NDTFFR Board Meeting Agenda

Thursday, March 22, 2018
1:00 pm
ND RIO Conference Room
3442 East Century Avenue
Bismarck, ND

1. **Call to Order and Approval of Agenda** - Pres. Gessner (Board Action)

2. **Approval of Minutes of January 25, 2018 Meeting** - Pres. Gessner (Board Action) 5 min.

3. **Benefit Appeal – Executive Session (Board Action) 30 min.**
   *Executive session required to discuss confidential member information and for attorney consultation pursuant to NDCC 15-39.1-30, NDCC 44-04-19.1 and 44-04-19.2.

4. **Quarterly Investment Update** – Dave Hunter (Information) 10 min.

5. **Board Education**: **Securities Litigation** – Dave Hunter (Information) 20 min.

6. **Devils Lake Meeting Update** – Fay Kopp (Information) 15 min.

7. **2019 Legislative Planning** – Fay Kopp (Board Action) 30 min.

8. **TFFR Member Online Update** – Shelly Schumacher (Information) 10 min.

9. **2018 Tax Withholding Update** – Fay Kopp (Information) 10 min.

10. **Annual Retirement Trends Report** – Shelly Schumacher (Board Action) 30 min.

11. **2018-19 Board Calendar and Education Plan** – Fay Kopp (Board Action) 10 min.

12. **Consent Agenda** – Disability and QDRO applications - Fay Kopp (Board Action) 5 min.
    *Executive session possible to discuss confidential member information pursuant to NDCC 15-39.1-30.

13. **Other Business**
    Next Board Meeting: April 26, 2018

14. **Adjournment**

Any person who requires an auxiliary aid or service should contact the Retirement and Investment Office at 701-328-9885 at least three (3) days before the scheduled meeting.

NORTH DAKOTA TEACHERS' FUND FOR RETIREMENT
MINUTES OF THE
JANUARY 25, 2018, BOARD MEETING

BOARD MEMBERS PRESENT:	Mike Gessner, President
	Rob Lech, Vice President
	Kirsten Baesler, State Supt. (TLCF)
	Mike Burton, Trustee
	Toni Gumeringer, Trustee
	Mel Olson, Trustee
	Kelly Schmidt, State Treasurer
STAFF PRESENT:	Bonnie Heit, Admin Svs Supvr
	David Hunter, ED/CIO
	Fay Kopp, Deputy ED/CRO
	Missy Kopp, Retirement Assistant
	Sara Sauter, Audit Services Supvr
	Shelly Schumacher, Retirement Program Mgr
OTHERS PRESENT:	Patrick Brooke, Attorney General's Office
	Kathy Kindschi, NDU-Retired

CALL TO ORDER:

Mr. Mike Gessner, President of the Teachers' Fund for Retirement (TFFR) Board of Trustees, called the meeting to order at 1:15 p.m. on Thursday, January 25, 2018, at the Retirement and Investment Office, Bismarck, ND.

THE FOLLOWING MEMBERS WERE PRESENT REPRESENTING A QUORUM: MR. BURTON, MR. GESSNER, MRS. GUMERINGER, MR. LECH, MR.OLSON, AND SUPT. BAESLER

ACCEPTANCE OF AGENDA:

The Board considered the agenda for the January 25, 2018 meeting.

IT WAS MOVED BY MR. OLSON AND SECONDED BY MRS. GUMERINGER AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE AGENDA AS DISTRIBUTED.

AYES: SUPT. BAESLER, MR. BURTON, MR. LECH, MRS. GUMERINGER, MR. OLSON, AND PRESIDENT GESSNER
NAYS: NONE
MOTION CARRIED.
ABSENT: TREASURER SCHMIDT

MINUTES:

The Board considered the minutes of the October 26, 2017, meeting.

IT WAS MOVED BY MR. LECH AND SECONDED BY MR. BURTON AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE OCTOBER 26, 2017, MINUTES AS DISTRIBUTED.

AYES: MR. LECH, MR. OLSON, MR. BURTON, SUPT. BAESLER, MRS. GUMERINGER, AND PRESIDENT GESSNER
NAYS: NONE
MOTION CARRIED.
ABSENT: TREASURER SCHMIDT

BOARD EDUCATION:

Mr. Hunter provided education to the Board on Environmental, Social and Governance (ESG) Investing and explained how these factors are considered in making investment decisions as part of the due diligence process. Mr. Hunter reviewed State Investment Board Policy E-7.1 on Proxy Voting which has been in place since 1995, and addresses ESG investing. Board discussion followed.

INVESTMENT UPDATE:

Mr. Hunter provided an investment update for periods ending September 30, 2017 and November 30, 2017. For the 1-year period ended September 30, 2017, TFFR earned a net return of 13% versus a policy benchmark of less than 12%. TFFR earned a net return of over 9% for the 5-years ended September 30, 2017, which exceeded the policy benchmark of 8% by approximately 1%.

Mr. Hunter informed the Board that RIO personnel are in the process of implementing standardized asset allocation guidelines for its SIB clients. These changes will not impact target allocations to Equity, Fixed Income or Real Assets which will remain at 58%, 23% and 18%, respectively. However sector allocation within each broad asset class will be simplified into public or private for Equity, investment grade or non-investment grade for Fixed Income and real estate or other for Real Assets. Mr. Hunter also reminded the Board that the TFFR (and PERS) Boards approved these recommendations for Fixed Income late last year in connection with the fixed income restructuring. Mr. Hunter requested the Board approve the TFFR Investment Policy Statement to reflect these changes. After discussion,

IT WAS MOVED BY MR. OLSON AND SECONDED BY MRS. GUMERINGER AND CARRIED BY A ROLL CALL VOTE TO ACCEPT STAFF RECOMMENDATION ON CHANGES TO THE TFFR INVESTMENT POLICY STATEMENT.

AYES: TREASURER SCHMIDT, SUPT. BAESLER, MRS. GUMERINGER, MR. OLSON, MR. BURTON, MR. LECH, PRESIDENT GESSNER
NAYS: NONE
MOTION CARRIED.

IT WAS MOVED BY MR. LECH AND SECONDED BY MR. BURTON AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE INVESTMENT REPORT FORTHE QUARTER ENDING SEPTEMBER 30, 2017.

AYES: MRS. GUMERINGER, MR. BURTON, MR. LECH, SUPT. BAESLER, MR. OLSON, TREASURER SCHMIDT, PRESIDENT GESSNER
NAYS: NONE
MOTION CARRIED.

The Board requested that future investment policy statement changes be reflected in a separate agenda item.

AGENCY UPDATE:

Mr. Hunter reported that RIO is fully staffed as of January 2, 2018. Ms. Denise Weeks rejoined RIO as a Retirement Benefits Counselor, Ms. Sara Sauter as Supervisor of Audit Services and Ms. Missy Kopp as Retirement Administrative Assistant.

Mr. Hunter reviewed the results of RIO's Employee Survey initiated by the Governor's Office in December 2017. Survey results gave RIO a favorable response on over 79% of the questions. Open-ended responses focused on improving employee communication, compensation and teamwork. Mr. Hunter stated he plans to meet with the State People Officer and work with RIO managers and staff to address concerns.

TAX WITHHOLDING UPDATE:

Ms. Kopp reviewed the 2018 Tax Withholding changes which were approved by Congress and signed into law on December 22, 2017. Since the IRS released new 2018 tables on January 11, 2018, Ms. Kopp stated TFFR plans to implement the 2018 federal tax withholding changes for the February 1, 2018 retiree payroll. However, since the ND state tax department has not yet issued new 2018 tables, it is possible that only the federal tax changes will be reflected in the February 1 retiree payments. Ms. Kopp stated that Annual Retirement Benefit Change Notices will be mailed to all 8,521 retirees in February, notifying them of any changes in their net monthly benefit as a result of the new tax withholding tables, and confirming their current monthly benefit amount. Board discussion followed.

MEMBER ONLINE UPDATE:

Ms. Kopp informed the Board that TFFR Member Online is scheduled to go live on February 1, 2018. Ms. Kopp reviewed the account information that will be available to active and retired members. TFFR retirees will receive the first notification that Member Online is available with their Retirement Benefit notices which will be distributed in February 2018. TFFR Member Online Services will be the feature story in the "Report Card" and "Retirement Today" member newsletters which are anticipated to be distributed to members in late February. After the initial rollout is conducted, staff will continue marketing Member Online in email blasts to members via employers, member outreach program materials, correspondence, and other phone and personal interactions with members.

Ms. Kopp thanked Mr. Rich Nagel, Ms. Shelly Schumacher, Mr. Len Wall and other RIO, ITD and CPAS staff who were involved in getting Member Online into production.

GASB 67 & 68:

Ms. Schumacher reviewed the GASB 67 & 68 report for the year ending June 30, 2017. The report was prepared by TFFR's actuary, Segal Company, and audited by the plan's auditor, CliftonLarsonAllen. The report will be posted on the TFFR website for all employers to use in their 2018 financial statements.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. LECH AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE GASB 67 & 68 REPORT FOR THE PERIOD ENDING JUNE 30, 2017.

AYES: MR. OLSON, MR. LECH, SUPT. BAESLER, MRS. GUMERINGER, TREASURER SCHMIDT, MR. BURTON, PRESIDENT GESSNER
NAYS: NONE
MOTION CARRIED.

BOARD POLICY:

Ms. Kopp reviewed TFFR Board Policy C-7, Employer Payment Plan Models, for the Board's second reading and final adoption.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. OLSON AND CARRIED BY A ROLL CALL VOTE TO APPROVE THE SECOND READING AND FINAL ADOPTION TO TFFR BOARD POLICY C-7 EMPLOYER PAYMENT PLAN MODELS.

AYES: MR. BURTON, MRS. GUMERINGER, MR. OLSON, TREASURER SCHMIDT, MR. LECH, SUPT. BAESLER, PRESIDENT GESSNER
NAYS: NONE
MOTION CARRIED.

The Board recessed at 2:43 p.m. and reconvened at 2:55 p.m.

LEGISLATIVE PLANNING:

Ms. Kopp reviewed 2019 legislative planning timeline and TFFR plan benefits, contributions, investment, and funding background information. Based on 2017 actuarial projections, TFFR's funded status is expected to improve over the next 30 years, therefore additional contribution or benefit changes are not required for funding purposes at this time. However, events which could affect TFFR funding levels in the future will be closely monitored including investment performance, actuarial experience, actuarial assumption changes, and legislative actions. Ms. Kopp informed the Board that a bill will need to be drafted to address Internal Revenue Code compliance updates. She also outlined various possible plan design and administrative changes for board consideration. Board discussion followed.

The Board requested that two bills be drafted for additional discussion at the March 22 meeting regarding IRS technical corrections and retiree substitute teaching. Bill drafts will need to be submitted to the Legislative Employee Benefits Programs Committee for study by April 1, 2018.

ENDS-STATISTICS REPORT:

Ms. Schumacher reviewed the TFFR Ends and Retirement Statistics for the year ending June 30, 2017. The information provided validates that TFFR Ends policies formally adopted by the TFFR Board and accepted by the SIB, are being implemented. Board discussion followed.

IT WAS MOVED BY MR. LECH AND SECONDED BY MR. OLSON AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE ANNUAL TFFR ENDS REVIEW FOR THE YEAR ENDING JUNE 30, 2017.

AYES: MRS. GUMERINGER, MR. LECH, TREASURER SCHMIDT, SUPT. BAESLER, MR. BURTON, MR. OLSON, PRESIDENT GESSNER
NAYS: NONE
MOTION CARRIED.

AUDIT SERVICES:

Ms. Sauter reviewed Audit Services second quarter activities report for the period of October 1, 2017 - December 31, 2017.

CAFR AND PPCC AWARDS:

Ms. Kopp informed the Board that the 2017 RIO Comprehensive Annual Financial Report (CAFR) has been completed. RIO has been awarded a Certificate of Achievement for Excellence in Financial Reporting for the past 20 years from the Government Finance Officers Association (GFOA).

Ms. Kopp noted that TFFR has also received the Public Pension Coordinating Council (PPCC) 2017 Public Pension Standards Award for administration. TFFR has received the award for administration and/or funding from PPCC since 1992.

Ms. Kopp thanked Ms. Connie Flanagan, Ms. Schumacher and other staff, for their efforts.

OTHER:

The Board requested feedback from the Devils Lake meeting held on November 21, 2017 with Mr. Hunter and Ms. Kopp. This item will be on the agenda for the March 2018 board meeting.

Mr. Gessner informed the Board that he will be retiring at the end of the 2017-18 school year. Mr. Gessner’s 47-year teaching career was with the Minot Public School District as a Math instructor. Mr. Gessner has been representing the active teachers on the board since June 16, 2005.

ADJOURNMENT:

With no further business to come before the Board, President Gessner adjourned the meeting at 4:31 p.m.

Respectfully Submitted:

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Mr. Mike Gessner, President
Teachers’ Fund for Retirement Board

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Bonnie Heit
Reporting Secretary

TFFR Investment Update

For the Periods Ended December 31, 2017

March 12, 2018

Note: This document contains unaudited data which is deemed to be materially accurate, but is unaudited and subject to change.

Dave Hunter, Executive Director/CIO

Darren Schulz, Deputy Chief Investment Officer

ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

Executive Summary for periods ended Dec. 31, 2017

Investment Performance Update –

- **For the 1-year period ended Dec. 31, 2017, TFFR earned a net return of nearly 17% versus a policy benchmark of less than 15%.** The financial markets were incredibly robust and resilient in 2017 with global equities rising 21% and TFFR's International Equity portfolio up over 30%. U.S. equities also performed very well and up over 20% in 2017. TFFR's fixed income returns far exceeded expectations with our U.S. debt portfolio posting a **7%** gain versus a **3.5%** return for the Aggregate Index. TFFR's international debt portfolio had a banner year and earned over **11%** beating the global fixed income index of 10.5%. Real Assets were mixed with Real Estate earning 9.7% and Infrastructure up 11%, while Timber declined 4% in 2017. **TFFR's target allocations remain at 58% Equity, 23% Fixed Income, 18% Real Assets and 1% Cash.**

- **Asset allocation is the primary driver of returns. TFFR earned a net return of nearly 9.3% for the 5-years ended Dec. 31, 2017, which exceeded the policy benchmark by approximately 1%.** Asset allocation generated **$900 million** (90%) and active management produced roughly **$100 million**[1] (10%) of TFFR's net investment income over the last 5-years.

- **TFFR's returns were achieved while adhering to board approved risk guidelines** which approximated 106% of the policy benchmark and produced over 0.50% of positive risk adjusted excess return for the 5-years ended Dec. 31, 2017. TFFR's investment returns ranked in the **27th** percentile based on Callan's Public Fund Sponsor Database on an unadjusted risk basis for the 5-years ended Dec. 31, 2017.

Footnote 1: Assuming the market value of TFFR's assets were $2 billion for the five-years ended Dec. 31, 2017 ($2 billion x 1% = $20 million x 5 years = $100 million).

TFFR Investment Ends – Dec. 31, 2017

SIB clients should receive net investment returns consistent with their written investment policies and market variables. This "End" is evaluated based on comparison of each client's (a) actual net investment return, (b) standard deviation and (c) risk adjusted excess return, to the client's policy benchmark over 5 years.

TFFR earned $182 million of net investment income for the 6 months ended 12/31/17.

	Current FYTD 12/31/2017	1 Yr Ended 12/31/2017	3 Yrs Ended 12/31/2017	5 Yrs Ended 12/31/2017	Risk 5 Yrs Ended 12/31/2017	Risk Adj Excess Return 5 Yrs Ended 12/31/2017
Total Fund Return - Net	7.88%	16.98%	8.00%	9.29%	4.8%	0.52%
Policy Benchmark Return	6.63%	14.24%	6.96%	8.24%	4.6%	
Excess Return	1.25%	2.74%	1.04%	1.04%	106%	

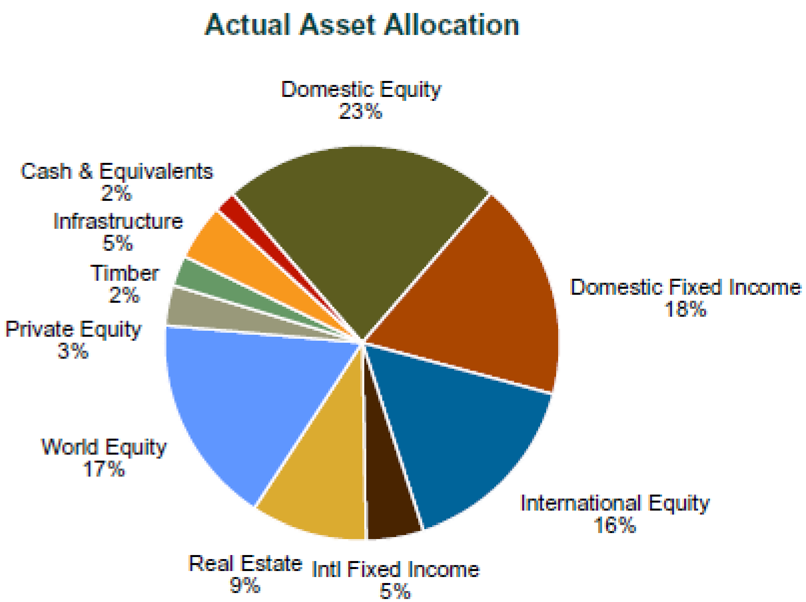
Key: TFFR investments averaged $2 billion the last 5-years and Excess Return has exceeded **1%** per annum. Based on these values, **TFFR's use of active management has enhanced Net Investment Returns by $50 million for the 5-years ended Dec. 31, 2017** (or $2 billion x 1% = $20 million x 5 years = **$100 million**). **These returns were achieved while adhering to prescribed Risk limits (e.g. 106% vs. a 115% policy).**

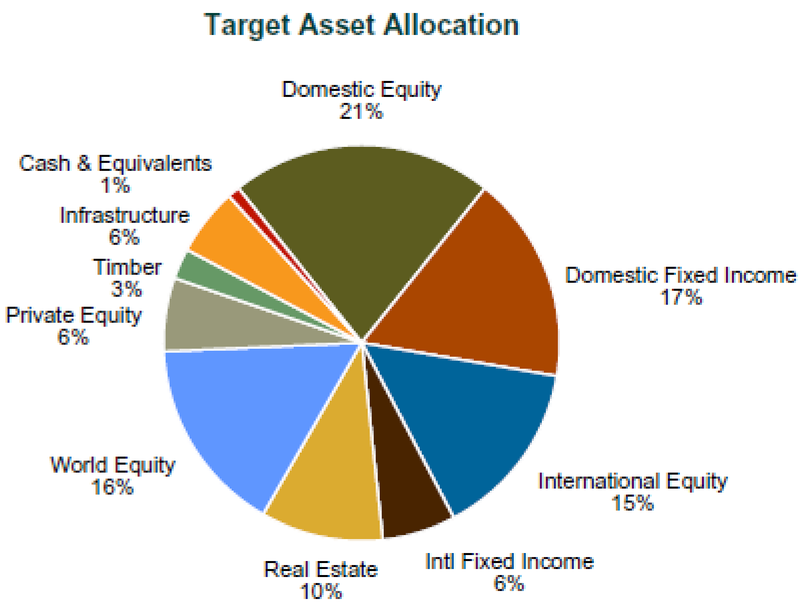
5-Yr. Returns Dec. 31, 2017	Asset Allocation	Benchmark Return	Allocation x Return
Asset Class	*a*	*b*	*a x b*
Equity	58%	11%	6.4%
Fixed Income	24%	2.5%	0.6%
Real Assets	18%	7%	1.3%
Policy Benchmark Return (5-years)			8.2%

Current Policy Benchmark: 58% Equity (31% U.S., 21% Non-U.S., 6% Private); **23% Fixed Income** (13% U.S., 6% Non-U.S. 4% High Yield); **18% Real Assets** (10% Real Estate; 5% Infrastructure; 3% Timber); and **1% Cash.**

Actual Asset Allocations are within 3% of Target

The Private Equity Underweight of 2.7% is offset by Overweight allocations to Domestic Equity of 1.3%, Int'l. Equity of 1.2% and World Equity of 1.2%.





Asset Class	$000s Actual	Weight Actual	Target	Percent Difference	$000s Difference
Domestic Equity	561,368	22.7%	21.4%	1.3%	32,125
Domestic Fixed Income	442,704	17.9%	17.0%	0.9%	22,277
International Equity	390,935	15.8%	14.6%	1.2%	29,863
Intl Fixed Income	117,286	4.7%	6.0%	(1.3%)	(31,100)
Real Estate	234,196	9.5%	10.0%	(0.5%)	(13,114)
World Equity	425,202	17.2%	16.0%	1.2%	29,506
Private Equity	80,971	3.3%	6.0%	(2.7%)	(67,415)
Timber	60,875	2.5%	2.5%	(0.0%)	(952)
Infrastructure	114,631	4.6%	5.5%	(0.9%)	(21,389)
Cash & Equivalents	44,930	1.8%	1.0%	0.8%	20,199
Total	2,473,098	100.0%	100.0%		

Asset Class Performance

Periodic Table of Investment Returns for Periods Ended December 31, 2017

Best → Worst

Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
MSCI:EM Gross 7.5%	MSCI:EM Gross 37.8%	S&P:500 11.4%	S&P:500 15.8%	Russell:2000 Index 8.7%	MSCI:EM Gross 12.7%
S&P:500 6.6%	MSCI:EAFE 25.0%	Russell:2000 Index 10.0%	Russell:2000 Index 14.1%	S&P:500 8.5%	Russell:2000 Index 11.2%
Blmbg:Commodity Price Idx 4.4%	S&P:500 21.8%	MSCI:EM Gross 9.5%	MSCI:EAFE 7.9%	Blmbg:Aggregate 4.0%	S&P:500 9.9%
MSCI:EAFE 4.2%	Russell:2000 Index 14.6%	MSCI:EAFE 7.8%	MSCI:EM Gross 4.7%	MSCI:EM Gross 2.0%	MSCI:EAFE 8.1%
Russell:2000 Index 3.3%	Blmbg:Aggregate 3.5%	Blmbg:Aggregate 2.2%	Blmbg:Aggregate 2.1%	MSCI:EAFE 1.9%	Blmbg:Aggregate 4.1%
Blmbg:Aggregate 0.4%	3 Month T-Bill 0.9%	3 Month T-Bill 0.4%	3 Month T-Bill 0.3%	3 Month T-Bill 0.4%	3 Month T-Bill 1.3%
3 Month T-Bill 0.3%	Blmbg:Commodity Price Idx 0.7%	Blmbg:Commodity Price Idx (5.5%)	Blmbg:Commodity Price Idx (8.7%)	Blmbg:Commodity Price Idx (7.1%)	Blmbg:Commodity Price Idx (1.5%)

Emerging Markets (MSCI EM) returned nearly 38% while International Equity (MSCI EAFE) returned 25% in 2017. U.S. Small Cap (Russell 2000) returned 14.6% for the 1-year ended Dec. 31, 2017, while U.S. Fixed Income (Blmbg. Aggregate) was up 3.5% in 2017. Commodities were the worst performing sector the last 1-, 3-, 5-, 10- and 15-years, but earned 4.4% last quarter.

Global Equity, Fixed Income and Real Asset Valuations

TFFR's investment income was $95.5 million last quarter while net outflows were $10.3 million.

Asset Class Allocation

	December 31, 2017				September 30, 2017	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
GLOBAL EQUITY	**$1,458,475,618**	**58.97%**	**$(55,725,199)**	**$80,923,522**	**$1,433,277,296**	**60.02%**
Domestic Equity	**$561,368,126**	**22.70%**	**$(17,706,195)**	**$33,927,248**	**$545,147,073**	**22.83%**
Large Cap	436,907,647	17.67%	(7,604,005)	28,573,967	415,937,685	17.42%
Small Cap	124,460,479	5.03%	(10,102,190)	5,353,281	129,209,388	5.41%
International Equity	**$390,935,293**	**15.81%**	**$(25,171,319)**	**$20,772,411**	**$395,334,200**	**16.56%**
Developed Intl Equity	306,693,052	12.40%	(15,171,319)	14,616,085	307,248,285	12.87%
Emerging Markets	84,242,241	3.41%	(10,000,000)	6,156,326	88,085,915	3.69%
World Equity	**$425,201,673**	**17.19%**	**$(12,850,593)**	**$23,443,057**	**$414,609,208**	**17.36%**
Private Equity	**$80,970,527**	**3.27%**	**$2,908**	**$2,780,805**	**$78,186,815**	**3.27%**
GLOBAL FIXED INCOME	**$559,989,808**	**22.64%**	**$16,870,617**	**$4,076,107**	**$539,043,084**	**22.57%**
Fixed Income Comp	**$442,703,933**	**17.90%**	**$16,980,157**	**$3,607,439**	**$422,116,338**	**17.68%**
Investment Grade Fixed	305,818,673	12.37%	(133,031)	2,197,686	303,754,018	12.72%
Below Inv. Grade Fixed Income	136,885,260	5.53%	17,113,187	1,409,753	118,362,320	4.96%
International Fixed Income	**$117,285,874**	**4.74%**	**$(109,540)**	**$468,669**	**$116,926,746**	**4.90%**
GLOBAL REAL ASSETS	**$409,702,574**	**16.57%**	**$(4,590,328)**	**$10,366,808**	**$403,926,094**	**16.92%**
Real Estate	234,195,986	9.47%	(5,060,531)	6,268,943	232,987,574	9.76%
Timber	60,875,438	2.46%	0	(254,077)	61,129,515	2.56%
Infrastructure	114,631,151	4.64%	470,203	4,351,943	109,809,006	4.60%
Cash & Equivalents	**$44,929,868**	**1.82%**	**$33,164,624**	**$105,134**	**$11,660,110**	**0.49%**
Securities Lending Income	**$0**	**0.00%**	**$(40,512)**	**$40,512**	**-**	**-**
Total Fund	**$2,473,097,868**	**100.0%**	**$(10,320,799)**	**$95,512,083**	**$2,387,906,584**	**100.0%**

Cash Outflows

Cash Inflows

TFFR's Global Equity returns outperformed its weighted average global equity benchmark by 1.85% in 2017 and 1.00% over the last 5-years largely as a result of strong performance within International Equity. U.S. Equity returns were generally in line with benchmarks after deducting fees, although U.S. Small Cap Equity has struggled the last 3-to-5 years. World Equity returns have generally been in line with benchmarks, although performance was strong in 2017. RIO intends to conduct a comprehensive review of our global equity portfolio in the next year. **In the interim, we are pleased to report that Public Equity returns consistently exceed benchmark by 1% on an overall basis and Private Equity returns have begun to improve in 2017.**

Returns for Periods Ended December 31, 2017

	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Global Equity				
Gross	5.75%	24.14%	9.96%	12.22%
Net	5.69%	23.87%	9.68%	11.90%
Wtd Avg Global Equity Benchmark	5.27%	21.02%	8.66%	10.90%
Domestic Equity				
Gross	6.36%	20.28%	11.29%	15.98%
Net	6.32%	20.08%	11.10%	15.77%
Wtd Avg Domestic Equity Benchmark	5.85%	20.12%	11.00%	15.42%
Large Cap Equity				
Gross	6.99%	21.85%	11.92%	16.57%
Net	6.96%	21.73%	11.78%	16.40%
Benchmark(1)	6.59%	21.69%	11.23%	15.71%
Small Cap Equity				
Gross	4.39%	15.30%	9.04%	13.83%
Net	4.31%	14.87%	8.69%	13.50%
Russell 2000 Index	3.34%	14.65%	9.96%	14.12%
International Equity				
Gross	5.44%	31.14%	10.57%	9.46%
Net	5.40%	30.92%	10.37%	9.22%
Wtd Avg Intl Equity Benchmark	4.84%	26.65%	8.00%	7.21%
Developed Intl Equity				
Gross	4.89%	28.85%	10.40%	10.12%
Net	4.83%	28.57%	10.14%	9.85%
Benchmark(2)	4.23%	24.21%	7.64%	7.80%
Emerging Markets				
Gross	7.58%	39.80%	10.53%	5.94%
Net	7.58%	39.80%	10.53%	5.79%
Benchmark(3)	7.44%	37.28%	9.10%	4.35%
World Equity				
Gross	5.72%	26.69%	9.96%	12.44%
Net	5.63%	26.22%	9.40%	11.77%
MSCI World Index	5.51%	22.40%	9.26%	11.64%
Private Equity				
Net	3.51%	7.43%	(0.38%)	1.33%

Global Fixed Income returns have consistently beat expectations in both the U.S. and International markets, although absolute returns in the U.S. often exceeded International returns by 1% to 2% (e.g. 3.67% versus 2.32% over the last 5 years).

Global Real Asset returns have also consistently beat expectations, although performance has been mixed. Real Estate and Infrastructure earned 12.5% and 5.5%, respectively, the last 5-years, while Timber returns disappointed at -0.35% per annum for the 5-years ended December 31, 2017.

