



# ND STATE INVESTMENT BOARD MEETING

Friday, January 25, 2019, 8:30 a.m.  
Workforce Safety & Insurance  
1600 E Century Avenue, Bismarck, ND

## AGENDA

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

**II. ACCEPTANCE OF MINUTES (November 16, 2018)**

**III. INVESTMENTS & GOVERNANCE** (enclosed unless otherwise noted)

- A. Asset and Performance Overview - Mr. Hunter *Informational* (10 minutes)
- B. Annual Technology Report - Mr. Nagel *Informational* (10 minutes)
- C. 2019-20 Board Meeting Schedule - Mr. Hunter **Board Action** (10 minutes)
- D. Legacy Fund Review - Mr. Hunter *Informational* (10 minutes)
- E. RIO Employee Survey Results - Mr. Hunter *Informational* (10 minutes)
- F. Ongoing Investment Due Diligence Report - Mr. Schulz *Informational* (10 minutes)
- G. SIB Audit Committee Charter & Internal Audit Division Charter - Ms. Sauter **Board Action** (10 minutes)
- H. Legislative Update / RIO Budget Update - Mr. Hunter *Informational* (15 minutes) *(to follow)*

**IV. QUARTERLY MONITORING** (enclosed) (5 min) **Board Acceptance**

- A. Budget and Financial Condition - Mr. Hunter
- B. Executive Limitations / Staff Relations - Mr. Hunter
- C. Investment Program - Mr. Schulz
- D. Retirement Program - Ms. Kopp

**V. OTHER**

Next Meetings: SIB Securities Litigation - February 14, 2019, 3:00 pm - RIO Conference Room  
SIB Audit Committee - February 21, 2019, 3:00 pm - RIO Conference Room  
SIB meeting - February 22, 2019, 8:30 a.m. - Workforce Safety & Insurance

**VI. ADJOURNMENT**

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*An individual who requires an auxiliary aid or service may contact the Retirement and Investment Office at 701-328-9885 at least three (3) days prior to the scheduled meeting.*

**NORTH DAKOTA STATE INVESTMENT BOARD  
MINUTES OF THE  
NOVEMBER 16, 2018, BOARD MEETING**

**MEMBERS PRESENT:** Brent Sanford, Lt. Governor, Chair  
Rob Lech, TFFR Board, Vice Chair  
Troy Seibel, PERS Board, Parliamentarian  
Toni Gumeringer, TFFR Board  
Adam Miller, PERS Board  
Mel Olson, TFFR Board  
Kelly Schmidt, State Treasurer  
Jodi Smith, Commissioner of Trust Lands  
Yvonne Smith, PERS Board  
Cindy Ternes, WSI Designee

**MEMBERS ABSENT:** Jon Godfread, Insurance Commissioner

**STAFF PRESENT:** Eric Chin, Senior Investment Officer  
Connie Flanagan, Chief Financial Officer  
Bonnie Heit, Admin Svs Suprv  
David Hunter, ED/CIO  
Fay Kopp, Dep ED/CRO  
Sara Sauter, Audit Svs Suprv  
Cody Schmidt, Compliance Officer  
Darren Schulz, Dep CIO  
Susan Walcker, Investment Accountant

**OTHERS PRESENT:** Brian Barnett, APT, Inc.  
Alex Browning, Callan LLC  
Jeff Engleson, Dept. of Trust Lands  
Paul Erlendson, Callan LLC  
Paul Michaels, Invesco  
Anders Odegaard, Attorney General's Office  
Bryan Reinhardt, PERS  
Max Swango, Invesco  
Inga Sweet, Callan LLC

**CALL TO ORDER:**

Lt. Governor Sanford, Chair, called the State Investment Board (SIB) regular meeting to order at 8:35 a.m. on Friday, November 16, 2018, in the Peace Garden Room, at the State Capitol, Bismarck, ND.

**AGENDA:**

**IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY DR. LECH AND CARRIED BY A VOICE VOTE TO ACCEPT THE AGENDA FOR THE NOVEMBER 16, 2018, MEETING.**

**AYES: COMMISSIONER SMITH, TREASURER SCHMIDT, MR. MILLER, MR. OLSON, MS. TERNES, MS. GUMERINGER, MR. SEIBEL, DR. LECH, MS. SMITH, AND LT. GOVERNOR SANFORD**

**NAYS: NONE**

**MOTION CARRIED**

**ABSENT: COMMISSIONER GODFREAD**

MINUTES:

IT WAS MOVED BY MR. OLSON AND SECONDED BY MS. SMITH AND CARRIED BY A VOICE VOTE TO ACCEPT THE MINUTES OF THE OCTOBER 26, 2018, MEETING AS DISTRIBUTED.

AYES: MS. GUMERINGER, COMMISSIONER SMITH, MS. SMITH, MS. TERNES, TREASURER SCHMIDT, DR. LECH, MR. OLSON, MR. SEIBEL, MR. MILLER, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

GOVERNANCE:

Audit Committee - Ms. Sara Sauter, Supervisor of Audit Services, updated the SIB on the activities of the SIB Audit Committee since their November 15, 2018, meeting.

CliftonLarsonAllen presented the results of the June 30, 2018, financial audit of RIO and also an update on the GASB 68 Schedule Audit. Mr. Hunter provided an educational segment on 1) regular monitoring of SIB client "Investment Ends"; and 2) the investment manager due diligence process. Ms. Sauter also provided an activities report for the period of July 1, 2018 - September 30, 2018.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MS. SMITH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE SIB AUDIT COMMITTEE REPORT.

AYES: MR. OLSON, MR. SEIBEL, COMMISSIONER SMITH, MS. GUMERINGER, MS. SMITH, MR. MILLER, TREASURER SCHMIDT, MS. TERNES, DR. LECH, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

Mr. Hunter stated the Internal Audit Division of RIO has been working on implementing a new work plan which was approved by the SIB Audit Committee at their September 27, 2018, meeting. As a result of this year's risk assessment conducted by Ms. Sauter, the Internal Audit Division of RIO is transitioning from a 95/5 split of time allocated between the Teachers' Fund for Retirement program and the State Investment Board program respectively to a 50/50 split.

Mr. Hunter also reviewed the financial audit of RIO for the period ending June 30, 2018. Mr. Hunter stated the report is about as clean as you can get and reflects the great work done by Ms. Flanagan and the fiscal division as well as the entire staff at RIO.

IT WAS MOVED BY MS. TERNES AND SECONDED BY DR. LECH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE JUNE 30, 2018, FINANCIAL AUDIT OF RIO.

AYES: TREASURER SCHMIDT, MR. GUMERINGER, MS. TERNES, COMMISSIONER SMITH, MS. SMITH, DR. LECH, MR. MILLER, MR. SEIBEL, MR. OLSON, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

Securities Litigation - Mr. Hunter updated the SIB on the activities of the Securities Litigation Committee since their November 5, 2018, meeting. Mr. Hunter stated the Securities Litigation Committee had met with several law firms considered to be leading experts in the securities litigation field. The Securities Litigation Committee has identified three firms the SIB could utilize if future legal representation would be needed: Bernstein Litowitz Berger & Grossman; Labaton Sucharow; and Grant & Eisenhower.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MS. SMITH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE SECURITIES LITIGATION REPORT.

AYES: MR. SMITH, MR. MILLER, MR. OLSON, MS. GUMERINGER, DR. LECH, MR. SEIBEL, MS. TERNES, COMMISSIONER SMITH, TREASURER SCHMIDT, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

**INVESTMENTS:**

Asset/Performance Overview - Mr. Hunter highlighted assets and performance of the SIB portfolios for the period ending September 30, 2018. SIB client investments approached \$14.2 billion as of September 30, 2018, with the Pension Trust exceeding \$5.8 billion, Insurance Trust approaching \$2.2 billion, and Legacy Fund approaching \$5.9 billion.

The Pension Trust posted a net return of 7.7% in the last year. During the last 5-years, the Pension Trust generated a net annualized return of 7.8%, exceeding the performance benchmark of 7.0%.

The Insurance Trust generated a net return of 4.1% in the last year. During the last 5-years, the Insurance Trust posted a net annualized return of 5.2%, exceeding the performance benchmark of 3.9%.

Legacy Fund generated a net return of 6.0% last year, exceeding its policy benchmark. During the last 5-years, Legacy Fund earned a net annualized return of 6.3%, exceeding the performance benchmark of 5.4%.

RIO investment personnel conservatively estimate the SIB use of active management enhanced client returns by \$300 million for the 5-years ended September 30, 2018.

If SIB managers outperform their benchmark by 0.01% (or one basis point), after all fees & expenses, client returns improve by \$1.4 million per year (e.g. \$14 billion x 0.01% = \$1.4 million).

RIO's internal costs for administering their external investments is less than one basis point or 0.01% per year.

Every Pension Trust client posted positive excess returns of at least 0.50% per annum over the last 5-years, while adhering to approved risk levels and generating positive risk adjusted excess return for six of their seven pension clients (over the last five years).

Every Non-Pension Trust client generated positive excess returns of at least 0.60% per annum and positive risk adjusted excess returns for the 5-years ended June 30, 2018, with two exceptions for PERS Retiree Health Insurance Credit Fund (-0.09%) and PERS Group Insurance (-0.06%).

IT WAS MOVED BY MR. OLSON AND SECONDED BY MRS. GUMERINGER AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE ASSET AND PERFORMANCE REVIEW FOR THE PERIOD ENDING SEPTEMBER 30, 2018.

AYES: TREASURER SCHMIDT, MR. SEIBEL, MR. OLSON, COMMISSIONER SMITH, DR. LECH, MR. MILLER, MS. GUMERINGER, MS. SMITH, MS. TERNES, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

Real Estate - Mr. Schulz reviewed the Pension Trust real estate portfolio. The Pension Trust real estate portfolio is currently under-allocated in the non-core real estate sector within the Pension Trust by approximately \$140 million. The Pension Trust has been invested in four prior value-added real estate investment funds with Invesco over the past decade.

Invesco representatives, Mr. Michaels and Mr. Swango, provided an overview of Invesco, current SIB mandates managed by the firm, and also introduced the U.S. value-added Fund V for the SIB's consideration.

Mr. Schulz recommended a \$70 million commitment to Invesco's Value Added Fund V.

After discussion,

**IT WAS MOVED BY DR. LECH AND SECONDED BY MS. TERNES AND CARRIED BY A ROLL CALL VOTE TO COMMIT \$70 MILLION TO INVESCO'S VALUE ADDED FUND V SUBJECT TO SATISFACTORY LEGAL REVIEW AND NEGOTIATION.**

**AYES: MS. TERNES, MR. OLSON, TREASURER SCHMIDT, COMMISSIONER SMITH, MR. SEIBEL, DR. LECH, MR. MILLER, MS. SMITH, MS. GUMERINGER, AND LT. GOVERNOR SANFORD**

**NAYS: NONE**

**MOTION CARRIED**

**ABSENT: COMMISSIONER GODFREAD**

The Board recessed at 9:43 a.m. and reconvened at 10:06 a.m.

Callan LLC - Ms. Sweet updated the board on the organizational structure of Callan and also on succession and strategic planning.

Mr. Erlendson reviewed US and Foreign markets and the investment performance of the Pension Trust, Insurance Trust, and Legacy Fund for the quarter ending September 30, 2018. After the review,

**IT WAS MOVED BY MS. TERNES AND SECONDED BY DR. LECH AND CARRIED BY A VOICE VOTE TO ACCEPT CALLAN'S INVESTMENT PERFORMANCE REVIEW FOR THE PERIOD ENDING SEPTEMBER 30, 2018.**

**AYES: MS. TERNES, MR. OLSON, MR. MILLER, TREASURER SCHMIDT, MS. GUMERINGER, MS. SMITH, COMMISSIONER SMITH, DR. LECH, MR. SEIBEL, AND LT. GOVERNOR SANFORD**

**NAYS: NONE**

**MOTION CARRIED**

**ABSENT: COMMISSIONER GODFREAD**

Callan LLC Fee Study - Mr. Browning reviewed results of Callan's fee study for the fiscal year ending June 30, 2018. RIO investment personnel believe the investment expenses are reasonable overall and that management fees have been trending downward on a % basis since fiscal year 2013. The return on investment fees has been positive and exceeded 50 bps per annum (or \$300 million in aggregate) over the last five years. The SIB has been successful in prudently using active management to generate positive risk adjusted rates of return while significantly reducing fee levels for nearly all of their clients.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MS. SMITH AND CARRIED BY A VOICE VOTE TO ACCEPT THE CALLAN FEE STUDY RESULTS FOR THE FISCAL YEAR ENDING JUNE 30, 2018.

AYES: DR. LECH, TREASURER SCHMIDT, MR. OLSON, COMMISSIONER SMITH, MR. SEIBEL, MR. MILLER, MS. GUMERINGER, MS. SMITH, MS. TERNES, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIOENR GODFREAD

Legacy Fund Earnings - Mr. Hunter provided a Legacy Fund earnings estimate for the remaining 2017-19 and upcoming 2019-21 biennia. NDCC 21-10-12 defines earnings as net income in accordance with generally accepted accounting principles, excluding any unrealized gains or losses. The definition of earnings is materially different than net investment return which includes both unrealized and realized gains and losses. The Legacy Fund generated over \$1.2 billion of net investment earnings since inception, as of September 30, 2018, whereas earnings as defined in accordance with NDCC 21-10-12 exceeded \$700 million during the same time period. RIO investment personnel, as of August 8, 2018, raised the transferrable earnings estimate for the Legacy Fund from \$300 million to \$350 million based on the expected strength and resiliency of the capital markets over the next year. However, in light of recently increasing downward price volatility in the capital markets, RIO investment personnel is reducing its' current transferrable earnings estimate back to \$300 million for the 2017-19 biennium while holding its' transferrable earnings estimate at \$300 million for the 2019-21 biennium. The \$300 million transferrable earnings estimate for the 2019-21 biennia is based on the Office of Management and Budget's (OMB) latest forecasted oil and gas tax deposits causing average Legacy Fund investments to approximate \$7.5 billion in the 2019-21 biennia while continuing to use the 2% average earnings rate ( $\$7.5 \text{ billion} \times 2\% \text{ earnings rate} = \$150 \text{ million} \times 2 \text{ years} = \$300 \text{ million}$ ).

New Client - Mr. Hunter informed the board, RIO investment personnel were approached by the State Historical Society of North Dakota (SHS) inquiring about investment management services for their Endowment Funds which total over \$640,000. Mr. Hunter requested authorization to continue to work with the SHS to determine if they would be a viable client for the SIB.

IT WAS MOVED BY MR. OLSON AND SECONDED BY MS. GUMERINGER AND CARRIED BY A VOICE VOTE TO DIRECT STAFF TO CONTINUE WITH THE PROCESS OF DETERMINING WHETHER THE SHS WOULD BE AN APPROPRIATE CLIENT FOR THE SIB.

AYES: MS. TERNES, COMMISSIONER SMITH, MS. GUMERINGER, MS. SMITH, MR. SEIBEL, MR. MILLER, DR. LECH, MR. OLSON, TREASURER SCHMDIT, AND LT. GOVERNOR SANFORD

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

**OTHER:**

A meeting has been tentatively scheduled for the SIB on December 21, 2018, at 8:30 a.m. at the Retirement and Investment Office to address, if need be, any business prior to the start of the legislative session.

The next meeting of the SIB for regular business has been scheduled for January 25, 2019, at 8:30 a.m. at Workforce Safety & Insurance, 1600 E Century Ave.

The next meeting of the Securities Litigation Committee meeting is scheduled for February 14, 2019, at 3:00 p.m. at the Retirement and Investment Office.

The next meeting of the SIB Audit Committee is scheduled for February 21, 2019, at 3:00 p.m. at the Retirement and Investment Office.

**ADJOURNMENT:**

With no further business to come before the SIB, Lt. Governor Sanford adjourned the meeting at 11:52 a.m.

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Lt. Governor Sanford, Chair  
State Investment Board

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Bonnie Heit  
Recorder

**Informational**

# **Asset and Performance Overview**

## **Interim Update**

January 18, 2019

Dave Hunter, Executive Director / CIO

Darren Schulz, Deputy Chief Investment Officer

Connie Flanagan, Chief Financial Officer

Eric Chin, Senior Investment Analyst

ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

# State Investment Board – Client Assets Under Management

Fund Name	Market Values as of 11/30/18 <sup>(1)</sup>	Market Values as of 9/30/18 <sup>(1)</sup>	Market Values as of 6/30/18 <sup>(2)</sup>
<b>Pension Trust Fund</b>			
Public Employees Retirement System (PERS)	2,963,975,311	3,087,115,472	3,024,222,995
Teachers' Fund for Retirement (TFFR)	2,420,114,305	2,526,452,653	2,485,835,306
City of Bismarck Employees Pension	97,918,151	100,990,920	99,177,507
City of Grand Forks Employees Pension	63,635,519	67,199,301	63,633,206
City of Bismarck Police Pension	39,552,163	40,888,393	40,106,249
Grand Forks Park District	6,716,738	7,013,895	6,772,657
<b>Subtotal Pension Trust Fund</b>	<b>5,591,912,187</b>	<b>5,829,660,634</b>	<b>5,719,747,919</b>
<b>Insurance Trust Fund</b>			
Workforce Safety & Insurance (WSI)	1,883,403,124	1,933,569,800	1,923,117,660
Budget Stabilization Fund	114,461,578	114,023,036	113,603,777
City of Fargo FargoDome Permanent Fund	42,594,784	45,665,193	44,629,288
PERS Group Insurance Account	32,329,024	29,257,455	31,610,707
State Fire and Tornado Fund	22,633,302	23,646,363	23,066,784
Petroleum Tank Release Compensation Fund	6,186,592	6,200,882	6,167,272
ND Association of Counties (NDACo) Fund	5,846,080	6,031,900	5,910,661
State Risk Management Fund	4,553,198	4,663,817	4,956,217
State Risk Management Workers Comp Fund	3,597,772	3,699,994	5,356,549
State Bonding Fund	3,419,780	3,429,976	3,411,215
ND Board of Medicine	2,247,701	2,279,087	2,251,119
Insurance Regulatory Trust Fund	1,206,840	1,101,023	5,637,791
Bismarck Deferred Sick Leave Account	721,786	742,505	730,026
Lewis & Clark Interpretive Center Endowment Fund	692,611	716,108	
Cultural Endowment Fund	444,042	462,684	448,825
<b>Subtotal Insurance Trust Fund</b>	<b>2,124,338,214</b>	<b>2,175,489,823</b>	<b>2,170,897,891</b>
<b>Legacy Trust Fund</b>			
Legacy Fund	5,765,157,670	5,886,115,867	5,577,319,109
PERS Retiree Insurance Credit Fund	124,450,806	130,443,712	126,605,207
Job Service of North Dakota Pension	95,280,203	96,681,300	95,690,469
ND Tobacco Prevention and Control Trust Fund	48,578,910	48,864,750	54,365,162
<b>Total Assets Under SIB Management</b>	<b>13,749,717,990</b>	<b>14,167,256,086</b>	<b>13,744,625,757</b>

<sup>(1)</sup> Market values are unaudited and subject to change.

<sup>(2)</sup> 6/30/18 market values as stated in the Comprehensive Annual Financial Report.

## Interim Update as of November 30, 2018:

- ▶ **SIB client investments declined to \$13.75 billion as of November 30, 2018**, with the Pension Trust declining by \$238 million, Insurance Trust declining by \$51 million and Legacy declining by \$121 million since 9/30/2018.
- ▶ **The Pension Trust posted a preliminary net investment loss of -1.3% for the 5 months ended 11/30/2018.**
- ▶ **The Insurance Trust generated a preliminary net loss of -0.64% for the 5 months ended 11/30/2018.**
- ▶ **Legacy Fund experienced a preliminary net investment loss of -2.21% for the 5 months ended 11/30/2018.**

## Preliminary Return Estimates as of December 31, 2018:

- ▶ **The S&P 500 fell 9% in December and 13.5% in the 4<sup>th</sup> quarter of 2018** as investment volatility spiked due to growing geopolitical risk in the U.S. and abroad (despite generally strong economic fundamentals in the US).
- ▶ **RIO estimates that net investment returns for the Legacy Fund, PERS and TFFR will approximate -5% for the six months ended 12/31/2018.**
- ▶ **WSI is estimated to generate a net investment loss of -1.5% for the six months ended 12/31/2018**, while the Budget Stabilization Fund is estimated to earn a net investment gain of +1.5% for this same period.
- ▶ **Callan & RIO will provide an investment performance update at our next SIB meeting on Feb. 22, 2018.**

# The Callan Periodic Table of Investment Returns

Annual Returns for Key Indices Ranked in Order of Performance (1999–2018)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Non-U.S. Equity	Real Estate	U.S. Fixed Income	Non-U.S. Fixed Income	Emerging Market Equity	Real Estate	Emerging Market Equity	Real Estate	Emerging Market Equity	U.S. Fixed Income	Emerging Market Equity	Small Cap Equity	U.S. Fixed Income	Real Estate	Small Cap Equity	Real Estate	Large Cap Equity	Small Cap Equity	Emerging Market Equity	Cash Equivalent
27.92%	13.84%	8.43%	22.37%	55.82%	37.96%	34.00%	42.12%	39.38%	5.24%	78.51%	26.85%	7.84%	27.73%	38.82%	15.02%	1.38%	21.31%	37.28%	1.87%
Small Cap Equity	U.S. Fixed Income	High Yield	U.S. Fixed Income	Small Cap Equity	Emerging Market Equity	Real Estate	Emerging Market Equity	Non-U.S. Equity	Non-U.S. Fixed Income	High Yield	Real Estate	High Yield	Emerging Market Equity	Large Cap Equity	Large Cap Equity	U.S. Fixed Income	High Yield	Non-U.S. Equity	U.S. Fixed Income
21.26%	11.63%	5.28%	10.26%	47.25%	25.55%	15.35%	32.17%	12.44%	4.39%	58.21%	19.63%	4.98%	18.23%	32.39%	13.69%	0.55%	17.13%	24.21%	0.01%
Large Cap Equity	Cash Equivalent	Cash Equivalent	Real Estate	Real Estate	Non-U.S. Equity	Non-U.S. Equity	Non-U.S. Equity	Non-U.S. Fixed Income	Cash Equivalent	Real Estate	Emerging Market Equity	Non-U.S. Fixed Income	Non-U.S. Equity	Non-U.S. Equity	U.S. Fixed Income	Cash Equivalent	Large Cap Equity	Large Cap Equity	High Yield
21.04%	6.18%	4.42%	2.82%	40.69%	20.38%	14.47%	25.71%	11.03%	2.06%	37.13%	18.88%	4.36%	16.41%	21.02%	5.97%	0.05%	11.96%	21.83%	-2.08%
Real Estate	Small Cap Equity	Small Cap Equity	Cash Equivalent	Non-U.S. Equity	Small Cap Equity	Large Cap Equity	Small Cap Equity	U.S. Fixed Income	High Yield	Non-U.S. Equity	High Yield	Large Cap Equity	Small Cap Equity	High Yield	Small Cap Equity	Real Estate	Emerging Market Equity	Small Cap Equity	Non-U.S. Fixed Income
8.87%	-3.02%	2.49%	1.78%	39.42%	18.33%	4.91%	18.37%	6.97%	-26.16%	33.67%	15.12%	2.11%	16.35%	7.44%	4.89%	-0.79%	11.19%	14.65%	-2.15%
Cash Equivalent	Non-U.S. Fixed Income	Emerging Market Equity	High Yield	High Yield	Non-U.S. Fixed Income	Small Cap Equity	Large Cap Equity	Large Cap Equity	Small Cap Equity	Small Cap Equity	Large Cap Equity	Cash Equivalent	Large Cap Equity	Real Estate	High Yield	Non-U.S. Equity	Real Estate	Non-U.S. Fixed Income	Large Cap Equity
4.85%	-3.91%	-2.61%	-1.37%	28.97%	12.54%	4.55%	15.79%	5.49%	-33.79%	27.17%	15.06%	0.10%	16.00%	3.67%	2.45%	-3.04%	4.06%	10.51%	-4.38%
High Yield	High Yield	Non-U.S. Fixed Income	Emerging Market Equity	Large Cap Equity	High Yield	Cash Equivalent	High Yield	Cash Equivalent	Large Cap Equity	Large Cap Equity	Non-U.S. Equity	Small Cap Equity	High Yield	Cash Equivalent	Cash Equivalent	Small Cap Equity	Non-U.S. Equity	Real Estate	Real Estate
2.39%	-5.86%	-3.75%	-6.16%	28.68%	11.13%	3.07%	11.85%	5.00%	-37.00%	26.47%	8.95%	-4.18%	15.81%	0.07%	0.03%	-4.41%	2.75%	10.36%	-5.63%
U.S. Fixed Income	Large Cap Equity	Real Estate	Non-U.S. Equity	Non-U.S. Fixed Income	Large Cap Equity	High Yield	Non-U.S. Fixed Income	High Yield	Non-U.S. Equity	Non-U.S. Fixed Income	U.S. Fixed Income	Real Estate	U.S. Fixed Income	U.S. Fixed Income	Emerging Market Equity	High Yield	U.S. Fixed Income	High Yield	Small Cap Equity
-0.83%	-9.11%	-3.81%	-15.80%	19.36%	10.88%	2.74%	8.16%	1.87%	-43.56%	7.53%	6.54%	-6.46%	4.21%	-2.02%	-2.19%	-4.47%	2.65%	7.50%	-11.01%
Non-U.S. Fixed Income	Non-U.S. Equity	Large Cap Equity	Small Cap Equity	U.S. Fixed Income	U.S. Fixed Income	U.S. Fixed Income	Cash Equivalent	Small Cap Equity	Real Estate	U.S. Fixed Income	Non-U.S. Fixed Income	Non-U.S. Equity	Non-U.S. Fixed Income	Emerging Market Equity	Non-U.S. Fixed Income	Non-U.S. Fixed Income	Non-U.S. Fixed Income	U.S. Fixed Income	Non-U.S. Equity
-8.83%	-13.37%	-11.89%	-20.48%	4.10%	4.34%	2.43%	4.85%	-1.57%	-48.21%	5.93%	4.95%	-12.21%	4.09%	-2.60%	-3.09%	-6.02%	1.49%	3.54%	-14.09%
	Non-U.S. Equity	Large Cap Equity	Cash Equivalent	Cash Equivalent	Non-U.S. Fixed Income	U.S. Fixed Income	Real Estate	Emerging Market Equity	Cash Equivalent	Cash Equivalent	Emerging Market Equity	Cash Equivalent	Cash Equivalent	Non-U.S. Fixed Income	Non-U.S. Equity	Emerging Market Equity	Cash Equivalent	Cash Equivalent	Emerging Market Equity
	-21.40%	-22.10%	1.15%	1.33%	-8.65%	4.33%	-7.39%	-53.33%	0.21%	0.13%	-18.42%	0.11%	-3.08%	-4.32%	-14.92%	0.33%	0.86%		-14.58%

The Callan Periodic Table of Investment Returns conveys the strong *case for diversification* across asset classes (stocks vs. bonds), capitalizations (large vs. small), and equity markets (U.S. vs. non-U.S.). The Table highlights the uncertainty inherent in all capital markets. Rankings change every year. Also noteworthy is the difference between absolute and relative performance, as returns for the top-performing asset class span a wide range over the past 20 years.



# The Callan Periodic Table of Investment Returns 1999–2018

Callan's Periodic Table of Investment Returns depicts annual returns for 8 asset classes, ranked from best to worst performance for each calendar year. The asset classes are color-coded to enable easy tracking over time. We describe the well-known, industry-standard market indices that we use as proxies for each asset class in the text below.

- **Large Cap Equity (S&P 500)** measures the performance of large capitalization U.S. stocks. The S&P 500 is a market-value-weighted index of 500 stocks. The weightings make each company's influence on the Index performance directly proportional to that company's market value.
- **Small Cap Equity (Russell 2000)** measures the performance of small capitalization U.S. stocks. The Russell 2000 is a market-value-weighted index of the 2,000 smallest stocks in the broad-market Russell 3000 Index.
- **Non-U.S. Equity (MSCI World ex USA)** is an international index that is designed to measure the performance of large and mid cap equities in developed markets in Europe, the Middle East, the Pacific region, and Canada.
- **Emerging Market Equity (MSCI Emerging Markets)** is an international index that is designed to measure the performance of equity markets in 24 emerging countries around the world.
- **U.S. Fixed Income (Bloomberg Barclays US Aggregate Bond Index)** includes U.S. government, corporate, and mortgage-backed securities with maturities of at least one year.
- **High Yield (Bloomberg Barclays High Yield Bond Index)** measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt.
- **Non-U.S. Fixed Income (Bloomberg Barclays Global Aggregate ex US Bond Index)** is an unmanaged index that is comprised of several other Bloomberg Barclays indices that measure the fixed income performance of regions around the world, excluding the U.S.
- **Real Estate (FTSE EPRA/NAREIT Developed REIT Index)** is designed to measure the stock performance of companies engaged in specific real estate activities in the North American, European, and Asian real estate markets.
- **Cash Equivalent (3-month Treasury Bill)** is a short-term debt obligation backed by the Treasury Department of the U.S. government with a maturity of less than one year.

## Callan's Periodic Table Marks a Milestone in Its History

For the first time in the history of Callan's Periodic Table of Investment Returns, stretching back to 1979, the best-performing asset class in 2018 returned essentially zero! It is an unusual year when virtually all broad asset classes post negative returns. Rising interest rates hit fixed income, while a sell-off in the fourth quarter dinged equity returns around the globe. Cash—the risk-free alternative—was positive, up 1.87%. A selection of bond market segments (government bonds, mortgages, asset-backed securities, and municipal bonds) generated positive returns, but the broad fixed income market returned 0.01%. Volatility returned to the global equity markets in 2018, following several years of below-average readings during which the return to U.S. equity trended up strongly. This recent volatility, which is not remarkable from a historical standpoint, could well be a harbinger of 2019 market performance given a wide array of economic, political, and market-related uncertainties that are currently vexing investors. Callan has long advised clients that adherence to an appropriate and well-defined asset allocation (including periodic rebalancing!) remains the best course of action to manage the path to successful attainment of long-term investment goals.

## Callan

Callan was founded as an employee-owned investment consulting firm in 1973. Ever since, we have empowered institutional clients with creative, customized investment solutions backed by proprietary research, exclusive data, and ongoing education. Today, Callan advises on more than \$2 trillion in total fund sponsor assets, which makes it among the largest independently owned investment consulting firms in the U.S. We use a client-focused consulting model to serve pension and defined contribution plan sponsors, endowments, foundations, independent investment advisers, investment managers, and other asset owners. Callan has six offices throughout the U.S. Learn more at [www.callan.com](http://www.callan.com).

### Corporate Headquarters

San Francisco 800.227.3288

### Regional Consulting Offices

Atlanta 800.522.9782

Chicago 800.999.3536

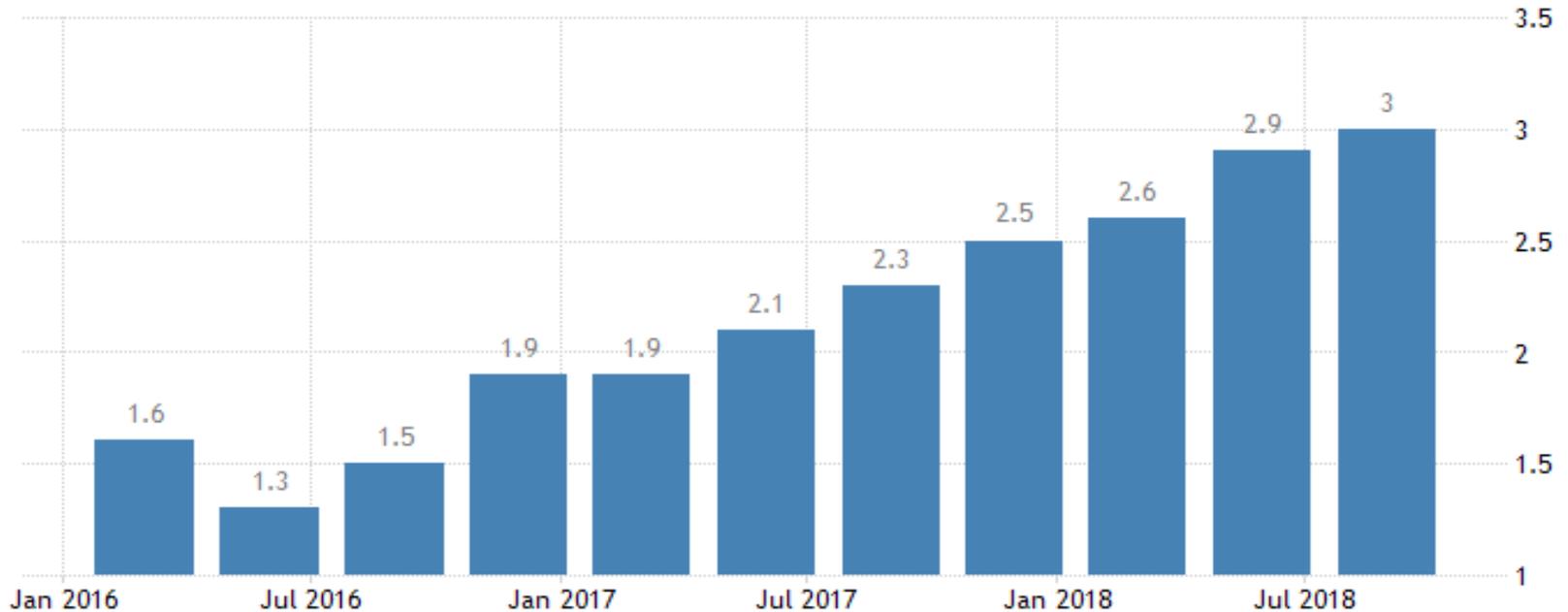
Denver 855.864.3377

Portland, OR 800.227.3288

Summit, NJ 800.274.5878

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# U.S. Economy – Annual GDP Growth Rates



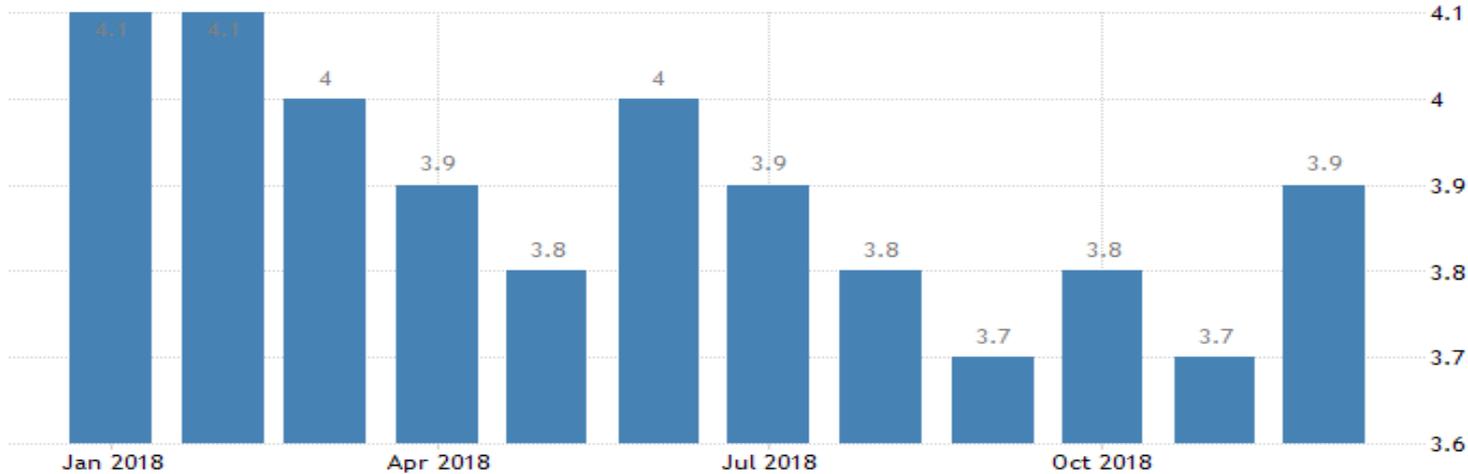
SOURCE: TRADINGECONOMICS.COM | U.S. BUREAU OF ECONOMIC ANALYSIS

## US GDP Growth Rates:

The US economy expanded at an annual growth rate of 3.0% in the 3rd quarter of 2018 increasing from 2.6% for the 1<sup>st</sup> quarter of 2018 and up from 2.9% in the 2<sup>nd</sup> quarter of 2018. The United States is the world's largest economy. Yet, like in the case of many other developed nations, U.S. growth rates have generally been declining in the last two decades. GDP annual growth rates in the U.S. averaged 3.2% from 1948 until 2017, reaching an all-time high of 13.4% in the 4<sup>th</sup> quarter of 1950 and a record low of -3.9% in the 2<sup>nd</sup> quarter of 2009.

