

Executive Summary - Informational

TO: State Investment Board
FROM: Dave Hunter
DATE: March 23, 2020
SUBJECT: SIB Meeting Materials – March 27, 2020

The SIB meeting on Friday, March 27th, will be held in a virtual manner using video and teleconferencing technology in light of escalating public health concerns related to the COVID-19 outbreak and cover the following topics:

1. **Interim Investment Update** – Estimated client returns are consistent with their underlying asset allocation with TFFR, PERS and Legacy Fund down approximately 12%, WSI down approximately 4% and Budget Stabilization Fund up approximately 4% for the fiscal year to date - July 1, 2019 to March 19, 2020, as summarized below:

Estimated YTD Through 3/19/2020

(Actual returns are net of fees; estimates are gross indices)

		TFFR	PERS	Legacy	WSI	Budget Stabilization
Market Value	31-Jan	2,680,818,159	3,308,729,753	6,915,413,432	2,135,747,745	678,180,739
Total Fund Actual through	31-Jan	5.85%	5.87%	6.17%	5.62%	2.30%
Total Fund Policy through	31-Jan	5.40%	5.31%	5.78%	4.93%	1.83%
Est. MTD through	2/29/2020	-4%	-4%	-4%	-1%	1%
Est. MTD through	3/19/2020	-14%	-14%	-14%	-8%	1%
Estimated FYTD Return 3/19/2020		-12%	-12%	-12%	-4%	4%

February and March returns are rough indicative estimates based on underlying benchmark data (not actual results) and all amounts are preliminary, unaudited and subject to change.

2. **Capital Markets Update** – RIO will review recent asset class returns and the speed and severity of the current market decline in comparison to prior market corrections. We will also review S&P 500 returns in the 12 months following the last seven major downturns (dating back to Black Monday in 1987) and highlight the historical benefits of “Staying Invested” the last 20 years (which included the March 2000 Tech Bubble, 2007 Financial Crisis, 2011 U.S. Credit Downgrade and 4Q 2018 Trade War).
3. **Portfolio Rebalancing Update** – RIO recommends the SIB engage Parametric to assist RIO in synthetically rebalancing fund exposures in an efficient and cost effective manner. The SIB previously engaged Parametric to synthetically rebalance client portfolios in 2008 in order to maintain target asset class exposures during a period of extreme market volatility. Overlay programs effectively rebalance client portfolios towards long term strategic asset allocation targets via the use of equity

and fixed income futures contracts. Exchange traded futures are widely used by institutional investors to prevent the forced sale of physical securities during a period of distressed pricing, poor liquidity and/or wide bid-ask spreads. The original Parametric equity overlay program generated \$100 million of net investment gains for SIB clients when last used to synthetically balance exposures in 2008.

4. **Veterans Cemetery Trust Fund** – RIO will request the SIB to consider a motion to formally accept the Office of the State Treasurer as a contractual investment client for the Veterans Cemetery Trust Fund noting the Industrial Commission approved this proposal at their March 9, 2020 meeting.
5. **SIB Committee and Client Board Meetings** – The Executive Review Committee will request the SIB to review and approve the results of 2020 Board Self-Assessment Survey. The Committee will also provide an update on Executive Director/CIO assessment tools and a recommended timeline for completion. RIO will also highlight recent investment updates provided to SIB client board members and legislative leaders.
6. **RIO Agency Update** – RIO will provide an update of recent staffing changes including succession planning for RIO's Deputy Executive Director and Chief Retirement Officer Fay Kopp and Retirement Program Manager Shelly Schumacher in addition to the hiring of our new Investment Accountant Ann Griffin on March 2nd. RIO will also discuss recent actions taken by the agency to address the escalating public health concern of the COVID-19 outbreak. **Despite these challenging conditions, I believe our agency continues to perform at a high level while acknowledging that certain service response times have increased in recent weeks. I must also highlight that Fay Kopp has graciously agreed to delay her planned March 31st retirement given the unprecedented challenges we are facing at this time. I am extremely grateful to Fay for once again putting the interests of others ahead of her own for the benefit of many.**



ND STATE INVESTMENT BOARD MEETING

Friday, March 27, 2020, 9:00 a.m.

RIO Conference Room (**Virtual Meeting Host**)

Teleconferencing - 701.328.7950 Participant Code – 696855#

3442 East Century Avenue, Bismarck, ND

REVISED AGENDA

I. CALL TO ORDER AND ACCEPTANCE OF AGENDA

II. ACCEPTANCE OF MINUTES (February 28, 2020)

III. INVESTMENTS

- A. Interim Investment Update – Mr. Hunter (15 minutes) *Informational*
- B. Portfolio Rebalancing Update – Mr. Hunter (30 minutes)
 - 1. Parametric Overlay Services – Mr. Thomas Lee (CIO) and Mr. Ben Lazarus (Senior Director)
 - 2. Callan Overlay Solutions Rebalancing Memo – Mr. Paul Erlendson & Mr. Alex Browning
 - 3. Staff Recommendation – Mr. Schulz **Board Action**
- C. New SIB Client – Veterans Cemetery Trust Fund - Mr. Hunter (5 minutes) **Board Action**

IV. GOVERNANCE / EDUCATION

- A. Executive Review Committee Update - Ms. Yvonne Smith (20 minutes)
 - 1. Review of Board-Self Assessment Survey Results – Ms. Sara Sauter **Board Action**
 - 2. Overview of Director/CIO Assessment Tools & Timeline – Ms. Yvonne Smith *Informational*
- B. RIO Agency Update – Mr. Hunter (10 minutes) *Informational (verbal)*
 - 1. Team Staffing & Performance, COVID-19 Preparedness and Agency Communications

V. OTHER

Next Meetings: SIB Executive Review Committee – April 13, 2020, 8:30 a.m. – RIO Conference Room
SIB - April 24, 2020, 8:30 a.m. – State Capitol (Fort Union Room)
SIB Securities Litigation Committee - May 19, 2020, 1:00 p.m. - RIO Conference Room
SIB Audit Committee - May 21, 2020, 3:00 p.m. - RIO Conference Room

VI. ADJOURNMENT

**NORTH DAKOTA STATE INVESTMENT BOARD
MINUTES OF THE
FEBRUARY 28, 2020, BOARD MEETING**

MEMBERS PRESENT: Brent Sanford, Lt. Governor, Chair
Rob Lech, TFFR Board, Vice Chair (tlcf)
Bryan Klipfel, Director of WSI
Troy Seibel, PERS Board, Parliamentarian
Toni Gumeringer, TFFR Board
Gary Kreidt, Legacy/Budget Stab. Adv. Board
Adam Miller, PERS Board
Mel Olson, TFFR Board
Kelly Schmidt, State Treasurer
Jodi Smith, Commissioner of Trust Lands
Yvonne Smith, PERS Board

MEMBERS ABSENT: Jon Godfread, Insurance Commissioner

STAFF PRESENT: Eric Chin, Chief Risk Officer/Senior CIO (tlcf)
Bonnie Heit, Admin Svs Suprv
David Hunter, Exec Dir/CIO
Matt Posch, Investment/Compliance Officer
Sara Sauter, Suprv of Internal Audit
Darren Schulz, Dep CIO

GUESTS: Alex Browning, Callan LLC
Paul Erlendson, Callan LLC
Bryan Reinhardt, PERS

CALL TO ORDER:

Lt. Governor Sanford, Chair, called the State Investment Board (SIB) regular meeting to order at 8:30 a.m. on Friday, February 28, 2020, at the State Capitol, Ft. Union Room, Bismarck, ND.

AGENDA:

The Board considered the agenda for the February 28, 2020, meeting,

IT WAS MOVED BY MR. OLSON AND SECONDED BY MS. SMITH AND CARRIED BY A VOICE VOTE TO ACCEPT THE AGENDA FOR THE FEBRUARY 28, 2020, MEETING.

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

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

MINUTES:

IT WAS MOVED BY MS. SMITH AND SECONDED BY MR. KLIPFEL AND CARRIED BY A VOICE VOTE TO APPROVE THE JANUARY 24, 2020, MINUTES AS DISTRIBUTED.

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

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

INVESTMENTS:

Mr. Hunter highlighted the investment portfolios the SIB manages on behalf of its clients for the period ending December 31, 2019. SIB investments exceeded \$16.3 billion. SIB clients earned over \$2.3 billion of net investment income in 2019 with the Legacy Fund earning over 18% (\$1+ billion) and Public Employees Retirement System (PERS) (\$500+ million) and Teachers' Fund for Retirement (TFFR) (\$400+ million) each earning over 17.9% for the year ended 12/31/2019. The vast majority of SIB clients earned at least 0.50% of positive excess return for the 5-years ended 12/31/2019, while net investment returns for PERS and TFFR were ranked in the top quartile based on Callan's Public Fund Database for the 3, 5 and 10 year periods ended 12/31/2019.

Callan LLC - Representatives reviewed the investment performance of the Pension Trust, Insurance Trust, and Legacy Fund for the period ending December 31, 2019. Callan LLC also provided a market update for the same period.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MS. SMITH AND CARRIED BY A VOICE VOTE TO ACCEPT THE CALLAN REPORT FOR THE QUARTER ENDING DECEMBER 31, 2019.

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

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

U.S. Small Cap Equity - Mr. Schulz reviewed the parameters of the U.S. small cap equity search in which Callan LLC will be assisting. The small cap equity search process will replace the Parametric Russell 2000 synthetic index mandates with strategies that have a greater potential for outperformance. The search will be aligned to complement the SIB's existing manager structure. In 2019, the SIB approved expanding an existing \$160 million relationship with Atlanta Capital in U.S. small cap.

Investment Updates - Mr. Hunter informed the Board he provided investment updates for the period ending December 31, 2019, to the PERS Investment Subcommittee and Workforce Safety & Insurance in February. Mr. Hunter highlighted key points of the presentations.

The Board recessed at 9:50 a.m. and reconvened at 10:13 a.m.

GOVERNANCE:

Audit Committee - Ms. Sauter reviewed activities of the Internal Audit division for the period of October 1, 2019 - December 31, 2019.

Audit Activities Completed on Behalf of TFFR - Three Employer Audits were completed and one will be started soon.

The Salary Verification Audit is in progress. The reconciliation of salaries is scheduled to start during the third quarter.

The TFFR File Maintenance Audit fieldwork was completed and a report will be issued in February 2020.

The Benefit Payment Audit will be completed February/March 2020 timeframe.

Audit Activities Completed on Behalf of RIO - The Administrative Expense Audit was completed in January 2020. Internal Audit reviewed RIO's policies pertaining to travel and office expenses and compared those to the Office of Management and Budget (OMB) policies and state purchasing requirements.

Audit Activities Completed on Behalf of the SIB - The Executive Limitations Audit for the calendar year January 1, 2019 - December 31, 2019 was completed in February 2020. The audit reviews the Executive Director/CIO's level of compliance with SIB Governance Manual Executive Limitation policies.

IT WAS MOVED BY MR. OLSON AND SECONDED BY MR. KLIPFEL AND CARRIED BY A VOICE VOTE TO APPROVE THE AUDIT REPORT.

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

NAYS: NONE

MOTION CARRIED

ABSENT: COMMISSIONER GODFREAD

Executive Review Committee (ERC) - The SIB self-assessment was sent out on Wednesday, February 12, 2020, with a due date of Wednesday, February 26, 2020. The results of the self-assessment will be shared with the SIB at their March 27, 2020, meeting.

Once the SIB self-assessment is completed, the ERC will focus on the Executive Director/CIO performance evaluation and compensation recommendation.

Proxy Voting Policy - The SIB approved engaging Broadridge Financial Solutions to utilize their Proxy Disclosure service to enhance the SIB's ability to more efficiently audit the proxy voting practices and actions of its equity managers. RIO personnel will be conducting a comparison of Northern Trust and Broadridge's proxy voting reporting services and will share their findings at the March board meeting as well as an update on contract discussions with Broadridge.

Pension Administration System - Mr. Hunter informed the Board, the TFFR Board approved the Project Charter for the Pension Administration System Modernization Project at their January 23, 2020, meeting. The Project Charter was included in the Board's meeting materials.

Agency Update - The Deputy Executive Director/Chief Retirement Officer position was posted on January 8, 2020. Interviews were conducted on February 21, 2020, by Dr. Lech, Treasurer Schmidt, Mr. Hunter, and Ms. Denise Weeks. An offer of employment was extended to the top finalist, and RIO and Human Resource Management Services (HRMS) are in the process of finalizing the details.

The Retirement Program Manager position was accepted by Ms. Weeks, effective March 1, 2020. RIO will be posting a Retirement Programs Specialist vacancy in the near future.

The Investment Accountant position has been filled by Ms. Ann Griffin, effective March 2, 2020.

OTHER:

The next meeting of the SIB Executive Review Committee has been scheduled for March 16, 2020, at 8:30 a.m. at the Retirement and Investment Office.

The next meeting of the SIB for regular business has been scheduled for March 27, 2020, at 8:30 a.m., at the State Capitol, Ft. Union Room.

The next meeting of the SIB Securities Litigation Committee is scheduled for May 19, 2020, at 1:00 p.m. at the Retirement and Investment Office.

The next meeting of the SIB Audit Committee is scheduled for May 21, 2020, 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 10:39 a.m.

Lt. Governor Brent Sanford, Chair
State Investment Board

Bonnie Heit
Recorder

State Investment Board – Five Largest SIB Clients

Interim Estimated Returns – March 25, 2020

Interim estimated net investment returns for the **SIB's five largest clients** are summarized below on a fiscal year to date basis from July 1, 2019 to (Wednesday) March 25, 2020:

Estimated YTD Through 3/25/2020

(Actual returns are net of fees; estimates are gross indices)

		TFFR	PERS	Legacy	WSI	Budget Stabilization
Market Value	29-Feb	2,566,905,667	3,170,230,556	6,731,941,268	2,116,255,006	712,481,242
Total Fund Actual through	29-Feb	1.6%	1.6%	2.5%	4.6%	2.7%
Total Fund Policy through	29-Feb	1.1%	1.2%	2.1%	4.2%	2.7%
Est. MTD through	3/25/2020	-10%	-10%	-10%	-6%	1%
Estimated FYTD Return	3/25/2020	-9%	-9%	-8%	-1%	4%
Equity		58%	58%	50%	22%	-
Fixed Income		23%	23%	35%	60%	100%
Real Assets		18%	19%	15%	17%	-
Cash		1%	-	-	1%	-

- **Estimated SIB client returns are deemed to be largely consistent with their underlying asset allocation** with TFFR and PERS down approximately 9%, Legacy Fund down approximately 8%, WSI down about 1% and the Budget Stabilization Fund up approximately 4% from July 1, 2019 to March 25, 2020.
- Funds with higher equity allocations are more adversely impacted by the recent severe equity market decline. TFFR, PERS and Legacy Fund have target allocations to public equities of 52%, 51% and 50%, respectively, while TFFR and PERS have target private equity allocations of 6% and 7%, respectively.

Net Investment Returns as of February 29, 2020, are preliminary and subject to change. March returns are rough indicative estimates based on underlying benchmark data (not actual results) and all amounts are preliminary, unaudited and subject to material change.

Informational

Interim Investment Update

Indicative Preliminary Return Estimates Subject to Change

March 24, 2020

Dave Hunter, Executive Director / CIO

Darren Schulz, Deputy Chief Investment Officer

Fay Kopp, Deputy Executive Director / Chief Retirement Officer

Connie Flanagan, Chief Financial Officer

Eric Chin, Chief Risk Officer

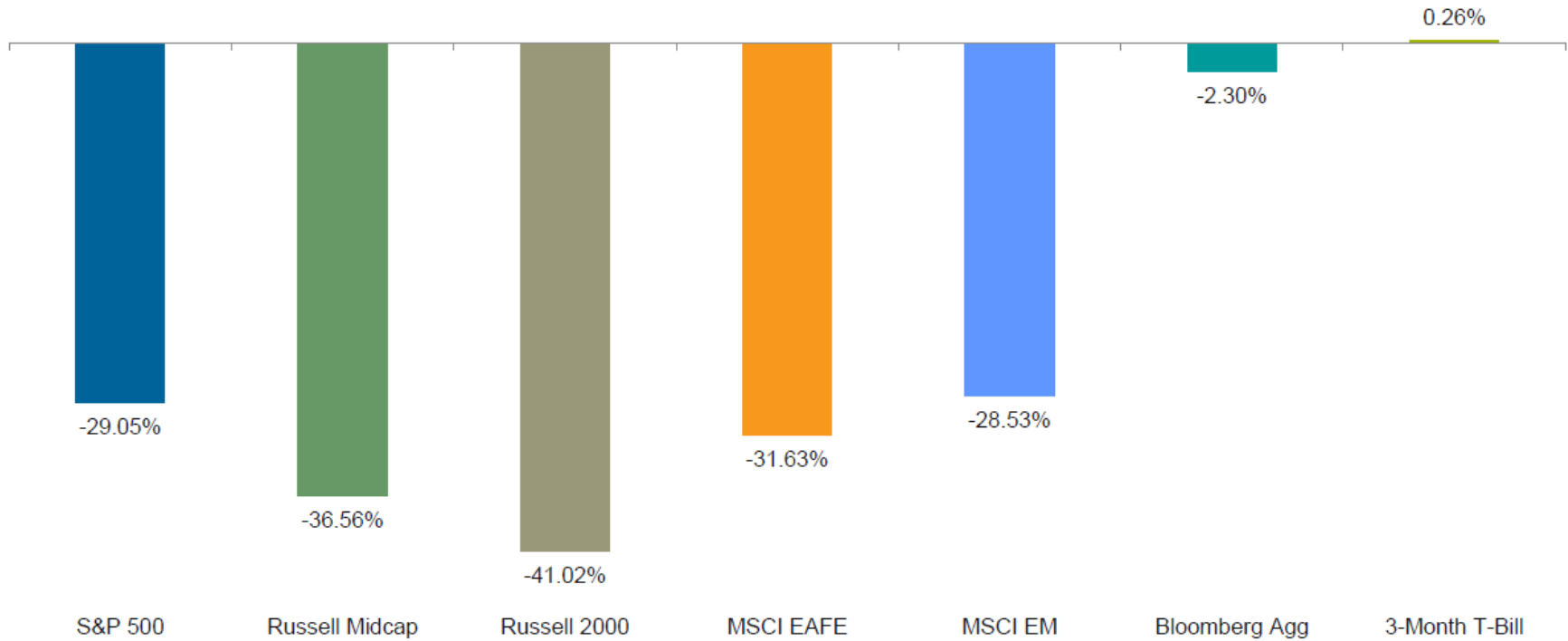
ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

