I. APPROVAL OF AGENDA

II. APPROVAL OF MINUTES (AUGUST 26, 2016)

III. INVESTMENTS
   A. SIB Update: Investment Fees and Private Equity - Mr. Hunter (enclosed) (20 min) Informational
   B. JPMorgan Real Estate Update - Ms. Anezinis, Mr. Cerreta, Mr. Sakelaris (60 min) Informational

============================= Break from 10:00 to 10:15 am =============================

IV. GOVERNANCE (enclosed) (60 min) Board Acceptance Requested
   A. Annual Review of Governance Manual - Mr. Hunter
   B. Annual Compliance Update - Mr. Schmidt
   C. RIO Budget Update - Ms. Flanagan

V. ADMINISTRATION (enclosed) (15 min) Informational
   A. Employee Benefits Programs Committee Meeting Update - Mr. Hunter

VI. OTHER

   Next Meetings: SIB Audit Committee meeting - September 23, 2016, 1:00 p.m., State Capitol, Peace Garden Room
   SIB meeting - October 28, 2016, 8:30 a.m., State Capitol, Peace Garden Room

VII. ADJOURNMENT

Any individual requiring an auxiliary aid or service, please contact the Retirement and Investment Office (701) 328-9885 at least three (3) days prior to the scheduled meeting.
NORTH DAKOTA STATE INVESTMENT BOARD
MINUTES OF THE
AUGUST 26, 2016, BOARD MEETING

MEMBERS PRESENT:
Drew Wrigley, Lt. Governor, Chair
Mike Sandal, Vice Chair
Lance Gaebe, Commissioner of Trust Lands
Mike Gessner, TFFR Board
Rob Lech, TFFR Board
Mel Olson, TFFR Board
Kelly Schmidt, State Treasurer
Yvonne Smith, PERS Board
Cindy Ternes, WSI designee
Tom Trenbeath, PERS Board

MEMBERS ABSENT:
Adam Hamm, Insurance Commissioner

STAFF PRESENT:
Eric Chin, Investment Analyst
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

GUESTS PRESENT:
Alex Browning, Callan Associates
Jeff Engleson, Dept. of Trust Lands
Paul Erlendson, Callan Associates

CALL TO ORDER:
Mr. Mike Sandal, Vice Chair, called the State Investment Board (SIB) meeting to order at 8:30 a.m. on Friday, August 26, 2016, at the State Capitol, Peace Garden Room, Bismarck, ND.

AGENDA:

IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. OLSON AND CARRIED ON A VOICE VOTE TO ACCEPT THE AGENDA FOR THE AUGUST 26, 2016, MEETING AS DISTRIBUTED.

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

MINUTES:

IT WAS MOVED BY COMMISSIONER GAEBE AND SECONDED BY MR. LECH AND CARRIED ON A VOICE VOTE TO ACCEPT THE JULY 22, 2016, MINUTES AS DISTRIBUTED.

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

Asset and Performance Overview - Mr. Hunter reviewed SIB clients’ assets under management as of June 30, 2016. Assets under management grew by approximately 5.8 percent or $617 million in the last year with the Legacy Fund creating the largest asset growth of $481 million primarily due to tax collections. Assets totaled $11.3 billion based on unaudited valuations as of June 30, 2016.

The Legacy Fund generated a net investment gain of 1.06 percent for the year ended June 30, 2016. Since inception, the Legacy Fund has generated a net annualized return of 2.78% (over the last 4.75 years) exceeding the performance benchmark of 2.05%.

The Pension Trust posted a net return of 0.31 percent in the last year. During the last 5 years, the Pension Trust generated a net annualized return of 6.35% exceeding the performance benchmark of 5.99%.

The Insurance Trust generated a net return of 3.12 percent in the last year. During the last 5 years, the Insurance Trust posted a net annualized return of 4.83% exceeding the performance benchmark of 3.81%.

Every Pension Trust client generated positive excess returns for the three and 5-year periods ended June 30, 2016. The Public Employees Retirement System excess return approximated to 0.59% and 0.41% over the last three and 5-year periods, respectively. The Teachers’ Fund for Retirement excess return approximated to 0.60% for the last 3 years and 0.59% for the last 5 years.

Every Non-Pension Trust client generated positive excess returns and positive risk adjusted excess returns for the 5 years ending June 30, 2016, if applicable, with one exception for the PERS Retiree Health Insurance Credit Fund. Risk, as measured by standard deviation, was within approved levels for all SIB clients for the five years ending June 30, 2016, if applicable.

SIB Fee Reduction Initiatives - Mr. Hunter also reviewed initiatives to reduce fees since 2010 by RIO personnel, Callan Associates, Novarca, and The Northern Trust. SIB client fees declined from 0.65% in fiscal 2013 to 0.47% for the year ended June 30, 2015. The 0.17 percent decline in fees translates into $17 million of annual incremental income for the SIB’s clients. RIO personnel are striving to reduce overall client investment management fees to 0.45% for the fiscal year ended June 30, 2016.

RIO personnel recommended engaging Callan to conduct a review of the SIB’s investment manager fee levels for the fiscal year ended June 30, 2016 and secondly to engage a third party firm to perform a review of The Northern Trust’s class action claims filing process. RIO personnel have conducted due diligence reviews on the following third party firms - Financial Recovery Technologies, Institutional Shareholder Services, and Broadridge Investor Communication Services. After discussion,

IT WAS MOVED BY COMMISSIONER GAEBE AND SECONDED BY MS. TERNES AND CARRIED ON A ROLL CALL VOTE TO ACCEPT STAFF RECOMMENDATIONS AND ENGAGE CALLAN TO PERFORM A FEE STUDY. SECONDLY, TO ENTER INTO A CONTRACT WITH A THIRD PARTY FIRM TO REVIEW THE NORTHERN TRUST’S CLASS ACTION CLAIMS FILING PROCESS SUBJECT TO SATISFACTORY CONTRACT NEGOTIATIONS.

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

Lt. Governor Wrigley entered the meeting and presided over the remainder of the meeting.

Callan Performance Review – Mr. Erlendson and Mr. Browning reviewed the performance of the Pension Trust, Legacy Fund, and Insurance Trust for the period ending June 30, 2016.

IT WAS MOVED BY MR. GESSNER AND SECONDED BY MR. SANDAL AND CARRIED ON A VOICE VOTE TO ACCEPT CALLAN’S PERFORMANCE MEASUREMENT REVIEW FOR THE QUARTER ENDING JUNE 30, 2016.

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

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER HAMM

The Board recessed at 10:15 am and reconvened at 10:28 am.

BOARD EDUCATION:

Governance Review – Mr. Hunter and the board reviewed and discussed their current governance model. Board members generally agreed that the current governance model which is based on Carver, but incorporates components of other widely used models, meets the overall needs and desires of the SIB. There is a desire to enhance stakeholder confidence and the SIB and RIO personnel will work to develop a plan to foster greater stakeholder confidence about the SIB’s investment processes and results. Mr. Hunter stated SIB client returns have benefitted from “good governance” including the prudent use of active management in recent years which RIO personnel estimates has enhanced SIB client net returns by over 0.50% or $200+ million for the 5 years ended June 30, 2016.

Mr. Hunter informed the board he has been working with Callan representatives to bring a condensed version of the Callan College to a future board meeting. After discussion, Mr. Hunter will look into bringing the session to the March 24, 2017, board meeting.

Mr. Hunter noted the asset class definitions/glossary materials in the board members packets, which trustees can use as a reference.

Discussion was held on mentoring and education for the elected/appointed trustees who will be joining the board in the upcoming year. Lt. Governor Wrigley stressed the importance of continuing education and mentoring for the new members to get them up to speed as quickly as possible.

MONITORING:

Per Governance Policy, Board/Staff Relationship/Monitoring Executive Performance C-4, the following monitoring reports for the quarter ending June 30, 2016, were provided to the SIB for their consideration: Budget/Financial Conditions, Executive Limitations/Staff Relations, Investment Program, and Retirement Program.

Mr. Hunter stated the office recently completed their first internship program, May 16, 2016 – August 19, 2016. Mr. Hunter congratulated Ms. Miller Bowley on a successful program. Mr. Bradley Kasper did a wonderful job assisting primarily the Audit Division with additional assistance given to the Retirement Division.
An updated Watch List for the same period was also included. Capital Group was removed from the list. The firm was terminated June 1, 2016, and replaced by William Blair. RIO personnel are reviewing the fixed income allocation in the Pension Trust, which includes international debt and unconstrained bond, and mortgage backed securities mandates. The JP Morgan mortgage backed securities mandate, which has been on the Watch List since April 2016, will be addressed during the review as well as the UBS international fixed income mandate, which was placed on the Watch List in January 2015.

IT WAS MOVED BY MR. GESSNER AND SECONDED BY MR. OLSON AND CARRIED ON A VOICE VOTE TO ACCEPT THE MONITORING REPORTS FOR THE QUARTER ENDING JUNE 30, 2016.

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

OTHER:

Mr. Gessner was reappointed to a five year term on the Teachers’ Fund for Retirement Board effective July 1, 2016 and extending to June 30, 2021.

The next meeting of the SIB is scheduled for September 23, 2016, at 8:30 a.m. in the Peace Garden Room at the State Capitol.

The next meeting of the SIB Audit Committee is scheduled for September 23, 2016, at 1:00 p.m. in the Peace Garden Room at the State Capitol.

ADJOURNMENT:

With no further business to come before the SIB, Lt. Governor Wrigley adjourned the meeting at 11:10 a.m.

Lt. Governor Wrigley, Chair
State Investment Board

_________________________________
Bonnie Heit
Assistant to the Board
State Investment Board Update:
Investment Fees and Private Equity

September 16, 2016

Dave Hunter, Executive Director / CIO
Darren Schulz, Deputy Chief Investment Officer
ND Retirement & Investment Office (RIO)
State Investment Board (SIB)
Investment Fees and Expenses – Preliminary Overview

During the last three-years, investment management fees and expenses as a % of average assets under management declined from 0.65% in fiscal 2013 to 0.51% in fiscal 2014 to 0.48% in fiscal 2015 and to less than 0.45% in fiscal 2016.

- Based on $10 billion of average assets under management, this 20+ bps decline between fiscal 2013 and fiscal 2016 translates into approximately $20 million of annual incremental savings.

- RIO will diligently work to prudently manage all SIB client investment fees and expenses, but acknowledges it will be challenging to reduce fees and expenses below 45 bps (0.45%) per annum in future years. Current fiscal years results were materially impacted by low incentive performance fees.

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

<table>
<thead>
<tr>
<th>All State Investment Board Clients</th>
<th>Investment Fees and Expenses</th>
<th>Average &quot;Assets Under Management&quot;</th>
<th>% of &quot;AUM&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year Ended June 30, 2013</td>
<td>$45 million</td>
<td>$6.9 billion</td>
<td>0.65%</td>
</tr>
<tr>
<td>Fiscal Year Ended June 30, 2014</td>
<td>$44 million</td>
<td>$8.6 billion</td>
<td>0.51%</td>
</tr>
<tr>
<td>Fiscal Year Ended June 30, 2015</td>
<td>$48 million</td>
<td>$10.1 billion</td>
<td>0.48%</td>
</tr>
<tr>
<td>Fiscal Year Ended June 30, 2016</td>
<td>$46 million</td>
<td>$10.9 billion</td>
<td>0.42%</td>
</tr>
</tbody>
</table>

Note: All amounts are deemed to be materially accurate, but are unaudited and subject to change.
## Pension Trust Investment Fees and Expenses – Preliminary Results

### Pension Investment Pool

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th>FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>Average Assets Under</td>
<td>Investment</td>
</tr>
<tr>
<td>Management Fees</td>
<td>Management</td>
<td>Management Fees</td>
</tr>
<tr>
<td>a</td>
<td>b</td>
<td>c</td>
</tr>
<tr>
<td>$ 24,218,714</td>
<td>$ 4,749,354,077</td>
<td>$ 29,496,348</td>
</tr>
<tr>
<td>Fees in %</td>
<td>0.51%</td>
<td>0.63%</td>
</tr>
</tbody>
</table>

### Preliminary Results for the Pension Trust:

Investment management fees and expenses for the Pension Investment Pool declined by approximately 10 basis points (or 0.10%) in the last fiscal year. On an absolute dollar basis, investment management fees and expenses declined by approximately $5 million to $24 million in FY 2016 (from $29.5 million in FY 2015).

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

Note: All amounts are deemed to be materially accurate, but are unaudited and subject to change.
Insurance Trust Investment Fees and Expenses – Preliminary Results

Preliminary Results for the Insurance Trust:

Investment management fees and expenses for the Insurance Investment Pool remained relatively flat during the last two fiscal years approximating 35 basis points (or 0.35%). On an absolute dollar basis, investment management fees and expenses increased by approximately $170,000 to $8.13 million in FY 2016 from ($7.96 million in FY 2015).

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

Note: All amounts are deemed to be materially accurate, but are unaudited and subject to change.
Legacy Fund: Preliminary Investment Fees and Expenses

### Legacy Fund Schedule of Investment Expenses

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th>FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Market Value</td>
<td>Fees in $</td>
</tr>
<tr>
<td>Investment manager fees</td>
<td>12,282,031</td>
<td>0.34%</td>
</tr>
<tr>
<td>Custodian fees</td>
<td>355,571</td>
<td>0.01%</td>
</tr>
<tr>
<td>Investment consultant fees</td>
<td>198,884</td>
<td>0.01%</td>
</tr>
<tr>
<td>SIB Service Fees</td>
<td>-</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total investment fees and expenses</td>
<td>$ 3,583,577,456</td>
<td>$ 12,836,486</td>
</tr>
</tbody>
</table>

- Investment fees for the Legacy Fund increased to 0.36% from 0.33% in the last fiscal year as the approved asset allocation strategy (of 50% equity, 35% fixed income and 15% real assets) was fully implemented on January 31, 2015. As a result, fiscal year 2016 was the first year in which the new asset allocation was effective throughout the entire fiscal year (versus only five months in fiscal 2015).

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

Note: All amounts are deemed to be materially accurate, but are unaudited and subject to change.
### Budget Stabilization Fund: Investment Fees by Asset Class

#### Budget Stabilization Fund

**Schedule of Investment Expenses**

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th></th>
<th></th>
<th>FY 2015</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Market Value</td>
<td>Fees in $</td>
<td>Fees in %</td>
<td>Average Market Value</td>
<td>Fees in $</td>
<td>Fees in %</td>
</tr>
<tr>
<td><strong>Investment managers' fees:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term fixed income managers</td>
<td>479,196,968</td>
<td>669,381</td>
<td>0.14%</td>
<td>478,363,794</td>
<td>660,665</td>
<td>0.14%</td>
</tr>
<tr>
<td>Cash &amp; equivalents managers</td>
<td>10,312,590</td>
<td>13,406</td>
<td>0.13%</td>
<td>7,565,653</td>
<td>9,835</td>
<td>0.13%</td>
</tr>
<tr>
<td><strong>Total investment managers' fees</strong></td>
<td>489,509,558</td>
<td>682,786</td>
<td>0.14%</td>
<td>485,929,447</td>
<td>670,500</td>
<td>0.14%</td>
</tr>
<tr>
<td>Custodian fees</td>
<td>41,892</td>
<td>0.01%</td>
<td>0.01%</td>
<td>40,150</td>
<td>0.01%</td>
<td>0.01%</td>
</tr>
<tr>
<td>Investment consultant fees</td>
<td>23,556</td>
<td>0.00%</td>
<td>0.00%</td>
<td>26,509</td>
<td>0.01%</td>
<td>0.01%</td>
</tr>
<tr>
<td><strong>Total investment expenses</strong></td>
<td>748,234</td>
<td>0.15%</td>
<td></td>
<td>737,159</td>
<td>0.15%</td>
<td></td>
</tr>
</tbody>
</table>

- **Investment management fees for the Budget Stabilization Fund remained flat at 15 bps for the last two years.**

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

- **Note:** All amounts are deemed to be materially accurate, but are unaudited and subject to change.
### All State Investment Board Clients

<table>
<thead>
<tr>
<th></th>
<th>FY 2016</th>
<th>FY 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Management Fees and Expenses</td>
<td>a $45,636,596</td>
<td>c $47,835,823</td>
</tr>
<tr>
<td>Average Assets Under Management</td>
<td>b $10,896,823,142</td>
<td>d $10,146,752,469</td>
</tr>
<tr>
<td>Fees in %</td>
<td>a / b 0.42%</td>
<td>c / d 0.47%</td>
</tr>
</tbody>
</table>

### Preliminary Results for SIB Clients:

On an absolute dollar basis, investment management fees and expenses declined by approximately $2 million in the last fiscal year to approximately $46 million in 2016 (from $47.8 million in 2015).

---

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

Note: All amounts are deemed to be materially accurate, but are unaudited and subject to change.
Investment Update:
Private Equity
## Private Equity Co-Investment Update: North Dakota Investors LLC

### June 30, 2016

<table>
<thead>
<tr>
<th>Private Equity</th>
<th>Market Value</th>
<th>Weight</th>
<th>Net New Inv.</th>
<th>Inv. Return</th>
<th>Market Value</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams Street Direct Co-Invest Fd</td>
<td>$159,339,951</td>
<td>3.37%</td>
<td>$(3,820,389)</td>
<td>$150,516</td>
<td>$163,009,824</td>
<td>3.50%</td>
</tr>
<tr>
<td>Adams Street Direct Fund 2010</td>
<td>5,574,253</td>
<td>0.12%</td>
<td>(2,933,236)</td>
<td>186,243</td>
<td>8,321,246</td>
<td>0.18%</td>
</tr>
<tr>
<td>Adams Street 1998 Partnership</td>
<td>1,351,602</td>
<td>0.03%</td>
<td>(24,451)</td>
<td>(101.124)</td>
<td>1,477,177</td>
<td>0.03%</td>
</tr>
<tr>
<td>Adams Street 1999 Partnership</td>
<td>125,801</td>
<td>0.00%</td>
<td>0</td>
<td>125</td>
<td>125,676</td>
<td>0.00%</td>
</tr>
<tr>
<td>Adams Street 2000 Partnership</td>
<td>337,984</td>
<td>0.01%</td>
<td>0</td>
<td>5,701</td>
<td>332,283</td>
<td>0.01%</td>
</tr>
<tr>
<td>Adams Street 2001 Partnership</td>
<td>938,044</td>
<td>0.02%</td>
<td>(474,696)</td>
<td>(42,823)</td>
<td>1,455,563</td>
<td>0.03%</td>
</tr>
<tr>
<td>Adams Street 2002 Partnership</td>
<td>1,516,486</td>
<td>0.03%</td>
<td>0</td>
<td>(111,149)</td>
<td>1,627,635</td>
<td>0.03%</td>
</tr>
<tr>
<td>Adams Street 2003 Partnership</td>
<td>738,435</td>
<td>0.02%</td>
<td>0</td>
<td>34,653</td>
<td>703,782</td>
<td>0.02%</td>
</tr>
<tr>
<td>Adams Street 2010 Partnership</td>
<td>358,030</td>
<td>0.01%</td>
<td>0</td>
<td>(14,164)</td>
<td>372,794</td>
<td>0.01%</td>
</tr>
<tr>
<td>Adams Street 2008 Fund</td>
<td>5,513,205</td>
<td>0.12%</td>
<td>0</td>
<td>(30,409)</td>
<td>5,543,614</td>
<td>0.12%</td>
</tr>
<tr>
<td>Adams Street 1999 Non-US</td>
<td>7,468,204</td>
<td>0.16%</td>
<td>(130,374)</td>
<td>(31,554)</td>
<td>7,630,132</td>
<td>0.16%</td>
</tr>
<tr>
<td>Adams Street 2000 Non-US</td>
<td>401,159</td>
<td>0.01%</td>
<td>0</td>
<td>4,664</td>
<td>396,605</td>
<td>0.01%</td>
</tr>
<tr>
<td>Adams Street 2001 Non-US</td>
<td>709,712</td>
<td>0.02%</td>
<td>0</td>
<td>(12,711)</td>
<td>722,423</td>
<td>0.02%</td>
</tr>
<tr>
<td>Adams Street 2002 Non-US</td>
<td>169,925</td>
<td>0.00%</td>
<td>0</td>
<td>(9,564)</td>
<td>179,490</td>
<td>0.00%</td>
</tr>
<tr>
<td>Adams Street 2003 Non-US</td>
<td>1,028,252</td>
<td>0.02%</td>
<td>0</td>
<td>13,107</td>
<td>1,015,145</td>
<td>0.02%</td>
</tr>
<tr>
<td>Adams Street 2004 Non-US</td>
<td>565,080</td>
<td>0.01%</td>
<td>0</td>
<td>(23,003)</td>
<td>588,082</td>
<td>0.02%</td>
</tr>
<tr>
<td>Adams Street 2010 Non-US</td>
<td>402,925</td>
<td>0.01%</td>
<td>0</td>
<td>(22,309)</td>
<td>424,444</td>
<td>0.01%</td>
</tr>
<tr>
<td>Adams Street 2010 Non-US Emg</td>
<td>2,630,679</td>
<td>0.06%</td>
<td>0</td>
<td>4,987</td>
<td>2,625,692</td>
<td>0.06%</td>
</tr>
<tr>
<td>Adams Street 2015 Global Fd</td>
<td>1,209,610</td>
<td>0.03%</td>
<td>0</td>
<td>(12,118)</td>
<td>1,302,728</td>
<td>0.03%</td>
</tr>
<tr>
<td>Adams Street BVCF IV Fund</td>
<td>1,512,943</td>
<td>0.03%</td>
<td>0</td>
<td>(82,425)</td>
<td>1,595,368</td>
<td>0.03%</td>
</tr>
<tr>
<td>Hearthstone Advisors MSII</td>
<td>3,764,686</td>
<td>0.08%</td>
<td>0</td>
<td>(12,040)</td>
<td>3,776,726</td>
<td>0.08%</td>
</tr>
<tr>
<td>Hearthstone Advisors MSIII</td>
<td>12,792</td>
<td>0.00%</td>
<td>0</td>
<td>12,791</td>
<td>1</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

### March 31, 2016

<table>
<thead>
<tr>
<th>Private Equity</th>
<th>Market Value</th>
<th>Weight</th>
<th>Net New Inv.</th>
<th>Inv. Return</th>
<th>Market Value</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CorsAir III</td>
<td>$13,394,710</td>
<td>0.28%</td>
<td>(15,406)</td>
<td>(129,050)</td>
<td>13,539,166</td>
<td>0.29%</td>
</tr>
<tr>
<td>ND Investors</td>
<td>11,921,782</td>
<td>0.25%</td>
<td>25,000</td>
<td>(707,708)</td>
<td>12,604,490</td>
<td>0.27%</td>
</tr>
<tr>
<td>CorsAir IV</td>
<td>17,104,833</td>
<td>0.36%</td>
<td>(4,573,546)</td>
<td>1,149,272</td>
<td>20,529,107</td>
<td>0.44%</td>
</tr>
<tr>
<td>Capital International V</td>
<td>7,819,086</td>
<td>0.17%</td>
<td>24,729</td>
<td>402,868</td>
<td>7,931,459</td>
<td>0.16%</td>
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<tr>
<td>Capital International VI</td>
<td>17,880,644</td>
<td>0.38%</td>
<td>29,445</td>
<td>2,331,001</td>
<td>15,520,998</td>
<td>0.33%</td>
</tr>
<tr>
<td>EIG Energy Fund XIV</td>
<td>4,666,317</td>
<td>0.10%</td>
<td>166,162</td>
<td>(1,834,821)</td>
<td>6,334,976</td>
<td>0.14%</td>
</tr>
<tr>
<td>Lewis &amp; Clark, LP</td>
<td>1,329,099</td>
<td>0.03%</td>
<td>0</td>
<td>(1,304,581)</td>
<td>2,724,490</td>
<td>0.06%</td>
</tr>
<tr>
<td>Lewis &amp; Clark II</td>
<td>9,613,134</td>
<td>0.20%</td>
<td>0</td>
<td>177,226</td>
<td>9,435,908</td>
<td>0.20%</td>
</tr>
<tr>
<td>Quantum Energy Partners</td>
<td>6,127,000</td>
<td>0.13%</td>
<td>0</td>
<td>(875,399)</td>
<td>7,002,390</td>
<td>0.15%</td>
</tr>
<tr>
<td>Quantum Resources</td>
<td>51,635</td>
<td>0.00%</td>
<td>0</td>
<td>51,634</td>
<td>1</td>
<td>0.00%</td>
</tr>
<tr>
<td>Matlin Patterson I</td>
<td>1</td>
<td>0.00%</td>
<td>(13,696)</td>
<td>296</td>
<td>13,401</td>
<td>0.00%</td>
</tr>
<tr>
<td>Matlin Patterson II</td>
<td>1,625,922</td>
<td>0.03%</td>
<td>0</td>
<td>(118,160)</td>
<td>1,744,082</td>
<td>0.04%</td>
</tr>
<tr>
<td>Matlin Patterson III</td>
<td>26,972,129</td>
<td>0.57%</td>
<td>140,594</td>
<td>1,166,499</td>
<td>25,665,036</td>
<td>0.55%</td>
</tr>
</tbody>
</table>
Nashville, TN (August 29, 2016) – CapStar Financial Holdings, Inc. (“CapStar” or “The Company”), a holding company that operates primarily through its wholly owned banking subsidiary, CapStar Bank, announced today that it has filed a registration statement on Form S-1 with the Securities and Exchange Commission relating to the proposed initial public offering of its common stock. A portion of the shares of common stock will be issued and sold by the Company and a portion will be sold by certain shareholders of the Company. The number of shares to be offered and the price range for the proposed offering have not yet been determined. The Company has applied to list its common stock on the NASDAQ Global Select Market under the ticker symbol “CSTR.”

A registration statement (see hyperlink below) relating to these securities has been filed with the Securities and Exchange Commission but has not yet become effective. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This press release shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

https://www.sec.gov/Archives/edgar/data/1676479/000119312516708966/d221790ds1a.htm
NASHVILLE, Tenn., Sept. 21, 2016 /PRNewswire/ -- CapStar Financial Holdings, Inc. ("CapStar" or the "Company"), announced today the pricing of the initial public offering of 2,585,000 of its common stock, including 1,300,299 shares to be sold by the Company and 1,284,701 shares to be sold by selling shareholders, at a public offering price of $15.00 per share, which is expected to result in aggregate gross proceeds of approximately $38.8 million. The net proceeds to the Company, after deducting the underwriting discount and estimated offering expenses, are expected to be approximately $16.6 million. The underwriters have the option to purchase up to an additional 387,750 shares of common stock from the Company within the next 30 days. The shares are expected to begin trading on Thursday, September 22, 2016, on the NASDAQ Global Select Market under the ticker symbol "CSTR."

Keefe, Bruyette & Woods, Inc. and Sandler O'Neill & Partners, L.P. are acting as the joint book-running managers for the offering. Raymond James & Associates, Inc. and Stephens, Inc. are acting as co-managers for the offering.

A registration statement relating to these securities has been filed with, and declared effective by, the Securities and Exchange Commission ("SEC") (File No. 333-213367). This press release shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there by any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. The offering is being made only by means of the written prospectus forming part of the effective registration statement. Copies of the final prospectus relating to the offering may be obtained, when available, from Keefe, Bruyette & Woods, Inc., A Stifel Company, 787 Seventh Avenue, Fourth Floor, New York, NY 10019, Attention: Equity Capital Markets, or by calling (800) 966-1559; or from Sandler O'Neill & Partners, L.P., 1251 Avenue of the Americas, 6th Floor, New York, NY 10020, Attention: Syndicate, or by calling (866) 805-4128, or by email at syndicate@sandleroneill.com.

About CapStar

CapStar Financial Holdings, Inc. is a bank holding company headquartered in Nashville, Tennessee, and operates primarily through its wholly owned subsidiary, CapStar Bank, a Tennessee-chartered state bank.

Forward-Looking Statements

This press release includes "forward-looking statements," including with respect to the proposed initial public offering. Forward-looking statements are subject to many risks and uncertainties, including, but not limited to, economic conditions (including interest rate environment, government economic and monetary policies, the strength of global financial markets and inflation and deflation) that impact the financial services industry as a whole and/or our business and other risks detailed in "Cautionary Note Regarding Forward-Looking Statements," "Risk Factors" and other sections of the registration statement. We caution you that the forward-looking statements included in this press release are not a guarantee of future events, and that actual events may differ materially from those made in or suggested by the forward-looking statements. Forward-looking statements are often, but not always, made through the use of words or phrases such as "may," "should," "could," "predict," "potential," "believe," "will likely result," "expect," "continue," "will," "anticipate," "seek," "estimate," "intend," "plan," "project," "projection," "forecast," "goal," "target," "would," and "outlook," or the negative version of those words or other comparable words of a future or forward-looking nature. Any forward-looking statements presented herein are made only as of the date of this press release, and we do not undertake any obligation to update or revise any forward-looking statements to reflect changes in assumptions, the occurrence of unanticipated events, or otherwise, except as required by law.


CONTACT: Beth Alexander (615) 732-6424, balexander@capstarbank.com
North Dakota State Investment Board

J.P. Morgan Asset Management Global Real Assets

Market Update
September 23, 2016

Melissa Anezinis, Executive Director
(312) 732-7915, melissa.m.anezinis@jpmchase.com

Luigi Cerreta, Executive Director
(212) 648-2212, luigi.b.cerreta@jpmorgan.com
Today’s presenters

**Melissa Anezinis, executive director**, is a client portfolio manager in J.P. Morgan Asset Management – Global Real Assets, where she is responsible for capital raising and client advisory across the firm's Real Estate Americas investment platform. Melissa was previously a Relationship Manager on the North America Institutional sales team working with institutional investors in the Midwest. She joined J.P. Morgan Asset Management in 2011 after roles in the Hedge Funds industry as Director of Partner Relations for SLS Capital in New York and as Head of the Capital Introductions Group for Cantor Fitzgerald Prime Services. Previously Melissa held a client associate role at J.P. Morgan Asset Management in New York and was with The Torrenzano Group, where she provided strategic investor relations counsel to financial companies. She earned a B.S. in journalism, cum laude, from the Honors Tutorial College at Ohio University and an M.B.A. from Columbia Business School. She holds Series 3, 7 and 63 licenses.

**Luigi Cerreta, executive director**, is a member of the U.S. Real Estate Research team at J.P. Morgan Asset Management – Global Real Assets and performs regional and market economic analyses that support the investment decision making process. Luigi also provides analytical and quantitative support to the Diversified Commercial Property Fund and is a member of the portfolio management team. He is a contributor to the research and analytics that support the GRA Omni platform and the co-author of the 2011 research paper, “Persistent Outperformance: Examining the Track Record of Large Properties” as well as “The Realization: DC asset allocation programs move beyond public markets.” An employee since 2005, Luigi has eleven years of experience in analyzing real estate and securities markets. Luigi holds a B.E. in Civil Engineering from Cooper Union College and is a CFA charterholder.
Investment review

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II. Fund Overview .................................................. 33
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J.P. Morgan Asset Management – Global Real Assets – U.S. Real Estate platform

We are one of the industry’s premier real assets investment managers

Scale, stability and strength

- $61 billion in AUM across the U.S.
- 45 years of real estate investment management experience
- 240+ professionals in 7 offices across the country

Capabilities and experience

- Part of a global platform of real estate, infrastructure and maritime/transport strategies
- A disciplined investment process consistently implemented across investment types and regions
- Local expertise across strategies, sectors and regions, and complex transactions

Information advantage

- Large organization provides access to outstanding proprietary and external data sources
- Dedicated research team provides market research and portfolio construction analysis
- Over $10 billion of annual transaction activity provides unmatched market knowledge

Client focus

- Trusted advisor and fiduciary to over 1,000 clients worldwide
- A legacy of trusted partnership built on a promise to put client interests ahead of our own
- Focus on open communication, transparency and shared information

AUM as of March 31, 2016
Source: J.P. Morgan Asset Management
J.P. Morgan Asset Management – U.S. Real Estate: Trends

September 2016
2016 Themes

- U.S. core real estate returns are relatively high and fundamentals are broadly strong

- Core capital is more scarce, partly because many investors are moving up the risk curve. This has slowed the market
  - We think given where we are in the cycle, moving to higher risk is a bad idea. A mature cycle suggests lowering risk
  - Falling interest rates and steady fundamentals suggest this pause in the core space will be temporary. This creates a unique opportunity

Source: J.P. Morgan Asset Management; as of 2016Q2
U.S. core real estate yields are relatively high...

Yields across fixed income, equities and real assets

Operating income growth has been relatively high

NCREIF ODCE same-store NOI versus S&P 500 EBITDA per share (index: 2005Q1 = 100)

A big driver of strong NOI growth has been low supply outside of apartments.

Sources: REIS, J.P. Morgan Asset Management; as of 2016Q2.
Leading to recent outperformance

2014 and 2015 total returns by asset class

Sources: NCREIF, S&P, Barclays, J.P. Morgan Asset Management; as of 2015Q4
In 2016, both transaction volumes and appreciation have slowed sharply.

RCA quarterly transaction volume

NCREIF ODCE quarterly appreciation returns

Sources: RCA, NCREIF, J.P. Morgan as of Q2 2016
The driver has been (1) rebalancing and (2) tactical shifts to higher risk real estate

Cumulative new investments by US pension funds into real estate strategies since 2014Q2

Source: FPL Advisors as of Q2 2016
Moving up the risk curve at the wrong time

NCREIF ODCE (NPI only) property price index, year-over-year change

Sources: J.P. Morgan Asset Management as of Q2 2016. Forecasts, projections and other forward looking statements are based upon current beliefs and expectations. They are for illustrative purposes only and serve as an indication of what may occur. Given the inherent uncertainties and risks associated with forecasts, projections and other forward statements, actual events, results or performance may differ materially from those reflected or contemplated. As of Q2 2016.
A mature cycle suggests it’s time to reduce risk

If you believe...

