

# NDTFFR Board Meeting AGENDA

Thursday, January 23, 2020 – 8:30 am Radisson Hotel – Renoir Russell Room 6<sup>th</sup> & Broadway, Bismarck, ND

### **BUSINESS MEETING - 8:30 am**

- 1. Call to Order and Approval of Agenda Pres. Lech (Action)
- 2. Approval of Minutes of October 24, 2019 Meeting Pres. Lech (Action)
- 3. 2019 GASB 67 & 68 Report Matt Strom, Segal via phone conference (Action) 10 min.
- 4. **2019 Plan Management Policy Report** Matt Strom, Segal via phone conference (Action) 10 min.
- 5. Plan Management Policy Correction Fay Kopp (Action) 10 min.
- 6. Executive Session Attorney Consultation, Review and Approval of Order, Benefit Appeal #2019-1A Nici Meyer (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 NDCC 44-04-19.2.
- 7. Quarterly Investment Update (9/30/19) Dave Hunter (Information) 15 min.
- 8. Board Education: Retiree Reemployment Provisions Shelly Schumacher (Information) 15 min
- 9. 2018-19 Reemployed Retiree Report Shelly Schumacher (Action) 15 min.
- 10. **2021 Legislative Planning** Fay Kopp (Information) 30 min.
- 11. **Pension Administration System Project Charter** Fay Kopp (Action) 15 min.
- 12. Core Values Approval Pres. Lech (Information) 15 min.
- 13. **2019 CAFR, PPCC Award, and TFFR Fast Facts** Fay Kopp (Information) 10 min.
- 14. Quarterly Audit Services Update (9/30/19) Sara Sauter (Information) 10 min.
- 15. RIO Staffing Update Dave Hunter, Fay Kopp (Information) 15 min.
- 16. **2020-21 Board Calendar** Fay Kopp (Action) 5 min.
- 17. Consent Agenda Fay Kopp (Action) 10 min.

Employer Reporting Reviews Wilton and Jamestown

Disability #2020-1, 2020-2 Confidential – to follow separately QDRO # 2020-1, 2020-2 Confidential – to follow separately

\*Executive Session possible if Board discusses confidential information pursuant to NDCC 15-39.1-30.

18. Other Business

ND Teachers' Fund for Retirement Board Meeting Agenda January 23, 2020

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### **BOARD RETREAT** – 1:00 pm (approximately)

- 1. Retreat Introduction and Purpose Pres. Lech
- 2. Review of Mission, Vision, and Values Statements Pres. Lech
- 3. **Perspectives Decision-making Exercise** Pres. Lech
- 4. Revised Board Governance Manual Highlights Cody Mickelson and Committee
- 5. **Board Education Competencies** Pres. Lech
- 6. **TFFR's Image Communication Ideas** Mel Olson
- 7. **Trustee Open Forum** Pres. Lech
- 8. Adjournment

Next TFFR Board Meeting: March 26, 2020

Any individual requiring an auxiliary aid or service should contact the Retirement and Investment Office at 701.328.9885 at least three (3) days prior to the scheduled meeting.



### **EXECUTIVE SUMMARY**

TFFR Board Meeting & Retreat January 23, 2020 – 8:30 am Radisson Hotel Renoir/Russel Room

Highlights of the January 23 TFFR Board meeting:

- Segal will present the 2019 GASB 67 & 68 Report. Segal will also present the updated 2019 Plan Management Policy Score. The 2019 policy score of 6 (which means the Board should continue to monitor the plan) did not change from the 2018 score. However, it will be updated again based on the results of the Experience Study which is currently in progress. Because reducing TFFR's current 7.75% investment return assumption is expected to be recommended, as well as other possible assumption changes, there is the potential the policy score could decline. The Plan Management Policy which was approved in October also requires a correction since a section of the policy was omitted in error in the approved version.
- Dave will provide a TFFR Investment Update. TFFR earned a net investment return
  of 15.9% for the 11 months ended 11.30.19 (over \$365 million of net investment
  income) due to favorable capital market and economic conditions in 2019. TFFR
  returns have approximated the actuarial return assumption for the last 30 years
  ended 6.30.19 (TFFR earned 7.7% compared to 7.75% return assumption). Pension
  trust "gross" returns were in the 33rd percentile for the 5-years ended 9.30.19.
- Lots of discussion about Retiree Re-employment rules so Shelly will present
  Board Education on the topic and present the 2018-19 Retiree Re-employment
  Report. Last year 336 retirees returned to covered employment with 132 employers.
  Most retirees continue to return to work under the General Rule (700-1000 hours).
  There has been little change from previous years.
- Fay will review 2021 Legislative Planning issues and topics for Board discussion. Legislative proposals must be filed by 4.1.20 for Legislative Employee Benefits Committee review. At this time, there are no critical funding, administrative or compliance issues requiring legislation.
- TFFR Pension Administration System Modernization Project planning meetings are underway. A Project Manager has been assigned by NDIT, and a Project Charter has been drafted. The Project Charter will be reviewed by the Executive Steering Committee on 1.21.20, and then submitted to the TFFR Board for final approval at the 1.23.20 meeting.

- Continued discussion of TFFR Core Values will include feedback from trustees and staff.
- A **RIO Staffing Update** will be shared with the Board. External recruitment for the Deputy Executive-Chief Retirement Officer position has commenced with a closing date of January 30 (5 applications received to date), and the Retirement Program Manager position has been posted internally (1 application received).
- An update will be provided on the Member Benefit Appeal and administrative hearing which was conducted on 1.8.20. The Administrative Law Judge's recommendation is expected within 30 days of the hearing after which the Board will be expected to act on the recommended order.
- TFFR's Board Retreat will follow the Board Business Meeting. The Retreat agenda
  includes a variety of topics and activities Board decision making, governance,
  education competencies, and image. The Retreat topics are intended to provide a
  starting point for Board discussion and new ideas.

# NORTH DAKOTA TEACHERS' FUND FOR RETIREMENT MINUTES OF THE

OCTOBER 24, 2019, BOARD MEETING

BOARD MEMBERS PRESENT: Rob Lech, President

Mike Burton, Vice President Toni Gumeringer, Trustee Cody Mickelson, Trustee

Mel Olson, Trustee

Kelly Schmidt, State Treasurer

**BOARD MEMBER ABSENT:** Kirsten Baesler, State Supt. DPI

**STAFF PRESENT:** David Hunter, ED/CIO

Fay Kopp, Deputy ED/CRO

Missy Kopp, Retirement Assistant Stephanie Starr, Ret Programs Spec Dottie Thorsen, Internal Auditor Denise Weeks, Ret Programs Spec

OTHERS PRESENT: Danelle Hopkins, Governor's Office

Kim Nicholl, Segal Consultants

Anders Odegaard, Attorney General's Office

Fern Pokorny, NDU - Retired Matt Strom, Segal Consultants

### CALL TO ORDER:

Dr. Rob Lech, President of the Teachers' Fund for Retirement (TFFR) Board of Trustees, called the meeting to order at 1:00 p.m. on Thursday, October 24, 2019, at the State Capitol, Peace Garden Room, Bismarck, ND.

THE FOLLOWING MEMBERS WERE PRESENT REPRESENTING A QUORUM: MR. BURTON, MS. GUMERINGER, PRES. LECH, MR. MICKELSON, MR. OLSON AND TREASURER SCHMIDT.

### ACCEPTANCE OF AGENDA:

The Board considered the agenda for the October 24, 2019, meeting.

IT WAS MOVED BY MR. OLSON AND SECONDED BY MR. MICKELSON AND CARRIED BY A VOICE VOTE TO ACCEPT THE AGENDA AS DISTRIBUTED.

AYES: TREASURER SCHMIDT, MR. BURTON, MR. MICKELSON, MS. GUMERINGER, MR.

OLSON, AND PRES. LECH

NAYS: NONE

MOTION CARRIED

ABSENT: SUPT. BAESLER

### MINUTES:

The Board considered the minutes of the September 26, 2019, meeting.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MS. GUMERINGER AND CARRIED BY A VOICE VOTE TO ACCEPT THE SEPTEMBER 26, 2019, MINUTES AS DISTRIBUTED.

AYES: MR. MICKELSON, MR. OLSON, TREASURER SCHMIDT, MR. BURTON, MS. GUMERINGER, AND PRES. LECH

NAYS: NONE MOTION CARRIED

ABSENT: SUPT. BAESLER

### **ACTUARIAL VALUATION REPORT:**

Ms. Kim Nicholl and Mr. Matt Strom, Segal Consulting, described the annual actuarial valuation process, assumptions, methods and presented the Actuarial Valuation Report as of July 1, 2019. Highlights include the following:

- Market value of assets returned 5.4% for year ending 6/30/19 (Segal calculation). Gradual recognition of deferred losses resulted in 6.4% return on actuarial value of assets.
- Net impact on funded ratio was an increase from 65.4% (as of 7/1/2018) to 66.0% (as of 7/1/2019).
- Effective amortization period decreased from 26 years to 24 years.
- Net impact on actuarially determined contribution (ADC) was a decrease from 12.94% of payroll to 12.84% of payroll. Based on the employer contribution rate of 12.75%, the contribution deficiency has decreased from 0.19% of payroll to 0.09% of payroll.
- GASB Net Pension Liability increased from \$1.33 billion as of 6/30/18, to \$1.38 billion as of 6/30/19.

Board discussion followed on 2019 valuation results and future funding projections.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. BURTON AND CARRIED BY A ROLL CALL VOTE TO APPROVE THE 2019 ACTUARIAL VALUATION REPORT.

AYES: TREASURER SCHMIDT, MS. GUMERINGER, MR. OLSON, MR. BURTON, MR. MICKELSON, AND PRES. LECH

NAYS: NONE MOTION CARRIED

ABSENT: SUPT. BAESLER

### BOARD EDUCATION - EXPERIENCE STUDY BASICS:

Ms. Nicholl and Mr. Strom presented information related to Experience Study planning and purpose. Each actuarial valuation involves a projection of benefits expected to be paid in the future to all members of TFFR. The projection of benefit payments is based on assumptions of future events and conditions.

Assumptions are grouped into two broad categories, demographic assumptions which are primarily selected based on recent experience and economic assumptions which rely more on a long-term outlook of expected future trends.

Gains and losses result from actual experience that differs from expected. Actuarial experience studies are undertaken periodically and serve as the basis for recommended changes in actuarial assumptions and methods.

The Plan Management Policy will be updated in November 2019 based on the results of the July 1, 2019 actuarial valuation. The experience study will be presented at the March 2020 Board meeting, then the Plan Management Policy will be updated based on the results of the experience study in 2020.

Board discussion followed on TFFR's current 7.75% investment return assumption, and implications of reducing the assumption.

### PLAN MANAGEMENT POLICY - 2ND READING:

Ms. Kopp commented on the Plan Management Policy. No feedback has been received since the  $1^{\rm st}$  reading, and no additional changes have been made.

IT WAS MOVED BY MR. OLSON AND SECONDED BY MS. GUMERINGER AND CARRIED BY A ROLL CALL VOTE FOR FINAL APPROVAL OF THE TFFR PLAN MANAGEMENT POLICY.

AYES: MS. GUMERINGER, MR. BURTON, MR. MICKELSON, MR. OLSON, TREASURER SCHMIDT, AND PRES. LECH

NAYS: NONE MOTION CARRIED

ABSENT: SUPT. BAESLER

#### LEGISLATIVE UPDATE:

Ms. Kopp commented on the Legislative Employee Benefit Programs Committee meeting on October 23, 2019. Mr. Hunter presented an overview of the Retirement and Investment Office (RIO) and State Investment Board (SIB), including investment returns and programs. Ms. Kopp presented an overview of the TFFR program. Segal presented the 2019 actuarial valuation report.

The Board recessed at 2:00 p.m. and reconvened at 2:15 p.m.

### BENEFIT APPEAL #2019-1A:

Pres. Lech stated that TFFR Benefit Appeal #2019-1A must be discussed in executive session. The purpose of the executive session is to consider the benefit appeal and review confidential information under NDCC 15-39.1-30. The legal authority for closing this portion of the meeting is NDCC section 44-04-19.2.

Executive session began at 2:17 p.m. and ended at 3:05 p.m. It was attended by the TFFR Board, RIO staff members, TFFR legal counsel, and the member.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. OLSON AND CARRIED BY A ROLL CALL VOTE TO DENY BENEFIT APPEAL #2019-1A.

AYES: MR. OLSON, MR. MICKELSON, MS. GUMERINGER, TREASURER SCHMIDT, MR.

BURTON, AND PRES. LECH

NAYS: NONE MOTION CARRIED

ABSENT: SUPT. BAESLER

The Board recessed at 3:07 and reconvened at 3:12 p.m.

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. OLSON AND CARRIED BY A ROLL CALL VOTE TO AUTHORIZE RIO STAFF TO RELEASE INFORMATION RELATED TO APPEAL #2019-1A, PURSUANT TO NDCC 15-39.1-30(12), CONFIDENTIALITY OF RECORDS WHICH ALLOWS DISCLOSURE OF INFORMATION TO ANY PERSON IF THE BOARD DETERMINES DISCLOSURE IS NECESSARY FOR TREATMENT, OPERATIONAL, OR PAYMENT PURPOSES, INCLUDING THE COMPLETION OF NECESSARY DOCUMENTS.

AYES: MR. BURTON, MS. GUMERINGER, MR. OLSON, TREASURER SCHMIDT, MR.

MICKELSON, AND PRES. LECH

NAYS: NONE MOTION CARRIED

ABSENT: SUPT. BAESLER

The Board recessed at 3:15 p.m. and reconvened at 3:26 p.m.

### EMPLOYER REPORTING REVIEWS:

Ms. Kopp reviewed the new process for Employer Reporting Reviews. After Internal Audit (IA) completes their review of employer reporting, they issue a report to Retirement Services who is responsible for creating and issuing an official Employer Reporting Review report documenting errors, corrections, and recommendations to the Employer. All communications and follow up related to the review are handled by Retirement Services. The employer is also required to accept or reject the report and sign an acknowledgement letter providing an explanation of how the employer will comply with findings and recommendations. The TFFR Board will then approve the report at a regularly scheduled board meeting.

Ms. Kopp suggested that these reports could be approved on the consent agenda in the future.

Board discussion followed.

IT WAS MOVED BY MR. BURTON AND SECONDED BY MR. MICKELSON AND CARRIED BY A ROLL CALL VOTE TO APPROVE THE WARWICK AND NEW ENGLAND REPORTING REVIEWS.

AYES: MR. BURTON, MS. GUMERINGER, MR. OLSON, TREASURER SCHMIDT, MR.

MICKELSON, AND PRES. LECH

NAYS: NONE MOTION CARRIED

ABSENT: SUPT. BAESLER

### PENSION ADMINISTRATION SYSTEM (PAS) PROJECT UPDATE:

Ms. Kopp provided an update on the PAS project. In early October, Ms. Kopp sent a memo to the Governor's Office as a response to their request for information. The memo explained that the Board and staff are focused on the Board's fiduciary responsibility and the importance of making the most prudent decision for TFFR without regard to other State or outside interests. TFFR intends to follow all state procurement guidelines to ensure a fair and competitive bidding process is used.

RIO staff is currently working with ND Information Technology (NDIT) on the Project Charter, which is required for all large IT projects. The Charter will be presented to the Board for approval.

Board discussion followed.

### GOVERNANCE & POLICY REVIEW (GPR) COMMITTEE UPDATE:

Mr. Mickelson and Ms. Kopp provided an update on the GPR Committee. The Committee has had initial discussions on the first draft of a revised TFFR Board Governance Policy Manual, Sections A-J. Ms. Kopp will be scheduling a meeting with TFFR's legal counsel to discuss governance related questions and ensure proper legal review of potential changes and additions to the policies and bylaws. The Committee plans to meet in November or early December for another review of changes made to Sections A-J and an initial review of Sections K-U.

Board discussion followed.

### TRUSTEE EDUCATIONAL CONFERENCE REPORTS:

Ms. Gumeringer reported on the National Education Association (NEA) Pension Forum which she attended in July 2019 and the National Council on Teacher Retirement (NCTR) Annual Conference which she attended in October 2019. Mr. Olson and Mr. Burton also reported on the NCTR Annual

Conference which they attended in October 2019. Mr. Mickelson reported on the NCTR Trustee Workshop, which he attended in July 2019.

### BOARD RETREAT PLANNING:

Ms. Kopp and Pres. Lech have started making plans for a TFFR Board retreat on January 23, 2020. The tentative plan is to meet at the Radisson Hotel, in Bismarck, at 1:00 p.m. for the regular Board business meeting followed by a retreat session, dinner and a second retreat session. Treasurer Schmidt mentioned the possibility of having the Board meeting in the morning, and retreat sessions in the afternoon as another alternative which will be considered.

Board discussion followed.

#### CHIEF RETIREMENT OFFICER (CRO) SUCCESSION PLANNING:

Mr. Hunter discussed the plans for filling the CRO position after Ms. Kopp's retirement. RIO management and TFFR leadership has met to discuss the best ways to fill this opening. They have also consulted with Human Resource Management Services for input. In order to identify any retirement leaders who may be interesting in pursuing the opportunity to become TFFR's next CRO and RIO's next Deputy Executive Director, RIO intends to post the position internally in the upcoming weeks and then will post it externally. They will provide a further update to the TFFR Board and SIB in November.

### VISION STATEMENT APPROVAL:

At the September meeting, Pres. Lech led the Board in an exercise to develop a TFFR vision statement. Board members worked in small groups to identify TFFR's cause, actions, and outcomes which were used to draft possible vision statements. Pres. Lech sent the options to Board members and RIO staff to get feedback on these statements.

Using this feedback and after further discussion, the Board considered the following vision statement:

"TFFR's vision is to be a trusted leader in the administration of a financially sound retirement program for ND educators by providing exceptional customer service, professional plan management, and organizational effectiveness by adhering to the principles of good governance, transparency, and accountability."

IT WAS MOVED BY TREASURER SCHMIDT AND SECONDED BY MR. OLSON AND CARRIED BY A ROLL CALL VOTE TO APPROVE THE NEW TFFR BOARD VISION STATEMENT.

AYES: MS. GUMERINGER, MR. MICKELSON, TREASURER SCHMIDT, MR. BURTON, MR. OLSON, AND PRES. LECH.

NAYS: NONE

MOTION CARRIED

ABSENT: SUPT. BAESLER

### CORE VALUES DEVELOPMENT:

Pres. Lech explained the process that will be used to establish core values of the TFFR Board. Pres. Lech created a survey with a vast selection of values, skills, and attributes related to investments, organizational performance, governance, and other outcomes to be ranked. Board members and RIO staff were asked to review the list and rank the Top 5 as it relates to the success of TFFR. There will be additional discussion on TFFR's core values at the January meeting.

### ADJOURNMENT:

With no further business to come before the Board, President Lech adjourned the meeting at 4:13 p.m.

Respectfully Submitted:

\_\_\_\_\_

Dr. Rob Lech, President Teachers' Fund for Retirement Board

Missy Kopp Reporting Secretary



### **MEMORANDUM**

TO: TFFR Board FROM: Fay Kopp

**DATE:** January 17, 2020

SUBJ: 2019 GASB 67 & 68 Report

Matt Strom, Segal Consultants, will highlight the attached 2019 GASB 67 & 68 Report which was prepared by TFFR's actuary, Segal, and audited by RIO's auditor, CliftonLarsonAllen.

After Board approval, the 2019 GASB 67 & 68 Report, and the audited Schedules of Employer Allocations and Pension Amounts by Employer, will be posted on the TFFR website. These reports, along with the sample GASB 68 disclosure template and sample journal entries, are provided to assist TFFR participating employers and their auditors with GASB 68 compliance as they prepare their annual financial statements.

### **BOARD ACTION**

Board Motion to approve the 2019 GASB 67 & 68 Report.



# North Dakota Teachers' Fund for Retirement

Governmental Accounting Standards Board Statement Nos 67 and 68 Actuarial Valuation as of July 1, 2019

This report has been prepared at the request of the Board of Trustees to assist the sponsors of the Fund in preparing their financial report for liabilities associated with the Fund. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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October 31, 2019

Board of Trustees North Dakota Teachers' Fund for Retirement 3442 East Century Avenue Bismarck, ND 58507-7100

### Dear Board Members:

We are pleased to submit the following report intended to be used for satisfying certain reporting requirements by Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 as of June 30, 2019.

This report was prepared in accordance with generally accepted actuarial principles and practices. The census and financial information on which our calculations were based was supplied by the staff of the Retirement and Investment Office. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Matthew Strom, FSA, MAAA, Enrolled Actuary.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the Fund.

We look forward to reviewing this report with you and to answering any questions.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

Matthew Strom, FSA, MAAA, EA Senior Vice President and Actuary Tanya Dybal, FSA, MAAA, EA

Actuary



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### **Section 1: Actuarial Valuation Summary**

### **Purpose**

This report has been prepared by Segal Consulting to present certain disclosure information required by Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 as of June 30, 2019. This valuation is based on:

- > The benefit provisions set forth in the North Dakota Century Code, as administered by the TFFR Board of Trustees;
- The characteristics of covered active members, terminated vested members, and retired members and beneficiaries as of July 1, 2019, provided by the North Dakota Retirement and Investment Office;
- > The assets of the Fund as of June 30, 2019, provided by the North Dakota Retirement and Investment Office;
- > Economic assumptions regarding future salary increases and investment earnings adopted by the Board; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

### **Valuation Comments**

The following are key observations regarding this actuarial valuation:

- > Governmental Accounting Standards Board (GASB) Statements 67 and 68 contain rules for the reporting of pension liabilities for accounting purposes. Statement 67 was effective with the fiscal year ending June 30, 2014, for Plan reporting. Statement 68 was effective with the fiscal year ending June 30, 2015, for employer reporting. The information contained in this valuation is intended to be used (along with other information) in order to comply with both Statements 67 and 68.
- > It is important to note that the GASB rules only redefine pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for actual pension funding purposes. Plans can still develop and adopt funding policies under current practices.
- > When measuring pension liability for GASB purposes, the same actuarial cost method (Entry Age method) is used to determine the funded status of the Plan, the actuarially determined contribution rate, and the effective amortization period. In addition, the GASB blended discount rate calculation results in the same discount rate (expected return on assets) as used for funding purposes. This

- means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on the same basis as the Actuarial Accrued Liability (AAL) measure for funding.
- > The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan Fiduciary Net Position. The Plan Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) on a market value basis. The NPL increased from \$1.33 billion as of June 30, 2018, to \$1.38 billion as of June 30, 2019, primarily as a result of unfavorable investment returns for the fiscal year ending June 30, 2019. Changes in these values during the prior fiscal year ending June 30, 2019, can be found in Exhibit 5.
- The discount rate used to determine the TPL and NPL was 7.75% as of both June 30, 2019 and June 30, 2018. The detailed calculations used in this derivation were provided separately.

# **Summary of Key Valuation Results**

	2019	2018
Disclosure elements for fiscal year ending June 30:		
Service cost	\$77,755,965	\$78,041,335
Total Pension Liability	3,993,424,160	3,863,515,726
Plan Fiduciary Net Position	2,616,171,056	2,530,657,411
Net Pension Liability	1,377,253,104	1,332,858,315
Pension fiduciary net position as a percentage of total pension liability	65.5%	65.5%
Schedule of contributions for fiscal year ending June 30:		
Actuarially determined contributions	\$90,777,781	\$88,307,239
Actual contributions	89,444,881	86,675,715
Contribution deficiency / (excess)	1,332,900	1,631,524
Demographic data for plan year ending June 30:		
Number of retired members and beneficiaries	8,918	8,743
Number of vested terminated members	1,657	1,623
Number of inactive non-vested members	1,035	971
Number of active members	11,175	10,881
Key assumptions as of June 30:		
Investment rate of return	7.75%	7.75%
Municipal Bond Index	3.50%	3.87%
Inflation rate	2.75%	2.75%
Projected salary increases	4.25% to 14.50% varying by service	4.25% to 14.50% varying by service

## **Important Information about Actuarial Valuations**

In order to prepare an actuarial valuation, Segal Consulting ("Segal") relies on a number of input items. These include:

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our funding valuation report to confirm that Segal has correctly interpreted the plan of benefits.
Participant data	An actuarial valuation for a plan is based on data provided to the actuary by TFFR. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Assets	The valuation is based on the market value of assets as of the valuation date, as provided by TFFR.
Actuarial assumptions	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The valuation is prepared at the request of TFFR to assist the sponsors of the Fund in preparing items related to the pension plan in their financial reports. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
- If TFFR is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. TFFR should look to their other advisors for expertise in these areas.

As Segal Consulting has no discretionary authority with respect to the management or assets of TFFR, it is not a fiduciary in its capacity as actuaries and consultants with respect to TFFR.

# **Section 2: GASB 67 and 68 Information**

# **Exhibit 1 - Membership Data**

	July 1, 2019	July 1, 2018
Retired members and beneficiaries	8,918	8,743
Vested inactive members	1,657	1,623
Non-Vested inactive members	1,035	971
Active members		
Vested	7,936	7,696
Non-Vested	<u>3,239</u>	<u>3,185</u>
Total active members	11,175	10,881
Total membership	22,785	22,218

## **Active Membership By Plan Eligibility**

	July 1, 2019	July 1, 2018
Tier 1 Grandfathered	1,633	1,889
Tier 1 Non-Grandfathered	3,131	3,180
Tier 2	<u>6,411</u>	<u>5,812</u>
Total Active membership	11,175	10,881

### **Exhibit 2 - Net Pension Liability**

	July 1, 2019	July 1, 2018
Components of the Net Pension Liability		
Total Pension Liability	\$3,993,424,160	\$3,863,515,726
Plan Fiduciary Net Position	(2,616,171,056)	(2,530,657,411)
Net Pension Liability	1,377,253,104	1,332,858,315
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	65.5%	65.5%

*Plan provisions.* The plan provisions used in the measurement of the net pension liability are the same as those used in the actuarial valuation as of July 1, 2019.

Actuarial assumptions. The total pension liability as of June 30, 2019, which was measured by an actuarial valuation as of July 1, 2019, used the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	4.25% to 14.50%, varying by service, including inflation and productivity
Investment rate of return	7.75%, net of pension plan investment expense, including inflation
Cost-of-living adjustments	None

For active and inactive members, mortality rates were based on the RP-2014 Employee Mortality Table, projected generationally using Scale MP-2014. For healthy retirees, mortality rates were based on the RP-2014 Healthy Annuitant Mortality Table set back one year, multiplied by 50% for ages under 75 and grading up to 100% by age 80, projected generationally using Scale MP-2014. For disability retirees, mortality rates were based on the RP-2014 Disabled Mortality Table set forward four years.

The actuarial assumptions used were based on the results of an experience study dated April 30, 2015. They are the same as the assumptions used in the July 1, 2019, funding actuarial valuation for TFFR.

### **Exhibit 3 - Target Asset Allocation**

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of July 1, 2019 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
Global Equities	58%	6.9%
Global Fixed Income	23%	2.1%
Global Real Assets	18%	5.4%
Cash Equivalents	1%	0.0%
Total	100%	

<sup>\*</sup>As reported by the North Dakota Retirement and Investment Office.

Discount rate: The long-term expected rate of return on pension plan investments is 7.75%. The high quality tax-exempt general obligation municipal bond rate (20-Bond GO Index) as of the closest date prior to the valuation date of June 30, 2019, is 3.50%, as published by The Bond Buyer.

The discount rate used to measure the total pension liability was 7.75% as of June 30, 2019. The projection of cash flows used to determine the discount rate assumed plan member and employer contributions will be made at rates equal to those based on the July 1, 2019, Actuarial Valuation Report. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members as of June 30, 2019. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2019.

### **Exhibit 4 - Discount Rate Sensitivity**

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the TFFR as of June 30, 2019 and June 30, 2018, calculated using the discount rate of 7.75%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.75%) or 1-percentage-point higher (8.75%) than the current rate.

	Current		
Net Pension Liability	1% Decrease (6.75%)	Discount Rate (7.75%)	1% Increase (8.75%)
Net pension liability as of June 30, 2019	\$1,859,994,289	\$1,377,253,104	\$976,082,834
Net pension liability as of June 30, 2018	\$1,799,744,383	\$1,332,858,315	\$944,554,161

# **Exhibit 5 - Schedule of Changes in Net Pension Liability**

	2019	2018
Total Pension Liability		
Service cost	\$77,755,965	\$78,041,335
Interest	296,875,949	287,375,333
Change of benefit terms	0	0
Differences between expected and actual experience	(23,494,914)	(27,939,071)
Changes of assumptions	0	0
Benefit payments, including refunds of member contributions	<u>(221,228,566)</u>	(207,978,699)
Net change in Total Pension Liability	\$129,908,434	\$129,498,898
Total Pension Liability – beginning	<u>3,863,515,726</u>	3,734,016,828
Total Pension Liability – ending	<u>\$3,993,424,160</u>	\$3,863,515,726
Plan Fiduciary Net Position		
Contributions – employer	\$89,444,881	\$86,675,715
Contributions – employee	82,429,594	79,877,611
Contributions – member	1,916,787	2,181,106
Contributions – other	158,713	194,028
Net investment income	135,043,319	211,345,369
Benefit payments, including refunds of member contributions	(221,228,566)	(207,978,699)
Administrative expense	(2,251,083)	(2,128,794)
Other	<u>0</u>	<u>0</u>
Net change in Plan Fiduciary Net Position	\$85,513,645	\$170,166,336
Plan Fiduciary Net Position – beginning	<u>2,530,657,411</u>	2,360,491,075
Plan Fiduciary Net Position – ending	\$2,616,171,056	\$2,530,657,411
Net Pension Liability – ending	<u>\$1,377,253,104</u>	<u>\$1,332,858,315</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	65.5%	65.5%
Covered payroll	\$701,528,450	\$679,809,385
Plan Net Pension Liability as percentage of covered payroll	196.3%	196.1%

# **Exhibit 6 - Schedule of Employer Contributions**

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2013	\$52,396,153	\$59,300,720	(\$6,904,567)	\$551,655,590	10.75%
2014	59,513,485	62,355,146	(2,841,661)	580,053,235	10.75%
2015	71,167,632	78,422,098	(7,254,466)	615,104,860	12.75%
2016	84,724,122	82,839,932	1,884,190	649,724,868	12.75%
2017	89,231,211	86,058,868	3,172,343	674,971,342	12.75%
2018	88,307,239	86,675,715	1,631,524	679,809,385	12.75%
2019	90,777,781	89,444,881	1,332,900	701,528,450	12.75%

### **Notes to Exhibit 6**

Methods and assumptions used to establish "actuarially determined contribution" rates:

Valuation date	Actuarially determined contribution rates are calculated as of June 30, with appropriate interest to the middle of the fiscal year.
Actuarial cost method	Entry Age Actuarial Cost Method
Amortization method	Level percentage of pay, closed
Remaining amortization period	24 years as of July 1, 2019  The amortization of unfunded actuarial accrued liability (UAAL) within the actuarially determined contribution rate calculation is based on the level percentage of pay required to amortize the UAAL over the 30-year closed period that began July 1, 2013. For this calculation, payroll is assumed to increase 3.25% per year.
Asset valuation method	The market value of assets with a five-year phase-in of actual return in excess of (or less than) expected investment income. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year).
Actuarial assumptions:	
Investment rate of return	7.75%, net of pension plan investment expense
Inflation rate	2.75%
Projected salary increases	4.25% to 14.50%, varying by service, includes inflation and productivity
Mortality*	Post-retirement Non-Disabled: RP-2014 Healthy Annuitant Mortality Table set back one year, multiplied by 50% for ages under 75 and grading up to 100% by age 80, projected generationally using Scale MP-2014.
	Pre-retirement Non-Disabled: RP-2014 Employee Mortality Table, projected generationally using Scale MP-2014.
	Disabled: RP-2014 Disabled Mortality table set forward 4 years.
Other assumptions	Same as those used in the July 1, 2019, and July 1, 2018, actuarial funding valuations.

<sup>\*</sup>The mortality rates were based on historical and current demographic data, as used in the experience study dated April 30, 2015. The underlying tables reasonably reflect the mortality experience of the Fund as of the measurement date.

### **Section 3: Additional Information for GASB 68**

Changes in the collective net pension liability from the beginning of the year to the end of the year arise from the net difference between changes in the total pension liability and plan fiduciary net position that occurred during the year. Changes in net pension liability will be recognized immediately as pension expense, or reported as deferred outflows of resources related to pensions or deferred inflows of resources related to pensions, depending on the nature of the change.

Differences between actual and expected investment-related experience are recognized over a closed five-year period. Differences between actual and expected non-investment-related experience and changes of assumptions are recognized over the average of the expected remaining service lives of all members who are provided with pensions through the pension plan (active employees and inactive employees). The amounts below that are not included in pension expense for the current year are included in deferred outflows of resources or deferred inflows of resources related to pensions.

**Exhibit A - Reconciliation of Collective Net Pension Liability** 

	Increase/(Decrease) For Fiscal year Ending June 30, 2019		
	Total Pension Plan Fiduciary Net Net F Liability Position Lia		
	(a)	(b)	(a) – (b)
Balance at the beginning of the year	\$3,863,515,726	\$2,530,657,411	\$1,332,858,315
Changes for the year			
Service cost	77,755,965		77,755,965
Interest	296,875,949		296,875,949
Differences between expected and actual experience	(23,494,914)		(23,494,914)
Contributions – employer		89,444,881	(89,444,881)
Contributions – member		82,429,594	(82,429,594)
Contributions – purchased service credit		1,916,787	(1,916,787)
Contributions – other		158,713	(158,713)
Net Investment income		135,043,319	(135,043,319)
Benefit payments, including refunds of employee contributions	(221,228,566)	(221,228,566)	
Administrative expense		(2,251,083)	2,251,083
Change of assumptions	<del></del>		
Change of benefit terms			
Net Change	129,908,434	85,513,645	44,394,789
Balances at end of year	\$3,993,424,160	\$2,616,171,056	\$1,377,253,104

As shown in Exhibit A, during the plan year that ended June 30, 2019, the changes in net pension liability due to differences between expected and actual demographic experience is a decrease of \$23,494,914. The average expected remaining service lives of all members is 7 years, determined as of July 1, 2018 (the beginning of the measurement period ending June 30, 2019). Therefore, of the \$23,494,914 demographic gain, \$3,356,416 is recognized in pension expense in the current year and \$20,138,498 is reflected as a deferred inflow of resources related to pensions.

Based on the assumed investment return of 7.75%, the expected net investment income for the year was \$194,206,674. As shown in Exhibit A, the actual net investment income for the year was \$135,043,319. The difference between actual and expected investment experience is an increase in net pension liability of \$59,163,355, which is recognized over a 5-year period. Of this amount, \$11,832,671 is reflected in the current year and \$47,330,684 is reflected as a deferred outflow of resources related to pensions.

Exhibit B - Collective Deferred Outflow of Resources and Deferred Inflows of Resources **Related to Pensions** 

Employer	Year Established	Original Balance	Original Amortization Period	Amortization Amount During 2019	Outstanding Balance at June 30, 2019
Outflows		<u> </u>		<u> </u>	·
Demographics	2014	\$9,347,346	7 years	\$1,335,335	\$1,335,336
Demographics	2015	2,209,258	7 years	315,608	631,218
Assumptions	2015	171,324,647	7 years	24,474,950	48,949,897
Investments	2015	93,160,436	5 years	18,632,088	0
Investments	2016	156,759,166	5 years	31,351,833	31,351,834
Investments	2019	59,163,355	5 years	11,832,671	47,330,684
Total Outflows				\$87,942,485	\$129,598,969
Inflows					
Demographics	2016	8,092,800	7 years	1,156,114	3,468,344
Demographics	2017	10,748,944	7 years	1,535,563	6,142,255
Investments	2017	103,235,815	5 years	20,647,163	41,294,326
Investments	2018	30,002,998	5 years	6,000,600	18,001,798
Demographics	2018	27,939,071	7 years	3,991,296	19,956,479
Demographics	2019	23,494,914	7 years	3,356,416	20,138,498
Total Inflows				\$36,687,152	\$109,001,700

## **Exhibit B - Collective Deferred Outflow of Resources and Deferred Inflows of Resources Related to Pensions (Continued)**

	June 30, 2019	June 30, 2018
Deferred Outflows of Resources		
Difference between expected an actual experience in the Total Pension Liability	\$1,966,554	\$3,617,497
Changes in assumptions	48,949,897	73,424,847
Net difference between projected and actual earnings on pension plan investments	19,386,394	0
Total Deferred Outflows of Resources	\$70,302,845	\$77,042,344
Deferred Inflows of Resources		
Difference between expected and actual experience in the Total Pension Liability	\$49,705,576	\$36,250,051
Changes of assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	<u>0</u>	4,608,132
Total Deferred Inflows of Resources	\$49,705,576	\$40,858,183
Deferred outflows of resources and deferred inflows of resources related to pension will be r	ecognized as follows:	
Year Ended June 30:		
2019	N/A	\$42,779,078
2020	\$32,623,247	24,146,992
2021	(63,924)	(8,540,179)
2022	(4,207,318)	(12,683,573)
2023	2,949,393	(5,526,862)
2024	(7,347,711)	(3,991,295)
Thereafter	(3,356,418)	
Net deferred outflows/(inflows) of resources	\$20,597,269	\$36,184,161

Exhibit C below shows the individual components of collective pension expense, which totaled \$149,426,562 for the fiscal year that ended June 30, 2019.

Annual pension expense for the year can also be viewed as the change in net pension liability, plus employer contributions for the year, less the change in outstanding balances of deferred outflows and deferred inflows of resources from the end of the prior fiscal year to end of the current fiscal year. From Exhibit A, the change in net pension liability during the year was \$44,394,789 and employer contributions were \$89,444,881. The net value of deferred outflows and deferred inflows of resources as of the end of the current fiscal year is \$20,597,269 compared to the net value as of the end of the prior fiscal of \$36,184,161 for a change of (\$15,586,892). Therefore, the pension expense for the fiscal year that ended June 30, 2019, is \$44,394,789 + \$89,444,881 - (\$15,586,892), or \$149,426,562.

**Exhibit C - Collective Pension Expenses** 

Components of Pension Expense	Fiscal Year Ending June 30, 2019	Fiscal Year Ending June 30, 2018
Service cost	\$77,755,965	\$78,041,335
Interest on the Total Pension Liability	296,875,949	287,375,333
Projected earnings on plan investments	(194,206,674)	(181,342,371)
Member contributions	(82,429,594)	(79,877,611)
Contributions – purchased service credit	(1,916,787)	(2,181,106)
Contributions – other	(158,713)	(194,028)
Administrative expense	2,251,083	2,128,794
Current Year recognition of:		
Changes in assumptions	24,474,950	24,474,950
Difference between expected and actual experience	(8,388,446)	(5,032,030)
Difference between projected and actual earnings on pension plan investments	35,168,829	(6,422,617)
Change of benefit terms	0	0
Total pension expense	\$149,426,562	\$116,970,649

TFFR is classified as a cost-sharing multiple-employer defined benefit pension plan for GASB accounting purposes. As specified in GASB 68, employers that participate in TFFR are required to recognize their proportionate share of the collective pension amounts for all benefits provided through the Fund. Pension amounts to be recognized by employers include the net pension liability, deferred outflows of resources related to pensions, deferred inflows of resources related to pensions, and pension expense. In addition, the effects of (1) a change in the employer's proportion of the collective net pension liability and (2) differences during the measurement period between the employer's contributions and its proportionate share of the total of contributions from employers included in the collective net pension liability are required to be determined and recognized.

The basis of an employer's allocation of the collective pension amounts should be consistent with the manner in which contributions to the plan are determined. Since contributions to TFFR are collected as a percentage of payroll, covered payroll for the fiscal year ending June 30, 2019, is used as the proportionate share allocation basis. Retirement and Investment Office staff supplied covered payroll for each employer.

The net effect of the change on an employer's proportionate share of the collective net pension liability and collective deferred outflows of resources and deferred inflows of resources is recognized over the average of the expected remaining service lives of all members who are provided with pensions through TFFR.

In addition, the difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ended June 30, 2019, is recognized over the same period. However, since TFFR contributions are collected on the same basis as the proportionate share allocation, there is no difference between the actual employer contributions and the proportionate share of the employer contributions. If employers no longer report to TFFR, they will continue to remain on the schedule until their deferral balances are depleted.

Exhibits D and E that follow show the proportionate share information for employers of TFFR for the fiscal year ending June 30, 2019.

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EXHIBIT D
Schedule of Employer Allocations as of June 30, 2019

	Coursed Bornell	Employer's Proportionate
Employer Name	Covered Payroll	Share Allocation
Alexander School	\$ 1,420,946	0.20255003%
Anamoose School	691,421	0.09855917%
Apple Creek Elem School	297,570	0.04241743%
Ashley School	969,017	0.13812935%
Bakker Elem School	43,525	0.00620431%
Barnes County North	1,582,685	0.22560524%
Beach School	2,153,298	0.30694385%
Belcourt School  Belfield Public School	8,650,947	1.23315700%
	1,637,915	0.23347807%
Beulah School	3,555,146	0.50677145%
Billings Co. School Dist. Bismarck Public Schools	848,687	0.12097678%
	74,264,596	10.58611318%
Bismarck State College	-	0.00000000%
Blessed John Paul II Catholic Sch Network  Bottineau School	2 040 264	0.00000000%
Bowbells School	3,849,361	0.54871056%
	612,593	0.08732255%
Bowman School  Burke Central School	2,945,220	0.41982906%
	1,003,631	0.14306350%
Burleigh County Spec. Ed.	117,449	0.01674181%
Carrington School Cavalier School	2,921,503	0.41644826%
	2,308,894	0.32912329%
Center Stanton School Central Cass School	1,586,576	0.22615995%
	3,935,508	0.56099057%
Central Valley School	1,336,672	0.00000000%
Central Valley School  Dakota Prairie School		0.19053708%
Devils Lake School	2,035,168	0.29010482%
Dickinson School	10,821,543	1.54256645%
	22,201,680	3.16475838%
Divide School  Drake School	2,508,494 483,917	0.35757553% 0.06898037%
Drayton School	1,416,967	0.20198279%
Dunseith School	3,346,884	0.47708456%
E Central Ctr Exc Childn	794,262	0.11321875%
Earl Elem. School	26,000	0.00370618%
Edgeley School	1,375,535	0.19607684%
Edmore School	779,372	0.11109629%
Eight Mile School	1,668,632	0.23785663%
Elgin-New Leipzig School	1,201,171	0.17122198%
Ellendale School	1,720,552	0.24525756%
Emerado Elementary School	631,984	0.09008678%
Enderlin Area School District	1,972,282	0.28114065%
Fairmount School	1,038,903	0.14809138%
Fargo Public Schools	72,692,434	10.36200801%
Fessenden-Bowdon School	1,115,739	0.15904403%
Finley-Sharon School	1,093,723	0.15590577%
Flasher School	1,207,678	0.17214952%
Fordville Lankin School	628,946	0.08965366%
Fort Ransom Elem School	158,186	0.02254880%
Fort Totten School	1,539,679	0.21947488%
Fort Yates School	1,158,728	0.16517197%
Gackle-Streeter Pub Sch	818,783	0.11671412%
Garrison School	2,331,883	0.33240028%
Glen Ullin School	1,065,916	0.15194202%
Glenburn School	1,889,344	0.26931819%
Goodrich School	308,819	0.04402087%
Grafton School	4,384,159	0.62494382%
Grand Forks School	48,158,729	6.86482901%
Great North West Cooperative	174,410	0.02486149%
Grenora School	1,313,027	0.18716657%
Griggs County Central Sch	1,703,149	0.24277690%
	1,7 55,145	J.Z-Z1103070

