I. APPROVAL OF AGENDA

II. APPROVAL OF MINUTES (AUGUST 25, 2017)

III. INVESTMENTS
A. Manager Interviews
   1. Fixed Income Restructuring Overview - Mr. Schulz (enclosed) (10 minutes)
   2. Montgomery – Ms. Burton, Mr. Bhansali, Mr. Klug and Mr. Vasquez (enclosed) (40 minutes)
   3. Staff Recommendation - Mr. Chin (enclosed) (10 minutes) Board Action
B. TFFR Investment Policy Statement - Mr. Hunter (enclosed) (5 minutes) Board Acceptance
C. Tribune Litigation Update - Asst. Attorney General Janilyn Murtha (10 min) Board Action*
   * Executive Session pursuant to NDCC §44-04-18.4(1), §44-04-19.1(9), & §44-04-19.2- to discuss confidential commercial and financial information and provide contract negotiating instructions to its attorney or negotiator.

IV. GOVERNANCE (enclosed) (90 minutes)
A. SIB Audit Committee Update - Ms. Miller-Bowley Board Acceptance
B. Annual Governance Manual Review / Board Education - Mr. Hunter & Ms. Murtha Board Action
C. Annual Compliance Update - Mr. Schmidt Board Acceptance
D. RIO Budget Update - Ms. Flanagan Board Acceptance
E. Asset Liability Studies - Mr. Hunter Board Action

V. OTHER

Next Meetings: SIB meeting - October 27, 2017, 8:30 a.m., State Capitol, Peace Garden Room
SIB Audit Committee meeting - November 16, 2017, 3:00 p.m, Retirement and Investment Office

VI. ADJOURNMENT

MEMBERS PRESENT: Lance Gaebe, Commissioner of Trust Lands
Mike Gessner, TFFR Board
Jon Godfread, Insurance Commissioner
Rob Lech, TFFR Board
Adam Miller, PERS Board
Mel Olson, TFFR Board
Brent Sanford, Lt. Governor
Kelly Schmidt, State Treasurer
Troy Seibel, PERS Board
Yvonne Smith, PERS Board
Cindy Ternes, WSI Designee

STAFF PRESENT: Eric Chin, Investment Officer
Connie Flanagan, Fiscal & Invt Ops Mgr (TLCF)
Bonnie Heit, Assist to the SIB
David Hunter, ED/CIO
Terra Miller Bowley, Supvr Audit Services
Cody Schmidt, Compliance Officer
Darren Schulz, Dep CIO

OTHERS PRESENT: Alex Browning, Callan Associates
Jeff Engleson, Dept. of Trust Lands
Paul Erlendson, Callan Associates
Miguel Gonzalo, Adams Street
Stephanie King, PIMCO
Scott Mather, PIMCO
Kelly Meldrum, Adams Street (TLCF)
Jan Murtha, Attorney General’s Office

CALL TO ORDER:
Lt. Governor Sanford called the State Investment Board (SIB) meeting to order at 8:34 a.m. on Friday, August 25, 2017, at the State Capitol, Peace Garden Room, Bismarck, ND.

AGENDA:
IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. GESSNER AND CARRIED BY A VOICE VOTE TO ACCEPT THE AGENDA FOR THE AUGUST 25, 2017, MEETING.

AYES: COMMISSIONER GAEBE, TREASURER SCHMIDT, MR. MILLER, COMMISSIONER GODFREAD, MR. OLSON, MS. TERNES, MR. GESSNER, MR. SEIBEL, MR. LECH, MS. SMITH, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED

MINUTES:
IT WAS MOVED BY MS. SMITH AND SECONDED BY MR. OLSON AND CARRIED BY A VOICE VOTE TO ACCEPT THE MINUTES OF THE JULY 28, 2017, MEETING AS DISTRIBUTED.

AYES: MR. GESSNER, COMMISSIONER GAEBE, MS. SMITH, MS. TERNES, TREASURER SCHMIDT, MR. LECH, COMMISSIONER GODFREAD, MR. OLSON, MR. SEIBEL, MR. MILLER, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ELECTION OF OFFICERS AND APPOINTMENTS:


AYES: TREASURER SCHMIDT, MR. GESSNER, COMMISSIONER GODFREAD, MS. TERNES, COMMISSIONER GAEBE, MS. SMITH, MR. LECH, MR. MILLER, MR. SEIBEL, MR. OLSON, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED


AYES: TREASURER SCHMIDT, MR. SEIBEL, MR. OLSON, COMMISSIONER GAEBE, MR. LECH, MR. MILLER, COMMISSIONER GODFREAD, MR. GESSNER, MS. SMITH, MS. TERNES, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED


With the resignation of Mr. Mike Sandal from the PERS board, the SIB needed to appoint one new member to represent PERS on the SIB Audit Committee.

IT WAS MOVED BY MS. TERNES AND SECONDED BY TREASURER SCHMIDT AND CARRIED BY A ROLL CALL VOTE TO NOMINATE MS. SMITH TO THE SIB AUDIT COMMITTEE FOR THE PERIOD OF AUGUST 25, 2017 – JUNE 30, 2018.

AYES: MS. TERNES, MR. OLSON, COMMISSIONER GODFREAD, TREASURER SCHMIDT, COMMISSIONER GAEBE, MR. SEIBEL, MR. LECH, MR. MILLER, MS. SMITH, MR. GESSNER, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED

The Audit Committee will also consist of Ms. Rebecca Dorwart, CPA, CIA, Mr. Joshua Wiens, CPA, Ms. Cindy Ternes, representing elected/appointed officials, and Mr. Michael Gessner, representing TFFR.

INVESTMENTS:

Asset and Performance Overview - Mr. Hunter reviewed SIB clients’ assets under management as of June 30, 2017. Assets under management grew by approximately 8.6 percent or $971 million in the last year due to a combination of Legacy Fund and Pension Trust asset growth of $878 million and $577 million, respectively. SIB assets totaled approximately $12.3 billion as of June 30, 2017, based on unaudited valuations.

The Legacy Fund generated a net investment gain of 12.03 percent for the year ended June 30, 2017, exceeding its performance benchmark. During the last 5-years, the Legacy Fund has generated a net annualized return of 4.76%, exceeding the performance benchmark of 3.84%.
The Pension Trust posted a net return of 12.96% percent in the last year. During the last 5 years, the Pension Trust generated a net annualized return of 9.14 percent exceeding the performance benchmark of 8.20 percent.

The Insurance Trust generated a net return of 7.80 percent in the last year. During the last 5 years, the Insurance Trust posted a net annualized return of 5.45 percent exceeding the performance benchmark of 3.90 percent.

Every Pension Trust client posted positive excess returns for the 5-years ended June 30, 2017, while adhering to approved risk levels and generating at least 0.50% of positive risk adjusted excess return (over the last 5-years).

Every Non-Pension Trust client generated positive excess return and positive risk adjusted excess returns for the 5-years ended June 30, 2017, with two exceptions for the PERS Retiree Health Insurance Credit Fund and PERS Group Insurance.

Risk, as measured by standard deviation, was within approved levels for all SIB clients for the 5-years ended June 30, 2017.

Mr. Hunter also recommended the removal of PIMCO from the Watch List. After extensive due diligence by investment staff and consultation with Callan, RIO personnel recommended that PIMCO be removed from the Watch List. PIMCO was originally placed on the Watch List due to leadership changes.

**IT WAS MOVED BY MR. LECH AND SECONDED BY TREASURER SCHMIDT AND CARRIED BY A ROLL CALL VOTE TO ACCEPT STAFF RECOMMENDATION AND REMOVE PIMCO FROM THE WATCH LIST.**

AYES: MS. TERNES, COMMISSIONER GODFREAD, MR. OLSON, MR. MILLER, TREASURER SCHMIDT, MR. GESSNER, MS. SMITH, COMMISSIONER GAEBE, MR. LECH, MR. SEIBEL, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED

ND Parks and Recreation – Mr. Hunter informed the board the North Dakota Parks and Recreations Department inquired if an endowment trust for the Lewis and Clark Fort Mandan Foundation could become a client of the SIB. The assets of the portfolio consist of $650,000. The SIB elected to table this issue until a more thorough analysis is done on this request by RIO personnel and Callan.

Fixed Income Restructuring – Mr. Schulz provided an update on the restructuring of the Fixed Income Portfolio for the Pension Trust.

PIMCO – PIMCO representatives, Ms. Stephanie King and Mr. Scott Mather, reviewed the firm’s core fixed income product.

After discussion,

**IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. LECH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT STAFF RECOMMENDATION AND ENLIST PIMCO TO MANAGE UP TO A $300 MILLION CORE BOND STRATEGY FOR THE PENSION TRUST WHICH WOULD INCLUDE TRANSITIONING THE PIMCO AGENCY MORTGAGE BACKED SECURITIES MANDATE INTO THE NEW MANDATE.**

AYES: MR. LECH, TREASURER SCHMIDT, MR. OLSON, COMMISSIONER GAEBE, MR. SEIBEL, MR. MILLER, COMMISSIONER GODFREAD, MR. GESSNER, MS. SMITH, MS. TERNES, AND LT. GOVERNOR SANFORD.

NAYS: NONE

MOTION CARRIED

Adams Street – Adams Street representatives, Mr. Miguel Gonzalo and Ms. Kelly Meldrum reviewed the firm’s Global Private Equity Program for 2017.
Mr. Hunter informed the board within the Pension Trust there is currently a 6.5% or $345 million target allocation to private equity versus an actual allocation of $167 million. In order to reduce this $178 million underweight, RIO personnel recommends the SIB approve a new “follow-on” commitment to the Adams Street 2017 Global Fund of $60 million.

After discussion,

IT WAS MOVED BY MR. GESSNER AND SECONDED BY MS. SMITH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT STAFF RECOMMENDATION AND AUTHORIZE A NEW “FOLLOW-ON” COMMITMENT OF $60 MILLION TO THE ADAMS STREET 2017 GLOBAL FUND.

AYES: COMMISSIONER GODFREAD, COMMISSIONER GAEBE, MR. GESSNER, MS. SMITH, MR. SEIBEL, MR. MILLER, MR. LECH, MR. OLSON, TREASURER SCHMIDT, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: MS. TERNES

Callan Performance Review – Callan representatives, Mr. Erlendson and Mr. Browning, reviewed performance of the Pension Trust, Legacy Fund, and Insurance Trust for the period ending June 30, 2017.

Mr. Erlendson informed the board effective September 1, 2017, Mr. Greg Allen, President and Director of Research, will assume the title of CEO and President. Mr. Ron Peyton, Chairman and CEO, will assume the title of Executive Chairman. Mr. Allen and Mr. Peyton will maintain their current reporting lines, aside from Mr. Allen reporting to the board. Mr. Allen’s current title, Director of Research, will be transitioned sometime in the future. Callan Associates will also be designated as a Limited Liability Company (LLC).

IT WAS MOVED BY MR. GESSNER AND SECONDED BY MS. SMITH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT CALLAN’S PERFORMANCE EVALUATION FOR THE QUARTER ENDING JUNE 30, 2017.

AYES: MR. GESSNER, COMMISSIONER GAEBE, MS. SMITH, TREASURER SCHMIDT, MR. LECH, MR. OLSON, MR. SEIBEL, MR. MILLER, MS. TERNES, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: COMMISSIONER GODFREAD

MONITORING:

Per Governance Policy, Board/Staff Relationship/Monitoring Executive Performance C-4, the following monitoring reports for the quarter ending June 30, 2017, were provided to the SIB for their consideration: Budget/Financial Conditions, Executive Limitations/Staff Relations, Investment Program, Retirement Program, and Watch List.

Investment Manager Catalog – Board members were also provided an Investment Manager Catalog which lists each of the SIB’s current investment managers and their mandates as well as closed accounts.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. LECH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE MONITORING REPORTS FOR THE QUARTER ENDING JUNE 30, 2017.

AYES: MR. OLSON, MR. GESSNER, MR. MILLER, MS. SMITH, MR. SEIBEL, MS. TERNES, COMMISSIONER GAEBE, MR. LECH, TREASURER SCHMIDT, AND LT. GOVERNOR SANFORD
NAYS: NONE
MOTION CARRIED
ABSENT: COMMISSIONER GODFREAD
OTHER:

Mr. Hunter informed the SIB he is reaching out to the members of the Legacy and Budget Stabilization Fund Advisory Board regarding board governance. Mr. Hunter would be willing to assist them in establishing their own policies and board governance.

The next meeting of the SIB is scheduled for September 22, 2017, at 8:30 a.m. at the State Capitol, Peace Garden Room.

The next meeting of the SIB Audit Committee is scheduled for September 22, 2017, at 1:00 p.m. at the State Capitol, Peace Garden Room.

ADJOURNMENT:

With no further business to come before the SIB, Lt. Governor Sanford adjourned the meeting at 12:21 p.m.

__________________________________
Lt. Governor Sanford, Chairman
State Investment Board

__________________________________
Bonnie Heit
Assistant to the Board
Fixed Income Restructuring Overview

September 22, 2017

Dave Hunter, Darren Schulz and Eric Chin
Pension Trust Fixed Income Structure

- Evolving fixed income landscape and stage of credit cycle merited a review of the Pension Trust’s current fixed income manager structure
- In January, Staff presented a conceptual framework encompassing the following changes:
  - Increasing anchor of high quality, low risk, highly liquid U.S. investment grade core fixed income aka “High Quality Core”
  - Diversifying traditional non-investment grade with high yield/loan alternatives and private credit aka “Diversified Credit”
  - Transitioning non-U.S./global developed fixed income into U.S. centric fixed income
Fixed Income Structure Proposal
Initially discussed at the January 2017 SIB Meeting

• Barbelled approach

High Quality Core
• Low Risk
• Liquid
• Low Returns
• 65% Target

Diversified Credit
• Moderate Risk
• Less Liquid
• Higher Returns
• 35% Target

• Increase allocation to investment grade instruments
• Reallocate current investment grade assets into two Core Bond mandates—allow managers to tactically shift allocations across investment grade assets
Higher Expected Risk-Adjusted Returns

### PENSION TRUST - Fixed Income Only

<table>
<thead>
<tr>
<th></th>
<th>CURRENT</th>
<th>Projected</th>
<th>PROPOSED</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pension Trust</strong></td>
<td>Target</td>
<td>Allocation</td>
<td>Target</td>
<td>Allocation</td>
</tr>
<tr>
<td>U.S. Investment Grade (IG)</td>
<td>13.3%</td>
<td>3.0%</td>
<td>16.3%</td>
<td>3.0%</td>
</tr>
<tr>
<td>U.S. High Yield Debt (HY)</td>
<td>4.6%</td>
<td>4.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>International Debt</strong></td>
<td>5.4%</td>
<td>1.4%</td>
<td>0.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td>23.3%</td>
<td>(1) 3.0%</td>
<td>23.3%</td>
<td>(2) 3.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Return</th>
<th>Risk</th>
<th>Pension $</th>
<th>Risk</th>
<th>Pension $</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Investment Grade (IG)</td>
<td>3.8%</td>
<td>3.8%</td>
<td>$864</td>
<td>3.8%</td>
<td>$864</td>
</tr>
<tr>
<td>Diversified Credit (DC)</td>
<td>10.4%</td>
<td>10.4%</td>
<td>$371</td>
<td>10.4%</td>
<td>$371</td>
</tr>
<tr>
<td>International Debt (a)</td>
<td>9.2%</td>
<td>9.2%</td>
<td>$0</td>
<td>9.2%</td>
<td>$0</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>6.3%</td>
<td>(3)</td>
<td>$1,235</td>
<td>5.7%</td>
<td>(4)</td>
</tr>
</tbody>
</table>

**RIO's Fixed Income Recommendation:**

If International Debt (a) is eliminated while U.S. Investment Grade and Diversified Credit are increased by 3% and 2.4%, respectively, Projected Return would increase from 3.0% (1) to 3.5% (2), while Projected Risk would decline from 6.3% (3) to 5.7% (4).

**Key Point:** RIO's Recommendation Increases Projected Returns 0.5% and Decreases Projected Risk 0.6% of "Fixed Income" in the Pension Trust.
Summarized Allocation Changes

Existing Fixed Income Structure
- Domestic Invest Grade: 57%
- Domestic Below Invest Grade: 23%
- Global/Non-U.S. Invest Grade: 20%

Proposed Fixed Income Structure
- High Quality Core: 65%
- Diversified Credit: 35%

Legend:
- Domestic Invest Grade
- Domestic Below Invest Grade
- Global/Non-U.S. Invest Grade
- High Quality Core
- Diversified Credit
Summary of Fixed Income Sector Changes

The Pension Trust was valued at $5.3 billion as of June 30, 2017, including $1.2 billion of fixed income with $700 million of Investment Grade, $250+ million of Non-Investment Grade and $250+ million of International Debt.

Restructuring the Pension Trust will transition $250+ million of International Debt ($100+ million from UBS and $150+ million from Brandywine) to Core Fixed Income ($200+ million) or Diversified Credit ($50+ million).

Agency MBS mandates with JPMorgan ($130 million) and PIMCO ($185 million) will also be transitioned into Core Fixed Income.

Post restructuring, the Pension Trust will have up to $600 million in Core Fixed Income (split between two managers). Funding for Core Fixed Income will come Agency MBS ($315 million) and International Debt ($250+ million).
Montgomery Core Fixed Income

September 22, 2017

North Dakota State Investment Board

Presented by:
Maulik Bhansali, CFA, Senior Portfolio Manager
Jarad Vasquez, Senior Portfolio Manager
David Klug, CFA, Portfolio Specialist
Kirsten Burton, Sales Director, Business Development

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Wells Fargo Asset Management is a trade name used by the asset management businesses of Wells Fargo & Company.
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II. Wells Capital Management
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IV. Montgomery Core Fixed Income
V. Investment process
VI. Montgomery’s risk tools
VII. Addendum
   ▪ Investment guidelines
   ▪ Investment results
   ▪ GIPS® compliant presentation
VIII. Team bios
Wells Fargo Asset Management
Wells Fargo Asset Management (WFAM)

As the asset management business of Wells Fargo, we put clients first in everything we do.

We foster enduring client relationships with:
- Institutions
- Financial advisors
- Individual clients

Our values center on:

- Specialized, independent investment teams with proven processes
- Rigorous investment risk management oversight
- Client-centric relationships

Firm snapshot

<table>
<thead>
<tr>
<th>AUM</th>
<th>$487 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment teams</td>
<td>29</td>
</tr>
<tr>
<td>Global investment talent</td>
<td>500+</td>
</tr>
<tr>
<td>Team members</td>
<td>1,100+</td>
</tr>
<tr>
<td>Offices worldwide</td>
<td>21</td>
</tr>
</tbody>
</table>

Assets under management

<table>
<thead>
<tr>
<th>By asset class</th>
<th>AUM ($B)</th>
<th>Assets (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>95</td>
<td>20</td>
</tr>
<tr>
<td>Fixed Income / Stable Value</td>
<td>262</td>
<td>54</td>
</tr>
<tr>
<td>Money Market</td>
<td>96</td>
<td>20</td>
</tr>
<tr>
<td>Alternatives</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Multi-Asset Solutions</td>
<td>27</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: All figures as of June 30, 2017
## WFAM investment capabilities

Investment capabilities span all asset classes, providing a wealth of investment expertise to our clients.

- We provide clients with global access to our investment capabilities in a variety of vehicles. Please inquire further with your Wells Fargo contact for more information.

<table>
<thead>
<tr>
<th>MANAGER (AUM)</th>
<th>U.S. Equity</th>
<th>Global Equity</th>
<th>Emerging Markets Equity</th>
<th>U.S. Fixed Income</th>
<th>European Fixed Income</th>
<th>Global Fixed Income</th>
<th>Alternatives /Options</th>
<th>LDI/Specialty /Multi-Asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wells Capital Management¹</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Traditional Strategies ($353B)</td>
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<tr>
<td>Analytic Investors²</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>Active Quantitative Strategies ($19B)</td>
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<td></td>
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<tr>
<td>Factor-based strategies, Options, Alternatives</td>
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<td></td>
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<tr>
<td>The Rock Creek Group³</td>
<td>✓</td>
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<td></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Hedge Fund of Funds ($11B)</td>
<td></td>
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<tr>
<td>Golden Capital Management⁴</td>
<td>✓</td>
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<td>Quantitative Strategies ($10B)</td>
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<tr>
<td>Galliard Capital Management</td>
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<td>✓</td>
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<tr>
<td>Stable Value &amp; Fixed Income ($93B)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note: All figures as of June 30, 2017.

1 Wells Capital Management’s AUM includes $3B from the ECM Asset Management team, $6B from the First International Advisors team, and $19B from the Analytic Investors team. Total firm assets under management includes $7B in non-discretionary AUM and notional AUM.

2 Analytic Investors was acquired by WFAM on October 1, 2016. Total assets shown include notional, discretionary, and non-discretionary assets.

3 Wells Fargo owns a majority stake in The Rock Creek Group. Total assets shown include discretionary and non-discretionary assets.

4 Golden Capital Management was acquired by WFAM on July 1, 2017. Total assets shown include discretionary and non-discretionary assets.
Wells Capital Management
Wells Capital Management

Wells Capital Management (WellsCap) is a leading institutional investment management firm and part of Wells Fargo Asset Management.

- We are strongly committed to three beliefs that lead to long-term, successful partnerships with our clients:

  **Independent investment thinking**
  
  Our strong investment culture thrives on independent investment thinking.

  **Rigorous investment risk management**
  
  Rigorous, independent investment risk management is imperative to the consistent generation of risk-adjusted alpha.

  **Client-centric relationships**
  
  Enduring client relationships are cultivated by being client-centric, not product-centric.
Wells Capital Management

**WellsCap profile**
- Established in 1996
- AUM in excess of $353 billion
- 27 independent investment teams
- Over 1,000 clients in more than 30 countries worldwide
- 414 investment professionals with an average firm tenure of 11 years
- Signatory to the Principles for Responsible Investment

**Assets under management**
- U.S. Equity 20%
- Global/ex-U.S. Equity 9%
- U.S. Fixed Income 35%
- Global/ex-U.S. Fixed Income 3%
- Short Duration 28%
- Multi-Asset Solutions 5%

**Assets by clients**
- Corporate 29%
- Endowment/Foundation/Non-Profit 7%
- Public/Government/Union 15%
- Sovereign Wealth Fund/Central Bank 3%
- Wells Fargo Sub-Advisory 31%
- External Sub-Advisory 14%
- Other 1%

As of June 30, 2017. Total firm assets under management are $353B. The charts above excludes $97B in Money Market Mutual Funds and other Wells Fargo Affiliated Money Market Accounts. Assets under management, excluding Money Market Mutual Funds and other Wells Fargo Affiliated Money Market accounts total $256B. Total firm assets under management includes $5B in Non-Discretionary AUM and Notional AUM.