Core real estate is pricey and the economic cycle has many years (4+) to run

Then you should...

Trim core to low end of strategic range and allocate to range of higher-beta open- and closed-end strategies

Core real estate is pricey and the economic cycle is mature but has some years left

Raise core allocation near the high end of strategic range. Target portfolio risk at or below benchmark. Avoid the vintage effect of later-cycle closed end funds

Core real estate is pricey and the economic cycle is ending

Consider reducing all risk asset exposure and move to higher cash allocation. Keep powder dry for early cycle opportunity funds

Source: J.P. Morgan Asset Management; as of 2016Q2
Lower debt costs raising levered core returns

Core unlevered IRRs and 65% mortgage rates

Core IRRs levered at 25%

Source: JPMAM, Moody’s; as of June 2016.
The IRR (internal rate of return) shown above is calculated based upon internal JPMAM data. There can be no guarantee the IRR will be achieved. The charts and/or graphs shown above and throughout the presentation are for illustration and discussion purposes only.
Core market appears to be stabilizing

Equity REIT premium to net asset value

Monthly % change in Moody’s/RCA Commercial Property Price Index

Source: Green Street Advisors; as of September 1, 2016 (left hand side), Real Capital Analytics, Moody’s; as of July 2016. (right hand side).
Highest quality assets often only come to market when pricing is full

Portfolio total returns indexed versus 2008 peak, valued quarterly via appraisals & sales prices

Assets purchased near peak: January 2006 through March 2008

Similar peak to trough decline for both

Assets purchased early: before January 2006

All data from JPMAM US Real Estate Asset Management; as of March 2013
Pullback in financing for higher LTV debt has made mezzanine attractive again

Five-year mezzanine (56%-80% LTV) spreads, to 5-year Treasurys, basis points

Represents spreads on 5-year debt deals
Sector trends
Office: Construction falling well before cycle end

US Office Construction Starts, millions of square feet

Class A Office Vacancy Rate

Source: CBRE (left chart), CoStar (right chart); both as of 2016Q2.
Office: Vacancy is broadly lower, but results vary by market

Office total vacancy change from previous year

Source: CBRE; as of 2016Q2.
Industrial: Demand booming but large box construction also rising

Vacancy Rate

Source: CBRE; as of 2016Q2.
Industrial: Infill strategy has seen less development and better rent growth than big box strategy

<table>
<thead>
<tr>
<th></th>
<th>Inventory</th>
<th>Rents</th>
<th>Vacancy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Square feet, millions</td>
<td>2-year stock growth</td>
<td>Rent Level</td>
</tr>
<tr>
<td>Infill</td>
<td>763</td>
<td>0.8%</td>
<td>$6.91</td>
</tr>
<tr>
<td>Large Majors</td>
<td>492</td>
<td>13.2%</td>
<td>$4.11</td>
</tr>
</tbody>
</table>

“Infill” is a set of targeted high-density submarkets defined by GRA Research

“In Large Majors” are Northern NJ, Los Angeles, Chicago & Dallas. Assets > 200k sf, built after 1995

Source: CoStar, J.P. Morgan as of 2015Q3
Retail: Internet sales are eating into brick and mortar centers; service tenants growing

Brick and Mortar as a % of expenditures

Services as a % expenditures

Source: BEA as of 1Q 2016.
Retail: High-end supported by long-term income trends

Growth in real household before-tax income, 1949-1979

- Top 5%: 86.0%
- Top 20%: 99.0%
- Fourth 20%: 114.0%
- Middle 20%: 111.0%
- Second 20%: 100.0%
- Bottom 20%: 116.0%

Growth in real household before-tax income, 1979-2012

- Top 5%: 63.5%
- Top 20%: 42.6%
- Fourth 20%: 15.5%
- Middle 20%: 5.7%
- Second 20%: 1.1%
- Bottom 20%: -2.7%

Source: Census, ICSC. Shown for illustrative purposes only. Information as of 2012 except where otherwise noted.
Apartment: Supply and affordability are becoming increasingly strong headwinds

US multifamily deliveries

Year on year growth

Apartment: Likely causing rent growth to slow further but defensive nature attractive later cycle

US rent growth

ODCE Appreciation Return: Peak to Trough

- 541 basis point outperformance
- 269 basis point outperformance

Source: Left-hand chart: Axiometrics and JPMAM; as of 2016Q2; Right-hand chart: NCREIF ODCE.
Where are we in the cycle?

Index of same-property NOI growth

Current cycle:
- 5 years old
- Produced a 34% increase in NOI from its trough so far

2000s NOI cycle:
- Lasted 4 years
- Produced a 34% increase in NOI from its trough

1990s NOI cycle:
- Lasted 8 years
- Produced a 45% increase in NOI from its trough

We expect:
- NOI growth rank over next 12 months:
  - 1. Office
  - 2. Industrial
  - 3. Retail
  - 4. Apartments

- 4-5% core NOI growth in 2017

Source: NCREIF (NPI properties in ODCE Managers); as of 2016Q2.
2016 high conviction strategies

- **Market entry points**
  - Maturity of cycle suggests core/core-plus over high-risk value-add and opportunistic strategies
  - Moderate amounts of leverage executed prudently can be highly accretive
  - Pullback in financing for higher LTV debt has made mezzanine attractive again

- **Sector entry points**
  - **Office**: Absorption slowing, but construction slowing faster; modest rent growth allows continued mark to market of rolling leases
  - **Industrial**: booming demand, but increasing big box supply; distribution moving to infill locations which are supply-constrained
  - **Apartment**: supply weighing on rent growth which is expected to continue to slow; defensiveness attractive nonetheless
  - **Retail**: internet share of sales rising even faster; barbell necessity retail, service/entertainment retail. Avoid boxes selling goods that are shifting online

Source: J.P. Morgan Asset Management; as of 2016Q2.
Fund overviews
JPMCB SPF: Fund overview

Fund Profile and Performance – 2Q2016

- $41.9bn gross asset value
- $30.7bn net asset value
- 4.7% cash position
- 25.9% LTV
- 2Q total gross return of 2.0%
- One year total gross return of 11.1%

2016 Strategy

- Net sellers of office assets
- Continue to reduce leverage
- Development focus in multi-family and industrial
- Low beta strategy key to late cycle success
- Projected 2016 total return of 7-9%*

Diversification

- SPF: 41.4% ODCE: 40.4%
- San Francisco 7.0%
- Los Angeles 10.5%
- SPF: 5.4% ODCE: 9.5%
- Boston 8.1%
- New York 12.3%
- SPF: 29.0% ODCE: 30.4%
- SPF: 24.2% ODCE: 19.7%

- Retail 24.6%
- Land 0.1%
- Office 46.4%
- Residential 21.0%
- Industrial 7.9%

<table>
<thead>
<tr>
<th>% of NAV</th>
<th>Target range (%)</th>
<th>ODCE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>46.4</td>
<td>38 to 45</td>
</tr>
<tr>
<td>Industrial</td>
<td>7.9</td>
<td>10 to 15</td>
</tr>
<tr>
<td>Residential</td>
<td>21.0</td>
<td>18 to 25</td>
</tr>
<tr>
<td>Retail</td>
<td>24.6</td>
<td>20 to 25</td>
</tr>
<tr>
<td>Other</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

*Net of debt; values may not total 100% due to rounding
Past performance is not a guarantee of comparable future returns. Returns assume the reinvestment of income. Performance results are gross of investment management fees. The deduction of an advisory fee reduces an investor’s return. Diversification does not guarantee investment returns and does not eliminate the risk of loss.

*The target returns are for illustrative purposes only and are subject to significant limitations. An investor should not expect to achieve actual returns similar to the target returns shown above. Because of the inherent limitations of the target returns, potential investors should not rely on them when making a decision on whether or not to invest in the strategy. Please see the complete Target Return disclosure at the conclusion of the presentation for more information on the risks and limitation of target returns.
JPMCB SPF: Recent investment activity

**RECENT REDEVELOPMENT**

Valley Fair Mall, San Jose, CA

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current SF</td>
<td>1,478,420 SF</td>
</tr>
<tr>
<td>SF After Completion</td>
<td>2,015,000 SF</td>
</tr>
<tr>
<td>Anticipated Open Date</td>
<td>April 2019</td>
</tr>
<tr>
<td>SPF Equity Interest</td>
<td>50%</td>
</tr>
<tr>
<td>Market Value</td>
<td>$1.7 billion</td>
</tr>
<tr>
<td>Estimated SPF Development Contribution</td>
<td>$532.2 million</td>
</tr>
</tbody>
</table>

The IRR shown above is calculated based upon internal JPMIM data and is gross of fees. There can be no guarantee the IRR will be achieved. This example is a representative investment. However, you should not assume that this type of investment will be available to or, if available, will be selected for investment in the future. There can be no guarantee of future success.

**RECENT DISPOSITION**

1285 Avenue of the Americas, New York, NY

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>1,790,214 SF</td>
</tr>
<tr>
<td>Acquisition Date</td>
<td>July 2001</td>
</tr>
<tr>
<td>Disposition Date</td>
<td>May 2016</td>
</tr>
<tr>
<td>Net Proceeds</td>
<td>$581.7 million</td>
</tr>
<tr>
<td>Realized IRR</td>
<td>15.40%</td>
</tr>
<tr>
<td>Equity Multiple</td>
<td>4.70x</td>
</tr>
</tbody>
</table>
JPMCB SSPF: Fund overview

**Fund Profile and Performance – 2Q2016**
- $6.1bn gross asset value
- $3.4bn net asset value
- 3.5% cash position
- 43.3% LTV
- 2Q total gross return of 3.1%
- One year total gross return of 15.9%

**2016 Strategy**
- Acquire existing properties with meaningful discounts to replacement cost
- Seek targeted development opportunities with attractive spreads over core
- Capitalize on favorable leasing environment
- Projected 2016 total return of 12-15%*

**Diversification**

1 Net of debt; values may not total 100% due to rounding
Past performance is not a guarantee of comparable future returns. Returns assume the reinvestment of income. Performance results are gross of investment management fees. The deduction of an advisory fee reduces an investor’s return. Diversification does not guarantee investment returns and does not eliminate the risk of loss.

*The target returns are for illustrative purposes only and are subject to significant limitations. An investor should not expect to achieve actual returns similar to the target returns shown above. Because of the inherent limitations of the target returns, potential investors should not rely on them when making a decision on whether or not to invest in the strategy. Please see the complete Target Return disclosure at the conclusion of the presentation for more information on the risks and limitation of target returns.
The IRR shown above is calculated based upon internal JPMIM data and is gross of fees. There can be no guarantee the IRR will be achieved. This example is a representative investment. However, you should not assume that this type of investment will be available to or, if available, will be selected for investment in the future. There can be no guarantee of future success.
J.P. Morgan U.S. Real Estate Income and Growth Fund: Fund overview

**Fund Profile and Performance – 2Q2016**
- $4.1bn gross asset value
- $2.4bn net asset value
- 4% cash position
- 40% Current LTV\(^1\)
- 2Q total gross return of 1.3%
- One year total gross return of 9.8%

**2016 Strategy**
- Stay on strategy with no style drift
- Continue to refine the portfolio through selective acquisitions and sales
- Maintain an attractive and defensive debt profile
- Anticipate a normalization of returns in 2016*:
  - Total gross return of **8-10%**

**Diversification by property type and location**

<table>
<thead>
<tr>
<th>Property Type</th>
<th>% of NAV</th>
<th>Top MSAs</th>
<th>% of NAV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>20%</td>
<td>Washington, DC</td>
<td>16.6</td>
</tr>
<tr>
<td>Retail</td>
<td>18%</td>
<td>Greater New York</td>
<td>12.0</td>
</tr>
<tr>
<td>Office</td>
<td>45%</td>
<td>Silicon Valley</td>
<td>9.3</td>
</tr>
<tr>
<td>Industrial</td>
<td>17%</td>
<td>Los Angeles</td>
<td>6.3</td>
</tr>
<tr>
<td>Residential</td>
<td>20%</td>
<td>Houston</td>
<td>4.7</td>
</tr>
<tr>
<td>Retail</td>
<td>18%</td>
<td>Baltimore</td>
<td>4.6</td>
</tr>
<tr>
<td>Office</td>
<td>45%</td>
<td>San Francisco</td>
<td>4.5</td>
</tr>
<tr>
<td>Industrial</td>
<td>17%</td>
<td>Seattle</td>
<td>4.3</td>
</tr>
<tr>
<td>Residential</td>
<td>18%</td>
<td>Riverside/San Bernardino</td>
<td>3.6</td>
</tr>
<tr>
<td>Retail</td>
<td>18%</td>
<td>Dallas</td>
<td>3.5</td>
</tr>
</tbody>
</table>

1 Represents current leverage as a percentage of the total Fund gross asset value.
Allocations are subject to change at the discretion of the portfolio manager without notice. Diversification does not guarantee investment returns and does not eliminate the risk of loss.

*The target returns are for illustrative purposes only and are subject to significant limitations. An investor should not expect to achieve actual returns similar to the target returns shown above. Because of the inherent limitations of the target returns, potential investors should not rely on them when making a decision on whether or not to invest in the strategy. Please see the complete Target Return disclosure at the conclusion of the presentation for more information on the risks and limitation of target returns.*
J.P. Morgan U.S. Real Estate Income and Growth Fund: Recent investment activity

**RECENT ACQUISITION**

580 California Street, San Francisco, CA

- **Property Type**: Office
- **Size**: 322,000 sf
- **Purchase Price**: $218.0 million gross, $109.3 million equity
- **Price per sf**: $676/sf
- **Going-in Yield**: 3.8%
- **Stabilized Yield**: 5.4%
- **Projected IRR (unlevered)**: 6.8%
- **LTV**: 50%
- **Stabilized Yield (levered)**: 7.0%

**RECENT MEZZANINE ACQUISITION**

Church Park Apartments, Boston, MA

- **Loan Amount**: $65.0 million ($522,000/unit)
- **LTV**: 75.9%
- **Interest Rate/Term**: 6.75%/10 Year
- **Objective**: Refinancing
- **Fully Funded**
  - **Senior Loan**: $200.0 million (57.3% LTV)
  - **Mezzanine Loan**: $65.0 million (75.9% LTV)
- **Sponsor Equity**: $84.0 million
- **Total Capitalization**: $349.0 million
- **Asset Type**: Residential/Retail
- **Size**: 508 units with 74,000 sf of retail
- **Occupancy**: 98.0%

The IRR shown above is calculated based upon internal JPMIM data and is gross of fees. There can be no guarantee the IRR will be achieved. This example is a representative investment. However, you should not assume that this type of investment will be available to or, if available, will be selected for investment in the future. There can be no guarantee of future success.
Appendix
North Dakota State Investment Board
Investment summary as of June 30, 2016

### Invested capital

<table>
<thead>
<tr>
<th>Account Performance (%)</th>
<th>Income</th>
<th>Appreciation</th>
<th>Total</th>
<th>ODCE Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three months¹</td>
<td>1.1</td>
<td>0.9</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td>One year</td>
<td>4.6</td>
<td>6.2</td>
<td>11.1</td>
<td>11.8</td>
</tr>
<tr>
<td>Three years</td>
<td>5.0</td>
<td>7.5</td>
<td>12.8</td>
<td>13.0</td>
</tr>
<tr>
<td>Five years</td>
<td>5.1</td>
<td>7.6</td>
<td>13.0</td>
<td>12.7</td>
</tr>
<tr>
<td>Ten years</td>
<td>5.4</td>
<td>1.4</td>
<td>6.9</td>
<td>6.2</td>
</tr>
<tr>
<td>Fifteen years</td>
<td>6.0</td>
<td>2.6</td>
<td>8.8</td>
<td>7.9</td>
</tr>
<tr>
<td>Since inception (1/1/1998)</td>
<td>6.6</td>
<td>3.0</td>
<td>9.8</td>
<td>9.0</td>
</tr>
</tbody>
</table>

¹ non-annualized returns

Past performance is not a guarantee of comparable future results. Total return assumes the reinvestment of income. Performance results are gross of investment management fees. The deduction of an advisory fee reduces an investor’s return. Actual account performance will vary depending on individual portfolio security selection and the applicable fee schedule. Fees are described in Part II of the Advisor’s ADV which is available upon request. See Appendix for additional information.

The following is an example of the effect of compounded advisory fees over a period of time on the value of a client’s portfolio: A portfolio with a beginning value of $100mm, gaining an annual return of 10% per annum would grow to $259mm after 10 years, assuming no fees have been paid out. Conversely, a portfolio with a beginning value of $100mm, gaining an annual return of 10% per annum, but paying a fee of 1% per annum, would only grow to $235mm after 10 years. The annualized returns over the 10 year time period are 10.00% (gross of fees) and 8.91% (net of fees). If the fee in the above example was 0.25% per annum, the portfolio would grow to $253mm after 10 years and return 9.73% net of fees. The fees were calculated on a monthly basis, which shows the maximum effect of compounding.
# North Dakota State Investment Board

**Investment summary as of June 30, 2016**

<table>
<thead>
<tr>
<th>Invested capital</th>
<th>Market value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Situation Property Fund</td>
<td>$4,657,435</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Account Performance (%)</th>
<th>Income</th>
<th>Appreciation</th>
<th>Total</th>
<th>ODCE Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three months(^1)</td>
<td>0.7</td>
<td>2.4</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>One year</td>
<td>2.5</td>
<td>13.1</td>
<td>15.9</td>
<td>11.8</td>
</tr>
<tr>
<td>Three years</td>
<td>3.1</td>
<td>14.4</td>
<td>17.9</td>
<td>13.0</td>
</tr>
<tr>
<td>Five years</td>
<td>3.7</td>
<td>13.3</td>
<td>17.6</td>
<td>12.7</td>
</tr>
<tr>
<td>Ten years</td>
<td>4.1</td>
<td>2.3</td>
<td>6.5</td>
<td>6.2</td>
</tr>
<tr>
<td>Fifteen years</td>
<td>4.7</td>
<td>3.5</td>
<td>8.4</td>
<td>7.9</td>
</tr>
<tr>
<td>Since inception (1/1/1998)</td>
<td>5.1</td>
<td>3.7</td>
<td>9.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>

\(^1\) non-annualized returns

Past performance is not a guarantee of comparable future results. Total return assumes the reinvestment of income. Performance results are gross of investment management fees. The deduction of an advisory fee reduces an investor’s return. Actual account performance will vary depending on individual portfolio security selection and the applicable fee schedule.
## North Dakota State Investment Board
Investment summary as of June 30, 2016

<table>
<thead>
<tr>
<th>Invested capital – J.P. Morgan U.S. Real Estate Income and Growth Fund</th>
<th>Market value</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dakota State Investment Board - Insurance Trust</td>
<td>$ 68,537,191</td>
</tr>
<tr>
<td>North Dakota State Investment Board - Legacy Fund</td>
<td>$ 96,000,761</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Account Performance (%)</th>
<th>Gross Income</th>
<th>Gross Appreciation</th>
<th>Gross Total</th>
<th>Net Income</th>
<th>Net Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three months(^1)</td>
<td>1.3</td>
<td>0.0</td>
<td>1.3</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>One year</td>
<td>5.4</td>
<td>4.4</td>
<td>10.0</td>
<td>4.1</td>
<td>8.6</td>
</tr>
<tr>
<td>Three years</td>
<td>5.9</td>
<td>6.3</td>
<td>12.5</td>
<td>4.6</td>
<td>11.1</td>
</tr>
<tr>
<td>Five years</td>
<td>6.1</td>
<td>8.6</td>
<td>15.2</td>
<td>4.8</td>
<td>13.7</td>
</tr>
<tr>
<td>Seven years</td>
<td>7.1</td>
<td>5.6</td>
<td>13.0</td>
<td>5.7</td>
<td>11.5</td>
</tr>
<tr>
<td>Since inception (11/1/2005)</td>
<td>7.1</td>
<td>-2.1</td>
<td>4.8</td>
<td>5.6</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Note: Past performance not indicative of future performance
Source: J.P. Morgan
Risks

The following summarizes certain key risk factors. Please see the Fund’s Confidential Private Placement Memorandum for a more detailed discussion of these and other risks.

General. An investment in the Fund involves significant risk. There can be no assurance that the Fund’s return objectives will be realized or that there will be any return of capital. An investor could lose all of its investment.

Illiquidity and restrictions on transfer and withdrawal. Interests in a Fund Investor Vehicle are generally not transferable except with the consent of the relevant General Partner, Board of Directors or other body managing the applicable Fund Investor Vehicle, which consent may be withheld in their sole discretion. Investors may not withdraw capital from the Fund Investor Vehicle in which they have invested. Although Investors will have the ability on a quarterly basis to request the repurchase of some or all of their Interests, any such repurchases will only be made in the discretion of the relevant General Partner, Board of Directors or other body managing the applicable Fund Investor Vehicle in consultation with J.P. Morgan Investment Management, Inc., and there can be no assurance that either will exercise their discretion to repurchase Interests at any time. The Interests may not be resold, transferred or otherwise disposed of by Investors except in compliance with applicable securities laws and the transfer restrictions contained in the respective Charter Documents.

Risks associated with real estate investments. An investment in the Fund is subject to certain risks associated with the ownership of real estate and the real estate industry in general. These risks include, among others, possible declines in the value of real estate; risks related to general and local economic conditions; possible lack of availability of mortgage funds; overbuilding; extended vacancies of properties; increases in competition; property taxes and transaction, operating and foreclosure expenses; legal fees and expenses incurred to protect the Fund’s investments; changes in zoning laws; costs resulting from the clean up of, and liability to third parties for damages resulting from, environmental problems; casualty or condemnation losses; uninsured damages from floods, earthquakes or other natural disasters; limitations on and variations in rents; and changes in interest rates. To the extent that assets underlying the investments are concentrated geographically, by property type or in certain other respects, the Fund may be subject to certain of the foregoing risks to a greater extent.

Dependence on Investment Adviser. Most of the investment decisions with respect to the Fund will be made by the Investment Adviser. The success of the Fund depends significantly on the Investment Adviser’s ability to identify, select, manage and dispose of appropriate investments. There is no guarantee that suitable investments will be available or that investments will be successful.

Leverage. Certain of the Fund’s investments may be leveraged, which may adversely affect income earned by the Fund or may result in a loss of principal. The use of leverage creates an opportunity for increased net income, but at the same time involves a high degree of financial risk and may increase the exposure of the Fund or its investments to factors such as rising interest rates, downturns in the economy or deterioration in the condition of the investment collateral. The Fund may be unable to secure attractive financing as market fluctuations may significantly decrease the availability and increase the cost of leverage. Principal and interest payments on any leverage will be payable regardless of whether the Fund has sufficient cash available. Senior lenders would be entitled to a preferred cash flow prior to the Fund’s entitlement to payment on its Investment.

Valuation. Since the Fund’s investments have limited or no liquidity, the actual value received upon liquidation may significantly differ from the interim valuations arrived at by the Fund.

Taxation. Returns in the Fund will be subject to U.S. federal, state and local tax regardless of the Fund Investor Vehicle. Non-U.S. investors may also be subject to taxation in their home countries. The rate and amount of tax will vary depending on the mix and type of real estate investments and other investments made by the Fund. An Investor in one of the U.S. Partnerships will generally be subject to U.S. tax on income earned through such U.S. Partnership, even if distributions are not made by (or if such distributions are automatically reinvested in) that U.S. Partnership. Non-U.S. investors should be aware that the German KG and the Cayman Corporations intend to invest in U.S. real estate through U.S. subsidiary corporations. Such U.S. subsidiary corporations will pay U.S. federal and state tax on all income they derive, including upon their disposition of such real estate, thus reducing the return to such Non-U.S. Investors when compared with U.S. investors in the U.S. Partnerships. Tax-exempt U.S. investors investing in a U.S. Partnership should be aware of the potential for a U.S. Partnership to generate “unrelated business taxable income” (although the General Partner of Domestic LP has agreed, subject to the discussion in the Confidential Private Placement Memorandum, to use best efforts to minimize, to the extent reasonably possible and to the extent not inconsistent with Domestic LP’s investment objectives, the realization of such income by Domestic LP). For a more detailed discussion of the tax consequences of an Investment in the Fund, Investors should review the Confidential Private Placement Memorandum. Investors should consult their tax advisers regarding such tax consequences as well as any taxes to which they may be subject in their own jurisdiction.
Other Tax Considerations. In addition to the U.S. federal tax considerations of investing in the Fund, Investors in the U.S. Partnerships should note that there may be tax filing requirements in the states and other jurisdictions where the Fund acquires real estate or otherwise earns income or gains, conducts activities or is deemed to be engaged in a trade or business. While Domestic LP generally makes its real estate investments through REIT Subsidiaries that are expected to eliminate the need for such tax return filings by Investors and the imposition of direct state and local taxes on Investors in Domestic LP, there can be no assurance that Investors in Domestic LP will not have to file any state and local tax returns or pay any state and local taxes. Conversely, Direct LP does not expect to make any investments through REIT Subsidiaries and Investors in Direct LP will generally be subject to direct state and local taxes as well as tax return filings with respect to U.S. real estate investments. As discussed in further detail in the Confidential Private Placement Memorandum, the Investment Adviser, with respect to Direct LP, will coordinate tax filings for certain Investors that are individuals and certain grantor trusts in the states and other jurisdictions where consolidated or composite tax filings are available. Corporate and other non-individual investors will be required to file their own tax returns in applicable states or other jurisdictions.

Target Return. The target return discussed herein has been established as of the date of this Booklet. The Target Return has been established by J.P. Morgan Investment Management Inc. ("JPMIM") based on its assumptions and calculations using data available to it and available investment opportunities and is subject to the risks set forth herein and set forth more fully in the Memorandum. A more detailed explanation along with the data supporting the target returns is on file with JPMIM and is available for inspection upon request. The target returns are for illustration/discussion purposes only and are subject to significant limitations. An investor should not expect to achieve actual returns similar to the target returns shown above. The target returns are JPMIM's estimate based on JPMIM's assumptions, as well as past and current market conditions, which are subject to change. JPMIM has the discretion to change the target returns for the Fund at any time. Because of the inherent limitations of the target returns, potential investors should not rely on them when making a decision on whether or not to invest in the Fund. The target returns cannot account for the impact that economic and market factors have on the implementation of an actual investment program. Unlike actual performance, the target returns do not reflect actual trading, liquidity constraints, fees, expenses, and other factors that could impact the future returns of the Fund. JPMIM's ability to achieve the target returns is subject to risk factors over which JPMIM may have no or limited control. Investors should review carefully the selected risk factors below as well as in the Memorandum. No representation is made that the Fund will achieve the target return or its investment objective. Actual returns could be higher or lower than the target returns. A more detailed explanation of how JPMIM calculated the target returns is available upon request.
J.P. Morgan Asset Management

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In accordance with Section B-7 of the SIB Governance Manual, the Board Planning Cycle should include an “Annual Review of the Governance Manual” in September. In order to facilitate a meaningful review of the Governance Manual, RIO encourages board members and RIO staff to review the Governance Manual prior to the September board meeting.

RIO will be prepared to discuss all sections of the SIB Governance Manual with the Board, but intends to focus the current year review on the following areas, unless directed otherwise by the Board:

- **Section B – Governance Process (B-1 to B-10)**
- **Section C – Board Staff Relationship (C-1 to C-4)**
- **Section D – Mission and Investment Services (D-1 and D-3)**
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EXHIBITS

Annual Affirmation of Conflict of Interest Policy............................................................ A-I
POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: GENERAL EXECUTIVE CONSTRAINT

The executive director shall not knowingly cause or allow any practice, activity, decision, or organizational circumstance which is either imprudent or in violation of commonly accepted business and professional ethics, state law, rules, and policies.

1. With respect to treatment of staff, the executive director shall not knowingly cause or allow any condition or any communication which is unfair, undignified, or disrespectful.

2. In relating to the public and other governmental entities, the executive director may not knowingly cause or allow any action which is unfair, undignified, or disrespectful. In addition, the executive director may not allow any communications from the staff which are inaccurate or fail to distinguish between fact and personal opinion.

3. Budgeting for any fiscal year or the remaining part of any fiscal year shall not knowingly deviate materially from board Ends priorities, or create fiscal jeopardy, or fail to be derived from the biennial planning calendar.

4. With respect to the actual, ongoing condition of the organization's financial health, the executive director may not cause or allow the development of fiscal jeopardy or a material deviation of actual expenditures from board priorities established in Ends policies.

5. With respect to providing information and counsel to the board, the executive director may not permit the board to be uninformed.

6. The executive director may not allow assets to be unprotected, inadequately maintained, nor unnecessarily risked.

7. Compensation and benefits for staff shall not deviate from applicable state and federal law, including N.D. Administrative Code, Chapter 4-07-02.

8. In order to protect the board from sudden loss of executive services, the executive director may not have fewer than three other executives familiar with board and chief executive issues and processes. The executive director shall not fail to inform the Deputy Executive Director, the Deputy Chief Investment Officer, and the Fiscal and Investment Operations Manager of executive and board issues and processes.

9. The executive director will not allow a conflict of interest in the procurement of goods and services.

10. The executive director will not operate the office without a code of conduct for all RIO Employees. This code of conduct will be a part of the office Administrative Policy Manual.

Amended: January 22, 1999; November 19, 1999; September 26, 2014.
POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: STAFF RELATIONS

With respect to treatment of staff, the executive director shall not cause or allow any condition or any communication which is unfair, undignified, or disrespectful.

Accordingly, the executive director may not:

1. Operate without personnel procedures which clarify personnel rules for staff, provide for effective handling of grievances, and protect against wrongful conditions or violate any state or federal law.

2. Fail to provide staff with the opportunity to complete an employment termination questionnaire and an exit interview with the Supervisor of Audit Services.

Amended: May 31, 1996; September 26, 2014.
In relating to the public and other governmental entities, the executive director may not cause or allow any action which is unfair, undignified, or disrespectful. In addition, the executive director may not allow any communications from the staff which is inaccurate or fails to distinguish between fact and personal opinion.

POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: BUDGETING

Budgeting for any fiscal year or the remaining part of any fiscal year shall not deviate materially from board Ends priorities, or create fiscal jeopardy.

Accordingly, the executive director may not cause or allow budgeting which:

1. Contains too little information to enable credible projection of expenses, cash flow, and disclosure of planning assumptions.

2. Plans the expenditure in any fiscal year of more funds than are authorized by legislative appropriation.

3. Reduces the level of service, or anticipates a reduction in the level of service, of any Retirement and Investment Office program without the prior approval of the State Investment Board.

POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: FINANCIAL CONDITION

With respect to the actual, ongoing condition of the organization's financial health, the executive director may not cause or allow the development of fiscal jeopardy or a material deviation of actual expenditures from board priorities established in Ends policies.

Accordingly, the executive director may not:

1. Make any expenditure that exceeds the appropriation authority authorized by the North Dakota legislature.

2. Create policies for payment of administrative obligations that are in conflict with the policies of the Office of Management and Budget.

3. Initiate a transfer of appropriation authority between budget line items without board and Emergency Commission approval.

4. Allow appropriation expenditures to be made unless reported on PeopleSoft.

Amended: September 26, 2014.
POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: COMMUNICATION AND COUNSEL TO THE BOARD

With respect to providing information and counsel to the board, the executive director may not permit the board to be uninformed.

Accordingly, the executive director may not:

1. Neglect to submit monitoring data required by the board (see policy on Monitoring Executive Performance) in a timely, accurate, and understandable fashion, directly addressing provisions of the board policies being monitored.

2. Let the board be unaware of relevant trends, anticipated adverse media coverage, material external and internal changes, and particularly changes in the assumptions upon which any board policy has previously been established.

3. Fail to advise the board if, in the executive director's opinion, the board is not in compliance with its own policies on Governance Process and Board-Staff Relationship, particularly in the case of board behavior which is detrimental to the work relationship between the board and the executive director.

4. Fail to marshal for the board as many staff and external points of view, issues, and options as needed for fully informed board choices.

5. Present information in unnecessarily complex or lengthy form.

6. Fail to provide a mechanism for official board, officer, or committee communications.

7. Fail to deal with the board as a whole except when (a) fulfilling individual requests for information or (b) responding to officers or committees duly charged by the board.

8. Fail to report in a timely manner an actual or anticipated noncompliance with any policy of the board, particularly Ends and Executive Limitations.

9. Fail to inform the board in a timely manner of any intention to hire or dismiss the Deputy Executive Director, the Deputy Chief Investment Officer, or the Fiscal and Investment Operations Manager.

10. Fail to keep the board informed concerning the delegation of fiduciary authority to any staff member. Every person to whom such fiduciary responsibility is delegated is ultimately accountable to the board as to the exercise and execution of the delegated authority.

Amended: September 26, 2014.
POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: ASSET PROTECTION

The executive director may not allow assets to be unprotected, inadequately maintained, nor unnecessarily risked.

Accordingly, the executive director may not:

1. Fail to insure against theft and casualty losses to at least 80 percent replacement value and against liability losses to board members, staff, or the organization itself in an amount greater than the average for comparable organizations.

2. Allow non-bonded personnel access to funds.

3. Subject plant and equipment to improper wear and tear or insufficient maintenance.

4. Unnecessarily expose the organization, its board, or staff to claims of liability.

5. Fail to protect intellectual property, information, and files from loss or significant damage.

6. Receive, process, or disburse funds under controls which are insufficient to meet the state auditor's standards.

7. Invest or hold operating capital in a manner that is inconsistent with state law or board policy.

8. Acquire, encumber, or dispose of real property.

9. Endanger the organization's public image or credibility, particularly in ways that would hinder its accomplishment of mission.