*Last updated in July of 2018.*

# U.S. Unemployment Rates



SOURCE: TRADINGECONOMICS.COM | U.S. BUREAU OF LABOR STATISTICS

The US unemployment rate increased to 3.9% in November of 2018, up from the previous month's 49-year low and above market expectations of 3.7%.

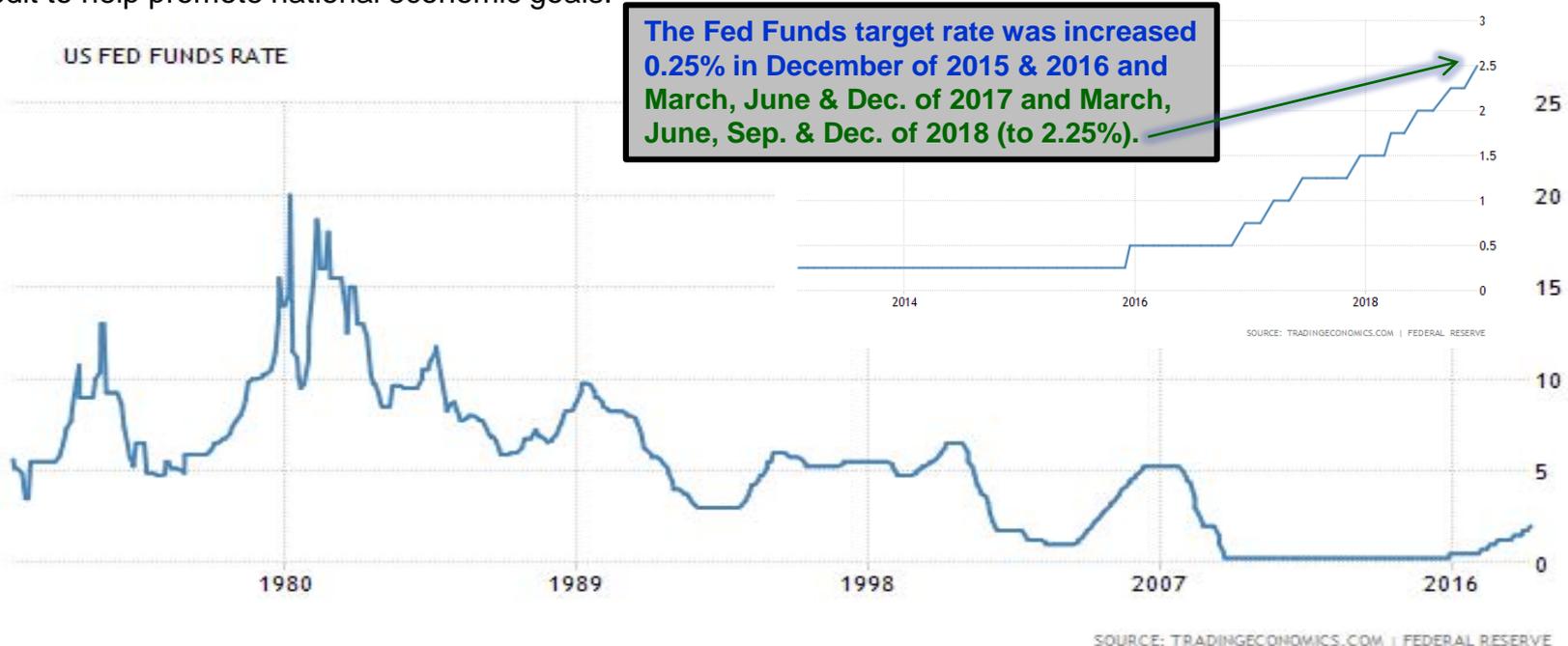


SOURCE: TRADINGECONOMICS.COM | U.S. BUREAU OF LABOR STATISTICS

Unemployment Rates in the United States averaged 5.8% from 1948 until 2018, reaching an all time high of 10.8% in November of 1982 and a record low of 2.5% in May of 1953.

# U.S. Fed Funds Rate (1971 to 2018)

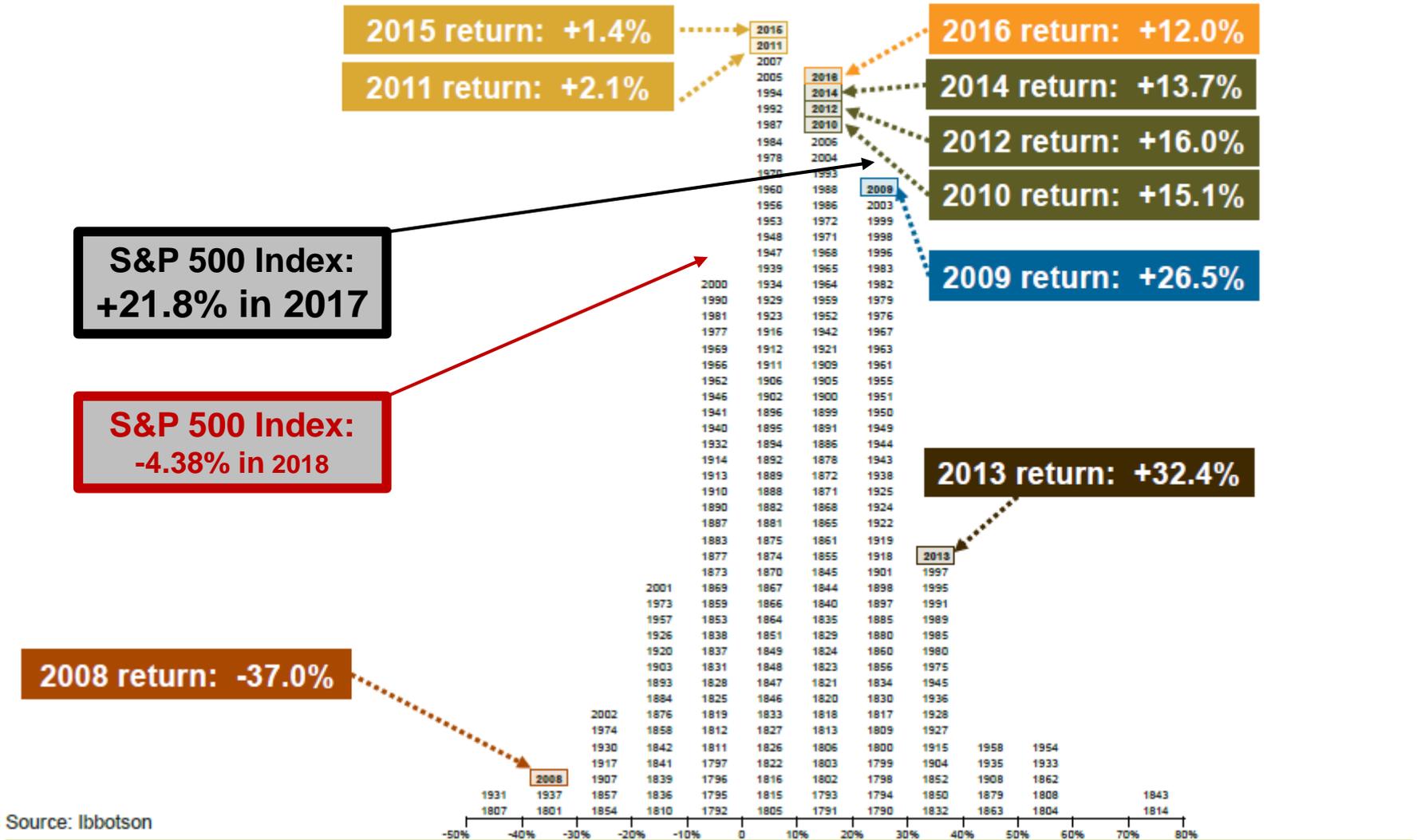
**Background:** The **federal funds rate** is the interest rate at which banks lend reserve balances to other banks overnight (on an uncollateralized basis). Banks with surplus balances lend to those in need of larger balances. Reserve balances are held at the Federal Reserve to maintain the banks' reserve requirements. **Changes in the federal funds rate trigger a chain of events that affect other short-term interest rates**, foreign exchange rates, long-term interest rates, the amount of money and credit, and, ultimately, a range of economic variables, including employment, output, and prices of goods and services. The Federal Reserve uses "monetary policy" to influence the availability and cost of money and credit to help promote national economic goals.



The Federal Reserve raised the target federal funds rate four (4) times in 2018, three (3) times in 2017 and once each in December of 2016 and 2015. Interest Rates in the United States averaged 5.8% from 1971 until 2017, reaching an all time high of 20% percent in March of 1980 and a record low of 0.25% in December of 2008. The current Fed Funds Target Rate is 2.50% at January 18, 2019.

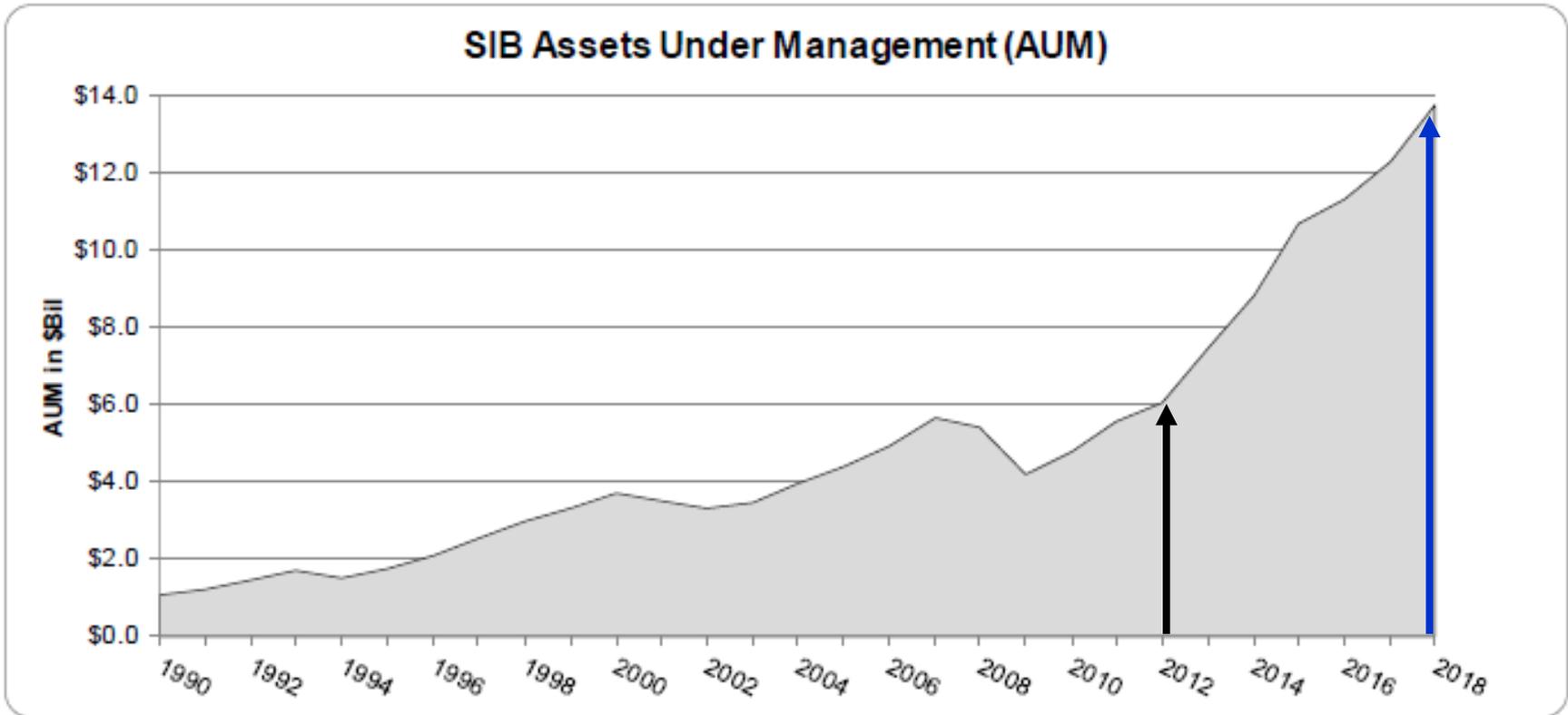
# Stock Market Returns by Calendar Year

2016 Performance in Perspective: History of the U.S. Stock Market (228 Years of Returns)



Source: Ibbotson

# SIB Client Investments Have Doubled since 2012

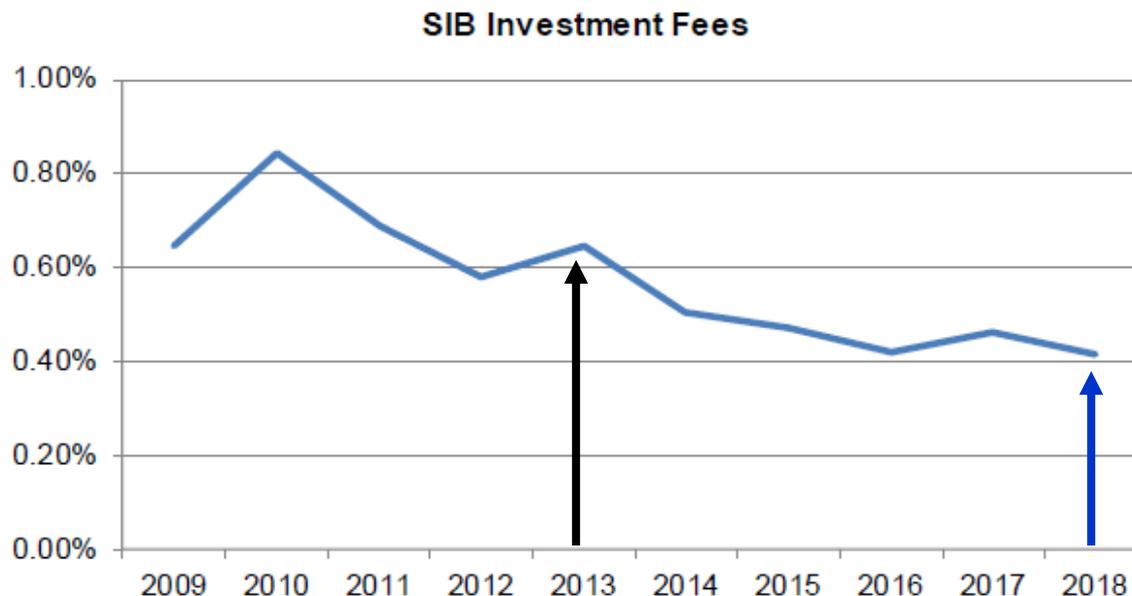


**SIB clients Assets Under Management (AUM) have grown from \$6 billion in 2012 to over \$13 billion in 2018 largely as a result of deposits into the Legacy Fund in addition to reasonable investment earnings growth.**

**Despite significant growth in client services offered by both the SIB and TFFR programs, SIB and TFFR client satisfaction ratings remain solid at 3.7 for the SIB and 3.8 for TFFR (on a 4.0 grading scale).**

# Return on SIB Investment Fees & Expenses

Investment fees have declined by 0.23% from 0.65% in fiscal 2013 to 0.42% in fiscal 2018 (as a % of AUM).



Note: If SIB client investments averaged \$10 billion the last 5 fiscal years, the 0.23% decline in investment expenses translates into \$23 million of annual fee savings.

The SIB and RIO work to keep investment fees at or below 0.50% per year, while seeking to identify investment firms which beat their performance benchmarks by 0.50% or more (after all expenses) over the long-term.

If the SIB and RIO are successful in attaining both of the above goals, our SIB clients are effectively earning a minimum 2-for-1 return on their investment fee dollars (in the form of better returns over stated benchmarks).

The SIB and RIO were successful in attaining the above goals for nearly all of our clients in fiscal 2018 such that the use of active management generated \$100 million of incremental income for our clients (in fiscal 2018).

MEMORANDUM

**TO:** SIB Board  
**FROM:** Richard Nagel  
**DATE:** January 14, 2019  
**SUBJ:** Annual Technology Report

1. Member Online Portal

The Member Online Portal went live in January 2018. As of January 14, 2019 about 2,800 members have successfully logged in (2,100 actives and 700 retirees). RIO continues to communicate with the members to assist with any issues or questions they may have. RIO staff continues to strategize and market the application to encourage members to sign in.

2. Pension Administration Software (PAS)

TFFR's current pension administration software (PAS) replaced the outdated mainframe system in 2005, and has been in operation for 13 years. The functionality and technical architecture of this client-server technology is at the end of its product release lifecycle.

As you know, RIO believes it is time to move towards a more technologically advanced, more secure web based system which would provide significant improvements in functionality for TFFR members, employers, and staff. During the past year, RIO has studied the potential risks, benefits, and costs of upgrading or replacing the current application to improve and streamline TFFR pension administration processes, reporting capabilities, communications and services to members and employers. Currently, RIO has provided testimony to the Senate Appropriations Committee and will continue to work with legislators in an effort to get funding approved for this project.

3. IT Security

Security is always a main priority for RIO and ITD. The IT Supervisor has been working with the Audit Supervisor to review current policies and procedures to ensure a high level of security. The Audit Supervisor is also working on an internal risk assessment (all divisions) for RIO to help determine any areas of improvement or modifications to improve overall risk and security.

4. Hardware/Software Upgrades

IT recently upgraded the Tamale RMS software to the most current version. We are also working on implementing the web-based platform for Tamale as well. This will allow users more flexibility when working remotely.

**Future IT Initiatives:**

1. Records retention and purge (CPAS database and FileNet – FileNet was completed in December 2018).
2. Configure layout for new website, add data, and publish to production for public viewing by July 1, 2019.
3. Create and utilize data analytics for member and employer data reconciliation (replace manual processes).
4. Potential upgrade/replacement of Pension Administration Software. This would allow for greater functionality, enhancements and additional security for all RIO staff, TFFR Members, and TFFR Employers

**BOARD APPROVAL REQUESTED**

**TO:** State Investment Board (SIB)  
**FROM:** Dave Hunter, Executive Director/CIO  
**DATE:** January 18, 2019  
**SUBJECT:** SIB Meeting Schedule

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**RIO requests the SIB approve one of the proposed board meeting schedules through June 30, 2020.** SIB meetings are generally held on the fourth Friday morning of each month with the exception of June, November and December. The November meeting is moved up to the third Friday (due to Thanksgiving), while no meeting has occurred in June or December in recent years.

**State Investment Board 2019-20 Meeting Schedule (Option A – 10 meetings/year)**

1. July 26, 2019 (Election of Officers - Reserved for Board Education)
2. August 23, 2019 (Fiscal Year-End Performance Review as of 6/30/2019)
3. September 27, 2019
4. October 25, 2019
5. November 22, 2019 (Quarterly Performance Review as of 9/30/2019)
6. January 24, 2020
7. February 28, 2020 (Quarterly Performance Review as of 12/31/2019)
8. March 27, 2020
9. April 24, 2020
10. May 22, 2020 (Quarterly Performance Review as of 3/31/2020)

**State Investment Board 2019-20 Meeting Schedule (Option B – 8 meetings/year)**

1. July 26, 2019 (Election of Officers - Reserved for Board Education)
2. August 23, 2019 (Fiscal Year-End Performance Review as of 6/30/2019)
3. October 25, 2019
4. November 22, 2019 (Quarterly Performance Review as of 9/30/2019)
5. January 24, 2020
6. February 28, 2020 (Quarterly Performance Review as of 12/31/2019)
7. April 24, 2020
8. May 22, 2020 (Quarterly Performance Review as of 3/31/2020)

**Previously Scheduled SIB Meetings:**

1. January 25, 2019 (*Legislative Session*)
2. February 22, 2019 (Quarterly Performance Review as of 12/31/18) (*Legislative Session*)
3. March 22, 2019 (*Legislative Session*)
4. April 26, 2019 (*Legislative Session*)
5. May 24, 2019 (Quarterly Performance Review as of 3/31/19)

## Legacy Fund Review January 18, 2019

Given the number of proposed bills and resolutions relating to the Legacy Fund, we have included the **Asset Allocation and Spending Study** presentation made by Callan to SIB (and Advisory Board) in May of 2018. For similar reasons, we have also included background on the existing \$200 million Bank of North Dakota Match Loan CD Program which is included within the Legacy Fund fixed income allocation, although less than \$40 million is outstanding as of December 31, 2018.

### **Important Points:**

- 1) The General Fund budget for the 2017-19 biennium includes a \$200 million appropriation of Legacy Fund earnings;
- 2) RIO has forecasted earnings, as defined by NDCC 21-10-12, to approximate \$300 million in both the 2017-19 biennium and 2019-21 biennium;
- 3) Transferrable earnings from the Legacy Fund to the General Fund, as defined by NDCC 21-10-12, exceeded \$342 million for the 17 months ended November 30, 2018;
- 4) It is important to note that “NDCC 21-10-12 earnings” can decline (and even become negative) if realized losses exceed realized gains and interest and dividend income over any defined time period (or biennium);
- 5) The impact of withdrawing \$1 billion from Legacy today, will reduce the Fund by \$3.2 billion over the next 20-years based on the assumed 6% long-term rate of return; and
- 6) The impact of withdrawing \$1 billion from Legacy today, will reduce the Fund by \$1.8 billion over the next 20-years if the long-term rate of return was reduced to 3%.

### **Overview of Legislative Bill Proposals relating to Legacy Fund Earnings & Principal:**

Numerous legislative bills and resolutions have been proposed relating to the use of Legacy Fund earnings and principal. RIO will continue to monitor these proposals and offer support to any legislators or other parties requesting our assistance on the estimated impact of these proposals on the future growth and earnings potential of the Legacy Fund. In most instances, RIO investment professionals consult with other outside experts in determining the estimated impact of these various proposals noting that Callan and our fellow U.S. sovereign wealth fund leaders and mineral trust officials are consistently willing to share their own insight and experiences which are very helpful.

As one might expect, it is challenging to estimate the impact of proposed spending bills which are heavily dependent on the future oil and gas prices and production particularly when combined with investment earnings volatility. Given these challenges, RIO attempts to be conservative when asked to provide point estimates for any designated future time period. When making presentations, RIO also attempts to explain that investment earnings, as currently defined, will likely be negative in some future two-year period as there is no-way to guarantee a 6% compound annual rate of return every single year even though we are highly confident we will achieve this long-term return expectation over the next 20-years. One point which is less challenging to confirm, however, is that any significant withdrawal from the Legacy Fund in the early years of its existence will have a major impact on its

long-term earnings growth. As example, a withdrawal of \$1 billion today will reduce the size of the Legacy Fund by \$3.2 billion in 20-years based on a 6% long-term assumed rate of return. If the rate of return was reduced to only 3%, a \$1 billion withdrawal would reduce the Legacy Fund by \$1.8 billion in 20-years.

### **Legacy Fund Earnings Update November 8, 2018**

**RIO was requested to provide a revised Legacy Fund earnings estimate for the remaining 2017-19 and upcoming 2019-21 biennia.** RIO relied on oil and gas tax estimates provided by OMB and expected investment earnings over the next three years. Estimates are based on the anticipated average balance of the Legacy Fund during the forecast period acknowledging that commodity prices are volatile in addition to the impact of this price volatility on oil and gas production and related tax collections.

#### **Background:**

**The North Dakota State Investment Board (SIB) and Legacy Fund Advisory Board completed an asset liability study in May of 2018 which confirmed the current target asset allocation of 50% equity, 35% fixed income and 15% diversified real assets.** Given that our current investment policy includes a 50% target allocation to public equities which are inherently subject to significant return volatility including the potential for negative investment returns over any defined time period, RIO notes it is reasonable to expect the Legacy Fund to lose money during certain periods when the equity markets are experiencing losses, credit markets are experiencing elevated defaults and/or when liquidity in the private markets is challenged. Despite these investment concerns (which are present in most any return seeking portfolio), RIO is confident the Legacy Fund will meet or exceed its targeted investment return of 6% over the long term. In order to be prudent and diligent and in light of our significant fiduciary responsibility, the SIB and RIO work with expert consultants and professional investment management firms to confirm the reasonableness of our future capital market assumptions which serve as the foundation for long-term return expectations.

**RIO notes the original earnings estimate of \$200 million for the 2017-19 biennium was based on a 2% average “earnings” rate and anticipated Legacy Fund average balance of approximately \$5 billion** (\$5 billion x 2% = \$100 million per year or \$200 million per biennium). *The 2% average “earnings” rate was originally based on the midpoint of the RV Kuhn consultant forecast including a 6% Base Case and -2% Worst Case, noting the Worst Case was raised by 1% (from -3%) based on the expected strength of the capital markets during the prescribed time period.* **RIO notes that NDCC 21-10-12 defines “earnings” as “net income in accordance with generally accepted accounting principles, excluding any unrealized gains or losses.” This definition of “earnings” is materially different than net investment return which includes both unrealized and realized gains and losses.** For comparison, the Legacy Fund generated over \$1.2 billion of net investment earnings since inception (as of September 30, 2018) whereas “earnings” as defined in accordance with NDCC 21-10-12 exceeded \$700 million during this same time period.

**Legacy Fund “Transferrable Earnings” Estimate:**

On August 8, 2018, RIO raised the “transferrable earnings” estimate for the Legacy Fund from \$300 million to \$350 million based on the expected strength and resiliency of the capital markets over the next year. **However, in light of recently increasing downward price volatility in the capital markets, RIO is reducing its’ current “transferrable earnings” estimate back to \$300 million for the 2017-19 biennium while holding its’ “transferrable earnings” estimate at \$300 million for the 2019-21 biennium.** The reduction in the 2017-19 estimate reflects the 7% equity market correction experienced in October, while noting the Legacy Fund generated over \$120 million of *net investment income* in the 3<sup>rd</sup> quarter. The **\$300 million estimate for the 2017-19 biennium** also closely approximates actual “transferrable earnings” of **\$306 million** for the 15 months ended Sep. 30, 2018 (see table below). RIO does not deem it to be prudent to extrapolate the actual “transferrable earnings” rate through Sep. 30, 2018, for the entire biennium given recent market events (and noting the extrapolated value is \$490 million or \$306 million divided by 15 months and times 24 months). RIO notes U.S. equities experienced a 7% market correction in October after posting a 7% gain for the 3<sup>rd</sup> calendar quarter of 2018 (while international equities were down 8% in October after posting a 1% gain in the 3<sup>rd</sup> quarter).

**The \$300 million “transferrable earnings” estimate for the 2019-21 biennia is based on OMB’s latest forecasted oil and gas tax deposits causing average Legacy Fund investments to approximate \$7.5 billion in the 2019-21 biennia while continuing to use our 2% average “earnings” rate (\$7.5 billion x 2% “earnings” rate = \$150 million x 2 years = \$300 million).**

	Fiscal Year Ended June 30, 2018	Fiscal Year To Date Sept. 30, 2018	July 1, 2017 to Sept. 30, 2018
Interest, Divident & Other Income	\$ 117,456,240	\$ 27,819,296	\$ 145,275,536
Investment Expenses	\$ (10,018,870)	\$ (2,200,473)	\$ (12,219,343)
Administrative Expenses	\$ (834,828)	\$ (128,583)	\$ (963,411)
<b>Net Interest, Divident &amp; Other Income</b>	<b>\$ 106,602,542</b>	<b>\$ 25,490,240</b>	<b>\$ 132,092,782</b>
Net Realized Gains and Losses on Investments	\$ 135,608,963	\$ 38,005,566	\$ 173,614,529
Net Securities Lending Income	\$ 648,335	\$ 157,940	\$ 806,275
<b>NDCC 21-10-12 Earnings</b>	<b>\$ 242,859,840</b>	<b>\$ 63,653,746</b>	<b>\$ 306,513,586</b>
Net Unrealized Gains and Losses	\$ 117,715,692	\$ 57,529,586	\$ 175,245,278
Net Investment Income after Administrative Expen:	\$ 360,575,532	\$ 121,183,332	\$ 481,758,864
Net Investment Income before Administrative Expenses	\$ 361,410,360	\$ 121,311,915	\$ 482,722,275



## Appendix

### Review of Legacy Fund “Transferrable Earnings” definition:

Although there is a reasonable belief that the long-term “transferrable earnings” rate will trend upwards towards 3% to 4% in the next decade, **it is important to acknowledge that “realized earnings” will likely be negative in some future 2-year time frame.**

Given the risk of a moderate market correction in the foreseeable future, RIO notes the definition of “transferrable earnings” **could be revised to exclude both realized and unrealized gains and losses to minimize volatility and the potential adverse impact on our State’s budgeting process.** **If “transferrable earnings” were revised to only include “net investment income without any realized or unrealized gains or losses”, the impact of a market correction would be significantly reduced.**

### Example:

RIO notes that **“net investment income without realized and unrealized gains or losses” approximated \$132 million for the 15 months ended September 30, 2018 (see table on prior page).** **Based on this current earnings rate, net investment income without realized and unrealized gains or losses is forecasted to exceed \$200 million for 2017-19.** In contrast, “transferrable earnings as currently defined under NDCC 21-10-12 approximated \$306 million for the 15 months ended September 30, 2018.



Callan

May 19, 2018

A decorative graphic consisting of two vertical bars, one orange and one green, connected at the bottom by a horizontal line, forming a bracket-like shape.

**Asset Allocation and  
Spending Study**

North Dakota Legacy Fund

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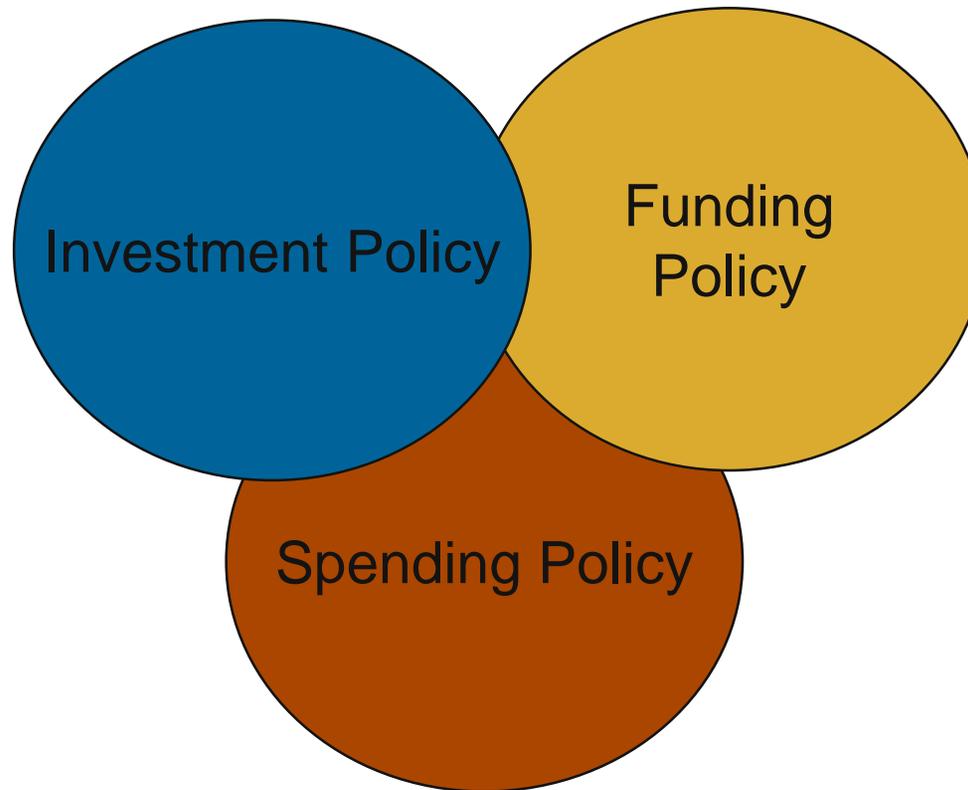
**Paul Erlendson**  
Fund Sponsor Consulting

**Alex Browning**  
Fund Sponsor Consulting

**Jay Kloepfer**  
Capital Market Research

# What is an Asset Allocation and Spending Study?

- How will the assets supporting spending be invested?
- What risk/return objectives?
- How to manage cash flows?