# EXHIBIT D Schedule of Employer Allocations as of June 30, 2019

Gst Educational Services         1,783,059         0.25416781%           Halliday School         280,182         0.03993877%           Harvey School         2,253,165         0.32117945%           Hatton Eisleon Psd         1,203,702         0.17158274           Hazelton - Moffit School         906,274         0.12918562%           Hazen School         2,772,477         0.39520525%           Hebron School         1,1378,657         0.1969311%           Hettinger School         1,378,657         0.19692184%           Hops School         2,646,943         0.377310846           Horse Creek Elem. School         40,100         0.00571608%           James River Multidistrict Spec Ed Unit         1,334,268         0.19019447%           Jamestown School         1,750,587         0.24953902%           Kernsal School         1,750,587         0.24953902%           Kernsal School         2,296,223         0.32731715%           Kildeer Courty School District         2,296,223         0.32731715%           Kildeer School         3,539,400         0.50452687%           Kildeer School         1,005,518         0.14333242%           Kildeer School         1,208,701         0.17229535%           Kark Region Spec Ed	Employer Name	Covered Payroll	Employer's Proportionate Share Allocation
Hankinson School	Gst Educational Services	1,783,059	0.25416781%
Hartony School	Halliday School	280,182	0.03993877%
Hattino Eielson Psd	Hankinson School	1,559,779	0.22234004%
Hazelton - Moffit School	Harvey School	2,253,165	0.32117945%
Hazen School	Hatton Eielson Psd	1,203,702	0.17158274%
Hebron School	Hazelton - Moffit School	906,274	0.12918562%
Hettinger School	Hazen School	2,772,477	0.39520525%
Hillsboro School	Hebron School	1,121,990	0.15993511%
Hope School	-	1,378,657	0.19652184%
Horse Creek Elem. School		· · ·	0.37731084%
James River Multidistrict Spec Ed Unit         1,334,268         0.19019447%           Jamestown School         13,519,117         1.92709460%           Kennare School         283,068         0.24953902%           Kensal School         283,068         0.04035014%           Kidder County School District         2,296,223         0.32731715%           Killdeer School         3,064,597         0.43684577%           Kindred School         3,539,400         0.50452687%           Kulm School         1,005,518         0.14333242%           Lake Region Spec Ed         1,914,995         0.27297466%           Lakota School         1,208,701         0.17229536%           Lamoure School         1,492,516         0.21275209%           Lamjoure School         2,551,015         0.3633667%           Lardinore School         2,531,160         0.30407320%           Leeds School         1,051,290         0.14985708%           Lewis And Clark School         2,522,521         0.35957800%           Lewis And Clark School         1,680,696         0.23957635%           Lisbon School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         2,	•	•	
Jamestown School         13,519,117         1,92709460%           Kennare School         1,750,587         0,24953902%           Kensal School         283,068         0,04035014%           Kidder County School District         2,296,223         0,32731715%           Kidder County School District         2,296,223         0,32731715%           Kidleer School         3,664,697         0,43684577%           Kildred School         1,005,518         0,14333242%           Lake Region Spec Ed         1,914,995         0,27297468%           Lakou School         1,209,701         0,17229536%           Lamoure School         1,295,1015         0,36363667%           Lamigdon Area School         2,510,15         0,36363667%           Larimore School         1,051,290         0,14985708%           Leeds School         1,051,290         0,14985708%           Leeds School         1,051,290         0,14985708%           Lidgerwood School         1,146,596         0,16344261%           Linton School         1,680,696         0,23957635%           Lidgerwood School         1,680,696         0,23957635%           Littel Heart Elem. School         3,538,121         0,50434466%           Litter Heart Elem. School         35		. — — — — .	
Kenmare School         1,750,587         0,24953902%           Kensal School         283,068         0,04035014%           Kildder County School District         2,296,223         0,32731715%           Kilddeer School         3,064,597         0,43684577%           Kilddeer School         3,539,400         0,50452887%           Kulm School         1,005,518         0,14333242%           Lake Region Spec Ed         1,914,995         0,27297468%           Lakota School         1,208,701         0,17229535%           Lamoure School         1,492,516         0,212775209%           Langdon Area School         2,551,015         0,3636367%           Larmore School         1,051,290         0,14985708%           Lewis And Clark School         2,522,521         0,35957509%           Lidgerwood School         1,146,596         0,16344261%           Linton School         1,880,696         0,23957635%           Lisbon School         3,538,121         0,5043466%           Litchville-Marion School         342,175         0,12004852%           Little Heart Elem. School         393,392         0,01986977%           Lopar County         4,079         0,00058148%           Lone Tree Elem. School         947,106	·		
Kensal School         283,068         0.04035014%           Kidder County School District         2,296,223         0.32731715%           Kildeer School         3,064,597         0.43684577%           Kindred School         3,539,400         0.50452687%           Kulm School         1,005,518         0.14333242%           Lake Region Spec Ed         1,914,995         0.27297468%           Lakota School         1,208,701         0.172295386           Lamoure School         1,492,516         0.21275209%           Langdon Area School         2,551,015         0.36363667%           Larimore School         1,051,290         0.14985708           Lewis And Clark School         2,522,521         0.35957500%           Lidgerwood School         1,166,596         0.16344261%           Linton School         1,680,696         0.23957635%           Liston School         3,538,121         0.50434466%           Litchville-Marion School         842,175         0.12004852%           Little Heart Elem. School         33,392         0.01986977%           Lone Tree Elem. School         253,413         0.03612298%           Lone Tree Elem. School         253,413         0.03612298%           Mandore Public Schools         21			
Kilder County School District         2,296,223         0.32731715%           Kildder School         3,064,597         0.43884577%           Kindred School         3,539,400         0.50452687%           Kulm School         1,005,518         0.14333242%           Lake Region Spec Ed         1,914,995         0.27297468%           Lakota School         1,208,701         0.17229535%           Lamoure School         1,492,516         0.21275209%           Langdon Area School         2,551,015         0.36363667%           Larimore School         2,133,160         0.30407320%           Leeds School         1,051,290         0.14985708%           Lewis And Clark School         2,522,521         0.35957500%           Lidgerwood School         1,146,596         0.16344261%           Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         842,175         0.12048525           Little Heart Elem. School         139,392         0.01986977%           Logar County         4,079         0.00058148%           Lonetree Spec Ed Unit         171,822         0.02445251%           Madock School         947,106         <			
Kildeer School         3,064,597         0.43684577%           Kindred School         3,539,400         0.50452687%           Kulm School         1,005,518         0.14333242%           Lake Region Spec Ed         1,914,995         0.27297468%           Lakota School         1,208,701         0.17229535%           Lamoure School         2,551,015         0.3636367%           Langdon Area School         2,133,160         0.30407320%           Ledes School         1,051,290         0.14885708%           Lewis And Clark School         2,522,521         0.35957500%           Ledes School         1,146,596         0.16344261%           Lidgerwood School         1,680,696         0.23957535%           Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         3,538,121         0.50434466%           Little Heart Elem. School         393,392         0.01986977%           Logan County         4,079         0.0058148%           Lone Tree Elem. School         253,413         0.03612298%           Lone tree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0,13500606%           Mandan Public Schools         21,037,667         <		. — — — — .	
Kindred School         3,539,400         0.50452687%           Kulm School         1,005,518         0.14333242%           Lake Region Spec Ed         1,914,995         0.27297468%           Lakota School         1,208,701         0.17229536%           Lamoure School         1,492,516         0.21275209%           Lamoure School         2,551,015         0.36363667%           Larimore School         2,133,160         0.30407320%           Leeds School         1,051,290         0.14985708           Lewis And Clark School         2,522,521         0.35957500%           Lidgerwood School         1,146,596         0.16344261%           Linton School         1,680,696         0.2397635%           Lisbon School         3,538,121         0.504344661           Litter Heart Elem. School         3,538,121         0.1004852%           Little Heart Elem. School         40,79         0.00058148%           Lone Tree Elem. School         253,413         0.03612298           Lone Tree Elem. School         353,413         0.03612298           Lone Tree Elem. School         353,413         0.03612980           Lone Tree Elem. School         253,413         0.03612980           Mardock School         347,106	•		
Kulm School         1,005,518         0.14333242%           Lake Region Spec Ed         1,914,995         0.27297468%           Lakota School         1,208,701         0.17229535%           Lamoure School         1,492,516         0.21275209%           Langdon Area School         2,551,015         0.36363667%           Larimore School         1,051,290         0.14988708%           Lewis And Clark School         2,522,521         0.35957500%           Lewis And Clark School         1,146,596         0.16344261%           Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Lister Heart Elem. School         342,175         0.1204852%           Little Heart Elem. School         253,413         0.0381298%           Lone Tree Elem. School         253,413         0.03812298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.1350066%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Mary Elem. School         1,696,016         0.24176009%           Maple Valley School         1,696,016			
Lake Region Spec Ed         1,914,995         0.27297468%           Lakota School         1,208,701         0.17229535%           Lamoure School         1,492,516         0.21275209%           Langdon Area School         2,551,015         0.36363667%           Larimore School         2,133,160         0.30407320%           Leeds School         1,051,290         0.14985708%           Lewis And Clark School         1,580,696         0.23957500%           Lidgerwood School         1,486,596         0.23957635%           Liston School         3,538,121         0.50434466%           Liston School         3,538,121         0.50434466%           Liston School         3,538,121         0.50434466%           Lister Berm. School         139,392         0.01986977%           Logan County         4,079         0.00058148%           Lone Tree Elem. School         253,413         0.03612298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.1350066%           Manning Elem School         987,860         0.14038772%           Manning Elem School         987,4860         0.14038772%           Maple Valley School         1,696,016         0.241			
Lakota School         1,208,701         0.17229535%           Lamgure School         1,492,516         0.21275209%           Langdon Area School         2,551,015         0.36363667%           Larimore School         2,133,160         0.30407320%           Leeds School         1,051,290         0.14985708%           Lewis And Clark School         2,522,521         0.35957500%           Lidgenwood School         1,146,596         0.16344261%           Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Liston School         3,538,121         0.12004852%           Little Heart Elem. School         139,392         0.01986977%           Logan County         4,079         0.0058148%           Lone Tree Elem. School         253,413         0.03612298           Lone Tree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandare School         96,744         0.013500606%           Manning Elem. School         96,744         0.01379048%           Manning Elem. School         96,744         0.01379048%           Manyel Elem. School         1,696,016         0.24176		. — — — — .	
Lamoure School         1,492,516         0.21275209%           Langdon Area School         2,551,015         0.36363667%           Lerimore School         1,051,290         0.14985708%           Lewis And Clark School         2,522,521         0.35957500%           Lewis And Clark School         1,146,596         0.16344261%           Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         4,079         0.0048627%           Litdle Heart Elem. School         139,392         0.01986977%           Logan County         4,079         0.0058148%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandare School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manyle Valley School         1,696,016         0.24176009%           Maple Valley School         1,696,016         0.24176009%           Maple Valley School         1,596,016         0.24176009%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349 <td>-</td> <td></td> <td></td>	-		
Langdon Area School         2,551,015         0,36363667%           Larimore School         2,133,160         0.30407320%           Leeds School         1,051,290         0.14988708%           Lewis And Clark School         2,522,521         0.35957500%           Lidgerwood School         1,146,596         0.15344261%           Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         842,175         0.12004852%           Little Heart Elem. School         139,392         0.01986977%           Logar County         4,079         0.0058148%           Lone Tree Elem. School         253,413         0.03612298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandar Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Maning Elem. School         96,744         0.01379048%           Manvel Elem. School         1,696,016         0.24176009%           Mary Pott C-G School         1,596,016         0.24176009%           Mary Pott C-G School         2,750			
Larimore School         2,133,160         0.30407320%           Leeds School         1,051,290         0.14985708%           Lewis And Clark School         2,522,521         0.35957500%           Lidgerwood School         1,146,596         0.16344261%           Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Littchville-Marion School         842,175         0.12004852%           Little Heart Elem. School         139,392         0.01986977%           Lone Tree Elem. School         253,413         0.036112298%           Lone Tree Elem. School         253,413         0.03612298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandan Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manyel Valley School         1,696,016         0.24176009%           Maple Valley School         1,696,016         0.24176009%           Mary Port C-G School         2,750,120         0.09911915%           Mcclusky School			
Leeds School         1,051,290         0.14985708%           Lewis And Clark School         2,522,521         0.35957500%           Lidgerwood School         1,146,596         0.16344261%           Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         842,175         0.12004852%           Little Heart Elem. School         139,392         0.01986977%           Logan County         4,079         0.00058148%           Lone Tree Elem. School         253,413         0.0361228%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandar Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.114038772%           Maple Valley School         1,696,016         0.24176009%           Maple Valley School         1,596,016         0.24176009%           Mary-Port C-G School         2,750,120         0.39201835%           McLusky School         695,349<		. — — — -	
Lewis And Clark School         2,522,521         0.35957500%           Lidgerwood School         1,146,596         0.16344261%           Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         842,175         0.12004852%           Little Heart Elem. School         139,392         0.01986977%           Logan County         4,079         0.00058148%           Lone Tree Elem. School         253,413         0.03612298%           Lone Tree Elem. School         253,413         0.03612298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandara Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         127,525         0.01817818%           Max School         127,525         0.01817818%           Max School         1,255,181			
Lidgerwood School         1,146,596         0.16344261%           Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         842,175         0.12004852%           Little Heart Elem. School         139,392         0.01986977%           Logan County         4,079         0.0058148%           Lone Tree Elem. School         253,413         0.03612288%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.1350060%           Mandan Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Maning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         836,679         0.11926511%           Max School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.			
Linton School         1,680,696         0.23957635%           Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         842,175         0.12004852%           Little Heart Elem. School         139,392         0.01986977%           Logan County         4,079         0.00058148%           Lone Tree Elem. School         253,413         0.03612298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandar Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24476009%           Maple Valley School         1,696,016         0.24476009%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00643912%           Mckenzie County School         1,038,726			
Lisbon School         3,538,121         0.50434466%           Litchville-Marion School         842,175         0.12004852%           Little Heart Elem. School         139,392         0.01986977%           Logan County         4,079         0.00058148%           Lone Tree Elem. School         253,413         0.03612298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandan Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Maple Valley School         1,696,016         0.24176009%           Max School         1,155,181         0.1646624%           Max School         1,155,181         0.1646624%           McLusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,058,691         0.		. — — — — .	
Little Heart Elem. School         133,392         0.01986977%           Logan County         4,079         0.00058148%           Lone Tree Elem. School         253,413         0.03612298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandan Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Maple Valley School         836,679         0.19126511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1,26681805%           Medina School         1,038,726         0.14806608%           Mindway School         1,260,899			
Logan County         4,079         0.00058148%           Lone Tree Elem. School         253,413         0.03612298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandan Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Maple Valley School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1,26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         1,058,691         0.15091208%           Mildway School         1,260,899 <t< td=""><td>Litchville-Marion School</td><td>842,175</td><td>0.12004852%</td></t<>	Litchville-Marion School	842,175	0.12004852%
Lone Tree Elem. School         253,413         0.03612298%           Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandan Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1,26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,710,976	Little Heart Elem. School	139,392	0.01986977%
Lonetree Spec Ed Unit         171,822         0.02449251%           Maddock School         947,106         0.13500606%           Mandan Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1,26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Minnewaukan School         1,710,976         0.	Logan County	4,079	0.00058148%
Maddock School         947,106         0.13500606%           Mandan Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1,26681805%           Medina School         1,038,726         0.1480608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,710,976         0.24389258%           Minot School         1,376,253         0.19617920% <td>Lone Tree Elem. School</td> <td>253,413</td> <td>0.03612298%</td>	Lone Tree Elem. School	253,413	0.03612298%
Mandan Public Schools         21,037,667         2.99883309%           Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         1,376,253         0.196179	•		0.02449251%
Mandaree School         1,653,855         0.23575023%           Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midror School         1,260,899         0.17973603%           Milnor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.3006		. — — — — -	
Manning Elem School         96,744         0.01379048%           Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,710,976         0.24389258%           Minot School         44,638,534         6.36303966%           Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%			
Manvel Elem. School         984,860         0.14038772%           Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Minor School         1,710,976         0.24389258%           Minot School         1,710,976         0.24389258%           Minot School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%			
Maple Valley School         1,696,016         0.24176009%           Mapleton Elem. School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Minor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         44,638,534         6.36303966%           Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%	_	•	
Mapleton Elem. School         836,679         0.11926511%           Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         44,638,534         6.36303966%           Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%		. — — — — .	
Marmarth Elem. School         127,525         0.01817818%           Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         44,638,534         6.36303966%           Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%			
Max School         1,155,181         0.16466624%           May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         44,638,534         6.36303966%           Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%	·	•	
May-Port C-G School         2,750,120         0.39201835%           Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         44,638,534         6.36303966%           Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%		•	
Mcclusky School         695,349         0.09911915%           Mckenzie County         44,541         0.00634912%           Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         44,638,534         6.36303966%           Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%		. <del> </del>	
Mckenzie County       44,541       0.00634912%         Mckenzie County School       8,887,089       1.26681805%         Medina School       1,038,726       0.14806608%         Menoken Elem School       206,510       0.02943715%         Midkota       1,058,691       0.15091208%         Midway School       1,260,899       0.17973603%         Milnor School       1,710,976       0.24389258%         Minot School       44,638,534       6.36303966%         Minto School       44,638,534       6.36303966%         Mohall Lansford Sherwood       2,108,918       0.30061758%         Montpelier School       808,563       0.11525736%         Morton County       5,963       0.00085000%	•		
Mckenzie County School         8,887,089         1.26681805%           Medina School         1,038,726         0.14806608%           Menoken Elem School         206,510         0.02943715%           Midkota         1,058,691         0.15091208%           Midway School         1,260,899         0.17973603%           Milnor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         44,638,534         6.36303966%           Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%	•	•	
Medina School       1,038,726       0.14806608%         Menoken Elem School       206,510       0.02943715%         Midkota       1,058,691       0.15091208%         Midway School       1,260,899       0.17973603%         Milnor School       1,452,267       0.20701466%         Minnewaukan School       1,710,976       0.24389258%         Minot School       44,638,534       6.36303966%         Minto School       1,376,253       0.19617920%         Mohall Lansford Sherwood       2,108,918       0.30061758%         Montpelier School       808,563       0.11525736%         Morton County       5,963       0.00085000%	•		
Menoken Elem School206,5100.02943715%Midkota1,058,6910.15091208%Midway School1,260,8990.17973603%Milnor School1,452,2670.20701466%Minnewaukan School1,710,9760.24389258%Minot School44,638,5346.36303966%Minto School1,376,2530.19617920%Mohall Lansford Sherwood2,108,9180.30061758%Montpelier School808,5630.11525736%Morton County5,9630.00085000%		. — — — — .	
Midkota1,058,6910.15091208%Midway School1,260,8990.17973603%Milnor School1,452,2670.20701466%Minnewaukan School1,710,9760.24389258%Minot School44,638,5346.36303966%Minto School1,376,2530.19617920%Mohall Lansford Sherwood2,108,9180.30061758%Montpelier School808,5630.11525736%Morton County5,9630.00085000%			
Midway School1,260,8990.17973603%Milnor School1,452,2670.20701466%Minnewaukan School1,710,9760.24389258%Minot School44,638,5346.36303966%Minto School1,376,2530.19617920%Mohall Lansford Sherwood2,108,9180.30061758%Montpelier School808,5630.11525736%Morton County5,9630.00085000%			
Milnor School         1,452,267         0.20701466%           Minnewaukan School         1,710,976         0.24389258%           Minot School         44,638,534         6.36303966%           Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%	Midway School		
Minnewaukan School1,710,9760.24389258%Minot School44,638,5346.36303966%Minto School1,376,2530.19617920%Mohall Lansford Sherwood2,108,9180.30061758%Montpelier School808,5630.11525736%Morton County5,9630.00085000%		. — — — — .	
Minot School       44,638,534       6.36303966%         Minto School       1,376,253       0.19617920%         Mohall Lansford Sherwood       2,108,918       0.30061758%         Montpelier School       808,563       0.11525736%         Morton County       5,963       0.00085000%			
Minto School         1,376,253         0.19617920%           Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%			
Mohall Lansford Sherwood         2,108,918         0.30061758%           Montpelier School         808,563         0.11525736%           Morton County         5,963         0.00085000%	Minto School	· · ·	
Morton County 5,963 0.00085000%	Mohall Lansford Sherwood	. — — — -	
·	Montpelier School	808,563	0.11525736%
Mott-Regent School         1,348,084         0.19216380%	Morton County	5,963	0.00085000%
	Mott-Regent School	1,348,084	0.19216380%

# EXHIBIT D Schedule of Employer Allocations as of June 30, 2019

	Covered Deveal	Employer's Proportionate
Employer Name	Covered Payroll	Share Allocation
Mt Pleasant School	1,717,486	0.24482060%
Munich School	1,082,119	0.15425165%
N Central Area Career And Tech Center	4 542 020	0.0000000%
Napoleon School	1,513,829	0.21579014%
Naughton Rural School  Nd Center For Distance Education	105,170	0.01499159%
	1,404,997	0.20027652%
Nd Dept Of Public Instruction Nd School For Blind	185,243	0.02640563%
Nd School For Deaf		0.09756961% 0.13475661%
Nd United	155,114	0.02211088%
Nd Youth Correctional Cnt	1,176,353	0.02211086%
Nedrose School	3,072,119	
	13,521	0.43791790%
Nelson County Nesson School	1,837,917	
New England School	1,486,390	0.26198747% 0.21187876%
New Rockford Sheyenne School	1,799,363	
New Salem-Almont	2,060,302	0.25649178% 0.29368763%
New Town School	5,399,683	
Newburg United District	5,399,663 832,843	0.76970263% 0.11871839%
North Border School	2,767,199	0.39445282%
North Sargent School	1,586,165	0.22610135%
North Star	1,685,871	0.24031404%
North Valley Area Career	585,301	0.24031404%
Northern Cass School Dist	3,342,452	0.47645279%
Northern Plains Spec Ed	316,450	0.04510858%
Northwood School	1,754,253	0.25006162%
Oakes School	1,988,877	0.28350632%
Oberon Elem School	473,668	0.26350632%
Oliver - Mercer Spec Ed	880,230	0.12547319%
Page School	687,587	0.09801263%
Park River Area School District	2,083,502	0.29699470%
Parshall School	1,864,703	0.26580577%
Peace Garden Spec Ed	534,330	0.07616654%
Pembina Spec Ed Coop	114,694	0.01634912%
Pingree - Buchanan School	756,716	0.10786672%
Pleasant Valley Elem	700,710	0.00000000%
Powers Lake School	1,220,462	0.17397188%
Richardton-Taylor	1,837,418	0.26191641%
Richland School	1,563,354	0.22284975%
Robinson School	-	0.00000000%
Rolette County		0.00000000%
Rolette School	1,232,898	0.17574452%
Roosevelt School	418,032	0.05958869%
Roughrider Area Career And Tech Center	143,474	0.02045163%
Roughrider Service Program	193,712	0.02761286%
Rugby School	3,493,391	0.49796854%
Rural Cass Spec Ed	1,346,584	0.19194998%
Sargent Central School	1,619,237	0.23081558%
Sawyer School	567,661	0.08091776%
Scranton School	1,201,696	0.17129682%
Se Region Career And Tech	1,588,560	0.22644268%
Selfridge School	955,755	0.13623897%
Sheyenne Valley Area Voc	932,149	0.13023897 %
Sheyenne Valley Spec Ed	1,457,880	0.20781479%
Slope County	26,757	0.00381412%
Solen - Cannonball School	1,647,712	0.23487460%
Souris Valley Spec Ed	1,244,857	0.17744919%
South Cent. Prairie Sp Ed	59,855	0.00853208%
South East Education Cooperative	578,882	0.08251728%
South Heart School	1,959,845	0.27936785%

EXHIBIT D
Schedule of Employer Allocations as of June 30, 2019

		Employer's Proportionate
Employer Name	Covered Payroll	Share Allocation
South Prairie School District	2,557,680	0.36458676%
South Valley Spec Ed	496,464	0.07076884%
Southwest Special Education Unit	68,836	0.00981229%
St. John'S School	2,784,709	0.39694882%
St. Thomas School	631,772	0.09005647%
Stanley School	3,770,614	0.53748549%
Starkweather School	543,086	0.07741466%
Sterling School	304,559	0.04341363%
Strasburg School District	997,680	0.14221512%
Surrey School	2,531,108	0.36079906%
Sweet Briar Elem School	119,090	0.01697581%
Tgu School District	2,539,124	0.36194175%
Thompson School	2,478,583	0.35331185%
Tioga School	3,346,879	0.47708384%
Turtle Lake-Mercer School	1,345,786	0.19183632%
Twin Buttes Elem. School	449,696	0.06410235%
Underwood School	1,475,910	0.21038491%
United School	3,382,044	0.48209650%
Upper Valley Spec Ed	2,600,460	0.37068484%
Valley - Edinburg School	1,571,267	0.22397766%
Valley City School	6,093,991	0.86867340%
Velva School	2,666,812	0.38014313%
Wahpeton School	6,747,928	0.96188941%
Ward County	29,842	0.00425383%
Warwick School	1,621,711	0.23116820%
Washburn School	1,832,370	0.26119679%
West Fargo School	64,487,314	9.19240184%
West River Student Services	684,249	0.09753686%
Westhope School	1,109,593	0.15816791%
White Shield School	1,657,607	0.23628508%
Williams Co School Dist #8	2,410,913	0.34366580%
Williston School	20,782,759	2.96249689%
Wilmac Special Education	4,292,043	0.61181313%
Wilton School	1,435,276	0.20459276%
Wing School	727,360	0.10368224%
Wishek School	1,325,738	0.18897844%
Wolford School	541,162	0.07714039%
Wyndmere School	1,412,260	0.20131183%
Yellowstone Elem. School	506,724	0.07223146%
Zeeland School	415,851	0.05927784%
Grand Totals:	701,528,450	100%

				D	iscount Rate Sensitiv	rity		Schedule of C	Contributions			Pension Expense	
					,			2211044110 01 0				Expone	
Employer Name	Employer's Proportionate Share Allocation	Net Pension Liability	Covered Payroll	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)	Statutory Required Contribution	Contributions In Relation to the Statutory Required Contribution	Contribution Deficiency/ (Excess)	Contributions as a Percentage of Covered Payroll	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Alexander School	0.20255003%	\$ 2,789,627	\$ 1,420,946	\$ 3,767,419	\$ 2,789,627	\$ 1,977,056	\$ 181,171	\$ (181,171)	\$ -	12.75%	\$ 302,664	\$ 102,978	\$ 405,642
Anamoose School	0.09855917%	1,357,409	691,421	1,833,195	1,357,409	962,019	88,156	(88,156)	-	12.75%	147,274	(16,186)	131,088
Apple Creek Elem School	0.04241743%	584,195	297,570	788,962	584,195	414,029	37,940	(37,940)	-	12.75%	63,383	(27,997)	35,386
Ashley School	0.13812935%	1,902,391	969,017	2,569,198	1,902,391	1,348,257	123,550	(123,550)		12.75%	206,402	(22,691)	183,711
Bakker Elem School	0.00620431%	85,449	43,525	115,400	85,449	60,559	5,549	(5,549)	-	12.75%	9,271	831	10,102
Barnes County North	0.22560524%	3,107,155	1,582,685	4,196,245	3,107,155	2,202,094	201,792	(201,792)	-	12.75%	337,114	(109,423)	227,691
Beach School	0.30694385%	4,227,394	2,153,298	5,709,138	4,227,394	2,996,026	274,546	(274,546)	-	12.75%	458,656	(81,020)	377,636
Belcourt School  Belfield Public School	1.23315700% 0.23347807%	16,983,693 3,215,584	8,650,947 1,637,915	22,936,650 4,342,679	16,983,693 3,215,584	12,036,634 2,278,939	1,102,996 208,834	(1,102,996) (208,834)	<del>-</del>	12.75%	1,842,664 348,878	(186,710) 25,391	1,655,954 374,269
Beulah School	0.23347807% 0.50677145%	6,979,526	3,555,146	9,425,920	6,979,526	4,946,509	453,281	(453,281)	-	12.75% 12.75%	757,251	(87,056)	670,195
Billings Co. School Dist.	0.12097678%	1,666,156	848,687	2,250,161	1,666,156	1,180,834	108,208	(108,208)	-	12.75%	180,771	(8,011)	172,760
Bismarck Public Schools	10.58611318%	145,797,572	74,264,596	196,901,101	145,797,572	103,329,234	9,468,736	(9,468,736)	-	12.75%	15,818,465	(118,600)	15,699,865
Bismarck State College	0.00000000%									12.75%		(8,930)	(8,930
Blessed John Paul II Catholic Sch Network	0.00000000%	-	-	-	-	-	-	=	=	12.75%	-	(8,788)	(8,788
Bottineau School	0.54871056%	7,557,133	3,849,361	10,205,985	7,557,133	5,355,870	490,794	(490,794)	-	12.75%	819,919	(98,114)	721,805
Bowbells School	0.08732255%	1,202,653	612,593	1,624,194	1,202,653	852,340	78,106	(78,106)		12.75%	130,483	(269)	130,214
Bowman School	0.41982906%	5,782,109	2,945,220	7,808,797	5,782,109	4,097,879	375,516	(375,516)	-	12.75%	627,336	(44,562)	582,774
Burke Central School	0.14306350%	1,970,346	1,003,631	2,660,973	1,970,346	1,396,418	127,963	(127,963)	=	12.75%	213,775	(1,634)	212,141
Burleigh County Spec. Ed.	0.01674181%	230,577 5,735,547	117,449 2,921,503	311,397 7,745,914	230,577 5,735,547	163,414 4,064,880	14,975 372,492	(14,975) (372,492)	-	12.75%	25,017 622,284	9,004 (72,578)	34,021 549,706
Carrington School Cavalier School	0.41644826% 0.32912329%	4,532,861	2,308,894	6,121,674	4,532,861	3,212,516	294,384	(294,384)		12.75% 12.75%	491,798	(20,509)	471,289
Center Stanton School	0.22615995%	3,114,795	1,586,576	4,206,562	3,114,795	2,207,508	202,288	(202,288)	-	12.75%	337,943	(1,835)	336,108
Central Cass School	0.56099057%	7,726,260	3,935,508	10,434,393	7,726,260	5,475,733	501,777	(501,777)	-	12.75%	838,269	(13,823)	824,446
Central Elementary School	0.00000000%	· · · · ·					· -	· · · ·	-	12.75%	· -	(19,182)	(19,182
Central Valley School	0.19053708%	2,624,178	1,336,672	3,543,979	2,624,178	1,859,800	170,426	(170,426)		12.75%	284,713	(30,824)	253,889
Dakota Prairie School	0.29010482%	3,995,478	2,035,168	5,395,933	3,995,478	2,831,663	259,484	(259,484)	-	12.75%	433,494	12,214	445,708
Devils Lake School	1.54256645%	21,245,044	10,821,543	28,691,648	21,245,044	15,056,726	1,379,747	(1,379,747)	-	12.75%	2,305,004	(280,828)	2,024,176
Dickinson School	3.16475838%	43,586,733	22,201,680	58,864,325	43,586,733	30,890,663	2,830,714	(2,830,714)	<del>-</del>	12.75%	4,728,990	1,001,101	5,730,091
Divide School	0.35757553%	4,924,720 950,034	2,508,494 483,917	6,650,884 1,283,031	4,924,720 950,034	3,490,233 673,306	319,833 61,699	(319,833)	-	12.75%	534,313 103,075	(24,299) (38,164)	510,014 64,911
Drake School Drayton School	0.06898037% 0.20198279%	2,781,814	1,416,967	3,756,868	2,781,814	1,971,519	180,663	(61,699) (180,663)	-	12.75% 12.75%	301,816	28,912	330,728
Dunseith School	0.47708456%	6,570,662	3,346,884	8,873,746	6,570,662	4,656,740	426,728	(426,728)	-	12.75%	712,891	102,511	815,402
E Central Ctr Exc Childn	0.11321875%	1,559,309	794,262	2,105,862	1,559,309	1,105,109	101,268	(101,268)		12.75%	169,179	(28,701)	140,478
Earl Elem. School	0.00370618%	51,043	26,000	68,935	51,043	36,175	3,315	(3,315)	-	12.75%	5,538	(2,791)	2,747
Edgeley School	0.19607684%	2,700,474	1,375,535	3,647,018	2,700,474	1,913,872	175,381	(175,381)	-	12.75%	292,991	(5,673)	287,318
Edmore School	0.11109629%	1,530,077	779,372	2,066,385	1,530,077	1,084,392	99,370	(99,370)		12.75%	166,007	2,782	168,789
Eight Mile School	0.23785663%	3,275,888	1,668,632	4,424,120	3,275,888	2,321,678	212,751	(212,751)	-	12.75%	355,421	53,094	408,515
Elgin-New Leipzig School	0.17122198%	2,358,160	1,201,171	3,184,719	2,358,160	1,671,268	153,149	(153,149)	-	12.75%	255,851	9,764	265,615
Ellendale School	0.24525756%	3,377,817	1,720,552	4,561,777	3,377,817	2,393,917	219,370	(219,370)	=	12.75%	366,480	(82,795)	283,685
Emerado Elementary School  Enderlin Area School District	0.09008678% 0.28114065%	1,240,723 3,872,018	631,984 1,972,282	1,675,609 5,229,200	1,240,723 3,872,018	879,322 2,744,166	80,578 251,466	(80,578) (251,466)	<u>-</u>	12.75% 12.75%	134,614 420,099	(2,739) (53,246)	131,875 366,853
Fairmount School	0.28114065% 0.14809138%	2,039,593	1,038,903	2,754,491	2,039,593	1,445,495	132,460	(132,460)	-	12.75% 12.75%	221,288	(23,125)	198,163
Farqo Public Schools	10.36200801%	142,711,077	72,692,434	192,732,757	142,711,077	101,141,781	9,268,286	(9,268,286)	_	12.75%	15,483,592	(910,523)	14,573,069
Fessenden-Bowdon School	0.15904403%	2,190,439	1,115,739	2,958,210	2,190,439	1,552,401	142,257	(142,257)	-	12.75%	237,654	9,201	246,855
Finley-Sharon School	0.15590577%	2,147,217	1,093,723	2,899,838	2,147,217	1,521,769	139,450	(139,450)		12.75%	232,965	(52,135)	180,830
Flasher School	0.17214952%	2,370,935	1,207,678	3,201,971	2,370,935	1,680,322	153,979	(153,979)	-	12.75%	257,237	(14,557)	242,680
Fordville Lankin School	0.08965366%	1,234,758	628,946	1,667,553	1,234,758	875,094	80,191	(80,191)	-	12.75%	133,966	(6,302)	127,664
Fort Ransom Elem School	0.02254880%	310,554	158,186	419,406	310,554	220,095	20,169	(20,169)		12.75%	33,694	(6,408)	27,286
Fort Totten School	0.21947488%	3,022,725	1,539,679	4,082,220	3,022,725	2,142,257	196,309	(196,309)	-	12.75%	327,954	(74,387)	253,567
Fort Yates School Gackle-Streeter Pub Sch	0.16517197%	2,274,836 1,607,449	1,158,728 818,783	3,072,189 2,170,876	2,274,836 1,607,449	1,612,215 1,139,226	147,738 104,395	(147,738) (104,395)	-	12.75%	246,811 174,402	(19,634) (11,057)	227,177 163,345
Garrison School	0.11671412%	1,607,449 4,577,993	2,331,883	2,170,876 6,182,626	1,607,449 4,577,993	1,139,226 3,244,502	104,395 297,315	(104,395)	-	12.75%	174,402 496,694	(34,777)	163,345 461,917
Glen Ullin School	0.33240028% 0.15194202%	2,092,626	1,065,916	2,826,113	2,092,626	1,483,080	135,904	(135,904)		12.75% 12.75%	227,042	(35,147)	191,895
Glenburn School	0.15194202%	3,709,193	1,889,344	5,009,303	3,709,193	2,628,769	240,891	(240,891)	-	12.75%	402,433	19,219	421,652
Goodrich School	0.04402087%	606,279	308,819	818,786	606,279	429,680	39,374	(39,374)	=	12.75%	65,779	(6,112)	59,667
Grafton School	0.62494382%	8,607,058	4,384,159	11,623,919	8,607,058	6,099,969	558,980	(558,980)	-	12.75%	933,832	(113,706)	820,126
Grand Forks School	6.86482901%	94,546,071	48,158,729	127,685,428	94,546,071	67,006,418	6,140,238	(6,140,238)		12.75%	10,257,878	(579,953)	9,677,925
Great North West Cooperative	0.02486149%	342,406	174,410	462,422	342,406	242,669	22,237	(22,237)	-	12.75%	37,150	5,072	42,222
Grenora School	0.18716657%	2,577,757	1,313,027	3,481,288	2,577,757	1,826,901	167,411	(167,411)	-	12.75%	279,677	35,571	315,248
Griggs County Central Sch	0.24277600%	3 3/13 652	1 703 149	4 515 636	3 343 652	2 369 704	217 152	(217 152)		12 75%	362 773	(80 583)	282 190

Discount Rate Sensitivity	Schedule of Contributions	Pension Expense

Employer Name	Employer's Proportionate Share Allocation	Net Pension Liability	Covered Payroll	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)	Statutory Required Contribution	Contributions In Relation to the Statutory Required Contribution	Contribution Deficiency/ (Excess)	Contributions as a Percentage of Covered Payroll	Proportionate Share of Plan Pension Expense	Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
•	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Gst Educational Services	0.25416781%	3,500,534	1,783,059	4,727,507	3,500,534	2,480,888	227,340	(227,340)	-	12.75%	379,794	9,415	389,209
Halliday School	0.03993877%	550,058	280,182	742,859	550,058	389,835	35,723	(35,723)	-	12.75%	59,679	(55,933)	3,746
Hankinson School	0.22234004%	3,062,185	1,559,779	4,135,512	3,062,185	2,170,223	198,872	(198,872)	-	12.75%	332,235	(75,355)	256,880
Harvey School	0.32117945%	4,423,454	2,253,165	5,973,919	4,423,454	3,134,977	287,279	(287,279)		12.75%	479,927	(69,810)	410,117
Hatton Eielson Psd	0.17158274%	2,363,129	1,203,702	3,191,429	2,363,129	1,674,790	153,472	(153,472)	-	12.75%	256,390	(17,128)	239,262
Hazelton - Moffit School	0.12918562%	1,779,213	906,274	2,402,845	1,779,213	1,260,959	115,550	(115,550)	-	12.75%	193,038	(3,576)	189,462
Hazen School	0.39520525%	5,442,977	2,772,477	7,350,795	5,442,977	3,857,531	353,491	(353,491)	-	12.75%	590,542	(90,459)	500,083
Hetringer School	0.15993511% 0.19652184%	2,202,711 2,706,603	1,121,990 1,378,657	2,974,784 3,655,295	2,202,711 2,706,603	1,561,099 1,918,216	143,054 175,779	(143,054)		12.75% 12.75%	238,986 293,656	(50,159) (116,214)	188,827 177,442
Hillsboro School	0.37731084%	5,196,525	2,646,943	7,017,960	5,196,525	3,682,866	337,485	(337,485)	_	12.75%	563,803	18,572	582,375
Hope School	0.10699527%	1,473,596	750,602	1,990,106	1,473,596	1,044,362	95,702	(95,702)	-	12.75%	159,879	10,440	170,319
Horse Creek Elem. School	0.00571608%	78,725	40,100	106,319	78,725	55,794	5,113	(5,113)	-	12.75%	8,541	(518)	8,023
James River Multidistrict Spec Ed Unit	0.19019447%	2,619,459	1,334,268	3,537,606	2,619,459	1,856,456	170,119	(170,119)		12.75%	284,201	(12,509)	271,692
Jamestown School	1.92709460%	26,540,970	13,519,117	35,843,850	26,540,970	18,810,040	1,723,687	(1,723,687)	-	12.75%	2,879,591	(417,142)	2,462,449
Kenmare School	0.24953902%	3,436,784	1,750,587	4,641,412	3,436,784	2,435,708	223,200	(223,200)	-	12.75%	372,878	(76,817)	296,061
Kensal School	0.04035014%	555,724	283,068	750,510	555,724	393,851	36,091	(36,091)		12.75%	60,294	(42,945)	17,349
Kidder County School District	0.32731715%	4,507,986	2,296,223	6,088,080	4,507,986	3,194,887	292,768	(292,768)	-	12.75%	489,099	(64,857)	424,242
Killdeer School Kindred School	0.43684577%	6,016,472 6,948,612	3,064,597 3,539,400	8,125,306 9.384.171	6,016,472 6,948,612	4,263,977 4,924,600	390,736 451,273	(390,736) (451,273)	-	12.75%	652,764 753,897	65,665 3,203	718,429 757,100
Kulm School	0.50452687%	1,974,050	1,005,518	2,665,975	1,974,050	1,399,043	128,204	(128,204)	-	12.75%	214,177	(58,198)	155,979
Lake Region Spec Ed	0.14333242% 0.27297468%	3,759,552	1,914,995	5,077,313	3,759,552	2,664,459	244,162	(244,162)		12.75% 12.75%	407,897	(24,017)	383,880
Lakota School	0.17229535%	2,372,943	1,208,701	3,204,684	2,372,943	1,681,745	154,109	(154,109)	_	12.75%	257,455	(40,581)	216,874
Lamoure School	0.21275209%	2,930,135	1,492,516	3,957,177	2,930,135	2,076,637	190,296	(190,296)	-	12.75%	317,908	(51,224)	266,684
Langdon Area School	0.36363667%	5,008,197	2,551,015	6,763,621	5,008,197	3,549,395	325,254	(325,254)	-	12.75%	543,370	54,221	597,591
Larimore School	0.30407320%	4,187,858	2,133,160	5,655,744	4,187,858	2,968,006	271,978	(271,978)		12.75%	454,366	(90,565)	363,801
Leeds School	0.14985708%	2,063,911	1,051,290	2,787,333	2,063,911	1,462,729	134,039	(134,039)	-	12.75%	223,926	(39,741)	184,185
Lewis And Clark School	0.35957500%	4,952,258	2,522,521	6,688,074	4,952,258	3,509,750	321,621	(321,621)	-	12.75%	537,301	(85,417)	451,884
Lidgerwood School	0.16344261%	2,251,018	1,146,596	3,040,023	2,251,018	1,595,335	146,191 214,289	(146,191)		12.75%	244,227	(41,435)	202,792
Linton School Lisbon School	0.23957635%	3,299,573 6,946,102	1,680,696 3,538,121	4,456,106 9,380,782	3,299,573 6,946,102	2,338,464 4,922,822	451,110	(214,289) (451,110)	-	12.75% 12.75%	357,991 753,625	(55,933) (87,925)	302,058 665,700
Litchville-Marion School	0.50434466% 0.12004852%	1,653,372	842,175	2,232,896	1,653,372	1,171,773	107,377	(107,377)	-	12.75%	179,384	(33,133)	146,251
Little Heart Elem. School	0.01986977%	273,657	139,392	369,577	273,657	193,945	17,772	(17,772)	_	12.75%	29,691	6,599	36,290
Logan County	0.00058148%	8,008	4,079	10,815	8,008	5,676	520	(520)		12.75%	869	(183)	686
Lone Tree Elem. School	0.03612298%	497,505	253,413	671,885	497,505	352,590	32,310	(32,310)	-	12.75%	53,977	4,314	58,291
Lonetree Spec Ed Unit	0.02449251%	337,324	171,822	455,559	337,324	239,067	21,907	(21,907)	-	12.75%	36,598	904	37,502
Maddock School	0.13500606%	1,859,375	947,106	2,511,105	1,859,375	1,317,771	120,756	(120,756)		12.75%	201,735	(40,160)	161,575
Mandan Public Schools	2.99883309%	41,301,522	21,037,667	55,778,124	41,301,522	29,271,095	2,682,303	(2,682,303)	-	12.75%	4,481,053	299,649	4,780,702
Mandaree School	0.23575023%	3,246,877	1,653,855	4,384,941	3,246,877	2,301,118	210,867	(210,867)	-	12.75%	352,273	(66,860)	285,413
Manning Elem School	0.01379048%	189,930 1,933,494	96,744 984,860	256,502 2,611,204	189,930	134,607 1,370,300	12,335 125,570	(12,335) (125,570)	-	12.75%	20,607 209,777	3,437 26,140	24,044 235,917
Manvel Elem. School Maple Valley School	0.14038772% 0.24176009%	3,329,648	1,696,016	4,496,724	1,933,494 3,329,648	2,359,779	216,242	(216,242)	<del>-</del>	12.75% 12.75%	361,254	(38,771)	322.483
Mapleton Elem. School	0.11926511%	1,642,582	836,679	2,218,324	1,642,582	1,164,126	106,677	(106,677)	_	12.75%	178,214	20,840	199,054
Marmarth Elem. School	0.01817818%	250,360	127,525	338,113	250,360	177,434	16,259	(16,259)	_	12.75%	27,163	(14,282)	12,881
Max School	0.16466624%	2,267,871	1,155,181	3,062,783	2,267,871	1,607,279	147,286	(147,286)	-	12.75%	246,055	(34,045)	212,010
May-Port C-G School	0.39201835%	5,399,085	2,750,120	7,291,519	5,399,085	3,826,424	350,640	(350,640)		12.75%	585,780	(46,412)	539,368
Mcclusky School	0.09911915%	1,365,122	695,349	1,843,611	1,365,122	967,485	88,657	(88,657)	-	12.75%	148,110	(44,704)	103,406
Mckenzie County	0.00634912%	87,443	44,541	118,093	87,443	61,973	5,679	(5,679)	-	12.75%	9,487	(4,351)	5,136
Mckenzie County School	1.26681805%	17,447,291	8,887,089	23,562,743	17,447,291	12,365,194	1,133,104	(1,133,104)		12.75%	1,892,963	871,719	2,764,682
Medina School	0.14806608%	2,039,245	1,038,726	2,754,021	2,039,245	1,445,248	132,438	(132,438)	-	12.75%	221,250	(18,262)	202,988
Menoken Elem School Midkota	0.02943715%	405,424 2,078,441	206,510	547,529 2,806,956	405,424 2,078,441	287,331 1,473,027	26,330 134,983	(26,330) (134,983)	-	12.75%	43,987 225,503	16,324	60,311 189,486
	0.15091208%	2,078,441	1,058,691 1,260,899	3,343,080	2,475,420	1,754,373	160,765	(160,765)	-	12.75%	268,573	(36,017) (89,677)	178,896
Midway School Milnor School	0. <u>17973603%</u> 0.20701466%	2,851,116	1,452,267	3,850,461	2,475,420	2,020,635	185,164	(185,164)		12.75% 12.75%	309,335	(55,932)	253,403
Minnewaukan School	0.24389258%	3,359,018	1,710,976	4,536,388	3,359,018	2,380,594	218,149	(218,149)	-	12.75%	364,440	(58,502)	305,938
Minot School	6.36303966%	87,635,161	44,638,534	118,352,174	87,635,161	62,108,538	5,691,413	(5,691,413)	-	12.75%	9,508,071	(967,021)	8,541,050
Minto School	0.19617920%	2,701,884	1,376,253	3,648,922	2,701,884	1,914,871	175,472	(175,472)	-	12.75%	293,144	22,754	315,898
Mohall Lansford Sherwood	0.30061758%	4,140,265	2,108,918	5,591,470	4,140,265	2,934,277	268,887	(268,887)		12.75%	449,203	(139,504)	309,699
Montpelier School	0.11525736%	1,587,386	808,563	2,143,780	1,587,386	1,125,007	103,092	(103,092)	-	12.75%	172,225	2,708	174,933
Morton County	0.00085000%	11,707	5,963	15,810	11,707	8,297	760	(760)	=	12.75%	1,270	(6,594)	(5,324)
Mott-Regent School	0.19216380%	2,646,582	1,348,084	3,574,236	2,646,582	1,875,678	171,881	(171,881)		12.75%	287,144	(99,088)	188,056

Net Amortization of

Discount Rate Sensitivity	Schedule of Contributions	Pension Expense

Employer Name	Employer's Proportionate Share Allocation	Net Pension Liability	Covered Payroll	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)	Statutory Required Contribution	Contributions In Relation to the Statutory Required Contribution	Contribution Deficiency/ (Excess)	Contributions as a Percentage of Covered Payroll	Proportionate Share of Plan Pension Expense	Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Mt Pleasant School	0.24482060%	3,371,799	1,717,486	4,553,649	3,371,799	2,389,652	218,979	(218,979)	-	12.75%	365,827	(5,885)	359,942
Munich School	0.15425165%	2,124,436	1,082,119	2,869,072	2,124,436	1,505,624	137,970	(137,970)	-	12.75%	230,493	43,061	273,554
N Central Area Career And Tech Center	0.00000000%	-	-	-	-	-	-		-	12.75%	-	(42,724)	(42,724)
Napoleon School	0.21579014%	2,971,976	1,513,829	4,013,684	2,971,976	2,106,291	193,013	(193,013)		12.75%	322,448	(41,850)	280,598
Naughton Rural School	0.01499159%	206,472	105,170	278,843	206,472	146,330	13,409	(13,409)		12.75%	22,401	6,627	29,028
Nd Center For Distance Education	0.20027652%	2,758,315	1,404,997	3,725,132	2,758,315	1,954,865	179,137	(179,137)	-	12.75%	299,266	79,762	379,028
Nd Dept Of Public Instruction	0.02640563%	363,672	185,243	491,143	363,672	257,741	23,618	(23,618)	-	12.75%	39,457	10,808	50,265
Nd School For Blind	0.09756961%	1,343,780	684,479	1,814,789	1,343,780	952,360	87,271	(87,271)		12.75%	145,795	(23,329)	122,466
Nd School For Deaf Nd United	0.13475661% 0.02211088%	1,855,940 304,523	945,356 155,114	2,506,465 411,261	1,855,940 304,523	1,315,336 215,821	120,533 19,777	(120,533) (19,777)	-	12.75% 12.75%	201,362 33,040	(9,377) (52,205)	191,985 (19,165)
Nd Youth Correctional Cnt	0.02211088%	2,309,438	1,176,353	3,118,919	2,309,438	1,636,738	149,985	(149,985)	-	12.75%	250,565	(48,088)	202,477
Nedrose School	0.16768434% 0.43791790%	6,031,238	3,072,119	8,145,248	6,031,238	4,274,441	391,695	(391,695)			654,366	365,592	1,019,958
Nelson County	0.00192735%	26,544	13,521	35,849	26,544	18,813	1,724	(1,724)		12.75% 12.75%	2,880	169	3,049
Nesson School	0.26198747%	3,608,231	1,837,917	4,872,952	3,608,231	2,557,215	234,334	(234,334)	-	12.75%	391,479	52,650	444,129
New England School	0.21187876%	2,918,107	1,486,390	3,940,933	2,918,107	2,068,112	189,515	(189,515)	-	12.75%	316,603	40,631	357,234
New Rockford Sheyenne School	0.25649178%	3,532,541	1,799,363	4,770,732	3,532,541	2,503,572	229,419	(229,419)	-	12.75%	383,267	(39,921)	343,346
New Salem-Almont	0.29368763%	4,044,822	2,060,302	5,462,573	4,044,822	2,866,635	262,689	(262,689)		12.75%	438,847	48,235	487,082
New Town School	0.76970263%	10,600,753	5,399,683	14,316,425	10,600,753	7,512,935	688,460	(688,460)	-	12.75%	1,150,140	211,903	1,362,043
Newburg United District	0.11871839%	1,635,053	832,843	2,208,155	1,635,053	1,158,790	106,188	(106,188)	-	12.75%	177,397	33,594	210,991
North Border School	0.39445282%	5,432,614	2,767,199	7,336,800	5,432,614	3,850,186	352,818	(352,818)		12.75%	589,417	(109,101)	480,316
North Sargent School	0.22610135%	3,113,988	1,586,165	4,205,472	3,113,988	2,206,936	202,236	(202,236)	=	12.75%	337,855	34,305	372,160
North Star	0.24031404%	3,309,733	1,685,871	4,469,827	3,309,733	2,345,664	214,949	(214,949)	-	12.75%	359,093	(12,226)	346,867
North Valley Area Career	0.08343221%	1,149,073	585,301	1,551,834	1,149,073	814,367	74,626	(74,626)	-	12.75%	124,670	(29,457)	95,213
Northern Cass School Dist	0.47645279%	6,561,961	3,342,452	8,861,995	6,561,961	4,650,574	426,163	(426,163)		12.75%	711,947	115,206	827,153
Northern Plains Spec Ed	0.04510858%	621,259 3,443,981	316,450 1,754,253	839,017 4,651,132	621,259 3,443,981	440,297 2,440,809	40,347 223,667	(40,347) (223,667)	-	12.75%	67,404 373,658	21,231 46,967	88,635 420,625
Northwood School Oakes School	0.25006162%	3,904,600	1,988,877	5,273,201	3,904,600	2,767,257	253,582	(253,582)	-	12.75%	423,634	(77,730)	345,904
Oberon Elem School	0.28350632% 0.06751936%	929,912	473,668	1,255,856	929,912	659,045	60,393	(60,393)		12.75% 12.75%	100,892	(9,653)	91,239
Oliver - Mercer Spec Ed	0.12547319%	1,728,083	880,230	2,333,794	1,728,083	1,224,722	112,229	(112,229)		12.75%	187,490	(39,984)	147,506
Page School	0.09801263%	1,349,882	687,587	1,823,029	1,349,882	956,684	87,667	(87,667)	-	12.75%	146,457	(29,625)	116,832
Park River Area School District	0.29699470%	4,090,369	2,083,502	5,524,084	4,090,369	2,898,914	265,647	(265,647)	-	12.75%	443,789	(81,242)	362,547
Parshall School	0.26580577%	3,660,818	1,864,703	4,943,972	3,660,818	2,594,484	237,750	(237,750)	-	12.75%	397,184	(28,958)	368,226
Peace Garden Spec Ed	0.07616654%	1,049,006	534,330	1,416,693	1,049,006	743,449	68,127	(68,127)		12.75%	113,813	(420)	113,393
Pembina Spec Ed Coop	0.01634912%	225,169	114,694	304,093	225,169	159,581	14,623	(14,623)	-	12.75%	24,430	(20,940)	3,490
Pingree - Buchanan School	0.10786672%	1,485,598	756,716	2,006,315	1,485,598	1,052,869	96,481	(96,481)	-	12.75%	161,182	(41,689)	119,493
Pleasant Valley Elem	0.00000000%	<del>-</del>				<u>-</u>				12.75%		(4,753)	(4,753)
Powers Lake School	0.17397188%	2,396,033	1,220,462	3,235,867	2,396,033	1,698,110	155,609	(155,609)	-	12.75%	259,960	20,903	280,863
Richardton-Taylor	0.26191641%	3,607,252	1,837,418	4,871,630	3,607,252	2,556,521	234,271	(234,271)	-	12.75%	391,373	(7,585) (61,653)	383,788
Richland School	0.22284975%	3,069,205	1,563,354	4,144,993	3,069,205	2,175,198	199,328	(199,328)	-	12.75%	332,997		271,344
Robinson School Rolette County	0.00000000% 0.00000000%									12.75% 12.75%		(20,228)	(20,228)
Rolette School	0.17574452%	2,420,447	1,232,898	3,268,838	2,420,447	1,715,412	157,194	(157,194)	_	12.75%	262,609	(4,954)	257,655
Roosevelt School	0.05958869%	820,687	418,032	1,108,346	820,687	581,635	53,299	(53,299)	_	12.75%	89,041	(10,497)	78,544
Roughrider Area Career And Tech Center	0.02045163%	281,671	143,474	380,399	281,671	199,625	18,293	(18,293)	-	12.75%	30,560	(11,359)	19,201
Roughrider Service Program	0.02761286%	380,299	193,712	513,598	380,299	269,524	24,698	(24,698)		12.75%	41,261	17,746	59,007
Rugby School	0.49796854%	6,858,287	3,493,391	9,262,186	6,858,287	4,860,585	445,407	(445,407)	-	12.75%	744,097	(3,733)	740,364
Rural Cass Spec Ed	0.19194998%	2,643,637	1,346,584	3,570,259	2,643,637	1,873,591	171,689	(171,689)	-	12.75%	286,824	38,282	325,106
Sargent Central School	0.23081558%	3,178,915	1,619,237	4,293,157	3,178,915	2,252,951	206,453	(206,453)		12.75%	344,900	5,163	350,063
Sawyer School	0.08091776%	1,114,442	567,661	1,505,066	1,114,442	789,824	72,377	(72,377)		12.75%	120,913	(99,557)	21,356
Scranton School	0.17129682%	2,359,191	1,201,696	3,186,111	2,359,191	1,671,999	153,216	(153,216)	-	12.75%	255,963	(1,528)	254,435
Se Region Career And Tech	0.22644268%	3,118,689	1,588,560	4,211,821	3,118,689	2,210,268	202,541	(202,541)	=	12.75%	338,366	17,001	355,367
Selfridge School	0.13623897%	1,876,355	955,755	2,534,037	1,876,355	1,329,805	121,859	(121,859)		12.75%	203,577	1,541	205,118
Sheyenne Valley Area Voc	0.13287395%	1,830,011	932,149	2,471,448	1,830,011	1,296,960	118,849	(118,849)	-	12.75%	198,549	31,715	230,264
Sheyenne Valley Spec Ed	0.20781479%	2,862,136	1,457,880	3,865,343	2,862,136	2,028,444	185,880	(185,880)	-	12.75%	310,530	(82,013)	228,517
Slope County	0.00381412%	52,530	26,757	70,942	52,530	37,229	3,412	(3,412)	-	12.75%	5,699	(185)	5,514
Solen - Cannonball School	0.23487460%	3,234,818	1,647,712	4,368,654	3,234,818	2,292,571	210,083	(210,083)	<u>-</u> -	12.75%	350,965	(81,356)	269,609 138,195
Souris Valley Spec Ed South Cent. Prairie Sp Ed	0.17744919%	2,443,924 117,508	1,244,857 59,855	3,300,545 158,696	2,443,924 117,508	1,732,051 83,280	158,719 7,632	(158,719) (7,632)	-	12.75%	265,156 12,749	(126,961) (13,358)	138,195
South Cent. Prairie Sp Ed South East Education Cooperative	0.00853208% 0.08251728%	1,136,472	59,855 578,882	1,534,817	1,136,472	805,437	73,807	(7,632)	-	12.75% 12.75%	123,303	142,787	266,090
South Heart School	0.08251728% 0.27936785%	3,847,602	1,959,845	5,196,226	3,847,602	2,726,862	249,880	(249,880)	-	12.75% 12.75%	417,450	117,608	535,058
Count licait Sciloti	0.27930785%	5,047,002	1,909,045	5,190,220	5,047,002	2,120,002	249,000	(249,000)		12.75%	417,430	117,008	333,030