10. Deviate from the investment process set by the State Investment Board (SIB) as contained in the board's policy on investments.

POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: COMPENSATION AND BENEFITS

Compensation and benefits for staff shall not deviate from applicable state and federal law, including N.D. Administrative Code, Chapter 4-07-02.

Accordingly, the executive director may not:

1. Change the compensation and benefits of any program officer reporting directly to the SIB.

2. Promise or imply permanent or guaranteed employment.

Amended: January 22, 1999; November 19, 1999.
Conflicts of interest and the appearance of impropriety shall be avoided by the executive director. The executive director must not allow family, social, professional, or other relationships to influence their judgment in discharging their responsibilities. The executive director must refrain from financial and business dealings that tend to reflect adversely on their duties. If a conflict of interest unavoidably arises, the executive director shall immediately disclose the conflict to the SIB. Conflicts of interest to be avoided include, but are not limited to: receiving consideration for advice given to a person concerning any matter over which the executive director has any direct or indirect control, acting as an agent or attorney for a person in a transaction involving the board, and participation in any transaction for which the executive director has acquired information unavailable to the general public, through their position.

"Conflict of Interest" means a situation in which a board member or staff member has a direct and substantial personal or financial interest in a matter which also involves the member's fiduciary responsibility.

The executive director will be required to affirm their understanding of this policy annually, in writing, and must disclose any conflicts of interest that may arise (See Exhibit A-I).

Amended: January 22, 1999; February 25, 2011.
The executive director will not operate the office without a code of conduct for all RIO employees. This code of conduct shall be a part of the office Administrative Policy Manual.

**Policy Implemented:** June 27, 1997.
POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: UNRELATED BUSINESS INTERESTS

In the pursuit of personal business interests, the Executive Director will not allow a situation to exist that presents a conflict of interest to the SIB investment program, nor shall such activity be in violation of RIO Administrative Policy 3.47, Use of Office Facilities and Equipment.

Policy Implemented: August 18, 2000
Memorandum

To: RIO Executive Director/CIO

From: RIO Compliance Officer

Date: July 1, 20--

RE: Annual Affirmation of Conflict of Interest Policy

Executive Limitations Policy A-9, *Conflict of Interest*, which is attached to this memorandum, details the conflict of interest policy for the executive director. This policy also indicates that the executive director is required to reaffirm their understanding of this policy annually and disclose any conflicts of interest. Therefore, please read and sign the statement below to comply with this requirement.

“I have read and understand SIB Executive Limitations Policy A-9, *Conflict of Interest*. I have disclosed any conflicts of interest as required by this policy.”

Name (printed) __________________________

Signature ________________________________

Date ________________________________

Detail of any conflicts of interest (if any):
# B. GOVERNANCE PROCESS

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**EXHIBITS**

*Annual Affirmation of Code of Conduct Policy...* B-1
POLICY TYPE: GOVERNANCE PROCESS

POLICY TITLE: GOVERNANCE COMMITMENT

The board, on behalf of benefit recipients and the other clients, who have entrusted their funds to us, will:

• Lead the North Dakota Retirement and Investment Office (RIO) with a strategic perspective.

• Rigorously attend to its investment and oversight role.

• Continually improve its capability as a body to define values and vision.

The board will strive to govern with an emphasis on:

- Outward vision rather than an internal preoccupation.
- Encouragement of diversity in viewpoints.
- Strategic leadership more than administrative detail.
- Clear distinction of board and executive director roles.
- Collective rather than individual decisions.
- Future rather than past or present.
- Proactivity rather than reactivity.

The board will:

1. Cultivate a sense of group responsibility. The board, not the staff, will be responsible for excellence in governing. The board will strive to be an initiator of policy, not merely a reactor to staff initiatives. The board will strive to use the expertise of individual members to enhance the ability of the board as a body, rather than to substitute the individual judgments for the board's values.

2. Direct, control, and inspire the organization through the careful establishment of the broadest written policies reflecting the board's values and perspectives. The board's major focus will be on the intended long-term impacts outside the operating organization (Ends), not on the administrative or programmatic means of attaining those effects.

3. Enforce upon itself whatever discipline is needed to govern with excellence. Discipline will apply to matters such as attendance, policy-making principles, respect of roles, and ensuring the continuity of governance capability.

4. After speaking with one voice, self-police any tendency to stray from adopted board governance policies. The board will not allow any officer, member, or committee of the board to hinder or be an excuse for not fulfilling its commitments. The board respects the right of any member, as an individual, to publicly disagree with an adopted board policy. Board members will accurately portray board policies and decisions.

5. Promote continual board development through orientation and mentoring of new members in the board's governance process and through periodic board discussion of process improvement. The board shall not delegate new member governance orientation to the executive director or any staff member.

A. A board mentor, who is knowledgeable and who will assume responsibility for assisting the new members, will be assigned by the chairperson.
POLICY TYPE: GOVERNANCE PROCESS

POLICY TITLE: GOVERNING STYLE

B. The new board member should read and study Chapter 21-10, North Dakota Century Code (Section J of the SIB Policy Governance Manual which governs the activities of the boards represented on the SIB: Teachers' Fund for Retirement Board, Public Employees Retirement Systems Board, and the State Investment Board).

C. The board should receive a glossary of terms used by the retirement and pension fund industry; i.e. Callan Associates Inc. - Glossary of Terms.

D. Newly appointed or elected board members should become familiar with the Carver Model of Governance, since the SIB directs its activities by this model. They should read Boards That Make a Difference and study the policy manuals that have been developed by the SIB and TFFR Board.

E. The board members must understand their roles as trustees and fiduciaries, the Prudent Investor Rule, and Procedural Prudence.

A "new trustee book bag" containing the Retirement and Investment Office’s Comprehensive Annual Financial Report (CAFR) and reference materials relating to board governance, fiduciary conduct, and investment management concepts and terminology and other appropriate materials will be made available to new trustees.

F. The executive director will provide the SIB with a list of periodicals available which would provide current information on pension issues. The board members will review and request subscriptions to appropriate periodicals.

6. Monitor and regularly discuss the board's process and performance. Self-monitoring will include comparison of board activity and discipline to policies in the Governance Process and Board-Staff Relationship categories.

7. Observe Robert's Rules except where the board has superseded them.

The function of the board is to make certain contributions that lead RIO toward the desired performance and ensure that it occurs. The board's specific contributions are unique to its trusteeship role and necessary for proper governance and management.

Consequently, the "products" or contributions of the board shall be:

1. The link between the SIB, its investment clients, and benefit recipients.

2. Written governing policies that, at the broadest levels, address:
   A. Ends: Organizational products, impacts, benefits, outcomes, recipients, and their relative worth (what good for which needs at what cost).
   B. Executive Limitations: Constraints on executive authority which establish the prudence and ethics boundaries within which all executive activity and decisions must take place.
   C. Governance Process: Specification of how the board conceives, carries out, and monitors its own task.
   D. Board-Executive Director Relationship: How authority is delegated and its proper use monitored: the executive director's role, authority, and accountability.

3. The assurance of executive director performance against above policies 2a and 2b.

4. Legislation necessary to achieve the board's Ends.

**Policy Implemented:** June 23, 1995.
POLICY TYPE: GOVERNANCE PROCESS

POLICY TITLE: CHAIRPERSON'S ROLE

The chairperson's primary responsibility is to insure the integrity of the board's process. The chairperson is the only board member authorized to speak for the board other than in specifically authorized instances.

1. The duty of the chairperson is to see that the board operates consistent with state law, administrative rules, and its own policies.

   A. The board agenda will be the responsibility and be coordinated by the chairperson.

   B. Meeting discussion content will only be those issues which, according to board policy, clearly belong to the board and not the executive director, or in a board member's opinion, may deal with fiduciary responsibilities.

   C. Deliberation will be fair, open, and thorough, but also efficient, timely, orderly, and brief.

   D. The chairperson shall appoint a parliamentarian.

2. The authority of the chairperson consists in making decisions that fall within the topics covered by board policies on Governance Process and Board-Executive Director Relationship, except where the board specifically delegates portions of this authority to others. The chairperson is authorized to use any reasonable interpretation of the provisions in these policies.

   A. The chairperson is empowered to chair board meetings with all the commonly accepted authority of that position (e.g., ruling, recognizing).

   B. The chairperson has no authority to make decisions about policies created by the board within Ends and Executive Limitations policy areas. Therefore, the chairperson has no authority to supervise or direct the executive director.

   C. The chairperson may represent the board to outside parties in announcing board-stated positions and in stating chairperson decisions and interpretations within the area delegated to the chairperson.

   D. The chairperson is authorized, in consultation with the RIO Executive Director, to grant approval for international travel by SIB members and to keep the board informed on travel requests.

   E. The chairperson is authorized, in consultation with the RIO Executive Director, to grant approval for domestic due diligence visits by SIB members and it shall be the responsibility of the traveling board member to report to the SIB on the results of the due diligence visits.

POLICY TYPE: GOVERNANCE PROCESS

POLICY TITLE: BOARD COMMITTEE PRINCIPLES

Unless specifically provided by governance policy, board committees will be assigned so as to minimally interfere with the wholeness of the board's job and so as never to interfere with delegation from board to executive director. Board committees will be used sparingly.

1. Board committees are to help the board do its job, not to help the staff do its job. Committees ordinarily will assist the board by preparing policy alternatives and implications for board deliberation. Board committees are created to advise the board, not the staff.

2. Board committees may not speak or act for the board except when formally given such authority for specific and time-limited purposes. Expectations and authority will be carefully stated in order not to conflict with authority delegated to the executive director.

3. Board committees cannot exercise authority over staff however committees will make requests of staff through the executive director unless staff is assigned to the committee. Because the executive director works for the full board, he or she will not be required to obtain approval of a board committee before an executive action. In keeping with the board's broader focus, board committees will normally not have direct dealings with current staff operations.

4. Board committees are to avoid over-identification with the committee’s assignment. Therefore, a board committee which has helped the board create policy will not be used to monitor organizational performance on that policy.

5. This policy applies only to committees which are formed by board action, whether or not the committees include non-board members. It does not apply to committees formed under the authority of the executive director.

6. The chairperson will appoint board committees authorized by the board. The operational life span of a board committee will be defined at the time of appointment.

Policy Implemented: June 23, 2995.
Amended: November 22, 1996, February 27, 2015
POLICY TYPE: GOVERNANCE PROCESS

POLICY TITLE: STANDING COMMITTEES

The board's standing committee is that which is set forth in this policy as follows:

1. Audit Committee
   
   A. The audit committee shall operate under the terms of a charter approved by the board.

INTRODUCTION

An Audit Committee has been established as a standing committee of the State Investment Board (SIB). The Audit Committee will assist the SIB in carrying out its oversight responsibilities as they relate to the Retirement and Investment Office (RIO) internal and external audit programs, including financial and other reporting practices, internal controls, and compliance with laws, regulations, and ethics.

The primary objective of the internal audit function is to assist the SIB and management in the effective discharge of their responsibilities. To this end, internal auditing will furnish them with analyses, appraisals, recommendations, and pertinent information concerning the activities reviewed.

Functions and units within RIO will be reviewed at appropriate intervals to determine whether they are effectively carrying out their responsibilities of planning, organizing, directing, and controlling in accordance with SIB and management instructions, applicable laws, policies, and procedures, and in a manner consistent with both the RIO objectives and high standards of administrative practice.

POLICY OF THE STATE INVESTMENT BOARD

The audit staff shall have full, free, and unrestricted access to all RIO activities, records, property, and personnel relative to the subject under review. The audit function will be conducted in a manner consistent with acceptable professional standards and coordinated with others to best achieve the audit objectives and the RIO objectives.

The Internal Audit Services Unit is responsible for developing and directing a broad, comprehensive program of internal auditing within RIO. The Internal Audit Services Unit will report administratively to management and functionally to the Audit Committee of the SIB.

The RIO unit supervisors are responsible for seeing that corrective action on reported weaknesses is either planned or taken within 30 days from the receipt of a report disclosing those weaknesses if known or applicable. The unit supervisors are also responsible for seeing that a written report of action planned or completed is sent to the executive director. If a plan for action is reported, a second report shall be made promptly upon completion of the plan.

To accomplish its job outputs with a governance style consistent with board policies, the board will strive to follow a biennial agenda, which (a) completes a re-exploration of Ends policies annually and (b) continually improves its performance through attention to board education and to enriched input and deliberation.

1. A biennial calendar will be developed.

2. The cycle will conclude each year on the last day of June in order that administrative budgeting can be based on accomplishing a one-year segment of the most recent board long-range vision.
   A. In the first three months of the new cycle, the board will strive to develop its agenda for the ensuing one-year period.
   B. Scheduled monitoring will be used to evaluate and adjust the annual agenda as needed.

3. Education, input, and deliberation will receive paramount attention in structuring the series of meetings and other board activities during the year.
   A. To the extent feasible, the board will strive to identify those areas of education and input needed to increase the level of wisdom and forethought it can give to subsequent choices.
   B. A board education plan will be developed during July and August of each year.

4. The sequence derived from this process for the board planning year ending June 30 is as follows:
   A. July: Election of officers, appoints audit committee, plan annual agenda, begin to develop board education plan, and new board member orientation.
   B. August: Investment Director review of investment results, establish investment work plan, add investment education to education plan, and continue new board member orientation.
   D. October: Annual meeting for evaluation of RIO vs. Ends policies and annual board evaluation.
   E. November: Investment Director report on investment work plan.
   F. January: During second year of the biennium, begin to develop Ends policies for the coming biennium for budget purposes.
   G. February: Investment Director report on investment work plan. Evaluation of Executive Director.
   H. March: During first year of biennium, set budget guidelines for budget development.
   I. May: Investment Director report on investment work plan.

Amended: September 26, 2014, February 27, 2015.
The following will be the Code of Ethical Responsibility for the SIB:

1. SIB members owe a duty to conduct themselves so as to inspire the confidence, respect, and trust of the SIB members and to strive to avoid not only professional impropriety but also the appearance of impropriety.

2. SIB members should perform the duties of their offices impartially and diligently. SIB members are expected to fulfill their responsibilities in accord with the intent of all applicable laws and regulations and to refrain from any form of dishonest or unethical conduct. Board members should be unswayed by partisan interest, public sentiment, or fear of criticism.

3. Conflicts of interest and the appearance of impropriety shall be avoided by SIB members. Board members must not allow their family, social, professional, or other relationships to influence their judgment in discharging their responsibilities. Board members must refrain from financial and business dealings that tend to reflect adversely on their duties. If a conflict of interest unavoidably arises, the board member shall immediately disclose the conflict to the SIB. A board member must abstain in those situations where the board member is faced with taking some official action regarding property or a contract in which the board member has a personal interest. Conflicts of interest to be avoided include, but are not limited to: receiving consideration for advice over which the board member has any direct or indirect control, acting as an agent or attorney for a person in a transaction involving the board, and participation in any transaction involving for which the board member has acquired information unavailable to the general public, through participation on the board.

“Conflict of Interest” means a situation in which a board member or staff member has a direct and substantial personal or financial interest in a matter with also involves the member’s fiduciary responsibility.

4. The board should not unnecessarily retain consultants. The hiring of consultants shall be based on merit, avoiding nepotism and preference based upon considerations other than merit that may occur for any reason, including prior working relationships. The compensation of such consultants shall not exceed the fair value of services rendered.

5. Board members must abide by North Dakota Century code 21-10-09, which reads: “No member, officer, agent, or employee of the state investment board shall profit in any manner from transactions on behalf of the funds. Any person violating any of the provisions of this section shall be guilty of a Class A misdemeanor.”

6. Board members shall perform their respective duties in a manner that satisfies their fiduciary responsibilities.

7. All activities and transactions performed on behalf of public pension funds must be for the exclusive purpose of providing benefits to plan participants and defraying reasonable expenses of administering the plan.
8. **Prohibited transactions.** Prohibited transactions are those involving self-dealing. Self-dealing refers to the fiduciary’s use of plan assets or material, non-public information for personal gain; engaging in transactions on behalf of parties whose interests are adverse to the plan; or receiving personal consideration in connection with any planned transaction.

9. Violation of these rules may result in an official reprimand from the SIB. No reprimand may be issued until the board member or employee has had the opportunity to be heard by the board.

10. Board Members are required to affirm their understanding of this policy annually, in writing, and must disclose any conflicts of interest that may arise (See Exhibit B-I).

**Policy Implemented:** June 23, 1995.
The board is responsible for:

1. Proper exercise of fiduciary investment authority by RIO.
2. The determination of policies.
3. The investment and disposition of property held in a fiduciary capacity.
4. The direction and review of the actions of all officers, employees, and committees in the exercise of the board's delegated fiduciary authority.

New policies or policy amendments may be proposed by the Executive Director or a Board member. All new policies or amendments may be submitted to the Board’s Legal Counsel for drafting in the approved style.

Upon request of the Executive Director or a Board member a new policy or amendment shall be placed on the Board’s agenda for action as follows:

1. Introduction and first reading. A brief explanation or summary of the new policy or amendment shall be presented to the Board. Upon approval of introduction and first reading, the measure shall be placed on the agenda of the next scheduled meeting of the Board for second reading and adoption. When appropriate, the measure shall be distributed to interested parties.

2. Second reading and adoption. Interested parties and the public shall be allowed an opportunity to comment on the policy or amendment before final action by the Board. The measure shall take effect immediately following second reading and adoption by the Board, unless a different effective date is stated.

3. Amendments. Amendments may be proposed at any time before final adoption of the measure. Upon determination by the Board that adoption of an amendment constitutes a substantive change that significantly changes the meaning or effect of the measure, the Board shall continue consideration of second reading and adoption to the next meeting to permit further review and comment.

Emergency measures. The Board may, upon determination that an emergency or other circumstances calling for expeditious action exists, waive the requirement of a second meeting and immediately approve second reading and adoption following introduction and first reading.

Policy Implemented: February 27, 2009
Memorandum

To: State Investment Board
From: RIO Compliance Officer
Date: July 1, 20--
RE: Annual Affirmation of Code of Conduct Policy

Governance Process Policy B-8, Board Members’ Code of Conduct, which is attached to this memorandum, details the Code of Ethical Responsibility for the SIB. Item #10 of this policy indicates that each Board Member is required to reaffirm their understanding of this policy annually and disclose any conflicts of interest. Therefore, please read and sign the statement below to comply with this requirement.

“I have read and understand SIB Governance Process Policy B-8 Board Members’ Code of Conduct. I have disclosed any conflicts of interest as required by this policy.”

Name (printed) __________________________________________

Signature______________________________________________

Date__________________________________________________

Detail of any conflicts of interest (if any):
POLICY TYPE: BOARD-STAFF RELATIONSHIP

POLICY TITLE: CHIEF EXECUTIVE ROLE

The executive director, as chief executive officer, is accountable to the board acting as a body. The board will instruct the executive director through these written policies, delegating to the executive director the implementation and administration of these policies.

POLICY TYPE: BOARD-STAFF RELATIONSHIP

POLICY TITLE: DELEGATION TO THE EXECUTIVE DIRECTOR

All board authority delegated to staff is delegated through the executive director.

1. The board authority will direct the executive director to achieve specified results, for specified recipients, at a specified cost through the establishment of *Ends* policies. The board will limit the latitude the Executive Director may exercise in practices, methods, conduct, and other “means” to the *Ends* through establishment of *Executive Limitations* policies.

2. The Executive Director must use reasonable judgment in the implementation or administration of the board’s *Ends* and *Executive Limitations* policies; the executive director is authorized to establish practices, and develop activities.

3. The board may change its *Ends* and *Executive Limitations* policies. By so doing, the board changes the latitude of choice given to the Executive Director. If any particular delegation is in place, the board and its members will respect and support the Executive Director’s choices, provided that the Executive Director’s choice is consistent with the board’s fiduciary responsibility.

4. Only decisions of the board acting as the body are binding upon the Executive Director.
   a. Decisions or instructions of individual board members, officers, or committees are not binding on the Executive Director except in rare instances when the board has specifically authorized such exercise of authority.
   b. In the case of board members or committees requesting information, other than a public record, or assistance without board authorization, the Executive Director may refuse such requests that require a material amount of staff time or funds or is disruptive.

5. The Executive Director will be responsible for the hiring, termination, and annual evaluation of all employees of the Retirement and Investment Office.

Amended: November 22, 1996; November 19, 1999.
POLICY TYPE: BOARD-STAFF RELATIONSHIP

POLICY TITLE: EXECUTIVE DIRECTOR JOB DESCRIPTION

As the board's single official link to the operating organization, the executive director's performance will be considered to be synonymous with the RIO's total performance.

Consequently, the executive director's job contributions can be stated as performance in the following areas:

1. Organizational accomplishment of the provisions of board policies on *Ends*.

2. Organizational operation within the boundaries of prudence and ethics established in board policies on *Executive Limitations*.

3. Maintain accurate records of the proceedings of the SIB and TFFR Board.

POLICY TYPE: BOARD-STAFF RELATIONSHIP

POLICY TITLE: MONITORING EXECUTIVE PERFORMANCE

Monitoring executive performance is synonymous with monitoring organizational performance against board policies on *Ends* and on *Executive Limitations*. Any evaluation of the executive director's performance, formal or informal, may be derived only from these monitoring data.

1. The purpose of monitoring is simply to determine the degree to which board policies are being fulfilled. Information which does not do this will not be considered to be monitoring. Only a minimum amount of board time as necessary will be devoted toward monitoring so that meetings can best be used to create the future rather than to review the past.

2. A given policy may be monitored in one or more of three ways:

   A. Internal report: Disclosure of compliance information to the board from the executive director.

   B. External report: Discovery of compliance information by a disinterested, external auditor, inspector or judge who is selected by and reports directly to the board. Such reports must assess executive performance only against policies of the board, not those of the external party unless the board has previously indicated that party's opinion to be the standard.

   C. Direct board inspection: Discovery of compliance information by a board member, a committee, or the board as a whole. This is a board inspection of documents, activities, or circumstances directed by the board which allows a "prudent person" test of policy compliance.

3. The board will monitor each *Ends* and *Executive Limitations* policy according to the following frequency and method:

   Quarterly internal reports for policies:

   A-2 Staff Relations
   A-4 Budgeting
   A-5 Financial Condition
   D-3 Investment Services
   D-4 Investment Performance

   Annual external reports for policies:

   A-2 Staff Relations
   A-4 Budgeting
   A-7 Asset Protection
   D-3 Investment Services
   D-4 Investment Performance
Annual internal reports for policies:

A-1 General Executive Constraint
A-3 Relating to Public and Government
A-8 Compensation and Benefits
A-9 Conflict of Interest

4. The Executive Director will submit required monitoring reports at regular meetings of the board. The board will act on those reports by voting on one of the following motions:

A. A motion to accept the report.

B. A motion to conditionally accept the report, with a statement of the revisions or additional information that is necessary for the report to be accepted without condition.

The internal audit staff will be responsible for preparing an annual summary of the board’s action concerning required reports submitted by the Executive Director, and the summary will be made available as a part of the formal evaluation of the Executive Director.

5. Each March the board will conduct a formal evaluation of the executive director/investment officer. This evaluation will be based on accomplishments of Ends and Compliance with Executive Limitations.

6. 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 salary for the executive director/investment officer.

In making its recommendation, the committee will consider job performance as evidenced by the annual summary of the periodic monitoring reports, the Retirement and Investment Office budget status, the annual Public Pension System's Compensation Survey, the annual National Association of State Investment Officer's survey, the legislature's approved salary increases for state employees, the North Dakota market compensation for comparable positions, and other data or information considered relevant by the committee.

The committee's recommendation will be placed on the May board meeting agenda for possible action by the board. Final action by the board will be accomplished no later than the June board meeting.

Policy Implemented: June 23, 1995
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**EXHIBITS**

*Organizational Beneficiaries* ............................................................... *D-I*

*Monitoring Summary* .................................................................................. *D-II*
The Retirement and Investment Office exists in order that:

- SIB clients receive investment returns, consistent with their written investment policies and market variables, in a cost effective manner and under the Prudent Investor Rule.

- Potential SIB clients have access to information regarding the investment services provided by the SIB.

- TFFR benefit recipients receive their retirement benefits in a cost effective and timely manner.

- TFFR members have access to information which will allow them to become knowledgeable about the issues and process of retirement.

- SIB clients and TFFR benefit recipients receive satisfactory services from the boards and staff of the office.

POLICY TYPE: ENDS

POLICY TITLE: ORGANIZATIONAL BENEFICIARIES

RIO beneficiaries (clients) are those which are statutorily defined and those which have contracted for services under statutory authority. Exhibit D-I lists the organizational beneficiaries.

The Retirement and Investment Office exists in order that:

1. SIB clients receive investment returns, consistent with their written investment policies and market variables, in a cost-effective manner and under the Prudent Investor Rule.

   A. This “End” will be evaluated based on the following:

      1. Comparison of client fund’s rate of return NET of fees and expenses, to that of the client’s policy benchmark over a minimum evaluation period of 5 years.

      2. Comparison of the client fund’s risk, measured by standard deviation of NET returns, to that of the client’s policy benchmark over a minimum evaluation period of 5 years.

      3. Comparison of the risk adjusted performance of the client fund, NET of fees and expenses, to that of the client’s policy benchmark over a minimum evaluation period of 5 years.

**Policy Implemented**: October 27, 1995.

POLICY TYPE: ENDS

POLICY TITLE: INFORMATION ON AVAILABLE SERVICES

The Retirement and Investment Office exists in order that:

1. Potential SIB clients have access to information regarding the investment services provided by the SIB.

The Retirement and Investment Office exists in order that:

1. TFFR benefit recipients receive their retirement benefits in a cost-effective and timely manner.

   A. Retirement program performance quality will be measured against the Ends and retirement policies and administrative rules adopted by the Teachers' Fund for Retirement Board.

**Policy Implemented:** October 27, 1995.
The Retirement and Investment Office exists in order that:

1. TFFR members have access to information which will allow them to become knowledgeable about the issues and process of retirement.

**Policy Implemented:** October 27, 1995.
POLICY TYPE: ENDS

POLICY TITLE: CUSTOMER SATISFACTION

The Retirement and Investment Office exists in order that:

1. SIB clients and TFFR benefit recipients receive satisfactory services from the boards and staff of the office.

   A. The quality of services will be assured by direct board contact and by surveying clients and beneficiaries at least annually and promptly addressing identified client/beneficiary concerns.

Policy Implemented: December 1, 1995.
ORGANIZATIONAL BENEFICIARIES

INVESTMENT CLIENTS:

Statutory:

1. Budget Stabilization Fund
2. Cultural Endowment Fund
3. Insurance Regulatory Trust Fund
4. Petroleum Tank Release Compensation Fund
5. Public Employees Retirement System Fund
6. Risk Management Fund
7. State Bonding Fund
8. State Fire and Tornado Fund
9. Teachers’ Fund for Retirement
10. The Legacy Fund
11. Workforce Safety & Insurance Fund

Contractual:

1. City of Bismarck Deferred Sick Leave Fund
2. City of Bismarck Employees Retirement Fund
3. City of Bismarck Police Retirement Fund
4. City of Fargo Dome Permanent Fund
5. City of Grand Forks Park District Pension Fund
6. City of Grand Forks Pension Fund
7. ND Association of Counties Fund
8. ND Job Service Retirement Fund
9. Public Employees Retirement System Group Health Insurance Fund
10. Public Employees Retirement System Retiree Health Insurance Fund
11. Board of Medicine
12. Center for Tobacco Prevention & Control

ADMINISTRATIVE CLIENTS:

Statutory:

1. Teachers’ Fund for Retirement Beneficiaries

Amended: July 24, 2015
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Audit Supervisor = Report to State Investment Board Audit Committee with a Summary Report to the SIB  
FYE = Fiscal Year End CYE = Calendar Year End N/A = Not Applicable Amended September 26, 2014
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EXHIBITS

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POLICY TYPE: INVESTMENTS

POLICY TITLE: FIDUCIARY DUTIES

By virtue of the responsibilities assigned to the SIB by North Dakota Century Code Chapter 21-10, the members of the SIB are fiduciaries for twelve statutory funds. Through contractual obligations, fiduciary responsibility extends to eleven additional funds.

A fiduciary is a person who has discretionary authority or management responsibility for assets held in trust to which another has beneficial title or interest. The fiduciary is responsible for knowing the "prudent requirements" for the investment of trust assets. Remedial actions may be assessed against fiduciaries for violations of fiduciary duty.

North Dakota state law provides broad fiduciary guidelines for the SIB members. NDCC 21-10-07 specifies that "the state investment board shall apply the prudent investor rule in investing for funds under its supervision. The "prudent investor rule" means that in making investments, 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."

Procedural prudence is a term that has evolved to describe the appropriate activities of a person (or persons) who act in a fiduciary role. Court decisions to date indicate that procedural prudence is more important in assessing fiduciary activities than actual portfolio performance. A fiduciary cannot be faulted for making the "wrong" decision provided that proper due diligence was performed.

The key to successfully discharging the SIB's fiduciary duties is the establishment of and adherence to proper due diligence procedures. While not bound by ERISA (Employee Retirement and Income Security Act of 1974), the SIB will use the procedural prudence outlined by ERISA as guidance in developing its procedures:

1. An investment policy must be established for each fund and must be in writing.
2. Plan assets must be diversified, unless under the circumstances it would be prudent not to do so.
3. Investment decisions must be made with the skill and care of a prudent expert.
4. Investment performance must be monitored.
5. Investment expenses must be controlled.
6. Prohibited transactions must be avoided.

Amended: May 30, 1997; January 22, 1999; February 27, 2009
POLICY TYPE: INVESTMENTS

POLICY TITLE: INVESTMENT PROCESS

The SIB believes that an investment program must be built and managed like any good business, with a clear statement of mission, overall objectives, roles and responsibilities, and policies and guidelines. Major issues to be faced by the SIB will revolve around:

Asset allocation targets:

- Setting appropriate benchmarks.
- Finding the right managers.
- Monitoring the program.
- Searching for appropriate new opportunities.

To ensure rigorous attention to all aspects of the investment program, the SIB follows an established investment process. This process, described by the diagram on the following page, involves three phases:

- Investment policy development/modification.
- Implementation/monitoring.
- Evaluation.

The first column of boxes describes the policy development phase, the middle column implementation/monitoring, and the last box on right evaluation. Activities associated with internal entities are shown along the top. Those associated with external entities are shown along the bottom. The middle shows activities that internal and external entities work on together.

INTERNAL ENTITIES

- Specification of Investment Objectives, Constraints, and Preferences
- Development of Asset Allocation and Investment Policy
- Liability Projections Capital Market Expectations Asset Allocation and Asset/Liability Optimizations
- Accounting Auditing Performance and Asset Allocation Reporting Proxy Voting
- Selection of Managers Portfolio Rebalancing
- Evaluation of Managers Evaluation of Costs
- Evaluation of Managers Evaluation of Costs
- Evaluation of Managers Evaluation of Costs
- Evaluation of Managers Evaluation of Costs
- Evaluation of Managers Evaluation of Costs

EXTERNAL ENTITIES

2.1
POLICY TYPE: INVESTMENTS

POLICY TITLE: KEY PROGRAM ENTITIES AND RESPONSIBILITIES

The key responsibilities of the entities involved in the investment program are:

Fund Governing Bodies

1. Establish policy on investment goals and objectives.
2. Establish asset allocation.
3. Hire actuary when required.

SIB

1. Invest funds entrusted by statute and contracted entities.
2. Set policies on appropriate investments and investment practices for entrusted funds.
3. Approve asset allocation and investment policies of participating trust funds.
4. Report the investment performance of the funds to each fund’s governing authority.
5. Hire and terminate money managers, custodians, and consultants.

Investment Officer and RIO Staff

1. Implement investment policies approved by the SIB.
2. Provide research and administrative support for SIB projects.
3. Recommend investment regulations appropriate for governing the investment of entrusted funds.
4. Assist fund governing bodies in developing asset allocation and investment policies.
5. Evaluate money manager adherence to investment objectives.
6. Provide performance reports to the SIB and boards of participating funds.
7. Recommend hiring or terminating money managers, custodians, consultants, and other outside services needed to effectively manage the investment funds.
8. Develop and maintain appropriate accounting policies and systems for the funds entrusted to the SIB.
POLICY TYPE: INVESTMENTS

POLICY TITLE: KEY PROGRAM ENTITIES AND RESPONSIBILITIES

Investment Consultant

1. Measure money manager performance and monitor adherence to investment goals, objectives, and policies.
2. Conduct annual evaluation of program policies and results, and assist in development of annual work plan.
3. Assist in implementation of annual work plan.
4. Conduct asset allocation or asset/liability studies.
5. Conduct requested money manager searches.
6. Assist in development of investment policies and manager structure and rebalancing guidelines.
7. Extension of staff for special projects.

Actuary

1. Assist fund governing bodies in developing benefit and funding policies.
2. Measure actuarial soundness of plan.
3. Perform experience studies as requested by plan sponsor.
4. Provide liability projections as needed.
5. Conduct annual evaluation of program policies and results, and assist in developmental of annual work plan.
6. Assist in implementation of annual work plan.

Auditor

1. Measure, validate, and offer an opinion on agency financial statements and management.
2. Assist in developing appropriate accounting policies and procedures.
3. Bring technical competence, sound business judgment, integrity, and objectivity to the financial reporting process.
Policies and Procedures

POLICY TYPE: INVESTMENTS

POLICY TITLE: KEY PROGRAM ENTITIES AND RESPONSIBILITIES

Master Custodian

1. Provide safekeeping of all securities purchased by managers on behalf of the SIB.
2. Provide global custody services.
3. Collect interest, dividend, and principal payments in a timely manner.
4. Provide for timely settlement of securities.
5. Price all securities and post transactions daily.
6. Maintain short-term investment vehicles for investment of cash not invested by SIB managers. Sweep all manager accounts daily to ensure all available cash is invested.
7. Provide monthly, quarterly, and annual accounting reports for posting to RIO’s general ledger.
8. May manage a securities lending program to enhance income.
9. Provide electronic access to accounting reports.
10. Provide other services that assist with the monitoring of managers and investments.