U.S. and Global Equities Have Fallen by Over 30%

Returns of Market Benchmarks

From S&P 500 Peak: February 19, 2020 Through March 18, 2020



Nearly All Major Asset Classes Have Been Impacted

Asset Class Performance

Surging Volatility and Turbulent Financial Markets

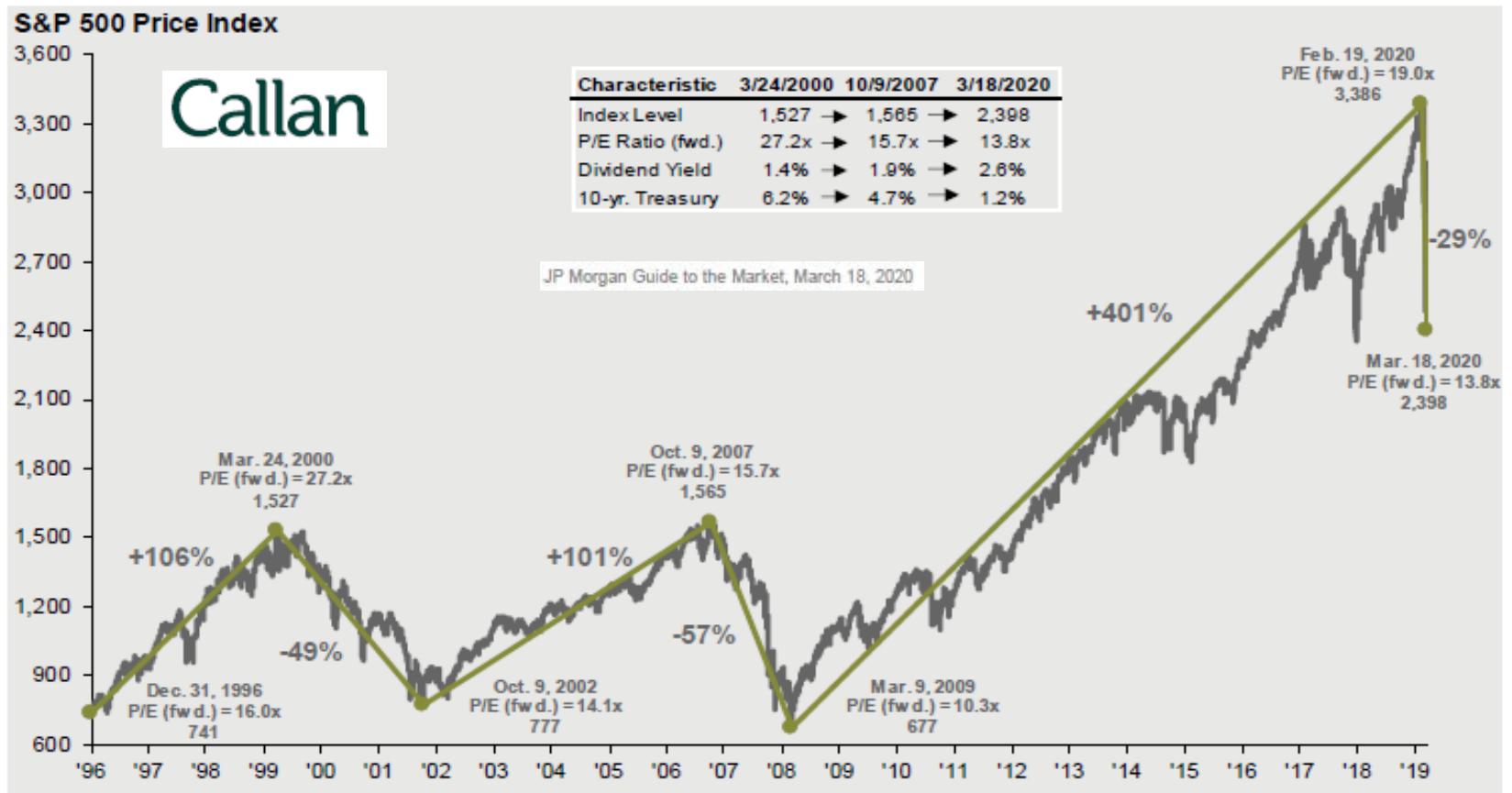
Trailing Periods Ended February 29, 2020

	YTD (as of 3/18/20)	Feb 2020	Jan 2020	4Q 2019	1 Year	5 Years	10 Years	20 Years
Best	3 Month T-Bill 0.47%	Bbg:Agg 1.80%	Bbg:Agg 1.92%	MSCI:EM Gross 11.93%	Bbg:Agg 11.68%	S&P:500 11.70%	S&P:500 13.56%	Russell:2000 7.59%
	Bbg:Agg -0.35%	3 Month T-Bill 0.15%	3 Month T-Bill 0.13%	Russell:2000 9.94%	S&P:500 8.19%	Russell:2000 8.23%	Russell:2000 11.83%	MSCI:EM Gross 7.03%
	S&P:500 -25.45%	MSCI:EM Gross -5.27%	S&P:500 -0.04%	S&P:500 9.07%	3 Month T-Bill 2.18%	MSCI:EM Gross 6.01%	MSCI:EAFE 5.50%	S&P:500 6.06%
	MSCI:EM Gross -29.19%	S&P:500 -8.23%	MSCI:EAFE -2.09%	MSCI:EAFE 8.17%	MSCI:EAFE -0.57%	MSCI:EAFE 5.67%	MSCI:EM Gross 4.04%	Bbg:Agg 5.03%
	MSCI:EAFE -32.17%	Russell:2000 -8.42%	Russell:2000 -3.21%	3 Month T-Bill 0.46%	MSCI:EM Gross -1.51%	Bbg:Agg 3.05%	Bbg:Agg 3.75%	MSCI:EAFE 3.32%
Worst	Russell:2000 -40.42%	MSCI:EAFE -9.04%	MSCI:EM Gross -4.66%	Bbg:Agg 0.18%	Russell:2000 -4.92%	3 Month T-Bill 1.07%	3 Month T-Bill 0.58%	3 Month T-Bill 1.78%

The Speed of the S&P 500 Index Decline is Unprecedented

How Far we Came, How Fast we Fell

Through March 18, 2020



The Speed of the Current Decline was Faster than 1987 or 1929

Putting Capital Market Performance in Historical Context

Recent stock market declines have been steep and fast

The fastest bear market correction (-20% from prior peak) follows the longest bull market expansion in history (11 years)

15 days: Fastest bear market correction in the S&P500 on record



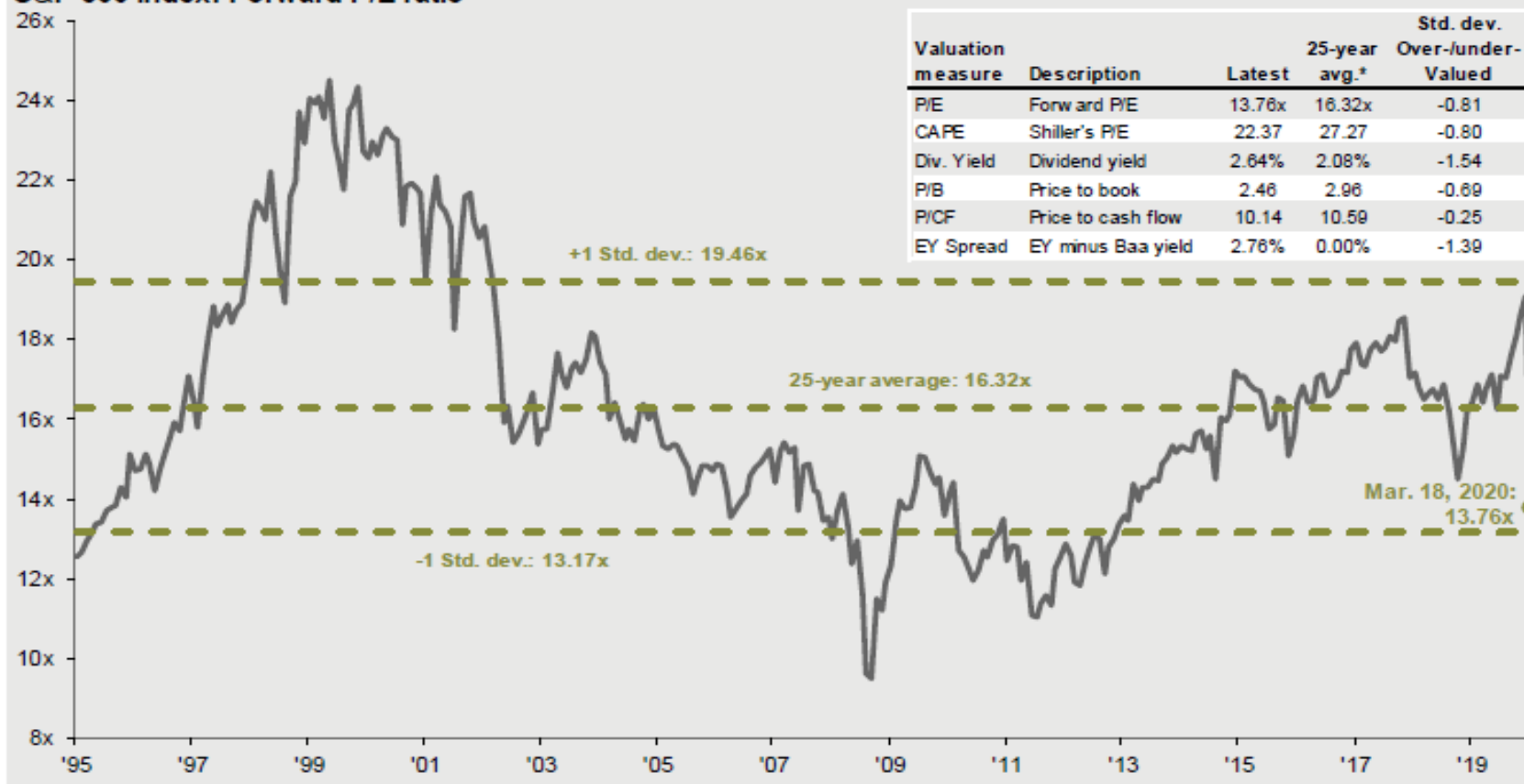
The S&P 500 Index went from being overvalued by one standard deviation to undervalued by one standard deviation in one month from February 19 to March 18

Overvalued to Undervalued in a Month

Callan

JP Morgan Guide to the Market, March 18, 2020

S&P 500 Index: Forward P/E ratio



What is the estimated impact of the fastest Bear market correction in history (down 20% from peak) following the longest Bull market in history?

Interim estimated net investment returns for the **SIB's five largest clients** are summarized below on a fiscal year to date basis from July 1, 2019 to (Thursday) March 19, 2020:

Estimated YTD Through 3/19/2020

(Actual returns are net of fees; estimates are gross indices)

		TFFR	PERS	Legacy	WSI	Budget Stabilization
Market Value	31-Jan	2,680,818,159	3,308,729,753	6,915,413,432	2,135,747,745	678,180,739
Total Fund Actual through	31-Jan	5.85%	5.87%	6.17%	5.62%	2.30%
Total Fund Policy through	31-Jan	5.40%	5.31%	5.78%	4.93%	1.83%
Est. MTD through	2/29/2020	-4%	-4%	-4%	-1%	1%
Est. MTD through	3/19/2020	-14%	-14%	-14%	-8%	1%
Estimated FYTD Return 3/19/2020		-12%	-12%	-12%	-4%	4%

- **Estimated SIB client returns are deemed to be largely consistent with their underlying asset allocation** with TFFR, PERS and Legacy Fund down approximately 12%, WSI down approximately 4% and the Budget Stabilization Fund up approximately 4% from July 1, 2019 to March 19, 2020.
- Funds with higher equity allocations are more adversely impacted by the recent severe equity market decline. TFFR, PERS and Legacy Fund have target allocations to public equities of 52%, 51% and 50%, respectively, while TFFR and PERS have target private equity allocations of 6% and 7%, respectively.
- WSI's target asset allocation is 22% public equity, 60% fixed income, 17% real assets and 1% cash.
- The Budget Stabilization Fund has a target asset allocation of 100% short term fixed income and cash.

February and March returns are rough indicative estimates based on underlying benchmark data (not actual results) and all amounts are preliminary, unaudited and subject to change.

State Investment Board – Pension Clients

Interim Estimated Returns – March 19, 2020

Interim estimated investment returns for the SIB's seven Pension clients are deemed to be largely consistent with underlying asset allocations and summarized below on a fiscal year to date basis through March 19, 2020:

Estimated YTD Through 3/19/2020

(Actual returns are net of fees; estimates are gross indices)

		TFFR	PERS	Job Service	Bismarck Employees	Bismarck Police	Grand Forks	Grand Forks Parks
Market Value	31-Jan	2,680,818,159	3,308,729,753	98,151,301	108,871,580	43,444,342	68,519,592	7,551,216
Total Fund Actual through	31-Jan	5.85%	5.87%	3.73%	5.60%	5.56%	6.14%	5.75%
Total Fund Policy through	31-Jan	5.40%	5.31%	3.92%	5.05%	5.04%	5.72%	5.09%
Est. MTD through	2/29/2020	-4%	-4%	▼ -1%	-3%	-3%	-4%	-4%
Est. MTD through	3/19/2020	-14%	-14%	▼ -6%	-12%	-13%	-14%	-13%
Estimated FYTD Return 3/19/2020		-12%	-12%	-4%	-10%	-11%	-13%	-11%

TFFR and PERS interim estimated fiscal year to date returns as of March 19, 2020, are down approximately 12% with an equity allocation of 58%. Job Service with an asset allocation of 20% equity and 80% fixed income is estimated to be down roughly 4% due to this plan being de-risked in recent years (with a funded ratio over 140% using a 4.5% return assumption). The City of Bismarck Employee & Police Plans and City of Grand Forks Park District Plans are estimated to be down approximately 10% to 11% from July 1, 2019 to March 19, 2020, due to slightly lower equity allocations than TFFR or PERS. The City of Grand Forks Pension Plan is estimated to be down approximately 13% during this same period due to a slightly higher equity allocation than TFFR or PERS.

February and March returns are rough indicative estimates based on underlying benchmark data (not actual results) and all amounts are preliminary, unaudited and subject to change.

State Investment Board – Non-Pension Clients

Interim Estimated Returns – March 19, 2020

Interim estimated returns for Non-Pension clients are deemed to be largely consistent with their underlying asset allocation and summarized below on fiscal year to date basis from July 1, 2019 through March 19, 2020:

Estimated YTD Through 3/19/2020

(Actual returns are net of fees; estimates are gross indices)

		PERS Retiree Health (SEI)	Fire & Tornado	Bonding	Insurance Reg	Petroleum Tank	Risk Mgmt Risk Mgmt	Risk Mgmt WC
Market Value	31-Jan	145,143,389	23,900,095	3,734,070	1,479,586	6,187,780	4,316,217	4,124,772
Total Fund Actual through	31-Jan	6.51%	5.83%	3.45%	4.55%	3.23%	6.09%	6.40%
Total Fund Policy through	31-Jan	6.46%	5.33%	2.95%	4.26%	2.79%	5.68%	6.07%

Est. MTD through	2/29/2020	▼ -4%	▼ -2%	▼ 1%	▼ -2%	▼ 1%	▼ -1%	▼ -2%
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Est. MTD through	3/19/2020	-15%	-10%	-2%	-8%	-2%	-10%	-11%
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Estimated FYTD Return 3/19/2020	-13%	-7%	2%	-6%	2%	-5%	-7%
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NOTE: PERS Group Insurance and AG Settlement Funds will be added shortly.

		NDACo	Bismarck Def.Sick	Board of Medicine	Cultural Endowment	FargoDome	Tobacco	Parks&Rec
Market Value	31-Jan	6,727,317	774,670	2,473,987	506,355	45,634,611	7,430,814	798,224
Total Fund Actual through	31-Jan	6.24%	5.91%	5.07%	6.59%	6.30%	1.52%	6.26%
Total Fund Policy through	31-Jan	5.65%	5.27%	4.35%	6.43%	5.79%	1.58%	5.54%

Est. MTD through	2/29/2020	▼ -2%	▼ -1%	▼ -1%	▼ -4%	▼ -4%	▼ 1%	▼ -2%
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Est. MTD through	3/19/2020	-9%	-10%	-5%	-14%	-14%	1%	-11%
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Estimated FYTD Return 3/19/2020	-6%	-6%	-1%	-12%	-12%	3%	-7%
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February and March returns are rough indicative estimates based on underlying benchmark data (not actual results) and all amounts are preliminary, unaudited and subject to change.

The S&P 500 has experienced significant market rebounds following the last seven major market downturns since Black Monday in 1987

Focus on the Long Term

Market rebounds can be swift and powerful

History shows that financial markets tend to go up over time. Only by staying invested can investors participate in the full breadth of the ensuing recovery.

12-month performance following major declines

S&P 500 biggest declines	Black Monday 8/25/87- 12/4/87	Gulf War 7/16/90- 10/11/90	Asia Crisis 7/17/98- 9/31/98	Tech Bubble 3/27/00- 10/9/02	Financial Crisis 10/9/07 -3/9/09	US Credit Downgrade 3/10/11- 10/3/11	Trade War 10/3/18- 12/24/18
% decline	-33.5%	-19.9%	-19.3%	-49.0%	-56.8%	-19.0%	-19.6%
Next 12 months	+21.4%	+29.1%	+37.9%	+33.7%	+68.6%	+32.0%	+37.1%

Source: BlackRock; March 12, 2020

Source: Morningstar as of 2/28/20. Returns are principal only not including dividends. U.S. stocks represented by the S&P 500 Index. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You can't invest directly in an index.