**EXHIBIT E** 

#### Schedule of Pension Amounts by Employer as of June 30, 2019

				Dis	scount Rate Sensitivit	ty		Schedule of C	ontributions			Pension Expense	
<u>Employer Name</u>	Employer's Proportionate Share Allocation	Net Pension Liability	Covered Payroll	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)	Statutory Required Contribution	Contributions In Relation to the Statutory Required Contribution	Contribution Deficiency/ (Excess)	Contributions as a Percentage of Covered Payroll	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
South Prairie School District	0.36458676%	5,021,282	2,557,680	6,781,293	5,021,282	3,558,669	326,104	(326,104)	-	12.75%	544,789	270,872	815,661
South Valley Spec Ed	0.07076884%	974,666	496,464	1,316,296	974,666	690,762	63,299	(63,299)	-	12.75%	105,747	(61,622)	44,125
Southwest Special Education Unit	0.00981229%	135,140	68,836	182,508	135,140	95,776	8,777	(8,777)	-	12.75%	14,662	(977)	13,685
St. John'S School	0.39694882%	5,466,990	2,784,709	7,383,225	5,466,990	3,874,549	355,050	(355,050)		12.75%	593,147	11,225	604,372
St. Thomas School	0.09005647%	1,240,306	631,772	1,675,045	1,240,306	879,026	80,551	(80,551)	-	12.75%	134,568	(33,307)	101,261
Stanley School	0.53748549%	7,402,536	3,770,614	9,997,199	7,402,536	5,246,304	480,753	(480,753)	-	12.75%	803,146	90,482	893,628
Starkweather School	0.07741466%	1,066,196	543,086	1,439,908	1,066,196	755,631	69,243	(69,243)	-	12.75%	115,678	(31,062)	84,616
Sterling School	0.04341363%	597,916	304,559	807,491	597,916	423,753	38,831	(38,831)		12.75%	64,871	14,082	78,953
Strasburg School District	0.14221512%	1,958,662	997,680	2,645,193	1,958,662	1,388,137	127,204	(127,204)	-	12.75%	212,507	5,972	218,479
Surrey School	0.36079906%	4,969,116	2,531,108	6,710,842	4,969,116	3,521,698	322,716	(322,716)	-	12.75%	539,130	(12,669)	526,461
Sweet Briar Elem School	0.01697581%	233,800	119,090	315,749	233,800	165,698	15,184	(15,184)	-	12.75%	25,366	8,064	33,430
Tgu School District	0.36194175%	4,984,854	2,539,124	6,732,096	4,984,854	3,532,851	323,738	(323,738)		12.75%	540,837	(121,241)	419,596
Thompson School	0.35331185%	4,865,998	2,478,583	6,571,580	4,865,998	3,448,616	316,019	(316,019)	-	12.75%	527,942	57,494	585,436
Tioga School	0.47708384%	6,570,652	3,346,879	8,873,732	6,570,652	4,656,733	426,727	(426,727)	-	12.75%	712,890	123,385	836,275
Turtle Lake-Mercer School Twin Buttes Elem. School	0.19183632%	2,642,072 882,852	1,345,786 449,696	3,568,145 1,192,300	2,642,072 882,852	1,872,481 625,692	171,588 57,336	(171,588) (57,336)	-	12.75%	286,654 95,786	(25,008) (19,645)	261,646 76,141
Underwood School	0.06410235%	2,897,533	1,475,910	3.913.147	2.897.533	2.053.531	188,179	(188,179)		12.75%	314,371	(62,230)	252,141
United School	0.21038491% 0.48209650%	6,639,689	3,382,044	8,966,967	6,639,689	4,705,661	431,211	(431,211)	-	12.75% 12.75%	720,380	8,463	728,843
Upper Valley Spec Ed		5,105,268	2,600,460	6,894,717	5,105,268	3,618,191	331,559	(331,559)	-	12.75%	553,902	9,582	563,484
Valley - Edinburg School	0.37068484%	3,084,739	1,571,267	4.165.972	3,084,739	2,186,207	200,337	(200,337)	-		334,682	(34,865)	299,817
Valley City School	0.22397766% 0.86867340%	11,963,831	6,093,991	16,157,276	11,963,831	8,478,972	776,984	(776,984)	<u>-</u>	12.75% 12.75%	1,298,029	(233,890)	1,064,139
Velva School	0.38014313%	5,235,533	2,666,812	7,070,641	5,235,533	3,710,512	340,019	(340,019)	_	12.75%	568,035	(33,085)	534,950
Wahpeton School	0.38014313%	13,247,652	6,747,928	17,891,088	13,247,652	9,388,837	860,361	(860,361)	-	12.75%	1,437,318	(196,061)	1,241,257
Ward County	0.00425383%	58.586	29.842	79,121	58.586	41.521	3.805	(3.805)	_	12.75%	6.356	(402)	5,954
Warwick School	0.00425363%	3,183,771	1,621,711	4,299,715	3,183,771	2,256,393	206,768	(206,768)		12.75%	345,427	(54,940)	290,487
Washburn School	0.26119679%	3,597,341	1,832,370	4,858,245	3,597,341	2,549,497	233,627	(233,627)	_	12.75%	390,297	26,472	416,769
West Fargo School	9.19240184%	126,602,640	64,487,314	170,978,149	126,602,640	89,725,456	8,222,133	(8,222,133)	_	12.75%	13,735,890	2,942,222	16,678,112
West River Student Services	0.09753686%	1,343,329	684,249	1.814.180	1,343,329	952.041	87.242	(87,242)	_	12.75%	145.746	(4.282)	141,464
Westhope School	0.15816791%	2,178,372	1,109,593	2,941,914	2,178,372	1,543,850	141,473	(141,473)		12.75%	236,345	(6,156)	230,189
White Shield School	0.23628508%	3,254,244	1,657,607	4,394,889	3,254,244	2,306,338	211,345	(211,345)	_	12.75%	353,073	4,559	357,632
Williams Co School Dist #8	0.34366580%	4,733,148	2,410,913	6,392,164	4,733,148	3,354,463	307,391	(307,391)	-	12.75%	513,528	5,678	519,206
Williston School	2.96249689%	40,801,080	20,782,759	55,102,273	40,801,080	28,916,424	2,649,802	(2,649,802)	-	12.75%	4,426,757	970,372	5,397,129
Wilmac Special Education	0.61181313%	8,426,215	4,292,043	11,379,689	8,426,215	5,971,803	547,236	(547,236)		12.75%	914,211	323,237	1,237,448
Wilton School	0.20459276%	2,817,760	1,435,276	3,805,414	2,817,760	1,996,995	182,998	(182,998)	-	12.75%	305,716	16,087	321,803
Wing School	0.10368224%	1,427,967	727,360	1,928,484	1,427,967	1,012,025	92,738	(92,738)	-	12.75%	154,929	(8,061)	146,868
Wishek School	0.18897844%	2,602,711	1,325,738	3,514,988	2,602,711	1.844.586	169.032	(169,032)	-	12.75%	282.384	1,506	283.890
Wolford School	0.07714039%	1,062,418	541,162	1,434,807	1,062,418	752,954	68,998	(68,998)		12.75%	115,268	(3,730)	111,538
Wyndmere School	0.20131183%	2,772,573	1,412,260	3,744,389	2,772,573	1,964,970	180,063	(180,063)	-	12.75%	300,813	(58,359)	242,454
Yellowstone Elem. School	0.07223146%	994,810	506,724	1,343,501	994,810	705,039	64,607	(64,607)	-	12.75%	107,933	(12,961)	94,972
Zeeland School	0.05927784%	816,406	415,851	1,102,564	816,406	578,601	53,021	(53,021)	-	12.75%	88,577	(29,651)	58,926
Grand Totals:	100%	1,377,253,104	701,528,450	1,859,994,289	1,377,253,104	976,082,834	89,444,881	(89,444,881)	-	12.75%	149,426,562		149,426,562
Note: Columns may not foot due to round	line							, , , , , ,					

Note: Columns may not foot due to rounding.

		Deferred Outflows of Resources					Deferred In	flows of Resources		Deferred (Inflows)/Outflows Recognized In Future Pension Expense (Year Ended June 30):					
Employer Name	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	2020	2021	2022	2023	2024	Thereafter
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
Alexander School	\$ 3,983	\$ 39,267	\$ 99,148	\$ 438,147	\$ 580,545	\$ 100,679	\$ -	\$ 19,245	\$ 119,924	\$ 169,056	\$ 102,846	\$ 78,020	\$ 46,415	\$ 30,364	\$ 33,921
Anamoose School	1,938	19,107	48,245	42,456	111,746	48,989	-	181,531	230,520	15,967	(16,252)	(32,245)	(20,584)	(34,401)	(31,260)
Apple Creek Elem School	834	8,223	20,763	4,594	34,414	21,084	-	118,233	139,317	(14,159)	(28,025)	(19,623)	(18,120)	(19,668)	(5,308)
Ashley School	2,716	26,778	67,614	5,609	102,717	68,658		97,876	166,534	22,371	(22,777)	(31,307)	(10,496)	(14,729)	(6,877) 112
Bakker Elem School Barnes County North	122 4,437	1,203 43,737	3,037 110,434	7,786	12,148 158,608	3,084 112,138	-	2,044 360,035	5,128 472,173	2,855 (35,823)	828 (109,564)	(83,767)	1,788 (26,995)	590 (43,007)	112 (14,410)
Beach School	6,036	59,505	150,249	14,999	230,789	152,568	-	269,524	422,092	19,115	(81,217)	(63,932)	(29,732)	(27,733)	(7,803)
Belcourt School	24,251	239,065	603,629	161,474	1,028,419	612,948	-	833,292	1,446,240	215,586	(187,497)	(180,831)	(46,139)	(117,932)	(101,008)
Belfield Public School	4,591	45,263	114,287	165,049	329,190	116,052		48,444	164,496	101,559	25,244	13,135	17,631	5,703	1,424
Beulah School	9,966	98,245	248,064	199,708	555,983	251,894	-	534,412	786,306	78,269	(87,379)	(97,135)	(21,089)	(41,639)	(61,349)
Billings Co. School Dist.	2,379	23,453	59,218	135,314	220,364	60,132	-	126,544	186,676	31,456	(8,087)	25,297	10,728	(13,357)	(12,348)
Bismarck Public Schools Bismarck State College	208,182	2,052,266	5,181,891	1,423,048	8,865,387	5,261,889		2,748,586 17,858	8,010,475 17,858	3,334,934 (8,930)	(125,366) (8,928)	(798,424)	175,258	(1,153,354)	(578,135)
Blessed John Paul II Catholic Sch Network	-	-	-	-	-	-	-	25,940	25,940	(8,788)	(8,785)	(8,367)	-	-	-
Bottineau School	10,791	106,375	268,593	159,986	545,745	272,740	-	491,574	764,314	80,893	(98,465)	(109,049)	(35,733)	(23,059)	(33,156)
Bowbells School	1,717	16,929	42,744	55,839	117,229	43,404	-	63,132	106,536	28,218	(323)	141	5,825	(16,700)	(6,469)
Bowman School	8,256	81,390	205,506	36,033	331,185	208,678		184,334	393,012	92,400	(44,832)	(57,621)	3,948	(32,637)	(23,086)
Burke Central School	2,813	27,735	70,029	259,539	360,116	71,111	-	245,439	316,550	45,038	(1,726)	29,816	(2,735)	(3,150)	(23,675)
Burleigh County Spec. Ed.	329	3,246	8,195	41,534	53,304	8,322	-	4,941	13,263	14,466	8,995	4,014	6,855	3,473	2,240
Carrington School Cavalier School	8,190 6,472	80,734 63,805	203,851 161,106	64,811 45,454	357,586 276,837	206,998 163,593		413,819 152,742	620,817 316,335	63,281 86,862	(72,844) (20,717)	(100,664) (48,656)	(58,348) (15,926)	(51,270)	(43,385) (8,240)
Center Stanton School	4,448	43,844	110,705	90,525	249,522	112,414	-	99,156	211,570	71,946	(1,983)	(16,223)	10,927	(9,794)	(16,922)
Central Cass School	11,032	108,756	274,604	292,238	686,630	278,844	-	174,406	453,250	169,190	(14,181)	(12,816)	69,059	(112)	22,240
Central Elementary School				2,597	2,597			112,244	112,244	(19,182)	(19,181)	(19,073)	(17,887)	(16,902)	(17,422)
Central Valley School	3,747	36,938	93,268	21,642	155,595	94,708		94,716	189,424	31,335	(30,943)	(24,956)	7,584	(10,061)	(6,788)
Dakota Prairie School	5,705	56,241	142,006	181,376	385,328	144,198	-	140,207	284,405	106,856	12,031	(4,409)	13,870	(2,993)	(24,431)
Devils Lake School Dickinson School	30,335 62,237	299,048 613,533	755,085 1,549,146	437,522 4,180,215	1,521,990 6,405,131	766,742 1,573,061	-	1,191,977	1,958,719 1,573,061	222,407 2,033,548	(281,815) 999,079	(253,092) 497,100	(31,433) 693,453	(113,943) 324,644	21,147 284,245
Divide School	7,032	69,321	175,033	130,836	382,222	177,735		239,530	417,265	92,354	(24,527)	(18,873)	7,436	(46,692)	(44,742)
Drake School	1,357	13,373	33,766	20,042	68,538	34,287	-	133,006	167,293	(15,660)	(38,206)	(29,364)	(12,799)	(1,220)	(1,505)
Drayton School	3,972	39,157	98,870	178,853	320,852	100,397	-	97,728	198,125	94,805	28,785	(6,059)	25,798	(18,883)	(1,718)
Dunseith School	9,382	92,489	233,532	414,696	750,099	237,138		73,072	310,210	258,151	102,205	75,597	62,246	(30,119)	(28,190)
E Central Ctr Exc Childn	2,227	21,949	55,420	2,719	82,315	56,276	-	117,607	173,883	8,235	(28,772)	(34,820)	(7,201)	(18,029)	(10,980)
Earl Elem. School	73 3,856	718	1,814	1,824 168,776	4,429	1,842	-	16,084 152,928	17,926 250,389	(1,582)	(2,795)	(2,561)	(2,001)	(2,171)	(2,387)
Edgeley School Edmore School	2,185	38,012 21,538	95,979 54.382	79.080	306,623 157,185	97,461 55,221	-	152,928 60,746	250,389 115,967	58,294 39,025	(5,799) 2,710	(11,670) (7,740)	4,628 2.831	(10,768) 4.609	21,550 (218)
Eight Mile School	4,678	46,112	116,431	330,746	497,967	118,228		204,542	322,770	130,691	52,939	13,591	7,451	742	(30,217)
Elgin-New Leipzig School	3,367	33,194	83,813	89,950	210,324	85,107	-	75,448	160,555	65,622	9,656	11,135	(379)	(22,670)	(13,595)
Ellendale School	4,823	47,547	120,053	88,013	260,436	121,907	-	351,082	472,989	(2,784)	(82,950)	(70,399)	(30,044)	(32,812)	6,436
Emerado Elementary School	1,772	17,465	44,097	37,360	100,694	44,778		41,550	86,328	26,650	(2,796)	(4,625)	7,220	(5,467)	(6,617)
Enderlin Area School District Fairmount School	5,529 2,912	54,503 28,710	137,618 72,491	30,913 21,615	228,563 125,728	139,743 73,610	-	339,967 98,759	479,710 172,369	38,471 25,187	(53,429) (23,218)	(70,955)	(45,766) 1,762	(79,499)	(39,968)
Fargo Public Schools	2,912	2,008,820	5,072,192	21,615 82,341	7,367,127	5,150,496	-	3,057,164	8,207,660	2,469,900	(23,218)	(26,041) (923,811)	(161,693)	(12,959) (852,446)	(11,373) (455,335)
Fessenden-Bowdon School	3,128	30,833	77,852	45,546	157,359	79,054	-	17.774	96,828	61,086	9,100	3,656	3,765	(13,261)	(3,815)
Finley-Sharon School	3,066	30,225	76,316	78,358	187,965	77,494		194,325	271,819	(1,273)	(52,232)	(49,900)	12,417	2,180	4,953
Flasher School	3,385	33,374	84,267	61,147	182,173	85,568	-	67,543	153,111	41,604	(14,669)	6,312	17,005	(14,783)	(6,407)
Fordville Lankin School	1,763	17,381	43,885	49,119	112,148	44,563	-	54,465	99,028	22,946	(6,357)	(8,397)	2,342	(2,593)	5,180
Fort Ransom Elem School	443	4,371	11,038	2,952	18,804	11,208		33,308	44,516	948	(6,424)	(8,831)	(3,402)	(5,036)	(2,967)
Fort Totten School Fort Yates School	4,316 3,248	42,548 32,021	107,433 80,852	171,311 191,168	325,608 307,289	109,091 82,100	-	392,656 333,991	501,747 416,091	(2,787) 34,250	(74,528) (19,743)	(63,005) (37,658)	(21,682) (19,155)	(35,321) (67,939)	21,185 1,443
Gackle-Streeter Pub Sch	3,248 2.295	22,627	80,852 57,131	13,225	95,278	58,013	-	47.061	105.074	34,250 27.019	(19,743)	(37,658)	(19,155)	(10,329)	(6,387)
Garrison School	6,537	64,440	162,710	45,489	279,176	165,221	-	263,525	428,746	73,663	(34,992)	(70,299)	(29,322)	(50,700)	(37,920)
Glen Ullin School	2,988	29,456	74,375	31,706	138,525	75,524		275,982	351,506	14,421	(35,244)	(57,393)	(46,301)	(54,976)	(33,488)
Glenburn School	5,296	52,211	131,831	324,721	514,059	133,866	-	278,714	412,580	107,079	19,049	18,747	(23,857)	(33,677)	14,138
Goodrich School	866	8,534	21,548	15,182	46,130	21,881	-	29,671	51,552	8,249	(6,142)	(4,687)	499	(1,031)	(2,312)
Grafton School	12,290	121,154	305,909	32,955	472,308	310,632		583,494	894,126	90,171	(114,104)	(156,476)	(96,376)	(121,061)	(23,971)
Grand Forks School Great North West Cooperative	135,001 489	1,330,843 4,820	3,360,327 12,170	384,512 111,404	5,210,683 128,883	3,412,203 12,358	=	2,635,185 83,107	6,047,388 95,465	1,659,577 13,183	(584,343) 5,054	(521,990) (2,592)	(158,863) (3,106)	(860,729) 6,499	(370,357) 14,380
Great North West Cooperative Grenora School	489 3,681	4,820 36,285	12,170 91,618	111,404 194,798	128,883 326,382	12,358 93,032	-	83,107 35,341	95,465 128,373	13,183 96,631	5,054 35,448	(2,592) 8,105	(3,106)	6,499 12,662	14,380 17,273
Griggs County Central Sch	4,774	47,066	118,839	8,481	179,160	120,674	-	243,795	364,469	(1,381)	(80,740)	(74,044)	4,518	(22,599)	(11,063)

	Deferred Outflows of Resources						Deferred In	flows of Resources		Deferred (Inflows)/Outflows Recognized In Future Pension Expense (Year Ended June 30):					
Farsham News	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	2020	2021	2022	2023	2024	Thereafter
Employer Name	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
Gst Educational Services	4,998	49,274	124,415	183,112	361,799	126,336	(20)	113,886	240,222	92,333	9,251	28,281	22,547	(13,180)	(17,656)
Halliday School	785	7,743	19,550	13,663	41,741	19,852	-	265,211	285,063	(42,904)	(55,959)	(58,802)	(50,079)	(36,122)	543
Hankinson School	4,372	43,104	108,835	51,349	207,660	110,515	-	225,591	336,106	(2,820)	(75,497)	(37,777)	7,387	(9,173)	(10,566)
Harvey School	6,316	62,265	157,217	55,871	281,669	159,644		397,210	556,854	34,969	(70,013)	(64,898)	(60,536)	(71,200)	(43,506)
Hatton Eielson Psd Hazelton - Moffit School	3,374 2,541	33,264 25,044	83,990 63,236	70,107 171,839	190,735 262,660	85,286 64,212	-	109,478 132,085	194,764 196,297	38,848 38,569	(17,237) (3,660)	(20,610) 15,170	906 6,865	(11,864) (6,110)	5,928 15,529
Hazen School	7,772	76,616	193,453	99,367	377,208	196,439	-	627,741	824,180	38,470	(90,713)	(120,689)	(77,047)	(99,170)	(97,825)
Hebron School	3,145	31,006	78,288	14,712	127,151	79,497		253,389	332,886	2,017	(50,261)	(46,060)	(27,918)	(48,062)	(35,451)
Hettinger School	3,865	38,098	96,197	-	138,160	97,682	-	385,539	483,221	(52,102)	(116,339)	(82,178)	(37,229)	(37,339)	(19,874)
Hillsboro School Hope School	7,420 2,104	73,147 20,743	184,693 52,374	134,982 166,674	400,242 241,895	187,545 53,183	-	136,957 87,483	324,502 140,666	141,663 45,345	18,333 10,370	(20,528) 13,667	8,781 10,572	(38,176) 17,560	(34,333) 3,714
Horse Creek Elem. School	112	1,108	2,798	40,661	44,679	2,841	-	46,325	49,166	1,347	(523)	(196)	2,826	(7,821)	(119)
James River Multidistrict Spec Ed Unit	3,740	36,872	93,100	132,927	266,639	94,537		307,441	401,978	49,539	(12,632)	(34,270)	(23,994)	(56,357)	(57,625)
Jamestown School	37,897	373,594	943,311	-	1,354,802	957,873	-	1,477,992	2,435,865	211,539	(418,375)	(363,454)	(99,233)	(269,151)	(142,388)
Kenmare School Kensal School	4,907 794	48,377 7,822	122,149 19,751	22,469 17,813	197,902 46,180	124,035 20,056	-	311,034 212,029	435,069 232,085	4,591 (29,781)	(76,977) (42,969)	(47,021) (49,820)	(23,896) (49,420)	(55,207) (7,880)	(38,657) (6,034)
Kidder County School District	6,437	63,455	160,221	194,691	424.804	162.695		306,820	469.515	41,924	(65,066)	(39,663)	(49,420)	11,321	6,842
Killdeer School	8,591	84,689	213,836	366,947	674,063	217,137	-	54,494	271,631	208,178	65,387	23,118	69,799	26,873	9,077
Kindred School	9,922	97,810	246,965	221,195	575,892	250,778	-	110,318	361,096	167,796	2,881	(4,524)	59,358	(3,441)	(7,275)
Kulm School	2,819 5,368	27,787 52,920	70,161 133,621	45,807 172,296	146,574 364,205	71,244 135,684		277,457 154,437	348,701 290,121	(11,438) 65,036	(58,292) (24,191)	(54,010)	(32,888) 35,627	(21,030) 12,334	(24,471) 1,167
Lake Region Spec Ed Lakota School	3,388	33,402	84,338	113,464	234,592	85,640	-	245,144	330,784	15,627	(40,691)	(13,694)	(4,436)	(19,513)	(33,485)
Lamoure School	4,184	41,245	104,142	23,018	172,589	105,750	-	293,555	399,305	18,183	(51,360)	(71,682)	(42,389)	(51,929)	(27,538)
Langdon Area School	7,151	70,496	178,000	742,877	998,524	180,748		325,506	506,254	172,851	53,987	46,600	176,004	20,427	22,401
Larimore School	5,980	58,949	148,844	119,890	333,663	151,141	-	436,768	587,909	8,634	(90,757)	(37,138)	(28,598)	(51,240)	(55,147)
Leeds School Lewis And Clark School	2,947 7,071	29,052 69,709	73,355 176,012	10,888 54,274	116,242 307,066	74,487 178,729	-	191,967 541,258	266,454 719,987	9,147 31,888	(39,835) (85,646)	(51,486) (110,200)	(21,119) (73,101)	(29,439) (118,869)	(17,481) (56,994)
Lidgerwood School	3,214	31,686	80,005	24,437	139,342	81,240	-	188,439	269,679	11,885	(41,538)	(28,290)	(24,738)	(38,609)	(9,047)
Linton School	4,711	46,445	117,272	10,552	178,980	119,083		191,860	310,943	22,225	(56,085)	(43,819)	(18,681)	(21,528)	(14,073)
Lisbon School Litchville-Marion School	9,918 2,361	97,774 23,273	246,876 58,764	111,118 48,798	465,686 133,196	250,687 59,671	-	457,346 167,475	708,033 227,146	76,609 6,031	(88,244) (33,209)	(60,192) (23,888)	(42,029) (16,926)	(68,578) (29,247)	(59,912) 3,289
Little Heart Elem. School	2,361	23,273 3,852	9,726	35,530	49,499	9,876	-	5,087	14,963	13,081	(33,209)	(23,888) 5,009	8,127	1,799	(66)
Logan County	11	113	285	-	409	289		666	955	7	(185)	(163)	(65)	(84)	(57)
Lone Tree Elem. School	710	7,003	17,682	48,722	74,117	17,955	-	39,633	57,588	16,098	4,293	(1,577)	(4,644)	1,544	816
Lonetree Spec Ed Unit Maddock School	482 2.655	4,748 26,173	11,989 66.085	74,873 8.049	92,092 102,962	12,174 67,106	-	83,549 169,943	95,723 237.049	8,894 3.883	886 (40,248)	424 (45,604)	757 (24.996)	(723) (23.935)	(13,870) (3,187)
Mandan Public Schools	58,974	581,366	1.467.926	908,958	3,017,224	1,490,587		86,751	1,577,338	1,277,966	297,734	(29,916)	139,272	(23,935)	(54,065)
Mandaree School	4,636	45,703	115,399	285,309	451,047	117,181	-	402,551	519,732	10,049	(67,012)	(35,125)	(27,053)	15,216	35,240
Manning Elem School	271	2,673	6,750	24,288	33,982	6,855	-	20,381	27,236	7,936	3,425	(485)	1,578	(2,384)	(3,322)
Manyel Velley School	2,761	27,216	68,720	209,496	308,193	69,781		30,355	100,136	71,939	26,049	30,589	35,081	18,434	25,965
Maple Valley School Mapleton Elem. School	4,754 2,345	46,869 23,121	118,341 58,380	24,957 129,827	194,921 213,673	120,168 59,281	-	148,741 30,284	268,909 89,565	40,099 59,748	(38,928) 20,765	(32,582) 12,383	2,602 31,014	(28,527) 1,408	(16,653) (1,209)
Marmarth Elem. School	357	3,524	8,898	59,621	72,400	9,036	-	113,510	122,546	(8,352)	(14,295)	(7,459)	(16,065)	(8,347)	4,372
Max School	3,238	31,923	80,604	9,688	125,453	81,848		180,414	262,262	19,674	(34,147)	(35,730)	(27,172)	(40,317)	(19,117)
May-Port C-G School Mcclusky School	7,709 1,949	75,998 19,216	191,893 48,519	27,168 217,778	302,768 287,462	194,855 49,268	-	305,886 312,550	500,741 361,818	81,477 (12,368)	(46,661) (44,766)	(76,485) (18,630)	(44,476) (22,598)	(72,951) (3,429)	(38,877) 27,435
Mckenzie County	1,949	1,231	3,108	2,084	6,548	3,156	-	13,617	16,773	(2,280)	(4,353)	(2,904)	(22,396)	(5,429)	(464)
Mckenzie County School	24,913	245,590	620,106	3,537,630	4,428,239	629,679	-	-	629,679	1,284,996	870,911	583,674	507,638	313,992	237,349
Medina School	2,912	28,705	72,478	75,855	179,950	73,597		179,997	253,594	30,042	(18,357)	(9,582)	(16,776)	(37,644)	(21,328)
Menoken Elem School Midkota	579 2.968	5,707 29,256	14,409 73,871	62,094 52,220	82,789 158.315	14,632 75,012	-	- 151.914	14,632 226,926	25,927 13,215	16,305 (36,114)	14,006 (25,206)	10,328 5,507	1,333 (11,307)	257 (14,705)
Midway School	2,968	29,256 34,844	73,871 87,981	38,310	164,670	75,012 89,339	-	452,245	541,584	(31,041)	(89,791)	(25,206)	(77,767)	(77,180)	(23,272)
Milnor School	4,071	40,133	101,333	129,899	275,436	102,898		309,612	412,510	11,603	(56,061)	(57,571)	(2,031)	(7,650)	(25,363)
Minnewaukan School	4,796	47,282	119,385	203,300	374,763	121,228	-	396,192	517,420	21,064	(58,659)	(43,393)	(26,228)	(2,347)	(33,094)
Minot School	125,133 3.858	1,233,564	3,114,701	400.004	4,473,398	3,162,786	-	4,204,771 71,419	7,367,557	1,108,809	(971,091)	(1,037,370)	(436,366)	(1,004,910)	(553,232)
Minto School  Mohall Lansford Sherwood	3,858 5,912	38,032 58,279	96,030 147,152	189,294	327,214 211,343	97,512 149,424		71,419 506,982	168,931 656,406	86,754 (41,433)	22,631 (139,695)	13,093 (129,908)	36,861 (49,057)	(8,669)	7,613 (27,124)
Montpelier School	2,267	22,344	56,418	22,668	103,697	57,289	-	18,490	75,779	40,309	2,636	(2,774)	(344)	(8,698)	(3,211)
Morton County	17	165	416	901	1,499	422	-	36,028	36,450	(6,317)	(6,593)	(6,924)	(6,969)	(6,922)	(1,227)
Mott-Regent School	3,779	37,254	94,064		135,097	95,516		448,999	544,515	(36,398)	(99,210)	(96,970)	(75,937)	(65,006)	(35,898)

-		Deferr	ed Outflows of Res	ources			Deferred In	flows of Resources		Deferred (	Inflows)/Outflows	Recognized In Fu	ture Pension Expe	nse (Year Ended	lune 30):
	Differences Between Expected and Actual	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Outflows of	Differences Between Expected and Actual	Changes of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Inflows of				-		
Employer Name	Experience	Investments	Assumptions	Contributions	Resources	Experience	Assumptions	Contributions	Resources	2020	2021	2022	2023	2024	Thereafter
Mt Discourt Cohool	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
Mt Pleasant School Munich School	4,815 3,033	47,462 29,904	119,839 75,506	105,448 173,137	277,564 281,580	121,689 76,672	-	133,235 6,058	254,924 82,730	73,983 93,383	(6,042) 42,961	(24,353) 27,807	(8,089) 23,147	(18,865) 8.778	6,006 2,774
N Central Area Career And Tech Center	3,033	29,904	73,300	-	201,300		-	206,731	206,731	(42,724)	(42,726)	(42,032)	(40,413)	(38,836)	2,774
Napoleon School	4,244	41,834	105,629	54,452	206,159	107,260		236,766	344,026	28,548	(41,989)	(46,793)	(16,832)	(29,262)	(31,540)
Naughton Rural School	295	2,906	7,338	33,177	43,716	7,452	-	679	8,131	11,518	6,615	6,335	6,872	2,791	1,453
Nd Center For Distance Education	3,939 519	38,826	98,035	278,820	419,620	99,549	-	159,871	259,420 157,682	145,099	79,636	(47,755)	1,286 (4,444)	(8,967)	(9,098) (24,257)
Nd Dept Of Public Instruction Nd School For Blind	1,919	5,119 18,915	12,926 47,760	125,409 51,953	143,973 120,547	13,125 48.498	-	144,557 159,868	208,366	19,422 8,501	10,789 (23,390)	10,597 (20,062)	(19,037)	(25,816) (15,455)	(24,257)
Nd School For Deaf	2,650	26,124	65,963	44,956	139,693	66,982		101,447	168,429	34,585	(9,462)	(20,418)	1,455	(20,973)	(13,922)
Nd United	435	4,287	10,823	6,562	22,107	10,990	-	303,636	314,626	(44,992)	(52,219)	(51,753)	(47,321)	(47,905)	(48,330)
Nd Youth Correctional Cnt	3,298	32,508	82,081	64,133	182,020	83,348	-	266,806	350,154	6,616	(48,192)	(41,405)	(33,328)	(24,025)	(27,800)
Nedrose School  Nelson County	8,612 38	84,896 374	214,360 943	1,361,812 612	1,669,680 1,967	217,670 958			217,670 999	508,455 798	365,314 169	340,154 12	122,724 136	69,763	45,601 (71)
Nesson School	5,152	50,790	128,243	302,985	487,170	130,222	-	100,929	231,151	138,119	52,480	31,567	28,897	19,109	(14,153)
New England School	4,167	41,076	103,714	119,947	268,904	105,316	-	12,812	118,128	109,753	40,498	12,645	7,195	(15,167)	(4,147)
New Rockford Sheyenne School	5,044	49,725	125,552	112,526	292,847	127,491		218,328	345,819	43,755	(40,087)	(51,646)	(2,282)	2,631	(5,342)
New Salem-Almont	5,776	56,935	143,760	315,560	522,031	145,979	-	110,032	256,011	144,045	48,049	8,182	65,879	(3,990)	3,856
New Town School Newburg United District	15,137 2,335	149,218 23,015	376,769 58,113	1,100,689 178,878	1,641,813 262,341	382,585 59,010	-	110,539 3,493	493,124 62,503	463,005 72,324	211,409 33,516	124,658 30,345	216,588 35,279	86,285 20,643	46,743 7,729
North Border School	7,757	76,470	193,084	154,479	431,790	196,065	-	557,551	753,616	19,582	(109,353)	(54,585)	(77,847)	(73,636)	(25,986)
North Sargent School	4,446	43,833	110,676	228,611	387,566	112,385		159,328	271,713	108,067	34,158	22,188	(6,002)	(16,764)	(25,793)
North Star	4,726	46,588	117,633	102,817	271,764	119,449	-	208,088	327,537	66,172	(12,378)	(29,516)	(25,233)	(27,234)	(27,584)
North Valley Area Career	1,641	16,174	40,840	58,190	116,845	41,470	-	116,612	158,082	(2,239)	(29,511)	(5,680)	10,073	(11,873)	(2,006)
Northern Cass School Dist Northern Plains Spec Ed	9,370 887	92,367 8,745	233,223 22,081	440,363 73,647	775,323 105,360	236,824 22,421		24,361	236,824 46,782	270,640 35,947	114,903 21,203	88,747 2,763	97,998 8,553	(26,055)	(7,734)
Northwood School	4,918	48,478	122,405	207,342	383,143	124,295	-	13,667	137,962	128,545	46,809	35,412	32,316	(5,310)	7,409
Oakes School	5,575	54,962	138,776	100,692	300,005	140,918	-	448,426	589,344	14,759	(77,911)	(74,390)	(40,660)	(51,158)	(59,979)
Oberon Elem School	1,328	13,090	33,051	243,039	290,508	33,561		161,624	195,185	12,374	(9,698)	(2,047)	46,456	21,802	26,434
Oliver - Mercer Spec Ed	2,467	24,325	61,419	31,010	119,221	62,367	-	267,241	329,608	949	(40,067)	(55,596)	(46,749)	(35,973)	(32,950)
Page School Park River Area School District	1,927 5,841	19,001 57,577	47,977 145,379	64,494 35,351	133,399 244,148	48,718 147,623	-	186,742 339,405	235,460 487,028	2,350 15,647	(29,690) (81,429)	(30,351) (64,613)	(9,190) (21,804)	(33,298) (61,224)	(1,883) (29,458)
Parshall School	5,227	51,530	130,112	321,622	508,491	132,120	-	338,694	470,814	57,756	(29,127)	(11,079)	17,826	28,008	(25,708)
Peace Garden Spec Ed	1,498	14,766	37,283	69,946	123,493	37,859		129,433	167,292	24,428	(467)	(14,283)	(9,455)	(19,892)	(24,129)
Pembina Spec Ed Coop	322	3,170	8,003	17,559	29,054	8,126	-	63,406	71,532	(15,606)	(20,948)	(1,044)	463	(1,255)	(4,089)
Pingree - Buchanan School	2,121	20,911	52,801	7,811	83,644	53,616	=	221,325	274,941	(6,499)	(41,760)	(36,994)	(31,879)	(41,774)	(32,390)
Pleasant Valley Elem Powers Lake School	3.421	33,727	85,159	132,261	254,568	86,474		9,505 55,900	9,505 142,374	(4,753) 77,658	(4,752)	7,054	6,309	2,367	(1,983)
Richardton-Taylor	5,151	50,776	128,208	67,314	251,449	130,187	-	125,142	255,329	77,861	20,789 (7,753)	(34,336)	3,723	(23,384)	(19,991)
Richland School	4,382	43,203	109,085	71,400	228,070	110,769	-	268,064	378,833	11,048	(61,792)	(63,658)	5,744	(34,794)	(7,310)
Robinson School								50,548	50,548	(20,228)	(20,228)	(10,092)			
Rolette County		-	-	-	-	-	-	2,276	2,276	(1,137)	(1,139)	-	- (40.000)	-	- (0.1.705)
Rolette School Roosevelt School	3,456 1,172	34,071 11,552	86,027 29,169	96,449 83,565	220,003 125,458	87,355 29,619	=	199,997 101,844	287,352 131,463	52,380 8,943	(5,065) (10,536)	(29,664) (6,169)	(13,362) (7,999)	(46,912) 7,903	(24,726) 1,854
Roughrider Area Career And Tech Center	402	3,965	10.011	41,160	55,538	10,166	-	62,668	72,834	(4,687)	(11,373)	(9,726)	10,656	(1,584)	(581)
Roughrider Service Program	543	5,353	13,516	130,850	150,262	13,725		190,773	204,498	26,754	17,726	(10,040)	(33,934)	(34,380)	(20,363)
Rugby School	9,793	96,538	243,755	71,374	421,460	247,518	-	53,967	301,485	158,721	(4,053)	(23,552)	20,437	(26,758)	(4,820)
Rural Cass Spec Ed	3,775	37,212	93,959	452,998	587,944	95,410	-	170,162	265,572	100,902	38,158	39,430	53,334	71,371	19,176
Sargent Central School Sawyer School	4,539 1,591	44,747 15,687	112,984 39,609	145,802 73,297	308,072 130,184	114,728 40,221		104,828 517,016	219,556 557,237	80,463 (73,159)	5,017 (99,607)	8,246 (112,677)	24,894 (93,302)	(9,213)	(20,891) 6,262
Scranton School	3,369	33,208	83,850	52,131	172,558	85,144	-	42,777	127,921	54,355	(1,635)	(13,177)	13,159	(4,345)	(3,719)
Se Region Career And Tech	4,453	43,899	110,843	77,545	236,740	112,555	-	1,292	113,847	90,874	16,854	5,801	18,507	(9,217)	76
Selfridge School	2,679	26,412	66,689	44,537	140,317	67,718		34,568	102,286	45,987	1,457	411	6,926	(7,948)	(8,802)
Sheyenne Valley Area Voc	2,613	25,759	65,042	274,490	367,904	66,046	-	58,390	124,436	75,063	31,628	31,573	38,393	36,583	30,228
Sheyenne Valley Spec Ed	4,087 75	40,288 739	101,725	92,055 698	238,155 3,379	103,296 1,896	=	433,883	537,179 2,867	(14,217) 1,059	(82,147)	(100,900)	(33,172) 154	(31,265)	(37,323) (137)
Slope County Solen - Cannonball School	75 4,619	739 45,534	1,867 114,971	77,145	3,379 242,269	1,896 116,746	-	971 281,626	2,867 398,372	1,059 (4,732)	(188) (81,508)	(221) (21,054)	154 1,470	(154) (41,998)	(8.281)
Souris Valley Spec Ed	3,490	34,401	86,861	255,821	380,573	88,202		660,138	748,340	(69,071)	(127,074)	(131,260)	(83,932)	35,273	(8,281) 8,298
South Cent. Prairie Sp Ed	168	1,654	4,176	-	5,998	4,241	-	64,221	68,462	(10,575)	(13,360)	(13,117)	(12,229)	(12,879)	(303)
South East Education Cooperative	1,623	15,997	40,392	769,582	827,594	41,016	-	226,983	267,999	169,707	142,734	139,315	145,218	(43,032)	5,653
South Heart School	5,494	54,159	136,750	504,129	700,532	138,861			138,861	208,747	117,431	81,642	85,124	43,695	25,032