Portfolio Managers

1. Manage portfolios as assigned by the SIB.
2. Provide liquidity, as required, in a timely and cost-efficient manner.
3. Vote proxies.
4. Provide educational assistance to board.

Amended: February 27, 2009
POLICY TYPE: INVESTMENTS

POLICY TITLE: INVESTMENT POLICY DEVELOPMENT – TRUST FUNDS

All funds under SIB management must have a written investment policy. Investment policy forms the cornerstone of the management of any investment program. A sound investment policy ensures that fund assets are managed in a disciplined process, based on long-term fundamental investment principles.

For the larger, more complex trust funds, consultants are used to assist in policy and asset allocation development. Their specialized skills are needed to model and analyze the many variables that go into determining a proper asset allocation.

Policy development starts with the specification of investment objectives, constraints, and preferences. Fund trustees must address a number of factors:

- What is the fund's objective(s)?
- What is the board's tolerance for risk or threshold for under-performance?
- What are the fund's liquidity needs and cash flow characteristics?
- What are the board's asset class preferences and constraints?
- What is the actuarial earnings assumption?
- What are the legal or political considerations?
- What is the investment time horizon?

Since the ultimate objective of fund investments is to provide for the payment of future capital needs, claims, or other monetary requirements, it is essential that the investment policy be developed within the context of fund liabilities or spending policy. The development of investment policy, therefore, is always unique to the circumstances of each fund.

Complex actuarial models are used to quantify the liabilities of the pension plans and Workforce Safety and Insurance. Internal entities develop cash flow forecasts for the smaller funds based on past claims or anticipated expenditures.

Asset allocation optimizations are used to quantify the range of future investment outcomes. Investment consultants contribute needed expertise on capital market expectations and in identifying the risks associated with a particular asset allocation.

For some funds, the risk/return tradeoffs of alternative portfolios are not well represented by expected returns and standard deviation. More important are the expected results for required sponsor and participant contributions and funded ratios over time. Asset/liability modeling is the tool that allows the governing boards to examine and assess the tradeoffs leading to an appropriate investment policy.

The results of the optimizations are a description of the range of financial results that might realistically be expected to occur. These results provide the basis for determining an asset allocation.
In accordance with NDCC 21-10-02.1, RIO staff works with each fund's governing authority, and consultants as needed, to develop an investment policy, which includes an appropriate asset allocation, for each of the statutory funds. Contracted entities are responsible for their own policy development.

Each policy, as a minimum, will include the following information:

1. Fund characteristics and constraints.
   a. An explanation as to the purpose of the portfolio and its legal structure.
   b. Size of portfolio and the likelihood and amount of future contributions and disbursements
   c. Participant demographics when applicable.
   d. Fiscal health of fund.
   e. Constraints.
   f. Unique circumstances.

2. Responsibilities of SIB.

3. Investment objectives.


5. Asset allocation policy and guidelines.


**Policy Implemented:** September 20, 1995.

**Amended:** February 27, 2009
POLICY TYPE: INVESTMENTS

POLICY TITLE: INVESTMENT POLICY DEVELOPMENT – INVESTMENT POOLS

The SIB does no in-house investment of funds. All investment activity is delegated to outside money managers. Within each asset class there are numerous manager styles (i.e. market sector specializations) that may be employed by the SIB to affect exposure to the various asset classes.

SIB investment pool policy statements will define the following for each asset class:

1. Strategic objectives.

2. Performance objectives.
   a. Appropriate capital market benchmarks.
   b. Excess return targets, after payment of investment management fees.
   c. Peer-group ranking.
   d. Risk characteristics.
   e. Termination factors.

3. Portfolio constraints.
   b. Quality held (maximum in company/industry/economic sector).
   c. Other specific restrictions if applicable (ADRs, 144A securities, prohibited transactions, etc.).

4. Investment structure.
   a. Percent of assets per manager cycle.
   b. Ranges for rebalancing.

5. Control Procedures
   a. Duties and responsibilities of the SIB
   b. Duties and responsibilities of money managers.
   c. Reporting requirements.

Amended: February 27, 2009
The SIB will ensure that appropriate monitoring mechanisms are in place at all times. The three basic mechanisms are:

- Accounting
- Auditing
- Performance Measurement

The primary objective of these functions is to provide useful information to decision makers (fiduciaries and legislators). These monitoring functions are needed to keep track of assets and manager activity and to control the asset mix. Different aspects of these activities will be conducted internally by RIO staff and externally by the master custodian, auditors, and investment consultants.

**Accounting**

The master custodian will provide RIO staff with such accounting detail and at such frequency as the staff deems necessary to fulfill the SIB’s reporting requirements.

From this information, RIO accounting staff will generate monthly and annual financial statements for each of the trust funds managed by the SIB.

RIO management is responsible to ensure the proper valuation of all assets. Formal valuation policies must be developed and implemented utilizing industry best practices and GAAP accounting requirements.

**Compliance**

RIO management is responsible for developing and implementing compliance procedures utilizing industry best practices. A summary of compliance procedures and results will be presented to the SIB annually.

**Auditing**

The North Dakota State Auditor is responsible for the external audit of RIO. They may assign this responsibility to an outside firm which they select by way of the RFP process. The SIB Audit Committee may make recommendations to the State Auditor concerning the selection, evaluation, and termination of this firm. This firm conducts an extensive financial and management audit for each fiscal year. The audited financial statements are filed with the Legislative Audit and Fiscal Review Committee.

RIO has a dedicated internal audit function that reports to the SIB Audit Committee. The internal audit function encompasses both the investment and retirement divisions of RIO. The SIB Audit Committee has oversight responsibilities as outlined in the SIB Audit Committee charter.

**Performance Measurement and Reporting**

The third element of monitoring entails measuring the performance of the individual investment managers and the total fund performance of each of the funds under the SIB. The SIB will retain reputable investment consultants or performance measurement services to provide comprehensive quarterly performance measurement information. This information will include data on the capital markets, other plan sponsors, and other investment managers. Performance results for SIB accounts will be calculated from data provided by the master custodian and compared to relevant capital market benchmarks, other public funds, manager peer groups, and investment goals specified in the asset class investment policy. Time periods covered by the report may vary but generally will include the most recent quarter, last 12 months, last three years, five years, and longer time periods (as data is available).
POLICY TYPE: INVESTMENTS

POLICY TITLE: MONITORING

RIO staff will use appropriate sources to compile monthly performance reports for each of the funds under the SIB that show recent performance and asset mix.

Amended: February 27, 2009, February 25, 2011.
POLLICY TYPE: INVESTMENTS

POLICY TITLE: PROXY VOTING

STATEMENT OF POLICY

It shall be the policy of the State Investment Board (SIB) to vote all proxies appurtenant to shares held in the various plans administered by the Board, and to vote said shares in a manner that best serves the system's interests. Specifically, all shares are to be voted with the interest of preserving or enhancing share value. The Board endorses the Department of Labor opinion that proxies have economic power which shareholders are obligated to exercise to improve corporate performance. The Board further recognized that proxy issues are frequently complex, requiring expert guidance; accordingly, it has adopted procedures that employ such experts.

The objectives of these policies are as follows:

1. Exercise the value empowered in proxies.
2. Maintain or improve share value for the exclusive benefit of the participants.
3. Achieve changes for the common good whenever these do not conflict with the exclusive benefit objective.

PROCEDURES

DISTINCTION OF RESPONSIBILITIES

Master Custodian

The system's master custodian shall be responsible for timely receipt and distribution of proxy ballots to the appropriate investment management institutions.

Managers

The managers shall be responsible for promptly voting all proxies pursuant to the Board's policies, and in keeping with the managers' best judgments.

Staff

Staff, in concert with the master custodian and the managers, shall be responsible for monitoring the receipt and voting of all proxies.

Board

The Board shall administer and enforce its policies. This administration and enforcement requires reporting from responsible persons, as discussed in the following.
POLICY TYPE: INVESTMENTS

POLICY TITLE: PROXY VOTING

REPORTING

Master Custodian

The master custodian shall report quarterly in writing on all pertinent proxy issues, including (1) receipt of proxy material; (2) nature of issues; (3) due date; (4) names of managers and dates forwarded; and (5) deficiency reports covering proxies that should have been received but were not.

Managers

Managers shall report quarterly in writing on how proxies have been voted, with explanations given whenever the Board's guidelines have not been followed.

Staff

Internal audit staff shall report annually on the efficiency of the process, the portion of total proxies that have actually been voted, and compliance with Board directives.

GUIDELINES

The Board believes that good corporate investment decisions require good corporate governance, and that social responsibilities cannot be ignored in these decision processes. Accordingly, the practice of faithfully voting with management will not be tolerated, nor will the "Wall Street Rule" which advocates the sale of shares if there is disagreement with management.

In keeping with the Board's philosophy, the managers are encouraged to vote for proposals that increase or enhance the following, and against those that decrease or diminish the same:

- Health of the population
- Environmental conditions
- Management and Board accountability
- Abolition of management entrenchment
- Control of executive compensation
- Shareholder rights and ownership
- Fair labor practices

Guidelines may be altered periodically by the Board as situations warrant.

Amended: February 27, 2009
POLICY TYPE: INVESTMENTS

POLICY TITLE: IMPLEMENTATION – INVESTMENT MANAGER SELECTION

The SIB hires investment managers with the intention of maintaining long-standing relationships. Care is taken to select managers for defined roles based on their strengths in designated areas. The hiring process is done in accordance with all applicable state and federal laws.

Some manager selections are conducted by the consultant while others may be directed by the staff in coordination with the SIB. Ultimately, the selection process is often a team effort involving the investment consultants, SIB members, and RIO staff. A consultant may be invaluable in this activity due to the large volume of data that needs to be collected, verified, and summarized. Also, their ongoing dialogue with money management firms provides useful qualitative input.

The investment management business has rapidly evolved since the 1990’s. It is recognized that many viable firms have been formed as the result of spin-offs or start-ups and may not have a traditional long-term investment performance history in accordance with the following guidelines. There has also been a tremendous increase in the types of strategies available to institutional investors resulting in the need for flexibility in the establishment of investment criteria. Subject to the case-by-case acceptance of deviation by the SIB members, money managers must meet the following minimum selection criteria for inclusion in a manager search:

- Must be a registered investment adviser, bank, insurance company, or investment company (mutual fund). Should provide ADV Part II (registered investment adviser) prospectus (investment company) or comparable information (bank or insurance company).
- Provide at least five years of actual quarterly performance data that is time weighted a representative composite of accounts, and meets Global Investment Performance Standards (GIPS).
- Provide information that illustrates the key investment personnel have been together for at least five years and the capabilities of the firm can handle the current level of investment activity.
- Able to articulate the firm's investment strategies and philosophy in a manner understandable by the Board, and provide a statement that the strategy has been followed for at least five years.
- Disclose any pending or past litigation or censure.
- Be willing to acknowledge their fiduciary status in writing (mutual funds are exempted from this requirement).

The following steps will be followed in the selection process, subject to modification relative to investment strategy and manager search circumstances:

- Develop a profile of the type of manager needed. This is based on the investment goals and asset allocations. Included in the profile are such things as:

  Quantitative characteristics, such as GIPS-compliant composite return data, risk-adjusted rates of return and relevant portfolio characteristics.
POLICY TYPE: INVESTMENTS

POLICY TITLE: IMPLEMENTATION – INVESTMENT MANAGER SELECTION

Qualitative characteristics, such as key personnel, investment philosophy, investment strategy, research orientation, decision making process, and risk controls.

Organizational factors, such as type and size of firm, ownership structure, client servicing capabilities, ability to obtain and retain clients, and fees.

• The Investment Officer will give a written report to the SIB on the due diligence process conducted by the Investment Officer, RIO staff, and the SIB in the manager selection process. This report will include selection steps followed and process steps excluded.

• Consultant and/or staff use the profile to screen their data base for managers that meet SIB criteria.

• Consultant and/or staff reduce the group to the top candidates and prepare a summary report. The report will contain pertinent data on each of the candidates.

• When appropriate, on-site visits may be made by staff and board members to the candidates' home offices. Visits by board members to potential manager sites must have board approval.

• When appropriate the Investment Officer will conduct fact-finding pre-interviews. SIB trustees and RIO staff will receive notice of these pre-interviews.

Interviews are conducted with each of the finalists in Bismarck. All are required to bring the potential portfolio manager to the interview. Particular attention is paid to gaining an understanding of the investment process and determining the manager's compatibility with the SIB's guidelines and objectives.

The Investment Officer will schedule manager interviews with the SIB. Following these interviews, the Investment Officer, with the advice of RIO staff and consultants, will make recommendations to the SIB on manager selection.

• The SIB will select the investment manager by majority vote.

• Manager(s) selected by the SIB are notified immediately by RIO staff. Unsuccessful candidates are notified by consultant.

• Investment management contracts are reviewed and finalized, sent to the Attorney General for approval, and executed.

• Accounts are set up at the master custodian and on the internal general ledger.

• Consultant is notified when to begin the measurement of the investment performance of the manager(s).

Policy Implemented: September 20, 1995
Amended: February 27, 2009
Portfolio Rebalancing

The need to rebalance the portfolio can arise due to a new asset allocation or because market activity has driven the actual distribution of assets away from the desired mix. To minimize transaction costs due to rebalancing, RIO works with the investment consultants to determine appropriate ranges around the target mix (which are specified in the policy statement). Rigidly adhered to, such a policy is a valuable risk control tool. By maintaining asset mix within reasonably tight ranges, the SIB avoids making unintentional "bets" in the asset mix and avoids market-timing decisions.

All of the funds the SIB oversees have an asset allocation with minimum and maximum limits assigned. RIO's rebalancing policy requires the asset mix to be determined at the end of each month. At the end of each quarter, all portfolios deviating from the target beyond the acceptable limits are rebalanced to target.

POLICY TYPE: INVESTMENTS

The SIB will follow an annual evaluation cycle for the investment program to ensure systematic review of investment policies and performance results and the development and implementation of corrective action plans. Evaluation of the program seeks to answer such questions as:

- Are all investment goals being met?
- What has worked and what has not?
- Have changes occurred in the capital markets, plan design, or board philosophy to warrant changes in investment policy?
- Are money managers meeting our expectations?
- Is continued confidence in the money managers warranted?
- Are accounting practices sound and fair to participating funds?
- Is service delivered in the most cost-effective manner?

The SIB’s consultants play a key role in helping to answer some of these questions. The external auditor's report provides insight on accounting practices and cost effectiveness.

Evaluation of Money Managers

Achievement of the SIB's performance goals hinges on the success of the investment strategies and money managers it employs. Evaluation of each money manager must consider the following:

- Has the manager achieved the SIB's performance objectives?
- Has the firm adhered to the investment philosophy for which it was hired?
- Have there been any organizational or personnel changes that may negatively affect future performance?
- Are areas of concern being adequately addressed?
- Can the manager perform well in the future, regardless of whether extraordinary events, long-term performance, and/or short-term performance argue for termination?

These criteria are assessed by quantitative and qualitative means:

- Analyses provided by the investment consultant.
- Annual meetings with each manager in Bismarck to discuss performance, investment philosophy, organizational changes, economic outlook, and areas of concern.
POLICY TYPE: INVESTMENTS

POLICY TITLE: EVALUATION

Longer periods of time are better than shorter time periods when assessing a manager's performance. Ideally, performance should be assessed over a market cycle. Market cycles have varying lengths but have historically averaged 5-7 years. The SIB will use a minimum five-year period to evaluate manager performance against long-term performance standards. Long-term performance standards will be a market index that the manager has previously agreed to be measured against.

Shorter-term performance standards will also be established for each money manager. These standards will incorporate a minimum three-year measurement period and measure the manager against a previously agreed-upon peer group or style market index.

Long-term performance standards, short-term performance standards, extraordinary events, and termination factors will be incorporated in the written asset class investment policies.

Evaluation of Program Costs

Costs will be broken out by internal administration, investment consultants, master custodian, and external manager fees. Reports will detail this information by investment pool, managers, and by fund.

These costs will be compared to other funds on an annual basis. The most reliable source of comparison currently available is the cost survey prepared by the Canadian consulting firm Cost Effectiveness Measurement, Inc. The information contained in this survey is not available anywhere else. Staff is encouraged to identify other cost-comparison sources.

POLICY TYPE: INVESTMENTS

POLICY TITLE: PERFORMANCE RELATED INVESTMENT MANAGER REVIEW

The North Dakota State Investment Board (SIB) recognizes the inherent importance of assessing an investment manager because of performance. Thus, the following process of evaluation includes quantitative and qualitative input. This procedure is structured to assist the SIB in recognizing potentially distressed investment managers, initiating a formal review process, and providing guidelines for termination if necessary. Note: The “Manager Review” terminology or concept is not meant to cause the manager to make substantive changes in investment philosophy, style, or strategies. Rather, it is intended to define a period of close scrutiny of the manager’s activities, circumstances, and investment results.

Factors which may result in a Manager Review:

Significant changes in organizational structure
Significant changes in investment philosophy
Significant deviation in portfolio management from stated philosophy (style drift)
Substandard investment performance
Diminished confidence in manager

Manager Review Procedures:

Information is submitted to, or generated by, the Board which initiates consideration of a Manager Review.

If warranted, the Board takes action to initiate a Manager Review.

Based on the situation and with input from the Investment Director, the SIB suggests appropriate action to facilitate the Review. Action may include telephone conferencing, local or on-site visits with manager, investigation by consultants, appearance of manager before a select committee of the SIB, or appearance of the manager before the SIB. Investment Director initiates investigation of situation based on direction from SIB.

The Investment Director report’s findings to SIB at a subsequent meeting.

After considering findings of the Manager Review, SIB may:

• Remove manager from Review status
• Suggest additional action to facilitate Manager Review
• Relieve manager of duties
POLICY TYPE: INVESTMENTS

POLICY TITLE: PERFORMANCE RELATED INVESTMENT MANAGER REVIEW

In the case where continued investigation is warranted, the Investment Director will report new information and/or recommendations to the SIB as appropriate. It will be considered the responsibility of the Investment Director to maintain awareness and consideration of the Review until the situation is resolved.

It is important to recognize that situations occasionally arise of such a serious nature that a Manager Review process must be immediately initiated. In such cases, the Investment Director is granted the authority to place an investment manager under Review, including the freezing of assets if necessary, and report on such action at the next meeting of the State Investment Board.

In every case, the Investment Director is responsible for documenting the Manager Review process including recognition of:

- Reason of Manager Review
- Action taken to investigate the situation
- Report on results of investigation
- Report on resultant action taken by SIB
- Notification of investigation and conclusions to manager and consultants

A complete record of Manager Review activities and history shall be maintained at the ND Retirement and Investment Office.

Policy Implemented: June 27, 1997.
The SIB has a commitment to the Bank of North Dakota Match Loan Program. The purpose of the program is to encourage and attract financially strong companies to North Dakota. The program is targeted to manufacturing, processing and value-added industries.

The SIB provides capital to the program by purchasing Certificates of Deposit (CD's) from the Bank of North Dakota. The CD's are guaranteed by the state, typically have seven to fifteen year maturities and pay interest pegged to US Treasury notes.

The source of funding for CD's shall be determined by the Investment Director; that funding to be from the most appropriate source consistent with liquidity and relative yield and return objectives and constraints.

Amended: February 27, 2009
POLICY TYPE: INVESTMENTS

POLICY TITLE: ACCEPTING NEW CLIENTS

NDCC 21-10-06 states “The state investment board may provide investment services to, and manage the money of, any agency, institution, or political subdivision of the state, subject to agreement with the industrial commission. The scope of services to be provided by the state investment board to the agency, institution, or political subdivision must be specified in a written contract. The state investment board may charge a fee for providing investment services and any revenue collected must be deposited in the state retirement and investment fund.”

When a request is received by staff from a potential new investor requesting investment services from the State Investment (SIB), the following steps shall be followed.

1. Staff will conduct initial discussions with the potential client regarding type of fund, risk tolerance, size of fund, services to be provided, costs, etc.

2. Staff will recommend that an Asset/Liability study be conducted by the potential client if one has not been done recently. This discussion will include a description of the asset classes available for investment with the SIB to be included in their study.

3. If the potential client is still interested in participating in the SIB program, staff will bring the preliminary request to the SIB for acceptance. It shall be the policy of the SIB to take the following into consideration when determining if a new investor request will be accepted.

   a. Internal staff administrative capacity.
   b. Compatibility of new investor’s goals and risk tolerances with the existing SIB program structure.
   c. Whatever other factors the SIB determines to be appropriate to the decision.

4. If the SIB chooses to accept the preliminary request, staff will provide the necessary template documents to the potential client for review and completion. These documents include a contract for services and investment guidelines.

5. Once documentation is completed, staff will request to have the issue included on the Industrial Commission’s agenda for their approval. Copies of all documentation will be provided for their review.

6. If approved by the Industrial Commission, final documentation will be presented to the SIB for final acceptance.

7. If accepted, staff will work with the new client to set up transfer of funds and implementation of asset allocation as directed. All new clients will be brought in as of the last day of a calendar quarter.

8. Fees will be charged with the intention of covering all associated costs as described in RIO Fiscal Management procedure “Investment Fee Allocations”.

Policy Implemented: November 20, 2009
GENERAL PURPOSE

1. The North Dakota State Investment Board (“SIB”) is a fiduciary for assets held in trust for the benefit of SIB clients’ including their beneficiaries and to defray expenses of administration of their respective investment funds.

2. In order to carry out its fiduciary duty to prudently invest and diversify the assets of the various investment funds, the SIB invests considerable assets in global public securities markets.

3. The efficient and effective deployment of plan assets requires that in seeking returns market risks must be prudently assumed and managed. Investing in publicly-traded securities in regulated markets under accounting, disclosure and business practice laws and regulations provides general, but not perfect assurance that the information forming the basis for investments is accurate, conforms with accepted accounting practices, and is not distorted due to misfeasance, malfeasance or nonfeasance, or the timing of information disclosures by persons or entities with the ability to affect market prices of the investment securities.

4. Legal action is sometimes necessary to attempt to recover all or part of losses the fund may incur due to alleged improper action or inaction that results in the impairment of the value of the fund’s security holdings.

5. Most such actions will be prosecuted by the class action bar whether or not the SIB takes an active role as a plaintiff or a passive role as a member of a certified class of plaintiffs. Any ultimate award or settlement from a class action filing will be ratably allocated among legitimate claimants.

6. The SIB will generally only consider pursuing active participation in securities actions when such a role is expected to add value by enhancing the prospect for recovery, increasing the amount of recovery, assuring more efficient and effective prosecution of the case, or identifying and addressing corporate governance issues through litigation.

For purposes of this Policy, “active participation” means seeking status as lead plaintiff, co-lead plaintiff, or filing separate legal action.

NON-ACTIVE RECOVERY AND FILING

1. SIB will require as part of its agreement with its custodial bank, that adequate securities class action monitoring is maintained on an ongoing basis, sufficient to assure that most of the actual awards and settlements for such cases are tracked and identified and that proof of claim forms, including supporting documentation, will be properly and timely filed.

2. To augment and enhance coverage, identification and tracking of class-action cases (potential or actual) SIB may engage one or more legal firms that specialize in monitoring and prosecuting security class-action cases; any such engagement is subject to the special appointment requirements of N.D.C.C. § 54-12-08. For these purposes only, such firm(s) may be granted ongoing access to security holdings information through the custodian bank.
3. A monitoring agreement with any law firm for monitoring service access and reporting will not commit SIB to employing said firm in the event that it seeks to represent SIB as an active participant in any securities related litigation. Such representation must be effected by a separate retainer agreement between the SIB and said firm, or another, depending on such factors as the potential monetary scope, the nature of the case and industry specialty that may be required, the allocation of current or past cases among candidate firms, the likely duration and cost of prosecuting such a case, retainer fees or contingency splits, the venue in which the case is to be filed, and other considerations.

4. The custodial bank will be required to provide the Retirement and Investment Office (“RIO”) with periodic reports that detail class action cases monitored, claims filed, and award or settlement distributions received. RIO will maintain these records and provide an update to the SIB with regards to accounting information on distributions received on claims filed by the custodian bank on our behalf.

Active Participation in Cases

1. The Executive Director will initiate active participation in securities cases only upon prior review and approval of the SIB. Before bringing any recommendations to the Board, the Executive Director with significant assistance by legal counsel from the Office of the Attorney General, will assess the merits and prospects for active participation by reference to the criteria and factors outlined in this section.

2. Decision Criteria and Factors:

   a. The decision to participate in an active capacity in security litigation should be based on the totality of the circumstances. Dollar loss amounts are important, but not the sole or overriding factor to consider in making such recommendations by the Executive Director, or determinations by the SIB.

   b. Potential losses to SIB clients must be significant in order to warrant participation as a lead plaintiff, co-lead plaintiff, or separate “opt-out” litigant. Generally, in cases where the potential loss does not exceed the greater of 0.1% of trust assets, the SIB will avoid active participation.

   c. The *prima facia* merits of the claim for loss, and the factual basis for the action, recognizing that the full discovery process will not commence until the class has been certified by the court in which such case is to be filed.

   d. The availability of witnesses, and possible support that may be obtained from investment managers, consultants, and the custodial bank through discovery.

   e. The potential that any defendants or insurers will be able to pay an adequate recovery to the class, without impairing the value of any current security holdings SIB may yet hold in the issuer in the portfolio.

   f. The ability of the law firm recommending action on the part of SIB to prosecute the case effectively, in the venue where such case is likely to be filed, and the experience of the firm in managing such cases individually or in partnership with other firms.
g. Potential long-term benefits from corporate governance changes from pursuing litigation.

h. The ability of SIB to serve as a fiduciary on behalf of all class members in the case, especially in relative terms to other institutional investors that may be considering the same case.

i. Potential costs that may be incurred. Special consideration must be given to any case that must be filed in a non-U.S. venue under the “Morrison” criteria established by the U. S. Supreme Court in a 2010 decision, since costs of litigation and potential liabilities of unsuccessful claims may be significant.

j. Current workload and staffing resources required for the fulfillment of SIB’s primary member service functions, and whether participation might displace time and staff resources needed for core business functions.

3. Decision Criteria and Factors for cases filed in a non-U.S. venue: In addition to the Criteria and Factors set forth in Subsection 2, the SIB may consider the following:

   a. The proposed funding arrangements for the action.

   b. Evaluate the merits and risks of the case in light of the law of the jurisdiction in which the action would be brought.

   c. The role or level of participation in the case by the SIB.

Roles in Managing and Monitoring Litigation

1. The SIB will make the final determination of whether it is in the SIB’s best interest to pursue active participation in any case and whether to engage any law firm and the terms of such engagement.

2. Decisions regarding the conduct and implementation of the Board’s decision to participate will be the responsibility of the Executive Director, or an approved member of the management staff if he so delegates. When feasible and advisable, the Executive Director shall seek advice and direction from the Board on strategic and legal issues that may arise in prosecuting the action on behalf of the SIB and its clients. The Executive Director shall timely report to the Board on the progress of the litigation.

3. The Executive Director shall be responsible for management of the relationship with any portfolio monitoring law firm or organization for such purpose. Based on the need for additional coverage, the Executive Director will determine whether one or several firms are needed to fulfill the goals of this Policy and may terminate such monitoring agreements as judgment advises.

4. Any agreement for portfolio monitoring services that includes a fee or subscription cost must first be approved by the SIB before execution by the Executive Director.

Policy Review

1. The Board shall review this policy at least every three years to ensure that it remains relevant and appropriate.

Policy Implemented: November 20, 2015
State Investment Board (SIB) Members 2015-2016:

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<th>Incumbent</th>
<th>Designation</th>
<th>Term Expiration</th>
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<tr>
<td>Lt. Governor</td>
<td>Drew Wrigley</td>
<td>Ex officio</td>
<td>Open</td>
</tr>
<tr>
<td>State Treasurer</td>
<td>Kelly Schmidt</td>
<td>Ex officio</td>
<td>Open</td>
</tr>
<tr>
<td>State Insurance Commissioner</td>
<td>Adam Hamm</td>
<td>Ex officio</td>
<td>Open</td>
</tr>
<tr>
<td>Commissioner University &amp; School Lands</td>
<td>Lance Gaebe</td>
<td>Appointed</td>
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</tr>
<tr>
<td>Executive Director Workforce Safety &amp; Insurance</td>
<td>Bryan Klipfel</td>
<td>Appointed</td>
<td>N/A</td>
</tr>
<tr>
<td>Trustee, TFFR</td>
<td>Mel Olson</td>
<td>Appointed by TFFR Board</td>
<td>6/30/18</td>
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<tr>
<td>Trustee, TFFR</td>
<td>Michael Gessner</td>
<td>Appointed by TFFR Board</td>
<td>6/30/16</td>
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<tr>
<td>Trustee, TFFR</td>
<td>Rob Lech</td>
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<td>6/30/20</td>
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<tr>
<td>Trustee, PERS</td>
<td>Mike Sandal</td>
<td>Appointed by PERS Board</td>
<td>6/30/17</td>
</tr>
<tr>
<td>Trustee, PERS</td>
<td>Tom Trenbeath</td>
<td>Appointed by PERS Board</td>
<td>6/30/20</td>
</tr>
<tr>
<td>Trustee, PERS</td>
<td>Yvonne Smith</td>
<td>Appointed by PERS Board</td>
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Retirement and Investment Office (RIO) Staff:

<table>
<thead>
<tr>
<th>Position</th>
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<th>Education</th>
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<tbody>
<tr>
<td>Executive Director/</td>
<td>David Hunter</td>
<td>BS, Accounting, Northern Illinois University MBA, Finance, University of Chicago</td>
</tr>
<tr>
<td>Chief Investment Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Investment Officer</td>
<td>Darren Schulz</td>
<td>BBA, Finance, Georgia State University, CFA</td>
</tr>
<tr>
<td>Fiscal and Investment Operations Mgr</td>
<td>Connie Flanagan</td>
<td>BS, Accounting, University of Mary</td>
</tr>
<tr>
<td>Deputy Executive Director/</td>
<td>Fay Kopp</td>
<td>BS, Education, Valley City State University, CRC, CRA</td>
</tr>
<tr>
<td>Chief Retirement Officer</td>
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External

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<tr>
<td>Investment Consultant</td>
<td>Callan Associates Inc.</td>
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<tr>
<td>Actuary (TFFR)</td>
<td>Segal</td>
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<tr>
<td>Auditor</td>
<td>CliftonLarsonAllen</td>
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<tr>
<td>Master/Global Custodian</td>
<td>The Northern Trust Company</td>
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F. TFFR ENDS

Reference: Teachers' Fund for Retirement “Ends”

http://www.nd.gov/rio/SIB/Board/default.htm
G. TRUST FUND INVESTMENT GUIDELINES

Bismarck Deferred Sick Leave
Bismarck Employees
Bismarck Police
Board of Medicine
Bonding
Budget Stabilization
Cultural Endowment Fund
Fargo - FargoDome Permanent Fund
Fire and Tornado
Grand Forks City
Grand Forks Park
Health Care Trust
Insurance Regulatory
Job Service
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H. BY-LAWS

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CHAPTER 1 - AUTHORITY

Section 1-1. The State Investment Board (SIB) has the authority to maintain an administrative office under Chapter 54-52.5, North Dakota Century Code.

Section 1-2. The SIB has the authority and responsibility for providing administrative services to the North Dakota Teachers' Fund for Retirement (TFFR) and the North Dakota State Investment Board. This includes organizing, staffing, and maintaining an administrative office.

Section 1-3. The SIB has the authority and responsibility for developing and monitoring the agency budget.

Section 1-4. The SIB has the authority and responsibility to maintain office records, an accounting system, and data processing support services.

Section 1-5. The SIB has the authority to pay all claims and investment expenses filed with TFFR and the SIB.

CHAPTER 2 - BOARD

Section 2-1. Members of the State Investment Board (SIB) are the Governor, State Treasurer, Commissioner of University and School Lands, director of Workforce Safety & Insurance, Commissioner of Insurance, three members of the Teachers’ Fund for Retirement (TFFR) Board, two of the elected members and one member of the Public Employees Retirement System (PERS) Board as selected by those boards. The PERS and TFFR Boards may appoint an alternate designee with full voting privileges to attend meetings of the SIB when a selected member is unable to attend. The director of Workforce Safety and Insurance may appoint a designee, subject to approval by the Workforce Safety and Insurance board of directors, to attend the meetings, participate, and vote when the director is unable to attend.

Section 2-2. The SIB will have general charge and management of the business of TFFR and the SIB, subject to law, administrative rules and regulations, and governance policies. The SIB will make such policy as necessary to fulfill this obligation.

Section 2-3. When the statutes allow a Deputy to represent a member of the SIB or an alternate to represent the TFFR or PERS Board, the Chair will recognize the individual for the record, and the individual(s) will then have the right to vote on matters before the SIB.

Section 2-4. The SIB will be responsible for the operation of an administrative office that will provide support services to TFFR and the SIB.

Amended: July 22, 2011.
CHAPTER 3 - OFFICERS AND DUTIES

Section 3-1. The officers of the SIB are a Chair and Vice Chair, one of which must be an appointed or elected member of the TFFR or PERS Board. The officers will be elected by the SIB to a one-year term at the first regularly scheduled meeting following July 1 of each year. Vacancies will be filled by the SIB at the first scheduled meeting following the vacancy.

Section 3-2. Chair. The Chair will preside at all meetings of the SIB.

Section 3-3. Vice Chair. In the absence of the Chair, the Vice Chair will perform the duties of the Chair.

