

Knowledge transfer



- Client trainings and knowledge transfer, e.g.:
  - Education on the asset class and our processes
  - Sharing of investment memoranda / due diligence material
  - Participation in quarterly portfolio reviews
  - Attendance of due diligence meetings

For illustrative purposes only.

Definitions and disclosures

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Overview of Pathway Capital Management

North Dakota State Investment Board

March 18, 2016

PATHWAY®
CAPITAL MANAGEMENT

- Overview of Pathway
- Investment Strategy and Process
- Secondaries and Co-investments
- PPEF I-8 Overview
- Customized PE Program
- Appendix

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Overview of Pathway

Pathway Overview

- **Global Private Market Specialist**—Pathway creates and manages private market programs comprising primaries, secondaries, and co-investments for institutional investors worldwide.
- **Established**—1991
- **Assets Under Management**—$31.2 billion[1]
- **Global Investor Base**—Institutions across North America, Europe, and Asia
  - Corporate Pension Funds
  - Financial Institutions
  - Public Pension Funds and Trusts
  - Foundations and Endowments
  - Sovereign Wealth Entities
- **Ownership**—Independent, 100% partner owned
- **Personnel**—125 partners and employees, including 42 investment professionals, supported by a deep team of legal, accounting, client services, information technology, and administrative personnel
- **Locations**—California • Rhode Island • London • Hong Kong • Tokyo[2]

SEC-Registered ▪ FCA-Regulated ▪ SFC-Regulated[3]

1. Represents roll-forward market value plus undrawn capital at December 31, 2015.
2. Strategic alliance with Tokio Marine Asset Management, a Japanese investment adviser.
3. Pathway is an SEC-registered investment adviser. Pathway's wholly owned subsidiary, Pathway Capital Management (UK) Limited, is authorized and regulated by the Financial Conduct Authority, and Pathway's wholly owned subsidiary, Pathway Capital Management (HK) Limited, is licensed in Hong Kong by the Securities and Futures Commission to engage in certain marketing activities. Neither the U.S. Securities and Exchange Commission nor any other U.S. agency, non-U.S. securities commission, or state agency has approved this presentation, and none has confirmed the accuracy or determined the adequacy of this documentation. Any representation to the contrary is unlawful.

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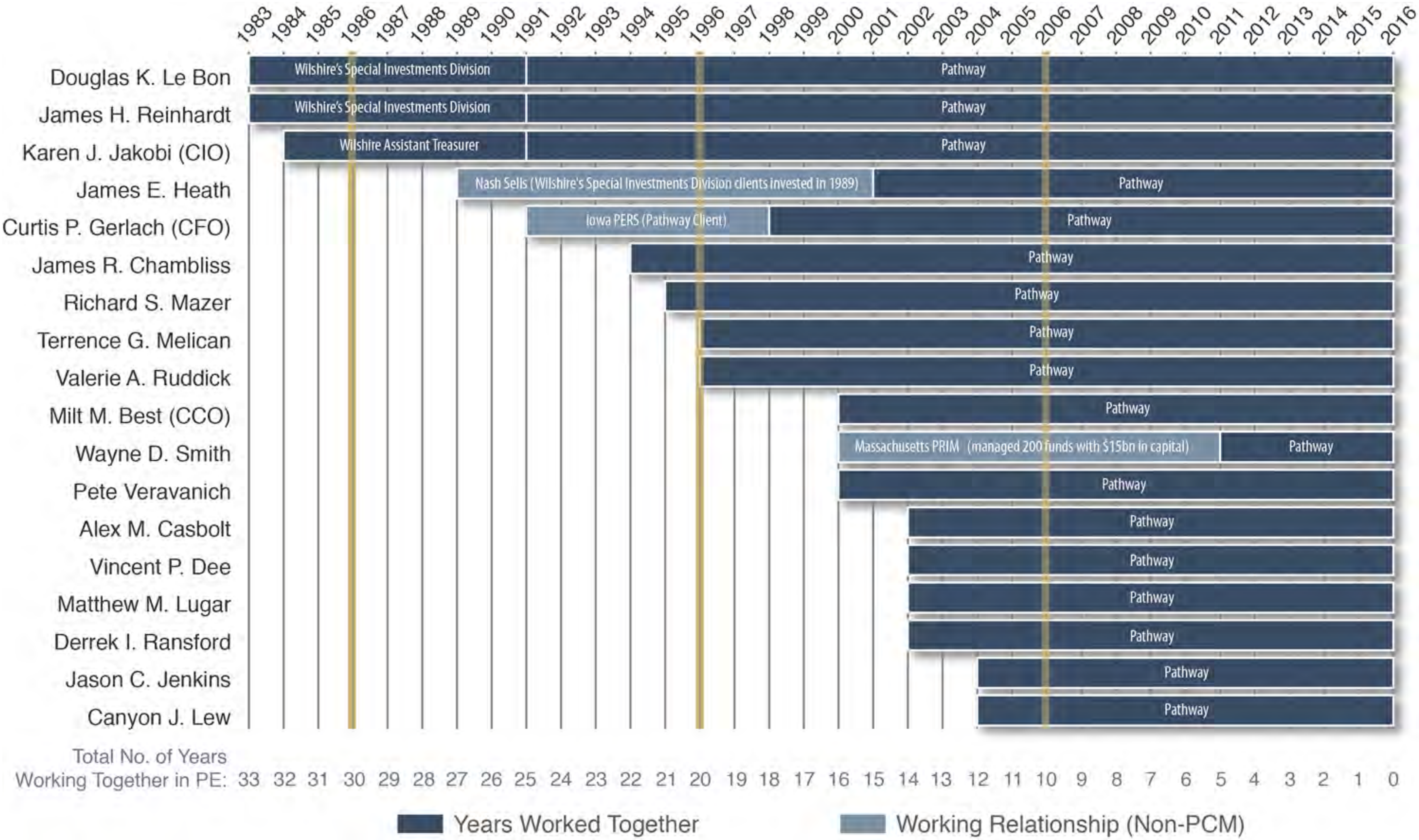
Pathway's most-senior professionals have worked together as a team for a significant period of time.



Investment Team Continuity and Experience

Pathway believes that its competitive advantage can be explained by the experience and stability of management and the scale of its participation in the private markets:

- The private market investment **experience** of Pathway's principals is substantial, spanning numerous important global economic events:

1980s
Market Crash of 1987
Savings & Loan Crisis

1990s
Gulf War
Recession
Currency Crisis in Latin America, Asia, and Russia
Long-Term Capital

2000s
9/11
Tech Bubble
Recessions (2)
Corporate and Accounting Scandals
Global Financial Crisis

2010s
Pathway believes it is best-suited to navigate economic events that will occur this decade and beyond.

- The scale of participation by Pathway has been substantial:
  - Active investment year after year
  - Substantial amounts of capital invested on behalf of clients and investors
- Pathway believes that it is one of the most **stable** PE firms in the industry:
  - 100% owned by its 18 principals
  - Investment Committee members have an average of 24 years of private market experience
  - 16 senior investment principals have on average 20 years of private market experience

Organizational Chart

Investment Team

Douglas K. Le Bon
Senior Managing Director

James H. Reinhardt
Senior Managing Director

Karen J. Jakobi
Senior Managing Director & CIO

Alex M. Casbolt†
Managing Director

James R. Chambliss
Managing Director

Vincent P. Dee, CFA
Managing Director

James E. Heath†
Managing Director

Richard S. Mazer
Managing Director

Terrence G. Melican
Managing Director

Valerie A. Ruddick
Managing Director

Wayne D. Smith, CFA*
Managing Director

Jason C. Jenkins, CFA
Director

Canyon J. Lew
Director

Matthew M. Lugar*
Director

Derrek I. Ransford, CFA
Director

Pete Veravanich
Director

Paul J. de Groot, CFA
Sr. Vice President

Simon Y.S. Lau‡
Sr. Vice President

Mikael Sand, CFA†
Vice President

John T. Ruggieri, CFA*
Vice President

Nicholas J. Siemsen, CFA
Vice President

Joseph C. Tien‡
Vice President

Stefan Goettl†
Sr. Associate

Bryan P. Nelson, CFA
Sr. Associate

Hiral G. Savani, CPA
Sr. Associate

Kevin W. Bland
Associate

Jeffrey L. Buress*
Associate

Jeremy N. Ebstein
Associate

Justin C. Maney, CFA
Associate

Blessie Vizconde
Associate

Wyatt H. Geiger
Sr. Investment Analyst

Petros Krappas†
Sr. Investment Analyst

Brett W. Richardson
Sr. Investment Analyst

Alice M. Cope
Investment Analyst

Andrew Fojanesi*
Investment Analyst

Matthew T. Kahn
Investment Analyst

Stephen M. Kraman
Investment Analyst

Trisha A. Mandalia†
Investment Analyst

Paolo Manaloto
Investment Analyst

Jun Tae Park‡
Investment Analyst

Benjamin Pittsley*
Investment Analyst

Richard L. Wang
Investment Analyst

Client Services

Linda S. Chaffin
Sr. Vice President

Gerard R. Branka*
Vice President

6 Staff

Legal

Ashok K. Tripathi, Esq.
Sr. Vice President & General Counsel
5 Staff

Corporate Accounting, Fund Accounting & Tax

Curtis P. Gerlach
Director & CFO
40 Staff

Compliance

Milt M. Best, CFA
Director & CCO
3 Staff

Systems Administration

Brian M. Leyran
Systems Administration Mgr.
3 Staff

Software Development

Michael C. Long
Mgr.–Software Development
4 Staff

Editorial & Production

Christopher M. Lopez
Editor & Production Manager
3 Staff

HR & Admin.

Laurie N. Kiley
Vice President of HR
19 Staff

NOTE: Bold type denotes Pathway principals. *Rhode Island staff. †London staff. ‡Hong Kong staff.

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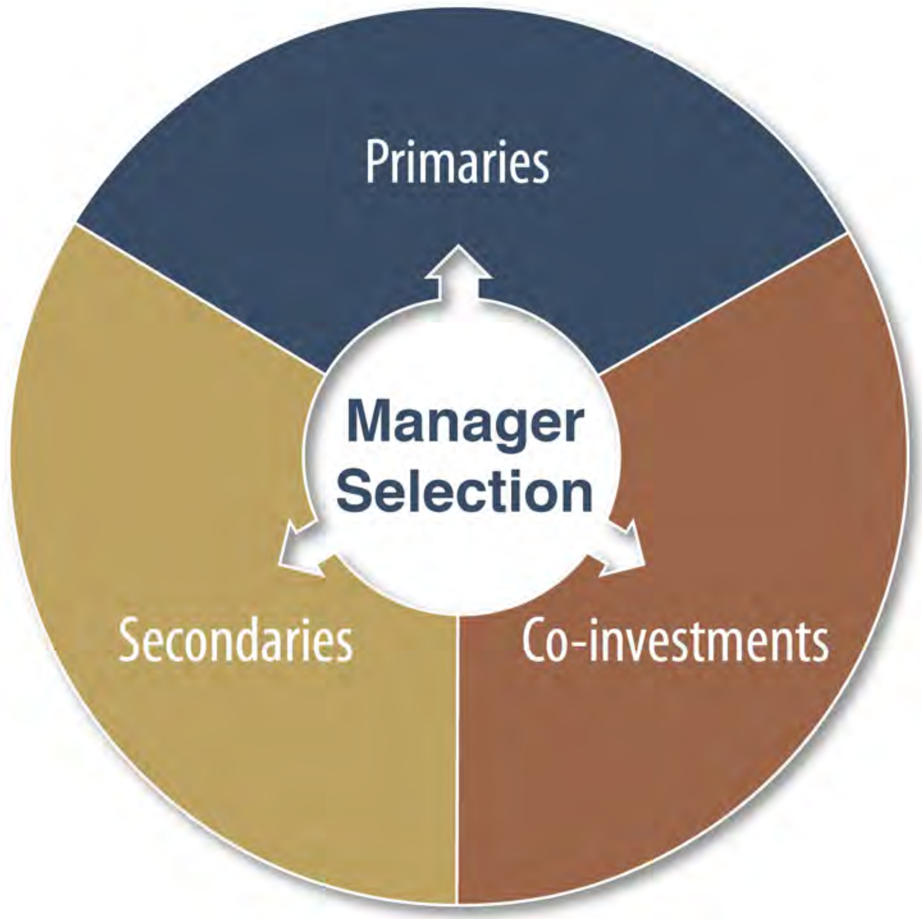
Investment Strategy and Process

Pathway's Integrated Investment Philosophy

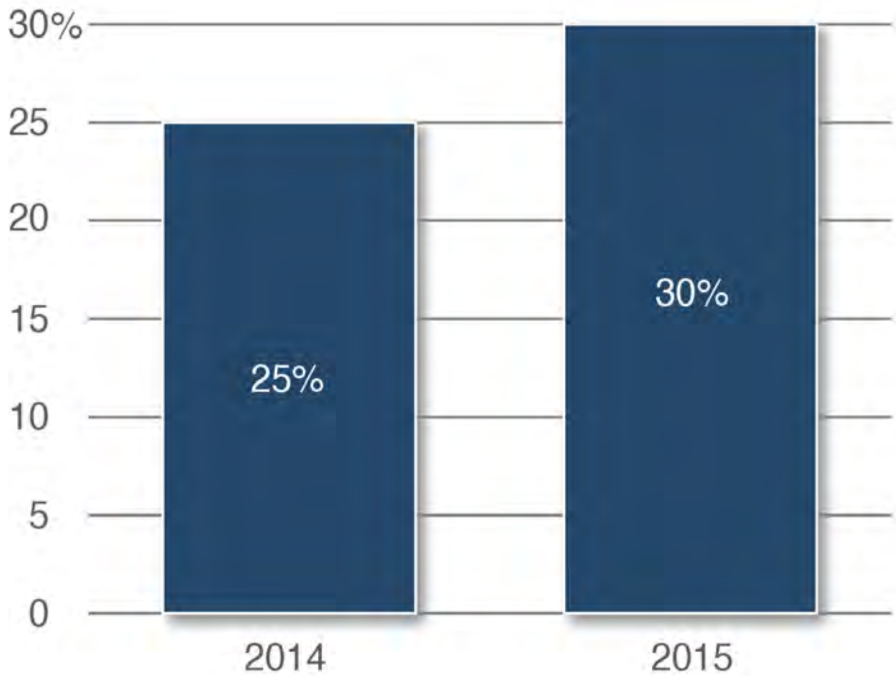
Leveraging Relationships

- Pathway is centered on selecting high-quality managers.



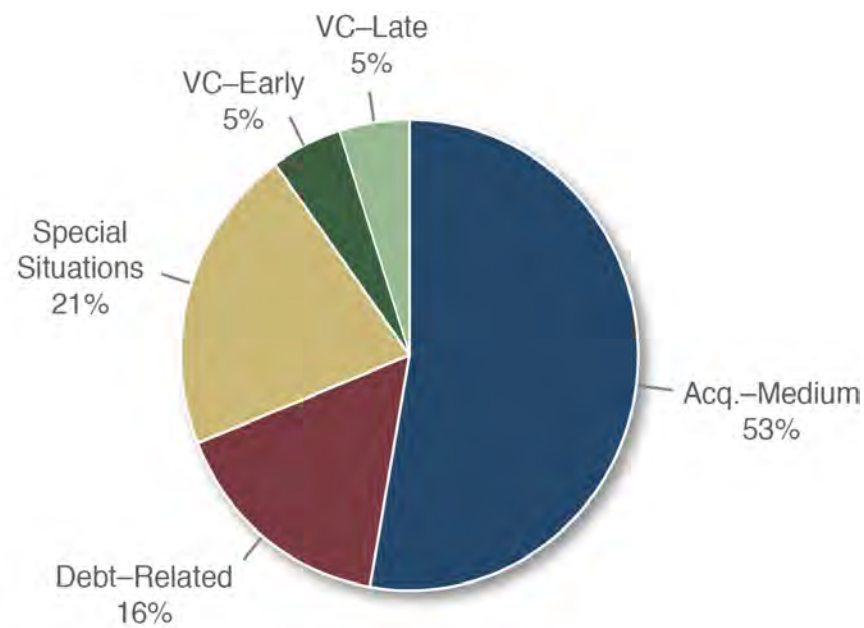
Proactive Sourcing over the Past 2 Years

Proactively Sourced Commitments



NOTE: Presented as a percentage of total dollars committed to primary discretionary investment partnerships for each year shown.

By Investment Strategy



NOTE: Percentages based on number of proactively sourced investments made from January 1, 2014, to December 31, 2015.

Disclaimer: This slide includes all proactively sourced (i.e., new relationships sourced through Pathway's proactive efforts) discretionary primary private market investments (i.e., limited partnership interests) made from January 1, 2014, to December 31, 2015. The slide is intended to illustrate Pathway's current active approach to sourcing new general partner relationships with managers of private market funds. No representation is being made that an investor will or is likely to have access or receive allocation to funds such as the funds on this slide. It should not be assumed that proactively sourced investments will be profitable or will equal the performance of the funds shown on this slide.

Pathway Aims to See Everything but Targets Only High-Quality Funds

- Rigorous due diligence is applied to each opportunity, consistently, to identify what Pathway believes to be high-quality managers.
- Mitigates the risk of investing in "hot" fads or sectors that are unproven and, in Pathway's experience, unlikely to generate attractive returns.
- Established and tested criteria, with a high threshold.

Pathway Targets GPs With

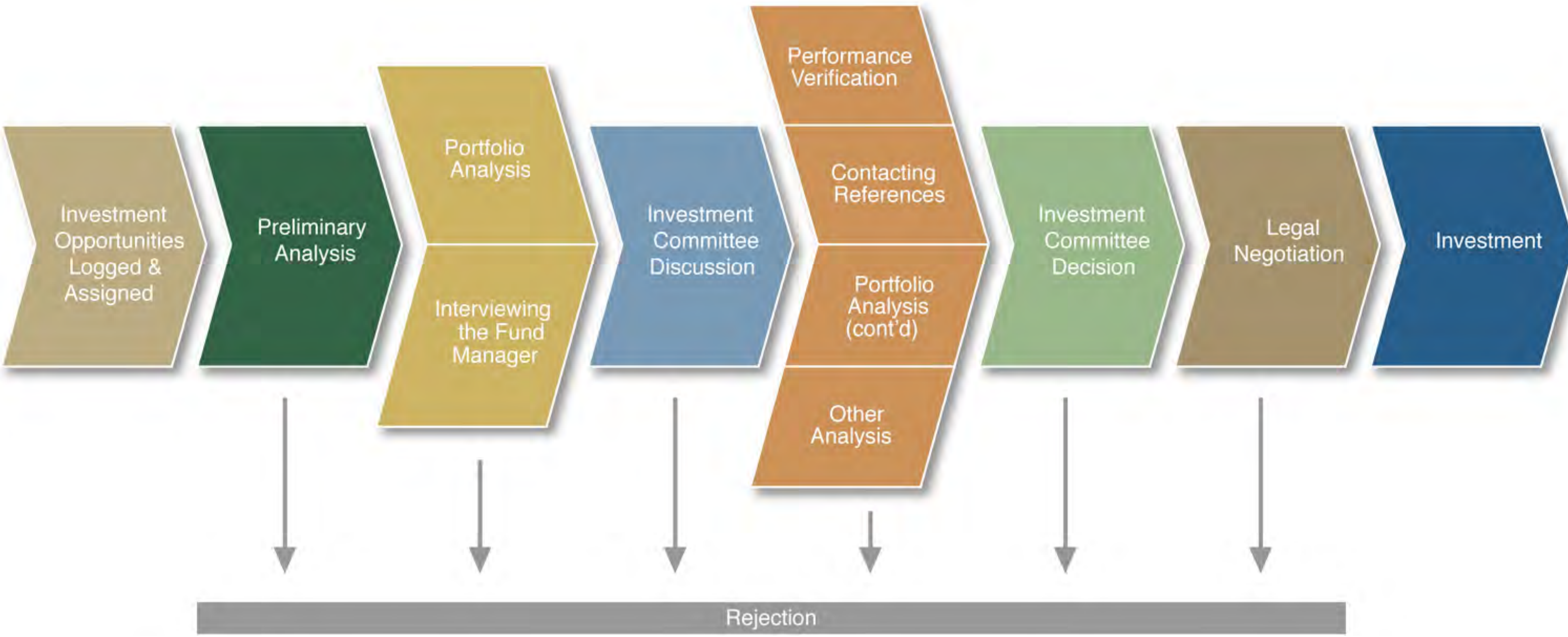
- Sound Business Models
- Exceptional Management Teams
- Proven Access
- Differentiated Resources
- Successful Long-Term Track Records

and Markets With

- Avenues for Liquidity
- Exceptional Talent Pools
- Reliable Accounting & Legal Systems
- Stable Political Environments
- Attractive Long-Term Economic Fundamentals

NOTE: Data is for the year ended December 31, 2015. [a]Pathway held 454 meetings for 302 partnerships. Primary investments only.

Pathway's Investment Process



- Pathway typically reviews 400–550 investment opportunities per year.
- As an investment opportunity moves forward, additional investment professionals become involved in the process: typically 12–20 professionals for a completed investment.
- Strict adherence to our selection criteria and thorough application of our due diligence process leads to a low selection rate—approximately 4% of opportunities reviewed.[1]

1. Pathway invested in 98 of the 2,528 primary funds it reviewed over the 5-year period ended December 31, 2015.

Portfolio Construction

Pathway believes that creating a concentrated and balanced portfolio will result in a successful, long-term private equity program.

Private Market Experience

Pathway has depth of experience at the various stages of the investment cycle for fund investments.

Portfolio Development

Over **75** Investment Portfolios

Developing investor objectives, policies, and criteria.

Determining appropriate account structure and methods of communication.

Investment Screening

Over **9,500** Primary Partnership Opportunities Reviewed

Screening and analyzing prospective investment opportunities.

Financial analysis, reference checking, and due diligence meetings.

Investment Selection & Completion

Over **400** Partnerships

Over **$60 billion** in Commitments

Conducting business and legal review of partnership agreements.

Negotiating, structuring, and closing partnership investment commitments.

Monitoring & Reporting

Over **950** Partnerships Monitored

Over **16,000** Portfolio Companies

Monitoring fund financial statements.

Managing cash flows, calculating and reporting performance.

Confirming general partner compliance to partnership agreements and negotiating amendments.

Exiting

Over **60,000** Distributions

Over **400** Extensions & Completions

Managing cash/stock distributions, liquidation, and extension of partnership terms.

NOTE: Data from Pathway's inception in January 1991 through December 31, 2015, and includes approximately $385 million in 28 discretionary secondary purchases. This figure does not include co-investment data under Pathway's Co-investment Program, which was launched in 2013.

Secondaries and Co-investments

A Differentiated and Opportunistic Approach to Secondaries

Pathway's Approach to Secondaries
▪ Leverage significant industry knowledge and strong relationships with GPs
▪ Primary focus on determining the upside and quality of assets
▪ Focus on secondary interests in funds managed by high-quality GPs
▪ Strong long-term track record applying bottom-up approach to secondaries[a]
▪ Active engagement with GPs, including extension and termination decisions

[a]Please refer to pages 38 and 39 for Pathway's Discretionary Secondaries Investment Track Record.

Co-investment Program Overview

- The primary rationale for completing co-investments is to reduce private equity program expenses by eliminating or significantly reducing management fees and carried interest.

Pathway's Approach to Co-investments

- Invest only alongside what Pathway deems to be high-quality "Qualified" GPs, which have the following characteristics:
  - Pathway conducted primary due diligence on and invested in the GP's most recent fund.
  - The GP continues to be considered in good standing based on an assessment of the organization and its investment performance.
  - The GP has a high investment success percentage and also has high capital-preservation ratios.
- Conduct detailed due diligence on opportunity.
  - Utilizing primarily the GPs and its consultants' due diligence
  - Focusing on governance, valuation, deal structure, management, investment thesis, key risks, and fit with GP's strategy, among other things
- Construct diversified co-investment portfolios with what Pathway determines to be the appropriate exposure to each portfolio company when considering exposure through primary commitments and co-investments.

PPEF I-8 Overview

Benefits of PPEF I-8

- Opportunity to enhance current PE program with a different and complementary PE investment approach
  - Bottom-up approach focused on high-quality managers
  - Construction of high-conviction portfolios
  - A unique investment approach to secondaries and co-investments—both without a carry fee
- Program is expected to have minimal overlap with existing NDSIB managers
- An existing portfolio of strong managers in PPEF I-8
- FOF vehicle fees—accounting, tax, legal—shared across all investors on pro-rata basis
- Turnkey solution that minimizes administrative burden

PPEF I-8 Overview

Status

Fund Size Target	$300 million
Closed to Date	$379 million
Inception Date	March 2015
Committed Capital	$228 million
Portfolio to Date	23 Primary Partnerships 1 Secondary Interest 5 Co-investments

Investment Guidelines

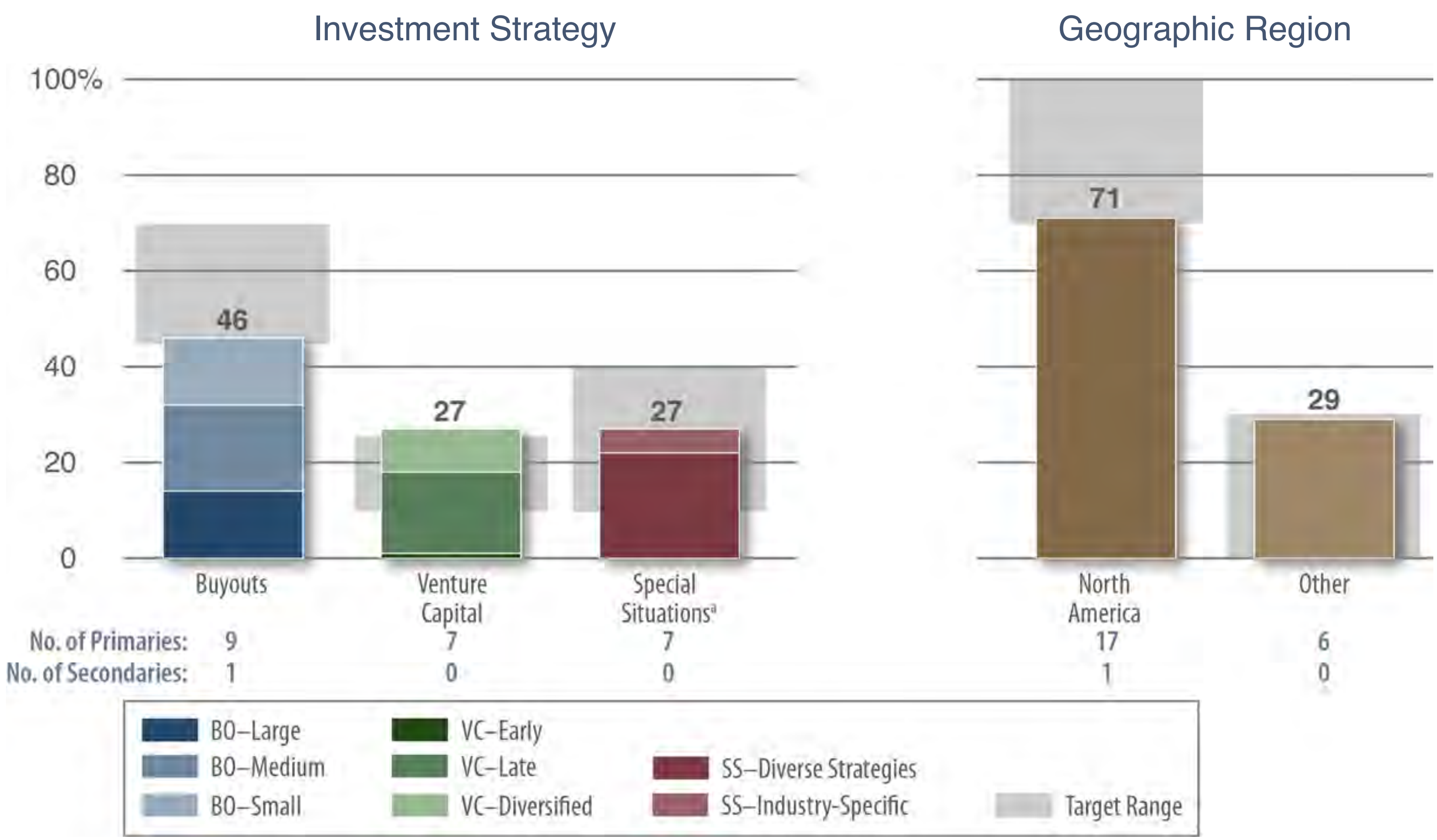
Investment Strategy	Buyouts 45%–70% Special Situations 10%–40% Venture Capital 10%–25%
Geographic Region	North America ≥70% Europe, Asia & Other ≤30%
Investment Type	Primaries ≥65% Secondaries ≤20% Co-investments ≤15%

Commitments	▪ PPEF I-8 has been well-received with limited partner commitments exceeding the target fund size. ▪ A final close is scheduled for March 2016. ▪ The Fund has a diverse investor base with 13 institutional investors from North America, Europe and Asia.
Investments	▪ PPEF I-8 has invested $228 million: $217 million in primary investments, $2 million in secondary interests, and $9 million in co-investments. ▪ The pipeline of opportunities remains attractive, and several near-term investments are expected.
Contributions	▪ Investment activity in the underlying partnerships is gaining momentum; 16 partnerships have made investments to date. ▪ PPEF I-8 has called 7% of investors' committed capital.

Diversification by Investment Strategy and Region

As a % of Partnership Commitments

March 8, 2016



NOTES: Commitments to non-USD-denominated partnerships are accounted for by multiplying unfunded commitments by the quarter-ending exchange rate, then adding the result to the cumulative capital contributions, causing commitments to non-USD denominated partnerships to fluctuate quarterly.

Target ranges reflect the PPEF I-8 Investment Guidelines.

[a] Includes debt-related, industry-focused, and multistrategy partnerships.

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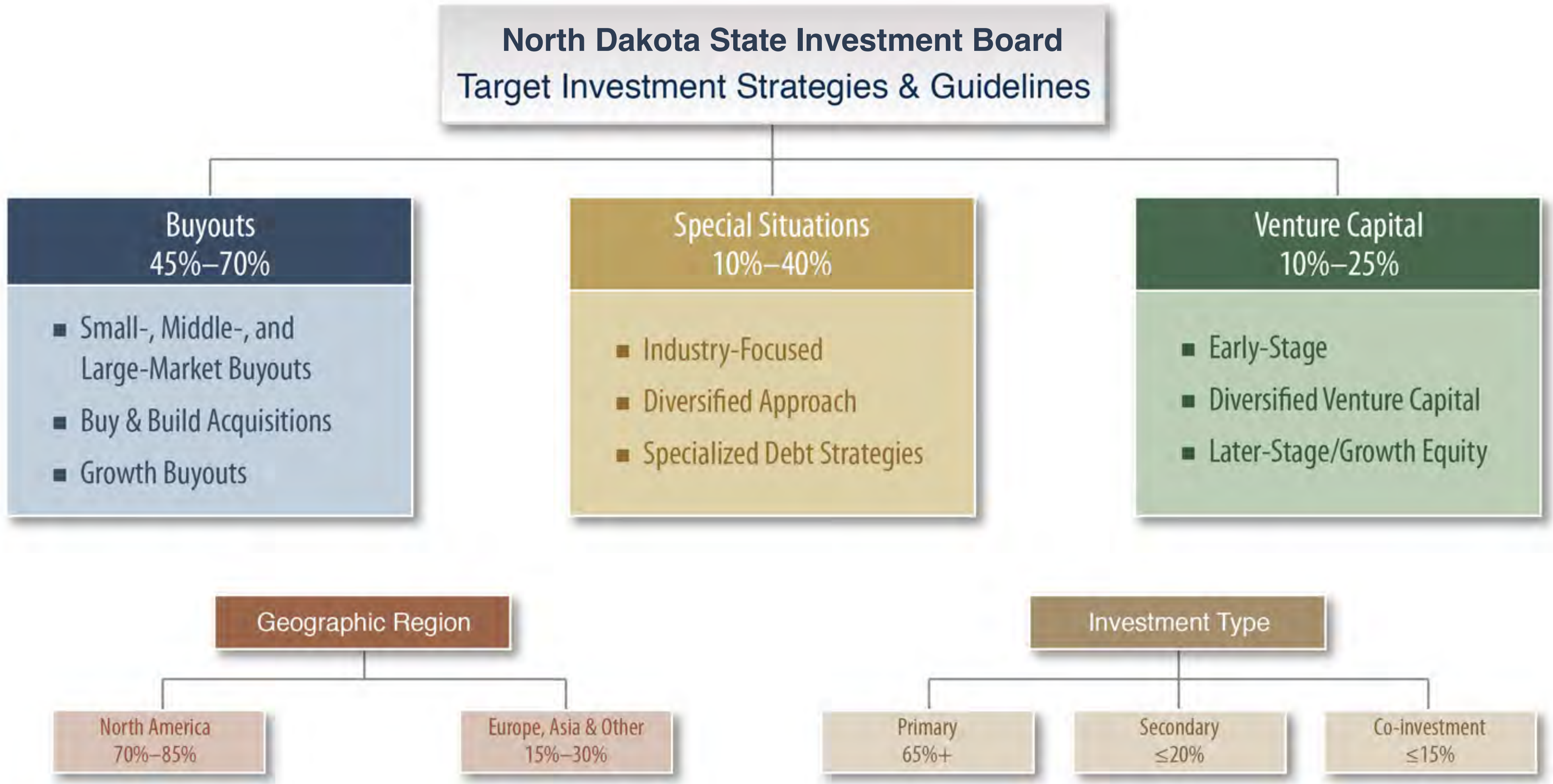
Customized PE Program

Benefits of a Pathway Customized PE Program

- NDSIB to tailor attributes of program as desired. Ability to emphasize selected strategies, investment types, and time horizon.
- Enhances existing PE program with a different and complementary PE investment approach:
  - Bottom-up approach focused on high-quality managers
  - Construction of high-conviction portfolios
  - Unique investing approach to secondaries and co-investments—both without a carry fee
- Turnkey solution that minimizes administrative burden.
- Customized service and reporting structured to meet NDSIB's needs.
- Pathway has established, developed, and managed more than 50 customized private equity programs totaling more than $38 billion in underlying fund commitments.