1 Includes accounts with durations over 1-5 year benchmarks.
2 Includes accounts with durations up to 1-5 year benchmarks, excluding Money Market Funds.
## WellsCap investment teams

### U.S. equity

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytic Investors</td>
<td>Los Angeles, CA</td>
<td>Benchmark-oriented, Low Volatility Equity</td>
</tr>
<tr>
<td>Beacon Growth Equity</td>
<td>Boston, MA</td>
<td>Small Cap Growth</td>
</tr>
<tr>
<td>Fundamental Growth Equity</td>
<td>Indianapolis, IN</td>
<td>Small, SMID, Mid, Large, All Cap Growth</td>
</tr>
<tr>
<td>Golden Capital Management</td>
<td>Charlotte, NC</td>
<td>Quant-driven, Enhanced Index, Dividend Yield</td>
</tr>
<tr>
<td>Heritage Growth Equity</td>
<td>Menomonee Falls, WI</td>
<td>Small, Large, All, Large/Mid Cap Growth</td>
</tr>
<tr>
<td>MetWest Capital Equity</td>
<td>Newport Beach, CA</td>
<td>Large Cap Intrinsic Value</td>
</tr>
<tr>
<td>PMV Equity</td>
<td>Menomonee Falls, WI</td>
<td>Small, SMID, All Cap</td>
</tr>
<tr>
<td>Select Equity</td>
<td>Chicago, IL</td>
<td>Small Cap</td>
</tr>
<tr>
<td>Special Global Equity</td>
<td>Boston, MA, Menomonee Falls, WI</td>
<td>Small, Mid Cap Value</td>
</tr>
<tr>
<td>Stageline Value Equity</td>
<td>Lake Oswego, OR</td>
<td>Small Cap Value</td>
</tr>
<tr>
<td>Value Equity</td>
<td>New York, NY</td>
<td>Small Cap Value</td>
</tr>
</tbody>
</table>

### Global/international equity

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytic Investors</td>
<td>Los Angeles, CA</td>
<td>Global, Emerging Markets, ACWI Low Volatility</td>
</tr>
<tr>
<td>Berkeley Street Emerging Markets Equity</td>
<td>Richmond, VA</td>
<td>All, Large/Mid Cap</td>
</tr>
<tr>
<td>Closed-End Fund Strategies</td>
<td>Richmond, VA</td>
<td>International, Emerging Markets CEF</td>
</tr>
<tr>
<td>EverKey Global Equity</td>
<td>New York, NY, Nassau Bahamas</td>
<td>Global, International</td>
</tr>
<tr>
<td>Golden Capital Management</td>
<td>Charlotte, NC</td>
<td>Quant-driven, Enhanced Index, Div Yield</td>
</tr>
<tr>
<td>MetWest Capital Equity</td>
<td>Newport Beach, CA</td>
<td>International, Global</td>
</tr>
<tr>
<td>Precious Metals</td>
<td>Boston, MA</td>
<td>Precious Metals</td>
</tr>
<tr>
<td>SF Global Emerging Markets Equity</td>
<td>San Francisco, CA</td>
<td>Emerging Markets Equity Income/Total Return, Asia Pacific</td>
</tr>
<tr>
<td>Special Global Equity</td>
<td>Boston, MA, Menomonee Falls, WI</td>
<td>International, Global Small Cap</td>
</tr>
</tbody>
</table>

### U.S. fixed income

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customized Fixed Income</td>
<td>Menomonee Falls, WI</td>
<td>Core, Core Plus, Enhanced Core, Intermediate, Long Duration, Medium Quality, Mortgage-Focused, Short, TIPS</td>
</tr>
<tr>
<td>Money Market Funds</td>
<td>Charlotte, NC, Minneapolis, MN, San Francisco, CA</td>
<td>Taxable, Tax-Exempt</td>
</tr>
<tr>
<td>Montgomery Fixed Income</td>
<td>Walnut Creek, CA</td>
<td>Core, Short Duration, Long Credit</td>
</tr>
<tr>
<td>Premier Income Strategies</td>
<td>San Francisco, CA</td>
<td>Credit Focused, Intermediate, Structured</td>
</tr>
<tr>
<td>Short Duration Fixed Income</td>
<td>San Francisco, CA</td>
<td>Taxable and Tax-Exempt with durations of 3 months to 1-5 years</td>
</tr>
<tr>
<td>Tax-Exempt Fixed Income</td>
<td>Menomonee Falls, WI</td>
<td>Tax-Exempt Short, Intermediate, Long Duration, High Yield</td>
</tr>
<tr>
<td>U.S. High Yield Fixed Income</td>
<td>San Francisco, CA and Menomonee Falls, WI</td>
<td>High Yield, Bank Loans, Short-Term High Yield</td>
</tr>
</tbody>
</table>

### Global/international fixed income

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECM Asset Management Limited</td>
<td>London, U.K.</td>
<td>Multi-Sector Credit, Sub-Investment Grade, Investment Grade, Financials, European Infrastructure</td>
</tr>
</tbody>
</table>

### Investment solutions

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liability Driven Investment</td>
<td>San Francisco, CA</td>
<td>Analytics, LDI Design, Glidepathing, Multi-Asset Class Solutions</td>
</tr>
<tr>
<td>Multi-Asset Solutions</td>
<td>San Francisco, CA</td>
<td>Customized Strategic and Tactical Asset Allocation, Multi-Asset Solutions, Target Date, Dynamic Risk Hedging, Absolute Return Solutions</td>
</tr>
</tbody>
</table>

### Alternatives

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytic Investors</td>
<td>Los Angeles, CA</td>
<td>Long/Short Equity, Market Neutral, Derivatives-based strategies</td>
</tr>
<tr>
<td>ECM Asset Management Limited</td>
<td>London, U.K.</td>
<td>European Infrastructure debt, Absolute return multi-sector credit</td>
</tr>
<tr>
<td>EverKey Global Equity</td>
<td>New York, NY, Nassau Bahamas</td>
<td>Long/Short Equity</td>
</tr>
</tbody>
</table>
Montgomery Fixed Income
Montgomery Fixed Income

- Founded in 1990, autonomous investment team located in Walnut Creek, California
- Manage $33.0 billion\(^1\) across three complementary strategies: Core, Short Duration, and Long Credit
- One team, one philosophy, one process across all three strategies
- Overlapping securities universe enables us to leverage our research, trading, proprietary risk management, and technology resources throughout

**What differentiates the Montgomery approach:**

- Superior, consistent outperformance across all types of market environments
- Best-in-class information ratio
- Bottom-up, active relative value management and an intense focus on risk discipline generates outperformance from security selection, not interest rate or sector positioning
- Core has outperformed the benchmark 25 out of 26 years; Short Duration has outperformed the benchmark 21 out of 24 years; Long Credit launched in 2013 and outperformed its benchmark since inception (9/30/2013)

<table>
<thead>
<tr>
<th>Montgomery Strategy</th>
<th>Benchmark</th>
<th>AUM($B)^{1,2}</th>
<th>Securities Universe Focus</th>
<th>Strategy Inception</th>
<th>Investment Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>Bloomberg Barclays U.S. Aggregate Index</td>
<td>28.6</td>
<td>Treasuries, Agencies, Mortgages, Structured Products, Credit</td>
<td>3Q1990</td>
<td>Separate Account 3c7 Fund and CIT WF Core Bond Fund</td>
</tr>
<tr>
<td>Short Duration</td>
<td>Bloomberg Barclays 1-3yr U.S. Government Index</td>
<td>3.2</td>
<td>80% Government or Government Related + Highly-Rated Structured Products and Credit (+ Treasury Futures)</td>
<td>4Q1992</td>
<td>Separate Account WF Short Duration Gov’t Bond Fund</td>
</tr>
<tr>
<td>Long Credit</td>
<td>Bloomberg Barclays U.S. Long Credit Index</td>
<td>1.2</td>
<td>Credit (+ Treasury Futures)</td>
<td>3Q2013</td>
<td>Separate Account</td>
</tr>
</tbody>
</table>

\(^{1}\) AUM as of June 30, 2017. \(^{2}\) Strategy AUMs include accounts that are not part of the underlying composite.
We understand and tailor our approach to the unique needs of a diverse client base.

<table>
<thead>
<tr>
<th>Client Type</th>
<th>% of Strategy AUM</th>
<th>Representative Clients¹</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Advisory Assignments</td>
<td>42%</td>
<td>Columbia Management Investment Advisors</td>
<td>Northwestern Mutual Series Fund</td>
</tr>
<tr>
<td></td>
<td></td>
<td>John Hancock Financial Services</td>
<td>Raymond James</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SEI Investments Company</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>State Street Global Advisors</td>
</tr>
<tr>
<td>Proprietary Funds</td>
<td>21%</td>
<td>Wells Fargo Core Bond Fund</td>
<td>Wells Fargo Short Duration Government Bond Fund</td>
</tr>
<tr>
<td>Public Retirement Plans</td>
<td>15%</td>
<td>Boston Retirement Board</td>
<td>Los Angeles Department of Water and Power Employees’ Retirement Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Colorado Public Employees Retirement Association</td>
<td>Policemen’s Annuity and Benefit Fund, City of Chicago</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Los Angeles County Employees Retirement Association</td>
<td>Town of Fairfield Retirement Plans</td>
</tr>
<tr>
<td>Corporate Retirement Plans</td>
<td>16%</td>
<td>Dana Holding Corporation</td>
<td>Merck</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deere &amp; Co.</td>
<td>Safeway</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freeport-McMoRan</td>
<td>Sysco</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hewlett-Packard</td>
<td>WEC Energy Group</td>
</tr>
<tr>
<td>Foundation / Endowment / Non-Profit</td>
<td>4%</td>
<td>Albert and Margaret Alkek Foundation</td>
<td>Michigan State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Valley Children’s Healthcare</td>
<td>Nevada System of Higher Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kaiser Foundation Health Plan</td>
<td></td>
</tr>
<tr>
<td>Taft-Hartley Retirement Plans</td>
<td>1%</td>
<td>I.U.O.E. Local 14-14B Pension Fund</td>
<td>Teamsters Local 830 Pension Fund</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private Sanitation Union Local 813 Pension Trust Fund</td>
<td></td>
</tr>
</tbody>
</table>

¹ As of June 30, 2017. This list herein is representative of Wells Capital Management’s Montgomery U.S. Fixed Income clients based on client type classification. Only clients who gave us permission to do so are included on this list. Neither performance data nor account size was used as a means of selecting their inclusion. The use of their names does not constitute an indication of approval or disapproval of our products or services.
Investment philosophy

We believe:

- **Bottom-up security selection** from a focused universe of high quality, liquid bonds offers the opportunity for consistent and replicable outperformance

- **Active relative value management** generates alpha

- **Market-oriented risk analysis tools** are the foundation of a disciplined investment process

- **Developing an informational and analytic edge** creates investment opportunities

- **Information ratio** is the best way to measure long-term success in delivering risk-adjusted excess returns
Experienced, integrated investment team implements disciplined process

Team has an average of 12 years at the firm, and an average of 21 years of investment experience

Senior Portfolio Managers and Co-Heads

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Year Joined Firm</th>
<th>Year Joined Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas O'Connor, CFA</td>
<td>Senior Portfolio Manager and Co-Head</td>
<td>2000</td>
<td>1988</td>
</tr>
<tr>
<td>Troy Ludgood</td>
<td>Senior Portfolio Manager and Co-Head</td>
<td>2004</td>
<td>2000</td>
</tr>
<tr>
<td>Maulik Bhanasali, CFA</td>
<td>Senior Portfolio Manager</td>
<td>2001</td>
<td>2001</td>
</tr>
<tr>
<td>Jarad Vasquez</td>
<td>Senior Portfolio Manager</td>
<td>2007</td>
<td>2001</td>
</tr>
<tr>
<td>Prachi Kapadia, CFA</td>
<td>Senior Analyst</td>
<td>2010</td>
<td>1999</td>
</tr>
<tr>
<td>Tim Maloney</td>
<td>Trader</td>
<td>2016</td>
<td>2008</td>
</tr>
<tr>
<td>Peter Wilson</td>
<td>Portfolio Manager</td>
<td>2013</td>
<td>1985</td>
</tr>
<tr>
<td>H. Thomas Lyons</td>
<td>Senior Analyst</td>
<td>2010</td>
<td>1992</td>
</tr>
</tbody>
</table>

Senior Portfolio Managers

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Year Joined Firm</th>
<th>Year Joined Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven Ricks, CFA</td>
<td>Portfolio Manager</td>
<td>2005</td>
<td>1999</td>
</tr>
<tr>
<td>Theresa Fennell, CFA</td>
<td>Portfolio Manager</td>
<td>2002</td>
<td>1986</td>
</tr>
<tr>
<td>Peter Shih</td>
<td>Trader</td>
<td>2007</td>
<td>2007</td>
</tr>
<tr>
<td>Jerry Z. Zhang</td>
<td>Associate Analyst</td>
<td>2014</td>
<td>2014</td>
</tr>
</tbody>
</table>

Credit

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Year Joined Firm</th>
<th>Year Joined Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prachi Kapadia, CFA</td>
<td>Senior Analyst</td>
<td>2010</td>
<td>1999</td>
</tr>
<tr>
<td>Tim Maloney</td>
<td>Trader</td>
<td>2016</td>
<td>2008</td>
</tr>
</tbody>
</table>

Mortgages and Structured Products

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Year Joined Firm</th>
<th>Year Joined Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Sharkey, CFA</td>
<td>Portfolio Manager</td>
<td>2003</td>
<td>1997</td>
</tr>
<tr>
<td>Steven Brown, CFA</td>
<td>Senior Analyst</td>
<td>2010</td>
<td>1999</td>
</tr>
<tr>
<td>Jerry Z. Zhang</td>
<td>Associate Analyst</td>
<td>2014</td>
<td>2014</td>
</tr>
</tbody>
</table>

Portfolio Coordination and Risk Analytics

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Year Joined Firm</th>
<th>Year Joined Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonathan Gray, CFA</td>
<td>Developer</td>
<td>2005</td>
<td>2005</td>
</tr>
<tr>
<td>Nancy Lederer</td>
<td>Trader</td>
<td>1997</td>
<td>1980</td>
</tr>
</tbody>
</table>

Portfolio Specialists

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Year Joined Firm</th>
<th>Year Joined Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Klug, CFA</td>
<td>Portfolio Specialist</td>
<td>2013</td>
<td>2004</td>
</tr>
</tbody>
</table>

Note: Years at Firm and Years Investment Experience assumes 1 year of experience for calendar year employee joined and 1 year of experience for current calendar year.

Note: CFA® and Chartered Financial Analyst® are trademarks owned by CFA Institute.
Montgomery Core Fixed Income

I. Investment performance

II. Information ratio

III. Portfolio positioning
Outperformance 25 out of 26 years

Annual Returns
Montgomery U.S. Core calendar year rates of return
Performance as of June 30, 2017

*Calendar year 1990 is from inception date, August 1, 1990 through December 31, 1990.
Note: The GIPS® compliant presentation can be found at the end of this presentation. Source: WellsCap Performance.
Superior, consistent outperformance across all types of market environments

Quarterly Excess Returns
Montgomery U.S. Core vs. Bloomberg Barclays U.S. Aggregate Index
January 1, 1994 – June 30, 2017

Market Turmoil is Consistent... So is our Excess Return

(1) Excess returns are the excess composite gross of fee returns versus the Index. Note: The GIPS® compliant presentation can be found at the end of this presentation.
Superior, consistent outperformance across all types of market environments

Rolling 12-Month Excess Returns
Montgomery U.S. Core vs. Bloomberg Barclays U.S. Aggregate Index¹
January 1, 1994 – June 30, 2017

(1) Excess returns are the excess composite gross of fee returns versus the Index. Bars represent the rolling 12-month gross excess return for each quarter-end. Note: The GIPS® compliant presentation can be found at the end of this presentation. Source: WellsCap Performance.
Best-in-class risk-adjusted returns

The Goal: Maximize Information Ratio
As of June 30, 2017

Strong Excess Returns Coupled With Low Tracking Error Consistently Yields Top-Ranked Risk-Adjusted Returns

Montgomery U.S. Core FI Gross

Inception (1990) to Date

<table>
<thead>
<tr>
<th>Inception (1990) to Date</th>
<th>Information Ratio</th>
<th>Rank</th>
<th>Excess Return</th>
<th>Rank</th>
<th>Tracking Error</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montgomery U.S. Core FI Gross</td>
<td>1.40</td>
<td>1</td>
<td>1.02</td>
<td>3</td>
<td>0.73</td>
<td>88</td>
</tr>
</tbody>
</table>

- # of Observations
- Universe(5%)
- Universe(25%)
- Universe(Median)
- Universe(75%)
- Universe(95%)

(1) Montgomery U.S. Core Fixed Income gross of fees vs. Bloomberg Barclays U.S. Aggregate Index. Source: eVestment Alliance Database via MPI. All returns for periods greater than one year are annualized. There may be a small return difference (1-2 bps) in charts generated by eVestment Alliance due to rounding. Note: The GIPS® compliant presentation can be found at the end of this presentation.
Core Fixed Income peer universe rankings

Information Ratio: 3, 5, 7 & 10 Years vs Bloomberg Barclays U.S. Aggregate Index
As of June 30, 2017

Manager vs. Bloomberg Barclays U.S. Aggregate Return

<table>
<thead>
<tr>
<th></th>
<th>3 Years</th>
<th>5 Years</th>
<th>7 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR</td>
<td>Rank</td>
<td>IR</td>
<td>Rank</td>
<td>IR</td>
</tr>
<tr>
<td>Montgomery U.S. Core FI Gross</td>
<td>2.55</td>
<td>2</td>
<td>2.05</td>
<td>6</td>
</tr>
<tr>
<td># of Observations</td>
<td>222</td>
<td></td>
<td>219</td>
<td></td>
</tr>
<tr>
<td>Universe(5%)</td>
<td>2.09</td>
<td></td>
<td>2.09</td>
<td></td>
</tr>
<tr>
<td>Universe(25%)</td>
<td>1.07</td>
<td></td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td>Universe(Median)</td>
<td>0.62</td>
<td></td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>Universe(75%)</td>
<td>0.09</td>
<td></td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>Universe(95%)</td>
<td>-0.49</td>
<td></td>
<td>-0.43</td>
<td></td>
</tr>
</tbody>
</table>

Source: eVestment Alliance Database via MPI. The GIPS® compliant presentation can be found at the end of this presentation.
Portfolio positioning vs. Bloomberg Barclays U.S. Aggregate Index

Opportunistc sector decisions versus benchmark
As of June 30, 2017

Sector exposure – by credit quality

Sector exposure – by market value

Sector exposure – by dollar duration

(1) This information is based on a representative account within the Montgomery U.S. Core Fixed Income Composite. The representative account has been selected by meeting the following criteria: 1) the account is in the Montgomery U.S. Core Fixed Income Composite. 2) Wells Capital represents that the holdings, characteristics and risk profile are representative of the strategy/style of the Montgomery U.S. Core Fixed Income Composite. Any changes to the representative account must be approved by the director of investment risk management. (2) Percentages represent market value of total assets and are not risk-adjusted. (3) Percentages represent dollar duration weightings. Cash is excluded. Note: Figures may not sum to 100% due to rounding.
The Montgomery Fixed Income advantage

What differentiates the Montgomery approach:

- Superior, consistent outperformance across all types of market environments
- Best-in-class information ratio
- Bottom-up, active relative value management and an intense focus on risk discipline generates outperformance from security selection, not interest rate or sector positioning
- Core has outperformed the benchmark 25 out of 26 years; Short Duration has outperformed the benchmark 21 out of 24 years; Long Credit launched in 2013 and outperformed its benchmark since inception (9/30/2013)
Investment process
Investment process

Risk managed throughout process

Security analysis
- Fundamental factors
- Sector comparisons
- Technical considerations

Target positioning
- Risk targets
- Sector ranges
- Market and portfolio positioning

Security selection
- Relative value of securities
- Liquidity
- Credit
- Convexity

Portfolio construction
- Trading, execution, and allocation
- Reporting and monitoring

Investment process – key elements:
- Well-defined securities universe
- Bottom-up security selection performed with rigorous constraints
- Relative value trading
- Disciplined, replicable process
- Duration within 10% of benchmark

Setting strategy – senior members of investment team responsible for:
- Quarterly sector review meetings and weekly market updates
- Setting risk targets and ranges during these meetings
- Daily discussions about market and portfolio positioning
Credit decision process

- **Investment universe**
  - Focus on high-grade, liquid, U.S. dollar-denominated bonds
  - Active across Industrial, Financial, Non-Corporates (sovereigns, supranationals, and other government-related entities)
  - Carefully evaluate opportunity set in context of portfolio strategy

- **Fundamental research**
  - Dedicated sector specialists conduct in-depth fundamental and industry research
  - Company review within industry context helps to frame risk profile and lay groundwork for relative value analysis

- **Relative value strategy**
  - Analysts integrate fundamental research with market intelligence to formulate relative value view
  - Active trading strategy within and across credit sub-sectors

- **Quantitative approach**
  - RiskSum™ provides real-time view of portfolio; helps to guide position sizing on a risk-adjusted basis
  - Proprietary spread database allows for efficient identification of relative value opportunities
The mortgage market presents a large, liquid, high quality opportunity set

Our investment universe:

| Agency backed government-guaranteed or government-related mortgage securities |
|---------------------|---------------------|---------------------|
| Pass-throughs       | CMOs                | Hybrid ARMs         |
| Fannie, Freddie, and Ginnie | Sequentialss | 3/1s                |
| 30-year, 15-year, and other terms | PACs          | 5/1s                |
| TBAs                | Strips              | 7/1s                |
| Specified pools – seasoning, loan balance, geographies, LTV, and FICO stories among others | VADMs        | 10/1s               |
|                     |                     | Post resets         |

Complexity of mortgage market facilitates consistent excess return potential

- Prepayment risks are intricate
- Sophisticated mortgage investors often materially disagree on the value of the embedded call option
- The large footprint of investors driven by differing economic incentives causes the market to be consistently dislocated and mispriced

Agency mortgage views can be expressed at multiple levels

- Mortgage/Treasury basis – Mortgages overvalued or undervalued versus the Treasury curve
- Within mortgage subsectors – CMOs, Pools, TBAs, Hybrid ARMs
- At the security level – bond characteristics such as seasoning, loan balance and geography can affect the borrowers ability and willingness to refinance.
Mortgage process

Fundamental research provides the foundation
- Study trends and evolution of pass-through market to take advantage of shifts in collateral, float, and risk
- Research underperforming sectors to look for opportunities
- Value securities using external and proprietary analytic tools
- Live market monitors and attribution systems that link directly to our proprietary RiskSum™ system