#### EXHIBIT E (continued)

#### Schedule of Pension Amounts by Employer as of June 30, 2019

Actual Experience   Investments   Changes of Experience   Investments   Contributions   Cont		Deferred Inflows of Resources				Deferred (Inflows)/Outflows Recognized In Future Pension Expense (Year Ended June 30):						
(14)	Total Deferred Outflows of Resources	Differenc Betwee Expected Actua Experier	n and Change	es of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	2020	2021	2022	2023	2024	Thereafter
South Prairie Elem School         7,170         70,680         178,465         932,258           South Valley Spec Ed         1,392         13,720         34,641         138,244           Southwest Special Education Unit         193         1,902         4,803         1,102           St. Thomas School         7,806         76,954         194,306         141,208           St. Thomas School         10,570         104,199         263,099         415,012           Stanley School         10,570         104,199         263,099         415,012           Sterling School         1,522         15,008         37,894         51,628           Sterling School District         2,797         27,570         69,614         157,535           Surey School District         7,995         69,946         176,611         113,805           Sweet Briar Elem School         334         3,291         8,310         35,639           Tgu School District         7,118         70,167         177,170         177,170           Tompson School         6,948         68,494         172,946         322,232           Tioga School         9,382         92,489         233,532         413,763           Turtle Lake-Mercer School <t< th=""><th>(18)</th><th>(19)</th><th>(20)</th><th></th><th>(21)</th><th>(22)</th><th>(23)</th><th>(24)</th><th>(25)</th><th>(26)</th><th>(27)</th><th>(28)</th></t<>	(18)	(19)	(20)		(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
South Valley Spec Ed         1,392         13,720         34,641         138,244           Southwest Special Education Unit         193         1,902         4,803         1,102           St. John's School         7,806         76,954         194,306         141,208           St. Thomas School         1,771         17,459         44,083         23,374           Stanky School         10,570         104,199         263,099         415,012           Starkweather School         1,522         15,008         37,894         51,628           Sterling School         854         8,416         21,251         55,317           Strasburg School District         2,797         27,570         69,614         157,535           Surey School         334         3,291         8,310         35,639           Tgu School District         7,118         70,167         177,170         -           Tgu School District         7,118         70,167         177,170         -           Thompson School         6,948         88,494         172,946         322,232           Toga School         9,382         92,489         233,532         413,763           Turtle Lake-Mercer School         3,773         37,190	1,188,573			· _	(,	181,220	389,812	270,641	229,881	111,225	4,289	1,505
Southwest Special Education Unit         193         1,902         4,803         1,102           St. John'S School         7,806         76,954         194,306         141,208           St. Thomas School         1,771         17,459         44,083         23,374           Stankweather School         10,570         104,199         263,099         415,012           Starkweather School         1,522         15,008         37,894         51,628           Sterling School         854         8,416         21,251         55,317           Strasburg School District         2,797         27,570         69,614         157,535           Surey School District         7,095         69,946         176,611         113,805           Sweet Briar Elem School         334         3,291         8,310         35,639           Tgu School District         7,118         70,167         177,170	187.997		176		302.439	337,615	(38,535)	(61,665)	(73,593)	9,810	17,796	(3,431)
St. John's School         7,806         76,954         194,306         141,208           St. Thomas School         1,771         17,459         44,083         23,374           Stanley School         10,570         104,199         263,099         415,012           Starkweather School         1,522         15,008         37,894         51,628           Sterling School District         2,797         27,570         69,614         157,535           Surey School District         7,095         69,946         176,611         113,805           Sweet Briar Elem School         334         3,291         8,310         35,639           Tgu School District         7,118         70,167         177,170           Thompson School         6,948         68,494         172,946         322,232           Tigg School District         7,118         70,167         177,170           Thompson School         6,948         68,494         172,946         322,232           Tigg School District         7,118         70,167         177,170           Thompson School         3,732         37,190         93,904         136,730           Turle Lake-Mercer School         3,773         37,190         93,904         136,730	8,000		877		3,281	8,158	2,224	(981)	(405)	393	(889)	(500)
St. Thomas School	420,274			_	56,875	254,181	140,723	10,970	(11,333)	36,035	(12,002)	1,701
Stanley School	86,687	44	763		146,232	190,995	(3,928)	(33,364)	(37,213)	(13,903)	(16,734)	832
Starkweather School   1,522   15,008   37,894   51,628   Sterling School   854   8,416   21,251   55,317   517   527   727,570   69,614   157,535   517   527   527,570   69,614   157,535   527   527,570   69,614   157,535   527   527,570   69,614   157,535   527   527,570   69,614   157,535   527   527,570   69,614   157,535   527   527,570   69,614   113,805   527   527,570   69,614   113,805   527   5	792,880			_	134,406	401,566	265,827	90,139	33,947	82,384	(45,532)	(35,452)
Stering School   854   8,416   21,251   55,317     Strasburg School District   2,797   27,570   69,614   157,535     Surrey School   7,095   69,946   176,611   113,805     Sweet Briar Elem School   334   3,291   8,310   35,639     Tgu School District   7,118   70,167   177,170     Thompson School   6,948   68,494   172,946   322,232     Tioga School   9,382   92,489   233,532   413,763     Turtle Lake-Mercer School   3,773   37,190   93,904   136,730     Turtle Lake-Mercer School   1,261   12,427   31,378   37,426     Underwood School   4,137   40,786   102,993   -   Unided School   9,481   93,461   235,986   331,152     Upper Valley Spec Ed   7,290   71,862   181,450   158,356     Valley - Edinburg School   4,405   43,421   109,637   136,188     Valley - Edinburg School   17,083   168,404   425,215   71,134     Velva School   18,916   186,476   470,844   -   Ward County   84   825   2,082   577     Warrvick School   18,916   186,476   470,844   -   Ward County   84   825   2,082   577     Warvick School   1,918   18,909   47,744   123,181     West Fargo School   3,110   30,663   77,423   57,216     Williston School   4,627   45,807   115,661   318,511     Williston School   12,032   118,609   299,482   1,449,666     Willing School   1,202   118,609   299,482   1,449,666     Willing School   1,203   118,609   299,482   1,449,666     Willing School   1,517   14,955   37,760   37,605     Williston School   1,517   14,955   37,760   37,605     Wyndmere School   1,420   14,003   3,537   29,199	106,052		479	-	150,024	188,503	(5,807)	(31,110)	(29,512)	(16,287)	(5,739)	6,005
Strasburg School District         2,797         27,570         69,614         157,535           Surey School         7,095         69,946         176,611         113,805           Sweet Briar Elem School         334         3,291         8,310         35,639           Tgu School District         7,118         70,167         177,170         .           Thompson School         6,948         68,494         172,946         322,232           Tioga School         9,382         92,489         233,532         413,763           Turlle Lake-Mercer School         3,773         37,190         93,904         136,730           Twin Buttes Elem. School         1,261         12,2427         31,378         37,426           United School         9,481         93,461         235,996         331,152           Upper Valley Spec Ed         7,290         71,862         181,450         158,356           Valley - Edinburg School         4,405         43,421         109,637         136,188           Valley City School         17,083         168,404         425,215         71,134           Velva School         7,476         73,696         186,080         92,433           Ward Courty         84         825 </td <td>85,838</td> <td></td> <td>579</td> <td></td> <td>-</td> <td>21,579</td> <td>28,245</td> <td>14,056</td> <td>7,803</td> <td>10,312</td> <td>4,681</td> <td>(839)</td>	85,838		579		-	21,579	28,245	14,056	7,803	10,312	4,681	(839)
Surrey School   7,095   69,946   176,611   113,805   Sweet Briar Elem School   334   3,291   8,310   35,639   Tgu School District   7,118   70,167   177,170   - 1   777,170	257,516		689		57,010	127,699	52,367	5,879	28,494	35,465	10,121	(2,509)
Sweet Briar Elem School         334         3,291         8,310         35,639           Tgu School District         7,118         70,167         177,170         177,170           Thompson School         6,948         66,494         172,946         322,232           Tiogs School         9,382         92,489         233,532         413,763           Turtle Lake-Mercer School         3,773         37,190         93,004         136,730           Twin Buttes Elem. School         1,261         12,427         31,378         37,426           Underwood School         4,137         40,786         102,983         102,983           United School         9,481         9,481         235,986         331,152           Upper Valley Spec Ed         7,290         71,862         181,450         158,356           Valley - Edinburg School         4,405         43,421         109,637         136,188           Valley City School         17,083         168,404         425,215         71,134           Velva School         7,476         73,696         186,080         92,433           Wahpeton School         18,916         186,476         470,844         -           Ward County         84         825	367,457			_	181,697	361.034	105,035	(12,902)	(31,846)	1,267	(24,186)	(30,946)
Tgu School District	47,574		438	_	-	8,438	13.602	8,052	7,176	7.767	2,152	387
Thompson School	254,455	179	905	_	546,419	726,324	(3,164)	(121,469)	(123,100)	(86,938)	(89,503)	(47,694)
Tioga School         9,382         92,489         233,532         413,763           Turlie Lake-Mercer School         3,773         37,190         93,904         136,730           Twin Buttes Elem. School         1,261         12,427         31,378         37,426           Underwood School         4,137         40,786         102,983	570,620				34,186	209,802	172,756	57,268	59,719	68,155	5,526	(2,605)
Twin Buttes Elem. School         1,261         12,427         31,378         37,426           Underwood School         4,137         40,786         102,983         -           United School         9,481         33,461         23,986         331,152           Upper Valley Spec Ed         7,290         71,862         181,450         158,356           Valley - Edinburg School         4,405         43,421         109,637         136,188           Valley City School         17,083         166,404         425,215         71,134           Velva School         7,476         73,696         186,080         92,433           Warbeton School         18,916         186,476         470,844         -           Ward County         84         825         2,082         577           Warnick School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Fargo School         180,774         1,782,075         4,499,671         11,417,005           West Fargo School         3,110         30,663         77,7423         57,216           White Shield School         4,647         45,807         <	749,166	237	137	-	42,333	279,470	279,025	123,079	26,877	36,690	(1,850)	5,875
Uniderwood School         4,137         40,786         102,983         -           Unided School         9,481         93,461         235,986         331,152           Upper Valley Spec Ed         7,290         71,862         181,450         158,356           Valley - Edinburg School         4,405         43,421         109,637         136,188           Valley City School         17,083         168,404         425,215         71,134           Velva School         7,476         73,696         186,080         92,433           Warboton School         18,916         186,476         470,844         -           Ward County         84         825         2,082         577           Warwick School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Fargo School         180,774         1,782,075         4,499,671         11,417,005           West River Student Services         1,918         18,909         47,744         123,181           Westingo School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807	271,597	95	353	-	145,443	240,796	37,575	(25,129)	(527)	32,084	(2,815)	(10,389)
United School         9,481         93,461         235,986         331,152           Upper Valley Spec Ed         7,290         71,862         181,450         158,356           Valley - Edinburg School         4,405         43,421         109,637         136,188           Valley Edinburg School         7,083         168,404         425,215         71,134           Velva School         7,476         73,696         186,080         92,433           Warpeton School         18,916         186,476         470,844         -           Ward County         84         825         2,082         577           Warnick School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West River Student Services         1,918         18,909         47,744         123,181           West River Student Services         1,918         18,909         47,743         57,216           White Shield School         4,647         45,807         115,661         318,511           Williams Special Education         12,032         118,609         29,482         1,489,139         3,2273,362           Williams Special Educatio	82,492	31	862	-	90,610	122,472	1,267	(19,687)	(17,170)	5,878	(3,968)	(6,301)
Upper Valley Spec Ed         7,290         71,862         181,450         158,356           Valley - Edinburg School         4,405         43,421         109,637         136,188           Valley City School         17,083         168,404         425,215         71,134           Velva School         7,476         73,696         186,080         92,433           Wahpeton School         18,916         186,476         470,844         -7           Ward County         84         825         2,082         577           Warnick School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Fargo School         180,774         1,782,075         4,499,671         11,417,005           West River Student Services         1,918         18,909         47,744         123,181           Westhope School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807         115,661         318,511           Williams Co School Dist #8         6,758         66,624         168,224         391,227           Williams Co Special Education         12,032 <td>147,906</td> <td>104</td> <td>573</td> <td></td> <td>280,201</td> <td>384,774</td> <td>6,404</td> <td>(62,362)</td> <td>(65,450)</td> <td>(39,770)</td> <td>(46,731)</td> <td>(28,958)</td>	147,906	104	573		280,201	384,774	6,404	(62,362)	(65,450)	(39,770)	(46,731)	(28,958)
Valley - Edinburg School         4,405         43,421         109,637         136,188           Valley City School         17,083         168,404         425,215         71,134           Velva School         7,476         73,696         186,080         92,433           Wahpeton School         18,916         186,476         470,844         -           Ward County         84         825         2,082         577           Wark School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Fargo School         180,774         1,782,075         4,499,671         11,417,005           West River Student Services         1,918         18,909         47,744         123,181           West Fargo School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807         11,661         318,511           Williams Co School Dist #8         6,758         66,624         168,224         391,227           Williams Special Education         12,032         118,609         299,482         1,449,656           William Special Education         12,032	670,080	239	629	-	259,406	499,035	165,739	8,155	32,970	67,298	(65,001)	(38,115)
Valley City School         17,083         168,404         425,215         71,134           Velva School         7,476         73,696         186,080         92,433           Wahpeton School         18,916         186,476         470,844         -           Ward County         84         825         2,082         577           Warnikic School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Fargo School         180,774         1,782,075         4,499,671         11,417,005           West River Student Services         1,918         18,909         47,744         123,181           Westhope School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807         115,661         318,511           Williating Co School Dist #8         6,758         66,624         180,224         391,227           Williston School         58,259         574,321         1,450,139         3,273,362           Williating Special Education         12,032         118,609         299,482         1,449,656           Williating School         4,023 <td>418,958</td> <td>184</td> <td>251</td> <td>-</td> <td>205,917</td> <td>390,168</td> <td>130,511</td> <td>9,347</td> <td>(27,984)</td> <td>7,744</td> <td>(48,667)</td> <td>(42,161)</td>	418,958	184	251	-	205,917	390,168	130,511	9,347	(27,984)	7,744	(48,667)	(42,161)
Velva School         7,476         73,696         186,080         92,433           Wahpeton School         18,916         186,476         470,844         -           Ward County         84         825         2,082         577           Warwick School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Fargo School         180,774         1,782,075         4,499,671         11,417,005           West River Student Services         1,918         18,909         47,744         123,181           Westinge School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807         115,661         318,511           Williams Co School Dist #8         6,758         66,624         188,224         391,227           Williams Special Education         12,032         118,609         299,482         1,449,656           Williams Special Education         12,032         118,609         299,482         1,449,656           Williams Special Education         2,039         20,100         50,752         43,513           Wing School         2,039 </td <td>293,651</td> <td>111</td> <td>329</td> <td></td> <td>379,149</td> <td>490,478</td> <td>38,204</td> <td>(35,005)</td> <td>(33,265)</td> <td>(62,632)</td> <td>(68,503)</td> <td>(35,626)</td>	293,651	111	329		379,149	490,478	38,204	(35,005)	(33,265)	(62,632)	(68,503)	(35,626)
Wahpeton School         18,916         186,476         470,844         -           Ward County         84         825         2,082         577           Warwick School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Flargo School         180,774         1,782,075         4,499,671         11,417,005           West River Student Services         1,918         18,909         47,744         123,181           West River Student Services         1,918         18,909         47,744         123,181           West River Student Services         1,918         18,909         37,742         57,216           White Shield School         4,647         45,807         115,661         318,511           Williams Co School Dist #8         6,758         66,624         168,224         391,227           Williams Special Education         12,032         118,609         299,482         1,496,656           Williams Special Education         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School	681,836	431	779		881,463	1,313,242	49,499	(234,443)	(122,523)	(84,063)	(150,319)	(89,557)
Ward County         84         825         2,082         577           Warwick School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Fargo School         180,774         1,782,075         4,499,671         11,417,005           West River Student Services         1,918         18,909         47,744         123,181           Westhope School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807         115,661         318,511           Williatings Co School Dist #8         6,758         66,624         168,224         391,227           Williston School         58,259         574,321         1,450,139         3,273,362           Williand Special Education         12,032         118,609         299,482         1,449,656           Williand School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wing School         3,716         36,636         92,505         48,779           Wolford School         1,517 <td< td=""><td>359,685</td><td>188</td><td>952</td><td>-</td><td>213,913</td><td>402,865</td><td>90,930</td><td>(33,325)</td><td>(24,378)</td><td>7,276</td><td>(45,729)</td><td>(37,955)</td></td<>	359,685	188	952	-	213,913	402,865	90,930	(33,325)	(24,378)	7,276	(45,729)	(37,955)
Warwick School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Farge School         180,774         1,782,075         4,499,671         11,147,005           West River Student Services         1,918         18,909         47,744         123,181           Westhope School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807         115,661         318,511           Williams Co School Dist #8         6,758         66,624         168,224         391,227           Willians Special Education         12,032         118,609         299,482         1,449,656           Williams Special Education         12,032         118,609         299,482         1,449,656           William School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolf of School         1,517         14,955         37,760         37,605           Wyndmere School         1,	676,236		113	-	775,880	1,253,993	117,739	(196,677)	(219,659)	(95,766)	(132,984)	(50,410)
Warnick School         4,546         44,815         113,157         133,416           Washburn School         5,137         50,637         127,856         209,148           West Fargo School         180,774         1,782,075         4,499,671         11,417,005           West River Student Services         1,918         18,909         47,744         123,181           Westhope School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807         115,661         318,511           Williams Co School Dist #8         6,758         66,624         168,224         391,227           Williand Special Education         12,032         118,609         299,482         1,449,656           Wilnac Special Education         12,032         118,609         299,482         1,449,656           Wiln School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,760         37,605           Wyndmere School         1,420 </td <td>3,568</td> <td></td> <td>114</td> <td></td> <td>2,060</td> <td>4,174</td> <td>986</td> <td>(406)</td> <td>(541)</td> <td>(47)</td> <td>(328)</td> <td>(272)</td>	3,568		114		2,060	4,174	986	(406)	(541)	(47)	(328)	(272)
West Fargo School         180,774         1,782,075         4,499,671         11,417,005           West River Student Services         1,918         18,909         47,744         123,181           West River Student Services         1,918         18,909         47,742         127,216           White Shield School         4,647         45,807         115,661         318,511           Williams Co School Dist #8         6,758         66,624         168,224         391,227           Williston School         58,259         574,321         1,450,139         3,273,362           Willimac Special Education         12,032         118,609         299,462         1,449,656           Willion School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,760         37,605           Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	295,934			-	395,728	510,631	20,475	(55,086)	(109,465)	(52,146)	(18,018)	(458)
West River Student Services         1,918         18,909         47,744         123,181           Westhope School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807         115,661         318,511           Williams Co School Dist #8         6,758         66,624         188,224         391,227           Williams Special Education         12,032         118,609         299,482         1,449,656           Williams Special Education         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,760         37,605           Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	392,778			-	79,318	209,147	111,683	26,304	18,574	19,840	11,225	(3,996)
Westhope School         3,110         30,663         77,423         57,216           White Shield School         4,647         45,807         115,661         318,511           Williams Co School Dist #8         6,758         66,624         168,224         391,227           Williston School         58,259         574,321         1,450,139         3,273,362           Wilmas Special Education         12,032         118,609         299,482         1,449,656           Wilton School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,605         37,605           Wyndmere School         3,959         39,027         38,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	17,879,525			-	-	4,569,136	5,941,082	2,936,348	2,010,417	1,972,160	227,335	223,047
White Shield School         4,647         45,807         115,661         318,511           Williams Co School Dist #8         6,758         66,624         168,224         391,227           Williston School         58,259         574,321         1,450,139         3,273,362           Wilmac Special Education         12,032         118,609         299,482         1,449,656           Wilton School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,760         37,605           Wyndmere School         3,959         39,027         38,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	191,752	. —	481	:	168,265	216,746	27,538	(4,342)	(25,417)	(12,769)	(21,583)	11,580
Williams Co School Dist #8         6,788         66,624         168,224         391,227           Williston School         58,259         574,321         1,450,139         3,273,362           Willinac Special Education         12,032         118,609         299,482         1,449,656           Willina School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,760         37,605           Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	168,412		618	-	112,029	190,647	45,444	(6,255)	(30,750)	(6,436)	(22,484)	(1,754)
Williston School         58,259         574,321         1,450,139         3,273,362           Wilmac Special Education         12,032         118,609         299,482         1,449,656           Wilton School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,760         37,605           Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	484,626			-	152,100	269,547	81,643	4,407	9,762	45,185	37,421	36,661
Wilmac Special Education         12,032         118,609         299,482         1,449,656           Wilton School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,660         37,605           Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	632,833			-	171,096	341,917	117,793	5,461	17,378	67,452	42,647	40,185
Wilton School         4,023         39,663         100,148         124,388           Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,760         37,605           Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	5,356,081	. — — — .			74,933	1,547,459	1,936,835	968,479	381,856	333,095	46,774	141,583
Wing School         2,039         20,100         50,752         43,513           Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,760         37,605           Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	1,879,779			-	200,893	504,998	522,830	322,843	222,093	196,796	22,812	87,406
Wishek School         3,716         36,636         92,505         48,779           Wolford School         1,517         14,955         37,660         37,605           Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	268,222			-	50,904 68,894	152,598	82,832	15,958	6,152	17,900	(12,781) (14,874)	5,564
Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	116,404 181,636		536 933	-	68,894 52,428	120,430 146,361	25,764 63.157	(8,124) 1.386	(8,264) (9,874)	6,678	( /- /	(5,204)
Wyndmere School         3,959         39,027         98,542         38,565           Yellowstone Elem. School         1,420         14,003         35,357         29,199	91,837		933 343		52,428 75,171	146,361	21,436	(3,781)	(9,874)	10,589 (2,596)	(19,347)	(10,636) (12,358)
Yellowstone Elem. School 1,420 14,003 35,357 29,199	180,093			-	237,767	337,830	7,315	(58,490)	(49,013)	(2,596)	(36,451)	(327)
	180,093 79,979		903	-	100,711	337,830 136,614	7,315 10,603	(58,490)	(49,013)	(20,774)	(36,451)	(327)
	79,979 111.709		903 464	-	161,489	136,614	(10,313)	(13,006)	(24,362)	(7,870) 4.169	(4,318)	(3,578)
Zeeland School         1,166         11,492         29,016         70,035           Grand Totals:         1,966,554         19,386,394         48,949,897         53,354,203	123.657.048			-	53.354.203	103.059.779	32.623.247	(63,924)	(4,207,318)	2.949.393	(7,347,711)	(3.356.418)



#### **MEMORANDUM**

TO: TFFR Board FROM: Fay Kopp

**DATE:** January 17, 2020

SUBJ: 2019 TFFR Plan Management Policy Report

Matt Strom, Segal Consultants, will present the attached 2019 Plan Management Policy Report.

As you can see from the attached report, the 2019 composite summary score is equal to 6 which indicates the Board should continue to monitor the plan. This score has not changed from the 2018 score, but will be updated again based on the results of the Experience Study which is currently in progress.

#### **BOARD ACTION**

Board Motion to approve the 2019 Plan Management Policy Report.





# North Dakota Teachers' Fund for Retirement

Plan Management Policy Score Update Based on the June 30, 2019 Actuarial Valuation

December 20, 2019

### Summary Score based on July 1, 2019 Actuarial Valuation

Composite summary score equal to 6

### **Assessment:**

Summary score of 11 to 14:

Summary score of 7 or 10:

Summary score of 4 to 6:

Summary score of 0 to 3:

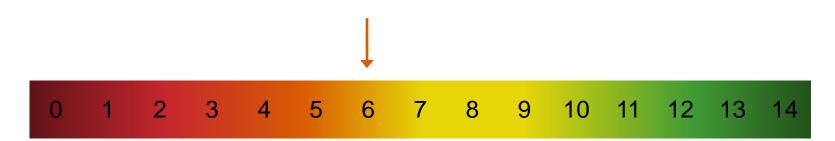
Objectives being met or likely to be met

Objectives may be met over longer period

**Continue to monitor** 

**Changes should be considered** 

Based on a summary score of 6: Orange



The summary score has not changed from last year's valuation results. However, the summary score will be updated based on the results of the experience study currently in progress.

### Plan Funding Policy vs. Plan Management Policy

### The funding policy sets actuarially sound contribution rates

- TFFR's funding policy serves as a benchmark, which compares the actuarially determined contribution rate to the fixed employer contribution rate
- Actuarially determined contribution is equal to Normal Cost plus 24 year amortization of Unfunded Accrued Liability (as of 7/1/2019)
  - Amortization targets 100% funding in 24 years
  - TFFR's amortization method is 30 year closed period that began on July 1, 2013

### The plan management policy monitors the ongoing plan health

- Objective criteria have been established to evaluate health of TFFR
- Market volatility and contribution inadequacy risks are illustrated through stochastic modeling
- Board is able to evaluate the probabilities of future funded ratios
- Serves as advance warning tool

The TFFR plan management policy is a more robust way to evaluate the ongoing health and sustainability of TFFR.

### **Using the Plan Management Policy**

- Initially, the Policy Score will be updated subsequent to each valuation and experience study
- The Policy Score provides context for likelihood of future positive or negative events
  - For example, if funded ratio is projected to be at an unacceptable level with a high likelihood, the Board can explore ways to address this
- The Policy Score will be part of the actuarial analysis of proposed legislation
  - Will proposed legislation improve, retain, or worsen the Policy Score?

The July 1, 2019 Policy Score is determined on the basis of:

- The June 30, 2019 actuarial valuation
- The Horizon Actuarial Services, LLC Survey of Capital Market Assumptions (2019 Edition)

### **Stochastic Modeling of Investment Return**

- Modeling of future simulated return trials is based on:
  - The Horizon Survey of Capital Market Assumptions (2019 Edition)
    - This survey compiles and averages the capital market assumptions of 34\* investment consultants
  - TFFR's current target asset allocation, shown below:

	Asset Class	Target Allocation
/e	US Core	16%
ativ	Real Estate	10%
ern	High Yield	7%
Fixed/Alternative	Commodities/Timber	2%
xed	Infrastructure	6%
ίĒ	Cash	1%
	US Large Cap	24%
>	US Small Cap	7%
Equity	International Developed	17%
Ш	Emerging Markets	4%
	Private Equity	6%

<sup>\*</sup> Our analysis is based upon the 16 respondents that provided "long-term" (20+ years) assumptions

### **Capital Market Assumptions**

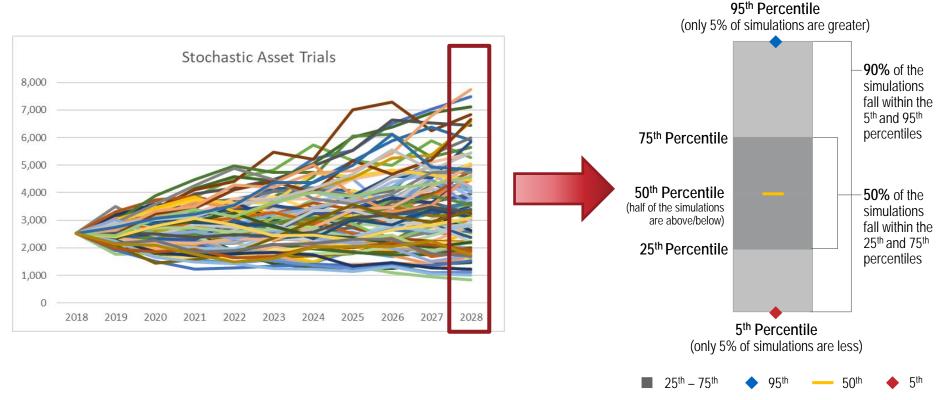
Fixed/Alternative

Asset Class	the state of the s	l Return*/ Deviation	Target Allocation	Weighted Return
US Core	4.5%	5.5%	16%	0.72%
Real Estate	7.9%	15.0%	10%	0.79%
High Yield	6.4%	10.1%	7%	0.45%
Commodities/Timber	6.3%	17.7%	2%	0.13%
Infrastructure	8.5%	14.4%	6%	0.51%
Cash	3.1%	2.3%	1%	0.03%
US Large Cap	8.3%	16.2%	24%	1.99%
US Small Cap	9.5%	20.2%	7%	0.67%
International Developed	9.3%	18.2%	17%	1.58%
Emerging Markets	11.7%	24.7%	4%	0.47%
Private Equity	12.8%	22.1%	6%	0.77%
Total			100%	8.10%
Adjustment to Geometric				(0.63%)
Total Long-term Return				7.47%

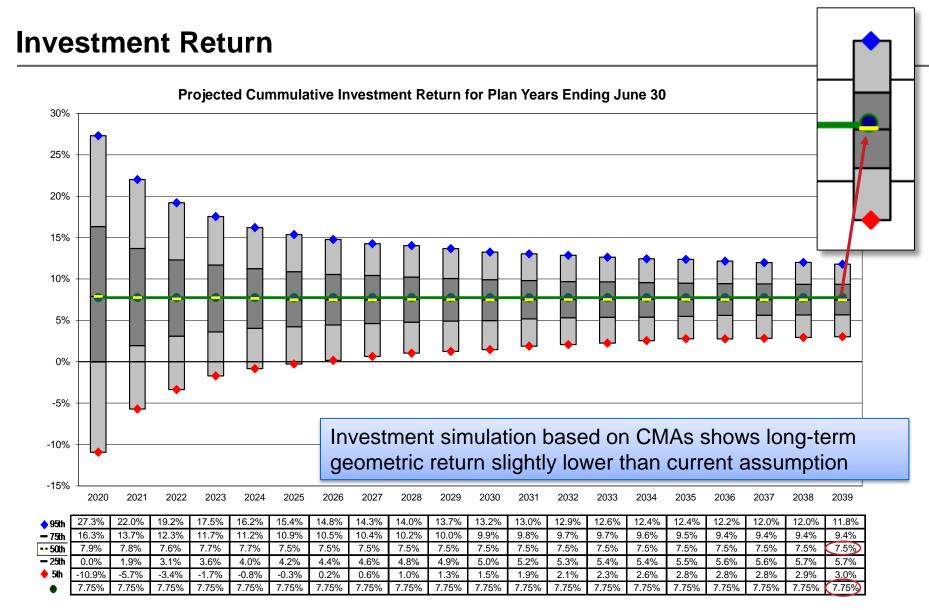
<sup>\*</sup> Based on 20-year arithmetic assumptions and reflects long-term inflation of 2.29%

### **Summarizing Stochastic Results**

The individual trials are grouped into percentiles and summarized as a range



- The median is represented by the yellow line at the center of the distribution
- > The dark gray shaded rectangle represents 50% of all outcomes around the median
- > The large, light gray rectangle (inclusive of the dark gray area) represents 90% of all outcomes around the median
- Other percentile results/probabilities are calculated from the underlying data



Current investment return assumption

### Metrics for Plan Management Policy Scoring System

#### Current funded ratio

- The Fund's current funded ratio is one of the most visible metrics.
- A high current funded ratio should be recognized in the scoring

#### Downside funded ratio in 2030

 In the short-term, the Fund should avoid an "undesirable" funded ratio with relatively high. probability

### Target funded ratio in 2040

 Over a longer term, the Fund should be on the path to achieving its goals with reasonable probability

### Improvement in funded ratio over a 10-year period

Regardless of where the Fund sits today, it should seek an increasing funded ratio over time

### Ability to recover from/withstand a market downturn

 In situations where the financial markets experience a downturn, the scoring should recognize when the funded ratio improves relative to the impact after the downturn

> For purposes of the Policy scoring, the market value of assets is used when determining the funded ratio.

### **Policy Scoring System**

Based on current year funded ratio If current ratio is 90% or higher: +3 Criteria 1 If current ratio is between 80% to 90%: +2 If current ratio is between 70% to 80%; +1 If current ratio is less than 70%: +0 Downside funded ratio in 2030 Under 65% funded ratio with less than 20% probability: +3 Criteria 2 Under 65% funded ratio with less than 30% probability: +2 Under 65% funded ratio with less than 40% probability: +1 Under 65% funded ratio with more than 40% probability: +0 Target funded ratio in 2040 85% or higher with more than 50% probability: +4 • 80% or higher with more than 50% probability: +3 Criteria 3 75% or higher with more than 50% probability: +2 70% or higher with more than 50% probability: +1 • Not more than 70% with more than 50% probability: +0 Improvement over 10 years Funded ratio improves by +5% over 10 years with 66% probability: +2 Criteria 4 Funded ratio improves by +5% over 10 years with 50% probability: +1 Ratio does not improve by +5% over 10 years with 50% probability: +0 Ability to recover from market downturn\* • Funded ratio after downturn improves by +5% over 10 years with 50% probability: +2 Criteria 5 Funded ratio after downturn improves by +5% over 10 years with 33% probability: +1 • Ratio after downturn does not improve by +5% over 10 years with 33% probability: +0

<sup>\* &</sup>quot;Market downturn" defined as a two-year compound average return of -10% or worse

### **Policy Scoring System** (continued)

- Total summary score ranged from 0 to 14
  - Metrics focus on funded ratio measures.
- > Summary "health" is summed up as follows:
  - **Green** (score of 11 to 14) indicates "objectives being met or likely to be met"
  - Yellow (score of 7 to 10) indicates "objectives may be met over longer period"
  - Orange (score of 4 to 6) indicates "continue to monitor"
  - Red (score of 0 to 3) indicates "changes should be considered"



### **Policy Scoring System** (continued)

Criteria 1	Current year funded ratio is 66%  If current ratio is 90% or higher: +3  If current ratio is between 80% to 90%: +2  If current ratio is between 70% to 80%: +1  If current ratio is less than 70%: +0	+0
Criteria 2	<ul> <li>37% probability of funded ratio &lt;65% in 2030</li> <li>Under 65% funded ratio with less than 20% probability: +3</li> <li>Under 65% funded ratio with less than 30% probability: +2</li> <li>Under 65% funded ratio with less than 40% probability: +1</li> <li>Under 65% funded ratio with more than 40% probability: +0</li> </ul>	+1
Criteria 3	<ul> <li>51% probability of funded ratio &gt;80% in 2040</li> <li>85% or higher with more than 50% probability: +4 (47% probability)</li> <li>80% or higher with more than 50% probability: +3 (51% probability)</li> <li>75% or higher with more than 50% probability: +2 (56% probability)</li> <li>70% or higher with more than 50% probability: +1 (60% probability)</li> <li>Not more than 70% with more than 50% probability: +0</li> </ul>	+3
Criteria 4	<ul> <li>55% probability of improvement over 10 years</li> <li>Funded ratio improves by +5% over 10 years with 66% probability: +2</li> <li>Funded ratio improves by +5% over 10 years with 50% probability: +1</li> <li>Ratio does not improve by +5% over 10 years with 50% probability: +0</li> </ul>	+1
Criteria 5	<ul> <li>39% probability of recovering from market downturn*</li> <li>Funded ratio after downturn improves by +5% over 10 years with 50% probability: +2</li> <li>Funded ratio after downturn improves by +5% over 10 years with 33% probability: +1</li> <li>Ratio after downturn does not improve by +5% over 10 years with 33% probability: +0</li> </ul>	+1
		16

<sup>\* 892</sup> scenarios contain -10% average or worse over 2 years (in the first 10 years), 346 of which "recover"

### **Notable Differences from Prior Analysis**

- > The 2019 Horizon Survey CMAs result in a lower 50<sup>th</sup> percentile long-term geometric return compared to the 2018 study
  - 7.47% versus 7.55%
- The liability projection from the 2019 actuarial valuation is negligibly higher compared to the projection based upon the 2018 actuarial valuation
  - Demographic experience during fiscal 2019 had a very minor impact on the modeling results
- For the most part, the probabilities on which the scoring is based remained similar to the prior analysis
  - Notably, for Criteria 3, where +3 points is given in both this analysis and the prior analysis, the probability of the funded ratio >80% in 2040 decreased from 53% to 51%
    - 50% is the threshold cutoff, so this is a criteria that is close to moving from a "+3" to a "+2"

### Other External Factors

- > Other factors outside of TFFR could have an effect on the directional trend of future Policy Scores
  - Projected economic conditions
  - Market cycles
  - North Dakota economy
- > Taking into consideration the results of the July 1, 2019 actuarial valuation and relevant information used to develop the valuation results and various projections, the Policy score is 6. The stochastic projections on which most of the scoring elements are based rely on composite capital market expectations of several investment consulting firms. These expectations may reflect the potential for near-term market influences to some degree. However, there are other external forces not explicitly factored into the capital market assumptions, which may have an impact on the Policy score in the short-term. Many economists believe that the US economy is ripe for a recession. Several leading indicators, such as an inverted yield curve, slowing GDP growth, and declining corporate profits are pointing towards a recession in the near future. A recession could negate some of the investment gains that TFFR has seen in recent years. In addition, an election year coming up in 2020 and continued trade issues between the U.S. and China also create unrest in investment markets. Typically, the economy in North Dakota tends to weather national recessions well. However, it remains to be seen if the factors that contribute to this would hold true for another recession, if it were to occur.

### **Caveats**

- > The projections are based on the results of the July 1, 2019, actuarial valuation performed for the Board of Trustees of the North Dakota Teachers' Fund for Retirement. The actuarial valuation report has information on the plan provisions, data, methods and assumptions used in the valuation.
- > Projections, by their nature, are not a guarantee of future results. The projections modeled are intended to serve as estimates of future financial outcomes that are based on the information available to us at the time the modeling is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternate methodologies are used.



#### **MEMORANDUM**

TO: TFFR Board FROM: Fay Kopp

**DATE:** January 17, 2020

SUBJ: TFFR Plan Management Policy – Correction

Please see the attached TFFR Plan Management Policy (PMP), and consider proposed corrections noted below.

At the September 26, 2019 meeting, the Board reviewed a draft PMP which included Section VII Outside Factors (introduction and 1st reading of policy). There was additional board discussion about further modifying the Outside Factors section of the PMP to include, and then later exclude specific + or – to the PMP score. Unfortunately, for the October 24, 2019 meeting, I inadvertently included an earlier version of the draft PMP which did not include Section VII Outside factors (2<sup>nd</sup> reading and final approval). Therefore, I would like to request that the Policy which was approved in October 2019 be corrected as follows:

#### VII. Outside Factors

Other factors outside of TFFR could have an effect on the directional trend of future Policy Scores. These factors include, but are not limited to:

- Projected economic conditions
- Market cycles
- North Dakota economy

TFFR staff and the actuary will discuss the appropriate outside factors and determine whether these factors are expected to potentially improve or worsen the Policy Score. and append the Policy Score with a plus ("+") or minus ("-") depending on the expected directional trend, if warranted.

If approved, the corrected PMP would look like the attached version.

#### **BOARD ACTION**

Board Motion to Approve corrections to the TFFR Plan Management Policy.

### North Dakota Teachers' Fund for Retirement Plan Management Policy Draft

#### I. Plan Management Policy Overview

The North Dakota Teachers' Fund for Retirement (TFFR) Plan Management Policy is a risk assessment and management tool that monitors the ongoing health of TFFR using the most recent actuarial valuation results and stochastic projections. The objective of the Plan Management Policy is to provide a basis for balancing the Fund's obligations with current assets and expected future contributions in order to maintain its long-term health and viability. The Policy also provides a framework that the Board can follow in establishing metrics for future funding and benefit changes. The Plan Management Policy is based upon metrics and a scoring system that were established at the July 24, 2019 Board meeting. The Plan Management Policy Score will be updated subsequent to each annual actuarial valuation.

#### II. Background

The Plan Management Policy is different from the Funding Policy. The Funding Policy sets parameters for the determination of the actuarially determined contribution (ADC) as of each actuarial valuation date. The Plan Management Policy establishes the parameters for a forward-looking assessment of TFFR.

An ADC is used as a benchmark to compare to the statutory contribution rate. An ADC reflects an asset valuation method (i.e., smoothing method), actuarial cost method (e.g., entry age normal), and amortization method for paying down unfunded liabilities or recognizing surplus assets. A description of the ADC is contained in a separate document ("Actuarial Funding Policy Statement"). In summary, the current TFFR funding policy relies on an ADC that is equal to the sum of (a) the employer normal cost rate and (b) the level percentage of pay required to amortize the unfunded actuarial accrued liability over the 30-year closed period that began July 1, 2013 (24 years remaining as of July 1, 2019).

#### III. Risk Assessment and Management

The Plan Management Policy is a risk assessment tool. The risks facing TFFR can be broadly classified into three categories: risks related to economic variables, risks related to demographic events, and risks related to external forces. An overview of the primary risks facing TFFR stakeholders follows.

Risks related to economic variables:

- Investment return the risk that actual returns will be different than expected and more volatile than desired.
- Inflation (price inflation, wage inflation) the risk that measures of inflation will be inconsistent with other economic measures.

Risks related to demographic events:

- Mortality/longevity the risk that participants will live longer than expected
- Payroll and/or population growth the risk that aggregate payroll will increase at a rate less than expected. This is relevant since contributions to TFFR are collected as a percentage of member payroll.

• Retirement/disability/termination experience – the risk that members leave active service in a manner than generates actuarial gains or losses relative to the assumptions.

There are even risks related to external forces (e.g., governance risk, regulatory risk, litigation risk, political risk), but these risks are difficult – or impossible – to manage.

The Plan Management Policy is a tool that measures investment return risk, since investment return risk has the most significant impact on TFFR's long term financial health.

#### **IV. Scoring System Metrics**

The scoring system metrics that will be monitored on a periodic basis are:

- > The current funded ratio: This is equal to the ratio of the market value of assets to the actuarial accrued liability as of the latest actuarial valuation date. The purpose of this metric is to assess the current funded status of TFFR.
- The downside funded ratio as of July 1, 2030: Based on stochastic projections, determine the probability that the funded ratio will be less than 65%. The purpose of this metric is to assess the likelihood of the funded ratio not improving over the short term. The lower the likelihood that the funded ratio will not increase, the higher the score.
- > The target funded ratio as of July 1, 2040: Based on stochastic projections, determine whether the funded ratio is projected to increase above certain thresholds over a longer time horizon with 51% or more probability.
- Improvement in the funded ratio over a 10-year period: Based on stochastic projections, determine the probability that the funded ratio will improve by 5% over the following 10 years.
- Ability to recover/withstand from a market downturn: Based on stochastic projections, determine the probability that the funded ratio improves by 5% over 10 years following a market downturn. A market downturn is defined as a two-year period with a compound average return of -10% or worse.

#### V. Policy Score

The Policy Score is the sum of the points that have been assigned to each metric and can range from 0 to 14 and correspond to a color ranging from red to green. A higher score indicates better overall health of TFFR. The Policy Score is grouped into the following categories:

Color	Policy Score	Indication
Green	11 to 14	TFFR objectives are being met or likely to be met
Yellow	7 to 10	TFFR objectives may be met over a longer period
Orange	4 to 6	Continue to monitor TFFR
Red	0 to 3	Changes to TFFR should be considered

#### **VI. Policy Scoring System**

Each metric is assigned a score based upon the results of the annual actuarial valuation and resulting analysis as follows:

Metric	Criteria	Score
The current funded ratio	Funded ratio of 90% or higher	• +3
	<ul> <li>Funded ratio between 80% and 90%</li> </ul>	<ul><li>+2</li></ul>
	<ul> <li>Funded ratio between 70% and 80%</li> </ul>	• +1
	<ul> <li>Funded ratio less than 70%</li> </ul>	• +0
The downside funded	Under 65% funded ratio with less than 20% probability	• +3
ratio as of July 1, 2030	<ul> <li>Under 65% funded ratio with less than 30% probability</li> </ul>	• +2
	<ul> <li>Under 65% funded ratio with less than 40% probability</li> </ul>	• +1
	<ul> <li>Under 65% funded ratio with more than 40% probability</li> </ul>	• +0
The target funded ratio	85% or higher with 51% or more probability	• +4
as of July 1, 2040	<ul> <li>Between 80% and 85% with 51% or more probability</li> </ul>	• +3
	<ul> <li>Between 75% and 80% with 51% or more probability</li> </ul>	• +2
	<ul> <li>Between 70% and 75% with 51% or more probability</li> </ul>	• +1
	<ul> <li>Not more than 70% with 51% or more probability</li> </ul>	• +0
Improvement in the funded ratio over a 10-	<ul> <li>Funded ratio improves by +5% over 10 years with 66% probability</li> </ul>	• +2
year period	<ul> <li>Funded ratio improves by +5% over 10 years with 50% probability</li> </ul>	• +1
	<ul> <li>Funded ratio does not improve by +5% over 10 years with 50% probability</li> </ul>	• +0
Ability to recover from or withstand a market	<ul> <li>Funded ratio after downturn improves by +5% over 10 years with 50% probability</li> </ul>	• +2
downturn	<ul> <li>Funded ratio after downturn improves by +5% over 10 years with 33% probability</li> </ul>	• +1
	<ul> <li>Funded ratio after downturn does not improve by +5% over 10 years with 33% probability</li> </ul>	• +0

For purposes of scoring, probabilities and funded ratios will be rounded to the nearest whole percentage. For example, a probability of 49.6% would be rounded up to 50%.

#### VII. Outside Factors

Other factors outside of TFFR could have an effect on the directional trend of future Policy Scores. These factors include, but are not limited to:

- Projected economic conditions
- Market cycles
- North Dakota economy

TFFR Staff and the actuary will discuss the appropriate outside factors and determine whether these factors are expected to potentially improve or worsen the Policy Score.

#### **VIII. Actuarial Assumptions**

The actuarial assumptions used will be the same as those used for the annual actuarial valuation. The actuarial assumptions are described in detail in the actuarial valuation report. The funded ratio used in the plan management policy is based upon the market value of assets.

In order to stochastically model investment returns, Capital Market Assumptions are used. Capital Market Assumptions are developed by investment firms and represent expectations for future risk and returns for different asset classes. The Capital Market Assumptions used for the analysis are those published in the most recently available Horizon's Annual Survey of Capital Market Assumptions. If Horizon discontinues the publication of this survey, a suitable replacement or alternative will be used.

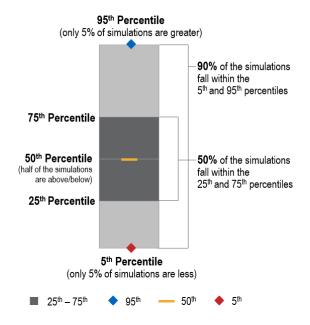
Projected liabilities are based upon an "open group" liability forecast. An open group projection generates projected populations for each future valuation date based on assumptions related to retirement, termination, salary increases, mortality, etc. New entrant records are generated to replace active members that decrement in the model in order to maintain a level active membership in the future. The profile of new entrants is based on recent demographics of new hires, subject to input from TFFR staff and Board.

#### IX. Stochastic Modeling

The Capital Market Assumptions are used with TFFR's target asset allocation in order to simulate 5,000 investment portfolio return scenarios, each simulation representing a 20-year period. The simulated investment returns, along with open group liability forecasts, are used to model the projected funded ratio. The results are grouped into percentiles and summarized as a range:

- ➤ **Best Case**: Better cases would occur only 5% of the time (above the 95<sup>th</sup> percentile in the example below)
- ➤ **Most Likely**: Better or worse cases (50<sup>th</sup> percentile) are equally likely
- **Worst Case**: Worse cases would occur only 5% of the time (below the 5<sup>th</sup> percentile in the example below)

#### Sample Funded Ratio



TFFR Board Adopted:



### **Executive Session – Benefit Appeal 2019-1A**

Confidential member information will be sent next week, to Board members only, through a secure link.

# **TFFR Interim Investment Report**

For the Periods Ended September 30 and November 30 of 2019

January 14, 2020

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
Fay Kopp, Deputy Executive Director / TFFR Chief Retirement Officer
Darren Schulz, Deputy Chief Investment Officer
Connie Flanagan, Chief Financial Officer
Eric Chin, Chief Risk Officer
ND Retirement & Investment Office (RIO)
State Investment Board (SIB)

# TFFR earned a net investment return of 15.9% for the 11 months ended Nov. 30, 2019, largely due to favorable capital market and economic conditions in 2019.

SIB Interim Investme Calendar Year To Dat	Since July 1, 2019						
30-Nov-19	3/31/2019	6/30/2019	9/30/2019	10/31/2019	11/30/2019	Fiscal YTD 11/30/2019	Calendar YTD 11/30/2019
TFFR	7.46%	3.53%	0.40%	2.04%	1.74%	4.25%	15.96%
Policy Benchmark	7.66%	3.40%	0.64%	1.51%	1.48%	3.70%	15.41%
Excess Return	-0.20%	0.13%	-0.24%	0.53%	0.26%	0.55%	0.55%
PERS	7.46%	3.50%	0.37%	2.07%	1.74%	4.26%	15.93%
Policy Benchmark	7.53%	3.42%	0.61%	1.49%	1.48%	3.62%	15.23%
Legacy Fund	7.72%	3.24%	1.01%	1.79%	1.65%	4.52%	16.23%
Policy Benchmark	7.67%	3.38%	0.97%	1.48%	1.43%	3.93%	15.68%
wsı	5.29%	3.26%	1.70%	1.07%	0.77%	3.57%	12.61%
Policy Benchmark	4.89%	3.10%	1.60%	0.80%	0.65%	3.08%	11.47%

Note: All data is preliminary, unaudited and subject to change, but deemed to be materially accurate.

TFFR earned over \$365 million of net investment income for the 11 months ended November 30, 2019.

### **Monthly Asset Class Returns in 2019**

#### **Callan Periodic Table of Investment Returns**

<b>\</b>	
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-0.07%

5.09%

	Monthly Returns											Annual Returns	
	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019	2019
Best	Small Cap Equity	Small Cap Equity	Real Estate	Large Cap Equity	U.S. Fixed Income	Small Cap Equity	Large Cap Equity	U.S. Fixed Income	Dev ex-U.S. Equity	Emerging Market Equity	Small Cap Equity	Emerging Market Equity	Large Cap Equity
	11.25%	5.20%	3.51%	4.05%	1.78%	7.07%	1.44%	2.59%	2.81%	4.22%	4.12%	7.46%	31.49%
	Real Estate	Large Cap Equity	Large Cap Equity	Small Cap Equity	Glbl ex-U.S. Fixed	Large Cap Equity	Small Cap Equity	Real Estate	Real Estate	Dev ex-U.S. Equity	Large Cap Equity	Dev ex-U.S. Equity	Small Cap Equity
	10.87%	3.21%	1.94%	3.40%	1.04%	7.05%	0.58%	1.87%	2.35%	3.23%	3.63%	3.19%	25.52%
	Emerging Market Equity	Dev ex-U.S. Equity	U.S. Fixed Income	Dev ex-U.S. Equity	Real Estate	Emerging Market Equity	High Yield	Glbl ex-U.S. Fixed	Small Cap Equity	Small Cap Equity	Dev ex-U.S. Equity	Large Cap Equity	Dev ex-U.S. Equity
	8.77%	2.57%	1.92%	2.83%	-0.29%	6.24%	0.56%	1.59%	2.08%	2.63%	1.25%	3.02%	22.49%
	Large Cap Equity	High Yield	High Yield	Emerging Market Equity	High Yield	Dev ex-U.S. Equity	Real Estate	High Yield	Emerging Market Equity	Real Estate	High Yield	Small Cap Equity	Real Estate
	8.01%	1.66%	0.94%	2.11%	-1.19%	5.94%	0.35%	0.40%	1.91%	2.50%	0.33%	2.88%	21.91%
	Dev ex-U.S. Equity	Emerging Market Equity	Emerging Market Equity	High Yield	Dev ex-U.S. Equity	Glbl ex-U.S. Fixed	U.S. Fixed Income	Large Cap Equity	Large Cap Equity	Large Cap Equity	U.S. Fixed Income	High Yield	Emerging Market Equity
	7.14%	0.22%	0.84%	1.42%	-4.73%	2.98%	0.22%	-1.58%	1.87%	2.17%	-0.05%	2.00%	18.44%
	High Yield	U.S. Fixed Income	Glbl ex-U.S. Fixed	U.S. Fixed Income	Large Cap Equity	High Yield	Glbl ex-U.S. Fixed	Dev ex-U.S. Equity	High Yield	Glbl ex-U.S. Fixed	Emerging Market Equity	Glbl ex-U.S. Fixed	High Yield
	4.52%	-0.06%	0.71%	0.03%	-6.35%	2.28%	-0.72%	-2.46%	0.36%	0.96%	-0.14%	1.09%	14.32%
	Glbl ex-U.S. Fixed	Real Estate	Dev ex-U.S. Equity	Glbl ex-U.S. Fixed	Emerging Market Equity	Real Estate	Dev ex-U.S. Equity	Emerging Market Equity	U.S. Fixed Income	U.S. Fixed Income	Real Estate	Real Estate	U.S. Fixed Income
	1.86%	-0.15%	0.51%	-0.61%	-7.26%	1.56%	-1.21%	-4.88%	-0.53%	0.30%	-1.22%	0.49%	8.72%
Worst	U.S. Fixed Income	Glbl ex-U.S. Fixed	Small Cap Equity	Real Estate	Small Cap Equity	U.S. Fixed Income	Emerging Market Equity	Small Cap Equity	Glbl ex-U.S. Fixed	High Yield	Glbl ex-U.S. Fixed	U.S. Fixed Income	Glbl ex-U.S. Fixed

-1.42%

1.26%

-7.78%

1.06%

-2.09%

-1.32%

Sources: 

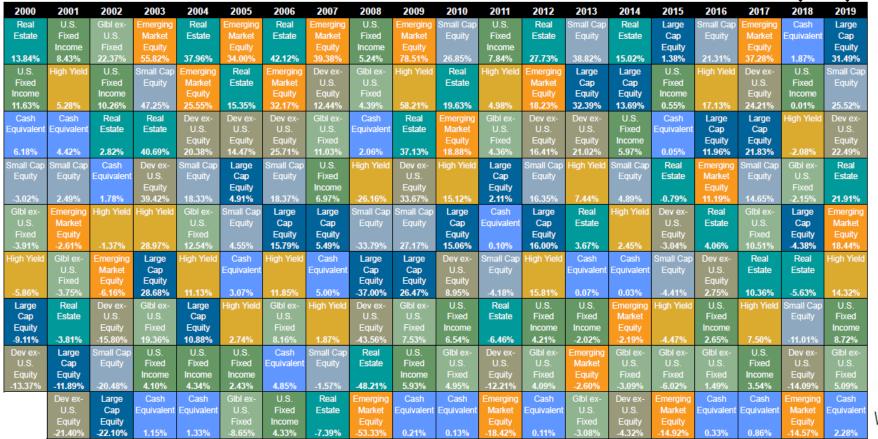
Bloomberg Barclays Aggregate 
Bloomberg Barclays Corp High Yield 
Bloomberg Barclays Global Aggregate ex US

 <sup>■</sup> EPRA/NAREIT Developed
 ■ MSCI World ex USA
 ■ MSCI Emerging Markets
 ■ Russell 2000
 ■ S&P 500

### Cash was King in 2018 and Everything Performed Well in 2019

#### The Callan Periodic Table of Investment Returns

Annual Returns for Key Indices Ranked in Order of Performance (2000–2019)



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

A printable copy of The Callan Periodic Table of Investment Returns is available on our website at www.callan.com.