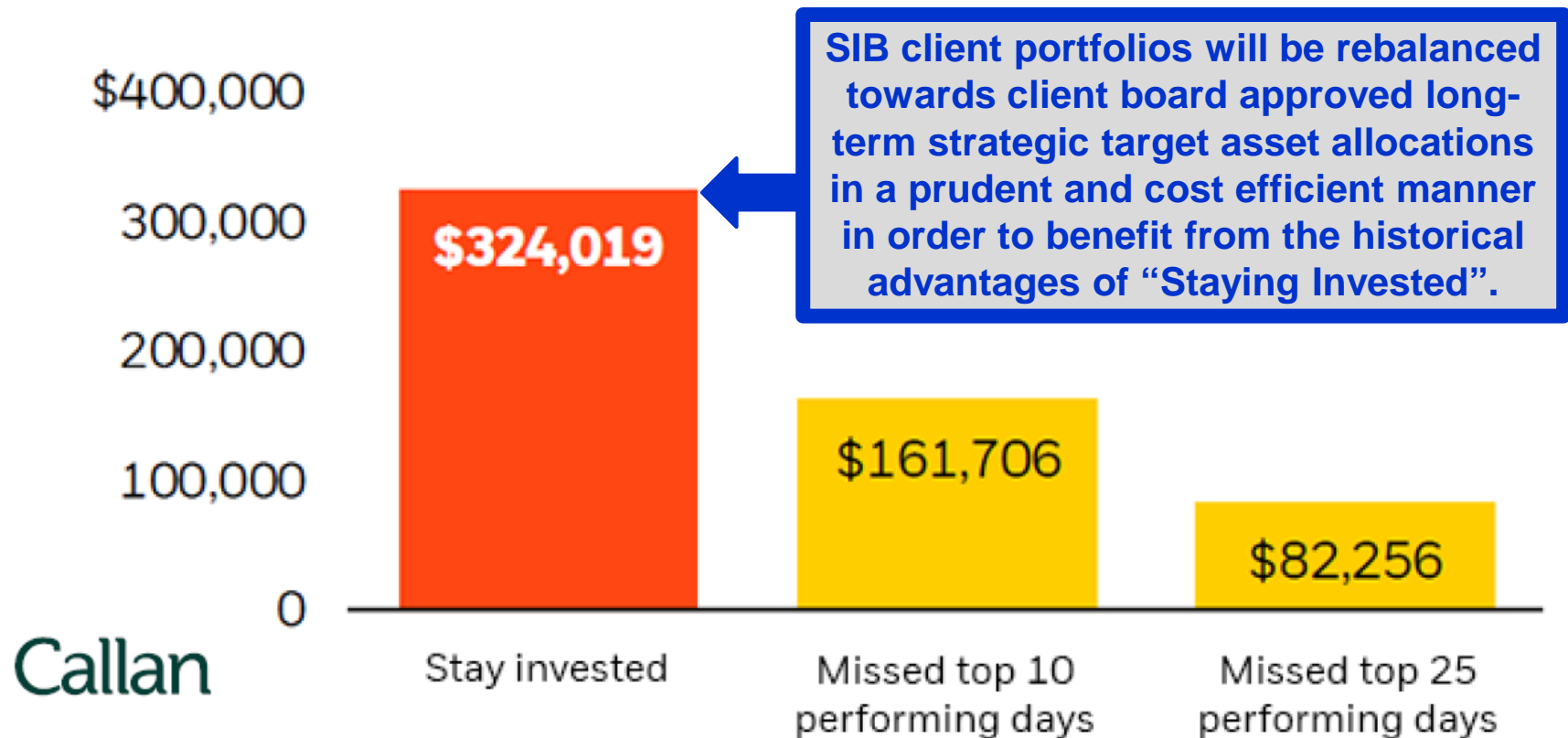
The Impact of “Missing the Top Ten Days” the last 20-years is over 50%

Action: RIO will rebalance our SIB client portfolios to “Stay Invested”

Focus on the Long Term

Timing market cycles is nearly impossible to do with any consistency

Hypothetical return of \$100,000 invested in the S&P 500 Index over a 20-year period (March 2000 to March 2020), versus the return if the 10 and 25 top-performing days were missed.



Callan

State Investment Board – Five Largest SIB Clients

Interim Estimated Returns – March 23, 2020

Interim estimated net investment returns for the **SIB's five largest clients** are summarized below on a fiscal year to date basis from July 1, 2019 to (Monday) March 23, 2020:

Estimated YTD Through 3/23/2020

(Actual returns are net of fees; estimates are gross indices)

		TFFR	PERS	Legacy	WSI	Budget Stabilization
Market Value	31-Jan	2,680,818,159	3,308,729,753	6,915,413,432	2,135,747,745	678,180,739
Total Fund Actual through	31-Jan	5.85%	5.87%	6.17%	5.62%	2.30%
Total Fund Policy through	31-Jan	5.40%	5.31%	5.78%	4.93%	1.83%
	29-Feb					
Est. MTD through	2/29/2020	-4%	-4%	-4%	-1%	1%
Est. MTD through	3/23/2020	-15%	-15%	-14%	-8%	1%
Estimated FYTD Return	3/23/2020	-14%	-14%	-13%	-4%	4%

- **Estimated SIB client returns are deemed to be largely consistent with their underlying asset allocation** with TFFR, PERS and Legacy Fund down approximately 14%, Legacy down approximately 13%, WSI down about 4% and the Budget Stabilization Fund up approximately 4% from July 1, 2019 to March 23, 2020.
- Funds with higher equity allocations are more adversely impacted by the recent severe equity market decline. TFFR, PERS and Legacy Fund have target allocations to public equities of 52%, 51% and 50%, respectively, while TFFR and PERS have target private equity allocations of 6% and 7%, respectively.
- WSI's target asset allocation is 22% public equity, 60% fixed income, 17% real assets and 1% cash.
- The Budget Stabilization Fund has a target asset allocation of 100% short term fixed income and cash.

State Investment Board – Pension Clients

Interim Estimated Returns – March 23, 2020

Interim estimated investment returns for the SIB's seven Pension clients are deemed to be largely consistent with underlying asset allocations and summarized below on a fiscal year to date basis through March 23, 2020:

Estimated YTD Through 3/23/2020

(Actual returns are net of fees; estimates are gross indices)

		TFFR	PERS	Job Service	Bismarck Employees	Bismarck Police	Grand Forks	Grand Forks Parks
Market Value	31-Jan	2,680,818,159	3,308,729,753	98,151,301	108,871,580	43,444,342	68,519,592	7,551,216
Total Fund Actual through	31-Jan	5.85%	5.87%	3.73%	5.60%	5.56%	6.14%	5.75%
Total Fund Policy through	31-Jan	5.40%	5.31%	3.92%	5.05%	5.04%	5.72%	5.09%
	29-Feb							
Est. MTD through	2/29/2020	-4%	-4%	-1%	-3%	-3%	-4%	-4%
Est. MTD through	3/23/2020	-15%	-15%	-6%	-13%	-14%	-16%	-14%
Estimated FYTD Return	3/23/2020	-14%	-14%	-4%	-11%	-12%	-15%	-12%

TFFR and PERS interim estimated fiscal year to date returns as of March 23, 2020, are down approximately 14% with an equity allocation of 58%. Job Service with an asset allocation of 20% equity and 80% fixed income is estimated to be down roughly 4% due to this plan being de-risked in recent years (with a funded ratio over 140% using a 4.5% return assumption). The City of Bismarck Employee & Police Plans and City of Grand Forks Park District Plans are estimated to be down approximately 11% to 12% from July 1, 2019 to March 23, 2020, due to slightly lower equity allocations than TFFR or PERS. The City of Grand Forks Pension Plan is estimated to be down approximately 15% during this same period due to a slightly higher equity allocation than TFFR or PERS.

February and March returns are rough indicative estimates based on underlying benchmark data (not actual results) and all amounts are preliminary, unaudited and subject to change.

State Investment Board – Non-Pension Clients

Interim Estimated Returns – March 23, 2020

Interim estimated returns for Non-Pension clients are deemed to be largely consistent with their underlying asset allocation and summarized below on fiscal year to date basis from July 1, 2019 through March 23, 2020:

Estimated YTD Through 3/23/2020

(Actual returns are net of fees; estimates are gross indices)

		PERS Retiree Health	Fire & Tornado	Bonding	Insurance Reg	Petroleum Tank	Risk Mgmt Risk Mgmt	Risk Mgmt WC
Market Value	31-Jan	145,143,389	23,900,095	3,734,070	1,479,586	6,187,780	4,316,217	4,124,772
Total Fund Actual through	31-Jan	6.51%	5.83%	3.45%	4.55%	3.23%	6.09%	6.40%
Total Fund Policy through	31-Jan	6.46%	5.33%	2.95%	4.26%	2.79%	5.68%	6.07%
	29-Feb							
Est. MTD through	2/29/2020	-4%	-2%	1%	-2%	1%	-1%	-2%
Est. MTD through	3/23/2020	-17%	-11%	-2%	-9%	-1%	-10%	-11%
Estimated FYTD Return	3/23/2020	-15%	-8%	3%	-7%	3%	-6%	-8%

		NDACo	Bismarck Def.Sick	Board of Medicine	Cultural Endowmen	FargoDome	Tobacco	Parks & Rec	PERS Group Ins
Market Value	31-Jan	6,727,317	774,670	2,473,987	506,355	45,634,611	7,430,814	798,224	29,942,560
Total Fund Actual through	31-Jan	6.24%	5.91%	5.07%	6.59%	6.30%	1.52%	6.26%	1.41%
Total Fund Policy through	31-Jan	5.65%	5.27%	4.35%	6.43%	5.79%	1.58%	5.54%	1.10%
	29-Feb								
Est. MTD through	2/29/2020	-2%	-1%	-1%	-4%	-4%	1%	-2%	1%
Est. MTD through	3/23/2020	-10%	-10%	-5%	-16%	-15%	1%	-11%	1%
Estimated FYTD Return	3/23/2020	-6%	-6%	-1%	-14%	-13%	3%	-7%	3%

February and March returns are rough indicative estimates based on underlying benchmark data (not actual results) and all amounts are preliminary, unaudited and subject to change.

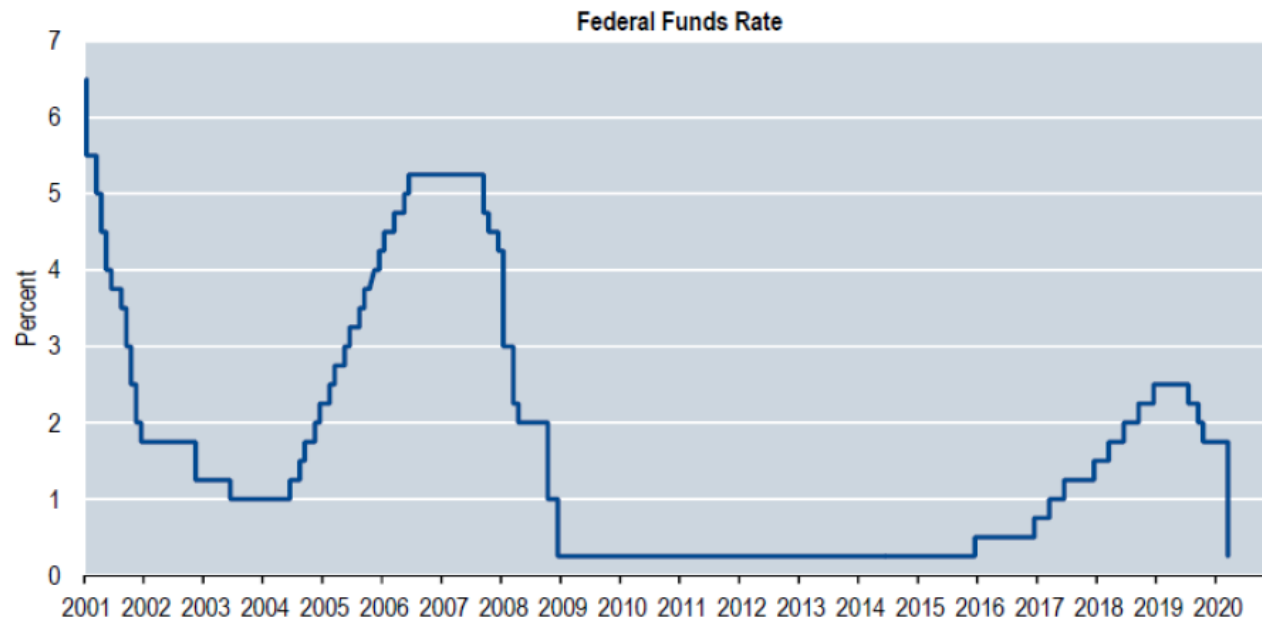
Government Response: Monetary Policy

Monetary Policy is focused on ensuring ample liquidity

The Federal Reserve cut the target interest rate back to 0-0.25% (the “zero lower bound”) in an emergency meeting Sunday, March 15. The last time rates were set to this level was in the depths of the GFC.

Chairman Powell has been publicly espousing patience, suggesting benchmark interest rates will remain low for as long as necessary.

Fed announced fourth round of quantitative easing – the purchase of \$700 billion in Treasuries and mortgage backed securities with two aims; 1) boost liquidity in the financial system and, 2) increase aggregate demand by expanding the money supply.

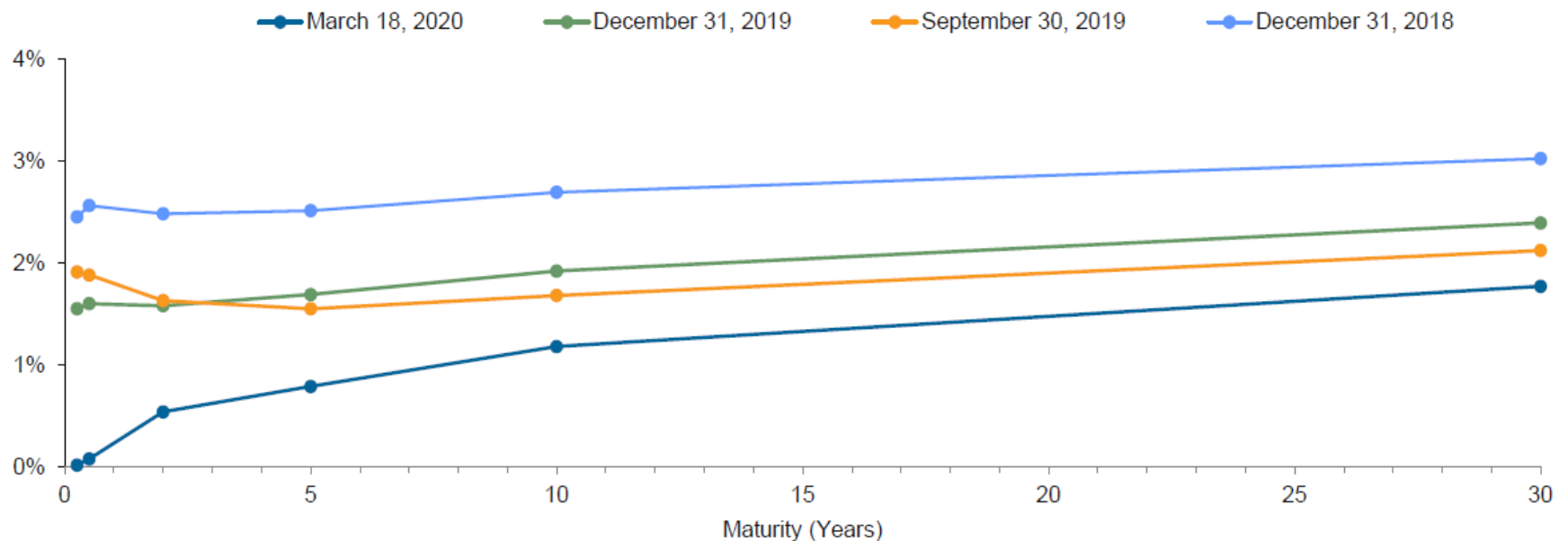


Callan

Source: Western Asset; March 18, 2020.