- What is the source of funds for the trust?
- What level of inflow can be expected?
- What are the Fund's expenses?

- What type of spending policy?
- What level of spending?
- What sources of spending?

**The Board is implementing a “best practice” by conducting an asset allocation study every 4-to-5 years (or whenever there is a material change in the Funding or Spending policy).**

# Why Conduct an Asset Allocation and Spending Study?

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- **Cornerstone of Strategic Planning:**

- Acknowledge change and uncertainty in the capital markets.
- Project and evaluate impact of uncertainty on assets and spending levels.
- Establish reasonable return expectations.
- Determine the objectives of the Fund.
- Determine the Fund's risk tolerance.
- Provide basis for selecting an asset allocation policy that appropriately reflects risk & return objectives.

- **Last study conducted in 2013.**

- Establishment of the Legacy Fund.
- Accumulation with no spending for first five years.
- Substantial deposits of oil & gas tax revenues, plus strong investment earnings built Fund to more than \$5 billion
  - *Substantial variability in both energy production and prices – currently on the upswing.*
- **Current legislation calls for transfer of “Earnings” to General Fund to commence in Fiscal Year 2019.**
  - ***NDCC 21-10 defines “Earnings” as interest and dividend income plus or minus net realized capital gains or losses.***
  - ***“Earnings” or “Income” accrues through the end of each biennium, and is to be transferred at the start of the next biennium.***
  - ***Legislature is permitted to spend up to 15% of the Fund principal in each biennium (e.g. 7.5% year). These funds are expected to be transferred at the start of the next biennium.***
  - ***Assuming current interest rates, “earnings” or “income” is expected to amount to between 2% and 3% of fund assets. The legislation establishes a spending policy of as much as 10.5% per year (e.g. 3% + 7.5% = 10.5%). This rate is much higher than most endowments or permanent funds.***
  - ***Strong inflows from energy tax revenues can offset high rate of spending. Lower inflows may require tempering of spending rate attached to the market value of the Fund.***

**NDCC 21-10-12. Legacy Fund – Earnings** 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.

# Efficient Asset Mix Alternatives

## Existing Legacy Fund Asset Classes

**The Current Policy Target of 50% Equity, 35% Fixed Income and 15% Real Assets (with an Expected Return of 5.8%) is closest to “Mix 3”.**

Asset Class	Policy Target	Optimal Mixes						
		min	max	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Broad US Equity	30%	0%	100%	18%	23%	29%	34%	40%
Broad Non-US Equity	20%	0%	100%	12%	16%	20%	24%	28%
Domestic Fixed Income	35%	0%	100%	55%	45%	35%	25%	15%
TIPS	5%	0%	100%	8%	7%	5%	4%	3%
Infrastructure	5%	0%	100%	2%	2%	3%	3%	3%
Real Estate	5%	0%	100%	5%	7%	8%	10%	11%
<b>Total</b>	<b>100%</b>			<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Expected Return	5.82%			4.88%	5.35%	5.79%	6.17%	6.52%
Expected Real Return	3.57%			2.63%	3.10%	3.54%	3.92%	4.27%
Expected Standard Deviation	10.75%			6.77%	8.63%	10.59%	12.59%	14.62%
Projected Yield	3.11%			3.27%	3.20%	3.12%	3.05%	2.97%
Total Equity (%)	50%			30%	39%	49%	58%	68%
Total Fixed Income (%)	40%			63%	52%	40%	29%	18%
% Illiquid	15%			12%	14%	16%	18%	19%

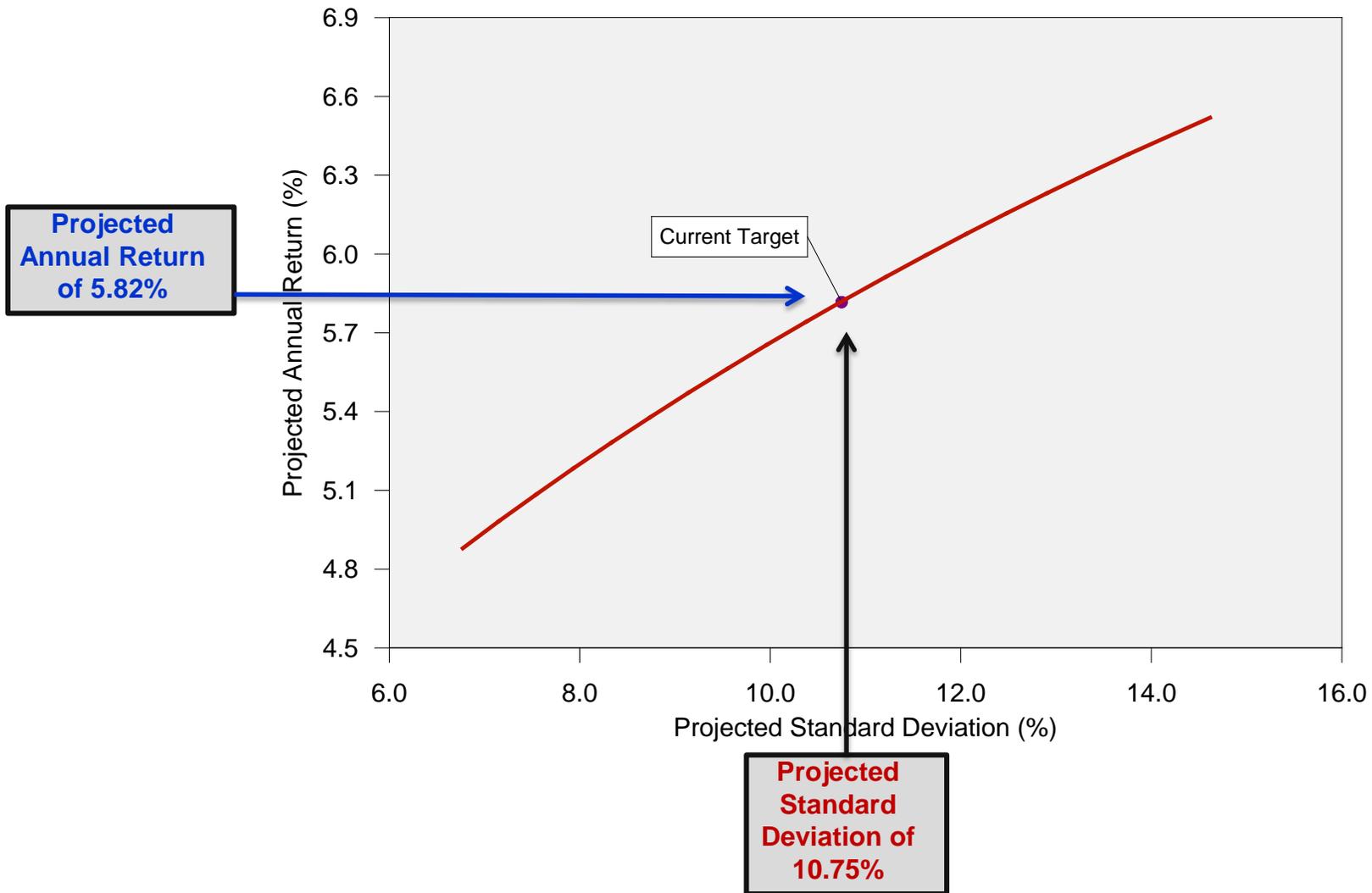
**“Illiquid” Investments targeted at less than 20%.**

- The policy target adopted by Legacy Fund in 2013. Reflects existing asset classes invested in the Legacy Fund, including broad international equity and diversified real assets.
- No constraints imposed on the allocation to any asset class.
- Real estate, private credit (5% of assets under fixed income) and infrastructure are the illiquid asset classes.
- Expected return for the target represents 10-year compound rate of 5.8%, similar to that of alternative Mix 3. Moderate expectations for the capital markets means even portfolios with greater than 70% exposure to risky assets (Mix 5) will be challenged to reach 7%.
- Current spending policy = all investment income (defined as dividends, yield and realized capital gains), plus the legislature may spend up to 15% of the principal value of the Fund in each biennium. The distributions are taken from the Fund at the end of each biennium. The effective annual spending rate for the maximum allowable is 7.5% of market value plus income (currently close to 3%) for a total of 10.5%.
- Absent inflows into a permanent fund, sustainable spending policies are typically set at or just below the long-term real return expectation.
- Policy target real return expectation is 3.6%, compared to the potential to spend up to 10.5% of the Legacy Fund.
- Strong inflows from oil & gas tax revenues can support spending policy in excess of the Fund's real rate of return.
- Legacy Fund asset allocation with 35% in fixed income is somewhat conservative compared to Endowment and Foundation peer group.

**Key Point: Mix 3 is broadly defined as 49% Equity, 35% Fixed Income and 16% Real Assets (including TIPS).**

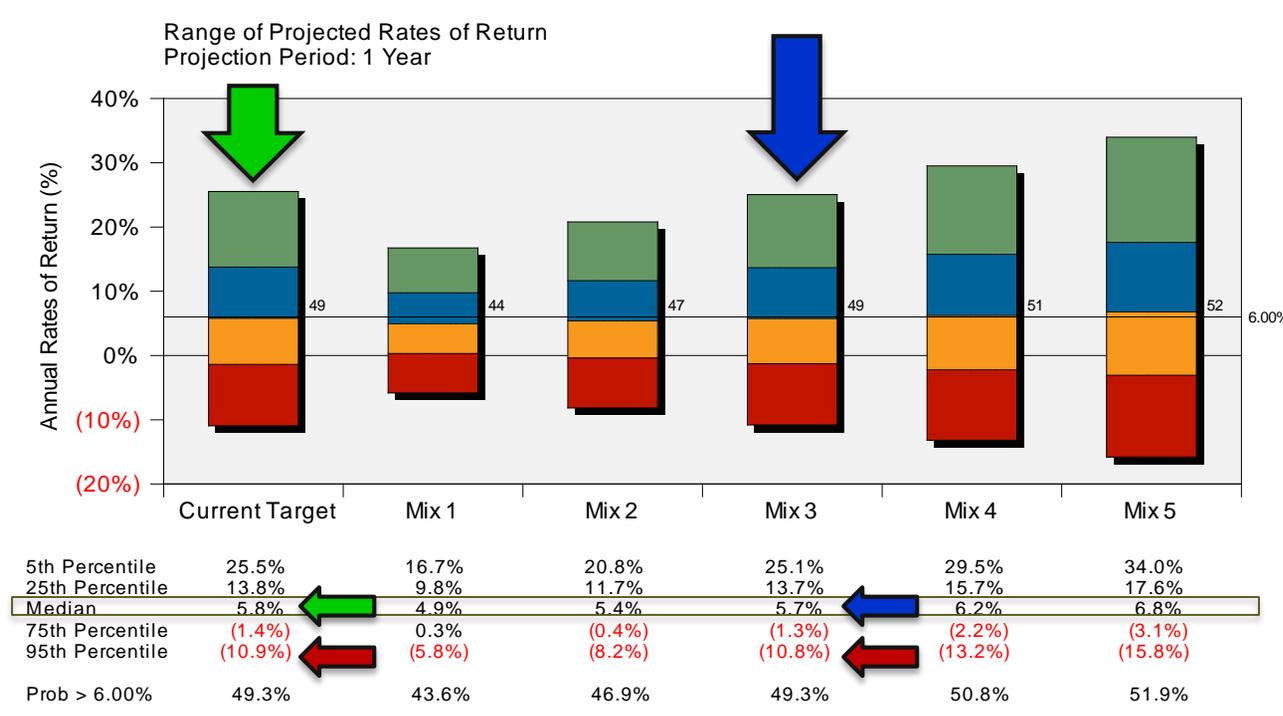
# Efficient Asset Mix Alternatives

## Efficient Frontier Depicting Risk and Return



# Asset Mix Alternatives

## Range of Projected Returns – One Year

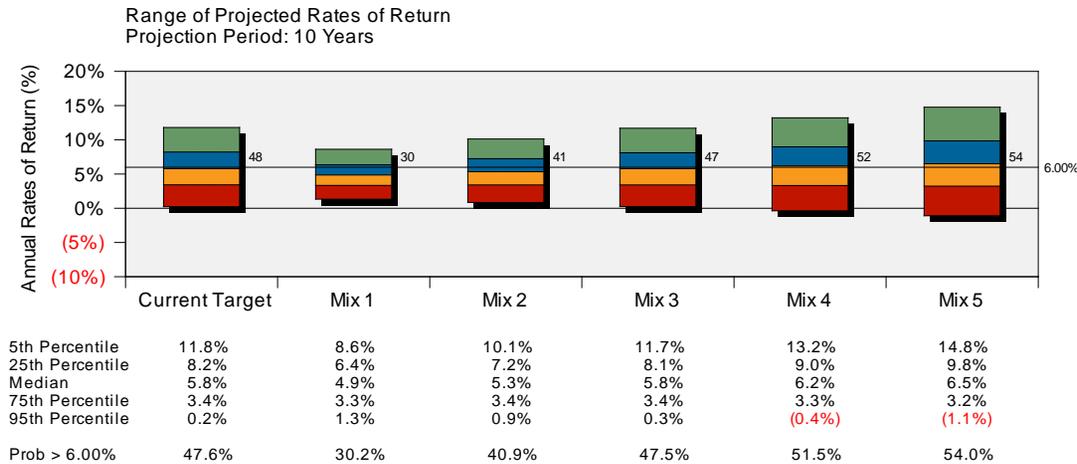
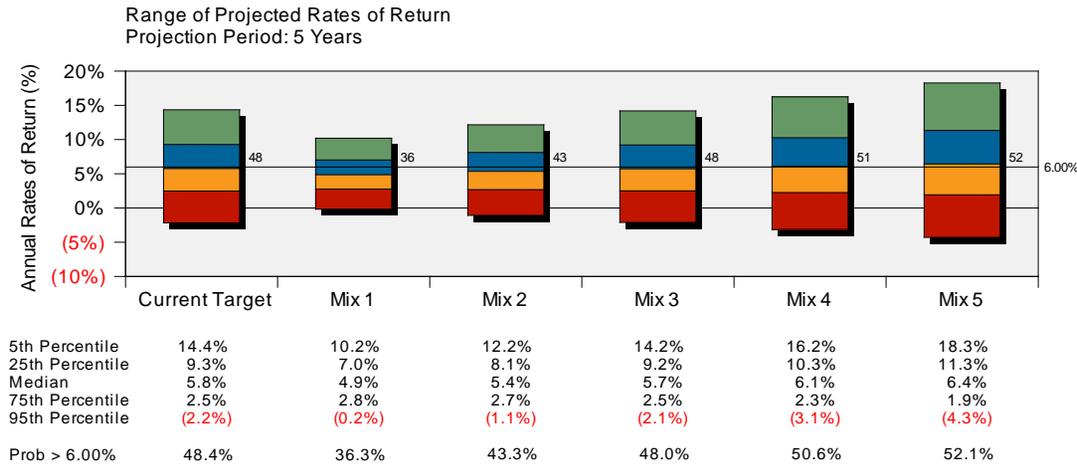


- The “Current Target” has a “Median” annual expected return of 5.8% with a 95<sup>th</sup> Percentile return of -10.9%
- Callan’s “Mix 3” has a “Median” annual expected return of 5.7% with a 95<sup>th</sup> Percentile return of -10.8%

- We use simulation to derive a range of expected returns and the likelihood of their occurrence.
- Increased volatility with greater equity exposure.

# Asset Mix Alternatives

## Range of Projected Returns – Five and Ten Years



- Range of returns narrows over longer time period. This is the benefit of “time diversification”, where extreme events offset one another producing less volatility.
- Negative returns are less likely over longer time period (roughly 1 in 20 chance).

# Consider Alternative Asset Classes

**Legacy's current allocation is 50% Equity, 35% Fixed Income, 15% Real Assets**

- Legacy Fund has established a diversified investment portfolio:
  - Broad exposure to equity investments, including U.S., developed and emerging international markets, and across large, mid and small cap
  - Established a 15% target to real assets, comprised of 5% in private real estate and 10% in diversified real assets (private infrastructure and global inflation-linked bonds).
  - Diversified fixed income exposure currently includes core, core plus, opportunistic, intermediate, private credit and CDs (with the latter issued by the Bank of North Dakota).
- Other alternatives employed by institutional investors, including other state trust funds:
  - Private equity
  - Absolute return – includes hedge funds and Multi-Asset Class (MAC) strategies
  - Other inflation hedges:
    - *Commodities*
    - *Energy*
- Key consideration: interaction of Legacy Fund investment and distribution policy with expected oil & gas inflows.
  - Funds pursuing substantial exposure to alternatives typically engage in market-value-related distribution policies = current Legacy Fund policy.
  - Previous study recommended in 2013 that the Legacy Fund board first consider a tilt toward higher return/higher risk asset classes, then consider diversification into alternative and illiquid strategies.

**Key Point: Callan and RIO deem the current “Target” allocation to be reasonable, but seek to review Mix 2, 3 and 4, with the Board based on their desire to reduce, hold or increase “targeted” risk levels.**

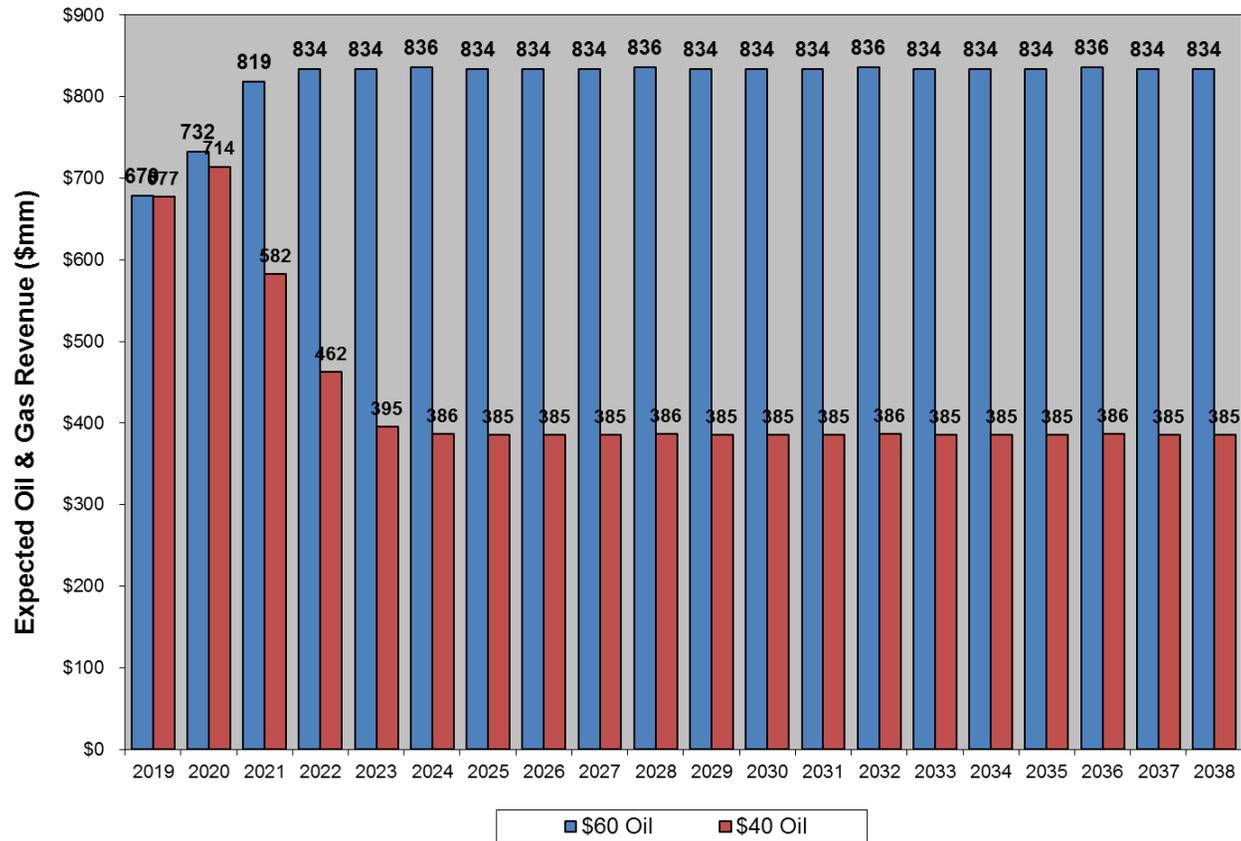


Legacy Fund Spending Policy

Deterministic Projections

# Project Oil and Gas Tax Deposits Into Legacy Fund

Baseline Scenario of \$60 Oil, Alternative Scenario of \$40 Oil and Lower Production



WTI Crude was \$71.50 on May 17<sup>th</sup> 1:50pm CT.

- Baseline assumes oil prices rise from current \$55 to \$60 and hold steady over the forecast. Forecast for the next four years comes from State of North Dakota; Callan extends the forecast to 20 years.
- Production rises from current level of 1.1 mm barrels per day (BOPD) to 1.4 mm over next 3 years, then holds steady for the forecast.
- Alternative scenario assumes oil prices rise in line with the baseline for two years, then fall to \$40 and hold steady over the forecast. Production is assumed to rise in line with the baseline for two years, then fall back to 1.0 mm BOPD.
- Resulting projections of asset values and spending from the alternative oil price & production scenario differ substantially from baseline, and will have an impact on the future financial condition of Fund.

# Spending Policy Considerations

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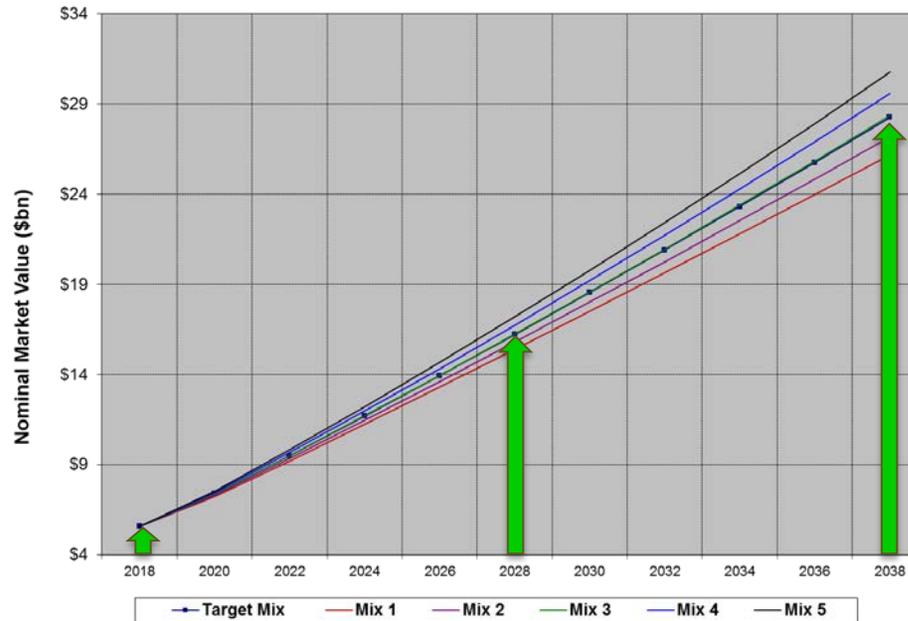
- **General rule of thumb: to balance intergenerational equity in the absence of inflows, a policy can't spend more than the expected real return on investments over the long run.**
- **Rule leads many endowments, foundations and state natural resource funds to seek a higher return to support higher real spending.**
  - Inflation of 2.5%-3% plus a nominal return target of 8% results in a real return expectation of 5%-5.5%
  - 5% is very typical of the spending targeted by a majority of foundations & endowments.
  - Challenge in today's environment: generating a real return of 5%. Many institutions are reconsidering spending policies in light of expectations for the capital markets.
- **How to accommodate potential inflows from royalties?**
  - Ignore – dedicate to growing the endowment for future spending.
  - Acknowledge – supports spending in excess of the real investment return.
  - Projections for strong royalty revenue suggests that the Legacy Fund could support spending well in excess of the expected real return; reduction in royalty expectations would suggest reconsideration of the effective rate of spending by the Fund.
  - Most similar funds calculate spending from market value of assets smoothed over a rolling time period, 3 to 5 years. Purpose of rolling Market Value (MV) calculation is to smooth spending in light of volatile capital markets.
  - **Legacy Fund distribution policy is unique.**
    - *Income accrues over the biennium and is transferred to the General Fund at the beginning of the next biennium. Realized capital gains introduce an asymmetry into spending, with a zero floor when gains turn to losses in a market downturn.*
    - *The Legislature may spend up to 15% of the market value of the fund each biennium. This distribution is also assumed to take place in the next biennium.*
    - *Income and the increase in market value accrues over a set two year period that contracts as each month and quarter passes, and then a large chunk of the assets are sent over to the general fund at the conclusion of the biennium.*

**Note: NDCC Earnings approximated \$170 million for the 9 months ended March 31, 2018.**

# Projected Growth in Legacy Fund Market Value – Base Case 1

Spending Policy of Income (NDCC Earnings) and 0% of Principal, \$60 Oil

Nominal Market Value



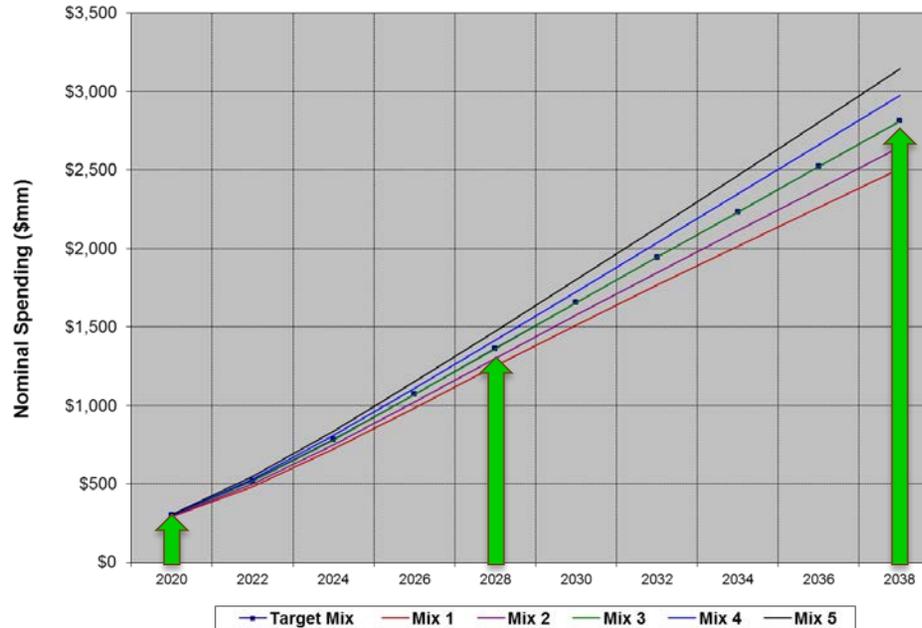
**Target Mix/Mix 3 = Legacy Fund grows to \$16 billion in 2028 and \$28 billion by 2038.**

- Base Case 1 = \$60 Oil, Spending Policy = 100% of Income Plus 0% of Principal
- Charts show nominal and real (inflation-adjusted) market value for the year following each biennium, after transfers to the General Fund have been removed.
- Nominal and real market values increase under all asset allocations, supported by strong inflows from \$60 oil and 1.4 mm BOPD production.
- Purchasing power of the Legacy Fund (real value of Fund assets) can be sustained over the long run under a spending policy of income plus 0% of fund value each biennium. Spending at the maximum rate allowed for the Fund (income plus 15% of fund value) would eventually catch up to inflows from oil and gas, and real value of the fund begins to decline after 15 years for all mixes (not shown above).
- Higher equity allocations (Current Target, Mix 4 and 5) result in higher expected return and greater growth in the real value of the corpus.

# Projected Growth in Spending – Base Case 1

Spending Policy of Income (NDCC Earnings) and 0% of Principal, \$60 Oil

Nominal Spending



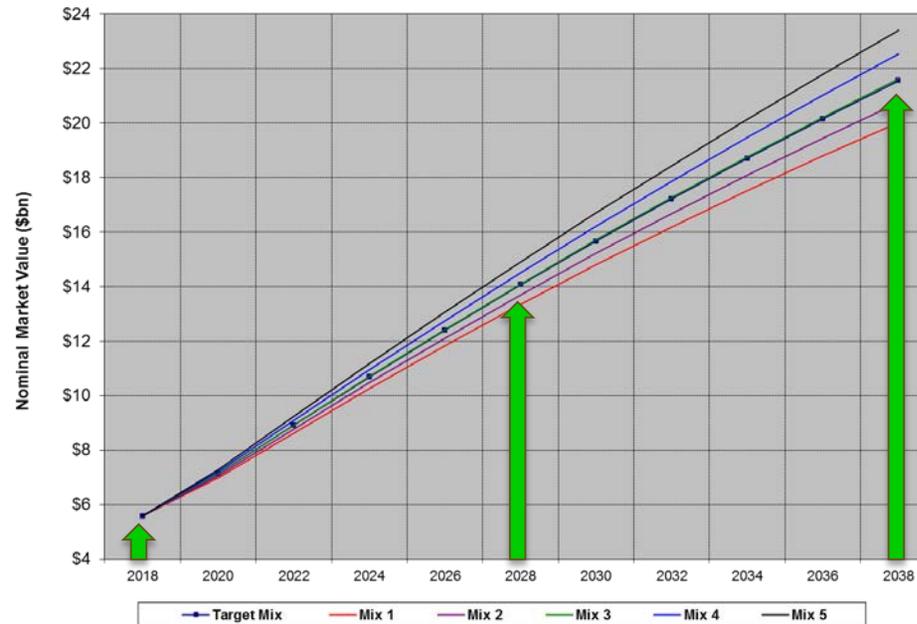
**Target Mix/Mix 3 = NDCC Earnings grow to \$1.4 billion in 2028 and \$2.8 billion by 2038.**

- Charts show nominal and real spending (transfers to the General Fund) for the year following each biennium.
- Nominal and real spending increases under each asset allocation mix. Spending from income grows from two sources:
  - As interest rates are projected to rise and the corpus against which yields are calculated grows
  - Realized capital gains grow as the corpus increases
  - Effective spending rate from total investment income rises over time, adding to the total rate of spending.
- Higher equity allocations (Current Target, Mix 4 and 5) result in greater growth in the nominal spending.
- Real spending at the maximum rate allowed for the Fund (income plus 15% of fund value) would increase under each asset allocation mix for about 15 years, then begin to decline (not shown above).

# Projected Growth in Legacy Fund Market Value – Base Case 2

Spending Policy of Income and 5% of Principal, \$60 Oil

Nominal Market Value



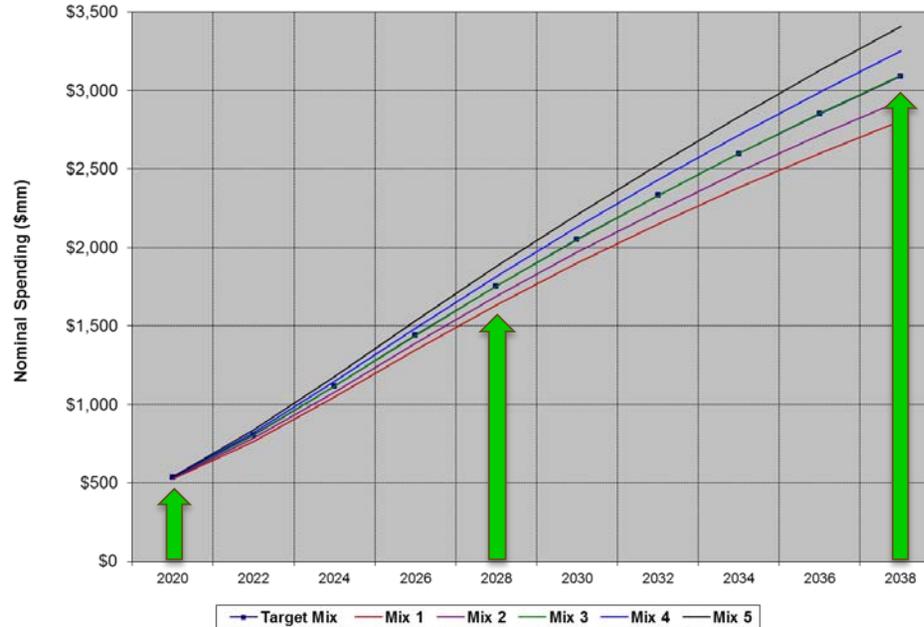
**Target Mix/Mix 3 = Legacy Fund grows to \$14 billion in 2028 and \$21.5 billion by 2038.**

- Charts show nominal and real (inflation-adjusted) market value for the year following each biennium, after transfers to the General Fund have been removed.
- Nominal and real market values increase under all asset allocations, supported by strong inflows from \$60 oil and 1.4 mm BOPD production.
- Purchasing power of the Legacy Fund (real value of Fund assets) can be sustained over the long run under a spending policy of income plus 5% of fund value each biennium. Spending at the maximum rate allowed for the Fund (income plus 15% of fund value) would eventually catch up to inflows from oil and gas, and real value of the fund begins to decline after 15 years for all mixes (not shown above).
- Higher equity allocations (Current Target, Mix 4 and 5) result in higher expected return and greater growth in the real value of the corpus.