Customized PE Program—Preliminary Portfolio Plan

Pathway would work with NDSIB to construct a customized investment plan. The target ranges shown below can be tailored to meet NDSIB's needs.



NOTE: Target ranges by region and strategy presented as a percentage of total commitments. Ranges may fluctuate depending on the economic environment and the availability of high-quality offerings. Secondaries include buyout, special situation/debt-related, and venture capital investments.

Appendix

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Biographies

James H. Reinhardt
Senior Managing Director

Mr. Reinhardt is a senior managing director and cofounder of Pathway whose private market experience dates back to 1983. Based in Pathway's California office, Mr. Reinhardt is involved in all aspects of Pathway's investment and client-servicing activities and is a member of Pathway's Investment Committee.

Before forming Pathway, Mr. Reinhardt cofounded the Special Investments Division of Wilshire Associates Inc. in 1983. This independent division of Wilshire focused exclusively on assisting institutions with investment in the private equity asset class. Since the formation of Pathway, Mr. Reinhardt has assisted clients with more than 400 private market limited partnerships, which represent over $60 billion in capital commitments. Mr. Reinhardt has served on the advisory boards and valuation committees of several private market investment partnerships. He received a BS in business management from the University of Redlands and an MBA from California State University, Northridge.

Wayne D. Smith, CFA
Managing Director

Mr. Smith joined Pathway in 2011 and is a managing director in the Rhode Island office. He is responsible for investment analysis and due diligence, negotiating and reviewing investment vehicle documents, and client servicing. Additionally, Mr. Smith serves on the advisory boards of several private market partnerships.

Prior to joining Pathway, Mr. Smith managed the private equity program for the $50 billion Pension Reserves Investment Management Board (PRIM) in Massachusetts, where he had worked since 2000. In this capacity, he performed due diligence, recommended investments, and had oversight responsibility for a portfolio of more than 200 limited partnerships and $15 billion in committed capital. Before joining PRIM, Mr. Smith had worked on private equity investments for Liberty Mutual Group since 1996. He received a BA in management from Assumption College and an MBA from Babson College. Mr. Smith is a CFA charterholder.

Linda S. Chaffin
Senior Vice President

Ms. Chaffin joined Pathway in 2011 and is a senior vice president in the California office. She is responsible for client servicing and business development in the United States.

Prior to joining Pathway, Ms. Chaffin worked at Marwit Capital, where she was responsible for investor relations, finance, and investment management. Her prior experience includes eight years with J.P. Morgan's Mergers & Acquisitions Group in New York, as well as corporate finance roles with GE Capital, Stern Stewart, and the Huntington National Bank. Ms. Chaffin received a BS in business administration from the Ohio State University and an MBA, with honors, from the University of Chicago Booth School of Business.

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Website
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Risk Factors Relating to a Fund of Funds

An investment in a Pathway fund of funds is speculative and entails a high degree of risk. There can be no assurance that the investment objectives of a Pathway fund of funds will be achieved and that investors will not incur losses. Moreover, an investment in a Pathway fund of funds will provide limited liquidity since the interests therein will not be freely transferable, and the investors in the fund will have very limited withdrawal rights. An investor in a Pathway fund of funds must be prepared to bear the risk of an investment in the fund for an indefinite period and be able to withstand a total loss of its investment in the fund.

Additional risks associated with an investment are described in each fund's private placement memorandum, if any, and include, but are not limited to, the following: (i) the fund has not identified any specific investments and may be unable to find a sufficient number of attractive opportunities to meet its investment objectives; (ii) both the fund and the underlying investment funds impose management charges and other expenses, which will result in greater expense than if an investor were able to invest directly in the investment partnership; (iii) the success of the fund will be highly dependent on the expertise and performance of the Pathway investment team and the loss of certain of these individuals could have a significant adverse impact on the business of the fund; (iv) there is not now and there will not be a public market for interests in the fund, and fund interests may not be assigned or transferred without the prior written consent of the General Partner. Accordingly, an investor may not be able to liquidate its investment and must be prepared to bear the risks of owning its interest for an extended period of time; and (v) the fund is expected to invest only in investment partnerships and therefore may not be as well diversified as other funds.

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No representation is being made that the Adviser will or is likely to achieve comparable performance results to that shown herein. Past performance is not necessarily indicative of future results. Although valuations of unrealized investments are made on assumptions that the Adviser believes are reasonable under the circumstances, the actual realized return on unrealized investments will depend on, among other factors, future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs, and the timing and manner of sale, all of which may differ significantly from the assumptions on which the valuations used in the data contained herein are based. Accordingly, there can be no assurance that these valuations are accurate, and the actual realized return on these investments may differ materially from the returns indicated herein.

No representation is being made that a prospective investor will or is likely to have access to funds such as the funds referenced herein. The reference to such funds was made with the benefit of hindsight based on historical rates of return of such manager and on specific investments made by such funds. Accordingly, performance results of specified funds inevitably show positive rates of return or investment results.

AGENDA ITEM III.A.3.

BOARD ACTION REQUESTED

TO: State Investment Board

FROM: Dave Hunter, Darren Schulz, and Eric Chin

DATE: March 18, 2016

SUBJECT: Private Equity Recommendation: Approve BlackRock Private Equity Partners to build a custom private equity program

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RIO Recommendation:

Staff recommends that the SIB engage BlackRock Private Equity Partners ("PEP") to build and manage a customized Global Core Private Equity Program for the Pension Trust. PEP offers comprehensive access to premier investments across Primaries, Secondaries, and Co-investments, as well as the technical expertise and investment know-how necessary to build and manage a successful customized fund of funds program.

PEP offers a number of competitive advantages that are essential for the long-term success of the NDSIB's private equity program. These include:

1. **PEP's $4.6 trillion parent organization provides infrastructure and deal sourcing capabilities that are unmatched in the industry. Consequently PEP has superior access to primaries, co-investments, and secondaries. Moreover, the investment insights and sector views generated by BlackRock's 135+ investment teams can provide invaluable and proprietary information for deal evaluation, and portfolio positioning.**
2. **The PEP customized program allows the NDSIB to tailor exposures around its existing private equity investments. Through PEP, the NDSIB can increase exposures to strategies such as special situations and distressed; strategies that Adam Street (the NDSIB's other private equity provider) has historically not allocated to. Furthermore, a customized program offers the NDSIB the flexibility to adjust the pacing of its private equity program. The NDSIB will be able to optimize its capital allocations in response to changing market conditions, and capital calls and distributions from its other private equity investments.**
3. **PEP offers the most compelling client service model and can serve as an extension of staff in the private equity space. PEP will provide extensive training and direct introductions to the underlying GPs. Moreover, PEP will provide staff access to its internal research, due diligence, and market intelligence. Other PEP clients have leveraged PEP's extensive training and knowledge transfer capabilities to develop their own internal private equity sourcing capabilities.**
4. **Lastly, PEP offers the most compelling fee arrangement (see "BlackRock Private Equity Partners Evaluation: Section 5").**

Background:

At the September 2015 SIB Board Meeting, Staff highlighted the Pension Trust's underweight to private equity. At the time, the Pension Trust was approximately $60 million underweight its target allocation to private equity. In order to reduce the underweight the SIB approved 1) a new commitment to the ASP Global Fund of up to $30 million (2015), and 2) the appointment of Callan to conduct a manager search to identify a strategic partner to complement Adams Street. Since the September board meeting, Staff has worked closely with Callan to identify and evaluate private equity fund of funds managers. Today, Callan and Staff has selected Pathway Capital Management and PEP to present to the board.

Process:

Over the past two years, Staff has spent considerable time and resources analyzing and evaluating the private equity asset class. Research efforts comprised of discussion with peers (i.e. City of Seattle), evaluating industry white papers, and meetings and conference calls with a number of private equity investment and consulting firms including: Adams Street, BlackRock, Capital Group, Carlyle Group, Cogent, CorsAir, Credit Suisse, Evercore, Goldman Sachs, Hamilton Lane, HarbourVest, Invest America, JPMorgan, KKR, Matlin Patterson, Pantheon, Partners Group, Pathway, Portfolio Advisors, Public Pension Capital, Quantum Energy Partners, RCP Investors and UBS.

Following the board's approval (in September 2015) to commence a search to find a private equity program to complement Adam Street, Staff collaborated with Callan to construct a candidate pool of twelve global private equity providers. The managers were:

1. Abbott Capital
2. Neuberger Berman Private Equity
3. BlackRock Private Equity Partners ("PEP")
4. Pantheon Ventures ("Pantheon")
5. Grosvenor Private Markets
6. Pathway Capital Management ("Pathway")
7. Hamilton Lane Advisors
8. Portfolio Advisors
9. KKR Customized Portfolio Solutions
10. Public Pension Capital
11. Mesirow Private Equity
12. RCP Advisors

Each of these managers was tasked with completing a detailed questionnaire that requested information across different facets of their business and organization. Staff and Callan evaluated these responses, and culled the twelve managers down to five. Key areas of focus included:

- **Organization**: Firm ownership, lines of business, client make-up, assets under management, private equity assets, and product offerings
- **Team**: Size and experience of the team (investments, legal and compliance, and operations), staff turnover, organizational culture, internal controls, and the private equity research and due diligence process.
- **Strategy**: Historical deployment of capital across different private equity strategies, current investment views, and investment process/philosophy

- **Portfolio Characteristics**: Model portfolio – number of managers, secondaries, and co-investments. Geographic allocation, and strategic allocation (buyout, venture/growth, special situations)
- **Performance Based Metrics and Historical Returns**: IRR, Total Value to Paid-In ("TVPI"), Distributed to Paid-In ("DPI"), vintage year evaluation, and consistency of performance
- **Proposed Vehicle Structure**: Commingled Fund of Funds, Fund of One, Separate Account, or Other, and accompanying fees and expenses

Key factors that eliminated candidates in this stage of the vetting process included inadequate infrastructure, small investment team, insufficient AUM, a short track record, and/or other performance related issues. The five remaining candidates were BlackRock Private Equity Partners, Abbott Capital, Portfolio Advisors, Pantheon Ventures and Pathway Capital Management.

Staff conducted an additional layer of diligence on the remaining five managers by leading conference calls, or onsite meetings in Bismarck. While all five providers rated highly, three managers; Pantheon, Pathway, and PEP rose to the top. Differentiation at this stage was more nuanced. Some of the key characteristics that led to the selection of the three semi-finalist managers included:

1. Pantheon and Pathway are large well established organizations each managing over $30 billion in private equity assets (committed plus uncommitted). While PEP is slightly smaller and manages roughly $12 billion in private equity assets, it is housed within a $4.6 trillion asset management firm.
2. PEP, Pantheon, and Pathway all have deep investment teams with 32, 71, and 43 investment professionals respectively.
3. Historical performance generated by the three managers is compelling
4. The three managers offer different but attractive product structures
    a. PEP offers the most attractive customized fund of one program
    b. Pathway offers both commingled and customized products with a noteworthy focus on primary investments
    c. Pantheon offers a unique hybrid structure that has the benefits of a commingled program while still allowing for a high degree of customization (Pantheon was ultimately not chosen to present today because the complexity of the hybrid structure may add additional risk, and Pantheon's client service model rated lower than PEP's or Pathway's).

Staff proceeded to conduct onsite due diligence on the three semi-finalist managers at the managers' respective headquarters. Staff spent half a day meeting with the investment, operations, and client service teams of each provider. As a last step in the diligence process, Staff conducted extensive reference checks on the three finalist candidates. Some of the organizations that Staff reached out to included: Alaska Permanent Fund Corporation, AT&T, New Jersey Division of Investment, New Mexico Education Retirement Board, Teacher Retirement System of Texas, Tacoma Employees' Retirement System, Chicago Teachers'

Pension Fund, Public Employees' Retirement System of Mississippi, Lincoln Financial Group, and Segal Rogerscasey.

<u>BlackRock Private Equity Partners Evaluation:</u>

1. **Organizational Overview and History:** PEP sits within BlackRock, Inc. ("BlackRock"), a global Investment firm with $4.6 trillion assets under management. BlackRock is a publicly traded corporation that employs 135+ investment teams, and operates in 30 countries and 70 cities across the Americas, Europe, Asia-Pacific, the Middle East, and Africa.

   PEP is headquartered in Princeton, NJ and has offices in Hong Kong, Zurich, and London. The group employs 116 professionals, 32 of which are investment professionals. PEP manages approximately $12 billion AUM (uncalled commitments plus net asset value).

   PEP was formed in July 1999 by Russ Steenberg, Managing Director, Global Head of PEP, when he was hired by Merrill Lynch Investment Managers ("MLIM"). Mr. Steenberg was tasked with building a private equity fund of funds and direct co-investment business. This program was acquired by BlackRock in October 2006 through BlackRock's acquisition of MLIM.

   In September 2012, BlackRock acquired Swiss Re Private Equity Partners AG ("SRPEP"), the European private equity fund-of-funds franchise of Swiss Re. The entire SRPEP investment team transferred to BlackRock and is now fully integrated. SRPEP began investing in private equity in 1995, and launched its first private equity program for like-minded European investors in 2003.

2. **Investment Strategy/Philosophy:** PEP seeks to build a diversified private equity program diversified across investment type, strategy, stage, industry sector, geography and vintage year. Key tenets of PEP's investment philosophy include:

   a. **Private equity succeeds through fundamental value creation.** Premium returns are generated when investments are made opportunistically, at relatively low prices, by knowledgeable investment professionals.
   b. **Patience and consistency is necessary for the success of a private equity program.** PEP constructs portfolios to consistently access top-tier investments throughout all market cycles.
   c. **Diversification is vital.** A successful private equity program should adhere to a top-down asset allocation and diversification model.
   d. **Identify top performers.** Much of the excess return generated by GPs is concentrated in a relatively small number of top-tier firms.
   e. **Investment due diligence and investment experience is crucial to finding attractive investment opportunities.** PEP employs rigorous investment due diligence combined with investment experience to identify attractive investments across primaries, secondaries, and co-investments.

3. Model Portfolio:

Strategy Type	# of Investments	Total $ to Strategy ($M)	% to Strategy
Primary Funds	20-30	$100.0	75%
Buyout Funds	10-15	$56.0	56%
Venture Capital Funds	0-5	$4.0	4%
Special Situations Funds	5-10	$15.0	15%
Secondary Investments	5-10	$12.5	12.50%
Direct Co-Investments	10-15	$12.5	12.50%
Total Investments	30-55	$100.0	100%

4. Performance Overview:

Primaries				
Private Equity Provider	**Average IRR (2000-2011)**	**Average TVPI (2000-2011)**	**Total Capital Deployed (2000-2011) ($M)**	**Average Capital Deployed (2011-2014) ($M)**
BLK PEP & SR	13.4%	1.57	$ 7,703.53	$ 382.70
BLK Legacy PEP	15.8%	1.73	$ 3,887.98	$ 305.17
BLK Legacy SR	9.8%	1.38	$ 3,815.59	$ 77.53
Pantheon	13.8%	1.65	$ 12,382.20	$ 688.45
Pathway	14.7%	1.60	$ 25,939.03	$ 2,463.59

Co-investments				
Private Equity Provider	**Average IRR (2000-2011)**	**Average TVPI (2000-2011)**	**Total Capital Deployed (2000-2011) ($M)**	**Average Capital Deployed (2011-2014) ($M)**
BLK PEP & SR	24.6%	2.08	$ 1,918.00	$ 300.47
BLK Legacy PEP	24.6%	2.08	$ 1,918.00	$ 300.47
BLK Legacy SR	N/A	N/A	N/A	N/A
Pantheon	26.4%	1.85	$ 692.86	$ 188.29
Pathway	N/A	-	$ -	$ 38.46

The PEP composite performance (BLK PEP & SR) combines performance from the original BlackRock team and the Swiss Re team (acquired by Blackrock in 2012). Dissecting the PEP composite track record illustrates the strength of the Legacy PEP team track record with an average yearly gross IRR from primaries of 15.8% (2000-2011). Moreover, the Legacy PEP team managed the most robust co-investment platform deploying close to $2 billion and generating an attractive IRR of 24.6% (2000-2011).

Staff was initially concerned with the lower returns of the Swiss Re track record. Diligence revealed the Swiss Re results were impacted from different geographic allocations, currency exposure, and frankly a different investment process. The Swiss Re team is now fully integrated with the BlackRock Legacy team and operates under the same investment process the BlackRock Legacy team has employed to generate attractive returns. Following the acquisition, the Swiss Re team underwent extensive training with the BlackRock Legacy team. Staff has met with team members from the Swiss Re team, believes the acquisition is additive, and is comfortable with BlackRock's composite performance track record.

5. **Fees and Capacity:** For a $100 million commitment and a 3 year investment period.

   Management Fee
   - 0.35% per annum on committed capital during the investment period
   - 0.35% per annum on invested capital in years 4 through 12
   - No management fee after year 12

   Carried Interest
   - 0% on primary funds
   - 10% on direct co-investments and secondary investments subject to an 8% preferred return compounded annually (American-style waterfall)
   - 100% GP Catch up

<u>Conclusion:</u>

Staff believes that engaging either Pathway or PEP to manage a private equity fund of funds portfolio will help the Pension Trust achieve its long term investment goals. Both Pathway and PEP possess the platform, infrastructure, network, and access to build and manage a portfolio of high quality primaries and secondaries.

However, Staff recommends an allocation to PEP over Pathway as a result of the following factors:

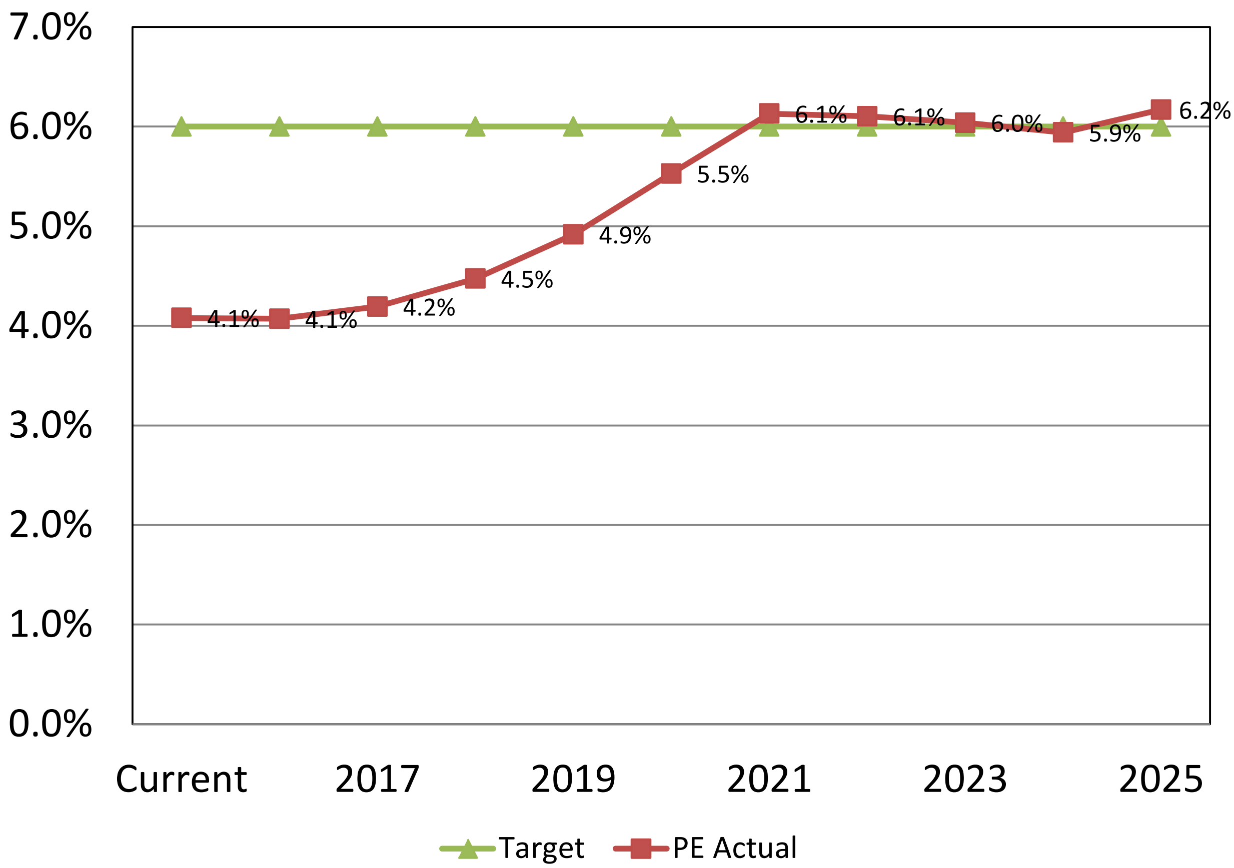
1. PEP's co-investment platform is well established. The PEP team has generated a long and successful track record sourcing, evaluating, and investing in co-investments. Since 2001, PEP has deployed over $3.0 billion to co-investments and achieved a gross IRR of 14.6%. Alternatively, Pathway began its co-investment platform in 2014, and does not have an evaluable track record. Staff is uncomfortable allocating to Pathway's commingled vehicles because co-investments can represent up to 15% of capital in these structures.
2. PEP offers a comparatively attractive management fee structure:
   a. PEP: 35 basis points on committed capital in years 1-3 and 35 bps on invested capital in years 4-12 (PEP has a carried interest fee component on secondaries and co-investments).
   b. For a $100 million mandate Pathway's fee structure equates to approximately 56 basis points on committed capital (Pathway does not charge carried interest on secondaries or co-investments).
3. Over the next five years PEP projects to deploy approximately $1.5 billion a year in the private equity space, while Pathway projects to deploy approximately $3.9 billion a year. Staff believes it will be more difficult to efficiently deploy the larger amount of capital, and thus may hinder the SIB's ability to access limited capacity investments. In other words, Staff believes that PEP is more likely to receive its full allocation because its "bite sizes" are projected to be smaller.
4. PEP's allocation policy treats all investors equally. For limited capacity investments PEP distributes capacity on a pro rata basis. However, Pathway's allocation policy favors existing investors. At Pathway, accounts with existing general partner relationships

receive preferential allocations to the general partners' subsequent funds. As a new investor, PEP's allocation policy is advantageous for the NDSIB.

5. PEP's client service and knowledge transfer model is significantly stronger than Pathway's. PEP will offer superior transparency and access to its research and due diligence.

Pacing Model:

Callan's latest pacing model assumes a 6% private equity target and a 0% plan growth rate.



The projection is based on the following commitment amounts.

Year	ASP ($M)	BLK PEP ($M)	Total ($M)
2016	$ 30.00	$ 75.00	$ 105.00
2017	$ 25.00	$ -	$ 25.00
2018	$ 25.00	$ -	$ 25.00
2019	$ 25.00	$ 85.00	$ 110.00
2020	$ 30.00	$ -	$ 30.00
2021	$ 30.00	$ -	$ 30.00
2022	$ 40.00	$ 120.00	$ 160.00
2023	$ 40.00	$ -	$ 40.00
2024	$ 40.00	$ -	$ 40.00
2025	$ 40.00	$ 40.00	$ 80.00
Totals	$ 325.00	$ 320.00	$ 645.00

Please note the BLK PEP commitment amount is expected to be invested over three years. Furthermore, as a customized program the investment pacing can be adjusted to better meet the NDSIB's target allocation.

A Presentation for the North Dakota State Investment Board

March 18, 2016

Asha Bangalore
Senior Vice President
Economic Research

Patti Koulouris
Senior Vice President
Client Executive

NORTHERN TRUST

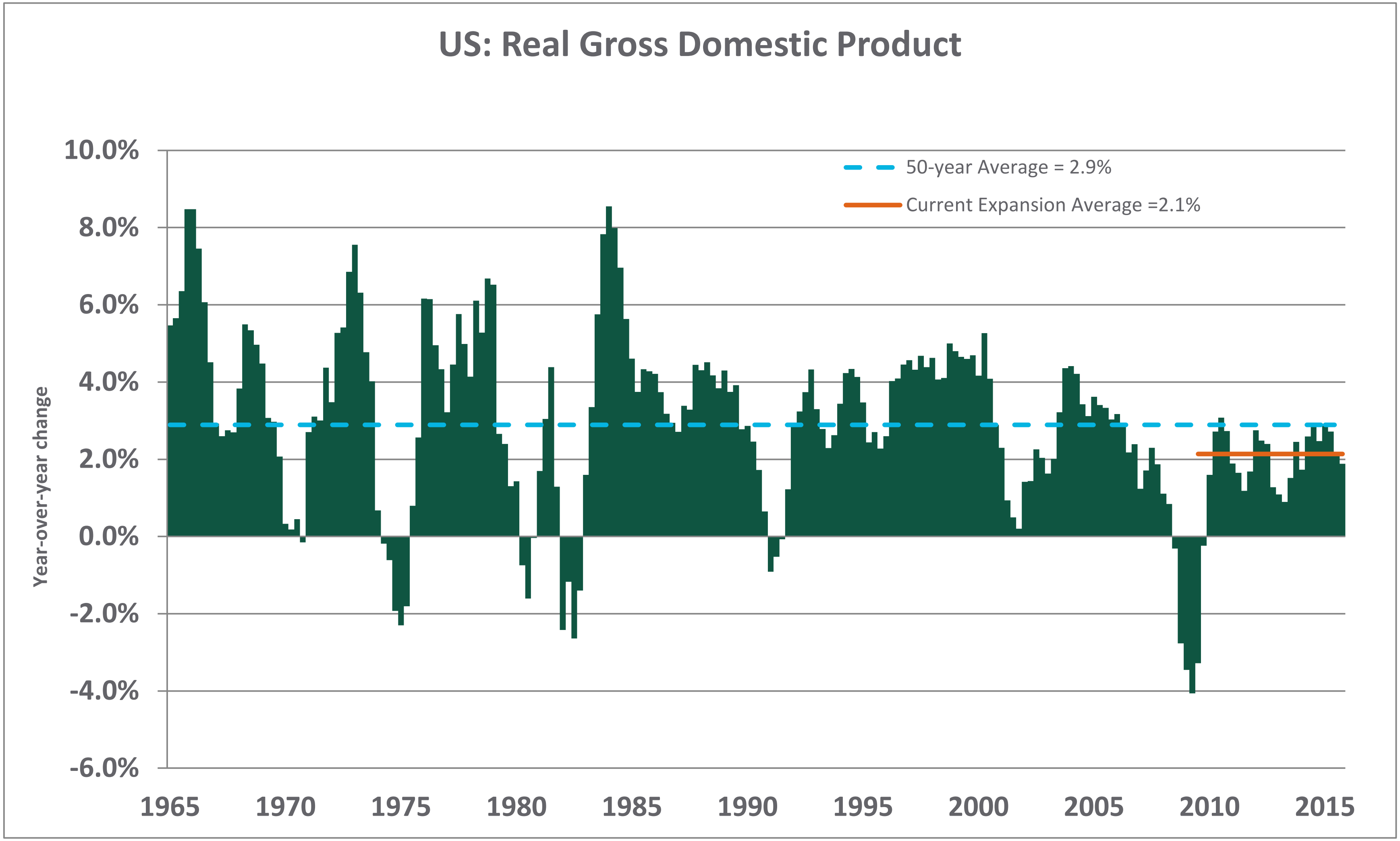
Tailwinds and Headwinds in the Global Economy

NORTHERN TRUST

 |

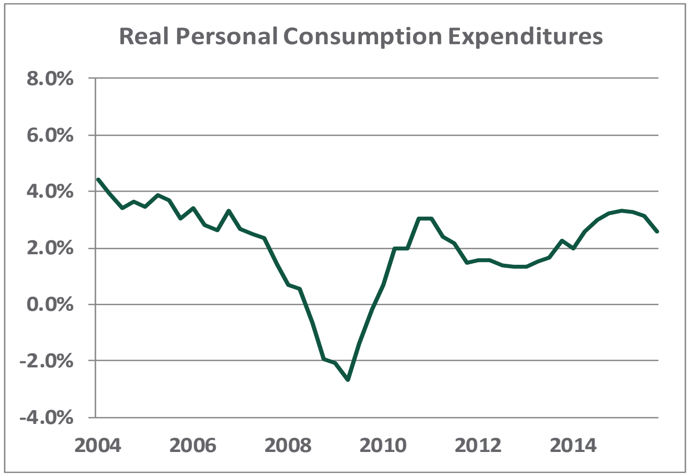
United States

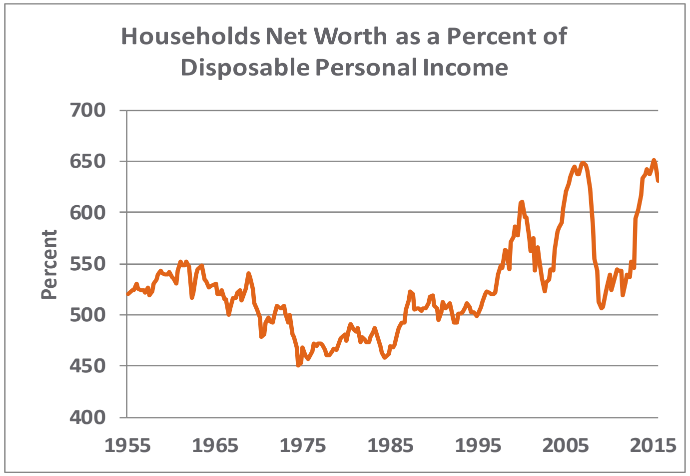
The expansion is one of the longest on record.

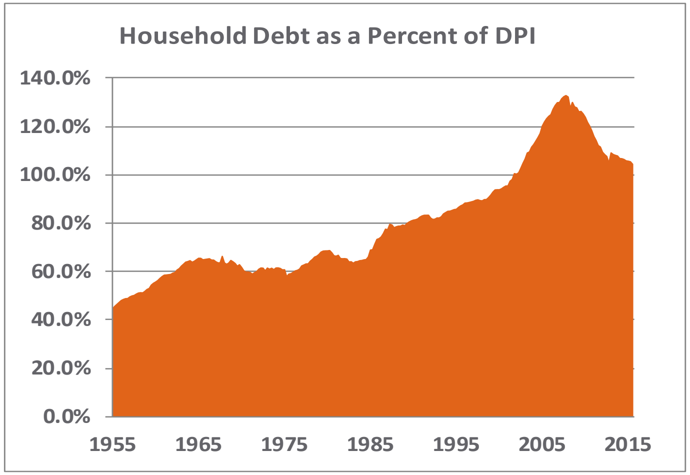


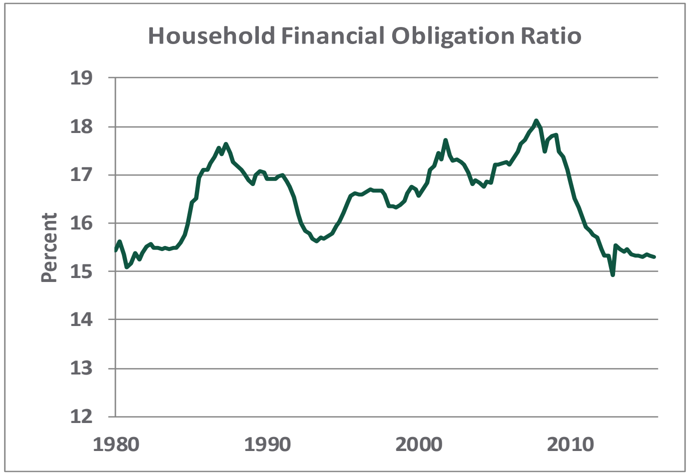
Source: Haver Analytics

Favorable consumer fundamentals are supportive of growth.