Returns for Periods Ended December 31, 2017

	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Global Fixed Income				
Gross	0.73%	8.23%	4.21%	3.92%
Net	0.67%	7.98%	3.96%	3.67%
Wtd Avg Global Fixed Inc. Benchmark	0.73%	6.03%	2.90%	2.32%
Domestic Fixed Income				
Gross	0.83%	7.25%	4.72%	4.77%
Net	0.79%	7.05%	4.51%	4.56%
Wtd Avg Domestic FI Benchmark	0.41%	4.47%	3.22%	3.05%
Inv. Grade Fixed Income				
Gross	0.72%	6.41%	3.97%	3.96%
Net	0.69%	6.27%	3.84%	3.84%
Blmbg Aggregate Index	0.39%	3.54%	2.24%	2.10%
Below Inv. Grade Fixed Income				
Gross	1.10%	9.56%	6.78%	6.89%
Net	1.03%	9.17%	6.37%	6.45%
Blmbg HY Corp 2% Issue	0.47%	7.50%	6.36%	5.78%
International Fixed Income				
Gross	0.40%	11.56%	2.49%	0.99%
Net	0.31%	11.16%	2.13%	0.63%
Wtd Avg Intl Fixed Income Benchmark	1.63%	10.51%	1.77%	(0.20%)
Global Real Assets				
Gross	2.57%	8.29%	7.91%	8.47%
Net	2.48%	7.87%	7.47%	8.04%
Wtd Avg Global Real Assets Benchmark	1.15%	5.02%	6.01%	6.95%
Real Estate				
Gross	2.72%	10.26%	11.94%	13.05%
Net	2.60%	9.74%	11.39%	12.50%
NCREIF Total Index	1.80%	6.96%	9.38%	10.19%
Timber				
Net	(0.42%)	(3.98%)	(0.85%)	(0.35%)
NCREIF Timberland Index	1.52%	3.63%	3.73%	6.22%
Infrastructure				
Gross	3.93%	11.99%	5.18%	6.11%
Net	3.82%	11.49%	4.63%	5.52%
CPI-W	(0.17%)	2.18%	1.52%	1.26%
Cash & Equivalents - Net	**0.31%**	**1.07%**	**0.56%**	**0.36%**
3-month Treasury Bill	0.28%	0.86%	0.41%	0.27%
Total Fund				
Gross	3.99%	17.27%	8.30%	9.61%
Net	3.93%	16.98%	8.00%	9.29%
Target*	3.42%	14.26%	6.96%	8.24%

TFFR Long Term Results are Near Long-Term Assumptions

Investment Performance (net of fees)

	FYTD 12/31/18	2017	2016	2015	2014	2013	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years	30 Years
		Fiscal Years ended June 30					Periods ended 6/30/17 (annualized)						
TFFR	9.37%	12.93%	0.28%	3.52%	16.53%	13.57%	5.44%	9.18%	3.81%	7.03%	6.19%	7.47%	7.84%

The TFFR Pension Plan is a Long Term Investor

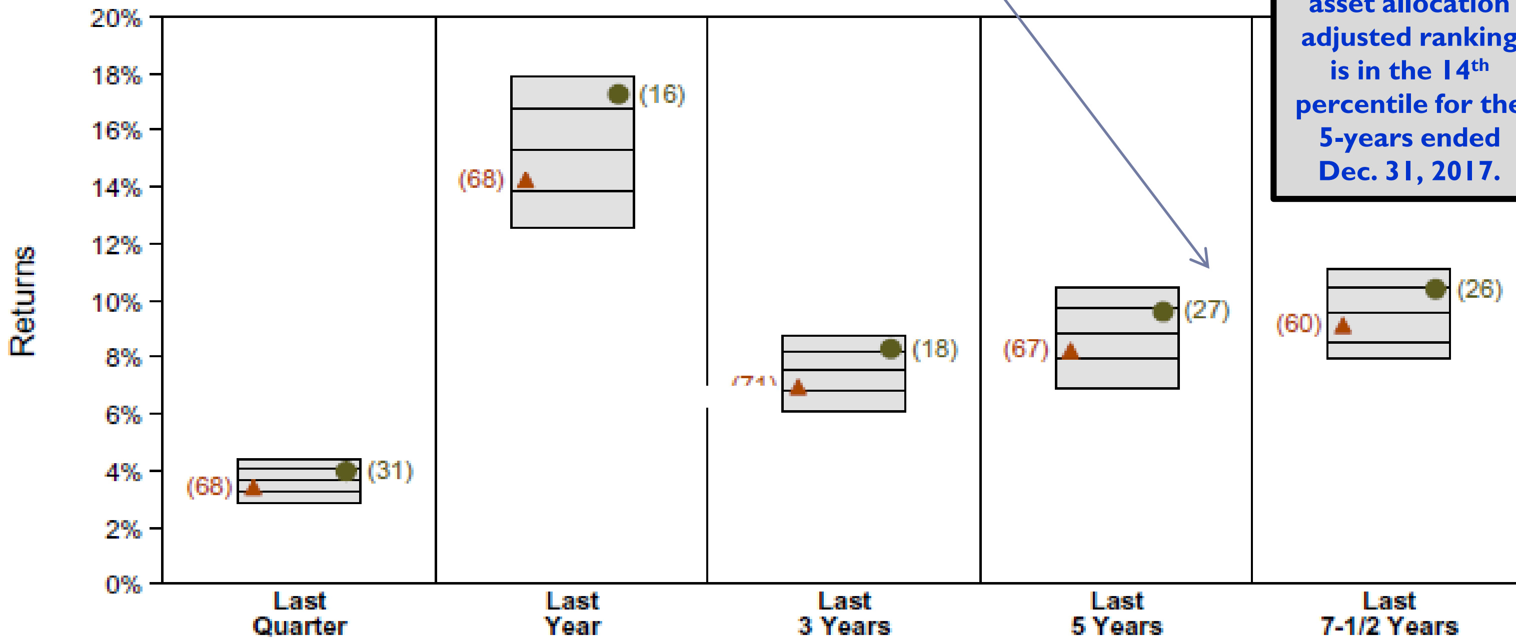
Net investment returns for the TFFR Pension Plan have approximated 7.84% for the last 30-years which is materially consistent with the plan's long term actuarial assumption of 7.75%.

TFFR's "gross" returns were ranked in the 27th percentile for the 5-years ended Dec. 31, 2017, based on Callan's "Public Fund Sponsor Database".

Callan Public Fund Sponsor Database

Unadjusted Ranking

NOTE: TFFR's asset allocation adjusted ranking is in the 14th percentile for the 5-years ended Dec. 31, 2017.

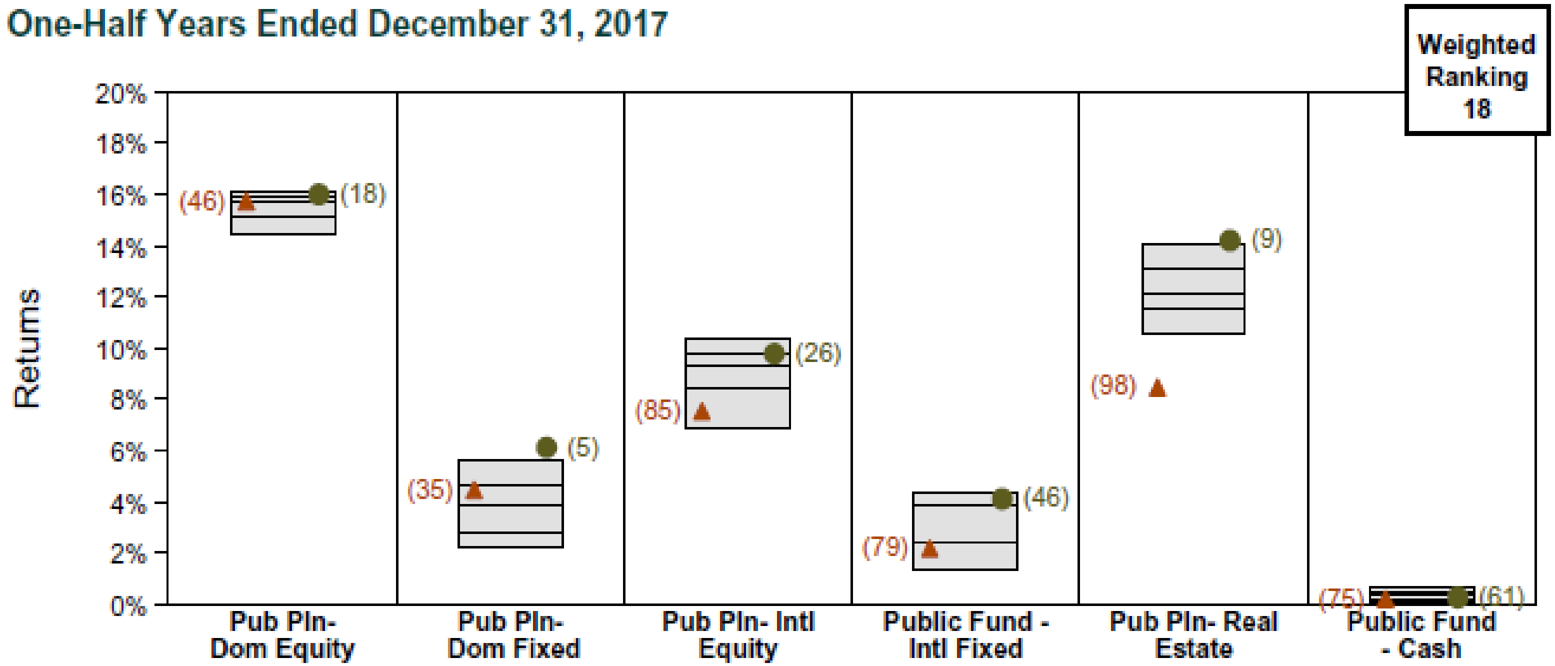


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7-1/2 Years
10th Percentile	4.41	17.88	8.75	10.50	11.07
25th Percentile	4.12	16.75	8.17	9.72	10.44
Median	3.71	15.28	7.59	8.85	9.59
75th Percentile	3.28	13.83	6.85	7.93	8.56
90th Percentile	2.83	12.54	6.10	6.93	7.94
Total Fund ●	3.99	17.27	8.30	9.61	10.41
Policy Target ▲	3.42	14.26	6.96	8.24	9.13

* Current Quarter Target = 16.6% Russell 1000 Index, 16.0% MSCI World, 13.0% Blmbg Aggregate, 11.8% MSCI World ex US, 10.0% NCREIF Total Index, 6.0% Blmbg Glob Agg ex USD, 6.0% NDSIB TFFR - Private Equity, 5.5% CPI-W, 4.8% Russell 2000 Index, 4.0% Blmbg HY 2% Iss Cap, 2.8% MSCI EM, 2.5% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.

TFFR managers performed well in the public markets the last 7.5 years, but have been challenged in private equity and timber.

Total Asset Class Performance
Seven and One-Half Years Ended December 31, 2017



	Pub Pln- Dom Equity	Pub Pln- Dom Fixed	Pub Pln- Intl Equity	Public Fund - Intl Fixed	Pub Pln- Real Estate	Public Fund - Cash
10th Percentile	16.12	5.60	10.39	4.39	14.11	0.64
25th Percentile	15.93	4.70	9.82	4.34	13.05	0.53
Median	15.67	3.86	9.28	3.87	12.09	0.38
75th Percentile	15.13	2.86	8.48	2.45	11.54	0.22
90th Percentile	14.43	2.21	6.86	1.33	10.59	0.08
Asset Class Composite ●	15.99	6.13	9.78	4.12	14.20	0.28
Composite Benchmark ▲	15.72	4.47	7.55	2.19	8.48	0.22

NOTE: SIB utilizes the private markets to invest in real estate, infrastructure and timber (in addition to private equity and private debt).

NDSIB Watch List

At December 31, 2017

JP Morgan MBS (Pen.)		$132,337,114	
	Returns	Index[1]	Excess
1 Year	3.04	2.47	0.57
3 Year	2.43	1.88	0.54
Inception*	2.64	2.29	0.34

*Funded 09/30/2014

[1] Bloomberg Mortgage Index

UBS International Fixed (Pen.)		$94,812,889	
	Returns	Index[2]	Excess
1 Year	9.99	10.51	(0.53)
3 Year	1.64	1.77	(0.13)
Inception*	5.95	5.69	0.26

*Funded 07/01/1989

[2] Bloomberg Global Aggregate ex-US

Note: Return data is gross of fee due to data availability

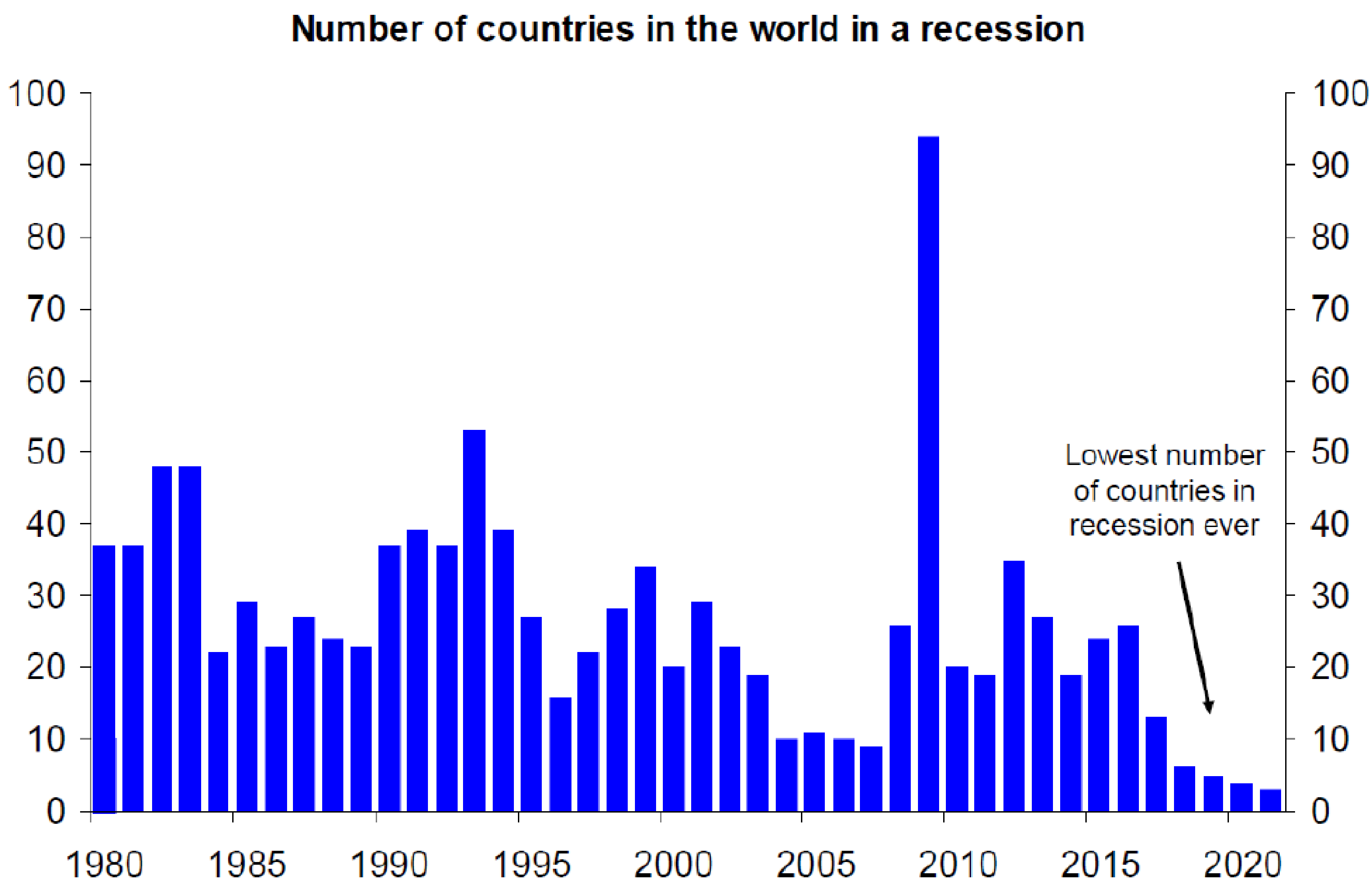
UPDATE:

The JPMorgan MBS (Mortgage Backed Securities) strategy and UBS International Fixed Income mandate were transitioned into Core Fixed Income portfolios with Prudential Global Investment Management in the 1st calendar quarter of 2018. As such, there are no investment managers on Watch as of March 12, 2018

TFFR's net investment returns for the seven months ended Jan. 31, 2018, are approximately 11.3%.

Capital & Global Economic Markets Update

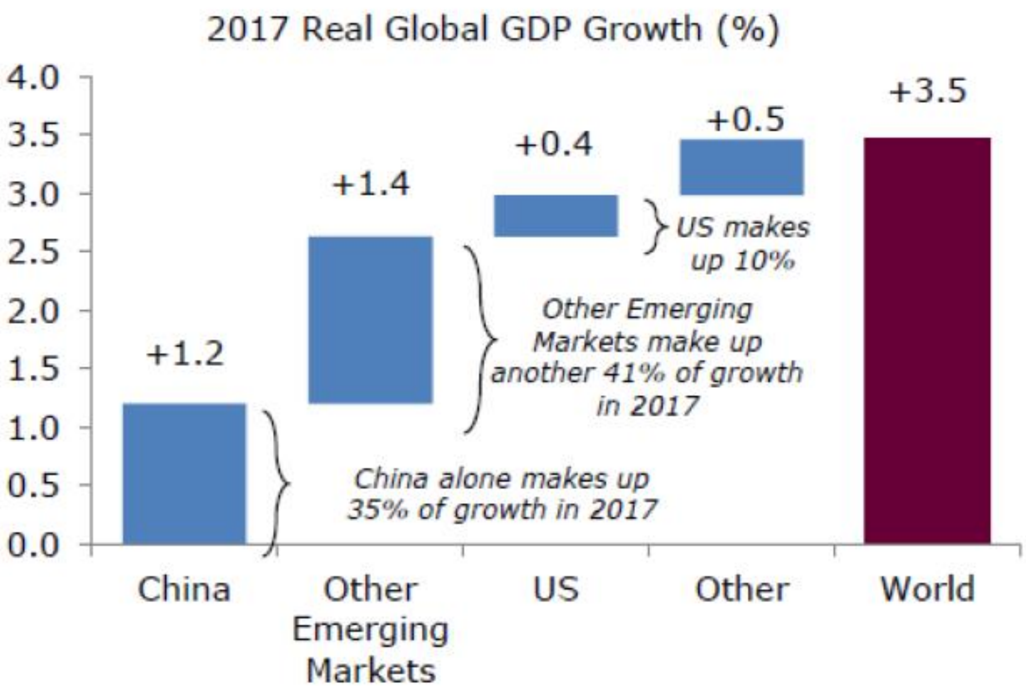
Global Growth & Recession

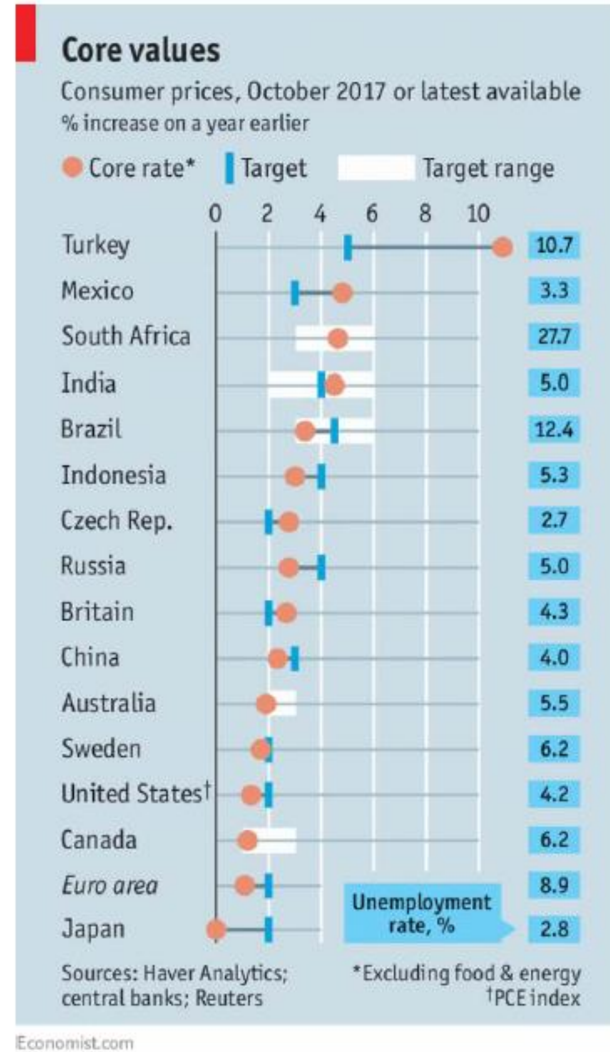


Source: Deutsche Bank

Global Growth is Positive

Global inflation and unemployment are low





Source: KKR; International Monetary Fund World Economic Outlook; Have Analytics. Data as of April 18, 2017.

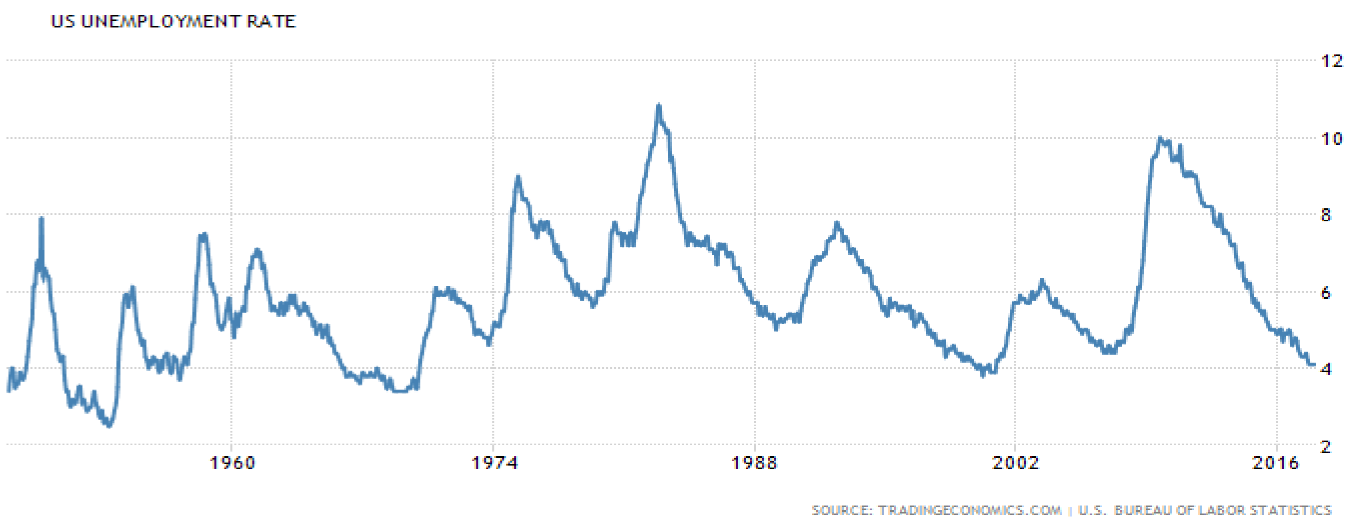
Source: The Economist, 4 November 2017

U.S. Unemployment Rates

2017 - 2018

The U.S. unemployment rate stood at 4.1% in 4Q/2017 and Jan/Feb of 2018 slightly above market expectations of 4% and at a 17-year low. The labor force participation rate rose by 0.3% to 63%, the highest in 5 months.

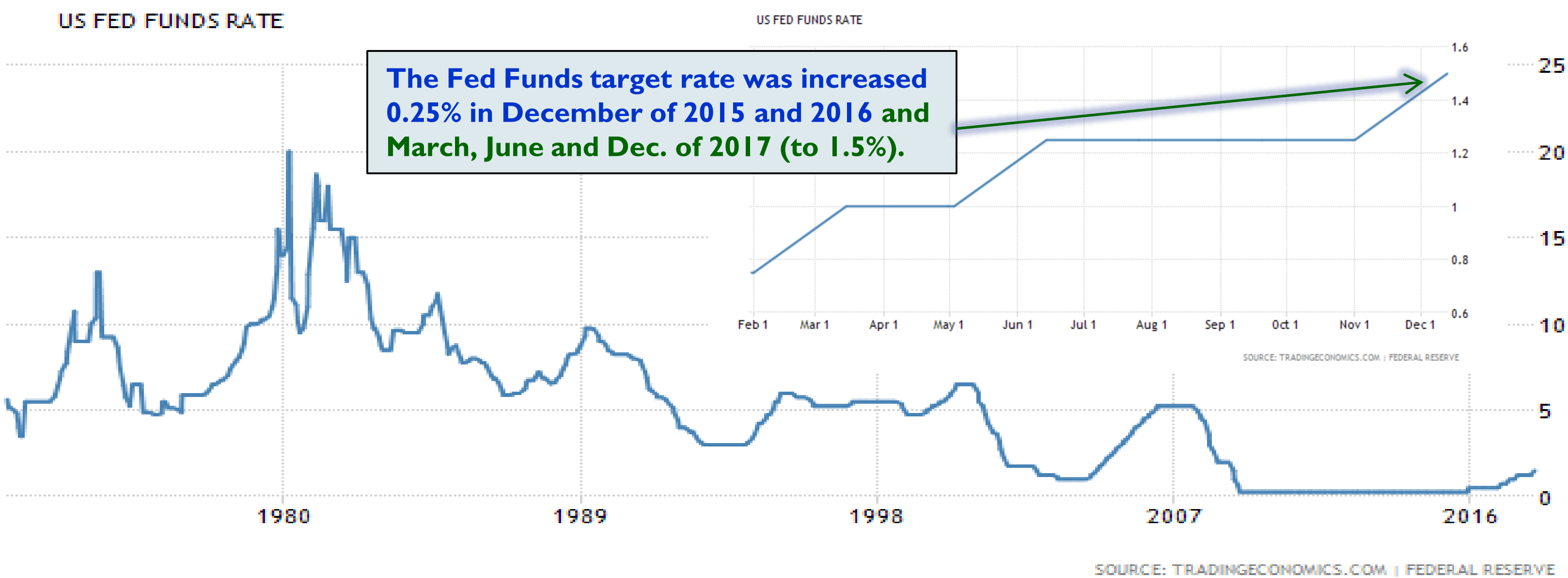
1950 to 2017



U.S. unemployment averaged 5.8% from 1948 until 2017, reaching an all time high of 10.8% in November of 1982 and a record low of 2.5% in May of 1953.

U.S. Fed Funds Rate (1971 to 2017)

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



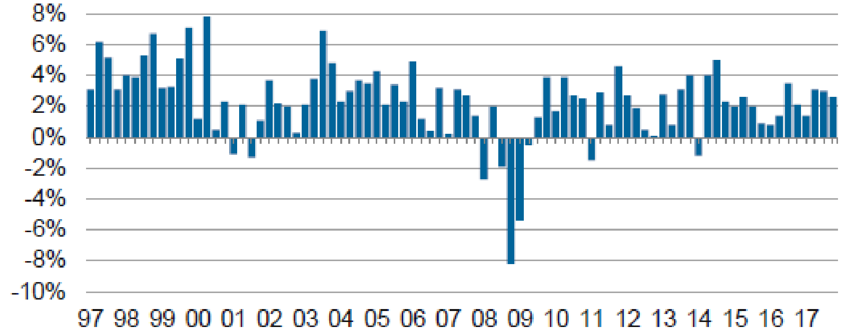
The Federal Reserve raised the target range for its federal funds rate by 25bps to 1%r to 1.25% during its June 2017 meeting, in line with market expectations. Policymakers kept forecasts for one more rate hike this year while increasing growth projections and lowering inflation expectations. In addition, details on how the central bank will start reducing its USD 4.5 trillion portfolio were also provided. Interest Rate in the United States averaged 5.79 percent from 1971 until 2017, reaching an all time high of 20 percent in March of 1980 and a record low of 0.25 percent in December of 2008.

Global Economic Update

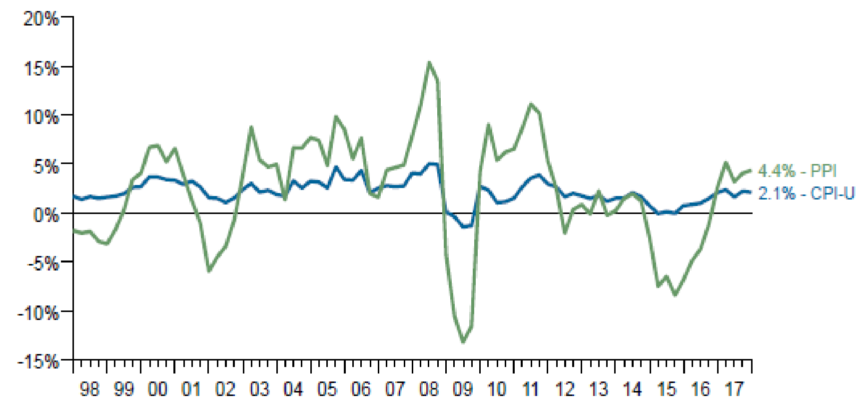
The Big Picture

- In the U.S., initial fourth quarter real GDP growth was 2.6% (annualized) following robust second and third quarter growth. The estimate for the full year is 2.3%.
- Headline CPI increased 0.1% in December, and 2.1% year-over-year. Core CPI, which excludes food and energy prices, increased 0.3% in December, and 1.8% over the trailing 12 months.
- The unemployment rate held steady at 4.1% in December even though the number of unemployed actively looking for work rose slightly.
- Non-U.S. developed economies continued to gain momentum. Third quarter GDP growth in the Euro zone was 2.6% (year-over-year) while inflation remained low (1.5% year-over-year as of November).
- The Fed hiked the Fed Funds target by 25 basis points at its December meeting to 1.25% - 1.50%. This move marked the third increase of 25 basis points during the year.
- Markets are pricing in an additional three hikes in 2018, while Fed projections are for rates to end 2018 between 2.00% and 2.25%.
- As expected, the ECB kept its interest rates on hold in the fourth quarter, but it confirmed that it plans to reduce asset purchases to €30bn a month in January 2018, down from €60bn.