Active mortgage trading strategy yields valuable market intelligence
- Constantly assess trading environment to inform valuation decisions
- Monitor investor activity and track flows to influence positioning
- Consistently invest in market sub-sectors to boost our ability to spot market dislocations and liquidity needs
- Interact with traders and strategy teams across wall street to remain at the forefront of technical information and “who is doing what to whom”
Investments in structured products

Investing in structured products presents a unique risk-reward proposition

<table>
<thead>
<tr>
<th>Investment consideration</th>
<th>Attractive</th>
<th>Our experience in structured products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit risk</td>
<td>✓</td>
<td>▪ Many parts of the structured products sector exhibit excellent credit quality which has been tested through multiple economic cycles</td>
</tr>
<tr>
<td>Liquidity</td>
<td>✓</td>
<td>▪ Portions of the structured products sector offer relatively strong liquidity characteristics allowing us to employ our process</td>
</tr>
<tr>
<td>Diversification</td>
<td>✓</td>
<td>▪ The structured products sector offers exposure which reflects its own investment merits, which can often be uncorrelated with other large investment grade markets</td>
</tr>
<tr>
<td>Valuations</td>
<td>✓</td>
<td>▪ Valuations in structured products markets are often attractive relative to other high quality investment grade fixed income sectors</td>
</tr>
</tbody>
</table>
Investments in structured products

Structured products include a variety of asset classes:

<table>
<thead>
<tr>
<th>ABS</th>
<th>CMBS</th>
<th>RMBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit cards</td>
<td>Conduit CMBS</td>
<td>Prime jumbo RMBS</td>
</tr>
<tr>
<td>Auto loans and leases</td>
<td>Single asset CMBS</td>
<td>GSE “credit risk transfer”</td>
</tr>
<tr>
<td>Student loans</td>
<td>Single borrower CMBS</td>
<td></td>
</tr>
<tr>
<td>Cell phone loans</td>
<td>Agency CMBS</td>
<td></td>
</tr>
<tr>
<td>Commercial loans</td>
<td>Single family rental securitizations</td>
<td></td>
</tr>
<tr>
<td>Esoteric assets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Narrowing our investment universe through a criteria-based filter

- Is the deal structure and collateral analyzable? Yes
- Is there sufficient liquidity? Yes
- Is the sponsor long-term financially viable? Yes
- Is the sponsor committed to securitization markets? Yes
- Do we have an investment edge? Yes

Montgomery Fixed Income’s Dynamic Opportunity Set
Montgomery’s risk tools
Multi-functional proprietary RiskSum™ anchors every step of the process

Real time integrated portfolio, trading, compliance, and risk tools designed for insight and efficiency

RiskSum™

Security database  Risk tools  Portfolio analysis  Trade order management  Pre-trade compliance

Macro level risk management

- Monitors portfolio risk consistently across 12 risk dimensions
- Risk factors:
  - Interest rate risk
    - Duration
    - Curve-adjusted duration
    - Convexity
  - Sector risk
    - Dollar-weighted duration
    - Duration-weighted
    - Risk-adjusted
    - Broad sector
    - Sub-sector
  - Yield curve risk
    - Aggregate portfolio
    - Sector level
  - Other factors
    - Liquidity
    - Swap risk

Micro level risk management

- Monitors sector and name exposure versus benchmark
- Tools to help size positions
# Montgomery’s risk tools

## A working example: Representative account exposures\(^1,2\)

As of June 30, 2017

### Duration

<table>
<thead>
<tr>
<th></th>
<th>Representative Account</th>
<th>Benchmark(^3)</th>
<th>Exposure vs. Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Representative Account</td>
<td>6.00</td>
<td>6.01</td>
<td>-0.01/-0.17%</td>
</tr>
</tbody>
</table>

### Sector exposure

<table>
<thead>
<tr>
<th>Sector exposure</th>
<th>Market value weighted</th>
<th>Exposure vs. Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Representative account</td>
<td>Benchmark</td>
</tr>
<tr>
<td>Treasury</td>
<td>29%</td>
<td>37%</td>
</tr>
<tr>
<td>Credit</td>
<td>25%</td>
<td>31%</td>
</tr>
<tr>
<td>Mortgages(^4)</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>ABS</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>CMBS</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Agency</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Notes:

(1) This information is based on a representative account within the Montgomery U.S. Core Fixed Income Composite. The representative account has been selected by meeting the following criteria: 1) the account is in the Montgomery U.S. Core Fixed Income Composite, 2) Wells Capital Management represents that the holdings, characteristics and risk profile are representative of the strategy/style of the Montgomery U.S. Core Fixed Income Composite. Any changes to the representative account must be approved by one of the Co-Heads of Portfolio Risk Management and Analytics. (2) Figures may not sum due to rounding error. (3) Benchmark is the Bloomberg Barclays U.S. Aggregate Index. (4) Mortgages includes Agency mortgages and Agency CMOs.
Security selection: The key driver of performance

Performance attribution vs. Bloomberg Barclays U.S. Aggregate Index
January 1, 1999 – December 31, 2016

>90% of Performance From Security Selection
Security Selection Positive Every Year Since We Began Measuring

(1) This information is based on the Montgomery U.S. Core Fixed Income Composite. Figures are risk-adjusted. Note: The GIPS® compliant presentation can be found at the end of this presentation. Source: WellsCap Performance.
Portfolio positioning: Sector exposure

Sector exposure vs. benchmark (risk-adjusted)¹
June 2007 – June 2017 (10-Year Rolling Period)

(1) This information is based on a representative account within the Montgomery U.S. Core Fixed Income Composite. The representative account has been selected by meeting the following criteria: 1) the account is in the Montgomery U.S. Core Fixed Income Composite, 2) Wells Capital represents that the holdings, characteristics and risk profile are representative of the strategy/style of the Montgomery U.S. Core Fixed Income Composite. Any changes to the representative account must be approved by one of the Co-Heads of Portfolio Risk Management and Analytics. Figures are risk-adjusted.
Addendum
# Montgomery Core investment guidelines

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Bloomberg Barclays U.S. Aggregate Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration range</td>
<td>+/- 10% of benchmark duration</td>
</tr>
<tr>
<td>Permitted securities</td>
<td></td>
</tr>
</tbody>
</table>
|                 | - Investment grade U.S. dollar-denominated fixed income securities and cash equivalents, including U.S. Treasuries and Agencies, mortgages, CMOs, municipal securities, corporate, asset-backed and CMBS securities. Investment grade bonds are those in the four highest rating categories, as rated by Moody’s Investors Service, Inc., Standard & Poor’s Corporation, or Fitch  
|                 | - Securities that are dollar-denominated that are issued by foreign government agencies, local governments, sovereigns, and corporations that have no operations in the United States, up to 20% of the portfolio’s value  
|                 | - Rule 144(a) securities may be included up to 15% of the portfolio’s value  
|                 | - TBA securities issued by a Federal Agency and mortgage dollar rolls may be used  
|                 | - Short-term investments rated at least P2 or equivalent by Moody’s Investors Service, Inc., Standard & Poor’s Corporation or Fitch  
|                 | - Up to 5% of the portfolio may be invested in securities rated below investment grade |
| Prohibited securities |  
|                 | - Foreign currency-denominated securities  
|                 | - Securities convertible into common stock  
|                 | - Futures  
|                 | - Private placements (excepting Rule 144(a) securities described above and Wells Fargo Trust for Institutional Investments, our core commingled vehicle) |
| Maximum position in one issuer |  
|                 | - Maximum of 5% of portfolio value per issuer unless the issuer is the U.S. Government or its Agencies, in which case there is no limit |
Investment results

Montgomery U.S. Core Fixed Income Composite
Returns through June 30, 2017

All returns for periods greater than one year are annualized. Note: The GIPS® compliant presentation can be found at the end of this presentation.
Core composite quartile performance

As of June 30, 2017

Manager vs. Barclays US Aggregate Return

<table>
<thead>
<tr>
<th></th>
<th>QTD Return</th>
<th>Rank</th>
<th>YTD Return</th>
<th>Rank</th>
<th>1 Year Return</th>
<th>Rank</th>
<th>3 Years Return</th>
<th>Rank</th>
<th>5 Years Return</th>
<th>Rank</th>
<th>7 Years Return</th>
<th>Rank</th>
<th>10 Years Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montgomery U.S. Core FI Gross</td>
<td>1.52</td>
<td>56</td>
<td>2.47</td>
<td>56</td>
<td>0.36</td>
<td>49</td>
<td>2.94</td>
<td>37</td>
<td>2.96</td>
<td>34</td>
<td>4.17</td>
<td>23</td>
<td>5.73</td>
</tr>
<tr>
<td>Bloomberg Barclays U.S. Aggregate Index</td>
<td>1.45</td>
<td>72</td>
<td>2.27</td>
<td>77</td>
<td>-0.31</td>
<td>85</td>
<td>2.48</td>
<td>82</td>
<td>2.21</td>
<td>89</td>
<td>3.19</td>
<td>89</td>
<td>4.48</td>
</tr>
</tbody>
</table>

# of Observations

- Montgomery U.S. Core FI Gross: 226
- Bloomberg Barclays U.S. Aggregate Index: 226

Source: eVestment Alliance. The GIPS® compliant presentation can be found at the end of this presentation.
GIPS® Compliant Presentation
Montgomery U.S. Core Fixed Income Composite Performance Summary

<table>
<thead>
<tr>
<th>Period</th>
<th>Gross Annual Return (%)</th>
<th>Net Annual Return (%)</th>
<th>Primary Index Return (%)</th>
<th>Comp 3 Yr Std. Dev.</th>
<th>Primary Index 3 Yr Std Dev</th>
<th>Internal Dispersion</th>
<th>Number of Accounts</th>
<th>Composite Assets ($-mm)</th>
<th>Total Firm Assets ($-mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>3.26</td>
<td>2.83</td>
<td>2.65</td>
<td>2.97</td>
<td>2.98</td>
<td>0.11</td>
<td>36</td>
<td>25,982.7</td>
<td>330,718</td>
</tr>
<tr>
<td>2015</td>
<td>0.93</td>
<td>0.50</td>
<td>0.55</td>
<td>3.00</td>
<td>2.88</td>
<td>0.06</td>
<td>38</td>
<td>22,105.1</td>
<td>349,342</td>
</tr>
<tr>
<td>2014</td>
<td>6.51</td>
<td>6.07</td>
<td>5.97</td>
<td>2.80</td>
<td>2.63</td>
<td>0.06</td>
<td>35</td>
<td>19,766.6</td>
<td>351,065</td>
</tr>
<tr>
<td>2013</td>
<td>-1.57</td>
<td>-1.99</td>
<td>-2.02</td>
<td>2.84</td>
<td>2.71</td>
<td>0.08</td>
<td>32</td>
<td>15,972.9</td>
<td>357,113</td>
</tr>
<tr>
<td>2012</td>
<td>7.09</td>
<td>6.64</td>
<td>4.21</td>
<td>2.32</td>
<td>2.38</td>
<td>0.15</td>
<td>36</td>
<td>18,388.1</td>
<td>332,154</td>
</tr>
<tr>
<td>2011</td>
<td>9.02</td>
<td>8.56</td>
<td>7.84</td>
<td>2.79</td>
<td>2.78</td>
<td>0.08</td>
<td>37</td>
<td>17,400.0</td>
<td>330,855</td>
</tr>
<tr>
<td>2010</td>
<td>8.01</td>
<td>7.53</td>
<td>6.54</td>
<td>4.38</td>
<td>4.17</td>
<td>0.14</td>
<td>38</td>
<td>17,563.7</td>
<td>365,552</td>
</tr>
<tr>
<td>2009</td>
<td>12.30</td>
<td>11.80</td>
<td>5.93</td>
<td>4.30</td>
<td>4.11</td>
<td>0.41</td>
<td>44</td>
<td>19,742.9</td>
<td>363,451</td>
</tr>
<tr>
<td>2008</td>
<td>4.00</td>
<td>3.53</td>
<td>5.24</td>
<td>4.07</td>
<td>3.97</td>
<td>0.64</td>
<td>38</td>
<td>13,783.2</td>
<td>252,048</td>
</tr>
<tr>
<td>2007</td>
<td>7.07</td>
<td>6.59</td>
<td>6.97</td>
<td>2.73</td>
<td>2.77</td>
<td>0.08</td>
<td>32</td>
<td>9,556.3</td>
<td>219,912</td>
</tr>
</tbody>
</table>

Primary Index: Bloomberg Barclays U.S. Aggregate Index

1. Wells Capital Management (“WellsCap”) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. WellsCap has been independently verified for the periods from January 1, 1997 through December 31, 2016. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm’s policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The Montgomery U.S. Core Fixed Income Composite has been examined for the periods from January 1, 1997 through December 31, 2016. The verification and performance examination reports are available upon request.

2. WellsCap is a registered investment adviser and a wholly owned subsidiary of Wells Fargo Bank, N.A. Since the firm’s creation in 1996, the firm has acquired a number of investment teams and/or assets through mergers and acquisitions. These include assets and/or investment teams from Norwest Investment Management Inc., Sutter Advisors, LLC, Montgomery Asset Management, Benson Associates, Strong Financial Corporation, Evergreen Investments, First International Advisors, LLC, Metropolitan West Capital Management, LLC, EverKey Global Partners and ECM Asset Management Limited. In addition, Analytic Investors, LLC was added to the firm at close of business March 31, 2017. In all cases, the investment teams involved in each acquisition and merger remain autonomous teams within WellsCap.

3. The Montgomery U.S. Core Fixed Income Composite (“Composite”) includes all discretionary accounts over $5 million managed in this style. This style utilizes a bottom up security selection process to identify investment opportunities from a universe of high-grade liquid bonds. The manager employs a broad array of fixed income securities, including U.S. Government, corporate securities, mortgage-backed securities, asset-backed securities, commercial mortgage-backed securities and CMOs in the investment process. The strategy is designed to deliver excess risk-adjusted returns relative to the Bloomberg Barclays U.S. Aggregate Index. Effective January 1, 2008 the Composite was redefined to include pooled funds managed in this style. As of April 1, 2011 the Composite was redefined to exclude accounts prohibited from holding either 144(a) securities with or without registration rights. In February 2007, Marie Chandoha, Senior Portfolio Manager, left WellsCap. In December 2009, Bill Stevens, Senior Portfolio Manager, left WellsCap. In January 2010, Lynne Royer, Senior Portfolio Manager, left WellsCap. In December 2009, Bill Stevens, Senior Portfolio Manager, left WellsCap. The Composite was created in July 1992. The Composite inception date is July 31, 1990.

4. Composite returns are net of transaction costs and non-reclaimable withholding taxes, if any, are expressed in U.S. dollars, and reflect the reinvestment of dividends and other earnings. Gross composite returns do not reflect the deduction of investment advisory fees. Net composite returns are calculated using a model investment advisory fee, which is the maximum annual advisory fee based upon the fee schedule in effect during each respective performance period. Any changes to the fee schedule are reflected in the calculation of the net composite returns beginning with the period in which the fee schedule is revised. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. The Composite may contain accounts with performance-based fees. WellsCap’s fee schedules are available upon request and may also be found in Part 2 of Form ADV. The published fee schedule for this strategy is 0.42% for the first $15mm, 0.33% for the next $85mm, 0.25% for the next $100mm, 0.20% for the next $550mm and 0.15% over $750mm. The Composite has a Significant Cash Flow (SCF) policy to temporarily remove accounts from the composite. The SCF policy was amended on April 1, 2009 to redefine a significant cash flow as a single or series of net client initiated cash flows within a ten business day window of either a contribution or withdrawal of cash and/or securities that exceeds 20% of the previous day’s total market value of the account. Previously a SCF was defined as a single cash flow that exceeded 20% of the previous day’s total market value of the account. Additional information regarding WellsCap’s policies for valuing accounts, calculating performance and preparing compliant presentations are available upon request.

5. Internal dispersion is the equal weighted standard deviation of the annual gross returns of all accounts included in the composite for the entire year. For years where there are 5 or fewer accounts in the composite for the entire year, dispersion is not presented as it is not a meaningful statistical calculation. The 3-year annualized standard deviation measures the variability of the gross composite returns and the index returns over the preceding 36-month time period.

6. Index returns are provided to represent the investment environment existing during the time periods shown and are not covered by the report of independent verifiers. The Bloomberg Barclays U.S. Aggregate Index represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. For comparison purposes, the index is fully invested, which includes the reinvestment of income. The returns for the index do not include any transaction costs, management fees or other costs.

7. Actual performance results may differ from composite returns, depending on the size of the account, investment guidelines and/or restrictions, inception date and other factors. Performance for some accounts in this composite may be calculated by third-parties that use different security pricing and performance methodologies. Past performance is not indicative of future results. As with any investment vehicle, there is always the potential for gains as well as the possibility of losses. Our registration as an Investment Adviser does not imply any level of skill or training. For a complete list of WellsCap composite descriptions, please see https://wellscap.com/about-us/business-risk-compliance.jsp.
Team bios
Investment team

**Thomas O’Connor, CFA**
*Managing Director, Senior Portfolio Manager and Co-Head*

Thomas O’Connor is senior portfolio manager and co-head for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2000, Tom was a senior portfolio manager in charge of Agency mortgages at Vanderbilt Capital Advisors (formerly ARM Capital Advisors). Earlier, Tom was a senior trader of Agency mortgages in both a proprietary and market-making role at the Union Bank of Switzerland. He was also a senior trader at First Boston and Smith Barney. Tom has been in the investment industry since 1988. He earned a bachelor’s degree in business administration from the University of Vermont and has earned the right to use the CFA designation.

**Troy Ludgood**
*Managing Director, Senior Portfolio Manager and Co-Head*

Troy Ludgood is senior portfolio manager and co-head for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2004, Troy was a trader at Lehman Brothers, responsible for corporate, emerging markets, and non-dollar sovereign bonds. Before transitioning to the investment industry in 2000, Troy worked as an industrial engineer at Ahold and May Department Stores. He earned a bachelor’s degree in industrial engineering from Georgia Tech and earned his master’s degree in business administration from the Wharton School at the University of Pennsylvania.

**Maulik Bhansali, CFA**
*Senior Portfolio Manager*

Maulik Bhansali is a senior portfolio manager for the Montgomery Fixed Income team at Wells Capital Management. Prior to this role, he was an equity research analyst responsible for quantitative modeling and portfolio construction in addition to fundamental analysis. Prior to joining the firm in 2001, Maulik worked with Watson Wyatt Worldwide where he served as a retirement actuary. He earned a bachelor’s degree in economics and international studies from Yale University, where he graduated cum laude. Maulik also earned a master’s degree in financial engineering at the University of California, Berkeley. He is an Associate of the Society of Actuaries and has earned the right to use the CFA designation.

**Jarad Vasquez**
*Senior Portfolio Manager*

Jarad Vasquez is a senior portfolio manager focusing on mortgage-backed securities for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2007, Jarad was a trader at Susquehanna International Group where he traded MBS in a proprietary relative value strategy and equity options as a specialist on the Philadelphia Stock Exchange. He has been in the investment industry since 2001. Jarad earned a bachelor’s degree in management science from the Massachusetts Institute of Technology.

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Investment team (continued)

David Klug, CFA
Portfolio Specialist
David Klug is a portfolio specialist for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2013, David was a vice president and head of Technology Fixed Income Capital Markets at Morgan Stanley. He held a variety of positions during his career at Morgan Stanley including origination, structuring, and execution roles across equity capital markets, fixed income capital markets, fixed income derivatives, and risk management. Earlier, David was an analyst in the Investment Banking Funds group at Macquarie, and an analyst in the Asset Management Group at Lombard Odier. David earned a bachelor’s degree in finance and economics from McGill University, where he graduated magna cum laude, and completed the Program for Leadership Development at the Harvard Business School.

Steve Johnson
Portfolio Specialist
Steve Johnson is a portfolio specialist for the Montgomery Fixed Income Team at Wells Capital Management. Prior to joining the firm in 2016, Steve was an Associate in the Institutional Securities Group at Morgan Stanley focused on long and short duration investment grade credit products. He earned a bachelor’s degree in Economics from Duke University and a Masters of Management Studies from the Fuqua School of Business.

Steven Ricks, CFA
Portfolio Manager
Steven Ricks is a portfolio manager focusing on credit for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2005, Steve was a senior research analyst at ABN AMRO Incorporated in New York, with experience in both the fixed income and equity markets. Before entering the investment industry in 1999, Steve was a policy analyst on the staff of U.S. Representative Christopher Cox (CA) in Washington, D.C. He earned a bachelor’s degree in government from the University of Virginia and holds a master’s degree in business administration from the Yale School of Management. Steven has earned the right to use the CFA designation.

Theresa C. Fennell, CFA
Portfolio Manager
Theresa Fennell is a portfolio manager focusing on credit for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2002, Theresa was a senior portfolio manager at American Century Investment Management. Earlier, she was an associate portfolio manager and senior analyst in the high yield research area at Greenwich Street Advisors, a unit of Salomon Smith Barney. She has been in the investment industry since 1986. Theresa earned a bachelor’s degree in economics from the University of Virginia and has earned the right to use the CFA designation.

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Investment team (continued)

**Peter Wilson**  
*Portfolio Manager*  
Peter Wilson is a portfolio manager for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2013, Peter was a Managing Director and Head of Trading and Research at The Seaport Group. Earlier in his career, he was a partner and Senior Portfolio Manager at KLS Diversified Asset Management, Global Head of High Yield and Distressed Trading at UBS, and Head of High Yield Trading at JPMorgan Chase. Peter has been in the investment industry since 1985. He earned a bachelor’s degree in political science and history from Gettysburg College.

**H. Thomas Lyons**  
*Senior Analyst*  
Tom Lyons is a senior analyst focusing on credit research for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2010, Tom ran UBS's European energy and utilities credit research practice. Earlier, he led strategy and acquisition initiatives for Louis Dreyfus and did project finance for GE Capital. Tom has been in the investment industry since 1992. He earned a bachelor's degree from Duke University and a master's degree in business administration from the Wharton School at the University of Pennsylvania.

**Prachi Kapadia, CFA**  
*Senior Analyst*  
Prachi Kapadia is a senior analyst focusing on credit for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2016, Prachi served as a credit research analyst at Loomis, Sayles & Company. Earlier, she was an analyst at RBS Citizens focused on distressed debt restructuring and at NewStar Financial focused on leveraged finance. She has been in the investment industry since 2008. Prachi earned a bachelor's degree in finance from Bentley University and has earned the right to use the CFA designation.

**Timothy Maloney**  
*Trader*  
Timothy Maloney is a trader focusing on credit for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the team in 2016, Timothy was an Associate at Morgan Stanley in Foreign Exchange and Emerging Markets. Timothy earned a master's of science in finance from the Vanderbilt University Owen Graduate School of Management in 2012. Prior to pursuing his masters, Timothy earned a bachelor's degree at Vanderbilt University, dual-majoring in economics and engineering sciences with a minor in engineering management.