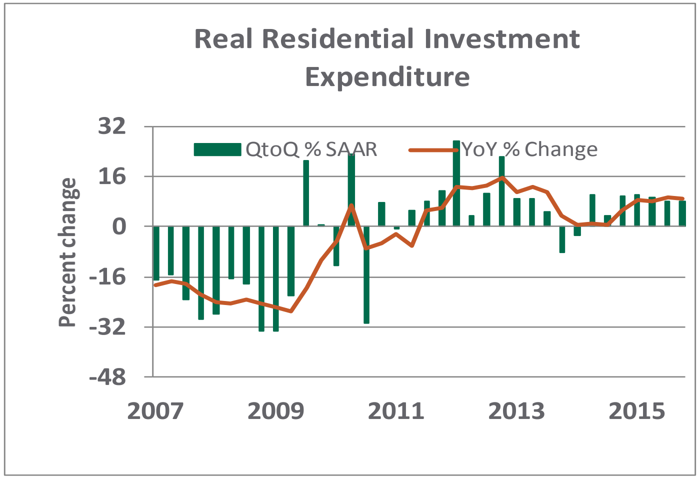


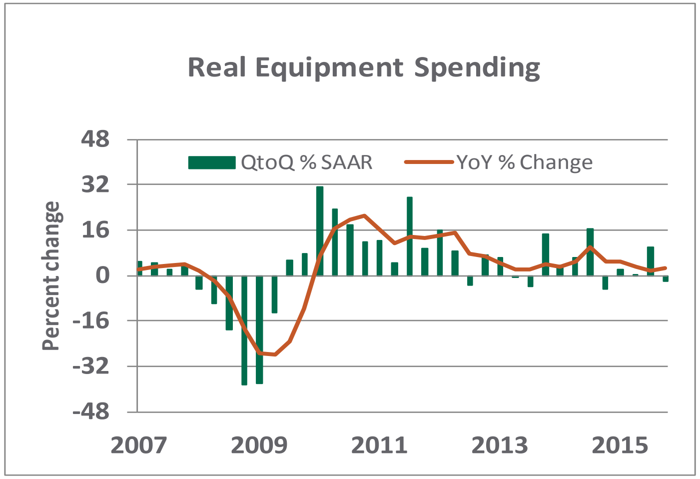


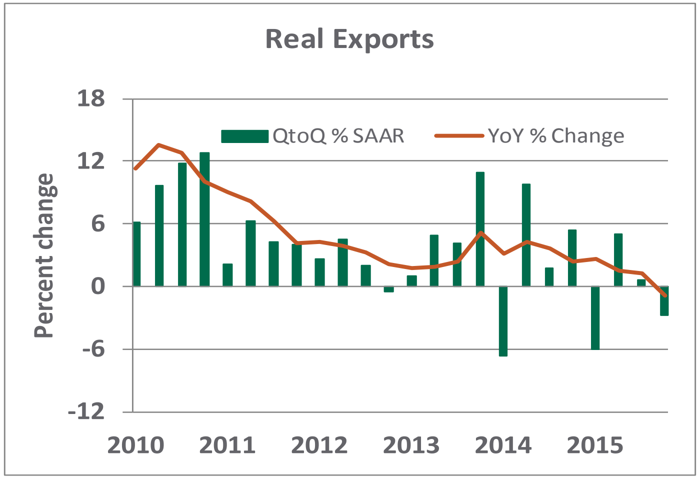


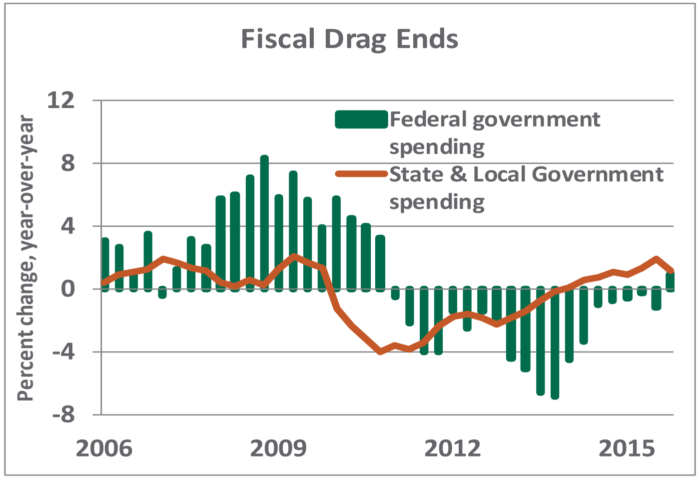
Source: Haver Analytics

Exports are on the watch list, business spending is soft, residential and government outlays are not a drag.



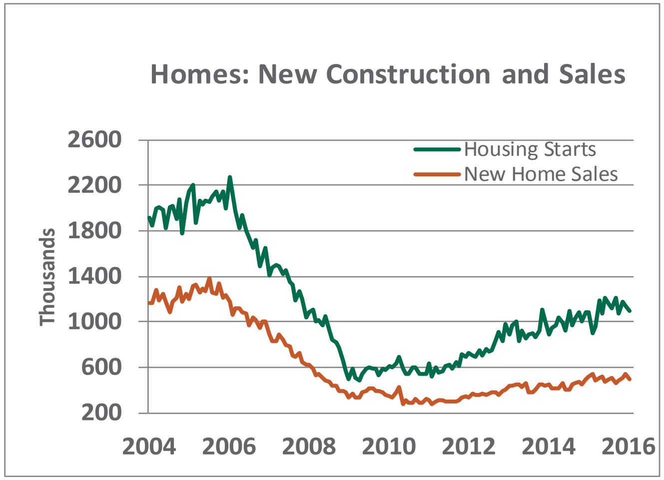


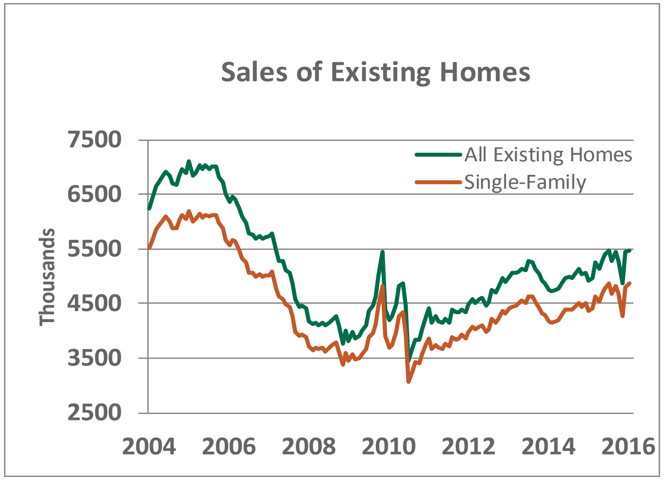


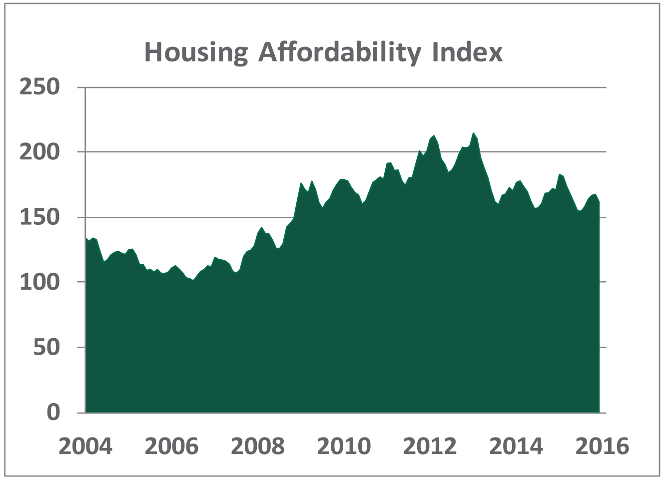


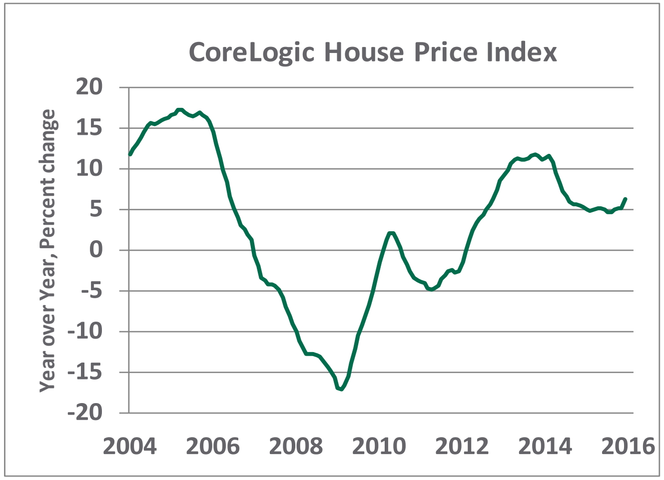
Source: Haver Analytics

The housing sector is stable and the outlook is positive.



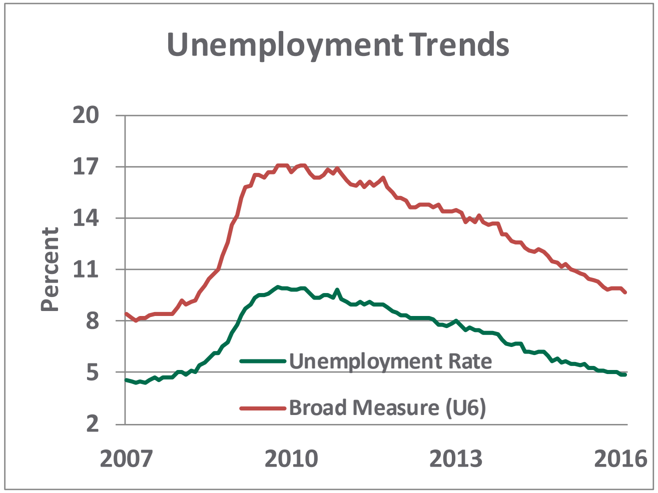


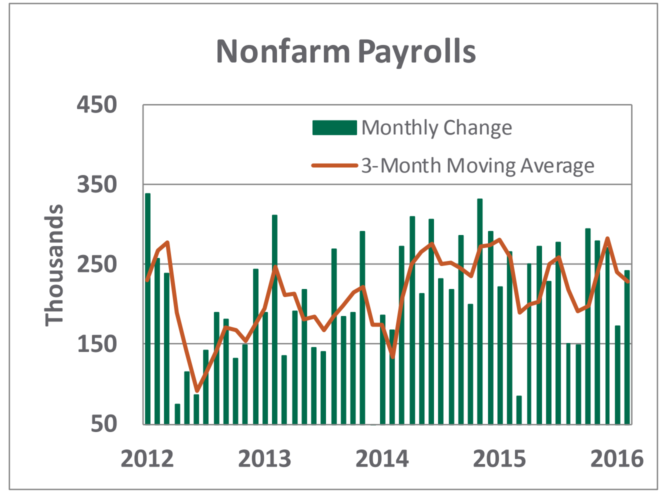


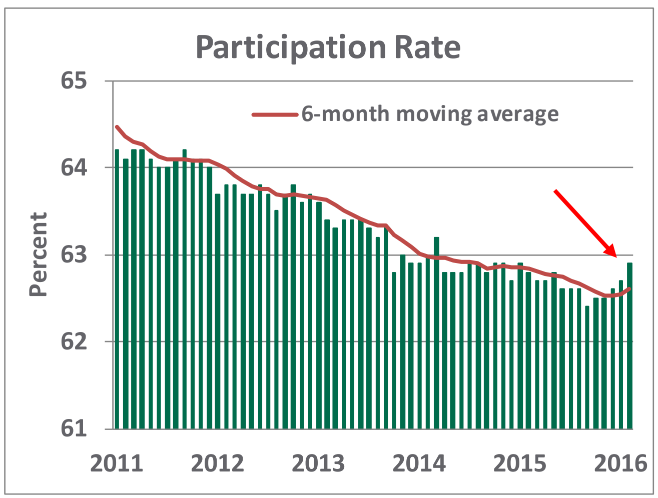


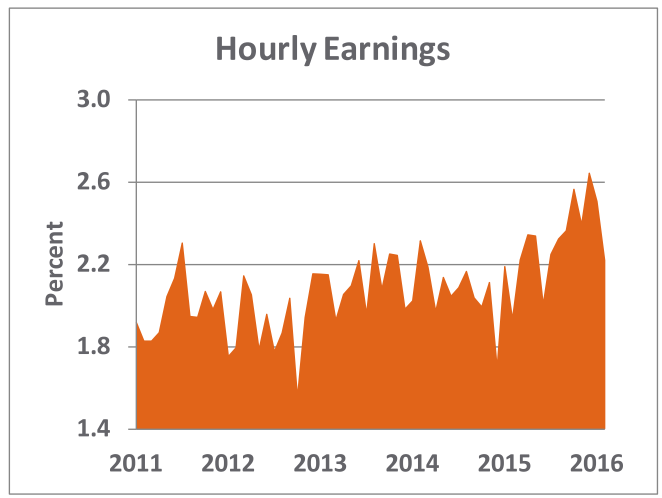
Source: Haver Analytics

The labor market is largely a bright spot, pockets of concern remain.



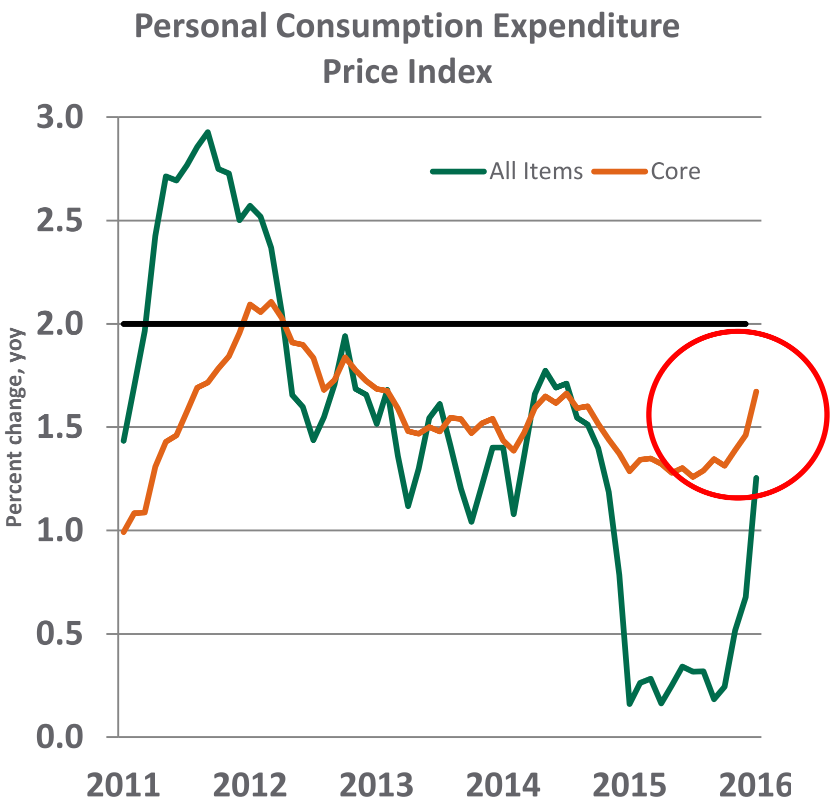


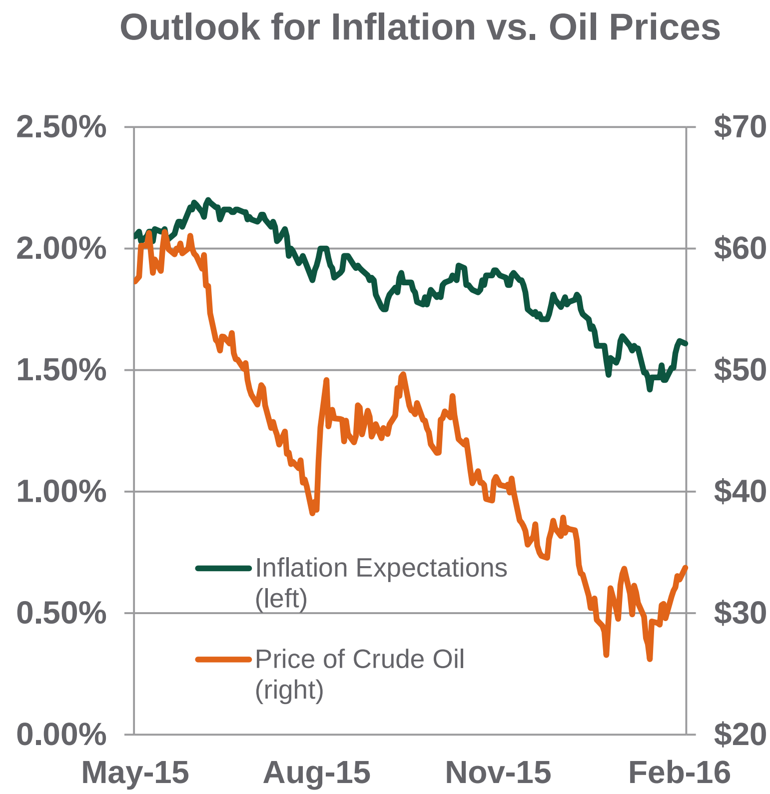




Source: Haver Analytics

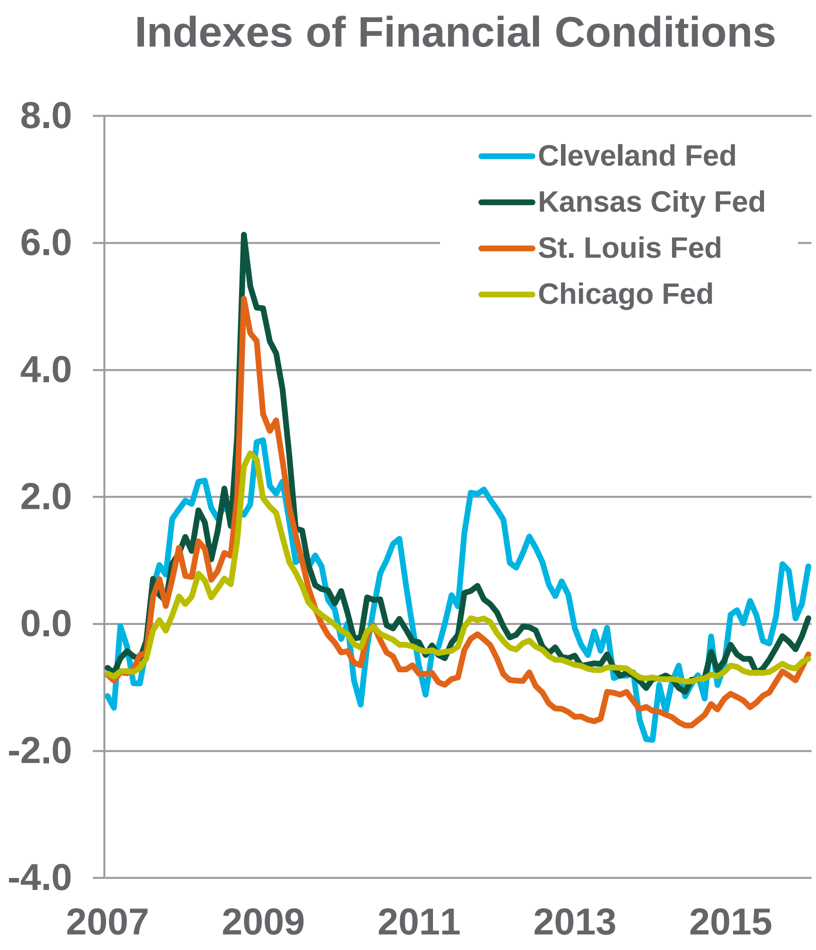
Mixed readings on inflation and inflation expectations.

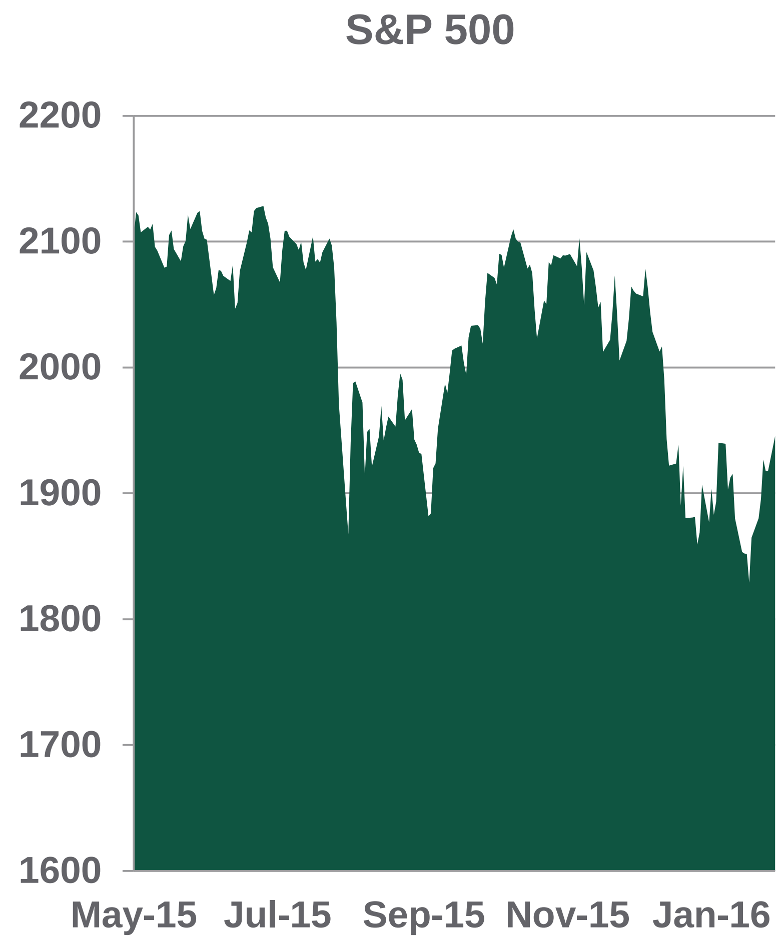




Source: Haver Analytics

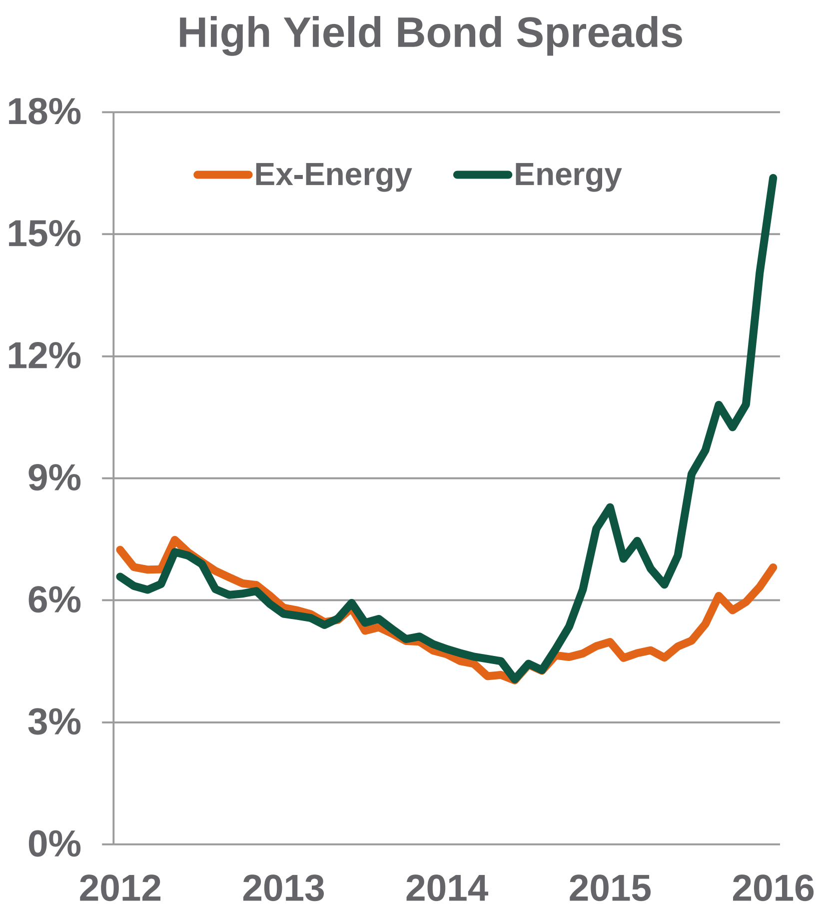
The Fed is watching financial conditions…

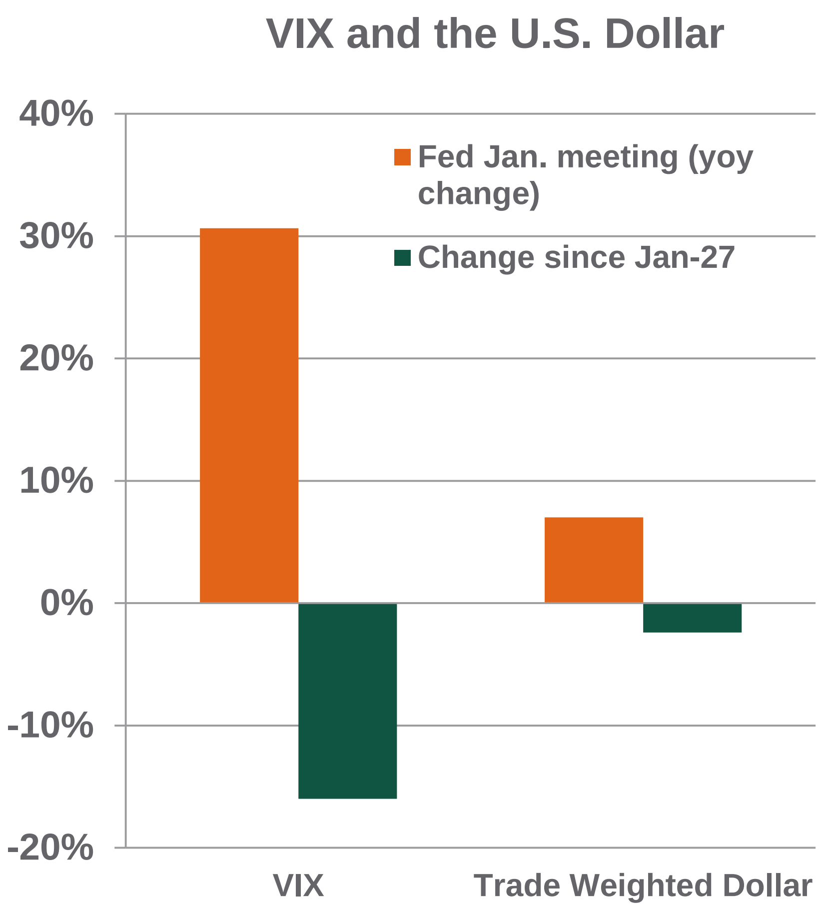




Source: Haver Analytics

... which are complicating matters.



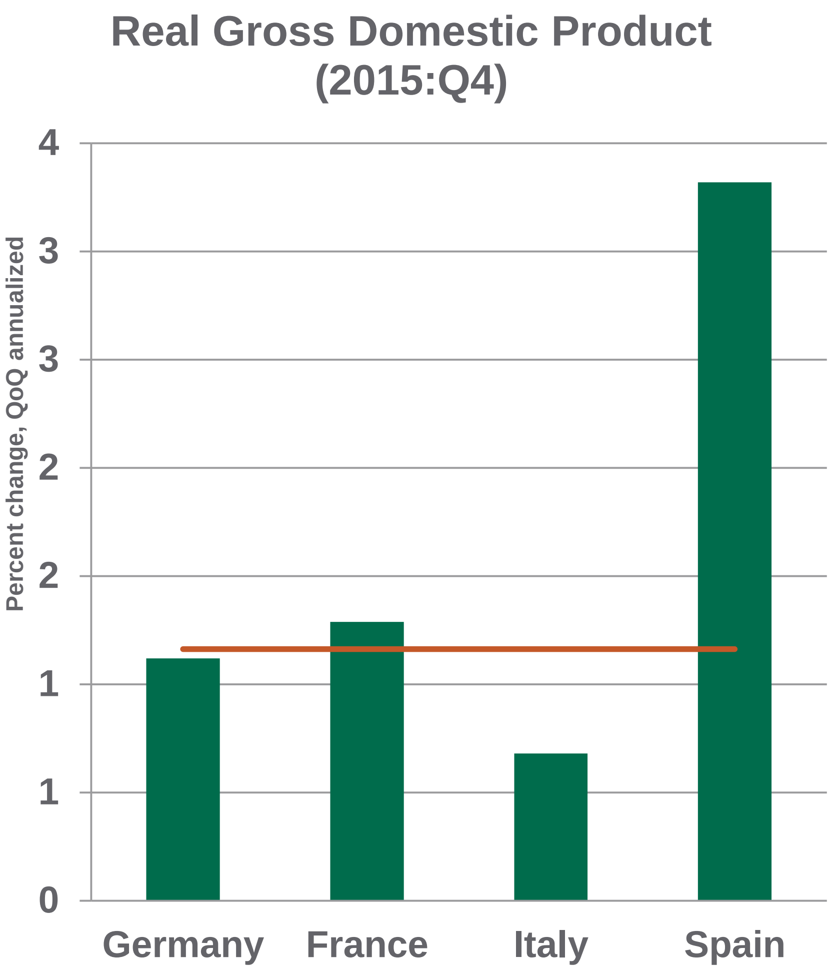


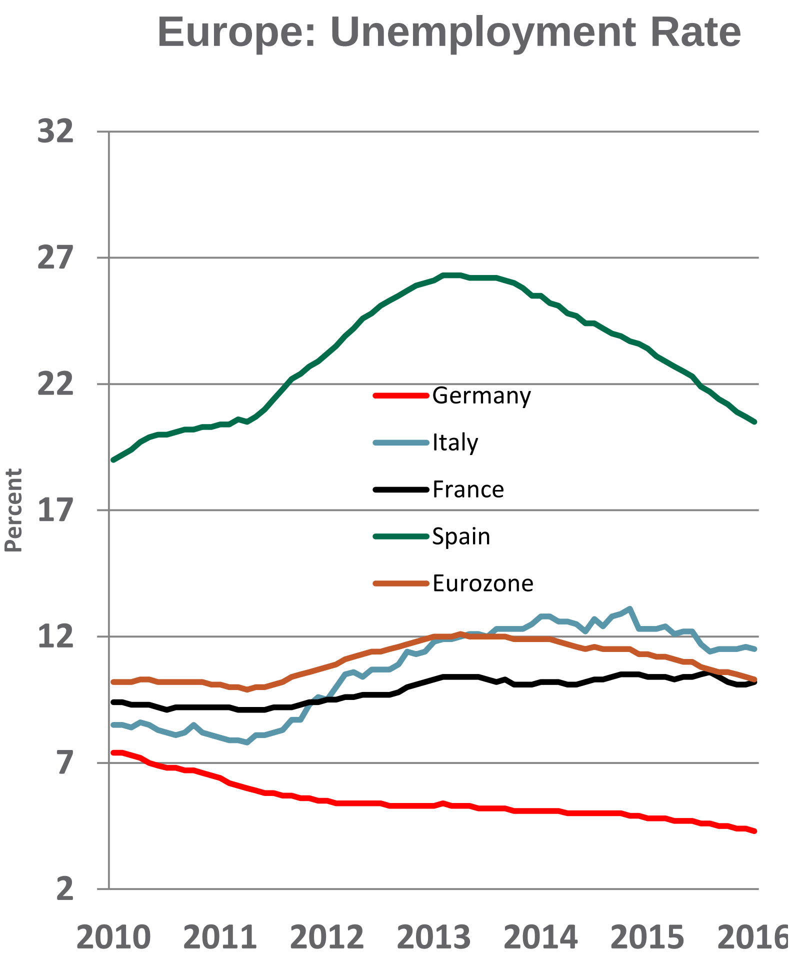
Source: Barclays, Haver Analytics

Eurozone

NORTHERN TRUST

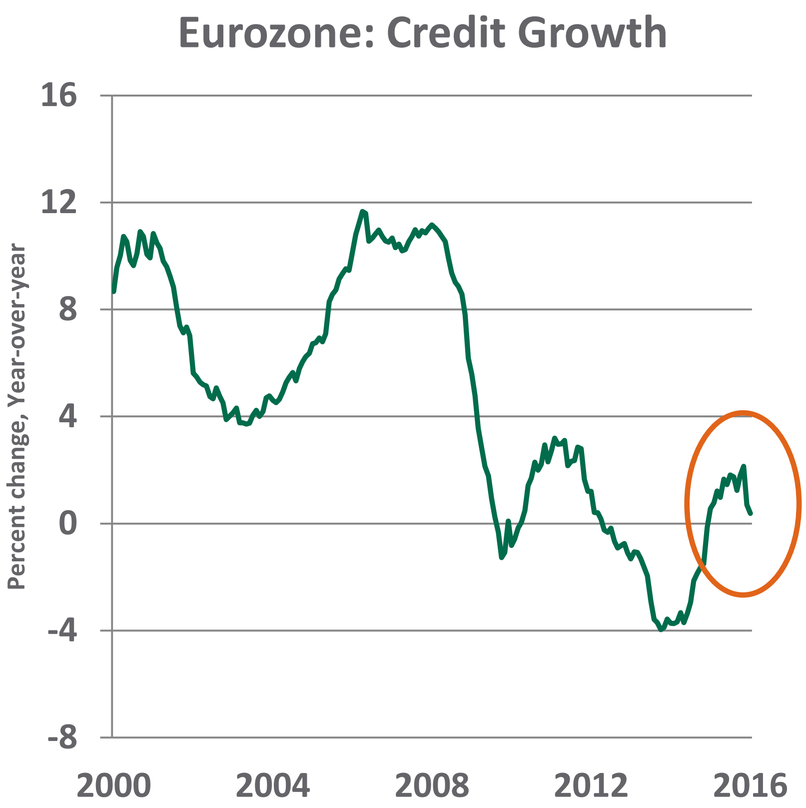
There are no easy economics solutions for the members of the eurozone.