Section 3-4. Executive Director. An Executive Director will be retained by the SIB. The Executive Director will serve at the SIB's pleasure, be responsible for keeping the records of the SIB and TFFR Board actions, and perform such duties as the SIB prescribes. The Executive Director will make out and give out all notices required to be given by law, procedures, or rules and regulations of the two boards.

CHAPTER 4 - MEETINGS

Section 4-1. Regular meetings of the SIB to conduct business are to be held as often as necessary. The SIB will meet at least once each quarter. Notice of all meetings will be made in accordance with North Dakota Century Code, Section 44-04-20.

Section 4-2. Meetings of the SIB may be called by the Chair or two members of the SIB upon reasonable notice in writing to the other members of the Board. (NDCC 21-10-04)

Section 4-3. A quorum will be six (6) members of the SIB.

Section 4-4. Voting on matters before the SIB will be contained in the minutes which will show the recorded vote of each SIB member.

Section 4-5. All meetings of the SIB are open to the public.

Section 4-6. A record of procedures will be kept by the Executive Director on all meetings of the SIB. The records of these proceedings are public documents, and copies will be distributed to the TFFR, SIB, and PERS Boards and upon request.

Section 4-7. Public participation during meetings of the SIB may be allowed at the discretion of the Chair.

Section 4-8. SIB members, except elected and appointed officials, will be paid the amount specified in NDCC 21-10-01 per SIB meeting attended.

Expenses will be paid according to state law and OMB policies.

Amended: July 22, 2011.
CHAPTER 5 - COMMITTEES

Section 5-1. The SIB will establish one standing committee: Audit Committee.

Section 5-1-1. Audit Committee. The Audit Committee will consist of five members. They will be selected by the SIB. Three members of the committee will represent the three groups on the SIB (TFFR Board, PERS Board, and elected and appointed officials). The other two members will be selected from outside of the SIB and be auditors with at least a Certified Public Accountant (CPA) or Certified Internal Auditor (CIA) designation.

The Audit Committee will have responsibility for oversight of financial reporting, auditing, and internal control. The Audit Committee will be responsible for developing a written charter, to be approved by the SIB, which puts forth the authority, responsibilities, and structure of the Audit Committee. It will also be the responsibility of the Audit Committee to supervise the audit activities of the internal audit staff, work with the State Auditor/external auditors, and develop reports for the SIB.

The Executive Director shall supervise the administrative activities of the internal/external audit programs such as travel, securing contracts, paying fees, maintaining official reports, etc.

The supervisor of the internal audit function will be the staff member directly responsible to the Audit Committee.

Membership on the Audit Committee will be for one year or termination of term on the SIB. Vacancies will be filled by the SIB at the first scheduled meeting following the vacancy. There will be no limit to the number of terms served on the Audit Committee.

Section 5-2. No member of the SIB will be paid, other than expenses, for attending seminars, conferences, or other such educational meetings.

CHAPTER 6 - RULES OF ORDER

Section 6-1. All SIB meetings will be conducted in accordance with Robert’s Rules of Order Newly Revised except as superseded by these by-laws and board governance policies.

CHAPTER 7 - ADMINISTRATIVE OFFICE

Section 7-1. For the purpose of carrying out the day-to-day business of TFFR and the SIB, an administrative office will be maintained in Bismarck, North Dakota. This office is called the Retirement and Investment Office (RIO).

Section 7-2. The Executive Director will be the administrator of the office.

CHAPTER 8 - AMENDMENTS

Section 8-1. These by-laws may be amended by a two-thirds vote of SIB members. All amendments must be mailed to SIB members at least thirty (30) days prior to the meeting at which they are considered.

Section 8-2. All amendments must include an effective date.

### I. CENTURY CODE

#### STATE INVESTMENT BOARD

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<td>21-10-06.</td>
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<tr>
<td>Funds under management of board - Accounts.</td>
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<tr>
<td>21-10-06.1.</td>
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<tr>
<td>Board - Investment reports.</td>
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<tr>
<td>21-10-06.2.</td>
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<td>Investment costs.</td>
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<td>Legal investments.</td>
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<td>Reserves - Percentage limitations.</td>
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<td>Personal profit prohibited - Penalty.</td>
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<tr>
<td>State investment board fund - Cost of operation of board.</td>
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<td>Legacy and budget stabilization fund advisory board.</td>
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<td>21-10-12</td>
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<tr>
<td>Legacy fund - Earnings defined.</td>
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#### STATE RETIREMENT AND INVESTMENT OFFICE

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# Biennial Calendar - Annual Board Planning Cycle

Approved by the SIB on April 24, 2016

## Biennial Agenda

<table>
<thead>
<tr>
<th>Fiscal 2015-16</th>
<th>July 2015</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>January 2016</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
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<tbody>
<tr>
<td><strong>Audit Comm.</strong></td>
<td>Review</td>
<td>(Done)</td>
<td>Ends policies</td>
<td>Investment</td>
<td>Work Plan</td>
<td>Work Plan</td>
<td>Biennial</td>
<td>Agenda</td>
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<td>Agenda</td>
<td>Agenda</td>
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<td>Member</td>
<td>Board</td>
<td>Scheduled</td>
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<td>- Legislative</td>
<td>- Legislative</td>
<td>Review</td>
<td>Review</td>
<td>Review</td>
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<tr>
<td><strong>Plan Board</strong></td>
<td>Work Plan</td>
<td>Orientation</td>
<td>Evaluation</td>
<td>-</td>
<td>Limitations</td>
<td>-</td>
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<td><strong>Education</strong></td>
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<table>
<thead>
<tr>
<th>Fiscal 2016-17</th>
<th>July 2016</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>January 2017</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
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<td>Annual</td>
<td>Annual</td>
<td>Annual</td>
<td>Investment</td>
<td>No Meeting</td>
<td>Investment</td>
<td>Planned</td>
<td>Confirm</td>
<td>Review</td>
<td>Investment</td>
<td>No Meeting</td>
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<td><strong>Agenda has not been established for Fiscal 2016-17</strong></td>
<td>Election of</td>
<td>Investment</td>
<td>Review of</td>
<td>Evaluation</td>
<td>Director</td>
<td>Report on</td>
<td>Director</td>
<td>Report on</td>
<td>Guideline</td>
<td>Biennial</td>
<td>Director</td>
<td>Planned</td>
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<td>Audit Comm.</td>
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<td>New Board</td>
<td>Ends policies</td>
<td>Investment</td>
<td>Work Plan</td>
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<td>Work Plan</td>
<td>Budget</td>
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<td>Plan Annual Agenda</td>
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<td>Work Plan</td>
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<td>Limitations</td>
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<td></td>
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</table>

1.) SIB Governance Policy B-7 on Governance Process states that "the Board will follow a biennial agenda which (a) completes a re-exploration of Ends policies annually (April) (which is also referred to as "RIO's Mission Statement") and (b) continually improves its performance through attention to board education and to enriched input and deliberation."

2.) "In the first three months of the new cycle, the Board will develop its agenda for the ensuing year. Scheduled monitoring will be used to evaluate and adjust the annual agenda as needed."

3.) "The Board will identify areas of education and input needed to increase the level of wisdom forethought it can give to subsequent choices. A board education plan will be developed during July and August of each year."

4.) **Budget Guidelines:** RIO will prepare and submit a biennial budget pursuant to OMB guidelines as established by the Governor which will not reduce the level of service provided by RIO. Expenditures for budget items will not exceed the appropriation without approval of the State Investment Board.

---

Date: April 14, 2016
Annual SIB Meeting Schedule for 2016-17

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 22, 2016 (Retreat)</td>
<td>January 27, 2017</td>
</tr>
<tr>
<td>August 26, 2016</td>
<td>February 24, 2017</td>
</tr>
<tr>
<td>September 23, 2016</td>
<td>March 24, 2017</td>
</tr>
<tr>
<td>October 28, 2016</td>
<td>April 28, 2017</td>
</tr>
<tr>
<td>November 18, 2016</td>
<td>May 26, 2017</td>
</tr>
<tr>
<td>December – No Meeting</td>
<td>June – No Meeting</td>
</tr>
</tbody>
</table>

The SIB approved the above meeting schedule on April 24, 2016.
NDRI O

COMPLIANCE REPORT

FY2016
### Annual Certification of Compliance with Investment Guidelines

<table>
<thead>
<tr>
<th>Manager</th>
<th>6-30-16 Certification Rec’d</th>
<th>Exceptions Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams Street Partners (All Funds)</td>
<td>8/23/2016</td>
<td>None</td>
</tr>
<tr>
<td>Atlanta Capital</td>
<td>8/15/2016</td>
<td>None</td>
</tr>
<tr>
<td>Axiom</td>
<td>7/6/2016</td>
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<tr>
<td>Babson Capital</td>
<td>8/10/2016</td>
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</tr>
<tr>
<td>Brandywine</td>
<td>7/29/2016</td>
<td>None</td>
</tr>
<tr>
<td>Capital Guardian</td>
<td>7/18/2016</td>
<td>Terminated - 05/17/16</td>
</tr>
<tr>
<td>Capital International V, VI</td>
<td>7/1/2016</td>
<td>None - See Note</td>
</tr>
<tr>
<td>Clifton Group</td>
<td>7/12/2016</td>
<td>None</td>
</tr>
<tr>
<td>Corsair III, IV, ND Inv LLC</td>
<td>9/9/2016</td>
<td>None</td>
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<tr>
<td>Declaration</td>
<td>7/11/2016</td>
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</tr>
<tr>
<td>DFA</td>
<td>7/29/2016</td>
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</tr>
<tr>
<td>EIG (TCW)</td>
<td>8/12/2016</td>
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</tr>
<tr>
<td>Epoch</td>
<td>7/14/2016</td>
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<tr>
<td>Goldman Sachs 2006 &amp; V</td>
<td>9/7/2016</td>
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<tr>
<td>Grosvenor (I &amp; II)</td>
<td>8/1/2016</td>
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<tr>
<td>Hearthstone II, III</td>
<td>6/30/2016</td>
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<tr>
<td>INVESCO (Core, II &amp; III)</td>
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<td>INVESCO Value Add IV</td>
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<tr>
<td>INVESCO Asia (I &amp; III)</td>
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<tr>
<td>Invest America (L&amp;C &amp; L&amp;C II)</td>
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<td>JP Morgan</td>
<td>7/11/2016</td>
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<td>LACM</td>
<td>8/29/2016</td>
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<td>Loomis Sayles</td>
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<td>7/20/2016</td>
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<td>Matlin Patterson I, II, III</td>
<td>7/5/2016 - I &amp; II Only</td>
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<td>Northern Trust Asset Management</td>
<td>8/11/2016</td>
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<tr>
<td>PIMCO (UBF &amp; MBS)</td>
<td>8/30/2016</td>
<td>See Exceptions Log</td>
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<tr>
<td>Prudential</td>
<td>8/29/2016</td>
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<tr>
<td>Quantum Energy</td>
<td>6/30/2016</td>
<td>None</td>
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<tr>
<td>Research Affiliates</td>
<td>8/15/2016</td>
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<td>SEI</td>
<td>8/2/2016</td>
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<tr>
<td>State Street</td>
<td>7/21/2016</td>
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<tr>
<td>TIR (3 accounts)</td>
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<tr>
<td>UBS</td>
<td>8/3/2016</td>
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<td>Vanguard</td>
<td>7/12/2016</td>
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<td>Wellington</td>
<td>8/15/2016</td>
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<tr>
<td>Wells Capital</td>
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<tr>
<td>Western</td>
<td>8/16/2016</td>
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<tr>
<td>William Blair</td>
<td>Not Funded in FY16</td>
<td></td>
</tr>
</tbody>
</table>

Multiple accounts

* Manager reported exceptions that were previously approved by Dave, Darren & Eric to be held (see exceptions log)

**Capital International V, VI**

As the investment manager of CIPEF V and CIPEF VI, we are required to manage the fund in accordance with the terms of the funds' limited partnership agreements (‘LPA’). We have processes and controls to monitor compliance with the fund's applicable investment restrictions, but we do not routinely provide compliance certifications to limited partners. Instead, we ask that limited partners rely on our standard reporting as specified per the funds' LPAs for information as to such matters. To the extent there is a known breach of an investment guideline, Capital Group Private Markets would take remedial steps, which may include seeking consent of the Advisory Committee (if allowed under the LPA) or a waiver and amendment to the LPA from the limited partners.
<table>
<thead>
<tr>
<th>Date Received</th>
<th>Manager</th>
<th>Guideline Exception</th>
<th>Cusip</th>
<th>Description</th>
<th>Manager Recommendation</th>
<th>Action Taken</th>
<th>Maturity Date</th>
<th>Par/Shares</th>
<th>Cost</th>
<th>Fair Value</th>
<th>Acct #</th>
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<td>9/11/2015</td>
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<td>144A Bond</td>
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<tr>
<td>10/19/2015</td>
<td>Pimco UBF</td>
<td>Minimum rating requirement</td>
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<td>&gt;40% exposure to BA (45.01)</td>
<td>Was due to cash withdrawal - No action required</td>
<td>Compliance Restored</td>
<td>10/27/15</td>
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<td>NA</td>
<td>Multiple</td>
<td>NDK21</td>
</tr>
<tr>
<td>12/16/2015</td>
<td>Pimco UBF</td>
<td>Minimum rating requirement</td>
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<td>&gt;40% exposure to BA (45.10)</td>
<td>Was due to cash withdrawal - No action required</td>
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<td>Pimco UBF</td>
<td>Minimum rating requirement</td>
<td>multiple</td>
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<td>Multiple</td>
<td>NDK21</td>
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<td>Parametric/Clifton</td>
<td>Security rated below investment grade</td>
<td>22541ZSM3</td>
<td>Enhanced S&amp;P - PEN</td>
<td>Hold until all principal is received or increase in price</td>
<td>concur</td>
<td>8/25/2019</td>
<td>100</td>
<td>55,920</td>
<td>54,783</td>
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<td>Parametric/Clifton</td>
<td>Security rated below investment grade</td>
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<td>Enhanced S&amp;P - LEG</td>
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<td>ERuss2000 - PEN</td>
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<td>concur</td>
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<td>22,395</td>
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<td>4/12/2016</td>
<td>Brandywine</td>
<td>Non-Index Country: Below A or better NSRO 0-5%</td>
<td>multiple</td>
<td>&gt;5% position in Brazil (5.12%)</td>
<td>Monitor - Continue to hold</td>
<td>Corrected as of 4/12/2016</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NDK08</td>
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<tr>
<td>5/23/2016</td>
<td>Brandywine</td>
<td>Non-Index Country: Below A or better NSRO 0-5%</td>
<td>multiple</td>
<td>&gt;5% position in Brazil (5.96%)</td>
<td>Monitor - Continue to hold</td>
<td>Corrected as of 5/23/2016</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NDK08</td>
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<td>6/10/2016</td>
<td>Brandywine</td>
<td>Non-Index Country: Below A or better NSRO 0-5%</td>
<td>multiple</td>
<td>&gt;5% position in Brazil (5.20%)</td>
<td>Monitor - Continue to hold</td>
<td>Corrected as of 6/10/2016</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NDK08</td>
</tr>
<tr>
<td>6/29/2016</td>
<td>Brandywine</td>
<td>Non-Index Country: Below A or better NSRO 0-5%</td>
<td>multiple</td>
<td>&gt;5% position in Brazil (5.07%)</td>
<td>Monitor - Continue to hold</td>
<td>Corrected as of 6/30/2016</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NDK08</td>
</tr>
<tr>
<td>Manager</td>
<td>Audit</td>
<td>Date rec'd</td>
<td>Opinion</td>
<td>Internal Controls</td>
<td>Notes</td>
<td></td>
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TIR Springbank 12/31/2015 4/5/2016 clean N/A
TIR Teredo 12/31/2015 4/4/2016 clean N/A
TIR Eastern Timberland Opp. LLC 12/31/2015 4/5/2016 clean N/A
Vanguard 10/31/2015 8/31/2016 clean N/A: N-SAR file w/ SEC
Wellington Management 8/31/2015 8/30/2016 clean 10/31/2015
William Blair 12/31/2015 9/14/2016 clean 6/30/2016

All Separately Managed Accounts Northern Trust as Custodian

Statement on Standards for Attestation Engagement (SSAE) No. 16
A compliance audit for assessing the internal control framework on service organizations that provide critical outsourcing activities for other entities. SSAE 16 is the reporting standard for all service auditors' reports from June 15th 2011, and beyond. SSAE 16 was preceded by SAS 70. A main difference between SSAE 16 and SAS70 is the SSAE 16 requires the management of the service company to provide written assertion to the auditor that their description accurately represents their organizational system.

N/A - SSAE 16 reviews generally apply to service organizations with a large number of transactions, such as custody services. These firms have determined that a SSAE 16 review is not necessary based on the number of transactions and types of investments held. We will continue to monitor them but concur with their determination at this time.

Note 1: Atlanta Capital
Basis for qualified opinion: The Company has not recorded compensation expense in the accompanying financial statements related to certain stock-based compensation awards granted to employees of the Company by Eaton Vance Corp. nor has it provided required disclosures for such stock-based awards in the notes to the financial statements. In our opinion, accounting principles generally accepted in the United States of America require the Company to record such stock based compensation expense in the accompanying financial statements. Had the Company recorded such stock-based compensation expense, net income would decrease by $4,034,472 and $3,604,562 for the years ended October 31, 2015 and 2014, respectively.

Atlanta Capital - Qualified Opinion Response
Atlanta Capital is a majority owned subsidiary and therefore our financial results are ultimately consolidated with those of our parent company, Eaton Vance Corp. Eaton Vance prefers not to allocate stock based compensation down to the subsidiary level for financial reporting purposes, primarily because our financial reports are used to determine valuation for put/call transactions between ACM owner employees and Eaton Vance. Per the terms of the LLC operating agreements governing these put/call transactions, stock based compensation is not included in our net income calculation, therefore we choose to exclude from the audit report resulting in the qualified opinion. All relevant information regarding this compensation is fully disclosed in the report itself, it is simply an executive election to ensure our reported audited net income is consistent across subsidiaries.

RIO Assessment: Concur

Note 2: InvestAmerica
As discussed in Note 1, the investments have been valued on a basis of accounting prescribed by the U.S. Small Business Administration (SBA) which practices differ from generally accepted accounting principles. Accordingly, the accompanying investment values are not intended to be a presentation in conformity with accounting principles generally accepted in the United States of America. The investment valuations of L&C Private Equities II, LP were prepared in accordance with its approved valuation policy established in accordance with Section 310(d)(2) of the Small Business Investment Act of 1958, as amended, with the following exception. As discussed in Note 1, in 2015, management increased the value of a private equity investment that did not meet the conditions required by the SBA. Quantification of the combined effects of the departures from U.S. generally accepted accounting principles on the financial statements of L&C Private Equities II, LP is not practicable.

RIO Assessment: We concur that the methodology is appropriate
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<td></td>
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<tr>
<td>Capital International</td>
<td>4/4/2016</td>
<td>Yes</td>
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<td>Corsair</td>
<td>3/29/2016</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Declaration Management (Total Return)/Manulife</td>
<td>6/22/2016</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Dimensional Fund Advisors</td>
<td>7/22/2016</td>
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<td></td>
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<tr>
<td>EIG (formerly TCW)</td>
<td>3/29/2016</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Goldman Sachs</td>
<td>8/23/2016</td>
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<td></td>
</tr>
<tr>
<td>Grosvenor Customized Infrastructure</td>
<td>3/30/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hearthstone</td>
<td>3/29/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Invesco</td>
<td>8/15/2016</td>
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<td></td>
</tr>
<tr>
<td>JP Morgan</td>
<td>7/29/2016</td>
<td>Yes</td>
<td>See Note Below¹</td>
</tr>
<tr>
<td>LA Capital Large Cap Alpha</td>
<td>8/10/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Loomis Sayles Full Discretion Fund</td>
<td>9/15/2015</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Matlin Patterson</td>
<td>3/29/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Northern Trust Asset Management</td>
<td>8/9/2016</td>
<td>Yes</td>
<td>See Note Below²</td>
</tr>
<tr>
<td>PIMCO</td>
<td>8/29/2016</td>
<td>Yes</td>
<td>See Note Below³</td>
</tr>
<tr>
<td>Prudential</td>
<td>5/26/2016</td>
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<td></td>
</tr>
<tr>
<td>Quantum Energy</td>
<td>3/30/2016</td>
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<td></td>
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<tr>
<td>Quantum Resources</td>
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<td></td>
<td>De-registered after filing 2014 annual report</td>
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<td>Research Affiliates</td>
<td>3/28/2016</td>
<td>Yes</td>
<td></td>
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<tr>
<td>SEI</td>
<td>5/6/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>State Street</td>
<td>8/11/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>TIR</td>
<td>3/23/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>UBS</td>
<td>3/30/2016</td>
<td>Yes</td>
<td>See Note Below⁴</td>
</tr>
<tr>
<td>Vanguard</td>
<td>6/28/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Wellington Management</td>
<td>7/20/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Western Asset Management</td>
<td>7/25/2016</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>William Blair</td>
<td>3/30/2016</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**JP Morgan**


JPMC ENTERED A GUILTY PLEA ON MAY 20, 2015 PURSUANT TO A PLEA AGREEMENT WITH THE DOJ. JPMC AGREED TO PAY A CRIMINAL FINE OF $550 MILLION AND A MANDATORY ASSESSMENT OF $400. JPMC AGREED TO BE SUBJECT TO PROBATION FOR 3 YEARS. THE SENTENCING DATE HAS NOT YET OCCURRED.
Northern Trust Asset Management

2ON JUNE 18, 2015, THE SECURITIES AND EXCHANGE COMMISSION (SEC) BROUGHT DMNISTRATIVE AND CEASE-AND-DESIST PROCEEDINGS AGAINST 36 MUNICIPAL SECURITIES DEALERS, INCLUDING THE NORTHERN TRUST COMPANY (NORTHERN TRUST), IN WHICH THE SEC ALLEGED THAT THE MUNICIPAL SECURITIES DEALERS CONDUCTED INADEQUATE DUE DILIGENCE EFFORTS IN THE ISSUANCE OF SECURITIES BY CERTAIN MUNICIPAL ISSUERS, AND THEREFORE VIOLATED SECTION 17(A)(2) OF THE SECURITIES ACT OF 1933. NORTHERN TRUST, WITHOUT ADMITTING OR DENYING ANY FINDINGS, CONSENTED TO A $60,000 CIVIL PENALTY IN CONNECTION WITH THREE MUNICIPAL SECURITIES OFFERING THAT TOOK PLACE IN 2010. THE SEC FURTHER ORDERED NORTHERN TRUST AND THE OTHER DEALERS TO RETAIN AN INDEPENDENT CONSULTANT TO REVIEW THEIR POLICIES AND PROCEDURES RELATED TO MUNICIPAL SECURITIES UNDERWRITING DUE DILIGENCE AND TO ADOPT RECOMMENDATIONS MADE BY THE INDEPENDENT CONSULTANT WITHIN NINE MONTHS OF THE ISSUANCE OF THE ORDER.

PIMCO


UBS

4ON MAY 20, 2015, THE DEPARTMENT OF JUSTICE CRIMINAL DIVISION TERMINATED A DECEMBER 19, 2012 NON-PROSECUTION AGREEMENT (THE NPA) WITH UBS AG. AS A RESULT, ON MAY 20, 2015, UBS AG ENTERED INTO A PLEA AGREEMENT WITH THE DEPARTMENT OF JUSTICE CRIMINAL DIVISION PURSUANT TO WHICH UBS AG AGREED TO AND DID PLEAD GUILTY TO A ONE-COUNT CRIMINAL INFORMATION FILED IN THE DISTRICT OF CONNECTICUT CHARGING UBS AG WITH ONE COUNT OF WIRE FRAUD IN VIOLATION OF 18 USC SECTIONS 1343 AND 1342. AS PART OF THE PLEA AGREEMENT, UBS AG AGREED TO PAY A $203 MILLION PENALTY. THE CRIMINAL INFORMATION CHARGES THAT BETWEEN APPROXIMATELY 2001 AND 2010, UBS AG ENGAGED IN SCHEME TO DEFRAUD COUNTERPARTIES TO INTEREST RATE DERIVATIVES TRANSACTIONS BY MANIPULATING BENCHMARK INTEREST RATES, INCLUDING YEN LIBOR. THE CRIMINAL DIVISION TERMINATED THE NPA BASED ON ITS DETERMINATION, IN ITS SOLE DISCRETION, THAT CERTAIN OF ITS EMPLOYEES COMMITTED CRIMINAL CONDUCT THAT VIOLATED THE NPA, INCLUDING FRAUDULENT AND DECEPTIVE CURRENCY TRADING AND SALES PRACTICES IN CONDUCTING CERTAIN FOREIGN EXCHANGE MARKET TRANSACTIONS WITH CUSTOMERS AND COLLUSION WITH OTHER PARTICIPANTS IN CERTAIN FX MARKETS.

ON OCTOBER 13, 2015, THE SECURITIES AND EXCHANGE COMMISSION ALLEGED THAT UBS NEGLIGENTLY MADE MISLEADING STATEMENTS AND OMISSIONS IN THE OFFER OR SALE OF SECURITIES, WHICH VIOLATED SECTION 17(A)(2) OF THE SECURITIES ACT. UBS HAS NEITHER ADMITTED OR DENIED THESE FINDINGS. UBS AG WAS ISSUED A CEASE AND DESIST ORDER, AND ORDERED TO PAY (1) $10,000,000 IN DISGORGEMENT, (2) $1.5 MILLION IN REJUDGMENT INTEREST; AND (3)8,000,000 CIVIL MONETARY PENALTY.
<table>
<thead>
<tr>
<th>Manager</th>
<th>Date Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams Street Partners (All Funds)</td>
<td>8/30/2016</td>
</tr>
<tr>
<td>Atlanta Capital</td>
<td>8/15/2016</td>
</tr>
<tr>
<td>Axiom</td>
<td>8/24/2016</td>
</tr>
<tr>
<td>Babson Capital</td>
<td>Draft to be available on 9/16/2016</td>
</tr>
<tr>
<td>Brandywine</td>
<td>8/30/2016</td>
</tr>
<tr>
<td>Clifton Group</td>
<td>8/29/2016</td>
</tr>
<tr>
<td>Declaration</td>
<td>8/31/2016</td>
</tr>
<tr>
<td>DFA</td>
<td>9/1/2016</td>
</tr>
<tr>
<td>Epoch</td>
<td>8/19/2016</td>
</tr>
<tr>
<td>JP Morgan</td>
<td>8/26/2016</td>
</tr>
<tr>
<td>LACM</td>
<td>8/30/2016</td>
</tr>
<tr>
<td>Loomis Sayles</td>
<td>8/31/2016</td>
</tr>
<tr>
<td>LSV</td>
<td>8/11/2016</td>
</tr>
<tr>
<td>Northern Trust Global Investments</td>
<td>9/1/2016</td>
</tr>
<tr>
<td>PIMCO (UBF &amp; MBS)</td>
<td>8/31/2016</td>
</tr>
<tr>
<td>Prudential (Fixed Income)</td>
<td>8/16/2016</td>
</tr>
<tr>
<td>SEI</td>
<td>8/26/2016</td>
</tr>
<tr>
<td>State Street</td>
<td>8/30/2016</td>
</tr>
<tr>
<td>UBS</td>
<td>8/24/2016</td>
</tr>
<tr>
<td>Vanguard</td>
<td>8/31/2016</td>
</tr>
<tr>
<td>Wellington</td>
<td>8/31/2016</td>
</tr>
<tr>
<td>Wells Capital</td>
<td>9/1/2016</td>
</tr>
<tr>
<td>Western</td>
<td>8/31/2016</td>
</tr>
<tr>
<td>William Blair</td>
<td>8/31/2016</td>
</tr>
</tbody>
</table>

multiple accounts
NORTH DAKOTA STATE INVESTMENT BOARD

DUE DILIGENCE QUESTIONNAIRE

FOR PERIOD ENDING 6/30/16

Please read the following instructions before completing this questionnaire:

1. All questions must be completed.
2. Type or select answers to each question.
3. If any questions are not applicable, please answer as “N/A”.
4. If any answer is larger than the space available, please include it in an attachment that references the page and section number.
5. Responses are due no later than August 31, 2016.
GENERAL INFORMATION

Firm Name: ____________________________________________

Address: ____________________________________________

City: __________________________ State: _________ Zip: _________

Contact Name: __________________________ Phone: _________

Title: __________________________ Fax: _________

E-mail: ____________________________________________

FIRM INFORMATION

1. Describe the history of your firm including a timeline of key dates/events (i.e. new products, acquisitions, personnel lift-outs, etc).

2. Describe your firm’s ownership structure. List all entities/individuals with 5% ownership or more. Note any recent (within the past five years) or pending changes in ownership structure.

3. Explain owners’ relationship to firm.

4. List all related companies and explain related companies’ relationship to firm.

5. Is the firm a Registered SEC Investment Advisor? If so, please provide SEC registration name and file number.

6. Is the organization involved in any other business other than investment management? If yes, please explain.

7. Please list your firm’s lines of business and the approximate contributions of each business to your organization’s total revenue. If you are an affiliate or subsidiary of an organization, what percentage of the parent firm’s total revenue does your subsidiary or affiliate generate?

8. Please describe whether investment management capabilities were developed in-house or derived through acquisition of talent from another firm. If the latter, indicate when this occurred.

9. Which of your firm’s offices service this account? Which specific services are provided by which offices?

10. List the locations where the firm has other offices.

11. How would you describe the culture of the firm? How would you illustrate this culture to someone outside the firm?

12. Provide information pertaining to any organizational changes that have occurred during the past five years that a prudent investment professional would consider material. Are there any changes anticipated in the coming year?

13. Has your firm been the subject of an audit, censure (fine), inquiry or administrative action by the SEC, IRS, or DOL in the past five years? If so, please explain findings and provide a copy, as well as evidence of any changes in procedures implemented as a result of such audit.

14. Please indicate your firm’s fiduciary classification. Please check all that apply:

North Dakota State Investment Board

Due Diligence Questionnaire Page 2 of 9
15. Indicate the name of your insurance carrier and the dollar amount of your coverage:

   Errors & Omissions: Coverage: $
   Fiduciary Liability: Coverage: $
   Fidelity Bond: Coverage: $

PERSONNEL

1. Please list the individuals involved in portfolio management and research for this strategy. For each individual, please provide the following information:
   a. Tenure at company and with this strategy
   b. Industry experience
   c. Education and credentials
   d. Office location
   e. Area(s) of specialization
   f. If applicable, other responsibilities beyond those associated with this strategy

2. Please indicate when and why any investment professionals involved with the subject product departed or joined the firm in the last five years. For personnel who have left, please indicate job titles and years with the firm. Please include all additions and departures, regardless of seniority.

3. Does your firm have a succession plan in place for key personnel on the subject product? Please describe.

4. Discuss your organization’s compensation and incentive program for investment professionals. How are professionals evaluated and rewarded? What incentives are provided to attract and retain superior individuals? If equity ownership is possible, on what basis is it determined and distributed? How is the departure of a shareholder treated?

5. Provide information regarding the expiration date of current employment contracts with key personnel. Please include a discussion of long term incentives, options or performance clauses.

6. Provide an organizational chart diagramming the relationships between the professional staff as well as the parent-subsidiary, affiliate, or joint venture entities. You may attach this chart to the end of the DDQ.

7. Has any employee associated with this product been party to any investigations, litigation (including any settled out of court), or regulatory action during the past five years while at this or any other firm? If so, provide a detailed explanation and indicate the current status. Specify whether the employee is involved in any pending litigation or investigations.
**ASSETS AND BREAKDOWN**

1. Please provide assets managed and number of accounts as of 6/30/16.

<table>
<thead>
<tr>
<th>Firm Product</th>
<th>Assets ($mil)</th>
<th># Accounts</th>
<th>Product</th>
<th>Assets ($mil)</th>
<th># Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Institutional Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US Tax Exempt</td>
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<tr>
<td>US Taxable</td>
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</tr>
<tr>
<td>By Client Type</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Public Fund</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Corporate</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Union/Multi-Employer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endowment &amp; Foundation</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
<td></td>
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<td>High Net Worth</td>
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<tr>
<td>Wrap Accounts</td>
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<td>Sub-Advisor</td>
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<tr>
<td>Other</td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Describe “other”:

2. Complete the following tables indicating accounts and market value of assets gained and lost for each of the last three years ending June 30.

**Firmwide**

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<thead>
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<th></th>
<th>2016</th>
<th></th>
<th></th>
<th>2015</th>
<th></th>
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<th>2014</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Gain</td>
<td>Loss</td>
<td>Total</td>
<td>Gain</td>
<td>Loss</td>
<td>Total</td>
<td>Gain</td>
<td>Loss</td>
</tr>
<tr>
<td>Total accounts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Total assets</td>
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<td>Total public fund accounts</td>
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Subject Product

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<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Gain</td>
<td>Loss</td>
</tr>
<tr>
<td>Total accounts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total public fund accounts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public fund assets</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Please provide an explanation of account departures and additions and for any meaningful changes in firm wide and/or product assets.

4. What is the minimum, average, and maximum account size for the subject strategy?

5. You may include additional detail or explanation of firm assets under management below to demonstrate firm capabilities.

6. Please list clients representing more than 10% of total firm assets under management or total firm revenue. It is adequate to describe the client without identifying them (e.g., public pension plan). Please comment on business risk related to client concentration.

INVESTMENT STRATEGY

1. Describe your investment philosophy for the subject strategy.

2. Describe the drivers of return. What has been your historical experience on return drivers?

3. Have you made or are you planning any modifications to your overall investment philosophy or process? If so, describe the process used to identify and effect the change.