U.S. Quarterly Real GDP Growth (20 Years)



Inflation Year-Over Year



U.S. Equity Market

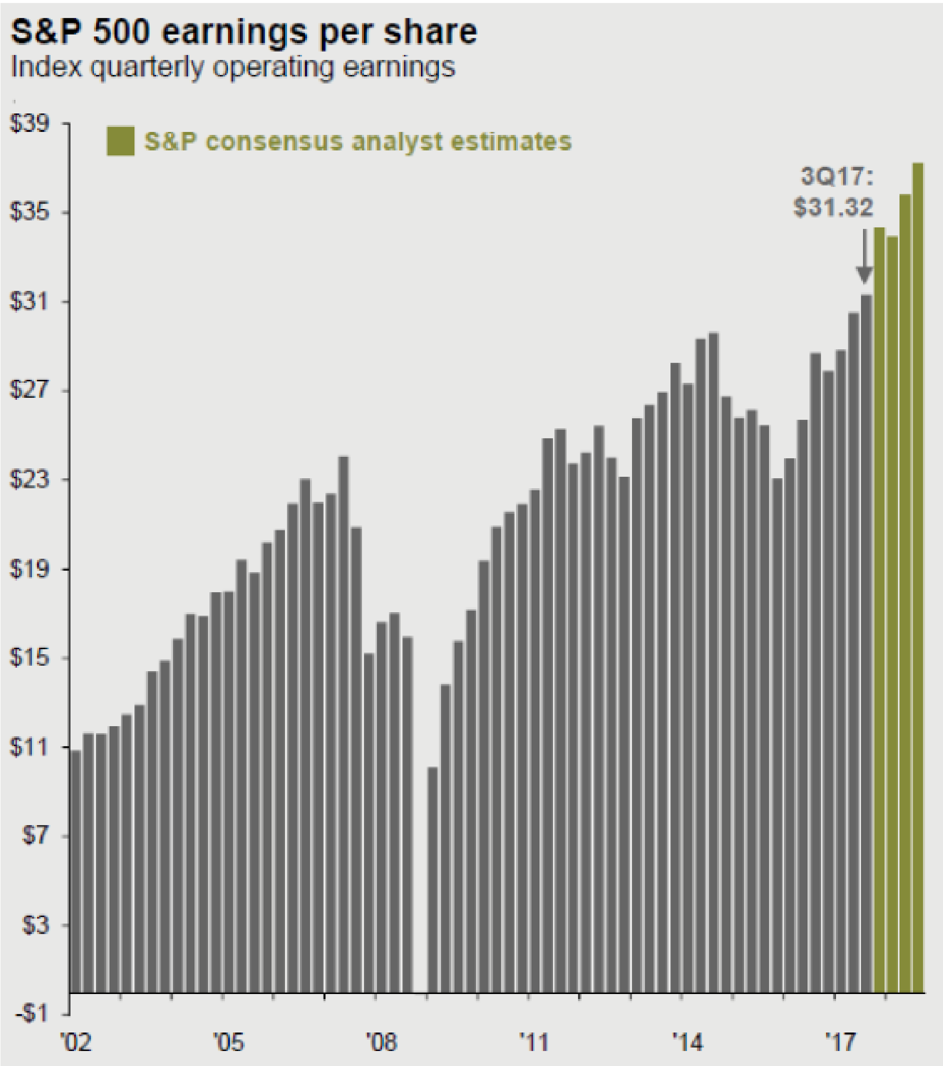
Periods Ending December 31, 2017

- The U.S. equity market continued its upward trajectory in the 4th quarter, closing out a strong year marked by low volatility despite U.S. political turbulence and global catastrophes.
- Large Cap outperformed Small Cap across styles for the quarter. Risk assets continued to lead the equity market in the quarter.
- Consumer Discretionary (+9.9%) and Tech (+9.0%) were the strongest performers with Apple, Amazon and Microsoft posting 10-20% returns.
- Growth outperformed Value in 4Q across the market cap range: The overweight to Tech and Consumer Discretionary in the Growth indices drove outperformance.
- Momentum-oriented stocks (MSCI Momentum Index +37.8%) posted their biggest annual gain since 1999, leaving valuations stretched in the space; MSCI Defensive Index returned 12.3% for 2017.

Large Cap Equity	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
Russell 1000 Growth	7.86	30.21	13.79	17.33	10.00	10.70
Russell 1000 Value	5.33	13.66	8.65	14.04	7.10	9.55
Mid Cap Equity						
Russell Midcap Growth	6.81	25.27	10.30	15.30	9.10	11.96
Russell Midcap Value	5.50	13.34	9.00	14.68	9.10	11.96
Small Cap Equity						
Russell 2000 Growth	4.59	22.17	10.28	15.21	9.19	11.57
Russell 2000 Value	2.05	7.84	9.55	13.01	8.17	10.66

Source: Callan, Russell Investment Group

S&P 500 Earnings



Source: JP Morgan Guide to the Markets, 1Q 2018 As of December 31, 2017

- Through 2/2, 50% of companies in the S&P 500 have reported actual results for the fourth quarter.
- 75% of S&P 500 companies have reported positive EPS surprises and 80% have reported positive sales surprises.
- The blended earnings growth rate for the S&P 500 is 13.4%.
- All 11 sectors are reporting earnings growth for the quarter, led by the Energy sector.
- Energy (+111%) and Materials *+41%) show the highest year-over-year earnings growth gains (Energy from a low base).

Source: FACTSET; Earnings Insights February 2, 2018

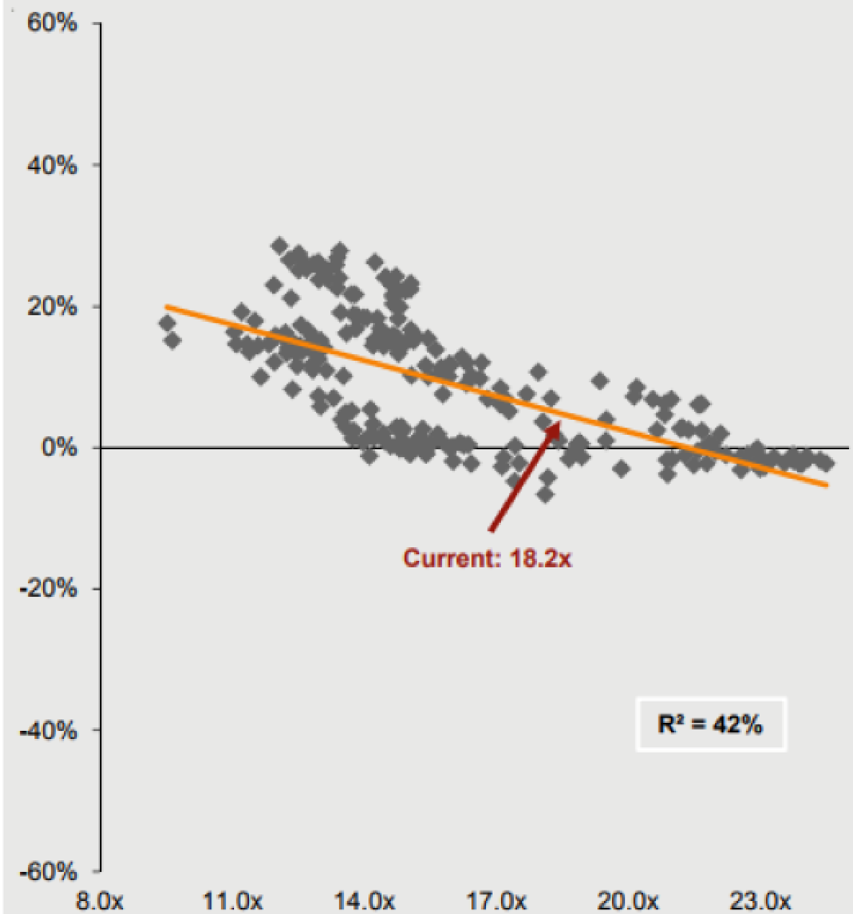
Valuations are Getting Rich – Prospects for Future Returns

Current P/E as % of 15-year avg. P/E*

	Value	Blend	Growth
Large	123.0%	125.6%	126.7%
Mid	117.6%	117.3%	118.6%
Small	110.9%	120.6%	132.6%

Forward P/E and subsequent 5-yr. annualized returns

S&P 500 Total Return Index



Source: JP Morgan Guide to the Markets®, 1Q 2018 As of December 31, 2017.

Non-U.S. Equity Market

Periods Ending December 31, 2017

- Non-U.S. developed equity (MSCI EAFE Index +4.2%) trailed U.S. (MSCI USA +6.4%) after beating in the previous three quarters. The U.S. benefited late in the quarter from much anticipated tax reform and a strong consumer/holiday period.
- The U.S. Dollar fell against the EUR and GBP, boosting USD returns, but was flat to the JPY.
- Emerging Markets (MSCI Emerging Markets Index +7.4%) outpaced Developed Markets for the fourth consecutive quarter (MSCI EAFE Index +4.2%), fueled by a soft dollar, synchronized global growth, and strong oil and commodity prices.
- China (+7.6%) performed in line with broader EM. Chinese technology continued to perform well but was less of a performance outlier than in previous quarters. China's growing and less-visible debt is an increasing concern.
- Developed non-U.S. small cap outperformed its large/mid cap counterparts modestly, led by Asia. Australian SC (+11.6%) and Japan SC (+8.7%) led the segments. Sectors were all positive for the quarter with only moderate dispersion.

Non-U.S. Equity	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
MSCI ACWI ex USA	5.00	27.19	7.83	6.80	1.84	8.75
MSCI ACWI ex USA Growth	5.77	32.01	9.29	7.97	2.40	8.66
MSCI ACWI ex USA Value	4.23	22.66	6.31	5.58	1.23	8.78
MSCI EAFE	4.23	25.03	7.80	7.90	1.94	8.11
MSCI EAFE (local)	3.66	15.23	8.54	11.44	3.30	7.39
Regional Equity						
MSCI Europe	2.21	25.51	6.69	7.37	1.34	8.04
MSCI Europe (local)	1.27	13.06	8.34	10.10	3.52	7.59
MSCI Japan	8.49	23.99	11.62	11.16	3.17	6.97
MSCI Japan (local)	8.57	19.75	9.33	17.20	3.25	6.60
MSCI Pacific ex Japan	7.01	25.88	7.51	5.46	3.55	11.64
MSCI Pacific ex Japan (loc)	7.09	19.43	8.61	9.53	4.14	9.68

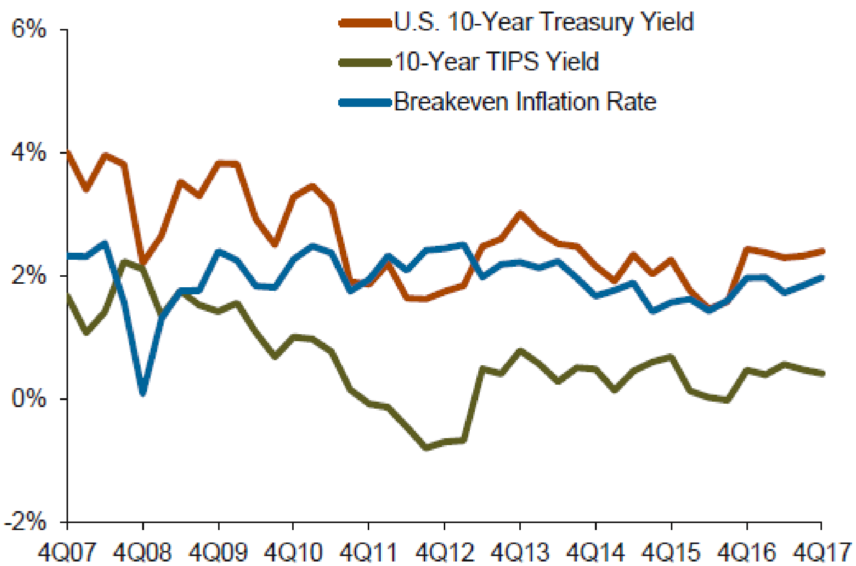
Emerging/Frontier Markets	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
MSCI Emerging Markets	7.44	37.28	9.10	4.35	1.68	12.31
MSCI Emerging Markets (loc)	5.68	30.55	10.51	7.98	4.14	12.56
MSCI Frontier Markets	5.61	31.86	5.01	9.27	-1.35	8.56
Non-U.S. Small Cap Equity						
MSCI EAFE Small Cap	6.05	33.01	14.20	12.85	5.77	12.24
MSCI Em Mkts Small Cap	9.23	33.84	8.44	5.41	2.78	13.32

Source: Callan, MSCI

Yield Curve Changes

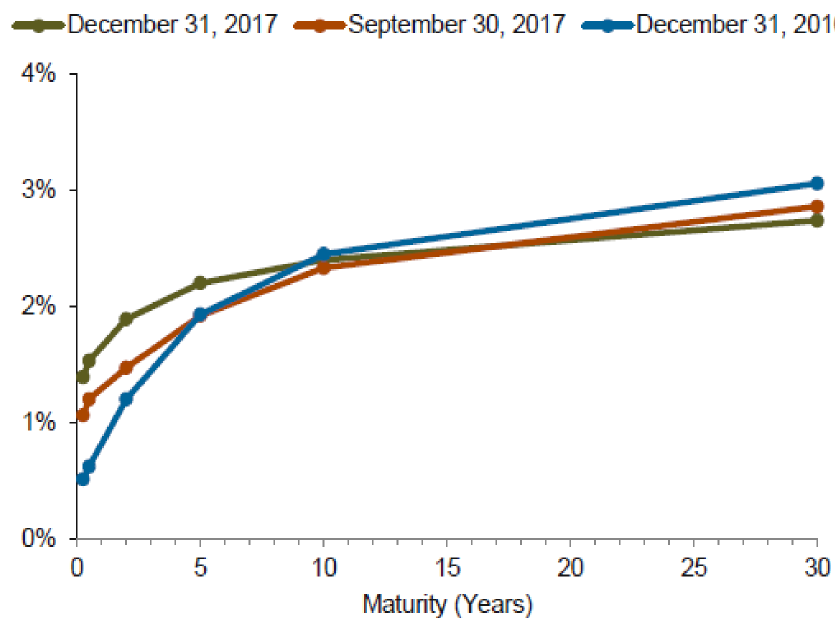
Periods Ending December 31, 2017

Historical 10-Year Yields



Source: Bloomberg

U.S. Treasury Yield Curves



Source: U.S. Department of the Treasury

- The Treasury yield curve flattened during the quarter. The yield on the 3-month rose 33 bps while the yield on the 30-year fell 12 bps.
- Breakeven inflation rose in the quarter but is flat for the year.

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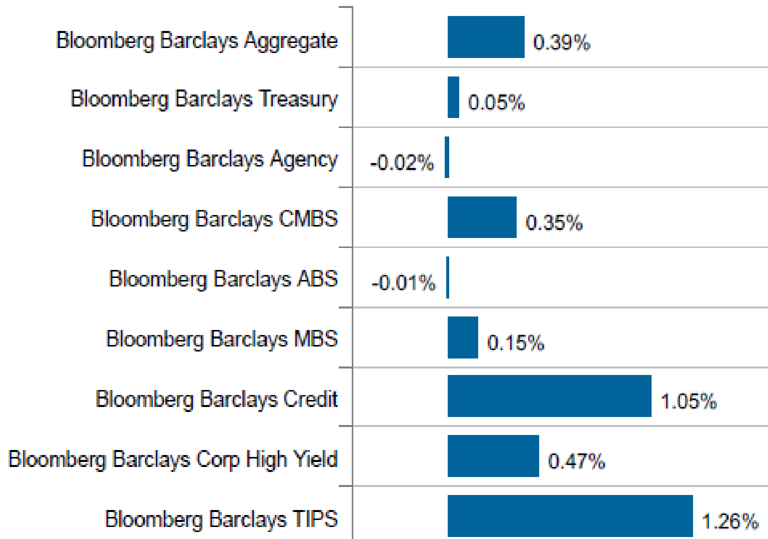
Total Rates of Return by Bond Sector

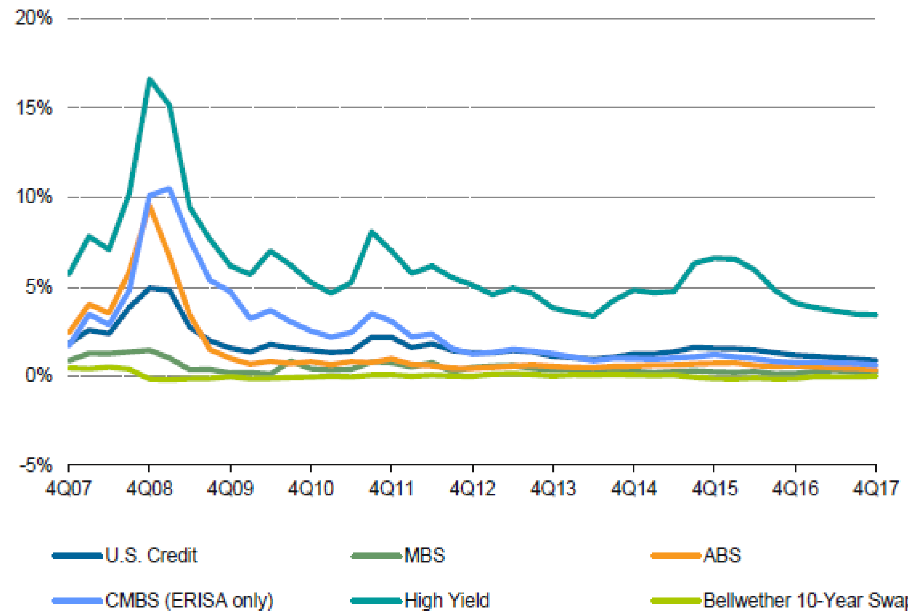
Periods Ending December 31, 2017

Total Returns



Source: Bloomberg Barclays

Effective Yield Over Treasuries

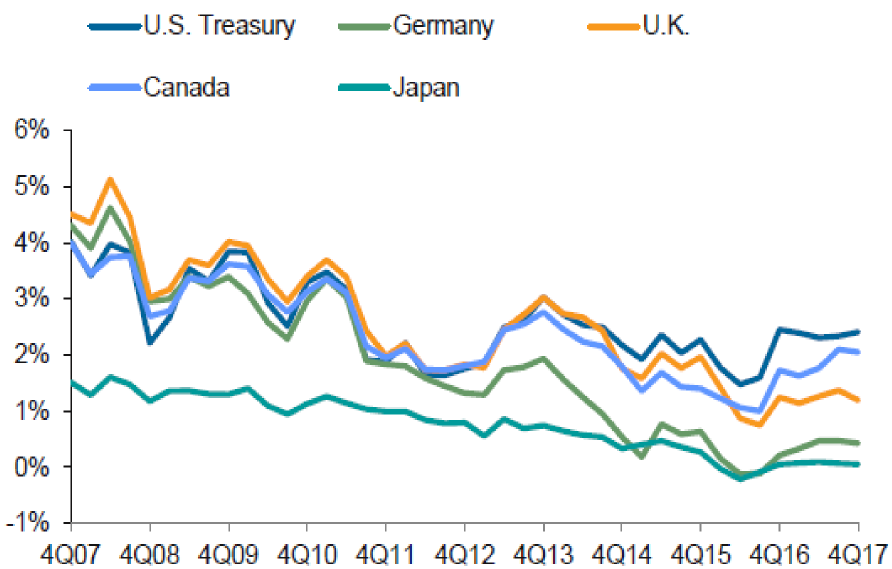


- Increasing inflation expectations provided a tailwind to TIPS and the sector was the best performer for the quarter (+1.3%).
- Demand for yield saw spreads contract in Credit, overcoming rising rates to post a return of 1.1%.
- High yield spreads have contracted by 66 bps since 4Q 2016, helping the sector return 7.5% for the year.

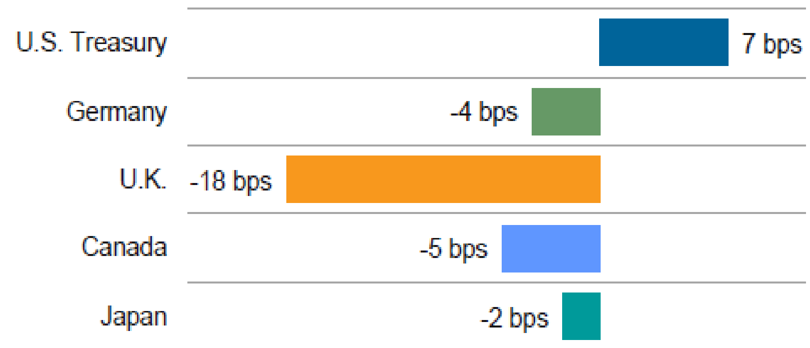
Global Fixed Income

Periods Ending December 31, 2017

10-Year Global Government Bond Yields

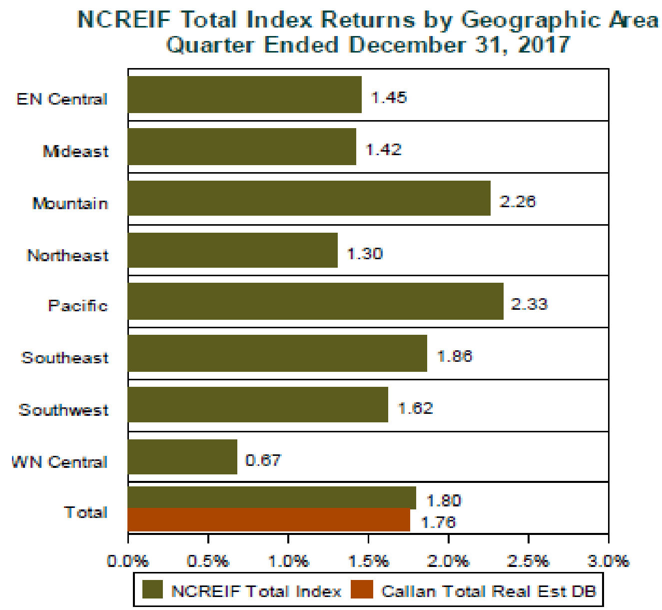


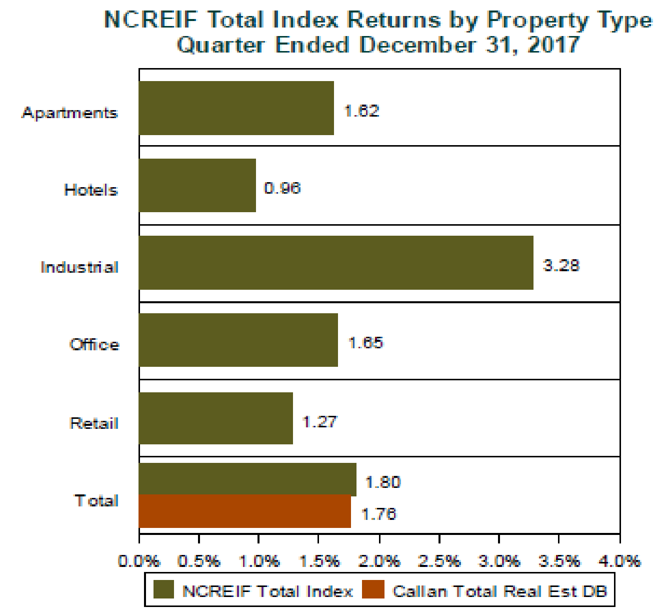
Change in 10-year Yields from 3Q17 to 4Q17

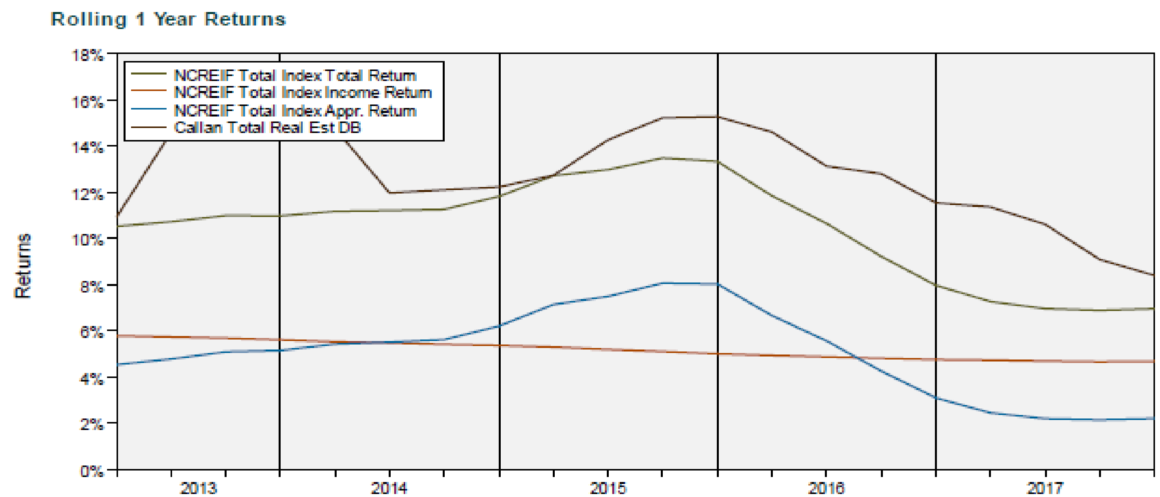


- Worldwide, rates remain low.
- The U.S. saw the yield on the 10-year increase seven basis points during the quarter. Yields in other global developed economies fell.