U.S. Treasury Yield Curves

U.S. Treasury Yield Curves



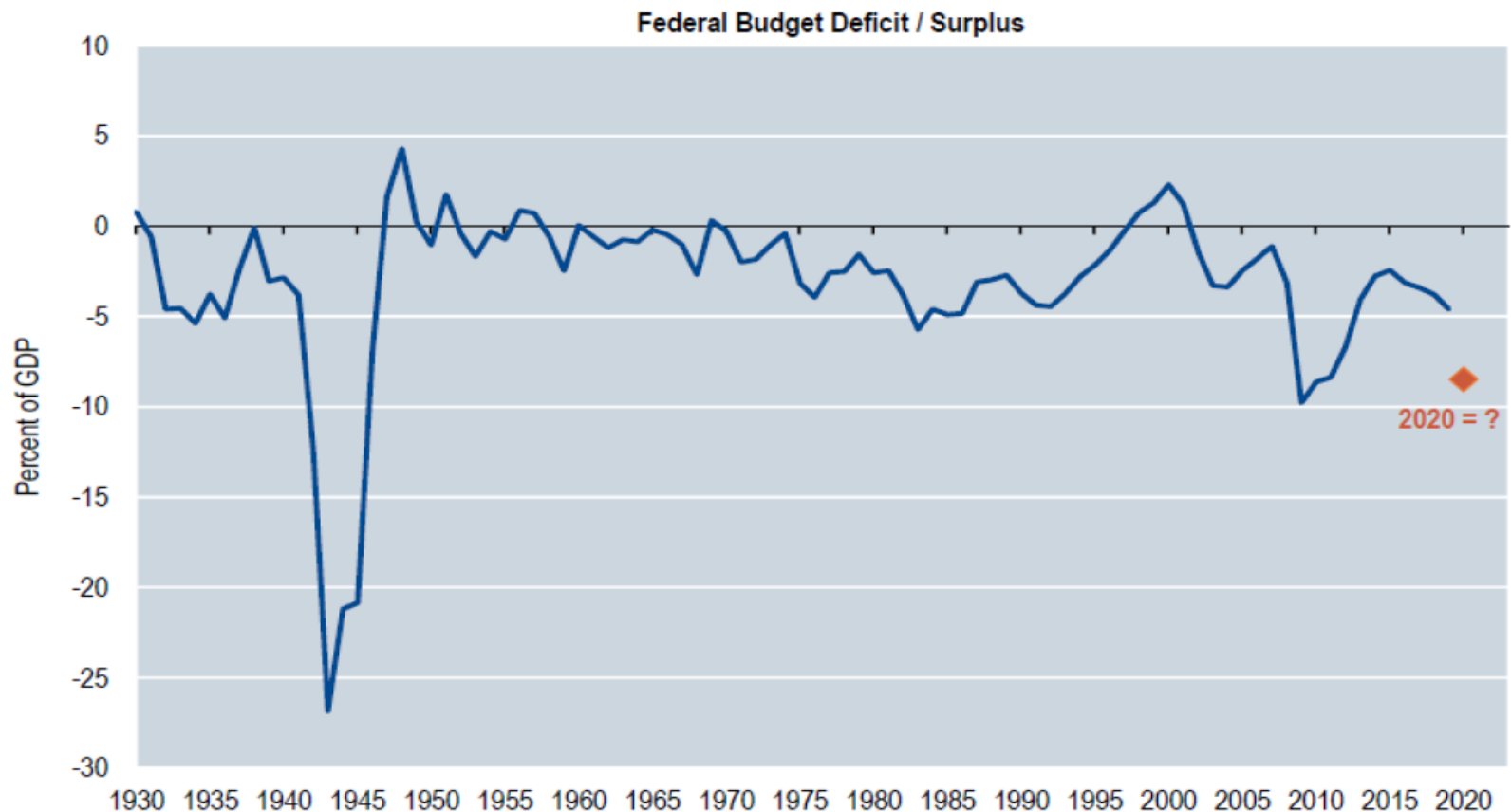
	1 Mo	2 Mo	3 Mo	6 Mo	1 Yr	2 Yr	3 Yr	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
12/31/2019	1.48	1.51	1.55	1.6	1.59	1.58	1.62	1.69	1.83	1.92	2.25	2.39
03/18/2020	0.04	0.03	0.02	0.08	0.21	0.54	0.66	0.79	1.08	1.18	1.6	1.77
Difference	(1.44)	(1.48)	(1.53)	(1.52)	(1.38)	(1.04)	(0.96)	(0.90)	(0.75)	(0.74)	(0.65)	(0.62)

Callan

Government Response: Fiscal Policy

Fiscal Policy is gearing up to support a displaced workforce with sizable stimulus proposals

Sizing of stimulus expected to be approximately \$850bn (equivalent to 4% of GDP). May go higher - \$1tn?



Source: Western Asset; March 18, 2020.

Dramatic Decline in Oil Prices

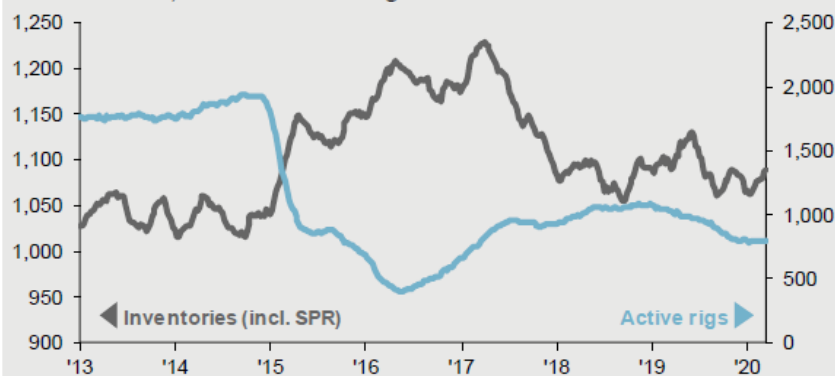
Change in production and consumption of liquid fuels

Production, consumption and inventories, millions of barrels per day

Production	2017	2018	2019	2020*	2021*	Growth since '17
U.S.	15.7	17.9	19.5	20.9	20.8	32.8%
OPEC	37.4	37.3	35.2	34.2	34.5	-7.8%
Russia	11.2	11.4	11.5	11.6	11.5	2.8%
Global	98.1	100.8	100.6	102.1	102.4	4.4%
Consumption						
U.S.	20.0	20.5	20.5	20.5	20.7	3.8%
China	13.6	14.0	14.5	14.6	15.4	13.4%
Global	98.7	100.0	100.8	101.1	102.9	4.2%
Inventory Change						
	-0.6	0.8	-0.2	1.0	-0.4	

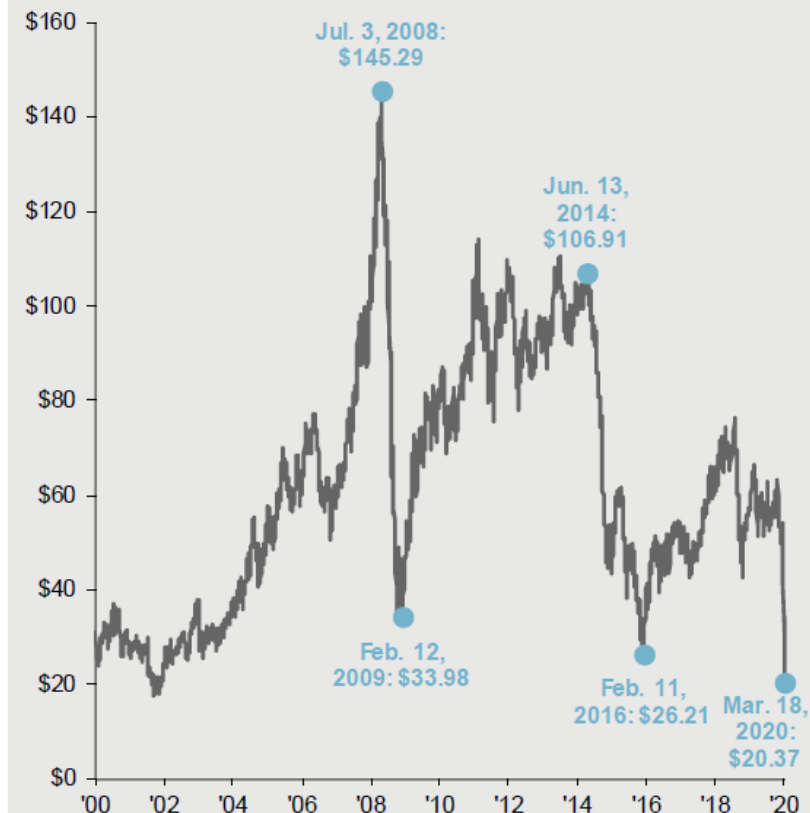
U.S. crude oil inventories and rig count**

Million barrels, number of active rigs



Price of oil

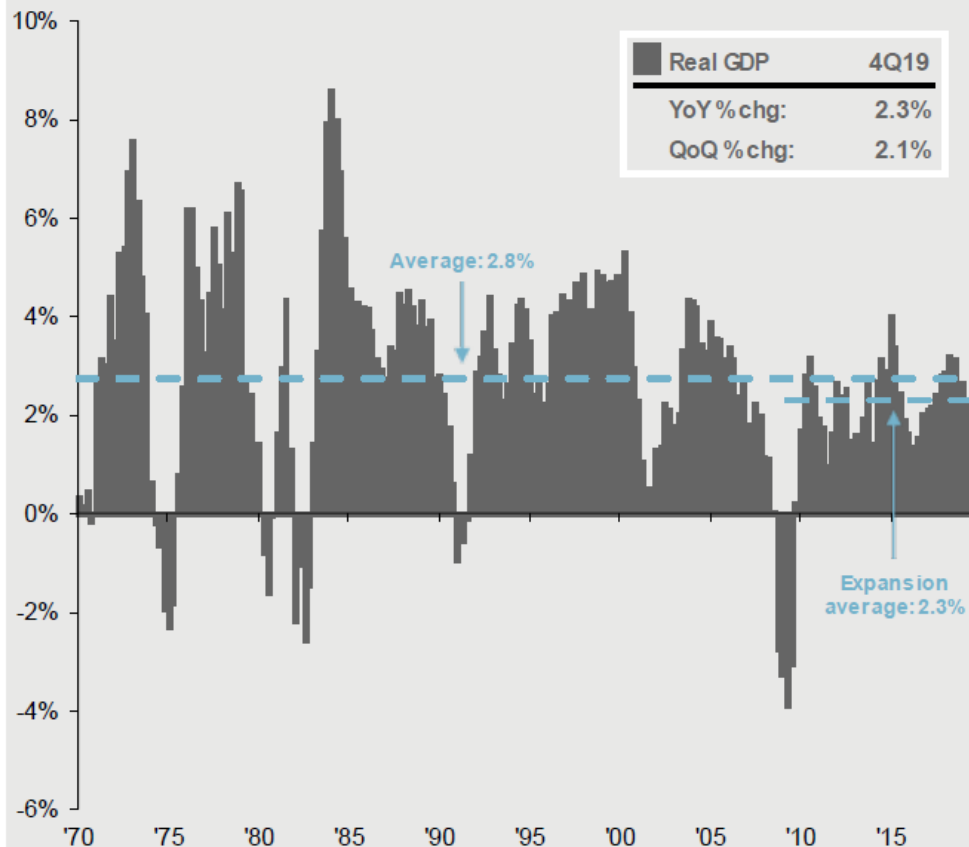
WTI crude, nominal prices, USD/barrel



GDP and the Role of the Consumer

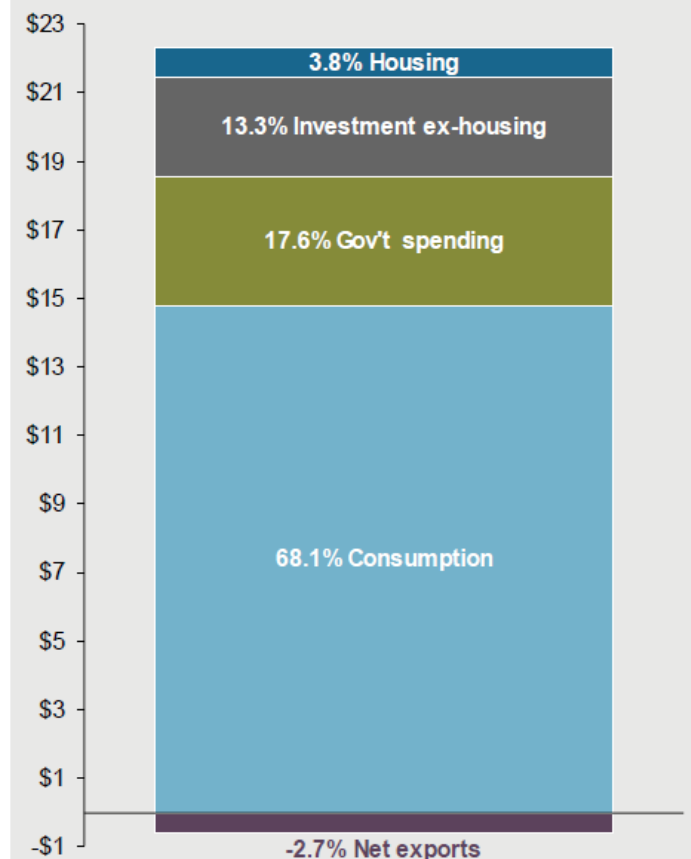
Real GDP

Year-over-year % change



Components of GDP

4Q19 nominal GDP, USD trillions



Proxy Voting Policy Update

Informational

Background: In connection with our annual Governance Manual Review in late-2019, the SIB and RIO sought to adopt emerging best practices with regards to efficiently monitoring various proxy voting practices on topics such as executive compensation and board diversity in addition to certain shareholder led initiatives which could potentially be misaligned with the best interests of our stakeholders and constituents.

Update as of March 23, 2020:

RIO continues to work with Broadridge Financial Solutions and our custodian - Northern Trust to develop a practical and cost efficient process to enhance our ability to efficiently monitor the proxy voting policies, practices and actions of our equity managers in order to gain assurance that they are materially aligned with the investment beliefs of the SIB and the best interests of our stakeholders and constituents.

Cover Memo to Request for Board Action

TO: State Investment Board
FROM: Dave Hunter
DATE: March 24, 2020
SUBJECT: Portfolio Rebalancing Update

RIO has requested Parametric's Chief Investment Officer Thomas Lee and Senior Director Benjamin Lazarus to highlight the benefits of using an equity and fixed income overlay program to synthetically rebalance fund exposures in an efficient and cost effective manner.

The SIB previously engaged Parametric to synthetically rebalance client portfolios in 2008 in order to maintain target asset class exposures during a period of extreme market volatility. Overlay programs effectively rebalance client portfolios towards long term strategic asset allocation targets via the use of equity and fixed income futures contracts. RIO notes that exchange traded futures are widely used by institutional investors (including many other U.S. public pension plans) to prevent the forced sale of physical securities during a period of distressed pricing, poor liquidity and/or wide bid-ask spreads.

The original Parametric equity overlay program generated \$100 million of net investment gains for our clients when used to synthetically rebalance exposures in 2008 to 2010.

It is also important to note that Callan investment professionals Paul Erlendson and Alex Browning were instrumental in re-engaging with Parametric in recent weeks (and weekends) and strongly support the use of Parametric's overlay program in order to synthetically rebalance fund exposures in an efficient and cost effective manner.



Memorandum

To: North Dakota State Investment Board
From: Paul Erlendson and Alex Browning
CC: David Hunter, NRDIO Executive Director and Chief Investment Officer
Date: March 26, 2020
Subject: Overlay solution for rebalancing SIB portfolios

Background

Retirement and Investment Office (RIO) Chief Investment Officer Dave Hunter recently asked Callan to provide comments regarding a proposal from Parametric to provide futures overlay services to the North Dakota State Investment Board (SIB).

The comments below are intended to provide background information about futures overlay programs including program objectives, risks, and costs as well as issues to consider. While Callan is broadly supportive of overlay programs, the desirability of such a program is subject to the objective(s) to be achieved, the skills of the proposed service provider, the ability to monitor outcomes, and the competitive advantage of the overlay versus a simpler solution. To that end, it will be important to understand the circumstances that have given rise to NDSIB's consideration of Parametric's proposal.

The Need

Each of the client portfolios overseen by the SIB has a target asset allocation with prescribed rebalancing ranges to maintain each client's approved level of investment risk. Historically, the SIB through RIO staff have done a very cost-effective job at minimizing the degree of variation versus target for each of its clients' investment programs. But this was accomplished during times of "normal market behavior."

In today's capital markets that have been roiled by the Corona Virus and an oil price war, the liquidity needed to rebalance client portfolios is more costly than has normally been the case. That is, the bid-ask spread between what buyers are willing to pay and sellers are willing to accept is wider than normal. As a result, the price to rebalance portfolios to their strategic asset allocation targets has become much more expensive as has the cost and ability to raise cash for benefit payments and other capital calls. In this environment, Parametric's proposed futures overlay service offers a potential less-costly solution.

History

Prior to the onset of the 2007 – 2008 Global Financial Crisis (GFC), Callan and Parametric conducted educational sessions on futures overlay programs with the SIB. By the time the GFC impacted financial markets, the SIB was in the enviable position to make an educated decision regarding the use of a futures overlay solution to address the then current market disruption. When the equity and fixed-income markets went into freefall and the ability to efficiently transact was impaired because of poor securities pricing, Parametric's futures overlay program provided the means for the SIB to rebalance the Funds' stock and bond allocation. This was particularly valuable at that time because the futures overlay program obviated the costs associated with transacting in the cash/physical securities markets. As a result, SIB maintained its clients' asset allocation and risk policies in a cost-effective and timely manner.

Thus, the solution that worked well during the GFC is now being proposed to help the SIB effectively rebalance fund portfolios in the current environment of diminished market liquidity. For this reason, Parametric's proposal is timely. Further, Callan believes that Parametric is a highly qualified firm to provide this particular service.

The Goal

Parametric describes the proposed overlay program as seeking to achieve the following goals and objectives for the North Dakota State Investment Board¹:

- Timely and efficient reallocation of portfolio exposures;
 - Achieving this goal will permit the SIB to quickly rebalance asset classes back to target weights.
- Reduction of tracking error;
 - Put another way, Parametric seeks to help RIO minimize performance variation versus each Funds' target allocation by providing a method for cost effectively rebalancing using the futures overlay service.
- Reduction of transaction costs;
 - By using the futures market which is efficiently priced, the overlay program will control trading costs that might result from trading inefficiently-priced securities in the cash/physical markets.

¹ Parametric presentation to the North Dakota State Investment Board titled "Overlay Services", March 2020. Page 11.

Considerations

While not a complete list, the following questions may be useful in evaluating the fit of Parametric's proposal to the needs of the SIB:

1. If the Retirement & Investment Office has been able to rebalance so effectively in the past, what are the specific market conditions that prevent RIO from efficiently and cost-effectively rebalance client portfolios today? When are these conditions expected to resolve?
2. What are the expected financial and operational costs to SIB associated with an overlay program's margin and collateral requirements? What are the management costs of the program?
3. Please describe the data that the SIB can use to objectively evaluate the cost-effectiveness and success (or lack thereof) of the overlay service.
4. What are the execution risks inherent to using futures to approximate the existing portfolio positions?

Callan is available – albeit remotely for the time being – to respond to inquiries from the SIB and your staff.

#



North Dakota State Investment Board (NDSIB)

Overlay Services

March, 2020

Parametric Overlay Solutions by the Numbers



\$98B+
overlay assets under
management¹



33
dedicated investment
professionals, including 22
portfolio managers and 11
investment support



225+
institutional
investors

Types of clients that utilize Parametric overlay strategies include:

- Corporate pension plans
- Endowments
- Faith-based
- Family offices
- Foundations
- Healthcare
- Multi-Manager/DC Portfolios
- Outsourced CIO
- Public pension plans
- Taft Hartley

All numbers are approximate as of 12/31/2019

¹Assets under management include overlay assets managed on a discretionary and non-discretionary basis.