4. Address the following as it relates to your investment strategy and the portfolio construction process you use to implement your philosophy:
   
   a. Role of top-down, thematic and/or sector allocation decisions in your process, and how these decisions are made and implemented.

   b. What is the firm’s research process as it relates to the subject strategy? How is the research process organized (i.e. regional, country and/or sector)?
c. Comment on security selection, including the initial universe, decision making factors, and analysis by market segment. Include use of model portfolios or recommended lists. Describe the process by which an investment idea is originated and implemented.

d. Describe your portfolio construction process. What specific factors are integral to the portfolio construction process? Specify the portfolio guidelines and rules, such as maximum issue and sector weights. Describe any quantitative techniques or optimization tools used to construct portfolios.

e. How is portfolio risk measured, monitored and controlled? Describe any risk management models used and how this analysis is incorporated in the portfolio management process.

f. Describe your sell discipline. Under what conditions can the manager/investment committee deviate from your stated discipline?

g. If subject strategy is a passive mandate, does your strategy attempt full index replication or are sampling techniques utilized when constructing the portfolio? If sampling is utilized, please describe your sampling process.

5. Please list the relative importance of each of the following decisions:

<table>
<thead>
<tr>
<th></th>
<th>Fixed Income</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation</td>
<td>Allocation</td>
<td></td>
</tr>
<tr>
<td>Selection</td>
<td>Selection</td>
<td></td>
</tr>
<tr>
<td>Duration</td>
<td>Currency</td>
<td></td>
</tr>
<tr>
<td>Curve</td>
<td>Other (list and explain below)</td>
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</tr>
<tr>
<td>Currency</td>
<td>Totals</td>
<td>100%</td>
</tr>
<tr>
<td>Other (list and explain below)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

6. What unique attributes or competitive advantage does your firm or subject strategy have, which distinguishes it from its competitors? Why do you believe this advantage is sustainable?

7. Describe what circumstances or market conditions would favor the subject strategy? When can it be expected to be out of phase or be unrewarded?

8. If applicable, please describe your currency decision and hedging policy.

9. Does this strategy utilize leverage in any way? If so, please describe. What is the expected and maximum leverage employed in the strategy?

10. Describe the firm’s use of derivatives in the management of the strategy. If applicable, please list any procedures that serve as guidelines for your firm’s management of the collateral.

North Dakota State Investment Board

Due Diligence Questionnaire Page 6 of 9
TRADING

1. Please describe your policies and procedures concerning trading and execution, including those relating to the following:

   a. How your firm seeks to achieve best execution;

   b. How your firm measures and minimizes trading costs;

   c. How your traders interact with portfolio managers and analysts.

2. Describe your trading practices, including the trading systems and strategies you use, and indicate any enhancements your firm is contemplating.

3. What guidelines and practices does your firm employ in managing its counterparty risk?

4. How many broker relationships does your firm have? Please describe how the broker/dealers your firm uses are selected.

5. Does your firm trade client accounts through any related or affiliated broker/dealer? If yes, describe the nature of the relationship and the percentage of trades directed through such affiliate(s).

6. Does your firm use soft dollars? If so, for what purpose?

RISK MANAGEMENT

1. Please describe the risk management process within your organization and the degree of independence from your portfolio management process. Please describe how the firm assures the independence of risk management.

2. How is portfolio risk measured, monitored and controlled? Describe any risk management models used and how this analysis is incorporated in the portfolio management process.

COMPLIANCE/INTERNAL CONTROLS

1. What compliance system does your firm employ? How is compliance implemented in your firm’s operations?

2. Provide a detailed summary of your firm’s internal control structure. Who serves as your firm’s compliance officer? Who does he/she report to? Does the firm conduct periodic risk assessment?

3. What systems are in place for ensuring that portfolios are in compliance with client guidelines?

4. Has your firm ever violated a client guideline in the subject strategy? If so, please describe the violation and resolution. It is acceptable if this information is grouped by some method of categorization that allows for easier reporting.
5. Describe valuation policies and procedures by security type, list pricing sources and personnel responsible for valuation. Describe any special systems, valuation services, or other unique issues relating to the pricing of less liquid securities in the portfolio.

6. Is your firm registered with the CFA Institute as compliant with the CFA Institute’s Asset Manager Code (AMC) of Professional Conduct? If not, would your firm consider registering as compliant in the future?

7. Please state your firm’s ethics policy. How do you ensure that employees follow this ethics policy? How are violations of the firm’s ethics policy handled?

**FEES**

1. Please provide a fee schedule for the subject strategy, including any breakpoints.

2. Under what circumstances are your fees negotiable?

3. Do all clients pay the same fee? Please explain any discrepancies.

4. Is there a minimum annual fee?

5. Do you offer a performance-based fee? If so, please provide a performance-based fee schedule. Over what period is performance evaluated and against what benchmark? What is the base fee? Is there a maximum fee (a cap)?

6. Do you offer a Most Favored Nations (MFN) clause? If not, please provide an explanation of why not.

**CLIENT SERVICES**

1. Describe your firm’s approach to client service.

2. What policies are in effect to control the workload as it relates to the number of clients serviced by each account manager? Is there a limit on the number of accounts that an account manager may handle?

3. Provide a breakdown for each key investment person’s time dedicated to each listed function (add more rows for additional key persons if necessary):
<table>
<thead>
<tr>
<th>Key Persons</th>
<th>Portfolio Management</th>
<th>Research</th>
<th>Management / Supervision</th>
<th>Marketing / Client Service</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Describe other:

**BUSINESS PLANS**

1. Please discuss the overall business objectives of your firm with respect to future growth. Comment on any present or planned areas of emphasis over the near future. Be sure to include in your response the following:
   a. Total assets or client relationships that will be accepted;
   b. Maximum amount of clients or assets per portfolio manager;
   c. Plans to develop and expand resources.

2. Indicate the details of any new investment services you plan to introduce.

3. Do you have any plans to cap or limit your growth in terms of total assets and total number of accounts? If so, please describe.

**OTHER**

1. Describe your emergency and disaster recovery plans. Do you have plans/arrangements in place for an alternative work site should your facilities become inoperative?

**ADDITIONAL INFORMATION**

1. Please provide a current list of references, including other public fund clients.
<table>
<thead>
<tr>
<th>CONTINUING APPROPRIATIONS</th>
<th>TFFR Expenses</th>
<th>SIB Actual Expenses</th>
<th>Total RIO Actual Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVESTMENT EXPENDITURES</td>
<td>$10,571,984</td>
<td>$35,064,612</td>
<td>$45,636,596</td>
</tr>
<tr>
<td>MEMBER CLAIMS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANNUITY PAYMENTS</td>
<td>180,617,784</td>
<td>-</td>
<td>180,617,784</td>
</tr>
<tr>
<td>REFUND PAYMENTS</td>
<td>5,350,896</td>
<td>-</td>
<td>5,350,896</td>
</tr>
<tr>
<td>TOTAL MEMBER CLAIMS</td>
<td>185,968,680</td>
<td>-</td>
<td>185,968,680</td>
</tr>
<tr>
<td>OTHER CONTINUING APPROPRIATIONS</td>
<td>330,184</td>
<td>187,578</td>
<td>517,762</td>
</tr>
<tr>
<td>TOTAL CONTINUING APPROPRIATIONS</td>
<td>196,870,848</td>
<td>35,252,190</td>
<td>232,123,038</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPROPRIATED EXPENDITURES</th>
<th>TFFR Expenses</th>
<th>SIB Actual Expenses</th>
<th>Total RIO Actual Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALARIES AND BENEFITS</td>
<td>1,055,650</td>
<td>1,004,093</td>
<td>2,059,743</td>
</tr>
<tr>
<td>OPERATING EXPENSES</td>
<td>247,978</td>
<td>92,243</td>
<td>340,221</td>
</tr>
<tr>
<td>SIB EXPENSES ALLOCATED TO TFFR</td>
<td>217,844</td>
<td>(217,844)</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL APPROPRIATED EXPENDITURES</td>
<td>1,521,472</td>
<td>878,492</td>
<td>2,399,964</td>
</tr>
</tbody>
</table>

| TOTAL EXPENDITURES | TFFR $198,392,320 | SIB $36,130,682 | Total RIO $234,523,002 |
## 2015-2017 Biennium Appropriation Status Report

**As of June 30, 2016**

<table>
<thead>
<tr>
<th></th>
<th>2015-2017 BUDGET</th>
<th>ADJUSTED APPROPRIATION</th>
<th>BIENNIAL TO DATE ACTUAL</th>
<th>BUDGET AVAILABLE</th>
<th>% BUDGET</th>
<th>% OF BIENNIAL REMAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries and Benefits</strong></td>
<td>$ 4,340,551.00</td>
<td>$ 4,342,801.00</td>
<td>$ 2,059,742.83</td>
<td>$ 2,283,058.17</td>
<td>52.57%</td>
<td>50.00%</td>
</tr>
<tr>
<td><strong>Operating Expenditures</strong></td>
<td>990,874.00</td>
<td>990,874.00</td>
<td>340,221.85</td>
<td>650,652.15</td>
<td>65.66%</td>
<td>50.00%</td>
</tr>
<tr>
<td><strong>Contingency</strong></td>
<td>82,000.00</td>
<td>82,000.00</td>
<td>0.00</td>
<td>82,000.00</td>
<td>100.00%</td>
<td>50.00%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 5,413,425.00</td>
<td>$ 5,415,675.00</td>
<td>$ 2,399,964.68</td>
<td>3,015,710.32</td>
<td>55.68%</td>
<td>50.00%</td>
</tr>
</tbody>
</table>
### Schedule of Consulting Expenses
For Fiscal Years Ended June 30, 2016 and 2015

<table>
<thead>
<tr>
<th></th>
<th>Pension Trust 2016</th>
<th>Pension Trust 2015</th>
<th>Investment Trust 2016</th>
<th>Investment Trust 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuary fees:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segal Company</td>
<td>$144,633</td>
<td>$123,556</td>
<td>$ -</td>
<td>$722</td>
</tr>
<tr>
<td>Auditing/Accounting fees:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CliftonLarsonAllen LLC</td>
<td>104,507</td>
<td>154,932</td>
<td>27,993</td>
<td>26,568</td>
</tr>
<tr>
<td>Eide Bailly, P.C.</td>
<td>-</td>
<td>6,143</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Auditing Fees</td>
<td>104,507</td>
<td>161,075</td>
<td>27,993</td>
<td>26,568</td>
</tr>
<tr>
<td>Disability consulting fees:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanford Health</td>
<td>300</td>
<td>425</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Legal fees:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K&amp;L Gates LLP</td>
<td>2,598</td>
<td>2,313</td>
<td>3,401</td>
<td>3,182</td>
</tr>
<tr>
<td>Ice Miller LLP</td>
<td>-</td>
<td>23,430</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ND Attorney General</td>
<td>18,264</td>
<td>13,979</td>
<td>21,493</td>
<td>16,601</td>
</tr>
<tr>
<td>Total legal fees:</td>
<td>20,862</td>
<td>39,722</td>
<td>24,894</td>
<td>19,783</td>
</tr>
<tr>
<td>Total consultant expenses</td>
<td>$270,302</td>
<td>$324,778</td>
<td>$52,887</td>
<td>$47,073</td>
</tr>
</tbody>
</table>
**Optional Package Request:** In addition to the Base Budget Request above, we have requested an additional $75,000 in an Optional Package Request for Cyber Risk Insurance. This insurance would help with the extensive costs of cyber attacks or data breaches of any kind by offering a variety of coverage options such as privacy liability, lawsuits, public relations, forensics, mailing notifications, credit monitoring, call centers and much more. Although still in the research phase at this time, RIO feels the amount requested will assist in achieving the goal of finding an insurance policy that will allow the agency to best protect the State of ND, RIO and RIO customers.

**Board Travel Budget Assumptions:** Our budget request includes funding for approximately 13 out of state trips for board members (TFFR and SIB). Although this is fewer than in past budget requests, we feel it better reflects what has actually been used historically and should not affect board members’ ability to attend valuable training. This means each board member may travel once each biennium with the possibility of a second trip if some do not use them.

**In-State Reimbursement Rates:** Lodging rate is 90% of Federal GSA rate for ND ($91 effective October 1, 2016) so rate is $81.90 plus tax (some higher exceptions in oil counties). Mileage is linked to Federal GSA rate which is currently $0.54 per mile. In-state meal rates: Breakfast: $7.00; Lunch: $10.50; Dinner: $17.50
Preliminary Investment Update:
Public Employees Retirement System (PERS) and Teachers’ Fund for Retirement (TFFR)

Employee Benefits Program Committee
September 1, 2016

Note:
This presentation was made to the Employee Benefits Program Committee on Sep. 1, 2016.

Dave Hunter, Executive Director / CIO
ND Retirement & Investment Office (RIO)
State Investment Board (SIB)
Overview of PERS and TFFR Investment Returns and SIB Client Assets Under Management

PERS and TFFR Pension Plans Posted a Net Investment Return of 0.28% for Fiscal 2016
Current year results were negatively impacted by slowing economic growth rates and political uncertainty in the U.S. and abroad. During the last 3-to-5 years, PERS and TFFR’s results have outperformed (e.g. 32nd to 37th percentile) most other U.S. public pension plans. Over the last 30-years, PERS and TFFR posted net investment returns of 7.89% and 7.73%, which is close to their respective long-term assumptions of 8.0% and 7.75%, respectively.

SIB Client Assets Have Doubled in the Last Five-Years
SIB assets have doubled from $5.6 billion at June 30, 2011, to $11.3 billion at June 30, 2016. This growth has resulted from $3.5 billion in cash contributions (predominantly from the Legacy Fund) and nearly $2.2 billion of net investment returns.

SIB Returns Have Outperformed Passive Benchmarks By Over $200 million since 2011
SIB investment returns have benefitted from selecting firms which have outperformed passive benchmarks by over $200 million (or 0.50%) in the last 5-years (after fees). Asset allocation decisions are the primary driver of investment returns but the prudent use of active investment management can help our clients achieve their long term investment goals.

Focus on Investment Management Fees and Expenses
Fee reduction efforts have reduced SIB client investment fees from 0.65% per year in fiscal 2013 to nearly 0.45% in fiscal 2016 – this translates into over $20 million of annual fee savings.
“World GDP Growth Rates” have declined to 2.5% from 2012 to 2015, with some “Experts” projecting slightly higher future growth rates.

Source: Historical Global GDP Growth Rates from The World Bank Group, with Projected Growth Rates by The Conference Board.
U.S. GDP Growth is Slowing although the U.S. Unemployment Rate is Low

**US GDP Annual Growth Rate**

- Jul 2013: 1.7%
- Jan 2014: 2.7%
- Jul 2014: 2.4%
- Jan 2015: 2.5%
- Jul 2015: 3.3%
- Jan 2016: 3%
- Jul 2016: 1.2%

**US Unemployment Rate**

- 2006: 5%
- 2008: 8%
- 2010: 9%
- 2012: 7%
- 2014: 5%
- 2016: 4%

Yield Curve Changes

Periods Ending June 30, 2016

Key: Long-Term Treasury Rates Fell 0.85% Last Year

- Low rates abroad kept demand for U.S. assets strong. The German 10-year sovereign bond traded at a negative yield for the first time ever.

- The decline in Treasury yields boosted returns across all segments, with longer maturities posting the biggest gains. The 10-year dropped 29 basis points to a low not seen since 2012, finishing June at 1.49%.

- Breakeven inflation ended lower despite a climb in oil prices and healthy core inflation numbers.
Global Rate Expectations and Current Environment

**Key:** 74% of Global Gov’t. Bond Yields are < 1% while 36% are **Negative.**

* Target policy rates for Japan are estimated using EuroYen 3-month futures contracts less a 6 bps risk premium.

### U.S. Equity Style Returns

**Periods Ending June 30, 2016**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Core</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large</strong></td>
<td>2.9%</td>
<td>2.9%</td>
<td>3.0%</td>
</tr>
<tr>
<td><strong>Mid</strong></td>
<td>3.3%</td>
<td>0.6%</td>
<td>-2.1%</td>
</tr>
<tr>
<td><strong>Small</strong></td>
<td>-2.6%</td>
<td>-6.7%</td>
<td>-10.8%</td>
</tr>
</tbody>
</table>

- Last Year: Small cap underperformed; style mixed

Large Cap Core is represented by the Russell 1000 Index, Large Cap Value is represented by the Russell 1000 Value Index and Large Cap Growth is represented by the Russell 1000 Growth Index. Mid Cap Core is represented by the Russell Midcap Index, Mid Cap Value is represented by the Russell Midcap Value Index and Mid Cap Growth is represented by the Russell Midcap Growth Index. Small Cap Core is represented by the Russell 2000 Index, Small Cap Value is represented by the Russell 2000 Value Index and Small Cap Growth is represented by the Russell 2000 Growth Index.
### Asset Class Performance

#### Periodic Table of Investment Returns for Periods Ended June 30, 2016

<table>
<thead>
<tr>
<th></th>
<th>Last Quarter</th>
<th>Last Year</th>
<th>Last 3 Years</th>
<th>Last 5 Years</th>
<th>Last 10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Best</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLMBRG:Commodity Idx</td>
<td>12.7%</td>
<td>S&amp;P:500</td>
<td>11.7%</td>
<td>12.1%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Russell:2000 Index</td>
<td>3.8%</td>
<td>S&amp;P:500</td>
<td>7.1%</td>
<td>8.4%</td>
<td>6.2%</td>
</tr>
<tr>
<td>S&amp;P:500</td>
<td>2.5%</td>
<td>Russel:2000 Index</td>
<td>4.1%</td>
<td>3.8%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Barclays:Aggregate Index</td>
<td>2.2%</td>
<td>Russell:2000 Index</td>
<td>6.7%</td>
<td>MSCI:EAFE</td>
<td>MSCI:EM Gross</td>
</tr>
<tr>
<td>MSCI:EM Gross</td>
<td>0.8%</td>
<td>MSCI:EAFE</td>
<td>2.1%</td>
<td>1.7%</td>
<td>3.9%</td>
</tr>
<tr>
<td>3 Month T-Bill</td>
<td>0.1%</td>
<td>MSCI:EM Gross</td>
<td>0.1%</td>
<td>0.1%</td>
<td>1.6%</td>
</tr>
<tr>
<td>MSCI:EAFE</td>
<td>(1.5%)</td>
<td>BLMBRG:Commodity Idx</td>
<td>(13.5%)</td>
<td>BLMBRG:Commodity Idx</td>
<td>BLMBRG:Commodity Idx</td>
</tr>
</tbody>
</table>

| **Worst**      |              |           |              |              |               |
| MSCI:EAFE      | (10.2%)      | 3 Month T-Bill | 0.1% | 0.1% | 1.0% |
| MSCI:EM Gross  | (11.7%)      | MSCI:EM Gross | (1.2%) | (3.4%) | (6.5%) |
| BLMBRG:Commodity Idx | (10.6%)        | BLMBRG:Commodity Idx | (10.9%) | BLMBRG:Commodity Idx | (6.5%) |
PERS Actual Allocations are within 1% to 2% of Target Allocations

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>$000s Actual</th>
<th>Actual</th>
<th>$000s Target</th>
<th>Percent Difference</th>
<th>$000s Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Equity</td>
<td>546,892</td>
<td>22.2%</td>
<td>21.4%</td>
<td>0.8%</td>
<td>20,609</td>
</tr>
<tr>
<td>Domestic Fixed Income</td>
<td>433,307</td>
<td>17.6%</td>
<td>17.0%</td>
<td>0.6%</td>
<td>15,232</td>
</tr>
<tr>
<td>International Equity</td>
<td>367,297</td>
<td>14.9%</td>
<td>14.6%</td>
<td>0.3%</td>
<td>8,244</td>
</tr>
<tr>
<td>Intl Fixed Income</td>
<td>128,666</td>
<td>5.2%</td>
<td>5.0%</td>
<td>0.2%</td>
<td>5,702</td>
</tr>
<tr>
<td>Real Estate</td>
<td>275,539</td>
<td>11.2%</td>
<td>10.0%</td>
<td>1.2%</td>
<td>29,612</td>
</tr>
<tr>
<td>World Equity</td>
<td>402,558</td>
<td>16.4%</td>
<td>16.0%</td>
<td>0.4%</td>
<td>9,075</td>
</tr>
<tr>
<td>Private Equity</td>
<td>79,938</td>
<td>3.3%</td>
<td>5.0%</td>
<td>(1.7%)</td>
<td>(43,025)</td>
</tr>
<tr>
<td>Timber</td>
<td>77,460</td>
<td>3.1%</td>
<td>5.0%</td>
<td>(1.9%)</td>
<td>(45,504)</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>108,994</td>
<td>4.4%</td>
<td>5.0%</td>
<td>(0.6%)</td>
<td>(13,969)</td>
</tr>
<tr>
<td>Cash &amp; Equivalents</td>
<td>38,615</td>
<td>1.6%</td>
<td>1.0%</td>
<td>0.6%</td>
<td>14,023</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,459,266</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For the current fiscal year ended June 30, 2016, PERS generated a net return of 0.28%, largely due to slowing global growth rates and significant political uncertainty in many markets. As a result, Global Equities, with a 57% allocation, declined by 3.90% last year. On a positive note, Fixed Income and Real Assets displayed strong gains as both benchmarks increased by over 6.21% in the last fiscal year. PERS Fixed Income (with a 23% allocation) underperformed as the portfolio was positioned for a gradual rise in rates during a period when rates declined, while Real Assets (up 7.99%) was PERS top asset class.
PERS Performance and Attribution

As of June 30, 2016

One Year Relative Attribution Effects

1 Year Ended 6/30/2016
Gross: 0.61%
Net of fees: 0.28%
Target: 0.56%
Net Added: -0.28%

One Year Relative Attribution Effects

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Effective Actual Weight</th>
<th>Effective Target Weight</th>
<th>Actual Return</th>
<th>Target Return</th>
<th>Manager Effect</th>
<th>Asset Allocation</th>
<th>Total Relative Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Equity</td>
<td>23%</td>
<td>21%</td>
<td>2.03%</td>
<td>0.73%</td>
<td>0.28%</td>
<td>(0.03%)</td>
<td>0.25%</td>
</tr>
<tr>
<td>Domestic Fixed Income</td>
<td>18%</td>
<td>17%</td>
<td>3.85%</td>
<td>4.77%</td>
<td>(0.17%)</td>
<td>0.03%</td>
<td>(0.14%)</td>
</tr>
<tr>
<td>Real Estate</td>
<td>11%</td>
<td>10%</td>
<td>11.96%</td>
<td>10.64%</td>
<td>0.15%</td>
<td>(0.01%)</td>
<td>0.13%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>5%</td>
<td>5%</td>
<td>3.65%</td>
<td>0.64%</td>
<td>0.13%</td>
<td>(0.01%)</td>
<td>0.12%</td>
</tr>
<tr>
<td>Timber</td>
<td>3%</td>
<td>5%</td>
<td>4.34%</td>
<td>3.49%</td>
<td>0.03%</td>
<td>(0.05%)</td>
<td>0.02%</td>
</tr>
<tr>
<td>International Equity</td>
<td>15%</td>
<td>15%</td>
<td>(7.76%)</td>
<td>(10.45%)</td>
<td>0.44%</td>
<td>(0.07%)</td>
<td>0.37%</td>
</tr>
<tr>
<td>International Fixed Inc.</td>
<td>5%</td>
<td>5%</td>
<td>7.68%</td>
<td>11.24%</td>
<td>(0.16%)</td>
<td>(0.01%)</td>
<td>(0.17%)</td>
</tr>
<tr>
<td>Private Equity</td>
<td>4%</td>
<td>5%</td>
<td>(7.19%)</td>
<td>(7.19%)</td>
<td>0.00%</td>
<td>0.11%</td>
<td>0.11%</td>
</tr>
<tr>
<td>World Equity</td>
<td>16%</td>
<td>16%</td>
<td>(6.53%)</td>
<td>(2.75%)</td>
<td>(0.63%)</td>
<td>(0.01%)</td>
<td>(0.64%)</td>
</tr>
<tr>
<td>Cash &amp; Equivalents</td>
<td>1%</td>
<td>1%</td>
<td>0.29%</td>
<td>0.19%</td>
<td>0.00%</td>
<td>0.04%</td>
<td>0.04%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>0.61%</strong></td>
<td><strong>0.56%</strong></td>
<td><strong>0.08%</strong></td>
<td><strong>(0.02%)</strong></td>
<td><strong>0.06%</strong></td>
</tr>
</tbody>
</table>

Callan | Knowledge. Experience. Integrity. | Second Quarter 2016
PERS Performance and Attribution

As of June 30, 2016

Six Year Annualized Risk vs Return

6 Years Ended 6/30/2016
Gross: 9.17%
Net of fees: 8.82%
Target: 8.37%
Net Added: 0.45%

Six Year Annualized Relative Attribution Effects

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Effective Actual Weight</th>
<th>Effective Target Weight</th>
<th>Actual Return</th>
<th>Target Return</th>
<th>Manager Effect</th>
<th>Asset Allocation</th>
<th>Total Relative Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Equity</td>
<td>28%</td>
<td>27%</td>
<td>15.13%</td>
<td>14.52%</td>
<td>0.08%</td>
<td>0.10%</td>
<td>0.18%</td>
</tr>
<tr>
<td>Domestic Fixed Income</td>
<td>20%</td>
<td>20%</td>
<td>6.18%</td>
<td>4.86%</td>
<td>0.21%</td>
<td>(0.04)%</td>
<td>0.17%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>9%</td>
<td>9%</td>
<td>15.46%</td>
<td>12.37%</td>
<td>0.24%</td>
<td>0.01%</td>
<td>0.25%</td>
</tr>
<tr>
<td>Timber</td>
<td>4%</td>
<td>4%</td>
<td>-</td>
<td>-</td>
<td>(0.24%)</td>
<td>(0.05%)</td>
<td>(0.29%)</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>3%</td>
<td>4%</td>
<td>-</td>
<td>-</td>
<td>0.15%</td>
<td>0.08%</td>
<td>0.23%</td>
</tr>
<tr>
<td>International Equity</td>
<td>16%</td>
<td>16%</td>
<td>6.41%</td>
<td>4.14%</td>
<td>0.35%</td>
<td>(0.07%)</td>
<td>0.28%</td>
</tr>
<tr>
<td>International Fixed Inc.</td>
<td>5%</td>
<td>5%</td>
<td>4.43%</td>
<td>2.71%</td>
<td>0.09%</td>
<td>(0.01%)</td>
<td>0.08%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>5%</td>
<td>5%</td>
<td>2.76%</td>
<td>2.76%</td>
<td>0.00%</td>
<td>(0.03%)</td>
<td>(0.03%)</td>
</tr>
<tr>
<td>World Equity</td>
<td>10%</td>
<td>10%</td>
<td>-</td>
<td>-</td>
<td>(0.03%)</td>
<td>(0.04%)</td>
<td>(0.07%)</td>
</tr>
<tr>
<td>Cash &amp; Equivalents</td>
<td>1%</td>
<td>1%</td>
<td>0.12%</td>
<td>0.10%</td>
<td>0.00%</td>
<td>(0.01%)</td>
<td>(0.01%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>9.17%</strong></td>
<td><strong>8.37%</strong></td>
<td><strong>0.85%</strong></td>
<td><strong>(0.06%)</strong></td>
<td><strong>0.80%</strong></td>
</tr>
</tbody>
</table>
PERS Net Investment Return was 0.28% and 6.49% for the 1- and 5-year periods ended June 30, 2016, respectively.

### One-Year Returns:
PERS posted a net investment return of **0.28%** for the year ended June 30, 2016, which trailed its performance benchmark of 0.56%. Two large global equity managers were responsible for 0.63% of negative attribution. Fixed Income was also responsible for 0.33% of negative attribution as the portfolio was positioned for a gradual rise in interest rates. In contrast, 10-year U.S. Treasury rates fell from 2.35% at June 30, 2015, to less than 1.50% at June 30, 2016.

### Five-Year Returns:
PERS posted a net investment return of **6.49%** for the 5-years ended June 30, 2016, largely due to strong results in real estate (up 13%) and U.S. public equities (up 11%). Despite the disappointing results last year, active management generated **$46 million of incremental income** for PERS for the 5-year period ended June 30, 2016.

Note: All amounts are deemed to be materially accurate, but are unaudited and subject to change.
PERS “gross” returns were ranked in the 33\textsuperscript{rd} percentile for the 5-years ended June 30, 2016, based on Callan’s “Public Fund Sponsor Database”.

*Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 12.0% Barclays Aggregate Index, 11.1% MSCI EAFE, 10.0% NCREIF Total Index, 5.0% CPI-W, 5.0% Barclays US HY Corp 2% Cp, 5.0% NDSIB PERS - Private Equity, 5.0% Barclays Global Agg ex-US, 5.0% NCREIF Timberland Index, 4.8% Russell 2000 Index, 3.5% MSCI EM and 1.0% 3-month Treasury Bill.*
TFFR Actual Allocations are within 1% to 3% of Target Allocations

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>$000s Actual</th>
<th>Actual</th>
<th>$000s Target</th>
<th>Percent Difference</th>
<th>$000s Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Equity</td>
<td>478,122</td>
<td>23.0%</td>
<td>21.4%</td>
<td>1.6%</td>
<td>32,554</td>
</tr>
<tr>
<td>Domestic Fixed Income</td>
<td>361,707</td>
<td>17.4%</td>
<td>17.0%</td>
<td>0.4%</td>
<td>7,751</td>
</tr>
<tr>
<td>International Equity</td>
<td>321,177</td>
<td>15.4%</td>
<td>14.6%</td>
<td>0.8%</td>
<td>17,192</td>
</tr>
<tr>
<td>Intl Fixed Income</td>
<td>121,443</td>
<td>5.8%</td>
<td>6.0%</td>
<td>(0.2%)</td>
<td>(3,483)</td>
</tr>
<tr>
<td>Real Estate</td>
<td>204,184</td>
<td>9.8%</td>
<td>10.0%</td>
<td>(0.2%)</td>
<td>(4,025)</td>
</tr>
<tr>
<td>World Equity</td>
<td>335,715</td>
<td>16.1%</td>
<td>16.0%</td>
<td>0.1%</td>
<td>2,580</td>
</tr>
<tr>
<td>Private Equity</td>
<td>73,374</td>
<td>3.5%</td>
<td>6.0%</td>
<td>(2.5%)</td>
<td>(51,551)</td>
</tr>
<tr>
<td>Timber</td>
<td>70,258</td>
<td>3.4%</td>
<td>3.0%</td>
<td>0.4%</td>
<td>7,796</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>97,588</td>
<td>4.7%</td>
<td>5.0%</td>
<td>(0.3%)</td>
<td>(6,517)</td>
</tr>
<tr>
<td>Cash &amp; Equivalents</td>
<td>18,522</td>
<td>0.9%</td>
<td>1.0%</td>
<td>(0.1%)</td>
<td>(2,299)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,082,090</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For the current fiscal year ended June 30, 2016, TFFR generated a net return of 0.28%, largely due to slowing global growth rates and significant political uncertainty in many markets. As a result, Global Equities, with a 58% allocation, declined by 3.9% last year. On a positive note, Fixed Income and Real Assets displayed strong gains as both benchmarks increased by 6.3% in the last fiscal year. TFFR Fixed Income (with a 23% allocation) underperformed as the portfolio was positioned for a gradual rise in rates during a period when rates declined, while Real Assets (up 7.83%) was TFFR’s top asset class.
## TFFR Performance and Attribution

**As of June 30, 2016**

### One Year Relative Attribution Effects

![Graph showing relative attribution effects for different asset classes.]