# Projected Growth in Spending – Base Case 2

Spending Policy of Income and 5% of Principal, \$60 Oil

Nominal Spending



**Target Mix/Mix 3 = Total spending grows to \$1.75 billion in 2028 and \$3.1 billion by 2038.**

- Charts show nominal and real spending (transfers to the General Fund) for the year following each biennium.
- Nominal and real spending increases under each asset allocation mix. Spending from income grows from three sources:
  - As interest rates are projected to rise and the corpus against which yields are calculated grows
  - Realized capital gains grow as the corpus increases
  - Spend 5% of Fund principal as the corpus increases
  - Effective spending rate from total investment income rises over time, adding to the total rate of spending.
- Higher equity allocations (Current Target, Mix 4 and 5) result in greater growth in the nominal spending.
- Real spending at the maximum rate allowed for the Fund (income plus 15% of fund value) would increase under each asset allocation mix for about 15 years, then begin to decline (not shown above).

# Conclusions – Deterministic Results

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- **The Legacy Fund spending policy (via distributions to General Fund) is expected to generate a lumpy spending pattern, with large outflows moving from the fund at the start of a biennium & no outflows in the following year.**
- Spending is based on the income earned during the previous biennium and the market value net of spending at the start of the previous biennium. The real value of Fund assets is projected to grow over the next 10 and 20 years for all asset mixes, fueled by strong projections of oil & gas revenues. A spending rate of income plus 0% of Fund value over each biennium is expected to result in growth in both the real value of Fund assets and spending, supported by the expected strong inflows of oil & gas revenues assuming \$60 oil and 1.4 mm BOPD production.
- **Current projections of oil & gas production and prices suggest deposits will ultimately be insufficient to offset spending at the maximum rate (15% of principal plus income each biennium) allowed in the founding legislation. Under the maximum rate, the sum of income plus 15% of principal spending would result in net outflows (spending less oil & gas revenues) that are well in excess of the real (inflation-adjusted) investment return.**
- A spending policy that targets a reduced rate of principal (for instance, Income plus 5% of Market Value) can preserve and increase the purchasing power of the Legacy Fund.
- **The impact of oil & gas tax inflows on the purchasing power and real spending can be profound. With no inflows, preserving the purchasing power (real market value) and real spending would be challenged at an annual rate beyond the real investment return (current target real return is 3.6%). The current projections of \$60 oil and 1.4 mm BOPD are expected to support a policy of income plus 5% of Fund principal. Under the maximum spending rate allowed, the current revenue projections will be challenged eventually, even for the most aggressive asset mixes.**
- Lower oil prices, which likely come with lower production, will require lower spending in excess of income to meet the goal of preserving the purchasing power of the fund.
- **A lower principal spending rate of 0% to 5% can improve the preservation of purchasing power in a lower return or energy tax revenue environment, at the cost of lower expected distributions.**

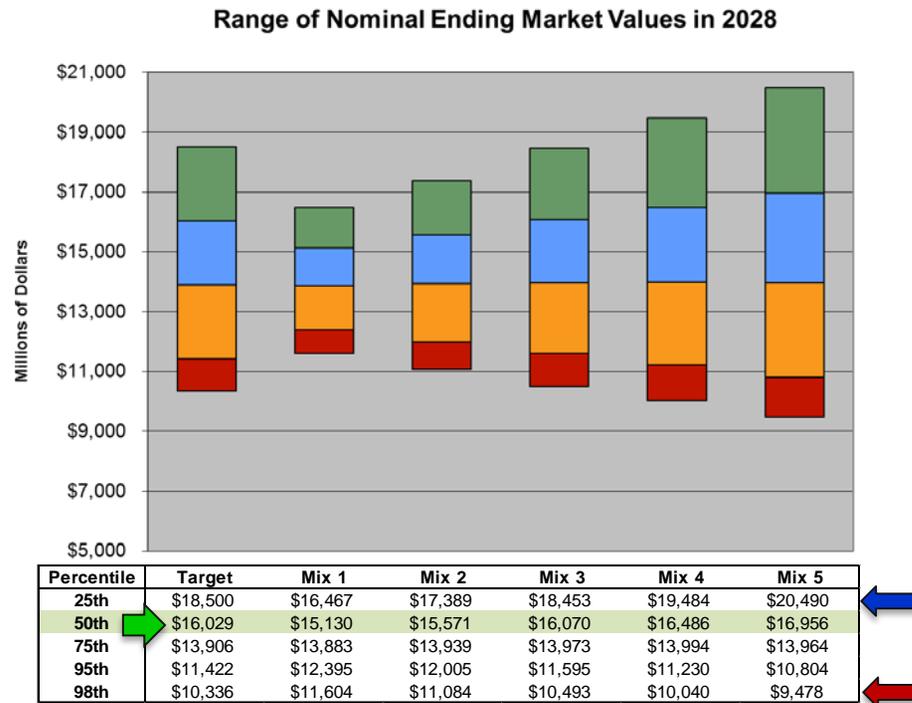
# Limitations of Deterministic Projections

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- A deterministic projection does not reflect capital market uncertainty (risk).
- 10-year (and 20-year) returns with no volatility - a deterministic projection with the same return each year - may yield substantially different results from a series of 10 annual returns with substantial volatility but the same 10-year average return. The sequence of the returns matter, as do the size of the swings. Negative returns earlier in the period may cause less harm than later in the period, when more money may be at stake.
- Simulation models that take volatility and probabilities into account typically generate median returns - those with a 50% probability of occurring - that are below those of the deterministic or average projections.
- The deterministic projections paint a more optimistic view of the Legacy Fund over the next 20 years than under a regime of capital market uncertainty.

# Simulated Market Values in 2028 – Base Case 1

## Spending Policy of Income and 0% of Principal

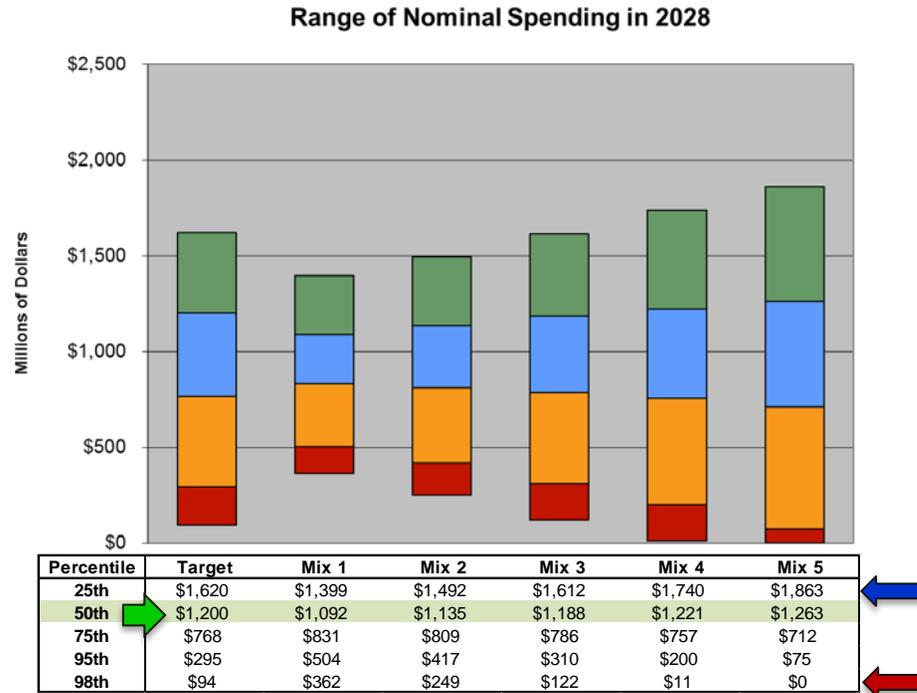


**The Legacy Fund is forecasted to reach \$16 billion in 2028 under the current “Target” asset allocation, while ranging from \$9.5 billion to \$20.5 billion under Mix 5 (Nominal).**

- Nominal (non-inflation-adjusted) Fund market value for the current Target in 10 years can range from \$10.4 b in the worst case scenario (98<sup>th</sup> percentile, or approximately 2 standard deviation event on the downside) to \$18.5 b at the 25<sup>th</sup> percentile, with a median of \$16 b.
- Range of potential results widens as equity exposure increases (moving from Mix 1 to Mix 5). Erosion of purchasing power occurs if projected real market value falls below today’s market value (\$5,372 mm at March 31, 2018) as represented by the blue line.
- Purchasing power under spending policy of income plus 0% of Fund principal over ten and twenty years can be maintained in the expected case across all of the asset mixes, thanks to the strong inflows of oil & gas tax receipts. Worst case scenarios for all asset mixes suggest the potential for erosion of purchasing power is low.

# Simulated Spending in 2028 – Base Case 1

## Spending Policy of Income and 0% of Principal



**Nominal Spending is expected to reach \$1.2 billion per biennium in 2028 under the current “Target” mix, while ranging from \$0 to \$1.863 billion under Mix 5.**

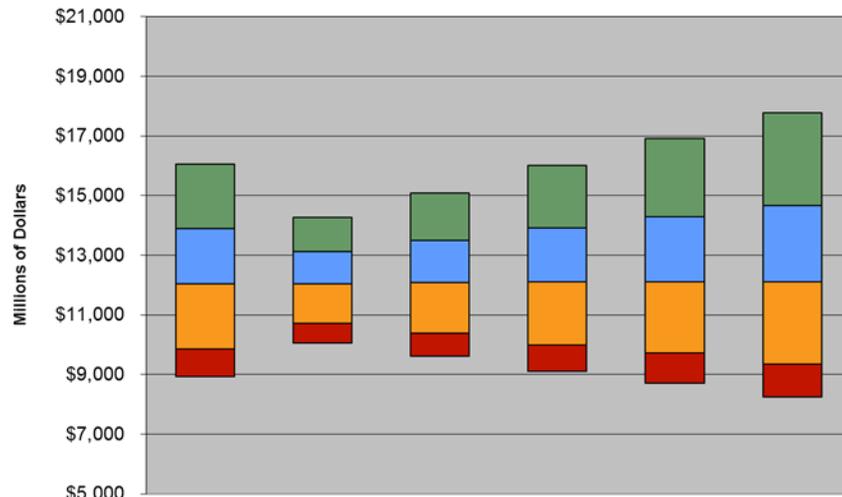
- Nominal (non-inflation-adjusted) total spending in 10 years (attributable to biennium ending with FY 2027) reaches \$1.2 b for the current target mix.
- Expected case (50<sup>th</sup> percentile) spending rises with equity exposure, at the expense of a lower worst case outcome. Greater realized capital gains in mixes with more equity makes up for the lower interest income. Real (inflation-adjusted) total spending in 10 years (attributable to biennium ending with FY 2027) reaches \$953 mm for the current target mix.
- Range of real spending widens over time, and with increasing exposure to equity. Realized capital losses offset income in worse case scenarios, with the zero floor under spending limiting the downside only in the extreme cases.

# Compare Market Values in 2028 – Alternative Spending Policy

Base Case 2 (Spend 5% of Principal) vs. Base Case 1 (Spend 0% of Principal)

5% of Principal

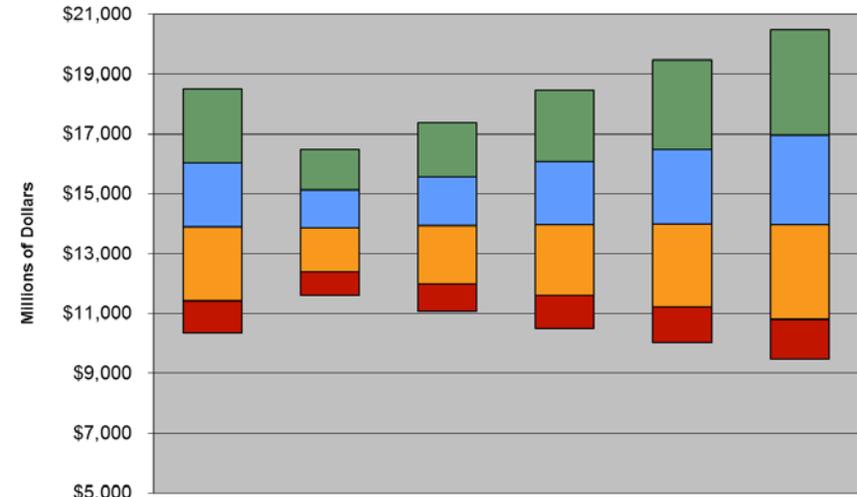
Range of Nominal Ending Market Values in 2028



Percentile	Target	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
25th	\$16,050	\$14,270	\$15,080	\$16,008	\$16,914	\$17,779
50th	\$13,906	\$13,114	\$13,499	\$13,909	\$14,294	\$14,663
75th	\$12,048	\$12,040	\$12,099	\$12,109	\$12,112	\$12,109
95th	\$9,861	\$10,730	\$10,393	\$10,002	\$9,722	\$9,353
98th	\$8,938	\$10,069	\$9,619	\$9,112	\$8,720	\$8,244

0% of Principal

Range of Nominal Ending Market Values in 2028



Percentile	Target	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
25th	\$18,500	\$16,467	\$17,389	\$18,453	\$19,484	\$20,490
50th	\$16,029	\$15,130	\$15,571	\$16,070	\$16,486	\$16,956
75th	\$13,906	\$13,883	\$13,939	\$13,973	\$13,994	\$13,964
95th	\$11,422	\$12,395	\$12,005	\$11,595	\$11,230	\$10,804
98th	\$10,336	\$11,604	\$11,084	\$10,493	\$10,040	\$9,478

**Target/Mix 3 = The Median Fund Value is forecasted to reach \$13.7 billion with a 5% Principal Spending Policy vs \$16 billion with a 0% Principal Spending Policy in 2028.**

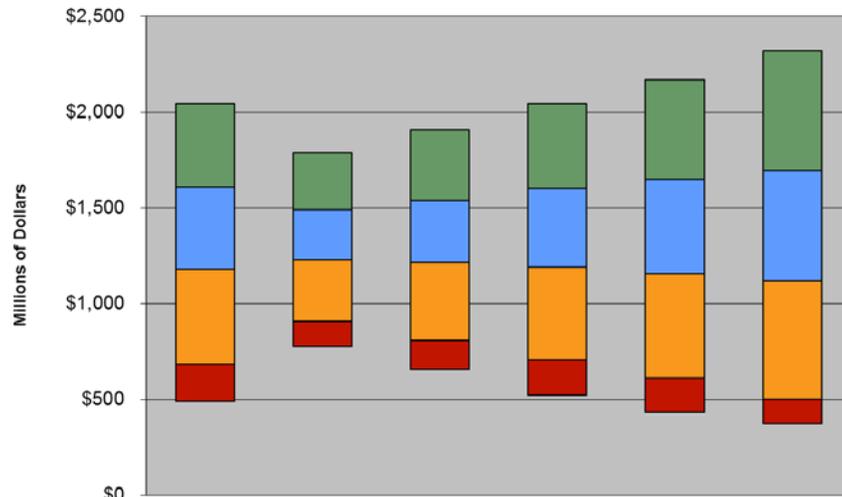
- Nominal (non-inflation-adjusted) Fund market value for the current Target in 10 years can range from \$7 b to \$15 b, with a median of \$10.3 b.
- Range of potential results widens as equity exposure increases (moving from Mix 1 to Mix 5).

# Compare Spending in 2028 – Alternative Spending Policy

Base Case 2 (Spend 5% of Principal) vs. Base Case 1 (Spend 0% of Principal)

5% of Principal

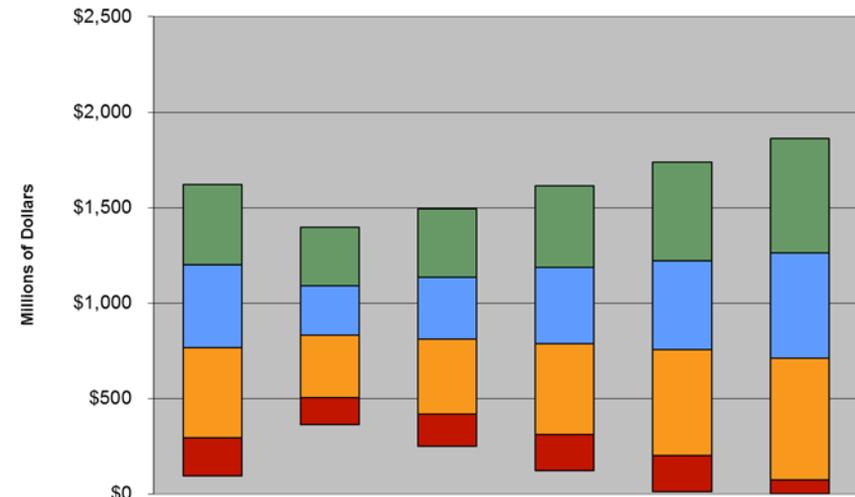
Range of Nominal Spending in 2028



Percentile	Target	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
25th	\$2,044	\$1,786	\$1,906	\$2,045	\$2,170	\$2,322
50th	\$1,607	\$1,490	\$1,539	\$1,601	\$1,650	\$1,695
75th	\$1,181	\$1,229	\$1,213	\$1,189	\$1,155	\$1,117
95th	\$685	\$909	\$808	\$707	\$611	\$501
98th	\$490	\$776	\$658	\$521	\$430	\$374

0% of Principal

Range of Nominal Spending in 2028



Percentile	Target	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
25th	\$1,620	\$1,399	\$1,492	\$1,612	\$1,740	\$1,863
50th	\$1,200	\$1,092	\$1,135	\$1,188	\$1,221	\$1,263
75th	\$768	\$831	\$809	\$786	\$757	\$712
95th	\$295	\$504	\$417	\$310	\$200	\$75
98th	\$94	\$362	\$249	\$122	\$11	\$0

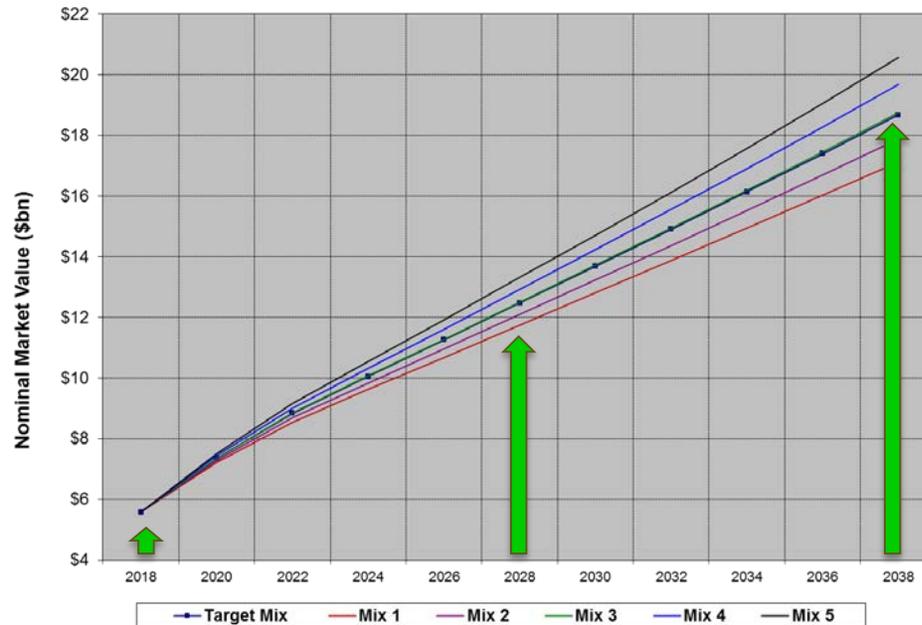
**Target/Mix 3 = Median Nominal Spending is forecasted to reach \$1.6 billion with a 5% Principal Spending Policy vs \$1.2 billion with a 0% Principal Spending Policy in 2028.**

- Nominal (non-inflation-adjusted) total spending in 10 years (attributable to biennium ending with FY 2027) reaches \$2 b for the current target mix.
- Total spending in 20 years (attributable to FY 2037 biennium) reaches almost \$3 b.
- Expected case spending rises with equity exposure, at the expense of a lower worse case outcome.

# Projected Growth in Legacy Fund Market Value – Base Case 3

Spending Policy of Income (NDCC Earnings) and 0% of Principal, \$40 Oil

Nominal Market Value

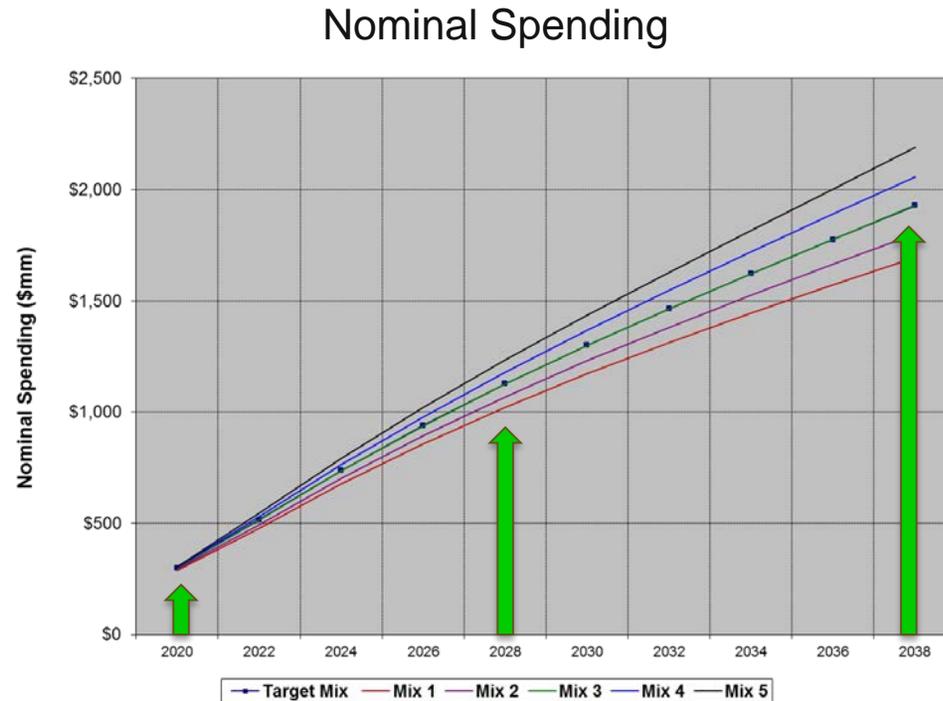


**Target Mix/Mix 3 = Legacy Fund grows to \$13 billion in 2028 and \$19 billion by 2038.**

- Base Case 3 = \$40 Oil, Spending Policy = 100% of Income Plus 0% of Principal
- Charts show nominal and real (inflation-adjusted) market value for the year following each biennium, after transfers to the General Fund have been removed.
- Nominal and real market values increase under all asset allocations, supported by inflows from \$40 oil and 1.0 mm BOPD production.
- Purchasing power of the Legacy Fund (real value of Fund assets) can be sustained over the long run under a spending policy of income plus 0% of fund value each biennium.
- Higher equity allocations (Current Target, Mix 4 and 5) result in higher expected return and greater growth in the real value of the corpus.

# Projected Growth in Spending – Base Case 3

Spending Policy of Income (NDCC Earnings) and 0% of Principal, \$40 Oil

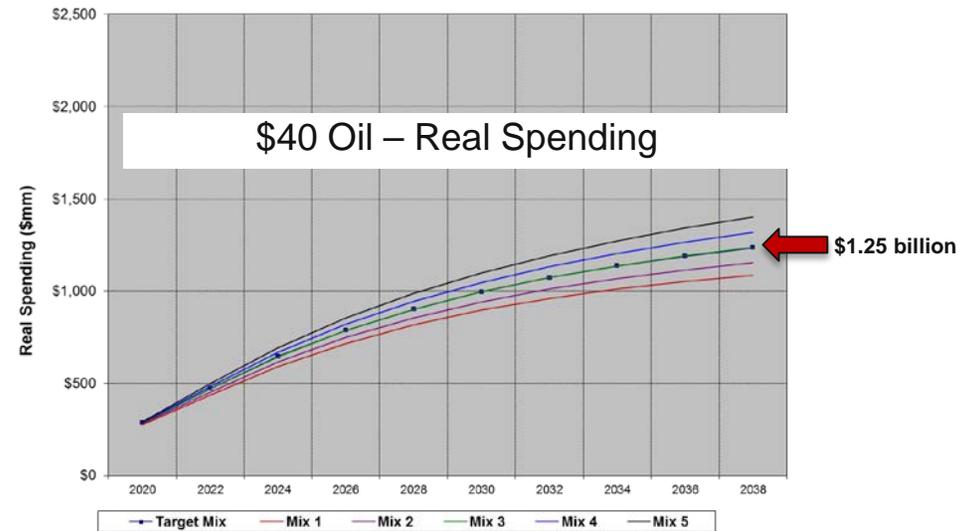
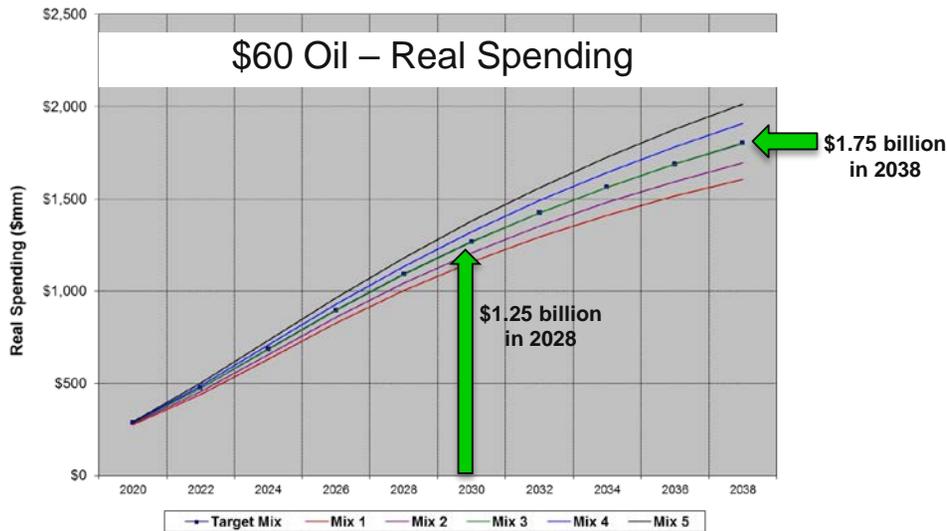
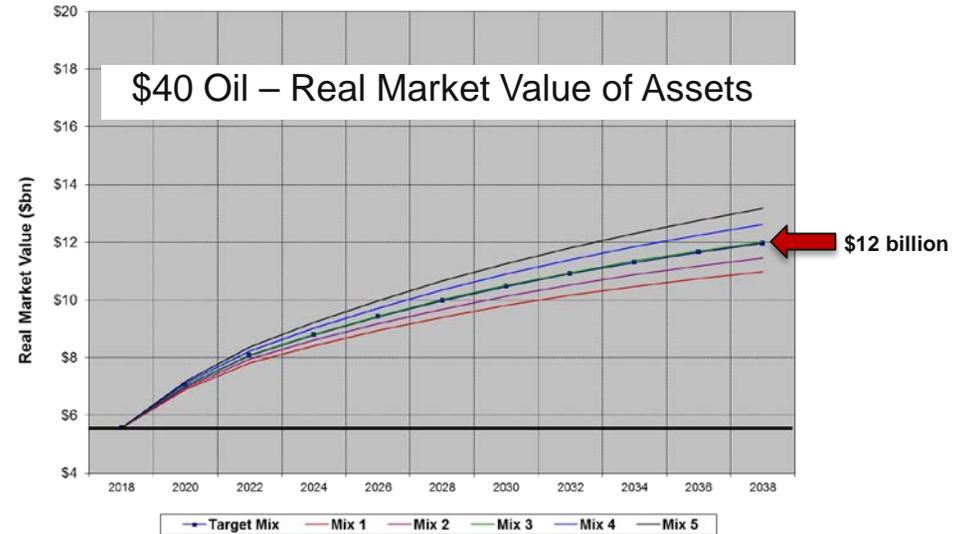
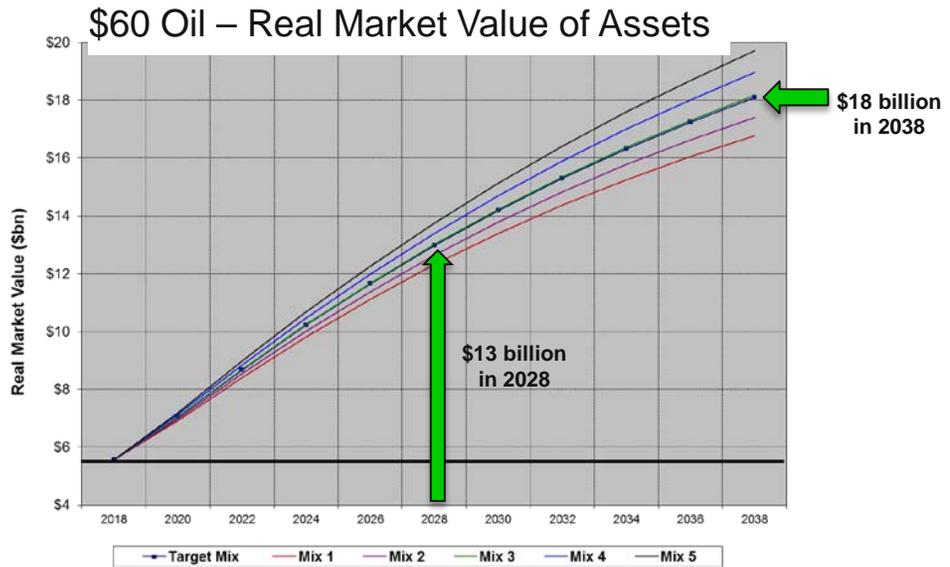


**Target Mix/Mix 3 = NDCC Earnings grow to \$1.2 billion in 2028 and \$1.8 billion by 2038.**

- Charts show nominal and real spending (transfers to the General Fund) for the year following each biennium.
- Nominal and real spending increases under each asset allocation mix. Spending from income grows from two sources:
  - As interest rates are projected to rise and the corpus against which yields are calculated grows
  - Realized capital gains grow as the corpus increases
  - Effective spending rate from total investment income rises over time, adding to the total rate of spending.
- Higher equity allocations (Current Target, Mix 4 and 5) result in greater growth in the nominal spending.

# Impact of Lower Oil Price and Production

\$40 Oil/1.0 mm BOPD versus \$60 Oil/1.4 mm BOPD (Spend Income Plus 0% of Principal)

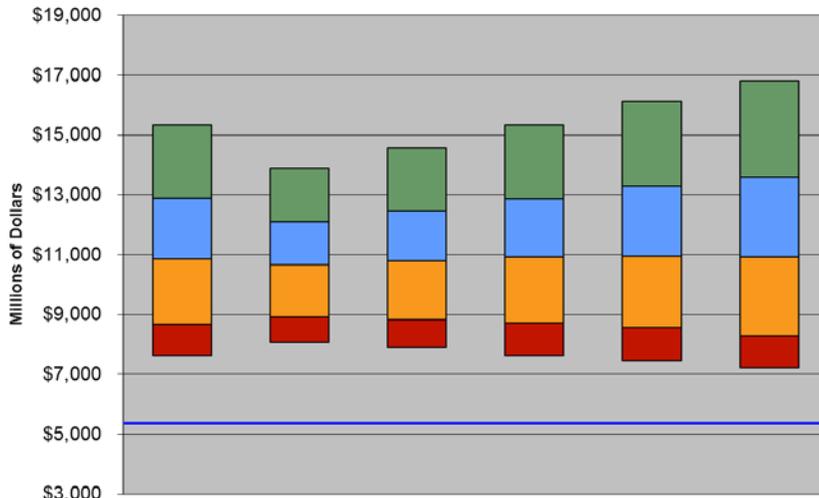


# Compare Real Market Values in 2028 – \$40 Oil vs. \$60 Oil

Spending Policy of Income and 0% of Principal

\$60 Oil

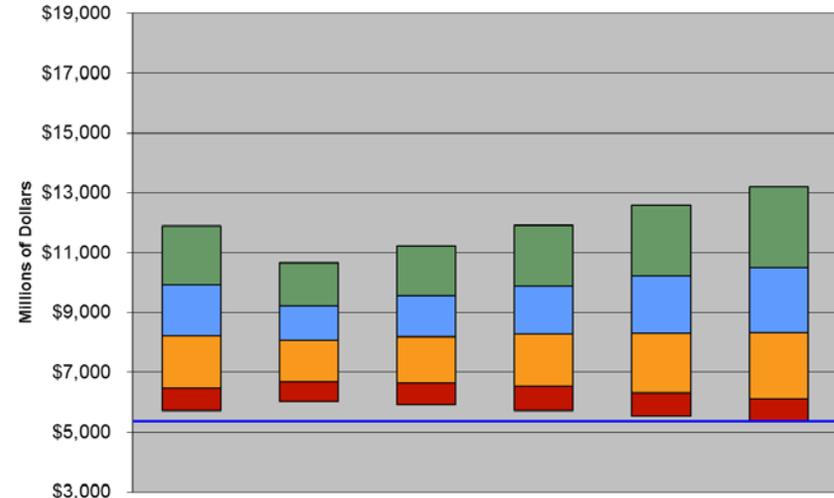
Range of Real Ending Market Values in 2028



Percentile	Target	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
25th	\$15,329	\$13,878	\$14,567	\$15,332	\$16,122	\$16,824
50th	\$12,897	\$12,094	\$12,465	\$12,861	\$13,289	\$13,596
75th	\$10,851	\$10,671	\$10,804	\$10,915	\$10,955	\$10,936
95th	\$8,685	\$8,908	\$8,836	\$8,713	\$8,557	\$8,269
98th	\$7,619	\$8,071	\$7,901	\$7,608	\$7,453	\$7,221

\$40 Oil

Range of Real Ending Market Values in 2028



Percentile	Target	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
25th	\$11,895	\$10,652	\$11,241	\$11,923	\$12,577	\$13,203
50th	\$9,923	\$9,231	\$9,549	\$9,900	\$10,224	\$10,517
75th	\$8,211	\$8,077	\$8,191	\$8,280	\$8,309	\$8,327
95th	\$6,477	\$6,683	\$6,651	\$6,526	\$6,313	\$6,124
98th	\$5,715	\$6,037	\$5,913	\$5,728	\$5,551	\$5,354

**Downside Case Scenario: Assuming 1.0 million BOPD at \$40 (instead of 1.4 million BOPD at \$60), the Fund Median Value declines from \$12.9 billion to \$9.9 billion in 2028.**

- Real (inflation-adjusted) Fund market value for all asset mixes can fall below the current asset value (blue line) for all mixes in downside case scenarios under \$40 oil/1.0 mm BOPD. Illustrates the impact of oil & gas revenue inflows on the financial condition of the Fund.