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Investment team (continued)

Peter Shih
Trader
Peter Shih is a trader for the Montgomery Fixed Income team at Wells Capital Management. He began his career in the investment industry when he joined the firm in 2007 as part of the WellsCap Analyst Development Program. Prior to joining the firm, Peter was an intern for Target Corporation and Johnson & Johnson. Peter earned his bachelor’s degree in economics from Northwestern University. He has completed Level I of the CFA Program.

Michael Sharkey, CFA
Portfolio Manager
Michael Sharkey is a portfolio manager focusing on asset-backed and commercial mortgage-backed securities for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2003, Michael served as an analyst in the commercial finance group at Wells Fargo Bank. Earlier, he was a research assistant at the Federal Reserve Board in the international finance division. He has been in the investment industry since 1997. Michael earned a bachelor’s degree in mathematics and economics from the University of Michigan and holds a master’s degree in finance and economics from the London School of Economics. He has earned the right to use the CFA designation.

Joseph Kippels, CFA
Portfolio Manager
Joseph Kippels is a portfolio manager for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2010, Joe was a portfolio manager at BlackRock (formerly Barclays Global Investors) where he focused on the Agency mortgage market and managed a wide variety of account types. Earlier, Joe worked in fixed income research at Smith Breeden Associates, Inc. and traded energy commodities at Mirant Americas Energy Marketing, LP. Joe has been in the investment industry since 2000. He earned a bachelor’s degree in economics and computer applications from the University of Notre Dame, where he graduated magna cum laude, and a master’s degree in business administration from The Fuqua School of Business at Duke University. Joe has earned the right to use the CFA designation.

Steven Brown, CFA
Senior Analyst
Steven Brown is a senior research analyst focusing on building relative value tools supporting CMBS and ABS research for the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 2010, Steven was a vice president at Barclays Capital in New York, where he structured hedges for clients, including ABS and CMBS issuers. Earlier, Steven was an analyst in the Debt Capital Markets group at Merrill Lynch. He has been in the investment industry since 1999. Steven earned a bachelor’s degree in economics from Bentley College and a master’s degree in business administration from the Yale School of Management. Steven has earned the right to use the CFA designation.

Note: CFA® and Chartered Financial Analyst® are trademarks owned by CFA Institute.
Investment team (continued)

Jerry Z. Zhang
Associate Analyst
Jerry Zhang is an associate analyst focusing on mortgages for the Montgomery Fixed Income team at Wells Capital Management. He began his career in the investment industry when he joined the firm in 2014. Prior to joining the team, Jerry was an analyst at Deloitte Consulting. Jerry earned his bachelor’s degree in statistics and economics from the University of California, Davis.

Jonathan Gray, CFA
Developer
Jonathan Gray is a developer on the Montgomery Fixed Income team at Wells Capital Management specializing in quantitative software strategies. He began his career in the investment industry when he joined the firm in 2005. Jon earned a bachelor’s degree in computer science and business from the University of California, Berkeley. Jon has earned the right to use the CFA designation.

Bill Rong
Developer
Bill Rong is a developer for the Montgomery Fixed Income team at Wells Capital Management. Bill specializes in system development. Prior to joining the firm in 2011, Bill served as a consultant in the Foreign Exchange Market Risk Group at Wells Fargo Bank. Earlier in his career, he served as software consultant at Acadian Asset Management in Boston. He has been in the investment industry since 2008. Bill earned a bachelor’s degree in computer science from Beijing Polytechnics University and master’s degree in finance from Boston College.

Nancy Lederer
Trader
Nancy Lederer is a trader on the Montgomery Fixed Income team at Wells Capital Management. Prior to joining the firm in 1997, Nancy was in institutional sales at Hambrecht & Quist and retail sales at Donaldson Lufkin & Jenrette. Earlier in her career, she was an assistant trader at Blair Kerr & Bell and at Private Ledger. She has been in the investment industry since 1980. Nancy earned a bachelor’s degree in finance from San Diego State University.

Daniel Luft
Portfolio Coordinator
Daniel Luft is the portfolio coordinator for the Montgomery Fixed Income team at Wells Capital Management. Dan is responsible for managing the cash management process, coordinating account transitions, and overseeing various risk management and compliance-related functions. Previously, he was a client service manager on WellsCap’s Client Administration team. Prior to joining the firm in 2008, Dan worked as a branch manager and AVP for Wells Fargo Bank and he also served as a financial advisor with Merrill Lynch. Dan has been in the investment industry since 2000. He earned a bachelor’s degree in communications from the University of California, Davis.

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Disclosure

Wells Fargo Asset Management (WFAM) is a trade name used by the asset management businesses of Wells Fargo & Company. WFAM includes but is not limited to Analytic Investors, LLC; ECM Asset Management Ltd.; First International Advisors, LLC; Galliard Capital Management, Inc.; Golden Capital Management, LLC; The Rock Creek Group, LP; Wells Capital Management Inc.; Wells Fargo Asset Management Luxembourg S.A.; Wells Fargo Funds Distributor, LLC; and Wells Fargo Funds Management, LLC.

Wells Capital Management does not serve as an independent advice fiduciary during the sales process to any investor.
Staff recommends that the NDSIB engage Wells Capital Management “Wells” to manage up to a $300 million Core Bond Strategy for the Pension Trust (Subject to continued negotiations and finalization of the contract).

Staff is specifically recommending Wells’ Montgomery Core Fixed Income “Montgomery” team to manage this mandate

Montgomery integrates risk management throughout its investment process. This focus on risk aligns well with the SIB’s search for a core fixed income product with downside protection

Pairing Montgomery’s bottom-up strategy with PIMCO’s Total Return Core Bond’s top-down strategy, offers valuable diversification
Investment Recommendation

Competitive Advantages

- Montgomery offers the advantages of a boutique investment manager backed by the resources of a large institutional asset manager
  - Wells has $353 billion AUM
    - Montgomery can leverage Wells’ 400+ investment team
    - Leverage Wells’ 400+ operations, risk, compliance and business development teams
  - Montgomery’s small focused team (19 investment professionals) facilitates its trading oriented relative value approach to core fixed income
  - Montgomery’s core business is managing core bond fixed income portfolios. $28.6 billion of the group’s $33.0 billion assets under management is in core bond fixed income
  - RiskSum—Montgomery’s proprietary risk tool evaluates risk at the security, sector, and portfolio level
Manager Search Process

Recap

- Began with over 200 core bond managers that manage separate account products
- Screened for managers with:
  - AUM greater than $5.0 billion
  - Positive gross of fee excess returns against the Bloomberg Aggregate Bond Index for the 10 year period (ending Dec. 31, 2016)
- Evaluated traditional metrics, and put heavier weight on downside protection, preservation of capital, and low correlation to equities
- Distributed an RFI, performed onsite diligence, and conducted stringent qualitative and quantitative analyses
Manager Search Process

Staff collaborated with Callan to create a short list of managers (below):

<table>
<thead>
<tr>
<th>Fund Name*</th>
<th>Inception Date</th>
<th>Total Product Assets ($M)</th>
<th>Excess Return vs. Blmbg:Aggregate for 40 Quarters</th>
<th>Correlation vs. S&amp;P:500 for 40 Quarters</th>
<th>Returns for 40 Quarters</th>
<th>Standard Deviation for 40 Quarters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baird:Core Bond</td>
<td>October-00</td>
<td>20,429.71</td>
<td>0.69%</td>
<td>0.21</td>
<td>5.17%</td>
<td>3.65%</td>
</tr>
<tr>
<td>Barings:Core FI</td>
<td>January-91</td>
<td>10,547.12</td>
<td>0.80%</td>
<td>0.02</td>
<td>5.28%</td>
<td>3.45%</td>
</tr>
<tr>
<td>IncomeR&amp;M:Aggregate</td>
<td>January-92</td>
<td>8,607.31</td>
<td>0.78%</td>
<td>0.11</td>
<td>5.26%</td>
<td>3.96%</td>
</tr>
<tr>
<td>MacKay:Core Invst Gr</td>
<td>October-86</td>
<td>5,261.40</td>
<td>1.00%</td>
<td>-0.07</td>
<td>5.48%</td>
<td>3.33%</td>
</tr>
<tr>
<td>Manulife:Core Fixed Income</td>
<td>January-96</td>
<td>10,968.96</td>
<td>1.60%</td>
<td>0.48</td>
<td>6.07%</td>
<td>4.64%</td>
</tr>
<tr>
<td>PIMCO:Total Return Core</td>
<td>December-89</td>
<td>31,904.02</td>
<td>1.26%</td>
<td>-0.03</td>
<td>5.73%</td>
<td>4.02%</td>
</tr>
<tr>
<td>PruFI:Core FI</td>
<td>January-91</td>
<td>34,667.77</td>
<td>1.03%</td>
<td>0.16</td>
<td>5.51%</td>
<td>3.57%</td>
</tr>
<tr>
<td>TCW:Core Fixed Income</td>
<td>October-96</td>
<td>10,588.49</td>
<td>1.17%</td>
<td>0.36</td>
<td>5.65%</td>
<td>4.17%</td>
</tr>
<tr>
<td>Wells:Montgomery Core Fixed</td>
<td>July-90</td>
<td>28,629.13</td>
<td>1.25%</td>
<td>-0.14</td>
<td>5.73%</td>
<td>3.42%</td>
</tr>
<tr>
<td>CAI Core Bond FI</td>
<td>October-73</td>
<td>2,068.69</td>
<td>0.56%</td>
<td>-0.07</td>
<td>5.04%</td>
<td>3.50%</td>
</tr>
<tr>
<td>Blmbg:Aggregate</td>
<td>January-76</td>
<td>0.00%</td>
<td>-0.29</td>
<td>4.48%</td>
<td>3.40%</td>
<td></td>
</tr>
<tr>
<td>S&amp;P:500</td>
<td>January-72</td>
<td>2.70%</td>
<td>1.00</td>
<td>7.18%</td>
<td>16.37%</td>
<td></td>
</tr>
</tbody>
</table>

* Data as of June 30, 2017. Numbers are unaudited. Source: Statistics are from Callan’s PeP database
Manager Search Process

- Staff grouped candidate managers into a top-down group and a bottom-up group
- PIMCO and Montgomery pair well quantitatively and qualitatively

### Excess Correlation Table
**Benchmark: Bloomberg Aggregate**
*(10 Years Ending Jun. 30, 2017)*

<table>
<thead>
<tr>
<th></th>
<th>Baird Core Bond</th>
<th>Barings Core FI</th>
<th>Income R&amp;M Aggregate</th>
<th>Manulife Core Fixed Income</th>
<th>PIMCO Total Return Core</th>
<th>PruFI Core Fixed Income</th>
<th>TCW Core Fixed Income</th>
<th>Wells Montgomery Core Fixed</th>
<th>CAI Core Bond FI</th>
<th>Blmbg Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baird Core Bond</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barings Core FI</td>
<td>0.87</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income R&amp;M Aggregate</td>
<td>0.79</td>
<td>0.82</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manulife Core Fixed Income</td>
<td>0.93</td>
<td>0.91</td>
<td>0.79</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIMCO Total Return</td>
<td>0.48</td>
<td>0.71</td>
<td>0.73</td>
<td>0.65</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PruFI Core Fixed</td>
<td>0.94</td>
<td>0.91</td>
<td>0.80</td>
<td>0.97</td>
<td>0.57</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCW Core Fixed Income</td>
<td>0.91</td>
<td>0.86</td>
<td>0.72</td>
<td>0.97</td>
<td>0.60</td>
<td>0.93</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wells Montgomery Core Fixed</td>
<td>0.69</td>
<td>0.82</td>
<td>0.64</td>
<td>0.77</td>
<td>0.54</td>
<td>0.85</td>
<td>0.72</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAI Core Bond FI</td>
<td>0.96</td>
<td>0.93</td>
<td>0.85</td>
<td>0.97</td>
<td>0.60</td>
<td>0.99</td>
<td>0.93</td>
<td>0.82</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Bllmbg Aggregate</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*Numbers are unaudited. Source: Statistics are from Callan's PeP database
Montgomery Manager Evaluation
Organizational Overview

- Fixed income team was founded in 1990 as part of Montgomery Asset Management
- Wells acquired Montgomery Asset Management in 2003
- Headquartered in Walnut Creek, California
- $33 billion of assets under management, $28.6 billion of which is in core fixed income products
- 19 person investment team
Montgomery Manager Evaluation

Investment Strategy/Process

- Montgomery employs a traditional bottom-up investment process to create a diversified portfolio of high quality bonds.
- The team identifies attractive securities through:
  - In-depth fundamental, industry, and market research
  - Sophisticated quantitative tools
- Senior Portfolio Managers set broad risk parameters such as duration, yield curve risk, and sector exposures.
- The team holds quarterly sector reviews, weekly market updates, and daily discussions about market and portfolio positioning.
Key differentiators of Montgomery's investment process and strategy are:

- Risk management is integral to Montgomery’s investment process
  - RiskSum: Montgomery's proprietary real-time portfolio management system sits on every team member’s desktop
  - The system measures risk for every individual bond
  - Analysts seek bonds that will outperform relative to its level of risk
  - The system aggregates risk at the portfolio level, and helps to prevent unintended exposures (duration, curve, sector, etc.)

- Focus on active relative value management
  - Montgomery employs an active trading strategy to generate alpha
  - Investment team is built to be nimble—day-to-day security selection lies with sector specialist portfolio managers, senior analysts, and traders
Montgomery Manager Evaluation

Performance and Risk Statistics

Common Period Returns and Risk Statistics (Gross)*
10 Years as of 6/30/17

<table>
<thead>
<tr>
<th></th>
<th>Wells Montgomery</th>
<th>Baird</th>
<th>Barings</th>
<th>Income R&amp;M</th>
<th>Manulife</th>
<th>Prudential</th>
<th>TCW</th>
<th>Callan Core</th>
<th>Bloomberg Agg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns (Gross)</td>
<td>5.73%</td>
<td>5.17%</td>
<td>5.28%</td>
<td>5.26%</td>
<td>6.07%</td>
<td>5.51%</td>
<td>5.65%</td>
<td>5.04%</td>
<td>4.48%</td>
</tr>
<tr>
<td>Excess Return (Bloomberg Agg.)</td>
<td>1.25%</td>
<td>0.69%</td>
<td>0.80%</td>
<td>0.78%</td>
<td>1.60%</td>
<td>1.03%</td>
<td>1.17%</td>
<td>0.56%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Excess Return Ratio (Bloomberg Agg.)</td>
<td>1.03%</td>
<td>0.32</td>
<td>0.54</td>
<td>0.37</td>
<td>0.40</td>
<td>0.51</td>
<td>0.37</td>
<td>0.49</td>
<td>N/A</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>3.42%</td>
<td>3.65%</td>
<td>3.45%</td>
<td>3.96%</td>
<td>4.64%</td>
<td>3.57%</td>
<td>4.17%</td>
<td>3.50%</td>
<td>3.40%</td>
</tr>
<tr>
<td>Sharpe Ratio (3 month T-bill)</td>
<td>1.50</td>
<td>1.26</td>
<td>1.36</td>
<td>1.18</td>
<td>1.18</td>
<td>1.38</td>
<td>1.22</td>
<td>1.27</td>
<td>1.15</td>
</tr>
<tr>
<td>Tracking Error (Bloomberg Agg.)</td>
<td>1.22%</td>
<td>2.17%</td>
<td>1.48%</td>
<td>2.13%</td>
<td>3.96%</td>
<td>2.03%</td>
<td>3.15%</td>
<td>1.34%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Information Ratio (Bloomberg Agg.)</td>
<td>1.13%</td>
<td>0.46</td>
<td>0.70</td>
<td>0.32</td>
<td>0.61</td>
<td>0.67</td>
<td>0.56</td>
<td>0.62</td>
<td>0.00%</td>
</tr>
<tr>
<td>Maximum Drawdown (Monthly)</td>
<td>4.61%</td>
<td>N/A</td>
<td>5.35%</td>
<td>7.38%</td>
<td>9.15%</td>
<td>6.61%</td>
<td>7.71%</td>
<td>5.04%</td>
<td>3.83%</td>
</tr>
<tr>
<td>Downside Risk (Bloomberg Agg.)</td>
<td>0.55%</td>
<td>1.62%</td>
<td>0.91%</td>
<td>1.25%</td>
<td>2.67%</td>
<td>1.39%</td>
<td>2.10%</td>
<td>0.79%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Up Market Capture (Bloomberg Agg.)</td>
<td>126.09%</td>
<td>115.44%</td>
<td>116.94%</td>
<td>121.79%</td>
<td>134.45%</td>
<td>122.07%</td>
<td>124.16%</td>
<td>112.51%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Down Market Capture (Bloomberg Agg.)</td>
<td>86.78%</td>
<td>97.11%</td>
<td>93.46%</td>
<td>111.70%</td>
<td>85.41%</td>
<td>91.34%</td>
<td>86.63%</td>
<td>94.17%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

*Numbers are unaudited. Source: Statistics are from Callan's PeP database

- Montgomery has an attractive Sharpe Ratio, Information Ratio, and Downside Risk calculation
- All seven bottom-up candidates produce attractive excess excess returns
Montgomery Manager Evaluation

Gross Returns (Periods Ended June 30, 2017)*

Montgomery has outperformed over the long term

*Numbers are unaudited. Source: Statistics are from Callan’s PeP database
Montgomery Manager Evaluation

Downside Risk (Periods Ended June 30, 2017)*

Montgomery focuses on downside risk

*Numbers are unaudited. Source: Statistics are from Callan’s PeP database
Montgomery Manager Evaluation
Sharpe Ratio (Periods Ended June 30, 2017)*

Montgomery has generated strong risk adjusted performance

*Numbers are unaudited. Source: Statistics are from Callan’s PeP database
Montgomery Manager Evaluation

Concerns

Staff’s main concern with Montgomery revolves around personnel turnover:

- Founder Bill Stevens and a senior portfolio manager Lynne Royer left to head Loomis’ Disciplined Alpha Core Fixed Income strategy in 2009

- Two recent departures and one pending:
  - Nicole Hammond—Senior Analyst
  - Christopher Kramer—Trader
  - Theresa Fennell—Portfolio Manager (will retire at the end of 2017)
Conclusion

The Montgomery Core Fixed Income strategy can serve as the bottom-up anchor for the Pension Trust’s high quality fixed income barbell

- Montgomery’s bottom-up strategy and small boutique nature pairs well with PIMCO’s large institutional top-down strategy
- Montgomery’s risk focus is evident in its track record. The integrated risk and investment approach is well suited to serve as part of the Pension Trust’s high quality anchor
- Montgomery’s small team, proprietary risk software, and relative value approach differentiates it from competitors
- Staff is concerned with recent personnel changes and will monitor accordingly
BOARD ACTION

TO: State Investment Board
FROM: Dave Hunter, Darren Schulz and Eric Chin
DATE: October 19, 2017
SUBJECT: Wells Montgomery Core Fixed Income Recommendation

Summary:
At a prior SIB meeting, Staff proposed a new fixed income manager framework for the Pension Trust that seeks to generate higher risk-adjusted returns and greater diversification. The proposed structure includes a principal allocation to U.S. investment grade core fixed income comprised of an anchor of low risk, high quality, highly liquid traditional fixed income to fulfill the role of capital preservation and high quality income generation. This anchor allocation to High Quality Core is comprised of core investment grade instruments to provide diversification from riskier assets such as equities. Today, as part of the restructuring, Staff is recommending that the Board approve the selection of Wells Capital's Montgomery subsidiary to manage a US Core Fixed Income mandate of up to $300 million as a complement to PIMCO on behalf of the Pension Trust.

RIO Staff Fixed Income Manager Structure Proposal

In January, Staff proposed a fixed income manager framework that seeks to achieve improvements in risk-adjusted return potential and diversification without increasing Pension trust plan-level risk. The proposed structure is a “barbelled” approach, explicitly segmenting the fixed income manager structure based on liquidity, quality, expected return potential and risk profile:

1. An anchor of low risk, high quality, highly liquid traditional fixed income beta exposures on one end of the credit risk spectrum to fulfill the role of capital preservation and high quality income generation. This anchor allocation to High Quality Core is comprised of core investment grade instruments to provide diversification from riskier assets such as equities. Staff is recommending approximately 65% of the total fixed income exposure be invested in High Quality Core.

2. Staff is recommending complementing High Quality Core with moderate risk, less liquid, higher return potential alternative credit strategies for greater diversification and differentiated sources of return enhancement. This satellite allocation, labelled “Diversified Credit”, broadens the traditional high yield designation to include high yield/loan alternatives, the first phase of which is a recommendation to establish a strategic allocation to middle market direct lending. Staff is recommending that approximately 35% of the total pension fixed income allocation be allocated to Diversified Credit. Staff is recommending that future direct lending commitments be funded from the existing traditional high yield mandate with Loomis Sayles.

3. Given the low expected return potential of non-U.S./global developed fixed income and the disproportionate currency risk contribution, Staff is recommending the transition of the pension trust’s non-U.S./global fixed income mandates into U.S. centric fixed income.
US Core Fixed Income Search Process:

From a manager database of over 200 investment manager candidates with US core fixed income product track records, Staff further narrowed the list of candidates by applying firm and product minimum asset criteria, which resulted in 40 remaining managers. Staff employed additional qualitative screens and quantitative analysis across a host of various metrics: relative performance, risk adjusted returns, tracking error, up/down market capture, standard deviation, quality distribution, historical sector allocations, correlation to equities, and excess return correlations. In collaboration with Callan, this vetting process produced a list of 10 viable candidates:

1. Baird
2. Barings
3. Income Research & Management
4. MacKay
5. Manulife
6. PIMCO
7. Prudential
8. TCW
9. Wells (Montgomery)
10. Western

Staff conducted conference calls and on-site due diligence meetings with all of the above managers with a focus on the following attributes:

- **Organization**: Firm ownership, client make-up (geographic & type), assets under management, and product offerings
- **Team**: Size and experience of the team, staff turnover, organizational culture, and retention methods for key staff
- **Process and Philosophy**: Drivers of outperformance (duration, curve, sector rotation, security selection)
- **Portfolio Characteristics**: Bias to specific sectors (credit, securitized), quality
- **Performance Based Metrics**: Correlation, risk (standalone and benchmark relative), excess returns, upside/downside capture, and consistency of performance

Among the firms that employ a bottoms-up fundamental investment process, Wells Capital’s Montgomery subsidiary was identified by Staff as serving as an ideal complement to PIMCO’s top-down investment approach. For reasons described below, Staff recommends that the Board engage Montgomery to manage a Core Bond strategy on behalf of the Pension Trust.