Real Estate Overview







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Appendix of Supporting Materials

TFFR Update as of December 31, 2017

Callan's Quarterly Reports of investment performance are available on the following web address:
http://www.nd.gov/rio/SIB/Board/SIB%20Meeting%20Materials/2018-02-23.pdf

Board members can review monthly manager level performance using the following web address:
http://www.nd.gov/rio/RIO_ref/performance/TFFR/201712.pdf

ND TEACHERS FUND FOR RETIREMENT
INVESTMENT PERFORMANCE REPORT AS OF JANUARY 31, 2018

	January-18					December-17					Current Fiscal YTD		Prior Year FY17	
		Allocation		Month			Allocation		Quarter					
	Market Value	Actual	Policy	Gross (4)	Net	Market Value	Actual	Policy	Gross (4)	Net	Gross (4)	Net	Gross (4)	Net
TOTAL FUND	**2,549,470,302**	**100.0%**	**100.0%**	**3.20%**	**3.18%**	**2,473,097,233**	**100.0%**	**100.0%**	**3.99%**	**3.93%**	**11.47%**	**11.31%**	**13.22%**	**12.92%**
POLICY TARGET BENCHMARK				*2.83%*	*2.83%*				*3.42%*	*3.42%*	*9.65%*	*9.65%*	*11.63%*	*11.63%*
TOTAL RELATIVE RETURN				0.37%	0.35%				0.57%	0.51%	1.82%	1.66%	1.60%	1.29%
GLOBAL EQUITIES	***1,533,432,321***	***60.1%***	***58.0%***	***5.24%***	***5.20%***	***1,458,474,983***	***59.0%***	***58.0%***	***5.75%***	***5.69%***	***17.54%***	***17.36%***	***19.10%***	***18.81%***
Benchmark			*52.0%*	***4.60%***	***4.60%***			*52.0%*	***5.27%***	***5.27%***	***14.89%***	***14.89%***	***18.58%***	***18.58%***
Epoch Global Choice (1)	198,437,424	7.8%	7.0%	5.57%	5.41%	188,023,857	7.6%	7.0%	6.05%	5.88%	19.87%	19.31%	17.71%	16.96%
LSV Global Value Equity	250,012,019	9.8%	9.0%	5.31%	5.28%	237,177,816	9.6%	9.0%	5.46%	5.43%	18.45%	18.26%	23.50%	23.29%
Total Global Equities	**448,449,443**	**17.6%**	**16.0%**	**5.42%**	**5.34%**	**425,201,673**	**17.2%**	**16.0%**	**5.72%**	**5.63%**	**19.08%**	**18.73%**	**21.01%**	**20.57%**
MSCI World				***5.28%***	***5.28%***				***5.51%***	***5.51%***	***16.45%***	***16.45%***	***18.20%***	***18.20%***
Domestic - broad	***587,884,737***	***23.1%***	***21.5%***	***5.29%***	***5.27%***	***561,367,490***	***22.7%***	***21.5%***	***6.36%***	***6.32%***	***17.22%***	***17.09%***	***17.35%***	***17.07%***
Benchmark				***4.84%***	***4.84%***				***5.85%***	***5.85%***	***16.26%***	***16.26%***	***19.56%***	***19.56%***
LA Capital Large Cap Growth	181,689,336	7.1%	6.6%	6.82%	6.82%	169,850,458	6.9%	6.6%	7.24%	7.19%	20.07%	19.95%	15.90%	15.66%
Russell 1000 Growth				***7.08%***	***7.08%***				***7.86%***	***7.86%***	***22.32%***	***22.32%***	***20.42%***	***20.42%***
LA Capital 60% Large Cap/40% Large Cap Active Extension	93,839,932	3.7%	3.3%	5.38%	5.38%	92,419,880	3.7%	3.3%	6.15%	6.13%	16.40%	16.34%	15.56%	15.44%
Russell 1000				***5.49%***	***5.49%***				***6.59%***	***6.59%***	***17.48%***	***17.48%***	***18.03%***	***18.03%***
NTAM - Quant Enhanced S&P 500	87,751,989	3.4%	3.3%	5.81%	5.81%	82,820,974	3.3%	3.3%	7.55%	7.55%	19.39%	19.39%	16.51%	16.51%
Clifton Group Enhanced S&P 500	96,888,598	3.8%	3.3%	5.38%	5.38%	91,815,699	3.7%	3.3%	6.88%	6.88%	17.66%	17.64%	17.97%	17.72%
S&P 500				***5.73%***	***5.73%***				***6.65%***	***6.65%***	***17.81%***	***17.81%***	***17.90%***	***17.90%***
Total Large Cap Domestic	**460,169,855**	**18.0%**	**16.6%**	**6.03%**	**6.03%**	**436,907,011**	**17.7%**	**16.6%**	**6.99%**	**6.96%**	**18.65%**	**18.58%**	**16.36%**	**16.20%**
Russell 1000 (2)				***5.49%***	***5.49%***				***6.59%***	***6.59%***	***17.48%***	***17.48%***	***18.03%***	***18.03%***
Atlanta Capital Small Cap Equity Fund	62,909,533	2.5%	2.4%	3.72%	3.54%	60,756,554	2.5%	2.4%	5.35%	5.17%	13.13%	12.54%	15.83%	14.98%
Clifton Group Enhanced Russell 2000	64,805,349	2.5%	2.4%	1.73%	1.73%	63,703,925	2.6%	2.4%	3.38%	3.38%	11.57%	11.45%	24.97%	24.44%
Total Small Cap Domestic	**127,714,882**	**5.0%**	**4.8%**	**2.70%**	**2.62%**	**124,460,479**	**5.0%**	**4.8%**	**4.39%**	**4.31%**	**12.51%**	**12.17%**	**20.74%**	**20.08%**
Russell 2000				***2.61%***	***2.61%***				***3.34%***	***3.34%***	***12.05%***	***12.05%***	***24.60%***	***24.60%***
International - broad	***414,544,868***	***16.3%***	***14.5%***	***6.06%***	***6.04%***	***390,935,293***	***15.8%***	***14.5%***	***5.44%***	***5.40%***	***20.10%***	***19.98%***	***21.37%***	***21.17%***
Benchmark				***5.36%***	***5.36%***				***4.84%***	***4.84%***	***17.16%***	***17.16%***	***20.33%***	***20.33%***
NTAM - MSCI World ex-US Index	156,720,808	6.1%	5.9%	4.72%	4.72%	149,664,273	6.1%	5.9%	3.96%	3.95%	15.07%	15.03%	19.94%	19.92%
MSCI World Ex US				***4.66%***	***4.66%***				***4.23%***	***4.23%***	***15.22%***	***15.22%***	***19.49%***	***19.49%***
William Blair International Leaders	79,845,785	3.1%	3.5%	6.47%	6.38%	75,056,738	3.0%	3.5%	5.54%	5.44%	21.02%	20.70%	20.15%	19.77%
MSCI ACWI ex-US IMI (Net)				***5.48%***	***5.48%***				***5.23%***	***5.23%***	***17.94%***	***17.94%***	***20.43%***	***20.43%***
DFA Intl. Small Cap Value Portfolio (4)	43,789,326	1.7%	1.2%	4.40%	4.40%	41,944,988	1.7%	1.2%	3.83%	3.83%	16.63%	16.63%	28.80%	28.80%
Wellington International Small Cap Opportunities	42,779,258	1.7%	1.2%	6.88%	6.88%	40,027,052	1.6%	1.2%	8.04%	7.83%	25.88%	25.39%	20.62%	19.62%
S&P/Citigroup BMI EPAC < $2BN				***5.31%***	***5.31%***				***7.60%***	***7.60%***	***19.53%***	***19.53%***	***20.89%***	***20.89%***
Total Developed International	**323,135,177**	**12.7%**	**11.8%**	**5.39%**	**5.36%**	**306,693,052**	**12.4%**	**11.8%**	**4.89%**	**4.83%**	**18.20%**	**18.03%**	**21.30%**	**21.05%**
MSCI World Ex US (3)				***4.66%***	***4.66%***				***4.23%***	***4.23%***	***15.22%***	***15.22%***	***19.49%***	***19.49%***
Axiom Emerging Markets Equity Fund (4)	68,021,559	2.7%	2.1%	9.20%	9.20%	62,288,851	2.5%	2.1%	7.25%	7.25%	28.84%	28.84%	22.29%	22.29%
DFA Emerging Markets Small Cap Portfolio (4)	23,388,132	0.9%	0.7%	6.54%	6.54%	21,953,390	0.9%	0.7%	8.58%	8.58%	22.70%	22.70%	19.53%	19.53%
Total Emerging Markets	**91,409,691**	**3.6%**	**2.8%**	**8.51%**	**8.51%**	**84,242,241**	**3.4%**	**2.8%**	**7.58%**	**7.58%**	**27.30%**	**27.30%**	**21.55%**	**21.55%**
MSCI Emerging Markets				***8.34%***	***8.34%***				***7.44%***	***7.44%***	***25.58%***	***25.58%***	***23.75%***	***23.75%***

ND TEACHERS FUND FOR RETIREMENT
INVESTMENT PERFORMANCE REPORT AS OF JANUARY 31, 2018

	January-18					December-17					Current Fiscal YTD		Prior Year FY17	
		Allocation		Month			Allocation		Quarter					
	Market Value	Actual	Policy	Gross (4)	Net	Market Value	Actual	Policy	Gross (4)	Net	Gross (4)	Net	Gross (4)	Net
Private Equity														
Adams Street-Brinson 1998 Partnership Fund	57,703	0.0%		0.00%	0.00%	57,703	0.0%		0.17%	0.17%	-0.24%	-0.24%	-0.16%	-0.16%
Adams Street-Brinson 1999 Partnership Fund	149,663	0.0%		0.00%	0.00%	149,663	0.0%		0.03%	0.03%	-3.60%	-3.60%	-0.25%	-0.25%
Adams Street-Brinson 2000 Partnership Fund	258,287	0.0%		0.00%	0.00%	258,287	0.0%		2.64%	2.64%	1.27%	1.27%	3.00%	3.00%
Adams Street-Brinson 2001 Partnership Fund	357,541	0.0%		0.00%	0.00%	480,168	0.0%		-0.14%	-0.14%	-2.88%	-2.88%	7.59%	7.59%
Adams Street-Brinson 2002 Partnership Fund	73,975	0.0%		0.00%	0.00%	73,975	0.0%		3.60%	3.60%	6.40%	6.40%	19.56%	19.56%
Adams Street-Brinson 2003 Partnership Fund	106,371	0.0%		0.00%	0.00%	106,371	0.0%		5.23%	5.23%	5.62%	5.62%	11.44%	11.44%
Total Adams Street-Brinson Partnership Funds	1,003,540	0.0%		0.00%	0.00%	1,126,167	0.0%		11.53%	11.53%	5.91%	5.91%	7.49%	7.49%
Adams Street-Brinson 1999 Non-US Partnership Fund	32,674	0.0%		0.00%	0.00%	32,674	0.0%		1.90%	1.90%	1.90%	1.90%	1.60%	1.60%
Adams Street-Brinson 2000 Non-US Partnership Fund	245,870	0.0%		0.00%	0.00%	245,870	0.0%		0.55%	0.55%	0.55%	0.55%	13.07%	13.07%
Adams Street-Brinson 2001 Non-US Partnership Fund	74,190	0.0%		0.00%	0.00%	74,190	0.0%		-0.85%	-0.85%	-0.85%	-0.85%	-4.37%	-4.37%
Adams Street-Brinson 2002 Non-US Partnership Fund	120,368	0.0%		0.00%	0.00%	120,368	0.0%		0.42%	0.42%	-1.83%	-1.83%	-5.01%	-5.01%
Adams Street-Brinson 2003 Non-US Partnership Fund	91,175	0.0%		0.00%	0.00%	91,175	0.0%		-4.80%	-4.80%	-0.31%	-0.31%	26.53%	26.53%
Adams Street-Brinson 2004 Non-US Partnership Fund	107,795	0.0%		0.00%	0.00%	126,208	0.0%		1.93%	1.93%	1.32%	1.32%	9.42%	9.42%
Total Adams Street-Brinson Non-US Partnership Fund	672,073	0.0%		0.00%	0.00%	690,486	0.0%		-0.85%	-0.85%	1.01%	1.01%	5.22%	5.22%
Adams Street 2008 Non-US Partnership Fd	3,607,155	0.1%		0.00%	0.00%	3,607,155	0.1%		5.79%	5.79%	8.63%	8.63%	15.67%	15.67%
Adams Street-Brinson BVCF IV	1,539,349	0.1%		0.00%	0.00%	1,539,349	0.1%		-0.02%	-0.02%	-3.40%	-3.40%	7.91%	7.91%
Adams Street Direct Co-investment Fund	672,868	0.0%		0.00%	0.00%	672,868	0.0%		2.04%	2.04%	4.88%	4.88%	-4.11%	-4.11%
Adams Street 2010 - Direct Fund	440,829	0.0%		0.00%	0.00%	440,829	0.0%		9.01%	9.01%	9.01%	9.01%	12.03%	12.03%
Adams Street 2010 - Non-US Emerging Mkts	712,225	0.0%		0.00%	0.00%	712,225	0.0%		4.86%	4.86%	7.76%	7.76%	10.13%	10.13%
Adams Street 2010 - Non-US Developed Mkts	1,414,437	0.1%		0.00%	0.00%	1,414,437	0.1%		6.94%	6.94%	11.39%	11.39%	21.63%	21.63%
Adams Street 2010 - Partnership Fund	2,896,971	0.1%		0.00%	0.00%	2,896,971	0.1%		3.31%	3.31%	4.15%	4.15%	15.12%	15.12%
Total Adams Street 2010 Funds	5,464,463	0.2%		0.00%	0.00%	5,464,463	0.2%		24.13%	24.13%	33.71%	33.71%	15.79%	15.79%
Adams Street 2015 Global Fund	5,036,350	0.2%		0.00%	0.00%	4,346,021	0.2%		5.32%	5.32%	5.18%	5.18%	51.76%	51.76%
Adams Street 2016 Global Fund	2,678,788	0.1%		0.00%	0.00%	2,492,290	0.1%		1.78%	1.78%	1.13%	1.13%	N/A	N/A
Adams Street 2017 Global Fund	1,201,878	0.0%		0.00%	0.00%	1,201,878	0.0%		N/A	N/A	N/A	N/A	N/A	N/A
Blackrock PEP	10,206,102	0.4%		0.00%	0.00%	9,414,546	0.4%		0.06%	0.06%	0.06%	0.06%	N/A	N/A
Matlin Patterson - Global Opportunities II	517,394	0.0%		0.00%	0.00%	517,394	0.0%		-2.81%	-2.81%	-2.89%	-2.89%	-28.84%	-28.84%
Matlin Patterson - Global Opportunities III	10,476,482	0.4%		0.00%	0.00%	10,476,482	0.4%		6.19%	6.19%	2.01%	2.01%	6.84%	6.84%
InvestAmerica - Lewis and Clark Fund	754,420	0.0%		0.00%	0.00%	728,494	0.0%		-2.52%	-2.52%	-2.52%	-2.52%	22.02%	22.02%
InvestAmerica - L&C II	3,048,402	0.1%		0.00%	0.00%	3,048,402	0.1%		11.14%	11.14%	11.14%	11.14%	10.83%	10.83%
Corsair III	6,312,994	0.2%		0.00%	0.00%	6,312,994	0.3%		1.15%	1.15%	0.13%	0.13%	6.83%	6.83%
Corsair IV	11,272,383	0.4%		0.00%	0.00%	11,288,898	0.5%		9.50%	9.50%	9.01%	9.01%	22.98%	22.98%
Capital International - Fund V	758,081	0.0%		-1.63%	-1.63%	758,081	0.0%		-19.32%	-19.32%	-21.59%	-21.59%	-49.48%	-49.48%
Capital International - Fund VI	11,940,701	0.5%		-0.29%	-0.29%	11,995,111	0.5%		3.70%	3.70%	3.03%	3.03%	9.55%	9.55%
EIG (formerly TCW)	2,577,230	0.1%		4.05%	4.05%	2,476,829	0.1%		-11.96%	-11.96%	-8.24%	-8.24%	12.11%	12.11%
Quantum - Energy Partners	1,753,328	0.1%		0.00%	0.00%	1,753,328	0.1%		3.94%	3.94%	-37.63%	-37.63%	68.38%	68.38%
Total Private Equity (4)	**82,553,274**	**3.2%**	**6.0%**	**0.07%**	**0.07%**	**80,970,527**	**3.3%**	**6.0%**	**3.51%**	**3.51%**	**1.01%**	**1.01%**	**11.12%**	**11.12%**

ND TEACHERS FUND FOR RETIREMENT
INVESTMENT PERFORMANCE REPORT AS OF JANUARY 31, 2018

	January-18					December-17					Current Fiscal YTD		Prior Year FY17	
		Allocation		Month			Allocation		Quarter					
	Market Value	Actual	Policy	Gross (4)	Net	Market Value	Actual	Policy	Gross (4)	Net	Gross (4)	Net	Gross (4)	Net
GLOBAL FIXED INCOME	***570,152,627***	***22.4%***	***23.0%***	***0.50%***	***0.50%***	***559,989,808***	***22.6%***	***23.0%***	***0.73%***	***0.68%***	***3.18%***	***3.06%***	***4.93%***	***4.68%***
Benchmark				***0.24%***	***0.24%***				***0.73%***	***0.73%***	***2.47%***	***2.47%***	***0.94%***	***0.94%***
Domestic Fixed Income	***448,300,308***	***17.6%***	***17.0%***	***-0.39%***	***-0.39%***	***442,703,933***	***17.9%***	***17.0%***	***0.83%***	***0.79%***	***2.10%***	***2.01%***	***6.24%***	***6.02%***
Benchmark				***-0.74%***	***-0.74%***				***0.41%***	***0.41%***	***0.78%***	***0.78%***	***2.62%***	***2.62%***
PIMCO Distressed Senior Credit Opportunities II (4)	48,909,269	1.9%	1.9%	0.98%	0.98%	48,561,476	2.0%	2.0%	1.36%	1.36%	6.69%	6.69%	17.08%	17.08%
Bloomberg Aggregate				***-1.15%***	***-1.15%***				***0.39%***	***0.39%***	***0.07%***	***0.07%***	***-0.31%***	***-0.31%***
State Street Long U.S. Treasury Index NL Fund	50,258,823	2.0%	1.3%	-3.23%	-3.23%	52,071,775	2.1%	1.3%	2.37%	2.35%	-0.37%	-0.38%	-7.23%	-7.27%
Bloomberg Long Treasuries				***-3.23%***	***-3.23%***				***2.37%***	***2.37%***	***-0.37%***	***-0.37%***	***-7.22%***	***-7.22%***
PIMCO Unconstrained Bond Fund	106,975,337	4.2%	1.7%	-1.12%	-1.12%	108,471,784	4.4%	1.7%	0.54%	0.51%	2.32%	2.18%	9.71%	9.22%
3m LIBOR				***0.15%***	***0.15%***				***0.36%***	***0.36%***	***0.84%***	***0.84%***	***0.98%***	***0.98%***
Declaration Total Return Bond Fund (4)	39,544,196	1.6%	1.6%	-0.12%	-0.12%	39,695,066	1.6%	1.6%	0.82%	0.82%	2.18%	2.18%	4.99%	4.99%
3m LIBOR				***0.15%***	***0.15%***				***0.36%***	***0.36%***	***0.84%***	***0.84%***	***0.98%***	***0.98%***
JP Morgan Mortgage Backed Securities	56,004,964	2.2%	2.6%	-0.87%	-0.87%	56,644,416	2.3%	2.6%	0.11%	0.06%	0.09%	-0.02%	0.81%	0.61%
PIMCO Agency MBS	17,007	0.0%	3.9%	5.45%	5.45%	374,156	0.0%	3.9%	2.00%	0.88%	8.63%	7.39%	0.36%	0.19%
Bloomberg Mortgage Backed Securities Index				***-1.17%***	***-1.17%***				***0.15%***	***0.15%***	***-0.07%***	***-0.07%***	***-0.06%***	***-0.06%***
Total Investment Grade Fixed Income	**301,709,597**	**11.8%**	**13.0%**	**-0.96%**	**-0.96%**	**305,818,673**	**12.4%**	**13.0%**	**0.72%**	**0.69%**	**1.40%**	**1.33%**	**3.79%**	**3.65%**
Bloomberg Aggregate				***-1.15%***	***-1.15%***				***0.39%***	***0.39%***	***0.07%***	***0.07%***	***-0.31%***	***-0.31%***
Ares ND Credit Strategies	28,380,664	1.1%	1.1%	0.00%	0.00%	19,857,421	0.8%	0.8%	0.10%	0.10%	N/A	N/A	N/A	N/A
Cerberus ND Private Credit Fund	27,013,797	1.1%	1.1%	0.67%	0.67%	26,834,566	1.1%	1.1%	4.17%	4.17%	N/A	N/A	N/A	N/A
S&P LSTA Leveraged Loan B Index				***1.01%***	***1.01%***				***1.09%***	***1.09%***				
Loomis Sayles High Yield	69,957,929	2.7%	1.0%	1.21%	1.21%	69,118,994	2.8%	1.3%	0.81%	0.67%	4.33%	4.06%	13.48%	12.91%
PIMCO BRAVO II (4)	20,871,021	0.8%	0.8%	0.79%	0.79%	20,706,979	0.8%	0.8%	1.07%	1.07%	1.87%	1.87%	13.38%	13.38%
GS Mezzanine Partners 2006 Offshore, L.P. (4)	48,745	0.0%	0.0%	0.00%	0.00%	48,745	0.0%	0.0%	2.13%	2.13%	6.91%	6.91%	59.81%	59.81%
GS Mezzanine Partners V Offshore, L.P. (4)	318,556	0.0%	0.0%	0.00%	0.00%	318,556	0.0%	0.0%	-7.29%	-7.29%	-2.79%	-2.79%	-13.28%	-13.28%
Bloomberg High Yield 2% Issuer Constrained Index				***0.60%***	***0.60%***				***0.47%***	***0.47%***				
Total Below Investment Grade Fixed Income	**146,590,711**	**5.7%**	**4.0%**	**0.84%**	**0.84%**	**136,885,260**	**5.5%**	**4.0%**	**1.10%**	**1.03%**	**3.70%**	**3.53%**	**13.30%**	**12.86%**
Bloomberg High Yield 2% Issuer Constrained Index				***0.60%***	***0.60%***				***0.47%***	***0.47%***	***3.07%***	***3.07%***	***12.69%***	***12.69%***
International Fixed Income	**121,852,319**	**4.8%**	**6.0%**	**3.89%**	**3.89%**	**117,285,874**	**4.7%**	**6.0%**	**0.40%**	**0.31%**	***7.23%***	***7.04%***	***1.15%***	***0.79%***
Benchmark				***3.03%***	***3.03%***				***1.63%***	***1.63%***	***7.30%***	***7.30%***	***-3.80%***	***-3.80%***
Developed Investment Grade Int'l FI														
UBS Global (ex-US) Bond Strategy	45,420,952	1.8%	3.0%	3.16%	3.16%	44,028,406	1.8%	3.0%	1.56%	1.46%	7.28%	7.10%	-3.69%	-4.00%
Bloomberg Global Aggregate ex-US				***3.03%***	***3.03%***				***1.63%***	***1.63%***	***7.30%***	***7.30%***	***-3.80%***	***-3.80%***
Brandywine Global Opportunistic Fixed Income	76,431,367	3.0%	3.0%	4.33%	4.33%	73,257,468	3.0%	3.0%	-0.28%	-0.38%	7.22%	7.01%	4.78%	4.38%
Bloomberg Global Aggregate (ex-US)				***1.19%***	***1.19%***				***1.08%***	***1.08%***	***4.09%***	***4.09%***	***-2.18%***	***-2.18%***
Total Developed Investment Grade Int'l FI	**121,852,319**	**4.8%**	**6.0%**	**3.89%**	**3.89%**	**117,285,874**	**4.7%**	**6.0%**	**0.40%**	**0.31%**	**7.23%**	**7.04%**	**1.15%**	**0.79%**
Bloomberg Global Aggregate ex-US				***3.03%***	***3.03%***				***1.63%***	***1.63%***	***7.30%***	***7.30%***	***-3.80%***	***-3.80%***

ND TEACHERS FUND FOR RETIREMENT

INVESTMENT PERFORMANCE REPORT AS OF JANUARY 31, 2018

	January-18					December-17					Current Fiscal YTD		Prior Year FY17	
		Allocation		Month			Allocation		Quarter					
	Market Value	Actual	Policy	Gross (4)	Net	Market Value	Actual	Policy	Gross (4)	Net	Gross (4)	Net	Gross (4)	Net
GLOBAL REAL ASSETS	***420,406,979***	***16.5%***	***18.0%***	***0.04%***	***0.04%***	***409,702,574***	***16.6%***	***18.0%***	***2.57%***	***2.48%***	***3.44%***	***3.29%***	***6.20%***	***5.78%***
Benchmark				***0.58%***	***0.58%***				***1.15%***	***1.15%***	***3.06%***	***3.06%***	***4.82%***	***4.82%***
Global Real Estate														
Invesco Core Real Estate - U.S.A., L.P.	121,644,359			0.00%	0.00%	109,885,627			2.26%	2.18%	3.75%	3.58%	8.53%	8.16%
INVESCO Real Estate Fund II (4)	79,805			0.86%	0.86%	79,136			0.58%	0.58%	1.45%	1.45%	22.72%	22.72%
Invesco Real Estate Fund III, LP (4)	7,867,134			-2.48%	-2.48%	8,068,508			1.51%	1.51%	-1.01%	-1.01%	11.58%	11.58%
Invesco U.S. Value-Add Fund IV, L.P. (4)	17,431,511			1.84%	1.84%	17,120,116			5.33%	5.33%	7.26%	7.26%	8.07%	8.07%
Invesco Asia Real Estate Fund I, L.P. (4)	113,849			0.00%	0.00%	113,868			-2.42%	-2.42%	-2.42%	-2.42%	982.41%	982.41%
Invesco Asia Real Estate Fund III, L.P. (4)	10,489,375			0.00%	0.00%	10,491,071			15.10%	15.10%	15.10%	15.10%	21.25%	21.25%
JP Morgan Strategic & Special Situation Property Blend	83,806,968			0.79%	0.79%	84,028,426			1.83%	1.60%	4.76%	4.29%	8.05%	7.08%
JP Morgan Alternative Property Fund	131,261			7.01%	7.01%	122,678			0.29%	0.29%	7.32%	7.32%	6.73%	6.73%
JP Morgan European Opportunistic Property Fund III (4)	4,310,825			3.74%	3.74%	4,155,952			-3.25%	-3.25%	4.08%	4.08%	-0.51%	-0.51%
JP Morgan Greater China Property Fund (4)	130,582			0.00%	0.00%	130,603			1.25%	1.25%	1.25%	1.25%	37.81%	37.81%
Total Global Real Estate	**246,005,671**	**9.6%**	**10.0%**	**0.38%**	**0.38%**	**234,195,986**	**9.5%**	**10.0%**	**2.72%**	**2.60%**	**4.64%**	**4.39%**	**9.65%**	**9.12%**
NCREIF TOTAL INDEX				***0.60%***	***0.60%***				***1.80%***	***1.80%***	***4.14%***	***4.14%***	***6.97%***	***6.97%***
TIR Teredo Timber, LLC	13,797,879	0.5%		-1.48%	-1.48%	14,005,532	0.6%		-1.33%	-1.33%	-2.79%	-2.79%	-7.02%	-7.02%
TIR Springbank, LLC	45,472,466	1.8%		-1.15%	-1.15%	46,869,906	1.9%		-0.14%	-0.14%	-1.29%	-1.29%	-10.13%	-10.13%
Total Timber (4)	**59,270,344**	**2.3%**	**2.3%**	**-1.23%**	**-1.23%**	**60,875,438**	**2.5%**	**2.5%**	**-0.42%**	**-0.42%**	**-1.64%**	**-1.64%**	**-9.44%**	**-9.44%**
NCREIF Timberland Index				***0.51%***	***0.51%***				***1.52%***	***1.52%***	***2.64%***	***2.64%***	***3.35%***	***3.35%***
JP Morgan Asian Infrastructure & Related Resources (4)	10,086,472	0.4%		0.00%	0.00%	10,086,477	0.4%		-4.67%	-4.67%	*-4.82%*	-4.82%	*35.48%*	35.48%
JP Morgan Infrastructure Investments Fund (IIF)	83,758,986	3.3%		0.00%	0.00%	83,758,987	3.4%		5.14%	5.00%	5.14%	5.02%	7.06%	6.33%
Grosvenor Customized Infrastructure Strategies, LP (4)	15,053,088	0.6%		0.00%	0.00%	15,053,088	0.6%		4.05%	4.05%	3.28%	3.28%	8.70%	8.70%
Grosvenor Customized Infrastructure Strategies II (4)	6,232,417	0.2%		-0.29%	-0.29%	5,732,598	0.2%		2.40%	2.40%	1.85%	1.85%	3.28%	3.28%
Total Infrastructure	**115,130,964**	**4.5%**	**5.7%**	**-0.01%**	**-0.01%**	**114,631,151**	**4.6%**	**5.5%**	**3.93%**	**3.82%**	**3.78%**	**3.69%**	**9.73%**	**9.21%**
CPI				***0.58%***	***0.58%***				***-0.17%***	***-0.17%***	***1.30%***	***1.30%***	***1.50%***	***1.50%***
Northern Trust Collective STIF	19,876,757			0.13%	0.13%	39,714,321			0.31%	0.31%	0.73%	0.73%	0.75%	0.75%
Bank of ND	5,601,617			0.12%	0.12%	5,215,547			0.30%	0.30%	0.71%	0.71%	N/A	N/A
Total Cash Equivalents	**25,478,374**	**1.0%**	**1.0%**	**0.12%**	**0.12%**	**44,929,868**	**1.8%**	**1.0%**	**0.31%**	**0.31%**	**0.74%**	**0.74%**	**0.74%**	**0.74%**
90 Day T-Bill				***0.12%***	***0.12%***				***0.28%***	***0.28%***	***0.67%***	***0.67%***	***0.49%***	***0.49%***

NOTE: Monthly returns and market values are preliminary and subject to change.

New asset class structure began October 1, 2011. Composite returns for new composites not available prior to that date.

Portfolios moved between asset classes will show historical returns in new position.

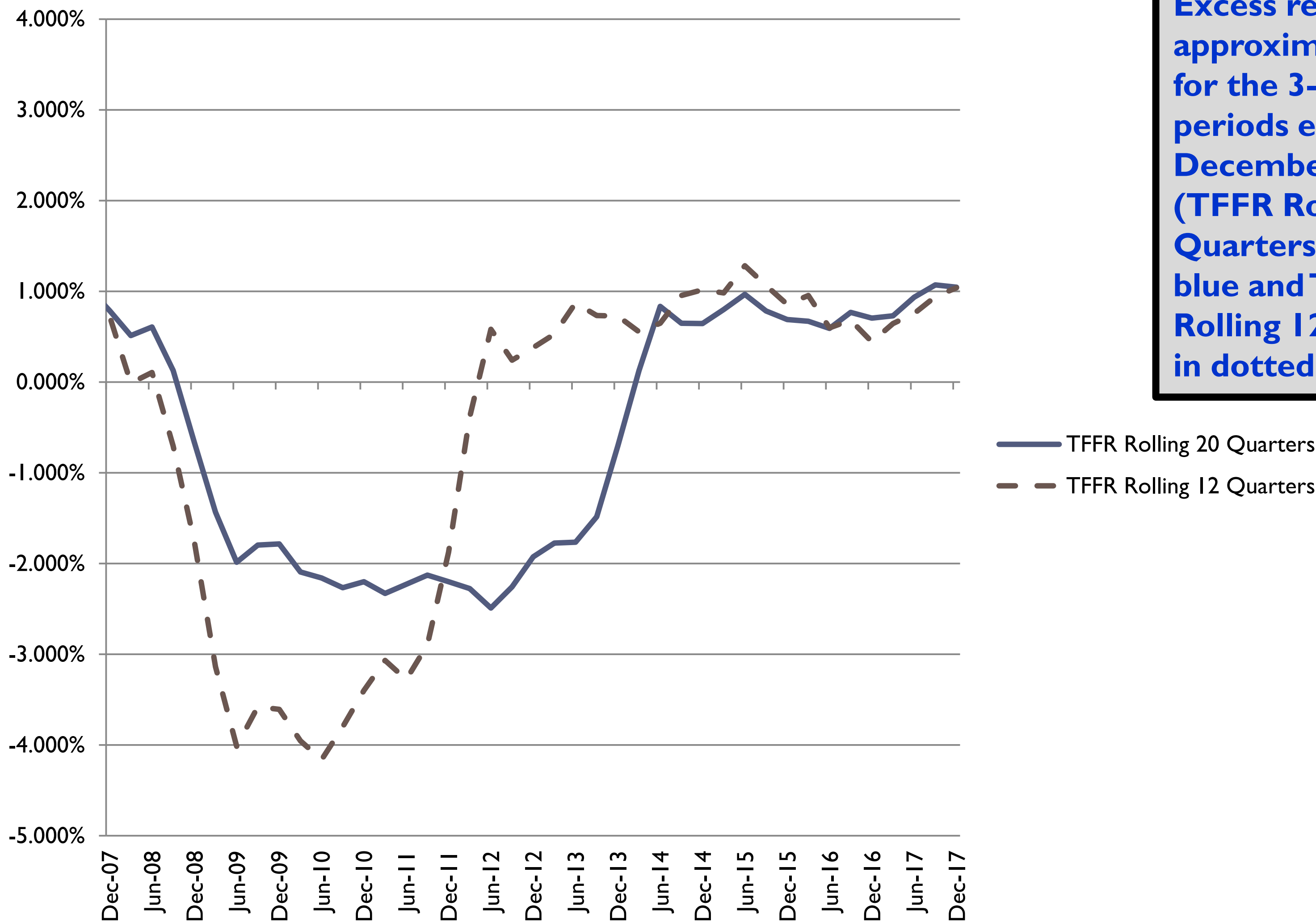
(1) Epoch was included in the Large Cap Domestic Equity composite through 12/31/11.