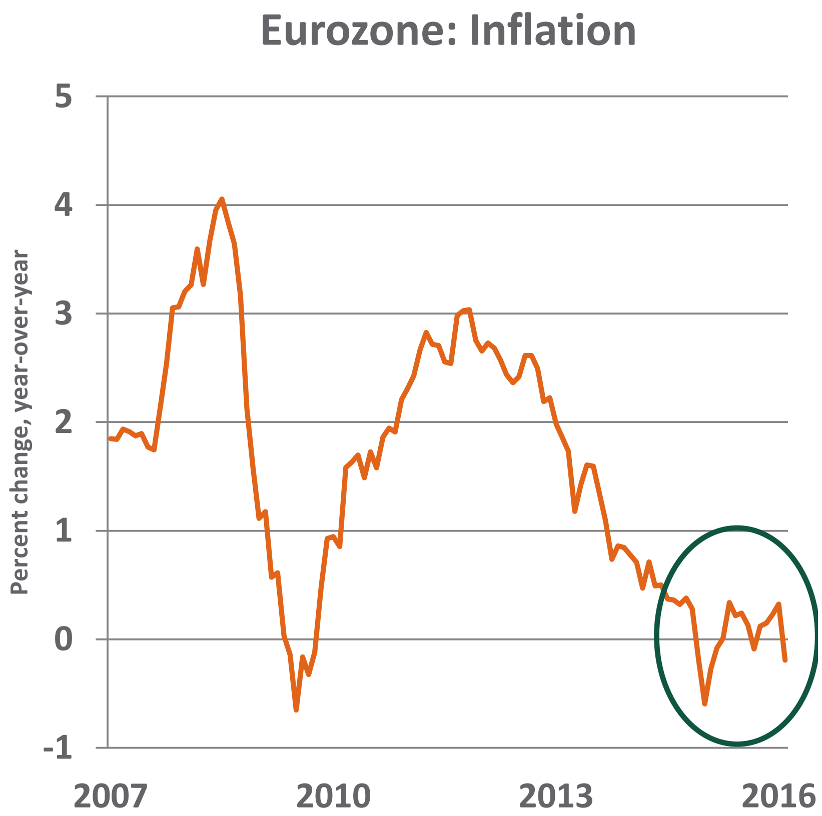




Source: Haver Analytics

What economic variables to track in the eurozone?



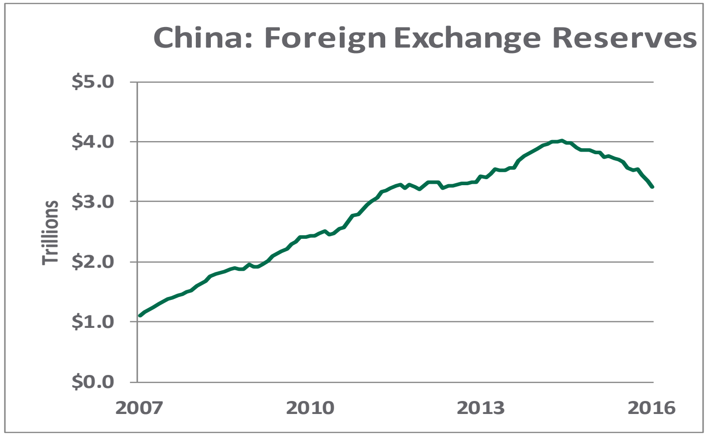


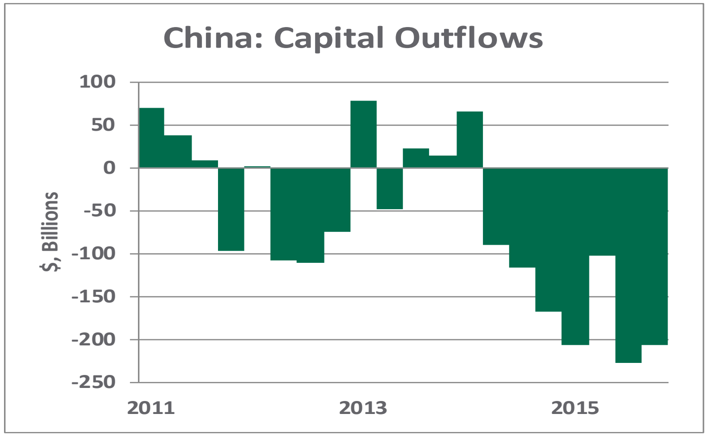
Source; Haver Analytics

China

NORTHERN TRUST

The Chinese economic challenges present a risk to the global economy.

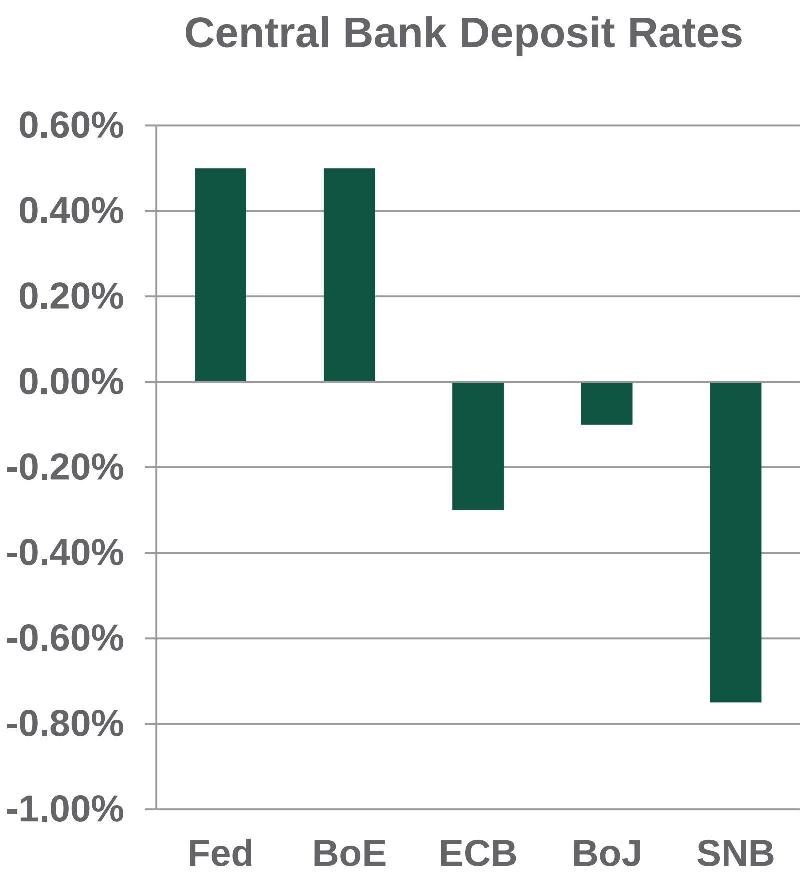


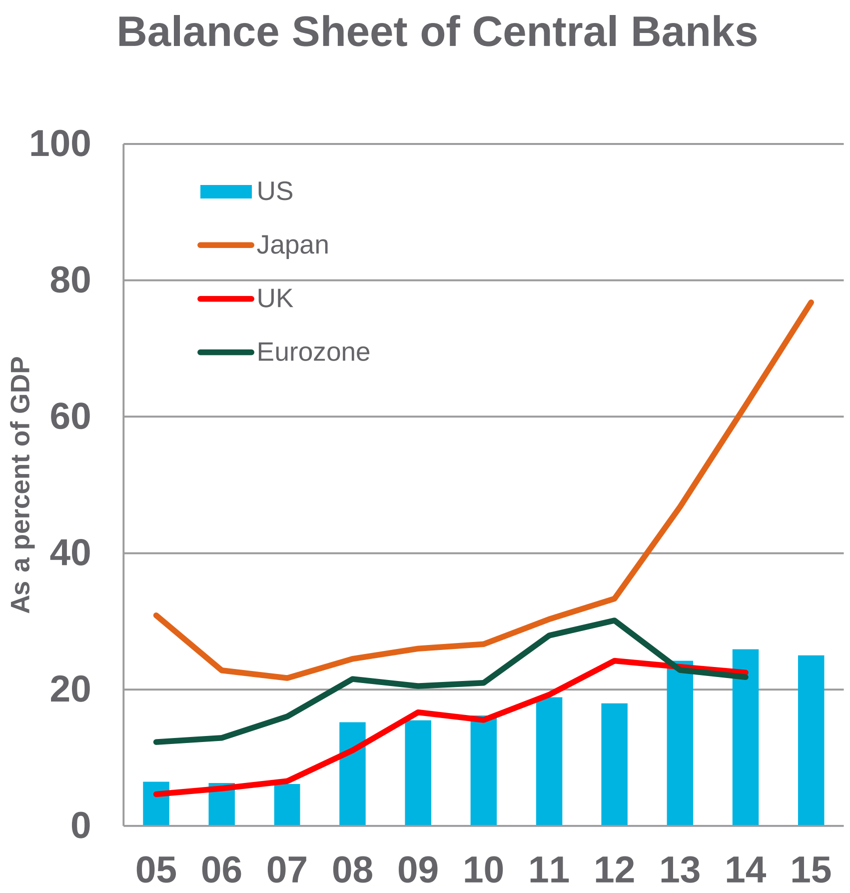


Source: Haver Analytics, Goldman Sachs

Central Banks

Central banks are minding the store.





Source: Haver Analytics

Securities Lending

NORTHERN TRUST

PROGRAM OVERVIEW

Lendable Base	Distribution Network
382 participating clients from **26** countries	Lending in **53** worldwide Equity & Fixed Income markets
$835 billion of lendable securities	**24-hour trading** (Hong Kong, London, Toronto and Chicago)
$111 billion of loans outstanding on average (13.2% utilization)	**56** approved borrowers at parent level

Collateral Structure

- **$115 billion** ($64.3 billion cash and $50.4 billion non-cash)
- Cash managed by Northern Trust Asset Management*
- Flexible collateral options available

Top Ten Borrowers** (by loan volume)

Goldman Sachs	Credit Suisse Group
Morgan Stanley	Royal Bank of Scotland
Citigroup	Barclays PLC
J.P. Morgan Chase	Deutsche Bank AG
Bank of America	UBS AG

Credit Ratings of Northern Trust

Top tier credit ratings and low level of long-term debt
Moody's Aa2
S&P AA-
Fitch Ratings AA

As at December 31, 2015
Source: Northern Trust / Original Currency USD

**$260 billion in total AUM for Short Duration Fixed Income*
*** Representing 76% of the total volume*

ORGANIZATION

Assets under management
US $875 billion

Assets under custody
US $6 trillion

Securities Lending lendable base
US $ 835 billion

As of December 31, 2015
(updated quarterly)

Source: Northern Trust

Philosophy

- Capital markets activity designed to enhance the return of overall investment program
- Extract intrinsic value from each loan
- Customized participation and collateral selection to match individual risk tolerance
- Does not interfere with investment strategy

Securities Lending Agent

- Securities Lending benefits from close coordination across the custody and asset management businesses
- Securities Lending is supported by independent credit and risk management functions within Northern Trust
- Indemnification is supported by capital and Northern Trust's balance sheet

Core Business of Northern Trust

- Among first US master custodians to lend securities in 1981 and US banks to lend globally in 1988
- Core business for Northern Trust in terms of revenue and trust fees
- Northern Trust continues to invest in the Securities Lending business

Northern Trust's Financial Strength and Stability

- Northern Trust is one of only five U.S. based banks to carry an Issuer Credit Rating from S&P of "A+" at the holding company level, currently the best rating given to a U.S. based bank
- Strong Tier 1 Capital Ratio of 11.1%

MANAGING RISK

Risk Management is instrumental to our program.

Risk	Definition	Mitigating Factors
Borrower Risk	Borrower default combined with insufficient collateral	• Rigorous credit committee review of borrowers and exposure limits • Daily marking of loans/collateral (initially collateralized at 102% for same currency, 105% for cross currency.) • Borrower default indemnification • Risk analysis tools (MSCI Barra) to measure and calibrate exposure
Trade Settlement Risk	Investment manager sells loaned security and borrower fails to return in time to settle the trade	• Timely communication of trade • Robust automated reallocations • Trade settlement protection

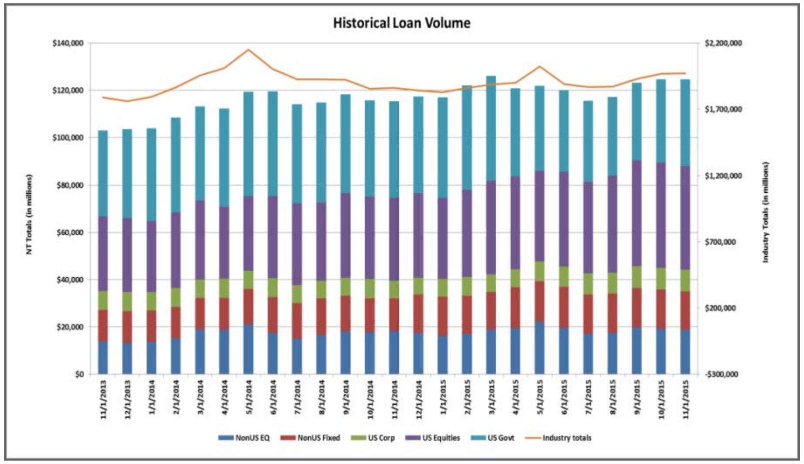
Additional Risks with Taking Cash as Collateral

Risk	Definition	Mitigating Factors
Cash Collateral Reinvestment Risk	Cash collateral investment becomes impaired or decreases in value	• Client approved investment guidelines • Robust independent oversight of cash investments • Dedicated team of fixed income research analysts • Daily automated monitoring of portfolio guidelines and compliance
Interest Rate Risk	Loan rebate rate exceeds earnings on cash collateral investments	• Close daily communication between lending and cash management teams • Shared risk between Northern Trust and client • Weekly “gap analysis” and periodic stress testing of portfolio

GENERAL RECENT OBSERVATIONS AND TRENDS

Market Drivers

- Global markets recovered from the prior quarter sell-off on improving economic conditions in China, ECB commitment to stimulating Eurozone growth and ongoing improvement in U.S. employment data.
- As was widely expected, the Federal Open Markets Committee increased the Federal Funds target rate by 25 basis points, the first increase in interest rates in over 9 years.
- Market volatility, as measured by the CBOE Volatility Index (VIX), declined 26% during the quarter.
- Increased demand from borrowers to pledge more and varied non-cash collateral types continues.



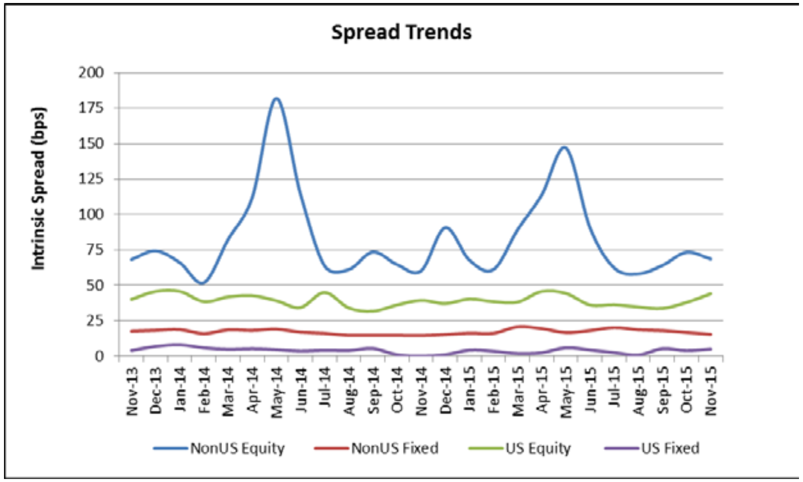
Demand from the Borrower Community

Equity Markets

- Loan volumes remained relatively stable as many hedge funds maintained exposures going into the final quarter of the year.
- The energy, commodities/materials, healthcare and consumer staples sectors continue to experience strong levels of borrower demand.
- Yield enhancement activity concentrated in France, Norway and Italy.

Fixed Income Markets

- Changes in the regulatory environment continue to negatively impact demand for US Treasury and Agency loans, especially versus cash collateral, resulting in lower overall lending spreads on those securities.
- Demand to borrow on a term basis versus noncash collateral, including equities, is on the rise.
- Demand for corporate and emerging markets bonds was impacted by the same global macro factors as equities.



INVESTMENT PROFILE: ND CUSTOM CASH COLLATERAL FUND

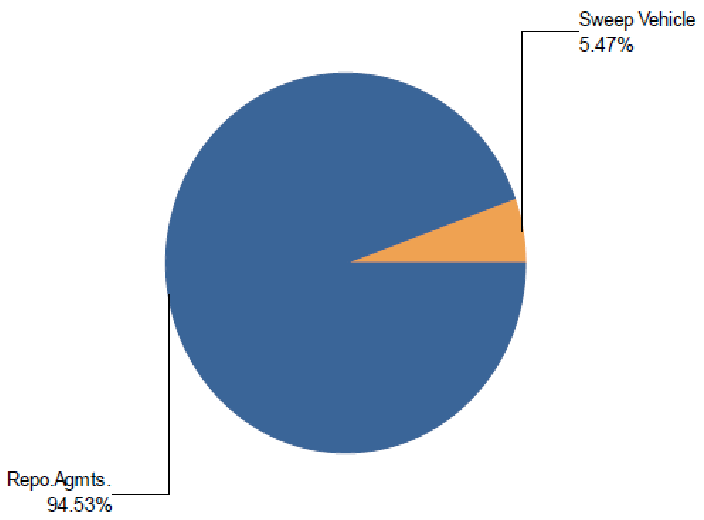
January 31, 2016

◆ **Asset Allocation & Characteristics Report**

NDSIBCF - NDSIB Custom Account - USD

Characteristics		
Total Book Value (in USD)	84,628,817	
Weighted Average Maturity (Interest Reset Date)	3 Days	
Weighted Average Maturity (Maturity Date)	3 Days	
Average Equivalent Quality Rating	A1+	
Total Number of Issues	6	
Quality Distribution	**Percentage**	
A1+ (SHORT TERM)	94.53%	
AA- (LONG TERM)	5.47%	
Maturity Breakdown Distribution	**Interest Reset**	**Maturity Date**
Overnight	100.00%	100.00%

Cash Collateral Asset Class Breakdown



NDSIBCF - NDSIB Custom Account - USD

Industry/Sector Distribution	Percentage
Banking Ind.	5.47%
Broker/Dealer	94.53%

NOTE: This information was created using the best unaudited data available to us and may not be completely reliable, accurate, or timely. Data is prepared on a settled basis, which may differ from traded basis data on the Cash Collateral Holdings report. "Traded Basis" reflects pending trades.

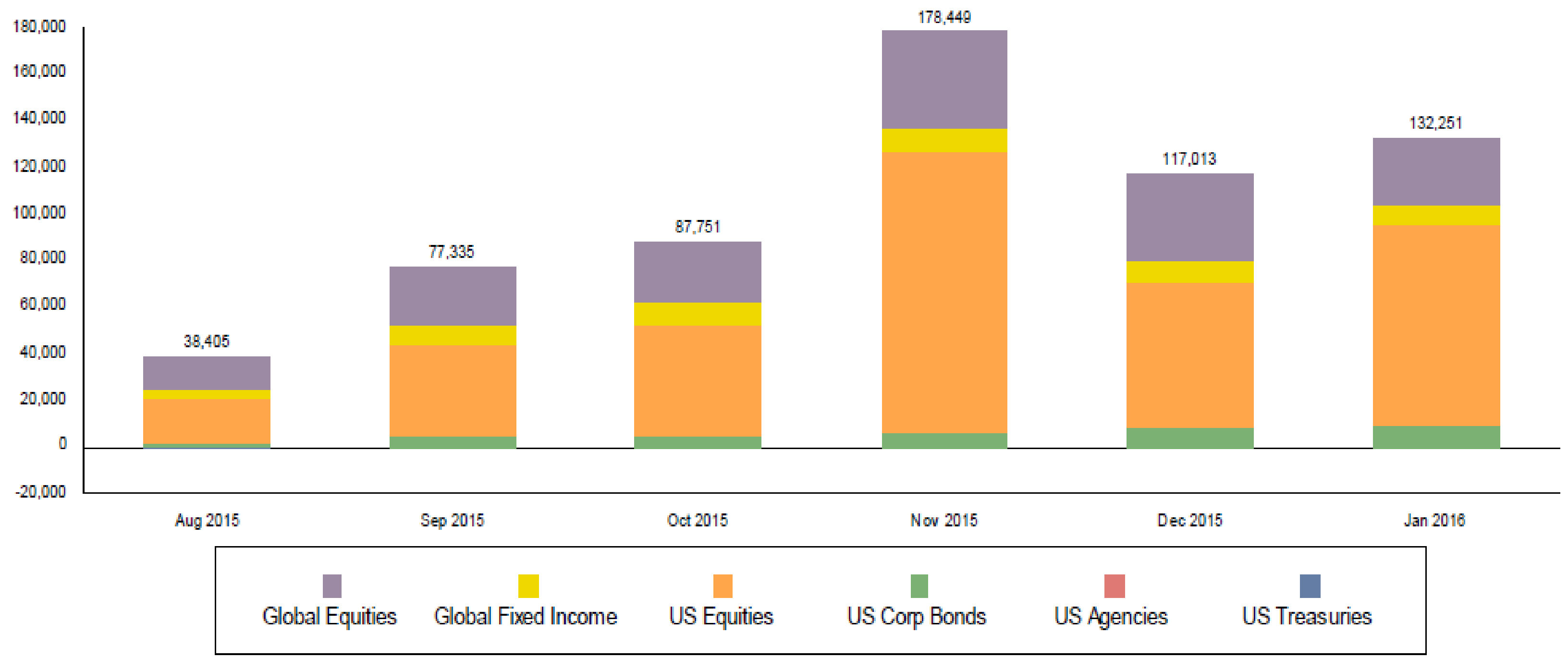
MONTHLY HISTORICAL NET EARNINGS

Northern Trust Securities Lending

Monthly Historical Graph (Net Earnings) USD **

Aug 2015 - Jan 2016

◆ **NORTH DAKOTA STATE INV.**



EARNINGS SCORECARD INCEPTION TO DATE

Northern Trust Securities Lending

Performance Scorecard - Lending and Investment Breakdown

From August, 2015 to January, 2016 **(USD) ****

◆ NORTH DAKOTA STATE INV.

	Market Value (USD)		% on	Gross Earnings (USD)			Spread (bps)			Gross BP Return	Net Earnings (USD)		
Security Type	Avg. on Loan	Avg. Available	Loan	Lending	Investment	Total	Lending	Investment	Overall	(bp) *	Lending	Investment	Total
US Treasuries	247,155	4,862,495	5.1%	74	-2	72	5.8	-0.2	5.7	0.3	59	-2	57
US Agencies	2,970	13,533,380	0.0%	-1	-1	-1	-3.6	-6.0	-9.6	0.0	0	-1	-1
US Corp Bonds	10,601,369	891,485,776	1.2%	47,342	-2,147	45,194	87.4	-4.0	83.4	1.0	37,879	-1,719	36,160
US Equities	51,348,919	1,686,822,484	3.0%	478,308	-9,751	468,557	182.2	-3.7	178.5	5.4	382,730	-7,810	374,919
Global Sovereign	4,313,906	59,373,425	7.3%	25,043	-1,129	23,914	113.6	-5.1	108.5	7.9	20,035	-903	19,132
Global Agencies	335,857	31,744,691	1.1%	621	-109	513	36.2	-6.3	29.9	0.3	497	-87	410
Global Corp Bonds	8,808,620	298,537,771	3.0%	40,883	-1,776	39,107	90.8	-3.9	86.9	2.6	32,708	-1,421	31,287
Global Equities	42,477,184	992,812,131	4.3%	215,666	-4,133	211,533	99.3	-1.9	97.4	4.2	172,545	-3,308	169,238
Total	**118,135,979**	**3,979,172,153**	**3.0%**	**807,937**	**-19,048**	**788,889**	**133.8**	**-3.2**	**130.7**	**3.9**	**646,453**	**-15,250**	**631,203**

Rebates for when USD cash is taken as collateral on applicable loans are based on the Fed Open benchmark rate.

PERFORMANCE SCORECARD: TOP TEN EARNING SECURITIES

Northern Trust Securities Lending

Page 1 of 1

Top 10 Net Earnings Report

From August 2015 To January 2016

- **NORTH DAKOTA STATE INV.**

Rank	Security Name	CUSIP/SEDOL	Net Earnings	% Of Total Net Earnings	Market Value On Loan (USD)	Average % Utilization	Average Spread
1	SYNCHRONY FINL COM	87165B103	98,650.99	15.63	3,662,252.48	35.03	647.24
2	CAL MAINE FOODS INC COM NEW STK	128030202	56,777.78	9.00	1,033,108.93	96.78	1,311.40
3	GAMESTOP CORP NEW CL A	36467W109	38,121.78	6.04	2,833,617.21	97.55	321.74
4	WORLD ACCEP CORP S C NEW COM	981419104	23,178.85	3.67	543,590.08	90.02	1,011.04
5	TOTAL EUR2.5	B15C557	18,226.86	2.89	575,665.43	10.87	729.40
6	SEADRILL LTD USD2	B09RMQ1	14,111.10	2.24	677,365.33	91.80	497.82
7	ADR VALE S A ADR	91912E105	13,016.86	2.06	663,187.92	98.95	452.39
8	TRANSOCEAN LTD	H8817H100	10,692.36	1.69	454,958.00	98.35	559.15
9	VALE OVERSEAS LTD 5.625% DUE 09-1	91911TAJ2	9,822.56	1.56	1,032,514.48	97.27	228.45
10	ELIZABETH ARDEN INC COM	28660G106	9,356.92	1.48	132,460.80	91.34	1,677.66
	Sub Total Of Top 10 Securities		291,956.06	46.25	11,608,720.66	49.60	599.58
	All Other		339,247.13	53.75	106,527,260.17	2.69	76.34
	Total		631,203.19	100.00	118,135,980.83	2.97	128.02

DISCLOSURES

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Evaluations are based on the asset allocation, actual historical spread and on-loan figures provided to Northern Trust. Consequently, as changes in these factors occur and as trading patterns of the portfolio managers' shift, actual earnings generated in Securities Lending may be impacted.

Past performance is no guarantee of future results. All material has been obtained from sources believed to be reliable, but its accuracy, completeness and interpretation cannot be guaranteed. This information does not constitute investment advice or a recommendation to buy or sell any security and is subject to change without notice.

June 2, 2015

Class Actions

OVERVIEW OF CLASS ACTION PROCESSING

- Northern Trust processes securities litigation that settled through the U.S. Courts, where claim administration is handled by U.S. claim administrator
- If allowed by the courts, Northern Trust will also file claims within settled class action cases outside of the US (Canada and the Netherlands)
- Northern Trust handles three primary functions:
  — *Tracking of settled lawsuits and client notification*
  — *Filing of claims*
  — *Posting of disbursements to client portfolios*

TRACKING OF SETTLED LAWSUITS

- Northern Trust receives notification of settlements:
  — *Security Class Action Services LLC (SCAS) alerts from Riskmetrics (www.riskmetrics.com/scas)*
  — *Interactive Data*
  — *Court Appointed Claims Administrators*
  — *Legal, Consultancy, and Accounting Newsletter from Mondaq.com*
  — *Stanford Law School Securities Class Action Clearinghouse (www.securities.stanford.edu/filings.html)*

CLIENT NOTIFICATION

- Northern Trust retrieves holdings and transactions:
  - — *All eligible securities*
  - — *All client accounts*
  - — *Entire class period*
- Northern Trust distributes notifications to all open accounts with activity via CDR
  - — *Notifications sent to Corp Action recipients and “Class Action Only” recipients*
- Client or Investment Manager returns decision if they wish to opt out
  - — *Client may choose to file separate lawsuit*
  - — *Investment Manager may file claims directly, and does not want NT to duplicate*
- If no opt out is received, Northern Trust files claims for current and former clients to ensure that no proceeds are missed.
- Northern Trust can hold standing instructions/permanent opt out
- Will send informational notifications for “Opt In” or “Group Action” events primarily outside of the US, for which Northern doesn’t typically have the authority to file.

FILING OF CLAIMS

- Northern Trust prepares all data required by claims administrator
  — *Positions at start and end of class period*
  — *Reconciled investment activity during the class period*
  — *Specific Holdings may be required*
- On or before filing deadline, Northern Trust submits claims
  — *Generally, we file electronically; occasionally via paper proof of claim*
  — *Northern Trust must certify that all activity included in the filing is valid*
- Retain record of claim filing
- Respond to inquiries from claims administrator
- Receive some notices of rejected claims (and reason)

POSTING PROCEEDS TO CLIENT PORTFOLIOS

- Elapsed time for settlement fund distributions may be 1 to 5 years (until all proceeds are received)
- Generally cash payments; occasionally securities
- Cash may be received in a single wire, or via thousands of individual checks sent by postal mail
- Northern Trust does not receive the formulas used to calculate proceeds. Northern Trust does not know how settlement fund was distributed across claimants.
- Northern Trust posts proceeds as quickly and efficiently as possible
- NT maintains standing instructions for closed accounts:
  — *Institutional clients restructure and close accounts*
  — *Proceeds redirected to another account, or paid to client*
- NT saves and researches unclaimed class action proceeds

USE OF OTHER VENDORS

- Northern Trust does not offer these services:
  — *Tracking of pending lawsuits*
  — *Calculation of projected proceeds from settlement funds*
  — *Advising clients on whether to file with the class or not*
  — *Filing claims for client activity at prior custodian*
- Northern Trust can supply other vendors with data to:
  — *Track pending lawsuits*
  — *Advise clients on how to approach securities litigation*

TOTAL NORTHERN TRUST VOLUMES

Total Cash Proceeds

Year	Events Filed	Events Paid	Total Amount Paid*
2008	132	181	$450,160,604.77
2009	131	283	$381,734,418.05
2010	169	236	$297,375,860.59
2011	106	182	$209,511,012.10
2012	93	190	$209,885,565.03
2013	107	210	$124,549,732.15
2014	94	167	$188,715,911.22
2015	109	171	$193,368,964.63
2016 (YTD)	14	21	$ 14,506,527.08

*All Amounts Are Reflected in USD
Volumes vary based on market fluctuations

NORTH DAKOTA STATE INVESTMENT BOARD COLLECTIONS

Total Cash Proceeds

Year	Events Filed	Events Paid	Total Amount Paid*
2008	314	103	$ 1,374,474,73
2009	241	163	$ 882,294.26
2010	197	183	$ 552,767.49
2011	148	106	$ 343,496.66
2012	168	108	$ 698,010.19
2013	211	135	$ 221,945.78
2014	121	146	$ 456,679.76
2015	151	111	$ 678,930,66
2016 (YTD)	21	16	$ 12,893,50

*All Amounts Are Reflected in USD
Volumes vary based on market fluctuations

CLASS ACTION TRENDS

- Class Action Industry trends
  - *Bigger settlements* → *Growing worldwide awareness and inquiries*
  - *Increasing number of securities eligible to file claims*
  - *Organizations electing to opt out of the class and file separate suits*
  - *Clients want more detail on claim rejection reasons*
  - *Auditors and Trustees checking participation*

2016 / 2017 ENHANCEMENTS

- Continue to enhance processing platform
  — *Increase automation, as claim filing volumes continue to grow*
  — *Continue improvements for client reporting*
- Expand the product to include more non-US class actions
  — *Movement towards additional class action filings within additional court systems.*

Northern Trust continues to invest in Class Actions, recognizing this service is important to sophisticated investors worldwide like the North Dakota State Investment Board.

NORTHERN
TRUST

AGENDA ITEM III.C.