Montgomery Core Fixed Income Strategy Evaluation:

1. **Organizational Overview**: Founded in 1981, Wells Capital is a wholly-owned subsidiary of Wells Fargo & Co., a large, publically-traded multi-national banking and financial services holding company. The subject strategy is managed by Montgomery Asset Management, a subsidiary of Wells Capital, which was acquired by Wells in 2003. As with other subsidiaries under the Wells umbrella, Montgomery operates as an independent entity, focusing solely on investing on behalf of its clients. As of June 30, 2017, Wells Capital manages approximately $353 billion in assets, of which $33 billion is managed by Montgomery Asset Management across three fixed income strategies: Core, Short Duration, and Long Credit. With an inception
date of July 1, 1990, Montgomery’s Core Fixed Income strategy consists of $28.6 billion in strategy assets.

2. Montgomery Core Fixed Income Strategy:

a. **People:** The investment team consists of two co-heads – Thomas O’Conner (joined the firm in 2000) and Troy Ludgood (2004) – supported by a team of portfolio managers, sector PMs, sector research analysts, traders, and portfolio coordination and risk analytics analysts. Portfolios are team managed whereby the two co-heads set target ranges for the overall exposures within the portfolio. Within these carefully defined parameters, sector PMs and research analysts are then responsible for making purchase and sell decisions within their area of responsibility.

b. **Philosophy and Process:** The Montgomery Core Fixed Income strategy employs fundamental bottoms-up security selection and relative value trading with the goal of consistently out-performing the benchmark in a risk-controlled manner. Security selection occurs within a universe of high grade, liquid, U.S. dollar-denominated bonds. From this universe, a team of sector specialists perform internal fundamental research to identify relative value opportunities. The firm’s proprietary risk management system, RiskSum, is integrated into every step of the investment process, allowing the team to evaluate each security’s credit, liquidity, yield curve and duration risk individually and in the context of its contribution to overall portfolio risk. Active relative value trading is also utilized as an additional source of alpha generation.

c. **Performance:** For periods ending June 30, 2017, Wells Montgomery’s Total Return strategy has delivered higher gross returns versus peers over the long term:

![Graph showing performance charts](image-url)

<table>
<thead>
<tr>
<th>Percentile Type</th>
<th>Wells Montgomery Core Fixed</th>
<th>CAI Core Bond</th>
<th>Blmngt Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th Percentile</td>
<td>1.58</td>
<td>0.37</td>
<td>(0.31)</td>
</tr>
<tr>
<td>25th Percentile</td>
<td>3.42</td>
<td>2.96</td>
<td>2.21</td>
</tr>
<tr>
<td>Median</td>
<td>5.70</td>
<td>5.04</td>
<td>4.48</td>
</tr>
<tr>
<td>75th Percentile</td>
<td>6.09</td>
<td>5.87</td>
<td>5.24</td>
</tr>
<tr>
<td>90th Percentile</td>
<td>5.40</td>
<td>5.65</td>
<td>5.49</td>
</tr>
</tbody>
</table>

*Numbers are unaudited. Source: Statistics are from Callan’s PeP database*
The strategy has also been remarkably consistent in delivering excess returns over 3-year rolling periods as compared to its peer group:

Another hallmark of the Wells Montgomery Core Fixed Income strategy is its emphasis on downside risk protection versus peers:

*Numbers are unaudited. Source: Statistics are from Callan’s PeP database*
Downside risk measures only the standard deviation of returns that are below the benchmark. Both the frequency and magnitude of underperformance affect the amount of downside risk. Put simply, the lower the downside risk number, the lower the degree and frequency of underperformance.

**Conclusion:**

Staff recommends to the Board the selection of Wells Capital's Montgomery subsidiary to manage up to a $300 million US Core Fixed Income mandate on behalf of the Pension Trust. Staff recommends that the Board award the mandate to Montgomery for the following reasons:

1. Its bottoms-up approach and the firm’s boutique nature pairs well with PIMCO's large top-down strategy, offering valuable diversification.

2. Montgomery’s heavy focus on risk management, particularly downside risk, is well suited as a high quality anchor for the Pension Trust’s investment grade allocation.

3. The firm’s size, relative value framework, and focus on the more liquid sectors of the bond differentiate them from other bottoms-up managers.
Current Pension Trust Fixed Income Manager Structure

<table>
<thead>
<tr>
<th>Managers</th>
<th>Market Value</th>
<th>Allocation (% of Total Portfolio)</th>
<th>Allocation (% of Fixed Income Portfolio)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actual</td>
<td>Policy</td>
</tr>
<tr>
<td>TOTAL PENSION TRUST</td>
<td>$5,299,205,292</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>PIMCO (DISCO II)</td>
<td>$107,377,713</td>
<td>2.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>State Street Long U.S. Treasury Index NL Fund</td>
<td>$118,180,932</td>
<td>2.2%</td>
<td>1.3%</td>
</tr>
<tr>
<td>PIMCO Unconstrained</td>
<td>$67,365,621</td>
<td>1.3%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Declaration (Total Return)</td>
<td>$90,750,663</td>
<td>1.7%</td>
<td>1.6%</td>
</tr>
<tr>
<td>JP Morgan Mortgage Backed Securities</td>
<td>$131,206,979</td>
<td>2.5%</td>
<td>2.7%</td>
</tr>
<tr>
<td>PIMCO Agency MBS</td>
<td>$183,534,801</td>
<td>3.5%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Total Investment Grade Fixed Income</td>
<td>$698,416,709</td>
<td>13.2%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Loomis Sayles High Yield</td>
<td>$200,807,828</td>
<td>3.8%</td>
<td>3.5%</td>
</tr>
<tr>
<td>PIMCO (BRAVO II)</td>
<td>$57,304,239</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>GS Mezzanine Partners 2006 Offshore, L.P.</td>
<td>$381,850</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>GS Mezzanine Partners V Offshore, L.P.</td>
<td>$1,398,900</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total Below Investment Grade Fixed Income</td>
<td>$259,892,817</td>
<td>4.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Total Domestic Fixed Income</td>
<td>$958,309,526</td>
<td>18.1%</td>
<td>17.8%</td>
</tr>
<tr>
<td>UBS Global (ex-US) Bond Strategy</td>
<td>$105,946,147</td>
<td>2.0%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Brandywine Global Opportunistic Fixed Income</td>
<td>$153,803,731</td>
<td>2.9%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Total Developed Investment Grade Int'l FI</td>
<td>$259,749,878</td>
<td>4.9%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Total International Fixed Income</td>
<td>$259,749,878</td>
<td>4.9%</td>
<td>5.4%</td>
</tr>
<tr>
<td>TOTAL GLOBAL FIXED INCOME</td>
<td>$1,218,059,404</td>
<td>23.0%</td>
<td>23.2%</td>
</tr>
</tbody>
</table>
RIO requests the SIB accept TFFR investment policy changes highlighted below.

On September 21, 2017, the TFFR board will be requested to approve a change within Global Fixed Income. Specifically, RIO requests that Investment Grade be reduced to 16% (from 19%), while Non-Investment Grade should be increased to 7% (from 4%). The total asset allocation to Global Fixed Income will remain constant at 23%.

These recommended changes are intended to improve TFFR’s risk adjusted returns by eliminating dedicated international fixed income sectors which are expected to generate low investment returns with high investment risk/volatility over the next 5-to-10 years.

The Fixed Income Restructuring Overview provides further support for this recommendation including the table excerpt immediately below.

<table>
<thead>
<tr>
<th>PENSION TRUST - Fixed Income Only</th>
<th>Fixed Income Restructuring to Improve Returns and Reduce Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT</strong></td>
<td></td>
</tr>
<tr>
<td>Pension Trust</td>
<td>Allocation</td>
</tr>
<tr>
<td>U.S. Investment Grade (IG)</td>
<td>13.3%</td>
</tr>
<tr>
<td>U.S. High Yield Debt (HY)</td>
<td>4.6%</td>
</tr>
<tr>
<td><strong>International Debt</strong></td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td>23.3%</td>
</tr>
</tbody>
</table>

$5,000

| **PROPOSED**                     |                                                            |
| Pension Trust                    | Allocation | Projected Return | Projected Risk |
| U.S. Investment Grade (IG)       | 16.3%      | 3.0%             | 3.8%          |
| Diversified Credit (DC)         | 7.0%       | 4.8%             | 10.4%         |
| International Debt (a)          | 0.0%       | (4) 1.4%         | 9.2%          |
| **Fixed Income**                 | 23.3%      | (2) 3.5%         | (4) 5.7%      |

$5 billion

$815

$350

$0

$1,165

RIO's Fixed Income Recommendation:

If International Debt (a) is eliminated while U.S. Investment Grade and Diversified Credit are increased by 3% and 2.4%, respectively, Projected Return would increase from 3.0% (1) to 3.5% (2), while Projected Risk would decline from 6.3% (3) to 5.7% (4).

Key Point: RIO’s Recommendation Increases Projected Returns 0.5% and Decreases Projected Risk 0.6% of "Fixed Income" in the Pension Trust.
TFFR Investment Policy Statement Review - Sep. 21, 2017

1. PLAN CHARACTERISTICS AND FUND CONSTRAINTS.

The North Dakota Teachers’ Fund for Retirement (TFFR) is a pension benefit plan that was established in 1913 to provide retirement income to all public school and certain state teachers and administrators in the state of North Dakota. The plan is administered by a seven member Board of Trustees comprised of five active and retired members of the fund appointed by the Governor of North Dakota and two elected officials - the State Treasurer and the State Superintendent of Public Instruction.

The plan is a multi-employer defined benefit public pension plan that provides retirement, disability, and death benefits in accordance with Chapter 15-39.1 of the North Dakota Century Code (NDCC). Monthly retirement benefits are based on the formula: Number of Years of service X 2.0% X Final Average Salary. Adjustments to the basic formula are made depending on the retirement option selected.

Funding is provided by monthly employee and employer contributions scheduled to increase as follows:

<table>
<thead>
<tr>
<th></th>
<th>7/1/11</th>
<th>7/1/12</th>
<th>7/1/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee</td>
<td>7.75%</td>
<td>9.75%</td>
<td>11.75%</td>
</tr>
<tr>
<td>Employer</td>
<td>8.75%</td>
<td>10.75%</td>
<td>12.75%</td>
</tr>
</tbody>
</table>

Employee and employer contributions will be reduced to 7.75% each when TFFR reaches 100% funded level on an actuarial value basis.

The TFFR Board has an actuarial valuation performed annually and an Experience Study and Asset Liability Study performed every five years. The actuarial assumed rate of return on assets was reduced to 7.75% from 8.0% as of July 1, 2015. Key plan and financial statistics are recorded in the most recent valuation report on file at the North Dakota Retirement and Investment office (RIO).

2. FUND GOALS

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

As a result, the Fund goals are to:

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

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

There are no changes proposed for this page.
TFFR Investment Policy Statement Review - Sep. 21, 2017

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

The TFFR Board is charged by law under NDCC 21-10-02.1 with the responsibility of establishing policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and investing the assets of the Fund in the manner provided in NDCC 21-10-07, the prudent investor rule. Under this rule, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. The Fund must be invested exclusively for the benefit of the members and their beneficiaries in accordance with this investment policy.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 of the North Dakota Century Code (NDCC) is hereby delegated to the SIB, who must establish written policies for the operation of the investment program, consistent with this investment policy.

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

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

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

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

4. RISK TOLERANCE

The Board is unwilling to undertake investment strategies that might jeopardize the ability of the Fund to finance the pension benefits promised to plan participants.

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

5. INVESTMENT OBJECTIVES

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

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

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

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Policy Target (%)</th>
<th>Rebalancing Range (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>58</td>
<td>46-65</td>
</tr>
<tr>
<td>Public Equity</td>
<td>52</td>
<td>44-60</td>
</tr>
<tr>
<td>U.S.</td>
<td>29</td>
<td>23-35</td>
</tr>
<tr>
<td>Global ex-U.S.</td>
<td>23</td>
<td>18-28</td>
</tr>
<tr>
<td>Private Equity</td>
<td>6</td>
<td>4-8</td>
</tr>
<tr>
<td>Global Fixed Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Grade</td>
<td>4416</td>
<td>44-2411-21</td>
</tr>
<tr>
<td>Non-Investment Grade</td>
<td>42</td>
<td>3-65-9</td>
</tr>
<tr>
<td>Global Real Assets</td>
<td>18</td>
<td>12-24</td>
</tr>
<tr>
<td>Global Real Estate</td>
<td>10</td>
<td>5-15</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>0-12</td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td>0-10</td>
</tr>
<tr>
<td>Timber</td>
<td></td>
<td>0-5</td>
</tr>
<tr>
<td>Commodities</td>
<td></td>
<td>0-5</td>
</tr>
<tr>
<td>Inflation Linked-Bonds</td>
<td></td>
<td>0-10</td>
</tr>
<tr>
<td>Other Inflation Sensitive Strategies</td>
<td>0-5</td>
<td>0-10</td>
</tr>
<tr>
<td>Global Alternatives</td>
<td></td>
<td>0-10</td>
</tr>
<tr>
<td>Cash</td>
<td>1</td>
<td>0-2</td>
</tr>
</tbody>
</table>

The Total Fixed Income allocation of 23% remains constant, but Investment Grade is reduced to 16% (from 19%) while Non-Investment Grade is raised to 7% (from 4%). The Rebalancing Range will remain at +/- 5% for IG and +/- 2% for NIG.

RIO recommends TFFR approve the Fixed Income allocation for Investment Grade (IG) be reduced to 16% (from 19%) and Non-Investment Grade (NIG) be increased to 7% (from 4%). This recommendation will reduce expected risk and increase expected return by eliminating International Fixed Income which has high expected volatility and a low expected return for the next 5-to-10 years (based on Callan’s Capital Market Assumptions as well as many other consultants). A supporting example is provided on page 18.
While the Board recognizes fluctuations in market values will lead to short-term deviations from policy targets, the Board does not intend to engage in tactical asset allocation. Allocations to Global Alternatives will result in pro-rata reduction in the policy targets.

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

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

For the purpose of this document, Social Investing is defined as “The investment or commitment of public pension fund money for the purpose of obtaining an effect other than a maximized return to the intended beneficiaries.”

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

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

Also, for the purpose of this document, the Exclusive Benefit Rule is met if the following four conditions are satisfied:
1) The cost does not exceed the fair market value at the time of investment.
2) The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar task.
3) Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
4) The safeguards and diversity that a prudent investor would adhere to are present.

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

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

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

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


Amended: November 30, 1995; August 21, 1997; July 15, 1999; July 27, 2000; September 18, 2003; July 14, 2005; September 21, 2006; September 20, 2007; October 27, 2011; September 26, 2013; January 21, 2016; September 21, 2017

Approved by SIB: November 18, 2011, February 26, 2016, September 22, 2017
The SIB and RIO have been working to restructure the fixed income allocation within the Pension Trust during the past year. The following three pages provide an overview of the fixed income restructuring plan as shared with the SIB in recent board meetings.

Fixed Income Restructuring Overview

August 25, 2017

Dave Hunter, Darren Schulz and Eric Chin
Evolving fixed income landscape and stage of credit cycle merited a review of the Pension Trust’s current fixed income manager structure.

In January, Staff presented a conceptual framework encompassing the following changes:

- Increasing anchor of high quality, low risk, highly liquid U.S. investment grade core fixed income aka “High Quality Core”
- Diversifying traditional non-investment grade with high yield/loan alternatives and private credit aka “Diversified Credit”
- Transitioning non-U.S./global developed fixed income into U.S. centric fixed income
Fixed Income Structure Proposal

Initially discussed at the Jan. 2017 Board Meeting

- Barbelled approach

High Quality Core
- Low Risk
- Liquid
- Low Returns
- 65% Target

Diversified Credit
- Moderate Risk
- Less Liquid
- Higher Returns
- 35% Target

- Increase allocation to investment grade instruments
- Reallocate current investment grade assets into two Core Bond mandates—allow managers to tactically shift allocations across investment grade assets
### Higher Expected Risk-Adjusted Returns

**PENSION TRUST - Fixed Income Only**

*Fixed Income Restructuring to Improve Returns and Reduce Risk*

<table>
<thead>
<tr>
<th></th>
<th>CURRENT</th>
<th>Target Allocation</th>
<th>Projected Return</th>
<th>Projected Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Investment Grade (IG)</td>
<td>13.3%</td>
<td>3.0%</td>
<td>3.8%</td>
<td></td>
</tr>
<tr>
<td>U.S. High Yield Debt (HY)</td>
<td>4.6%</td>
<td>4.8%</td>
<td>10.4%</td>
<td></td>
</tr>
<tr>
<td>International Debt</td>
<td>5.4%</td>
<td>1.4%</td>
<td>9.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td>23.3%</td>
<td><strong>3.0%</strong></td>
<td><strong>6.3%</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>PROPOSED</th>
<th>Target Allocation</th>
<th>Projected Return</th>
<th>Projected Risk</th>
<th>Pension $</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Investment Grade (IG)</td>
<td>16.3%</td>
<td>3.0%</td>
<td>3.8%</td>
<td>$864</td>
<td></td>
</tr>
<tr>
<td>Diversified Credit (DC)</td>
<td>7.0%</td>
<td>4.8%</td>
<td>10.4%</td>
<td>$371</td>
<td></td>
</tr>
<tr>
<td>International Debt (a)</td>
<td>0.0%</td>
<td>1.4%</td>
<td>9.2%</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td>23.3%</td>
<td><strong>3.5%</strong></td>
<td><strong>5.7%</strong></td>
<td>$1,235</td>
<td></td>
</tr>
</tbody>
</table>

**RIO's Fixed Income Recommendation:**

If International Debt (a) is eliminated while U.S. Investment Grade and Diversified Credit are increased by 3% and 2.4%, respectively, Projected Return would increase from 3.0% (1) to 3.5% (2), while Projected Risk would decline from 6.3% (3) to 5.7% (4).

**Key Point:** RIO's Recommendation Increases Projected Returns 0.5% and Decreases Projected Risk 0.6% of "Fixed Income" in the Pension Trust.
AGENDA

1. Call to Order and Approval of Agenda – Chair (committee action)(5 minutes)
2. Approval of May 25, 2017 Minutes – Chair (committee action)(5 minutes)
3. Election of Chair, Vice Chair, and Liaison – Chair (committee action)(10 minutes)
4. 2017 - 2018 Affirmation of Code of Conduct Policy – Cody Schmidt (information)(5 minutes)
5. 2016 - 2017 Year End Audit Activities Report – Terra Miller Bowley (committee action)(15 minutes)
6. 2016 - 2017 Audit Committee Report to SIB – Terra Miller Bowley (committee action)(5 minutes)
9. Other – Next SIB Audit Committee Meeting
   North Dakota Retirement and Investment Office
   3442 E Century Ave, Bismarck, ND 58503
   Thursday November 16, 2017 @ 3:00 PM
10. Adjournment

Any individual requiring an auxiliary aid or service should contact the Retirement and Investment Office at (701) 328-9885 at least (3) days prior to the scheduled meeting.
STATE INVESTMENT BOARD
AUDIT COMMITTEE MEETING
MINUTES OF THE
MAY 25, 2017, MEETING

COMMITTEE MEMBERS PRESENT: Rebecca Dorwart, Chair
Mike Gessner, TFFR Board (TLCF)
Mike Sandal, PERS Board
Cindy Ternes, Workforce Safety & Insurance
Josh Wiens, External Representative

STAFF PRESENT: Connie Flanagan, Fiscal & Invt Ops Mgr
Bonnie Heit, Assist to the Audit Committee
David Hunter, ED/CIO
Fay Kopp, Dep ED/CRO
Terra Miller Bowley, Suprv Audit Services
Dottie Thorsen, Internal Auditor

GUESTS: Thomas Rey, CliftonLarsonAllen

CALL TO ORDER:
Ms. Dorwart called the State Investment Board (SIB) Audit Committee meeting to
order at 3:00 p.m. on Thursday, May 25, 2017, at the Peace Garden Room, State
Capitol, Bismarck, ND.

A quorum was present for the purpose of conducting business.

AGENDA:

IT WAS MOVED BY MR. SANDAL AND SECONDED BY MS. TERNES AND CARRIED ON A VOICE VOTE
TO APPROVE THE AGENDA FOR THE MAY 25, 2017, MEETING AS DISTRIBUTED.

AYES: MR. SANDAL, MS. TERNES, MR. WIENS, MR. GESSNER, AND MS. DORWART
NAYS: NONE
MOTION CARRIED

MINUTES:

IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. WIENS AND CARRIED ON A VOICE VOTE
TO ACCEPT THE FEBRUARY 23, 2017, MINUTES.

AYES: MR. GESSNER, MR. SANDAL, MS. TERNES, MR. WIENS, AND MS. DORWART
NAYS: NONE
MOTION CARRIED

CLIFTONLARSONALLEN:

Mr. Thomas Rey, CliftonLarsonAllen, reviewed the engagement and work plan for the
audit of the financial statements of the Retirement and Investment Office (RIO)
for the period of July 1, 2016 to June 30, 2017.
Mr. Rey also reviewed the audit results for GASB 68 schedules (schedules of employer allocations and pension amounts by employer) for the period ending June 30, 2016. An unmodified opinion was issued on the statements.

IT WAS MOVED BY MR. SANDAL AND SECONDED BY MR. WIENS AND CARRIED BY A VOICE VOTE TO ACCEPT CLIFTONLARSONALLEN’S REPORT.

AYES: MS. TERNES, MR. WIENS, MR. SANDAL, MR. GESSNER, AND MS. DORWART
NAYS: NONE
MOTION CARRIED

AUDIT ACTIVITIES REPORT:


As of March 31, 2017, twenty-one employer audits were completed. This entailed two Special Audits, one Not In Compliance review, and eighteen Compliance Audits, with four more estimated to be closed prior to the end of the fiscal year.

The TFFR File Maintenance Audit was completed for the second quarter of fiscal year 2017 and no exceptions were noted.

The Annual Salary Verification Project commenced toward the end of March. Audit Services anticipates that the bulk of the work including employer notifications will occur during the month of April and the audit concluding in early May.

The Executive Limitations Audit was completed in February 2017. Audit Services was sufficiently satisfied that the Executive Director/CIO was in compliance with SIB Governance Manual Executive Limitation policies A-1 through A-11 for calendar year 2016.

The Executive Review Committee has requested the assistance of Audit Services to facilitate a survey of current SIB members for the purpose of evaluating the Executive Director/CIO of RIO. The survey will be administered in April 2017 and the results will be provided to the Executive Review Committee shortly thereafter.

Ms. Miller Bowley also stated Audit Services continues to pursue networking and professional development opportunities via the IIA’s local chapter, Central Nodak.

Mr. Sandal, as a member of the Executive Review Committee, commented the support by Audit Services during the Executive Director/CIO review was very very good.

IT WAS MOVED BY MR. SANDAL AND SECONDED BY MS. TERNES AND CARRIED BY A VOICE VOTE TO ACCEPT THE JANUARY 1, 2017 – MARCH 31, 2017, AUDIT ACTIVITIES REPORT.