(2) Prior to January 1, 2012, the benchmark was S&P 500.

(3) This benchmark was changed to the MSCI EAFE (unhedged) as of April 1, 2011.

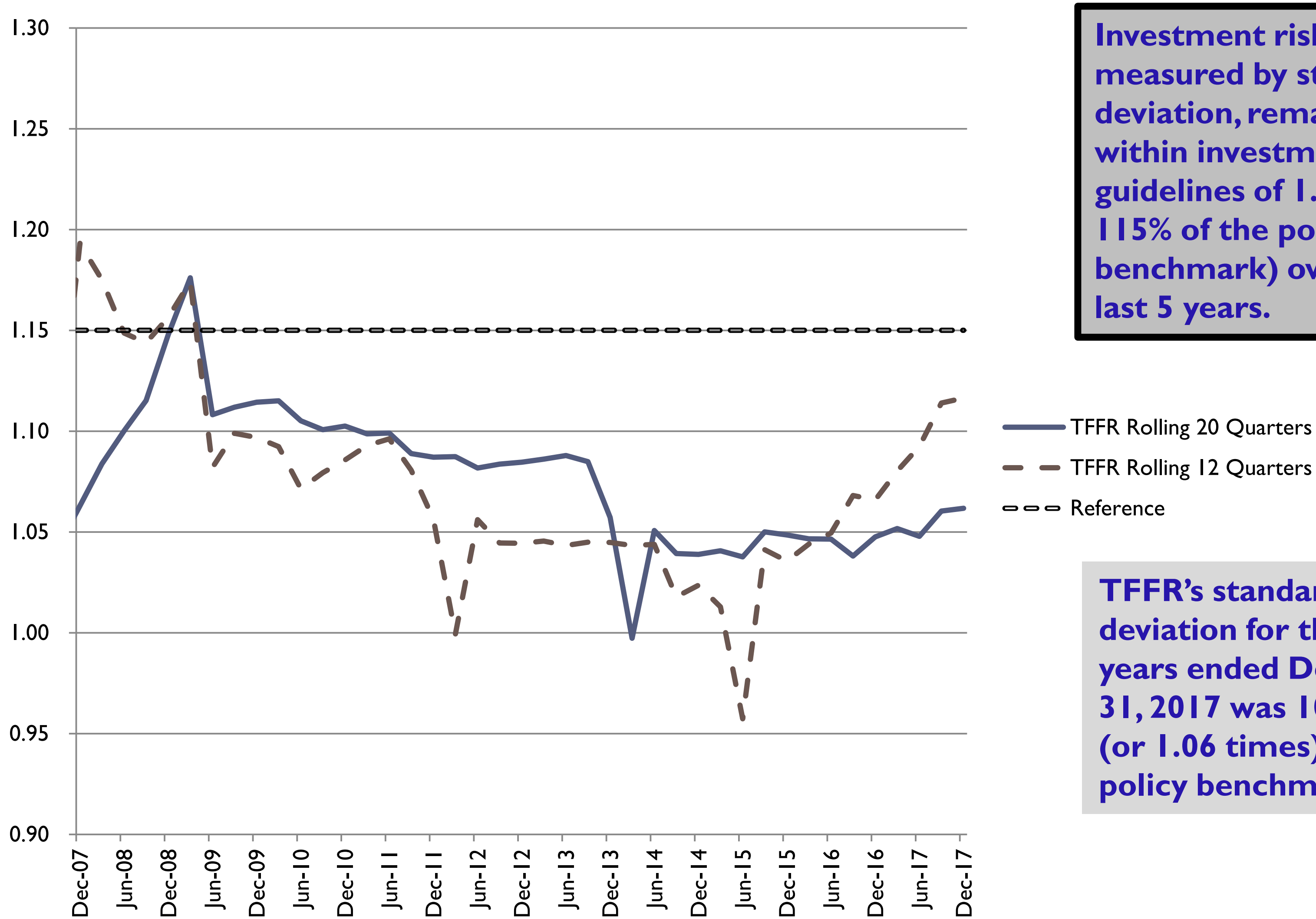
(4) All limited partnership-type (and mutual funds as of 7/1/14) investment returns will only be reported net of fees, which is standard practice by the investment consultant.

Excess Return Relative to Policy Benchmark
10 Years Ended 12/31/2017



Excess return approximated 0.65% for the 3- and 5-year periods ended December 31, 2017 (TFFR Rolling 12 Quarters in solid blue and TFFR Rolling 12 Quarters in dotted gray).

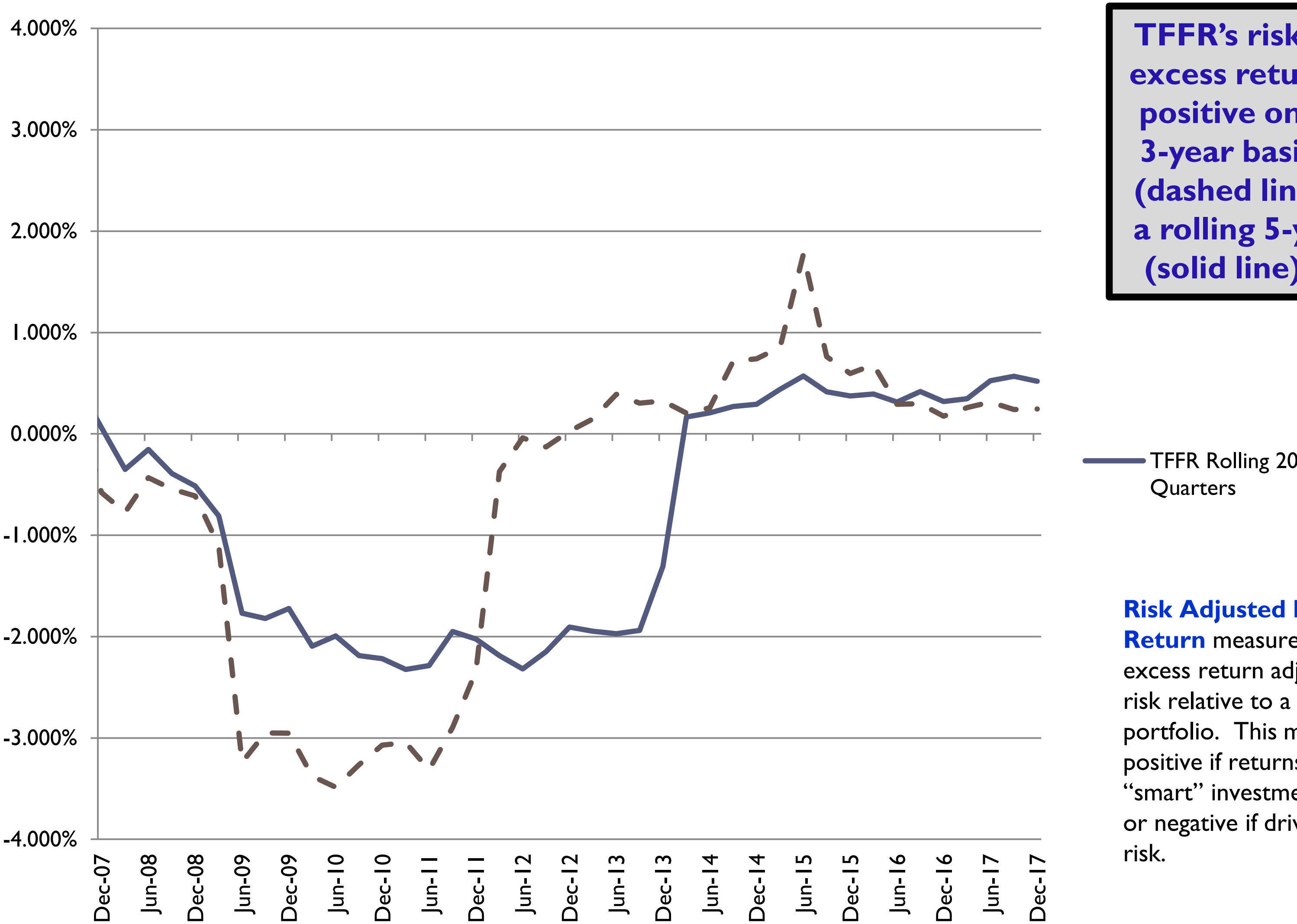
Relative Standard Deviation Relative to Policy Benchmark
10 Years Ended 12/31/2017



Investment risk, as measured by standard deviation, remains within investment guidelines of 1.15 (or 115% of the policy benchmark) over the last 5 years.

TFFR's standard deviation for the 5-years ended Dec. 31, 2017 was 106% (or 1.06 times) the policy benchmark.

Risk Adjusted Excess Return
10 Years Ended 12/31/2017



TFFR's risk adjusted excess return turned positive on a rolling 3-year basis in 2013 (dashed line) and on a rolling 5-year basis (solid line) in 2014.

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

Board Education: Securities Litigation

March 15, 2018

Dave Hunter, Executive Director/CIO
ND Retirement & Investment Office (RIO)
State Investment Board (SIB)

Securities Litigation Background

- The SIB has long recognized the importance of strong corporate governance and board oversight. Given recent developments in global securities litigation particularly outside the U.S. and giving special consideration to the U.S. Supreme Court cases for "Morrison" and "ANZ Securities", the SIB engaged Financial Recovery Technology (FRT) in 2017 to perform a review of our historical claims filing experience with regards to securities litigation actions.

- FRT's review of our class action claims filing actions and recoveries from 2007 to 2017 confirmed that our custodian, Northern Trust, had effectively monitored and obtained our ratable share of loss recoveries for the vast majority of U.S. class action claims the past decade.

- FRT's review also confirmed the growing need to expand our international securities litigation monitoring capabilities in order to enhance the likelihood of increasing loss recoveries on significant securities litigation actions outside the U.S., while enhancing our ability to monitor developing securities litigation actions including anti-trust cases and appraisal right disputes.

- Given the growth of the SIB's client assets in the past decade and recent securities litigation trends, the SIB established a Securities Litigation Committee (SLC) to offer additional oversight and maintain strong fiduciary responsibility while minimizing the administrative burden on our SIB clients, the Office of the Attorney General, the SIB and RIO. Appointed Committee members include the Chief Deputy Attorney General and State Treasurer along with RIO's legal counsel, chief fiscal officer and executive director.

Securities Litigation Charter, Policy and Thresholds

At our last SLC meeting, we acknowledged the importance of sharing newly proposed thresholds which will serve to guide the SLC in carrying out the SIB's policy with regards to "actively" engaging in new securities litigation actions.

- RIO Staff developed the proposed "**Thresholds**" based on detailed discussions with expert legal counsel (including FRT, BLBG, G&E and RGRD) and review of existing securities litigation policies established by over a dozen different U.S. public pension plans.
- RIO's recommended policy thresholds are summarized below:
  - **U.S. and Canada:** RIO recommends adding a dollar threshold of $5 million to the existing "0.1%" percentage threshold (based on trust assets). This change is consistent with nearly every other U.S. public pension plan litigation policy reviewed by RIO staff. (RIO's policy review noted that dollar thresholds generally ranged from $1 million to $10 million)
  - **Non-U.S. and Canada:** RIO recommends four dollar thresholds ranging from $20,000 to $10 million based on the perceived costs and risks associated with actively participating in securities litigation actions based on governing laws in international jurisdictions.
    - **$20,000** for passive or very low risk jurisdictions characterized by simple claim filing or registration demands, strong anonymity and very low costs (e.g. Australia)
    - **$1 million** for low risk jurisdictions with no discovery demands and low costs (e.g. Japan)
    - **$5 million** for moderate risk jurisdictions with some restricted discovery requirements, limited anonymity, the ability to fund/insure upfront fees and moderate overall costs (e.g. Germany)
    - **$10 million** for high risk jurisdictions which may require in-person discovery, no anonymity and uncapped fees (e.g. Taiwan, United Kingdom, Singapore and Brazil)

BLBG = Bernstein, Litowitz, Berger & Grossman LLP G&E = Grant & Eisenhofer RGRD = Robbins Geller Rudman & Dowd

BLB&G Bernstein Litowitz Berger & Grossmann LLP

The Value of Portfolio Monitoring

Presentation to:

North Dakota Retirement and Investment Office

David Hunter
Executive Director/Chief Investment Officer

Connie Flanagan
Fiscal and Investment Operations Manager

Janilyn Murtha
Assistant Attorney General North Dakota Attorney General's Office

October 11, 2017

Why should major investors like North Dakota have a securities monitoring agreement?

First, Congress passed a law asking them to.

That law is the

Private Securities Litigation Reform Act,

which encourages pension funds to take action if they lose money as a result of corporate wrongdoing.

The law has worked:

- Institutional investors and pension funds have been able to obtain higher recoveries and negotiate lower legal fees through their leadership.
- Nearly $120B have been recovered on behalf of investors through securities litigation since the passage of the Private Securities Litigation Reform Act, or “PSLRA.”

Sources: Institutional Shareholder Services, Inc. (ISS) January 2017; Cornerstone Research, Securities Class Action Settlements: 2016 Review and Analysis

PSLRA key points:

- The PSLRA encourages institutional investor participation:
  - The PSLRA's Lead Plaintiff provisions ensure that the investors with the "largest financial interest" lead securities class actions.
- The PSLRA also:
  - Imposes a discovery stay.
  - Heightens pleading standards.
  - Provides a safe harbor for "forward-looking statements."
  - Contains apportionment-of-fault provisions.
  - Seeks to enhance the quality of representation in securities litigation while reducing legal fees.

A preponderance of public pension funds have arranged with firms like ours to actively monitor their investment portfolios.

Some of our clients you may know…

- Alabama Retirement Systems
- Arizona State Retirement System
- Arkansas Public Employees Retirement System
- Arkansas Teacher Retirement System
- Boston Retirement Board
- California Public Employees Retirement System
- California State Teachers' Retirement System
- Fire and Police Pension Association of Colorado
- Florida State Board of Administration
- General Retirement System of the City of Detroit
- Hawaii (State of) Retirement Systems
- Kansas City, Missouri Employees' Retirement System
- Louisiana Municipal Police Employees' Retirement System
- Louisiana State Employees' Retirement System
- Public Employees' Retirement System of Mississippi
- Maryland State Retirement and Pension System
- Michigan (State of) Retirement System
- Montana Board of Investment
- Municipal Employees' Retirement System of Michigan
- New York State Common Retirement System
- North Carolina Retirement System
- Ohio Public Employees Retirement System
- Oklahoma Firefighters Pension and Retirement System
- Oregon Public Employees Retirement Fund
- Pennsylvania State Employees' Retirement System
- Policemen's Annuity and Benefit Fund of Chicago
- Public School Teachers' Pension and Retirement Fund of Chicago
- Rhode Island State Investment Commission
- San Francisco City and County Employees' Retirement System
- St. Paul Teachers' Retirement Fund Association
- State Teachers' Retirement System of Ohio
- Teacher Retirement System of Texas
- Virginia Retirement System

Hiring our law firm to monitor North Dakota’s portfolio does <u>NOT</u> mean you will have to become an active litigant.

Why Monitoring Is Helpful

- There are instances where our Firm has ensured a recovery for our client without them actually becoming actively involved.
- Public Pension Funds have begun to feel very vulnerable about foreign claims and their role in those settlements.
- It is considered best practice for funds to be aware of misconduct and litigation impacting their investments, and monitoring helps protect against scrutiny from others, including auditors, the press, and members.
- From time to time, an issue or case arises and the Fund may want to get advice or a second opinion without generating any further costs to the Fund.

The fiduciary duty of pension fund trustees

"Officers have a fiduciary obligation to recover funds lost through investments in public securities as the result of corporate mismanagement and/or fraud."

Government Finance Officers Association (U.S.)
Recommended Practice

Courts expect large pension funds to engage monitoring counsel

- Courts recognize that monitoring firms provide a valuable service in helping institutional investor trustees fulfill their fiduciary duties. Indeed, courts presume that large public funds have outside counsel to monitor the status of class actions.

See, e.g., Larson v. JPMorgan Chase & Co., 530 3d. 578, 581 (7th Cir. 2008) (Posner, J.)

Changes in the law require pension funds to take steps to ensure they can recover losses caused by fraud

- The role monitoring counsel play is even more important now, in the wake of the U.S. Supreme Court's recent *ANZ Securities* decision—which reversed decades of law concerning class action "tolling."
- While filing a class action previously served to preserve class members' claims, that is no longer the case. Now, investors may be forced to file a "protective" lawsuit if they believe the class action will not sufficiently protect their interests.

As Justice Ginsburg explained in dissent, as result of the decision, "every fiduciary who must safeguard investor assets, will have strong cause to file a protective claim, in a separate complaint or in a motion to intervene" before the limitations period expires.

Calif. Pub. Empls. Ret. Sys. v. ANZ Secs., Inc.,
137 S.Ct. 2042, 2058 (2017) (Ginsburg, J., dissenting).

How does monitoring work?

It's as easy as 1, 2, 3

1. Both parties sign an Engagement Letter.
2. A Steering Letter is sent to the Custodial Bank granting the Firm access to the portfolio.
3. The data is uploaded on our secure electronic platform, *PortfolioWatch.*

BLB&G's Portfolio Monitoring Covers Both Domestic and Foreign Securities Claims

- BLB&G monitors our clients' entire portfolio, whether the securities trade domestically or abroad:
  - Our robust platform proactively identifies and informs clients of investment losses caused by misconduct, as well as available options for recovery, and the risks and benefits of each option.
  - We provide analytic case-specific memoranda addressing all legal options with respect to new and pending foreign securities actions that are potentially meritorious, and in which our clients appear to have a material financial interest.

No gap in oversight

There is no need for additional monitoring programs specific to foreign securities actions.

PortfolioWatch Monitoring Platform

In response to the PSLRA, BLB&G pioneered portfolio monitoring and case evaluation services for its pension fund clients.

State-of-the-art technology

- Web-based platform
- Tracks client's investments and trading activity against new and pending actions
- Shows potential losses and highlights cases where recoveries may be available
- Provides key information to assist in claims filings in settled cases
- Offers a full array of reporting functions, historical data and current news
- Covers both U.S. and foreign securities

PortfolioWatch Monitoring Platform

High security

- Triple-encrypted security
- Servers kept in secured enterprise class data center within locked enclosures
- Regular security audits
- Unique log-on credentials that provide secure access to fund's account

BLB&G provides clients with a comprehensive suite of services

Portfolio Monitoring and Reporting

Auditing of Claims Filing

Securities Class Actions

Shareholder Derivative Cases

Corporate Governance Advice

Transaction/Deal Cases

Appraisal Rights Litigation

Direct Action and Opt-Out Cases

Foreign Law Claims

U.S. Supreme Court Advocacy

Educational Opportunities

Customized Client Reporting

- Catalogue of all securities litigation initiated during the period
- Summary of meritorious cases as determined by BLB&G
- Breakdown of client's losses in meritorious cases
- Active litigation update
- Listing of claim filing deadlines

We are committed to only one thing – getting the best result for our clients.

Portfolio monitoring and claims evaluation services are provided at **no charge** to our clients.

Litigation services are provided on a contingency fee basis. That means:

- No out-of-pocket costs to our clients.
- Our model ensures that our clients get the legal excellence and results they seek.

5 takeaways about our Firm

1

We've recovered more money for investors than any other firm in our field.

BLB&G has recovered over

$31 billion

for investors since its founding in 1983.

More Top Recoveries Than Any Other Firm

6
of the top 12 settlements of all time

We obtained 6 of the top 12 settlements of all time.

35
of the top 100 settlements of all time

We obtained over a third of the top 100 recoveries of all time.

40%
of all monies recovered in the top 100 settlements of all time

BLB&G eclipses all other firms in Securities Class Action Services' compiled data on the profession, having recovered 40% (over $25 billion) of all funds recovered in the top 100 settlements of all time.

Source: ISS/Securities Class Action Services ("SCAS"); NERA Economic Consulting

There are only 13 securities litigations in history resulting in settlements in excess of $1 billion.

BLB&G represented investors as Lead or co-Lead Counsel in 6 of these billion dollar cases.

BLB&G is the "Go-To" firm for high-stakes securities litigation.

WorldCom: **$6.2** BILLION	Cendant: **$3.3** BILLION
Bank of America: **$2.4** BILLION	Nortel: **$1.07** BILLION
Merck: **$1.06** BILLION	McKesson: **$1.05** BILLION

2

We have the lowest case dismissal rates in the industry.

This success rate is the best track record of any firm in the field.

86%

of our cases are upheld by the courts

Source: *Stanford Securities Litigation Analytics*

Why?

Because we only pursue meritorious cases and have a specialized in-house team of financial analysts and financial investigators who rigorously vet each potential case upfront to confirm the merits and protect our clients' interests.

Stanford Securities Litigation Analytics:

The Firm's 86% success rate is based on data from Stanford Securities litigation Stanford Securities Litigation Analytics (SSLA), a research project at Stanford Law School which tracks and collects data on securities class action litigation and SEC enforcement actions brought to enforce the disclosure requirements of the securities laws.

Over the past 15 years, the average securities class action recovery for cases in which BLB&G has served as Lead or co-Lead Counsel is over five times greater than the industry average.

Source: Stanford Securities Litigation Analytics

3

We pursue claims other firms fail to identify.

BLB&G's portfolio monitoring practice helps our clients to identify claims that others may miss.

Identifying Unique Claims:

- Lead Plaintiffs in the **Citigroup**, **Wachovia** and **Merrill Lynch** class actions omitted the claims of preferred stock and bond investors. As counsel for several pension funds, we identified this omission and filed claims on their behalf – obtaining over ***$1.5 billion*** in recoveries as a result.

- As a result of our investigation into certain banks' securities lending practices, we initiated a class action on behalf of our pension fund clients to recover losses suffered by securities lending program participants.
- We have identified claims on unique securities and investments – such as toxic RMBS and CDOs – and have pursued litigation against banks like Goldman Sachs, Bear Stearns, Morgan Stanley that has resulted in hundreds of millions of dollars in recoveries for investors.

4

Our attorneys are among the top practitioners in the field.

- Our attorneys are among the top practitioners in the field – over 120 attorneys with diverse experience – former prosecutors, former SEC and regulatory lawyers and attorneys who began their careers at some of the most prominent defense firms in the country.

- Our professional staff include outstanding financial and market analysts, investigators and client relations specialists.

Benchmark Litigation

New York and California "Litigation Stars"

Max Berger, Salvatore Graziano, Mark Lebovitch, Blair Nicholas, Hannah Ross, Gerald Silk and David Stickney

National "Plaintiff Attorney of the Year"

Mark Lebovitch

"Top 100 Trial Lawyers in America"

Salvatore Graziano

"Top 250 Women in Litigation in America"

Hannah Ross

"Under 40 Hot List"

Michael Blatchley, Katherine Sinderson, Jonathan Uslaner and Adam Wierzbowski

Lawdragon

The "500 Leading Lawyers in America"

Max Berger, Salvatore Graziano, Mark Lebovitch, Blair Nicholas, Hannah Ross, Gerald Silk and David Stickney

"Lawdragon Legend"

Max Berger

(Practitioners selected every year since list's inception 10 years ago.)

The National Law Journal

"Litigation Trailblazer and Pioneer"

Gerald Silk

Chambers and Partners' Guide to America's Leading Lawyers for Business

"Star Individual"

Max Berger

Salvatore Graziano, Gerald Silk and Mark Lebovitch were named among an elite group of notable practitioners in the field.

Law360

"Rising Stars" in Securities Litigation

Avi Josefson, Katherine Sinderson and Jonathan Uslaner

"Class Action MVPs"

Salvatore Graziano, David Stickney and John Browne

Daily Journal

California's "Top Plaintiff Attorneys"

David Stickney

California's "Top 40 Under 40" Attorneys

Jonathan Uslaner

Legal 500

"Leading Lawyers"

Max Berger (Securities Litigation) and Mark Lebovitch (M&A Litigation)

The Recorder

California "Litigation Groundbreaker"

David Stickney

5

We are consistently recognized by the legal media and the courts as one of the very best securities litigation firms.

"Few plaintiff firms command the level of recognition and respect from lawyers on both sides of the 'V' enjoyed by BLB&G…A frequent opponent in the defense capacity offers, '**We go against them often and definitely view them as the best**.'"

Benchmark Litigation: The Definitive Guide to America's Leading Firms (Euromoney/Institutional Investor)

One of only three firms in the U.S. named to the "Plaintiffs' Hot List" for twelve years
The National Law Journal

"Deep in resources and experience…"
The American Lawyer

Twice named the "Plaintiff Firm of the Year," BLB&G is the only plaintiff firm in the nation ranked Tier 1 for Securities Litigation
Benchmark

Top-ranked plaintiff securities litigation firm in the nation
Legal 500; Chambers Guide to America's Leading Lawyers for Business; and U.S. News-Best Lawyers

Selected "Securities Group of Year," "Class Action Group of the Year," and one of the Nation's "Most Feared Plaintiffs' Firms"
Law360

"Battle Proven"
The Wall Street Journal

“Some of the best trial lawyers I’ve ever seen.”

— United States District Court, Northern District of California

“The unique talents of [these] plaintiffs’ lawyers...are just simply not available in the mainstream of litigators.”

— United States District Court, District of Oregon

“The quality of the representation has been superb and is unsurpassed in this court’s experience.”

— United States District Court, Southern District of New York

“A cut above the typical lawyering I have seen.”

— United States District Court, Middle District of Tennessee

“This case [Landry’s] shows precisely the type of benefits that you can achieve for stockholders and how representative litigation can be a very important part of our corporate governance system…you’d put this case up as an example of what to do.”

— Delaware Court of Chancery

Michael Blatchley
Partner

T: (212) 554-1281
E: michaelb@blbglaw.com

Mr. Blatchley's practice focuses on securities fraud litigation. He is currently a member of the firm's new matter department in which he, along with a team of attorneys, financial analysts, forensic accountants, and investigators, counsels the firm's clients on their legal claims.

Mr. Blatchley has also served as a member of the litigation teams responsible for prosecuting a number of the firm's significant cases. For example, Mr. Blatchley was a key member of the team that recovered $150 million for investors in *In re JPMorgan Chase & Co. Securities Litigation*, a securities fraud class action arising out of misrepresentations and omissions concerning JPMorgan's Chief Investment Office, the company's risk management systems, and the trading activities of the so-called "London Whale." He was also a member of the litigation team in *In re Medtronic, Inc. Securities Litigation*, an action arising out of allegations that Medtronic promoted the Infuse bone graft for dangerous "off-label" uses, which resulted in an $85 million recovery for investors. In addition, Mr. Blatchley prosecuted a number of cases related to the financial crisis, including several actions arising out of wrongdoing related to the issuance of residential mortgage-backed securities and other complex financial products. Currently, Mr. Blatchley is a member of the team prosecuting *In re Allergan, Inc. Proxy Violation Securities Litigation.*

Mr. Blatchley was recently named to *Benchmark Litigation's* "Under 40 Hot List," which recognizes him as one the nation's most accomplished legal partners under the age of 40.

Tony Gelderman
Counsel

T: (504) 899-2339
E: tony@blbglaw.com

Mr. Gelderman heads the firm's Louisiana office and is responsible for the firm's institutional investor and client outreach. He is a frequent speaker at U.S. and European investor conferences and has written numerous articles on securities litigation and asset protection. Previously, Mr. Gelderman served as Chief of Staff and General Counsel to the Treasurer of the State of Louisiana (1992-1996) and prior to that served as General Counsel to the Louisiana Department of the Treasury. Mr. Gelderman also coordinated all legislative matters for the State Treasurer during his tenure with the Treasury Department. Earlier in Mr. Gelderman's career, he served as law clerk to U.S. District Judge Charles Schwartz, Jr., Eastern District of Louisiana (1986-1987).

MEMORANDUM

TO: **TFFR Board**

FROM: **Fay Kopp**

DATE: **March 15, 2018**

SUBJ: **Devils Lake Members Meeting Update**

At the request of the Devils Lake Education Association (DLEA) and ND United, Dave Hunter and I met with a group of active teachers and administrators in November 2017 to discuss TFFR related questions and concerns. Overall, the meeting was well attended, and the members were very interested in what Dave and I had to say about TFFR plan benefits and investment program.