BOARD ACCEPTANCE REQUESTED

TO: State Investment Board

FROM: Dave Hunter

DATE: March 14, 2016

SUBJECT: Investment Policy Statement Cover Memo

RIO recommends the State Investment Board accept the revised investment policy statements for the following six clients:

1. **City of Bismarck Police Pension Plan** and **City of Bismarck Employee Pension Plan** – The Boards for the City of Bismarck Police Pension Plan and City of Bismarck Employee Pension Plan adopted revised investment performance objectives that conform to performance metrics adopted by TFFR and PERS. These changes are largely formative in nature and do not include any asset allocation changes. The most significant language revision is highlighted below.

2. **Insurance Regulatory Trust Fund, Petroleum Tank Release Compensation Fund, Bonding Fund and Fire and Tornado Fund** - The Boards for each of the above funds have adopted revised investment performance objectives that conform to performance metrics adopted by SIB's other Insurance Trust clients in recent years. These changes are largely formative in nature and do not include any asset allocation changes.

Investment Objectives - Recommended:

The Bismarck City Employee (or Police) Pension Plan 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.

Investment Objectives - Current:

Investments of the Fund must seek to generate sufficient return to meet the goals outlined in this policy. The objectives established in this section are in accordance with the fiduciary requirement in federal and state law.

It is in the best interest of the Fund and its beneficiaries that objectives be established for the total Fund. It is clearly understood these objectives are to be viewed over the long term and have been established after full consideration of all factors set forth in this Statement of Investment Goals, Objectives and Policies.

a) The Fund should produce a rate of return, over any given time period that matches or exceeds that of the policy portfolio which is comprised of policy weights of appropriate asset class benchmarks as set by the SIB and reflected in the monthly investment performance reports.
b) The annual standard deviation of total returns for the Fund should not exceed that of the policy portfolio.
c) Over 10-year and longer periods the Fund should match or exceed the expected 8.6% rate of return assumed in the asset liability study. Expected risk for the period, measured by standard, is 9.7%.

CITY OF BISMARCK POLICE PENSION PLAN

INVESTMENT POLICY STATEMENT

1. PLAN CHARACTERISTICS AND FUND CONSTRAINTS

The Bismarck, North Dakota City Police Pension Plan (BCPPP) is the pension benefit plan (Fund) established for the city of Bismarck police. The Fund is administered by the Bismarck City Police Pension Plan Board of Trustees. The Fund is a defined benefit pension plan maintained to provide retirement benefits, and/or death benefits as may be the case, to the participants in accordance with Chapter 9-08 of the city of Bismarck Code of Ordinance (1986 revised). The Fund is administered in accordance with IRS and Treasury Regulations.

The Fund was established to provide benefits to members eligible to receive them in accordance with the provisions of the Fund.

2. FUND GOALS

The plan benefits are financed through both employer and employee contributions and the investment earnings on assets held in the Fund. The BCPPP Board recognizes that a sound investment program is essential to meet the pension obligations.

As a result, the Fund goals are to:

- Improve the Plan's funding status to protect and sustain current and future benefits.
- Minimize the employee and employer contributions needed to fund the Plan over the long term.
- Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.
- Accumulate a funding surplus to provide increases in retiree annuity payments to preserve the purchasing power of their retirement benefit.

The BCPPP Board acknowledges the material impact that funding the pension plan has on the City's financial performance. These goals affect the Fund's investment strategies and often represent conflicting goals. For example, minimizing the long-term funding costs implies a less conservative investment program, whereas dampening the volatility of contributions and avoiding large swings in the funding status implies a more conservative investment program. The BCPPP Board places greater emphasis on the strategy of improving the funding status and reducing the contributions that must be made to the Fund, as it is most consistent with the long-term goal of conserving money to apply to other important projects.

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

The BCPPP Board has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The BCPPP 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 BCPPP Board is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to finance the pension benefits promised to plan participants.

However, funding the pension promise in an economical manner is critical to the City's ability to continue to provide pension benefits to plan participants. Thus, the BCPPP Board actively seeks to lower the cost of funding the plan's pension obligations by taking on risk for which it expects to be compensated over the long term. The BCPPP Board understands that a prudent investment approach to risk taking can result in periods of under-performance for the Fund in which the funding status may decline. These periods, in turn, can lead to higher required contribution rates. Nevertheless, the BCPPP Board believes that such an approach, prudently implemented, best serves the long-run interests of the City and, therefore, of plan participants.

5. INVESTMENT OBJECTIVES

The BCPPP 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
1. 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

Benefit payments are projected to occur over a long period of time. This allows the BCPPP Board to adopt a long-term investment horizon and asset allocation policy for the management of fund assets. 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-liability analysis designed to assist the BCPPP Board in determining an acceptable volatility target for the fund and an optimal asset allocation policy mix. This asset-liability analysis considers both sides of the plan balance sheet, utilizing both quantitative and qualitative inputs, in order to estimate the potential impact of various asset class mixes on key measures of total plan risk, including the resulting estimated impact of funded status and contribution rates. After consideration of all the inputs and a discussion of its own collective risk tolerance, the BCPPP Board approves the appropriate policy asset mix for the Fund.

Asset Class	Policy Target(%)
Global Equity	51
Domestic Equity	27
Large	16
Small	11
International Equity	19
Developed	13
Emerging	6
Private Equity	5
Global Fixed Income	29
Domestic Fixed	25
Investment Grade	19
Non-Investment Grade	6
International Fixed	4
Developed	4
Global Real Assets	20
Global Real Estate	10
Other	10
Infrastructure	5
Timber	5

While the BCPPP Board recognizes fluctuations in market values will lead to short-term deviations from policy targets, the BCPPP 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.

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 BCPPP 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.

BISMARCK CITY POLICE PENSION PLAN BOARD OF TRUSTEES

Michael C. Seminary
MAYOR

Date: February 18, 2016

STATE INVESTMENT BOARD

David Hunter
Executive Director / CIO, RIO

Date: February 19, 2016

W.C. Wocken
City Administrator

CITY OF BISMARCK EMPLOYEE PENSION PLAN

INVESTMENT POLICY STATEMENT

1. PLAN CHARACTERISTICS AND FUND CONSTRAINTS

The Bismarck, North Dakota City Employee Pension Plan (BCEPP) is the pension benefit plan (Fund) established for the city of Bismarck public employees. The Fund is administered by the Bismarck City Employee Pension Plan Board of Trustees. The Fund is a defined benefit pension plan maintained to provide retirement benefits, and/or death benefits as may be the case, to the participants in accordance with Chapter 9-07 of the city of Bismarck Code of Ordinance (1986 revised). The Fund is administered in accordance with IRS and Treasury Regulations. The Fund was established to provide benefits to members eligible to receive them in accordance with the provisions of the Fund.

2. FUND GOALS

The plan benefits are financed through both employer and employee contributions and the investment earnings on assets held in the Fund. The BCEPP Board recognizes that a sound investment program is essential to meet the pension obligations.

As a result, the Fund goals are to:

- Improve the Plan's funding status to protect and sustain current and future benefits.
- Minimize the employee and employer contributions needed to fund the Plan over the long term.
- Avoid substantial volatility in required contribution rates and fluctuations in the Plan's funding status.
- Accumulate a funding surplus to provide increases in retiree annuity payments to preserve the purchasing power of their retirement benefit.

The BCEPP Board acknowledges the material impact that funding the pension plan has on the City's financial performance. These goals affect the Fund's investment strategies and often represent conflicting goals. For example, minimizing the long-term funding costs implies a less conservative investment program, whereas dampening the volatility of contributions and avoiding large swings in the funding status implies a more conservative investment program. The BCEPP Board places greater emphasis on the strategy of improving the funding status and reducing the contributions that must be made to the Fund, as it is most consistent with the long-term goal of conserving money to apply to other important projects.

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

The BCEPP Board has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. The BCEPP 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 BCEPP Board is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to finance the pension benefits promised to plan participants.

However, funding the pension promise in an economical manner is critical to the City's ability to continue to provide pension benefits to plan participants. Thus, the BCEPP Board actively seeks to lower the cost of funding the plan's pension obligations by taking on risk for which it expects to be compensated over the long term. The BCEPP Board understands that a prudent investment approach to risk taking can result in periods of under-performance for the Fund in which the funding status may decline. These periods, in turn, can lead to higher required contribution rates. Nevertheless, the BCEPP Board believes that such an approach, prudently implemented, best serves the long-run interests of the City and, therefore, of plan participants.

5. INVESTMENT OBJECTIVES

The BCEPP 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

Benefit payments are projected to occur over a long period of time. This allows the BCEPP Board to adopt a long-term investment horizon and asset allocation policy for the management of fund assets. 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-liability analysis designed to assist the BCEPP Board in determining an acceptable volatility target for the fund and an optimal asset allocation policy mix. This asset-liability analysis considers both sides of the plan balance sheet, utilizing both quantitative and qualitative inputs, in order to estimate the potential impact of various asset class mixes on key measures of total plan risk, including the resulting estimated impact of funded status and contribution rates. After consideration of all the inputs and a discussion of its own collective risk tolerance, the BCEPP Board approves the appropriate policy asset mix for the Fund.

Asset Class	Policy Target(%)
Global Equity	46
Domestic Equity	25
Large	15
Small	10
International Equity	17
Developed	12
Emerging	5
Private Equity	4
Global Fixed Income	34
Domestic Fixed	30
Investment Grade	24
Non-Investment Grade	6
International Fixed	4
Developed	4
Global Real Assets	20
Global Real Estate	10
Other	10
Infrastructure	5
Timber	5

While the BCEPP Board recognizes fluctuations in market values will lead to short-term deviations from policy targets, the BCEPP 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.

BISMARCK CITY EMPLOYEE PENSION PLAN BOARD OF TRUSTEES

Michael C. Seminary
Mayor

Date: February 18, 2016

W.C. Wocken
City Administrator

STATE INVESTMENT BOARD

David Hunter
Executive Director / CIO, RIO

Date: February 19, 2016

NORTH DAKOTA INSURANCE REGULATORY TRUST FUND

INVESTMENT POLICY STATEMENT

1. FUND CHARACTERISTICS AND CONSTRAINTS

The Insurance Regulatory Trust Fund (the Fund) was established for use by the Insurance Department to defray the expenses incurred in discharging its duties as described in NDCC 26.1.

Funding is provided primarily through the collection of fees and fines as specified in NDCC 26.1-01-07.1. Fees and other collections as well as earnings from investments are funding sources.

There is no statutory minimum balance for this fund. However, the Insurance Department relies entirely on the Fund to meet all operating expenses. Therefore, sufficient liquidity and risk control must be maintained at all times to ensure the solvency of the Insurance Department.

In accordance with NDCC 26.1-01-07.1 any cash balance in the Fund after all current biennium expenditures are met must be carried forward for the succeeding biennium. However, when the balance at the end of the biennium exceeds $1.0 million, any excess will be transferred to the general fund in the state treasury. Such transfers are generally made at the end of September or during the first two weeks of October. Operating expenses are paid from the Fund as incurred.

2. FUND MISSION

The primary mission of the Fund is to maintain an adequate balance in the fund to meet operating expenses.

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

The Fund is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing policies and asset allocation and investing the assets of the legacy fund in the manner provided in Section 21-10-07--the prudent institutional investor 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.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 is hereby delegated to the SIB, which 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, which are also required to employ investment strategies consistent with the investment policy. 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 pool.

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

The SIB shall notify the board within 30 days of any substantial or notable changes in money managers; performance measurement services; and consultants, including hiring or terminating a money manager, performance measurement service, or a consultant.

The SIB will implement necessary changes to this policy in an efficient and prudent manner.

4. RISK TOLERANCE

The investment objectives of the Fund reflect the long-term nature of the Fund, but also the low risk tolerance and shorter-term liquidity needs.

5. INVESTMENT OBJECTIVES

The Fund'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:

a. 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.
b. The Fund's risk, measured by the standard deviation of net returns, should be within 1% of the policy benchmark over a minimum evaluation period of five years. For example, if the policy benchmark is 4%, the Fund's risk should range between 3% and 5% over a five-year period.
c. 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

After consideration of all the inputs and discussion of its own risk tolerance, the Fund has chosen the following asset allocation:

Large Cap Domestic Equity	15%
Small Cap Domestic Equity	5%
International Equity	10%
Fixed Income	35%
Real Estate	0%
Cash Equivalents	35%

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. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.

c. No transaction may be made that would threaten the tax-exempt status of the Fund.

d. All assets will be held in custody by the State Investment Board's master custodian or such other custodians as are acceptable to the State Investment Board.

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 must provide 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 Fund'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 and investment performance standards. 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 Insurance Department 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 board.
2. A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each fund's investments.
4. Comparison of the performance of each fund managed by each advisory service to other funds under the board'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:

INSURANCE DEPARTMENT	**STATE INVESTMENT BOARD**
Adam Hamm **Commissioner of Insurance**	**David Hunter** **Executive Director/CIO**
Date: 2/17/16	**Date:** 2/18/16

NORTH DAKOTA PETROLEUM TANK RELEASE COMPENSATION FUND

INVESTMENT POLICY STATEMENT

1. FUND CHARACTERISTICS AND CONSTRAINTS

The Petroleum Tank Release Compensation Fund (the Fund) was established in 1989 in response to the Environmental Protection Agency's (EPA) requirement that all underground storage tank owners have proof of financial responsibility. Operation of the Fund is in accordance with ND23-37. The Fund's "sunset clause" date of June 30, 2011 has been extended and the time horizon for this Fund is uncertain at this time.

Funding is provided by annual premiums collected for aboveground and underground petroleum storage tanks. Registration of tanks with the Fund is mandatory, although certain types of tanks are excluded.

A statutory minimum balance of $6.0 million must be maintained in the Fund. Also, a minimum balance of $2.0 million is required by EPA. In the event reserves drop below this minimum, EPA would evaluate the Fund's ability to pay claims and would in all likelihood disapprove the Fund as a financial responsibility mechanism for North Dakota petroleum tank owners.

If a petroleum release occurs or petroleum contamination is discovered, an eligible tank owner is reimbursed 90% of necessary and reasonable costs between $5,000 and $155,000 for cleanup of contamination or third-party liability. The Fund reimburses 100% of costs between $155,000 and $1,000,000. Operating expenses are paid from the Fund as incurred.

2. FUND MISSION

The primary mission of the Fund is to maintain the statutory minimum balance in the fund.

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

The Fund is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing policies and asset allocation and investing the assets of the legacy fund in the manner provided in Section 21-10-07--the prudent institutional investor 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.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 is hereby delegated to the SIB, which 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, which are also required to employ investment strategies consistent with the investment policy. 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 pool.

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

The SIB shall notify the board within 30 days of any substantial or notable changes in money managers; performance measurement services; and consultants, including hiring or terminating a money manager, performance measurement service, or a consultant.

The SIB will implement necessary changes to this policy in an efficient and prudent manner.

4. RISK TOLERANCE

The investment objectives of the Fund reflect the long-term nature of the Fund, but also the low risk tolerance and shorter-term liquidity needs.

5. INVESTMENT OBJECTIVES.

The Fund'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:

a. 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.
b. The Fund's risk, measured by the standard deviation of net returns, should be within 1% of the policy benchmark over a minimum evaluation period of five years. For example, if the policy benchmark is 4%, the Fund's risk should range between 3% and 5% over a five-year period.
c. 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

After consideration of all the inputs and discussion of its own risk tolerance, the Fund has chosen the following asset allocation:

Large Cap Domestic Equity	0%
Small Cap Domestic Equity	0%
International Equity	0%
Fixed Income	50%

Real Estate	0%
Cash Equivalents	50%

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. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.

c. No transaction may be made that would threaten the tax-exempt status of the Fund.

d. All assets will be held in custody by the State Investment Board's master custodian or such other custodians as are acceptable to the State Investment Board.

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 must provide 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 Fund'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 and investment performance standards. 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 Insurance Department 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 board.
2. A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each fund's investments.
4. Comparison of the performance of each fund managed by each advisory service to other funds under the board'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:

INSURANCE DEPARTMENT	**STATE INVESTMENT BOARD**
Adam Hamm **Commissioner of Insurance**	**David Hunter** **Executive Director/CIO**
Date: 2/17/16	**Date:** 2/18/16

NORTH DAKOTA STATE BONDING FUND

INVESTMENT POLICY STATEMENT

1. FUND CHARACTERISTICS AND CONSTRAINTS.

The State Bonding Fund (the Fund) was established for bonding public employees and public officials in accordance with Chapter 26.1-21 of the North Dakota Century Code (NDCC). Annual collections to the Fund are in the form of fees and restitution. However, the primary funding source for the Fund is investment return.

A minimum balance of $2.0 million must be maintained at all times. If reserves drop below this statutory minimum, premiums will be assessed against all bond holders in accordance with NDCC 26.1-21-09. Such premiums will continue to be charged until the Fund balance reaches $3.0 million. This situation must be avoided.

Claims paid from the Fund are on an as-needed basis and are highly unpredictable. A judgment against the guilty party is required prior to the Fund making a claim payment. Generally, there is a 60-90 day lead-time to prepare for a claim payment. Appropriations from the Fund are exclusively for administrative costs.

2. FUND MISSION

The primary mission of the Fund is to maintain an adequate balance in the fund to avoid the necessity of assessing premiums to bond holders.

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

The Fund is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing policies and asset allocation and investing the assets of the legacy fund in the manner provided in Section 21-10-07--the prudent institutional investor 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.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 is hereby delegated to the SIB, which 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, which are also required to employ investment strategies consistent with the investment policy. 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 pool.

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

The SIB shall notify the board within 30 days of any substantial or notable changes in money managers; performance measurement services; and consultants, including hiring or terminating a money manager, performance measurement service, or a consultant.

The SIB will implement necessary changes to this policy in an efficient and prudent manner.

4. RISK TOLERANCE

The investment objectives of the Fund reflect the long-term nature of the Fund, but also the low risk tolerance and shorter-term liquidity needs.

5. INVESTMENT OBJECTIVES.

The Fund'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:

a. 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.
b. The Fund's risk, measured by the standard deviation of net returns, should be within 1% of the policy benchmark over a minimum evaluation period of five years. For example, if the policy benchmark is 4%, the Fund's risk should range between 3% and 5% over a five-year period.
c. 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

After consideration of all the inputs and discussion of its own risk tolerance, the Fund has chosen the following asset allocation:

Large Cap Domestic Equity	0%
Small Cap Domestic Equity	0%
International Equity	0%
Fixed Income	55%
Real Estate	0%
Cash Equivalents	45%

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. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.

c. No transaction may be made that would threaten the tax-exempt status of the Fund.

d. All assets will be held in custody by the State Investment Board's master custodian or such other custodians as are acceptable to the State Investment Board.

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 must provide 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 Fund'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 and investment performance standards. 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 Insurance Department 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 board.
2. A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each fund's investments.
4. Comparison of the performance of each fund managed by each advisory service to other funds under the board'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:

INSURANCE DEPARTMENT	**STATE INVESTMENT BOARD**
Adam Hamm **Commissioner of Insurance**	**David Hunter** **Executive Director/CIO**
Date: 2/17/16	**Date:** 2/18/16

NORTH DAKOTA FIRE AND TORNADO FUND

INVESTMENT POLICY STATEMENT

1. FUND CHARACTERISTICS AND CONSTRAINTS.

The State Fire and Tornado Fund (the Fund) was established in 1919 to insure the various state industries and political subdivisions against direct physical loss to public buildings, fixtures, and permanent contents due to the perils named in 26.1-22-02 of the North Dakota Century Code (NDCC). All state buildings and universities must be covered by the Fund. School districts and counties may participate at their option. Funding is primarily provided by annual premiums charged to policy holders in accordance with NDCC 26.1-22.

Effective August 1993, the state's boiler inspection program was placed under the direction of the Insurance Department. The costs of this program are appropriated from the Fund. Fees collected for boiler inspections and licensing will be the primary source of funding for the program. The 1995 Legislature added anhydrous ammonia storage facilities to the Fund's inspection responsibilities.

A minimum balance of $12.0 million must be maintained at all times. If reserves drop below this statutory minimum, additional premiums, as specified under NDCC 26.1-22, would be assessed. This situation must be avoided.

The Fund retains liability for the first $1 million on each and every loss. Any loss over this amount, up to a maximum of $100 million, is covered by reinsurance through a commercial reinsurance carrier. Reinsurance coverage is bid by the Insurance Department at least once every two years.

Claims paid from the Fund are highly unpredictable. Weather damage accounts for the majority of claims. Fires generally result in the most extensive damage. Generally, there is a two week lead time to prepare for a claim payment. Large claim payments have a longer lead time and are spread out in multiple payments whenever possible.

Operating expenses are paid from the Fund as incurred. These include Fund administration, boiler inspection program, anhydrous ammonia storage facility inspections, State Fire Marshall's Office, and the North Dakota Firefighter's Association.

2. FUND MISSION

The primary mission of the Fund is to maintain an adequate balance in the fund to avoid the necessity of assessing additional premiums to policy holders.

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

The Fund is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing policies and asset allocation and investing the assets of the Fund in the manner provided in Section 21-10-07 the prudent institutional investor 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.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 is hereby delegated to the SIB, which 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, which are also required to employ investment strategies consistent with the investment policy. 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 pool.

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

The SIB shall notify the board within 30 days of any substantial or notable changes in money managers; performance measurement services; and consultants, including hiring or terminating a money manager, performance measurement service, or a consultant.

The SIB will implement necessary changes to this policy in an efficient and prudent manner.

4. RISK TOLERANCE

The investment objectives of the Fund reflect the long-term nature of the Fund, but also the low risk tolerance and shorter-term liquidity needs.

5. INVESTMENT OBJECTIVES.

The Fund'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:

a. 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.
b. The Fund's risk, measured by the standard deviation of net returns, should be within 1% of the policy benchmark over a minimum evaluation period of five years. For example, if the policy benchmark is 4%, the Fund's risk should range between 3% and 5% over a five-year period.

c. 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

After consideration of all the inputs and discussion of its own risk tolerance, the Fund has chosen the following asset allocation:

Large Cap Domestic Equity	18.75%
Small Cap Domestic Equity	6.25%
International Equity	10.00%
Fixed Income	55.00%
Real Estate	0%
Cash Equivalents	10.00%

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. Derivative use will be monitored to ensure that undue risks are not taken by the money managers.

c. No transaction may be made that would threaten the tax-exempt status of the Fund.

d. All assets will be held in custody by the State Investment Board's master custodian or such other custodians as are acceptable to the State Investment Board.

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 must provide 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 Fund'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 and investment performance standards. 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.

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2. A list of investments at market value, compared to previous reporting period, of each fund managed by each advisory service.
3. Earnings, percentage earned, and change in market value of each fund's investments.
4. Comparison of the performance of each fund managed by each advisory service to other funds under the board'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:

INSURANCE DEPARTMENT

Adam Hamm
Commissioner of Insurance

Date: 2/17/16

STATE INVESTMENT BOARD

David Hunter
Executive Director/CIO

Date: 2/18/16

Introduction

A State Investment Board (SIB) Executive Review Committee has been appointed for the purpose of evaluating the performance of the Executive Director/CIO of the ND Retirement and Investment Office (RIO), Mr. David Hunter.

As a member of the SIB you are being asked to evaluate the Executive Director/CIO's level of compliance with the *Ends* and Executive Limitation policies set forth in the SIB Governance Manual. This evaluation assesses six major categories utilizing the following three point scale:

1 - DOES NOT MEET EXPECTATIONS: Executive Director/CIO is not performing acceptably and expectations are not being met. Goals for improvement must be set and performance review date established (3-6 months). To ensure the best possible feedback for the Executive Director/CIO a comment which provides further explanation is <u>strongly encouraged</u> when a rating of 1 is selected.

2 - MEETS EXPECTATIONS: Executive Director/CIO is performing acceptably and is meeting all standards and expectations.

3 - EXCEEDS EXPECTATIONS: Executive Director is performing beyond and exceeds the established standards and expectations. To ensure the best possible feedback for the Executive Director/CIO a comment which provides further explanation is <u>strongly encouraged</u> when a rating of 3 is selected.

Please contact the Supervisor of Audit Services, Terra Miller Bowley, at 701.328.9896 or tmbowley@nd.gov for additional information and supporting documentation related to the *Ends* and Executive Limitation policies addressed in the evaluation.

* 1. State Investment Board Member Completing the Evaluation:

[ ]

CATEGORY 1 - Board Meetings

(Reference: Executive Limitations A-6)

2. The Executive Director/CIO prepares agenda items with supporting information and disseminates to State Investment Board members at least three days prior to the meeting.

- 1
- 2
- 3
- Not Applicable

Comments

3. The Executive Director/CIO provides appropriate information to the State Investment Board either in writing or verbally to aid in decision-making related to policy development, asset allocation, portfolio structure, and investment strategies.

- 1
- 2
- 3
- Not Applicable

Comments

4. The Executive Director/CIO provides board material that identify items, which need "Board Action" and makes a staff recommendation where appropriate.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

5. The Executive Director/CIO provides education at board meetings in order for the State Investment Board to adequately perform their role.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

CATEGORY 2 - Board Relations

(Reference: Executive Limitations A-6)

6. The Executive Director/CIO is responsive to requests of the State Investment Board, adapts to the State Investment Board's direction on policy, and works with the board as a team member.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

7. The Executive Director/CIO keeps the State Investment Board aware of current issues and, when appropriate, provides information between board meetings.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

8. The Executive Director/CIO provides timely and accurate problem identification to the State Investment Board as well as solutions and options for consideration.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

CATEGORY 3 - Office Operations

(Reference: Executive Limitations A-2, A-4, A-5 and A-7)

9. The Executive Director/CIO adequately prepares a biennial budget, which includes, but is not limited to the following sub-categories:

3.2.1 - Biennial budget is prepared pursuant to OMB guidelines and submitted pursuant to guidelines established by the Office of the Governor.
3.2.2 - Does not reduce the level of service, or anticipate a reduction in the level of service, of any Retirement and Investment Office program without the prior approval of the State Investment Board.
3.2.3 - Expenditures for budget items do not exceed the appropriation without approval of the State Investment Board.

- 1
- 2
- 3
- Not Applicable

Comments

10. The Executive Director/CIO ensures RIO staff have a work environment that is safe, fair, respectful, organized, and gives direction through organizational goals and objectives.

- 1
- 2
- 3
- Not Applicable

Comments

11. The Executive Director/CIO provides leadership, coaching and effective feedback to RIO staff, recommending measures to improve performance and increase efficiency.

- ○ 1
- ○ 2
- ○ 3
- ○ Not Applicable

Comments

12. The Executive Director/CIO maintains and continues to develop positive working relationships across all organizational units and levels.

- ○ 1
- ○ 2
- ○ 3
- ○ Not Applicable

Comments

13. The Executive Director/CIO provides adequate staffing for the NDRIO, which includes, but is not limited to the following sub-categories:

3.4.1 - All applicable personnel rules of the State of North Dakota are followed.
3.4.2 - Staff performance evaluations are completed at least annually.

- ○ 1
- ○ 2
- ○ 3
- ○ Not Applicable

Comments

CATEGORY 4 - Investment Programs and Program Operations

(Reference: Executive Limitations A-6, A-7, A-9 and Ends D-3, D4)

14. The Executive Director/CIO maintains approved Investment Objectives and Policies.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

15. The Executive Director/CIO effectively advises, monitors and reports investment performances, which includes, but is not limited to the following sub-categories:

4.2.1 - Produces accurate and timely reports which are provided to the State Investment Board concerning investments, progress and compliance with investment policies.
4.2.2 - Advises and makes recommendations to the State Investment Board regarding investment programs and strategies.
4.2.3 - Recommends corrective actions as necessary to investment strategies.
4.2.4 - Monitors, analyzes, and recommends changes for all investment costs, including commissions, manager fees, and other costs.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

16. The Executive Director/CIO effectively monitors investment strategies, which includes, but is not limited to the following sub-categories:

4.3.1 - Formulates, evaluates, and recommends an investment policy for all of the State Investment Board client assets, including asset allocation, structure of investment assets and, upon approval, implementation of the policy.
4.3.2 - Makes recommendations to the State Investment Board related to the Watch List.
4.3.3 - Monitors and evaluates total portfolio risk and return and recommend adjustments to the asset allocation, investment strategy, manager structure and guidelines.
4.3.4 - Researches and recommends new asset classes and innovative investment management styles that can increase the return on assets, reduce risk, or reduce costs to the plan.

- 1
- 2
- 3
- Not Applicable

Comments

17. The Executive Director/CIO effectively monitors investment managers, which includes, but is not limited to the following sub-categories:

4.4.1 - Adjust managers' assets to maintain proper risk levels and asset allocation targets.
4.4.2 - At least quarterly, evaluates and reviews the investment activity and portfolio management of the investment managers.
4.4.3 - Reports a summary of investment manager activity and compliance with investment policy and contractual guidelines to the State Investment Board and individual plan governing boards.
4.4.4 - Regularly meets with the investment managers to review performance and other activity.
4.4.5 - Oversees and, when necessary, participates in searches for new investment managers and consultants, negotiates fees and contracts, and recommends termination of managers.

- ○ 1
- ○ 2
- ○ 3
- ○ Not Applicable

Comments

18. The Executive Director/CIO adheres to methods of collecting, reviewing, transmitting, and/or storing investment client information that protects against improper access to confidential information.

- ○ 1
- ○ 2
- ○ 3
- ○ Not Applicable

Comments

19. The Executive Director/CIO maintains high fiduciary standards.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

20. The Executive Director/CIO adequately provides State Investment Board contract management, which includes, but is not limited to the following sub-categories:

4.6.1 - Distributes and analyzes bids for services to facilitate decision-making for the State Investment Board.
4.6.2 - Monitors contractor performance and advises the State Investment Board of any issues, including options for responding and recommendations for associated action plans.
4.6.3 - Provide direction to all contracts to insure that State Investment Board objectives are achieved.
4.6.4 - Insure that all contractors comply with contract provision, state law and administrative rules.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

CATEGORY 5 - Public/Legislative Relations

(Reference: Executive Limitations A-3, A-9)

21. The Executive Director/CIO provides necessary information, through regular effective communications and timely programs, to various stakeholders.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

22. The Executive Director/CIO represents RIO and promotes State Investment Board programs to various stakeholders, constituencies, political subdivisions and the state legislature.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ Not Applicable

Comments

23. The Executive Director/CIO develops legislative proposals in concert with the State Investment Board and represents the board in communications and presentations to the legislature.

- 1
- 2
- 3
- Not Applicable

Comments

24. The Executive Director/CIO properly informs the Legislature, through the Interim Committee, regarding the status of the investment funds which fall under the oversight of the State Investment Board.

- 1
- 2
- 3
- Not Applicable

Comments

25. The Executive Director/CIO has developed a rapport with legislators to ensure the credible recognition of the positions of the State Investment Board.

- 1
- 2
- 3
- Not Applicable

Comments

CATEGORY 6 - Professional Skills and Development

(Reference: Executive Limitations A-2, A-6)

26. The Executive Director/CIO maintains membership and involvement in professional organizations and is current with applicable certifications.

- 1
- 2
- 3
- Not Applicable

Comments

27. The Executive Director/CIO provides visionary and strategic leadership to the State Investment Board.

- 1
- 2
- 3
- Not Applicable

Comments

28. The Executive Director/CIO exhibits a positive and results-oriented style with a predisposition to building consensus and goal achievement through collaboration.

- 1
- 2
- 3
- Not Applicable

Comments

29. The Executive Director/CIO demonstrates the ability to dissect highly complex issues and effectively develop and communicate a corresponding plan of action.

- 1
- 2
- 3
- Not Applicable

Comments

30. The Executive Director/CIO has reasonably attained professional goals for present year.

- 1
- 2
- 3
- Not Applicable

Comments

31. The Executive Director/CIO adheres to all laws, rules, policies, procedures, and professional ethics.

- 1
- 2
- 3
- Not Applicable

Comments

32. The Executive Director/CIO exhibits courtesy and respect in all interactions.

- 1
- 2
- 3
- Not Applicable

Comments

33. The Executive Director/CIO understands motivational drivers and is skilled at getting individuals, teams, and the entire organization to perform at the highest possible level and to embrace change.

- 1
- 2
- 3
- Not Applicable

Comments

AGENDA ITEM IV.A.

To: **State Investment Board**

From: Dave Hunter, Executive Director / CIO

Date: March 17, 2016

RE: **Executive Director / CIO Effectiveness Survey – Cover Memo**

Background, Scope and Results Summary:

The background, scope and results of the annual Executive Director / CIO Effectiveness Survey are summarized on the following 10 pages.