# Projected Real Market Value Table

## Spending Policy of Income and 0% of Principal

	Probability of Preserving Purchasing Power of Legacy Fund	Real Market Value Growth Over The Next 20 years (geometric)	
		Expected Case (50th Percentile)	Worse Case Scenarion (98th Percentile)
Target Mix	80%-85%	6.0%	2.3%
Mix 1	75%-80%	5.4%	2.3%
Mix 2	75%-80%	5.7%	2.3%
Mix 3	80%-85%	6.0%	2.3%
Target Mix	80%-85%	6.0%	2.3%
Mix 4	85%-90%	6.2%	2.1%
Mix 5	85%-90%	6.4%	2.0%

- Regardless of the asset allocation decision, oil & gas tax revenue is sufficient to support spending in excess of the real investment return as dictated by the allowable spending policy over the next 20 years. All of the asset mixes, including the Current Target are expected to generate expected real returns equal to or in excess of the effective spending rate under a policy of income plus 0% of principal. The effective spending rate under a policy of income plus 5% results in a spending rate in excess of the real return for all mixes. However, under a 5% spending policy, the oil & gas revenues as projected (\$60 per bbl, 1.4 mm BOPD) will improve the purchasing power of the Fund over 10 and 20 years. Spending at the maximum allowable rate of 15% of principal would result in spending catching up with the projected revenues and both the real value of the Fund and real spending would be expected to decline after 15 years.
- A more aggressive asset allocation increases the level to which the real value of the Fund will be built, at the cost of greater volatility, which translates into greater downside risk. The more aggressive asset mixes appear to do better even in the worse case results than more conservative mixes after 20 years.
- Risk/reward trade-off at 20 years appears suggests that a mix as aggressive as Mix 5 offers a positive trade-off between reward (improvement in real asset value) and risk (worsening in the worse case).
- Lower oil price and production introduce the potential for the real value of the fund assets and real spending to fall below the current value, eroding the purchasing power of the fund. In this scenario, asset mixes with greater equity exposure will see greater declines in real purchasing power. A less aggressive asset allocation combined with a spending rate of income plus 5% of principal in a lower oil & gas tax revenue environment can help preserve purchasing power; the trade-off is lower expected spending from the Fund.

# Summary of Results

**Recommendation: Maintain the current asset allocation of 50% Equity, 35% Debt and 15% Real Assets including ranges of 45% to 55% for Equity, 30% to 40% for Fixed Income and 12% to 18% Real Assets.**

- The appropriate asset allocation will attempt to balance the dual objectives of maintaining or increasing real spending while maintaining or growing the real (inflation-protected) value of the Legacy Fund over the projection period.
- In the absence of any inflows:
  - A spending policy with an effective rate less than or equal to the real return on the fund investments is required to maintain the real value of the corpus and therefore sustain intergenerational equity. Given that investment income is assumed to be transferred out each biennium at a rate of between 3% and 4% of fund assets annually, the Legislature would need to limit spending attached to the market value of the Fund's principal such that the sum of the income and MV spending level are sustainable in the long run –effectively no greater than the real investment return over time.
- Under the current projection of oil & gas tax revenue inflows:
  - Inflows are sufficient to offset the spending generated by a 5% of MV spending level (in addition to income) for all asset mixes over the next 20 years. The real value of the corpus increases under all asset mixes, implying that the purchasing power of the Legacy Fund increases over time. Spending 0% of the principal will serve to increase Fund assets even more over time. Spending at the maximum allowable rate (15% of principal plus income) will eventually cause growth in the real value of the corpus and spending will stop after 15 years, and both measures will begin to decline as spending catches up to the inflows.
- If the current projection of inflows is lower, the MV spending policy and/or the asset allocation policy would need to be adjusted if sustaining the real value of the fund corpus remains a goal. Lower inflows under the assumed 0% MV spending policy means all asset mixes, including the current Target, could see worse case outcomes in which the real market value of the principal would decline, thereby eroding the purchasing power of the Fund.
- **Increase/Maintain Real Market Value Objective**
- Current spending policy – to be completed
- **Increase/Maintain Real Spending Objective**
- Current spending policy – to be completed

# 2018 Capital Market Projections – Return and Risk

## Summary of Callan’s Long-Term Capital Market Projections (2018 – 2027)

**Capital Market Assumptions play a major role in developing our asset allocation policy.**

Asset Class	Index	PROJECTED RETURN			PROJECTED RISK		Projected Yield
		1-Year Arithmetic	10-Year Geometric*	Real	Standard Deviation	Sharpe Ratio	
<b>Equities</b>							
Broad Domestic Equity	Russell 3000	8.30%	6.85%	4.60%	18.25%	0.332	2.00%
Large Cap	S&P 500	8.05%	6.75%	4.50%	17.40%	0.333	2.10%
Small/Mid Cap	Russell 2500	9.30%	7.00%	4.75%	22.60%	0.312	1.55%
Global ex-U.S. Equity	MSCI ACWI ex USA	8.95%	7.00%	4.75%	21.00%	0.319	3.10%
International Equity	MSCI World ex USA	8.45%	6.75%	4.50%	19.70%	0.315	3.25%
Emerging Markets Equity	MSCI Emerging Markets	10.50%	7.00%	4.75%	27.45%	0.301	2.65%
<b>Fixed Income</b>							
Short Duration	Barclays G/C 1-3	2.60%	2.60%	0.35%	2.10%	0.167	2.85%
Domestic Fixed	Barclays Aggregate	3.05%	3.00%	0.75%	3.75%	0.213	3.50%
Long Duration	Barclays Long G/C	3.50%	3.00%	0.95%	10.95%	0.116	4.45%
TIPS	Barclays TIPS	3.10%	3.00%	0.75%	5.25%	0.162	3.35%
High Yield	Barclays High Yield	5.20%	4.75%	2.50%	10.35%	0.285	7.75%
Non-U.S. Fixed	Barclays Global Aggregate ex US	1.80%	1.40%	-0.85%	9.20%	-0.049	2.50%
Emerging Market Debt	EMBI Global Diversified	4.85%	4.50%	2.25%	9.60%	0.271	5.75%
<b>Other</b>							
Real Estate	Callan Real Estate	6.90%	5.75%	3.50%	16.35%	0.284	4.75%
Private Equity	TR Post Venture Cap	12.45%	7.35%	5.10%	32.90%	0.310	0.00%
Hedge Funds	Callan Hedge FOF Database	5.35%	5.05%	2.80%	9.15%	0.339	2.25%
Commodities	Bloomberg Commodity	4.25%	2.65%	0.40%	18.30%	0.109	2.25%
Cash Equivalents	90-Day T-Bill	2.25%	2.25%	0.00%	0.90%	0.000	2.25%
Inflation	CPI-U		2.25%		1.50%		

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

Source: Callan LLC



**Informational**

**TO:** State Investment Board  
**FROM:** Dave Hunter and Darren Schulz  
**DATE:** May 21, 2018  
**SUBJECT:** **Bank of North Dakota (BND) Match Loan CD Program Background**

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**Background:**

On June 17, 2017, the Legacy Fund Advisory Board approved the Legacy Fund Investment Policy Statement (IPS), which acknowledged the transfer of the BND Match Loan CD Program from the Budget Stabilization Fund into the Legacy Fund in early-2017. **On July 28, 2017, the SIB formally accepted the IPS as approved by the Advisory Board. The revised IPS noted “The BND CD investment will be limited to the lesser of \$200 million or 5% of the Legacy Fund (and represent a sector allocation within fixed income.)”** In addition, “BND will be requested to guarantee a minimum 1.75% investment return. **The minimum return requirement will be periodically reviewed in connection with the Legacy Fund’s overall asset allocation framework.** BND CD’s are rated AA by S&P.”

**Legacy Fund Advisory Board Meeting “Minutes” – November 27, 2017:**

***“Bank of North Dakota Matching and Infrastructure Loan Programs***

*At the request of Chairman Kempenich, Mr. Hardmeyer presented information ([Appendix D](#)) regarding the Bank of North Dakota's matching loan program **and the possibility of increasing legacy fund investments in Bank certificates of deposits (CDs) in order for the Bank to increase funding available for the matching loan program and an infrastructure loan program**. He said there is no risk to the legacy fund as the risk of loss lies with the Bank and the Bank has never had a loss on a loan in its match program.*

*In response to a question from Representative Kreidt, Mr. Hardmeyer said the CD rate would be the U.S. Treasury rate plus an agreed upon markup. He said the match program currently includes a fixed interest rate for a 5-year period with terms of 15 to 20 years. He said the political subdivisions would prefer to have a longer period in which the interest rate is fixed.*

*No further business appearing, Chairman Kempenich adjourned the meeting at 2:50 p.m.”*

**At the meeting, Mr. Hunter stated that RIO would consider this “infrastructure loan program” request in connection with the Legacy Fund asset allocation study being conducted by Callan.** Mr. Hunter referenced prior discussions with BND representatives including BND’s requested \$200 million program size increase (spread over four years in \$50 million annual increments). **In April of 2018 Callan recommended that RIO seek indicative pricing on BND CD’s from its fixed income managers in order to determine the appropriate credit and liquidity spreads for the proposed program.**

## **Indicative Pricing Estimates:**

**RIO reached out to three large fixed income managers for the SIB to obtain indicative pricing for BND CD's issued for terms of up to 10-years. Indicative pricing estimates widened at the 5-year term and ranged from a negative 0.08% to 1-year U.S. Treasury yields to a positive 1.00% to 10-year U.S. Treasury yields. Based on this indicative pricing analysis, RIO proposed the following spreads to BND representatives on May 18, 2018:**

- 0.00% spread to like-term U.S. Treasuries for terms up to 5-years;
- 0.50% spread to U.S. Treasuries for terms over 5-years, but less than 6-years;
- 0.60% spread to U.S. Treasuries for terms from 6-years, but less than 7-years;
- 0.70% spread to U.S. Treasuries for terms from 7-years, but less than 8-years;
- 0.80% spread to U.S. Treasuries for terms from 8-years, but less than 9-years;
- 0.90% spread to U.S. Treasuries for terms from 9-years, but less than 10-years;
- 1.00% spread to U.S. Treasuries for a 10-year term.

## **Summary:**

**Based on preliminary discussion, BND did not appear to be interested in aggressively pursuing this option at the above indicative pricing levels. RIO intends to meet with BND representatives in June to continue this discussion further noting that pricing levels, including credit and liquidity spreads, change over time.**

## **Concept Paper**

### **Utilizing Legacy Funding to Finance North Dakota Infrastructure**

**Purpose:** To create a program that utilizes a portion of the Fixed Income Allocation of the Legacy Fund to finance local political sub-division infrastructure in North Dakota.

#### **Background**

In 2010, North Dakota voters approved a measure creating the “Legacy Fund” utilizing 30% of the state’s share of oil and gas tax revenues. The intent is to create an on-going source of revenue from the one-time extraction of natural resources. Today, the Legacy Fund is over Five Billion dollars with an average deposit of \$34m per month in 2017. The investment goal of the Legacy Fund is principal preservation while maximizing total return.

Determining the investment strategy for the Legacy Fund is a two-step process. The first step is for the Legacy and Budget Stabilization Fund Advisory Board to develop recommendations for presentation to the State Investment Board. The second step in the process is for the State Investment Board to receive and act on the recommendations.

In addition to the Legacy Fund, the SIB also guides investments for other state funds. Examples include: the state bonding fund; teachers’ fund for retirement, state fire and tornado fund; WSI, Public Employee Retirement System, Insurance Regulatory Trust Fund, etc.

#### **The Infrastructure Challenge**

Communities across North Dakota need financing for infrastructure development and re-development. The size and scope of infrastructure financing need varies greatly depending on the size of the community and type of project. Redeveloping a road in a smaller community might only cost a million or two. Larger scale projects in the biggest communities easily run into the hundreds of millions of dollars.

Examples of projects that could be financed include:

- Road and Street Projects including curb and gutter
- Water and Waste Water Treatment Plants
- Extension of new Sewer and Water lines that do not qualify for SRF financing
- Essential regional water supply for municipal, rural and industrial purposes
- Permanent community flood protection across the state
- Intra-state natural gas pipeline capacity to provide an industrial gas supply enhancing the competitive position of a community and value-added economic development
- Real estate development that meets critical local demand for affordable housing
- Alternative transportation systems to serve evolving state and community needs

## **Proposal**

The concept of this white paper is to utilize a portion of the North Dakota Legacy Fund to finance investment in North Dakota Infrastructure. Creating a program to provide financing for infrastructure development can benefit the state in multiple ways.

1. A program can be structured to provide a return on investment to the corpus of the Legacy Fund.
2. Instead of state funds leaving North Dakota to be invested in large-scale infrastructure funds, it keeps the money in state with the added benefit of building local communities.
3. Funding will allow local political subdivisions to build or rehabilitate infrastructure in their community in a cost-effective way, lowering the cost to North Dakota taxpayers.

#### **Program Administration**

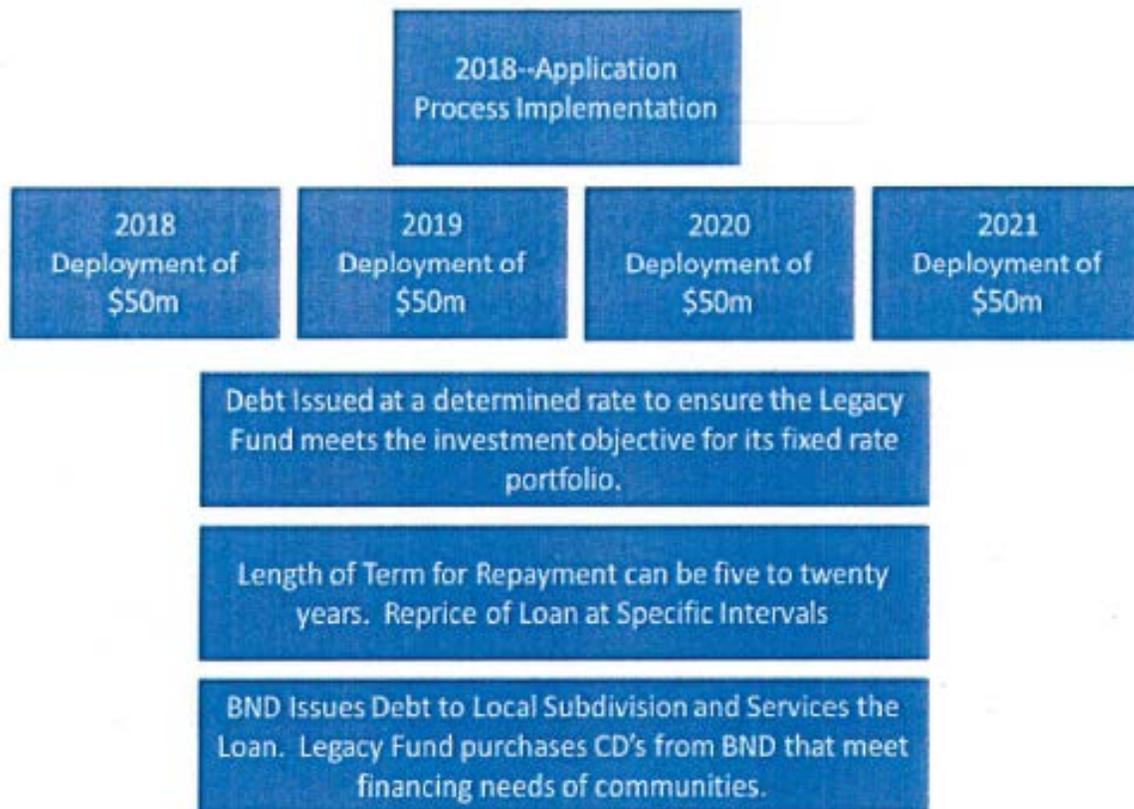
The Bank of North Dakota will develop and administer the infrastructure loan program. Some key concepts related to this proposal.

1. This is a loan program administered by BND. Loans will meet underwriting guidelines with a source of repayment and securitization of the note by a political subdivision.
2. As this is an investment of the Legacy Fund administered by BND, interest rates will be market rates.
3. As opposed to utilizing the earnings of the Legacy Fund, this proposal suggests the program be considered part of the investments or debt instruments of the fund. It is a part of the corpus, contributing to the earnings of the Fund.

## Program Structure

The Infrastructure Loan Program will mirror the structure of the existing BND Match Program. In this structure, the Retirement and Investment Office will purchase a Certificate of Deposit (CD) from the Bank of North Dakota with a specified rate return structure. BND will then utilize the investment to provide loans for infrastructure development to political subdivisions in North Dakota.

## Conceptual Financing Model



# BND Match Program

## Eligibility

Businesses that create new wealth for North Dakota and provide new jobs outside of the retail sector, especially in manufacturing, processing and value-added industries, are primary candidates. These companies shall provide evidence of considerable financial strength as demonstrated by a long-term investment grade rating. If a company does not have an adequate rating, it has three options to meet this requirement:

- Credit enhancement by a financial institution. The bank or credit union can provide a letter of credit acceptable to BND or pledge Fed Book entry securities.
- Guarantee from a federal guaranty agency or another company with an investment grade rating
- Pledge a certificate of deposit or marketable securities of a quality and level satisfactory to BND

This enhancement must provide 100 percent of BND's portion of the loan.

**Interest rate:** Interest rate on BND's portion of the loan is 0.25% over the 1- to 5- year US Treasury Yield Rate with a 2% floor. The interest rate may be adjusted periodically throughout the term of the loan depending upon the conditions of the MATCH funding and the ability of the borrower to maintain its long-term credit rating. The interest rate may reset at 1- to 5-year re-pricing windows consistent with the loan pricing options and may be subject to a prepayment penalty satisfactory to BND.

The borrower must provide evidence each year that the company's long term rating has remained at the investment grade level. Should the rating fall below investment grade, the interest rate on the note will be adjusted to reflect the market rate for the subsequent rating.

## **BND Match Loan CD Program History and Background:**

BND has a strong desire to maintain the CD Program which provides low cost financing to companies seeking to develop new businesses in North Dakota. RIO notes this economic development program has been in place for nearly 30 years although the funding source has migrated among various funds overseen by the SIB. Given the nature and size of the Legacy Fund, RIO most recently suggested the Legacy Fund as an alternative funding source to the Budget Stabilization Fund (which was reduced to support the General Fund). RIO notes “the retirement funds belonging to TFFR and PERS must be invested exclusively for the benefit of their members”. Given these “exclusive benefit” provisions, RIO does not intend to explore funding alternatives within the Pension Trust.

## **Budget Stabilization Fund Performance Review – March 31, 2017:**

The BND Match Loan CD Program was the best performing investment within the BSF over the last five years generating a 2.88% return while the Short Term Fixed Income portfolio posted a 1.61% return during this same period. BND’s strong performance is due to most of the CD rates being set at a fixed rate during a period of higher rates. As a result, the BND CD Program locked in rates several years ago when they were above current market rates available today. (BND CD’s were fully transferred into the Legacy Fund by January 31, 2017.)

### **Five Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	19%	19%	2.88%	0.87%	0.43%	0.00%	0.43%
Short Term Fixed Income	79%	79%	1.61%	0.65%	0.75%	0.00%	0.75%
Cash & Equivalents	2%	2%	0.15%	0.14%	0.00%	0.00%	0.00%
<b>Total</b>			<b>1.86%</b>	<b>= 0.68%</b>	<b>+ 1.18%</b>	<b>+ 0.01%</b>	<b>1.19%</b>

During the past year, the BND CD Program has continued to outperform other Short-Term Fixed Income investments although the level of the outperformance has declined as older CD’s bearing higher interest rates have been replaced with CD’s bearing lower interest rates given the current rate environment.

### **One Year Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
BND CDs	15%	15%	2.21%	2.21%	0.00%	0.02%	0.02%
Short Term Fixed Income	82%	82%	1.43%	0.25%	0.97%	0.01%	0.97%
Cash & Equivalents	3%	3%	0.31%	0.36%	(0.00%)	0.00%	0.00%
<b>Total</b>			<b>1.63%</b>	<b>= 0.64%</b>	<b>+ 0.97%</b>	<b>+ 0.02%</b>	<b>0.99%</b>

The current interest rate environment poses a substantial risk to the future BND CD Program particularly in the event interest rates were to rise sharply in the near future. RIO notes the BND CD’s are backed by the full faith and credit of the State of North Dakota.

## Legacy Fund Fixed Income Returns – December 31, 2017:

The Legacy Fund fully implemented a revised target asset allocation policy of 50% Equity, 35% Fixed Income, 10% Diversified Real Assets and 5% Real Estate in early-2015. BND CD's were transferred into the Legacy Fund (from the Budget Stabilization Fund) during the fourth quarter of 2016. **BND CD's generated a 2.71% net investment return for the Legacy Fund in 2017 which was approximately 0.83% below the Bloomberg Aggregate Index while being rated AA.**

### Returns for Periods Ended December 31, 2017

	Last Quarter	Last Year	Last 3 Years
<b>Domestic Fixed Income</b>			
Gross	0.97%	6.68%	4.34%
Net	0.95%	6.54%	4.21%
Bimbg Aggregate Index	0.39%	3.54%	2.24%
Ares ND Credit Strategies Fd - Net	0.09%	-	-
Cerberus ND Private Credit Fd - Net	4.17%	-	-
S&P/LSTA Leveraged Loan B	1.09%	4.27%	4.64%
 BND CDs - Net	0.66%	 2.71%	-
Declaration Total Return - Net	0.82%	5.67%	3.93%
Libor-3 Month	0.36%	1.26%	0.77%
Prudential - Gross	1.10%	7.24%	4.62%
Prudential - Net	1.03%	6.97%	4.35%
Bimbg Aggregate Index	0.39%	3.54%	2.24%
Wells Capital - Gross	1.30%	8.51%	5.02%
Wells Capital - Net	1.26%	8.29%	4.84%
Bimbg Baa Credit 3% In	1.22%	7.45%	4.09%
Western Asset - Gross	0.79%	5.66%	3.89%
Western Asset - Net	0.76%	5.53%	3.75%
Bimbg Aggregate Index	0.39%	3.54%	2.24%
SSgA US Govt Credit Bd Idx - Gross	0.49%	4.01%	2.39%
SSgA US Govt Credit Bd Idx - Net	0.48%	3.97%	2.35%
Bimbg Govt/Credit Bd	0.49%	4.00%	2.38%
Pooled Fixed Income - Net(1)	1.26%	13.44%	-
Bimbg Aggregate Index	0.39%	3.54%	2.24%

## NDSIB Governance Policy: Bank of North Dakota Match Loan Program (E-12)

**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.**

## **NDCC 21-10-11. Legacy and budget stabilization fund advisory board.**

The legacy and budget stabilization fund advisory board is created to develop recommendations for the investment of funds in the legacy fund and the budget stabilization fund to present to the state investment board. The goal of investment for the legacy fund is principal preservation while maximizing total return. The board consists of two members of the Senate appointed by the Senate Majority Leader, two members of the House of Representatives appointed by the House Majority Leader, the Director of the Office of Management and Budget or designee, the President of the Bank of North Dakota or designee, and the Tax Commissioner or designee. The board shall select a chairman and must meet at the call of the chairman. The board shall report at least semiannually to the budget section. Legislative members are entitled to receive compensation and expense reimbursement as provided under section 54-03-20 and reimbursement for mileage as provided by law for state officers. The legislative council shall pay the compensation and expense reimbursement for the legislative members. The legislative council shall provide staff services to the legacy and budget stabilization fund advisory board. The staff and consultants of the state retirement and investment office shall advise the board in developing asset allocation and investment policies.

## **NDCC 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.

### **NDCC 21-10-02.1. Board - Policies on investment goals and objectives and asset allocation.**

1. The governing body of each fund enumerated in section 21-10-06 shall establish policies on investment goals and objectives and asset allocation for each respective fund. The policies must provide for:
  - a. The definition and assignment of duties and responsibilities to advisory services and persons employed by the board.
  - b. Rate of return objectives, including liquidity requirements and acceptable levels of risk.
  - c. Long-range asset allocation goals.
  - d. Guidelines for the selection and redemption of investments.
  - e. Investment diversification, investment quality, qualification of advisory services, and amounts to be invested by advisory services.
  - f. The type of reports and procedures to be used in evaluating performance.
2. The asset allocation and any subsequent allocation changes for each fund must be approved by the governing body of that fund and the state investment board. The governing body of each fund shall use the staff and consultants of the retirement and investment office in developing asset allocation and investment policies.

**RIO Employee Survey  
Summary of Results  
January 18, 2018**

- **RIO's participation rate improved considerably to 89% (16 of 18) in 2018 versus 73% (11 of 15) in 2017, which is encouraging.**
- **RIO received "overwhelming positive responses" (defined as a favorable response rate of 80% or higher) on the following 14 survey questions:**
  1. I understand how my job contributes to our agency's success;
  2. The work I do is important;
  3. The physical layout of where I work allows me to be productive;
  4. I feel physically safe and secure to do my job where I work;
  5. I understand what to do if an emergency were to occur at work;
  6. My teammates are committed to performing quality work;
  7. My immediate supervisor believes customer service is important in our team;
  8. I understand my immediate supervisor's expectations of me;
  9. My immediate supervisor holds me accountable for achieving results;
  10. I have a clear understanding of RIO's mission, vision and values;
  11. I enjoy my work;
  12. I have a good work life balance;
  13. I am an important part of my employing agency; and
  14. My work gives me a feeling of personal accomplishment.
- **RIO received "materially positive responses" (defined as a favorable response rate of 60% or higher) on 76% of the survey questions.**
- **Although survey responses were generally positive and constructive, RIO received a favorable response rate of 50% or less on the following six questions:**
  1. My team has a climate in which diverse perspectives are valued (44% favorable);
  2. RIO's senior leadership seeks input from others before making important decisions (50%);
  3. Information and knowledge are shared openly (50%);
  4. I would recommend working for my specific agency to a friend (50%);
  5. I would recommend working the State of North Dakota as a good place to work (50%);
  6. I am satisfied with my opportunities for career growth & advancement (44% favorable).
- **Based on written survey commentary, the top three concerns cited by RIO team members included compensation (by a wide margin), communication and teamwork, which are common themes with other non-cabinet level agency survey responses.**

**Management Commentary:**

The Executive Director invites all RIO team members to promote and share constructive ideas to enhance our overall agency culture in 2019. In order to support this goal, RIO recently established a new Communication and Teamwork (CAT) committee to enhance overall agency teamwork and communication in the upcoming year.

# North Dakota Retirement & Investment Office - Team Member Survey (Oct.2018)

2018 Participation % = 89% (16 of 18 with no open positions)

2017 Participation % = 73% (11 of 15 with 3 open positions)

Questions 1-2 confirms the respondent is a RIO team member.	1-4 yrs.	5-10 yrs.	> 10 yrs.
2 How long have you worked for the State of ND?	8%	31%	61%
3 Do you supervise other team members?	43%	57%	
4 Please select the status of your position?	100%	0%	0%
Response Rate Color: Green - 80% to 100% Blue 60% to 80% White = Less than 60%	RIO Agency		
	Favorable	Neutral	Unfavor.
5 Training and professional development are available.	63%	25%	13%
6 I feel free to try new things even if my efforts don't succeed.	63%	13%	25%
7 Tools & resources to deliver excellent customer service are present.	56%	38%	6%
8 I understand how my job contributes to our agency's success.	94%	6%	0%
9 Processes and procedure allow me to meet my customers needs.	69%	19%	13%
10 I have passion and excitement about my work.	63%	38%	0%
11 The amount of work I am expected to do is reasonable.	63%	25%	13%
12 I have the authority I need to do my job effectively.	63%	6%	31%
13 The work I do is important.	100%	0%	0%
14 The physical layout of where I work allows me to be productive.	100%	0%	0%
15 I feel physically safe and secure to do my job where I work.	94%	6%	0%
16 I understand what to do if an emergency were to occur at work.	94%	6%	0%
17 My teammates use technology to best support our customers.	69%	19%	13%
18 There is a climate of trust within my team.	56%	19%	25%
19 My teammates display a high degree of teamwork.	56%	19%	25%
20 My team has a climate in which diverse perspectives are valued.	44%	38%	19%
21 My teammates develop and value relationships with others.	63%	13%	25%
22 My teammates are committed to performing quality work.	81%	13%	6%
23 I receive the right amount of communication from my immediate supervisor.	63%	19%	19%
24 My immediate supervisor believes customer service is important in our team.	88%	6%	6%
25 I understand my immediate supervisor's expectations of me.	81%	13%	6%
26 My immediate supervisor holds me accountable for achieving results.	88%	13%	0%
27 I am comfortable giving my immediate supervisor feedback.	69%	13%	19%
28 My immediate supervisor recognizes me for a job well done.	69%	13%	19%
29 My immediate supervisor treats me with respect.	69%	13%	19%
30 I am comfortable raising ethical concerns to my immediate supervisor.	69%	19%	13%
31 My immediate supervisor encourages me to think creatively at work.	63%	13%	25%
32 I have confidence in my immediate supervisor within the agency where I work.	69%	13%	19%
33 My immediate supervisor is willing to take a risk on new ideas.	63%	19%	19%
34 My agency's senior leadership informs us about things we need to know.	69%	19%	13%
35 My agency's senior leadership seeks input from others before making important decision.	44%	38%	19%
36 My agency's senior leadership sets an example for others to follow.	69%	25%	6%
37 My agency's senior leadership is transparent in their decisions.	63%	25%	13%
38 My agency's senior leadership treats others with respect.	75%	25%	0%
39 I am confident my agency's senior leadership will respond to unethical behavior.	69%	31%	0%
40 I have confidence in my agency's senior leadership to make the appropriate decisions.	56%	38%	6%
41 The agency where I work values honesty and integrity.	75%	19%	6%
42 I am recognized/rewarded for delivering great customer service to our customers.	56%	25%	19%
43 The agency where I work has a clear sense of purpose and direction.	63%	31%	6%
44 I have a clear understanding of my agency's mission, vision and values.	81%	13%	6%
45 Team members of the agency where I work trust and support each other.	56%	13%	31%
46 Information and knowledge are shared openly.	50%	25%	25%
47 I enjoy my work	88%	13%	0%
48 I have a good work life balance.	94%	6%	0%
49 I am an important part of my employing agency.	94%	6%	0%
50 I would recommend working for my specific agency to a friend.	50%	31%	19%
51 I would recommend the State of North Dakota as a good place to work.	50%	31%	19%
52 My work gives me a feeling of personal accomplishment	81%	19%	0%
53 I am satisfied with my opportunities for career growth and advancement.	44%	38%	19%
54 Considering everything, I am satisfied working here.	63%	38%	0%

**Informational**

# Ongoing Investment Due Diligence

January 25, 2019

Dave Hunter, Executive Director / CIO

Darren Schulz, Deputy Chief Investment Officer

Eric Chin, Senior Investment Officer

ND Retirement & Investment Office (RIO)

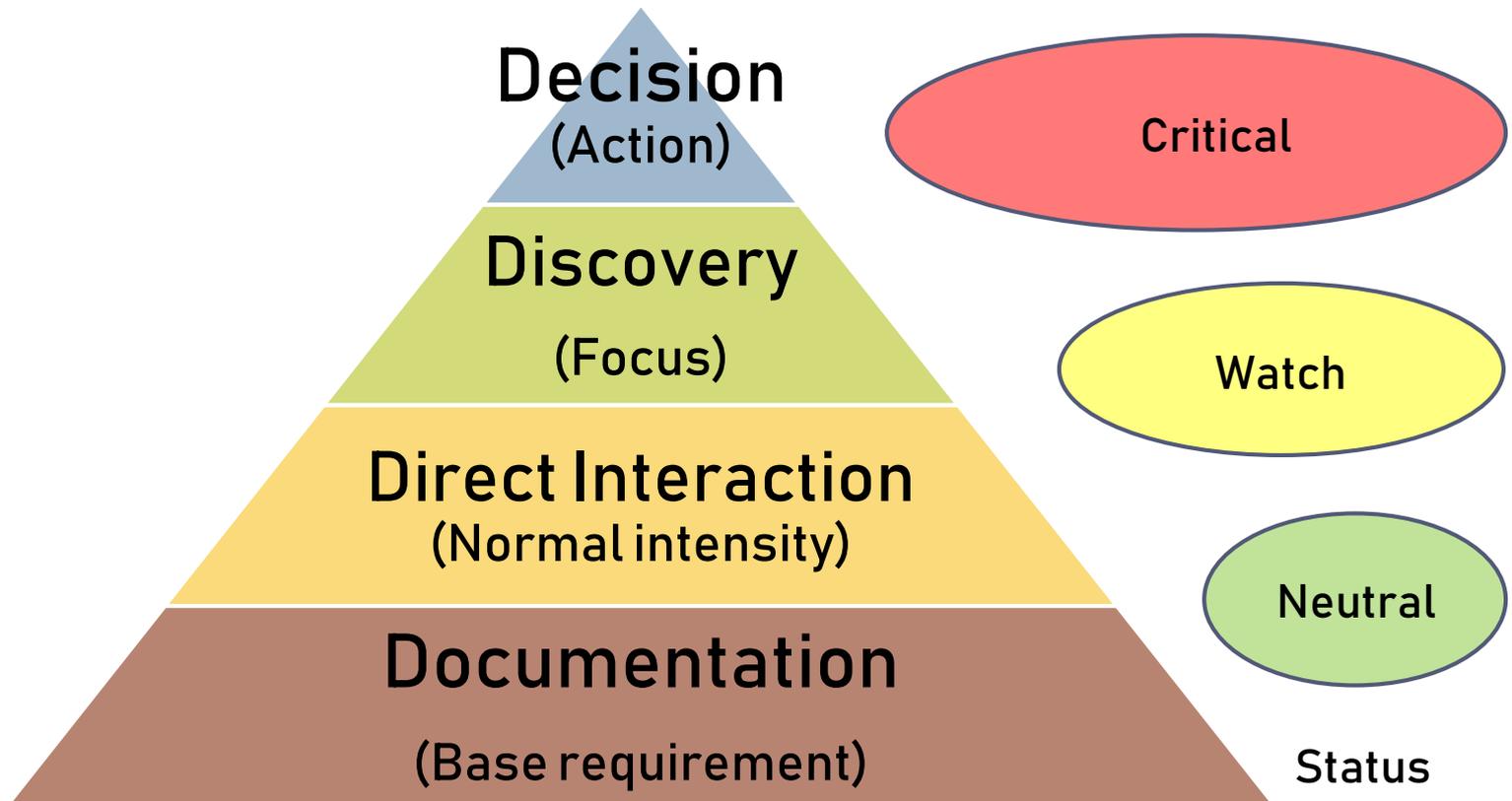
State Investment Board (SIB)

# SIB Investment Process



# Ongoing (Post-Hire) Investment Due Diligence

Monitoring is a critical control system with a hierarchy of scrutiny within an investment process. Its role is to observe, verify, and control in an attempt to shape portfolio behavior in a desirable way.