Representative Client List as of December 31, 2019

> **Public**

Cincinnati Employees Retirement System
City of Pittsburgh Comprehensive Municipal Pension Trust Fund
East Bay Municipal Utility District
Fairfax County Retirement Systems
Houston Police Officers' Pension System
Manhattan & Bronx Surface Transit Operating Authority Pension Plan
Marin County Employees' Retirement Association
Massachusetts Pension Reserves Investment Management Board
Municipal Employees' Retirement System of Michigan
New Mexico Public Employees' Retirement Association
North Dakota State Investment Board
Oakland Police and Fire Retirement System
Orange County Employees Retirement System
San Diego City Employees'
San Mateo County Employees' Retirement Association
Teachers Retirement System of Louisiana
Utah School & Institutional Trust Funds Office
Ventura County Employees' Retirement Association
Wisconsin Investment Board

> **Endowments**

Carnegie Institution of Washington
Florida State University
Indiana University & Foundation
Pepperdine University
Texas Christian University
University of Michigan
University of Minnesota
University of Pittsburgh

> **Faith Based**

Covenant Ministries of Benevolence
Ministers & Missionaries' Benefit Board of American Baptist Churches
Pension Fund of the Christian Church
YMCA Retirement Fund

> **Healthcare**

Advocate Health Care Network
North Memorial Health Care
Rush University Medical Center
Trinity Health

> **Taft-Hartley**

Board of Trustees ABC-NABET Retirement Trust Fund
Boilermaker-Blacksmith National Pension Trust
Carpenters, Regional Council, Greater Pennsylvania
Central Laborers' Pension Fund
Chicago Laborers' Pension & Welfare Funds
International Union of Painters and Allied Trades
National Retirement Fund
SEIU Benefit Funds
Teamsters, Western Pennsylvania

> **Foundations**

Auburn University
Doris Duke Charitable Foundation, Inc.
The John D. & Catherine T. MacArthur Foundation
The McKnight Foundation
Strada Education Network, Inc.
Wisconsin Alumni Research Foundation

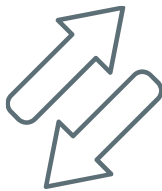
> **Corporate**

The Boeing Company
Cargill Inc.
Eversource Energy
Macy's Inc.
3M Company
Target Corporation
United Technologies Corporation

It is not known whether the listed clients approve or disapprove of the adviser. The partial list of clients included herein were selected as being representative of the different types of institutional clients and businesses serviced by Parametric. Performance-based data was not a determining factor in their selection.

Why Overlay?

Investors employ customized overlay strategies that help them achieve policy objectives. Overlay strategies offer:



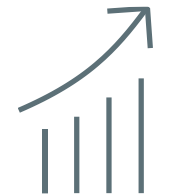
Return / Cost Improvement

Increased expected returns, reduced tracking error and transaction costs



Risk Management

More robust risk controls, portfolio governance, and access to risk specialists



Increased Efficiency

Greater liquidity, flexibility, and comprehensive reporting

Investing in a derivative strategy involves risk. Please refer to risks section for additional information.

NDSIB Overlay Program History

Program Begins:	November 2008 with Synthetic Rebalancing
Program Ends:	September 2009 through April 2010 Parametric (The Clifton Group) removes synthetic exposure based on NDSIB direction
Objective:	Maintain target exposures based on long term mandated policy goals in a volatile market environment
Parametric Provides:	<ul style="list-style-type: none">More flexibility and efficiency in adjusting asset class exposuresLower costs for establishing and removing exposure to various asset classesElimination of the forced sale of physical securities at below fair market valueConsultation with a trusted third party who specializes in centralized risk management

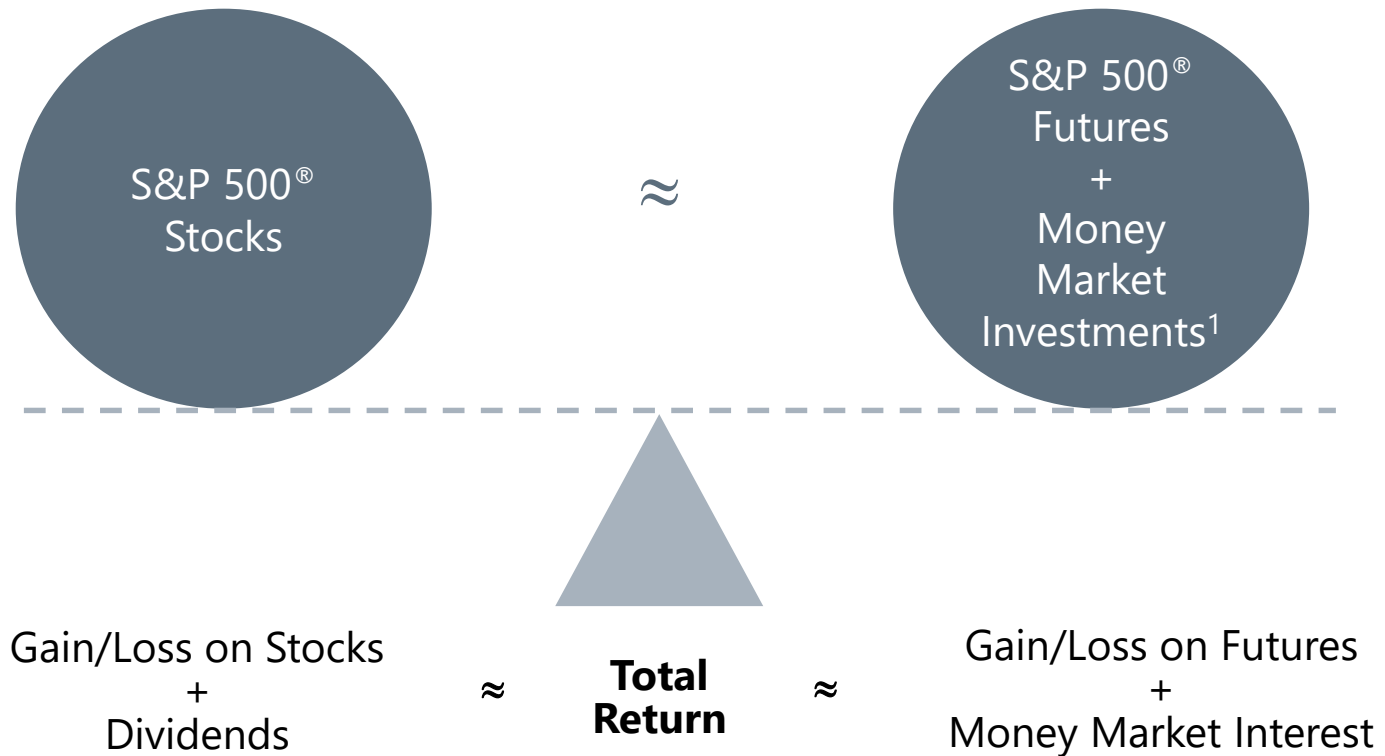
Total Gain/Loss from Synthetic Rebalancing with Parametric was \$110,991,311

Exchange Traded Futures

Characteristics	Types ¹
<ul style="list-style-type: none">• Standardized• Regulated• Small initial margin• Marked to market daily (virtually eliminating market risk)• Liquid (on average, more notional dollar volume is traded in S&P 500 futures than the average daily volume at the NYSE each day)• Efficiently priced with very low transaction costs• Users include Money Managers, Fund Sponsors, Index Funds, and Hedgers	<ul style="list-style-type: none">• U.S. Equity - S&P 500 Composite, S&P 400 Mid Cap, Russell 2000 indices• U.S. Fixed - Treasury Securities (2, 5, 10, 20 and 30 year), Swap Rates (5, 10 and 30 year)• International Equity - MSCI EAFE, Emerging Markets and several foreign country indices• International Fixed Income - foreign country government contracts• Commodities - S&P GSCITM and DJ-UBSSM indices, numerous individual commodities

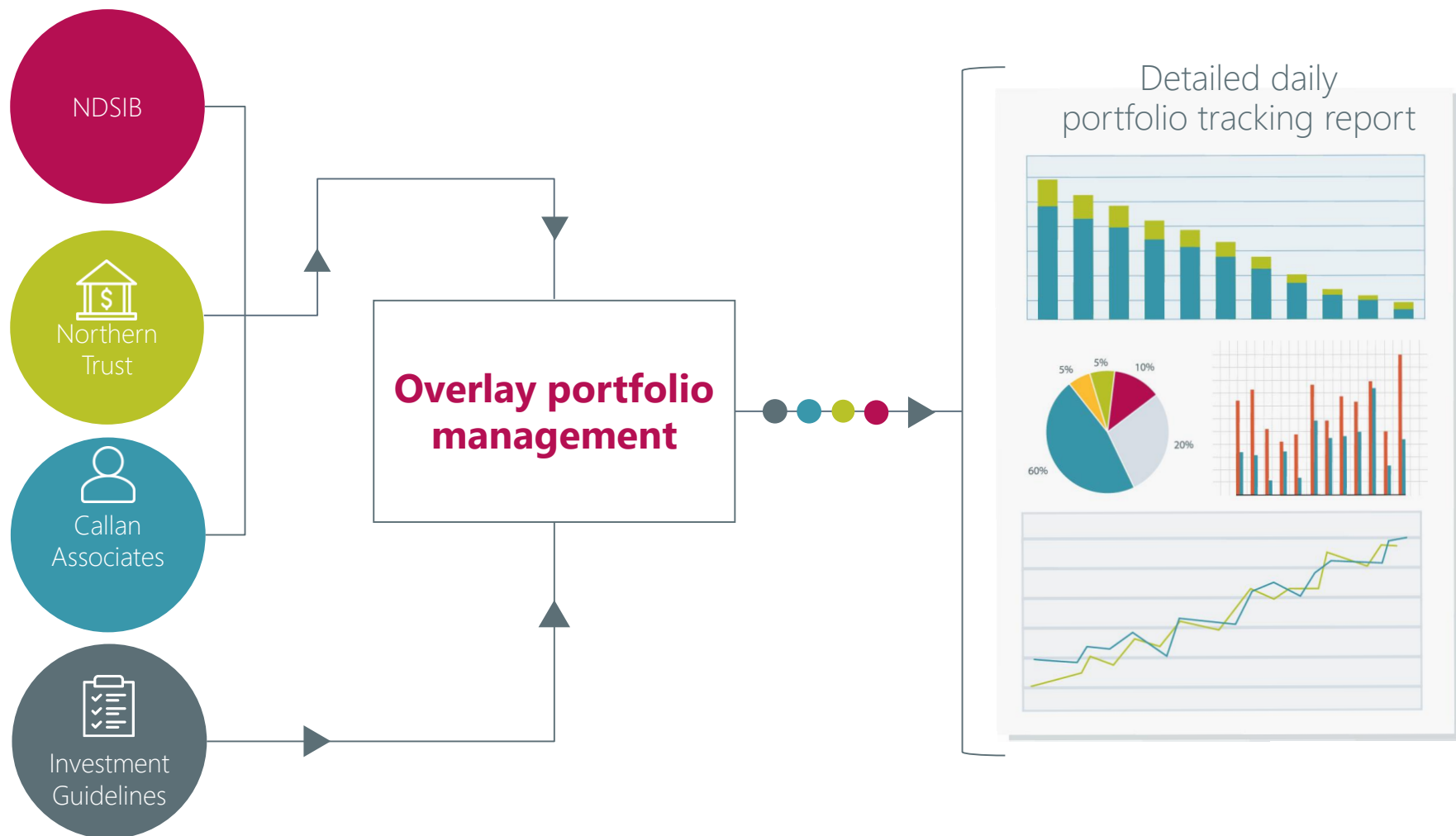
¹Where a futures contract on a desired index is not available, a synthetic index position may be created using a combination of available futures contracts. The synthetic index will not track the desired index perfectly, a concept known as "tracking error." A more detailed list of the indices that may be replicated using Exchange Traded Futures can be found on page 28.

Synthetic Indexing – S&P 500® Index Example



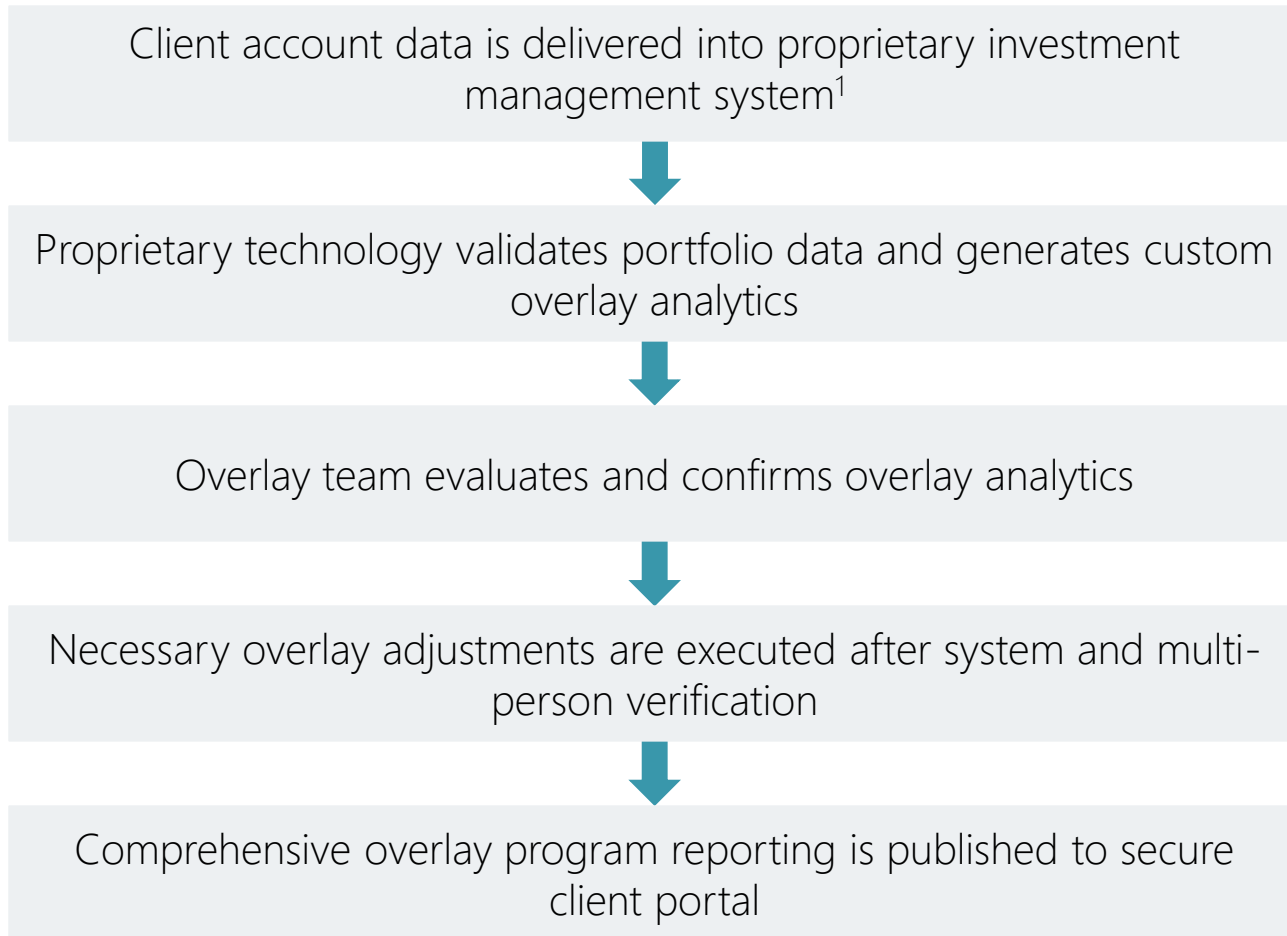
¹ Money market interest less the S&P 500 futures premium creates an income stream which is nearly identical to the S&P 500 dividend yield. For illustrative purposes only.

Overlay Program at a Glance



For illustrative purposes only.

Portfolio Management Process



¹ In some cases, data may not be available on a daily basis or is not accessible because the balance is held by a manager who does not make information available electronically. For illustrative purposes only.

Parametric Overlay Solutions

Parametric overlay solutions can help mitigate policy implementation challenges including:

Implementation challenge

Performance drag due to liquidity needs / inefficient cash flow process

Residual manager cash balance performance drag

Eliminating exposure gaps during portfolio re-allocations and manager changes

Managing / adjusting fund exposures within desired targets

Monitoring and adjusting exposures according to growth asset and liability matching glide path objectives

Unique exposure needs



Parametric overlay solution

Fund Cash Securitization

Manager Cash Securitization

Overlay Transition / Reallocation Management

Rebalancing / Portfolio Completion

Glide Path Exposure / Hedge Ratio Management

Outsourced Exposure Management

Investors choose from one or more overlay solutions to create a customized program designed to alleviate specific shortfalls and inefficiencies.

Rebalancing / Portfolio Completion



Asset class exposures which deviate meaningfully from long-term policy targets or short-term tactical preferences results in unwanted exposures and increased tracking error

Synthetic rebalancing of fund exposures in an efficient and cost effective manner to desired allocation

- ✓ Timely and efficient reallocation of portfolio exposures
- ✓ Reduction of tracking error
- ✓ Reduced transaction costs
- ✓ Expected favorable risk-adjusted outcomes
- ✓ Minimize exposure gaps during the rebalancing process

Intended component may not meet benefits listed above.

NDSIB Synthetic Rebalancing Example-Pension

NDSIB Target Asset Allocation

\$5.2 billion NDSIB Pension Pool has a 20.9% target allocation to domestic equity (S&P 500® benchmark), a 30.3% target allocation to international equity (MSCI EAFE benchmark) and a 23.3% target allocation to fixed income (Bloomberg Barclays U.S. Aggregate Index).

NDSIB Actual Asset Allocation

The fund's actual allocation is 18.4% domestic equity (-2.5% underweight), 26.0% international equity (-4.3% underweight) and 28.6% fixed income (5.3% overweight).