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# ND TEACHERS FUND FOR RETIREMENT INVESTMENT PERFORMANCE REPORT AS OF NOVEMBER 30, 2019

						Pr. Year 3 Years Ended			5 Years Ended	
	Ne	ovember			FYTD	FY19			6/20/2040	
	Allocation Month					6/30/2		6/30/2019		
	Market Value	Actual		Net	Net	Net	Gross (6)	Net	Gross (6)	Net
TOTAL FUND	2,647,826,535	100.0%	100.0%	1.76%	4.25%	5.54%	9.42%	9.15%	6.48%	6.18%
POLICY TARGET BENCHMARK				1.51%	3.70%	6.36%	8.61%	8.61%	5.66%	5.66%
TOTAL RELATIVE RETURN				0.25%	0.55%	-0.82%	0.81%	0.54%	0.82%	0.53%
GLOBAL EQUITIES	1,582,238,164	59.8%	58.0%	2.82%	5.50%	4.50%	11.99%	11.74%	6.98%	6.70%
Benchmark				2.48%	4.83%	5.71%	11.69%	11.69%	6.36%	6.36%
PUBLIC EQUITIES	1,465,619,655	55.4%	<b>52.0%</b>	3.02%	5.97%	4.26%				
Benchmark				2.72%	5.41%	5.08%				
Epoch Global Choice (1)	207,237,092	7.8%	7.0%	3.74%	5.70%	6.90%	13.25%	12.55%	8.21%	7.52%
MSCI World				2.79%	5.96%	6.33%	11.77%	11.77%	6.60%	6.60%
LSV Global Value Equity	226,701,925	8.6%	9.0%	3.09%	7.03%	0.07%	10.13%	9.96%	4.82%	4.36%
MSCI ACWI IMI (2)				2.49%	5.13%	6.33%	11.77%	11.77%	6.60%	6.60%
Total Global Equities	433,939,018	16.4%	16.0%	3.40%	6.41%	3.04%	11.55%	11.15%	6.31%	5.75%
MSCI World				2.79%	5.96%	6.33%	11.77%	11.77%	6.60%	6.60%
Domestic - broad	611,546,509	23.1%	21.5%	3.77%	7.03%	8.40%	14.11%	13.89%	10.49%	10.30%
Benchmark				3.86%	6.77%	6.94%	13.80%	13.80%	9.75%	9.75%
Large Cap Domestic										
LA Capital Large Cap Growth	186,625,763	7.0%	6.6%	4.48%	8.08%	11.56%	15.88%	15.65%	13.04%	12.80%
Russell 1000 Growth				4.44%	8.98%	11.56%	18.07%	18.07%	13.39%	13.39%
LA Capital 60% Large Cap/40% Large 0	94,757,943	3.6%	3.3%	3.63%	6.86%	10.75%	12.99%	12.87%	10.62%	10.49%
Russell 1000				3.78%	7.48%	10.02%	14.15%	14.15%	10.45%	10.45%
NTAM - Quant Enhanced S&P 500	94,158,426	3.6%	3.3%	3.74%	7.21%	6.28%	12.39%	12.39%	8.95%	8.88%
Clifton Group Enhanced S&P 500	96,401,531	3.6%	3.3%	3.68%	8.20%	10.62%	13.91%	13.82%	10.68%	10.63%
S&P 500				3.63%	7.67%	10.42%	14.19%	14.19%	10.71%	10.71%
Total Large Cap Domestic	471,943,662	17.8%	16.6%	4.00%	7.67%	10.12%	14.20%	14.07%	11.28%	11.14%
Russell 1000 (3)				3.78%	7.48%	10.02%	14.15%	14.15%	10.45%	10.45%
Small Cap Domestic										
Atlanta Capital Small Cap Equity Fund	68,031,537	2.6%	2.4%	1.95%	4.86%	9.54%	14.93%	14.13%	N/A	N/A
Clifton Group Enhanced Russell 2000	71,571,310	2.7%	2.4%	4.00%	4.90%	-3.36%	12.27%	12.07%	7.55%	7.27%
Total Small Cap Domestic	139,602,847	5.3%	4.8%	2.99%	4.95%	3.00%	13.82%	13.33%	7.75%	7.39%
Russell 2000				4.12%	- <b>4.29%</b> -	-3.31%	- 12.30% -	12.30%	7.06%	7.06%

### ND TEACHERS FUND FOR RETIREMENT INVESTMENT PERFORMANCE REPORT AS OF NOVEMBER 30, 2019

							3 Years	Endad	5 Years Ended	
	N	ovember	-19		FYTD	FY19	3 fears	Enaea	o rears	Enaea
		Alloc	ation_	Month			6/30/2019		6/30/	2019
	Market Value	Actual	Policy	Net	Net	Net	Gross (6)	Net	Gross (6)	Net
International - broad	420, 134, 129	15.9%	14.5%	1.58%	4.05%	-0.57%	10.07%	9.88%	3.69%	3.50%
Benchmark				0.98%	2.80%	1.31%	9.37%	9.37%	2.32%	2.32%
Developed International										
NTAM - MSCI World ex-US Index	167,246,561	6.3%	5.9%	1.23%	3.74%	1.51%	9.40%	9.36%	2.40%	2.37%
MSCI World Ex US				1.25%	3.55%	1.29%	9.01%	9.01%	2.04%	2.04%
William Blair International Leaders	99,348,015	3.8%	3.5%	2.96%	5.37%	5.20%	13.68%	13.30%	N/A	N/A
MSCI ACWI ex-US IMI (Net)				0.99%	2.79%	0.26%	9.17%	9.17%		
DFA Intl. Small Cap Value Portfolio (6)	35,720,483	1.3%	1.2%	1.67%	5.54%	-11.54%	6.29%	6.29%	1.05%	1.05%
Wellington International Small Cap Opp	35,101,220	1.3%	1.2%	3.19%	6.46%	-13.37%	7.10%	6.20%	4.70%	3.83%
S&P/Citigroup BMI EPAC < \$2BN				1.40%	4.64%	-9.91%	6.36%	6.36%	3.29%	3.29%
Total Developed International	337,416,279	12.7%	11.8%	1.98%	4.72%	-0.87%	10.03%	9.79%	3.57%	3.33%
MSCI World Ex US (4)				1.25%	3.55%	1.29%	9.01%	9.01%	2.19%	2.19%
Emerging Markets										
Axiom Emerging Markets Equity Fund (	60,878,639	2.3%	2.1%	0.30%	2.72%	0.91%	11.00%	11.00%	N/A	N/A
DFA Emerging Markets Small Cap Port	21,839,211	0.8%	0.7%	-0.90%	-1.99%	-1.31%	7.55%	7.55%	2.90%	2.90%
<b>Total Emerging Markets</b>	82,717,850	3.1%	2.8%	-0.02%	1.43%	0.41%	10.14%	10.14%	3.75%	3.75%
MSCI Emerging Markets				-0.14%	-0.35%	1.22%	10.66%	10.66%	2.49%	2.49%
Private Equity										
Total Private Equity (6)	116,618,509	4.4%	6.0%	0.36%	-0.22%	8.62%	8.31%	8.31%	2.22%	2.21%

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.

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

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

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

<sup>(4)</sup> Prior to July 1, 2018, the benchmark was 3m LIBOR.

<sup>(5)</sup> 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.

### ND TEACHERS FUND FOR RETIREMENT INVESTMENT PERFORMANCE REPORT AS OF NOVEMBER 30, 2019

					Current	Pr. Year	2 V	Foods d	5 V	For all and
		ovember	-19		FYTD	FY19	3 Years	Enaea	5 Years	Enaea
		Alloc	ation_	Month			6/30/	2019	6/30/	2019
	Market Value	Actual	Policy	Net	Net	Net	Gross (6)	Net	Gross (6)	Net
GLOBAL FIXED INCOME	566,564,336	21.4%	23.0%	0.21%	2.60%	7.75%	5.53%	5.32%	4.36%	4.13%
Benchmark				0.06%	2.35%	7.80%	3.54%	3.54%	2.91%	2.91%
Domestic Fixed Income	566,564,336	21.4%	23.0%	0.21%	2.60%	7.75%	5.63%	<i>5.45%</i>	4.82%	4.62%
Benchmark				0.06%	2.35%	7.80%	3.53%	3.53%	3.32%	3.32%
Investment Grade Fixed Income										
PIMCO Distressed Senior Credit Opport	41,185,298	1.6%	1.6%	0.84%	2.46%	5.90%	10.90%	10.90%	8.24%	8.24%
Prudential Core Fixed Income	131,674,319	5.0%	5.5%	0.00%	2.89%	8.17%	N/A	N/A	N/A	N/A
Bloomberg Aggregate				-0.05%	2.52%	7.87%	2.31%	2.31%	2.95%	2.95%
State Street Long U.S. Treasury Index I	39,137,186	1.5%	1.6%	-0.51%	6.45%	12.29%	1.33%	1.30%	5.70%	5.67%
Bloomberg Long Treasuries				-0.52%	6.44%	12.30%	1.34%	1.34%	5.71%	5.71%
PIMCO Core Plus Constrained (formerly	132,365,329	5.0%	5.5%	-0.30%	2.76%	8.20%	6.52%	6.25%	4.00%	3.70%
Bloomberg Aggregate (5)				<i>-0.0</i> 5%	2.52%	7.87%	3.49%	3.49%		
Declaration Total Return Bond Fund (6)	49,566,221	1.9%	1.9%	0.21%	2.35%	6.47%	4.92%	4.92%	4.20%	4.20%
3m LIBOR				0.16%	0.88%	2.61%	1.78%	1.78%	1.21%	1.21%
Total Investment Grade Fixed Incom	393,928,353	14.9%	16.0%	-0.04%	3.19%	8.12%	4.54%	4.42%	4.48%	4.36%
Bloomberg Aggregate				<i>-0.0</i> 5%	2.52%	7.87%	2.31%	2.31%	2.95%	2.95%
Below Investment Grade Fixed Inco										
Ares ND Credit Strategies	41,970,680	1.6%	1.6%	2.10%	2.10%	8.03%	N/A	N/A	N/A	N/A
Cerberus ND Private Credit Fund	43,599,165	1.6%	1.6%	1.16%	3.37%	8.89%	N/A	N/A	N/A	N/A
S&P LSTA Leveraged Loan B Index				0.86%	1.15%	4.22%				
Loomis Sayles High Yield	75,730,696	2.9%	3.3%	-0.10%	-0.19%	6.63%	7.86%	7.32%	4.87%	4.35%
PIMCO BRAVO II (6)	11,102,092	0.4%	0.4%	0.00%	-0.11%	3.10%	7.41%	7.41%	7.91%	7.91%
GS Mezzanine Partners 2006 Offshore,	,	0.0%	0.0%	1.26%	2.51%	6.62%	24.47%	24.47%	20.07%	20.07%
GS Mezzanine Partners V Offshore, L.F	· ·	0.0%	0.0%	28.33%	29.39%	36.09%	11.26%	11.26%	8.38%	8.38%
Bloomberg High Yield 2% Issuer Con				0.33%	1.94%	7.48%	3.32%	3.32%	1.98%	1.98%
Total Below Investment Grade Fixed	•	6.5%	7.0%	0.77%	1.33%	6.93%	8.64%	8.30%	5.77%	5.39%
Bloomberg High Yield 2% Issuer Con	strained Index			0.33%	1.94%	7.48%	7.52%	7.52%	4.71%	4.71%

### ND TEACHERS FUND FOR RETIREMENT INVESTMENT PERFORMANCE REPORT AS OF NOVEMBER 30, 2019

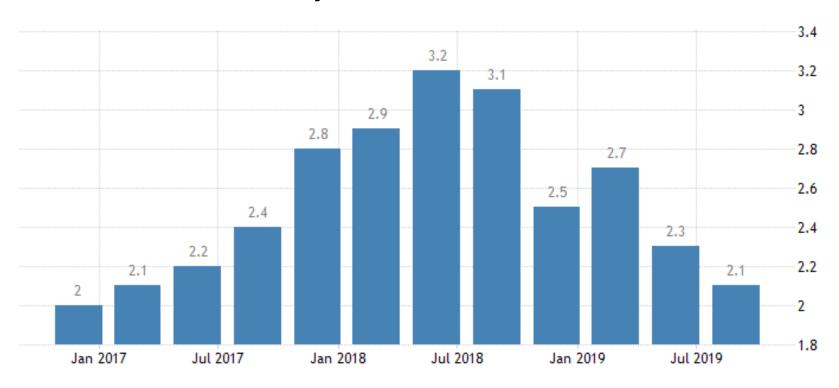
					Current	Pr. Year	3 Years	Endod	5 Years	Endod
	No	ovember	-19		FYTD	FY19	3 fears	Ended	o rears	Ended
		Alloc	ation_	Month			6/30/	2019	6/30/	2019
	Market Value	Actual	Policy	Net	Net	Net	Gross (6)	Net	Gross (6)	Net
GLOBAL REAL ASSETS	483,082,514	18.2%	18.0%	0.29%	2.28%	5.56%	6.23%	5.80%	7.31%	6.86%
Benchmark				0.33%	1.82%	5.26%	5.16%	5.16%	6.10%	6.10%
Global Real Estate										
Invesco Core Real Estate - U.S.A., L.P.	134,610,324			0.00%	1.91%	6.69%	7.95%	7.58%	10.19%	9.81%
Invesco Real Estate Fund III, LP (6)	1,714,864			0.00%	-13.82%	-17.71%	-2.70%	-2.70%	4.55%	4.55%
Invesco U.S. Value-Add Fund IV, L.P. (	18,531,727			0.00%	5.04%	12.51%	10.72%	10.72%	N/A	N/A
Invesco U.S. Value-Add Fund V, L.P. (6	8,818,690			0.00%	0.65%	N/A	N/A	N/A	N/A	N/A
Invesco Asia Real Estate Fund III, L.P.	10,002,325			5.94%	5.73%	16.08%	37.14%	37.14%	N/A	N/A
JP Morgan Strategic & Special Situation	105,624,239			0.58%	2.09%	5.19%	7.65%	6.69%	9.94%	8.89%
JP Morgan European Opportunistic Pro	1,972,558			-12.89%	-16.88%	9.79%	-16.29%	-16.29%	-3.12%	-3.12%
Total Global Real Estate	281,356,417	10.6%	10.0%	0.31%	2.00%	6.02%	8.14%	7.61%	10.39%	9.84%
NCREIF TOTAL INDEX				0.47%	2.37%	6.51%	6.89%	6.89%	8.83%	8.83%
OTHER REAL ASSETS	201,726,097	7.6%	8.0%	0.25%	2.67%	4.85%				
Benchmark				0.16%	1.13%	3.69%				
Timber										
TIR Teredo Timber, LLC	14,169,842	0.5%		0.00%	0.06%	7.55%	-1.35%	-1.35%	3.92%	3.92%
TIR Springbank, LLC	45,107,961	1.7%		0.00%	9.03%	2.99%	-3.22%	-3.22%	-1.77%	-1.77%
Total Timber (6)	59,277,803	2.2%	2.2%	0.00%	6.75%	4.10%	-2.78%	-2.78%	-0.07%	-0.07%
NCREIF Timberland Index				0.06%	0.31%	3.18%	3.37%	3.37%	4.67%	4.67%
Infrastructure										
Rohatyn Group Asian Infrastructure & R	8,181,740	0.3%		0.00%	2.04%	-15.64%	1.37%	1.37%	-1.72%	-1.72%
JP Morgan Infrastructure Investments F	80,137,455	3.0%		0.00%	0.38%	6.88%	8.40%	7.69%	6.24%	5.40%
ISQ Global Infrastructure Fund II	10,497,178	0.4%		5.95%	4.41%	2.41%	N/A	N/A	N/A	N/A
Macquarie Infrastructure Partners IV	24,447,410	0.9%		0.08%	2.47%	N/A	N/A	N/A	N/A	N/A
Grosvenor Customized Infrastructure St	10,919,912	0.4%		-0.95%	-1.02%	3.58%	6.44%	6.44%	6.62%	6.62%
Grosvenor Customized Infrastructure St	8,264,598	0.3%		0.00%	0.15%	16.38%	9.08%	9.08%	N/A	N/A
Total Infrastructure	142,448,294	5.4%	5.8%	0.35%	1.00%	5.12%	7.72%	7.22%	5.57%	5.02%
50% NCREIF ODCE/50% CPI-U (lagge	d one quarter)			0.19%	1.45%	3.91%	2.83%	2.83%	1.74%	1.74%
Cash Equivalents										
Northern Trust Collective STIF	8,369,495			0.15%	0.87%	2.23%	1.47%	1.47%	0.95%	0.95%
Bank of ND	7,572,025			0.14%	0.85%	2.27%	N/A	N/A	N/A	N/A
Total Cash Equivalents	15,941,520	0.6%	1.0%	0.14%	0.86%	2.32%	1.51%	1.51%	0.97%	0.97%
90 Day T-Bill				0.13%	0.88%	2.31%	1.38%	1.38%	0.87%	0.87%

TFFR underperformed its Policy Benchmark in Fiscal 2019 (like most other SIB clients). Despite this disappointing performance in Fiscal 2019, TFFR's Net Returns for the 3, 5 and 10-years ended June 30, 2019, generally exceeded its Policy Benchmark by over 0.50% or ½ of 1%.

	Rates of Return (net of fees)										
		For Fisc	al Year Er	ded 6/30		Periods ended 6/30/19 (Annualized)					
	2019	2018	2017	2016	2015	3 Years	5 Years	10 Years	20 Years	30 Years	
TFFR	5.54%	9.11%	12.92%	0.28%	3.52%	9.15%	6.18%	9.57%	5.68%	7.68%	
Policy Benchmark	6.35%	7.90%	11.63%	0.61%	2.15%	8.61%	5.66%	8.89%	5.74%	7.87%	
PERS	5.52%	9.19%	13.05%	0.28%	3.53%	9.21%	6.22%	9.41%	6.00%	7.90%	
Policy Benchmark	6.40%	7.82%	11.88%	0.56%	2.15%	8.68%	5.69%	8.96%	6.05%	8.09%	
WSI	6.87%	5.34%	8.29%	3.58%	3.27%	6.83%	5.45%	7.82%	5.87%	7.39%	
Policy Benchmark	7.05%	3.77%	5.20%	3.41%	2.66%	5.33%	4.41%	6.05%	5.46%	*	
Legacy Fund	4.98%	7.57%	12.03%	1.06%	3.31%	8.15%	5.72%	*	*	*	
Policy Benchmark	6.12%	6.50%	9.90%	1.03%	2.38%	7.49%	5.14%	-			

	Rates of Return (net of fees)									
		For Fisca	al Year En	ded 6/30		Periods ended 6/30/19 (Annualized)				
	2019	2018	2017	2016	2015	3 Years	5 Years	10 Years	20 Years	30 Years
<b>BENCHMARKS</b>										
S&P 500	10.42%	14.37%	17.90%	3.99%	7.42%	14.19%	10.71%	13.24%	6.33%	9.72%
Bloomberg Aggregate	7.87%	-0.40%	-0.31%	6.00%	1.86%	2.31%	2.95%	3.75%	5.01%	6.03%
90 Day T-Bills	2.31%	1.36%	0.49%	0.19%	0.02%	1.38%	0.87%	0.54%	1.82%	2.93%
Callan Public Plan										
Sponsors Database										
(Median-Net of Fees)	5.75%	7.66%	11.33%	0.34%	2.46%	8.22%	5.44%	8.44%	5.58%	6.72%

#### **U.S. Economy – Annual GDP Growth Rates**



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

#### **US GDP Growth Rates:**

The US economy expanded at an annual growth rate of 2.1% in the 3<sup>rd</sup> quarter of 2019 versus 2.3% in the prior (2<sup>nd</sup>) quarter and down from 3.2% in the 2<sup>nd</sup> quarter of 2018.

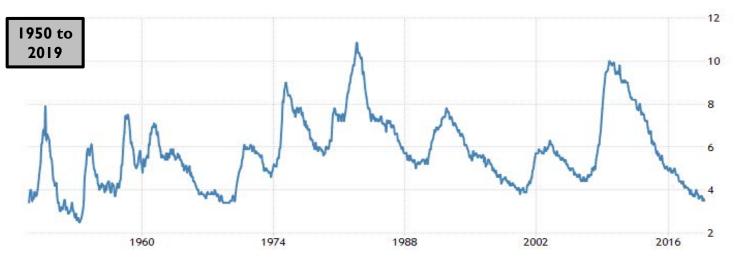
The United States is the world's largest economy. Yet, like in the case of many other developed nations, U.S. growth rates have generally been declining in the last two decades. GDP annual growth rates in the U.S. averaged 3.2% from 1948 until 2019, reaching an all-time high of 13.4% in the 4<sup>th</sup> quarter of 1950 and a record low of -3.9% in the 2<sup>nd</sup> quarter of 2009.

### **U.S.** Unemployment Rates



The U.S. unemployment rate remained at 3.5% in December of 2019 after hitting a 50-year low of 3.5% three times in the last half of 2019 generally in line with market expectations.





November of 1982 and a record low of 2.5% in May of 1953.

Unemployment

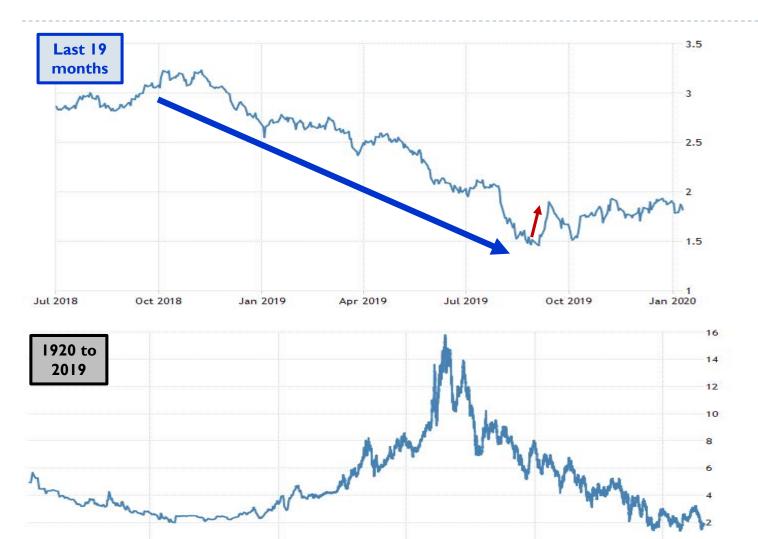
Rates in the

**United States** 

averaged 5.7% from 1948 until 2019, reaching an all time high of 10.8% in

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

#### 10-Year U.S. Government Bond Rates



1976

1995

2014

U.S. Gov't. 10-Yr.Yields fell from 3.2% in October of 2018 to 1.5% during the 3<sup>rd</sup> quarter of 2019 before increasing to 1.8% on Jan. 10, 2019.

U.S. Treasury % January 10, 2020

1.57% 2-yr 1.63% 5-yr 1.82% 10-yrs 2.28% 30-yrs

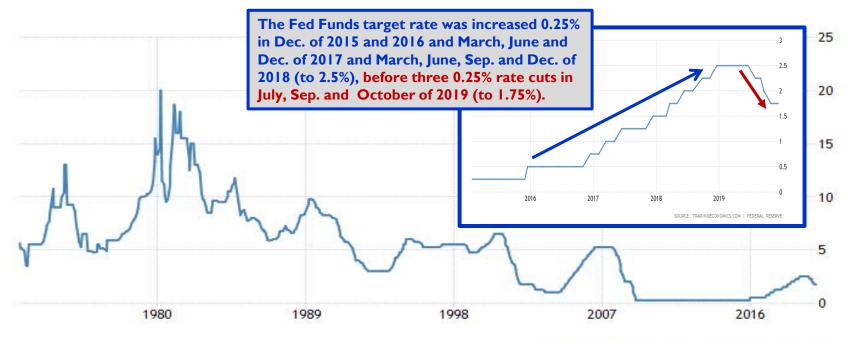
U.S. Gov't. 10-Yr.Yields reached an all time high of 15.82% in September of 1981 and a record low of 1.36% in July of 2016.

1938

1957

### U.S. Fed Funds Rate (1971 to 2020)

<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.



SOURCE: TRADINGECONOMICS.COM | FEDERAL RESERVE

The Federal Reserve raised the target range for fed funds four (4) times in 2018, three (3) times in 2017 and once each in December of 2016 and 2015. Interest Rates in the U.S. averaged 5.8% from 1971 until 2017, reaching an all time high of 20% percent in March of 1980 and a record low of 0.25% in December 2008. The Fed lowered the Fed Funds Target by 0.25% in July, Sep. and October of 2019.

#### TFFR Investment Ends – September 30, 2019

SIB clients should receive 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 <u>5 years</u>.

					Risk Adj
				Risk	Excess
				5 Yrs	Return
	1 Yr Ended	3 Yrs Ended	5 Yrs Ended	Ended	5 Yrs Ended
	9/30/2019	9/30/2019	9/30/2019	9/30/2019	9/30/2019
Total Fund Return - Net	3.42%	7.98%	6.51%	6.5%	0.15%
Policy Benchmark Return	4.15%	7.59%	6.07%	6.1%	
Total Relative Return	-0.73%	0.39%	0.44%	105%	



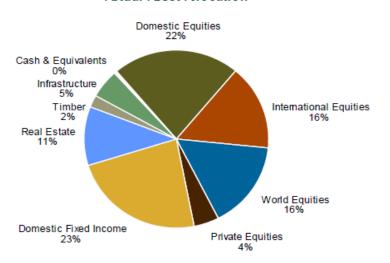
**Key Point:** TFFR investments have averaged over \$2 billion during the last 5-years and Excess Return has averaged over 0.40% per annum. Based on these values, TFFR's use of active management has enhanced Net Investment Returns by \$40 million for the 5-years ended June 30, 2019 (or \$2 billion x 0.40% = \$8 million x 5 years = \$40 million). This Excess Return has been achieved while adhering to prescribed **Risk** limits (e.g. 105% versus a policy limit of 115%).

#### **TFFR Allocation**

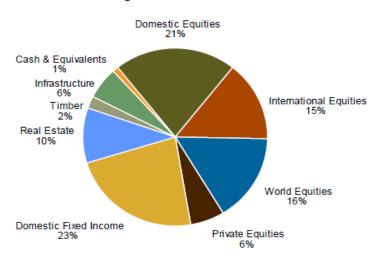
As of September 30, 2019

TFFR's Actual Asset Allocations are within 2% of Target noting the Private Equity Underweight of 1.6% is offset by an Overweight allocation to Domestic Equities of 0.9%, and International Equities of 0.9%.

#### Actual Asset Allocation



#### Target Asset Allocation



	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equities	571,200	22.3%	21.4%	0.9%	23,598
International Equities	397,821	15.5%	14.6%	0.9%	24,223
World Equities	408,022	15.9%	16.0%	(0.1%)	(1,400)
Private Équities	112,496	4.4%	6.0%	(1.6%)	(41,038)
Domestic Fixed Income	596,100	23.3%	23.0%	0.3%	7,555
Real Estate	275,035	10.7%	10.0%	0.7%	19,146
Timber	55,933	2.2%	2.2%	0.0%	0
Infrastructure	133,654	5.2%	5.8%	(0.6%)	(15, 124)
Cash & Equivalents	8,629	0.3%	1.0%	(0.7%)	(16,959)
Total	2,558,891	100.0%	100.0%		

### Global Equity, Fixed Income and Real Asset Valuations

#### **Asset Class Allocation**

	September 3	0, 2019		June 30, 2				
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight		
Global Equities	\$1,489,539,156	58.21%	\$(6,756,264)	\$(2,289,289)	\$1,498,584,709	58.23%		
Public Equities	\$1,377,043,499	53.81%	\$(14,097,119)	\$(1,824,220)	\$1,392,964,837	54.12%		
World Equities	\$408,022,150	15.95%	\$(5,084,269)	\$(2,983,318)	\$416,089,737	16.17%		
Domestic Equities	\$571,200,359	22.32%	\$(4,095,875)	\$6,505,994	\$568,790,240	22.10%		
Large Cap	443,369,621	17.33%	(4,148,908)	6,151,979	441,366,550	17.15%		
Small Cap	127,830,738	5.00%	53,033	354,015	127,423,689	4.95%		
International Equities	\$397,820,989	15.55%	\$(4,916,975)	\$(5,346,896)	\$408,084,861	15.86%		
Developed	318,828,399	12.46%	(4,986,975)	(3,011,790)	326,827,165	12.70%		
Emerging Markets	78,992,590	3.09%	70,000	(2,335,106)	81,257,696	3.16%		
Private Equities	\$112,495,657	4.40%	\$7,340,855	\$(465,070)	\$105,619,872	4.10%		
Global Fixed Income	\$596,100,294	23.30%	\$3,840,290	\$11,973,778	\$580,286,226	22.55%		
Domestic Fixed Income	\$596,100,294	23.30%	\$3,840,290	\$11,973,778	\$580,286,226	22.55%		
Investment Grade	414,609,468	16.20%	778,182	11,742,855	402,088,431	15.62%		
Below Investment Grade	181,490,826	7.09%	3,062,109	230,923	178,197,795	6.92%		
Global Real Assets	\$464,622,027	18.16%	\$3,617,597	\$1,290,310	\$459,714,120	17.86%		
Real Estate	\$275,035,050	10.75%	\$(1,816,488)	\$1,104,717	\$275,746,821	10.71%		
Other Real Assets	\$189,586,977	7.41%	\$5,434,085	\$185,593	\$183,967,299	7.15%		
Infrastructure	133,654,178	5.22%	6,273,677	185,594	127,194,908	4.94%		
Timber	55,932,798	2.19%	(839,593)	(0)	56,772,391	2.21%		
Cash	\$8,629,467	0.34%	\$(26,570,958)	\$162,926	\$35,037,499	1.36%		
Securities Lending Income	\$0	0.00%	\$(49,388)	\$49,388	-			
Total Fund	\$2,558,890,943	100.0%	\$(25,918,723)	\$11,187,112	\$2,573,622,554	100.0%		

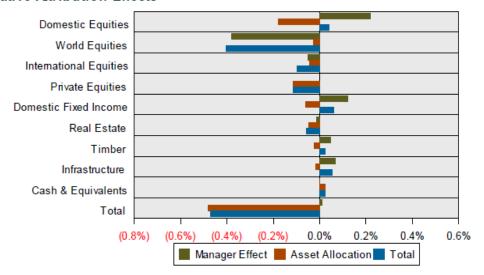


Net Investment Income increased TFFR pension assets by \$11.2 million in the first fiscal quarter of 2020.

#### **TFFR Performance and Attribution**

As of September 30, 2019

#### One Year Relative Attribution Effects



#### Returns for 1 Year Ended 09/30/2019

Return Type	Return (%)
Gross	3.66%
Net of fees	3.42%
Target	4.13%
Net added	-0.71%

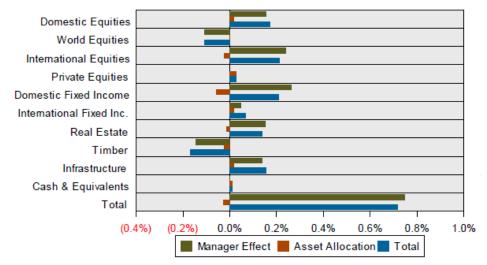


Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relativ e Return
Domestic Equities	23%	21%	1.92%	0.92%	0.22%	(0.18%)	0.04%
World Equities	16%	16%	(0.41%)	1.83%	(0.38%)	(0.03%)	(0.40%)
International Equities	16%	15%	(1.56%)	(1.12%)	(0.05%)	(0.04%)	(0.10%)
Private Equities	4%	6%	7.73%	7.73%	0.00%	(0.11%)	(0.11%)
Domestic Fixed Incor	ne 23%	23%	9.62%	9.14%	0.12%	(0.06%)	`0.06%
Real Estate	11%	10%	6.13%	6.24%	(0.01%)	(0.05%)	(0.06%)
Timber	2%	2%	4.10%	2.10%	`0.05%′	(0.02%)	0.02%
Infrastructure	5%	6%	4.86%	3.44%	0.07%	(0.02%)	0.05%
Cash & Equivalents	1%	1%	2.35%	2.39%	(0.00%)	0.02%	0.02%
Total			3.66% =	4.13%	+ 0.01% +	(0.48%)	(0.47%)

#### **TFFR Performance and Attribution**

As of September 30, 2019

#### Five Year Annualized Relative Attribution Effects



#### Returns for 5 Year Ended 09/30/2019

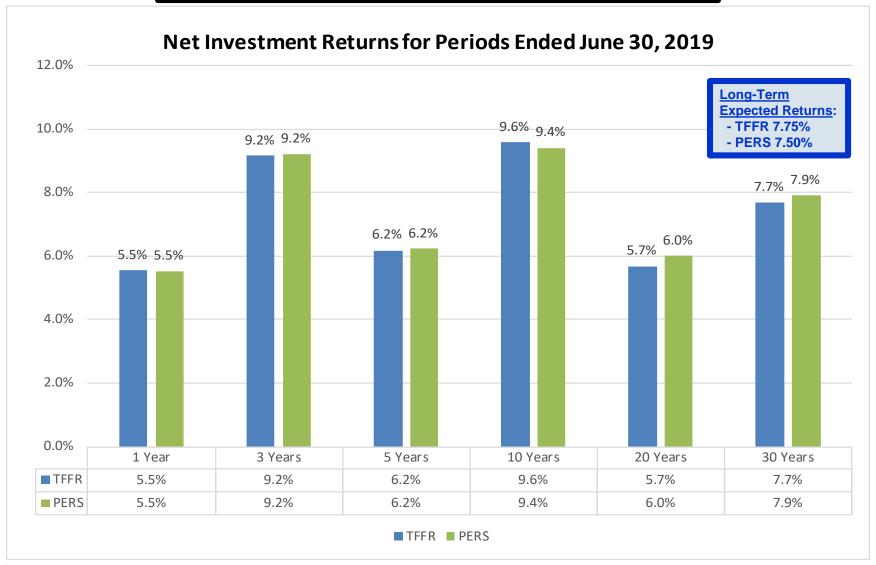
Return Type	Return (%)
Gross	6.79%
Net of fees	6.51%
Target	6.07%
Net added	0.44%



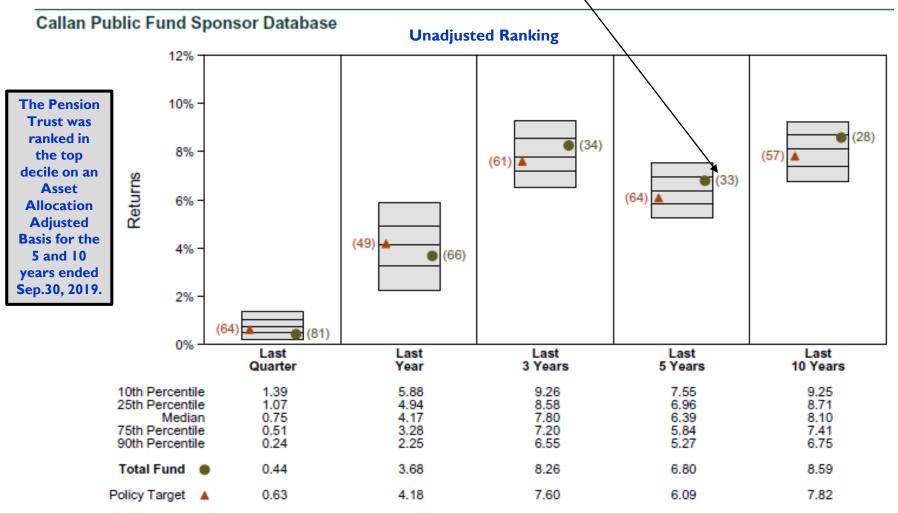
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Retum	Target Retum	Manager Effect	Asset Allocation	Total Relative Retum
Domestic Equities	23%	21%	10.86%	10.13%	0.15%	0.02%	0.17%
World Equities	16%	16%	6.48%	7.18%	(0.11%)	(0.00%)	(0.11%)
International Equities	15%	15%	4.61%	3.13%	0.24%	(0.03%)	0.21%
Private Equities	4%	6%	1.82%	1.82%	0.00%	0.03%	0.03%
Domestic Fixed Income	19%	19%	5.22%	3.82%	0.26%	(0.06%)	0.21%
International Fixed Inc.	3%	4%	-	-	0.05%	0.02%	0.07%
Real Estate	10%	10%	10.11%	8.57%	0.15%	(0.01%)	0.14%
Timber	3%	3%	(0.07%)	4.36%	(0.14%)	(0.02%)	(0.17%)
Infrastructure	5%	5%	4.91%	1.98%	0.14%	0.02%	0.16%
Cash & Equivalents	1%	1%	1.08%	0.98%	0.00%	0.01%	0.01%
-							

Total 6.79% = 6.07% + 0.75% + (0.03%) = 0.72%

## TFFR and PERS Returns have approximated their actuarial return assumptions the last 30 years.



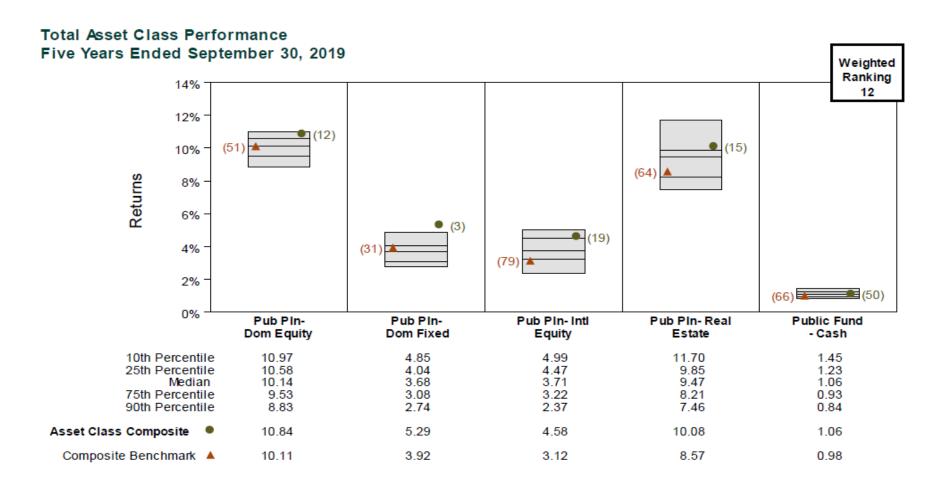
## Pension Trust "gross" returns were in the 33<sup>rd</sup> percentile for the 5-years ended Sep. 30, 2019, based on Callan's Public Fund Sponsor Database".



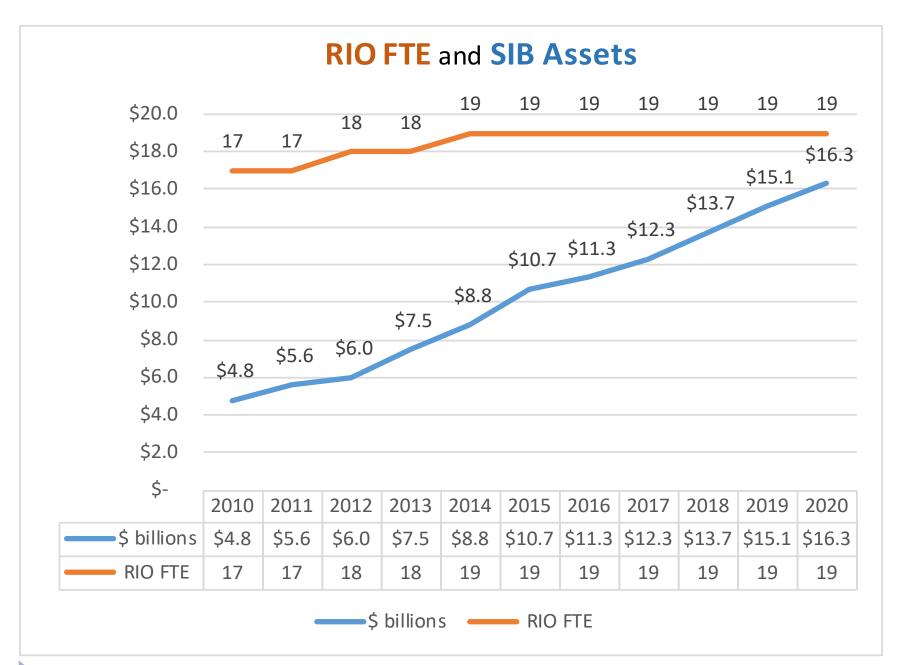
<sup>\*</sup> Current Quarter Target = 16.3% Blmbg Aggregate, 16.1% Russell 1000 Index, 16.0% MSCI World, 11.2% MSCI World ex US, 10.5% NCREIF Total Index, 7.0% Blmbg:HY Corp 2% Iss Cap, 6.5% NDSIB PEN - Private Equity, 4.9% Russell 2000 Index, 3.1% MSCI EM, 3.0% NCREIF NFI-ODCE Eq Wt Net, 3.0% CPI All Urban Cons lagged 3 months, 2.1% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

#### **Asset Class Composite Results**

Consolidated Pension Trust Asset Class Results vs. Other Public Pension Funds



- All asset classes outperformed their respective benchmarks over the trailing five years.
- All asset classes, with the exception of cash, ranked in the top quartile over the trailing five years.



#### Trustee Education offered by Council of Institutional Investors (CII)



#### CII Spring 2020 Conference & 35th Anniversary

Summary Agenda Speakers
Trustee Events Master Class
Board Meetings Advisory Council Meetings
Advertising Opportunities
Conference Sponsors

**Register Now** 

Already Registered?

#### **Trustee Events**

CII hosts educational and networking events in conjunction with semi-annual conferences for pension fund trustees and staff. Please contact CII Deputy Director <a href="Mailto:Amy Borrus">Amy Borrus</a> for more information or <a href="Mailto:Kylund Arnold">Kylund Arnold</a> for assistance in registering for either event.

#### Pension Fund Trustee Training -Education Trustees Can Use

Monday, March 9, from 8:30 AM - 2:30 PM ET | Hosted by CII in partnership with the CFA Institute | See the full curriculum here

WHAT: CII and the CFA Institute are pleased to offer a one-day training program tailored for public pension fund trustees.

The newly refreshed course starts with fiduciary duties and ethics training based on real-life case studies that provide instruction and encourage critical thinking. Trustees will hone their investment skills in "basic training" and in seminars on advanced topics such as private equity and the pros and cons of

#### Trustee Dinner & Roundtable

Monday, March 9, from 7:30-9:00 PM ET

A private dinner and discussion just for pension fund trustees. After a short update on CII initiatives from senior staff, trustees will have ample time to talk among themselves and to discuss issues of mutual interest.

timing the market. The course wraps up with a panel discussion on hot issues in fund governance. Instructors are seasoned professionals with an appreciation for the challenges fund trustees face.

WHY: The course is an entertaining and interactive program that is updated annually to reflect changing market trends. It covers fiduciary ethics, investment oversight skills and fund governance challenges delivered by CFA Institute experts and experienced fund trustees and staff. The course explores issues that are vital for both new and experienced trustees.

**COST:** With CFA Institute's support, CII is able to offer trustee training at an extremely low price (\$395 for CII Members, \$595 for non-members).

Please Note: Early bird pricing ends Friday, February 14. No refunds for cancelled registrations will be given after Friday, February 14. Conference registration closes Thursday, March 5.

Contact CII Staff

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#### Trustee Education offered by Council of Institutional Investors (CII)

#### **Trustee Education & CII Conference Background:**

If SIB or TFFR board members are interested in obtaining additional pension fund trustee training, the Council of Institutional Investors is offering education on "fiduciary ethics, investment oversight skills and fund governance challenges" the day before their Spring 2020 conference in Washington, DC, on Monday, March 9 from 8:30 AM -2:30 PM ET. More information on that session is available here.

If SIB or TFFR board members would like to attend the "Pension Fund Trustee Training" or CII Spring Conference, please reach out to myself or Bonnie in the upcoming weeks (preferably by February 14<sup>th</sup>). CII allows trustees from public pension funds to attend their conferences without any fee for registration. The full conference agenda is here.

RIO will highlight the educational benefits of attending CII's Pension Fund Trustee Training at our next board meeting and compare the background of the typical attendee at the training session versus the conference.

Note: Callan will highlight additional board member education options at our February 28<sup>th</sup> SIB meeting.



#### CII Spring 2020 Conference & 35th Anniversary

Summary **Agenda** Speakers Trustee Events Master Class Board Meetings Advisory Council Meetings Advertising Opportunities Conference Sponsors

Register Now

Already Registered?

#### Agenda

Please Note: The conference program is subject to change. Some sessions (such as constituency meetings) are open only to certain types of attendees or CII Members - please expand the session descriptions for more information. CII provides time for members to host panels during the conference but the views expressed in these member-hosted panels do not necessarily reflect those of CII or its member-approved policies. Please contact CII Staff at 202.822.0800 with any questions.

March 9, 2020

Member Lounge Open

8:00 AM-7:45 PM

**Registration Open** 

8:00 AM-7:45 PM

Pension Fund Trustee Training

8:30 AM-2:30 PM

Governance Master Class: Fifty Shades of Stewardship - Proxy Voting, Engagement and Sustainability

12:00 PM-2:00 PM

Member-Hosted Panel: Driving SDG Adoption on a Global Scale: A Case Study

3:00 PM-4:00 PM

# TFFR Retiree Reemployment

TFFR Board Meeting

January 23, 2020

### General Rule

#### NDCC 15-39.1-19.1

• A retired TFFR member may not return to covered employment until 30 calendar days have elapsed from the member's TFFR retirement date. A retired member may then return to covered employment under an annual hour limit and continue receiving a monthly retirement benefit. The annual hour limit is based on the length of the re-employed retiree's employment arrangement as follows:

9 Months -- 700 hours 11 Months -- 900 hours

10 Months -- 800 hours 12 Months -- 1000 hours

- A retiree must only "return to covered employment" to be subject to the return to work limitations. The reporting requirement of being licensed by ESPB and contractually employed that applies to non-retired active members does not apply to re-employed retirees.
- Professional development and extracurricular hours do not apply to the annual hour limit.
- TFFR retiree re-employment limits do not apply to: non-contracted substitute teaching\*; teaching in ND private schools or colleges; teaching out of state; or employment outside of education.
- \*TFFR defines a substitute teacher as a licensed teacher who temporarily replaces the regular contracted licensed teacher. When a school district employs a retiree to fill an "open position" TFFR does not view this open position as a "temporary position where the regular contracted person will be returning to the position" even if the retiree has agreed to fill the position for substitute teacher pay.

## Critical Shortage Exception NDCC 15-39.1-19.2

A retiree may return to TFFR covered employment in an approved critical shortage area (CSA) and exceed the annual hour limitation without losing retirement benefits. If retired on or prior to January 1, 2001, no waiting period is required. However, if the TFFR retirement date is after January 1, 2001, a one year waiting period is required before the retiree can consider this option. A retiree may perform non-contracted substitute teaching during the one year waiting period. Critical shortage areas are determined each year by the Education Standards and Practices Board (ESPB). ESPB also signs off on each CSA Exception application.

## Payment of Contributions

A retired member who returns to teaching under the General Rule or CSA will be treated as retired for all other purposes and will not earn any additional pension service credit. Both member and employer contributions must be paid on all eligible salary based on the employer's TFFR payment model. The member contributions will be included in the retired member's account value. The retiree's monthly benefit will not change.

## Benefit Suspension and Recalculation Exception

A retired member who returns to covered employment, exceeds the annual hour limit, and is not eligible for the CSA exception, will have their monthly benefit stopped the first of the month following the date the member reaches the annual hour limit. Employer and member contributions will be paid before and after the suspension on all salary paid to the retiree based on the employer's payment model. Suspension of benefits may also have tax consequences to the retiree.

## Benefit Suspension and Recalculation Exception

Upon re-retirement, the retiree's benefits may be recalculated. If re-retirement occurs with:

- Less than 2 years of additional earned service credit receive discontinued benefit plus benefit increases granted during the benefit suspension and a refund of the additional member contributions paid after the benefit suspension plus interest, member contributions paid prior to the benefit suspension will be added to the retiree's account value.
- 2-5 years of additional earned service credit greater of the discontinued annuity, plus additional years at the current multiplier, plus benefit increases granted during the suspension or all the years recalculated at the current multiplier, less an actuarial offset for the amount of benefits already paid. All member contributions will be added to the retiree's account value.
- 5 or more years of additional earned service credit greater of the calculation above or the retirement benefit recalculated using all the years at the current multiplier with no actuarial offset. All member contributions will be added to the retiree's account value.