Overview of the Executive Director / CIO Employee Opinion Survey Results:

I am pleased to report that 91% of survey respondents indicated that they "Agree" or "Strongly Agree" with the overall effectiveness of the ED/CIO, for which I am sincerely grateful. This is a meaningful improvement from last year in which 78% of the survey responses were recorded as "Agree" or "Strongly Agree". **The most significant area of improvement occurred in "Communication" which improved to 89% in 2015** (versus 63% in 2014), although RIO team members clearly desire further improvement in this area. I am also pleased to report that **"Leadership" improved to 89%** (from 83%) between years, while **"Valuing Employees" improved to 96%** (from 87%). RIO team members provided a great deal of constructive feedback which demonstrates a high level of engagement and sincere desire for further improvements. I take all constructive comments and recommendations to heart. As such, I endeavor to continue to improve upon my own overall effectiveness in the upcoming year.

Attachments: Executive Director / CIO Effectiveness Survey

Audit Services – North Dakota Retirement and Investment Office

Executive Director/CIO Effectiveness Survey Results

January 6, 2016

Background

The Audit Services Division of the Retirement and Investment Office (RIO) on an annual basis reviews the Executive Director/CIO's level of compliance with State Investment Board (SIB) Governance Manual Executive Limitation policies A-1 through A-11. Executive Limitation policy A-2 references staff relations. In an effort to gain insight into the relationship which exists between the Executive Director/CIO and staff an organization wide employee opinion survey is conducted annually to provide employees the opportunity to evaluate the effectiveness of the Executive Director/CIO in the areas of leadership, communication, and valuing employees. The results of this survey are then used to determine the Executive Director/CIO's compliance with Executive Limitation policy A-2.

Scope

The survey is comprised of ten multiple choice questions and one open ended question. The multiple choice questions focus on the areas of leadership, communication, and valuing employees with three questions dedicated to each area. Staff are presented with a statement and asked to select the option which best reflects how strongly they agree or disagree with the statement. Available options include strongly agree, agree, neither agree or disagree, disagree, and strongly disagree. The open ended question provides staff with the opportunity to provide comments and constructive feedback pertaining to their overall satisfaction with the job being done by the Executive Director/CIO, what the Executive Director/CIO has done well, and what the Executive Director/CIO could do better in the future.

Results Summary

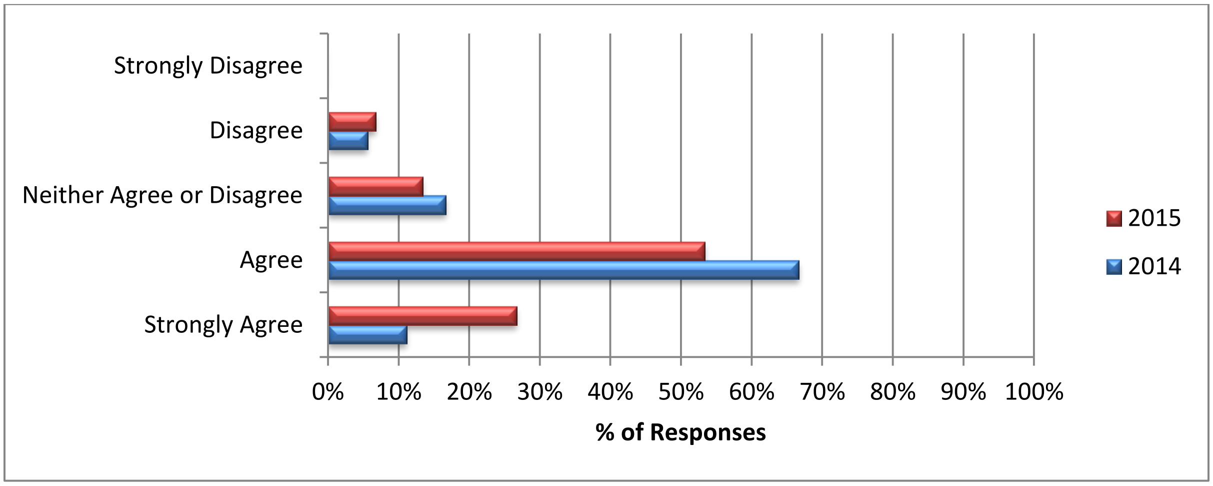
Overall survey responses trended more positive in 2015 when compared to the prior year. Staff agree the Executive Director/CIO provides a sense of purpose to the organization and defines roles and responsibilities of others. Staff indicated improved confidence in the Executive Director/CIO and overwhelmingly agreed that the Executive Director/CIO demonstrates integrity and sets an example for others. A marked improvement was seen in the area of communication with a greater number of staff indicating they are informed about organizational activities. Staff believes that information and communication are occurring throughout the organization at a greater frequency. Staff also agrees that the Executive Director/CIO is doing better at understanding the perspectives of others and demonstrating more openness to changing his position based on these perspectives. Consistent with the prior year the Executive Director/CIO received favorable responses in the area of valuing employees. Staff overwhelmingly agrees that the Executive Director/CIO shows genuine concern for staff and treats everyone with respect.

The responses to the open ended question reveal that in general staff believes that the Executive Director/CIO is doing a great job and representing the RIO well. Monthly staff meetings and one-on-one meetings were very positively received with all agreeing overall communication has improved. Although communication has improved as a whole, several staff indicated concern regarding communication among supervisory and other management staff, indicating this was an area which could use improvement. There is some concern that not all staff members are required to adhere to office policies and procedures and would like the Executive Director/CIO to ensure that this is not the case moving forward. Several staff indicated that the Executive Director/CIO has done a better job of soliciting information and gaining the perspectives of staff in the past year, however there is also an opportunity for improvement. Staff would also like greater autonomy to compete delegated tasks and would encourage the Executive Director/CIO to have greater confidence in their ability to complete those tasks. Finally staff acknowledged that they have observed the Executive Director/CIO attempting to make improvements and positive changes over the course of the last calendar year and are very encouraged by the efforts made. Staff would encourage the Executive Director/CIO to continue these efforts in the future.

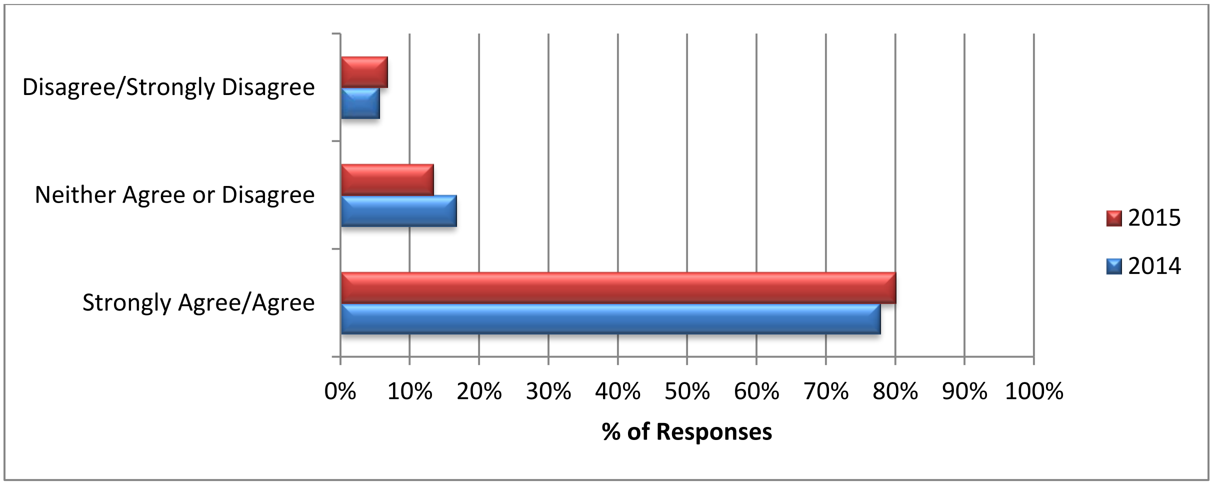
Executive Director/CIO Effectiveness - Leadership

Question 1: *The Executive Director/CIO provides a clear sense of purpose and direction, roles and responsibilities, for me and our team as a whole.*

Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	2	11.11%	4	26.67%
Agree	12	66.67%	8	53.33%
Neither Agree or Disagree	3	16.67%	2	13.33%
Disagree	1	5.56%	1	6.67%
Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



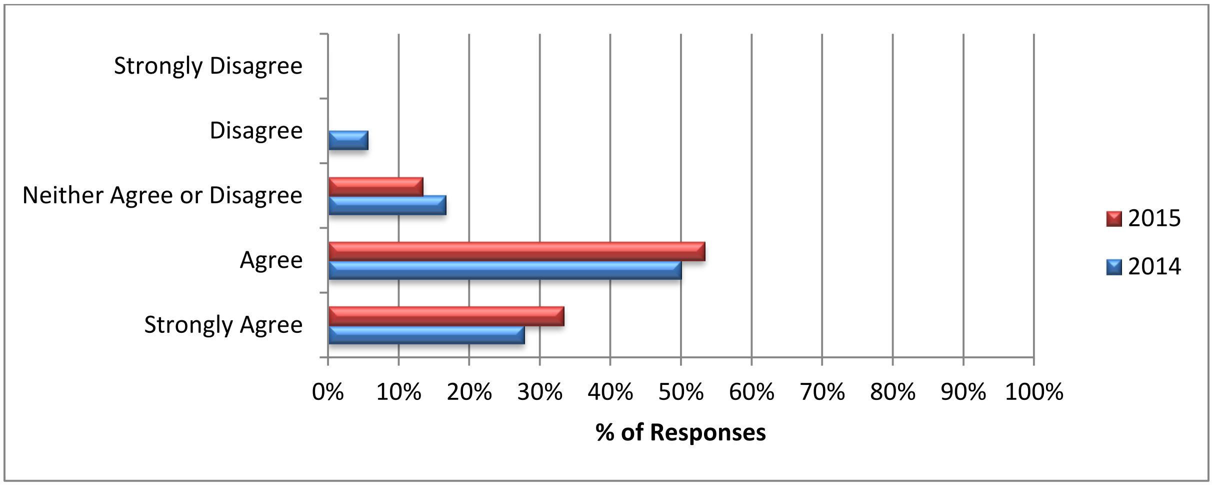
Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree/Agree	14	77.78%	12	80.00%
Neither Agree or Disagree	3	16.67%	2	13.33%
Disagree/Strongly Disagree	1	5.56%	1	6.67%
	18	100.00%	15	100.00%



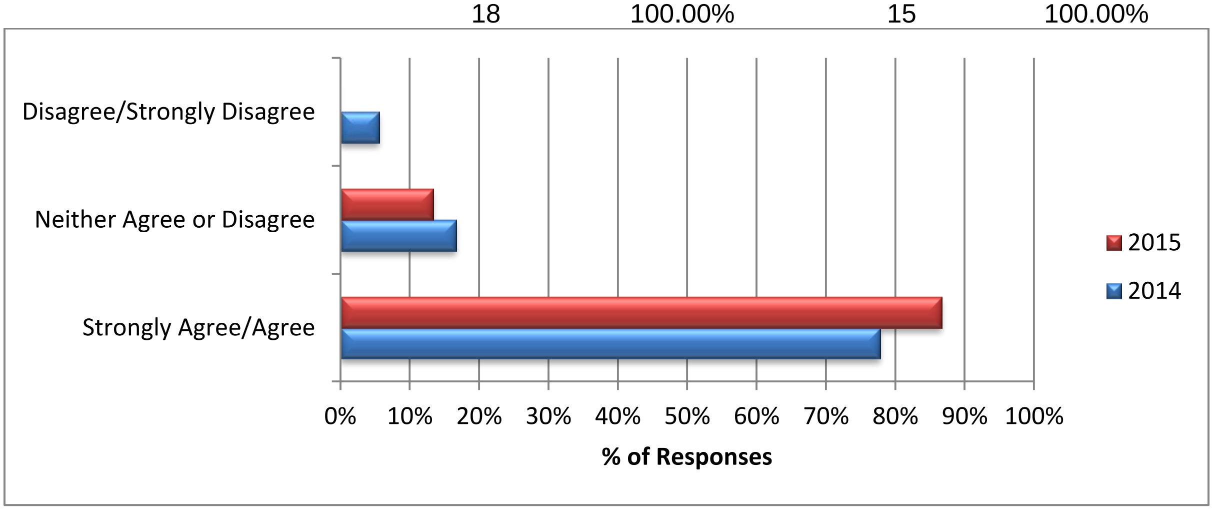
Executive Director/CIO Effectiveness – Leadership

Question 2: *Employees have confidence in the Executive Director/CIO.*

Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	5	27.78%	5	33.33%
Agree	9	50.00%	8	53.33%
Neither Agree or Disagree	3	16.67%	2	13.33%
Disagree	1	5.56%	0	0.00%
Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



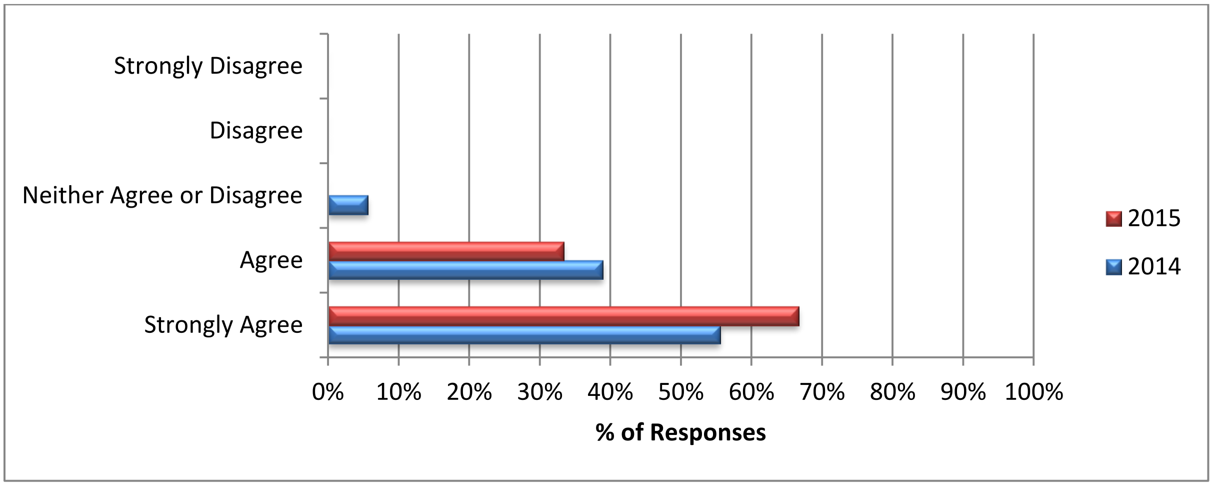
Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree/Agree	14	77.78%	13	86.67%
Neither Agree or Disagree	3	16.67%	2	13.33%
Disagree/Strongly Disagree	1	5.56%	0	0.00%
	18	100.00%	15	100.00%



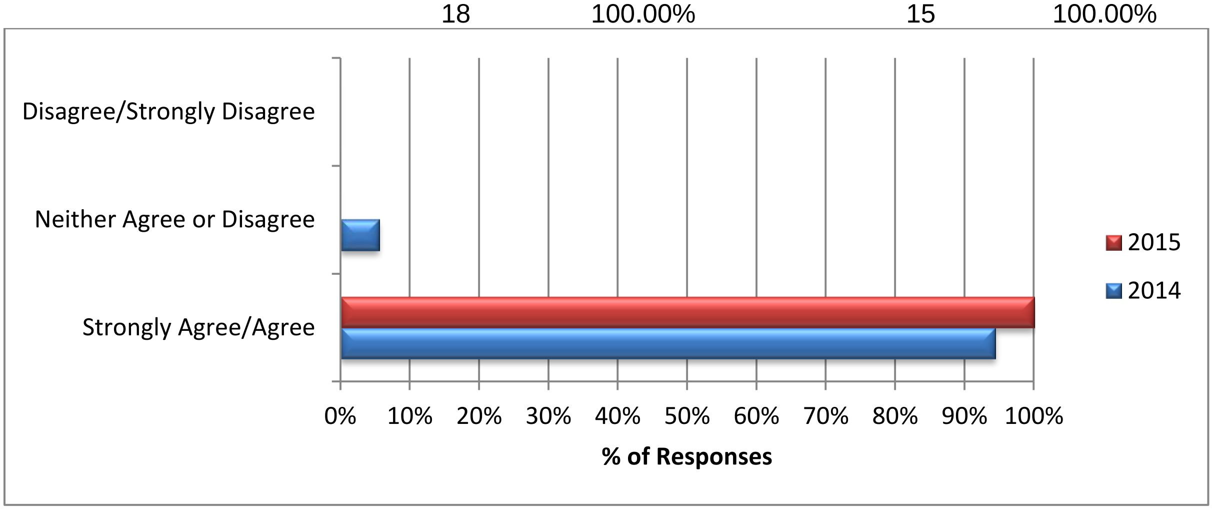
Executive Director/CIO Effectiveness - Leadership

Question 3: *The Executive Director/CIO demonstrates integrity and sets an example for others to follow.*

Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	10	55.56%	10	66.67%
Agree	7	38.89%	5	33.33%
Neither Agree or Disagree	1	5.56%	0	0.00%
Disagree	0	0.00%	0	0.00%
Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



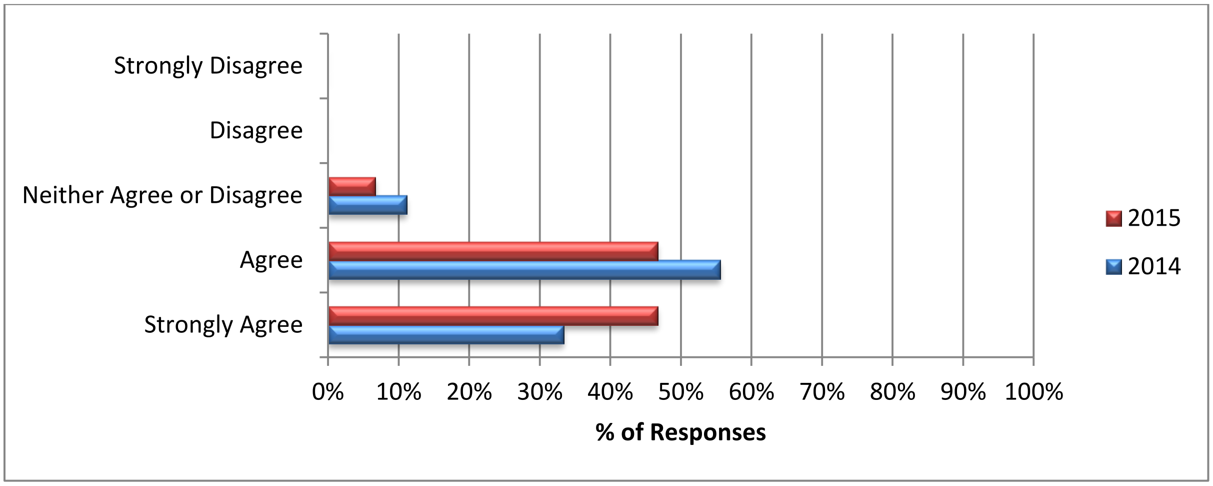
Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree/Agree	17	94.44%	15	100.00%
Neither Agree or Disagree	1	5.56%	0	0.00%
Disagree/Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



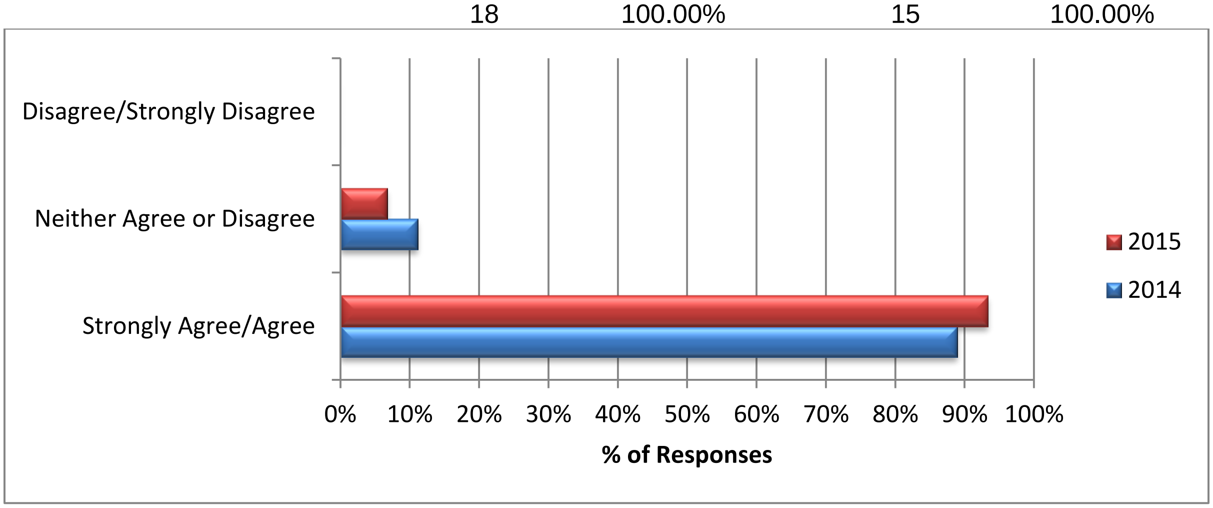
Executive Director/CIO Effectiveness – Communication

Question 1: *The Executive Director/CIO takes time to understand other perspectives and is open to changing his position.*

Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	6	33.33%	7	46.67%
Agree	10	55.56%	7	46.67%
Neither Agree or Disagree	2	11.11%	1	6.67%
Disagree	0	0.00%	0	0.00%
Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



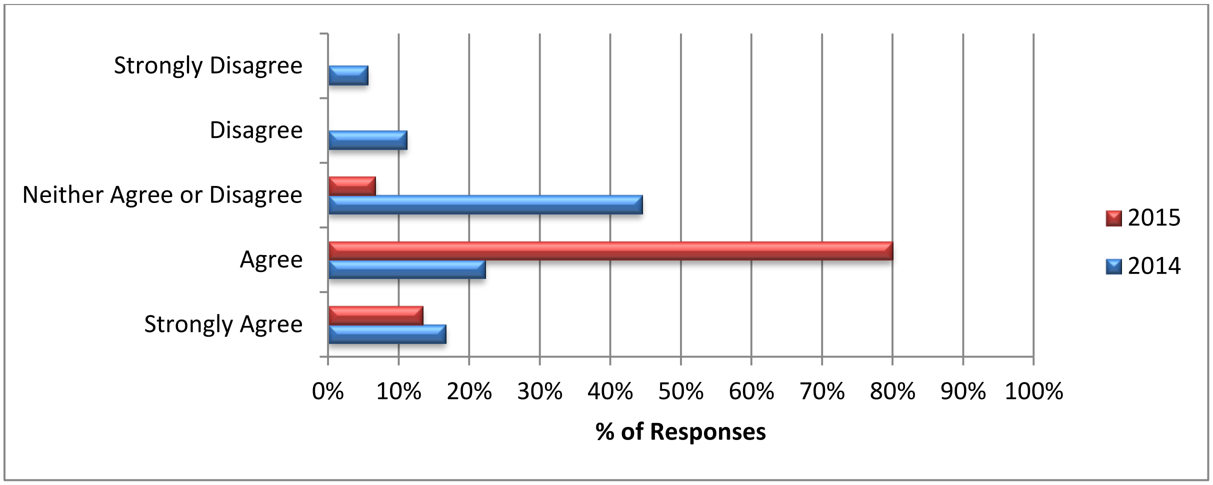
Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree/Agree	16	88.89%	14	93.33%
Neither Agree or Disagree	2	11.11%	1	6.67%
Disagree/Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



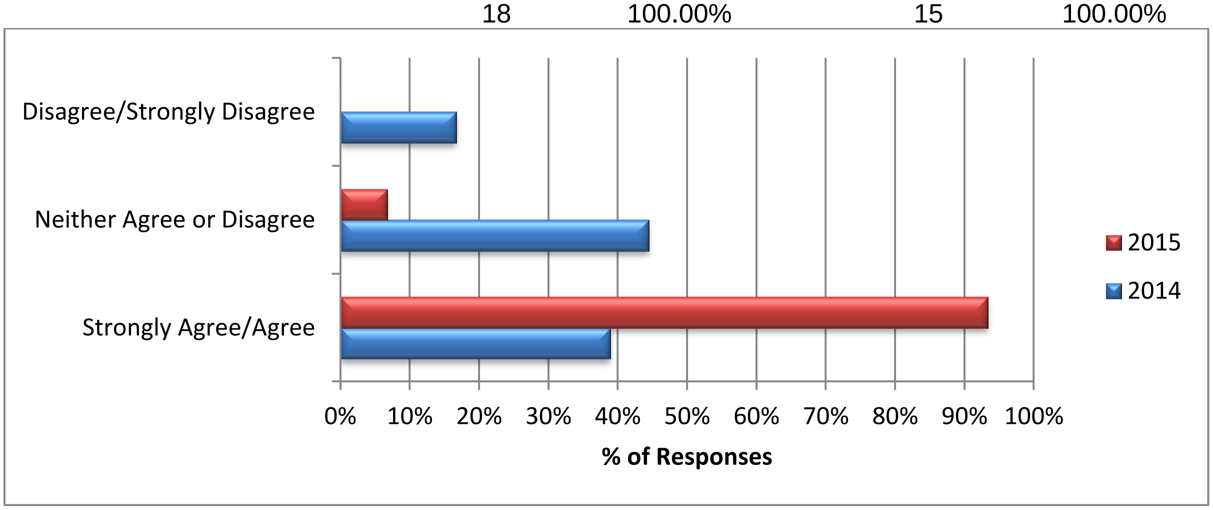
Executive Director/CIO Effectiveness - Communication

Question 2: *The Executive Director/CIO keeps employees informed about what is occurring throughout the organization.*

Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	3	16.67%	2	13.33%
Agree	4	22.22%	12	80.00%
Neither Agree or Disagree	8	44.44%	1	6.67%
Disagree	2	11.11%	0	0.00%
Strongly Disagree	1	5.56%	0	0.00%
	18	100.00%	15	100.00%



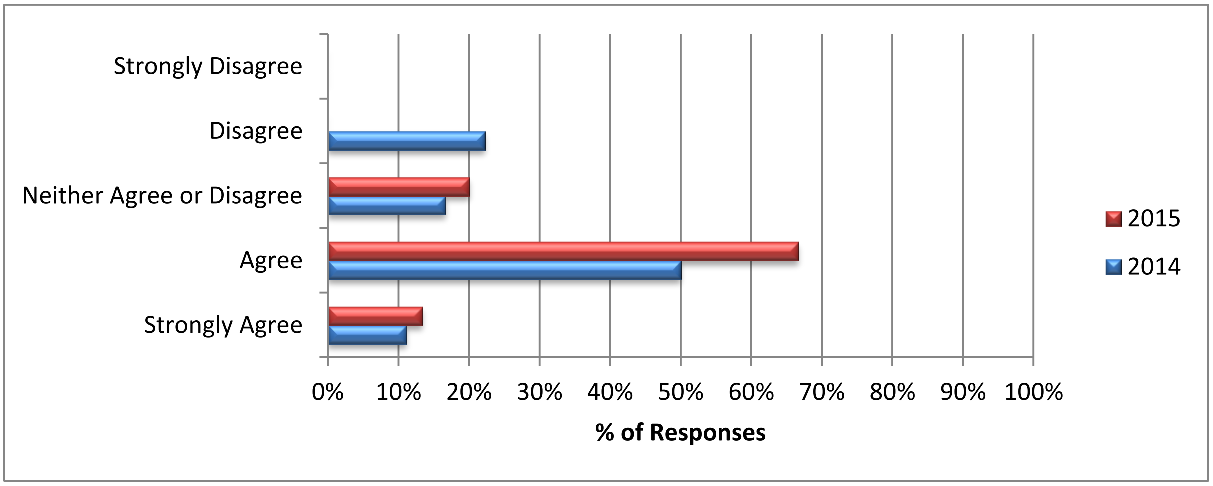
Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree/Agree	7	38.89%	14	93.33%
Neither Agree or Disagree	8	44.44%	1	6.67%
Disagree/Strongly Disagree	3	16.67%	0	0.00%
	18	100.00%	15	100.00%



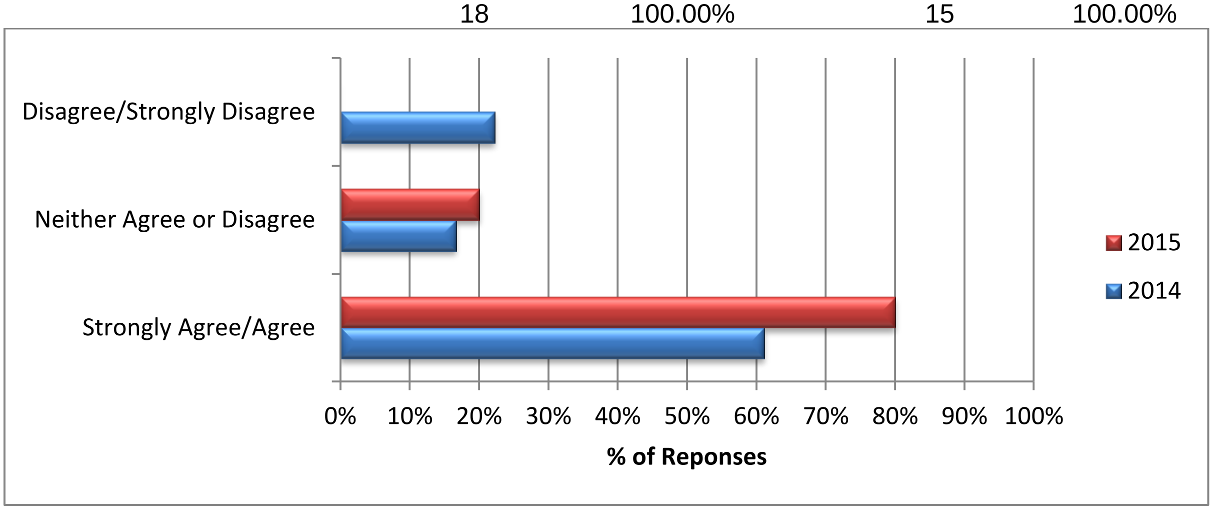
Executive Director/CIO Effectiveness - Communication

Question 3: *Information and knowledge are shared openly within this organization.*

Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	2	11.11%	2	13.33%
Agree	9	50.00%	10	66.67%
Neither Agree or Disagree	3	16.67%	3	20.00%
Disagree	4	22.22%	0	0.00%
Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



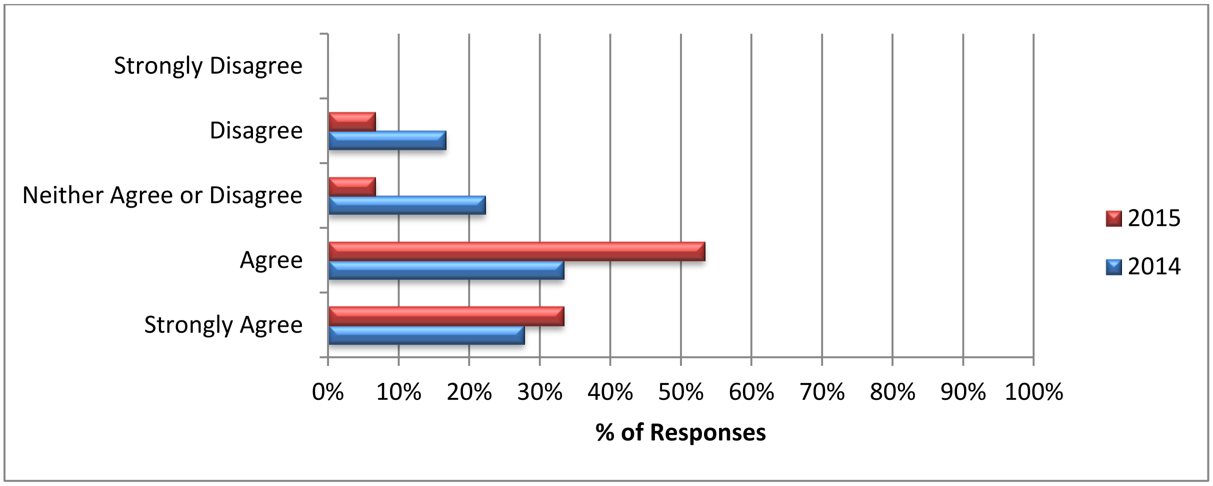
Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree/Agree	11	61.11%	12	80.00%
Neither Agree or Disagree	3	16.67%	3	20.00%
Disagree/Strongly Disagree	4	22.22%	0	0.00%
	18	100.00%	15	100.00%