General Topics Discussed:

1) Defined benefit and defined contribution plan structures
2) Current TFFR plan provisions and features
3) TFFR funding, payment of UAAL, and funding projections
4) 2011 legislative funding improvement plan, benefit and contribution changes, grandfathered and nongrandfathered members
5) TFFR Board and State Legislative authority regarding TFFR plan
6) Investment program – asset allocation, investment performance, investment return assumption, risk, Great Recession
7) Rate of interest earned on member contributions – not employer contributions
8) Member and employer contribution rates – if and when rates will be reduced, why employer contributions are not included in member account value
9) Member account value options at retirement
10) Life expectancy and how soon member's account value will be exhausted
11) Salary increase assumptions
12) Service purchase cost calculations
13) Death benefits and surviving spouse options
14) Misconceptions about TFFR plan
15) New office space

MAIN TALKING POINTS:

1) TFFR DB plan is a valuable benefit to teachers.

2) The plan provides lifetime retirement security for members.

   - Member doesn't have to worry about investment returns.
   - Member doesn't have to worry about outliving their retirement benefits.
   - Member can select among several optional forms of payment, many of which provide a continued benefit to a beneficiary upon the member's death.
   - TFFR provides ancillary in-service death and disability benefits (which are not typically provided under a DC plan).

3) TFFR funding levels have declined in the past 17 years. As of July 1, 2000, the funded percentage of the plan was 101.6%. Since then, the Fund has faced extremely challenging conditions with three principal causes:

   - Difficult conditions in the investment market. In addition to the significant market downturn in 2008-09, the market had a prior major downturn in the early 2000s. In the last 10 years, the average annual return of the Fund was 3.8%. Over the last 17 years, the average annual return was 5.1%. Over the past 30 years, average return was 7.8%. More recent performance has been positive with the Fund returning 9.2% over the past 5 years.

   - The past 17 years have seen a decline in interest rates. When interest rates decline, it affects the expectation of future investment returns. The Board lowered the assumed rate of return to 7.75% as of July 1, 2015.

   - Research shows that Americans are living longer. This longer life expectancy is reflected in the Fund's actuarial valuation, resulting in higher liabilities.

As of July 1, 2017, the TFFR's funded percentage was 63.7%. The UAAL was $1.35 billion. This is a substantial liability that will require many years to be paid off. The goal of the funding policy established by the Board is to pay down this unfunded liability over a 30-year period that began July 1, 2013.

Recent funding projections indicate the plan is expected to be fully funded within 30 years, if all actuarial assumptions are met, including the 7.75% investment return assumption.

4) While the cost of the TFFR plan has increased in the last decade, even younger members are expected to draw out their member contributions plus 6% interest within about 8-10 years after retirement.

5) The 6% guaranteed rate is higher than any guaranteed rate that teachers could earn in the open market, and higher than most plans provide.

6) Today's teachers are expected to live until age 90-95. Some will live longer; other's lives will be shorter. However, in general, if teachers work until age 60, they are expected draw TFFR benefits from the plan for 30+ years. Those benefits are equal to 60% of FAS if they have 30 years of service; or 80% of FAS if they have 40 years of service. TFFR benefits will be paid for life.

7) If teachers do not want to take the TFFR monthly benefit at retirement, they may convert their member account value and purchase an annuity which will likely pay less in monthly benefits than TFFR. Or they may choose to take a refund and direct their own investments taking all postretirement investment and mortality risk on their own.

8) All contributions that go into the TFFR trust fund, and investment earnings on those contributions, are paid out as retirement benefits to members (less expenses).

9) There are advantages and disadvantages to any retirement plan design. There is also a cost to provide certain desired features. The increased cost to make changes or add features to a plan must be calculated and carefully considered.

10) Any changes to TFFR plan provisions must be approved by the State Legislature.

To assist us in responding to some of the more detailed questions which were provided, TFFR's actuarial consultant provided us with some calculations. Here is an example using Segal's calculations.

Example TFFR Member Scenarios

Scenario		Accumulated Member Contributions at Retirement	Monthly Benefit at Retirement	Accumulated Member Contributions Exhausted, 0% Interest After Retirement	Accumulated Member Contributions Exhausted, 6% Interest After Retirement
	Member Scenario Based on No Salary Increases and Incorrect Plan Provisions				
1	Age 65 Retirement	$ 943,000	$ 4,000	Age 85 (20 years)	Not exhausted
	Scenarios with Projected Salary Increases				
2	Age 55 Retirement	$ 630,000	$ 4,500	Age 67 (12 years)	Reduced benefit
3	Age 60 Retirement	$ 959,000	$ 10,600	Age 68 (8 years)	
4	Age 62 Retirement	$ 1,126,000	$ 12,100	Age 70 (8 years)	
5	Age 65 Retirement	$ 1,425,000	$ 14,900	Age 73 (8 years)	
	Scenarios Assuming Accumulated Member Contributions Withdrawn and Annuitized				
1	Age 65 Retirement (no salary increases)		$ 4,900		
2	Age 55 Retirement		$ 2,700		
3	Age 60 Retirement		$ 4,500		
4	Age 62 Retirement		$ 5,500		
5	Age 65 Retirement		$ 7,400		

Scenario 1 is included to match the scenario provided by TFFR member. The exclusion of all future salary increases from the scenario is not reasonable, especially when the benefit is compared to an account balance that increases by 6% per year from age 34 to age 65. Scenario 1 assumed that accumulated member contributions are credited with 6% interest after retirement, which they are not. The assertion that the member fails to receive the value of his accumulated contributions back from TFFR is false.

Salary increases are assumed in accordance with the current valuation assumptions. That assumption for participants with 10 years of service is 5.75% per year, grading down to 4.25% at 25 years of service and over.

Annuitization factors are approximate, based on current market conditions.

Board Information Only. No board action is requested.

ND TFFR Fast Facts

FY End 6/30/2017

The ND Teachers' Fund for Retirement plan (ND TFFR) provides ND educators with a financial foundation for the future that includes a secure and stable retirement. This is possible due to TFFR's plan design, professional plan management, strong investment performance, and outstanding customer service.

MEMBERS

WE SERVE

10,874 ACTIVE MEMBERS

8,501 RETIRED MEMBERS

215 EMPLOYERS

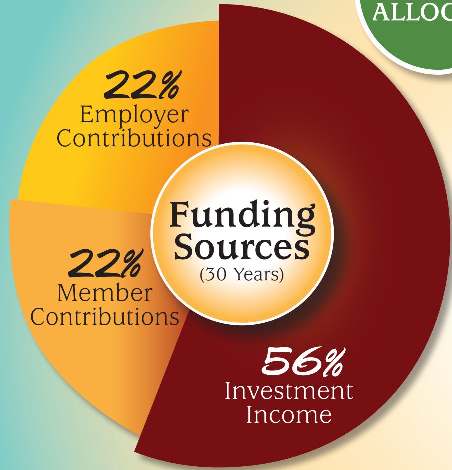
Member Stats	Actives	Retirees
Avg. Annual Salary/Benefit	$59,780	$23,400
Avg. Service Credit	11.9 yrs	27.4 yrs
Avg. Current Age	42.1 yrs	71.7 yrs

MEMBER/EMPLOYER SATISFACTION: 3.8 (4.0 Scale)

84% of benefits are paid to ND residents.

To positively impact the state's economy, **$191 million** was distributed to retirees in FY 2017.

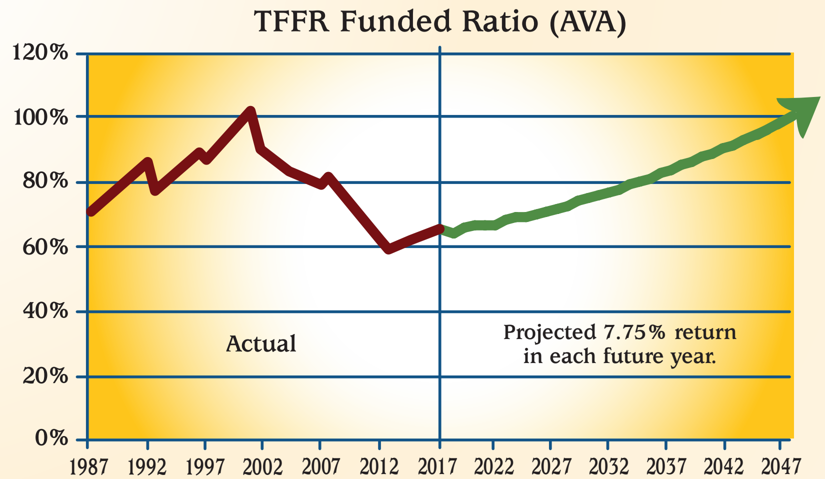
Market value of TFFR assets $2.4 billion



Investment Returns

1 year	12.9%
5 year	9.2%
30 year	7.8%

64% of BENEFITS are PREFUNDED



TFFR's long-term funding outlook is positive, and benefits are secure for past, present, and future ND educators.

ND Teachers' Fund for Retirement, 3442 E. Century Avenue, P.O. Box 7100, Bismarck, ND 58507
1-800-952-2970 or 701-328-9885 | Email: rio@nd.gov | Website: www.nd.gov/rio/tffr

ND TFFR PLAN SUMMARY

Tier 1 is a member who had service credit in the TFFR plan prior to 7/1/08.

- Tier 1 Grandfathered member was less than 10 years away from retirement eligibility as of 6/30/13. Grandfathered member was vested, and either age 55 or had a combined total of service credit and age equal to or greater than 65 on 6/30/13.
- Tier 1 Non-Grandfathered member was more than 10 years away from retirement eligibility as of 6/30/13. Non-grandfathered member was less than age 55 and had a combined total of service credit and age which was less than 65 on 6/30/13.

Tier 2 is a member who began participation in the TFFR plan on 7/1/08 or after.

**Contribution rates are in effect until TFFR reaches 100% funded level, then rates reduce to 7.75% each.*

	Tier 1 Grandfathered Member	Tier 1 Non-Grandfathered Member	Tier 2 Member
Employee Contribution Rates (active and re-employed retirees)			
7/1/10 – 6/30/12	7.75%	7.75%	7.75%
7/1/12 – 6/30/14	9.75%	9.75%	9.75%
*7/1/14 ongoing	11.75%	11.75%	11.75%
Employer Contribution Rates			
7/1/10 – 6/30/12	8.75%	8.75%	8.75%
7/1/12 – 6/30/14	10.75%	10.75%	10.75%
*7/1/14 ongoing	12.75%	12.75%	12.75%
Vesting Period	3 yrs	3 yrs	5 yrs
Unreduced Retirement Eligibility			
Minimum Age	No	60	60
AND Rule	Rule 85	Rule 90	Rule 90
OR Normal Retirement Age	65	65	65
Reduced Retirement Eligibility			
Minimum Age	55	55	55
Reduction Factor	6%	8%	8%
Retirement Formula Multiplier	2%	2%	2%
X Final Average Salary	3 yr FAS	3 yr FAS	5 yr FAS
X Service Credit	Total years	Total years	Total years
Disability Retirement	Yes	Yes	Yes
Retirement Formula Multiplier (2%) X Final Average Salary (FAS) X Total Service Credit			
Death/Survivor Benefits	Yes	Yes	Yes
Refund of account value or Life Annuity to survivor based on member's vesting status.			

MEMORANDUM

TO: **TFFR Board**

FROM: **Fay Kopp**

DATE: **March 15, 2018**

SUBJ: **2019 Legislative Planning**

As directed at the January TFFR Board meeting, attached are two bill drafts for TFFR Board consideration.

1) **IRS compliance updates (required language)**

NDCC 15-39.1-34 Internal Revenue Code compliance.

- Bill draft provides clarification and additional detail on direct rollover provisions that apply to the NDTFFR plan, namely the limitations on direct rollovers that apply to after-tax employee contributions; definitions for eligible rollover distribution, eligible retirement plan, and distributee.

- 2017 IRS favorable determination letter was contingent on approval of certain proposed amendments in the 2019 legislative session.

Reference:

- March 3, 2017 letter to IRS.

- March 17, 2017 IRS Favorable Determination Letter.

2) Retiree re-employment changes

NDCC 15-39.1-19 Retired teachers return to active service – Annuities discontinued on resumption of teaching over annual hour limit

NDCC 15-39.1-19.2 Retired teachers return to active service – Critical shortage areas and disciplines

- Bill draft clarifies that return to active service, return to covered employment, and return to teaching means retiree employment with a participating employer regardless of whether the retiree is licensed by ESPB or possesses a contract or other written agreement.

- Bill draft also provides that the retiree annual hours limit does not apply to both contracted and non-contracted substitute teaching, and that retiree and employer contributions are required on all salary except non-contracted substitute teaching (same as provisions for professional development and extracurricular duties performed by retiree).

Reference:

- March 15, 2018 TFFR Retiree Re-Employment and Substitute Teaching memo.

- April 2017 TFFR Board Policy, “In-staff Subbing Contract Period.”

BOARD ACTION. Board Motion to approve one or both (or combined) bill drafts to be submitted to the Legislative Employee Benefits Programs Committee by April 1, 2018 for interim study.

Sixty-sixth
Legislative Assembly
of North Dakota

________ BILL NO. _____

Introduced by

A BILL for an Act to amend and reenact section 15-39.1-34 of North Dakota Century Code, relating to Internal Revenue Code compliance.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. AMENDMENT. Section 15-39.1-34 of the North Dakota Century Code is amended and reenacted as follows:

15-39.1-34. Internal Revenue Code compliance.

The board shall administer the plan in compliance with section 415, section 401(a)(9), section 401(a)(17), and section 401(a)(31) of the Internal Revenue Code, as amended, and regulations adopted pursuant to those provisions as they apply to governmental plans. Pursuant to the rollover rules under section 401(a)(31) of the Internal Revenue Code, a distributee may elect to have an eligible rollover distribution, as defined in section 402(f)(2)(A) of the Internal Revenue Code, paid in a direct rollover to an eligible retirement plan, as defined in section 402(c)(8)(B) of the Internal Revenue Code, specified by the distributee. The definition of eligible retirement plan shall also apply in the case of a distribution to an alternate payee under a qualified domestic relations order, as defined in section 414(p) of the Internal Revenue Code. Any portion of a distribution that consists of after-tax employee contributions which are not included in gross income may be transferred only to an individual retirement account or individual retirement annuity described in section 408 or 408A of the Internal Revenue Code or to a qualified plan or an annuity contract described in section 401(a) and 403(b) of the Internal Revenue Code, respectively, that agrees to separately account for such amounts, including separately accounting for the portion of such distribution which is included in gross income and the portion of such distribution which is not so included.

For purposes of this section, “distributee” includes a nonspouse beneficiary of a deceased member; provided however, that in the case of a nonspouse beneficiary, the direct rollover may only be made to an individual retirement account or individual retirement annuity described in section 408 or 408A of the Internal Revenue Code that is established on behalf of the nonspouse beneficiary and will be treated as an inherited individual retirement account or inherited individual retirement annuity pursuant to section 402(c)(11) of the Internal Revenue Code.

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

RECEIVED
MAR 20 2017
NDRIO

Date: MAR 17 2017

NORTH DAKOTA TEACHERS FUND FOR
RETIREMENT BOARD
PO BOX 7100
BISMARCK, ND 58507-7100

Employer Identification Number:
45-6002349
DLN:
17007023722016
Person to Contact:
JENNIFER M THIMMADASIAH ID# 31316
Contact Telephone Number:
(513) 263-4613
Plan Name:
NORTH DAKOTA TEACHERS FUND FOR
RETIREMENT
Plan Number: 001

Dear Applicant:

Based on the information you provided, we are issuing this favorable determination letter for your plan listed above. However, our favorable determination only applies to the status of your plan under the Internal Revenue Code and is not a determination on the effect of other federal or local statutes. To use this letter as proof of the plan's status, you must keep this letter, the application forms, and all correspondence with us about your application.

Your determination letter does not apply to any qualification changes that become effective, any guidance issued, or any statutes enacted after the dates specified in the Cumulative List of Changes in Plan Requirements (the Cumulative List) for the cycle you submitted your application under, unless the new item was identified in the Cumulative List.

Your plan's continued qualification in its present form will depend on its effect in operation (Section 1.401-1(b)(3) of the Income Tax Regulations). We may review the status of the plan in operation periodically.

You can find more information on favorable determination letters in Publication 794, Favorable Determination Letter, including:

The significance and scope of reliance on this letter,
The effect of any elective determination request in your application materials,
The reporting requirements for qualified plans, and
Examples of the effect of a plan's operation on its qualified status.

You can get a copy of Publication 794 by visiting our website at www.irs.gov/formspubs or by calling 1-800-TAX-FORM (1-800-829-3676) to request a copy.

This letter considered the 2014 Cumulative List of Changes in Plan Qualification Requirements.

We made this determination on the condition that you adopt the proposed

NORTH DAKOTA TEACHERS FUND FOR

amendments you submitted in your letter dated 3/3/17, on or before the date the Income Tax Regulations provide under Section 401(b) of the Internal Revenue Code.

We based this determination letter solely on your claim that the plan meets the requirements of a governmental plan under Section 414(d) of the Internal Revenue Code.

This determination letter applies to the plan and related documents you submitted with the application you filed during the remedial amendment cycle ending 1/31/16.

This determination letter expresses no opinion as to the federal tax consequences of the replacement, or proposed replacement, of any joint and survivor, single life or other annuity being paid with a lump sum payment or other accelerated form of distribution.

If you submitted a Form 2848, Power of Attorney and Declaration of Representative, or Form 8821, Tax Information Authorization, with your application and asked us to send your authorized representative or appointee copies of written communications, we will send a copy of this letter to him or her.

If you have any questions, you can contact the person listed at the top of this letter.

Sincerely,

Karen D. Truss

Karen D. Truss
Director, EP Rulings & Agreements

STATE OF NORTH DAKOTA
OFFICE OF ATTORNEY GENERAL
STATE CAPITOL
600 E BOULEVARD AVE DEPT 125
BISMARCK, ND 58505-0040
(701) 328-2210
www.ag.nd.gov

Wayne Stenehjem
ATTORNEY GENERAL

March 3, 2017

VIA FACSIMILE ONLY

Ms. Jennifer Thimmadasaiah
Employee Plans Specialist
Stop 31
Attention: EP/EO Determination Letters
Internal Revenue Service
PO Box 12192
Covington, KY 41012-0192

Dear Ms. Thimmadasaiah:

Please accept this letter in follow-up to the request for additional information mailed to and received by the North Dakota Teachers' Fund for Retirement Board office on February 20, 2017. You indicated that our proposed amendment regarding direct rollovers was not sufficient and requested that the plan's direct rollover language be further clarified in statute (pursuant to sample language provided from your list of required modifications). All citations to specific statutory provisions in this response refer to governing plan document language that has already been provided to the IRS as part of the determination letter application.

Pursuant to your request, we revised our proposed amendment regarding direct rollovers to provide additional detail on direct rollover provisions that apply specifically to our plan, namely the limitations on direct rollovers that apply to after-tax employee contributions. Therefore, we propose to request the North Dakota Legislature amend North Dakota Century Code § 15-39.1-34 by adding the following underscored language regarding rollovers to this section (revisions to our original proposed amendment highlighted in italics):

15-39.1-34. Internal Revenue Code compliance.

The board shall administer the plan in compliance with section 415, section 401(a)(9), section 401(a)(17), and section 401(a)(31) of the Internal Revenue Code, as amended, and regulations adopted pursuant to those provisions as they apply to governmental plans. Pursuant to the rollover rules under section 401(a)(31) of the Internal Revenue Code, a distributee may elect to have an eligible rollover distribution, as defined in section *402(f)(2)(A)* of the Internal Revenue Code, paid in a direct rollover to an eligible retirement plan, as defined in section 402(c)(8)(B) of the Internal Revenue Code, specified by the distributee. *The definition of eligible retirement plan shall also apply in the case of a distribution to an alternate payee under a qualified domestic relations order, as defined in section 414(p) of the Internal Revenue Code. Any portion of a distribution*

> *that consists of after-tax employee contributions which are not included in gross income may be transferred only to an individual retirement account or individual retirement annuity described in section 408 or 408A of the Internal Revenue Code or to a qualified plan or an annuity contract described in section 401(a) and 403(b) of the Internal Revenue Code, respectively, that agrees to separately account for such amounts, including separately accounting for the portion of such distribution which is included in gross income and the portion of such distribution which is not so included.* For purposes of this section, "distributee" includes a nonspouse beneficiary of a deceased member; provided, however, that in the case of a nonspouse beneficiary, the direct rollover may only be made to an individual retirement account or individual retirement annuity described in section 408 or 408A of the Internal Revenue Code that is established on behalf of the nonspouse beneficiary and will be treated as an inherited individual retirement account or inherited individual retirement annuity pursuant to section 402(c)(11) of the Internal Revenue Code.

Please note that this proposed amendment does not contain all of the detailed language set forth in the sample language that you provided. However, we believe that the above proposed amendment, as revised, sufficiently describes the plan's direct rollover provisions for purposes of a favorable determination letter, for the following reasons:

1) Our proposed amendment language regarding direct rollovers is substantially similar to the language you have provided as further described below and is consistent with plan amendments proposed by the North Dakota Public Employees Retirement System Hybrid Plan and North Dakota Highway Patrolmen's Retirement System as part of those plans' determination letter process, and for which those plans received favorable determination letters contingent upon adoption of the proposed amendments. The State of North Dakota has an interest in maintaining consistency among the statutory provisions of its various statewide retirement plans.

2) A portion of the sample language you provided does not apply to our plan, including the rules relating to direct rollover restrictions on distributions less than $200 and rollovers from a designated Roth account, because the plan will not restrict distributions of less than $200, and thus it would be misleading to include provisions relating to such rules in our plan language.

3) Our proposed amendment language, as revised, is consistent with the applicable statutory provisions regarding direct rollovers as set forth in Internal Revenue Code section 401(a)(31), including referencing the definitions of "eligible rollover distribution" in Internal Revenue Code section 402(f)(2)(A) and "eligible retirement plan" in Internal Revenue Code section 402(c)(8)(B).

4) We believe our proposed language regarding the definition of "distributee" when read in conjunction with language currently contained in other existing state statutes is

substantially similar to the example language you provided. For example, in our correspondence of November 4, 2016, we indicated that North Dakota Century Code § 15-39.1-20 states: *"A member or beneficiary of a member may elect, at the time and under rules adopted by the board, to have any portion of an eligible rollover distribution paid directly in a direct rollover to an eligible retirement plan specified by the member or the beneficiary to the extent permitted by section 401(a)(31) of the Internal Revenue Code, as amended."*; and the Plan's definition of beneficiary is located in North Dakota Century Code § 15-39.1-04 (2) and states *"Beneficiary means a person, estate, trust or organization designated in writing by a participating member to receive benefits provided by this plan"*, and this includes a nonspouse beneficiary. Further, the Plan's definition of member is located in North Dakota Century Code § 15-39.1-04 (13), (14), (15), and (16) defining "Tier one grandfathered member", "Tier one member", "Tier one nongrandfathered member", and "Tier two member" respectively. Finally, the right of an alternate payee to receive all or part of the benefits payable to a member pursuant to a qualified domestic relations order is set forth in North Dakota Century Code § 15-39.1-12.2(2) which states "A 'qualified domestic relations order' for purposes of this section means any judgment, decree, or order, including approval of a property settlement agreement, which relates to the provision of child support, spousal support, or marital property rights to a spouse, former spouse, child, or other dependent of the teacher, which is made pursuant to a North Dakota domestic relations law, and which creates or recognizes the existence of an alternate payee's right to, or assigns to an alternate payee the right to, receive all or a part of the benefits payable to the teacher."

Thus, we believe our proposed amendment language, as revised, now contains all of the applicable, substantive provisions set forth in the sample language you provided other than the definitions of "eligible rollover distribution", "eligible retirement plan" and "distributee", which are substantially similar. It is our understanding that the provisions of the Internal Revenue Code do not allow qualified plans the discretion to select or omit any part of the statutory definition of these terms, and for this reason it is not necessary to include the actual language defining these terms in our plan document.

If our response and revised Plan document language do not, in your opinion, satisfy the information needed for a favorable determination letter from the IRS, we would appreciate a description of any deficiencies noted by the Service and an additional opportunity to correct any such deficiencies before a final determination is made, including the opportunity to discuss the reasons for any such deficiencies in a telephone conference with you and your manager.

Sincerely,

Janilyn K. Murtha
Assistant Attorney General

cc: Fay Kopp (w/enc.)

Sixty-sixth
Legislative Assembly
of North Dakota

________ BILL NO. _____

Introduced by

A BILL for an Act to amend and reenact sections 15-39.1-19.1 and 15-39.1-19.2 of the North Dakota Century, relating to retired teachers returning to active service.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. AMENDMENT. Section 15-39.1-19.1 of the North Dakota Century Code is amended and reenacted as follows:

15-39.1-19.1. Retired teachers return to active service - Annuities discontinued on resumption of teaching over annual hour limit.

1. a. Except as otherwise provided in section 15-39.1-19.2, a retired teacher who is receiving a retirement annuity under chapter 15-39, 15-39.1, or 15-39.2 may not return to covered employment until thirty calendar days have elapsed from the member's retirement date. A retired member may then return to covered employment under an annual hour limit and continue receiving a monthly retirement benefit. As provided for in this section, return to active service, return to covered employment or return to teaching means retiree employment in teaching, supervisory, administrative, or extracurricular duties with a participating employer regardless of whether the retiree is licensed by the education standards and practices board or possesses a contract or other written agreement with a participating employer. The annual hour limit is based on the length of the re-employed retiree's contract as follows:

    (1) Retiree reemployment of nine months or less, annual limit is seven hundred hours;

(2) Retiree reemployment of ten months, annual limit is eight hundred hours;

(3) Retiree reemployment of eleven months, annual limit is nine hundred hours; or

(4) Retiree reemployment of twelve months, annual limit is one thousand hours.

b. ~~Employment as a noncontracted substitute teacher does not apply to the annual hour limit. Professional~~Contracted and noncontracted substitute teaching, professional development and extracurricular duties do not apply to the annual hour limit.

c. The retired member and the retired member's employer must notify the fund office in writing within thirty days of the retired member's return to covered employment.

d. A retired member who returns to teaching shall pay the member contributions required by section 15-39.1-09 on the salary received by the retired member excluding noncontracted substitute teaching. The member contributions must be included in the retired member's account value and may not be refunded except as provided under subdivision a of subsection 2 of section 15-39.1-19.1 and section 15-39.1-17.

e. A participating employer who employs a retired member under this section shall pay the employer contributions required by section 15-39.1-09 on the salary of the retired member excluding noncontracted substitute teaching.

f. A retired teacher who returns to teaching and does not exceed the annual hour limit must be treated as retired for all other purposes under this chapter. A retired teacher may not earn any additional service during the period of re-employment. The retired teacher's benefits may not be adjusted to reflect changes in the retired teacher's age or final average monthly salary at the end of the period of re-employment, any optional form of payment elected under section 15-39.1-16 remains effective during and after the period of re-employment, and additional benefits normally available to an active member, such as disability benefits, are not available to a retired teacher re-employed under this section.

g. A retired teacher who returns to teaching and exceeds the annual hour limit must immediately notify the fund office in writing. Failure to notify the fund office results in the loss of one month's annuity benefit for the member. The retired member's monthly benefit must be discontinued the first of the month following the date the member reaches the annual hour limit.

2. Upon the retired teacher's subsequent retirement, the member's benefit must be resumed as follows:

a. If the teacher subsequently retires with less than two years of additional earned credited service, the teacher's contributions paid to the fund after the member's benefit was suspended must be refunded in accordance with section 15-39.1-20 and the teacher is entitled to receive the discontinued annuity, plus any postretirement benefit adjustments granted during the period of re-employment, the first day of the month following the teacher's re-retirement.

b. If the teacher subsequently retires with two or more but less than five years of additional earned credited service, the retired person's annuity is the greater of the sum of the discontinued annuity, plus an additional annuity computed according to this chapter based upon years of service and average salaries earned during the period of re-employment plus any postretirement benefit adjustments granted during the period of re-employment, or a recalculated annuity computed according to this chapter based on total years of service credit earned during both employment periods offset by the actuarial value of payments already received. The new annuity is payable the first day of the month following the member's re-retirement.

c. If the teacher subsequently retires with five or more years of additional earned credited service, the retired person's annuity is the greater of the sum of the discontinued annuity plus an additional annuity based upon years of service and average salaries earned during the period of re-employment plus any postretirement benefit adjustments granted during the period of re-employment, or a recalculated annuity based on all years of service computed under subsection 2 of section 15-39.1-10. The new annuity is payable the first day of the month following the member's re-retirement.

SECTION 2. AMENDMENT. Section 15-39.1-19.2 of the North Dakota Century Code is amended and reenacted as follows:

15-39.1-19.2. Retired teachers return to active service - Critical shortage areas and disciplines - Rules.

1. A retired teacher who is receiving a retirement annuity under chapter 15-39, 15-39.1, or 15-39.2 may elect to return to teaching without losing any benefits under the provisions of this section or elect to return to teaching under the provisions of section 15-39.1-19.1. <u>As provided for in this section, return to active service, return to covered employment or</u>

<u>return to teaching means retiree employment in teaching, supervisory, administrative, or extracurricular duties with a participating employer regardless of whether the retiree is licensed by the education standards and practices board or possesses a contract or other written agreement with a participating employer.</u> To return to teaching under this section, a retired teacher must:

a. Return to teach in a critical shortage geographical area or subject discipline as determined by the education standards and practices board by rule;

b. If retired after January 1, 2001, have been receiving a retirement annuity for at least one year. A retired teacher may perform noncontracted substitute teaching duties but may not engage in full-time or part-time teaching duties during the one-year separation from service; and

c. Notify the fund office in writing within thirty days of the retired member's return to covered employment. The retired member's employer must also notify the fund office in writing within thirty days of the retired member's return to covered employment.