# Staff Ongoing Investment DD Process

Daily/weekly	Monthly	Quarterly	Semi-annual /annual	Ad-hoc
<p>Staff monitors general market conditions, economic data releases, and industry news to glean information that may affect a manager and its key investments. Staff also monitors performance updates that are received for any unexpected developments. For separate account managers, Staff receives daily uploads of holdings that allow Staff to perform risk analysis and performance attribution.</p>	<p>Staff reviews monthly performance relative to the appropriate benchmarks. In addition, Staff monitors portfolio holdings and exposures, such as top holdings, or sectoral, regional, or asset class concentrations.</p>	<p>Staff undertakes a more detailed formal performance review focused on relative performance, market factors that impacted the portfolio, and positions that had the greatest positive or negative impact. All manager reporting – commentary, attribution, holdings, characteristics and performance – is filed into Tamale and reviewed. Additionally, performance reports generated by Callan are used as an aide to further understand portfolio behavior.</p>	<p>Staff communicates with managers on a regular basis; the frequency depends on a number of factors, including the complexity and nature of the mandate, whether there are any concerns or organizational changes, or as a routine matter as needed. Staff also reviews annual audited financial statements, due diligence questionnaires and compliance certifications for any material findings.</p>	<p>Staff and/or consultant may receive communications from the manager regarding changes that may adversely impact the mandate in the future. It is the duty of Staff to promptly review these communications for materiality and to develop a plan for follow-up action.</p>

# Periodic Reviews

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Periodic reviews consist of two components:

- I. **Remote reviews** or **desk reviews** consist of in-person, video, or audio teleconference meetings held at RIO offices on at least an annual basis. Frequency will be dictated by market conditions or manager-specific issues.
- II. **On-site manager visits** are required for all managers except those in “wind-down” at least once every three years. Typically, managers will be visited on-site every other year or more frequently.

**Desk reviews** are *not* considered to be industry best practice:

- Results in less comprehensive reviews and constrained agendas
- Does not allow for face-to-face interaction with a full array of key investment, operational, and legal personnel
- May expose investor to greater operational risk, as a firm’s ability to demonstrate operational practices is absent

# Termination Factors

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Qualitative criteria affecting the stability of a firm or a combination of qualitative and quantitative criteria may necessitate restructuring or termination of a mandate. Examples of termination criteria include:

- Changes to investment structure or policy
- Departures of key investment professionals
- Unsustainable growth in assets (or asset decreases impacting business/product viability)
- Changes to firm ownership or organizational structure
- Unexpected change in investment process
- Manager's edge is deteriorating
- Mismanagement of human capital (talent management, retention, succession)
- Style or strategy drift
- Significant litigation or regulatory investigation/finding
- Deterioration in compliance procedures

# NORTH DAKOTA STATE INVESTMENT BOARD

## ONGOING INVESTMENT DUE DILIGENCE POLICY

JANUARY 2019

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**Policy Purpose** The purpose of this policy is to provide a framework for North Dakota State Investment Board Staff to follow when conducting ongoing investment due diligence of existing investment managers.

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**Definition** Due diligence is a broadly based term comprised of many meanings within the institutional investment community. In plain language, it means appropriate carefulness. Within a legal sense, it means the degree of care that a prudent person would exercise. Due diligence is elevated with the goal of providing an added level of risk management and oversight. This is done through the use of a multi-pronged approach which is comprised of distinct, but inter-related components, which are carried out over the life of the investment from pre-hire to wind-down. These components include investment due diligence, operational due diligence, legal due diligence and compliance monitoring.

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**Background (The Ongoing Due Diligence Process)** A reliable investment due diligence process requires extensive ongoing monitoring to ensure that continued investment with a given manager is advisable. Importantly, the process should be *adaptive*. For example, a checklist can be a helpful tool, but following a checklist does not equate to conducting proper and effective due diligence; it needs to be flexible at times to pull on a thread of inquiry. The most important part of the process should be *discovery*, the investigative search to build an understanding that goes beyond a narrative found in pitch books, presentations, and due diligence reports available from third parties. The objective is to surface differential information and therefore the design of the process is not a one-size-fits-all effort; the approach can vary as deep issues are illuminated by new events.

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**Policy** It is the policy of the SIB that

- SIB investment Staff are delegated responsibility for the ongoing evaluation of external investment managers retained.
- Ongoing monitoring and evaluation of existing managers shall consist of both qualitative and quantitative criteria. Such criteria include but are not limited to the following:

**Policy  
(continued)**

- Organizational attributes and investment team
  - Investment philosophy and process
  - Historical holdings and exposures
  - Historical track record and performance statistics
  - Performance attribution
  - Risk management
- 

**Ongoing  
Monitoring  
and Review**

A reliable manager research process requires extensive ongoing monitoring to ensure that continued investment with a manager is advisable. After an initial investment, Staff will perform the following for each period:

**Daily/weekly:** Staff monitors general market conditions, economic data releases, and industry news to glean information that may affect a manager and its key investments. Staff also monitors performance updates that are received for any unexpected developments. For separate account managers, Staff receives daily uploads of holdings that allow Staff to perform risk analysis and performance attribution.

**Monthly:** Staff reviews monthly performance relative to the appropriate benchmarks. In addition, Staff monitors portfolio holdings and exposures, such as top holdings, or sectoral, regional, or asset class concentrations.

**Quarterly:** Staff undertakes a more detailed formal performance review focused on relative performance, market factors that impacted the portfolio, and positions that had the greatest positive or negative impact. All manager reporting – commentary, attribution, holdings, characteristics and performance – is filed into Tamale, a document management system, and reviewed. Additionally, performance reports generated by Callan are used as an aide to further understand portfolio behavior.

**Semi-Annually/Annually:** Staff communicates with managers on a regular basis; the frequency depends on a number of factors, including the complexity and nature of the mandate, whether there are any concerns or organizational changes, or as a routine matter as needed.

**Ad-hoc:** Staff and/or consultant may receive communications from the manager regarding changes that may adversely impact the mandate in the future. It is the duty of Staff to promptly review these communications for materiality and to develop a plan for follow-up action.

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**Termination Factors**

Decisions regarding retention or termination of external managers may be based solely on qualitative criteria which affect the stability of the firm or on a combination of qualitative and quantitative criteria. Significant developments or policy changes that may necessitate restructuring or terminating a manager mandate include, but are not limited to the following occurrences:

- Changes to investment structure or policy
- Departures of key investment professionals
- Unsustainable growth in assets (or asset decreases impacting business/product viability)
- Changes to firm ownership or organizational structure
- Unexpected change in investment process
- Mismanagement of human capital (talent management, retention, succession)
- Style or strategy drift
- Significant litigation or regulatory investigation/finding
- Deterioration in compliance procedures

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**Performance**

Emphasis is placed on longer time periods when appraising manager performance. A minimum of a five-year period will be used to evaluate manager performance against long-term performance standards. Shorter-term performance standards will incorporate a minimum three-year measurement period. Rolling period data consisting of short-term and long-term time horizons will be reviewed to gain a perspective on consistency of results.

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**Remote vs. On-site Due Diligence**

Monitoring consists of two components – both remote and onsite reviews. Remote strategy reviews consist of in-person, video, or audio teleconferences held at RIO offices, or other selected venues, with investment managers on at least an annual basis. More frequent video teleconferencing and other forms of communication may be utilized as market conditions or manager-specific issues warrant. Conducted by investment Staff, these sessions are an economical and prudent method to ensure Staff and the Board stay abreast of manager or strategy-related issues.

On-site investment due diligence is required for all managers, at least once every three years; however, exceptions will be made for managers in “wind-down”. Typically, managers will be visited for on-site due diligence every other year or more frequently. A minimum of one Staff member is required at each on-site meeting; consultant support is recommended but not required. In addition, Staff may attend manager-hosted events, such as annual investor days, annual general meetings and any relevant industry conferences.

Note: Staff may defer selected remote or on-site meetings depending upon schedule conflicts or other business considerations.

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**Annual  
Administrative  
Reviews**

Staff will review audited financial statements for each investment (or a summary of audited financial statements prepared by a reputable outside party) on an annual basis.

Staff will review summaries of responses to the annual Due Diligence Questionnaire and Compliance Certifications for new material findings that could materially impact Staff's opinion on the manager. Such questionnaires cover a wide variety of topics including but not limited to legal and regulatory matters, compliance oversight, service providers, and risk management.

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**Investment  
Consultant Role**

When applicable, Staff will utilize independent resources from the SIB's investment consultant to supplement internal resources applied to monitoring managers and developing manager termination/retention actions.

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# MEMORANDUM

**TO:** State Investment Board

**FROM:** Sara Sauter, Supervisor of Audit Services

**DATE:** January 25, 2019

**SUBJECT:** Audit Committee Charter Revisions and Audit Services Charter

The Audit Committee is a standing committee of the State Investment Board (SIB) authorized under SIB Governance Policy B-6, Standing Committees. Its primary function is to assist the SIB in fulfilling its oversight responsibilities of 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. SIB Governance Policy B-6 requires the Audit Committee to operate under the terms of a charter approved by the SIB.

On February 23, 2017 RIO's management was notified by RIO's legal counsel that the current practice of meeting with RIO's independent auditors, RIO's management, and RIO's audit staff independently, out of the presence of other parties, puts the Committee at risk of violating North Dakota's open records and meeting laws. The revised Audit Committee Charter has the verbiage removed.

The Audit Committee charter was also revised to reflect the governance manual and include a section on risk management.

An Audit Services Charter is proposed and is a best practice according to International Standards for the Professional Practice of Internal Auditing (Standards). The purpose of an Audit Services Charter is to demonstrate its importance and contribution to the organization through a process of audits and other activities designed to add value, at the same time that it avoids activities that have the potential to undermine its objectivity and independence.

The revised Audit Committee Charter and Audit Services charter have already been reviewed by legal counsel. The SIB Audit Committee approved the revisions to the current Charter and the Audit Services Charter on November 15, 2018.

If the SIB so desires, it is requested a board member to make a motion to accept the revisions to the SIB Audit Committee Charter and the new Audit Services Charter.

**CHARTER OF THE  
AUDIT COMMITTEE OF THE  
NORTH DAKOTA STATE INVESTMENT BOARD**

**PURPOSE**

The Audit Committee (the Committee) is a standing committee of the North Dakota State Investment Board (SIB) created to fulfill its fiduciary oversight responsibilities of the North Dakota Retirement and Investment Office (RIO) and to serve as a communications link among the SIB, the RIO's management and Audit Services staff, independent auditors, and others.

The Committee will assist with the integrity of the RIO's financial reporting process and system of internal controls, the RIO's compliance with legal and regulatory requirements, the performance of the RIO's Audit Services function and independent auditors, and the RIO's management of risks in the Committee's areas of responsibility. Audit Services will assist RIO in accomplishing its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

**AUTHORITY**

The Committee is authorized to provide oversight to the Audit Services function and the independent audit for the RIO. These activities provide assurance that RIO's financial condition and results of operations are accomplished in accordance with the RIO's policies and procedures and legal and regulatory requirements. The Committee may investigate any activity of the RIO and may retain persons as necessary from within or outside the RIO having special competence to assist the Committee in the accomplishment of its responsibilities.

The RIO's Supervisor of Audit Services will be the staff member reporting administratively to the Executive Director/Chief Investment Officer and functionally to the Committee.

The ~~RIO's management~~ Executive Director will supervise the administrative activities of the Audit Services function and independent audit activities such as securing contracts, paying fees, maintaining official reports, and other appropriate activities.

**COMPOSITION**

The Committee will consist of five members, selected by and approved by the SIB. Three members of the Committee will represent the three groups on the SIB: Teachers' Fund for Retirement (TFFR) Board, Public Employees Retirement System (PERS) Board, and elected and appointed officials, and two members selected from outside of the SIB and the RIO. The SIB should select committee members who are both independent and financially literate.

Membership on the 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 Committee.

The Committee will elect a Chair, and a Vice Chair, ~~and a liaison~~. A liaison will be appointed by the Chair. The Chair will preside at all meetings of the Committee. In the absence of the Chair, the Vice Chair will perform the duties of the Chair. The liaison will report annually to the SIB on the results of the independent audit and at least four times a year to the SIB and TFFR board on the activities of the Committee and other pertinent information.

The Committee may form, and delegate authority to, subcommittees when it deems appropriate.

### **MEETINGS**

The Committee will meet generally four times a year, with authority to convene additional meetings, as circumstances require or to adequately fulfill all the obligations and duties as outlined in this charter.

Meeting agendas will be prepared by the Supervisor of Audit Services and approved by the Committee Chair, unless otherwise directed by the Committee and will be provided to the Committee members along with briefing materials before the scheduled committee meeting.

Committee members are expected to attend each meeting, in person or via tele- or video-conference. The ~~RIO's executive management and~~ Supervisor of Audit Services, a representative of RIO's management team and others necessary to provide information and to conduct business will attend meetings. The Committee may invite staff of the RIO, auditors or others to attend meetings, as necessary. ~~The Committee may meet separately with the staff of the RIO, auditors and others. The Committee may, at its discretion, elect to meet without the presence of the RIO's executive management and/or Supervisor of Audit Services or others. Meetings will be conducted in accordance with NDCC 44-04-17.1.~~ The Committee may hold executive sessions as allowed under state law.

The Committee will act only on the affirmative vote of three of the committee members at a meeting. To conduct business, a quorum will be three members of the Committee. Should a quorum not be present before a scheduled meeting or during a meeting, the Chair will announce the absence of a quorum and the members will disburse. ~~Meetings unable to transact business for lack of a quorum are not considered meetings.~~ Meeting minutes will be prepared by the RIO, or as otherwise directed by the Committee. Approved meeting minutes of the Committee will be submitted to the SIB.

### **RESPONSIBILITIES**

The RIO's management is responsible for financial and other reporting, internal controls, and compliance with laws, regulations, and ethics. The Committee has the responsibility to provide oversight in the areas of:

- the reliability and integrity of financial and operating information;
- compliance with policies, plans, procedures, pertinent laws and regulations;
- compliance with the Code of Conduct applicable to the SIB, TFFR Board, and RIO employees;

- safeguarding of assets;
- economical and efficient use of resources; and
- effectiveness of achieving desired results from operations.

To this end, the Committee will:

#### Independent Audit

- Review the independent auditors' proposed audit scope and approach, including coordination of audit effort with RIO's Audit Services staff and any developments in accounting principles and auditing standards that may affect either the financial statements or the audit.
- ~~Meet with the independent auditors to discuss any matters that the Committee or auditors believe should be discussed privately (out of the presence of RIO's management and/or Audit Services staff, as appropriate) and review any restrictions on the audit work.~~
- Inquire as to any proposed changes in accounting or financial reporting procedures and of any unusual events that could impact the financial statements.
- Review the results of the financial statements report with the independent auditors and the RIO's management, prior to the release of the financial statements report to the SIB and other officials. This review will include the following, as applicable:
  - Any major problems encountered by the independent auditors and the resolution thereof;
  - The effect on the audit of any developments;
  - Any unresolved differences between the independent auditors and the RIO's management;
  - Any other significant comments or recommendations of the independent auditors or the RIO's management;
  - The adequacy of the RIO's internal accounting controls and accounting policies, procedures, and practices; and
  - Understand the scope of independent auditors' review of internal control over financial reporting, and obtain reports on significant findings and recommendations, together with the RIO's management responses.
- Consider the effectiveness of the RIO's internal control system, including information technology security and control.
- Consider whether the financial statements are complete, consistent with information known to committee members, and reflect appropriate accounting principles. This will include the following, as applicable:
  - The accuracy and completeness of the information in other sections of the annual report and related regulatory filings;

- The significant accounting and reporting issues, including complex or unusual transactions and highly judgmental areas, and recent professional and regulatory pronouncements, and understand their impact on the financial statements; and
- All matters required to be communicated to the Committee under generally accepted auditing standards with the RIO's management and the independent auditors.
- Review non-audit services, if any, performed for the RIO by the independent auditors.

### Audit Services

- Consider the effectiveness of the Audit Services function, within The Institute of Internal Auditors' *International Professional Practices Framework for Internal Auditing* consisting of the *Definition of Internal Auditing, Code of Ethics and the Standards*.
- Review with the ~~RIO's management and the~~ Executive Director and the Supervisor of Audit Services the audit charter, activities, staffing, and organizational structure of Audit Services.
- Review and approve the annual risk-based audit work plan and all major changes to the plan.
- Bring to attention of the Board any internal audit issues the Committee determines significant and appropriate for Board consideration.
- ~~Meet with the RIO's Supervisor of Audit Services to discuss any matters that the Committee or Audit Services believes should be discussed privately (out of the presence of RIO's management and/or the independent auditors, as appropriate) and review any restrictions on the audit work.~~
- Participate with ~~RIO's management~~ the Executive Director in the appointment and annual evaluation of the Supervisor of Audit Services. Work with ~~RIO's management~~ the Executive Director on any changes in staffing, including the addition, termination, or replacement of auditors, and the approval of salary increases and/or promotions other than those authorized by the legislature.

### Risk Management

- Obtain information and/or training to enhance the Committee's understanding of organization and its related risk management processes.
- Review the adequacy of the organization's policy on risk management.
- Review the effectiveness of the organization's system for assessing, monitoring, and controlling significant risks or exposures.
- Review management's reports on risks and related risk mitigations.
- Hire outside experts and consultants in risk management, as necessary, subject to full board approval.

## Compliance

- Review compliance by TFFR participating employers as it relates to TFFR laws, rules and policies through the receipt of employer audit results.
- Review staff compliance with federal and state laws and North Dakota administrative code as applicable to RIO, the SIB and TFFR Board programs, and the process for communicating the code of conduct to the RIO's staff, and for monitoring compliance through the receipt of the audit results.
- Review the process for communicating and monitoring compliance with the code of ethics, code of conduct, and fraud policies.
- Review the findings of any examinations by regulatory agencies, any auditor observations related to compliance, and the responsiveness and timeliness of management's actions to address the findings/recommendations.
- Obtain updates from the RIO's management and legal counsel regarding compliance matters, as deemed necessary.

## Reporting Responsibilities

- Report to the SIB about the Committee's activities, issues, and related recommendations.

Provide a written report annually to the SIB, describing the Committee's composition, responsibilities and how they were discharged, and any other information required.

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## Other Responsibilities

- Make recommendations to the North Dakota State Auditor's Office, when appropriate, as it relates to selection, evaluation, and termination of independent auditors.
- Obtain the information and training needed to enhance the committee members' understanding of the role of Audit Services and the independent auditor, the risk management process, internal controls, and a certain level of familiarity in financial reporting standards and processes so the Committee may adequately oversee.
- Serve as an open avenue of communication among the SIB, the RIO's management and Audit Services, the independent auditors, and others.

- Serve as an appropriate confidential body for individuals to provide information on potentially fraudulent financial reporting or breaches of internal control.
- Inquire of management and Audit Services regarding the procedures in place for the prevention of illegal payments, conflicts of interest, or other questionable practices.
- ~~• Meet with the RIO's management to discuss any matters that the Committee or management believes should be discussed privately (out of the presence of Audit Services staff and/or the independent auditors, as appropriate) and review any restrictions on the audit work.~~
- Perform other activities related to this charter as requested by the SIB.
- Institute and oversee special investigations as needed.
- Review any other reports the RIO issues that relates to the Committee's responsibilities.
- Review and assess the adequacy of the Committee charter annually, requesting the SIB approval for proposed changes.
- Confirm annually the review of all responsibilities outlined in this charter.

**DATE OF CREATION OF COMMITTEE AMENDMENTS:** December 14, 1993

**DATE AUDIT COMMITTEE CHARTER ADOPTED AND APPROVED:** June 24, 1994

**REVISED:** November 22, 1996, February 13, 1997, November 6, 2001, May 19, 2006, May 18, 2007, June 26, 2009, May 19, 2016, **November 15, 2018.**

# **AUDIT SERVICES CHARTER NORTH DAKOTA STATE INVESTMENT BOARD**

## **MISSION**

Audit Services to provides an independent, objective assurance and consulting activity designed to add value and improve North Dakota Retirement and Investment Office (RIO's) operations. Audit Services will assist RIO in accomplishing its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

## **OBJECTIVES AND SCOPE**

### ***Objectives***

#### ***Auditing Services***

The objectives of Audit Services are to provide independent assurance to the Audit Committee and management that RIO's assets are safeguarded, operating efficiency is enhanced, and compliance is maintained with prescribed laws, and Board and management policies. Included in the objectives are independent assessment of RIO's risk awareness and management of risk, reliability and integrity data, and achievement of the organization's goals and objectives.

#### ***Consulting and Advisory Services***

Audit Services' objectives for the consulting and advisory services are to provide management with assessments and advice for improving processes that will advance the goals and objectives of the organization. In particular, the objectives are to provide the assessments and advice on the front-end of projects so that risks may be identified, managed and internal controls may be designed at the beginning of a project.

### ***Scope***

The scope of Audit Services work is to conclude whether the RIO's framework of risk management, internal control, and governance processes, as designed and represented by management, is adequate and functioning in a manner to ensure:

1. Programs are operating within the highest fiduciary standards and are directed toward the requirements defined in the Federal and State laws, regulations, local government ordinances and rules, and the policies and procedures of RIO.
2. Programs and processes are consistent with industry best practices, using the best public and private examples as benchmarks, as practicable.
3. Significant legislative or regulatory issues impacting the RIO are recognized and addressed appropriately.
4. Significant financial, managerial, and operating information is accurate, reliable, and timely.
5. Resources are acquired economically, used efficiently, and adequately protected.
6. Existing policies and procedures are appropriate and updated.
7. Operations, processes and programs are consistent with established missions, objectives and goals, and whether they are being carried out as planned.
8. Risks within and outside the organization are appropriately identified and managed.
9. Quality service and continuous improvement are fostered in the RIO's control process.

10. Contractors, including third-party administrators, are meeting the objectives of the contracts, while in conformance with applicable laws, regulations, policies, procedures and best practices.
11. Operations, processes, or programs are reviewed at the request of the Audit Committee or management.

Improvements to member service, management of risks, internal control, governance, profitability, and the organization's effectiveness, efficiency and image may be identified during audits. This information will be communicated to the Audit Committee and to appropriate levels of management.

### **AUTHORITY**

The State Investment Board (SIB) established the Audit Committee to have oversight of the internal audit function of this organization. Audit Services is established by the Audit Committee of the SIB pursuant to best practices. This Charter and all future amendments to it are to be approved by the Audit Committee through a majority vote. This Charter shall be reviewed periodically and updated as required by the Audit Committee. The State Investment Board will have final approval this Charter.

### **ACCESS**

The Supervisor of Audit Services and designated audit staff, as appropriate, are granted authority for full, free and unrestricted access to all of the organization's functions, records, files and information systems, personnel, contractors, physical properties, and any other item relevant to the function, process or division under review. All contracts with vendors shall contain the RIO's standard audit language enabling the organization's internal auditors and other auditors and specialists to have access to relevant records and information. All of the employees of the organization are required to assist the staff of Audit Services in fulfilling their audit functions and fiduciary duties.

The Supervisor of Audit Services shall have free and unrestricted access to the Chairman of the Audit Committee, the Audit Committee, and the Chairman, and members of the State Investment Board. The Supervisor of Audit Services shall also have free and unrestricted access to the Executive Director, Management and all personnel, contractors and vendors of the organization, and employers, members, retirees and beneficiaries of the organization.

### **CONFIDENTIALITY**

Documents and information given to Audit Services shall be handled in the same prudent and confidential manner as by those employees normally accountable for them. The Supervisor of Audit Services shall ensure that internal audit staff is instructed in the handling and safeguarding of confidential information.

### **INDEPENDENCE AND OBJECTIVITY**

The Supervisor of Audit Services reports functionally to the Audit Committee and reports administratively to the Executive Director.

The Supervisor of Audit Services shall freely discuss audit policies, audit findings and recommendations, audit follow-up, guidance issues and other matters as necessary. The standards of professional audit independence will be discussed with the Audit Committee

periodically. The standards of independence used as benchmarks will be those of the organizations mentioned in the Standards of Audit Practice below.

## **RESPONSIBILITIES AND ACCOUNTABILITY**

The Supervisor of Audit Services is responsible for the following in order to meet the mission, objectives and scope of this Charter and Audit Services:

1. Select, train, develop and retain a competent audit staff that collectively has the abilities, knowledge, skills, experience, expertise and professional certifications necessary to accomplish the mission, objectives and scope of this Charter. Provide opportunity and support for staff obtaining professional training, professional examinations, and professional certifications.
2. Establish policies for conducting its activities and directing its technical and administrative functions according to the organization's policies and direction provided by the Audit Committee, and professional standards.
3. Conduct an annual risk assessment and produce a flexible audit plan that will accomplish the mission, objectives and scope of this Charter. The plan will include some unassigned hours in order to provide flexibility for changing condition; shall in part be based upon risks and control concerns identified by Management. This plan will be periodically updated as necessary.
4. Prepare a time budget that is complementary to the implementation of the audit plan.
5. Implement the annual audit plan, as approved, including, as appropriate, any plan amendments, special tasks or projects requested by Management and the Audit Committee.
6. Coordinate with audit clients to finalize recommendations for improvement and identify implementation timelines. Audit Services Staff shall consider costs and benefits while formulating and discussing their recommendations.
7. Evaluate and assess significant merging/consolidating functions and new or changing services, processes, operations, and control processes coincident with their development, implementation, and/or expansion.
8. Conduct periodic follow-up reviews to evaluate the adequacy of Management's corrective actions.
9. Issue periodic reports to the Audit Committee and Management summarizing results of audit activities, and summarizing the status of follow-up activities.
10. Provide periodic summaries of consulting and advisory activities to the Audit Committee.
11. Attend all Audit Committee meetings, and ensure attendance of additional staff and attendance by auditees as appropriate.
12. Obtain a peer review by other internal auditors or complete a self-assessment, no less frequently than every five (5) years as mandated by the IIA's *International Standards for the Professional Practice of Internal Auditing*.
13. Inform the Audit Committee of emerging trends and successful practices in internal auditing.
14. Assist in the investigation of significant suspected fraudulent activities within the organization and notify the Audit Committee, the Executive Director and Management, as appropriate, of the results.
15. Report to the Audit Committee on all activities and associated costs of work performed by the external financial statement auditors.

16. Consult with the organization's management, as requested, on potential policy and procedure changes.
17. Participate, in an advisory capacity, in the planning, design, development, and implementation and modification phases of major information related systems to determine whether:
  - Adequate controls are incorporated in the systems;
  - Adequate risk management techniques have been utilized;
  - Thorough systems testing is performed at appropriate stages;
  - Systems documentation is complete and accurate; and
  - The intended purpose and objectives of the system implementation or modifications have been met.
18. Participate in professional audit organizations by attending meetings, joining the governing boards, presenting speeches and papers, and networking with other professionals. Network with internal audit staff of other public pension systems to learn and exchange best practices information. Participate in other professional organizations related to the mission of the organization.
19. Work in coordination with other departments as point of contact for handling all matter related to audits, examinations, investigations or inquiries of the State Auditor or other appropriate State or Federal Auditors.
20. Review the organization's fraud policy and ethics policy periodically.

#### **STANDARDS OF AUDIT PRACTICE**

Audit Services shall follow the professional standards of relevant professional organizations. These include, but are not limited to, the following:

- International Standards for the Professional Practice of Internal Auditing and the Code of Ethics of Institute of Internal Auditors (IIA).
- American Institute of Certified Public Accountants (AICPA) Professional Standards and Code of Ethics, as applicable.
- Generally Accepted Government Auditing Standards (GAGAS) from the United States General Accounting Office (GAO), as applicable.

**DATE AUDIT SERVICES CHARTER ADOPTED AND APPROVED: November 15, 2018.**

## SIB Legislative Update January 21, 2019

Bill No.	Description	Sponsor/Introducer
HB 1368	SIB Membership	Rep. Kempenich, Brandenburg, Kreidt and Pollert Senators Dotzenrod, Klein and Wardner

<https://www.legis.nd.gov/assembly/66-2019/bill-index/bi1368.html>

HB 1368 makes changes to SIB membership. HB 1368 adds one member from the Legacy and Budget Stabilization Fund Advisory Committee to serve as a non-voting member on the SIB.

**HB 1368 was assigned to the House Government and Veterans Affairs Committee. A hearing was scheduled for Friday, January 25<sup>th</sup> at 8:00 am in the Fort Union Room.**

HB 1504	Legacy Earnings Fund	Representatives Kempenich, Dockter and K.Koppelman Senators Dotzenrod and Klein
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<https://www.legis.nd.gov/assembly/66-2019/bill-index/bi1504.html>

HB 1504 enacts a new section of NDCC 54-27 to create a new “legacy earnings fund “and declare an emergency. “Any legacy fund earnings transferred to the general fund ... in excess of 5% of the four-year average of legacy fund assets must be transferred by the state treasurer to the legacy earnings fund. The average value of the legacy fund’s assets must be determined by using the ending value for the most recent four fiscal years.”

HB 1504 was referred to the House Finance and Taxation Committee, although no committee hearing has been scheduled as of Monday, January 21<sup>st</sup>.

SB 2022	RIO Budget	Appropriations Committee
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<https://www.legis.nd.gov/assembly/66-2019/bill-index/bi2022.html>

SB 2022 contains the 2019-21 budget authority and continuing appropriations for RIO to administer the TFFR retirement program and SIB investment program which are special funds. RIO’s budget request includes maintaining current staffing levels (19 FTE), adding one new investment professional, and seeks approval to spend up to \$9.13 million to upgrade or replace TFFR’s outdated pension administration system.

SB 2022 was assigned to the Senate Appropriations Committee. The first Committee Hearing was held on Tuesday, January 8<sup>th</sup>. The hearing went well, with a generally positive reception of RIO’s budget requests. A subcommittee was appointed to review our budget details, with a particular focus on the TFFR pension software project. Subcommittee members include: Senators Poolman (Chair), Wanzek and Robinson.

**SB 2276**      **Infrastructure Revolving Loan Fund**      **Senators Heckaman, Grabinger, Mathern, Robinson**  
**Representatives Boschee, Mock**

<https://www.legis.nd.gov/assembly/66-2019/bill-index/bi2276.html>

SB 2276 seeks to amend NDCC 6-09-49 relating to the infrastructure revolving loan fund and to provide a statement of legislative intent. Section 1 of SB 2276 proposes to expand the definition of “essential infrastructure projects” to include “repairs and deferred maintenance projects for facilities of primary or secondary education institutions not eligible for loans under section 15.1-36-08; and projects intended to improve community quality of life, including the construction, refurbishment ... or improvement of recreational, arts, science, and other quality of life amenity projects”. Section 2 of SB 2276 states “It is the intent of the 66<sup>th</sup> legislative assembly that the BND and SIB collaborate to allow for the expansion of the investment of legacy fund assets in BND loan programs to include an investment of up to \$100 million in the infrastructure revolving loan program” for the 2019-21 biennium.

SB 2276 was originally assigned to the Education Committee on January 14<sup>th</sup>, but returned to the Senate floor and re-referred to the Finance and Taxation Committee. No Committee hearing has been scheduled post-referral to the Finance and Taxation Committee on January 21<sup>st</sup>.

**SB 2293**      **Game and Fish - Special Fund**      **Senators Oehlke, Kruen and J.Roers**  
**Representatives Jones, Mock and Porter**

<https://www.legis.nd.gov/assembly/66-2019/bill-index/bi2293.html>

SB 2293 creates “a special fund known as the aquatic species nuisance program fund.” “All moneys in the fund are appropriated to the game and fish department for use in aquatic nuisance species education, inspection, and monitoring programs under chapter 20.1-17.” “Investment of the \$15 million balance in this section may be made under the supervision of the state investment board.”