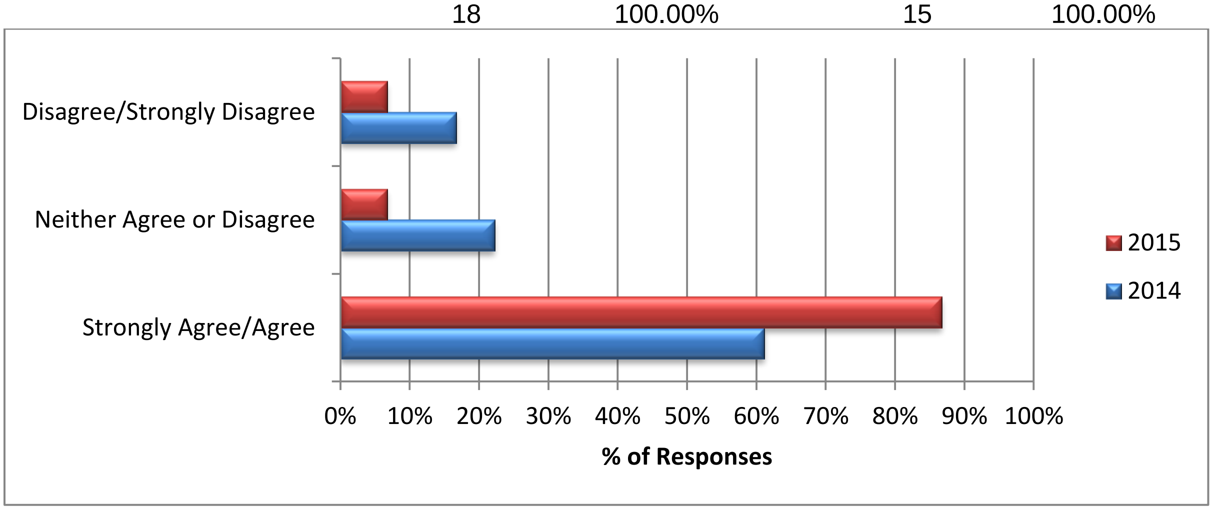
Executive Director/CIO Effectiveness – Valuing Employees

Question 1: *The Executive Director/CIO seeks input from all team members.*

Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	5	27.78%	5	33.33%
Agree	6	33.33%	8	53.33%
Neither Agree or Disagree	4	22.22%	1	6.67%
Disagree	3	16.67%	1	6.67%
Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



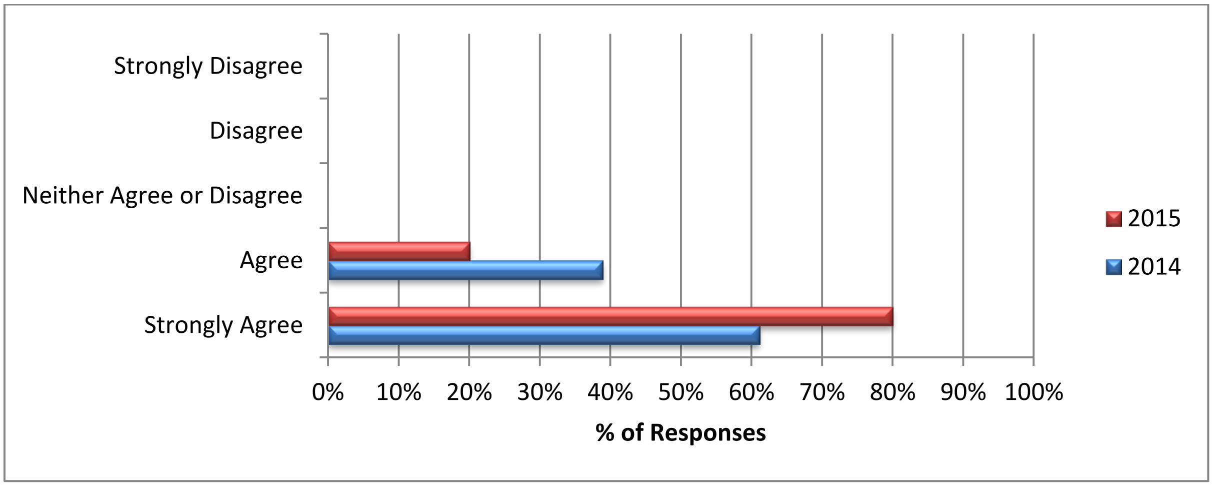
Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree/Agree	11	61.11%	13	86.67%
Neither Agree or Disagree	4	22.22%	1	6.67%
Disagree/Strongly Disagree	3	16.67%	1	6.67%
	18	100.00%	15	100.00%



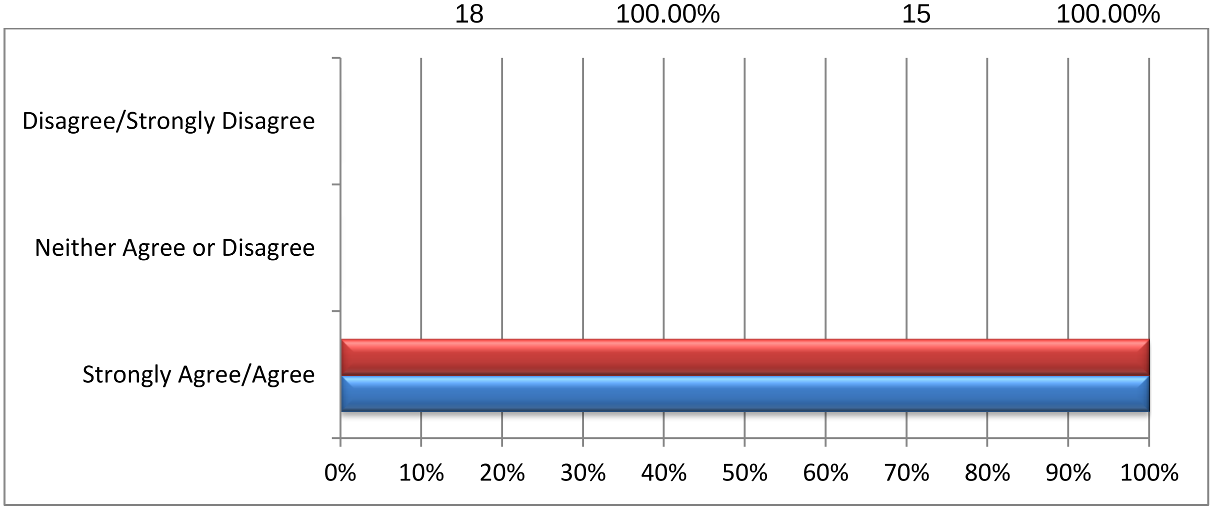
Executive Director/CIO Effectiveness – Valuing Employees

Question 2: *The Executive Director/CIO shows genuine concern for team members.*

Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	11	61.11%	12	80.00%
Agree	7	38.89%	3	20.00%
Neither Agree or Disagree	0	0.00%	0	0.00%
Disagree	0	0.00%	0	0.00%
Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



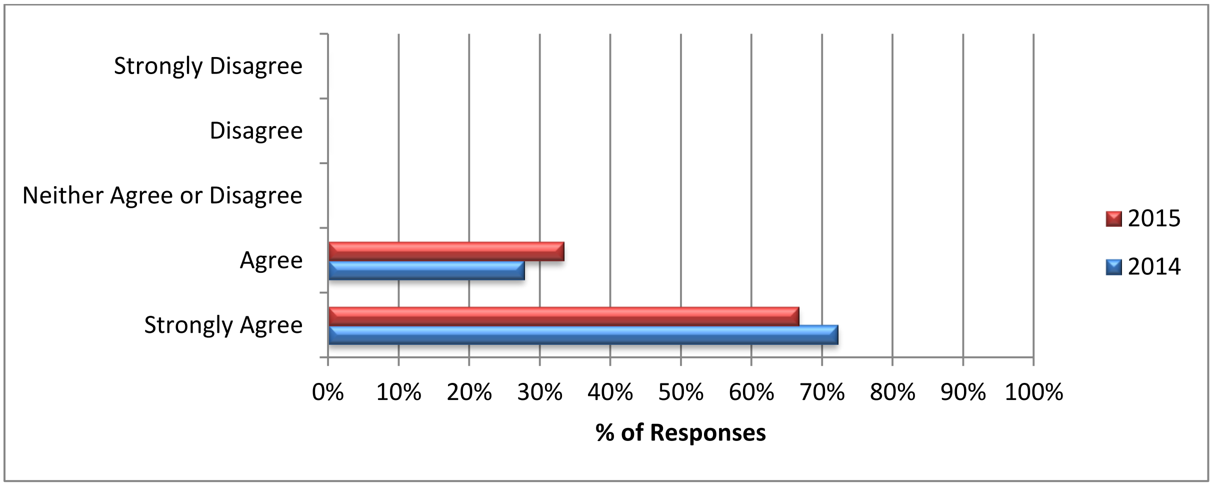
Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree/Agree	18	100.00%	15	100.00%
Neither Agree or Disagree	0	0.00%	0	0.00%
Disagree/Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



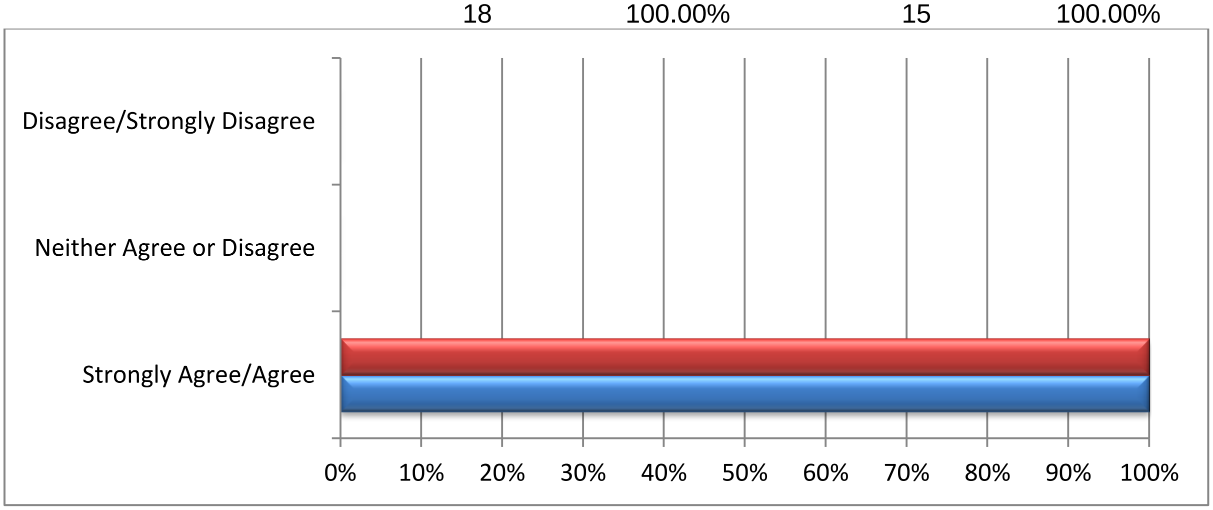
Executive Director/CIO Effectiveness – Valuing Employees

Question 3: *The Executive Limitation/CIO treats employees with respect.*

Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	13	72.22%	10	66.67%
Agree	5	27.78%	5	33.33%
Neither Agree or Disagree	0	0.00%	0	0.00%
Disagree	0	0.00%	0	0.00%
Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



Answer Choices	*2014 Responses*	*2014 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree/Agree	18	100.00%	15	100.00%
Neither Agree or Disagree	0	0.00%	0	0.00%
Disagree/Strongly Disagree	0	0.00%	0	0.00%
	18	100.00%	15	100.00%



AGENDA ITEM IV.A.

To: **State Investment Board**

From: Dave Hunter, Executive Director / CIO

Date: March 17, 2016

RE: **Employee Opinion Survey – Cover Memo**

<u>Background, Scope and Results Summary</u>:

The background, scope and results of the 2016 Employee Opinion Survey are summarized on the following 8 pages.

<u>Employee Opinion Survey Results</u>:

RIO's Audit Services team also recently completed administering an Employee Opinion Survey. The intent of the survey is to give RIO team members the opportunity to share their opinions regarding job satisfaction, employee morale, compensation, the physical office environment and immediate supervisors. All survey responses were anonymous.

A majority of the responses were "Agree" or "Strongly Agree" (64%) with the overall "Agree to Disagree" ratio in excess of 3.5-to-1.0. The # 1 response was "Agree" (42%) followed by "Strongly Agree" (22%), "Neither" (18%), Disagree (13%) and "Strong Disagree" (5%). The two questions generating responses with the highest conviction or sentiment (positive or negative) related to our "Office Environment and Resources". Ten individuals indicated that they are not satisfied with the physical working conditions at RIO (Question 1B) yet nearly everyone (17 out of 18) indicated that they have all the tools and equipment required to do the job. I take this to mean that we are providing a workplace for our team members to be successful despite having a less than desirable physical working environment. When combined with Question 1E in which no one expressed a negative response to moving to a new location, the responses suggest that we should seriously investigate new office space options. There were also mixed responses with regards to compensation and data and building security (Question 1A), the latter of which could likely be improved with a newer or reconfigured office space.

As a result of the above team member responses, RIO is exploring new office space alternatives for the next biennium while taking immediate measures to improve office security. On the compensation front, RIO also completed an overall compensation review in late-2015 which resulted in many RIO team members with 15 to 35 years of service receiving salary adjustments to properly reflect their greater experience combined with exceeding performance expectations. At our next office meeting, RIO intends to review our “compensation review process” to increase overall understanding of our pay classification system and constraints particularly given current budget concerns.

In summary, I found the 2016 Employee Opinion Survey to be incredibly worthwhile and constructive in identifying areas in which RIO can continue to improve upon overall job satisfaction, employee morale and team member engagement in the near future.

Attachment: Employee Opinion Survey

Audit Services

North Dakota Retirement and Investment Office

2016 Employee Opinion Survey Results

February 3, 2016

Background

The Audit Services Division of the Retirement and Investment Office (RIO) on an annual basis administers an employee opinion survey. The intent of the survey is to provide employees the opportunity to share their opinions regarding the physical office environment and resources, job satisfaction, employee morale, compensation, and immediate supervisors. All survey responses are anonymous.

Scope

The survey is comprised of four multiple choice questions and one open ended question. The multiple choice questions focus on the physical office environment and resources, overall job satisfaction, employee morale, compensation, and immediate supervisors. Staff are presented with a statement and asked to select the option which best reflects how strongly they agree or disagree with the statement. Available options include strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. The open ended question provided staff the opportunity to comment on what amenities and/or attributes would be most important to them when considering new office space.

Results Summary

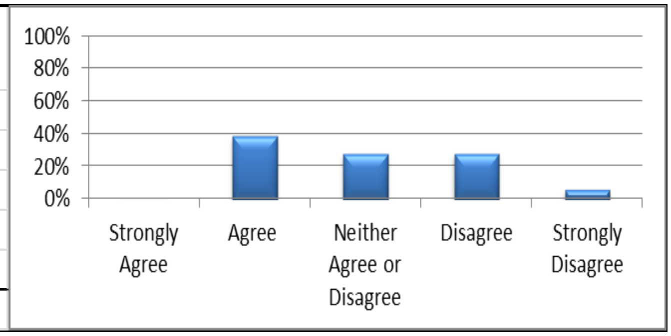
Detailed survey results are presented on the following pages and have been organized based on the topic addressed. In 2015 an employee opinion survey was administered which focused specifically on the relationship between staff and their immediate supervisor. A few of the statements posed in 2015 were repeated on the most current survey. If historical data is available it is also provided in the detailed survey results. All active employees as of January 12, 2016 were sent an invitation requesting their participation in the Employee Opinion Survey. Eighteen employees received invitations with a response rate of 100%.

Staff responses regarding data and building security were mixed with equal amounts of staff indicating current security measures were adequate or inadequate. A majority of staff indicated a willingness to move to a new office location likely due to the fact that over 50% of staff members are unhappy with their physical working conditions. Staff generally agreed on six attributes that would be important in a new office space – functioning HVAC, improved building and information security, natural and adequate light, larger breakroom, location near retail and food services, and multiple conference rooms with audio/visual capabilities. Approximately 60% of staff responded favorably (strongly agree or agree) to all statements referencing job satisfaction and morale. Responses indicate a majority of the staff is content in their current roles and believe that their skills and abilities are being leveraged and morale is generally positive. It is worth noting that a small percentage of the population (2-3 individuals) is unhappy with their current role and believes morale is generally low with two individuals indicating they do not intend to be working at RIO a year from now. Survey responses regarding compensation were again a bit mixed with between 20% - 30% of respondents indicating indifference (neither agree nor disagree) to the statements presented. Approximately 40% of staff responded favorably (strongly agree or agree) to statements referencing compensation. It does appear that the area of compensation merits additional attention and perhaps more communication with staff and education regarding salary determinations. Finally it does appear there has been a slight improvement in the relationship which exists between staff and their immediate supervisors. Approximately 70% of staff believes that their immediate supervisors provide adequate direction, constructive feedback, and are available when needed. Staff also indicated they believe that immediate supervisors promote communication and contribute to overall high team morale. Again it should be noted that a small percentage of the population (2-3 individuals) is unhappy with their current immediate supervisor.

Office Environment and Resources

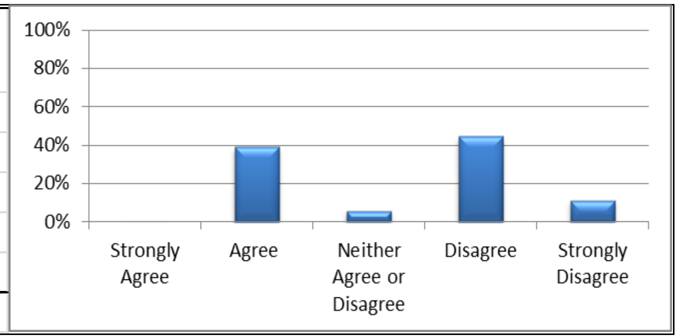
Question 1A: I feel safe in my work environment and I believe that RIO has adequate data and building security measures in place.

Answer Choices	*Responses*	*% Responses*
Strongly Agree	0	0.00%
Agree	7	38.89%
Neither Agree or Disagree	5	27.78%
Disagree	5	27.78%
Strongly Disagree	1	5.56%
	18	100.00%



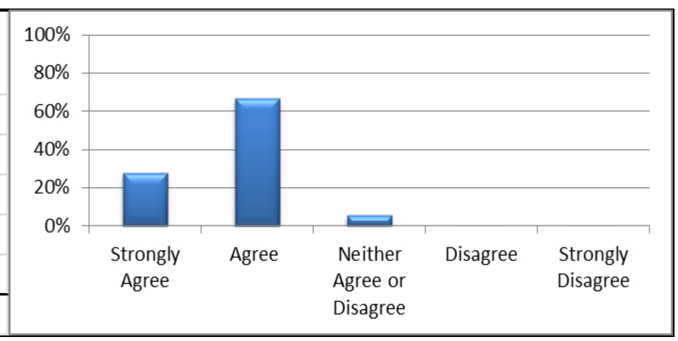
Question 1B: I am satisfied with the physical working conditions at RIO including but not limited to total square footage, office space, lighting, furniture, conference room space, restrooms, and heating/air conditioning.

Answer Choices	*Responses*	*% Responses*
Strongly Agree	0	0.00%
Agree	7	38.89%
Neither Agree or Disagree	1	5.56%
Disagree	8	44.44%
Strongly Disagree	2	11.11%
	18	100.00%



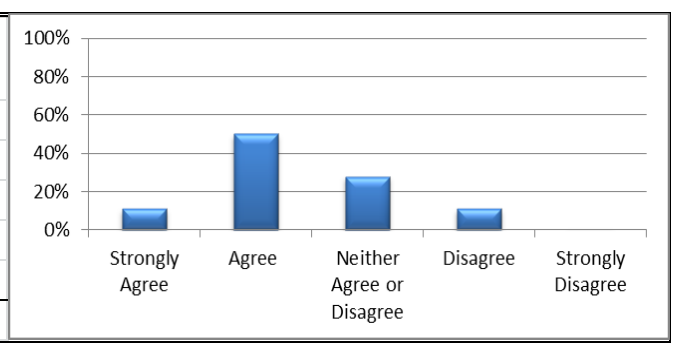
Question 1C: I have all the tools and equipment required to do my job well including but not limited to computers, printers, software, training, and office supplies.

Answer Choices	*Responses*	*% Responses*
Strongly Agree	5	27.78%
Agree	12	66.67%
Neither Agree or Disagree	1	5.56%
Disagree	0	0.00%
Strongly Disagree	0	0.00%
	18	100.00%



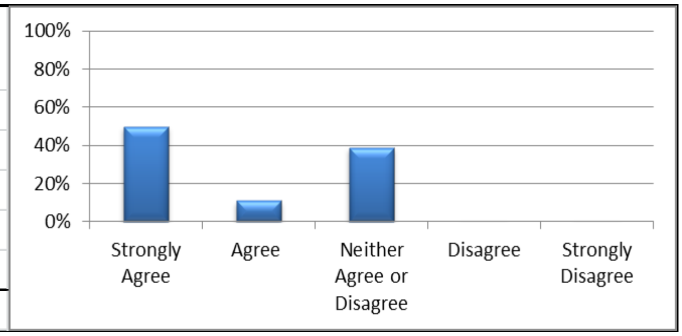
Question 1D: My department currently has an adequate number of staff in order to successfully handle current and future workloads.

Answer Choices	*Responses*	*% Responses*
Strongly Agree	2	11.11%
Agree	9	50.00%
Neither Agree or Disagree	5	27.78%
Disagree	2	11.11%
Strongly Disagree	0	0.00%
	18	100.00%



Question 1E: I would prefer to move to a new office location if given the option to do so.

Answer Choices	Responses	% Responses
Strongly Agree	9	50.00%
Agree	2	11.11%
Neither Agree or Disagree	7	38.89%
Disagree	0	0.00%
Strongly Disagree	0	0.00%
	18	100.00%



Question 1D: When considering new office space what amenities and/or attributes would be most important to you?

Employees provided a multitude of answers regarding the amenities and/or attributes that would be most important to them when considering a new office space. However, there were six amenities and/or attributes that were repeatedly mentioned by a majority of employees as being important:

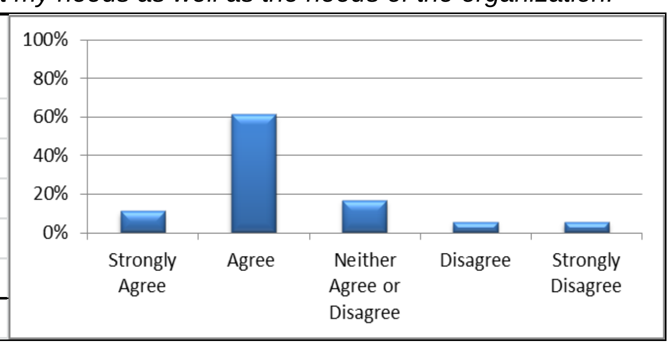
- Functioning HVAC system which provides adequate heating and cooling as well as improved air quality.
- Increased building and information security with the ability to secure working space form public space and the ability to secure and control access to sensitive hardcopy information.
- Windows which provide natural light and adequate artificial light.
- Larger breakroom with more seating and multiple microwaves.
- Location near retail center which allows for shopping, food, etc.
- Multiple conference rooms with audio/visual capabilities.

Other amenities and/or attributes which were mentioned were the ability to bring sit/stand desks and other furniture, more parking spaces and parking lots close to the building, Wi-Fi availability, functional and larger office spaces, cost efficient space, modern design, handicap accessible, enough square footage to accommodate growth, and an attentive landlord. Only four employees commented on private vs. cubicle office space and they were split on their preference with two preferring private offices and two not opposed to cubicles. One employee indicated that the length of their commute to the new office space would be an important factor. Two employees indicated some concern with moving to the BND Financial Center.

Job Satisfaction and Morale

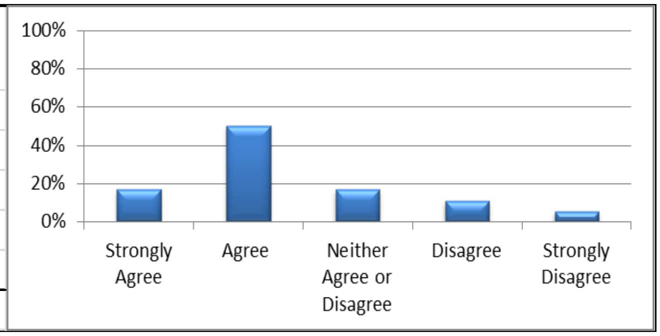
Question 2A: My work schedule is flexible enough to meet my needs as well as the needs of the organization.

Answer Choices	Responses	% Responses
Strongly Agree	2	11.11%
Agree	11	61.11%
Neither Agree or Disagree	3	16.67%
Disagree	1	5.56%
Strongly Disagree	1	5.56%
	18	100.00%



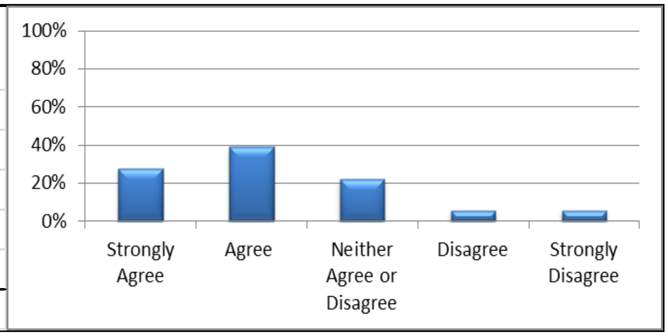
Question 2B: I have enough freedom and authority to do what is right for our clients and/or retirees.

Answer Choices	Responses	% Responses
Strongly Agree	3	16.67%
Agree	9	50.00%
Neither Agree or Disagree	3	16.67%
Disagree	2	11.11%
Strongly Disagree	1	5.56%
	18	100.00%



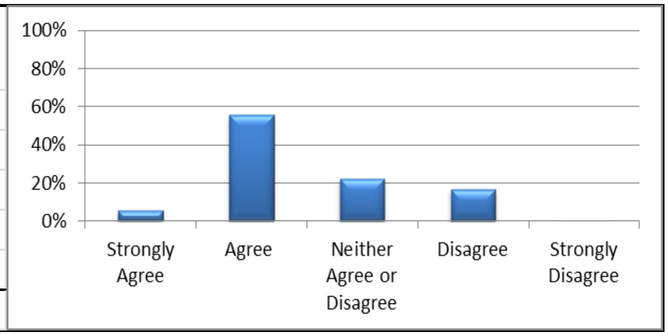
Question 2C: In my department workloads are fairly distributed and we work together to achieve a common goal.

Answer Choices	Responses	% Responses
Strongly Agree	5	27.78%
Agree	7	38.89%
Neither Agree or Disagree	4	22.22%
Disagree	1	5.56%
Strongly Disagree	1	5.56%
	18	100.00%



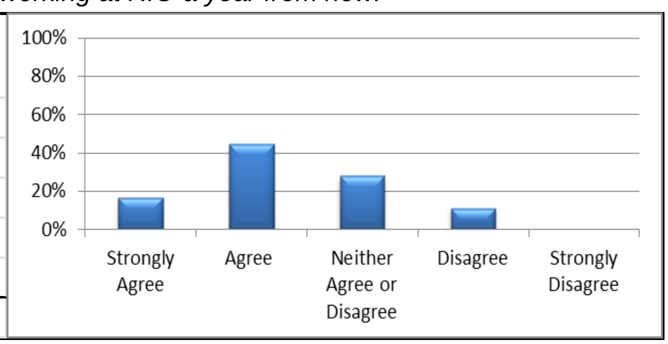
Question 2D: My skills and abilities are utilized effectively by my department.

Answer Choices	Responses	% Responses
Strongly Agree	1	5.56%
Agree	10	55.56%
Neither Agree or Disagree	4	22.22%
Disagree	3	16.67%
Strongly Disagree	0	0.00%
	18	100.00%



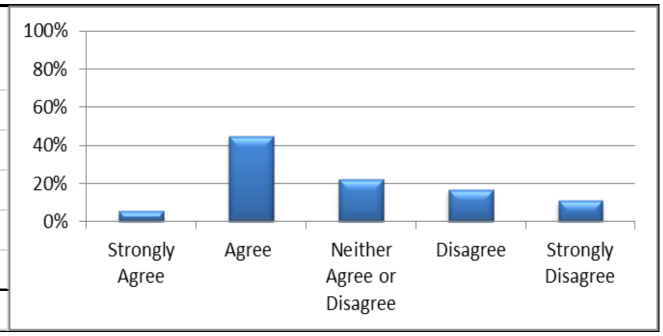
Question 2E: I enjoy my current position and intend to be working at RIO a year from now.

Answer Choices	Responses	% Responses
Strongly Agree	3	16.67%
Agree	8	44.44%
Neither Agree or Disagree	5	27.78%
Disagree	2	11.11%
Strongly Disagree	0	0.00%
	18	100.00%



Question 2F: I believe that employee morale is high in my department and throughout the organization.

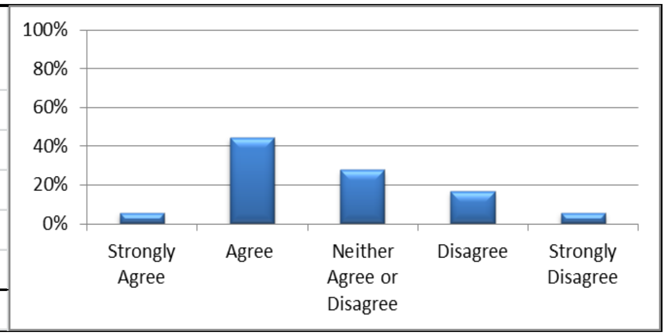
Answer Choices	*Responses*	*% Responses*
Strongly Agree	1	5.56%
Agree	8	44.44%
Neither Agree or Disagree	4	22.22%
Disagree	3	16.67%
Strongly Disagree	2	11.11%
	18	100.00%



Compensation

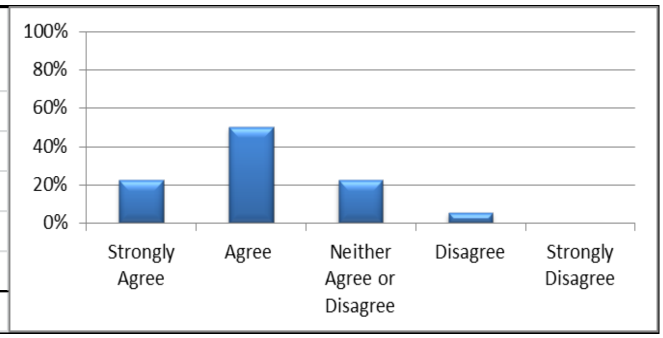
Question 3A: I understand how my compensation including performance pay, equity adjustments, and bonuses is determined.

Answer Choices	*Responses*	*% Responses*
Strongly Agree	1	5.56%
Agree	8	44.44%
Neither Agree or Disagree	5	27.78%
Disagree	3	16.67%
Strongly Disagree	1	5.56%
	18	100.00%



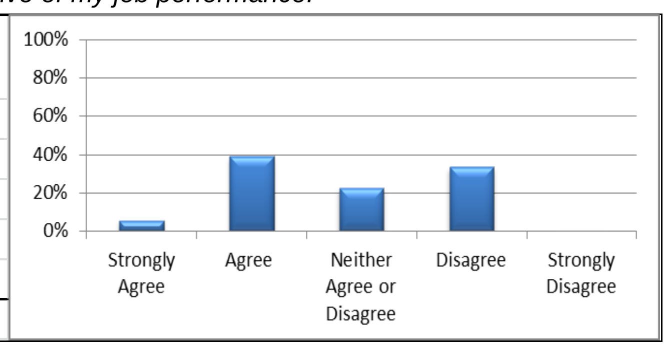
Question 3B: I am satisfied with the efforts the organization has made in the last year to address compensation, especially for long tenured employees.

Answer Choices	*Responses*	*% Responses*
Strongly Agree	4	22.22%
Agree	9	50.00%
Neither Agree or Disagree	4	22.22%
Disagree	1	5.56%
Strongly Disagree	0	0.00%
	18	100.00%



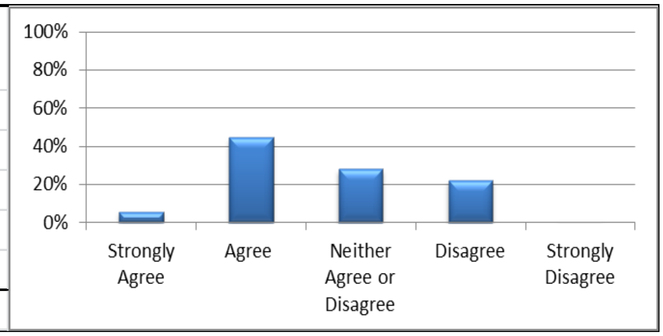
Question 3C: I believe my level of compensation is reflective of my job performance.

Answer Choices	*Responses*	*% Responses*
Strongly Agree	1	5.56%
Agree	7	38.89%
Neither Agree or Disagree	4	22.22%
Disagree	6	33.33%
Strongly Disagree	0	0.00%
	18	100.00%



Question 3D: I am satisfied with my overall compensation including salary and other benefits.