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Effective Actual Weight</th>
<th>Effective Target Weight</th>
<th>Actual Return</th>
<th>Target Return</th>
<th>Manager Effect</th>
<th>Asset Allocation</th>
<th>Total Relative Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Equity</td>
<td>22%</td>
<td>21%</td>
<td>2.02%</td>
<td>0.73%</td>
<td>0.28%</td>
<td>-0.00%</td>
<td>0.27%</td>
</tr>
<tr>
<td>Domestic Fixed Income</td>
<td>16%</td>
<td>17%</td>
<td>3.62%</td>
<td>4.63%</td>
<td>(0.18)%</td>
<td>0.03%</td>
<td>(0.15%)</td>
</tr>
<tr>
<td>Real Estate</td>
<td>11%</td>
<td>10%</td>
<td>11.96%</td>
<td>10.64%</td>
<td>0.12%</td>
<td>0.02%</td>
<td>0.14%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>5%</td>
<td>5%</td>
<td>3.65%</td>
<td>0.64%</td>
<td>0.14%</td>
<td>(0.02%)</td>
<td>0.12%</td>
</tr>
<tr>
<td>Timber</td>
<td>4%</td>
<td>5%</td>
<td>4.34%</td>
<td>3.49%</td>
<td>0.03%</td>
<td>(0.05%)</td>
<td>(0.01%)</td>
</tr>
<tr>
<td>International Equity</td>
<td>15%</td>
<td>15%</td>
<td>(7.71)%</td>
<td>(10.39)%</td>
<td>0.43%</td>
<td>(0.05)%</td>
<td>0.35%</td>
</tr>
<tr>
<td>International Fixed Inc.</td>
<td>5%</td>
<td>5%</td>
<td>7.88%</td>
<td>11.24%</td>
<td>(0.18)%</td>
<td>(0.04%)</td>
<td>(0.20%)</td>
</tr>
<tr>
<td>Private Equity</td>
<td>4%</td>
<td>5%</td>
<td>(7.19)%</td>
<td>(7.19)%</td>
<td>0.00%</td>
<td>0.08%</td>
<td>0.08%</td>
</tr>
<tr>
<td>World Equity</td>
<td>16%</td>
<td>16%</td>
<td>(6.53)%</td>
<td>(2.78)%</td>
<td>(0.62)%</td>
<td>(0.02%)</td>
<td>(0.64%)</td>
</tr>
<tr>
<td>Cash &amp; Equivalents</td>
<td>1%</td>
<td>1%</td>
<td>0.29%</td>
<td>0.19%</td>
<td>0.00%</td>
<td>0.04%</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

**Total**  
0.61% = 0.61% + 0.04% + (0.04%)  
(0.00%)
**TFFR Performance and Attribution**

As of June 30, 2016

**Six Year Annualized Risk vs Return**

- 25th percentile vs Public Fund DB
- 6 Years Ended 6/30/2016
  - Gross: 9.44%
  - Net of fees: 9.09%
  - Target: 8.36%
  - Net Added: 0.73%

**Six Year Annualized Relative Attribution Effects**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Effective Actual Weight</th>
<th>Effective Target Weight</th>
<th>Actual Return</th>
<th>Target Return</th>
<th>Manager Effect</th>
<th>Asset Allocation</th>
<th>Total Relative Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Equity</td>
<td>27%</td>
<td>26%</td>
<td>15.13%</td>
<td>14.51%</td>
<td>0.10%</td>
<td>0.09%</td>
<td>0.19%</td>
</tr>
<tr>
<td>Domestic Fixed Income</td>
<td>18%</td>
<td>17%</td>
<td>6.20%</td>
<td>4.90%</td>
<td>0.22%</td>
<td>(0.02%)</td>
<td>0.20%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>10%</td>
<td>10%</td>
<td>15.48%</td>
<td>12.37%</td>
<td>0.29%</td>
<td>0.03%</td>
<td>0.31%</td>
</tr>
<tr>
<td>Timber</td>
<td>4%</td>
<td>4%</td>
<td>-</td>
<td>-</td>
<td>(0.23%)</td>
<td>(0.00%)</td>
<td>(0.24%)</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>3%</td>
<td>4%</td>
<td>-</td>
<td>-</td>
<td>0.15%</td>
<td>0.10%</td>
<td>0.25%</td>
</tr>
<tr>
<td>International Equity</td>
<td>17%</td>
<td>17%</td>
<td>6.57%</td>
<td>4.33%</td>
<td>0.41%</td>
<td>(0.03%)</td>
<td>0.38%</td>
</tr>
<tr>
<td>International Fixed Inc.</td>
<td>5%</td>
<td>5%</td>
<td>4.43%</td>
<td>2.71%</td>
<td>0.09%</td>
<td>(0.02%)</td>
<td>0.08%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>5%</td>
<td>5%</td>
<td>2.78%</td>
<td>2.78%</td>
<td>0.00%</td>
<td>(0.02%)</td>
<td>(0.02%)</td>
</tr>
<tr>
<td>World Equity</td>
<td>10%</td>
<td>10%</td>
<td>0.12%</td>
<td>0.10%</td>
<td>(0.03%)</td>
<td>(0.04%)</td>
<td>(0.07%)</td>
</tr>
<tr>
<td>Cash &amp; Equivalents</td>
<td>1%</td>
<td>1%</td>
<td>-</td>
<td>-</td>
<td>0.00%</td>
<td>(0.01%)</td>
<td>(0.00%)</td>
</tr>
</tbody>
</table>

**Total**

9.44% = 8.36% + 1.00% + 0.08% = 1.08%

---

**Callan**

Knowledge. Experience. Integrity.
TFFR’s Net Investment Return was 0.28% and 6.32% for the 1- and 5-year periods ended June 30, 2016, respectively.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fund Return - Net</td>
<td>0.28%</td>
<td>6.55%</td>
<td>6.32%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>0.62%</td>
<td>5.95%</td>
<td>5.73%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>-0.34%</td>
<td>0.60%</td>
<td>0.59%</td>
<td>105%</td>
</tr>
</tbody>
</table>

**One-Year Returns:** TFFR posted a net investment return of **0.28%** for the year ended June 30, 2016, which trailed its performance benchmark of 0.62%. Two large global equity managers were responsible for 0.62% of negative attribution. Fixed Income was also responsible for 0.34% of negative attribution as the portfolio was positioned for a gradual rise in interest rates. In contrast, 10-year U.S. Treasury rates fell from 2.35% at June 30, 2015, to less than 1.50% at June 30, 2016.

**Five-Year Returns:** TFFR posted a net investment return of **6.32%** for the 5-years ended June 30, 2016, largely due to strong results in real estate (up 13%) and U.S. public equities (up 11%). Despite the disappointing results last year, active management generated **$44 million of incremental income** for TFFR for the 5-year period ended June 30, 2016.

Note: All amounts are deemed to be materially accurate, but are unaudited and subject to change.
TFFR’s “gross” returns were ranked in the 37th percentile for the 5-years ended June 30, 2016, based on Callan’s “Public Fund Sponsor Database”.

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 13.0% Barclays Aggregate Index, 11.8% MSCI EAFE, 10.0% NCREIF Total Index, 6.0% NDSIB TFFR - Private Equity, 6.0% Barclays Global Agg ex-US, 5.0% CPI-W, 4.8% Russell 2000 Index, 4.0% Barclays US HY Corp 2% Cp, 3.0% NCREIF Timberland Index, 2.8% MSCI EM and 1.0% 3-month Treasury Bill.
**PERS & TFFR – June 2016 Performance Update**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERS (Main Plan)</strong></td>
<td>$2,459,388,086</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>0.28%</td>
<td>6.51%</td>
<td>6.49%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>0.56%</td>
<td>5.92%</td>
<td>6.08%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>-0.28%</td>
<td>0.59%</td>
<td>0.41%</td>
<td>105%</td>
</tr>
<tr>
<td><strong>TFFR</strong></td>
<td>$2,082,183,640</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>0.28%</td>
<td>6.55%</td>
<td>6.32%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>0.62%</td>
<td>5.95%</td>
<td>5.73%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>-0.34%</td>
<td>0.60%</td>
<td>0.59%</td>
<td>105%</td>
</tr>
</tbody>
</table>

**PERS and TFFR:**

- **“Excess Return”** is defined as the actual investment return (after deducting investment fees) over the expected return of the underlying investment policy or benchmark (i.e. a passive index).
- **Active management has generated $90 million of incremental income** (after fees) for PERS & TFFR in the last 5-years. Based on $4 billion of assets and **Excess Return of 0.45%** ($4 billion x 0.45% x 5 years).
- **These strong returns have been achieved while reducing overall investment risk,** as measured by standard deviation, during the past 10 years. Standard deviation measures the amount of variation or dispersion from the average.

Note: Data as of June 30, 2016, is unaudited and subject to change.
How big is the post-retirement bill?

A relative comparison of the 50 states’ payment obligations

The state of the states: how much states spend on debt, pensions and retiree healthcare
% of state revenue collections required to pay the sum of interest on bonds, the state’s share of unfunded pension and retiree healthcare liabilities, and defined contribution plan payments

- Bars that appear above the **red line** indicate a level at which states face critical challenges in meeting an ability to service their debt and post-retirement benefit obligations.

- Bars that appear below the **green line** identify states that one might view not requiring “a disproportionate share of revenues to service their debts.”

- Note that North Dakota’s overall funding obligations are comparatively low (third from the right).

Appendix – EBPC Presentation (August 2016)

- State Investment Board Members
- Retirement and Investment Office Background
- State Investment Board Process
- North Dakota Century Code 21-10 State Investment Board
- Listing of Consulting and Professional Service Firms
- Transparency Enhancement Update (RIO Website)
- PERS and TFFR Asset Allocation Policies
The SIB includes 11 members with Lieutenant Governor Drew Wrigley serving as Chairman and includes State Treasurer Kelly Schmidt, the Commissioner of University and School Lands Lance Gaebe, the Director of Workforce Safety and Insurance designee Cindy Ternes, the Insurance Commissioner Adam Hamm, plus three TFFR board members and three PERS board members.

The TFFR representatives include Michael Gessner, Rob Lech and Mel Olson noting that Mr. Lech also serves as the board parliamentarian.

The PERS representatives include Mike Sandal, Tom Trenbeath and Yvonne Smith noting that Mr. Sandal also serves as Vice Chairman of the SIB.
RIO is an agency of the State of North Dakota. The agency was created by the 1989 Legislative Assembly to capture administrative and investment cost savings in the management of two important long-standing state programs – the retirement program of the Teachers’ Fund for Retirement (TFFR) and the investment program of the State Investment Board (SIB).

The SIB is responsible for setting policies and procedures guiding the investment of over $10.7 billion in assets for seven pension funds and 16 other insurance-type funds. Their investments are divided into two investment trust funds and two individual investment accounts. Individual investment guidelines for each fund can be found in the Investment Section. These guidelines include goals and objectives, risk tolerance, liquidity constraints, asset allocation and portfolio restrictions specific to each fund’s unique circumstances. When creating investment pools to implement the asset allocations for each client fund, the SIB takes all of these guidelines into consideration in order to best meet the objectives of each fund and safeguard fund assets.

The pension investment pool is made up of only qualified pension funds whose monies must be invested exclusively for the benefit of their participants. The insurance investment pool is made up of mainly insurance-type funds, but also includes other funds that do not qualify as pension funds and would like to benefit from the cost savings of being pooled with other funds’ assets. All of these funds are invested in accordance with the “Prudent Investor Rule.”

An important aspect of the prudent investor rule is that individual investments are considered not in isolation but in the context of the trust portfolio as a whole. Some new opportunities may appear risky when viewed alone. However, when part of a diversified mix of investments in stocks, bonds and other assets, they can increase returns often without increasing the overall portfolio risk and, in some cases, may help decrease the overall portfolio’s risk.
The pension investment pool was created in July 1989 with the pooling of selected investments of TFFR and the Public Employees Retirement System (PERS). Assets from the City of Bismarck Employees and Police pension funds were added later that same fiscal year. In April 1994, Job Service of North Dakota made their initial contribution to the pool. The City of Fargo Employees pension plan joined the pension pool in December 2007 and the City of Grand Forks Employees pension plan in May 2009. Most recently, the Grand Forks Park District pension plan began participating in the pension pool in December 2009. The City of Fargo Employees pension plan withdrew the bulk of their assets from the SIB in December 2013. Their balance at June 30, 2015, represents residual cash needed to pay final expenses.

The insurance investment pool began in December 1993 with the pooling of the assets of the WSI, Fire and Tornado, Bonding, Insurance Regulatory, and Petroleum Tank Release funds.

Other additions to this pool have occurred as follows:

- The Risk Management Fund was added in October 1996.
- Two North Dakota Association of Counties (NDACo) funds were added during fiscal year 1999, in January and March.
- The City of Bismarck Deferred Sick Leave and PERS Group Insurance funds were both added in July 1999.
- The City of Fargo FargoDome Permanent Fund was added in October 2002.
- The Risk Management Workers Compensation Fund was added in October 2003.
- The Cultural Endowment Fund was added by the 2005 legislature and funded in July 2005.
- The Budget Stabilization Fund joined the pool in September 2005 upon reaching statutorily designated levels.
- The State Board of Medical Examiners Fund joined the pool in April, 2014.
The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to RIO for its comprehensive annual financial report for the fiscal year ended June 30, 2015. This was the eighteenth consecutive year that RIO has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program’s requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

TFFR also received the 2015 Public Pension Standards Award for Funding and Administration from the Public Pension Coordinating Council. To receive the award, the retirement system must certify that it meets specific professional standards for a comprehensive benefit program, actuarial valuations, financial reporting, investments, communications to members, and funding adequacy.
State Investment Board Process

PERS Board (4 Funds) | TFFR Board | City of Bismarck Police Pension Board | City of Bismarck Employee Pension Board | City of Bismarck Deferred Sick Leave | City of Grand Forks Pension Fund | City of Grand Forks Park District Pension Fund

WSI Board | Insurance Commissioner (4 Funds) | State Risk Mgmt (2 Funds) | ND Association of Counties | Council on the Arts Cultural Endowment | State Board of Medical Examiners | Center for Tobacco Prevention & Control | City of Fargo FargoDome Permanent Fund

Budget Stabilization Fund | Legacy Fund

Legacy and Budget Stabilization Fund Advisory Board

SIB Client Boards:
1. PERS
2. TFFR
3. City of Bismarck
4. City of Grand Forks
5. WSI
6. Insurance Commissioner
7. State Risk Mgmt.
8. ND Association of Counties
9. Council on the Arts
10. State Board of Medical Examiners
11. Center for Tobacco Prevention & Control
12. City of Fargo
13. Legacy & Budget Stabilization Fund Advisory Board

State Investment Board (SIB)

Retirement and Investment Office (RIO)

Custodian Bank

Investment Managers

Investment Consultant

Legal Counsel, Actuaries & Independent Auditors
**State Investment Board Process**

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

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

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

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

Retirement and Investment Office Staff Responsibilities (on behalf of SIB):
- Administer overall investment strategy
- Advise SIB on ways to maximize risk/return opportunities within each asset class
- Act as liaison between SIB and managers, consultant and custodian
- Monitor individual clients’ investment guidelines and asset allocations
- Maintain separate accounting for client accounts

Investment Manager Responsibilities:
- Accept and implement specific mandates or “investment missions”
- Make buy/sell decisions based on investment guidelines
- Report to RIO Staff on regular basis
- Provide education to SIB
State Investment Board Process

Custodian Bank Responsibilities:
- Safe-keep assets
- Settle trades
- Record-keeper

Investment Consultant Responsibilities:
- Performance measurement of investment managers
- Manager search assistance
- Provide education to SIB
  Special projects

Others Experts:
- Legal Counsel
- Independent Actuaries and Auditors
- Specialists in custody and fee reviews and/or transaction cost analyses
NDCC Chapter 21-10 State Investment Board

21-10-01. State investment board - Membership - Term - Compensation – Advisory council.

The North Dakota state investment board consists of the governor, the state treasurer, the commissioner of university and school lands, the director of workforce safety and insurance, the insurance commissioner, three members of the teachers’ fund for retirement board or the board’s designees who need not be members of the fund as selected by that board, two of the elected members of the public employees retirement system board as selected by that board, and one member of the public employees retirement system board as selected by that board. The director of workforce safety and insurance may appoint a designee, subject to approval by the workforce safety and insurance board of directors, to attend the meetings, participate, and vote when the director is unable to attend. The teachers’ fund for retirement board may appoint an alternate designee with full voting privileges to attend meetings of the state investment board when a selected member is unable to attend. The public employees retirement system board may appoint an alternate designee with full voting privileges from the public employees retirement system board to attend meetings of the state investment board when a selected member is unable to attend. The members of the state investment board, except elected and appointed officials and the director of workforce safety and insurance or the director's designee, are entitled to receive as compensation one hundred forty-eight dollars per day and necessary mileage and travel expenses as provided in sections 44-08-04 and 54-06-09 for attending meetings of the state investment board.

The state investment board may establish an advisory council composed of individuals who are experienced and knowledgeable in the field of investments. The state investment board shall determine the responsibilities of the advisory council. Members of the advisory council are entitled to receive the same compensation as provided the members of the advisory board of the Bank of North Dakota and necessary mileage and travel expenses as provided in sections 44-08-04 and 54-06-09.

21-10-02. Board - Powers and duties.

The board is charged with the investment of the funds enumerated in section 21-10-06. It shall approve general types of securities for investment by these funds and set policies and procedures regulating securities transactions on behalf of the various funds. Representatives of the funds enumerated in section 21-10-06 may make recommendations to the board in regard to investments. The board or its designated agents must be custodian of securities purchased on behalf of funds under the management of the board. The board may appoint an investment director or advisory service, or both, who must be experienced in, and hold considerable knowledge of, the field of investments. The investment director or advisory service shall serve at the pleasure of the board. The investment director or advisory service may be an individual, corporation, limited liability company, partnership, or any legal entity which meets the qualifications established herein. The board may authorize the investment director to lend securities held by the funds. These securities must be collateralized as directed by the board. The board may create investment fund pools in which the funds identified in section 21-10-06 may invest.
21-10-02.1. Board - Policies on investment goals and objectives and asset allocation.
1. The governing body of each fund enumerated in section 21-10-06 shall establish policies on investment goals and objectives and asset allocation for each respective fund. The policies must provide for:
   a. The definition and assignment of duties and responsibilities to advisory services and persons employed by the board.
   b. Rate of return objectives, including liquidity requirements and acceptable levels of risk.
   c. Long-range asset allocation goals.
   d. Guidelines for the selection and redemption of investments.
   e. Investment diversification, investment quality, qualification of advisory services, and amounts to be invested by advisory services.
   f. The type of reports and procedures to be used in evaluating performance.
2. The asset allocation and any subsequent allocation changes for each fund must be approved by the governing body of that fund and the state investment board. The governing body of each fund shall use the staff and consultants of the retirement and investment office in developing asset allocation and investment policies.

21-10-03. Cooperation with Bank of North Dakota.

21-10-04. Board - Meetings.
The state investment board shall select one of its members to serve as chair, one to serve as vice chair, and shall meet at the call of the chair or upon written notice signed by two members of the board.

21-10-05. Investment director - Powers and duties.
Subject to the limitations contained in the law or the policymaking regulations or resolutions adopted by the board, the investment director may sign and execute all contracts and agreements to make purchases, sales, exchanges, investments, and reinvestments relating to the funds under the management of the board. This section is a continuing appropriation of all moneys required for the making of investments of funds under the management of the board. The investment director shall see that moneys invested are at all times handled in the best interests of the funds. Securities or investments may be sold or exchanged for other securities or investments.
The investment director shall formulate and recommend to the investment board for approval investment regulations or resolutions pertaining to the kind or nature of investments and limitations, conditions, and restrictions upon the methods, practices, or procedures for investment, reinvestment, purchase, sale, or exchange transactions that should govern the investment of funds under this chapter.
The board shall annually prepare reports on the investment performance of each fund under its control. The reports must be uniform and must include:

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.
NDCC Chapter 21-10 State Investment Board

21-10-06.2. Investment costs.
The amounts necessary to pay for investment costs, such as investment counseling fees, trustee fees, custodial fees, performance measurement fees, expenses associated with money manager searches, expenses associated with onsite audits and reviews of investment managers, and asset allocation expenses, incurred by the state investment board are hereby appropriated and must be paid directly out of the funds listed in section 21-10-06 by the fund incurring the expense.

21-10-07. Legal investments.
The state investment board shall apply the prudent investor rule in investing for funds under its supervision. The "prudent investor rule" means that in making investments 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 retirement funds belonging to the teachers' fund for retirement and the public employees retirement system must be invested exclusively for the benefit of their members and in accordance with the respective funds' investment goals and objectives.

21-10-08. Reserves - Percentage limitations.
In order to meet claims and liabilities, reserves must be established and maintained in each of the funds in accordance with the investment policy and asset allocation established for each fund.

21-10-09. Personal profit prohibited - Penalty.
No member, officer, agent, or employee of the state investment board may profit in any manner from transactions on behalf of the funds. Any person violating any of the provisions of this section is guilty of a class A misdemeanor.

21-10-10. State investment board fund - Cost of operation of board.
21-10-11. Legacy and budget stabilization fund advisory board.

The legacy and budget stabilization fund advisory board is created to develop recommendations for the investment of funds in the legacy fund and the budget stabilization fund to present to the state investment board. The goal of investment for the legacy fund is principal preservation while maximizing total return. The board consists of two members of the senate appointed by the senate majority leader, two members of the house of representatives appointed by the house majority leader, the director of the office of management and budget or designee, the president of the Bank of North Dakota or designee, and the tax commissioner or designee. The board shall select a chairman and must meet at the call of the chairman. The board shall report at least semiannually to the budget section. Legislative members are entitled to receive compensation and expense reimbursement as provided under section 54-03-20 and reimbursement for mileage as provided by law for state officers. The legislative council shall pay the compensation and expense reimbursement for the legislative members. The legislative council shall provide staff services to the legacy and budget stabilization fund advisory board. The staff and consultants of the state retirement and investment office shall advise the board in developing asset allocation and investment policies.

21-10-12. Legacy fund - Earnings defined.

For the purposes of section 26 of article X of the Constitution of North Dakota, the term "earnings" means net income in accordance with generally accepted accounting principles, excluding any unrealized gains or losses.
SIB client assets grew by approximately 6% (or $617 million) in the last year with the Legacy Fund creating the largest asset growth of $481 million primarily due to tax collections.

The Legacy Fund generated a net investment gain of 1.06% for the year ended June 30, 2016, slightly exceeding its performance benchmark. Since inception, the Legacy Fund has generated a net annualized return of 2.78% (over the last 4.75 years) exceeding the performance benchmark of 2.05%.

The Pension Trust posted a net return of 0.31% in the last year. During the last 5-years, the Pension Trust generated a net annualized return of 6.35%, exceeding the performance benchmark of 5.99%.

The Insurance Trust generated a net return of 3.12% in the last year. During the last 5-years, the Insurance Trust generated a net annualized return of 4.83%, exceeding the performance benchmark of 3.81%.

SIB client assets exceeded $11.3 billion as of June 30, 2016, based on unaudited valuations.
## ND RETIREMENT AND INVESTMENT OFFICE
### ND STATE INVESTMENT BOARD
### INVESTMENT PERFORMANCE SUMMARY
### AS OF JUNE 30, 2016

### Investment Performance (net of fees)

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Market Values as of 6/30/16</th>
<th>Quarter Ended</th>
<th>Fiscal Years ended June 30</th>
<th>Periods ended 6/30/16 (annualized)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pension Trust Fund</strong></td>
<td></td>
<td></td>
<td>2015</td>
<td>2014</td>
</tr>
<tr>
<td>Teachers' Fund for Retirement (TFR)</td>
<td>2,082,183,640</td>
<td>-4.98%</td>
<td>3.52%</td>
<td>15.53%</td>
</tr>
<tr>
<td>Public Employees Retirement System (PERS)</td>
<td>2,459,388,086</td>
<td>-5.04%</td>
<td>3.53%</td>
<td>16.38%</td>
</tr>
<tr>
<td>City of Bismarck Employees Pension</td>
<td>82,441,003</td>
<td>-4.25%</td>
<td>3.69%</td>
<td>14.56%</td>
</tr>
<tr>
<td>City of Bismarck Police Pension</td>
<td>33,983,589</td>
<td>-4.76%</td>
<td>3.56%</td>
<td>15.27%</td>
</tr>
<tr>
<td>Job Service of North Dakota Pension</td>
<td>96,888,333</td>
<td>-3.12%</td>
<td>3.30%</td>
<td>13.64%</td>
</tr>
<tr>
<td>City of Grand Forks Employees Pension</td>
<td>57,975,758</td>
<td>-5.32%</td>
<td>3.53%</td>
<td>16.33%</td>
</tr>
<tr>
<td>Park District of the City of Grand Forks Pension</td>
<td>5,720,246</td>
<td>-4.89%</td>
<td>4.22%</td>
<td>16.44%</td>
</tr>
<tr>
<td><strong>Subtotal Pension Trust Fund</strong></td>
<td>4,818,280,663</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Insurance Trust Fund</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workforce Safety &amp; Insurance (WSI)</td>
<td>1,832,104,203</td>
<td>-1.92%</td>
<td>3.26%</td>
<td>11.71%</td>
</tr>
<tr>
<td>State Fire and Tomato Fund</td>
<td>24,091,203</td>
<td>-2.89%</td>
<td>3.16%</td>
<td>12.78%</td>
</tr>
<tr>
<td>State Bonding Fund</td>
<td>3,296,372</td>
<td>-0.21%</td>
<td>1.25%</td>
<td>4.06%</td>
</tr>
<tr>
<td>Petroleum Tank Release Compensation Fund</td>
<td>7,149,512</td>
<td>0.20%</td>
<td>1.13%</td>
<td>3.66%</td>
</tr>
<tr>
<td>Insurance Regulatory Trust Fund</td>
<td>1,035,836</td>
<td>-2.55%</td>
<td>2.04%</td>
<td>9.88%</td>
</tr>
<tr>
<td>State Risk Management Fund</td>
<td>6,534,001</td>
<td>-2.08%</td>
<td>4.08%</td>
<td>12.29%</td>
</tr>
<tr>
<td>State Risk Management Workers Comp Fund</td>
<td>5,516,177</td>
<td>-2.65%</td>
<td>4.57%</td>
<td>13.66%</td>
</tr>
<tr>
<td>Cultural Endowment Fund</td>
<td>366,452</td>
<td>-4.39%</td>
<td>5.22%</td>
<td>16.94%</td>
</tr>
<tr>
<td>Budget Stabilization Fund</td>
<td>575,918,381</td>
<td>0.27%</td>
<td>1.86%</td>
<td>1.94%</td>
</tr>
<tr>
<td>ND Association of Counties (NDACo) Fund</td>
<td>4,048,663</td>
<td>-2.50%</td>
<td>2.77%</td>
<td>11.61%</td>
</tr>
<tr>
<td>Bismarck Deferred Sick Leave Account</td>
<td>642,265</td>
<td>-2.48%</td>
<td>2.95%</td>
<td>12.32%</td>
</tr>
<tr>
<td>City of Fargo FargoDome Permanent Fund</td>
<td>38,782,721</td>
<td>-4.50%</td>
<td>3.38%</td>
<td>16.34%</td>
</tr>
<tr>
<td>State Board of Medicine Fund</td>
<td>2,208,667</td>
<td>-1.66%</td>
<td>2.70%</td>
<td></td>
</tr>
<tr>
<td>PERS Group Insurance Account</td>
<td>37,715,356</td>
<td>0.00%</td>
<td>0.01%</td>
<td>0.06%</td>
</tr>
<tr>
<td><strong>Subtotal Insurance Trust Fund</strong></td>
<td>2,559,450,509</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Legacy Fund</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legacy Fund</td>
<td>3,809,485,177</td>
<td>-4.42%</td>
<td>1.06%</td>
<td>3.31%</td>
</tr>
<tr>
<td>Tobacco Control and Prevention Fund</td>
<td>54,366,538</td>
<td>-0.55%</td>
<td>0.65%</td>
<td></td>
</tr>
<tr>
<td><strong>PERS Retiree Insurance Credit Fund</strong></td>
<td>101,623,224</td>
<td>-5.59%</td>
<td>0.72%</td>
<td>3.06%</td>
</tr>
<tr>
<td><strong>Total Assets Under SIIB Management</strong></td>
<td>11,333,236,410</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Note: Asset allocation largely drives investment performance. Each fund has a unique allocation that takes into consideration return objectives, risk tolerance, liquidity constraints, and unique circumstances. Such considerations must be taken into account when comparing investment returns. All figures are preliminary and subject to revision.
# NDRIO – Consulting and Professional Services (June 30, 2016)

## Actuary
- **The Segal Company**  
  Chicago, Illinois

## Auditor
- **CliftonLarsonAllen LLP**  
  Baltimore, Maryland

## Legal Counsel
- **Attorney General's Office**  
  Bismarck, North Dakota
- **Ice Miller**  
  Chicago, Illinois
- **K&L Gates**  
  Boston, Massachusetts

## Information Technology
- **Advent Software, Inc.**  
  San Francisco, CA
- **CPAS Systems Inc.**  
  Toronto, Ontario

## Investment Consultant and Performance Measurement
- **Callan Associates Inc.**  
  San Francisco, California
- **Mercer LLC**  
  Chicago, Illinois
- **Novarca North America LLC**  
  Palo Alto, California
- **Adams Street Partners, LLC**  
  Chicago, Illinois

## Investment Managers (cont.)
- **Axiom International Investors**  
  Greenwich, Connecticut
- **Babson Capital Management LLC**  
  Boston, Massachusetts
- **Brandywine Asset Management**  
  Wilmington, Delaware
- **Callan Associates**  
  San Francisco, California
- **Capital Group**  
  Los Angeles, California
- **Corsair Capital**  
  New York, New York
- **Declaration Mgmt & Research, LLC**  
  McLean, Virginia
- **Dimensional Fund Advisors**  
  Chicago, Illinois
- **EIG Energy Partners**  
  Los Angeles, California
- **Epoch Investment Partners, Inc.**  
  New York, New York
- **Goldman Sachs Asset Mgmt**  
  New York, New York
- **Grosvenor Capital Management**  
  New York, NY
- **Hearthstone Homebuilding Investors, LLC**  
  Encino, California
- **INVESCO Realty Advisors**  
  Dallas, Texas
- **InvestAmerica L&C, LLC**  
  Cedar Rapids, Iowa
- **J.P. Morgan Invest, Mgmt, Inc.**  
  New York, New York
- **Loomis Sayles & Company**  
  Boston, Massachusetts
- **Los Angeles Capital Management**  
  Los Angeles, California
- **LSV Asset Management**  
  Chicago, Illinois
- **Matlin Patterson Global Advisers LLC**  
  New York, New York
- **Parametric Portfolio Associates**  
  DBA The Clifton Group
  Minneapolis, Minnesota
- **PIMCO**  
  Newport Beach, California
- **Prudential Investment Management**  
  Newark, New Jersey
- **Quantum Energy Partners**  
  Houston, Texas
- **Quantum Resources Mgmt, LLC**  
  Denver, Colorado
- **Research Affiliates, LLC**  
  Newport Beach, California
- **SEI Investments Management Co.**  
  Oaks, Pennsylvania
- **State Street Global Advisors**  
  Boston, Massachusetts
- **Timberland Investment Resources, LLC**  
  Atlanta, Georgia
- **UBS Global Asset Management**  
  Chicago, Illinois
- **The Vanguard Group**  
  Valley Forge, Pennsylvania
- **Wellington Trust Company, NA**  
  Boston, Massachusetts
- **Wells Capital Management, Inc.**  
  Menomonee Falls, Wisconsin
- **Western Asset Management Co.**  
  Pasadena, California
Strategic Investment Belief / Goal:

Although SIB meetings are open to the public and RIO is committed to adhering to all applicable open records laws, a transparency enhancement initiative was commenced in mid-2015 in order to make it easier for interested parties to gain access to information on RIO’s website. RIO believes these actions support our desire to foster trust, understanding and support within our community.

RIO’s Stated Action Plan (as stated in our SIB Meeting Materials in 2015 and 2016):

1) Enhance public access to our SIB Governance Manual by adding a new hyperlink on our RIO website (hyperlink accessed by clicking on “SIB Governance Manual” under the “SIB / Board” section); [http://www.nd.gov/rio/SIB/Board/GovernanceManual/default.htm](http://www.nd.gov/rio/SIB/Board/GovernanceManual/default.htm)

2) Enhance public access to our SIB Meeting Materials by adding a new hyperlink on our RIO website (hyperlink accessed by clicking on “Meeting Materials” under the “SIB / Board” section); [http://www.nd.gov/rio/SIB/Board/SIB%20Meeting%20Materials/default.htm](http://www.nd.gov/rio/SIB/Board/SIB%20Meeting%20Materials/default.htm)

3) Enhance public access to our SIB’s Audit Committee Charter and Meeting Materials by adding a new hyperlink on our RIO website (hyperlinks accessed by clicking on “SIB Audit Charter” or “Meeting Materials” under the “SIB Audit” section). [http://www.nd.gov/rio/SIB%20Audit/Board/default.htm](http://www.nd.gov/rio/SIB%20Audit/Board/default.htm)
Callan’s 10-Year “Expectations” Converted to “Long-Term Returns” plus a Higher Expected Inflation Rate in North Dakota

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Prior Targets</th>
<th>PERS Approved</th>
<th>TFFR Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>57%</td>
<td>58%</td>
<td>58%</td>
</tr>
<tr>
<td>Public</td>
<td>52%</td>
<td>51%</td>
<td>52%</td>
</tr>
<tr>
<td>Private</td>
<td>5%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Global Fixed Income</td>
<td>22%</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>Investment Grade</td>
<td>17%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>Non-Investment Grade</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Global Real Assets</td>
<td>20%</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>10%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Infrastructure &amp; Timber</td>
<td>10%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Cash Equivalents</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Totals</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Expected Return</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.) Expected Return based on Callan's 2016 Capital Market Expectations 7.00% 7.00%
2.) Adjustment to convert Callan's 10-Year Returns to Long-Term Expectations 0.50% 0.50%
3.) Adjustment for higher inflation assumption (PERS 0.50% or TFFR 0.25%) 0.50% 0.25%
4.) Client Long-Term Return Expectation with a higher inflation assumption 8.00% 7.75%

Note: Client returns have benefitted from active management by 40 to 60 basis points (approximately 0.50%) annualized during the past 5-years which is not incorporated in the above analysis.

Source: Callan’s Asset Allocation and Liability Study for the North Dakota Public Employees Retirement System dated May 2016.
2016 Capital Market Expectations

Return and Risk

- Public market expectations represent passive exposure (beta only).
- Return expectations for private market investments such as real estate and private equity reflect active management premiums.
- Return expectations are net of fees.