SB 2293 was referred to the Energy and Natural Resources Committee. A hearing was scheduled for Friday, January 25<sup>th</sup> at 10:30 am in the Fort Lincoln Room.

**SCR 4005**      **Legacy Fund - Principal & Earnings**      **Senators Hogue, Bekkedahl, Kruen and G. Lee**  
**Representatives Louser and Sanford**

<https://www.legis.nd.gov/assembly/66-2019/bill-index/bi4005.html>

SCR 4005 amends the Constitution of North Dakota relating to use of the principle and earnings of the legacy fund to create the North Dakota first fund, a political subdivision grant and revolving loan fund, for the purpose of financing infrastructure projects. A newly created North Dakota infrastructure board would administer the process to award grants and low-interest loans to selected political subdivisions for designated infrastructure projects. The ND infrastructure board would consist of two members from the house of representatives, two senators, nine city mayors, two county commissioners and one state water commission member. Initial funding would be obtained by transferring 15% of the Legacy Fund’s principal balance as of July 1, 2021. Subsequent funding would be derived from annual transfers of 15% of any increase in the Legacy Fund principal balance each fiscal year plus 25% of Legacy Fund earnings (to be defined) each fiscal year, to the North Dakota first fund on September 1<sup>st</sup> of each succeeding fiscal year.

NDRIO is working with Callan and the Treasurer's Office to forecast the potential impact of SCR 4005 on the expected growth of the Legacy Fund and its projected earnings over the next two decades.

SCR 4005 was referred to the Finance and Taxation Committee. **The first Committee hearing was held on Tuesday, January 15<sup>th</sup>, and attended by the State Treasurer, RIO's Executive Director and many others.**

**Legislative Links:**

<https://www.legis.nd.gov/assembly/66-2019/regular>

# RIO Budget Overview

	1	2	3	4	5	6	7	8
	2017-19 Base Budget	2019-21 Base Budget Request (w/10% reduction)	Optional Adjustment #1 "Reinstate 10% Reduction"	Optional Adjustment #2 "Additional FTE"	Additional Governor's Recommendations	Total Governor's Recommendation	Optional Adjustment #3 One-time Request "Pension Admin. System Project"	Total Agency Request
Salaries & Wages	\$ 4,425,570	\$ 3,860,125	\$ 550,194	\$ 294,996	\$ 304,981	\$ 5,010,296	\$ 50,000	\$ 5,060,296
Operating Expenses	862,484	862,484	-	14,450	12,000	888,934	2,789,000	3,677,934
Contingency	52,000	82,000	-	-	-	82,000	-	82,000
Capital Assets	-	-	-	-	-	-	6,300,000	6,300,000
	<b>\$ 5,340,054</b>	<b>\$ 4,804,609</b>	<b>\$ 550,194</b>	<b>\$ 309,446</b>	<b>\$ 316,981</b>	<b>\$ 5,981,230</b>	<b>\$ 9,139,000</b>	<b>\$ 15,120,230</b>
FTE Count	19	16	3	1	-	20	-	20

**Column 1:** RIO's **2017-19 Base Budget** was for **\$5.3 million** (including 19 FTE).

**Column 2:** RIO's **Base Budget** submission of **\$4.8 million** reflected a **10% cut in agency expenses as OMB requested**.

**Column 3: Option 1** - Given RIO's desire to maintain high quality service levels while noting that SIB investments and TFFR membership are at all-time highs. **The Governor recommended RIO "Reinstate 10% Reduction", which is greatly appreciated.**

**Column 4: Option 2** – RIO requested **\$309,446** for one additional FTE (Full Time Equivalent) position to support the continued growth of the SIB investment program. **The Governor recommended approval of one "Additional FTE", which is greatly appreciated.**

**Column 5: Additional Governor Recommendations** – **The Governor included \$316,981 of additional compensation and benefits for RIO which is greatly appreciated** particularly given our increasing responsibilities and 0% pay raises for the last two years.

**Column 6: Total Governor's Recommendation** – **Governor's recommendation increased RIO's budget by 12% to \$5.98 million.**

**Column 7: Option 3** - Given TFFR's pension administration system is 13-years old and our strong desire and need to adopt recent IT system advances, efficiencies and cybersecurity protection levels, we respectfully made a 1-time funding request for **\$9.139 million**.

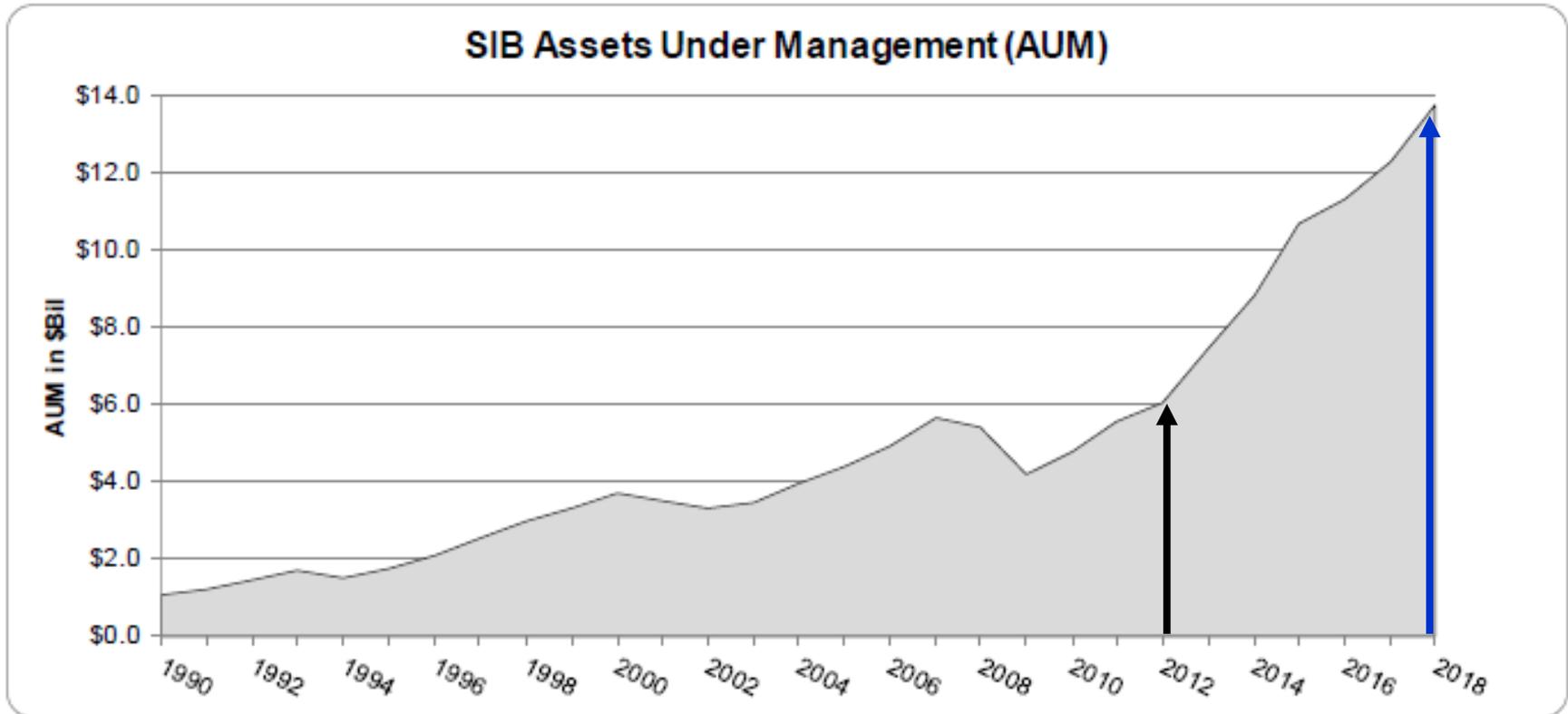
**Column 8: RIO's Total Budget Request for 2019-21 including three optional packages is \$15.12 million with 20 FTE.**

# RIO Budget Considerations

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- 1) RIO is a Special Fund agency and receives no appropriations from the General Fund.
- 2) SIB investments have experienced strong growth in recent years and increased from \$6 billion in 2012 to over \$13 billion in 2018, while TFFR membership has increased 12+% with active members and 35+% with retirees and beneficiaries over the last decade.
  - 1) **Optional Adjustment #1 – “Reinstate 10% Reduction”**: RIO has operated in a fiscally conservative manner for many years and deem it to be imprudent to reduce our budget given the growth and importance of our TFFR and SIB programs. As such, we respectfully request full reinstatement of **\$550,194** to our RIO budget. *Governor Recommendation*
- 3) In order to improve operational efficiency and maintain favorable client service ratings and overall investment performance, RIO requests funds to upgrade (or replace) its existing 13-years old TFFR pension administration system and add one FTE to support the continued expected growth in our SIB investment program.
  - 1) **Optional Adjustment #2 – “Additional FTE”**: RIO respectfully requests **\$309,446** to fund one FTE to support continued growth in the SIB investment program. *Governor Recommendation*
  - 1) **Optional Adjustment #3 – One-time Request “Pension Admin System”**: RIO respectfully requests up to **\$9.139 million** to upgrade (or replace) our TFFR pension administration system. *One-Time Special Funding*
- 4) RIO strongly encourages meaningful pay increases for all hard-working state employees.

# SIB Client Investments Have Doubled since 2012

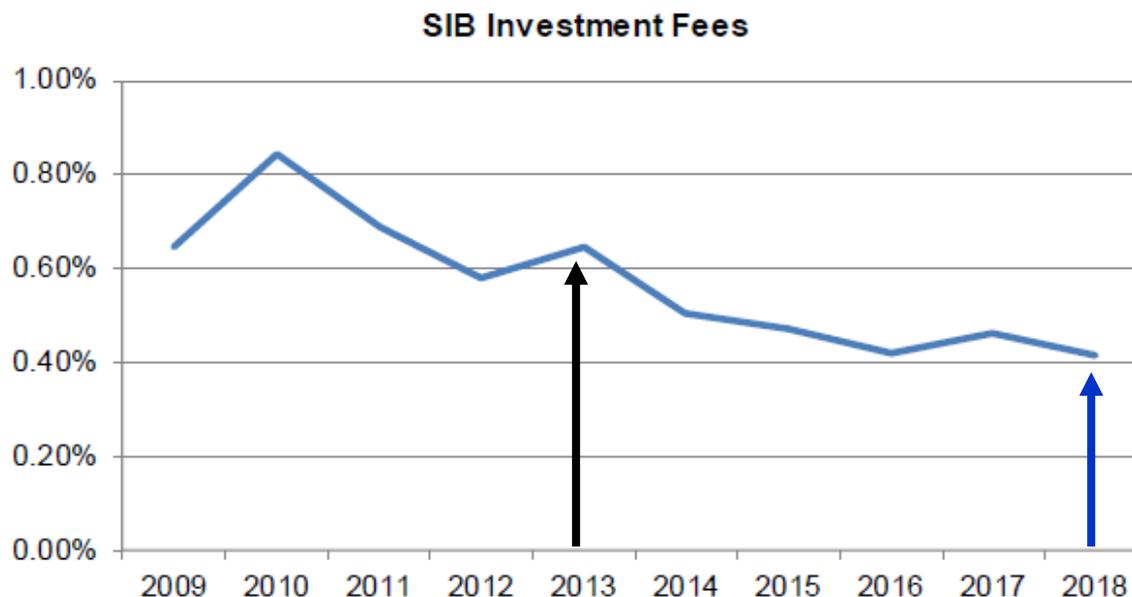


**SIB clients Assets Under Management (AUM) have grown from \$6 billion in 2012 to over \$13 billion in 2018 largely as a result of deposits into the Legacy Fund in addition to reasonable investment earnings growth.**

**Despite significant growth in client services offered by both the SIB and TFFR programs, SIB and TFFR client satisfaction ratings remain solid at 3.7 for the SIB and 3.8 for TFFR (on a 4.0 grading scale).**

# SIB Client Investment Fees and Expenses

Investment fees have declined from 0.65% in fiscal 2013 to 0.42% in fiscal 2018 (as a % of AUM).



The SIB and RIO work to keep investment fees at or below 0.50% per year, while seeking to identify investment firms which beat their performance benchmarks by 0.50% or more (after all expenses) over the long-term.

If the SIB and RIO are successful in attaining both of the above goals, our SIB clients are effectively earning a minimum 2-for-1 return on their investment fee dollars (in the form of better returns over stated benchmarks).

The SIB and RIO were successful in attaining the above goals for nearly all of our clients in fiscal 2018 such that the use of active management generated \$100 million of incremental income for our clients (in fiscal 2018).

# Retirement & Investment Office (RIO) Overview

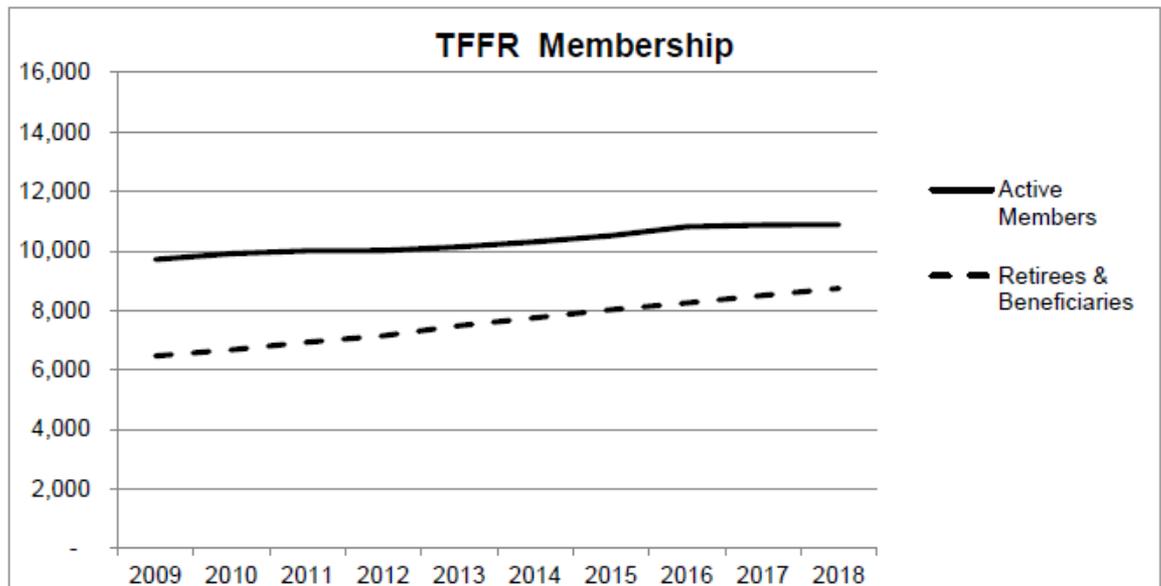
RIO was created by the 1989 Legislative Assembly to capture administrative cost savings in the management of TFFR's retirement program and the SIB investment program.

RIO is a Special Fund agency which serves the:

- A. TFFR, which oversees pension benefit administration for over 20,000 North Dakota teachers, administrators, retirees and beneficiaries; and
- B. SIB, which oversees \$13.7 billion of investments for 16 client boards including the Legacy Fund, PERS, TFFR and Workforce Safety & Insurance.

TFFR is a qualified defined benefit pension plan that covers North Dakota public school teachers and administrators.

1. Benefit funding comes from member and employer contributions and investment earnings. (No General Fund or Federal Fund appropriations.)
2. During the past decade, active members increased over 12%, while retirees and beneficiaries increased over 35%.



**Department 190 - Retirement and Investment Office  
Senate Bill No. 2022**

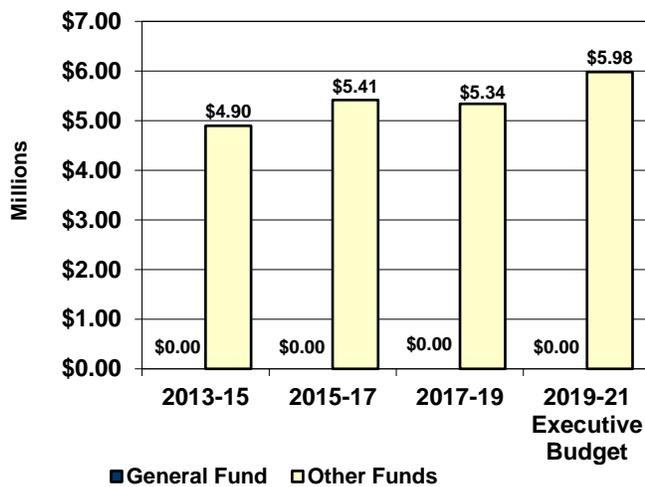
**Executive Budget Comparison to Prior Biennium Appropriations**

	FTE Positions	General Fund	Other Funds	Total
2019-21 Executive Budget	20.00	\$0	\$5,981,230	\$5,981,230
2017-19 Legislative Appropriations	19.00	0	5,340,054	5,340,054
Increase (Decrease)	1.00	\$0	\$641,176	\$641,176

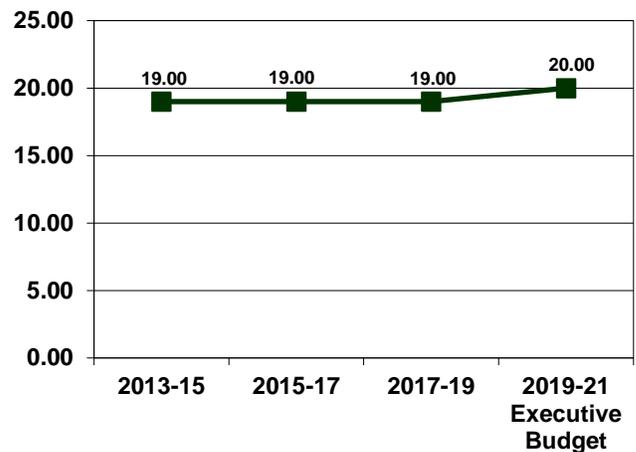
**Ongoing and One-Time Other Funds Appropriations**

	Ongoing Other Funds Appropriation	One-Time Other Funds Appropriation	Total Other Funds Appropriation
2019-21 Executive Budget	\$5,981,230	\$0	\$5,981,230
2017-19 Legislative Appropriations	5,340,054	0	5,340,054
Increase (Decrease)	\$641,176	\$0	\$641,176

**Agency Funding**



**FTE Positions**



**Executive Budget Comparison to Base Level**

	General Fund	Other Funds	Total
2019-21 Executive Budget	\$0	\$5,981,230	\$5,981,230
2019-21 Base Level	0	5,340,054	5,340,054
Increase (Decrease)	\$0	\$641,176	\$641,176

Attached as an appendix is a detailed comparison of the executive budget to the agency's base level appropriations.

**Executive Budget Highlights**

	General Fund	Other Funds	Total
1. Provides funding for state employee salary and benefit increases, of which \$202,668 is for salary increases, \$75,579 is for health insurance increases, and \$26,734 is for retirement increases	\$0	\$304,981	\$304,981
2. Adds 1 FTE investment analyst position (\$294,996) and related operating expenses of \$14,450		\$309,446	\$309,446
3. Adds funding for Microsoft Office 365 license expenses		\$12,000	\$12,000
4. Adds funding for contingencies to provide a total of \$82,000		\$30,000	\$30,000

**Other Sections Recommended to be Added in the Executive Budget  
(As Detailed in the Attached Appendix)**

**Contingencies line item** - Section 2 would provide, upon approval of the State Investment Board, the Retirement and Investment Office may transfer from the contingencies line item in Section 1 of the bill to all other line items.

### **Continuing Appropriations**

**Investment expenses** - North Dakota Century Code Section 21-10-06.2 - Investment management, custody, consulting, income offset, and due diligence/education costs.

**Benefits and refunds** - Section 15-39.1-05.2 - Benefits and refunds from the Teachers' Fund for Retirement.

**Administrative charges** - Section 15-39.1-05.2 - Income offset and Teachers' Fund for Retirement consulting costs.

### **Significant Audit Findings**

The audit for the Retirement and Investment Office conducted by CliftonLarsonAllen LLP, for the period ending June 30, 2018, did not identify any significant audit findings.

The schedule of employer allocations and pension amounts by employer prepared for the Retirement and Investment Office and audited by CliftonLarsonAllen LLP, for the period ending June 30, 2017, did not identify any significant audit findings.

### **Major Related Legislation**

At this time, no major related legislation has been introduced affecting this agency.

**Retirement and Investment Office - Budget No. 190**  
**Senate Bill No. 2022**  
**Base Level Funding Changes**

	<b>Executive Budget Recommendation</b>			
	<b>FTE Position</b>	<b>General Fund</b>	<b>Other Funds</b>	<b>Total</b>
<b>2019-21 Biennium Base Level</b>	19.00	\$0	\$5,340,054	\$5,340,054
<b>2019-21 Ongoing Funding Changes</b>				
Base payroll changes			(\$15,251)	(\$15,251)
Salary increase			202,668	202,668
Health insurance increase			75,579	75,579
Retirement contribution increase			26,734	26,734
Adds 1 FTE investment analyst position	1.00		309,446	309,446
Adds funding for Microsoft Office 365 license expenses			12,000	12,000
Adds funding for contingencies			30,000	30,000
<b>Total ongoing funding changes</b>	<b>1.00</b>	<b>\$0</b>	<b>\$641,176</b>	<b>\$641,176</b>
<b>One-time funding items</b>				
No one-time funding items				\$0
<b>Total one-time funding changes</b>	<b>0.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Changes to Base Level Funding</b>	<b>1.00</b>	<b>\$0</b>	<b>\$641,176</b>	<b>\$641,176</b>
<b>2019-21 Total Funding</b>	<b>20.00</b>	<b>\$0</b>	<b>\$5,981,230</b>	<b>\$5,981,230</b>

**Other Sections for Retirement and Investment Office - Budget No. 190**

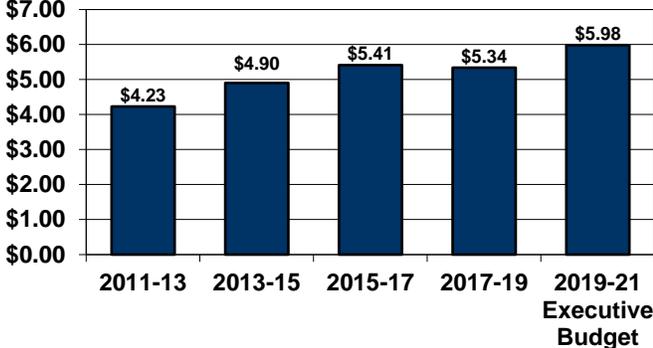
	<b>Executive Budget Recommendation</b>
Contingencies line item transfers	Section 2 would provide, upon approval of the State Investment Board, the Retirement and Investment Office may transfer from the contingencies line item in Section 1 of the bill to all other line items.

Department 190 - Retirement and Investment Office

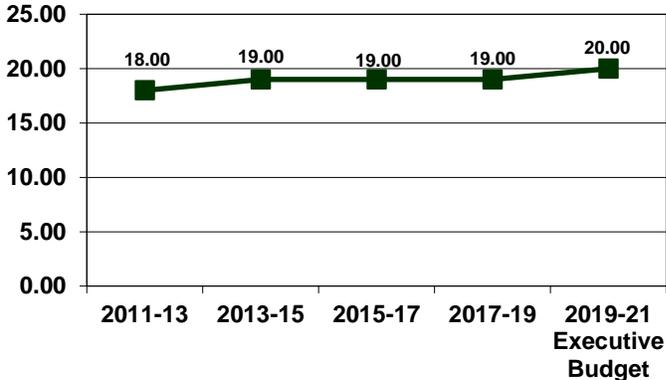
# Historical Appropriations Information

## Ongoing Total Fund Appropriations Since 2011-13

Agency Funding (in Millions)



FTE Positions



Ongoing Total Funds Appropriations					
	2011-13	2013-15	2015-17	2017-19	2019-21 Executive Budget
Ongoing total fund appropriations	\$4,232,954	\$4,899,369	\$5,413,425	\$5,340,054	\$5,981,230
Increase (decrease) from previous biennium	N/A	\$666,415	\$514,056	(\$73,371)	\$641,176
Percentage increase (decrease) from previous biennium	N/A	15.7%	10.5%	(1.4%)	12.0%
Cumulative percentage increase (decrease) from 2011-13 biennium	N/A	15.7%	27.9%	26.2%	41.3%

### Major Increases (Decreases) in Ongoing Total Fund Appropriations

**2013-15 Biennium**

- 1. Added funding for 1 FTE investment analyst position, and related operating costs \$283,553

**2015-17 Biennium**

- 1. No major changes

**2017-19 Biennium**

- 1. Adjusted funding for operating expenses (\$128,390)
- 2. Reduced contingency funding to \$52,000 (\$30,000)

**2019-21 Biennium (Executive Budget Recommendation)**

- 1. Adds 1 FTE investment analyst position (\$294,996) and related operating expenses of \$14,450 \$309,446
- 2. Adds funding for Microsoft Office 365 license expenses \$12,000
- 3. Adds funding for contingencies to provide a total of \$82,000 \$30,000

**GOVERNOR'S RECOMMENDATION FOR THE  
RETIREMENT AND INVESTMENT OFFICE AS SUBMITTED  
BY THE OFFICE OF MANAGEMENT AND BUDGET**

**SECTION 1. APPROPRIATION.** The funds provided in this section, or so much of the funds as may be necessary, are appropriated out of any moneys from special funds derived from income for the purpose of defraying their expenses, for the biennium beginning July 1, 2019, and ending June 30, 2021, as follows:

	<u>Base Level</u>	<u>Adjustments or Enhancements</u>	<u>Appropriation</u>
Salaries and wages	4,425,570	584,726	5,010,296
Operating Expenses	862,484	26,450	888,934
Contingencies	<u>52,000</u>	<u>30,000</u>	<u>82,000</u>
Total all funds	5,340,054	641,176	5,981,230
Less estimated income	<u>5,340,054</u>	<u>641,176</u>	<u>5,981,230</u>
Total general fund	-	-	-
Full-time equivalent positions	19.00	1.00	20.00

**SECTION 2. APPROPRIATION LINE ITEM TRANSFERS.** Upon approval of the state investment board, the retirement and investment office may transfer from their contingency line item in section 1 of this Act to all other line items. The agency shall notify the office of management and budget of each transfer made pursuant to this section.

**BUDGETING / FINANCIAL CONDITION**

**AS OF DECEMBER 31, 2018**

	2017-2019 BUDGET	ADJUSTED APPROPRIATION	BIENNIUM TO DATE ACTUAL	EXPENDITURES		
				BUDGET AVAILABLE	% BUDGET AVAILABLE	% OF BIENNIUM REMAINING
SALARIES AND BENEFITS	\$ 4,425,570.00	\$ 4,425,570.00	\$ 3,229,697.44	\$ 1,195,872.56	27.02%	25.00%
OPERATING EXPENDITURES	862,484.00	862,484.00	457,647.85	404,836.15	46.94%	25.00%
CONTINGENCY	52,000.00	52,000.00	0.00	52,000.00	100.00%	25.00%
TOTAL	<u>\$ 5,340,054.00</u>	<u>\$ 5,340,054.00</u>	<u>\$ 3,687,345.29</u>	<u>1,652,708.71</u>	<u>30.95%</u>	<u>25.00%</u>

## EXPENDITURE REPORT

QUARTER ENDED DECEMBER 31, 2018

	INVESTMENT	RETIREMENT	QUARTERLY TOTALS	FISCAL YEAR TO - DATE	BIENNIUM TO - DATE
<b><u>CONTINUING APPROPRIATIONS</u></b>					
INVESTMENT EXPENDITURES (SEE ATTACHED DETAIL)	\$ 5,479,677.66	\$ 0.00	\$ 5,479,677.66	\$ 12,129,674.25	\$ 43,377,978.13
MEMBER CLAIMS					
1. ANNUITY PAYMENTS	0.00	53,706,116.16	53,706,116.16	107,132,751.35	308,857,042.98
2. REFUND PAYMENTS	0.00	2,031,483.98	2,031,483.98	4,258,490.49	10,588,985.16
TOTAL MEMBER CLAIMS	0.00	55,737,600.14	55,737,600.14	111,391,241.84	319,446,028.14
OTHER CONTINUING APPROPRIATIONS	79,756.73	40,227.12	119,983.85	177,016.14	1,288,180.68
TOTAL CONTINUING APPROPRIATIONS	5,559,434.39	55,777,827.26	61,337,261.65	123,697,932.23	364,112,186.95
<b><u>BUDGETED EXPENDITURES</u></b>					
1. SALARIES & BENEFITS					
SALARIES	197,430.95	201,861.05	399,292.00	800,407.77	2,384,995.16
OVERTIME/TEMPORARY	0.00	0.00	0.00	0.00	0.00
TERMINATION SALARY & BENEFITS	0.00	0.00	0.00	0.00	0.00
FRINGE BENEFITS	62,159.44	79,669.81	141,829.25	280,934.53	844,702.28
TOTAL SALARY & BENEFITS	259,590.39	281,530.86	541,121.25	1,081,342.30	3,229,697.44
2. OPERATING EXPENDITURES					
DATA PROCESSING	3,407.51	15,493.30	18,900.81	32,486.78	112,154.36
TELECOMMUNICATIONS - ISD	914.01	1,425.55	2,339.56	3,788.45	12,984.11
TRAVEL	2,229.77	9,996.50	12,226.27	18,297.08	41,811.93
IT - SOFTWARE/SUPPLIES	0.00	0.00	0.00	0.00	394.15
POSTAGE SERVICES	568.34	9,964.56	10,532.90	15,300.93	50,096.17
IT - CONTRACTUAL SERVICES	130.06	289.00	419.06	1,474.75	5,302.27
BUILDING/LAND RENT & LEASES	8,028.81	13,513.98	21,542.79	44,455.58	132,221.74
DUES & PROF. DEVELOPMENT	1.75	5,514.25	5,516.00	9,951.00	21,013.50
OPERATING FEES & SERVICES	182.38	200.54	382.92	1,748.13	22,267.07
REPAIR SERVICE	0.00	0.00	0.00	0.00	229.39
PROFESSIONAL SERVICES	1,431.36	2,821.14	4,252.50	9,284.50	24,718.36
INSURANCE	171.12	297.69	468.81	627.17	1,236.97
OFFICE SUPPLIES	55.38	274.30	329.68	432.28	1,729.41
PRINTING	125.75	3,205.28	3,331.03	4,960.84	20,259.39
PROFESSIONAL SUPPLIES & MATERIALS	35.04	345.96	381.00	456.60	1,181.40
MISCELLANEOUS SUPPLIES	54.53	81.97	136.50	425.43	1,206.72
IT EQUIPMENT UNDER \$5000	1,318.81	1,193.21	2,512.02	2,512.02	3,243.49
OTHER EQUIP. UNDER \$5000	0.00	0.00	0.00	1,381.44	3,703.24
OFFICE EQUIP. & FURNITURE UNDER \$5000	180.25	519.75	700.00	700.00	1,894.18
TOTAL OPERATING EXPENDITURES	18,834.87	65,136.98	83,971.85	148,282.98	457,647.85
3. CONTINGENCY	0.00	0.00	0.00	0.00	0.00
TOTAL BUDGETED EXPENDITURES	278,425.26	346,667.84	625,093.10	1,229,625.28	3,687,345.29
TOTAL EXPENDITURES	\$ 5,758,102.92	\$ 56,084,267.98	\$ 61,962,354.75	\$ 124,927,557.51	\$ 367,799,532.24

**INVESTMENT EXPENDITURE DETAIL**

**FEEES PAID DURING THE QUARTER ENDED DECEMBER 31, 2018**

**FOR QUARTER ENDED 9/30/18**

**PENSION DEVELOPED INTERNATIONAL EQUITY POOL**

Northern Trust	26,760.58	
Wellington	180,536.71	
William Blair	165,219.28	
TOTAL PENSION INTERNATIONAL EQUITY		372,516.57

**PENSION GLOBAL EQUITY POOL**

Epoch	678,511.32	
LSV	129,785.00	
TOTAL PENSION GLOBAL EQUITY		808,296.32

**PENSION BELOW INVESTMENT GRADE FIXED**

Loomis Sayles		260,490.29
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**PENSION INVESTMENT GRADE FIXED INCOME POOL**

PIMCO	98,139.37	
State Street	6,362.24	
TOTAL PENSION INVESTMENT GRADE FIXED INCOME		104,501.61

**PENSION LARGE CAP EQUITY POOL**

LA Capital		275,130.29
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**PENSION SMALL CAP EQUITY POOL**

Atlanta Capital		300,243.00
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**PENSION REAL ESTATE**

Invesco		266,438.11
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**INSURANCE FIXED INCOME POOL**

State Street	9,275.61	
Wells	106,468.95	
Western Asset	104,073.52	
TOTAL INSURANCE FIXED INCOME		219,818.08

**INSURANCE LARGE CAP EQUITY POOL**

LA Capital	52,132.13	
LSV	51,462.00	
TOTAL INSURANCE LARGE CAP		103,594.13

**INSURANCE SMALL CAP EQUITY POOL**

PIMCO RAE		21,264.07
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**INSURANCE INT'L EQUITY**

LSV	62,436.00	
William Blair	64,779.59	
TOTAL INSURANCE INT'L EQUITY		127,215.59

**INSURANCE DIVERSIFIED REAL ASSETS**

Western Asset		35,456.89
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**INSURANCE REAL ESTATE**

Invesco		59,875.80
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**INVESTMENT EXPENDITURE DETAIL****FEES PAID DURING THE QUARTER ENDED DECEMBER 31, 2018****LEGACY FIXED INCOME**

State Street	16,421.90	
Wells	206,582.30	
Western Asset	167,174.38	
TOTAL INSURANCE FIXED INCOME		390,178.58

**LEGACY LARGE CAP EQUITY**

LA Capital	292,164.39	
LSV	270,149.00	
TOTAL INSURANCE LARGE CAP		562,313.39

**LEGACY SMALL CAP EQUITY**

PIMCO RAE		135,761.92
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**LEGACY INT'L EQUITY**

LSV	438,106.00	
William Blair	437,638.87	
TOTAL INSURANCE INT'L EQUITY		875,744.87

**LEGACY DIVERSIFIED REAL ASSETS**

Western Asset		116,177.10
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**LEGACY REAL ESTATE**

Invesco		120,449.96
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**PERS RETIREE HEALTH INSURANCE CREDIT FUND**

SEI		92,713.78
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**JOB SERVICE FUND**

SEI		70,412.43
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**TOBACCO PREVENTION & CONTROL TRUST FUND**

STATE STREET		2,585.43
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**CONSULTANT**

Adams Street	14,595.00	
Callan	105,509.89	
Novarca	22,296.10	
TOTAL CONSULTANT		142,400.99

**TOTAL FOR QUARTER ENDED 9/30/18****5,463,579.20****FOR QUARTER ENDED 12/31/18****PENSION CASH**

Northern Trust		16,098.46
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**TOTAL FOR QUARTER ENDED 12/31/18****16,098.46****TOTAL FEES PAID DURING QUARTER ENDED 12/31/2018****5,479,677.66**

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

### **QUARTERLY MONITORING REPORT**

**Quarter Ended December 31, 2018**

#### **EXECUTIVE LIMITATIONS / STAFF RELATIONS**

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

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

The Executive Director/CIO held four full office meetings and four manager meetings during the fourth calendar quarter of 2018 in order to promote an open and collaborative work environment while enhancing team member communication, awareness and engagement.