AYES: MR. GESSNER, MR. WIENS, MR. SANDAL, MS. TERNES, AND MS. DORWART
NAYS: NONE
MOTION CARRIED

WORKPLAN:

Ms. Miller Bowley reviewed the July 1, 2017 – June 30, 2018 Audit Services workplan.
Discussion followed on the allocation of Audit Services time particularly on the use of Audit Command Language (ACL). Ms. Miller Bowley stated because of the priorities established for the agency, the workplan does not allow anytime towards ACL at this time.

IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. SANDAL AND CARRIED BY A VOICE VOTE TO ACCEPT THE JULY 1, 2017 – JUNE 30, 2018, AUDIT SERVICES WORKPLAN.

AYES: MR. GESSNER, MR. SANDAL, MS. TERNES, MR. WIENS, AND MS. DORWART
NAYS: NONE
MOTION CARRIED

FRAUD HOTLINE:

Ms. Miller Bowley informed the Audit Committee RIO has installed an employee fraud hotline effective April 2017. The hotline allows employees to report fraudulent and wrongful behavior and remain anonymous. Online submissions can be made by employees 24/7 and a toll-free call service is available during business hours. RIO has designated the Executive Director/CIO as primary contact and the Supervisor of Audit Services as secondary contact. The Audit Committee suggested an external contact be designated as well. Ms. Miller Bowley will look into it.

BOARD EDUCATION:

Ms. Miller Bowley informed the Audit Committee Audit Services provided an educational segment to the Teachers’ Fund for Retirement Board at their March 23, 2017, meeting. The presentation included an overview of the Audit Services Division and the employer-auditing program. The presentation was provided to the Audit Committee.

MEETING SCHEDULE:

Ms. Miller Bowley presented a draft meeting schedule for the Audit Committee’s consideration for the period of July 1, 2017 – June 30, 2018.

IT WAS MOVED BY MR. WIENS AND SECONDED BY MR. GESSNER AND CARRIED BY A VOICE VOTE TO ACCEPT THE JULY 1, 2017 – JUNE 30, 2018, AUDIT SERVICES MEETING SCHEDULE.

AYES: MR. GESSNER, MR. WIENS, MR. SANDAL, MS. TERNES, AND MS. DORWART
NAYS: NONE
MOTION CARRIED

MEMBERSHIP:

Ms. Miller Bowley requested the Audit Committee notify her by June 1, 2017, if they are willing to continue to serve on the Audit Committee for the period of July 1, 2017 – June 30, 2018.

Mr. Sandal stated he would not be extending his term. The Audit Committee thanked Mr. Sandal for his service. Mr. Sandal has been a trustee of the Audit Committee since September 25, 2009. Mr. Sandal stated it has been an educational experience and thanked the Audit Committee and the team at RIO.
OTHER:

The next Audit Committee meeting is scheduled for Friday, September 22, 2017, at 1:00 pm at the State Capitol, Peace Garden Room.

With no further business to come before the Audit Committee, Ms. Dorwart adjourned the meeting at 4:05 p.m.

Respectfully Submitted:

_________________________
Ms. Rebecca Dorwart, Chair
SIB Audit Committee

_________________________
Bonnie Heit
Assistant to the Audit Committee
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, RIO encourages board members and RIO staff to review the Governance Manual prior to the September 22 board meeting.

RIO will be prepared to discuss all sections of our Governance Manual including North Dakota Century Code (NDCC) Chapter 21-10, but intends to focus this meetings review on the following areas, unless directed otherwise by the SIB:

- **NDCC 21-10 - State Investment Board** (4 pages)
- **Section B – Governance Process (B-1 to B-10)** (14 pages)
- **Section D – Mission and Investment Services (D-1 and D-3)** (10 pages)

**Note 1:** At the conclusion of our board discussion, the SIB may make a motion to accept RIO’s recommended changes to the Governance Manual (including Exhibit E-1 to reflect current SIB member composition). Alternatively, the Board may motion to recommend additional and/or different changes. The SIB recommended changes will be brought forward for further discussion and formally approved at our next regularly scheduled board meeting, assuming no additional changes are recommended.

**Note 2:** In order to increase the SIB and RIO’s awareness and understanding of recent changes impacting board governance and their potential impact on our current structure, RIO recommends the SIB engage Callan to provide board education on “Governance Trends in the Public Sector”. This action would allow the SIB and RIO to increase their understanding of developing governance trends and changing fiduciary risk levels within the public sector. It would also serve to improve the understanding of our own governance standards, practices and policies in addition to providing a comparison with our peers. RIO notes that Callan’s annual contract includes two projects every fiscal year. As such, there is no incremental cost for this additional board education (other than travel costs). If the board concurs, RIO requests the SIB to make a motion to engage Callan to provide board education on “Governance Trends in the Public Sector” at a future meeting.
CHAPTER 21-10
STATE INVESTMENT BOARD

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

1. 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.

2. 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.
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.

21-10-06. Funds under management of board - Accounts.
1. Subject to the provisions of section 21-10-02, the board shall invest the following funds:
   a. State bonding fund.
   b. Teachers' fund for retirement.
   c. State fire and tornado fund.
   d. Workforce safety and insurance fund.
   e. Public employees retirement system.
   f. Insurance regulatory trust fund.
   g. State risk management fund.
   h. Budget stabilization fund.
   i. Health care trust fund.
   j. Cultural endowment fund.
   k. Petroleum tank release compensation fund.
   l. Legacy fund.
   m. A fund under contract with the board pursuant to subsection 3.
2. Separate accounting must be maintained for each of the funds listed in subsection 1. The moneys of the individual funds may be commingled for investment purposes when determined advantageous.
3. 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.

21-10-06.1. Board - Investment reports.
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.

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
desigee, the president of the Bank of North Dakota or desigee, and the tax commissioner or
desigee. 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.
NORTH DAKOTA
RETIREMENT AND INVESTMENT OFFICE

STATE INVESTMENT BOARD

GOVERNANCE MANUAL

1930 BURNT BOAT DRIVE
P.O. BOX 7100
BISMARCK, ND 58507-7100
TELEPHONE: 701/328-9885
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## A. EXECUTIVE LIMITATIONS

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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.
POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: RELATING TO PUBLIC AND GOVERNMENT

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.

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 Implemented:** June 23, 1995.
**Amended:** November 2, 1997; June 26, 1998.
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.

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

**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.
POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: CONFLICT OF INTEREST

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.
POLICY TYPE: EXECUTIVE LIMITATIONS

POLICY TITLE: CODE OF CONDUCT

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 (*E*nds), 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-policing 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.

POLICY TYPE: GOVERNANCE PROCESS

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.

POLICY TYPE: GOVERNANCE PROCESS

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.
POLICY TYPE: GOVERNANCE PROCESS

POLICY TITLE: BOARD MEMBERS’ CODE OF CONDUCT

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.

POLICY TYPE: GOVERNANCE PROCESS

POLICY TITLE: ADMINISTRATION OF FIDUCIARY AUTHORITY

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.

POLICY TYPE: GOVERNANCE PROCESS

POLICY TITLE: POLICY INTRODUCTION/AMENDMENT/PASSAGE

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):
C. BOARD-STAFF RELATIONSHIP

PAGE

Chief Executive Role ........................................................................................................................................... C-1
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Executive Director Job Description ................................................................................................................... C-3
Monitoring Executive Performance .................................................................................................................... C-4
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
D. ENDS

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Organizational Beneficiaries ............................................................................................. D-2
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EXHIBITS

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

POLICY TYPE: ENDS

POLICY TITLE: INVESTMENT SERVICES

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.

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:

I. 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.
POLICY TYPE: ENDS

POLICY TITLE: INFORMATION ON RETIREMENT SERVICES

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 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
## GOVERNANCE POLICY MONITORING SUMMARY

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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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E. INVESTMENTS

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**EXHIBITS**

*Listing of Trust Funds* .................................................................................................................. E-I
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.

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 development 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.
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.
POLICY TITLE: INVESTMENT POLICY DEVELOPMENT – TRUST FUNDS

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
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.
POLICY 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.
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.

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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
POLICY TYPE: INVESTMENTS

POLICY TITLE: IMPLEMENTATION – PORTFOLIO REBALANCING

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.
POLICY TYPE: INVESTMENTS

POLICY TITLE: BANK OF NORTH DAKOTA MATCH LOAN PROGRAM

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
POLICY TYPE: INVESTMENTS

POLICY TITLE: SECURITIES MONITORING AND LITIGATION

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 custodial 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 2017-2018:

<table>
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<tr>
<th>Position</th>
<th>Incumbent</th>
<th>Designation</th>
<th>Term Expiration</th>
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<tbody>
<tr>
<td>Lt. Governor</td>
<td>Brent Sanford</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>Jon Godfread</td>
<td>Ex officio</td>
<td>Open</td>
</tr>
<tr>
<td>Commissioner University &amp; School Lands</td>
<td>Lance Gaebe</td>
<td>Appointed</td>
<td>N/A</td>
</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>
</tr>
<tr>
<td>Trustee, TFFR</td>
<td>Michael Gessner</td>
<td>Appointed by TFFR Board</td>
<td>6/30/21</td>
</tr>
<tr>
<td>Trustee, TFFR</td>
<td>Rob Lech</td>
<td>Appointed by TFFR Board</td>
<td>6/30/20</td>
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<tr>
<td>Trustee, PERS</td>
<td>Adam Miller</td>
<td>Appointed by PERS Board</td>
<td>6/30/22</td>
</tr>
<tr>
<td>Trustee, PERS</td>
<td>Troy Seibel</td>
<td>Appointed by PERS Board</td>
<td>6/30/21</td>
</tr>
<tr>
<td>Trustee, PERS</td>
<td>Yvonne Smith</td>
<td>Appointed by PERS Board</td>
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</tr>
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Retirement and Investment Office (RIO) Staff:

<table>
<thead>
<tr>
<th>Position</th>
<th>Incumbent</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Director/Chief Investment Officer</td>
<td>David Hunter</td>
<td>BS, Accounting, Northern Illinois University MBA, Finance, University of Chicago</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 Maryland</td>
</tr>
<tr>
<td>Deputy Executive Director/Chief Retirement Officer</td>
<td>Fay Kopp</td>
<td>BS, Education, Valley City State University, CRC, CRA</td>
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External

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<tr>
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<tr>
<td>Investment Consultant</td>
<td>Callan Associates Inc.</td>
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</tr>
<tr>
<td>Actuary (TFFR)</td>
<td>Segal</td>
<td>7/11</td>
</tr>
<tr>
<td>Auditor</td>
<td>CliftonLarsonAllen</td>
<td>4/12</td>
</tr>
<tr>
<td>Master/Global Custodian</td>
<td>The Northern Trust Company</td>
<td>12/83</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
Legacy Fund
ND Association of Counties
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PERS Prefunded Health
Petroleum Tank
Risk Management
Risk Management Workers Comp
Teachers’ Fund for Retirement
Workers Compensation
# H. BY-LAWS

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<td>Amendment</td>
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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.

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

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<td>Board - Powers and duties.</td>
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<td>Cooperation with Bank of North Dakota.</td>
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<td>21-10-04.</td>
<td>Board - Meetings.</td>
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<td>Legacy and budget stabilization fund advisory board.</td>
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**STATE RETIREMENT AND INVESTMENT OFFICE**

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<td>North Dakota State Retirement and Investment Office.</td>
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<tr>
<td>54-52.5-02.</td>
<td>Governing authority.</td>
</tr>
<tr>
<td>54-52.5-03.</td>
<td>State retirement and investment fund - Cost of operation of agency.</td>
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State Investment Board
Asset and Investment Performance Overview
For the periods ended June 30, 2017

September 15, 2017

Dave Hunter, Executive Director / CIO
Darren Schulz, Deputy Chief Investment Officer
ND Retirement & Investment Office (RIO)
State Investment Board (SIB)
Asset and Investment Performance Highlights – “Ends” policies were met, if not exceeded, at June 30, 2017

Pursuant to Section D-3 of our Governance Manual, SIB clients should receive investment returns consistent with their investment policies and market variables. This “End” will be evaluated based on a comparison of each client’s net investment return versus their policy benchmark over an evaluation period of 5-years.

- Investment returns exceeded policy benchmarks for 99% of SIB client assets under management for the 5-years ended June 30, 2017, while noting that prescribed risk levels (as measured by standard deviation) were adhered to for all client portfolios without exception.

- PERS and TFFR earned 13.0% and 12.9%, respectively, for the year ended June 30, 2017, exceeding their policy benchmarks. For the 5-years ended June 30, 2017, PERS and TFFR each earned over 9.1% per annum including over 0.60% of excess return which translates into over $120 million of incremental income (during the last 5 years).

- Legacy Fund earned 12% for the year ended June 30, 2017, surpassing its policy benchmark by over 1.5% which translates into $60 million of incremental income in fiscal 2017.

- Workforce Safety & Insurance earned 8.2% and 6.9% for the 1- and 5-year periods ended June 30, 2017, beating its policy benchmarks by at least 1.5% which translates into over $100 million of incremental income for WSI over the last 5-years.

**Conclusion:** RIO exists to provide SIB clients with investment returns consistent with their written investment policies and market variables. Based on the above performance including the additional support provided on the following 8 pages, the SIB and RIO are achieving the stated “Ends”.

The above amounts are based on unaudited data that is deemed to be materially accurate but subject to change.
Investment Performance Evaluation – June 30, 2017

Investment Performance Criteria:

SIB clients should receive investment returns consistent with their investment policies and market variables (pursuant to Section D.3 of the SIB Governance Manual). The “Ends” for investment performance is evaluated based on comparison of each client’s actual rate of return (net of fees), risk levels and risk adjusted returns, versus the client’s policy benchmark over 5 years.

Pension Trust:

Every Pension Trust client posted positive Excess Returns for the 5-year periods ended June 30, 2017, while adhering to approved risk levels and generating at least 0.50% of positive Risk Adjusted Excess Return (over the last 5-years).

PERS and TFFR earned 13.0% and 12.9%, respectively, for the 1-year ended June 30, 2017. TFFR and PERS each earned over 9% for the 5-years ended June 30, 2017. Global equities were the primary performance driver and gained 19% last year with U.S. Small Cap up 25% and Emerging Markets up 24%, while the S&P 500 index was up 18%. Our private equity portfolio posted strong absolute returns of 11% over the last year. U.S. fixed income was our #1 generator of excess return and earned 6% last year versus -0.31% for the Bloomberg Aggregate Index. Global Real Asset returns were mixed with Real Estate and Infrastructure each earning over 9% last year, while our Timber portfolio declined by over 9% in fiscal 2017.

Non-Pension Trust:

Every Non-Pension Trust client generated positive Excess Return and positive Risk Adjusted Excess Returns for the 5-years ended June 30, 2017, with two exceptions for the PERS Retiree Health Insurance Credit Fund and PERS Group Insurance.

The Legacy Fund earned 12% for the 1-year ended June 30, 2017, which translates into over $475 million of net investment income (including unrealized gains). The Legacy Fund’s U.S. Equity portfolio earned over 19% last year, while International Equities earned nearly 24%. U.S. Fixed Income also performed well with a 3.5% return versus -0.31% for the Bloomberg Aggregate Index. Diversified Real Assets and Real Estate returns exceeded their respective benchmarks and earned over 2% and 8%, respectively, in the last year. Our second largest non-Pension Trust client, WSI, also generated strong returns by earning over 8% for the 1-year ended June 30, 2017.

Risk, as measured by standard deviation, was within approved levels for all SIB clients for the 5-years ended June 30, 2017.

Actual asset allocations are within Target ranges and guidelines as confirmed by Callan Associates as of June 30, 2017.

Note: Current year returns are unaudited and subject to change.
**Pension Trust Return & Risk Summary – June 30, 2017**

**Returns and Risk:** Every Pension Trust client portfolio generated positive “Excess Return” for the 3- and 5-year periods ended June 30, 2017, while adhering to prescribed risk levels (e.g. within 115% of the Policy Benchmark for the 5-years ended 6/30/2017).

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</thead>
<tbody>
<tr>
<td><strong>PERS - $2.8 billion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>13.05%</td>
<td>5.49%</td>
<td>9.16%</td>
<td>4.8%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>11.87%</td>
<td>4.75%</td>
<td>8.25%</td>
<td>4.6%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>1.18%</td>
<td>0.74%</td>
<td>0.90%</td>
<td>105%</td>
<td></td>
</tr>
<tr>
<td><strong>TFFR - $2.3 billion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>12.92%</td>
<td>5.44%</td>
<td>9.18%</td>
<td>4.8%</td>
<td>0.52%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>11.63%</td>
<td>4.69%</td>
<td>8.25%</td>
<td>4.6%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>1.29%</td>
<td>0.76%</td>
<td>0.94%</td>
<td>105%</td>
<td></td>
</tr>
<tr>
<td><strong>Bismark Employee - $92 million</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>11.56%</td>
<td>5.26%</td>
<td>8.48%</td>
<td>4.2%</td>
<td>0.57%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>9.98%</td>
<td>4.48%</td>
<td>7.38%</td>
<td>4.0%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>1.58%</td>
<td>0.78%</td>
<td>1.10%</td>
<td>107%</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Amounts are unaudited and subject to change.*
Pension Trust Return & Risk Summary – June 30, 2017

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bismarck Police - $38 million</td>
<td>12.24%</td>
<td>5.26%</td>
<td>8.73%</td>
<td>4.6%</td>
<td>0.51%</td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>10.98%</td>
<td>4.56%</td>
<td>7.73%</td>
<td>4.3%</td>
<td>106%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>1.27%</td>
<td>0.70%</td>
<td>1.00%</td>
<td>106%</td>
<td>109%</td>
</tr>
</tbody>
</table>

Job Service - $97 million

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fund Return - Net</td>
<td>5.63%</td>
<td>4.79%</td>
<td>7.86%</td>
<td>3.9%</td>
<td>0.79%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>7.85%</td>
<td>3.85%</td>
<td>6.42%</td>
<td>3.6%</td>
<td>109%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>-2.22%</td>
<td>0.95%</td>
<td>1.44%</td>
<td>109%</td>
<td>103%</td>
</tr>
</tbody>
</table>

Grand Forks Employee - $63 million

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fund Return - Net</td>
<td>12.84%</td>
<td>5.37%</td>
<td>9.18%</td>
<td>5.0%</td>
<td>0.51%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>12.07%</td>
<td>4.83%</td>
<td>8.38%</td>
<td>4.8%</td>
<td>103%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>0.77%</td>
<td>0.54%</td>
<td>0.80%</td>
<td>103%</td>
<td>102%</td>
</tr>
</tbody>
</table>

Grand Forks Park District - $6 million

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fund Return - Net</td>
<td>12.74%</td>
<td>5.65%</td>
<td>9.46%</td>
<td>4.9%</td>
<td>0.73%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>11.83%</td>
<td>4.96%</td>
<td>8.55%</td>
<td>4.8%</td>
<td>102%</td>
</tr>
<tr>
<td>Excess Return</td>
<td>0.92%</td>
<td>0.69%</td>
<td>0.91%</td>
<td>102%</td>
<td>102%</td>
</tr>
</tbody>
</table>

Risk Adjusted Excess Return measures actual portfolio results versus a benchmark adjusted by its risk relative to a benchmark portfolio. This metric is positive if excess returns are due to “smart” investment decisions or negative if driven by excess risk.

Job Service is 140+% funded & significantly de-risked its investment portfolio over the last year.

Risk Adjusted Excess Returns for the 5-years ended June 30, 2017, were positive for all Pension Trust clients ranging from 0.50% for PERS to 0.79% for Job Service.

Note: Current year returns are unaudited and subject to change.
Non-Pension Trust Return & Risk Summary – June 30, 2017

Returns and Risk: All but two Non-Pension Trust clients generated positive Excess Return and Risk Adjusted Excess Return for the 5-year period ended June 30, 2017 (if applicable). These returns were achieved while adhering to reasonable risk levels which were generally within 1% of policy levels.

<table>
<thead>
<tr>
<th>Fund</th>
<th>Total Fund Return - Net</th>
<th>Policy Benchmark Return</th>
<th>Excess Return</th>
<th>Risk Adjusted Excess Return</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legacy Fund - $4.7 billion</strong></td>
<td>12.03%</td>
<td>9.91%</td>
<td>2.12%</td>
<td>0.59%</td>
</tr>
<tr>
<td><strong>Workforce Safety Insurance - $1.9 billion</strong></td>
<td>8.29%</td>
<td>5.20%</td>
<td>3.09%</td>
<td>1.37%</td>
</tr>
<tr>
<td><strong>Budget Stabilization - $6 million</strong></td>
<td>0.80%</td>
<td>0.37%</td>
<td>0.42%</td>
<td>0.55%</td>
</tr>
<tr>
<td><strong>Fire &amp; Tornado Fund - $22 million</strong></td>
<td>9.30%</td>
<td>6.47%</td>
<td>2.83%</td>
<td>0.79%</td>
</tr>
</tbody>
</table>

Risk Adjusted Excess Return measures a portfolio’s excess return adjusted by its risk relative to a benchmark portfolio. This metric is positive if returns are due to “smart” investment decisions or negative if driven by excess risk.

Note: Current year returns are unaudited and subject to change.
### Non-Pension Trust Return & Risk Summary – June 30, 2017

#### Current FYTD 3 Yrs Ended 5 Yrs Ended

<table>
<thead>
<tr>
<th>Fund Description</th>
<th>Current FYTD 6/30/2017</th>
<th>3 Yrs Ended 6/30/2017</th>
<th>5 Yrs Ended 6/30/2017</th>
<th>Risk 5 Yrs Ended 6/30/2017</th>
<th>Risk Adj Excess Return 5 Yrs Ended 6/30/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State Bonding Fund - $3 million</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>2.40%</td>
<td>2.37%</td>
<td>2.83%</td>
<td>2.0%</td>
<td>1.14%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>0.05%</td>
<td>1.48%</td>
<td>1.30%</td>
<td>1.7%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>2.34%</td>
<td>0.90%</td>
<td>1.52%</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td><strong>Insurance Reg. Trust Fund - $5 million</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>7.40%</td>
<td>3.60%</td>
<td>5.79%</td>
<td>3.0%</td>
<td>0.41%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>5.69%</td>
<td>2.93%</td>
<td>4.60%</td>
<td>2.6%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>1.70%</td>
<td>0.67%</td>
<td>1.20%</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td><strong>Petroleum Tank Release Compensation Fund - $6 million</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>2.23%</td>
<td>2.18%</td>
<td>2.54%</td>
<td>1.8%</td>
<td>1.04%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>0.09%</td>
<td>1.36%</td>
<td>1.20%</td>
<td>1.6%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>2.14%</td>
<td>0.82%</td>
<td>1.34%</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td><strong>State Risk Management Fund - $5.8 million</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td>8.27%</td>
<td>5.58%</td>
<td>7.81%</td>
<td>3.4%</td>
<td>1.03%</td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>5.47%</td>
<td>4.39%</td>
<td>5.79%</td>
<td>3.0%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>2.80%</td>
<td>1.19%</td>
<td>2.02%</td>
<td>OK</td>
<td></td>
</tr>
</tbody>
</table>

#### SIB Client Commentary:

The State Bonding Fund, Insurance Regulatory Trust Fund, Petroleum Tank Release Compensation Fund, and State Risk Management Fund have all posted positive Risk Adjusted Excess Returns for the 5-years ended June 30, 2017, including Excess Returns of 1.20% or more.