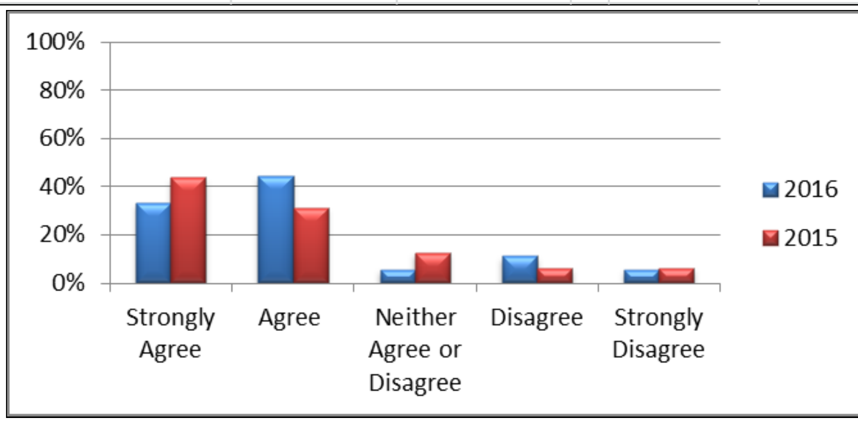
Answer Choices	*Responses*	*% Responses*
Strongly Agree	1	5.56%
Agree	8	44.44%
Neither Agree or Disagree	5	27.78%
Disagree	4	22.22%
Strongly Disagree	0	0.00%
	18	100.00%



Immediate Supervisors

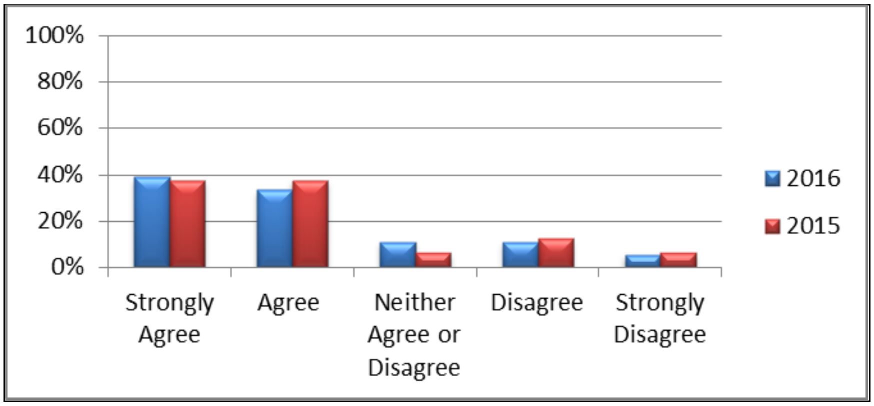
Question 4A: My immediate supervisor provides me with adequate direction in order for me to know what is expected of me.

Answer Choices	*2016 Responses*	*2016 % Responses*		*2015 Responses*	*2015 % Responses*
Strongly Agree	6	33.33%		7	43.75%
Agree	8	44.44%		5	31.25%
Neither Agree or Disagree	1	5.56%		2	12.50%
Disagree	2	11.11%		1	6.25%
Strongly Disagree	1	5.56%		1	6.25%
	18	100.00%		16	100.00%



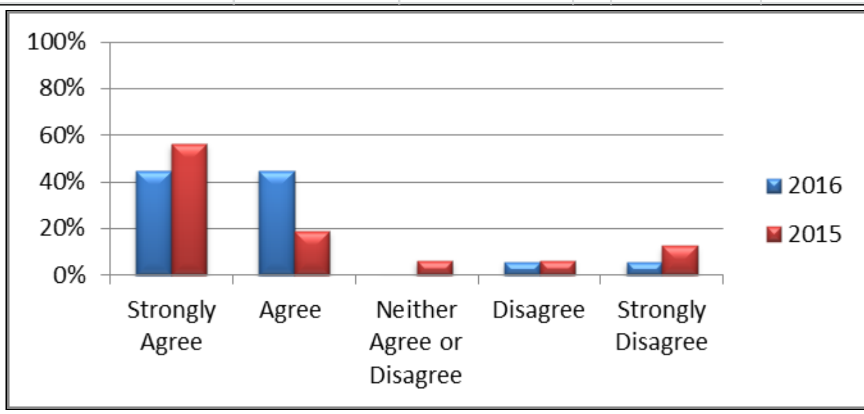
Question 4B: My immediate supervisor provides constructive feedback which allows me to improve my performance.

Answer Choices	*2016 Responses*	*2016 % Responses*		*2015 Responses*	*2015 % Responses*
Strongly Agree	7	38.89%		6	37.50%
Agree	6	33.33%		6	37.50%
Neither Agree or Disagree	2	11.11%		1	6.25%
Disagree	2	11.11%		2	12.50%
Strongly Disagree	1	5.56%		1	6.25%
	18	100.00%		16	100.00%



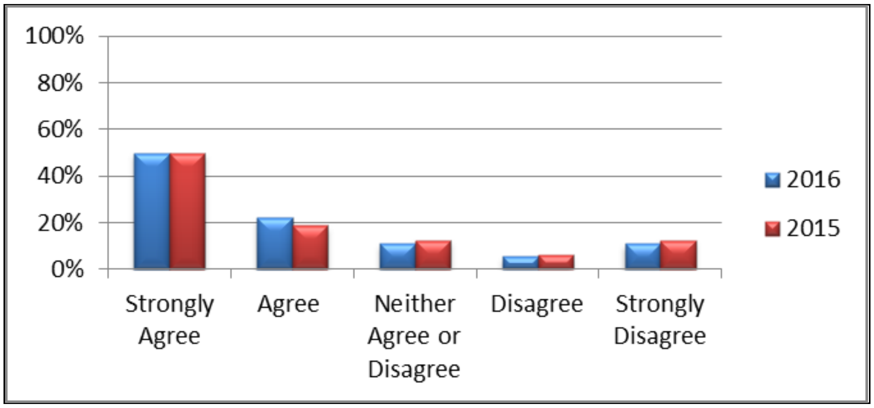
Question 4C: My immediate supervisor is open and approachable and available when needed.

Answer Choices	*2016 Responses*	*2016 % Responses*		*2015 Responses*	*2015 % Responses*
Strongly Agree	8	44.44%		9	56.25%
Agree	8	44.44%		3	18.75%
Neither Agree or Disagree	0	0.00%		1	6.25%
Disagree	1	5.56%		1	6.25%
Strongly Disagree	1	5.56%		2	12.50%
	18	100.00%		16	100.00%



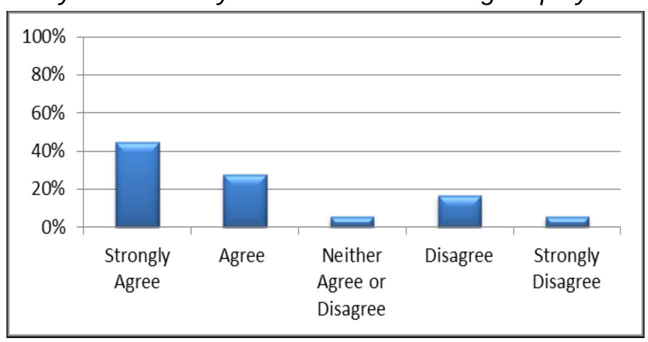
Question 4D: My immediate supervisor values and recognizes my individual contributions, opinions, and ideas in a manner that is meaningful to me.

Answer Choices	*2016 Responses*	*2016 % Responses*	*2015 Responses*	*2015 % Responses*
Strongly Agree	9	50.00%	8	50.00%
Agree	4	22.22%	3	18.75%
Neither Agree or Disagree	2	11.11%	2	12.50%
Disagree	1	5.56%	1	6.25%
Strongly Disagree	2	11.11%	2	12.50%
	18	100.00%	16	100.00%



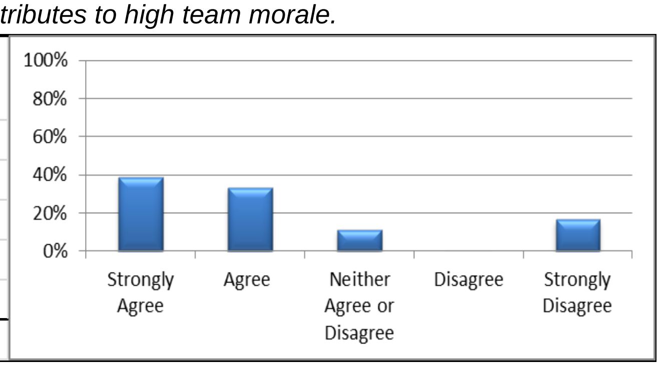
Question 4E: My immediate supervisor communicates frequently and honestly about issues affecting employees.

Answer Choices	*Responses*	*% Responses*
Strongly Agree	8	44.44%
Agree	5	27.78%
Neither Agree or Disagree	1	5.56%
Disagree	3	16.67%
Strongly Disagree	1	5.56%
	18	100.00%



Question 4F: My immediate supervisor promotes and contributes to high team morale.

Answer Choices	*Responses*	*% Responses*
Strongly Agree	7	38.89%
Agree	6	33.33%
Neither Agree or Disagree	2	11.11%
Disagree	0	0.00%
Strongly Disagree	3	16.67%
	18	100.00%



AGENDA ITEM V.

TO: State Investment Board

FROM: Dave Hunter

DATE: March 9, 2016

SUBJECT: Board Education on Fiduciary Duty – Investment Assets

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During the past year, SIB members and RIO personnel have actively participated in numerous educational opportunities including industry conferences (i.e. Callan, NASIO and NCTR) and specialized training courses in investments, retirement benefit services, auditing, ethics, fiduciary duty, governance and systems.

In order to expand awareness of the important role played by our SIB members in acting as a trustee, RIO is re-distributing "A Primer for Investment Trustees". Over the next several board meetings, RIO will highlight key "**Takeaways**" from each section and invite a board discussion on any related topics, questions or concerns which may benefit from a broader exchange of ideas. This publication is highly recommended by: 1) National Association of State Investment Officers; 2) CFA Institute; and 3) the investment consultant community.

In recent months, we focused on "Governance Structure", "Investment Policy", "The Fund's Mission", "Investment Objectives and Risk Tolerance". This month, we will focus on "Investment Assets". **As a result, RIO encourages SIB and RIO members to review <u>pages 57-to-68</u> of "A Primer for Investment Trustees".**

<u>Section 5: Investment Assets</u>

1. Market indices represent particular asset classes such as the S&P 500.
2. Market indices are valuable in providing an indication of an asset class's historical risks, returns and correlations with other asset classes,
3. Funds typically select certain market indices to serve as asset class targets, which aid decision makers in setting their asset allocation policies.
4. Internal investment management is often cheaper than external management and allows for more direct control of the investment process.
5. External management offers greater economies of scale which allows fund sponsors access to top investment talent and resources. It also typically allows more flexibility in changing managers when required.
6. Passive management (or indexing) attempts to match, with low volatility, the returns on a given market index by holding all or most of the securities with consistent sector weightings.
7. Active management involves holding portfolios that differ from an assigned benchmark in an attempt to outperform the benchmark. Active management risk represents the variability in performance relative to the benchmark.
8. The use of active management requires that a fund sponsor hold a series of beliefs:
    a. Managers exist who can produce positive excess return versus a benchmark;
    b. A fund's decision makers can identify these managers;
    c. The decision makers have the risk tolerance to endure extended periods of time when the manager underperforms the benchmark; and
    d. The decision makers can structure a team of these managers to accomplish the fund's investment objectives.

Board Education Calendar for the CFA Institute "A Primer for Investment Trustees":

October 2015	Session 1: Governance Structure
November 2015	Session 2: Investment Policy Session 3: The Fund's Mission
January 2016	Session 4: Investment Objectives
February 2016	Session 5: Investment Risk Tolerance
March 2016	**Session 6: Investment Assets**
April 2016	Session 7: Performance Evaluation
May 2016	Session 8: Ethics in Investing
June 2016	*No SIB meeting scheduled*
July 2016	**Governance Retreat (Jeanna Cullins of Aon Hewitt)**

Session 6. Investment Assets

Know thy opportunity.

—*Pittacus*

The Freedonia University Investment Committee has chosen to invest the Fund in a variety of asset types. As we discussed in Session 2 on investment policy and Session 5 on investment risk tolerance, we refer to those asset types as "asset classes." Asset classes are simply collections of securities that have common attributes. Although the distinctions among asset classes are, admittedly, somewhat arbitrary, the designation of asset classes helps the trustees and the staff to develop intelligent approaches to setting the Fund's policy asset mix and the Fund's risk level. Without asset class distinctions, conversations among the trustees and the staff about how to implement the investment program would be cumbersome and unproductive.

Types of Investment Assets

Broadly, the investment committee has authorized investments in three primary asset classes: common stocks (also called "equities"), bonds (also called "fixed income" or "debt"), and so-called ***alternative investments***. The trustees have further broken down these asset classes into additional asset classes. For example, the Fund holds U.S. common stocks and non-U.S. common stocks. Within the international common stock class, the Fund owns developed-market common stocks and emerging-market common stocks. Similarly, bond holdings can be segregated into U.S bonds and non-U.S. bonds, and each of these categories can be divided into investment-grade bonds and high-yield bonds.

Recall that Appendix B contains the Freedonia University DB pension fund's policy asset mix and provides an example of the various asset classes in which the investment committee has authorized the staff to invest. We won't have time in this session to consider each asset class (although we will discuss alternative investments in more detail later), but you can find a description of the Fund's asset classes in most standard investment textbooks.

Diversifying across Asset Classes

The investment committee's primary investment strategy is to diversify widely among risky assets. As discussed in the previous session, diversification offers a cost-free and simple means of controlling risk. The Fund does not invest in only one security. It invests in a portfolio of securities. The staff does not retain only one investment manager. The staff hires a group of investment managers using multiple investment approaches. And the managers do not invest in only one type of stock or bond. They invest across a wide spectrum of financial securities—from publicly traded stocks and bonds to a variety of less liquid investments that we categorize as alternative investments.

The Fund's potential ***investable universe*** of publicly traded stocks includes most equities that are traded in both U.S. and non-U.S. markets. That adds up to literally tens of thousands of securities. The Fund's investment managers will never own most of these stocks. For various reasons, such as size, liquidity, and lack of freely tradable shares, many of these stocks are not investable for all intents and purposes. Thus, the managers have to contend with an opportunity set that is much smaller than the potential universe.

The manner in which the staff approaches the Fund's investments in publicly traded bonds is quite similar to how it handles investments in publicly traded stocks. There are, however, subtle but important differences. Most notable is, as you know, that stocks are issued by corporations but bonds are issued not only by corporations but also by a wide variety of other organizations, including, to name a few, governments (state, local, and federal), agencies of government, and not-for-profit institutions. In addition to the many entities, there are numerous types of fixed-income securities that any one entity can issue. Whereas corporations typically issue one type of common stock, the many entities that issue bonds can also issue many different types of bonds or fixed-income securities, each backed by certain assets, maturing at different times, and with its own terms and conditions.

Market Indices

To understand the breadth and performance of the investable stock and bond universes, the trustees and staff turn to market indices that represent the publicly traded equity and fixed-income markets. These indices identify a large number of investable stocks and bonds that are representative of a particular market. A security's weight in the index is typically based on its ***market capitalization*** (share or bond price times number of shares or bonds outstanding) as a percentage of the total market capitalization of all the securities in the index. Inclusion in an index is usually determined by an objective set of rules or the decisions of a selection committee.

Perhaps the primary advantage of a market index is that it provides a performance history. By observing the returns earned by the index in the past, the trustees and staff get an indication of the risks and returns of the market that the index represents and the correlations of that market with other investments.

As we noted in Session 5 on investment risk tolerance, this historical information is valuable in developing the risk and return expectations used in setting a risk budget for the investment program. The indices also represent important accountability standards for assessing the Fund's performance, as we will discuss in Session 7 on performance evaluation.

For your convenience, **Exhibit 2** provides a list of commonly used equity and fixed-income market indices and their key characteristics. As you can see, in selecting an index to represent the Fund's investments in a particular asset class, the investment committee has a wide variety of choices. The market indices selected by the investment committee to represent the Fund's asset class investments are called the "asset class targets."

To examine how a particular asset class target is selected, let's look at the Fund's publicly traded equity investments as an example. The investment committee could adopt only one index, such as the All Country World Index, as a benchmark for all available stocks in both the U.S. market and the non-U.S. market, or it could treat these markets as separate asset classes and select one market index for U.S. stocks and one or more for non-U.S. stocks.

There is no one right answer. You'll find a variety of approaches at various funds. With the increasing globalization of investments, many funds have decided simply to refer to global equities in their policy asset mixes. As you can see in Appendix B, the policy asset mix chosen by the investment committee displays a combination of asset class targets for the U.S. equity, non-U.S. developed-market equity, and emerging-market equity investments.

The trustees' rationale for this approach was their familiarity with the U.S. equity market and the long history of investment performance available for these particular market indices, which allows a good understanding of their risk and return characteristics. The investment committee may revisit that decision in the future.

External and Internal Investment Management

After the investment committee establishes a structure for the Fund's public equities and fixed-income investments, the trustees need a strategy to implement the Fund's investments. Who will manage the investments and how the investments will be managed are two important questions.

Regarding the first question, the Fund's investments can be managed externally or internally. That is, the investment committee can instruct the staff to hire outside professional investment management firms or it can employ an on-site staff of investment professionals operating under the CIO. Most funds use external investment managers to some degree to manage their assets, and many have all of their assets managed externally. The Freedonia University

Exhibit 2. Sample of Widely Used Market Indices

Asset Class	Representative Benchmark	Description
Public equity		
U.S. equity	S&P 500 Index	500 blue-chip, mostly large-cap U.S. stocks
	Russell 2000 Index	2,000 small-cap U.S. stocks
	Russell 3000 Index	Largest 3,000 U.S. stocks by market cap (large, mid, and small)
Non-U.S. equity: Developed-market equity	MSCI World ex U.S. Index	Approximately 85 percent of the market cap of 22 developed-market equity markets, excluding the United States
	MSCI EAFE Index	Same as above but excluding Canada
Emerging-market equity	MSCI Emerging Markets Index	Includes approximately 85 percent of the market cap of 22 emerging-market equity markets
Global equity	MSCI All Country World Index	Combines developed- and emerging-market equity indices (including the United States)
Fixed income		
Core fixed income	Barclays Capital Aggregate Bond Index	Investment-grade, government-sponsored, corporate, mortgaged-backed bonds and other asset-backed securities, issued in U.S. dollars
High yield	Merrill Lynch U.S. High Yield Cash Pay Index	Debt securities issued by corporations rated lower than investment grade by one or more of the major rating agencies
Emerging-market debt	J.P. Morgan Emerging Markets Bond Index Global	Dollar-denominated debt securities issued by emerging-market countries
	J.P. Morgan Government Bond Index—Emerging Markets	Local-currency-denominated debt securities issued by emerging-market countries
Global sovereign debt	Citigroup World Government Bond Index	Sovereign bonds issued by 23 developed countries (all investment grade)
TIPS	Barclays Capital U.S. TIPS Index	All inflation-linked bonds issued by the U.S. Treasury
Alternative investments		
Real estate	FTSE EPRA/NAREIT Developed Index	All real estate investment trust (REIT) securities issued in developed markets in North America, Europe, and Asia
	NCREIF Property Index	A noninvestable index that tracks unlevered returns on more than 6,000 U.S. properties held by institutional investors in the office, retail, industrial, and apartment sectors

(continued)

Exhibit 2. Sample of Widely Used Market Indices (continued)

Asset Class	Representative Benchmark	Description
Private equity	Cambridge Associates U.S. Venture Capital Index	A noninvestable index based on return data compiled on funds representing more than three-quarters of the total dollars raised by venture capital managers since 1981
	Cambridge Associates Buyout Index	A noninvestable index based on return data compiled on funds representing more than two-thirds of the total dollars raised by leveraged buyout, subordinated debt, and special situations managers since 1986
Absolute return	HFRX Global Hedge Fund Index	A noninvestable non-value-weighted index of liquid, transparent hedge fund separate accounts engineered to achieve representative performance of a larger universe of hedge fund strategies
	HFRI Fund of Funds Composite Index	A noninvestable equally weighted index of more than 800 hedge funds of funds

Notes: HFR = Hedge Fund Research; NCREIF = National Council of Real Estate Investment Fiduciaries; MSCI = Morgan Stanley Capital International; TIPS = Treasury Inflation-Protected Securities. All indices are market-capitalization weighted unless indicated otherwise.

Investment Committee has chosen this latter approach. There are solid reasons to use internal investment management, primarily related to lower cost and more direct investment control. Those advantages are typically offset, however, by fewer degrees of freedom in making investment management changes and the large size of assets required to acquire top investment talent cost-effectively.

Employing external investment managers requires the investment committee to seek skillful external investment organizations. One of the downsides of using external managers is that their organizations change over time. Individuals come and go, and the organizations themselves undergo changes, sometimes being acquired by other investment management firms, sometimes even dissolving. This dynamic marketplace requires constant monitoring to ensure that the Fund's interests are protected. The investment staff spends a considerable amount of time on manager monitoring, often asking the Fund's investment consultant to assist in the process.

Of course, internal investment managers also come and go. Therefore, all funds that use internal management face the challenge of competing in the marketplace for qualified investment management talent. The compensation for internal managers is often too high for funds to accept on a staff level.

Furthermore, internal investment management requires considerable technology infrastructure and back-office support. In the end, external managers definitely are no cheaper, yet most funds prefer to pay external managers, who are also easier to dismiss than internal managers if performance is unacceptable.

Active and Passive Management

Directly related to the question of *who* will manage the Fund's investments is the issue of *how* the investments should be managed. In a broad sense, the investment committee has two choices. First, it could instruct the manager to invest the assets passively. That is, the manager could be directed to hold a portfolio designed to match the performance of a particular market index. This process is referred to as "***indexing***." For example, the trustees could instruct the manager simply to match (or "index to") the performance of a market index representing the U.S. equity asset class.

Indexing is a simple, low-cost form of investment management. Essentially, the manager holds all or most of the securities contained in the market index in the same proportions as the securities are held in the index. A manager cannot match the performance of the index exactly for a variety of reasons, including trading costs and management fees. Nevertheless, passive management offers the promise that the Fund's investment results will always be near those of the selected market index, with little variation around the index return. In exchange for this consistency of results, of course, the trustees can never expect the passive manager's results to exceed the returns reported for the market index by any appreciable amount.

Alternatively, the investment committee could direct the staff to hire active managers assigned to outperform particular benchmarks. (We will discuss benchmarks in Session 7 on performance evaluation. For the moment, you can think of a manager benchmark simply as a market index.) To produce this outperformance, the managers must hold portfolios that differ in composition from their benchmarks. Of course, underlying the use of active managers is the assumption that the managers' investment processes can identify investment opportunities that will produce a positive excess return relative to their benchmarks.

An active manager's decisions will not always be correct; as a result, returns above and below the benchmark will be greater (perhaps much greater) than will those of a passive manager. Although the staff can give the manager instructions regarding how much volatility relative to the benchmark is acceptable, this risk is an unavoidable part of active management. Furthermore, the management fees of active managers are generally much higher than those of passive managers and represent a major hurdle that active managers must clear to keep up with passive managers' performance.

The use of active management in an asset class requires a series of beliefs on the investment committee's part. The trustees must believe that

- managers exist who can produce a positive excess return relative to an appropriate benchmark,
- the staff can identify these managers,
- the staff can hire these managers to manage the Fund's assets,
- the trustees have the risk tolerance to endure extended periods of time when the manager underperforms the benchmark, and
- the staff can structure a team of these managers to reach the Fund's investment objectives.

The decision to hire active managers in a particular asset class requires the trustees to answer "yes" to *all* of these belief statements. A "no" answer to any of the statements implies that the Fund should not engage in active management in that asset class. By implication then, passive management ought to be the default position where it is available. (Some asset classes, such as private equity, can be accessed only through active management.)

Regarding the last belief statement, Molly, note that we could have a team of value-added active managers yet not achieve the investment objective of outperforming the asset class target. Such an outcome would occur if the aggregate performance of the active managers' benchmarks is different from the Fund's asset class target. For example, if the Fund's asset class target for U.S. equities is the Russell 3000 Index and if the staff has hired only one active manager and that manager's benchmark is the Russell 3000 Value Index, then the manager could outperform its benchmark but underperform the Fund's asset class target, the Russell 3000. (In Session 5 on investment risk tolerance, we referred to this mismatch between the managers' benchmarks and the asset class target as style bias.) The point is that the staff must ensure that the implementation of the investment program is consistent with the Fund's investment objectives and policy asset mix.

Separate Accounts and Commingled Funds

The investment committee must also determine in what types of accounts the Fund's assets will be managed: either in a ***separately managed account*** or a ***commingled fund***. A separately managed account is legally owned by the Fund and managed solely in the Fund's interests. Typically, a bank trustee holds custody of the assets and implements purchase and sale directions from the investment manager. Both the bank and the manager maintain valuation and accounting records of the account, which serves as an important check and balance in the Fund's governance process. Furthermore, the flow of money into and out of a separately managed account can occur only with the approval of the trustees or the staff. Most importantly, a separately managed account can implement investment guidelines that are unique to the Fund. For example, the trustees might want to restrict investment in certain stocks, such as tobacco stocks or stocks in particular countries, conditions that the manager can accommodate in a separately managed account.

In a commingled fund, the Fund's assets are combined with assets of other investors. The manager invests the commingled assets in a particular manner that is described in a legal document. The Fund does not hold shares of individual stocks; instead, it holds units in the commingled fund, which represent a *pro rata* share of all the commingled fund's investments. Mutual funds provide a familiar example of a commingled fund. In addition to mutual funds, there are other types of commingled funds, such as bank collective trust funds and unit trusts. Many managers require high minimum balances for separate accounts, but relatively small amounts of money can be invested in commingled funds. The primary advantage of a commingled fund is that it allows small investors to have access to top investment talent and resources at a reasonable cost. The main disadvantage is the inability of the investor in a commingled fund to customize the portfolio to the individual fund investor's unique needs and circumstances.

Alternative Investments

In addition to investing in publicly traded stocks and bonds, the investment committee has chosen to invest in a variety of less liquid asset classes, collectively referred to as "alternative investments." Some of the more prominent forms of alternative investments include the following:

- *Real estate*—equity and mortgage interests in various forms of commercial and residential properties, including office buildings, hotels, storage facilities, shopping malls, and apartments.
- *Commodities*—investments in agricultural products, metals, and energy sources (such as crude oil) through futures or cash market purchases.
- *Timber*—ownership of land and/or harvesting rights for various species of lumber products.
- *Venture capital*—investments in early- and late-stage start-up companies.
- ***Buyouts***—investments in private companies undergoing spin-offs, recapitalizations, or other forms of restructuring.
- *Distressed debt*—purchases of the debt of financially troubled companies, often with the intent of gaining control of the companies in a bankruptcy proceeding.

- *Mezzanine debt*—purchases of the junior, unsecured, non-publicly traded debt of companies.
- *Hedge funds*—investments in and across a variety of asset classes exploiting market inefficiencies identified by the manager and often using leverage, short selling, and derivative financial instruments.

Although there are exceptions, the Fund makes most of these investments through legal structures referred to as "limited partnerships." A business entity called a "***general partner***" (GP) raises financial commitments from a group of ***limited partners*** (LPs), of which the Fund is one. The GP manages the assets of the partnership. The LPs agree to supply a fixed amount of capital that must be "called" within a certain time period. During that investment period, the GP searches for attractive investment opportunities and, when it finds them, calls capital from the LPs. The GP manages the investments until it believes the appropriate time for harvesting has arrived, at which point the investments are sold and the proceeds distributed to the LPs. (A prominent exception is hedge funds, which are not intended to be dissolved but, rather, to continue to operate indefinitely; the LPs take their money out by selling their shares back to the GP or a third party.) The GP is compensated through management fees and a share of any profits realized in the transactions.

The ownership interests in the limited partnerships are not publicly traded and are transferable only with considerable effort. Thus, the Fund's ownership interests in alternative investments are highly illiquid. The illiquid nature of these investments creates potential benefits but also concerns. On the benefit side are higher expected investment returns. As we discussed in our previous session, all other things being equal, investors require a higher return from an illiquid investment than from a liquid one. To the extent that the Fund does not have to be fully invested in liquid assets, these alternative investments provide an opportunity to improve the Fund's expected return by investing a portion of its assets in illiquid investments.

Alternative investments also hold the promise of higher returns because of a less efficient market for the underlying investments. For example, many investors believe that once an issuer of debt runs into financial difficulty, holders of the bonds tend to sell them at significantly discounted prices. Skillful managers of distressed-debt funds contend that they can identify when the bonds are trading at overly depressed prices, buy them, and then later sell them as the troubled issuer's finances and business organization are restructured. Each type of alternative investment offers reasons why skillful and knowledgeable investors ought to earn a premium.

Alternative investments do, however, have their drawbacks. Managers of these investments charge high fees and share substantially in any profits earned, thereby driving down expected net returns to LPs. It may also be difficult to gain access to the top-tier managers, whose funds are often closed to new investors. The dispersion of investment results among alternative investment managers is far wider than it is with managers of publicly traded securities.

Moreover, the values of these investments are typically reported at appraisal values with a considerable time lag, which tends to understate the actual investment risk. As a result, other methods are needed to assess the risk and return characteristics of these investments and to determine how they fit in the investment program.

Another concern is the difficulty of establishing appropriate accountability standards. There is often little transparency regarding the GPs' investment strategies, which hinders potential investors from performing due diligence on the GPs. Furthermore, in the Fund's publicly traded stock and bond investments, market indices and submarket indices serve as useful benchmarks for the investment managers. Unfortunately, comparable benchmarks are not available for the alternative asset classes. In place of indices, many funds use comparisons with *peer groups* formed from "similar" investments. For reasons that we will discuss in Session 7, however, peer group comparisons can be problematic.

Takeaways

- Market indices represent particular asset classes, such as U.S. stocks.
- Market indices are valuable in that they provide an indication of an asset class's historical risks, returns, and correlations with other asset classes.
- Funds typically select certain market indices to serve as asset class targets, which aid decision makers in setting their asset allocation policies.
- Internal investment management is often cheaper than external management and allows for more direct control of the investment process.
- External management offers greater economies of scale, however, which allows fund sponsors access to top investment talent and resources. It also typically allows more flexibility in changing managers, if needed.
- Passive management (indexing) attempts to match, with low volatility, the returns on an assigned market index by holding all or most of the securities in the index in similar proportions to security weights in the index.
- Active management involves holding portfolios that differ from an assigned benchmark in an attempt to outperform that benchmark. The variability in performance relative to the benchmark is called "active management risk."

- The use of active management requires that a fund sponsor hold a series of beliefs:
  - Managers exist who can produce a positive excess return relative to an appropriate benchmark.
  - A fund's decision makers can identify these managers.
  - The decision makers can hire these managers to manage the fund's assets.
  - The decision makers have the risk tolerance to endure extended periods of time when the manager underperforms the benchmark.
  - The decision makers can structure a team of these managers to accomplish the fund's investment objectives.
- A separately managed account is legally owned by a fund and managed solely in the fund's interests.
- In a commingled fund, assets of many investors are combined. Investors in a commingled fund do not hold shares of individual stocks; rather, they hold units in the commingled account, which represent a *pro rata* share of the entire account.
- Alternative investments are investments in nontraditional assets (i.e., other than publicly traded stocks and bonds), such as real estate, venture capital, and buyouts. The legal form of the investments tends not to be readily tradable; thus, the investor's holdings are typically quite illiquid.

QUESTIONS MOLLY SHOULD ASK

- What asset classes has the investment committee designated for investment by the staff?
- What asset class targets have been selected? How were they chosen? When did the investment committee last review those selections?
- How are historical data used to form risk and return expectations about various asset classes? How are the asset classes likely to perform in different environments?
- Does the investment committee use predominately active or passive management in certain asset classes? How was the decision reached regarding the proportion of active versus passive management used in the Fund?
- What proportion of the Fund's assets is managed internally? How was the decision reached regarding the proportion of internal versus external management?
- Are the costs of running our investment program reasonable given the size and complexity of the program? How do we determine "reasonableness"?

- Does the staff have authority to hire and fire managers independent of the investment committee? If not, how are the trustees involved in those decisions?
- Does the staff use our consultant to help select managers? If so, is the Fund's consultant independent with respect to the managers it recommends?
- What considerations go into determining which types of alternative investments to own in the Fund?
- What return and risk expectations do we have for our alternative investments, and how do they compare to our publicly traded investments?
- What is the size of the commitment made to alternative investments that the Fund is obligated to invest but has not yet been called by the managers?
- How do we evaluate the potential introduction of a new asset class? What considerations should be involved? Do we have the expertise to select and monitor a new asset class?
- What if a potential new asset class is without a long history? How does that affect our analysis?