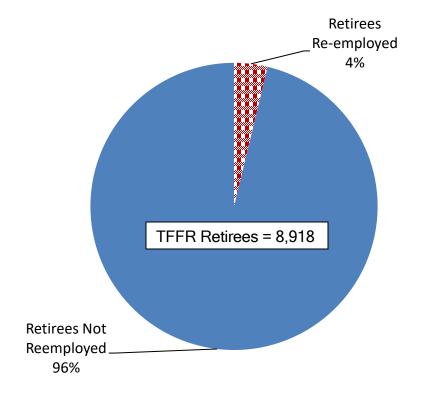
## Retiree Reemployment FAQ/Concerns

- Retiree Substitute Teaching (In-staff Subbing TFFR Board Policy C-24, Non-contracted Subbing)
- Required Payment of Contributions/No Change to Benefit
- Calculation of Hours Applicable to Annual Hour Limit

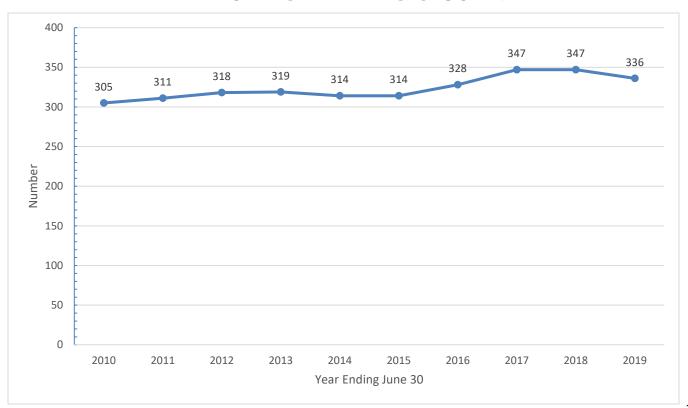
## 2018-19 Reemployed Retiree Report

## TFFR REEMPLOYED RETIREE REPORT 2018-19

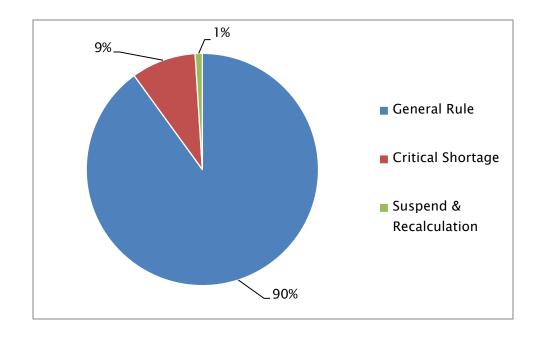
336
25
28
<u>283</u>
301
32
3
64
,025
,504
132

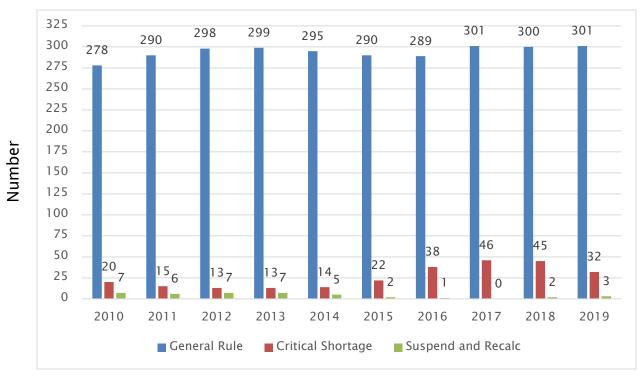


## TFFR REEMPLOYED RETIREES 10 YRS. ENDING 6-30-19



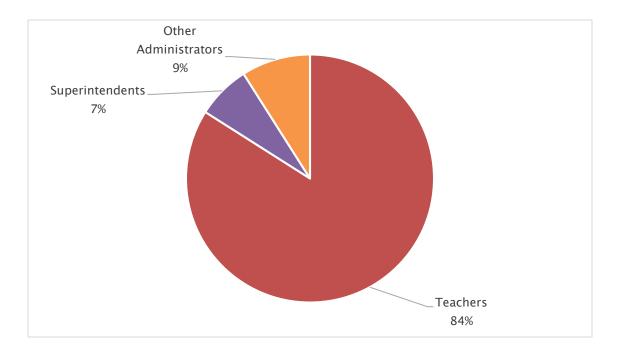
## TFFR REEMPLOYED RETIREES BY OPTION 2018-19

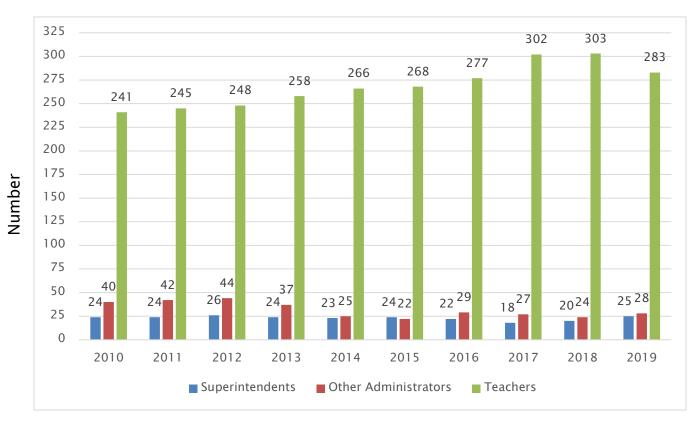




Year Ending June 30

## TFFR REEMPLOYED RETIREES BY JOB TYPE 2018-19





Year Ending June 30

## TFFR REEMPLOYED RETIREES BY SUBJECT/POSITION

#### 2018-19

Subject or Position	Re-Employed Retirees		
	Full Time	Part Time	Total
	CSA/SR	Gen Rule	
Art	0	2	2
Business	2	6	8
Counseling	1	14	15
Elementary Ed	6	9	15
English/Reading	4	12	16
Extra-Curricular	0	38	38
FACS	1	3	4
Foreign Language	1	4	5
Health/Phy Ed	0	3	3
Library/Media	1	7	8
Math	1	6	7
Mentors, Strategists, Prof. Dev.	0	21	21
Music	4	7	11
Science	2	11	13
Social Studies/History	1	5	6
Special Ed/Title/LD/Speech *	6	42	48
Summer School/Driver's Ed	0	24	24
Tech Coordination/Tech Ed	1	5	6
Voc Ed/Adult Ed	1	22	23
Other Teachers	1	9	10
<b>Total Retired Teachers</b>	33	250	283

Superintendent	2	23	25
Principal/Asst. Supt.	0	6	6
Director/Coordinator	0	22	22
<b>Total Retired Administrators</b>	2	51	53
<b>Total Reemployed Retirees</b>	35	301	336

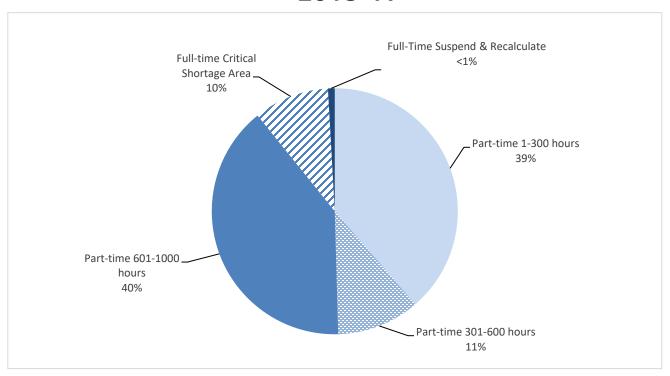
(8 teaching in 2 school districts & 2 teaching in 3 school districts)

*Special Ed	
LD	4
Speech Path/Ther	5
Spec Ed	22
Title	16
Hearing Impair	1

CSA = Critical Shortage Area

SR = Suspend & Recalc

## TFFR REEMPLOYED RETIREES BY HOURS CONTRACTED 2018-19



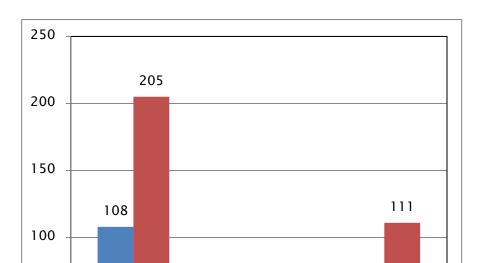
Hours Contracted	Reemployed Retirees		
Part Time – General Rule	Number	Percent	
1 – 300 hours	131	39	
301 - 600 hours	36	11	
601 – 1000 hours	134	40	
Full Time			
Critical Shortage Area	32	10	
Suspend & Recalculate	3	<u>&lt;1</u>	
Total Reemployed Retirees	336	100%	
(8 teaching in 2 districts)			
(2 teaching in 3 districts)			

## TFFR RE-EMPLOYED RETIREES BY EMPLOYER 2018-2019

		2010-2019			
School Districts	#	School Districts	#	School Districts	#
Alexander		Glenburn	1	Midkota	5
Anamoose	1	Goodrich	4	Midway	2
Apple Creek Elementary		Grafton	3	Milnor	1
Ashley		Grand Forks	25	Minnewauken	3
Bakker Elementary		Grenora		Minot	6
Barnes County North		Griggs County Central	2	Minto	1
Beach	1	Halliday	1	Mohall-Lansford-Sherwood	
Belcourt	3	Hankinson		Montpelier	2
Belfield	3	Harvey	1	Mott-Regent	1
Beulah	3	Hatton Eielson	1	Mt. Pleasant	1
Billings County School	2	Hazelton-Moffit		Munich	3
Bismarck	23	Hazen		Napoleon	2
Bottineau	3	Hebron	3	Naughton Rural	1
Bowbells		Hettinger	1	Nedrose	1
Bowman	2	Hillsboro	1	Nesson	1
Burke Central		Hope		New England	3
Carrington	1	Horse Creek Elementary		New Rockford-Sheyenne	
Cavalier	2	Jamestown	4	New Salem-Almont	2
Center-Stanton		Kenmare	1	New Town	4
Central Cass	1	Kensal	2	Newburg United	<u> </u>
Central Valley	1	Kidder County School Dist.	1	North Border School	4
Dakota Prairie	· ·	Killdeer	2	North Sargent	<u> </u>
Devils Lake	2	Kindred	3	North Star-Cando	3
Dickinson	4	Kulm	+ -	Northern Cass	+ -
Divide County	1	Lakota	1	Northwood	
Drake	<u> </u>	LaMoure	1	Oakes	
	E		2		1
Drayton Dunseith	5 2	Larimore		Oberon Elementary	1
		Larimore	2	Page	-
Earl Elementary		Leeds	-	Park River	2
Edgeley	4	Lewis and Clark	2	Parshall	1
Edmore	1	Lidgerwood	1	Pingree-Buchanan	1
Eight Mile		Linton	1	Powers Lake	3
Elgin/New Leipzig	1	Lisbon		Richardton-Taylor	2
Ellendale		Litchville-Marion		Richland	1
Emerado Elementary		Little Heart Elementary		Rolette	1
Enderlin Area School		Lone Tree Elementary		Roosevelt-Carson	2
Fairmount	1	Maddock	1	Rugby	3
Fargo	14	Mandan	3	Sargent Central	
Fessenden-Bowdon	1	Mandaree	2	Sawyer	
Finley-Sharon	1	Manning Elementary		Scranton	1
Flasher		Manvel Elementary	2	Selfridge	2
Fordville Lankin	1	Maple Valley	2	Solen-Canonball	
Fort Ransom Elementary	1	Mapleton Elementary		South Heart	1
Fort Totten	4	Marmarth Elementary	1	South Prairie	2
Fort Yates	2	Max		St. John's School	4
Gackle-Streeter	1	Mayville-Portland CG	3	St. Thomas	4
Garrison		McClusky	3	Stanley	
Glen Ullin		McKenzie County School Dist			
		Medina			
		Menoken Elementary			
				1	

School Districts (cont)	#	Special Education Units	#	Other	#
Starkweather		Burleigh County Special Ed	3	Great NW Education Co-op	1
Sterling Elementary	1	East Central Special Ed	4	ND United	
Strasburg	1	GST Educational	2	Rough Rider Ed Services	1
Surrey	1	James River Special Ed		South East Education Co-op	2
Sweet Briar Elementary		Lake Region Special Ed			
TGU		Lonetree Special Ed	1		
Thompson		Northern Plains Special Ed			
Tioga		Oliver-Mercer Special Ed			
Turtle Lake-Mercer	2	Peace Garden Special Ed	2		
Twin Buttes Elementary	1	Pembina Special Ed		Total TFFR Participating	213
Underwood	5	Rural Cass County Special Ed	1	Employers	
United		Sheyenne Valley Special Ed			
Valley-Edinburg	6	Souris Valley Special Ed			
Valley City	1	South Central Prairie Sp Ed		132 Employers Employing	
Velva	2	South Valley Special Ed		TFFR Retirees (62%)	
Wahpeton		Southwest Special Ed			
Warwick	3	Upper Valley Special Ed	2		
Washburn	2	West River Student Services	4	336 TFFR Retirees Employed	
West Fargo	23	Wil-Mac Special Ed	3	(8 retirees working in 2	
Westhope	1			school districts and 2	
White Shield	4			working in 3 school districts)	
Williams Co School Dist					
Williston	4				
Wilton	1	Vocational Centers			
Wing		N Central Area Career & Tech			
Wishek	2	N Valley Career & Tech Ctr	1		
Wolford	5	Roughrider Area Career/Tech	1		
Wyndmere		SE Region Career & Tech Ctr			
Yellowstone		Sheyenne Valley Area Voc Ctr			
Zeeland	1				
County Comprinted dente		State Agencies 9 Institutions		-	
County Superintendents		State Agencies & Institutions	4	-	
Logan County	4	ND Center for Distance Ed	4	-	
McKenzie County	1	ND Dept of Public Instruction		-	
Morton County		ND School for the Blind	4	-	
Nelson County		ND School for the Deaf	1	-	
Slope County		ND Youth Correctional Center	1	-	
Ward County				]	

## TFFR REEMPLOYED RETIREES BY EMPLOYER SIZE 2018-19



32

11

Large Employer

101 + Members

13

Medium Employer

51-100 Members

Empl <u>Size</u>	All <u>Empl</u> .	Empl w/ Re-empl <u>Retirees</u>	
Small Medium Large	183 17 <u>13</u>	108 13 <u>11</u>	59% 76% 85%
Total	213	132	62%

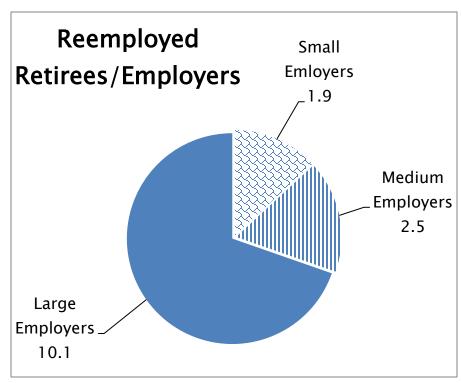
Employer <u>Size</u>	Re-empl <u>Retirees</u>	
Small Medium Large	205 32 <u>111</u>	59% 9% <u>32</u> %
Total	348	100%

Small Employer

1-50 Members

50

0



## Working After Retirement

After you retire, you may return to TFFR covered employment under employment limitations. The limits apply to TFFR covered employment which includes teaching, supervisory, and administrative services except for extra-curricular duties and professional development. The limits **do not** apply to:

- Teaching in public colleges and universities
- Teaching in private schools
- Employment outside of education
- Employment outside of ND

Non contracted substitute teaching does not apply to the annual hour limit. However, in-staff substitute teaching performed during an existing contracted period will apply to the annual hour limit.

To help you determine which return to work option best suits your needs, you should consider the following questions:

- How long have I been retired?
- How long do I plan to work?
- Do I plan to work full or part time?

Please also keep in mind that under both federal and state law, a teacher must terminate employment in order to be eligible to retire and receive retirement benefits. Therefore, at the time of retirement, there can be no written pre-existing agreement indicating re-employment after retirement. After the applicable waiting period (if any), should you decide to return to work, both you and your employer must complete a "TFFR Retired Member Employment Notification" form within 30 days of your employment. This form must be completed each year you return to teach.

Failure to notify TFFR that you have returned to TFFR covered employment will result in the loss of annuity benefits.

Because of the impact returning to work could have on your TFFR retirement benefits, we strongly encourage you to contact our office to discuss all of your options.

#### GENERAL RULE – ANNUAL HOUR LIMIT

After 30 days from your retirement date, you may return to TFFR covered employment for a maximum number of hours in a fiscal year (July 1 - June 30). You will continue to receive retirement benefits and employer and employee contributions will be paid on all retirement salary paid to the retiree including in-staff subbing, extra curricular and professional development pay based on the employer payment model. The additional employee contributions will be included in the retiree's account value but the monthly benefit will not be affected. The annual hour limit is based on the length of employment.

9-month contract = 700 hours 10-month contract = 800 hours 11-month contract = 900 hours 12-month contract = 1,000 hours

Example: Jane retires July 1, 2016, and begins TFFR retirement benefits. On August 1, she signs a 9-month contract with a ND school district to work 600 hours which allows her 100 hours for in-staff subbing. With the exception of extra-curricular duty and professional development, all compensated hours count toward the 700-hour limit. Jane and her employer submit a TFFR Retired Member Employment Notification form. Jane receives salary and employer and employee contributions are paid to TFFR on the teaching salary as well as any in-staff subbing, extra curricular or professional development pay. Jane continues to receive her retirement benefit while teaching part time. The additional employee contributions are added to the retiree's account balance but the monthly benefit is not affected.

#### **Exception A - Critical Shortage Area**

You may return to TFFR covered employment in an approved critical shortage area and exceed the annual hour limitation without losing your retirement benefits. If you retired on or prior to January 1, 2001, no waiting period is required.

#### RETIREE RETURN TO WORK OPTIONS AT A GLANCE

Retiree Return to Work Limitation	Waiting Period Required (Break in Service)	Length of Employment	TFFR Benefit Continued	TFFR Employee & Employer Contributions Paid	TFFR Benefit Amount Recalculated
General Rule – Annual hour limit	30 days from TFFR retirement date	Unlimited	Yes	Yes	No
Exception A: Critical shortage areas determined by ESPB  Over annual hour limit	One Year- if your retirement date is after 1/1/2001  None- if your retirement date is on or before 1/1/2001	Dependent upon annual approval and verification of critical shortage area	Yes	Yes	No
Exception B: Benefit suspension and recalculation Over annual hour limit	30 days from TFFR retirement date	Unlimited	No Benefit suspended after annual hour limit is reached	Yes	Yes  Recalculation based on the number of additional years of service

However, if your retirement date is after January 1, 2001, a one-year waiting period is required. You may perform non-contracted substitute teaching during the one-year waiting period. Critical shortage areas will be determined each year by the Education Standards and Practices Board (ESPB). Each year, you must re-apply for this exception. Like the General Rule, you will continue to receive retirement benefits, employer and employee contributions will be paid on all retirement salary based on the employer payment model. The additional employee contributions will be included in the retiree's account value but the monthly benefit will not be affected.

Example: John retires July 1, 2015 and begins TFFR retirement benefits. He does substitute teaching in 2015-16, then returns as a full time teacher on July 1, 2016, in an approved critical shortage area. John and his employer submit a TFFR Retired Member Employment Notification form. John receives salary and employer and employee contributions are paid to TFFR on all retirement salary. John continues to receive his retirement benefit while working full time in a critical shortage area. The additional employee contributions are added to the retiree's account value but the monthly benefit is not affected.

### EXCEPTION B – BENEFIT SUSPENSION AND RECALCULATION

After 30 days from your retirement date, you may return to TFFR covered employment and exceed the annual hour limitation. Under this option, employer and employee contributions will be paid on all retirement salary before and after the benefit suspension based on the employer's payment model. Your TFFR benefits will be suspended the first of the month following the month you reach the annual hour limit. Upon re-retirement, your benefits may be recalculated. If you re-retire with:

• Less than 2 years of additional earned service credit – you will receive the discontinued benefit plus benefit increases granted during the benefit suspension and a refund of employee contributions paid after the

benefit suspension plus interest. The employee contributions paid prior to the benefit suspension will be added to the retiree's account value.

- 2-5 years you will receive the greater of the discontinued annuity, plus additional years at the current multiplier, plus benefit increases granted during the suspension, OR all the years recalculated at the current multiplier, less an actuarial offset for the amount of benefits already paid. All employee contributions will be added to the retiree's account value.
- 5 or more years you will receive the greater of the calculation above or the retirement benefit recalculated using all the years at the current multiplier with no actuarial offset. All employee contributions will be added to the retiree's account value.

This brochure is a summary of NDCC 15-39.1-19.1 and is not intended to provide total information concerning employment after retirement. More detailed information may be obtained by contacting:

#### ND RETIREMENT AND INVESTMENT OFFICE

1930 Burnt Boat Drive P.O. Box 7100 Bismarck, ND 58507-7100

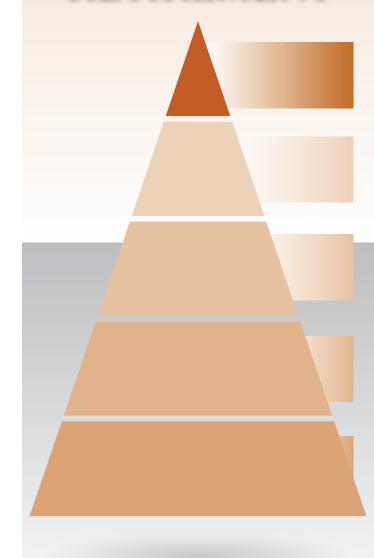
Phone: 1-701-328-9885 Toll free: 1-800-952-2970 www.nd.gov/rio

In compliance with the Americans with Disabilities Act, this document can be provided in alternate formats. Contact the administrative office to request an alternate format.

Effective 4/2016

#### North Dakota Teachers' Fund For Retirement

#### WORKING AFTER RETIREMENT



# NDTFFR Board 2021 Legislative Planning

January 23, 2020

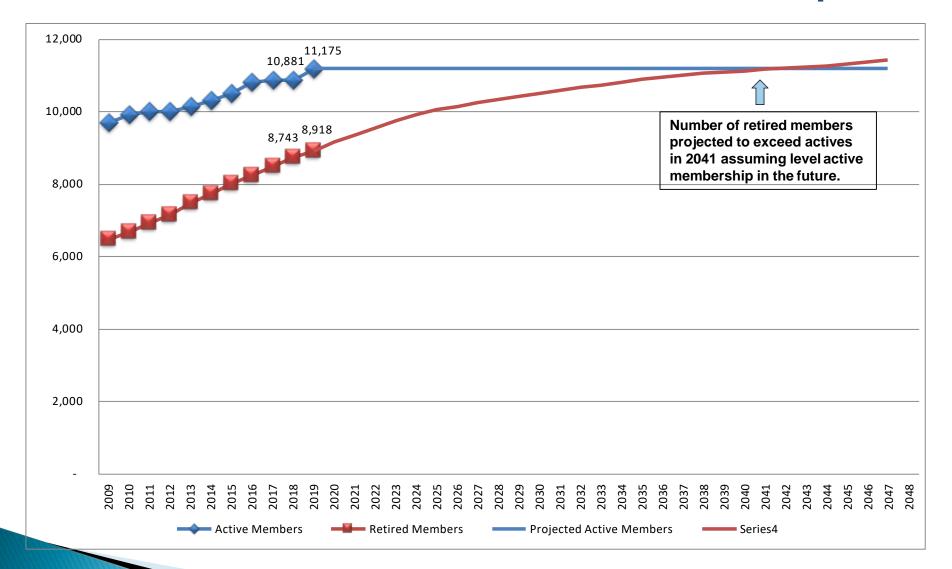
### Legislative Time Line

- Jan March 2020
  - TFFR Board Legislative Planning
- April 1, 2020
  - Deadline to submit bill drafts to Legislative Employee Benefits Programs Committee (LEBPC) for study.
- April November 2020
  - LEBPC study of legislative proposals, actuarial and technical analysis, public hearings, and Committee recommendation (favorable, unfavorable, no rec)
- December 10, 2020
  - Deadline for agencies and bill sponsors to file bills with Legislative Council for 2021 legislative session
- January 5 April 28, 2021
  - 67th Legislative Assembly in Session

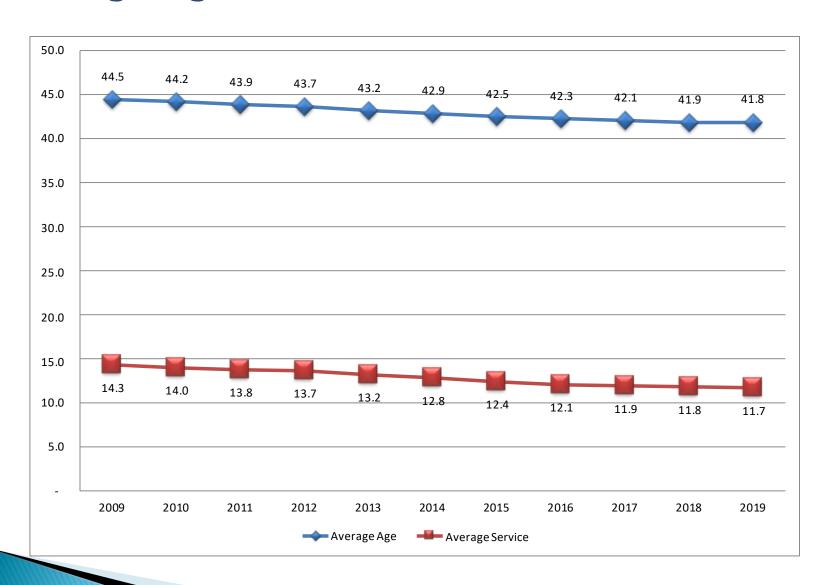
## Current NDTFFR Defined Benefit Plan

>>> Based on 2019 valuation data

### Active and Retired Membership



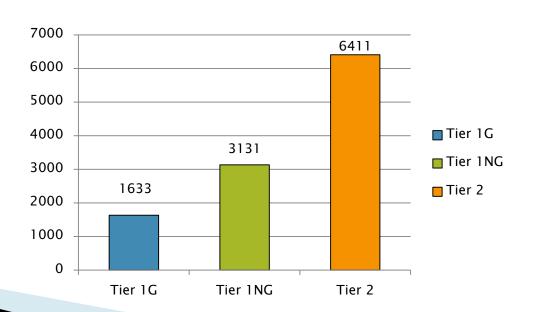
#### Average Age and Service of Active Members



### **TFFR Membership Tiers**

- Tier 1 Members who have service credit prior to 7/1/08
  - Grandfathered Members who on 6/30/13 were within 10 years of retirement eligibility (age 55+ or Rule of 65+)
  - Non-grandfathered Members who on 6/30/13 were more than 10 years away from retirement eligibility (less than Rule of 65).
- Tier 2 Members employed on or after 7/1/08

Total Active Members 11,175



## Summary of TFFR Pension Benefits for Membership Tiers

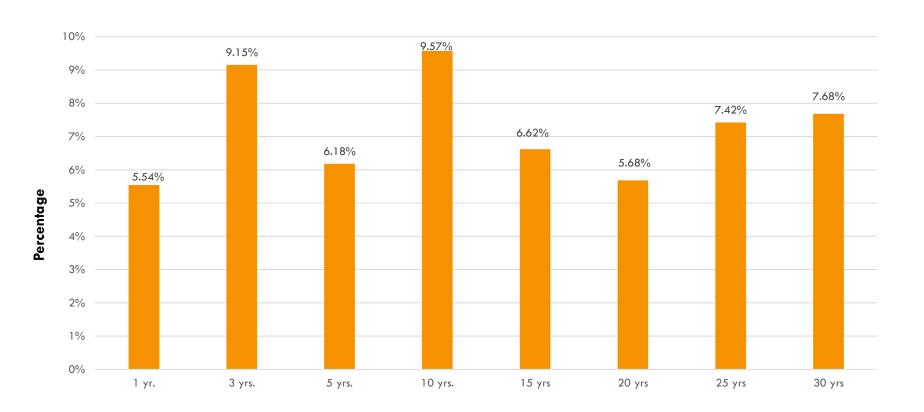
	Tier 1 Grandfathered Member	Tier 1 Non-Grandfathered Member	Tier 2 Member
Vesting Period	3 years	3 years	5 years
Unreduced Retirement Eligibility			
Minimum Age	No	60	60
AND Rule	Rule of 85	Rule of 90	Rule of 90
OR Normal Retirement Age	65	65	65
Reduced Retirement Eligibility			
Minimum Age	55	55	55
Reduction Factor	6%	8%	8%
Retirement Formula Multiplier	2%	2%	2%
x Final average salary (high salaries of career)	3 year FAS	3 year FAS	5 year FAS
x Service Credit	Total Years	Total Years	Total Years
Disability Retirement Retirement formula multiplier (2%) X FAS X total years	Yes	Yes	Yes
Death/Survivor Benefits	Yes	Yes	Yes
Refund of account value or life annuity to survivor based or	n member's vesting stat	us.	

#### **Contribution Rates**

RATES %	<b>Employer</b>	Member	Total	Increase
1997 – 2008	7.75%	7.75%	15.5%	
7/1/08	8.25%	7.75%	16.0%	+0.5%
7/1/10	8.75%	7.75%	16.5%	+0.5%
7/1/12	10.75%	9.75%	20.5%	+4.0%
7/1/14	12.75%	11.75%	24.5%	+4.0%

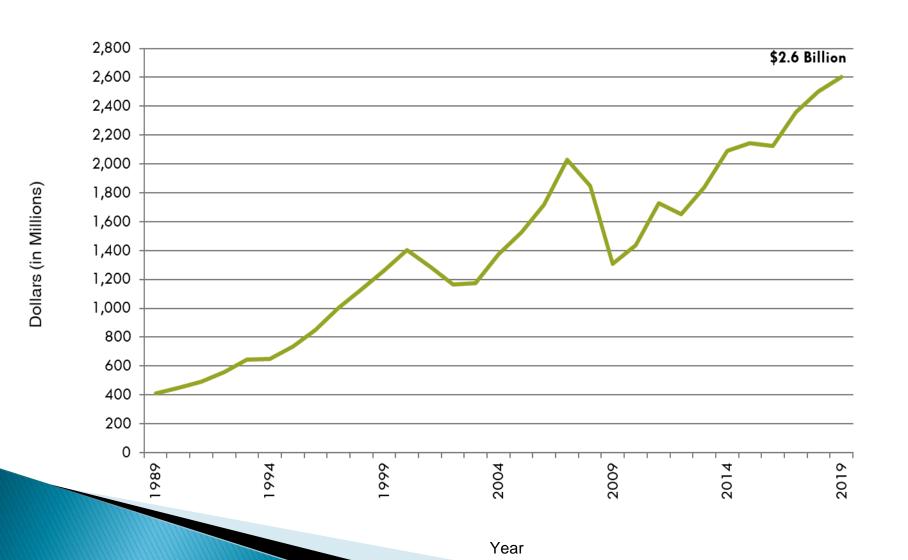
Note: 2011 legislation increased contribution rates to improve TFFR funding. Increased rates will be in effect until TFFR reaches 100% funded ratio, then rates will be reduced to 7.75% each.

## TFFR Net Investment Performance – Average Fiscal Year Ended June 30, 2019



Note: The investment returns shown were calculated by the SIB investment consultant. This calculation uses daily time-weighted cash flows in compliance with Global Investment Performance Standards (GIPS). These returns differ from the returns calculated by the actuary. The actuary calculation uses a very simplified approach with annual income and valuation data obtained by the actuary at the end of each fiscal year.

## Fair (Market) Value of TFFR Assets 1989–2019



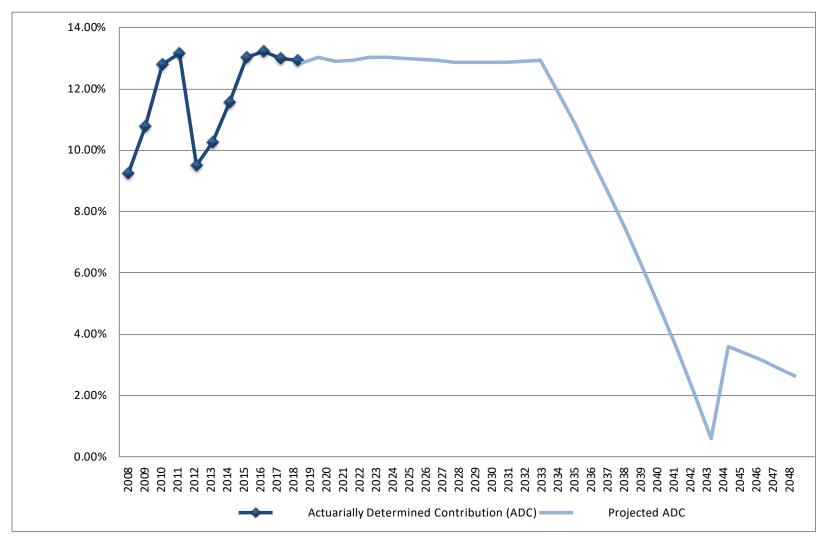
### Valuation Results (\$ in millions)

	July 1, 2019	July 1, 2018
Actuarial Accrued Liability:		
<ul> <li>Active Members</li> </ul>	\$1,570	\$1,538
<ul> <li>Inactive Members</li> </ul>	110	104
<ul> <li>Retirees and Beneficiaries</li> </ul>	2,314	2,222
Total	\$3,993	\$3,864
Actuarial Assets	2,636	2,526
Unfunded Accrued Liability	\$1,358	\$1,337
Funded Ratio	66.0%	65.4%

### **Actuarially Determined Contribution**

	For the Year Beginning		
	July 1, 2019	July 1, 2018	
Normal Cost Rate	11.87%	11.95%	
Member Rate	<u>11.75%</u>	<u>11.75%</u>	
Employer Normal Cost Rate	0.12%	0.20%	
Amortization of UAAL	<u>12.72%</u>	<u>12.74%</u>	
Actuarially Determined Contribution	12.84%	12.94%	
Statutory Employer Rate	12.75%	12.75%	
Contribution Sufficiency/(Deficiency)	(0.09%)	(0.19%)	

### **Actuarially Determined Contribution**

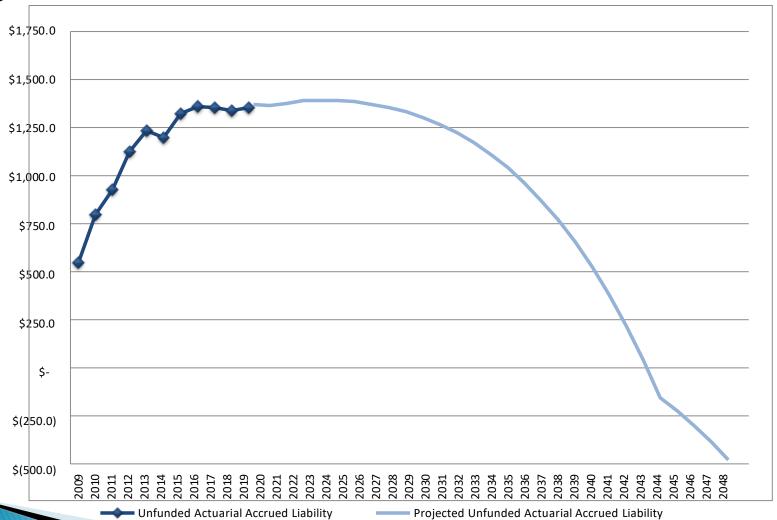


<sup>-</sup> For 2008 - 2013, the calculation of the ADC was based on a 30-year open level percentage of payroll amortization. Beginning in 2013, the period is 30-year closed. In 2033, when the remaining period reaches 10 years, it is assumed to operate as 10-year open

<sup>- 2012</sup> and 2013 reflect the actuarial present value of contribution increases effective July 1, 2014.

### **Unfunded Actuarial Accrued Liability**

#### \$ Millions

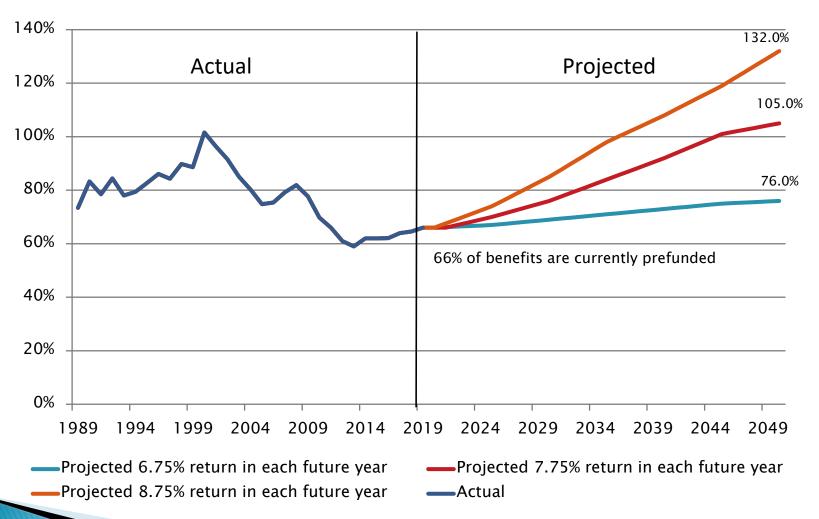


Projection based on all assumptions, including 7.75% investment return, realized as expected

### Funding Sensitivity Projections

- Funding projections provide information on what future funding might look like, and also their value relative to the current valuation date.
- Deterministic projections are based on a defined set of inputs.
  - Example: If investment actuarial assumption is met, then what is the result on funding?
- Projections of estimated funded ratios for 30 years
  - Additional projections assuming Fund earns 6.75%, 7.75% or 8.75% per year every year
  - Administrative expenses increase by 2.75% each year
  - All other experience is assumed to emerge as expected

## TFFR Funded Ratio: Actual and Projected

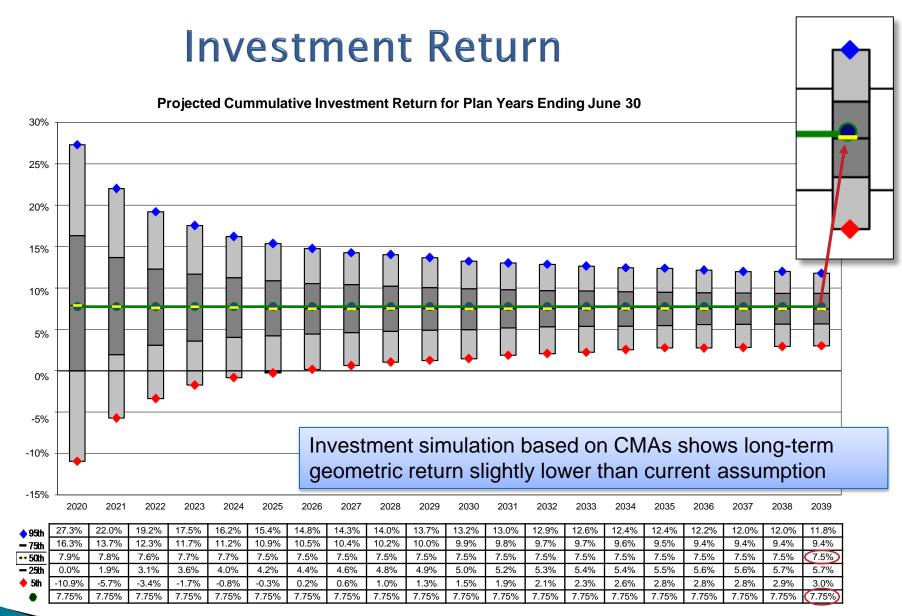


#### Projected Funded Ratios (AVA Basis) Actual Returns +1% or -1% of Assumed

Valuation Year	6.75% Return in Each Future Year	7.75% Return in Each Future Year	8.75% Return in Each Future Year
2019	66%	66%	66%
2020	66%	66%	67%
2021	66%	67%	68%
2022	66%	68%	70%
2023	67%	69%	72%
2024	67%	70%	74%
2029	69%	76%	85%
2034	71%	84%	98%
2039	73%	92%	108%
2044	75%	101%	119%
2049	76%	105%	132%

### Plan Management Policy

- Objective criteria have been established to evaluate financial health of TFFR
- Market volatility and contribution inadequacy risks are illustrated through stochastic modeling
- Board is able to evaluate the probabilities of future funded ratios
- Serves as an advance warning tool.
- TFFR Plan Management Policy is a more robust way to evaluate the ongoing health and sustainability of TFFR.



Current investment return assumption

#### Metrics for Plan Management Policy Scoring

#### Current funded ratio

- The Fund's current funded ratio is one of the most visible metrics
- A high current funded ratio should be recognized in the scoring

#### Downside funded ratio in 2030

 In the short-term, the Fund should avoid an "undesirable" funded ratio with relatively high probability

#### ➤ Target funded ratio in 2040

 Over a longer term, the Fund should be on the path to achieving its goals with reasonable probability

#### Improvement in funded ratio over a 10-year period

Regardless of where the Fund sits today, it should seek an increasing funded ratio over time

#### ➤ Ability to recover from/withstand a market downturn

 In situations where the financial markets experience a downturn, the scoring should recognize when the funded ratio improves relative to the impact after the downturn

For purposes of the Policy scoring, the market value of assets is used when determining the funded ratio.

### **2019 Policy Scoring**

	,	
Criteria 1	<ul> <li>Current year funded ratio is 66%</li> <li>If current ratio is 90% or higher: +3</li> <li>If current ratio is between 80% to 90%: +2</li> <li>If current ratio is between 70% to 80%: +1</li> <li>If current ratio is less than 70%: +0</li> </ul>	+0
Criteria 2	<ul> <li>37% probability of funded ratio &lt;65% in 2030</li> <li>Under 65% funded ratio with less than 20% probability: +3</li> <li>Under 65% funded ratio with less than 30% probability: +2</li> <li>Under 65% funded ratio with less than 40% probability: +1</li> <li>Under 65% funded ratio with more than 40% probability: +0</li> </ul>	+1
Criteria 3	<ul> <li>51% probability of funded ratio &gt;80% in 2040</li> <li>85% or higher with more than 50% probability: +4 (47% probability)</li> <li>80% or higher with more than 50% probability: +3 (51% probability)</li> <li>75% or higher with more than 50% probability: +2 (56% probability)</li> <li>70% or higher with more than 50% probability: +1 (60% probability)</li> <li>Not more than 70% with more than 50% probability: +0</li> </ul>	+3
Criteria 4	<ul> <li>55% probability of improvement over 10 years</li> <li>Funded ratio improves by +5% over 10 years with 66% probability: +2</li> <li>Funded ratio improves by +5% over 10 years with 50% probability: +1</li> <li>Ratio does not improve by +5% over 10 years with 50% probability: +0</li> </ul>	+1
Criteria 5	<ul> <li>39% probability of recovering from market downturn*</li> <li>Funded ratio after downturn improves by +5% over 10 years with 50% probability: +2</li> <li>Funded ratio after downturn improves by +5% over 10 years with 33% probability: +1</li> <li>Ratio after downturn does not improve by +5% over 10 years with 33% probability: +0</li> </ul>	+1
		+6

<sup>\* 892</sup> scenarios contain -10% average or worse over 2 years (in the first 10 years), 346 of which "recover"

### Summary Score based on 2019 Valuation

Composite summary score equal to 6

#### **Assessment:**

Summary score of 11 to 14:

Summary score of 7 or 10:

Summary score of 4 to 6:

Summary score of 0 to 3:

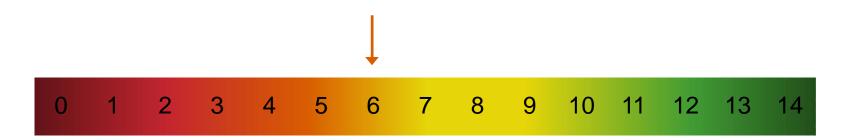
Objectives being met or likely to be met

Objectives may be met over longer period

**Continue to monitor** 

Changes should be considered

Based on a summary score of 6: Orange



The summary score has not changed from last year's valuation results. However, the summary score will be updated based on the results of the experience study currently in progress.

### Notable Differences from Prior Analysis

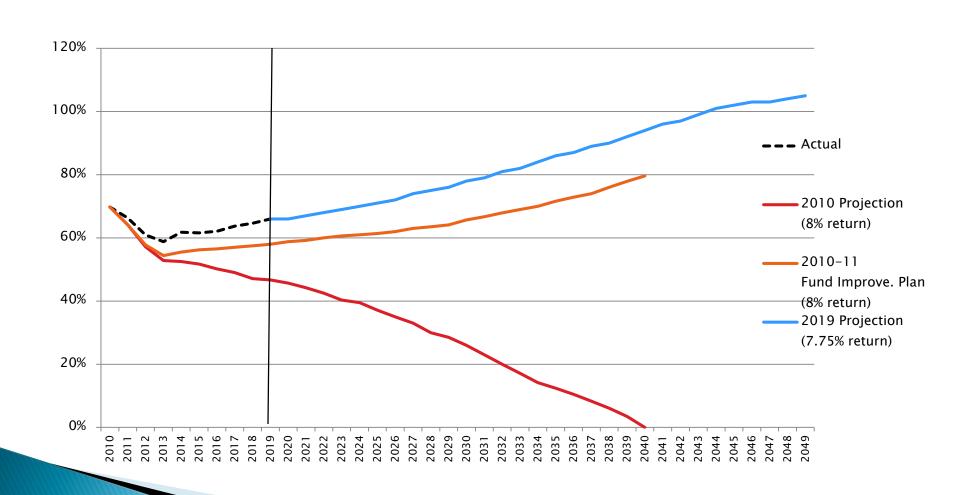
- ➤ The 2019 Horizon Survey CMAs result in a lower 50<sup>th</sup> percentile longterm geometric return compared to the 2018 study
  - <u>7.47</u>% versus <u>7.55</u>%
- ➤ The liability projection from the 2019 actuarial valuation is negligibly higher compared to the projection based upon the 2018 actuarial valuation
  - Demographic experience during fiscal 2019 had a very minor impact on the modeling results
- For the most part, the probabilities on which the scoring is based remained similar to the prior analysis
  - Notably, for Criteria 3, where +3 points is given in both this analysis and the prior analysis, the probability of the funded ratio >80% in 2040 decreased from 53% to 51%
    - 50% is the threshold cutoff, so this is a criteria that is close to moving from a "+3" to a "+2"

## 2021 Legislative Planning

## 2009–10 TFFR Funding Improvement Study Core Principles

- Restore the financial health of the TFFR plan for past, present, and future ND educators.
- Maintain adequate retirement security.
- Share responsibility for funding improvement with active and retired members and employers.
- Phase changes over time.
- Protect benefits of those employees closest to retirement.

### TFFR Funded Ratio Projections Then (2010) and Now (2019)



#### 2021 - TFFR Contribution or Benefit Changes?

- Investment simulation based on 2019 CMAs shows long-term geometric return of 7.47% (at 50<sup>th</sup> percentile) is lower than 7.55% return in 2018 simulation. Both are lower than TFFR's current 7.75% actuarial assumption. If future returns are less than 7.75% assumption, funding levels will decline OR will take longer to improve (currently 66%).
- Experience Study is being conducted in 2020. It is expected the actuary will recommend lowering the 7.75% assumed rate, along with other possible assumption changes which could impact TFFR funded ratio.
- ▶ 2019 Plan Management Score is <u>6</u>(no change from 2018) meaning Board should continue to closely monitor plan funding. Plan Management score will be updated after Experience Study.
- What could impact need for additional contribution or benefit changes in the future?
  - Future investment returns lower than 7.75% assumption.
  - Future actuarial assumption changes i.e. lowering investment return assumption.
  - Future actuarial experience higher salaries, more retirements, improved mortality, etc. that negatively impact plan.
  - Future legislative actions that might result in funding declines.
- **FUTURE UNKNOWN** Closely monitor events/actions that could affect TFFR funding levels.

#### Most Common Member and Employer Concerns

- 1) High member and employer contribution rates that won't be reduced for many years current law requires rates to be reduced to 7.75% each when TFFR reaches 100% funded level.
- 2) Retiree re-employment provisions current law requires retiree and employer contributions, maximum annual hours limit unless critical shortage area, and no benefit recalculation unless benefit is suspended.
- 3) No retiree benefit increase CABA approved in 2001; one time supplemental payment in 2009.

## 1) Reduce Member and Employer Contribution Rates Sooner (NDCC 15-39.1-09)

## Options that have been mentioned to improve TFFR funding or change timing of rate reduction:

- Reduce contribution rates when plan reaches 80% or 90% funded level current target is 100%
- Reduce interest earned on member contributions currently 6%
- New benefit tier for new hires with reduced benefits
  - Reduce benefit formula multiplier currently 2.0%
  - Increase vesting period and final average salary calculation period currently
     5 years
  - Extend normal (unreduced) retirement eligibility currently minimum age 60 with Rule of 90 or age 65
  - Other??

Note: NDPERS provisions for new employees hired in 2020: reduced benefit multiplier of 1.75%; and 1.14% employer contribution to Retiree Health Insurance Credit (RHIC) is reallocated to funding of PERS plan.

## 2) Modify Retiree Re-employment Provisions (NDCC 15-39.1-19.1 and 19.2)

#### Options that have been mentioned:

- Eliminate payment of re-employed retiree and/or employer contributions
- Increase benefit for re-employed retiree based on additional salary and service
- Remove or increase maximum annual hours limit under General Rule
- Remove 1 year break-in- service for critical shortage area exemption
- Clarify/change how subbing affects retiree re-employment
- Clarify that license and written agreement requirement for nonretired members does not apply to retired members who return to covered employment
- Other??

### 3) No Retiree Benefit Increase

Options that have been mentioned to fund retiree benefit increase:

- TFFR trust fund assets excess investment earnings
- Other Funds
  - Legacy Fund
  - Strategic Investment and Improvements Fund (SIIF)
  - General Fund
- Other??

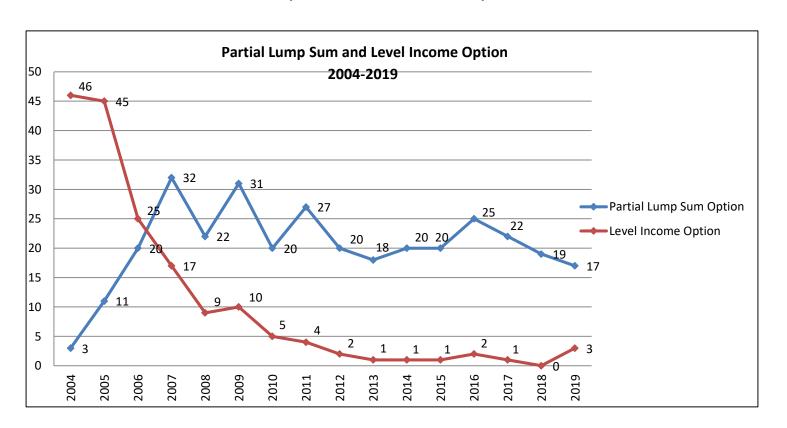
1) Remove level income option from available benefit options (SLA, 100% & 50% J&S, 20 & 10 yr TC&L) NDCC 15-39.1-16

As of 7/1/19: 543 retirees are receiving benefits under the level income option (effective 1989).

From 2004 – 2019: 327 members selected the partial lump sum option (effective 2004).

During that time period, 172 members selected the level income option.

Since the partial lump sum option (PLSO) became effective, the number of new retirees who have selected the level income option has dramatically declined.



## 2) Clarify or change definition of pensionable salary to address individual salary spiking concerns (NDCC 15-39.1-04-10)

- Salary caps or Final Average Salary limits of X%
- Within 5 years of retirement, salary increases above X% are not pensionable
- SD pays actuarial cost of salary increases above X%

#### 3) Add Portability Enhancement Provision (like NDPERS)

Offering a PEP provision is an incentive for individuals to save more for retirement by allowing an active member to "vest" in the employer contribution for cash distribution purposes if the member participates in an approved deferred compensation program. There would be a cost to the TFFR plan to offer such a provision.

- 4) Add language requiring state pension forfeiture if member is convicted of felony. Many states have laws that require a public employee or official who commits a felony related to his or her duties to forfeit benefits under the state retirement system.
  - Some pension forfeiture laws cover crimes or felonies related to official public duties only. Others may include all or only certain crimes or felonies committed.
  - Some laws require pension forfeiture for crimes committed during time of public service only; others may include crimes committed any time.
  - Many variations and options.

#### Legal and administrative considerations

- Could provisions be effective for new members only, OR active and retired members hired before adoption?
- How would TFFR track crimes committed by members?
- Other

#### 5) Remove outdated provisions and clean up TFFR statutes

- Old law college teachers and membership options (NDCC 15–39.2)
- Grandfathered members NDU, NDCEL, NDHSAA, etc. (only a few still in plan) (NDCC 15-39.1-04-12)
- Board composition (NDCC 15–39.1–05.1)
- Add fiduciary language to Board authority provisions (NDCC 15-39.1-05.2)
   Note: Prudent investor rule and exclusive benefit provisions are found in SIB statutes (NDCC 21-10).
- Other

#### 6) No Internal Revenue Code compliance changes needed in 2021

Changes to plan statutes will be necessary to comply with a federal law change (SECURE Act approved in December 2019) that increases the Required Minimum Distribution Age from age 70.5 to age 72. Plans have until the last day of the first plan year beginning on or after 1.1.24 to adopt amendments to their governing plan documents to reflect the changes to the required beginning date. Additional IRS guidance is expected to assist plans in complying with these new rules.

#### 7) Other plan design or administrative changes for discussion?

# 2021 Legislative Planning

TFFR Board Discussion

Input from Member and Employer Interest Groups

ND United ND RTA

ND CEL
 ND SBA

- Information requests for future board meeting
- Other Board Directives



#### **MEMORANDUM**

TO: TFFR Board

FROM: Fay Kopp and Rich Nagel

**DATE:** January 17, 2020

SUBJ: Pension Administration System Modernization Project Update

Kris Vollmer has been assigned by NDIT as the Project Manager for this important TFFR Pension Administration System (PAS) Modernization Project. Kris has been working with Rich and Fay on the Project Charter which is currently being reviewed by NDIT staff.

An Executive Steering Committee (ESC) Meeting for the TFFR PAS Project has been rescheduled from January 9 to January 21, 2020. Attached is the meeting agenda for the Committee's first meeting. As you can see, the Committee will review and approve a Project Charter which is required for all large state IT projects.

After ESC approval, the Project Charter will then be submitted to the TFFR Board for final approval. We will send it to you in advance of and/or review it at the January 23 meeting.

#### **BOARD ACTION**

Board Motion to Approve Project Charter for PAS Modernization Project.