2. A retired teacher who returns to teaching under this section shall pay the member contributions required by section 15-39.1-09 on the salary of the retired member<u> excluding noncontracted substitute teaching</u>. The member contributions must be included in the retired member's account value and may not be refunded except as provided under section 15-39.1-17. A retired teacher who returns to teaching under the provisions of this section must be treated as retired for all other purposes under this chapter. A retired teacher may not earn any additional service during the period of re-employment. The retired teacher's benefits may not be adjusted to

reflect changes in the retired teacher's age or final average monthly salary at the end of the period of re-employment, any optional form of payment elected under section 15-39.1-16 remains effective during and after the period of re-employment, and additional benefits normally available to an active member, such as disability benefits, are not available to a retired teacher re-employed under this section.

3. A participating employer who employs a retired member under this section shall pay the employer contributions required by section 15-39.1-09 on the salary of the retired member <u>excluding noncontracted substitute teaching</u>.

MEMORANDUM

TO: TFFR Board
FROM: Fay Kopp
DATE: March 15, 2018
SUBJ: TFFR Retiree Re-Employment and Substitute Teaching

Here is some background information about current provisions relating to TFFR Retiree Re-Employment and possible changes to those provisions.

__Current Law - No legislative changes__

Summary: Retiree annual hour limit does not apply to non-contracted substitute teaching (NDCC 15-39.1-19.1 (1b). Retiree and employer contributions are not required on non-contracted substitute teaching. Therefore, retiree annual hour limit does apply to contracted in-staff substitute teaching. Retiree and employer contributions are required on contracted in-staff substitute teaching. See "In-staff Subbing Contract Period" policy for exceptions.

TFFR Board Policy *"In-staff Subbing Contract Period"* adopted in April 2017:

1) *In-staff subbing is defined as substitute teaching duties performed by a contracted teacher for the contracting TFFR participating employer.*

2) *If re-employed retiree has a contract or written agreement with the employer for full or part time work, TFFR will view beginning and ending calendar dates indicated on the contract as the contract term to determine the contract period, __unless__ the contract period is otherwise specifically detailed in the contract.*

    - *If substitute teaching duties are performed during the contract term, those duties are considered in-staff subbing, and retirement contributions are required to be paid on the substitute teaching pay. The in-staff subbing hours are counted toward the annual hour limit (700-1000 hours).*
    - *If substitute teaching duties are performed before the beginning calendar date or after the ending calendar date of the contract term, those duties are not considered in-staff subbing, and no retirement contributions are required to be paid on the substitute teaching pay. The subbing hours are not counted toward the annual hour limit (700-1000 hours).*

3) *If the re-employed retiree does not have a contract or written agreement with the participating employer, then no retirement contributions are required to be paid on the substitute teaching pay. The subbing hours are not counted toward the annual hour limit (700-1000 hours).*

This Board policy provides two exceptions (loopholes) which allow retirees to return to covered employment and exceed the retiree annual hour limit with unlimited substitute teaching by either: (1) having a detailed written contract which specifies work schedule, days and/or hours to determine the length of the contract period; OR (2) by not having a having a written contract. In both of these exceptions, retirement contributions are not paid because it is considered non-contracted substitute teaching. For the 2017-18 school year, we are aware of five employers who have issued detailed contracts to seven reemployed retirees as provided for under this policy, and consequently can perform unlimited substitute teaching with no payment of retirement contributions on the sub pay.

Factors to consider:

- No legislation is required.

- Allows re-employed retirees to be contracted for 700-1000 hours for regular teaching duties and also perform unlimited substitute teaching during the remainder of the day/week/school year <u>IF</u> the school district includes specific details of the employee's work schedule on the retiree's contract. No retirement contributions are required on non-contracted in-staff subbing.

- Allows re-employed retirees to be employed for 700-1000 hours without a written contract for regular teaching duties and also perform unlimited substitute teaching outside of their work schedule since there is no written contract. No retirement contributions are required on non-contracted subbing.

- Allows school districts/retirees a choice regarding how TFFR will determine contract period for in-staff subbing (narrow interpretation with detailed contract vs broad interpretation with more generic contract) or if there is no contract at all.

- Doesn't treat all school districts/retirees consistently since the contract period is based on whether the school district includes details of the work schedule on the retiree's contract or if the school district doesn't issue a retiree contract.

- Complexity and inconsistency for those retirees who teach and substitute teach with multiple employers. Subbing is not always counted consistently with regards to annual hours limit and contributions payment due to differing employer contracting practices.

- Complex administration and communications with school districts and TFFR.

- Potential for negative public perception since re-employed retirees would be able to work full time (teaching plus non-contracted subbing) and collect full pension benefits.

Option 1 – Law Change

Summary: Retiree annual hours limit does not apply to contracted and non-contracted substitute teaching; retiree and employer contributions are required on all salary except non-contracted substitute teaching (same as provisions for professional development and extracurricular duties).

Factors to consider:

- Legislation is required.
  - Clarify that retiree return to covered employment provisions apply regardless of whether the retiree is licensed by ESPB or possesses a written contract.
  - Extend the requirement that retiree annual hours limit does not apply to both contracted and non-contracted substitute teaching.
  - Modify requirement that retiree and employer contributions are required on all salary except non-contracted substitute teaching salary.

- TFFR Board would need to decide whether Board Policy on "In-staff Subbing Contract Period" should be eliminated or continued. Policy provides two exceptions (loopholes) which allow retirees to return to covered employment and exceed the retiree annual hour limit with unlimited substitute teaching by either: (1) having a detailed written contract which specifies work schedule, days and/or hours to determine the length of the contract period; OR (2) by not having a having a written contract. In both of these exceptions, retirement contributions are not paid because it is considered non-contracted substitute teaching.

  - If board policy is eliminated, some school districts would have to begin paying retirement contributions on retiree subbing when they didn't have to during 2017-19 if they detailed the work schedules on contracts.

  - If board policy is continued, the inconsistent treatment between those that detail work schedules on contract and those that don't detail work schedules, will continue with some subbing pay being subject to retirement contributions and some not.

- Allows re-employed retirees to be employed with or without a written contract for 700-1000 hours for regular teaching duties and also perform unlimited substitute teaching during the remainder of the day/week/school year. Retirement contributions are required on all salary except non-contracted substitute teaching salary (like professional development and extracurricular duties).

- Complex administration and communications with school districts and TFFR.

- Potential for negative public perception since re-employed retirees would be able to work full time (teaching plus non-contracted subbing) and collect full pension benefits.

TFFR RETIREE RE-EMPLOYMENT AND SUBSTITUTE TEACHING

	No Change **No Legislation**	**Option 1** **Legislation Required**
Noncontracted Subbing		
Annual Hours Limit	No	No
Contributions Required	No	No
Contracted Subbing		
Annual Hours Limit	Yes *1,2	No
Contributions Required	Yes *1,2	Yes
***Exceptions – Board Policy**		TBD
1)No Employee Contract		
Annual Hour Limit	No*	
Contributions Required	No*	
2)Work Schedule Detailed on Contract		
Annual Hour Limit	No*	
Contributions Required	No*	

Policy Type: **TFFR Program**
Polity Title: **In-staff Subbing Contract Period**

It is the policy of the TFFR Board of Trustees that the following guidelines apply for the purpose of determining the contract period for in-staff subbing for active members and re-employed retirees as provided for in NDCC 15-39.1-04 (4) and (12), 15-39.1-19.1, 15-39.1-19.2, and NDAC 82-05-06-01.

1) In-staff subbing is defined as substitute teaching duties performed by a contracted teacher for the contracting TFFR participating employer.

2) If the active member or re-employed retiree has a contract or written agreement with the participating employer for full or part time work, TFFR will view the beginning and ending calendar dates indicated on the contract as the contract term to determine the contract period, unless the contract period is otherwise specifically detailed in the active member or re-employed retiree's contract.

    - If substitute teaching duties are performed during the contract term, those duties are considered in-staff subbing, and retirement contributions are required to be paid on the substitute teaching pay. The in-staff subbing hours are reported as compensated hours for active members and are counted toward the annual hour limit for re-employed retirees (700 – 1000 hours depending upon length of contract).

    - If substitute teaching duties are performed before the beginning calendar date or after the ending calendar date of the contract term, those duties are not considered in-staff subbing, and no retirement contributions are required to be paid on the substitute teaching pay. The subbing hours are not reported as compensated hours for active members and are not counted toward the annual hour limit for re-employed retirees.

3) If the active member or re-employed retiree does not have a contract or written agreement with the participating employer, then no retirement contributions are required to be paid on the substitute teaching pay. The subbing hours are not reported as compensated hours for active members and are not counted toward the annual hour limit for re-employed retirees.

This policy does not prohibit the Board from making an eligible salary determination for an individual member pursuant to N.D.A.C. 82-04-02-01.

TFFR Board Adopted: April 27, 2017

MEMORANDUM

TO: **TFFR Board**

FROM: **Shelly Schumacher**

DATE: **March 15, 2018**

SUBJ: **TFFR Member Online Update**

TFFR Member Online officially went into production on February 1, 2018.

Active and retired members were notified via member newsletters, active member email blasts, and retiree change notice inserts (attached). Retirement Services staff will continue to market this new online service in member outreach program materials, correspondence, additional email blasts, and other phone and personal interactions with members.

As of March 10, 2018, **<u>379</u>** members have signed up for TFFR Member Online:

Active Members	226
Retired Members	148
Survivor Beneficiaries	4
Terminated Members	1

IT staff, Rich Nagel and Len Wall, are doing a great job working with individual members on technical issues and getting logged in for the first time. Retirement Services staff, Shelly Schumacher, Paula Brown, Denise Weeks, and Estelle Kirchoffner, are also helping members understand the account information that is now available to them through this online service. Member feedback has been very positive.

Board Information Only. No board action is requested.

TFFR Member Online Services

The North Dakota Teachers' Fund for Retirement (TFFR) is very happy to announce that a secure Internet application for TFFR members – **TFFR Member Online Services --** is now available.

Non-retired TFFR members can access the following account information:

- Member Account Value
- Annual Statement
- Salary and Service Detail by Fiscal Year
- Refund Account Details
- Purchase of Service Details

Retired TFFR members and beneficiaries in payment can access the following:

- Retirement Account Details
- Pension Payment Details
- Pension Deduction Details

Accessing Your Account

- Go to www.nd.gov/rio
- Select TFFR link
- Review TFFR Member Online Instructions
- Select TFFR Member Online Services

Before you can access TFFR Member Online Services, you must have a Personal North Dakota Login ID and password. If you do not have a Personal North Dakota Login ID, you will need to register for the ID. If you forget your ID or password, just follow the on-screen instructions.

After you enter your North Dakota Login ID and password, you will be asked to supply your 6-digit TFFR Person ID and other personal information to validate your identity. This information will be entered the first time you access TFFR Member Online Services. Future visits to TFFR Member Online Services will only require you to enter your Personal North Dakota Login and password.

The security of confidential and sensitive information is very important to TFFR. Logging in to the state's secure system with your State of ND Login ID provides a secure environment in which you can access your TFFR account information.

Please sign up for TFFR Member Online today! Contact our office with any questions or comments at 701.328.9885 or 800.952.2970. For technical questions about the online application, please talk to our Information Technology staff. For questions about your TFFR account, please visit with Retirement Services staff. We are happy to assist you.

MEMORANDUM

TO: TFFR Board
FROM: Fay Kopp
DATE: March 15, 2018
SUBJ: 2018 Federal and State Tax Withholding Changes Update

- **2018 Federal Tax Withholding Changes**

As discussed at the January 2018 Board meeting, the IRS released the 2018 federal tax withholding tables on January 11, 2018. We were instructed to begin using the new tables as soon as possible, but no later than February 15.

TFFR implemented the federal tax withholding changes for the February 1, 2018 retiree payroll. Annual TFFR Retirement Benefit Change notices were sent to all retirees showing them their updated tax withholding, and current net benefit. The attached Tax Notice was also included.

- **2018 ND State Tax Withholding Changes**

The ND State Tax Department released the 2018 state tax withholding tables on February 26, 2018. Employers were instructed to update their payroll systems even though the changes were very minor.

Consequently, TFFR is implementing the state tax withholding changes for the April 1, 2018 retiree payroll. Retirement Benefit Change notices will not be sent to retirees again as stated in the Tax Notice they received in February. State tax withholding changes are minimal – in nearly all cases less than $1 per month, and in most cases, less than $0.25 per month.

- **Retiree Phone Calls**

TFFR staff has received some calls from retirees questioning the amount of their tax withholding changes. Because the tax withholding needs of retirees varies greatly based on their personal financial situation, TFFR encourages all retirees to review their individual tax situation with a qualified tax advisor, and to adjust tax withholding as needed. A tax withholding review is particularly important this year, as the new tax law takes effect and the IRS provides more information to help people understand the impact of these changes.

We are also encouraging retirees to sign up for TFFR Member Online which will provide them with additional details about their net benefit amount, federal and state tax withholding, and other deductions.

Board Information Only. No board action is requested.

IMPORTANT TAX NOTICE

For NDTFFR Retirees and Benefit Recipients
Federal and ND State Tax Withholding

As a result of the Tax Reform bill (Tax Cuts and Jobs Act, H.R.1) approved by Congress in December 2017, TFFR benefit recipients who have federal and state tax withheld may receive a higher net benefit payment than in the past because less taxes may be withheld under the new law.

Will the federal tax change affect your monthly TFFR benefit payment?

If you have authorized federal tax withholding from your monthly TFFR benefit payment, your **February 1, 2018** TFFR benefit payment will reflect the new 2018 federal tax withholding tables. In most cases, this should result in less federal tax withholding, and a higher net monthly benefit. The new federal tax tables could also slightly reduce your ND state tax withholding since the federal allowance amount changed and is used for both federal and state withholding. If you do not have federal taxes withheld, your net monthly benefit amount should not change. Please see the TFFR Retirement Benefit Notice included in this mailing for details about the amount of federal and state taxes withheld, and impact on your February 1 benefit amount, if any.

Will the ND state tax withholding tables change?

The ND State Tax Department is in the process of considering changes to the 2018 state tax withholding tables. This was delayed since certain changes contained in the federal legislation also affect how ND tax withholding is calculated. If new state tax tables are released, TFFR benefit recipients who have ND state tax withheld may see another change in their net benefit payment amount. Due to the cost of mailing services, another TFFR Retirement Change Notice will not be sent if the state tax tables change.

What should you do?

Please review the TFFR Retirement Change Notice included in this mailing and your monthly TFFR deposit in your bank account. You may also find it helpful to sign up for TFFR Member Online which will provide you with additional details about your net benefit amount, federal and state tax withholding, and other deductions. If you have any questions or wish to change your tax withholding, contact the Retirement Services Staff at 701-328-9885 or 800-952-2970. We are happy to assist you.

We encourage all TFFR benefit recipients to review your individual tax situation with a qualified tax advisor, and to adjust tax withholding as needed. A personal tax review is particularly important this year, as the new tax law takes effect and the IRS provides more information to help people understand the impact of these changes.

Retirement Trends and Projections

North Dakota
Teachers' Fund for Retirement

February 2018

Retirement: Now or Later?

The decision to retire is prompted by both non-financial and financial reasons.

- **Non-financial considerations:**
- Health of teacher (and spouse)
- Family issues (spouse, children, parents)
- Personal reasons (job satisfaction vs. job stress)
- Federal regulations
- State and local issues (school closings, school consolidations)

- **Financial considerations:**
- Salary vs. Retirement benefits
- Health insurance benefits – rising cost of medical care
- Employment in retirement
- Inflation

TFFR Members

- TFFR member count includes number of people, not FTE’s.

- TFFR members may be full time, part time, or temporary teachers, but must be licensed and contracted. Noncontract substitute teachers are not TFFR members.

TFFR Member Categories

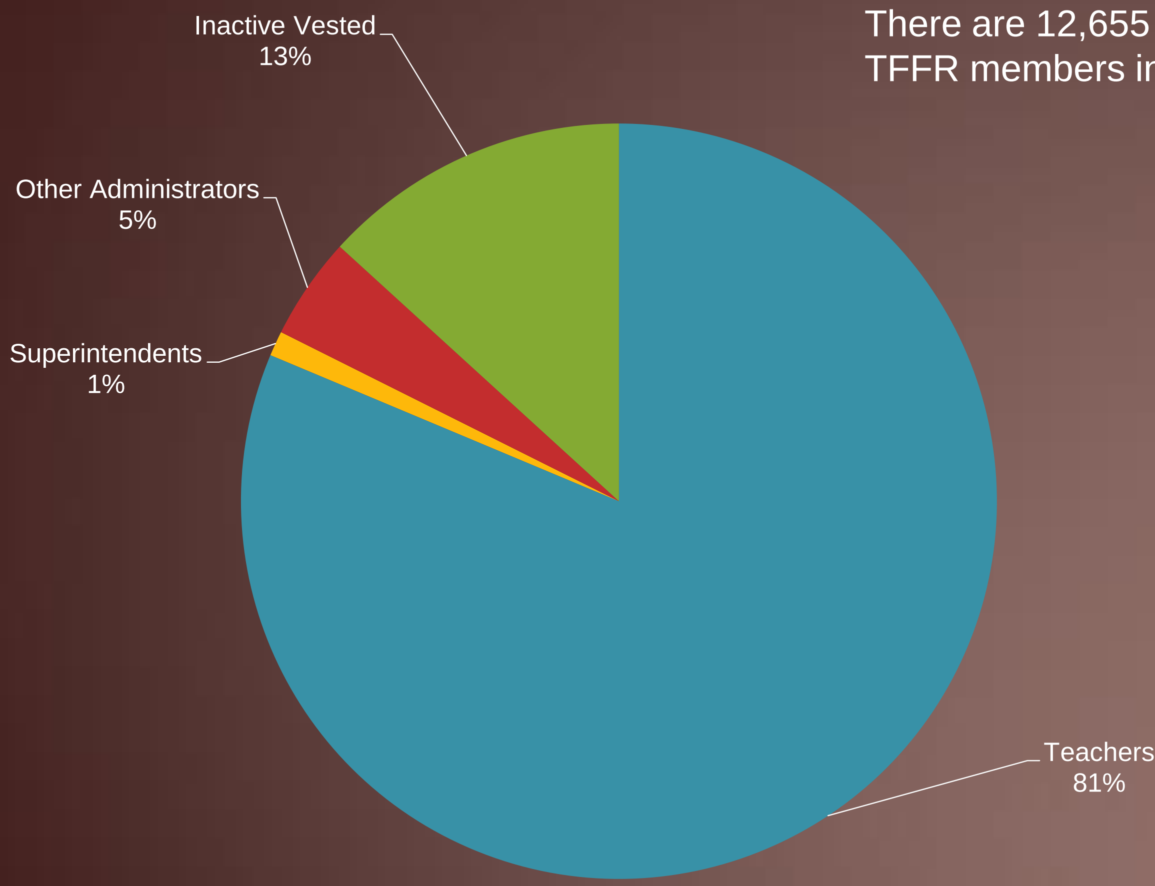
TFFR member categories are based on DPI title codes and presented according to teacher and administrator categories defined in NDCC 15.1-02-13.6.

- “Teacher” includes positions of teacher, special ed teacher, career advisor, coordinator, strategist, counselor, instructional coach, library media specialist, psychologist, and speech/language pathologist.
- “Superintendent” includes only school superintendents.
- “Other Administrators” includes positions of assistant superintendent, director, assistant director, principal, assistant principal, county superintendent, and other administrative positions.

Today

Current TFFR Membership

There are 12,655 active and inactive vested TFFR members in February 2018.



Teachers	10,291
Superintendents	135
Other Administrators	555
Inactive Vested	1,674
Total	12,655

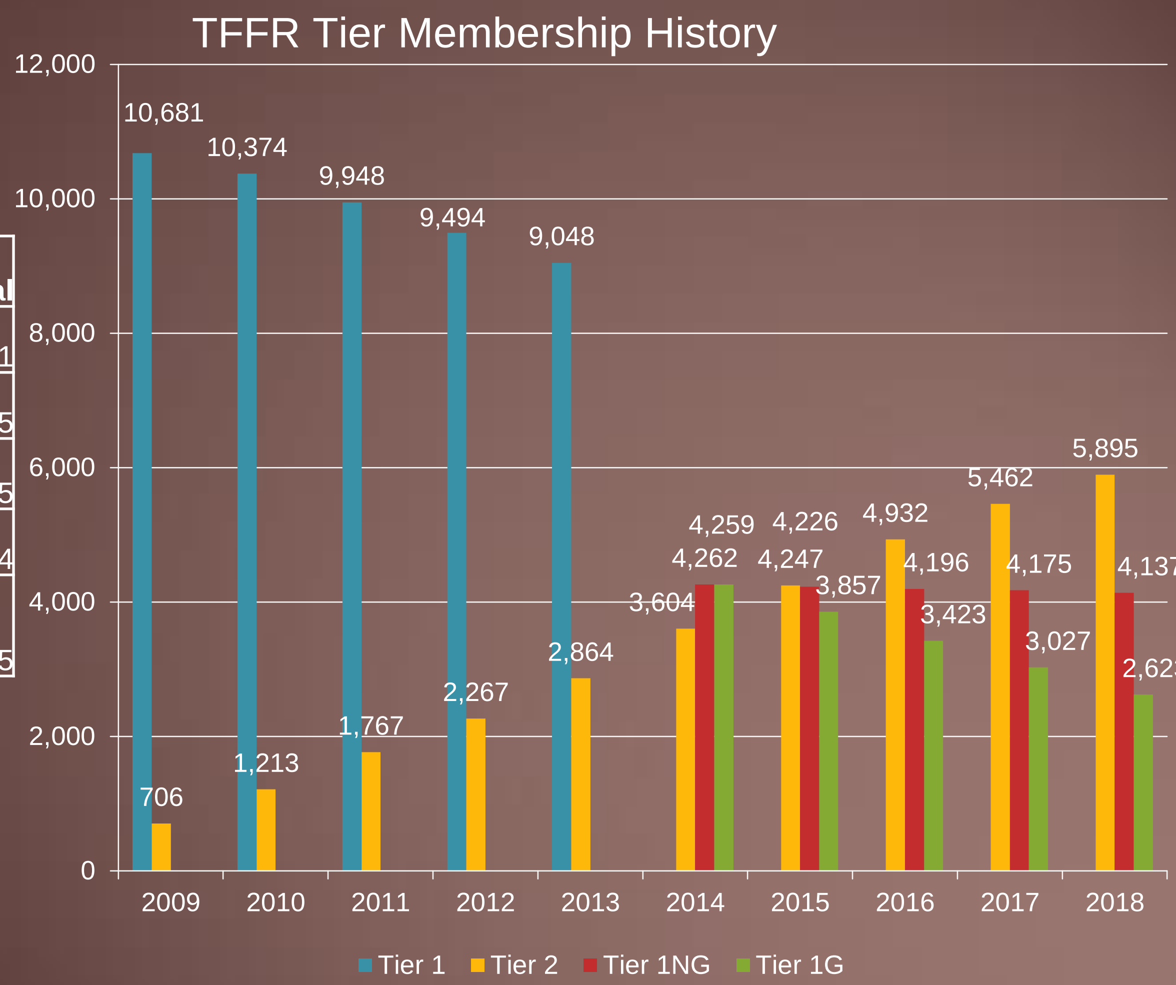
Note: There are also 1,031 inactive non-vested TFFR members and 8,507 retired members and beneficiaries.

Today

TFFR Tier Membership

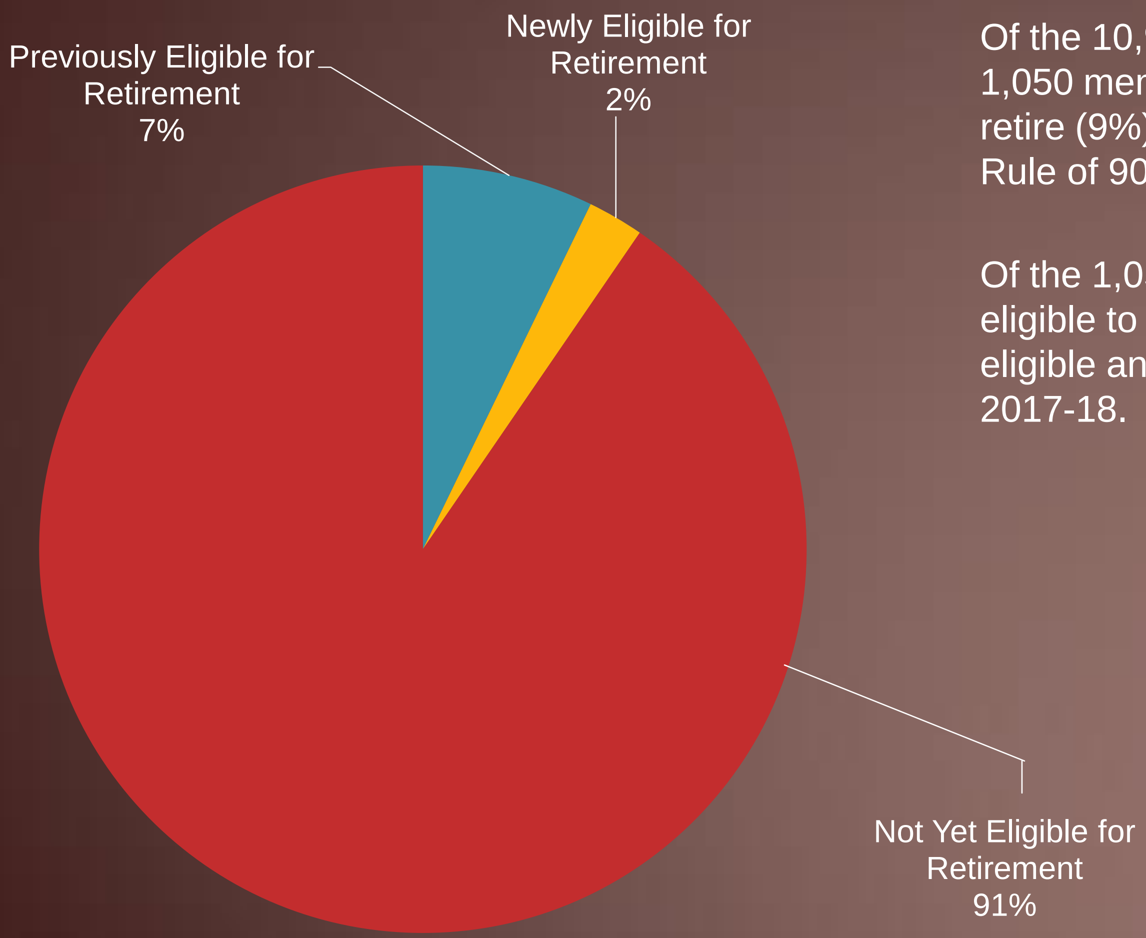
Active and inactive vested Tier membership in February 2018

TFFR Members	Tier 1G	Tier 1NG	Tier 2	Total
Teachers	1,939	2,882	5,470	10,291
Superintendents	53	42	40	135
Other Administrators	160	252	143	555
Inactive Vested	471	961	242	1,674
Total	2,623	4,137	5,895	12,655



Today

Current Active TFFR Membership Eligible for Retirement



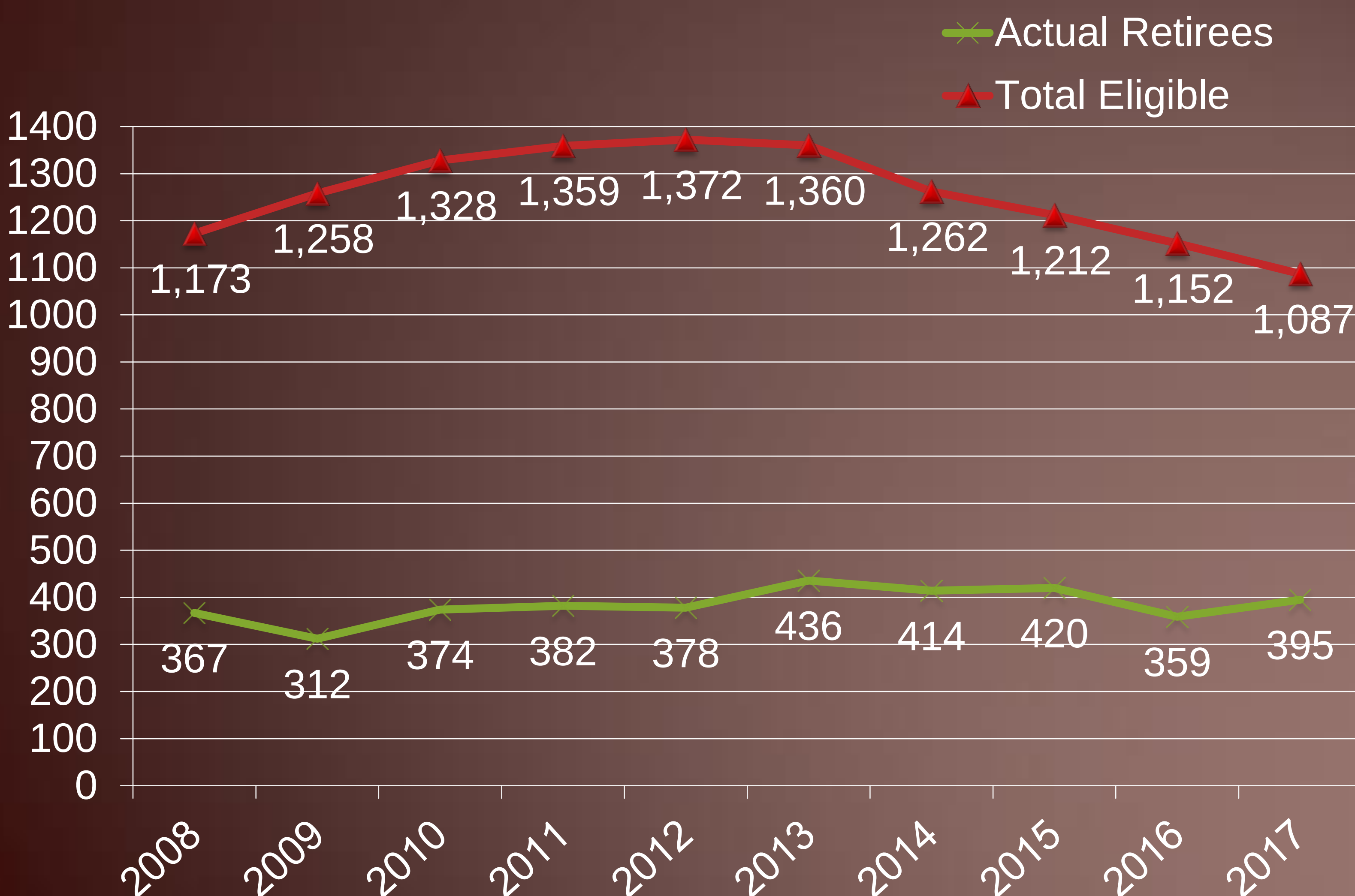
Of the 10,981 active TFFR members, 1,050 members are currently eligible to retire (9%) either under the Rule of 85, Rule of 90/Min age 60, or age 65.