In light of recent Employee Survey comments, RIO recently established a new Communication and Teamwork (CAT) committee to identify ways to improve overall office communication and teamwork noting that these two areas were most often cited as needing improvement (other than improving employee compensation). Two CAT committee meetings were held in November and December.

As noted in the prior quarterly update, RIO offered a Voluntary Separation Incentive Program (VSIP) to eligible employees on July 30, 2018. One retirement benefit counselor submitted the VSIP application which was approved with a termination date of April 30, 2019. Based on current and forecasted budget availability, we intend to fill this vacant position as soon as possible.

RIO was fully staffed as of December 31, 2018.

## Quarterly Report on Ends Q2:FY18

### Investment Program

Ongoing due diligence conducted on the following organizations:

Cerberus (direct lending)	Macquarie (infrastructure)
Epoch (global equity)	Manulife (fixed income)
Invesco (real estate)	Northern Trust (asset management)
I-Squared (infrastructure)	PIMCO (fixed income)
JP Morgan (short term bond, real estate)	Prudential (domestic fixed income)
LA Capital (large cap US equity)	Western (domestic fixed income)
LSV (public equity)	

Preliminary due diligence conducted on the following organizations:

Ares (structured credit)	Highbridge (stressed/distressed credit)
Blackstone (infrastructure)	Longview (global equity)
Brookfield (infrastructure)	Marathon (structured credit)
Cerberus (distressed)	PIMCO (alternative credit)

At the October SIB meeting, the Board approved a combined total commitment of up to \$140 million to Macquarie Infrastructure Partners on behalf of the Legacy Fund and Pension Trust.

Also in October, the Board approved the engagement of XTP to perform a review of the SIB's investment fee structures and underlying expenses subject to successful negotiation of legal documents and terms.

At the November SIB meeting, the Board approved a \$70 million commitment to Invesco Value Added Fund V on behalf of the Pension Trust. Staff and counsel are proceeding with a review of requisite legal documents.

Staff is continuing the live phase of the implementation of the BlackRock Solutions Aladdin system and is currently developing reporting packages.

Staff attended meetings with the following entities: TFFR Board, NDPERS Investment Subcommittee, and the Legacy and Budget Stabilization Fund Advisory Board.

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

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

No managers were on the Watch List during the quarter.

## **Quarterly Monitoring Report on TFFR Ends Quarter ended December 31, 2018**

### **Retirement Program**

This report highlights exceptions to normal operating conditions.

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- TFFR's actuary presented the 2018 annual actuarial valuation report, funding projections, and GASB 67 information to the TFFR Board and Legislative Employee Benefits Programs Committee.
- Developed a new process for TFFR employer reporting reviews with Audit and Retirement Services.
- TFFR received 2018 Public Pension Standards Award for Administration. This award is designed to recognize public employee retirement systems that meet professional standards for pension plan administration. TFFR has received a PPCC award each year it has been granted since 1992.
- TFFR Member Online activity continues to increase. To date, over 2,400 active, inactive, and retired members have registered for this service.
- Created a new electronic TFFR Retirement Guide and Retirement Application form to streamline the retirement application process and reduce cost of mailing retirement forms. New process went live in December 2018.
- Submitted TFFR technical corrections bill (HB 1044) to the 2019 Legislature to update plan language to maintain compliance with federal IRC requirements related to qualified governmental pension plans.
- Continued to work on RIO agency budget request (SB 2022) for 2019 legislative approval of a potential upgrade or replacement of TFFR's current pension administration software to a more technologically advanced and secure web based system. A new system would provide improved functionality for TFFR members, employers, and RIO staff by transforming TFFR pension administration processes, reporting capabilities, communications and services.



# BOARD LEADERSHIP

INNOVATIVE APPROACHES TO GOVERNANCE

NUMBER 160, NOV.–DEC. 2018

[www.boardleadershipnewsletter.com](http://www.boardleadershipnewsletter.com)

## Is It Good Enough to Be Responsible and Accurate?

By Athens Kolias

As Board Leadership readers increasingly see scandals at the board level making the news, one question that arises is about how clearly expectations are communicated. As board members go about their normal daily work, they often operate under an assumption that everyone on the board has read from the same dictionary, even as they increase efforts to bring more diversity into the boardroom. Here, Athens Kolias, governance consultant and adjunct professor at the San Francisco State University Center for Extended Learning, asks, "Do boards realize they may not be speaking the same language?"

Remember the Abbott and Costello routine "Who's on First?"

How confused Costello was to hear that the first baseman's name was Who? And the second base player was What? Naturally, the usage of these simple words out of context made for hilarity! But in the boardroom? Not so much.

Here we explore a few common terms and the way in which we sometimes confuse ourselves in our usage of them.

### Responsibility vs. Accountability

In an effort to create accountability, we define roles and assign responsibilities. We often use the terms *responsible* and *accountable* interchangeably. For daily casual conversations, that

might be good enough, but for professional discussions, we need more precision and intention in our use.

- **Responsible:** "able to be trusted to do what is right or to do the things that are expected."
- **Responsibility:** "the state of being the person who caused something to happen."
- **Accountable:** "required to explain actions or decisions to someone; required to be responsible for something."
- **Accountability:** "an obligation or willingness to accept responsibility or to account for one's actions."

Notice that the definitions for being *accountable* include words indicating an obligation or requirement, while being *responsible* says you caused something to happen.

So how do we facilitate clarity between these terms, beyond reading the dictionary?

One way is in use of the RACI chart, a common management tool that maps out tasks to persons performing a role.<sup>1</sup> For each task, we indicate the person(s) Responsible, Account-

(continued on page 2)

## NEWS

### Foundation Center webinar explores basics of board organization

The Foundation center will host a webinar titled Organizing Your Board to Get Things Done on Jan. 17, 2019, at 2:00 PM ET.

According to organizers, one of the most challenging functions of governance is how to structure the board and committees to get things done. To that end, this webinar addresses how to best organize board committees and meetings for effective governance, and explores many of the "nuts and bolts" such as board materials, agendas, and ongoing communications between meetings. The webinar will also explore the common committees and board structures in use and answer questions about governance models and board organization.

Attendees will learn:

- Common mistakes in organizing the board.
- Perspectives on appropriate committees and meeting expectations.
- Templates that are available to implement structures efficiently.
- Concrete next steps for changing aspects of the functioning of the board.

Registration fees for this event are \$49 until Jan. 10, after which the fee will increase to \$75.

For more information, visit <https://bit.ly/2DjXfoD>. ■

(continued on page 6)

### ALSO IN THIS ISSUE

BOARD GOVERNANCE AND DIVERSITY WILL BE MORE IMPORTANT THAN EVER IN 2019 ..... 4

BE BOLD! GETTING YOUR NONPROFIT BOARD TO THINK LIKE INNOVATORS ..... 7

# Responsible

(continued from front page)

able, Consulted, and Informed. While multiple people may be marked as Responsible, Consulted, or Informed, only one person should be held Accountable. The power of this tool is in clarifying roles, especially who has ultimate accountability, and encouraging cross-pollination of information through consultation and informing of relevant persons.

This ends up being an effective communication and planning tool for board committees and projects.

On boards following the Carver governance model, we say that the entire board is responsible for executing their duties, and accountable to the organization's owners. For example, Ownership-Linkage is a function of consulting the owners and informing them of results. While individual board members are responsible for contributing to board decisions, the board's One-Voice serves as its unified voice of delegation and accountability.

As stated by Susan Mogensen, if the board does not speak with one unified voice, then they "risk confusing the CEO (or delegatee) about what result or activity would demonstrate compliance with the board's expectations, which in turn would diminish the board's and CEO's ability to be accountable."<sup>2</sup>

## Accuracy vs. Precision

Similarly, we interchange the words *accuracy* and *precision*. Merriam-Webster reminds us:

*Many of us often use precision and accuracy as synonyms, but not scientists and engineers. For them, accuracy describes a particular measurement—that is, how close it is to the truth. But precision describes a measurement system—that is, how good it is at giving the same result every time it measures the same thing.*

- **Accuracy:** "freedom from mistake or error; correctness; conformity to truth or to a standard or model."
- **Precision:** "adapted for extremely accurate measurement or operation; done in a very careful and exact way."

While accuracy tells us we got things right, precision tells us *how right* we got things. A common example is based on a dartboard and five darts. If all five darts land on the dartboard, we say we hit the target! But the more closely the darts landed means we threw them precisely.

The difference between these words is somewhat contextual though. Let's say we are balancing our checkbook and we got it to within \$5 accuracy. Is that enough to know the whole situation? What if our checkbook balance is \$100? Is a \$5 discrepancy a good thing or a bad thing? Now con-

sider if our checkbook balance is \$100 million. Now a \$5 discrepancy looks like we are so very precise and have a much tighter control of our money!

So how would this play out in the boardroom? When we employ Policy Sizing, from the Carver approach, we know that we write a governance policy that is large enough to be an umbrella containing all possible scenarios. By casting a wide net, we ensure we can accurately respond to most organizational scenarios, trusting that management will use prudence in interpreting their meaning.

What happens if the board does not like the way management has interpreted its policy? They write a subpolicy, which is narrower than the global policy. They are employing precision in their policies to shape the way they are interpreted.

If precision is good, then more precision is better, right? Not so fast. Just like the checkbook example, if your checkbook is huge, and your standard for precision is accuracy within \$5, how much time and effort was spent achieving that level of precision? Was it worth it? If not, what result is good enough yet still precise enough to show accountability?

## Good, Excellent, and Good Enough for Now

So, there is an interesting rub. How do you know when your results are good enough? Are they good? Bad? Excellent? Good enough for now? It's not as black and white as it might seem. In fact, there is an inherent scale of "goodness" that is often taken for granted.

- **Good:** "conforming to a standard; adequate, satisfactory; suitable, fit."
- **Excellent:** "superior; very good, extremely good."

Defining whether a result is good or excellent requires that we define what success means to us. A quantifiable number best serves for our benchmark. Simply stating that we either met that success metric or did not is one way of judging good or not good. But we can do better.

OWNERSHIP-LINKAGE ANNUAL PLAN								
	CHAIR	Committee LEAD	Committee TEAM	DIRECTOR 1	DIRECTOR 2	SECRETARY	TREASURER	
Charter and Scope	A	R	I	R	C	C	C	C
Set schedule & deadlines	C	A	R	I	I	I	C, I	I
Define budget	C	A	R	I	I	I	I	C, I
Clarify Ownership categories	A	R	I	C	C	C	C	C
Design surveys	C	A	R	I	C, I	I	I	I
Design Interview questions	C	A	R	I	I	C, I	I	I
Plan facilitated workshop	I	A	R	I	I	I	C, I	I
Analyse Results	I	A	R	C, I	I	I	I	I
Report to Board	C, I	A	R	I	I	I	I	I
Capture lessons learned	C	A	C	C	C	C	C	C, I

In quality management circles, the statistically based Six Sigma methodology provides us with a tool to measure the degree of “goodness” we have created. The more defects or problems we observe, the more we can correct, but also the more time, effort, and resources are expended. Taking these factors into account, we decide what level of precision defines excellent performance.

This is great when you can use quantifiable measures, but what about less predictable goals, or lofty goals? For example, ending childhood hunger is an excellent cause, but it cannot be achieved in a single year. How can we say we’ve done a “good” job if we haven’t completed the job yet? In this case, being a perfectionist will get in your way. This is where “good enough for now” comes in.

- **Good enough for now:** “an encouragement to make progress and move the ball forward in the face of adversity.”<sup>3</sup>

In this scenario, it’s very reasonable to expect that the results of ending childhood hunger be staged in increments. For organizations using the Policy Governance® approach, the board states “End childhood hunger” in its Ends policies, while also defining which children will benefit and at what worth or priority for the organization.

It’s up to the CEO to take that direction, and provide their interpretation given their resources and constraints. This is where the CEO sets the board’s expectation of which results are good enough for now and which are staged for the next iteration. Often, in looking for early successes, we look for “low-hanging fruit,” a quickly achievable result, with maximum benefit, using the least resources.

That happens to align with a definition from Agile Project Management:

- **Minimal marketable feature:** “the smallest piece of functionality that can be delivered that has value to both the organization delivering it and the people using it.”<sup>4</sup>

Agile techniques use iterations of effort and a continuous improve-

ment mindset to achieve incremental outcomes. This is the fancy version of “good enough for now.” It is meant to achieve a functional outcome that is immediately useful but may not have all the bells and whistles yet. In the example, this could play out as getting nonperishable grains out to the hungry, receiving feedback that proteins are needed, and accomplishing distribution of proteins in the next iteration. By using this adaptive technique, we don’t frontload a lot of time and effort trying to achieve a perfect comprehensive outcome. This is especially helpful if our environment or requirements are likely to change midstream.

When the CEO’s accomplishments are reviewed by the board through scheduled monitoring reports, their expectation will be for an incremental success, which then can be judged as good enough for now, on our way to being excellent!

### Conclusion

*Responsible, accountable, accurate, precise, good, excellent, and good enough for now.*

Now that you’ve reviewed these terms, you might consider taking your board for a ballgame and a vocabulary review. Responsible is on first, Accurate is on second, and Good Enough is on third! Naturally! □

*Athens Koliass, MPM, PMP, PGP, PMI-ACP, is a member of the first cohort to earn a certificate for successful completion of the accredited Policy Governance Proficiency program through Govern for Impact (formerly the International Policy Governance Association). She is also a former chair of the board of the San Francisco chapter of the Project Management Institute. She can be reached at [athens@order4orgs.com](mailto:athens@order4orgs.com).*

1. <http://racichart.org/>.
2. <http://www.browndogconsulting.com/index.php/the-one-voice-principle/>.
3. <http://tynerblain.com/blog/2008/06/02/good-enough-for-now/>.
4. <http://www.disciplinedagiledelivery.com/defining-mvp/>.

## WHEN WE SAY...

**B**oard Leadership’s mission is “to discover, explain and discuss innovative approaches to board governance with the goal of helping organizations achieve effective, meaningful and successful leadership to fulfill their missions.”

Board Leadership aims to fulfill this mission by engaging its readers in a lively and illuminating inquiry into how board governance can be made more effective. This inquiry is based on three key assumptions:

- Boards exist to lead organizations, not merely monitor them.
- Effective board governance is not about either systems, structures, processes, theories, practices, culture, or behaviors—it is about all of them.
- Significant improvements are likely to come only through challenging the status quo and trying out new ideas in theory and in practice.

Uniquely among regular publications on board governance, Board Leadership primarily focuses on the job of board leadership as a whole, rather than on individual elements of practice within the overall job.

Over time, Board Leadership will provide a repository of different approaches to governance created through its regular “One Way to Govern” feature.

Here’s what a few of the key terms we use mean to us:

- **Innovative:** Creating significant positive change
- **Approaches:** Principles, theories, ideas, methodologies and practices.
- **Board governance:** The job of governing whole organizations. □

# Board governance and diversity will be more important than ever in 2019

Carlos Castelán

Carlos Castelán is managing director of The Navio Group in Minneapolis, a business consulting firm that works with retailers to improve their internal management and productivity challenges, helping them perform better and succeed in today's competitive business environment. Castelán and The Navio Group help clients transform and succeed while adapting to the constant predictable and unexpected changes in their business. In this column, he talks about how successful boards of directors at retailers work with their CEO and executive teams. Given the amount of change that's occurring in the industry, and in consumer-facing businesses, having strong board engagement is critical to navigating transformations.

There's a quote from Ayn Rand's *The Fountainhead*, written in 1943, that sums up a stereotypical view of a company's board of directors: "All I mean is that a board of directors is one or two ambitious men—and a lot of ballast. I mean that groups of men are vacuums. Great big empty nothings." In today's age of constant media coverage and scrutiny, the saying is outdated, given that CEOs rely on the support of their boards to succeed. That said, since boards operate in a less visible environment, they're often underappreciated and overlooked, which begs the question: What makes a great board of directors? In evaluating boards at retailers, we have found three themes that lead to a company's success, outside of traditional CEO succession planning:

- Diverse board member composition.
- Active boards that work with the CEO and his/her direct reports.
- Reimagining traditional industry metrics during times of immense change.

By rethinking the traditional role of boards and leveraging their expertise, CEOs and executive teams can both gather input and support in times of significant change, such as the one retailers are undergoing today.

## Diverse board members

There are many studies that show diversity—across gender, race, func-

tional experience, and background—leads to better outcomes.<sup>1</sup> We will not belabor this point but rather highlight its importance in relation to companies with a business-to-consumer (B2C) business model. Boards that reflect the diversity of a large customer base and understand the challenges they face across collective issues are better able to share customer pain-points, challenge thinking that may occur in an "echo chamber," or present new opportunities for business expansion.

A recent example from our work at The Navio Group that highlights the importance of diverse thinking occurred when a client sought to pilot new concept stores in Texas. The existing group that was leading the operations was focused on developing in-store roles and thought about the stores in terms of the Northeast regional demography where the company was headquartered. Because of the team's location and composition, a key point was overlooked: The customer base was going to be more diverse in the concept stores because of both the offerings as well as the locations in Texas. After pulling some additional data points related to the regional demographics as well as the target customer profile, we were able to work with the HR teams to include language requirements for the roles.

While the anecdote about store team members is a small example

of how diversity can affect everyday business decisions, a diverse board is as—if not more—important to both challenge existing norms as well as identify a wider array of strategic options or solution sets for a CEO. In businesses, such as retail, where customers are often highly diverse across gender, education, income, and geography, having a diverse board will further strategic discussions and be more reflective of a customer-centric approach.

## Active boards to advise CEO and the executive team

In an era of unprecedented change, a board that identifies high-performing CEOs and subsequently offers support while challenging him/her to think critically is crucial to success. Navigating change is essential to a company's performance, with roughly 50 percent of the Standard & Poor's list of 500 companies (S&P 500) forecasted to be replaced<sup>2</sup> over the next decade. Companies rise and fall much faster than ever before. In addition, CEOs at retailers are becoming harder<sup>3</sup> to replace, and it emphasizes the fact that boards will be forced to make crucial choices in relation to the CEO's performance before it's too late.

So, how can boards best work with executive teams to ensure high performance? For starters, it's important to develop clarity on the company's strategic vision and goals and then double-check that the executive team is working to deliver those objectives. In larger organizations, the gap between strategy and execution of projects can be significant without continuous reinforcement of the company's vision and goals. Boards can assist by ensuring that the executive team has clear roles and responsibilities related to the company's strategy. Boards can also advise on clarity of roles to identify the right structure during times of change.

For example, one area where board support or input can be useful is the establishment of a corporate innovation or transformation team. These teams, such as Walmart's Store No. 8, have come in vogue in recent years because of the need to develop new

solutions that reflect the accelerating pace of change in markets. In our work, we have found the mandate and scope of these types of teams to vary widely, which leads to mixed success.

A common theme from successful innovation teams we've worked with has been to (a) gain support from the board and CEO down and (b) operate independently from the rest of the organization to move quickly and make faster decisions. In these scenarios, the innovation teams operate with small groups of individuals—often four to six people—to build a business or launch new product(s). The goal is to be in market even faster to gather customer feedback, refine, or simply move on to something else if there's no resonance. Because of the approach, the teams often operate under a different banner/brand from the core organization to minimize conflicts from the existing business teams from titles, budget planning, pay bands, etc., as well as outside perception.

So, how does all of this apply to a board? As first outlined by management professors Rebecca Henderson and Kim Clark,<sup>4</sup> and then adapted by Harvard Business School's Clayton Christensen,<sup>5</sup> large organizations struggle to set up the right structure to launch transformative new offerings because they continue to make the same choices that made them successful. Boards can help executive teams overcome this pitfall, and navigate change, by advising the CEO on how to best structure innovation or transformation teams to operate independently from the core parts of the organization. Additionally, they can support the CEO in navigating short-term and long-term trade-offs by dedicating time at meetings to think through critical questions that might arise rather than treating the time—as many do—as an update to highlight only the “good news,” or a version of it.

### Reimagining traditional metrics in times of change

Along with advising on business-unit structure and organizational

design in a dynamic environment where companies now have different models to serve customers, boards can also help identify the right metrics to measure success. Customers do not make distinctions between retailers and brands, yet companies organize around individual business units to be most effective and bring concepts to life. With the line between the physical and digital worlds becoming blurred, and customers operating across numerous touchpoints, how can CEOs know if a unit or team is successful without a direct link to sales?

Success and how to measure it is a good place for boards to support the executive team. In thinking about clear roles and responsibilities for teams to pursue organizational objectives, a good conversation at the board level is about identifying nontraditional models and metrics as organizations transform and grow. This may also mean supporting an intuitive belief or idea that may not “pencil” right away.

A clear example of support for non-traditional models and metrics comes from Nordstrom, which launched stores without inventory (called Nordstrom Local<sup>6</sup>), starting in West Hollywood, California, and focused on providing services via stylists, tailors, and salon staff. The model of a store without inventory challenges the long-held retail dogma of measuring store performance in sales per square foot. It is clear, though, that such a concept received the support from the top brass because, on a stand-alone basis, it's hard to believe the stores would be profitable in highly trafficked areas with expensive real estate. In building such a concept, there needs to be a belief that unique stores and services increase customer engagement with the brand and/or bring in new customers. Perhaps the stores engage existing customers and they end up purchasing more online or from the traditional Nordstrom stores. Perhaps Nordstrom Local attracts new customers that otherwise wouldn't have been Nordstrom shoppers. Either way, it's clear that the company's leadership did not let conventional business

metrics get in the way of an idea they believed would better serve their customer.

Thinking about larger customer strategy and identifying how to find the right metrics to talk about success or the health of the business in the digital age will become increasingly important to help Wall Street understand the nontraditional business model. Boards are well-positioned to push and support teams to think differently about the business and then offer their support to the executive team when sharing that message to outside stakeholders. Traditional metrics will be reimagined in retail as the line between media, entertainment, and customer experience becomes blurred. Support from boards will be critical to a company's ability to adapt to changing customer expectations.

### Conclusion

Bringing diversity to the boardroom and then working with directors to gather feedback and rethink the business during times of great change are effective ways in which CEOs and executive teams can work with their boards. In this way, companies can flip the outdated, stereotypical notion of meeting with—as Rand said—“vacuums” or “big empty nothings” to engage in conversations that push traditional thinking and align stakeholders throughout the organization. In times of great change, boards are the CEO's best friends, and building a cohesive plan that leverages the board's outside expertise is of great value. □

1. <https://economics.princeton.edu/wp-content/uploads/2016/09/2016sample6.pdf>.

2. <https://www.inc.com/ilan-mochari/innosight-sp-500-new-companies.html>.

3. <https://www.wsj.com/articles/few-can-fill-the-ceos-job-directors-say-1507636800>.

4. [http://dimetic.dime-eu.org/dimetic\\_files/HendersonClarkASQ1990.pdf](http://dimetic.dime-eu.org/dimetic_files/HendersonClarkASQ1990.pdf).

5. <https://www.hbs.edu/faculty/Pages/item.aspx?num=46>.

6. <https://shop.nordstrom.com/content/nordstrom-local>.

# CALENDAR OF EVENTS

NOVEMBER 16, 2018

## ICSA Subsidiary Governance Conference

*America Square Conference Centre,  
1 America Square, 17 Crosswall,  
London, England EC3N 2LB UK*

The ICSA Subsidiary Governance Conference is a practitioner-led half-day event focused on the demanding endeavor of operating a large complex organization in light of increased demands being made from investors, regulators, politicians, employees, and clients that complicate the task of overseeing a large group of companies.

Through case studies, workshops, panel discussions, and technical sessions, attendees will have the opportunity to benchmark their own governance arrangements and further their understanding in key areas.

For more information, visit <https://bit.ly/2xmAhcE>.

JANUARY 20–23, 2019

## January Governance Institute Leadership Conference

*The Ritz-Carlton, 280 Vanderbilt Beach Road, Naples, FL 34108 USA*

The Governance Institute offers current information, interactive sessions, expert speakers, and the opportunity to meet others with a similar commitment to improving governance and achieving optimal board performance.

For more information, visit <https://bit.ly/2xpKp4a>.

JANUARY 29–31, 2019

## The Society for Corporate Governance Essentials Conference

*The Westin Fort Lauderdale Beach Resort, 321 North Fort Lauderdale Beach Blvd., Fort Lauderdale, FL 33304 USA*

Through a variety of plenary sessions, the SCG Essentials Conference will cover the basic fundamentals of corporate governance, including internal sources of and limits on governance authority, board responsibilities and structure, board and committee meetings, corporate entity management, records management and cybersecurity, risk management, minutes, and more.

For public companies, the topics include regulation and disclosure, shareholders, annual meetings, and drafting the proxy.

The private company series of breakout sessions will cover board oversight, governance and compliance, managing conflicts of interest, and succession planning.

Senior SCG members and other experts will offer practical solutions and advice on how to handle the varied responsibilities of the corporate secretary, assistant secretary, or other governance professional.

For more information, visit <https://www.societycorp.gov.org>.

MARCH 10–12, 2019

## Governance Institute March System Forum

*The Ritz-Carlton, 160 E. Pearson St., Chicago, IL 60611 USA*

This event offers attendees an effective means to stay abreast of current topics in health care and board governance. Sessions and workshops provide engaging and relevant content to foster learning opportunities and team building for boards, health care executives, and medical staff leadership. Attendees also have ample opportunity to network with like organizations facing similar challenges.

For more information, visit <https://bit.ly/2Nu04Kc>. □

# NEWS

## Data show increasing female representation on corporate boards

Recent data on gender diversity indicate that corporate boards are increasing the number of female directors and edging ever closer to gender parity.

Data from the second quarter of 2018, compiled by board intelligence firm Equilar, show that the percentage of women on Russell 3000 boards rose from 16.9 percent to 17.7 percent between March 31 and June 30, 2018. That's the third consecutive quarter to see an increase, and was enough to push the Equilar Gender Diversity Index to 0.35, where 1.0 represents parity among men and women on corporate boards.

According to the firm, this trend may partly be attributed to the fact that the number of new directorships that have gone to women has steadily increased over the last few years. That trend remained consistent in Q2 2018, as 34.9 percent of new board seats were appointed to women—up from 32 percent in Q1 and 29.4 percent for 2017 as a whole. This is a promising sign that companies are making a concerted effort to promote diversity in corporate boardrooms, the company said.

While the steps toward gender parity on boards are indeed welcoming, there is still plenty of room for improvement, the data show. The overall representation of women on boards is still below 20 percent, and 17.1 percent of boards have no women directors.

However, over the last year, the push for gender equality across corporate America—both from shareholders and lawmakers—has taken on greater prominence, and resulted in tangible improvements. In addition to the gains reported above, the data show modest increases in the number of Russell 3000 boards achieving gender parity and a sizable boost in the number of those boards with female representation between 40 percent and 50 percent.

For more information, visit <https://www.equilar.com>. □

# Be Bold! Getting Your Nonprofit Board to Think Like Innovators

By Cyndee Patterson

*Cyndee Patterson is director of the Lee Institute in Charlotte, North Carolina, which offers strategic planning and related services to charities and other civic groups. In this article, Patterson looks at the benefits of incorporating generative thinking in the nonprofit boardroom.*

See if this sounds familiar. Your nonprofit board gathers for its latest meeting, with an agenda focusing on a special event taking place next month, an issue that needs to be resolved before the quarter ends, or a review of how current expenditures look against the annual budget.

You participate in the meeting, but secretly think, "Why are we focusing on this? What am I doing here?"

Many nonprofit board members have had that experience or something similar. One reason why is the tendency of nonprofit boards to concentrate on short-term thinking. There's usually no lack of pressing subjects to discuss at board meetings, and once short-term needs are resolved, everyone leaves with a mild sense of satisfaction about how much got done.

I'd argue that nonprofit boards can do much more by intentionally devoting time to generative thinking.

Generative thinking is the practice of going deeper. It's not about what tasks need to be completed now or soon. Generative thinking is philosophical, designed to generate ideas and amplify your vision. It considers the big questions about whether the organization is meeting its mission, where it wants to be in five or 10 years, and whether it has the right people in place for the direction the board desires. Generative thinking is big-picture thinking.

In my tenure as president at The Lee Institute, which offers services to strengthen individuals and organizations committed to building great communities, I've seen that boards

don't pursue generative thinking unless they are asked or challenged to do so. It's human nature to prefer to talk about the needs right in front of you rather than ponder the deep questions that, when asked and answered, could make the most difference to the future of the organization.

But generative thinking is critical to move your organization forward. Without it, you can lose perspective of what the community wants. Is your nonprofit doing what the board intends? If your organization was founded years ago, does the community still need what you provide, or is it time to change? Generative thinking is strategic about the organization's highest and best purpose and how to fulfill it.

Look around your community or your field nationally. You'll see organizations that have pursued generative thinking to become real leaders. One of my favorite examples is the Guggenheim Foundation's decision to build a museum in Bilbao, Spain, designed by architect Frank Gehry. The concept was risky. Basque officials proposed Bilbao because they needed an economic stimulus in what was then a run-down port city, but it was an unlikely spot for a modern art museum. Gehry was a controversial choice, and the building he proposed was groundbreaking. Yet in the two decades since its opening, Guggenheim Museum Bilbao has become a cultural icon.

The good news for your organization is it doesn't take much preparation to lead your board into

a generative-thinking frame of mind. Board members already feel connected to the organization and its mission. The passion is there, and that's all you need to hold this kind of session.

To get started, consider having a morning or full-day retreat dedicated just to visionary conversation. A change of scenery can help stimulate creative thinking. Give board members some engagement with nature in a quiet and peaceful place. Provide a setting where they can reflect individually and in groups, and where they can feel free to be more than their typical board role.

For our board training and development clients at The Lee Institute, we recommend a three-step process to help nonprofit boards with generative thinking:

- **Start by asking bold questions.** Pay attention to each board member's individual connection to the group. Kickoff queries might include: "What are your ideas about the future of this organization?" "Why do you care about it, and what's important about it?" and "What drew you to this board service?"
- **Next, discuss the local and regional landscape.** What do you see taking shape in the community that's influencing your organization, and vice versa? How do board members see your agency making an impact now? What might be your next big leap forward?

Try this exercise in team building. Divide your board into small groups. Invite each group to create a headline of the big news five years from now about your agency. Ask them to name the media outlet where the news appears, too. Whether they imagine a story about your national expansion in *The Wall Street Journal* or an announcement about the new affordable apartments you are building on your local NPR station, this exercise reveals how big your

*(continued on next page)*

## Bold

(continued from previous page)

board thinks.

- **Finally, plan how the board will move the best ideas forward.** Ask, "If success were 100 percent guaranteed, what are the steps to take to get there?" While it is the board's role to generate big ideas and staff's job to make them happen, some big steps must start with the board. If you want to build a new theater and require a capital campaign, that decision and launch happens at the board level.

Perhaps you're the fortunate group that generates 10 exciting ideas and you're not sure how to select among them. Go back to your mission when choosing which ideas to test or explore. Your mission moors you to the place where you want to be. Of your 10 possibilities, maybe only five are

## FOOD FOR THOUGHT

"Consensus: The process of abandoning all beliefs, principles, values, and policies in search of something in which no one believes, but to which no one objects; the process of avoiding the very issues that have to be solved, merely because you cannot get agreement on the way ahead. What great cause would have been fought and won under the banner: 'I stand for consensus?'"

Margaret Thatcher

truly connected to it.

Some moments are particularly valuable for generative thinking. Turning points can be a catalyst for rich dialogue: when your nonprofit is coming out of a crisis, when there's discord among board members, or following an emergency in the community. Times like those call for your board to do more and be more than you have been before. Beyond those milestones, plan to schedule this kind of deep dive every one to three years, depending on your organization. Midway between the development of your strategic plans might be the best timing for your group.

Keep in mind these sessions can lead to significant change. If there are board factions moving away from the organization's mission or the passion that drew them to you initially, maybe it's time for some board members to depart. The same is true for staff. You want staff to be comfortable voicing concerns about the board's big ideas, but, ultimately, staff members must concentrate not on why the ideas can't happen, but how to make them work. (You'll recall one key question mentioned earlier for your generative-thinking session: Do we have the right staff in place to carry out our vision?)

Ultimately, generative thinking is your opportunity to ask the questions in the soul of your organization, and to hear the power and beauty of the answers. □

Cyndee Patterson is president of The Lee Institute, a nonprofit that offers strategic planning and other services to strengthen organizations, empower leaders, and engage citizens so they can build great communities. Reach her at [pmartin@tlwf.org](mailto:pmartin@tlwf.org) or learn more at <https://www.leeinstitute.org>.

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