Note: Current year returns are unaudited and subject to change.
Non-Pension Trust Return & Risk Summary – June 30, 2017

<table>
<thead>
<tr>
<th>Fund Description</th>
<th>Current FYTD</th>
<th>3 Yrs Ended</th>
<th>5 Yrs Ended</th>
<th>Risk 5 Yrs Ended</th>
<th>Risk Adj Excess Return 5 Yrs Ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Risk Management W/C Fund - $5.5 million</td>
<td>9.41%</td>
<td>6.03%</td>
<td>8.63%</td>
<td>3.8%</td>
<td>1.02%</td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>6.83%</td>
<td>4.90%</td>
<td>6.69%</td>
<td>3.4%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>2.58%</td>
<td>1.13%</td>
<td>1.94%</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>ND Assoc. of Counties - $4.4 million</td>
<td>8.30%</td>
<td>4.58%</td>
<td>6.92%</td>
<td>3.5%</td>
<td>0.74%</td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>5.51%</td>
<td>3.44%</td>
<td>5.07%</td>
<td>2.9%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>2.79%</td>
<td>1.14%</td>
<td>1.85%</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>Bismarck Deferred Sick Leave - $700,000</td>
<td>8.85%</td>
<td>4.99%</td>
<td>7.38%</td>
<td>3.7%</td>
<td>0.92%</td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>5.44%</td>
<td>3.62%</td>
<td>5.24%</td>
<td>3.0%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>3.41%</td>
<td>1.37%</td>
<td>2.15%</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>FargoDome Permanent Fund - $42 million</td>
<td>12.25%</td>
<td>5.50%</td>
<td>9.16%</td>
<td>4.9%</td>
<td>0.93%</td>
</tr>
<tr>
<td>Total Fund Return - Net</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy Benchmark Return</td>
<td>9.74%</td>
<td>4.38%</td>
<td>7.46%</td>
<td>4.5%</td>
<td></td>
</tr>
<tr>
<td>Excess Return</td>
<td>2.51%</td>
<td>1.11%</td>
<td>1.70%</td>
<td>OK</td>
<td></td>
</tr>
</tbody>
</table>

Note: Current year returns are unaudited and subject to change.

SIB Client Commentary:

The State Risk Management Workers Compensation Fund, North Dakota Association of Counties, City of Bismarck Deferred Sick Leave Account and FargoDome Permanent Fund have all posted positive Risk Adjusted Excess Returns for the 5-years ended June 30, 2017, including Excess Returns of 1.85% or more.
Non-Pension Trust Return & Risk Summary – June 30, 2017

SIB Client Specific Commentary:

The Cultural Endowment Fund has generated the highest absolute level of net investment returns (of 10.37%) over the last 5-years.

The Board of Medicine became an SIB client two years ago noting they were previously investing in Certificates of Deposit.

PERS Retiree Health absolute returns have been reasonable the last 5-years (8.80%) but disappointing on a risk adjusted basis (-0.64%). We are re-examining SEI’s benchmarks and risk and return profile.

PERS Group Insurance performance for the fiscal year ended June 30, 2017 is disappointing but within 0.04% of the Policy Benchmark Return over the last 5-years.

The Tobacco Prevention and Control Trust Fund was transferred to OMB regulatory oversight on July 1, 2017.

Note: Current year returns are unaudited and subject to change.
State Investment Board – Client Assets Under Management

- SIB client assets grew by approximately 8.6% (or $971 million) in the last year due to a combination of Legacy Fund and Pension Trust asset growth of $878 million and $577 million, respectively.

- The Pension Trust posted a net return of 12.96% in the last year. During the last 5-years, the Pension Trust generated a net annualized return of 9.14%, exceeding the performance benchmark of 8.20%.

- The Insurance Trust generated a net return of 7.80% in the last year. During the last 5-years, the Insurance Trust posted a net annualized return of 5.45%, exceeding the performance benchmark of 3.90%.

- The Legacy Fund generated a net investment gain of 12.03% for the year ended June 30, 2017, exceeding its performance benchmark. During the last 5-years, the Legacy Fund has generated a net annualized return of 4.76%, exceeding the performance benchmark of 3.84%.

- SIB client assets totaled approximately $12.3 billion as of June 30, 2017, based on unaudited valuations.

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Market Values as of 6/30/17 (1)</th>
<th>Market Values as of 6/30/16 (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pension Trust Fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Employees Retirement System (PERS)</td>
<td>2,781,347,058</td>
<td>2,459,388,086</td>
</tr>
<tr>
<td>Teachers’ Fund for Retirement (TFFR)</td>
<td>2,318,214,334</td>
<td>2,082,183,640</td>
</tr>
<tr>
<td>City of Bismarck Employees Pension</td>
<td>91,954,165</td>
<td>82,441,003</td>
</tr>
<tr>
<td>City of Grand Forks Employees Pension</td>
<td>63,392,384</td>
<td>57,975,758</td>
</tr>
<tr>
<td>City of Bismarck Police Pension</td>
<td>38,136,784</td>
<td>33,983,598</td>
</tr>
<tr>
<td>Grand Forks Park District</td>
<td>6,160,568</td>
<td>5,720,245</td>
</tr>
<tr>
<td><strong>Subtotal Pension Trust Fund</strong></td>
<td>5,299,205,292</td>
<td>4,721,692,330</td>
</tr>
<tr>
<td><strong>Insurance Trust Fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workforce Safety &amp; Insurance (WSI)</td>
<td>1,894,614,791</td>
<td>1,832,104,203</td>
</tr>
<tr>
<td>City of Fargo FargoDome Permanent Fund</td>
<td>41,634,918</td>
<td>38,782,721</td>
</tr>
<tr>
<td>PERS Group Insurance Account</td>
<td>37,500,315</td>
<td>37,715,356</td>
</tr>
<tr>
<td>State Fire and Tornado Fund</td>
<td>22,008,326</td>
<td>24,091,203</td>
</tr>
<tr>
<td>Petroleum Tank Release Compensation Fund</td>
<td>6,396,410</td>
<td>7,149,512</td>
</tr>
<tr>
<td>Budget Stabilization Fund</td>
<td>6,127,844</td>
<td>575,918,381</td>
</tr>
<tr>
<td>State Risk Management Fund</td>
<td>5,781,003</td>
<td>6,534,801</td>
</tr>
<tr>
<td>State Risk Management Workers Comp Fund</td>
<td>5,534,628</td>
<td>5,516,177</td>
</tr>
<tr>
<td>Insurance Regulatory Trust Fund</td>
<td>5,289,164</td>
<td>1,085,836</td>
</tr>
<tr>
<td>ND Association of Counties (NDACo) Fund</td>
<td>4,383,920</td>
<td>4,048,863</td>
</tr>
<tr>
<td>State Bonding Fund</td>
<td>3,374,399</td>
<td>3,296,372</td>
</tr>
<tr>
<td>ND Board of Medicine</td>
<td>2,179,911</td>
<td>2,208,667</td>
</tr>
<tr>
<td>Bismarck Deferred Sick Leave Account</td>
<td>698,131</td>
<td>642,265</td>
</tr>
<tr>
<td>Cultural Endowment Fund</td>
<td>431,470</td>
<td>386,452</td>
</tr>
<tr>
<td><strong>Subtotal Insurance Trust Fund</strong></td>
<td>2,035,955,230</td>
<td>2,539,480,809</td>
</tr>
<tr>
<td><strong>Legacy Trust Fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legacy Fund</td>
<td>4,687,963,729</td>
<td>3,809,485,177</td>
</tr>
<tr>
<td>PERS Retiree Insurance Credit Fund</td>
<td>116,150,947</td>
<td>101,623,224</td>
</tr>
<tr>
<td>Job Service of North Dakota Pension</td>
<td>97,332,820</td>
<td>96,588,333</td>
</tr>
<tr>
<td>ND Tobacco Prevention and Control Trust Fund</td>
<td>57,462,736</td>
<td>54,366,538</td>
</tr>
<tr>
<td><strong>Total Assets Under SIB Management</strong></td>
<td>12,294,070,754</td>
<td>11,323,236,410</td>
</tr>
</tbody>
</table>

(1) 6/30/17 market values are unaudited and subject to change.
(2) 6/30/16 market values as stated in the Comprehensive Annual Financial Report.
# Annual Investment Compliance Report for Year Ended 6/30/17

<table>
<thead>
<tr>
<th><strong>ADAMS STREET PARTNERS</strong></th>
<th><strong>Primary Contact:</strong> <a href="mailto:mgonzalo@adamsstreetpartners.com">mgonzalo@adamsstreetpartners.com</a></th>
<th><strong>Secondary Contact:</strong> <a href="mailto:mlefko@adamsstreetpartners.com">mlefko@adamsstreetpartners.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Checklist Sent:</strong> 07/19/2017</td>
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<tr>
<th><strong>ATLANTA CAPITAL</strong></th>
<th><strong>Primary Contact:</strong> <a href="mailto:emma.hutchinson@atcap.com">emma.hutchinson@atcap.com</a></th>
<th><strong>Secondary Contact:</strong></th>
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**Additional Comments:** 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 $4,804,657 and $4,034,472 for the years ended October 31, 2016 and 2015, respectively.

<table>
<thead>
<tr>
<th><strong>Axiom International</strong></th>
<th><strong>Primary Contact:</strong> <a href="mailto:lchamberlain@axinvest.com">lchamberlain@axinvest.com</a></th>
<th><strong>Secondary Contact:</strong> <a href="mailto:clientrelations@axiom-investors.com">clientrelations@axiom-investors.com</a></th>
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<th><strong>BLACKROCK PEP</strong></th>
<th><strong>Primary Contact:</strong> <a href="mailto:leo.chenette@blackrock.com">leo.chenette@blackrock.com</a></th>
<th><strong>Secondary Contact:</strong> <a href="mailto:brian.velez@blackrock.com">brian.velez@blackrock.com</a></th>
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<tr>
<td>BRANDYWINE</td>
<td><a href="mailto:lisa.welch@brandywineglobal.com">lisa.welch@brandywineglobal.com</a></td>
<td><a href="mailto:steven.szostak@brandywineglobal.com">steven.szostak@brandywineglobal.com</a></td>
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<tr>
<td>Jim <a href="mailto:mcguigan@capgroup.com">mcguigan@capgroup.com</a></td>
<td></td>
<td><a href="mailto:Brandon_florance@capgroup.com">Brandon_florance@capgroup.com</a></td>
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<td><a href="mailto:Blazarus@paraport.com">Blazarus@paraport.com</a></td>
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<tr>
<td><a href="mailto:Corsiarcompliance@corsairinvestments.com">Corsiarcompliance@corsairinvestments.com</a></td>
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**DECLARATION MANAGEMENT**  
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**Additional Comments:** Manulife Asset Management, GSD and GIS GBO state in its Description that it has controls in place to identify excessive and/or inappropriate access of users to its applications and requests that access is modified and/or revoked, and that management reviews weekly human resources termination and transfer requests and report that access is removed. However, as noted on pages 48 and 49 of the Description of tests of controls and results thereof, these controls were not operating effectively throughout the period January 1, 2016 to September 30, 2016. This resulted in the nonachievement of the control objective, “Controls provide reasonable assurance that logical access to production programs and data files is restricted to authorized individuals, and that individuals are restricted to performing authorized and appropriate actions” throughout the period January 1, 2016 to September 30, 2016.

**Declaration Response:** Regarding the SOC 1 Type 2 report covering the period January 1, 2016 to September 30, 2016: there was a qualification in this report because one of our 11 controls objectives was not met. Pertaining to logical access, the objective states that we have controls in place to provide reasonable assurance that logical access to production programs and data files is restricted to authorized individuals and that these individuals are restricted to performing authorized and appropriate actions. During testing, deviations were found in two of the six controls in place to meet this objective. As a result, Ernst & Young issued the opinion that we did not meet the objective. In direct response to these findings, we implemented changes to address the issues found during testing. After a thorough review of all login and application activity reports, we concluded that no inappropriate or unauthorized access was used during this period and the integrity of our systems was not jeopardized.

**DIMENSIONAL FUND ADVISORS**  
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**EPOCH**  
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**Additional Comments:**
**GOLDMAN SACHS**  
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**Additional Comments:** On December 21, 2016, the commodity futures trading commission ("CFTC") entered an order instituting proceedings pursuant to sections 6(c) and 6(d) of the commodity exchange act, making findings and imposing remedial sanctions (the "order") against the Goldman Sachs group, inc. ("GS group") and Goldman, Sachs & Co. ("GS&Co.", and together with gs group, "Goldman") relating to attempted manipulation of the U.S. Dollar international swaps and derivatives association fix ("usd isdafaix"), an interest rate benchmark. Specifically, the CFTC found that, from January 2007 through March 2012, certain traders on GS&Co.'s interest rate products trading desks submitted bids and offers, and executed trades, that were designed to attempt to manipulate the USD isdafaix. In addition, the CFTC found that these traders attempted to affect the rate at which USD isdafaix was set by making false, misleading, or knowingly inaccurate submissions to certain swaps brokers for inclusion in the calculation of the daily rates. The order also states that the traders submitted oral and written requests for certain rates to be submitted, which would benefit GS&Co.'s trading positions.

*Without admitting or denying the violations, Goldman consented to the entry of the order on December 21, 2016 by the CFTC, pursuant to which Goldman: (a) shall cease and desist from violating commodity exchange act sections 6(c)(1), 6(c)(1)(a), 6(c)(3), 6(d), and 9(a)(2), 7 u.s.c. §§ 9(1), 9(1)(a), 9(3), 13b, 13(a)(2) (2012), and CFTC regulations 180.1(a) and 180.2, 17 c.f.r. §§ 180.1(a), 180.2 (2015); (b) pay a civil monetary penalty of $120 million, which GS&Co. Paid on December 28, 2016; and (c) comply with the undertakings set forth in the order, including providing a report to the CFTC within 120 days of the order, addressing remediation efforts both prior to and since the entry of the order, and providing an additional report to the CFTC, no later than 365 days of the entry of the order, explaining how it has complied with the undertakings set forth in the order.*

**GROSVENOR**  
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**Additional Comments:**

**HEARTHSTONE**  
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**Additional Comments:**
### INVEESCO - Core, II, III, IV

**Checklist Sent:** 07/19/2017  
**Primary Contact:** paul.michaels@invesco.com  
**Secondary Contact:** melissa.neckar@invesco.com

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**Additional Comments:**  
Affiliate Disciplinary Information: On August 24, 2016, without admitting or denying the findings, WL Ross & Co. LLC (“WLRoss”), an SEC registered affiliate of IAI, consented to the entry of an order to cease and desist from committing or causing any violations and any future violations of Sections 206(2) and 206(4) of the Advisers Act and Rule 206(4)-8 thereunder and agreed to pay a civil monetary penalty of $2.3 million to the SEC. According to the order, WL Ross failed to adequately disclose its fee allocation practices to certain private equity funds it advised (the “WLR Funds”) and their investors and that ambiguous language in its private equity funds’ limited partnership agreements resulted in certain WLR Funds paying higher management fees between 2001 and 2011. The order also states that in determining to accept the settlement offer, the SEC considered remedial acts promptly undertaken by WL Ross and cooperation afforded to the SEC staff, including WL Ross’ self-reporting of the transaction fee allocation issue to the SEC staff, WL Ross’ voluntary determination to revise its fee allocation methodology, and WL Ross’ voluntary reimbursement, with interest, of $11,873,571 in management fee credits resulting from its retroactive application of the revised allocation methodology to the inception of the WLR Funds.

### INVEESCO Asia I & III

**Checklist Sent:** 07/19/2017  
**Primary Contact:** karen.chan@invesco.com

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**Additional Comments:**

### INVEST AMERICA

**Checklist Sent:** 07/19/2017  
**Primary Contact:** jcosgriff@investam.com  
**Secondary Contact:** mbenge@investam.com

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**Additional Comments:**  
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.
### JPMorgan Chase & Co.

**Checklist Sent:** 07/19/2017

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**Additional Comments:** On November 17, 2016, JPMorgan Chase & Co. ("JPMC") entered into a settlement with the Securities and Exchange Commission ("SEC") under which JPMC consented to the entry of an order (the "order") that finds that JPMC violated sections 13(b)(2)(a), 13(b)(2)(b) and 30a of the securities exchange act of 1934 ("exchange act"). The order finds that JPMC violated the anti-bribery provisions of the federal securities laws by corruptly providing valuable internships and employment to relatives and friends of foreign Government officials ("referral hires") in order to assist JPMC in retaining and obtaining business. In addition, the order finds that JPMC violated the books and records provisions and the internal accounting controls provisions of the foreign corrupt Practices act ("FCPA") in conjunction with certain referral hires.

The order requires JPMC to pay a total of $105,507,668 in disgorgement and prejudgment interest of $25,083,737, which was paid on November 27, 2016. Federally, the order directs JPMC to cease-and-desist and to pay a civil money penalty of $61,923,500, which was paid on November 17, 2016.

A state of New Hampshire bureau of securities regulation investigation concerned alleged misrepresentations and omissions in connection with the marketing, sale and distribution of auction rate securities. In addition to the agreement to repurchase certain auction rate securities ("ARS") sold to eligible investors prior to February 13, 2008, the settlement calls for the reimbursement of eligible investors who sold ARS below par, refunding of certain loan expenses incurred by eligible investors, special arbitration proceedings concerning consequential damages with respect to ARS, refunding certain refinancing fees incurred by municipal issuers of ARS and a civil penalty.

Without admitting or denying the findings, JPMorgan Chase & Co. consented to a fine of $97706.22 which was paid on 01/04/2017. The fine represents the New Hampshire portion of a total fine of $25 million negotiated with the NTAG and the state of Florida office of financial regulation on behalf of the NASAA task force. The remaining amount will be paid separately to other states. Also paid was $15,000 to NASAA as reimbursement for investigative costs incurred by NASAA.

### LA Capital

**Checklist Sent:** 07/19/2017

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**Additional Comments:** Grant Thornton recommended that the LA Capital CFO fully transition journal entry responsibilities to the Controller.

### Loeb & Loeb

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<tr>
<th>LSV</th>
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<tr>
<th>MATLIN PATTERSON</th>
<th>Primary Contact: <a href="mailto:investorservices@mpasset.com">investorservices@mpasset.com</a></th>
<th>Secondary Contact: <a href="mailto:nauth@matlinpatterson.com">nauth@matlinpatterson.com</a></th>
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<th>NORTHERN TRUST ASSET MANAGE.</th>
<th>Primary Contact: <a href="mailto:bp142@ntrs.com">bp142@ntrs.com</a></th>
<th>Secondary Contact: <a href="mailto:sy9@ntrs.com">sy9@ntrs.com</a></th>
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<th>Primary Contact: <a href="mailto:stephanie.king@pimco.com">stephanie.king@pimco.com</a></th>
<th>Secondary Contact: <a href="mailto:collin.kroeger@pimco.com">collin.kroeger@pimco.com</a></th>
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**Additional Comments:** On December 1, 2016, PIMCO entered into an agreement with the U.S. Securities and Exchange Commission ("sec") to settle charges relating to the PIMCO total return active exchange-traded fund ("bond"). The sec alleged that from February 29, 2012 to June 30, 2012, PIMCO did not sufficiently disclose the sources of performance for bond, inaccurately valued 43 smaller-sized ("odd lot") positions of non-agency mortgage backed securities using third-party vendor prices, and did not adopt and implement adequate written policies and procedures related to these matters. The sec found, and PIMCO neither admitted nor denied, that PIMCO violated section 206(2) of the investment advisers act of 1940 ("advisers act"), section 206(4) of the advisers act and rules 206(4)-7 and 206(4)-8 thereunder, section 34(b) of the investment company act, and rule 22c-1 under the investment company act.
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<td><a href="mailto:nicole.tolento@pgim.com">nicole.tolento@pgim.com</a></td>
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Additional Comments: SSGA is a division of State Street Bank and Trust Company, a wholly-owned subsidiary of State Street Corporation. As a bank, State Street Bank and Trust Company is exempt from having to register as an investment adviser with the U.S. Securities and Exchange Commission under Section 202(a)(11)(a) of the Investment Advisers Act of 1940. Therefore, no Form ADV is available.
### UBS

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### VANGUARD

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### WELLINGTON

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Additional Comments: The Federal Department of Finance - Switzerland ("FDF") alleged that Wellington had not filed, within the specified time period, reports that its collective ownership of a Swiss security crossed an ownership threshold. The amount of the settlement was chf7,000 (approximately USD $7,000) and Wellington consented to the fine in full settlement of the matter. There were no additional conditions imposed.

### WELLS CAPITAL

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Additional Comments: Complaint alleges that Wells Fargo personnel engaged in various allegedly improper acts and practices designed to meet sales goals and quotas, such as opening accounts without customer authorization, misrepresenting that certain products were available only in packages with other products, misusing customer data in connection with the foregoing and not disclosing such alleged misuse to customers. The complaint alleges that customers were harmed by, among other things, incurring unauthorized fees.