Of the 1,050 active TFFR members eligible to retire, 75% are previously eligible and 25% are newly eligible in 2017-18.

Previously Eligible for Retirement	791
Newly Eligible for Retirement	259
Not Yet Eligible for Retirement	9,931
Total	10,981

Yesterday

Actual Retirees & Total Eligible

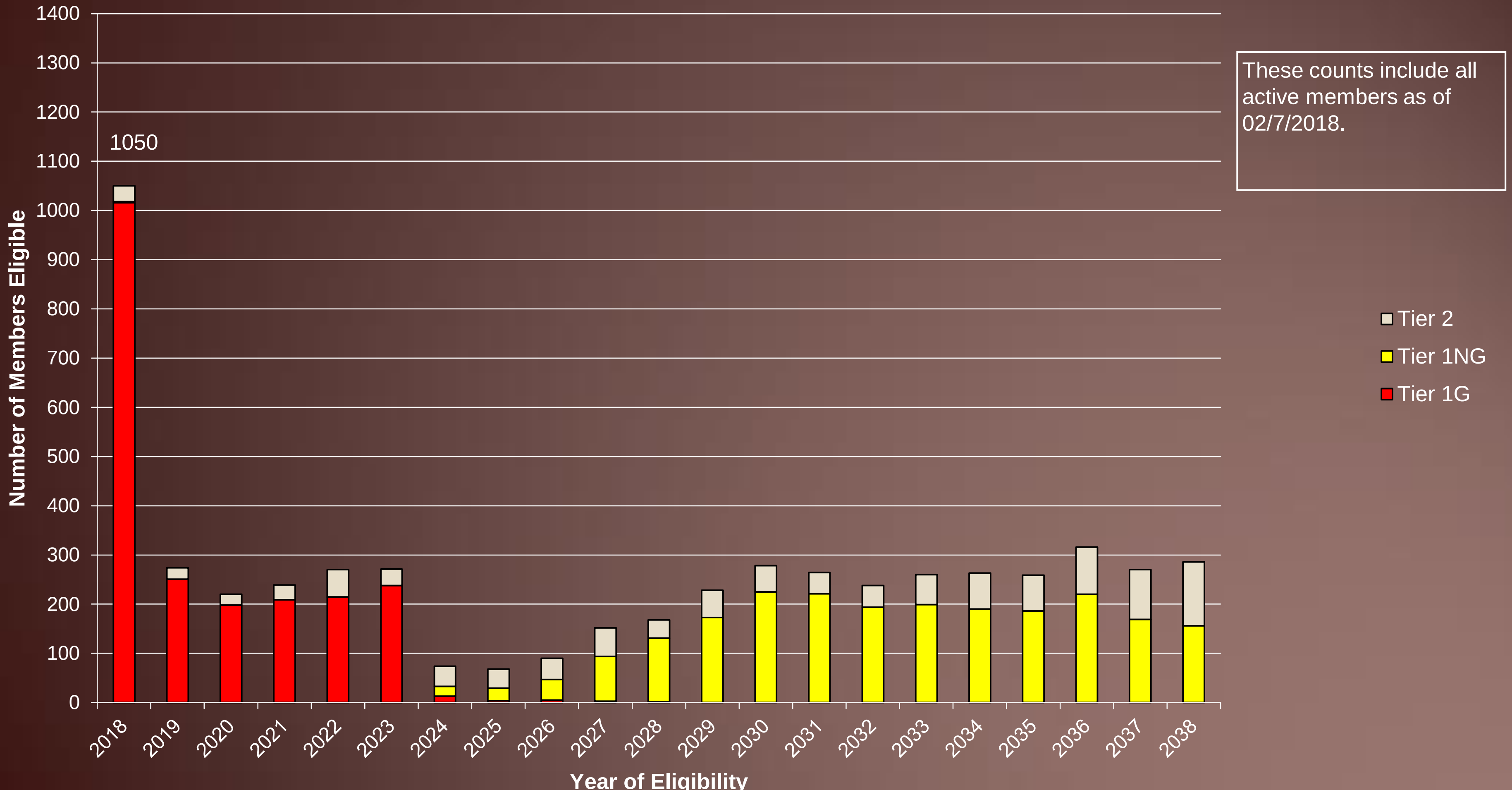


10 Year History

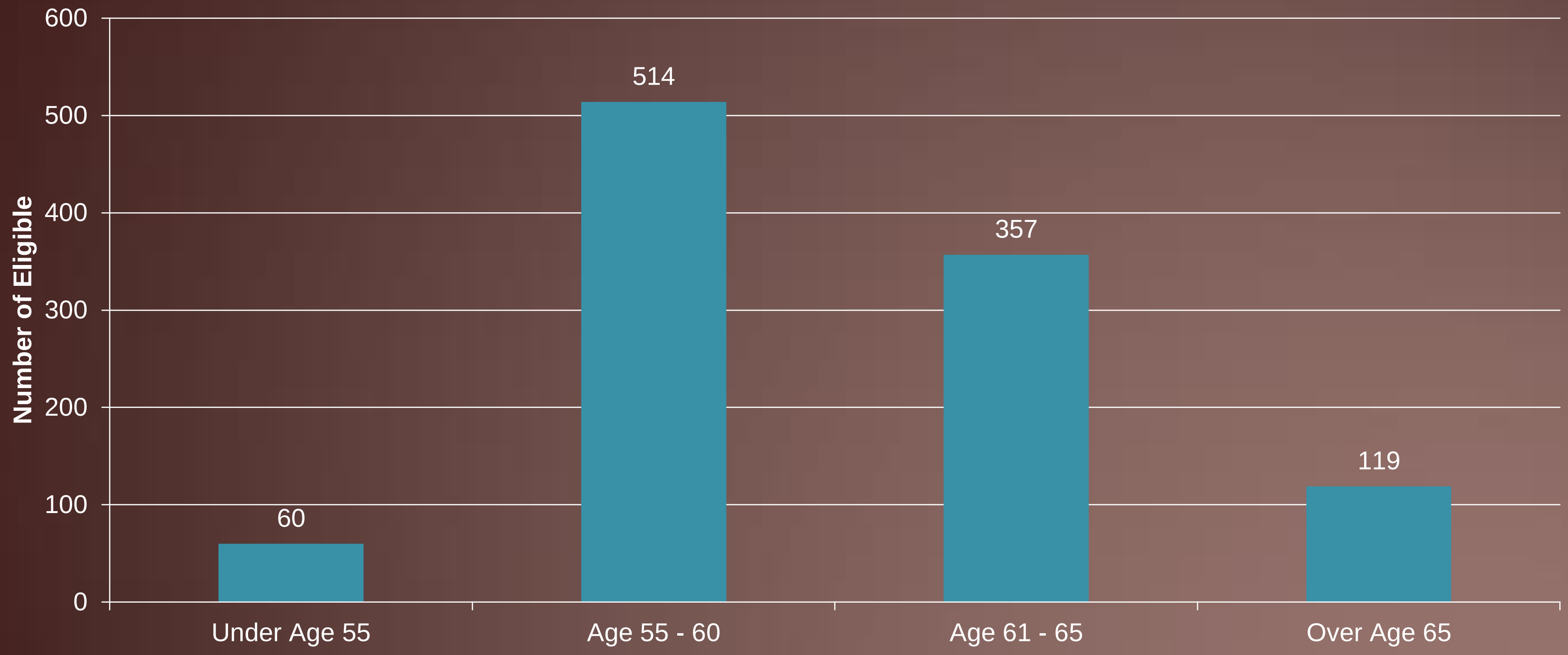
2008-2017

- On average, 1,256 teachers have been eligible to retire each year over the last 10 years.
- On average, 384 teachers actually retired each year, or total of almost 3,837 for 10 year period.
- Approximately 30% of eligible members actually retired over the past 10 years.

TFFR Active Membership Retirement Eligibility Profile - 20 Year Projection



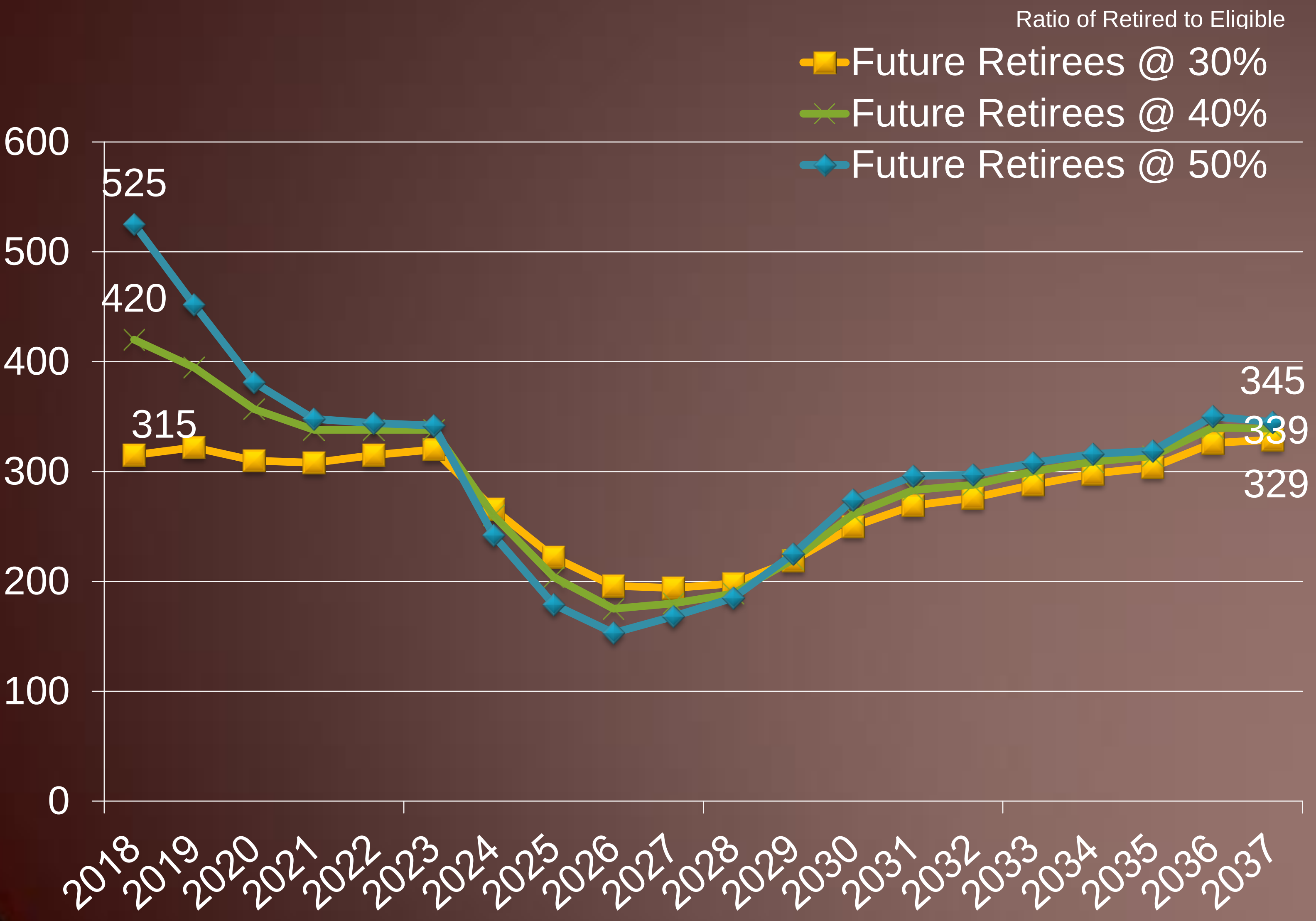
Current Eligible in 2018 by Age



Note: Of the 1,050 total eligible, the youngest is age 52 and the oldest is age 80

Tomorrow???

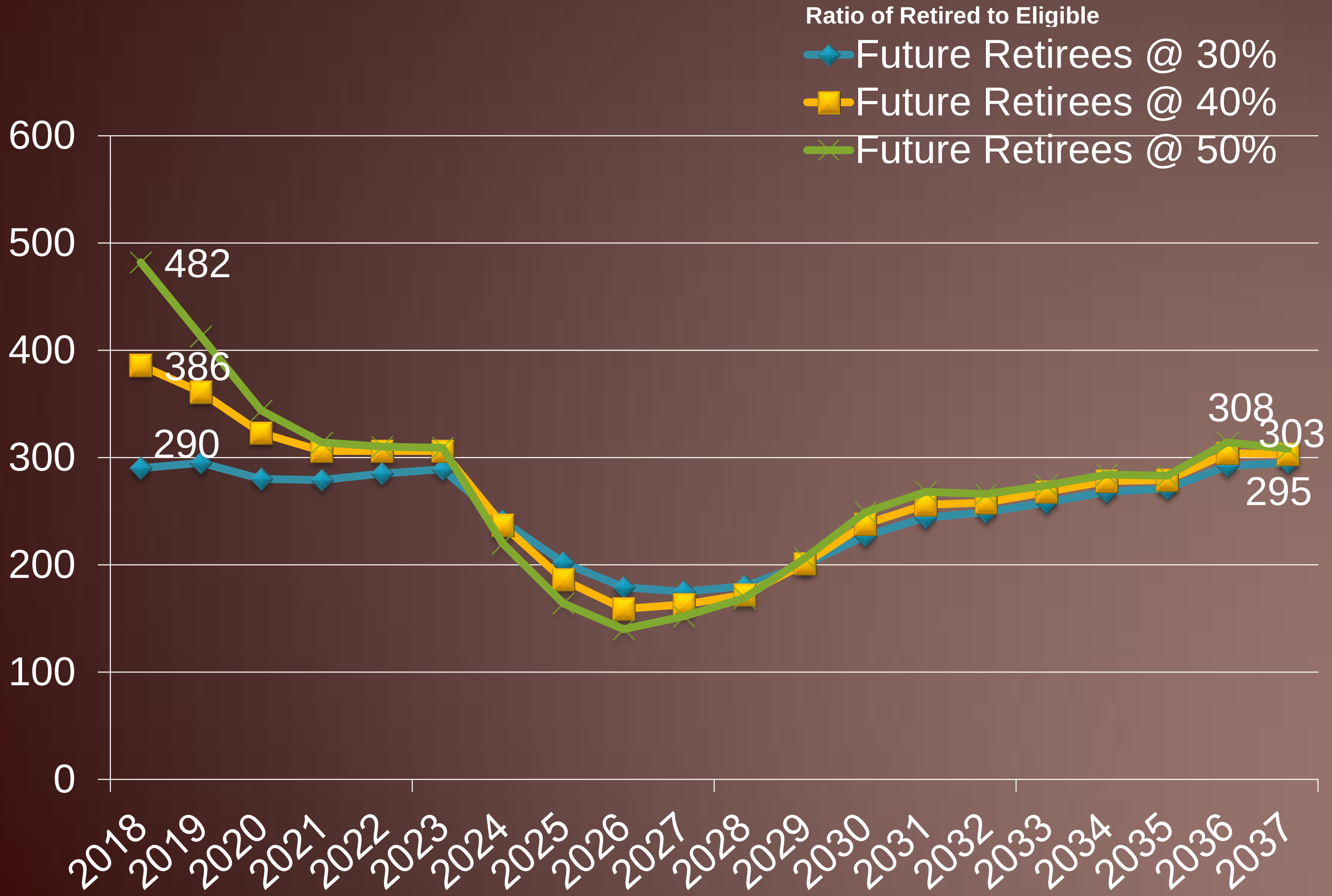
Projected Retirees All Active



Based on ratios of 30%, 40%, and 50% of actual retirements to eligible retirements, the number of active members projected to retire in the next 20 years.

Tomorrow???

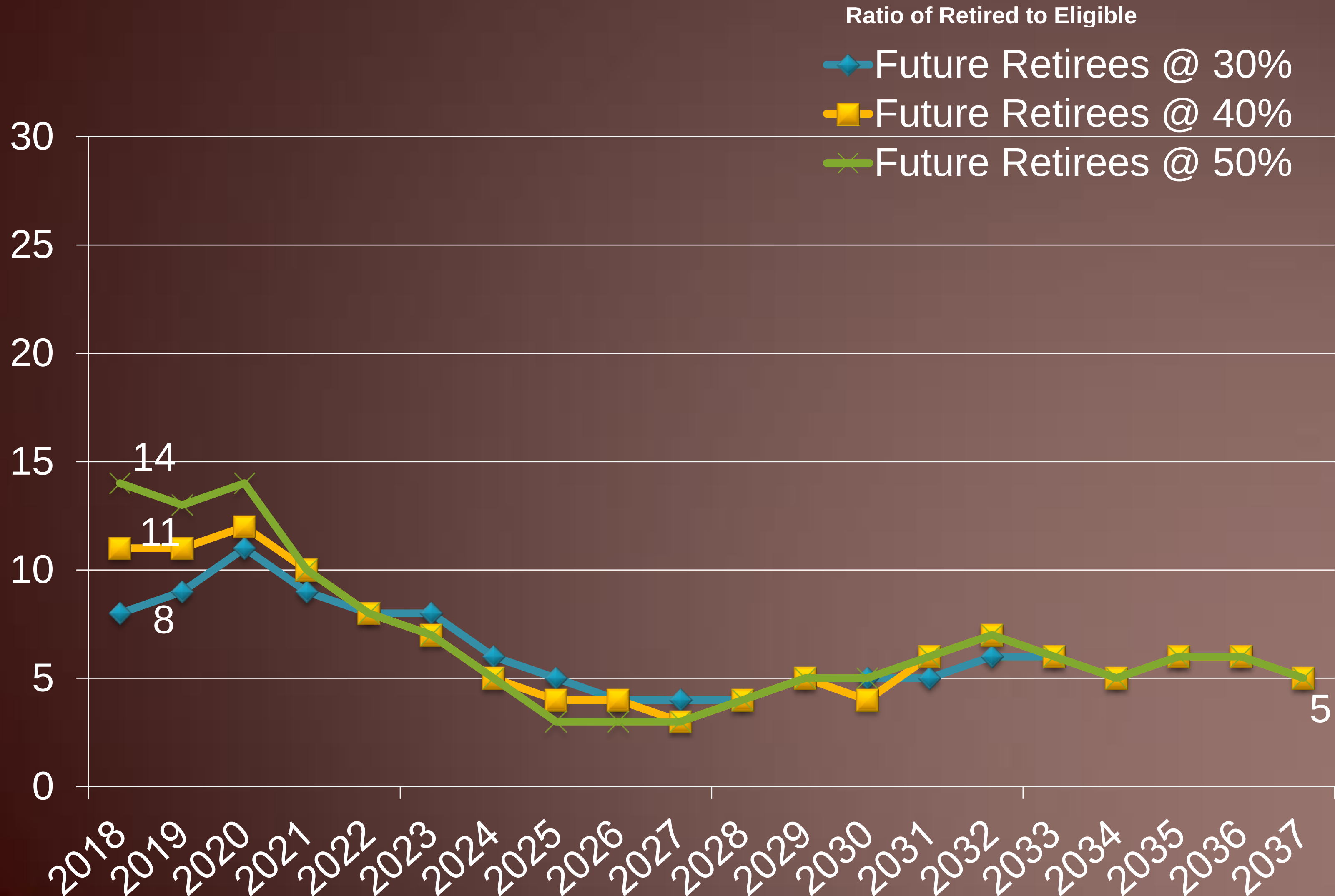
Projected Retirees Teachers



Based on ratios of 30%, 40%, and 50% of actual retirements to eligible retirements, the number of teachers projected to retire in the next 20 years.

Tomorrow???

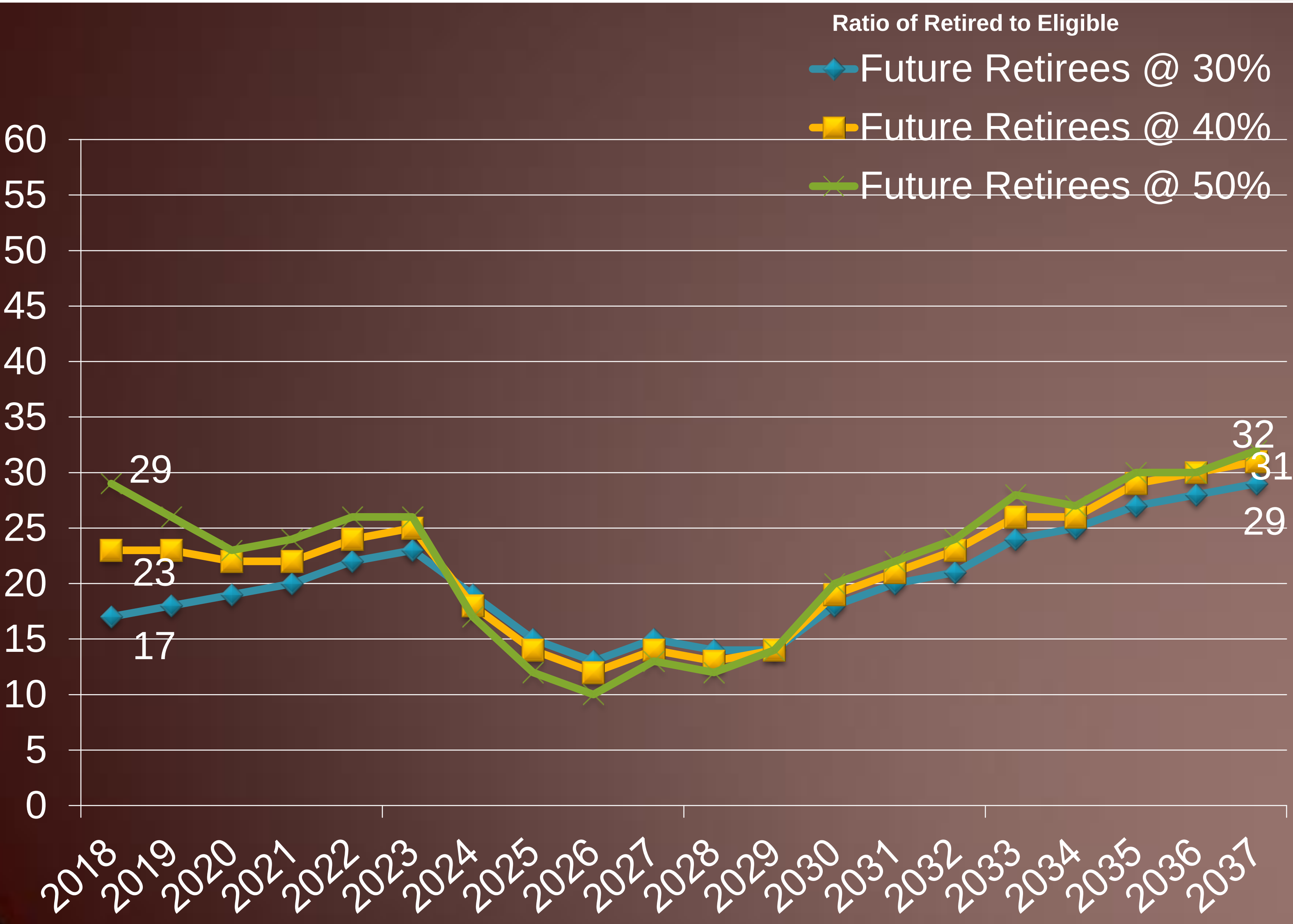
Projected Retirees Superintendents



Based on ratios of 30%, 40%, and 50% of actual retirements to eligible retirements, the number of superintendents projected to retire in the next 20 years.

Tomorrow???

Projected Retirees Other Administrators



Based on ratios of 30%, 40%, and 50% of actual retirements to eligible retirements, the number of other administrators projected to retire in the next 20 years.

Summary

Based on ratios of 30% and 40% of actual retirements to eligible retirements, approximately 2,800 to 3,000 active members are projected to retire in the next 10 years which averages about 290 per year.

		# Retire		Avg/Yr	
	Members	30%	40%	30%	40%
Teachers	10,291	2,515	2,733	252	273
Superintendents	135	72	75	7	8
Other Administrators	555	181	197	18	20
Total Active Members	10,981	2,768	3,005	277	301

Note: All retirement projections are estimates only.

MEMORANDUM

TO: TFFR Board

FROM: Fay Kopp

DATE: March 15, 2018

SUBJ: 2018-19 Board Calendar and Education Plan

TFFR Board policy C-2 requires the Board to conduct a minimum of six board meetings each year. Board meetings are generally scheduled for the day preceding the SIB meetings beginning in July of each year, unless a different day is determined. Special meetings may also be called, or this schedule may be adjusted if needed. Attached are suggested meeting dates for 2018-19. TFFR meetings are typically scheduled for Thursday's at 1 pm; TFFR meetings are not scheduled in August and May due to potential conflicts with school start and end dates.

If the Board is interested in meeting at a different time or day, or changing the number of meetings each year, a different schedule would need to be considered. You may wish to discuss this option.

I am also working on the 2018-19 Board Education plan, and am very interested in any suggestions from board members on agenda items, topics or information that would assist you in carrying out your board responsibilities. As examples, here are some board education topics from the past few years:

2015-16

- Pension Fund Governance (K. Ambachtsheer)
- Actuarial Valuation Process (Segal)
- Asset Liability Study Process (Callan)
- Actuarial Audit Process (Cavanaugh Macdonald)
- Fiduciary Duties/Ethics (AGO)

2016-17

- Pension Plan Governance (Aon Hewitt)
- State Cyber Security (ITD)
- Actuarial Valuation Process (Segal)
- National Pension Issues (Segal)
- ND Education Demographics (DPI)
- ND Teacher Shortages (ESPB)
- Audit Services Overview (RIO)
- Open Records/Open Meetings (AGO)

2017-18

- Callan College Investment Overview (Callan)
- Actuarial Valuation Process (Segal)
- Public Pension Actuarial Issues (Segal)
- QDRO Benefits (RIO)
- Disability Benefits (RIO)
- Environmental, Social, and Governance Investing (RIO)
- Securities Litigation (RIO)
- Fiduciary Duties/Ethics (AGO) – April 2018*

BOARD ACTION: Approve or adjust 2018-19 board meeting schedule. Provide directives for board agenda or board education topics.

DRAFT
2018-19
TFFR and SIB Meeting Schedule

July 2018

26	TFFR - 1:00 pm	
27	SIB – 8:30 am	
	(SIB Governance Retreat)	

August 2018

--	TFFR - No meeting
24	SIB - 8:30 am

September 2018

27	TFFR - 1:00 pm
28	SIB - 8:30 am

October 2018

25	TFFR - 1:00 pm
26	SIB - 8:30 am

November 2018*

--	TFFR - No meeting
16	SIB - 8:30 am

December 2018

--	TFFR - No meeting
21	SIB - 8:30 (Tentative)

January 2019

24	TFFR - 1:00 pm
25	SIB - 8:30 am

February 2019

--	TFFR - No meeting
22	SIB - 8:30 am

March 2019

21	TFFR - 1:00 pm
22	SIB - 8:30 am

April 2019

25	TFFR - 1:00 pm
26	SIB - 8:30 am

May 2019

--	TFFR - No meeting
24	SIB - 8:30 am

June 2019

--	No meetings

Notes:

1) SIB meetings scheduled for 4th Friday of each month, except for November* which is 3rd Friday due to Thanksgiving.
2) TFFR meetings scheduled for day preceding SIB meetings.

03/15/18

North Dakota Teachers' Fund For Retirement

NDTFFR Board Reading
March 2018

- National Association of State Retirement Administrators (NASRA): State Hybrid Retirement Plans - December 2017
- GRS Insight: Cash Balance Primer - October 2017
- National Institute on Retirement Security (NIRS): Millennials and Retirement: Already Falling Short - February 2018
- Econsult Solutions: The Impact of Insufficient Retirement Savings - January 2018