Potential Index Overlay Solution

Employ S&P 500® Index futures, MSCI EAFE Index futures and Treasury futures to align asset class exposures to get closer to desired targets

Expected Results

- Fund exposures are effectively rebalanced to policy targets without disrupting underlying manager structure or movement of physical capital
- Fund realizes transaction cost saving by utilizing futures to rebalance fund exposures instead of physical securities
- Portfolio exposures are rebalanced immediately and efficiently thus avoiding the settlement limitation and risk of physical capital movements
- Tracking error versus the policy benchmark may be reduced

How it Works

- \$176.9 million in S&P 500® and MSCI EAFE Index exposure is purchased (3.4% of \$5.2 billion) and \$176.9 million in Treasury futures exposure is sold (3.4% of \$5.2 billion)
- Index futures exposure combined with physical fund positions gets closer to desired asset allocation
- Offsetting long and short positions produce only fully collateralized market exposures without introducing explicit leverage

Asset Class	Target	Actual	Futures Overlay	Deviation from Target
Domestic Equity (S&P 500®)	20.9%	18.4%	+1.25%	-1.2%
International Equity (MSCI EAFE)	30.3%	26.0%	+2.15%	-2.1%
Fixed Income (Bloomberg Barclays U.S. Aggregate)	23.3%	28.6%	-3.40%	1.9%
Private Equity	6.5%	4.9%	0%	-1.6%
Real Assets	18.6%	21.8%	0%	3.2%
Cash	0.4%	0.3%	0%	-0.1%
Total	100%	100%	0% Net	

For illustrative purposes only. All investments are subject to loss. It is not possible to invest directly in an index.

Why Parametric Overlay Solutions

Our differentiators

Strategic focus



Over 30 years of experience¹ managing overlay programs and a core business focus with a dedicated overlay team

Comprehensive client service and communication



Client-focused investment team that works to provide customized solutions, ensure policy goals are achieved and seamlessly integrate with existing plans

Accuracy and process



Systems and processes developed for proper implementation and monitoring including comprehensive client reports provided daily, monthly, and quarterly in a timely manner

¹ 30 years reflects the history of the Clifton Group which was acquired by Parametric Portfolio Associates® LLC on December 31st, 2012.

Overlay Solutions: What Are the Risks?

Risk	Description	How Parametric mitigates
Market	Market performs in a way that was not anticipated. For example, cash outperforms capital markets.	Systematic market risk is an inherent part of the overlay program and can neither be diversified away nor mitigated. Client specific policy guidelines are established to clearly define desired market risk based on client asset allocation targets.
Communication/ Information	Overlay index exposures are maintained based on underlying investment values provided by one or more third parties. There are often delays in the receipt of updated information which can lead to exposure imbalance risks. Inadequate communication regarding cash flow moves into and out of fund and manager changes can lead to unwanted asset class exposures and loss.	Parametric establishes communication links with custodial, manager, and other sources to obtain and verify positions and cash flow data as soon as it is available. Suspect data may be researched and staff notified.
Margin/Liquidity	Potential that the market moves in a manner adverse to the overlay position causing a mark-to-market loss of capital to the fund and a resulting need to raise liquidity or to close positions; this situation could happen at a time when underlying fund or positions are also declining in value.	Parametric strives to be aware of potential collateral and cash requirements to reduce the risk of needing to remove positions. Additional margin requirements are communicated via electronic mail and margin adequacy is available to the client daily.
Tracking Error	Futures (synthetic) index returns do not perfectly track benchmark index returns. This divergence between the price behavior of a position or portfolio and the price behavior of a benchmark is tracking error and impacts performance.	Parametric seeks to minimize tracking error by utilizing liquid futures contracts with sufficient daily trading volume and open interest. All derivative contracts will have some tracking error that cannot be mitigated by an overlay manager.
Leverage	Creation of market exposure in excess of underlying collateral value may lead to significant capital losses and result in position liquidation.	Parametric obtains daily collateral pool values and adjusts beta overlay positions to maintain the ratio of total exposure to collateral within a pre-defined client determined band.
Counterparty	Counterparty credit risk on OTC trading. Note: Bilateral centrally cleared OTC counterparty risk is similar to the clearing risk of holding futures investments.	Parametric can facilitate the negotiation of ISDA documentation that seeks to reduce the potential credit risk associated with OTC counterparties. Parametric monitors credit ratings and credit default swap spreads for all counterparties used and will inform staff of developments which may negatively impact credit risk.
Collateral	The program may experience losses on the underlying designated assets in addition to potential losses on the index market exposure overlaying these assets.	This risk cannot be mitigated by an overlay manager. Parametric discusses the potential for negative performance in the collateral used for the overlay prior to alpha transport applications with client.

Appendices

Biographies

Justin Henne, CFA

Managing Director, Investment Management and Strategy

Justin leads the investment team responsible for the implementation and enhancement of Parametric's Customized Exposure Management Strategy. Since joining Parametric in 2004 (originally as an employee of the Clifton Group, which was acquired by Parametric in 2012), Justin has gained extensive experience trading a wide variety of derivative instruments to meet each client's unique exposure and risk management objectives. He earned a BA in financial management from the University of St. Thomas. A CFA charterholder, Justin is a member of the CFA Society of Minnesota.

Ben Lazarus, CFA

Senior Director, Institutional Relationships

Ben joined the firm in 2004 (originally as an employee of the Clifton Group, which was acquired by Parametric in 2012). He is responsible for developing, coordinating, and executing institutional business development strategies in the western US. In addition, he has developed new distribution partnerships for Parametric and has presented on the use of derivatives at different industry events. From 2015 to 2016, Ben was the senior vice president of US sales at Nuveen Investments. Ben earned a BA in psychology from the University of California, San Diego, and an MBA in marketing and strategic management from the University of Minnesota. A CFA charterholder, Ben is a member of the CFA Society of Minnesota.

Clint Talmo, CFA

Director, Investment Strategy

Clint leads a team of investment professionals responsible for designing, trading, and managing customized overlay portfolios utilizing a wide spectrum of asset classes across global markets. Prior to joining Parametric in 2014, Clint was a Partner at Aerwulf Asset Management. Previously, he worked for Interlachen Capital Group and EBF and Associates where his responsibilities included research, trading, and portfolio management. He earned a BS in finance from the University of Colorado. A CFA charterholder, Clint is a member of the CFA Society of Minnesota.

Thomas Lee, CFA

Chief Investment Officer

Tom is a member of Parametric's Executive Committee and leads Parametric's Research, Strategy, Portfolio Management, and Trading teams, coordinating resources, aligning priorities, and establishing processes for achieving clients' investment objectives. Tom has coauthored articles on topics ranging from liability-driven investing to the volatility risk premium. He is a voting member of all the firm's investment committees. Prior to joining Parametric in 1994 (originally as an employee of the Clifton Group, which was acquired by Parametric in 2012), Tom spent two years working for the Board of Governors of the Federal Reserve in Washington, DC. He earned a BS in economics and an MBA in finance from the University of Minnesota. A CFA charterholder, Tom is a member of the CFA Society of Minnesota.

Daniel Wamre, CFA

Senior Portfolio Manager

Dan leads a team of investment professionals responsible for designing, trading, and managing overlay portfolios. He has extensive experience helping clients and consultants manage portfolio exposures and risk through futures and options-based strategies. Prior to joining Parametric in 1995 as an intern, and full-time in 1998, Dan spent four years as a Platoon Commander/Executive Officer in the United States Marine Corps. Upon completion of graduate school, he spent ten months working as a commercial banking credit analyst for U.S. Bank in Minneapolis. He earned a BS from North Dakota State University and an MBA in finance from the University of Minnesota. A CFA charterholder, Dan is member of the CFA Society of Minnesota.

Richard Fong, CFA

Senior Portfolio Manager

Ricky leads a team of investment professionals responsible for designing, trading, and managing overlay portfolios. Since joining Parametric in 2010, Ricky has become a valuable resource supporting management of client LDI and options-based risk management solutions. He earned a BA in financial economics from Gustavus Adolphus College. A CFA charterholder, Ricky is a member of the CFA Society of Minnesota.

Synthetic Indices¹

The most often used index benchmarks are as follows:

>Domestic Equity²

- S&P 500® Index
- S&P 400® Mid Cap Index
- MSCI USA IMI Index
- MSCI Small Cap USA Index
- Russell 1000® Index
- Russell 2000® Index
- Russell 3000® Index
- Wilshire 5000 Index

>Fixed Income

- Bloomberg Barclays U.S. Aggregate Bond Index
- Bloomberg Barclays U.S. Aggregate Gov/Credit Index
- Bloomberg Barclays Intermediate U.S. Gov/Credit Index
- Bloomberg Barclays U.S. Long Gov/Credit Index
- Bloomberg Barclays U.S. Aggregate Long Treasury Index
- Bloomberg Barclays U.S. Long Treasury Index
- Bloomberg Barclays U.S. Universal Index
- Citi U.S. Broad Investment-Grade (USBIG) Bond Index
- BofA Merrill 1-3 Year U.S. Treasury Index
- Various Constant Duration Benchmarks

>International Equity

- MSCI EAFESM Index
- MSCI ACWI ex. U.S.SM
- MSCI ACWI ex. U.S. IMI
- MSCI Emerging Markets Index
- MSCI World ex. U.S.SM
- S&P Global Broad Market Index

>Global Equity

- MSCI ACWI IMI
- MSCI WorldSM

>Commodities

- S&P Goldman Sachs Commodity Index
- Bloomberg Commodities Index (BCOM)
- Custom Commodity Baskets

>International Fixed Income

- Citigroup WGBI ex. US
- Bloomberg Barclays Global Aggregate Index ex. U.S.

>Currency

- Indexes
- Individual Currency Exposure

Disclosures

Parametric Portfolio Associates LLC is an independent investment adviser registered under the Investment Advisers Act of 1940. Parametric Portfolio Associates LLC provides rules-based investment management services to institutional investors, individual clients and registered and non-registered investment vehicles including Systematic Alpha and Income Strategies, Custom Core, Centralized Portfolio Management (CPM), Overlay Services, Customized Exposure Management (CEM), Volatility Risk Premium (VRP), and Systematic Alternative Risk Premia (SARP). The Firm has complied with the GIPS standards retroactive to January 1, 2000.

The Firm is headquartered in Seattle, Washington. The Firm is a majority-owned subsidiary of Eaton Vance Corp. and offers its investment capabilities from its offices in Seattle, WA, Minneapolis, MN and Westport, CT. This material may not be forwarded or reproduced, in whole or in part, without the written consent of Parametric Compliance. Parametric and its affiliates are not responsible for its use by other parties.

This information is intended solely to report on investment strategies and opportunities identified by Parametric. Opinions and estimates offered constitute our judgment and are subject to change without notice, as are statements of financial market trends, which are based on current market conditions. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. Past performance is not indicative of future results. The views and strategies described may not be suitable for all investors. Investing entails risks and there can be no assurance that Parametric will achieve profits or avoid incurring losses. Parametric does not provide legal, tax and/or accounting advice or services. Clients should consult with their own tax or legal advisor prior to entering into any transaction or strategy described herein.

Charts, graphs and other visual presentations and text information were derived from internal, proprietary, and/or service vendor technology sources and/or may have been extracted from other firm data bases. As a result, the tabulation of certain reports may not precisely match other published data. Data may have originated from various sources including, but not limited to, Bloomberg, MSCI/Barra, FactSet, and/or other systems and programs. Parametric makes no representation or endorsement concerning the accuracy or propriety of information received from any other third party.

Benchmark/index information provided is for illustrative purposes only. Investors cannot invest directly in an index. Returns for indexes are calculated gross of management fees. Deviations from the benchmarks provided herein may include but are not limited to factors such as: the purchase of higher risk securities, over/under weighting specific sectors and countries, limitations in market capitalization, company revenue sources, and/or client restrictions. Parametric's proprietary investment process considers factors such as additional guidelines, restrictions, weightings, allocations, market conditions and other investment characteristics. Thus returns may at times materially differ from the stated benchmark and/or other disciplines and funds provided for comparison.

Derivatives such as futures, swaps, and other investment strategies have certain disadvantages and risks. Futures require the posting of initial and variation margin. Therefore, a portion of risk capital must be preserved for this purpose rather than being allocated to a manager. Liquid futures may not exist for published benchmarks which may result in tracking error. Also, some intra-period mispricing may occur. Swaps require periodic payments, may be less liquid than futures, and may have counterparty/credit risk. Some investment strategies require a cash investment equal to the desired amount of exposure.

Disclosures (Continued)

This material contains hypothetical, back-tested and/or model performance data, which may not be relied upon for investment decisions. Hypothetical, back-tested and/or model performance results have many inherent limitations, some of which are described below. Hypothetical returns are unaudited, are calculated in U.S. dollars using the internal rate of return, reflect the reinvestment of dividends, income and other distributions, but exclude transaction costs, advisory fees and do not take individual investor taxes into consideration. The deduction of such fees would reduce the results shown.

Model/target portfolio information presented, including, but not limited to, objectives, allocations and portfolio characteristics, is intended to provide a general example of the implementation of the strategy and no representation is being made that any client account will or is likely to achieve profits or losses similar to those shown. In fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently achieved by any particular trading program. One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, simulated trading does not involve financial risk, and no simulated trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or to adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the preparation of hypothetical performance results and all of which can adversely affect actual trading results. Because there are no actual trading results to compare to the hypothetical, back-tested and/or model performance results, clients should be particularly wary of placing undue reliance on these hypothetical results. Perspectives, opinions and testing data may change without notice. Detailed back-tested and/or model portfolio data is available upon request. No security, discipline or process is profitable all of the time. There is always the possibility of loss of investment.

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Parametric is headquartered at 800 5th Ave Suite 2800, Seattle, WA 98104. Parametric's Minneapolis office is located at 3600 Minnesota Drive, Suite 325, Minneapolis, MN 55435. For more information regarding Parametric and its investment strategies, or to request a copy of Parametric's Form ADV, please contact us at 206.694.5575 (Seattle) or 952.767.7700 (Minneapolis), or visit our website, www.parametricportfolio.com.

PIOS® Composite

Parametric Investment & Overlay Strategies

PIOS Composite Performance Presentation

As of December 31, 2018

Period	Returns			3 Yr. Annualized Standard Deviation		Dispersion	Assets		
	Total Gross Return AWR	Total Net Return AWR	Index	Composite	Index	Internal Equal Wtd.	Number of Portfolios *	Composite (MM) *	Total Firm (MM) *
2009	8.70%	8.54%	-	-	-	13.56%	128	17,483	-
2010	6.59%	6.43%	-	6.19%	-	7.20%	140	20,853	-
2011	2.80%	2.65%	-	5.53%	-	7.10%	188	19,771	-
2012	5.20%	5.04%	-	4.50%	-	5.22%	206	22,547	63,431
2013	4.81%	4.65%	-	3.54%	-	9.46%	215	30,045	80,896
2014	2.98%	2.83%	-	2.76%	-	6.11%	270	36,290	94,545
2015	-0.86%	-1.01%	-	2.82%	-	5.60%	333	43,711	99,248
2016	3.40%	3.24%	-	2.69%	-	8.53%	334	46,915	111,470
2017	9.03%	8.87%	-	2.97%	-	9.69%	335	45,026	137,760
2018	-2.86%	-3.01%	-	3.34%	-	5.17%	354	37,077	122,628

* The composite was not included in the Firm Assets prior to 2012 as it was being managed by a prior firm.

Index: None

Parametric Portfolio Associates LLC is an independent investment advisor registered under the Investment Advisers Act of 1940. Parametric Portfolio Associates LLC provides rules-based investment management services to institutional investors, individual clients and registered and non-registered investment vehicles, including Systematic Alpha and Income Strategies, Custom Core, Centralized Portfolio Management ("CPM"), Overlay Services, Customized Exposure Management ("CEM"), Volatility Risk Premium ("VRP"), and Systematic Alternative Risk Premia ("SARP"). The Firm has complied with the GIPS standards retroactive to January 1, 2000.

Prior to July 1, 2019, the firm included only the Parametric Investment & Overlay Strategies. On July 1, 2019, the firm was redefined to include the Parametric Custom Tax-Managed & Centralized Portfolio Management Strategies. For the purpose of complying with the GIPS standards, the Firm is defined and held out to the public as Parametric Portfolio Associates LLC.

Parametric Portfolio Associates LLC claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Parametric Portfolio Associates LLC has been independently verified for the periods January 1, 2000 to December 31, 2018. The verification report is available upon request.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

The PIOS (Policy Implementation Overlay Service) Composite is comprised of all fully discretionary separate accounts that create custom overlay solutions designed to help investors achieve policy objectives. The PIOS strategy utilizes an array of investment instruments to achieve client objectives through adherence to detailed investment guidelines. Objectives can include interest rate management, currency management, rebalancing, transition management, cash securitization and neutralizing policy performance shortfalls.

PIOS[®] Composite (Continued)

Parametric Portfolio Associates LLC

Composite creation date is December 2013.

This composite is not compared against a benchmark. There is no observable benchmark or index that exists with an objective similar to that of the strategy. It is not possible to directly invest in an index.

Derivative securities are used in the accounts which comprise this composite. The firm's strategies contain derivatives such as futures, options, swaps, and other investment strategies that may involve certain advantages and risks. Futures require the posting of initial and variation margin. Therefore, a portion of risk capital must be preserved for this purpose rather than being allocated to a manager. Swaps require periodic payments, which may be less liquid than futures, and certain swaps may have counterparty/credit risk. Some investment strategies may require a collateral investment equal to the desired amount of exposure.

Portfolio returns are calculated based on the sum of the daily gain/loss in the client account divided by the total portfolio value of the previous month end. The total portfolio value is the market value of the client's manager portfolios, as defined in the guidelines. The client account overlay target value at the prior month end is used for the composite asset weighted performance calculation.

Portfolio returns reflect the reinvestment of dividend and interest income.

Performance results are expressed in U.S. dollars.

Composite gross returns are after transaction costs and other direct expenses, but before management fees. Net returns reflect the deduction of model investment management fees, 0.15%. The fees for the investment management services herein are described in the fee schedule.

The separate account management fee schedule is as follows: First \$50M @ 0.15%; Thereafter @ 0.10%.

The dispersion of annual returns is measured by equal-weighted standard deviation of portfolio returns within the composite for the full year.

Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

A list of composite descriptions is available upon request.

Performance prior to January 2013 was achieved by the Clifton Group Investment Management prior to its merger with Parametric Portfolio Associates, LLC and has been linked to the performance history of Parametric Investment & Overlay Strategies. Performance results prior to January 2013 should not be interpreted as the actual historical performance of Parametric Investment & Overlay Strategies. Parametric Investment & Overlay Strategies has adhered to the performance record portability requirements of the GIPS standards in regard to the presentation and linking of this performance track record.