#### **Meeting Information:**

Meeting Title	TFFR PAS Modernization Project	Time	10:30 AM – 12:00 PM
Date	January 21, 2020	Location	NDIT -North Conf. Room 103
Facilitator	Faye Kopp/ Kris Vollmer	Note Taker	Kris Vollmer

#### Invitees/Attendees:

Required/	Attended	Name	Required/	Attended	Name
Optional	(Y/N)		Optional	(Y/N)	
R		Fay Kopp – TFFR Sponsor	R		Kris Vollmer, PM
R		David Hunter – RIO Exec	R		Justin Data, LPO
R		Becky Deichert – OMB	R		Shawn Riley, CIO
		Designee			
0		Rich Nagel – TFFR	0		Danelle Hopkins, GO
0		Dave Schaibley - AG	0		Jace Beehler, GO

#### Agenda/Minutes:

Item	Topic	Owner
1.	Call to order	Fave/Kris

#### 2. New Business

- Purpose and scope of the Executive Steering Committee
- Project Charter
- Project Planning

#### 3. Other Business

- Committee meeting frequency
- Other discussion

#### 4. Meeting adjournment



#### **MEMORANDUM**

TO: TFFR Board FROM: Fay Kopp

**DATE:** January 21, 2020

SUBJ: Pension Administration System Modernization Project Update

The TFFR Pension Administration System (PAS) Modernization Project Executive Steering Committee (ESC) met on Tuesday, January 21. Statutory Committee members include:

- Fay Kopp, TFFR Project Sponsor
- Dave Hunter, RIO Executive Director
- Becky Deichert, OMB Designee
- Justin Data, NDIT Large Project Oversight
- Shawn Riley, NDIT Chief Information Officer

Others attending the ESC meeting include:

- Kris Vollmer, NDIT Project Manager
- Dave Schaibley, Attorney General's Office
- Jace Beehler, Governor's Office
- Rich Nagel, RIO Supervisor of Information Technology

After discussion of the ESC purpose, member roles and responsibilities, and the TFFR Modernization Project Charter (attached) the Charter was approved by the Committee. During the project planning stage, monthly ESC meetings will be scheduled. Once the project gets underway, meetings will likely be held less frequently, on a bi-monthly or quarterly basis. It was a productive meeting, and NDIT support and guidance is appreciated.

The next step will be to establish a Procurement Team to develop an RFP for an external PAS business consultant.

I can respond to any questions at the Board meeting.

#### **BOARD ACTION**

Board Motion to Approve Project Charter for TFFR PAS Modernization Project.

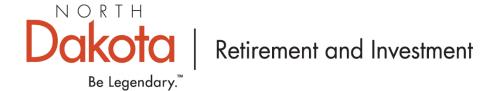
# Teachers' Fund for Retirement's Pension Administration System Modernization Project Project Charter

Project Sponsor: TFFR Board

Author: Richard Nagel

Version: 1.0

**Revision Date:** 01/17/2020



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### 1 Project Description

#### 1.1 Project History

The Teachers' Fund for Retirement's (TFFR) current Pension Administration System (PAS) administrator interface is 15 years old and was deployed in 2005 as a client-server application.

The PAS supports the administration of the TFFR benefits program for over 22,000 active, inactive, and retired members and 213 employers. The system maintains the demographic and account information, payroll reporting, contributions accounting, benefits calculations for refunds, retirement, disability, and death benefits, service credit purchases, pension calculations and processing, benefits payroll, tax processing, reporting and integration.

A member self-service portal is available to all members and provides basic viewing functionality (read-only access). Currently, just over 4,500 members are utilizing the member self-service portal.

An employer self-service portal is available to all employers and provides the ability to upload payroll contribution and earnings data files for processing by staff. However, employers cannot perform any business rule validations of the member data contained in the file. TFFR staff must perform the validations, evaluate data exceptions and any action for data corrections that are to be addressed and resubmitted by the employer. Currently, 182 employers are utilizing the employer self-service portal.

#### 1.2 Strategic Alignment

The project aligns TFFR's initiatives and goals to be more efficient, streamline processes, reinvent business plans/processes, and do more with less effort to ensure a more user-friendly experience for staff members as well as citizens. In order to accomplish these initiatives and goals, TFFR will need to upgrade or replace the current Pension Administration System.

Most of the desired features needed to reinvent the way TFFR conducts business are standard functions of modern PAS, either out of the box or implemented with configuration.

The project will increase citizen experience by improving the functionality available on member and employer online portals and providing information and feedback in a secure, timely manner.

#### 1.3 Business Need

- 1. TFFR's current PAS has been in operation for 15 years and is outdated. The functionality and technical architecture of this client-server technology is at the end of its product release lifecycle.
- 2. Reinvent and transform the way TFFR conducts business by utilizing updated technology, provide enhanced security and streamline processes throughout the new system.
- 3. Enhance and improve Member and Employer self-service portal experience.

#### 1.4 Solution Statement

The project will procure and implement a modernized upgrade or replacement of the current TFFR PAS utilizing a commercial off-the-shelf (COTS), modified off-the-shelf (MOTS) or software as a service (SaaS) solution with customization abilities to fit TFFR's business needs. An RFP will be developed to contract with an external PAS consultant to assist with the project including review of internal processes. A separate RFP will be developed to solicit bids from potential vendors to find the best solution for TFFR.

The overall goal is to upgrade/replace TFFR's current PAS system with a modern solution that allows TFFR to reinvent and streamline business processes and functionality to provide more interaction within

TFFR staff, as well as the members and employers that utilize the system. Since the current system is 15 years old, it would be very costly to implement the necessary functionality to achieve a more efficient, secure, and user-friendly system.

### 2 Project Scope

#### 2.1 Scope Statement

The project will upgrade or replace the current business processes as well as the existing PAS for TFFR. The upgrade/replacement solution should utilize a web-based platform or other solution.

#### 2.2 In Scope

- The project is considered a Major Information Technology (IT) Project and will follow the ND State Major IT Project Management standard and ND Century Code.
- Procurement:
  - RFP to acquire a PAS Consultant to review business processes
  - RFP for PAS replacement system
- Initiation and Planning:
  - Kickoff Meetings
  - o Project Plan and Schedule
  - o Large Project Oversight (LPO) Startup Report
- Execution and Testing
  - Key deliverables will be fully defined in the statement of work, agreed upon at time of contract negotiation
- Closing
  - Project Team Surveys
  - Closeout Meeting
  - Post Implementation Report (PIR)
  - LPO Closeout Report

#### 2.3 Out of Scope

Any element not listed as "in scope" above is considered "out of the scope" of the project.

Ongoing maintenance funding of PAS

TFFP PAS Modernization Project Charter Version: 1.0

# 3 Business Analysis

**Table 1: Project Objectives and Measurements** 

Objective		Lag Measurement(s)	Lead Measurement(s)
1	Business need: Provide citizen focused functional self-service portals.  Objective: Create and enhance functionality of Member and Employer self-service portals to meet the needs of citizen user groups (active and retired teachers and employers).	Increase new member logins by 20% within one-year of go-live.  Beginning one-month post go-live, IT staff will run monthly reports to determine use of self-service functionality. Counts will be taken by members (active and retired teachers) and by employer accesses.	The measure of number of times the current PAS is accessed online, count by members (active and retired teachers) and by employer accesses are taken on a monthly basis.  Additional measurements may be identified during the planning process.
2	Business need: Reinvent and Transform current processes.  Objective: Reinvent and transform the way TFFR conducts business by redefining business plan and processes to increase efficiencies.	Baseline processes that were automated; compare to manual process (before automation) as identified during business process modeling.  One year post go-live, decrease time spent on manual tasks by 10-15%.	Baseline measurement of manual processing will be taken during business process review and modeling. Measurements will be defined during the business process modeling step and identified in the Project Plan.
3	Business need: Modernize TFFR's outdated PAS.  Objective: Provide an interactive web-based solution that is accessible from multiple device types.	Implement a solution that uses modern technology.	The current PAS is client server based and uses an old technology that limits functionality and the ability to support desired citizen experience; and support pension administration best practices.

**Table 2: Anticipated Wins** 

An	Anticipated Wins		
1	By utilizing automated processes, efficiencies will be created for TFFR staff.		
2	Increasing functionality through the use of web portals allows citizens (members and employers) to update information in real-time rather than calling or mailing forms.		
3	A web-based system will be accessible from multiple devices allowing citizens (member and employers) more flexibility.		

### 4 Cost Analysis

The table below illustrates the project funding. The state legislature has given spending authority for \$9,000,000.00.

**Table 3: Project Funding** 

Funding Source	Funded Amount	Funding Explanation	
General Funds			
Federal Funds			
Special Funds	\$9,000,000	TFFR Trust Fund	
Other Funds			
Budget Total	\$9,000,000		

The following will be used as budgeting guidelines during the planning phase of the project:

- The total funds initially requested for the project was \$9,139,000.
- The total funds approved by the Legislature for the project was \$9,000,000.
- The project budget will be finalized during the project planning phase and approved by the Executive Steering committee (ESC) and the TFFR Board of Trustees.

### 5 Business Risk Analysis

#### 5.1 Risks of Performing the Project

**Table 4: Risks of Performing the Project** 

Risk	Impact	Response
Staff availability	Lower priority tasks will be delayed	Agency will review and prioritize all projects as needed.
Scope	Specifications and scope not properly defined will cause delays and cost	Hire external IT pension consultant to assist with project. Monitor project scope.
Security	PII must be secured and limit risk for breaches of any kind	Work with NDIT and vendor to ensure the solution utilizes world class technology and security measures

#### 5.2 Risks of Not Performing the Project

Table 5: Risks of Not Performing the Project

Risk	Impact	Response
	Limits portal security for	Limit what data is visible on
Less Secure PAS	members and employers PII data	current PAS to try and eliminate security risks
Limited support and increased costs	As the PAS ages, vendor resources and support are limited with older technology	Request additional budget funding or reallocate existing budget to support and fix the outdated PAS
Reduced efficiency	Staff is less efficient, and work takes longer. No new projects are introduced due to old processes that take time to do manually	Continue manual processes with outdated PAS.
Limited functionality	Limits the self-service portals for members and employers. Also limits what staff can do internally.	Continue manual processes with outdated PAS.

# 6 Organizational Change Analysis

This project is anticipated to reinvent and transform the way TFFR conducts pension plan administration by upgrading to an interactive web-based PAS platform. This web-based platform will allow TFFR to change business plans and processes by implementing a modernized PAS that allows for more user functionality, better self-service portals for 20,000+ members and 213 employers, automated processes for internal staff, and provides external users with a more user-friendly environment across multiple devices.

The overall impact this project will have on TFFR relates to updating all business plans and processes to change how tasks are currently completed. By utilizing a modernized PAS, more efficiencies will be created through automated process that allows TFFR staff to do more with less effort compared to the current manual processes.

The TFFR Board recognizes that a modern PAS is needed to modernize the way the TFFR pension plan is administered and is committed to this project. Agency Retirement and IT managers are leading this project with full support from the TFFR Board, RIO executive management, and staff.

### 7 Resource Analysis

The planning of this project is estimated to take approximately 16 weeks. The following identifies the resources required for planning only. It also includes the percentage of time and anticipated hours that will be required from each resource for the planning period.

Planning Start Date: February 3, 2020 Planning End Date: May 29, 2020

**Table 6: Resource Analysis** 

Resource	Role	% Time Expected
Rich Nagel	Agency IT Lead	Will vary depending on stage of project x%
Len Wall	Agency IT Coordinator	
Fay Корр	TFFR Project Sponsor	
Shelly Schumacher	Retirement Subject Matter Expert	
Connie Flanagan	Agency Budget-Procurement	
PAS Consultant	Business Consultant	
Kristine Vollmer	Project Manager	

### **8 Project Authority**

#### 8.1 Assumptions and Constraints

#### 8.1.1 Assumptions

Assumptions are factors that, for planning purposes, are considered to be true, real, or certain without proof or demonstration.

The project has the following assumptions:

- RFP required for external PAS consultant
- RFP required for vendor solution

#### 8.1.2 Constraints

Constraints are defined as the state, quality, or sense of being restricted to a given course of action or inaction. An applicable restriction or limitation, either internal or external, to the project that will affect the performance of the project or a process.

The project has the following constraints:

- Cost, schedule, scope, and quality are often in conflict during projects. The sponsor elected to prioritize as follows:
  - 1. Quality
  - 2. Scope
  - 3. Cost
  - 4. Schedule
- Staff Limitations

TFFP PAS Modernization Project Charter Version: 1.0

#### 8.2 Authority/Escalation

Authority to proceed with this charter is granted to the Project Manager. The ESC and TFFR Board must approve any diversion from the scope which would materially impact the project.

The Project Manager is authorized to utilize the resources necessary to plan the project based on the information above and will be required to receive sign-off on the project plan prior to execution.

### 9 Approval

Project Charter Approval Project Sponsor Name: xx	
Project Sponsor Signature:	Date:
Agreement to Secure Required Resources Approver Name: xx	
Approver Signature:	Date:

#### TFFR BOARD MEMO Thursday, January 23, 2020

RE: TFFR Core Values Development

FROM: Rob Lech, TFFR Board President

BOARD FOCUS: Action

At the October 24, 2019 meeting of the Teachers' Fund for Retirement Board, a core values exercise was initiated to gather perspective from board members and TFFR employees regarding the values that guide the organization. Based on this information, core values statements were created for consideration. Both versions used the same survey results, with the representing more of a listing of values, while the second version is a wordier representation.

#### **Core Values Statement**

<u>Customer Satisfaction</u> and <u>Commitment to Excellence</u> which is demonstrated by our trustworthiness, accountability, and respectfulness.

<u>Strong Governance</u> and <u>Operational Effectiveness</u> through our strategic leadership, fiduciary responsibility, ethical practices, and transparency.

The Teachers' Fund for Retirement is committed to the core values of <u>customer satisfaction</u> and a <u>commitment to excellence</u> through the prioritization of trustworthiness, accountability, and respectfulness. Additionally, the Teachers' Fund for Retirement makes a commitment to the core values of <u>strong governance</u> and <u>operational effectiveness</u> through strategic leadership, fiduciary responsibility, ethical practices, and transparency.

#### Recommendation

The board has the option to consider one of the option above, suggest an edit, or create a new Core Values Statement.

#### Recommended Action:

Approval or Revision of One of the Core Values Statement



#### **MEMORANDUM**

TO: TFFR Board FROM: Fay Kopp

**DATE:** January 17, 2020

SUBJ: 2019 CAFR, PPCC Award, and Fast Facts

The <u>2019 Comprehensive Annual Financial Report (CAFR)</u> has been completed. The report contains detailed investment, financial, actuarial, and statistical information about the TFFR and SIB programs. TFFR board members were sent a link to the 2019 CAFR in December. You can view, download or print the report from the RIO website.

Please notice that the Government Finance Officers Association (GFOA) has awarded a Certificate of Achievement for Excellence in Financial Reporting to RIO for the past 21 years (see 2019 CAFR, p. 13). In order to receive the award, RIO must publish an easily readable and efficiently organized comprehensive annual financial report. The report must also satisfy both generally accepted accounting principles and applicable legal requirements. The 2019 report has been submitted to GFOA for review, and we expect it to meet the requirements for receiving the award again this year.

Also, TFFR has received the <u>Public Pension Coordinating Council (PPCC) 2019</u>
<u>Public Pension Standards Award for Administration</u> (see 2019 CAFR, p. 14). To receive the award, the retirement system must certify that it meets specific standards for a comprehensive benefit program, actuarial valuations, financial reporting, investments, and communications to members. TFFR has received an award for administration and/or funding from PPCC since 1992.

The <u>2019 TFFR Fast Facts</u> has been updated, and is available on the RIO website. This one page summary provides key actuarial, financial, and investment details about the TFFR plan.

A sincere thanks to Connie Flanagan, Shelly Schumacher and other RIO staff for their efforts in ensuring RIO reports and publications are updated, and that RIO receives the GFOA and PPCC awards each year. This underscores our ongoing effort to be accurate, accountable, and transparent in all plan reporting activities.

BOARD INFORMATION AND DISCUSSION.



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.



11,175 ACTIVE MEMBERS

**RETIRED MEMBERS** 

**EMPLOYERS** 

Member Stats	Actives	Retirees
Avg. Annual Salary/Benefit	\$60,893	\$24,804
Avg. Service Credit	11.7 yrs	27.3 yrs
Avg. Current Age	41.8 yrs	72.2 yrs

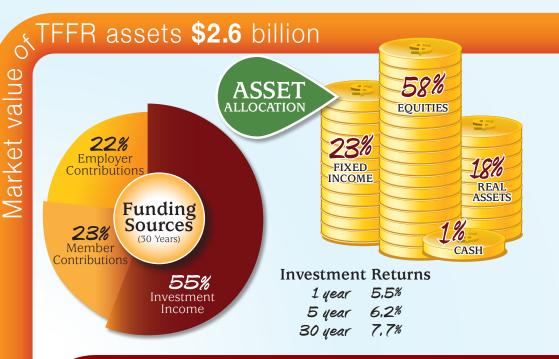
MEMBER/EMPLOYER SATISFACTION: 3.8 (4.0 Scale)

of benefits are paid to ND residents.

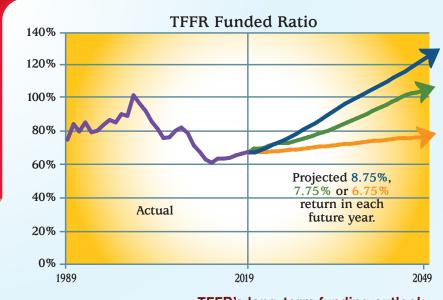
To positively impact the state's economy,

was distributed to

retirees in FY 2019.



### 66% 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 Fin	al Average Salary (FAS) X	Total Service Credit	
Death/Survivor Benefits	Yes	Yes	Yes
Refund of account value or Life Annuity	to survivor based on mem	ber's vesting status.	

#### RETIREMENT AND INVESTMENT OFFICE Internal Audit 2018-2019 1<sup>st</sup> Quarter Audit Activities Report July 1, 2019 – September 30, 2019

The audit objective of Internal Audit is twofold: first, to provide comprehensive, practical audit coverage of the Retirement and Investment Office (RIO) programs; second, to assist RIO management and the State Investment Board (SIB) by conducting special reviews or audits.

Audit coverage is based on the July 1, 2019 through June 30, 2020 work plan approved by the SIB Audit Committee. The audit activities undertaken are consistent with the Internal Audit charter and goals, and the goals of RIO. To the extent possible, our audits are being carried out in accordance with the International Standards for the Professional Practice of Internal Auditing. Audit effort is being directed to the needs of RIO and the concerns of management and the SIB Audit Committee.

#### **Investment and Agency Audit Activities**

#### Executive Limitation Audit

Each year the SIB conducts a customer satisfaction survey. The purpose of this annual survey is to determine how well the SIB, through the staff of the RIO, is meeting the expectations of its clients. This survey is part of the SIB's ongoing effort to be more responsive to the needs of their clients and to continually improve the services that are provided. Internal Audit facilitated the survey in July and August 2019 and results were provided to the SIB at their October 25, 2019 meeting.

#### External Audit Support

Internal Audit provided support to our external audit partners, CliftonLarsonAllen (CLA), during the GASB 68 Census Data Audits. Internal A notified twelve employers of an upcoming GASB 68 Census Data Audit in July 2019. CLA anticipated that GASB 68 Census Data Audit work would conclude in mid-October. In August 2019, Internal Audit sent out twenty-four employer confirmations as part of the financial statement audit.

#### • Investment Due Diligence Audit

Internal Audit developed an audit about the ongoing due diligence that is being performed on the investment managers that have been hired by the SIB. Discussions with investment staff and research went into the development of this new audit program. This audit includes the review of the procedures and documentation that is being done with the investment managers by RIO's staff. This audit was completed and issued in July 2019.

#### Administrative Expense Audit

A review of RIO's policies pertaining to travel and expenses which will be compared to OMB policy and state purchasing requirements. A sample of travel vouchers from both board members and staff will be reviewed, including in-state, out-of-state, and international travel to ensure compliance with policy and regulations. A sample of invoices (ex. rent, cleaning, etc.) will be selected. These invoices will be reviewed to ensure proper approvals were obtained, verify invoice with expense voucher, review contract, and review that payment was issued and cleared.

This audit is currently in progress.

#### **Retirement Program Audit Activities**

#### • TFFR Employer Salary Reviews

Internal Audit examines employer reporting to the Teachers' Fund for Retirement (TFFR) to determine whether retirement salaries and contributions reported for members of TFFR for accuracy with the definition of salary as it appears in the TFFR Employer Guide. Other reporting procedures reviewed during the audit process are calculation of service hours and eligibility for TFFR membership. A written report is issued after each review is completed to Retirement Services.

Status of TFFR Employer Audits as of September 30, 2019:

- o Three (3) employer audits had been completed.
- o One (1) employer audit was in progress.

#### File Maintenance

A review of changes made to TFFR member account data by Retirement and Investment Office employees is reviewed on an annual basis. Internal Audit reviews system generated (CPAS) audit tables to ensure transactions initiated by staff are expected and appropriate given an individual's role within the organization. Member accounts are also reviewed to ensure contact and demographic information has been updated correctly per Member Action Forms on file. Other procedures reviewed are change of addresses and the posting of beneficiary deaths that are not in pay status.

The audit fieldwork has been completed and a report will be issued in November 2019.

#### **Administrative Activities**

The Supervisor of Internal Audit attended the monthly RIO staff meetings, monthly RIO manager's meetings, divisional meetings, three SIB meetings, and one TFFR meeting. The Internal Audit staff member attended the monthly RIO staff meetings, divisional meetings, two TFFR meetings. The Supervisor of Internal Audit also had meetings with the new audit committee members as part of orientation to the committee.

#### Professional Development/CE/General Education

The Supervisor Internal Audit is pursuing a Master's in Business Administration with a concentration in Public Administration and completed the following courses: Statistics and Research, Business Ethics, and Foundations of Public Administration.

# NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE AUDIT SERVICES DIVISION

FISCAL YEAR 2019 -2020	FY 2019	FY 2019	FY 2020	FY 2020	FY 2020
	1st QTR	2nd QTR	3rd QTR	4th QTR	TOTAL
Audit Activities					
Retirement Program Audits:					
TFFR Employer Audit Program					283
New England-working with census data file	42				42.25
Warwick Public School District	5				5.25
Wilton	76				76.25
Jamestown Public Schools	67				66.5
General Employer Audits					
Audit Peer Reviews/TFFR Meeting(s)/Audit Planning/Audit Notifications	92				92.25
Benefits Audit - Deaths, Long-Outstanding Checks, Long-term Members	1				1
TFFR Cost Effective Benefit Payment Audit	0				0
TFFR Data Analytics	1				1
TFFR File Maintenance Audit	37				37
TFFR Purchase-Refund Audit	0				0
TFFR Task reports	56				56
Annual Salary Verification Project	30				30
Audit Continuous Improvement Project - Employer Audit Program - Census Data Audit File	0				0
Agency Administrative and Investment Audits:					
Executive Limitations Audit	10				10
Investment Due Diligence	48				48
Risk Assessment	0				0
Consulting	11				11
RIO External Auditor Assistance	41				41
Administrative Activities					
Administrative - Staff Mtgs, Time Reports, Email, Records Retention, General Reporting	170				170
Audit Committee/SIB/TFFR Attendance and Preparation	162				162
Professional Development/CE/General Education	2				2
Annual Leave, Sick Leave, and Holidays	190				190
Quarterly Total:	1040	0	0	0	1040

Total Hours for 2019-2020 4,160

 D. Thorsen Total Hours 2019-2020
 2,080

 S. Sauter Total Hours 2019-2020
 2080

#### NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE INTERNAL AUDIT SERVICES

#### TFFR EMPLOYER REVIEW OF SALARIES, SERVICE HOURS, AND ELIGIBITY OF TEACHERS REPORTED

JULY 1, 2019 TO JUNE 30, 2020

			EMPLOYER		FISCAL YEARS	TOTAL MEMBERS	REPORT DATE	TOTAL REVIEW HOURS	EMPLOYER CONTRIB'S DR(CR)	MEMBER SALARY ADJUSTED	MEMBER SERVICE CREDIT ADJUSTED	STATUS
	× &: •		Reviews Pendi Reviews in Pro Reviews Comp	gress -	(1)							
1	~	SS	Jamestown		2017-2018	212	10/16/2019	73.50	0.00	0	0	One Finding Noted: Ineligible summer salary was reported without a summer written agreement or without a continuing contract for the next fiscal year.
2	<b>&amp;</b> ;	DT	Minot		2017-2018	685						Audit notification sent 9/9/2019- received information 10/25/2019.
3	•	DT	New England	*	2016-2017	26	7/30/2019	95	(\$185.28)	2	1	Three findings noted:  Salaries were reported incorrectly: in-staff subbing was not reported, athletic supervision was not reported, and contract salary was reported incorrectly, service hours reported incorrectly, and hours were not monitored for retired teachers who returned to covered employment.
4	•	DT	Wilton	*^	2016-2017	32	8/22/2019	72	\$0.00	5	0	Three findings noted:  Salaries were reported incorrectly: athletic supervision was not reported, summer salary was reported in the incorrect fiscal year, and service hours were reported incorrectly.
					Totals	955		167	(\$185.28)	7	1	<u>-</u> -
							. <u></u>					

<sup>\*</sup> Expanded member accounts reviewed ^ Expanded number of years reviewed

NORTH DAKOTA RETIREMENT AND INVESTMENT OFFICE TFFR EMPLOYER AUDIT PROGRESS AND STATUS REPORT FOURTH AUDIT CYCLE START DATE: May 23, 2016 FOURTH AUDIT CYCLE END DATE:

	Size District ID	Auditor	Employer	Anticipated Notification Timeframe	100% or On- site	Info Received	Audit Started	Report Date	Corrections to Retirement Services	Invoice/Check Received from Retirement Services	Status	Members	Received	Report	Days b/w Info Received and Start Date (Business Days)	Days b/w Start and Report (Business Days)	Days w/Retirement Services (Business Days)	Audit Findings	Hours to Complete
END OF FISCAL YEAR 2017-2018																			
1	S 27-002	DT	ALEXANDER SCHOOL	July 2017	7/31/2017	8/15/2017	2/27/2018	10/25/2018	10/18/2018	10/25/2018	Complete	23	12	436	141	240	7	4 Findings noted	120
2	S 28-051	DT	GARRISON SCHOOL New Bus. Mgr. 11/2016	July 2017	7/31/2017	8/9/2017	8/8/2018	10/29/2018	N/A	N/A	Complete	44	8	446	261	82	0	1 Finding noted	58
3	S 39-028	DT	LIDGERWOOD SCHOOL	July 2017	7/31/2017	9/7/2017	8/1/2018	9/12/2018	N/A	N/A	Complete	45	29	370	235	42	0	1 Finding noted	46
4	S 03-029	DT	WARWICK SCHOOL - NIC REVIEW	March 2018	3/7/2018	4/5/2018	2/28/2019	5/23/2019	N/A	N/A	Complete	31	22	413	236	84	0	4 Findings noted	82
END OF FISCAL YEAR 2018-2019																			
1	S 21-009	DT	NEW ENGLAND SCHOOL	March 2018	3/9/2018	4/6/2018	5/31/2019	7/30/2019	N/A	N/A	Complete	26	21	480	301	60	0	3 Findings	95
2	S 28-001	DT	WILTON SCHOOL	March 2018	3/14/2018	4/13/2018	6/25/2019	8/22/2019	N/A	N/A	Complete	32	23	496	313	58	0	3 Findings	72
3	L 47-001	SS	JAMESTOWN SCHOOL	March 2019	3/7/2019	4/3/2019	8/27/2019	10/16/2019	N/A	10/25/2019	Complete	212	20	196	105	50	0	0 Findings	74
4	L 51-001		MINOT SCHOOL	August 2019	9/9/2019						Pending	685							
5	L 08-001		BISMARCK PUBLIC SCHOOLS	November 2019								1173							
6	M 35-005		RUGBY SCHOOL									61							
7	M 39-037		WAHPETON SCHOOL									108							
8	M 29-027		BEULAH SCHOOL									66							
9	L 30-001		MANDAN PUBLIC SCHOOLS									342							
10	M 11-041		OAKES SCHOOL									38							
11	M 45-009		SOUTH HEART SCHOOL									38							
12	M 12-001		DIVIDE SCHOOL									40							
13	M 22-001		KIDDER COUNTY SCHOOL DISTRICT									46							
								END OF	FISCAL YEAR	2019-2020								-	

# RIO Agency Update As of January 16, 2020

RIO's Deputy Executive Director and Chief Retirement Officer Fay Kopp previously announced her intent to retire from RIO effective on March 31. On January 10, RIO's Retirement Program Manager Shelly Schumacher announced her intent to retire effective on February 29. Given that we are sadly losing two of our most experienced, helpful, trusted and top performing agency leaders in the next few months, RIO management and SIB and TFFR leadership met to discuss the best ways to position our agency for continued future success. We also consulted with HRMS.

On January 9, RIO externally posted our Deputy Executive Director and Chief Retirement Officer position on our State website in addition to our RIO website and NCTR, NASRA and IFEBP websites shortly thereafter. The targeted closing date is Thursday, January 30. As of January 15, we have received five completed applications for our Deputy Executive Director / Chief Retirement Officer position.

On January 10, we internally posted our Retirement Program Manager position within our agency. I am pleased to report that we received one internal application from our most seasoned retirement benefits specialist. We intend to conduct an interview with this experienced professional between January 20<sup>th</sup> and 30<sup>th</sup>.

On January 9, RIO extended an offer to our top ranked Investment and Compliance Officer finalist. I am pleased to report that he accepted the offer the next day and we are targeting a start date of Monday, February 3<sup>rd</sup>. RIO notes that we obtained legislative approval to add one investment FTE effective July 1, 2019 (thereby increasing our agency FTE up to 20).

RIO is sad to inform the TFFR board our Investment Accountant was unable to successfully complete a probationary period effective as of January 10, 2020. RIO re-posted the Investment Accountant position on January 15<sup>th</sup> with the helpful assistance and guidance of HRMS.



#### **MEMORANDUM**

TO: TFFR Board FROM: Fay Kopp

DATE: January 17, 2020

SUBJ: 2020-21 TFFR Board Calendar

TFFR Board Policy C-2 (Board Meetings) requires the TFFR Board to conduct a minimum of six 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. TFFR meetings are typically scheduled for Thursdays at 1 pm, and have not been scheduled in August and May due to potential conflicts with school start and end dates. In the past few years, meetings have been scheduled in July, September, October, January, March and April.

SIB meetings are typically scheduled for the 4<sup>th</sup> Friday of each month, except for November which is the 3<sup>rd</sup> Friday due to Thanksgiving.

Attached are proposed TFFR meeting dates for 2020-21 **IF** the TFFR Board maintains its past schedule. If the Board is interested in meeting at a different time, day, or month, a different board meeting schedule can be developed. You may wish to discuss this option since some of the meeting months for TFFR may no longer be meeting months for SIB, requiring two separate trips for out-of-town TFFR trustees who are also on the SIB.

#### **BOARD ACTION**

Board Motion to Approve 2020-21 TFFR Board meeting schedule.



#### **DRAFT**

# TFFR and SIB Meeting Schedule 2020-2021

**July 2020** 

23 TFFR - 1:00 pm

24 TFFR Special - 8:30 am

24 SIB – 8:30 am (Educ Retreat)

January 2021

21 TFFR - 1:00 pm

22 SIB - 8:30 am

August 2020

--- TFFR - No meeting

28 SIB - 8:30 am (Tentative)

February 2021

-- TFFR - No meeting

26 SIB - 8:30 am

September 2020

24 TFFR - 1:00 pm

25 SIB - 8:30 am

March 2021

25 TFFR - 1:00 pm

26 SIB - 8:30 am (Tentative)

October 2020

22 TFFR - 1:00 pm

23 SIB - 8:30 am

April 2021

22 TFFR - 1:00 pm

23 SIB - 8:30 am

November 2020\*

-- TFFR - No meeting

20 SIB - 8:30 am

May 2021

TFFR - No meeting

28 SIB - 8:30 am

December 2020

No meetings

June 2021

No meetings

#### Notes:

- 1) TFFR Board Policy C-2 (Board Meetings) requires TFFR to conduct a minimum of 6 meetings per year, which are generally scheduled for the day preceding the SIB meetings, unless a different day is determined.
- 2) SIB meetings are scheduled for 4<sup>th</sup> Friday of each month, except for November\* which is 3<sup>rd</sup> Friday due to Thanksgiving. SIB is planning to meet 10 times in 2020-21, but may reduce to 8 meetings (possibly not meet in August and March).



#### **CONSENT AGENDA**

**Employer Reporting Reviews** Wilton and Jamestown attached

Disability #2020-1, 2020-2 Confidential – to follow separately

QDRO # 2020-1, 2020-2 Confidential – to follow separately

Confidential member information will be sent to Board members only, through a secure link.



# TFFR Employer Reporting Review Report Issued September 23, 2019

#### **Wilton School District**

July 1, 2015 – June 30, 2017

#### **Background**

Employers play a vital role in the successful operation of the Teachers' Fund for Retirement (TFFR) program for North Dakota educators. Employers must enroll eligible teachers and administrators for TFFR membership, report service hours, report and remit member and employer retirement contributions based on TFFR eligible retirement salary, complete necessary forms, distribute retirement information, and provide other information needed for TFFR to accurately and efficiently process retirement, refund, disability, and death benefits.

The Internal Audit (IA) division of the Retirement and Investment Office (RIO) has developed a program to review the required TFFR reports and payments that are made by school districts and other TFFR participating employers as provided for in NDCC 15-39.1. In particular, the program is designed to check the accuracy of retirement salaries, contributions, and service credit reported by employers. This program is in conjunction with and in addition to the audit performed by RIO's external auditors.

Upon completion, TFFR Employer Reporting Review reports are filed with TFFR Management who are responsible for notifying Employers of any errors, corrections, or recommendations. Reports are also filed with the TFFR Board and the Audit Committee of the State Investment Board (SIB). TFFR Employer Reporting Review reports are subject to ND open records and open meetings laws (except for confidential member information contained in report schedules) and are available on the public website with other TFFR and SIB Audit Committee meeting materials.

#### **Wilton School District Review**

Internal Audit conducted a TFFR Employer Reporting Review of the Wilton School District to test the accuracy of retirement salaries, contributions, and service credit reported by the district. The employer's master contracts, employer payment plan, salary schedules, extra-curricular payment schedules, individual teacher contracts, and payroll records were used in the review. Other reporting procedures reviewed during the review process included the calculation of service hours and eligibility for TFFR membership.

- Phase I Reviewed the district's reporting history, selected a sample of members for the salary review, requested information from the Employer.
- Phase II Completed the review of information received from the Employer to determine whether salary reported was eligible, members were eligible, and service hours were accurate.

Based on this review, TFFR is now issuing the Wilton School District this final TFFR Employer Reporting Review report which includes errors, corrections, and recommendations.

#### **Results Summary**

There were three Employer errors identified in the Wilton review (see below). As a result of these three Employer errors, there are seven member accounts requiring corrections. Details regarding the member account corrections will be sent to the Wilton Business Manager.

#### **Errors, Corrections and Recommendations**

**Error 1:** The Employer did not report eligible athletic supervision salary for one member. The error was isolated and did not affect other members in the District.

#### Correction/Recommendation:

Retirement Services will not correct the immaterial error. Retirement Services recommends that the Wilton business manager review the payroll code for athletic supervision to make sure these payments are reported to TFFR in the future.

**Error 2:** The Employer reported summer salary in the wrong fiscal year during the 2015/16, 2016/17, 2017/18, 2018/19, and 2019/20 fiscal years for seven TFFR members. Two additional TFFR members had driver education salary reported in 2016/17 and the Employer could not provide documentation on the dates that the two members taught Driver's Education. Therefore, TFFR was not able to determine if the salary was reported in the correct fiscal year. TFFR must be reported in the fiscal year earned, not when paid.

#### Correction/Recommendation:

Retirement Services will correct the salaries and contributions for the seven Wilton TFFR members included on the Schedule for Changes in Salaries and Contributions. This will result in moving salary and contributions between fiscal school years. Retirement Services also recommends that Wilton School include dates of employment on future driver education contracts.

**Error 3:** The Employer reported service hours incorrectly for two part-time teachers.

#### Correction/Recommendation:

Retirement Services will not correct the service hours for the two part-time teachers since they already earned a full year of service with another employer. Retirement Services recommends Wilton School establish procedures to monitor service hours and correctly report service hours for part time teachers in the future.

**Report Distribution:** 

Misty Schafer, Wilton School Board President Andrew Jordan, Wilton Superintendent Jenna Kirchmeier, Wilton Business Manager TFFR Board 28001/840



# TFFR Employer Reporting Review Report Issued October 29, 2019

#### Jamestown School District

July 1, 2016 - June 30, 2018

#### **Background**

Employers play a vital role in the successful operation of the Teachers' Fund for Retirement (TFFR) program for North Dakota educators. Employers must enroll eligible teachers and administrators for TFFR membership, report service hours, report and remit member and employer retirement contributions based on TFFR eligible retirement salary, complete necessary forms, distribute retirement information, and provide other information needed for TFFR to accurately and efficiently process retirement, refund, disability, and death benefits.

The Internal Audit (IA) division of the Retirement and Investment Office (RIO) has developed a program to review the required TFFR reports and payments that are made by school districts and other TFFR participating employers as provided for in NDCC 15-39.1. In particular, the program is designed to check the accuracy of retirement salaries, contributions, and service credit reported by employers. This program is in conjunction with and in addition to the audit performed by RIO's external auditors.

Upon completion, TFFR Employer Reporting Review reports are filed with TFFR Management who is responsible for issuing any errors, corrections, or recommendations to the Employer. Reports are also filed with the TFFR Board and the Audit Committee of the State Investment Board (SIB). TFFR Employer Reporting Review reports are subject to ND open records and open meetings laws (except for confidential member information contained in report schedules) and are available on the public website with other TFFR and SIB Audit Committee meeting materials.

#### **Jamestown School District Review**

Internal Audit conducted a TFFR Employer Reporting Review of the Jamestown School District to test the accuracy of retirement salaries, contributions, and service credit reported by the district. The employer's master contracts, employer payment plan, salary schedules, extra-curricular payment schedules, individual teacher contracts, and payroll records were used in the review. Other reporting procedures reviewed during the review process included the calculation of service hours and eligibility for TFFR membership.

- Phase I Reviewed the district's reporting history, selected a sample of members for the salary review, requested information from the Employer.
- Phase II Completed the review of information received from the Employer to determine whether salary reported was eligible, members were eligible, and service hours were accurate.

Based on this review, TFFR is now issuing the Jamestown School District this final TFFR Employer Reporting Review report which includes errors, corrections, and recommendations.

#### **Results Summary**

There was one Employer error identified in the Jamestown review (see below). No correction will be made as the amount was immaterial. Details of the member accounts reviewed will be sent to the Jamestown Business Manager.

#### **Errors, Corrections, and Recommendations**

**Error 1:** The Employer reported ineligible summer basketball camp salary for one member. The member did not have a summer or continuing contract with the Employer.

#### Correction/Recommendation:

Retirement Services will not correct the over reported salary and contributions for the one Jamestown TFFR member. The Jamestown Business Manager should monitor summer employment to make sure the individuals have a written agreement or continuing contract in place before reporting the salary to TFFR.

**Report Distribution:** 

Jennifer Schmidt, Jamestown School Board President Dr. Rob Lech, Jamestown Superintendent Sally Ost, Jamestown Business Manager TFFR Board 47001/840



# NDTFFR Board Reading January 2020

Overview of Public Pension Plan Governance. National Association of State Retirement Administrators (NASRA), November 2019.

<u>State and Local Government Spending on Public Employee Retirement Systems.</u>

National Association of State Retirement Administrators (NASRA), December 2019.

Retiree Cost of Living Adjustments. National Association of State Retirement Administrators (NASRA), November 2019.

<u>Peaceful Coexistence: The Facts About Pensions and Education Funding.</u> National Council on Public Employee Retirement Systems (NCPERS), October 2019.

<u>Proactive Pension Management, An Elected Official's Guide to Variable Benefit and Contribution Arrangements.</u> Center for State & Local Government Excellence (CSLGE) and AARP, September 2019.

<u>State and Local Employee Views on their Jobs, Pay and Benefits.</u> National Institute on Retirement Security (NIRS), November 2019

State Pension Funds Reduce Assumed Rates of Return. PEW Trusts, December 2019.

ND Teachers' Fund for Retirement Board Meeting Agenda January 23, 2020

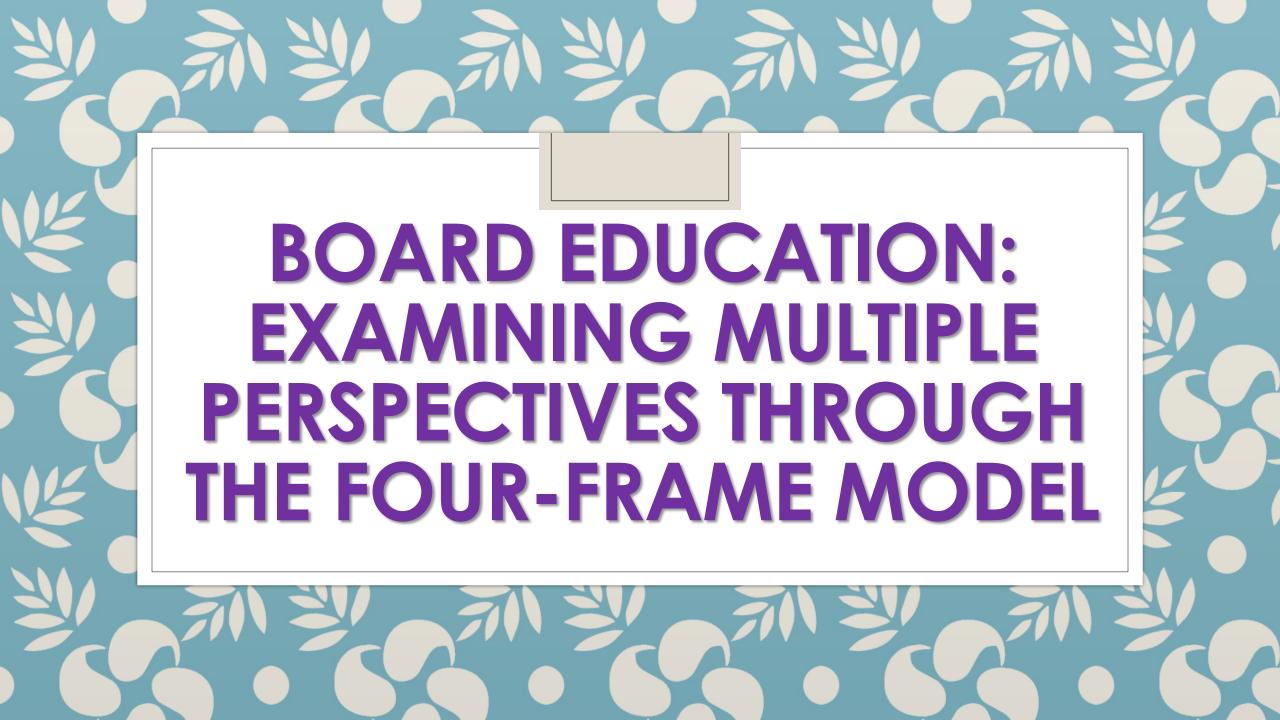
Page 2

#### **BOARD RETREAT** – 1:00 pm (approximately)

- 1. Retreat Introduction and Purpose Pres. Lech
- 2. Review of Mission, Vision, and Values Statements Pres. Lech
- 3. **Perspectives Decision-making Exercise** Pres. Lech
- 4. Revised Board Governance Manual Highlights Cody Mickelson and Committee
- 5. **Board Education Competencies** Pres. Lech
- 6. **TFFR's Image Communication Ideas** Mel Olson
- 7. Trustee Open Forum Pres. Lech
- 8. Adjournment

**Next TFFR Board Meeting: March 26, 2020** 

Any individual requiring an auxiliary aid or service should contact the Retirement and Investment Office at 701.328.9885 at least three (3) days prior to the scheduled meeting.



# Four-Frame Model Overview

- The idea that understanding multiple perspectives prior to making a decision is certainly not a new idea in governance. The Four-Frame model provides a framework for decision-makers to "reframe" an issue to allow a better understanding of all perspectives.
- The Four Frames are: Structural, Human Resource, Political, and Symbolic.
- On your own, please review the primer with the Frame Basics and Frame Assumptions.
   With a shoulder partner, share the frame that best matches the perspective you feel most comfortable with and why that most connects with you.

# Structural Frame

- The Structural frame is analogous to a factory or a machine.
- It is supported in disciplines, such as Sociology and Management Sciences
- The central concepts of the Structural frame are roles, goals, strategies and policies.
- The image of leadership is social architecture.
- The basic leadership challenge is to attune the structure of the organization to the task, technology, and environment.

# Human Resource Frame

- The Human Resource frame is analogous to a family.
- It is supported in disciplines, such as Psychology
- The central concepts of the Human Resource frame are needs, skills, and relationships.
- The image of leadership is empowerment.
- The basic leadership challenge is to align organizational and human needs.

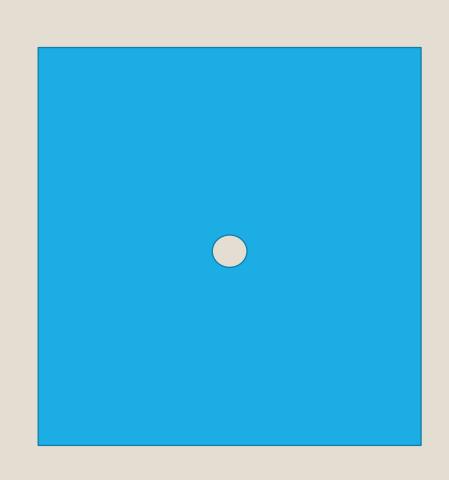
### Political Frame

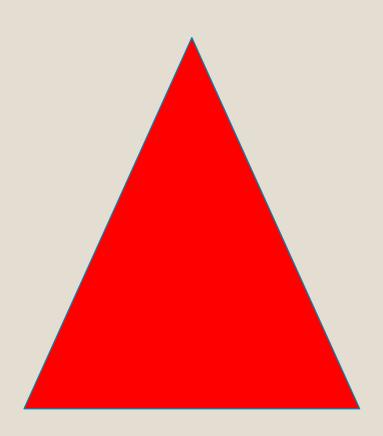
- The Political frame is analogous to a jungle.
- It is supported in disciplines, such as Political Science
- The central concepts of the Political frame are ranges of power, conflict, competition, and politics.
- The images of leadership are advocacy and political savvy.
- The basic leadership challenge is to develop an agenda and power base.

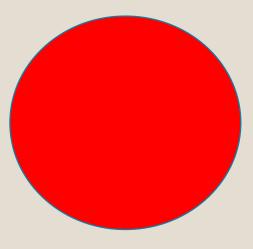
# Symbolic Frame

- The Symbolic frame is analogous to a carnival, temple or theatre.
- It is supported in disciplines, such as Anthropology and Institutional Theory
- The central concepts of the Symbolic frame are culture, ritual, ceremony, and stories
- The image of leadership is inspiration.
- The basic leadership challenge is to create faith, belief, and meaning.



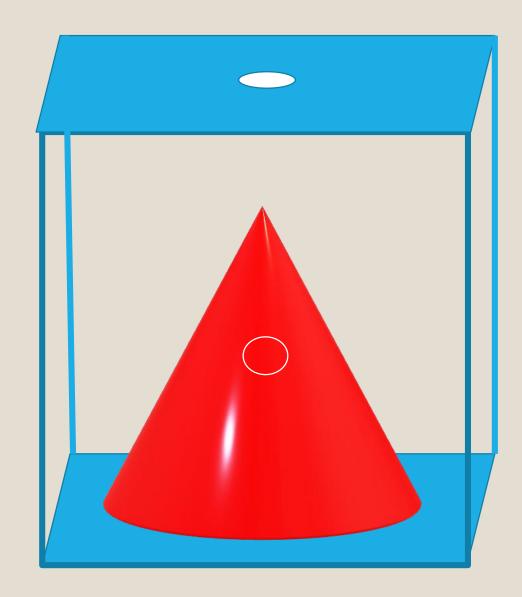








The real picture: A cone in a box!



## Necessity of Seeing All Perspectives

- While looking at only one perspective provides you with a response that is "right" from that perspective, it doesn't represent the full figure. The figure is actually a 3D box with a hole on top and a hole on the side. Inside the box is red cone.
- The first perspective only shows the outside of the box (sideview).
- The second perspective only shows one plane of the box (top view).
- The third perspective looks only through the hole in the side, so the cone appears to be only a triangle.
- The fourth perspective looks only through the hole in the top, so the cone appears to be only a circle.

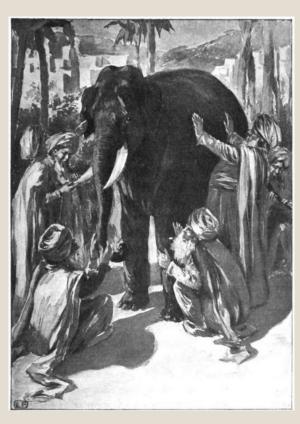
## Board Members Must Be(come) Comfortable with Being Uncomfortable

- We all have a more natural connection to one or possibly two of the frames. Similarly, there are also frame(s) that make us somewhat uncomfortable.
- As board members, we must become comfortable with being uncomfortable. If we are to make the best possible decision for TFFR members across ND, we need to be aware and respectful of all frames. The best decisions are made when decision-makers consider perspectives of all frames. While challenging, this is important to making the best possible decision.

## Roles of Board

 As a diverse board, we are representative of different perspectives (teachers – active and retired, administrators - active and retired, and elected officials). We do NOT directly represent those stakeholders. Our fiduciary duty means that we should consider and share those perspectives and ultimately make the decision that is best for the fund.

# The Blind Man and the Elephant



#### Moral:

So oft in theologic wars,
The disputants, I ween,
Rail on in utter ignorance
Of what each other mean,
And prate about an Elephant
Not one of them has seen!

"The Blind Men and the Elephant" by John Godfrey Saxe (1816–1887)



#### **MEMORANDUM**

TO: TFFR Board

FROM: Fay Kopp and Cody Mickelson, Committee Chair

**DATE:** January 17, 2020

SUBJ: Governance & Policy Review (GPR) Committee Update

The TFFR Governance and Policy Review Committee (Cody Mickelson, Chair; Rob Lech, Board President; and Mike Burton, Board Vice President) has had five meetings since the Committee was formed last spring (May 30, July 2, September 17, December 11, and January 6). Committee members and staff have been actively engaged in very productive and insightful discussions regarding board governance policies and best practices.