Summary of Callan’s Long-Term Capital Market Projections (2016 - 2025)

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Index</th>
<th>Projected Return*</th>
<th>Projected Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad Domestic Equity</td>
<td>Russell 3000</td>
<td>7.35%</td>
<td>18.70%</td>
</tr>
<tr>
<td>Large Cap</td>
<td>S&amp;P 500</td>
<td>7.25%</td>
<td>17.95%</td>
</tr>
<tr>
<td>Small/Mid Cap</td>
<td>Russell 2500</td>
<td>7.55%</td>
<td>22.75%</td>
</tr>
<tr>
<td>Global ex-US Equity</td>
<td>MSCI ACWI ex USA</td>
<td>7.55%</td>
<td>21.30%</td>
</tr>
<tr>
<td>International Equity</td>
<td>MSCI World ex USA</td>
<td>7.25%</td>
<td>20.05%</td>
</tr>
<tr>
<td>Emerging Markets Equity</td>
<td>MSCI Emerging Markets</td>
<td>7.60%</td>
<td>27.85%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Fixed</td>
<td>Barclays Aggregate</td>
<td>3.00%</td>
<td>3.75%</td>
</tr>
<tr>
<td>TIPS</td>
<td>Barclays TIPS</td>
<td>3.00%</td>
<td>5.30%</td>
</tr>
<tr>
<td>High Yield</td>
<td>Barclays High Yield</td>
<td>5.00%</td>
<td>10.50%</td>
</tr>
<tr>
<td>Non-US Fixed</td>
<td>Barclays Global Aggregate ex-USD</td>
<td>1.40%</td>
<td>9.20%</td>
</tr>
<tr>
<td>Emerging Market Debt</td>
<td>EMBI Global Diversified</td>
<td>4.60%</td>
<td>9.90%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>Callan Real Estate Database</td>
<td>6.00%</td>
<td>16.45%</td>
</tr>
<tr>
<td>Timberland</td>
<td>NCREIF Timberland</td>
<td>6.20%</td>
<td>17.50%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>S&amp;P Global Infr / JPM Infr</td>
<td>6.60%</td>
<td>19.00%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>TR Post Venture Capital</td>
<td>8.15%</td>
<td>32.80%</td>
</tr>
<tr>
<td>Hedge Funds</td>
<td>Callan Hedge FoF Database</td>
<td>5.25%</td>
<td>9.30%</td>
</tr>
<tr>
<td>Commodities</td>
<td>Bloomberg Commodity</td>
<td>2.75%</td>
<td>18.50%</td>
</tr>
<tr>
<td>Cash Equivalents</td>
<td>90-Day T-Bill</td>
<td>2.25%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Inflation</td>
<td>CPI-U</td>
<td>2.25%</td>
<td>1.50%</td>
</tr>
</tbody>
</table>

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).
THE 3% ALPHA PUZZLE:

WHY SO FEW INSTITUTIONAL INVESTORS CAN SOLVE IT

“We find that firms with good performance on material sustainability issues significantly outperform firms with poor performance on these issues......”.

From the 2015 HBS study
“Corporate Sustainability: First Evidence of Materiality”
by Khan, Serafeim, and Yoon

Is a 3% Alpha Possible?

Last month’s Letter calculated a real return of 3.6% is now a reasonable long-term expectation for a broadly diversified stock portfolio. This compares poorly with the 1871-2014 realization of 6.7%. So to get anywhere near that historical realization in the decades ahead requires outperforming the stock market by some 3%/yr. Impossible you say? I disagree, and explained why in a trilogy of Letters published in December, January, and April:

- Last December’s Letter was titled “Professor Fama’s Folly: Financial Markets Are Efficient”. It responded to the good professor’s famous observation last Fall that institutional investors who believe they can outperform the market over the long-term “must be from the moon”. The Letter argued that a real world “Inefficient Markets Hypothesis” was a far more plausible construct than the academic “Efficient Markets Hypothesis”, and that there was plenty of empirical evidence to support that viewpoint.

- The January Letter was titled “Active Investing….Three Possible Paths”. It laid out three mutually-supporting strategies available to institutional investors who have taken the time to understand them, and are also capable of actually implementing them. The dominant strategy at the individual institutional investor level is to design and implement “a comprehensive active long-term investment program”.

- Finally, the April Letter titled “Focusing Capital On The Long-Term: From Talking To Walking” documented my own 45-year journey of understanding the essence of actually implementing such a program. It progresses from John Maynard Keynes (α=8%/yr. for 25 yrs.), to Benjamin Graham and David Dodd’s 1934 text “Security Analysis”, to Warren Buffett (α=13/yr. for 35 yrs.), to David Swensen (α=5%/yr. for 20 yrs.), to a small group of investing institutions that had been implementing a coherent long-term approach to investing for a long-enough period of time that the resulting material alphas were very unlikely to be due to chance (α ranges from 5% to 2%/yr.). Conclusion: generating a 3% alpha over the long-term is indeed possible.

One of the cited supporting academic studies in the April Letter was a 2014 Harvard Business School (HBS) study “The Impact of Corporate Sustainability on Organizational Processes and Performance” by Eccles, Ioannou, and Serafeim. The quote at the top of this page is from a 2015 sequel to that study by Khan, Serafeim, and Yoon titled “Corporate Sustainability: First Evidence of Materiality”. I summarize its important new findings next.
Material Matters

The study’s authors posit that smart corporate investments in sustainability (i.e., making investments in ESG space) are value-enhancing despite the fact that academic study findings to date have been ambiguous on this point. The reason is, they believe, that these studies have not been able to adjust the relevant data for their materiality to the question at hand. As a simple example, environmental issues are going to be more material for non-renewable resources firms than for firms in the services sector. Their hypothesis is that once such materiality adjustments are made, corporate sustainability investments would translate into subsequent material enhancements in both corporate accounting performance, and in financial returns.

So how to create data sets that reflect material corporate sustainability factors and omit immaterial ones? The authors’ answer was to “hand-map” industry-material factors as defined by the Sustainability Accounting Standards Board (SASB) on to company-specific ESG scores as defined by MSCI-KLD. This meant assessing each factor at the company level as ‘material’ or ‘immaterial’ based on the SASB industry-level assessments. Corporate net sustainability scores were calculated based on subtracting the ‘concerns’ scores from the ‘strengths’ scores. This was done separately for the factors deemed ‘material’ and for factors deemed ‘immaterial’. This process was repeated for 2300 firms in 6 industry sectors over the 1991-2012 timeframe.

Material Alphas

Value-weighted and equally-weighted portfolios were created based on the resulting ‘material’ and ‘immaterial’ sustainability scores organized into quartiles, quintiles and deciles. Returns for the resulting portfolios were calculated, and adjusted for the standard Fama-French control factors. As expected, the portfolios with the highest ‘material’ sustainability scores generated materially higher factor-adjusted returns than the portfolios with the lowest scores. For example, Table 1 compares the alphas of the value-weighted portfolios with the highest and lowest scores created on quartile, quintile, and decile bases.

Table 1  Alphas for Highest and Lowest ‘Material’ Sustainability Companies

<table>
<thead>
<tr>
<th>Portfolio Construction</th>
<th>Highest-Score Portfolios</th>
<th>Lowest-Score Portfolios</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartiles</td>
<td>2.9%</td>
<td>-0.2%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Quintiles</td>
<td>3.4%</td>
<td>-1.6%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Deciles</td>
<td>5.6%</td>
<td>-3.3%</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

Source: “Corporate Sustainability: First Evidence of Materiality”, HBS Working Paper

The story was the same on a corporate accounting basis: high ‘material’ sustainability score companies produced higher future sales growth, ROA, and ROE numbers than low-score companies. Also as expected, no significant investment return or accounting performance differences were found when the ‘immaterial’ sustainability scores were used to create portfolios.

Study Implications

So what does all this mean? Specifically, it means that the study authors have identified an investment strategy that has reliably produced the target 3% long-term alpha we are looking for. Its foundations are
the information content embedded in the SASB and MSCI-KLD work products. But that is only the start: successful implementation also requires carefully “hand-mapping” one to the other to create the sustainability scores. The researchers made it clear this was a non-trivial task. For example:

“To classify each KLD data item as ‘material’ or ‘immaterial’, we follow guidance from SASB for each one of the 45 industries in our sample. Specifically, we download each industry standard that identifies material sustainability issues for companies within an industry. To classify topics, one researcher takes the lead in one sector and all the industries in that sector. Each topic identified by SASB as material is mapped to a KLD item, when one is available. After having a complete mapping, another researcher follows the same process. The two mappings are then compared by a third researcher, who assesses any differences. In our case, differences in mapping across researchers were minimal. The two researchers disagreed on only 2% of the total number of mappings. These differences were resolved by consultation by the third researcher ....”.

There is also a more general answer to the “so what does it all mean?” question. It is that really understanding how a corporation creates sustainable value over time can be the basis for creating a sustainable alpha over time for investors who 1. Understand this reality, and 2. Have the mandate, skills, organization design, and culture required to act on it. The study confirms the logic that these two conditions should endow an investment organization with a material sustainable comparative advantage and hence with material alpha-generation capability.

Why Isn’t Everybody Doing It?

All this raises another question: if this is such a great idea, why isn’t everybody doing it? The simple answer is that most institutional investor organizations don’t possess the two necessary ‘success’ conditions derived above. This reality can be confirmed by simple observation and by empirical confirmation. For example, the April Letter cited above summarized the findings of a recent IMF study titled “Institutionalizing Countercyclical Investing: A Framework for Long-Term Asset Owners”. Its findings are based on examining the investment behavior of a large, diverse group of institutional investors ($24 trillion) over a 25-year period.

Rather than finding the market-stabilizing, counter-cyclical, long-term alpha-generating behavior derived from the logic above, the opposite was true. Specifically, on average, institutional investors contribute to financial market instability in two equally-important ways: 1. Investors fail to rebalance after major market movements, and 2. Investors chase performance by doubling up so as to ride major market trends (i.e., they chase historical performance in the hope it will continue).

The IMF study confirms that ‘short-termism’ is alive and well in the global institutional Investment community, and continues to adversely affect the behavior of financial markets. Author Brad Jones concludes that changing this will require four things:

1. More effective institutional governance
2. Recognizing and addressing underlying principal/agent problems
3. Measuring the right things, including the longer-term risk of failure
4. Updating regulatory processes to promote counter-cyclical rather than pro-cyclical behaviour

To these four things, I would add two more:

5. A clear investment mandate, a fiduciary ‘best interests’ culture, and an ‘arms-length’ (i.e., apolitical) legal platform
6. Investment people who understand the businesses they invest in, especially their sustainability drivers
The reality is that, even today, very few investment institutions score well on these six success drivers...and that is why very few are capable of solving the 3% alpha puzzle. Fortunately, progress is being made by some organizations. As an example, the schematic below summarizes the CPP Investment Board’s efforts to that end.

CPPIB’S APPROACH TO SUSTAINABLE INVESTING FOR LONG-TERM VALUE

Implement focused strategies

Integrate ESG into Investment Decisions
All CPPIB Investment groups integrate material ESG factors into their due diligence, investment analysis, monitoring and asset management.

Actively engage as owners
We act as a constructive, active owner by advocating for progress on our defined engagement focus areas and exercising our voting rights as shareholders.

Make an Impact through collaboration
We collaborate with other global investors to advocate for better performance on ESG factors in companies and markets in which we invest.

Dedicate resources and processes

In-House ESG professionals
CPPIB’s professional in-house Sustainable Investing group supports ESG integration, and undertakes engagement and proxy voting activities.

Research
The Sustainable Investing and Investment groups conduct and review ESG research into sectors, companies, issues, standards and best practices.

ESG Approach and processes
The Sustainable Investing and Investment groups review current and emerging ESG best practices to continually develop and refine how we consider ESG factors.

Establish governing policies

Policy on Responsible Investing
Establishes how CPPIB approaches ESG factors within the context of our sole mandate to maximize long-term investment returns without undue risk of loss.

Proxy Voting Guidelines and Principles
Establishes how CPPIB will exercise our voting rights and advance shareholder democracy as owners in public companies.

Sustainable Investing Committee
All CPPIB Investment groups integrate material ESG factors into their due diligence, investment analysis, monitoring and asset management.

SOURCE: 2015 Report on Sustainable Investing, CPPIB Website

Keith Ambachtsheer

Endnotes
i. SASB’s mission is to develop and disseminate sustainability accounting standards that help corporations disclose material, decision-useful information to investors. As sustainability issues vary across industries, SASB examines these issues at the industry level. Based on research and peer-reviews, it assesses the relevance of 43 generic sustainability/ESG issues as material or immaterial on an industry-by-industry basis.

ii. The MSCI-KLD organization assigns ESG scores at the corporate level based on five ESG factors: Environment, Community and Society, Employees and Supply Chain, Customers, and Governance and Ethics.

iii. The 6 industry sectors were healthcare (547), financials (647), technology/communications (369), non-renewable resources (341), transportation (120), and services (283). Number of firms in brackets.

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Assembly Bill No. 2833

CHAPTER 361

An act to add Section 7514.7 to the Government Code, relating to retirement.

[ Approved by Governor September 14, 2016. Filed with Secretary of State September 14, 2016. ]

LEGISLATIVE COUNSEL’S DIGEST

AB 2833, Cooley. Public investment funds: disclosures.

The California Constitution commits to the retirement board of a public pension or retirement system plenary authority and fiduciary responsibility for investment of moneys and administration of the system. Existing law requires a retirement board to develop and implement a policy requiring disclosure of payments to placement agents, as defined, in connection with system investments in or through external managers that includes prescribed elements. Existing law requires disclosure of campaign contributions or gifts made by a placement agent to any member of a public pension retirement board, as specified. Existing law requires a public retirement system to obtain an actuarial valuation of the system not less than triennially and submit audited financial statements to the State Controller who then publishes a report on the financial condition of public retirement systems.

This bill, for new contracts entered into on and after January 1, 2017, and for existing contracts for which a new capital commitment is made on or after January 1, 2017, would require a public investment fund, as defined, to require alternative investment vehicles, as defined, to make specified disclosures regarding fees, expenses, and carried interest in connection with these vehicles and the underlying investments, as well as other specified information. Consistent with requirements relating to public records, the bill would require a public investment fund to disclose the information received in connection with alternative investment vehicles and the gross and net rate of return of each alternative investment vehicle, as specified, at least once annually at a meeting open to the public. The bill would require a public investment fund to undertake reasonable efforts to obtain the above-mentioned information for any existing contract for which the public investment fund has not made a new capital commitment on or after January 1, 2017. The bill would make a statement of legislative intent. Because this bill would impose new requirements on local entities relating to the collection of information and its presentation at an open meeting, it would impose a state-mandated local program.

The California Constitution requires local agencies, for the purpose of ensuring public access to the meetings of public bodies and the writings of public officials and agencies, to comply with a statutory enactment that amends or enacts laws relating to public records or open meetings and contains findings demonstrating that the enactment furthers the constitutional requirements relating to this purpose.

This bill would make legislative findings to that effect.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes
THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. It is the intent of the Legislature in enacting this section to increase the transparency of fees paid by public investment funds to alternative investment vehicles. Public investment funds pay significant fees to alternative investment vehicles and do not have sufficient information regarding the character and amount of those fees. As fiduciaries, public investment fund trustees have a duty to maximize investment returns in order to ensure promised benefits are adequately funded and to minimize taxpayer costs. Because fees paid to alternative investment vehicles reduce returns, public investment fund trustees need to be able to see and understand all of the fees they are charged.

SEC. 2. Section 7514.7 is added to the Government Code, to read:

7514.7. (a) Every public investment fund shall require each alternative investment vehicle in which it invests to make the following disclosures at least annually:

(1) The fees and expenses that the public investment fund pays directly to the alternative investment vehicle, the fund manager, or related parties.

(2) The public investment fund’s pro rata share of fees and expenses not included in paragraph (1) that are paid from the alternative investment vehicle to the fund manager or related parties. The public investment fund may independently calculate this information based on information contractually required to be provided by the alternative investment vehicle to the public investment fund. If the public investment fund independently calculates this information, then the alternative investment vehicle shall not be required to provide the information identified in this paragraph.

(3) The public investment fund’s pro rata share of carried interest distributed to the fund manager or related parties.

(4) The public investment fund’s pro rata share of aggregate fees and expenses paid by all of the portfolio companies held within the alternative investment vehicle to the fund manager or related parties.

(5) Any additional information described in subdivision (b) of Section 6254.26.

(b) Every public investment fund shall disclose the information provided pursuant to subdivision (a) at least once annually in a report presented at a meeting open to the public. The public investment fund’s report required pursuant to this subdivision shall also include the gross and net rate of return of each alternative investment vehicle, since inception, in which the public investment fund participates. The public investment fund may report the gross and net rate of return and information required by subdivision (a) based on its own calculations or based on calculations provided by the alternative investment vehicle.

(c) For purposes of this section:

(1) “Alternative investment” means an investment in a private equity fund, venture fund, hedge fund, or absolute return fund.

(2) “Alternative investment vehicle” means the limited partnership, limited liability company, or similar legal structure through which a public investment fund invests in an alternative investment.

(3) “Fund manager” means the general partner, managing manager, adviser, or other person or entity with primary investment decisionmaking authority over an alternative investment vehicle and related parties of the fund manager.

(4) “Carried interest” means any share of profits from an alternative investment vehicle that is distributed to a fund manager, general partner, or related parties, including allocations of alternative investment vehicle profits received by a fund manager in consideration of having waived fees that it might otherwise have been entitled to receive.

(5) “Portfolio companies” means individual portfolio investments made by the alternative investment vehicle.

(6) “Gross rate of return” means the internal rate of return for the alternative investment vehicle prior to the reduction of fees and expenses described in subdivision (a).

(7) “Public investment fund” means any fund of any public pension or retirement system, including that of the University of California.
(8) "Operational person" means any operational partner, senior advisor, or other consultant or employee whose primary activity for a relevant entity is to provide operational or back office support to any portfolio company of any alternative investment vehicle, account, or fund managed by a related person.

(9) "Related person" means any current or former employee, manager, or partner of any related entity that is involved in the investment activities or accounting and valuation functions of the relevant entity or any of their respective family members.

(10) "Related party" means:

(A) Any related person.

(B) Any operational person.

(C) Any entity more than 10 percent of the ownership of which is held directly or indirectly, whether through other entities or trusts, by a related person or operational person regardless if the related person or operational person participates in the carried interest received by the general partner or the special limited partner.

(D) Any consulting, legal, or other service provider regularly engaged by portfolio companies of an alternative investment vehicle, account, or fund managed by a related person and that also provides advice or services to any related person or relevant entity.

(11) "Relevant entity" means the general partner, any separate carry vehicle, the investor advisor, any of the investment advisor's parent or subsidiary entities, or any similar entity related to any other alternative investment vehicle, account, or fund advised or managed by any current or former related person.

(d) (1) This section shall apply to all new contracts the public investment fund enters into on or after January 1, 2017, and to all existing contracts pursuant to which the public investment fund makes a new capital commitment on or after January 1, 2017.

(2) With respect to existing contracts not covered by paragraph (1), the public investment fund shall undertake reasonable efforts to obtain the information described in subdivision (a) and comply with the reporting requirements contained in subdivision (b) with respect to any information obtained after January 1, 2017.

SEC. 3. The Legislature finds and declares that Section 2 of this act, which adds Section 7514.7 to the Government Code, furthers, within the meaning of paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the purposes of that constitutional section as it relates to the right of public access to the meetings of local public bodies or the writings of local public officials and local agencies. Pursuant to paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the Legislature makes the following findings:

The information in the disclosures required under subdivisions (a) and (b) of Section 7514.7 of the Government Code is necessary to ensure public confidence in the integrity of investments made by retirement boards pursuant to alternative investment vehicles.

SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIII 5 of the California Constitution because the only costs that may be incurred by a local agency or school district under this act would result from a legislative mandate that is within the scope of paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution.
At BlackRock, a Wall Street Rock Star's $5 Trillion Comeback

LOS ANGELES — Laurence D. Fink, the leader and founder of BlackRock, the world’s largest asset manager, had come home. A Bruin to the bone — class of 1974 — he had a story to tell the 5,000 giddy graduates packed into the cavernous basketball arena at the University of California, Los Angeles. Once upon a time he was a rock star on Wall Street. He had big hair and flashed turquoise jewelry, and making money had never seemed so easy. Until it wasn’t. “I screwed up,” Mr. Fink declared, recalling the $100 million he blew thanks to failed mortgage trades in 1986. “And it was bad.”

For the graduating millennials, the morality tale resonated not least because it came from a U.C.L.A. grad who had ascended, fallen from and again scaled Wall Street’s treacherous peaks. But it was his description of why he stumbled that truly explained his evolution from down-on-his-luck bond trader to master of a firm that has its eye on a sum about equal to the $16 trillion United States economy.

“I had become complacent — too sure of what I thought I knew,” Mr. Fink said. “I believed I had figured out the market. But I was wrong because while I wasn’t watching, the world had changed.”

Over the last decade, no other financial firm has gone further in challenging the classic Wall Street moneymaking model for investment banks and traditional mutual fund companies: Hire — and handsomely pay — hotshots to make big bets with other people’s money.

The future of finance, Mr. Fink has argued, lies with rules-based, data-driven investment styles such as exchange-traded funds, which track a variety of stock and bond indexes or adhere to a set of financial rules. The idea is that such an approach eliminates at least some of the potential for human error, while lowering costs.

It is this notion of using technology to root out investment risks that lies at the heart of BlackRock’s investing strategy. Putting this into practice is the firm’s risk-mitigation platform, Aladdin, which enjoys a ubiquity within the firm — it tracks everything from bond trades to head count — that evokes HAL 9000, the sentient computer in the movie “2001: A Space Odyssey.” Some employees even use Aladdin as a verb, as in, “Has the new portfolio manager been Aladdinized yet?”

Directing the Flow

On Wall Street, prestige and influence have always been functions of a firm’s ability to capture a large amount of what investors call flow — the trillions of dollars in securities that are bought and sold on a given day worldwide. Before the financial crisis, Goldman Sachs’s reputation was made because the choice transactions ran through its bankers and traders. The same could be said of the hedge fund SAC Capital Advisors under Steven A. Cohen, who rose to fame (and also became the target of regulators) on his ability to trade off this cascade.

But in today’s world of violent price swings and cash-starved markets, those with near infinite buying power — central banks, sovereign wealth funds and the largest money manager in the land — have become the new arbiters of flow. “We have never seen a paradigm shift like this,” said Anthony J. Perrotta Jr., an analyst with the Tabb Group, which analyzes the structure of financial markets. “It is
not about the flow of securities anymore, it is about the flow of information and indications of interest.”

BlackRock’s strategy was forged, and ultimately empowered, by two market calamities over the last three decades. The first, of course, was Mr. Fink’s experience at First Boston in 1986, when he bet big on mortgages without assessing how the securities would trade in a period of extreme stress.

But BlackRock became the behemoth it is today only after the events of 2008. That is when a souped-up, toxic variety of the securitized mortgages that Mr. Fink helped design years earlier at First Boston imploded — setting off a chain of bank failures and the deepest global economic downturn since the Great Depression. Chastened investment banks were forced to exit these businesses under pressure from regulators.

And in stepped BlackRock. Its assets under management swelled as investors — starved for higher returns — piled into the company’s E.T.F.s, which tracked the highflying markets.

“The balance of power is now with firms like BlackRock because they have the ‘bid,’” said Mr. Perrotta of Tabb, using Wall Street argot to describe the buying power of large asset managers.

The power shift was on display this spring, when Mr. Fink took the stage at an investor conference alongside John Cryan, recently charged with reviving the sagging fortunes of Deutsche Bank, one of the global investment firms that was minting money before the markets collapsed in 2008. While the event was billed as a cozy exchange of ideas between two Wall Street heavy-hitters, it played out instead as a series of slightly peevish questions posed by Mr. Cryan to Mr. Fink.

“You are effectively becoming the supplier of liquidity of last resort — beyond the central banks,” Mr. Cryan said to Mr. Fink. The assertion bordered on the impudent — suggesting that BlackRock and its $5 trillion stash of assets had become the new guarantor of stability because of its ability to buy and sell stocks and bonds in times of duress. Investment banks, which previously aspired to this duty, have been complaining for years that the financial system has become riskier because BlackRock and similar firms cannot perform such a market-making function.

But to say as much to Mr. Fink directly — and in a room full of investors, no less — was highly unusual. Mr. Fink was clearly irritated by the query. “Well that is not our role — we won’t play that role,” he replied stiffly. It was not the most convincing of replies.

‘I Am Aladdin’

Over the last 10 years, Mr. Fink has transformed BlackRock from a bond shop catering to pension funds and insurance companies into an asset-gathering machine that uses advanced technology to reimagine how investors buy, sell and assess the risks of a wide variety of securities. Via its $1 trillion-plus in exchange-traded funds, BlackRock has been instrumental in creating newly liquid markets in high-yield and corporate bonds — a direct attack on the business model of banks like Deutsche Bank.

And through its big data-mining risk platform, Aladdin, or Asset Liability and Debt and Derivatives Investment Network, BlackRock says it has developed the market’s most highly evolved framework for stress-testing how securities will respond to certain situations — such as a sudden rise in interest
rates or what happens in the event of a political surprise, like Donald J. Trump being elected president.

Staffed by 2,300 of BlackRock’s 13,000 employees, Aladdin promises to help firms trade, analyze and keep a compliant eye on the assets they manage. In an era of severe regulatory scrutiny, the service has become quite popular. Seventy-five firms — including Deutsche Bank’s asset management unit and Freddie Mac — managing a total of $10 trillion, now use it.

For a man who, in his speeches, consistently spends more time talking about technology and risk analytics than the vagaries of the capital markets, Mr. Fink is no techie. Like many Wall Street titans of his vintage, the 63-year-old Mr. Fink rarely sends emails. An infrequent texter, he does most of his communicating by phone, in meetings or over a plate of spicy pasta at his go-to Italian restaurant in Midtown Manhattan.

Mr. Fink maintains a grueling schedule, mixing regular bicoastal trips in the United States with frequent client jaunts to China and the Middle East. “This job requires an enormous commitment,” he said. “The pace is relentless. There will be a day when I wake up one day and say I just can’t do it anymore.”

That day remains well in the future, he says. Still, with BlackRock’s growth in size and sway, the issue of who, if anyone, from within the firm is qualified to succeed Mr. Fink has become an existential question for the company’s board of directors.

The problem is typical when replacing a founder: Mr. Fink has increased assets to $5 trillion from zero, and the imprint of his domineering personality has become so profound that virtually anyone will suffer to some degree in comparison, considering his track record.

After all, in 1983, he structured one of the first collateral mortgage obligations, and along with Lewis Ranieri at Salomon Brothers made it possible for large investors to enter the market for mortgages. A quarter of a century later, Mr. Fink recognized that the time was right for E.T.F.s and — in the depths of the financial crisis — bought Barclays’s iShares business, a deal analysts consider one of the shrewdest in recent Wall Street memory.

And beyond a soaring stock price, there are few better ways for a financial chief to command the respect of his peers than to slip through the grasp of regulators. So when Mr. Fink and his high-powered lobbyists in Washington were able to make the case, after the 2008 financial crisis, that major fund companies like BlackRock posed no risks to the markets because of their size, it only added to his aura.

There is a moment in Don DeLillo’s “Cosmopolis,” his meditation on the alienating effects of money and machines, when the protagonist financier offers a bit of advice to a colleague. There’s only one thing worth pursuing professionally and intellectually, he says: the interaction between technology and capital — its inseparability.

That, more or less, is what Mr. Fink told Dexter Senft, his computer expert at First Boston in 1982. “We are bringing the computer onto the trading floor, Dexter,” Mr. Fink recalls saying at the time. “If we can do this, it will change our business forever.”
Not only would Mr. Fink and his bond wizards be able to sell billions of dollars of new securities, giving birth to today’s market for asset backed mortgages, they could also analyze how these securities would trade in certain situations.

The immense losses at First Boston in 1986 taught a lesson that eventually shaped BlackRock. Mr. Fink realized that his clients on the “buy side” (the fund managers, insurance companies and pension funds shopping for investments) had become dependent on the ability of the “sell side” (the Wall Street investment banks) to analyze mortgages. That was because few buy-side clients had invested in computers and technology to the level First Boston had.

Most money management firms highlight their investment returns first, and risk controls second. BlackRock has taken a reverse approach: It believes that risk analysis, such as gauging how a security will trade if interest rates go up or down, improves investment results.

That is where Aladdin comes in. Aladdin is a network of code, trades, chat, algorithms and predictive models that on any given day can highlight vulnerabilities and opportunities connected to the $15 trillion the firm tracks — $10 trillion of which belongs to outside firms that pay BlackRock a fee to have access to the platform.

Aladdin fills the monitors of most BlackRock employees. One portfolio manager even went so far as to hang a nearly cinema-size screen on his office wall in order to get the full Aladdin experience. And at the company’s investor day in June, Mr. Fink and other top executives mentioned Aladdin 82 times — more than any other business line — even though the platform represents just 5 percent of the $11.3 billion in revenues BlackRock took in last year.

Or consider a recent marketing video that shows Mr. Fink and other top executives gazing at the camera and intoning one after the other, “I am Aladdin.”

Moments in the Sun

From Mr. Fink’s early days on Wall Street, his ambition has been stoked by a sense that he has not been receiving the proper credit for his achievements. At First Boston, even though he was among the earliest to popularize trading in mortgage securities, his peers including Mr. Ranieri and others drew more public attention as innovators and moneymakers.

As a successful, albeit mostly anonymous, bond manager at BlackRock in the 1990s and 2000s, he saw acclaim, pay and influence go to the chief executives of Goldman Sachs, Merrill Lynch and Morgan Stanley. That began changing only in 2009, when he bought Barclays’s E.T.F. business. Last year he was among a small circle of Wall Street executives to attend the state dinner at the White House for the Chinese president, Xi Jinping.

A part of Mr. Fink — a fervent Democrat today — believes he would make a pretty good Treasury secretary, say people who have discussed politics with him. Although he recently persuaded Cheryl Mills, one of Hillary Clinton’s closest advisers, to join the board of BlackRock, the view is fairly strongly held that if Mrs. Clinton becomes president, there is little chance that she will tap a Wall Street insider for the Treasury job.
With BlackRock’s stock having more than doubled since 2011, far outpacing the likes of Goldman and JPMorgan and trading close to its record high, it seems that the market has come around to Mr. Fink’s financial worldview: that a low cost, systematic style of investing will, over time, grow faster than the costlier “active investing” model in which individuals, not algorithms, make stock, bond and asset allocation decisions.

And the numbers in that regard are arresting. Through July, E.T.F.s and traditional index funds made up 30 percent of total mutual fund assets, according to the Investment Company Institute, a ratio that has doubled in just under 10 years.

Of course, with close to $1.5 trillion in actively managed funds, Mr. Fink is not ready to write off a segment of the industry that even after years of outflows clocks in at $11 trillion. And he underlines the importance of being able to offer the best of both active and passive investing styles to BlackRock clients.

But inside the firm and out, there is little doubt that he is betting the ranch on E.T.F.s and similarly themed investments choices. These include so-called factor strategies, in which a bet is made on a certain investment outcome — like value stocks outpacing growth stocks, or a basket of low-volatility equities beating the broader indexes.

In San Francisco, a team of equity investors deploys data analysis to study the language that a chief executive uses during an earnings call. Does he seem unusually bearish this quarter, compared with last? If so, maybe the stock is a sell.

“We have more information than anyone,” Mr. Fink said.

A Not-So-Short List

Some analysts, in fact, argue that BlackRock should be valued as a technology company, as opposed to an asset manager.

Mark Wiedman, 45, a BlackRock executive who is on the short list to succeed Mr. Fink, believes that bond E.T.F.s, in particular, are creating a liquid market where a new generation of bond investors can freely buy and sell.

For years, he and Mr. Fink have been pitching insurance companies and pension funds to stop buying individual bonds (from the likes of Deutsche Bank) and instead choose a BlackRock bond E.T.F. Now it’s happening.

“I think of E.T.F.s as technology,” Mr. Wiedman said, as he leaned back in a swivel chair in his office. “It is a product that bundles up a bunch of securities, puts them on a screen and makes them easier to trade.”

Like many top executives here, Mr. Wiedman can get a bit manic when discussing the subject: Midway through an interview, he felt the need to somewhat violently undo his tie and cast it aside.
Regulators are less enthusiastic. Global watchdogs like the Bank for International Settlements and the International Monetary Fund have described these bountiful flows into and out of BlackRock bond E.T.F.s as a liquidity illusion. Which means, according to Ken Monaghan, an investor in high-yielding corporate bonds, that easy-to-trade E.T.F.s have lured “tourist” investors — people seduced by the rich yields, but who may not be able to stomach a sustained market reversal.

And if they all leave at once, watch out. “E.T.F.s do not create liquidity,” said Mr. Monaghan, of the global fund manager Amundi Smith Breeden. “These new investors are not permanent.”

Aside from Mr. Wiedman of BlackRock, the short list to succeed Mr. Fink includes Robert S. Kapito, 59, a founding partner and current president of the firm who is seen as the top choice if a handover occurs sooner rather than later. Other candidates are Rob Goldstein, the 42-year-old chief operating officer and driving force behind Aladdin’s growth; Mark McCombe, 50, a former HSBC executive who looks after the firm’s big clients; Rich Kushel, 50, who oversees multi-asset investment strategies for clients; and Gary Shedlin, 52, the chief financial officer. There is also Mark Wiseman, a new hire who joined the firm this month to oversee its equity business.

It is a long list, and purposely so. For Mr. Fink, recommending a successor to his board is probably the weightiest decision he will make as BlackRock chief. He has taken pains to not tip his hand. “I want to make sure that the day after I leave, the firm is better off without me,” he said.

This spring, Mr. Fink called together more than 100 of the firm’s most senior executives for two days of meetings in Barcelona, Spain. BlackRock was approaching its 30th anniversary and Mr. Fink was in a nostalgic mood. Yet there was an edge to his remarks.

Yes, BlackRock was thriving because of its focus on low-risk, low-cost funds and the all-seeing wonders of Aladdin. But now was not the time to coast.

“We cannot let someone brand us as a vampire squid,” warned Mr. Fink, referring to a defining article in Rolling Stone magazine that so described Goldman Sachs.

Nor was this a time to sit fat and happy on a big pile of assets and let the fees role in, an indirect slap at actively managed giants such as Franklin Templeton and Pimco, where assets under management have recently been declining.

Never before, he said, had the fund management industry been so competitive and changing. “If you think you know everything about our business, you are kidding yourself,” he said. “The biggest question we have to answer is: ‘Are we developing the right leaders?’”

And then, looking out over the striving BlackRock executives gathered before him, he put it to them directly. “Are you,” he asked, “prepared to be one of those leaders?”