Past performance is not a guarantee of future results.

BOARD ACTION REQUESTED

TO: State Investment Board

FROM: Dave Hunter, Darren Schulz and Eric Chin

DATE: March 27, 2020

SUBJECT: Asset Allocation Rebalancing Recommendation: Retain Parametric to Synthetically Rebalance SIB Investment Pools

RIO Recommendation:

Due to a sharp selloff in global equities in recent weeks amid the novel coronavirus pandemic, the three primary SIB investment pools have experienced variances from equity target allocations that are approaching policy lower bounds. Given liquidity challenges in bond markets globally, the cost to transact in physical bonds is prohibitively expensive, which restricts institutions from using bonds as a source of funds to rebalance into public equities. Futures contracts, however, remain a liquid and relatively inexpensive way to access public market exposure synthetically. Similar to Board action undertaken during the depths of the Global Financial Crisis, Staff is recommending that the Board retain Parametric to establish a contingent futures overlay program to supplement trading in physical markets to rebalance SIB pools to remedy deviations from target allocations and minimize tracking error relative to policy.

Background:

As of the close of 3/24/20, global public equities, as measured by the MSCI All-Country World Index IMI, have declined approximately 29% since 2/19/20. As a result of this adverse market impact, current allocations to public equity are approaching minimum ranges for the asset class. Deviations from target allocations to public equity are illustrated below:

SIB Investment Pools
Public Equity Allocations
as of 3/24/20

	<u>Target %</u>	<u>Actual %</u>	<u>% Δ</u>	<u>\$ Δ (MM)</u>
Pension	57.8%	50.4%	-7.3%	\$390.2
Legacy	50.0%	41.7%	-8.3%	\$503.4
Insurance	16.5%	12.8%	-3.7%	\$104.5

With recent market turbulence, a challenge imposed upon investors is liquidity and the suddenly high cost of transacting in physical markets, particularly in bond markets globally. Prior to the Federal Reserve's 100 basis point rate cut on March 15, followed by its unprecedented asset purchase program and Congress's passage of a fiscal stimulus bill began to take shape, one common thread

gripped financial markets and the real economy: a global liquidity crunch of enormous scale. In recent weeks, investors rushed to raise cash and money market and other funds de-risked expecting large withdrawals given the partial shutdown of the global economy. While high quality fixed income is typically a natural source of funds to rebalance closer to target allocations during periods of equity stress, even the highest quality, liquid segments of the bond market such as Treasuries and Agency mortgages required investors to pay dearly to execute rebalancing trades. This was no classic flight to quality, where risky assets sank and safe haven assets soared.

The Case for Synthetic Rebalancing:

At a time of heightened volatility, derivatives are a valuable tool used by institutional investors to synthetically replicate exposures in asset classes without incurring higher transaction costs in physical markets. Today, the transaction costs associated with using futures instruments to gain synthetic exposure to an asset class are significantly less than trading the underlying assets in the physical market. Based on transaction costs, availability of synthetic instruments, and ease of execution, U.S. domestic equity, developed international equity, and U.S. Treasuries are by far the contracts of choice based on liquidity and very low transaction costs.

Pairing futures trades can be effective when rebalancing, as every asset class overweight has a corresponding underweight. For example, an investor that is currently underweight equities and overweight fixed income can combine a long position in equity futures with a short position in U.S. Treasury futures to rebalance without having to transact in physical assets. Futures positions can then be rolled back or increased accordingly to maintain strategic exposures.

Ultimately, rebalancing is a tradeoff between the transaction costs of trading to policy allocations and the tracking error borne by materially deviating from it. At a time when the cost to trade physical securities is particularly high, Staff believes that futures are an inexpensive, liquid, and widely used instrument to achieve synthetic exposure to public markets. It is a practical addition to the rebalancing implementation toolkit for institutional investors.

Conclusion:

Similar to Board action taken to rebalance SIB pools in 2008 during the Global Financial Crisis, Staff recommends that the State Investment Board engage Parametric to establish a synthetic rebalancing overlay program that could be activated should market conditions persist. The goal is to have a timely, efficient and inexpensive rebalancing solution to supplement trading in physical markets, which in the case of fixed income has seen a deterioration of liquidity, challenging price discovery, wide bid-ask spreads, and dramatically higher transaction costs.

BOARD ACTION REQUESTED

TO: State Investment Board
FROM: Dave Hunter and Connie Flanagan
DATE: March 10, 2020
SUBJECT: Veterans' Cemetery Trust Fund-Final Acceptance

At the January 24, 2020, meeting, the SIB authorized RIO staff to work towards accepting the Office of the State Treasurer as an investment client in relation to the ND Veterans' Cemetery Trust Fund. The ND Veterans' Cemetery Trust Fund was established in 1997 as a permanent fund to be used to support the veterans' cemetery. As spelled out in NDCC 39-04-10.10, the Fund receives a portion of the annual surcharge assessed on the issuance of North Dakota veterans' number plates. The North Dakota State Treasurer has full authority to invest the fund in the same manner as the State Investment Board is authorized to make investments. Upon request of the Adjutant, the interest in the Fund must be deposited into the Veterans' Cemetery Maintenance Fund for the purpose of funding salaries and maintenance of the veterans' cemetery.

A contract, including an Investment Policy Statement, has been drafted and agreed upon and are included for your review. The Industrial Commission, at their March 9 meeting, has approved the relationship per NDCC 21-10-06. If accepted by the Board, RIO will receive the transfer of assets on March 31.

Board Action Requested:

After addressing any questions, comments or concerns, RIO respectfully requests the SIB to consider a motion to formally accept the Office of the State Treasurer as a contractual investment client of the SIB for the Veterans' Cemetery Trust Fund, including acceptance of their Investment Policy Statement as presented.

INVESTMENT MANAGEMENT AGREEMENT

This agreement is entered into by and between the North Dakota State Investment Board ("NDSIB") and the North Dakota State Treasurer ("Trustee").

WHEREAS, the Trustee desires to retain the NDSIB as its investment manager with respect to the ND Veteran's Cemetery Trust Fund ("Fund") and the NDSIB desires to provide investment management services to the Trustee as set forth in this agreement;

WHEREAS, the NDSIB is authorized to provide investment management services to, and manage the money of, any agency, institution, or political subdivision of the state, subject to agreement with the Industrial Commission, under North Dakota Century Code (N.D.C.C.) § 21-10-06;

WHEREAS, the Industrial Commission, on March 9, 2020, has given its approval for the NDSIB to provide investment management services to the Trustee;

NOW THEREFORE, in consideration of the covenants to be performed by each party on behalf of the other, as hereinafter set forth, it is understood and AGREED by and between the parties hereto as follows:

SECTION 1: APPOINTMENT OF THE MANAGER.

The Trustee appoints NDSIB as its investment manager.

SECTION 2: POWERS OF THE MANAGER.

NDSIB has complete discretionary authority to allocate the Fund's assets according to the Fund's Statement of Investment Goals, Objectives and Policies (Attachment A) which is attached and incorporated by reference. The governing body of the Fund shall ensure that Attachment A meets the requirements of and follows the procedures set forth in

N.D.C.C. § 21-10-02.1. NDSIB will utilize money managers and can delegate discretionary authority to the individual money managers as to selection, retention, and sale of individual securities.

SECTION 3: FUND ACCOUNT.

The NDSIB will establish separate fund accounts on its internal accounting system, and any other accounts with the NDSIB's master custodian as may be appropriate, to maintain separate accounting for the Fund's assets. It is understood that the NDSIB, when investing the Fund's assets, may commingle those assets with other funds under the control of the NDSIB. Separate accounting will be maintained at all times.

The Trustee has the right at any time to make withdrawals from and additions to the fund accounts. Written notice of any withdrawal or addition must be provided to NDSIB prior to the action that is intended to be taken.

All assets will be custodied by the NDSIB's master custodian or such other bank or trust company as is acceptable to the NDSIB. Such custodian shall have physical possession of the assets in the account and is responsible for the safekeeping of the assets. All payments, distributions, and other transactions in cash or securities with respect to the fund account must be delivered promptly to or by the custodian and NDSIB is not responsible or liable with respect to the acts or omissions of the custodian in this regard.

SECTION 4: SERVICE TO OTHER FUNDS.

It is understood that NDSIB may from time to time give advice and take action with respect to other trust funds, which may differ from the advice given or the timing or the nature of action taken with respect to this Fund.

SECTION 5: RECORDS.

NDSIB will keep accurate books and records relating to its transactions under this agreement including records of all purchase and sale transactions. Confirmations of such transactions are available to the Trustee. NDSIB books and records relating to its transactions are open during regular office hours for inspection. NDSIB will provide reports to the Trustee of its performance and activities under this Agreement according to the schedule set forth on Attachment B and incorporated by reference. The parties understand that all records generated or maintained pursuant to this agreement are subject to North Dakota open records law.

SECTION 6: AUTHORIZED PERSONNEL.

NDSIB will provide the Trustee a written list of NDSIB's employees who are authorized to act under this Agreement which is attached as Attachment C and incorporated by reference. The Trustee will provide NDSIB a written list of individuals authorized to provide written instructions to NDSIB relating to matters contained herein which is attached as Attachment D and incorporated by reference.

SECTION 7: NDSIB STANDARDS.

NDSIB will apply the prudent investor rule in investing for funds under its supervision pursuant to N.D.C.C. § 21-10-07. This means that the NDSIB in making investments shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as

probable income. However, NDSIB may raise any legally available defense for any act or omission of itself or authorized personnel or any agent connected with NDSIB's obligations under this Agreement. In addition to carrying out its fiduciary responsibilities under the prudent investor rule, the NDSIB's fiduciary responsibilities include establishing and implementing policies in accordance with N.D.C.C. § 21-10-02.1 and approving investment regulations or resolutions recommended to it by the investment director pursuant to N.D.C.C. § 21-10-05. Additionally, NDSIB as a statutorily created state agency and fiduciary shall competently perform any duty imposed on it pursuant to N.D.C.C. Chapter 21-10 or any other applicable law.

SECTION 8: FEES AND EXPENSES OF MANAGER.

The Fund is responsible for the actual fees attributable to the Fund charged by money managers, the master custodian, consultants, and other professionals pursuant to N.D.C.C. § 21-10-06.2. If the Fund's assets are commingled with other NDSIB funds, such fees will be the Fund's proportional shares of those same fees charged to the NDSIB.

In addition, the Fund will pay to the NDSIB an administrative fee, payable quarterly, based on the Fund's pro rata share of the NDSIB's administrative expenses. A minimum fee of the lesser of 15 basis points of the total market value of the Fund or \$1,000 per year will apply. All fees will be paid directly out of the Fund's assets.

SECTION 9: NOTICES.

Any notice or demand made under the terms of this Agreement must be made in writing and delivered to the addresses set forth as follows:

- a. If to NDSIB at:

North Dakota Retirement and Investment Office
3442 East Century Avenue, P.O. Box 7100
Bismarck, ND 58507-7100

- b. If to the Trustee at:

North Dakota State Treasurer
600 East Boulevard Ave
Bismarck, ND 58505

- c. The above addresses may be changed at any time by written amendment.

SECTION 10: TERM and TERMINATION.

This Agreement will commence on the date by which all necessary signatures have been obtained and continue until terminated. This Agreement may be terminated at any time by either party by giving the other party ninety (90) days written notice of termination or such other shorter notice as may be mutually agreed upon. Termination shall be without prejudice to any obligations or liabilities of either party already accrued prior to the termination.

SECTION 11: MERGER CLAUSE.

This agreement constitutes the entire agreement between the parties. No waiver, consent, modification, or change of terms of this agreement shall bind either party unless in writing and signed by both parties. Such waiver, consent, modification, or change, if made, shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements, representations, oral or written, not specified herein regarding this agreement. The parties, by the signature of their authorized representatives,

hereby acknowledge that they have read this agreement, understand it, and agree to be bound by its terms and conditions.

SECTION 12: FORCE MAJEURE

NDSIB shall not be held responsible for delay or default caused by fire, flood, riot, acts of God or war if the event is beyond NDSIB'S reasonable control and NDSIB gives notice to Trustee immediately upon occurrence of the event causing the delay or default or that is reasonably expected to cause a delay or default.

SECTION 13: APPLICABLE LAW AND VENUE

This contract is governed by and construed in accordance with the laws of the State of North Dakota. Any action to enforce this contract must be adjudicated exclusively in the State District Court of Burleigh County, North Dakota.

Effective this 31st day of March, 2020.

ND State Investment Board

ND State Treasurer

By: _____
David Hunter, Executive Director/CIO

By: _____
Kelly Schmidt, State Treasurer

LIST OF ATTACHMENTS

Fund's Statement of Investment Goals, Objectives
and Policies

Attachment A

Report Listing

Attachment B

NDSIB Authorized Employees List

Attachment C

Trustee Authorized Employees List

Attachment D

ND VETERAN'S CEMETERY TRUST FUND

INVESTMENT POLICY STATEMENT

PLAN CHARACTERISTICS AND FUND CONSTRAINTS

The ND Veteran's Cemetery Trust Fund (Fund) was established in 1997 as a permanent fund to be used to support the veterans' cemetery. As spelled out in NDCC 39-04-10.10, the Fund receives a portion of the annual surcharge assessed on the issuance of North Dakota veterans' number plates. The North Dakota State Treasurer has full authority to invest the fund in the same manner as the State Investment Board is authorized to make investments. Upon request of the Adjutant General, the interest in the Fund must be deposited into the Veterans' Cemetery Maintenance Fund for the purpose of funding salaries and maintenance of the veterans' cemetery.

RESPONSIBILITIES AND DISCRETION OF THE STATE INVESTMENT BOARD

The ND State Treasurer (Client) has entered into a contract with the SIB for investment services as allowed under NDCC 21-10-06. It is the responsibility of the Client to establish policies on investment goals and asset allocation of the Fund. The SIB is charged with implementing these policies and asset allocation and investing the Fund in the manner provided in Section 21-10-07-the prudent institutional investor rule. The fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income.

Management responsibility for the investment program not assigned to the SIB in Chapter 21-10 is hereby delegated to the SIB, which must establish written policies for the operation of the investment program consistent with this investment policy.

The SIB may delegate investment responsibility to professional money managers, which are also required to employ investment strategies consistent with the investment policy. Where a money manager has been retained, the SIB's role in determining investment strategy and security selection is supervisory not advisory.

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

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

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

POLICY ASSET MIX

After consideration of all the liquidity needs, spending policy and time horizon of the Fund and a discussion of its risk tolerance, the Client approves the following policy asset mix for the Fund:

Global Equities	50%
Global Fixed Income	35%
Global Real Assets	15%

Rebalancing of the Fund to this target will be done in accordance with the SIB's rebalancing policy, but not less than annually.

INVESTMENT OBJECTIVES

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

- a. The Fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
- b. The Fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
- c. The risk-adjusted performance of the Fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

RESTRICTIONS

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

- a. Futures and options may be used to hedge or replicate underlying index exposure, but not for speculation.
- b. Derivatives use will be monitored to ensure that undue risks are not taken by the money managers.
- c. No transaction may be made that would threaten the tax-exempt status of the Fund.
- d. All assets will be held in custody by the SIB's master custodian or such other custodians as are acceptable to the SIB.
- e. No unhedged short sales or speculative margin purchases may be made.
- f. Social investing is prohibited unless it meets the exclusive benefit rule, and it can be substantiated that the investment provides an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk. For the purpose of this document, social investing is defined as the consideration of socially responsible criteria in the investment or commitment of public fund money for the purpose of obtaining an effect other than a maximized return to the Fund.

- g. Economically targeted investing is prohibited unless the investment meets the exclusive benefit rule.

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

Also, for the purpose of this document, the exclusive benefit rule is met if the following four conditions are satisfied:

- The cost does not exceed the fair market value at the time of investment.
- The investment provides the Fund with an equivalent or superior rate of return for a similar investment with a similar time horizon and similar risk.
- Sufficient liquidity is maintained in the Fund to permit distributions in accordance with the terms of the plan.
- The safeguards and diversity that a prudent investor would adhere to are present.

Where investment characteristics, including yield, risk, and liquidity, are equivalent, the Client's policy favors investments which will have a positive impact on the economy of North Dakota.

INTERNAL CONTROLS

A system of internal controls must be in place by the SIB to prevent losses of public funds arising from fraud or employee error. Such controls deemed most important are the separation of responsibilities for investment purchases from the recording of investment activity, custodial safekeeping, written confirmation of investment transactions, and established criteria for investment manager selection and monitoring. The annual financial audit must include a comprehensive review of the portfolio, accounting procedures for security transactions, and compliance with the investment policy.

EVALUATION AND REVIEW

Investment management of the Fund will be evaluated against the Fund's investment objectives and investment performance standards. Emphasis will be placed on 5-year and 10-year results. Evaluation should include an assessment of the continued feasibility of achieving the investment objectives and the appropriateness of the investment policy statement for achieving those objectives.

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

1. A list of advisory services managing investments for the Board.
2. A list of investments at fair value, compared to the previous reporting period, of each fund managed by each advisory service.
3. Earnings, percentage earned, and change in fair value of each fund's investments.

4. Comparison of the performance of each fund managed by each advisory service to other funds under the Board's control and to generally accepted market indicators.
5. All material legal or legislative proceedings affecting the SIB.
6. Compliance with this investment policy statement.

Approved by:

ND STATE TREASURER

STATE INVESTMENT BOARD

Kelly L. Schmidt
State Treasurer

David Hunter
Executive Director / CIO

Date: _____

Date: _____

**NORTH DAKOTA STATE INVESTMENT BOARD
REPORTING SERVICES**

Reporting services to be provided by the North Dakota State Investment Board to the Trustee will be as follows:

- Monthly - Financial Statements - Based on reconciled custodian reports generally available 45 calendar days after the close of the month.

Preliminary Performance Reports - Based on reconciled custodian reports and preliminary manager returns generally available 45 calendar days after the close of the month.
- Annually - Copy of North Dakota Retirement and Investment Office's audited annual financial statements as prepared by NDSIB's independent auditor; generally available December 15 for fiscal year ending June 30.