Judgment rendered: fine of $50,000,000.00 paid

Without admitting or denying the findings, Wells Fargo Bank, N.A. (WFBNA) consents to the finding that between January 1, 2008 and July 1, 2015, WFBNA violated the servicemember civil relief act (SCRA) by failing to obtain court orders prior to repossessing services member’s automobiles. Fine of $60,000 paid.
| Western Asset Management | Primary Contact: susan.signori@westernasset.com | Secondary Contact: matthew.hillier@westernasset.com |
|--------------------------|-------------------------------------------------|
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| Internal Controls | 9/30/16 | 8/17/17 | Clean opinion, Legg Mason (parent co.) |
| ADV | 7/11/17 | 8/17/17 |  |
| DDQ | 6/30/17 | 8/16/17 |  |

**Additional Comments:**

| William Blair | Primary Contact: triesenber g@williamblair.com | Secondary Contact: ddenizman@williamblair.com |
|---------------|-------------------------------------------------|
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| Internal Controls | 6/30/17 | 9/14/17 | Clean opinion |
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</tr>
</thead>
<tbody>
<tr>
<td>8/10/2016</td>
<td>Brandywine</td>
<td>Non-Index Country: Below A or better NSRO 0-5% multiple</td>
<td>8/10/2016</td>
<td>&gt;5% position in Brazil (5.04%)</td>
<td>Monitor - Continue to hold</td>
<td>concur</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NDK08</td>
</tr>
<tr>
<td>10/11/2016</td>
<td>Brandywine</td>
<td>Non-Index Country: Below A or better NSRO 0-5% multiple</td>
<td>10/11/2016</td>
<td>&gt;5% position in Brazil (5.04%)</td>
<td>Monitor - Continue to hold</td>
<td>concur</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NDK08</td>
</tr>
<tr>
<td>10/11/2016</td>
<td>Parametric/Clifton</td>
<td>Security rated below investment grade</td>
<td>10/11/2016</td>
<td>ERuss2000 - PEN</td>
<td>Hold until all principal is received or increase in price</td>
<td>concur</td>
<td>1/20/2018</td>
<td>1,000</td>
<td>21,183</td>
<td>21,083</td>
<td>26-77977</td>
</tr>
<tr>
<td>10/24/2016</td>
<td>Brandywine</td>
<td>Non-Index Country: Below A or better NSRO 0-5% multiple</td>
<td>10/24/2016</td>
<td>&gt;5% position in Brazil (5.04%)</td>
<td>Monitor - Continue to hold</td>
<td>concur</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NDK08</td>
</tr>
<tr>
<td>12/23/2016</td>
<td>Barings</td>
<td>Max 5% per Issuer violation due to redemption</td>
<td>12/23/2016</td>
<td>&gt;5% Gold. Sachs &amp; Morgan Stanley 12/29/16 liquidation, acct back within tolerance</td>
<td>liquidation</td>
<td>2/25/21 &amp; 2/19</td>
<td>1,000</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NDI08</td>
</tr>
</tbody>
</table>
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, 2017.
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 10
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>Firm Assets ($mil)</th>
<th># Accounts</th>
<th>Product Assets ($mil)</th>
<th># Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Institutional Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US Tax Exempt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US Taxable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>By Client Type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Fund</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Union/Multi-Employer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endowment &amp; Foundation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Net Worth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrap Accounts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Advisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Describe “other”:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Gain</td>
<td>Loss</td>
</tr>
<tr>
<td></td>
<td>accounts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>public</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>fund</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Subject Product**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
<th>2015</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</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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>
<td></td>
</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.
**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.

**ENVIRONMENTAL, SOCIAL & GOVERNANCE**

1. Does the firm have a policy addressing its approach to incorporating sustainable and responsible investment factors into its investment process? If so, please provide a copy of the policy and the extent of its use in current investment strategies. If not, please explain the rationale.

2. Please indicate the methods of internal investment manager oversight (e.g. oversight by committee, firm, management, board of directors, etc.) including reporting practices.

3. Please describe what ESG data, research, consultants, tools and practices are used and how they are incorporated into the investment and risk management process.

4. Have there been any changes in the firm’s ESG practices, policies, applications or reporting in the past year. If so, please explain the changes.
5. Please explain how active investment ownership practices are integrated into investment decisions including any impact on voting shares/rights.

6. Please describe what metrics are used to measure the impact of ESG investing practices.

7. Does the firm include climate related factors into its investment process including the measurement and monitoring of the carbon footprint of its investment portfolio? If yes, please explain the assessment process. If not, please explain the rationale.

8. Please list the various types of sustainable and responsible investing themes considered in the past and if any have been excluded because they were non investible (i.e. eliminate poverty, disease eradication, zero waste, healthy living, etc.).

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.

DISASTER RECOVERY

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.
## Retirement and Investment Office
### Expenditure Summary Report
#### Fiscal Year Ended June 30, 2017

<table>
<thead>
<tr>
<th></th>
<th>TFFR</th>
<th>SIB</th>
<th>Total RIO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Expenses</td>
<td>% of Total</td>
<td>Actual Expenses</td>
</tr>
<tr>
<td><strong>Continuing Appropriations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Expenditures *</td>
<td>$ 13,172,349</td>
<td>6.2%</td>
<td>$ 41,433,254</td>
</tr>
<tr>
<td><strong>Member Claims</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annuity Payments</td>
<td>191,104,694</td>
<td>-</td>
<td>191,104,694</td>
</tr>
<tr>
<td>Refund Payments</td>
<td>5,411,850</td>
<td>-</td>
<td>5,411,850</td>
</tr>
<tr>
<td>Total Member Claims</td>
<td>196,516,544</td>
<td>92.8%</td>
<td>-</td>
</tr>
<tr>
<td>Other Continuing Appropriations</td>
<td>415,576</td>
<td>0.2%</td>
<td>187,578</td>
</tr>
<tr>
<td>Total Continuing Appropriations</td>
<td>210,104,468</td>
<td>99.2%</td>
<td>41,620,832</td>
</tr>
<tr>
<td><strong>Appropriated Expenditures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and Benefits</td>
<td>1,135,689</td>
<td>0.5%</td>
<td>1,038,489</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>400,350</td>
<td>0.2%</td>
<td>101,981</td>
</tr>
<tr>
<td>Capital Assets</td>
<td>8,999</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Appropriated Expenses</td>
<td>1,766,854</td>
<td>0.8%</td>
<td>918,654</td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>$ 211,871,323</td>
<td>$ 42,539,486</td>
<td>$ 254,401,810</td>
</tr>
</tbody>
</table>

* Includes some estimates for June quarter carried interest/incentive fees for limited partnership funds that have not yet reported.
## Schedule of Consulting Expenses

**For Fiscal Years Ended June 30, 2017 and 2016**

<table>
<thead>
<tr>
<th></th>
<th>Pension Trust</th>
<th></th>
<th>Investment Trust</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuary fees:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cavanaugh MacDonald Consulting</td>
<td>$38,632</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Segal Company</td>
<td>$91,742</td>
<td>$144,633</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Total Actuary Fees</td>
<td>$130,374</td>
<td>$144,633</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>Auditing/Accounting fees:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CliftonLarsonAllen LLC</td>
<td>$108,987</td>
<td>$104,507</td>
<td>$28,213</td>
<td>$27,993</td>
</tr>
<tr>
<td>Total Auditing Fees</td>
<td>$108,987</td>
<td>$104,507</td>
<td>$28,213</td>
<td>$27,993</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>$300</td>
<td>$ -</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>$3,152</td>
<td>$2,598</td>
<td>$4,171</td>
<td>$3,401</td>
</tr>
<tr>
<td>Kasowitz, Benson, Torres &amp; Friedman</td>
<td>$1,357</td>
<td>$ -</td>
<td>$1,777</td>
<td>$ -</td>
</tr>
<tr>
<td>Ice Miller LLP</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>ND Attorney General</td>
<td>$20,323</td>
<td>$18,264</td>
<td>$23,520</td>
<td>$21,493</td>
</tr>
<tr>
<td>Total legal fees:</td>
<td>$24,832</td>
<td>$20,862</td>
<td>$29,468</td>
<td>$24,894</td>
</tr>
<tr>
<td>Total consultant expenses</td>
<td>$264,493</td>
<td>$270,302</td>
<td>$57,681</td>
<td>$52,887</td>
</tr>
</tbody>
</table>
## Retirement and Investment Office

### 2015-2017 Biennium Appropriation Status Report

**As of June 30, 2017**

<table>
<thead>
<tr>
<th>Category</th>
<th>2015-2017 Budget</th>
<th>Adjusted Appropriation</th>
<th>Biennium To Date Actual</th>
<th>Budget Available</th>
<th>% Budget Available</th>
<th>% of Biennium Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Benefits</td>
<td>$4,340,551</td>
<td>$4,342,556</td>
<td>$4,233,921</td>
<td>$108,635</td>
<td>2.50%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Operating Expenditures</td>
<td>990,874</td>
<td>990,874</td>
<td>842,556</td>
<td>148,318</td>
<td>14.97%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Contingency</td>
<td>82,000</td>
<td>82,000</td>
<td>8,999</td>
<td>73,001</td>
<td>89.03%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$5,413,425</strong></td>
<td><strong>$5,415,430</strong></td>
<td><strong>$5,085,477</strong></td>
<td><strong>329,953</strong></td>
<td><strong>6.09%</strong></td>
<td><strong>0.00%</strong></td>
</tr>
</tbody>
</table>
# Retirement and Investment Office

## Final Budget Status for 2015-2017 Biennium

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TFFR</td>
<td>SIB</td>
<td>RIO Total</td>
</tr>
<tr>
<td>SALARIES &amp; WAGES</td>
<td>$1,592,559</td>
<td>$1,602,477</td>
<td>$3,195,036</td>
</tr>
<tr>
<td>TEMPORARY SALARIES</td>
<td>6,005</td>
<td>4,000</td>
<td>10,005</td>
</tr>
<tr>
<td>BENEFITS</td>
<td>647,187</td>
<td>490,328</td>
<td>1,137,515</td>
</tr>
<tr>
<td>IT - DATA PROCESSING</td>
<td>149,551</td>
<td>26,517</td>
<td>176,068</td>
</tr>
<tr>
<td>IT - COMMUNICATIONS</td>
<td>13,800</td>
<td>6,240</td>
<td>20,040</td>
</tr>
<tr>
<td>TRAVEL</td>
<td>82,223</td>
<td>54,950</td>
<td>137,173</td>
</tr>
<tr>
<td>SUPPLIES - IT SOFTWARE</td>
<td>4,136</td>
<td>2,389</td>
<td>6,525</td>
</tr>
<tr>
<td>POSTAGE</td>
<td>89,980</td>
<td>7,040</td>
<td>97,020</td>
</tr>
<tr>
<td>IT CONTRACT SERVICES</td>
<td>177,280</td>
<td>3,722</td>
<td>181,002</td>
</tr>
<tr>
<td>LEASE/RENT - BLDG./LAND</td>
<td>104,273</td>
<td>59,503</td>
<td>163,776</td>
</tr>
<tr>
<td>PROFESSIONAL DEVELOPMENT</td>
<td>34,497</td>
<td>20,963</td>
<td>55,460</td>
</tr>
<tr>
<td>OPERATING FEES &amp; SERVICES</td>
<td>20,998</td>
<td>12,399</td>
<td>33,397</td>
</tr>
<tr>
<td>REPAIRS</td>
<td>634</td>
<td>366</td>
<td>1,000</td>
</tr>
<tr>
<td>PROFESSIONAL SERVICES</td>
<td>17,847</td>
<td>6,623</td>
<td>24,470</td>
</tr>
<tr>
<td>INSURANCE</td>
<td>928</td>
<td>535</td>
<td>1,463</td>
</tr>
<tr>
<td>OFFICE SUPPLIES</td>
<td>4,730</td>
<td>2,730</td>
<td>7,460</td>
</tr>
<tr>
<td>PRINTING</td>
<td>25,896</td>
<td>3,774</td>
<td>29,670</td>
</tr>
<tr>
<td>PROFESSIONAL SUPPLIES</td>
<td>1,500</td>
<td>1,500</td>
<td>3,000</td>
</tr>
<tr>
<td>MISCELLANEOUS SUPPLIES</td>
<td>3,083</td>
<td>1,777</td>
<td>4,860</td>
</tr>
<tr>
<td>IT EQUIPMENT &lt; $5000</td>
<td>29,105</td>
<td>12,185</td>
<td>41,290</td>
</tr>
<tr>
<td>OTHER EQUIPMENT &lt; $5000</td>
<td>4,000</td>
<td>4,000</td>
<td>8,000</td>
</tr>
<tr>
<td>OFFICE EQUIP &amp; FURNITURE &lt; $5000</td>
<td>4,265</td>
<td>2,462</td>
<td>6,727</td>
</tr>
<tr>
<td>TOTAL OPERATING</td>
<td>765,026</td>
<td>225,848</td>
<td>990,874</td>
</tr>
<tr>
<td>TOTAL BEFORE CONTINGENCY</td>
<td>3,010,777</td>
<td>2,322,653</td>
<td>5,333,430</td>
</tr>
<tr>
<td>CONTINGENCY (CAPITAL ASSETS)</td>
<td>41,000</td>
<td>41,000</td>
<td>82,000</td>
</tr>
<tr>
<td>TOTAL BUDGET</td>
<td>$3,051,777</td>
<td>$2,363,653</td>
<td>$5,415,430</td>
</tr>
</tbody>
</table>
## Retirement and Investment Office

**FINAL APPROVED BUDGET FOR 2017-2019 BIENNIAL**

<table>
<thead>
<tr>
<th></th>
<th>2015-2017 Biennium Approved Budget</th>
<th>2017-2019 Biennium Approved Budget</th>
<th>Change from 2015-17 Approved Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2015-2017 Biennium Approved Budget</strong></td>
<td>1,592,559.00 1,602,477.00 3,195,036.00</td>
<td>1,637,129.00 1,591,806.00 3,228,935.00</td>
<td>44,570.00 2.8% (10,671.00) -0.7% 33,899.00 1.1%</td>
</tr>
<tr>
<td><strong>TEMPORARY SALARIES</strong></td>
<td>6,005.00 4,000.00 10,005.00</td>
<td>- - -</td>
<td>(6,005.00) -100.0% (4,000.00) -100.0% (10,005.00) -100.0%</td>
</tr>
<tr>
<td><strong>BENEFITS</strong></td>
<td>647,187.00 490,328.00 1,137,515.00</td>
<td>688,683.00 507,952.00 1,196,635.00</td>
<td>41,496.00 6.4% 17,624.00 3.6% 59,120.00 5.2%</td>
</tr>
<tr>
<td><strong>TOTAL SALARIES &amp; BENEFITS</strong></td>
<td>2,245,751.00 2,096,805.00 4,342,556.00</td>
<td>2,325,812.00 2,099,758.00 4,425,570.00</td>
<td>80,061.00 3.6% 2,953.00 0.1% 83,014.00 1.9%</td>
</tr>
</tbody>
</table>

### IT - DATA PROCESSING

- **2015-2017 Biennium Approved Budget**: 149,551.00 26,517.00 176,068.00 150,402.00 29,006.00 179,408.00 851.00 0.5% 2,489.00 9.4% 3,340.00 1.9%
- **2017-2019 Biennium Approved Budget**: 139,551.00 26,517.00 176,068.00 150,402.00 29,006.00 179,408.00 851.00 0.5% 2,489.00 9.4% 3,340.00 1.9%

### TOTAL SALARIES & BENEFITS

- **2015-2017 Biennium Approved Budget**: 2,245,751.00 2,096,805.00 4,342,556.00 2,325,812.00 2,099,758.00 4,425,570.00 80,061.00 3.6% 2,953.00 0.1% 83,014.00 1.9%
- **2017-2019 Biennium Approved Budget**: 2,325,812.00 2,099,758.00 4,425,570.00 2,325,812.00 2,099,758.00 4,425,570.00 80,061.00 3.6% 2,953.00 0.1% 83,014.00 1.9%

### Board Travel Budget Guidelines

Our budget includes funding for approximately 13 out of state trips for board members (TFFR and SIB). General rule will be one trip per board member for the biennium. Additional trips may be approved in the second year of the biennium based on budget availability.

### In-State Reimbursement Rates

- Lodging rate is 90% of Federal GSA rate for ND ($93 effective October 1) so rate is $83.70 plus tax. Mileage is linked to Federal GSA rate which is currently $0.535 per mile. In-state meal rates:
  - Breakfast: $7.00; Lunch: $10.50; Dinner: $17.50 (no change from current rates).
BOARD ACCEPTANCE

TO: State Investment Board  
FROM: Dave Hunter  
DATE: September 15, 2017  
SUBJECT: Asset Liability Studies

In accordance with North Dakota Century Code 21-10-11, “The staff and consultants of the state retirement and investment office shall advise the board in developing asset allocation and investment policies.” Furthermore, “The legacy and budget stabilization fund advisory board is created to develop recommendations for the investment of funds in the legacy fund and budget stabilization fund to present to the state investment board.”

Given that the last asset liability study for the Legacy Fund was completed in April of 2013, RIO recommends the SIB accept our Staff recommendation to engage our existing investment consultant, Callan Associates, to conduct a new asset liability study in the upcoming 6-to-9 months. Callan has been instrumental in assisting the SIB and RIO in the implementation of the current asset allocation policy during the past four years. RIO also notes the SIB approved the renewal of the Callan investment consulting contract for the 2017-19 biennium on May 26, 2017. Given that Callan’s contract includes two projects each fiscal year, the Legacy Fund asset liability project may be permitted to count as one of two projects for the fiscal year ended June 30, 2018.

On a side note, RIO notes that other SIB clients may choose to use Callan to conduct their own asset liability studies in the upcoming year including Workforce Safety and Insurance and/or the City of Grand Forks Park District Employee Pension Plan.

RIO respectfully requests the SIB to acknowledge RIO’s recommendation to use Callan for the next asset liability study to be conducted for the Legacy Fund. The Legacy and Budget Stabilization Fund Advisory Board will be requested to approve this recommendation later this year.
Public Funds Can Still Compete

July 2017
Public Funds Can Still Compete: Key Findings

- In past findings, public funds struggled to outperform endowments and foundations (E&Fs), as reported in our paper titled “Can Public Funds Compete?” dated Winter 2003/2004.\(^1\)
- In a study conducted in 2011, we confirmed that public funds can compete with returns above E&Fs.\(^2\)
- An update on this study through 2016 concluded that public funds have continued to outperform E&Fs on average by 100 basis points over the last five years ending December 31, 2016.
- Public funds had larger allocations to public equities—namely U.S. equities versus E&Fs, which has contributed to outperformance.
- Public funds’ preference for private equity versus hedge fund exposure helped boost relative returns.
- Public funds typically have a cost advantage given their size (economies of scale).


\(^2\)Sudhakar Attaluri and Mike Sebastian, “Research Note: Public Funds Can Compete,” June 2012. We excluded corporate funds from this discussion as their framework for investing has changed significantly with the passage of the Pension Protection Act of 2006 (PPA).
Performance Summary

- In a prior research study\(^1\), we confirmed that Public Funds had outperformed E&Fs during the 2003 to 2011 period.

- This research study updates the prior study and concludes that Public Funds have continued to outperform E&Fs by an annualized 1.00% (gross of fees) from 2012 to 2016.
  - Additionally, Public Funds have achieved that outperformance at a lower level of volatility.

- The annualized total return for Public Funds also exceeded the current average public fund actuarial assumed rate of return of 7.5%\(^3\).

<table>
<thead>
<tr>
<th>Annualized Return (Gross of Fees)(^2)</th>
<th>2012-2016 (5 Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Funds</td>
<td>8.47%</td>
</tr>
<tr>
<td>E&amp;Fs</td>
<td>7.47%</td>
</tr>
<tr>
<td>Difference (Public Funds Minus E&amp;Fs)</td>
<td>+1.00%</td>
</tr>
</tbody>
</table>

Past performance is no guarantee of future results.

- While this data reflects gross of fee returns, we see no reason to believe that the cost advantage that existed in prior studies for public funds over E&Fs has changed. Historically the average fees for public funds were approximately 31 basis points less than E&Fs (45 bps average for public funds vs. 76 bps for E&Fs)\(^4\).

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\(^1\) Sudhakar Attaluri and Mike Sebastian, “Research Note: Public Funds Can Compete,” June 2012.

\(^2\) Source: Aon Hewitt/PARiS, a performance reporting program and universe generator from Investment Metrics representing approximately 400 Public Funds and 300 E&Fs.

\(^3\) Source: NASRA Issue Brief Public Pension Plan Investment Return Assumptions Updated February 2017.

\(^4\) Greenwich Associates.
Performance Summary (cont.)

- Public funds have not only outperformed E&Fs, but have achieved that outperformance at a lower level of volatility.
- While public funds have relied heavily on higher volatility public equities, public funds have also consistently held a higher allocation to lower-risk fixed income than E&Fs, which has helped dampen volatility.

Past performance is no guarantee of future results.
Recent Drivers of Relative Performance: Asset Allocation

- Allocations have varied greatly between Public Funds and E&Fs
  - Public Funds have preferred public equities and fixed income whereas E&Fs have preferred more alternatives
  - This has benefited public fund performance over the past five years given the strong returns in public equities during this period

![Percentage Point Differences in Asset Allocation (Public Fund Allocations Minus E&Fs)\(^1\)](image)

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\(^1\) Source: Aon Hewitt/ PARis, a performance reporting program and universe generator from Investment Metrics representing approximately 400 Public Funds and 300 E&Fs.

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Recent Drivers of Relative Performance: Asset Class Structure

- Public funds have allocated less to hedge funds and private equity than E&Fs
- Within these allocations, public funds have relied more heavily on private equity than hedge funds
- Outperformance of private equity over hedge funds has benefited public funds over the past five years

<table>
<thead>
<tr>
<th>Year</th>
<th>Private Equity (Public Funds)</th>
<th>Hedge Funds (Public Funds)</th>
<th>Private Equity (E&amp;Fs)</th>
<th>Hedge Funds (E&amp;Fs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>4.3%</td>
<td>15.2%</td>
<td>0.5%</td>
<td>10.0%</td>
</tr>
<tr>
<td>2011</td>
<td>4.8%</td>
<td>10.4%</td>
<td>2.3%</td>
<td>8.1%</td>
</tr>
<tr>
<td>2016</td>
<td>9.0%</td>
<td>23.7%</td>
<td>4.1%</td>
<td>13.4%</td>
</tr>
</tbody>
</table>

Looking Forward: Tools for Navigating the Current Market

Diversification
Ensure diversification across risk premiums, investment strategies, lock-up structures, and vehicles

Active Risk
Carefully consider optimal places to take active risk. Active risk should be taken when risk tolerance exists and where there is a strong probability for earning alpha

Market Dislocations
Take advantage of short-term market dislocations (recent examples: TARP, PIMCO BRAVO, energy)

Illiquidity
Determine the fund’s tolerance for illiquidity given liabilities and cash flow positioning

Medium Term Views
Medium term views (1–3 year views of capital markets) can impact rebalancing activity, investing contributions, tilting the portfolio, etc.
Looking to the Future: Identifying Competitive Advantages

**Governance Structure**
- Board delegation of investment decisions to the Fund’s Staff increases the ability to be nimble and opportunistic

**Investment Team Expertise**
- Access to internal and external resources and expertise
- Ability to hire specific asset class/strategy expertise

**Board/Committee Expertise**
- Stakeholders may have specific expertise that can be an advantage
- Education may be required in a particular area

**Fund Size**
- Larger funds have more access but maybe less nimble
- Niche strategy funds may be too small for larger funds
- Small funds can be more nimble but may miss out on the best managers

**Time Horizon**
- Long time horizons allow for higher levels of illiquidity and more risk
- Shorter time horizons (low funded status & high negative net cash flow), limit ability to take risk & illiquidity
Public funds can compete.

And they will continue to compete with other institutional investment programs like endowments and foundations.

Public funds have unique, competitive advantages that enable them to use different tools for navigating a difficult, complex, and challenging future market environment.
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