**NORTH DAKOTA STATE INVESTMENT BOARD
DELEGATION OF AUTHORITY**

The following North Dakota Retirement and Investment Office employees are authorized to act under this agreement.

<u>NAME</u>	<u>TITLE</u>	<u>SIGNATURE</u>
David Hunter	Executive Director/CIO	_____
Darren Schulz, CFA	Deputy CIO	_____
Connie Flanagan	Chief Financial Officer	_____
Susan Walcker	Senior Financial Accountant	_____

TRUSTEE DELEGATION OF AUTHORITY

The following employees are authorized to provide written instructions to the North Dakota State Investment Board for the indicated transactions:

	<u>Transaction</u>	<u>Individual</u>	<u>Signature</u>
1.	Investment Guidelines including asset allocations	Kelly L. Schmidt State Treasurer	
		Ryan K. Skor Director of Finance	
		Nicole Krivoruchka Cash Mgmt & Dist Analyst	
2.	Withdrawal or addition of assets	Kelly L. Schmidt State Treasurer	
		Ryan K. Skor Director of Finance	
		Nicole Krivoruchka Cash Mgmt & Dist Analyst	

By: _____

Effective Date

Title

North Dakota Retirement and Investment Office
Internal Audit
State Investment Board Self-Evaluation Executive Review Summary
March 27, 2020

Background

The State Investment Board (SIB) requested Internal Audit of the Retirement and Investment Office (RIO) to assist the SIB Executive Review Committee on developing and administering a Board Self-Evaluation Survey (Survey). Internal Audit worked with the Executive Review Committee in developing, administering, and reporting the self-evaluation results.

Scope

The Survey is comprised of twenty-nine questions and consists of five categories for both the self-assessment and board assessment portions. The five categories in each section included: board and staff roles, board and committee structure, board meetings, policy making and reviews, and financial management and investment practices. There were two open ended questions at the end that asked for any other input for the Survey and any recommendations for topics to be included in future evaluations. The Survey was administered through SurveyMonkey and results were reviewed by the Executive Review Committee. A four-point scale was used, with 4 – strongly agree, 3 – agree, 2 – disagree, and 1 – strongly disagree as the rating system. Twelve out of twelve board members participated in the Survey.

Results Summary

Generally, the self-assessment portion of the Survey had positive results and comments. In the self-assessment section, board members found their participation on the board to be stimulating and rewarding. The majority of board members *strongly agreed* they abide by the Board Code of Conduct and avoid conflicts of interest. Comments reflected that board members appreciate the Executive Summary for each meeting and policies are reviewed in sections versus all at once. Areas of improvement also have been identified. One board member stated the board should be reminded of their legal duties and responsibilities before approving policies or asset allocations. In the Survey board members felt there can be an overwhelming amount of board materials to read before the meeting to adequately prepare. Board members need to be more proactive in reaching out to staff for understanding financial reports and seeking clarification when necessary.

The board-assessment portion of the Survey also had positive results and comments. From a board level, board members felt that board meetings were well-run and a good use of time. The majority agreed the board stays informed of economic trends and conditions that can effect investment performance. There were several areas where improvement was identified. First, that attendance continues to be an area that needs improvement; board members missing meetings should be the exception, not the norm. Secondly, comments indicated that healthy discussions are held, but more board members need to actively participate in discussions. The board would benefit from hearing the perspectives of all the board members. The last area of improvement was that standing and ad hoc committees could improve communicating to the full board in an effective and timely manner.

In comparing the self-assessment portion to the board-assessment portion, there were areas of variance. In the self-assessment portion, the majority of the board members *strongly agreed* once again that they understood the authority that has been retained by the SIB and what duties have been delegated to staff. However, on the board-assessment portion, the majority of members only agreed that the board recognizes the authority retained and what has been delegated to staff. In the self-assessment portion, five board members *strongly agreed* and seven board members agreed that they actively engage and are prepared for board meetings. On the board-assessment portion only one board member *strongly agreed* that board members are engaged and prepared for meetings. A second board member disagreed that board members are prepared and stay in engaged in board meetings, while the remaining ten members just agreed.

General overall comments were positive. The SIB operates effectively and staff does an outstanding job keeping board members informed. The board needs to continue to stay proactive and improve. One comment made by a board member was the board needs to do a better job of communicating complex information to the public and legislature.

Overall, the SIB Board Self-Evaluation was positive and continues to show areas the board wishes to approve on.

2020 State Investment Board Self-Assessment

MARCH 27, 2020

Self-Assessment Results

Areas of Strength

- Participation positive and stimulating
- Understands Board Code of Conduct and conflicts of interest
- Executive summary and policy review beneficial

Areas of Improvement

- Additional training on legal duties and responsibilities
- Overwhelming amount of information
- Need to be proactive in reaching out to staff for clarity



Board Assessment Results

Areas of Strength

- Meetings are well-run
- Informed of economic trends and conditions
- Regularly reviews financial, investment, and portfolio

Areas of Improvement

- Meeting attendance
- All members should actively participate in discussions and hear all perspectives
- Standing and ad hoc committees could improve communication to full board



General Comments

- SIB operates effectively
- Staff does an outstanding job keeping board members informed
- Board needs to continue to stay proactive and improve
- Board members need to do a better job of communicating complex information with the public and legislature.



QUESTIONS OR COMMENTS?

State Investment Board
2020 Board Self-Evaluation

Compilation of State Investment Board Self-Evaluation Results

GENERAL OVERVIEW

The Board Self-Evaluation consists of five categories, for both the self-assessment and board assessment portions. The five categories in each section which included:

- ☐ Board and Staff Roles
- ☐ Board and Committee Structure
- ☐ Board Meetings
- ☐ Policy Making and Reviews
- ☐ Financial Management and Investment Practices

Any comments provided by respondents have been included as written in survey responses and have not been edited for spelling, grammar, etc.

**2020 State Investment Board Self-Evaluation
Self Assessment - Board and Staff Roles**

1. I believe I have the skills and training necessary to fulfil my responsibilities as a SIB member.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	6	50.00%	3.50	3.00
3 - Agree	6	50.00%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

2. I understand the authority that has been retained by the SIB and what duties have been delegated to staff.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	10	83.33%	3.83	4.00
3 - Agree	2	16.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

3. I actively engage in Board meetings by contributing to the discussions in a meaningful way, listening to others (i.e., board members, staff, guests) and communicate my points concisely.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	5	41.67%	3.42	3.30
3 - Agree	7	58.33%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

4. I make an effort to be educated on the aspects of the investment program that I do not understand.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	7	58.33%	3.58	3.50
3 - Agree	5	41.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

**2020 State Investment Board Self-Evaluation
Self Assessment - Board and Staff Roles**

Comments for Self-Assessment - Board and Staff Meetings:

The staff do an excellent job of providing the Board members with the information necessary to make the decisions necessary at the Board level.

It's imperative to recognize all Board members are at different levels in their service and need different levels of education.

I depend significantly upon board education for the areas that I need build further capacity. It becomes difficult to spend the amount of time necessary outside of the board room with other work/life responsibilities, so board education is crucial. Developing my own capacity, however, needs to be a greater priority. One other area to consider and plan for is turnover of key members of the SIB and staff. As a board, we must be proactive to mitigate the loss of institutional knowledge and recognize that existing members/staff need to fill that leadership void.

**2020 State Investment Board Self-Evaluation
Self Assessment - Board and Committee Structure**

5. I understand board conduct, abide by it, and avoid conflicts of interest.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	10	83.33%	3.83	3.80
3 - Agree	2	16.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

6. I find my participation on the Board to be stimulating and rewarding.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	9	75.00%	3.75	3.70
3 - Agree	3	25.00%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

7. I am comfortable with the amount of time I devote as a Board member.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	4	33.33%	3.33	3.40
3 - Agree	8	66.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

8. If I am not able to attend the SIB meeting, I make appropriate notifications to staff and review the information presented at the meeting.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	8	66.67%	3.67	3.80
3 - Agree	4	33.33%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

2020 State Investment Board Self-Evaluation
Self Assessment - Board and Committee Structure

Comments for Self-Assessment - Board and Committee Structure:

The greatest struggle to provide the necessary time to the Board is during Legislative Session. Due to extreme time constraints I would recommend minimizing meetings during session and only meeting when necessary. I would also recommend moving the meetings to Friday afternoons when Legislative Committee hearing are not being conducted.

I always try to make Board Meetings. However, my schedule is very busy and sometimes I can't. I normally try to read through material. It would be better if I contacted Dave or Darren to go through information. However, I like a stated before my schedule gets extremely busy.

It is a priority for me...I wish it was for others.

It is recognized that we have a diverse board with many professional responsibilities, however, it feels as if, at least, one board member is absent at every meeting. I believe we should strive for this to be the exception as opposed to the norm.

**2020 State Investment Board Self-Evaluation
Self-Assessment - Board Meeting**

9. I have participated in an effective new member orientation program which outlined responsibilities and important organizational information.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	5	41.67%	3.25	3.40
3 - Agree	5	41.67%		
2 - Disagree	2	16.67%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

10. I am prepared for Board meetings, reading information in advance, so I can make informed decisions.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	6	50.00%	3.50	3.50
3 - Agree	6	50.00%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

Comments for Self Assessment - Board Meeting:

When I started at WSI in 2009, I had Cindy Ternes as my designee. I did attend numerous meetings so I knew what to expect. When Cindy retired, I took over full time on the Board and really did not need an orientation.

Always. I appreciate the Executive Overview and the time frame allowing me to ask questions of staff when there are questions

I appreciate the changes that we have made in board education and orientation. I am hopeful that this will result in our least experienced board members feeling empowered to be active participants.

**2020 State Investment Board Self-Evaluation
Self-Assessment - Policy Making and Reviews**

11. I fully understand the policies of the SIB.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	5	41.67%	3.42	3.40
3 - Agree	7	58.33%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

12. I review board policies as necessary to fulfill my role as a board member.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	7	58.33%	3.50	3.40
3 - Agree	4	33.33%		
2 - Disagree	1	8.33%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

Comments for Self Assessment - Policy Making and Reviews:

I don't necessarily read through the rules. I receive most of my education at the actual Board meetings. I have been involved with the WSI Board for many years and understand Board governance.

I am very familiar with our governance structure. It is vital to our role

I appreciate that we have moved towards reviewing policies in smaller chunks over a period of time.

The board review of policies at meetings is helpful and meaningful.

2020 State Investment Board Self-Evaluation
Self-Assessment - Financial Management and Investment Practices

13. I understand the legal duties and responsibilities required of me as a fiduciary.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020</u> <u>Average</u> <u>Response</u>	<u>2019</u> <u>Average</u> <u>Response</u>
4 - Strongly Agree	10	83.33%	3.83	3.90
3 - Agree	2	16.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

14. I sufficiently understand all financial reports and seek clarification when necessary.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020</u> <u>Average</u> <u>Response</u>	<u>2019</u> <u>Average</u> <u>Response</u>
4 - Strongly Agree	7	58.33%	3.58	3.70
3 - Agree	5	41.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

15. I am familiar with the annual report by the independent auditors and understand any findings or recommendations.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020</u> <u>Average</u> <u>Response</u>	<u>2019</u> <u>Average</u> <u>Response</u>
4 - Strongly Agree	8	66.67%	3.67	3.70
3 - Agree	4	33.33%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

Comments for Self Assessment - Financial Management and Investment Practices:

I think the Board should be reminded of our legal duties and responsibilities when reviewing and approving the asset allocations of specific funds and their spending policies.

I get a lot of the same information through our WSI Board. I am familiar with annual reports.

These are important areas to consider additional education and guidance as we support future new board members. As referenced previously, we are losing outstanding leadership on our board so we must be proactive.

My career experiences being in charge of large budgets at the district and state level is valuable.

**2020 State Investment Board Self-Evaluation
Board Assessment - Board and Staff Roles**

16. The Board members are consistently prepared for meetings and stays engaged.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	1	8.33%	3.00	3.10
3 - Agree	10	83.33%		
2 - Disagree	1	8.33%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

17. The Board has healthy discussions on a topic before making a well informed decision.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	5	41.67%	3.42	3.40
3 - Agree	7	58.33%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

18. The Board recognizes the authority it has retained and what has been delegated to staff.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	5	41.67%	3.42	3.40
3 - Agree	7	58.33%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

Comments for Board Assessment - Board and Staff Roles:

I feel as if there are a select few Board members who speak more openly. I would like to see ALL of the Board members openly engaging in the conversations.

I appreciate the process used to provide recommendations to the board. It is well-thought out and gives all board members the information we need to make the best possible decision. The board would benefit from hearing the perspectives of all board members more.

Seldom does a board member cross the line into staff responsibilities.

**2020 State Investment Board Self-Evaluation
Board Assessment - Board and Committee Structure**

19. All Board members regularly attend board meetings.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	3	25.00%	3.00	3.00
3 - Agree	6	50.00%		
2 - Disagree	3	25.00%		
1 - Strongly Disagree	0	0.00%		
	12	100.00%		

20. Standing and ad hoc committees complete their tasks in an effective and timely way.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	5	41.67%	3.42	3.40
3 - Agree	7	58.33%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	12	100.00%		

21. Standing and ad hoc committees communicate to the full board in an effective and timely manner.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	3	25.00%	3.25	3.70
3 - Agree	9	75.00%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	12	100.00%		

Comments for Board Assessment - Board and Committee Structure:

It's challenging when ad hoc committees meet and present materials at the Board meeting and do not provide enough time for the Board to review the material prior to the meeting.

Attendance continues to be an area that we could improve. We make the best decisions when all board members are present to share perspectives.

The committee work and committee reports are usually very well done and contribute to board effectiveness.

**2020 State Investment Board Self-Evaluation
Board Assessment - Board Meetings**

22. Board meetings are generally well-run and make good use of members' time.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	7	58.33%	3.58	3.70
3 - Agree	5	41.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

23. Board meetings allow the right allocation of time between Board discussions and presentations.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	7	58.33%	3.58	3.50
3 - Agree	5	41.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

Comments for Board Assessment - Board Meetings:

When reviewing policies I think the review could be managed in a more efficient manner. Instead of reading through ALL of the policies that need to be reviewed present the changes in the policies in a high level overview and then allow the Board members to provide feedback.

The Board discussions and presentations are very informative.

The executive summary and detailed board memos are extremely helpful as the monthly packet can be daunting.

Meetings are efficiently and effectively run by the leadership.

**2020 State Investment Board Self-Evaluation
Board Assessment - Policy Making and Reviews**

24. The Board reviews policies on a regular basis and updates them as needed.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	7	58.33%	3.58	3.40
3 - Agree	5	41.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	12	100.00%		

25. If a new policy is needed for the SIB, the policy is clearly presented to and discussed by the Board.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020 Average Response</u>	<u>2019 Average Response</u>
4 - Strongly Agree	5	41.67%	3.42	3.50
3 - Agree	7	58.33%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	12	100.00%		

Comments for Board Assessment - Policy Making and Reviews:

When reviewing policies I think the review could be managed in a more efficient manner. Instead of reading through ALL of the policies that need to be reviewed present the changes in the policies in a high level overview and then allow the Board members to provide feedback.

The recent policy statement for proxies is a great example of how this process has worked (and should continue to work).

2020 State Investment Board Self-Evaluation
Board Assessment - Financial Management & Investment Practices

26. The Board regularly reviews financial, investment, and portfolio.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020</u> <u>Average</u> <u>Response</u>	<u>2019</u> <u>Average</u> <u>Response</u>
4 - Strongly Agree	7	58.33%	3.58	3.60
3 - Agree	5	41.67%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

27. The Board is regularly informed of economic trends or conditions that can effect investment performance.

<u>Answer Choices</u>	<u># Responses</u>	<u>% Responses</u>	<u>2020</u> <u>Average</u> <u>Response</u>	<u>2019</u> <u>Average</u> <u>Response</u>
4 - Strongly Agree	8	66.67%	3.67	3.50
3 - Agree	4	33.33%		
2 - Disagree	0	0.00%		
1 - Strongly Disagree	0	0.00%		
	<u>12</u>	<u>100.00%</u>		

Comments for Board Assessment - Financial Management and Investment Practices:

To have professionals like Callan come in and make presentations on economic trends is very helpful to me.

I depend on manager presentations to provide this information

There is an appropriate mix of board education, presentations (staff and external), consultants, and board guidance that ensures board members are well-informed on investments, performance, and economic trends and conditions. I see this as a profound institutional strength.

Department Leaders and regular reports from Callan and other experts in the field keep us well informed.

**2020 State Investment Board Self-Evaluation
Overall Assessment**

28. Any final comments, observations, or suggestions for the board self-evaluation?

Very well done!

I enjoy being part of the SIB. No suggestions.

The SIB operates effectively as a governance board, through the discussion of information prepared and presented by staff and consultants. It is critical that we keep our fiduciary responsibility central to our discussion and actions, and avoid being caught up in the political arena.

Just a comment: I believe the board does a good job of retaining authority where it needs to while also allowing staff to do their jobs effectively. Certainly any success the board has is a result of the good work done by staff at RIO.

I continue to appreciate the process for self-evaluation as I believe it helps our board be proactive and strive to be a little better tomorrow than we are today.

Caring, concerned board members focused on their fiduciary responsibilities combined with excellent office leadership and professional consultants result in a very effective board.

Staff does an exemplary job of informing staff of the status of the fund, changes that impact the fund, and continuing education on fiduciary responsibilities.

We must do a better job of letting the public/legislature know what we are doing, I am not sure how to take this complex information and distill it down to a readable bite size for the general public, but we must do a better job of telling our story as a board and an office.

29. Please let the Executive Review Committee know if there are any areas in the board self-evaluation that you would like to see addressed in the future?

The self-evaluation is comprehensive and addresses the needs of the Board.

Well done. I think this is comprehensive. It may be necessary, at some point, to consider the orientation question as it may not be applicable to every member the way it is currently worded. Perhaps make it more general, such as, "I am aware of our orientation process and it..."

Continued focus on fiduciary responsibilities and education on the fund investments.

Continue investment education

Results appear to indicate that the important actions and behaviors are being addressed.