This comprehensive review of current board governance policies and bylaws, by the Committee, has resulted in the attached revised TFFR Board Governance Manual. At the Board Retreat, Cody will present Governance Manual Highlights.

Additional time to discuss the Manual will be scheduled for the March 26 Board meeting, which would comprise the Introduction and 1<sup>st</sup> Reading of the Board Governance policies.

Prior to that time, the revised Manual will be submitted to the Attorney General's Office for legal review. Any suggested changes will be reviewed with the Committee prior to the 1<sup>st</sup> reading at the March board meeting.

# ND Teachers' Fund for Retirement (NDTFFR) Board Program Manual Table of Contents

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**SECTION II: TFFR Program Policies** 

### ND TEACHERS' FUND FOR RETIREMENT (NDTFFR) BOARD PROGRAM MANUAL

#### **SECTION I: TFFR GOVERNANCE POLICIES**

#### A) Introduction and Purpose

The ND Teachers' Fund for Retirement (TFFR) Board of Trustees is dedicated to ethically serving the members and stakeholders of the TFFR pension plan, and ensuring that the plan is effectively managed. The Board is committed to excellence in Board governance. An effective governance structure is essential to fulfilling fiduciary duties and Board responsibilities in accordance with the highest standards of professional responsibility, accountability, and transparency.

The Board developed and adopted this TFFR Board Program Manual to establish the framework within which the Board intends to set governance and oversight policy.

The purpose of the Manual is to:

- 1. Provide orientation material and exhibits for new TFFR trustees and executive staff as to the roles, responsibilities, policies, procedures, and activities in the governance and oversight of the TFFR plan.
- 2. Serve as an ongoing reference manual for current trustees and staff.
- 3. Describe the roles and responsibilities of the Board of Trustees as a Board, individual Trustees, Committees, Staff, and Service Providers.
- 4. Describe the relationship between the TFFR Board, the State Investment Board (SIB), and the Retirement and Investment Office (RIO) as it relates to the administration of the TFFR plan.
- 5. Establish a Board meeting protocol that outlines the manner in which the Board will conduct itself to enable the Board to carry out its responsibilities as effectively and efficiently as possible, and in accordance with state and federal law.
- 6. Facilitate the organized, efficient, and cohesive functioning of the Board.
- 7. Facilitate effective communication among the Trustees, staff, plan members, employers, and other external parties.
- 8. Define responsibility and accountability for hiring and monitoring outside service providers.

- 9. Document the method by which the Board will conduct a Board self- assessment.
- 10. Document Board governance and program policies, administrative rules, and state statutes governing the plan.

The TFFR Board Program Manual is an evolving set of documents that reflect the Board's current governance practices. The Manual will be reviewed by the Board on an annual basis. Board trustees, the Deputy Executive Director-Chief Retirement Officer, and/or legal counsel may recommend modifications for Board consideration and approval.

The contents of the TFFR Board Program Manual are intended to be consistent with state and federal laws, rules, and regulations. If there is any conflict between the provisions included in this Manual and state or federal law, the law prevails.

#### **B.** TFFR Program Overview

#### 1. History

The ND Teachers' Fund for Retirement (NDTFFR) (formerly the ND Teachers' Insurance and Retirement Fund or NDTIRF) was created by the ND Legislature in 1913. The defined benefit plan provides lifetime retirement, disability and survivor benefits for ND public school educators.

Membership participation, benefits provided, contribution requirements, and plan provisions are described in <u>State Law</u> and the <u>TFFR Member Handbook</u>.

#### 2. Legal Framework

ND Century Code (NDCC) Chapter 15-39.1 contains the legal authority and statutory language governing the plan, and is supplemented by ND Administrative Code (NDAC) Title 82.

TFFR is a qualified (tax exempt) defined benefit public pension plan covered under Section 401(a) of the Internal Revenue Code (IRC).

#### C. TFFR Mission, Vision, and Values

#### 1. Mission

TFFR administers a comprehensive retirement program that provides North Dakota public educators with a foundation for retirement security.

#### 2. Vision

TFFR's vision is to be a trusted leader in the administration of a financially sound retirement program for North Dakota educators by providing exceptional customer service, professional plan management, and organizational effectiveness by adhering to the principles of good governance, transparency, and accountability.

#### 3. Core Values - currently in development

#### D. TFFR Board Authority, Composition, Appointment, Terms

#### 1. Board Authority

TFFR is governed by a 7-member <u>TFFR Board of Trustees</u> who are charged with oversight, policy making, and administration of the TFFR retirement program as provided under <u>NDCC 15-39.1-05</u>. The trustees are fiduciaries, and as such have the highest standard of law placed on them.

#### 2. Board Composition

The Board is composed of seven trustees consisting of:

Two elected state officials:

- State Treasurer (ex officio)
- State Superintendent of Public Instruction (ex officio)

Five members appointed by the Governor:

- Two board members who are actively employed as elementary or secondary teachers in full-time positions not classified as school administrators. The appointment is made from a list of three nominees submitted to the Governor by ND United (NDU).
- One board member who is actively employed as a full-time school administrator. The appointment is made from a list of three nominees submitted to the Governor by the ND Council of Educational Leaders (NDCEL).
- Two board members who are retired members of the Fund. The appointment is made from a list of three nominees submitted to the Governor by the ND Retired Teachers Association (NDRTA).

#### 3. Board Trustee Desired Attributes

Board trustees should possess or develop the following desired attributes in order to become an effective board trustee.

- a. Unwaveringly ethical
- b. Perpetually inquisitive
- c. Knowledgeable about the membership
- d. Ability to understand complex actuarial, financial, and investment concepts
- e. Committed to strong board governance practices
- f. Diligent and willing to spend time to learn best pension practices
- g. Professional, respectful, and courteous demeanor
- h. Proactive and responsive approach to member needs
- Committed and engaged
- j. Active listening and communication skills
- k. Critical thinking skills
- I. Ability to make fair and timely decisions
- m. Open and accountable to stakeholders

#### 4. Board Appointment Process

When a TFFR Board trustee term expires or vacancy occurs, the Chief Retirement Officer will notify the Governor's Office and the applicable stakeholder group (ND United, ND Council of Educational Leaders, or ND Retired Teachers Association) of the vacancy. Board trustee desired attributes and board responsibilities will be provided to the Governor's Office and applicable stakeholder group to assist them in making board nominee or trustee selection.

NDU, NDCEL, or NDRTA will submit a list of three Board nominees to the Governor's Office, as required by state law. Board nominees must complete the "Application for Boards and Commissions" from the Governor's Office in order to be considered for TFFR Board appointment. This application contains information about the nominee's background, education, experience, financial disclosures, and references.

After reviewing the Board nominee applications, the Governor will make the trustee appointment, and will notify the selected nominee and the Chief Retirement Officer. The Governor's Office will send the newly appointed trustee a Certificate of Appointment which provides formal documentation of appointment to the TFFR Board. The Governor's office will also send an Oath of Office and Statement of Intent which must be signed by the trustee and returned to the Governor's Office. These documents confirm the trustee's appointment is official. Trustees can then carry out their official duties as a Board member and can be paid for authorized expenses.

#### 5. Trustee Terms, Resignations and Vacancies

The State Treasurer is an ex-officio member of the Board, and serves on the Board throughout the term of the State Treasurer's elected position. A lawful Deputy of the State Treasurer may act with the full authority of the State Treasurer, and may vote when serving as the State Treasurer's official designee on the Board. (Confirm with Legal?)

The State Superintendent of Public Instruction is an ex-officio member of the Board, and serves on the Board throughout the term of the State Superintendent's elected position. The State Superintendent may designate an individual to attend and participate in Board meetings, however the designee may not vote since the designee does not have the lawful authority to vote on behalf of the State Superintendent. (Confirm with Legal?)

Each of the five Governor-appointed trustees are appointed for a term of five years. The terms of office are staggered with the five appointed trustee positions beginning July 1 and expiring on June 30 of each successive year. There is no limit to the number of terms a trustee may serve on the Board. Trustees may remain on the Board until they are reappointed or until their successors are appointed. (Confirm with Legal?)

Appointed active trustees who terminate employment may not continue to serve on the Board as active teacher representative. Appointed active and retired trustees may resign from the Board by providing written notice to the Governor and the TFFR Board.

Appointed trustee position vacancies which occur before the expiration of a term due to the trustee's resignation, termination, removal, retirement, disability, death, or other reason, will be filled by the Governor, and the new appointee will complete the term for which the original trustee was selected. (Confirm with Legal that the Governor can remove the appointed trustees from the TFFR Board? If new Governor is elected, what is impact on current Governor appointed trustees.)

#### E. TFFR Board - Duties and Responsibilities

#### 1. Fiduciary Duties (discuss with Legal)

TFFR trustees are fiduciaries, and as such, have the highest standard of law placed upon them. Trustees are expected to discharge their duties with the utmost honesty and integrity and to act solely in the interest of the members, retirees, and beneficiaries for the exclusive purpose of providing benefits and paying reasonable expenses of administering the TFFR program.

Fiduciary duties include the following:

- a. Duty of loyalty. The obligation to act for the exclusive benefit of the plan participants and beneficiaries. Regardless of how trustees are selected, trustees must put the interests of all plan participants and beneficiaries above their own interests or those of any third parties.
- b. Duty of care. The responsibility to administer the plan efficiently and properly. The duty of care includes consideration and monitoring of the financial sustainability of funding practices and the effective administration of plan benefits in compliance with applicable laws.
- c. Duty of prudence. The obligation to act prudently in exercising power or discretion over the interests that are subject of the fiduciary relationship. A trustee should act in a manner consistent with a reasonably prudent person exercising care, skill, and caution.

#### 2.Board Responsibilities

The TFFR Board of Trustees is responsible for oversight, policy making, and administration of the TFFR plan as provided under NDCC 15-39.1-05.2.

Board responsibilities include:

- a. Establish and monitor policies for the administration of the TFFR plan.
- b. Set legislative priorities and positions, submit legislative proposals, and monitor legislation affecting the plan.
- c. Develop and adopt administrative rules and board policies to administer the plan.
- d. Establish and monitor TFFR plan funding policy and progress.
- e. Establish and monitor TFFR plan investment policies and asset allocation under NDCC 21-10-02.1.
- f. Select and monitor the performance of consultants, advisors, and service providers for the plan.
- g. Select and monitor actuarial consultant(s) to provide actuarial and technical consulting services including: annual actuarial valuations and GASB reports, periodic actuarial experience studies, independent actuarial audits, and other special projects and studies; develop and monitor actuarial funding policy, assumptions, methods, and factors; analyze proposed legislative changes; and advise the Board on actuarial, technical, and administrative issues.
- h. Select and monitor medical consultant to conduct disability reviews.
- i. Select and monitor investment consultant to perform periodic asset allocation and liability studies.
- j. Monitor and pay and plan benefits, consulting fees, administrative and investment expenditures.
- k. Administer the plan so as to maintain the plan's qualified status under Internal Revenue Code requirements.
- I. Review and approve applications for disability retirement, Qualified Domestic Relations Orders (QDROs), and other special benefit payments.
- m. Review and decide board appeals.

- n. Determine appropriate levels of service and monitor outreach programs provided to members and employers.
- o. Monitor RIO budget, expenditures, financial reporting system, and financial audit.
- p. Monitor RIO information technology systems, projects, and security.
- q. Select TFFR representatives to serve on SIB and monitor investment program activities and fund performance.
- r. Select TFFR representative to serve on SIB Audit Committee and monitor audit program activities.
- s. Inform the State Investment Board (SIB), which is the administrative board of the Retirement and Investment Office (RIO), of the TFFR program needs, policies, and services expected to be provided through RIO.
- t. Participate with the RIO Executive Director in the hiring, evaluation, and termination of the TFFR Chief Retirement Officer RIO Deputy Executive Director.

#### F. TFFR Board Trustees and Officers – Duties and Responsibilities

#### 1.TFFR Trustee

Trustees must be willing and able to devote the necessary time to fulfill their duties on the Board. This commitment includes the responsibility to:

- a. Act as a member of a seven-member Board of Trustees to provide leadership, oversee plan administration, and set the strategic direction for the TFFR program.
- b. Prepare for and attend Board and Committee meetings.
- c. Be an informed and active member of the Board, fully participating in the decisions and actions of the Board and its Committees by making independent assessments and reasonable judgments.
- d. Acquire and maintain the knowledge and skills necessary to perform trustee duties.
- e. Follow Board policies and procedures; applicable state and federal laws and rules.
- f. Be accurate when communicating with other trustees, members, beneficiaries, interested parties, the public, and RIO staff.
- g. Act collegially with the other trustees and staff in the conduct of TFFR business.
- h. Bring to the attention of the Board matters of concern that affect the TFFR plan.

- i. Seek the advice of the Chief Retirement Officer, legal advisor, and other trustees when necessary to fulfill their fiduciary duties.
- j. Comply with the Board's Code of Conduct and Ethics.
- k. Adhere to state law regarding confidentiality of member records and benefits.
- I. Adhere to state law regarding Open Meetings and Open Records.
- m. Evaluate trustee's individual performance and the Board's performance as a whole.

#### 2.TFFR Board President

The Board President's principal role is to lead the Board in the conduct of Board business by managing the affairs of the Board and ensuring the integrity of the Board's process. The Board President must be willing and able to devote the time necessary to fulfill these special responsibilities. This commitment includes the responsibility to:

- a. Convene and preside over all Board meetings in a collegial, fair, and efficient manner following Board policies, procedures, and applicable state laws and rules.
- b. Review and approve the agenda for regular and special Board meetings.
- c. Ensure proper and timely flow of adequate information to the Board.
- d. Solicit input from trustees regarding matters before the Board.
- e. Ensure adequate time is provided for effective study and discussion of business.
- f. Make Committee assignments.
- g. Execute documents and other legal instruments on behalf of TFFR as required by state law, authorized by the Board, or determined in conjunction with the Chief Retirement Officer.
- h. Represent the Board to outside parties and organizations.
- i. Lead the Board's self-assessment and self-development processes.
- i. Perform all other duties identified by the Board.

#### 3.TFFR Board Vice President

The Vice President will perform the duties of the President in the absence of the President.

#### 4.TFFR Representatives to SIB

The TFFR Board selects three trustees to represent TFFR on the SIB. TFFR representatives to the SIB must include one active teacher, one active administrator, and one retired member.

The TFFR representatives to the SIB have the same authority and responsibilities as do other SIB trustees as provided in <a href="NDCC 21-10">NDCC 21-10</a> and outlined in the <a href="SIB Governance">SIB Governance</a> Manual.

#### 5. Alternate TFFR Representative to SIB

The TFFR Board selects one alternate TFFR representative to serve on the SIB.

The Alternate TFFR representative to the SIB will perform the duties of the regular TFFR representative on the SIB in the absence of that trustee.

#### 6.TFFR Representative to SIB Audit Committee

The TFFR Board selects one TFFR representative on the SIB to serve on the SIB Audit Committee, subject to official appointment by SIB Chair.

The TFFR representative on the SIB Audit Committee has the same authority and responsibilities as do other trustees on the SIB Audit Committee which are outlined in the SIB Audit Committee Charter.

#### **G. State Investment Board**

The ND State Investment Board (SIB) is responsible for oversight, policy making, and administration of the SIB investment program as provided under NDCC 21-10. As such, TFFR assets, as well as other state pension, insurance, and other state funds, are invested by the SIB.

The SIB is composed of twelve trustees consisting of:

- Lt. Governor of the State of ND
- State Treasurer
- State Insurance Commissioner

- Director of Workforce Safety & Insurance
- Commissioner of University and School Lands
- Three TFFR trustees
- Three PERS trustees
- One Legacy & Budget Stabilization Fund Advisory Board trustee (nonvoting)

Investment of TFFR assets is based on the asset allocation and investment policy statement approved by the TFFR Board and accepted by the SIB. Funds are invested following the "prudent investor rule" and must be invested exclusively for the benefit of TFFR members.

The SIB is also the governing body of the ND Retirement and Investment Office (RIO).

#### H. Retirement and Investment Office

The ND Retirement and Investment Office (RIO) coordinates the activities of the TFFR retirement program and SIB investment program as provided under NDCC 54-52.5. The governing body of the RIO is the SIB, although the TFFR Board and SIB each maintain their legal identities and authority under state law.

RIO is responsible for developing the agency budget, providing the staff, and allocating necessary resources to administer both the TFFR and SIB programs, subject to budget approval by the Legislature. The TFFR Board and SIB provide input to RIO Executive Management to ensure retirement and investment program needs, policies, and services are considered.

RIO Executive Director - Chief Investment Officer is the administrator of RIO and is responsible for the SIB investment program. RIO Deputy Executive Director – Chief Retirement Officer assists in the administration of RIO, and is responsible for the TFFR retirement program.

RIO is an administrative agency of the State of North Dakota and operates from an office located at 3442 East Century Avenue in Bismarck, North Dakota.

#### I. Delegation to Staff and Organizational Structure

The TFFR Board delegates administration of the TFFR program to the RIO Deputy Executive Director - TFFR Chief Retirement Officer, subject to approval by the RIO Executive Director.

The RIO Deputy Executive Director – TFFR Chief Retirement Officer reports directly to the RIO Executive Director – Chief Investment Officer and functionally to the TFFR Board. See RIO Organizational Chart (Exhibit XX).

#### J. Staff - Duties and Responsibilities

#### 1.Deputy Executive Director – Chief Retirement Officer

The Deputy Executive Director – Chief Retirement Officer is hired by the RIO Executive Director – Chief Investment Officer, serves in an unclassified position, and is paid such salary as the Executive Director determines. The Board delegates responsibility for administering the TFFR program to the Deputy Executive Director – Chief Retirement Officer, subject to approval by the Executive Director. The Board will participate with the Executive Director in the hiring, evaluation, and termination of the Deputy Executive Director-Chief Retirement Officer.

#### Duties and responsibilities include:

- a. Assist the Executive Director in planning, supervising, and directing overall RIO programs in accordance with the SIB governance policies and state laws and rules, and represent the Executive Director in his/her absence.
- b. Administer the TFFR retirement program in accordance with governing statutes, rules, and TFFR Board policies and perform related work as assigned by the TFFR Board.
- c. Develop annual and long-range plans for the retirement program.
- d. Interpret state and federal law which governs the retirement program.
- e. Develop administrative rules, policies, and procedures necessary to administer the program.
- f. Represent the TFFR Board on retirement program issues.
- g. Direct TFFR legislative agenda and process.
- h. Maintain effective relationships with TFFR members, beneficiaries, employers, state officials, legislators and legislative committees, member and employer stakeholder groups, the media, and the public at large.
- i. Work with actuarial consultant, medical consultant, legal counsel, auditor, investment consultant, and other service providers in administering the plan.
- j. Assist in the formulation of RIO's budget, including staffing needs, program costs, operating costs, information technology requirements, and resources to assure that retirement program obligations are met.
- k. Develop Board and Committee meeting agendas and materials, attend all Board and Committee meetings, responsible for meeting minutes, required notices, procedures, and applicable rules and regulations of the fund.

- I. Provide the Board with relevant, appropriate, and timely information to enable it to properly carry out its oversight responsibilities.
- m. Advise the Board on significant issues, problems or developments pertaining to the plan, and provide recommended courses of action as appropriate. regarding Board policy or action.
- n. Maintain the data, records, and files of TFFR members, beneficiaries, and employers including membership data, salary, service, contributions, and benefit payments.
- o. Ensure the accurate and timely collection of member and employer contributions, maintenance of member accounts, processing of account claims, and payment of pension, disability, death and refund benefits as allowed under state law.
- p. In the absence of the Deputy Executive Director-Chief Retirement Officer, the Retirement Program Manager will be responsible for the administration of the TFFR program.

#### 2.Executive Director - Chief Investment Officer

The Executive Director – Chief Investment officer (ED-CIO) is hired by the SIB, serves in an unclassified position at the SIB's pleasure, and is paid such salary as the SIB determines.

Duties and Responsibilities include:

- a. Oversee planning, supervising, and directing overall RIO programs in accordance with SIB governance policies and state laws and rules.
- b. Administer the investment program of RIO and perform related work as assigned by the SIB.
- c. Direct the preparation and execution of the RIO budget and legislative agenda and evaluates and monitors financial and operational programs.
- d. Represent RIO, promote RIO programs, and has the authority and responsibility to carry out the day-to-day administrative duties for RIO.
- e. Attend all meetings of the SIB and TFFR Board.
- f. Hire staff as necessary to carry out the responsibilities of RIO.
- g. The TFFR Board will participate with the Executive Director in the hiring, evaluation, and termination of the Deputy Executive Director-Chief Retirement Officer.

#### K. Service Providers - Duties and Responsibilities

#### 1.Actuary

The TFFR Board is responsible for selecting and monitoring the actuarial consultant for the plan.

Duties and responsibilities include:

- a. Provide actuarial and technical consulting services for the plan.
- b. Prepare annual actuarial valuation and GASB reports, periodic actuarial experience studies, and other special projects and reports.
- c. Develop and monitor actuarial funding policy, assumptions, methods, factors, etc.
- d. Analyze proposed legislative changes.
- e. Advise the Board on actuarial, technical, and administrative issues.

The Board utilizes a request for proposal (RFP) process to periodically select and approve the plan's consulting actuary. It is the Board's intent to issue RFP's every 6 to 10 years, however the timing may be adjusted at the Board's discretion.

The Board monitors actuarial costs and services, and may extend the actuarial consulting service contract for 2 year terms, as approved by the TFFR Board.

The Board also hires an independent actuary to periodically perform an actuarial audit of the plan's consulting actuary. The Board utilizes an RFP process to select and approve the plan's actuarial auditor.

#### 2.Medical Consultant

The TFFR Board is responsible for selecting and monitoring a medical consultant for the plan to conduct disability reviews, disability re-certifications, and perform other medical reviews as necessary.

The Board monitors medical consulting costs and services, and may extend the medical consulting contract for 2 year terms, as approved by the TFFR Board. The Board may delegate this responsibility to the Chief Retirement Officer.

#### 3.Legal Counsel (discuss with Legal)

The ND Attorney General's Office (AGO) provides legal services to the TFFR Board and staff. The AGO assigns an assistant attorney general to advise the Board on legal issues related to plan administration.

Duties and Responsibilities include:

- a. Represent the Board and staff in all legal matters.
- b. Draft proposed legislation, administrative rules, and other legal documents.
- c. Review and advise on retirement program issues.
- d. Research and interpret state statutes and federal regulations.
- e. Review Board policies, procedural issues, contracts, and other legal documents.
- f. Respond to legal questions from staff, members, employers, and other individuals.
- g. Advise and educate the Board and staff on legal matters that relate to the administration of the retirement system including Board appeals, fiduciary duties, ethics, open records and meetings, potential litigation, and other legal issues.
- h. Work with staff from the AGO in representing the retirement plan in administrative hearings, litigation, and other matters involving the AGO.
- i. Work with outside legal counsel on application of Internal Revenue Code technical requirements and plan qualification issues.

#### 4. Auditor (External financial)

The ND State Auditor's Office selects the external financial auditor for RIO, with input from the SIB Audit Committee.

Duties and Responsibilities include:

- a. Perform annual audit of RIO's financial statements.
- b. Perform annual audit of TFFR's GASB 68 schedules.
- c. Provide report on internal controls and compliance.
- d. Provide required written communications.

Results of the annual financial audit are reported directly to SIB Audit Committee, and communicated to the TFFR Board in conjunction with annual audit services report.

#### 5.Investment Consultant, Managers, and Advisors

The SIB is responsible for investment of TFFR trust fund assets, and selects the investment consultant, managers, custodian, and advisors for the SIB program.

The governing body of each fund invested by the SIB is required to use RIO staff and consultants in developing asset allocation and investment policies. The TFFR Board has contracted with the SIB investment consultant to perform asset allocation and liability modeling studies in the past.

#### L. <u>Election of TFFR Board Officers and SIB trustee positions</u>

#### 1.Board Officers

The TFFR Board will elect the following Board officers each year. Any trustee may serve as a TFFR Board officer.

- Board President
- Board Vice President

The TFFR Board will select the following representatives to the SIB each year. Any trustee may serve as a TFFR representative to the SIB, except the State Treasurer is required to be an ex officio member of both the TFFR Board and SIB so may not be selected as a TFFR representative to the SIB.

- Three TFFR representatives to SIB (representatives must include one active teacher, one active administrator, and one retired member)
- One TFFR alternate representative to SIB
- One TFFR representative to SIB Audit Committee (from SIB)

#### 2. Election Procedure

The TFFR Board will elect the Board officers and TFFR representatives to the SIB at the first regular Board meeting immediately following July 1 of each year. There must be a quorum of four board members in attendance to elect officers.

Four affirmative votes are required to elect Board officers and TFFR representatives to the SIB. (Confirm with Legal –4 like votes are required per TFFR statutes-not majority?)

#### 3.Term

Board officers and TFFR representatives to SIB will hold office for one year, or until their successors are elected.

There is no limit to the number of years a trustee may hold office.

#### 4. Vacancies

A Board officer or TFFR representative to the SIB may resign from their position by providing written notice to the Board and Chief Retirement Officer.

Board officer or TFFR representative to the SIB vacancies that occur before the expiration of a term will be filled by the Board at the next regular meeting of the Board following the vacancy.

#### M. Board and Committee Meetings

#### 1.Open Meetings

All Board and Committee meetings are open to the public in accordance with ND Open Meetings laws pursuant to NDCC 44-04-17.1.

Meetings include any gathering of a quorum of the members of the Board (four members constitute a quorum for TFFR Board) regarding public business, and includes committees, subcommittees, informal gatherings or work sessions, and discussions where a quorum of members are participating by phone or any other electronic communication (either at the same time or in a series of individual contacts).

Emails or text messages between Board members regarding public business may constitute a meeting and violate open meeting laws.

Training seminars and purely social gatherings attended by a quorum of the Board or Committee are not meetings, however, as soon as the members discuss any public business, it becomes a meeting.

#### 2.Rules of Order

All Board and Committee meeting will be conducted in accordance with Robert's Rules of Order Newly Revised, except as superseded by state law and Board governance policies.

#### 3.Meeting Schedule

The Board will hold meetings as often as necessary for the transaction of business, but will conduct a minimum of six Board meetings each year.

The Board will approve an annual Board meeting schedule identifying the time, date, and location of regular Board meetings. Board meetings will generally be scheduled for the Thursday afternoon preceding SIB meetings beginning in July of each year, unless a different day is determined. (Note: SIB meetings are generally scheduled for the 4<sup>th</sup> Friday of each month.) The Board or Board President may modify this schedule, if needed.

The Board President, or any two members of the Board, may call for special or emergency Board meetings.

At the July Board meeting each year, the Board will elect officers, review governance and program policies, and develop the annual board agenda and education plan.

The Board may hold an annual offsite Board retreat to focus on board development, strategic planning, legislative planning, developments in public pension administration, and other topics as determined by the Board.

#### 4.Meeting Notice

Public notice of all Board and Committee meetings is made in accordance with state law pursuant to NDCC 44-04-20.

Meeting notices are posted on the Secretary of State website, RIO public website, RIO office, and the meeting location (if not held at RIO office).

#### **5.Meeting Agendas**

An annual schedule of agenda topics, reports, and education items for each regular board meeting will be developed by the Chief Retirement Officer and approved by the Board. The annual schedule will also include review of the Board Governance Manual over several meetings.

Board meeting agendas will be prepared by the Chief Retirement Officer and approved by the Board President using the annual schedule as a basis for topics to be included on each regular meeting agenda. Additional topics may be added by the Chief Retirement Officer, Board President, and Board trustees subject to approval by the Board President.

The meeting agenda should contain enough detail so trustees, members, interested parties, and the general public can understand the nature of each agenda item.

Any individual or organization who desires to appear on the agenda of a Board or Committee meeting must notify the Chief Retirement Officer in writing at least ten working days prior to the meeting date. The request must include the reason or topic to be discussed with the Board. Subject to approval by the Board President, the individual will be placed on a Board meeting agenda.

Regular Board meeting agendas may be added to or altered at the time of the meeting. For special or emergency meetings, only the specific topics included in the meeting notice may be discussed.

The meeting agenda will identify if the item requires Board action, information only, consent agenda, or executive session. The agenda will also note the estimated amount of time expected for each topic.

- Action items on the agenda contain information that require Board discussion and vote (annual reports, policy changes, benefit determinations, legislative positions, etc.)
- Information only items contain information that it is important for the Board to know, but do not require Board action or a Board vote (project updates, status reports, education, etc.)

- Consent agenda items will primarily consist of approval of disability applications, QDROs, employer reviews, or other routine administrative matters that require Board action as recommended by staff, but which typically do not require Board discussion. Trustees may request any item to be removed from the Consent agenda to allow for Board discussion and action.
- If an **Executive session** is required or anticipated, the Executive session must be listed as an agenda item (i.e. confidential member information, attorney consultation, etc.)

#### **6.Meeting Materials**

The Chief Retirement Officer will coordinate the preparation of Board meeting materials and develop an Executive Summary.

Meeting materials will generally be sent to trustees 5-7 days before the meeting, unless otherwise indicated.

Materials will be posted on the public RIO website, except for Executive Session or confidential items which will be sent via secure email to the trustees only.

#### 7. Meeting Attendance and Quorum

Attendance at Board meetings is an essential element of a trustee's fiduciary responsibility. Therefore, Board members are expected to attend all Board and applicable Committee meetings.

Board members may attend meetings in person, by telephone or video conference.

A quorum of four members must be present for the Board to conduct business.

Board members should come to meetings having read the materials prepared and circulated by staff and/or consultants.

Board members should be inquisitive, and should appropriately question staff, advisors, and fellow trustees as circumstances require.

Board members should conduct themselves with integrity and dignity, maintaining the highest ethical conduct at all times.

Board members should make every effort to engage in collegial deliberations and to maintain an atmosphere in which trustees can speak freely and explore ideas before becoming committed to positions.

#### 8. Voting

Voting on matters before the Board will be by roll call vote, except for procedural matters.

Each Board member is entitled to one vote. Proxy voting is not allowed.

Four members constitutes a quorum.

Four votes are required for resolution or action by the Board.

Board minutes will show the recorded vote of each Board member.

#### 9. Public Access and Comment

All Board and Committee meetings are open to the public and all persons who wish to attend may do so in accordance with ND Open Meeting laws, NDCC 44-04-17.1.

Public participation or comments during Board meetings may be allowed and limited to reasonable time limits at the discretion of the Board president. See Public Participation Guidelines (Exhibit XX To Be Developed).

Any individual or organization who desires to appear on a Board or Committee meeting agenda must notify the Chief Retirement Officer in writing at least ten working days prior to the meeting date. The request must include the reason or topic to be discussed with the Board. Subject to approval by the Board president, the individual will be placed on a Board meeting agenda.

#### **10.Executive Sessions**

The Board or Committee may conduct business in Executive Session only as permitted by state law, NDCC 44-04-19.2. Executive sessions shall be presided over by the Board President or Committee Chair.

Only the portions of a public meeting that are specifically confidential or exempt from the Open Meetings law may be closed to the public and held in Executive Session. The remainder of the meeting must be open to the public. Reasons a meeting may not be open to the public includes Board discussion of:

- Confidential member records or information under <u>NDCC 15-39.1-30</u> (examples include member benefit appeals, benefit determinations, disability applications, QDROs, etc.)
- Attorney's advice regarding a "pending or reasonably predictable" lawsuit involving TFFR
- Attorney's assessment of the risks, strengths or weaknesses of an action of the TFFR Board or negotiating strategy if holding the discussion in an open meeting would have an adverse effect on the bargaining or litigating position of the Board.

## **11.Closed Meeting Procedures**

State law specifies the following general procedure for holding an executive session.

- a. Convene meeting in an open session preceded by public notice.
- b. Announce during the open portion of the meeting the topics to be considered during the Executive Session and the legal authority for holding an Executive Session on those topics.
- c. Pass a motion to hold an Executive session, unless motion is unnecessary because a confidential meeting is required to discuss confidential information.
- d. Record the Executive Session electronically.
- e. Limit the topics considered during the Executive Session to the announced, authorized topics.
- f. Take final action on the topics considered in the Executive Session during the open portion of a meeting.
- g. All substantive votes must be recorded by roll call.

## 12. Meeting Minutes and Records

Minutes will be taken at all Board and Committee meetings, and presented for approval at the next regular meeting. The Board President or Committee Chair will sign the minutes after Board approval.

Approved meeting minutes will be made available on the RIO website, or upon request. Meeting minutes and records of the Board and Committee activities and actions will be maintained as required by state law.

## 13. Meeting Payment and Travel Expense Reimbursement

Board members, excluding ex-officio members, will receive compensation and travel expenses for attending Board and Committee meetings as provided in state law, NDCC 15-39.1-08.

Board members will be paid \$148 for each Board or Committee meeting attended. Board members will be paid the full amount for each meeting attended that lasts for two or more hours. Meetings lasting less than two hours will be paid at one half the amount. Mileage and travel expense reimbursement will be paid as provided in state law.

Board members may not lose regular salary, vacation pay, vacation or any personal leave, or be denied attendance by the state or political subdivision while serving on official business of TFFR.

To receive meeting payment, Board members must complete a travel expense form and submit it to RIO. See RIO Board Meeting In-State Travel Expense Voucher (Exhibit XX).

## N. Committees

## 1. Standing Committees

The TFFR Board may establish permanent standing committees. The Board currently has no standing committees.

## 2. Special Committees

The Board may establish special ad hoc committees as needed to carry out duties specified by the Board.

The Board President will appoint the Committee Chair and Committee members for special committees.

Committee Chairs are responsible for organizing the work of the Committee. In fulfilling this function, Committee Chairs:

- a. Schedule Committee meetings as often as necessary.
- b. Consult with the Chief Retirement Officer in setting the meeting agenda in accordance with the Committee's delegated responsibilities.
- c. Conduct Committee meetings in a collegial, fair, and efficient manner following Board policies, procedures, and applicable state law.
- d. Ensure the Committee operates to assist the Board consistent with its delegation.
- e. Provide Committee updates and reports to the Board.

When the Committee's duties are completed, the Committee automatically ceases to exist.

## 3. Audit Committee

The SIB Audit Committee also functions as a defacto Audit Committee for the TFFR Board since the SIB is the governing body of RIO and RIO administers both the TFFR retirement program and SIB investment program. (discuss with Legal)

The TFFR Board selects one TFFR representative on the SIB to serve on the SIB Audit Committee, subject to official appointment by SIB Chair. This representative will act as the TFFR Board's liaison to the SIB Audit Committee.

The TFFR Board's representative on the SIB Audit Committee and/or the Audit Supervisor, will provide Audit Committee updates and monitoring reports to the Board.

## O. Board Appeals

Any member, beneficiary, employer, or affected individual may appeal a determination made by the Chief Retirement Officer regarding TFFR eligibility, benefits, or other plan provisions with which the individual does not agree.

The affected individual must file a written request for Board review within thirty days after notice of the determination of the Chief Retirement Officer has been mailed to the affected individual. If a request for Board review is not filed within the thirty-day period, the decision of the Chief Retirement Officer is final. The request for Board review must include the decision being appealed, the reason(s) the individual believes the decision should be reversed or modified, and any relevant documentation.

To review the matter, an appeal hearing will be scheduled as part of a regularly scheduled B oard meeting. A summary of the relevant facts and documentation will be presented. The affected individual and/or designee may attend and speak at the hearing. After review of the facts, documentation, and testimony, the Board will make its decision. The Board's decision will be communicated in writing to the affected individual within 30 days of the decision.

Any individual aggrieved by a decision of the Board may initiate a formal administrative action against the Board in accordance with <u>ND Administrative Code Chapter 82-10</u> and <u>ND Century Code Chapter 28-32.</u>

## P. Board Communications

The TFFR Board President and Chief Retirement Officer are authorized to represent the Board on retirement program issues and in announcing Board positions and decisions, unless otherwise determined by the Board.

Board members may respond to general inquiries about the TFFR retirement program, however specific questions from members, beneficiaries, employers, and the public should be referred to the Chief Retirement Officer or the Retirement and Investment Office staff to provide more detailed information about the retirement program.

## Q. Trustee Orientation and Education Program

Trustees are responsible for making policy decisions affecting all major aspects of TFFR plan administration. Therefore, trustees should acquire and maintain an appropriate level of knowledge that provides and improves core competencies necessary to govern a large, complex pension fund.

## **1.Board Member Core Competencies**

Board members should develop and maintain their knowledge and understanding of the issues involved in the prudent management of the retirement plan. Specific areas include:

- a. Public pension plan governance
- b. Asset allocation and investment management
- c. Actuarial principles and funding policies
- d. Financial reporting, controls and audits
- e. Benefits administration
- f. Open meeting and open records laws
- g. Fiduciary responsibilities
- h. Ethics and conflicts of interest

## 2.Board Member Education

To permit Board members to develop core competencies, discharge their fiduciary duties, and ensure Board members have a full understanding of the issues facing the TFFR plan, the Board encourages trustee education including:

- a. New trustee orientation
- b. Mentoring program
- c. Educational conferences, workshops, and other training programs
- d. In-house education sessions
- e. Fiduciary education and ethics training
- f. Open meeting and open records training
- g. Webinars, Reports, and Studies

Board members should identify areas in which they might benefit from additional education, and work with the Chief Retirement Officer to find or develop educational opportunities to best address those needs.

Board members must annually report trustee education received each year. See TFFR Board Education Report Form (Exhibit XX).

## 3.New Trustee Orientation

Each new Board member should attend a new trustee orientation session(s) as soon as possible after appointed to the Board or elected to office. The orientation sessions will be developed by the Chief Retirement Officer, and will include, at minimum, review of the following topics and materials:

- a. Introduction to RIO staff
- b. Tour of RIO office
- c. Board Governance Manual
- d. Board duties and responsibilities
- e. History and overview of the plan
- f. Overview of TFFR-SIB-RIO organizational structure
- g. Laws, rules, and board policies governing the plan
- h. Benefit structure, administration, outreach services
- i. Fiduciary responsibilities, conflict of interests, and ethics
- j. Open meetings and open records
- k. Board meeting schedule and protocol
- I. Board meeting minutes and materials
- m. Actuarial valuation report, assumptions, methods, and funding policy
- n. Actuarial experience report
- o. Actuarial audit report
- p. Annual financial report
- q. Investment program, investment policy statement, asset allocation, and performance
- r. RIO website TFFR and SIB sections
- s. Legislative issues
- t. List of educational conferences and training sessions
- u. Other relevant information or materials deemed appropriate

## **4.Mentoring Program**

The Board President will assign each new trustee an experienced Board mentor to assist the new trustee in becoming familiar with Board responsibilities. The Board mentor should have at least two years of experience on the Board.

The Board mentor should contact the new Board member periodically outside of regularly scheduled Board meetings for consultation or discussion related to Board member duties and responsibilities. The new Board member should contact the Board mentor as often as necessary.

Appointment of a Board mentor does not constitute appointment of a Committee and does not implicate open meeting notice requirements. (discuss with Legal)

## 5. Educational Conferences, Workshops, and other Training Programs

The Chief Retirement Officer will maintain a list of educational conferences, workshops, and other training programs appropriate for Board members to attend. The list will be provided at least annually to Board members. Board members may attend such conferences or others deemed to be appropriate by the Chief Retirement Officer.

Subject to budget availability, Board members may attend at least one out of state educational conference each year. New trustees, or trustees with investment or other specialized Board responsibilities, may attend additional educational training sessions to help develop core competencies and become proficient in performing their duties.

The Chief Retirement Officer will review conference agendas and materials to ensure they are geared toward trustee education, and subject to budget availability, will approve Board travel requests. Board travel outside of the continental United States must be approved by the Board President and Chief Retirement Officer.

Any Board member who attends a conference, workshop, or other training program will present an oral report to the Board.

The Chief Retirement Officer will inform the Board of educational conferences, workshops, or other training programs attended by trustees on an annual basis.

## 6.In-House Education Sessions

Based on the education needs identified by Board members, the Chief Retirement Officer will arrange for staff or outside service providers to conduct educational sessions at regularly scheduled Board meetings. Topics may include pension board governance, actuarial and funding issues, investments, retirement operations and benefits, workforce demographics and shortages, and other topics determined by the Board.

## 7. Fiduciary Education and Ethics Training

At least every two years, a fiduciary education and ethics training session will be conducted at a regularly scheduled Board meeting. The session will review and update trustees regarding fiduciary issues and ethical conduct affecting their service on the Board.

## 8. Open Meetings and Open Records Training

At least every two years, an open meetings and open records training session will be conducted at a regularly scheduled Board meeting. The session will review and update trustees regarding open meetings and open records requirements affecting their service on the Board.

## 9. Webinars, Reports, and Studies

Board members are encouraged to subscribe to mailing lists and review websites for information about public pension plan conferences, webinars, reports, and studies from pension and investment organizations. Examples include:

- National Council on Teacher Retirement (NCTR)
- National Institute on Retirement Security (NIRS)
- National Education Association-Retired (<u>NEA-R</u>)
- National Retired Teachers Association (NRTA-AARP)
- International Foundation for Employee Benefit Plans (IFEBP)
- Center for State and Local Government Excellence (SLGE)
- Center for Retirement Research at Boston College (CRR)
- Callan Investment Institute (Callan)
- Council of Institutional Investors (CII)

The Chief Retirement Officer will also provide links to recent published reports and studies with Board meeting materials.

## 10.Reimbursement of Education Expenses (discuss)

Trustees must request approval for travel to educational conferences or other educational programs. Trustees should notify the Chief Retirement Officer of their interest in attending an educational conference or other program. RIO will complete the travel authorization form which must be signed by the trustee and approved by the Chief Retirement Officer. See ND Authorization for Out of State Travel (Exhibit XX).

RIO will make all travel arrangements and pay conference registration fees, unless otherwise agreed to by the Chief Retirement Officer and trustee.

Payment of travel-related expenses for trustee education will be in accordance with state of ND travel policies. Trustees will be reimbursed for travel related expenses including lodging, meals, transportation, etc. In order to receive reimbursement, a trustee must complete an expense form and attach receipts as required. See RIO Conference Expense Voucher – Board Members (Exhibit XX).

## R. Code of Conduct and Ethics (review with Legal)

Following is the Code of Ethical Responsibility for the TFFR Board of Trustees:

- 1. Board members owe a duty to conduct themselves so as to inspire the confidence, respect, and trust of the TFFR members and to strive to avoid not only professional impropriety, but also the appearance of impropriety.
- 2. Board members shall perform the duties of their offices impartially and diligently. Board members are expected to fulfill their responsibilities in accord with the intent of all applicable laws and to refrain from any form of dishonest or unethical conduct. Board members shall be unswayed by partisan interest, public sentiment, or fear of criticism.
- 3. Conflicts of interest and the appearance of impropriety shall be avoided by Board members. Board members shall not allow their family, social, professional, or other relationships to influence their judgment in discharging their responsibilities. Board members shall refrain from financial and business dealings that tend to reflect adversely on their impartiality or interfere with the proper performance of their duties. If a conflict of interest unavoidably arises, the Board member shall immediately disclose the conflict to the Board. Conflicts of interest to be avoided include, but are not limited to: receiving consideration for advice given to a person concerning any matter over which the Board member has any direct or indirect control, acting as an agent or attorney for a person in a transaction involving the Board, and participation in any transaction for which the Board member has acquired information unavailable to the general public, through participation on the Board. "Conflict of interest" means a situation in which a Board member has a direct and substantial personal or financial interest in a matter which also involves the member's fiduciary responsibility.
- 4. The Board shall not unnecessarily retain consultants. The hiring of consultants shall be based on merit, avoiding nepotism and preference based upon considerations other than merit that may occur for any reason, including prior working relationships. The compensation of such consultants shall not exceed the fair value of services rendered.
- 5. Board members shall abide by NDCC 21-10-09, which reads: "No member, officer, agent, or employee of the state investment board shall profit in any manner from transactions on behalf of the funds. Any person violating any of the provisions of this section shall be guilty of a class A misdemeanor."
- 6. Board members shall perform their respective duties in a manner that satisfies their fiduciary responsibilities.

- 7. Political contributions are regulated under NDCC 16.1-08-03 and are not restricted under this ethics policy.
- 8. All activities and transactions performed on behalf of public pension funds must be for the exclusive purpose of providing benefits to plan participants and defraying reasonable expenses of administering the plan.
- 9. Prohibited transactions. Prohibited transactions are those involving self-dealing. Self-dealing refers to the fiduciary's use of plan assets or material, non-public information for personal gain; engaging in transactions on behalf of parties whose interests are averse to the plan; or receiving personal consideration in connection with any planned transaction.
- 10. Violation of these rules shall result in an official reprimand from the TFFR Board. No reprimand shall be issued until the board member has had the opportunity to be heard by the Board.
- 11. Board members are required to affirm their understanding of this policy annually, in writing, and must disclose any conflicts of interest that may arise. See Conflict of Interest Statement (Exhibit XX?)
- 12. RIO Deputy Executive Director- Chief Retirement Officer is required to affirm his/her understanding of RIO Administrative Policy Code of Conduct for RIO Employees annually, in writing, and must disclose any conflicts of interest that may arise.

## S. Strategic Planning

The Board and Chief Retirement Officer will work collaboratively to develop a long-term strategic plan which may:

- 1. Identify and prioritize TFFR program issues and initiatives.
- 2. Assess the strengths, weaknesses, opportunities, and threats for TFFR.
- 3. Focus resources on high value activities.
- 4. Develop strategies to address priorities.
- 5. Monitor the progress and implementation of the strategic plan.
- 6. Work with RIO to ensure adequate resources are in place to support the successful execution of the plan.

## T. Board Policy Approval Process

Board governance and program policies may be adopted or amended from time to time based on the following process.

New policies or policy amendments may be proposed by the Chief Retirement Officer or a Board member. All new policies or amendments must be submitted to the Board's legal counsel at the Attorney General's office for review prior to Board approval.

Upon request of the Chief Retirement Officer or a Board member, a new policy or amendment shall be placed on the Board's agenda for action as follows:

- Introduction and first reading. A brief explanation or summary of the new policy or amendment shall be presented to the Board. Upon approval of introduction and first reading, the policy shall be placed on the agenda of the next scheduled meeting of the Board for second reading and adoption. When appropriate, the policy shall be distributed to interested parties.
- Second reading and adoption. Interested parties and the public shall be allowed an opportunity to comment on the policy or amendment before final action by the Board. The policy shall take effect immediately following second reading and adoption by the Board, unless a different effective date is stated.
- 3. Amendments. Amendments may be proposed at any time before final adoption of the policy. Upon determination by the Board that adoption of an amendment constitutes a substantive change that significantly changes the meaning or effect of the policy, the Board shall continue consideration of second reading and adoption to the next meeting to permit further review and comment.
- 4. Emergency measures. Upon determination that an emergency or other circumstances calling for expeditious action exists, the Board may waive the requirement of a second reading and immediately approve the new policy or amendment following introduction and first reading.

Board policies will be reviewed at least annually, or more often as needed.

## **U.** Board Self-Assessment

On an annual basis, the Board will engage in a self-assessment process to evaluate the trustee's individual performance and the Board's overall performance. The Board President is responsible for overseeing implementation of this assessment, with assistance of the Chief Retirement Officer and Supervisor of Audit Services.

Individual Trustee and Overall Board Assessments may contain topics including:

- Board and staff roles
- Board and Committee structure
- Board meetings
- Policy making and reviews
- Financial management practices
- Pension plan administration practices

See Board Self- Assessment (Exhibit XX Process and survey To Be Developed).

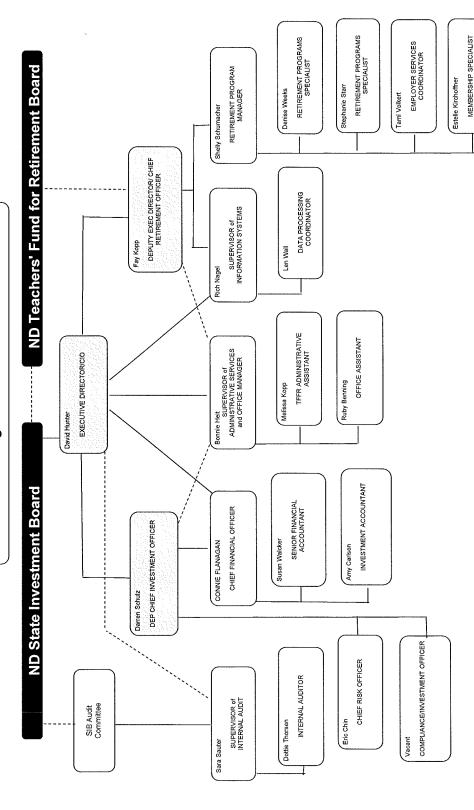
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**SECTION II: TFFR Program Policies** 

All remaining TFFR Program/Ends Policies to be added here.

To be reviewed after Board Governance Policies are developed and approved.

# ND Retirement and Investment Office Organizational Chart



Total of 20 FTE positions allocated between SIB and TFFR programs based on approximate time spent on each program. Currently FTEs are split 12 TFFR and 8 SIB (8 shared positions in fiscal, administrative, IT and audit).

## RETIREMENT AND INVESTMENT OFFICE

## Board Meeting and Non-State Employee In-State Travel Expense Voucher

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			TRAVI	L EXPENSES				
MEALS (Reimburse	d at state rate effective	/e 8/1/15:						
Date	☐ Breakfast (1st Qtr	- 6am)	\$7.00	Date		☐ Breakfast (1st	Qtr - 6am)	\$7.00
	Lunch (2nd Qtr - N	loon)	\$10.50			Lunch (2nd Qt	r - Noon)	\$10.50
	Dinner (3rd Qtr - 6	pm)	\$17.50			Dinner (3rd Qt	r - 6pm)	\$17.50
Date	☐ Breakfast (1st Qtr	- 6am)	\$7.00	Date		Breakfast (1st	Qtr - 6am)	\$7.00
	Lunch (2nd Qtr - N	loon)	\$10.50			Lunch (2nd Qt	r - Noon)	\$10.50
	Dinner (3rd Qtr - 6	pm)	\$17.50			Dinner (3rd Qt	r - 6pm)	\$17.50
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THOM.								
TO:						521030		
Total Miles:	@ \$.58/mile E	ffective 1/	1/19			Total Mileage \$		
LODGING (Attach F	leceipts - reimbursed	at actual	cost up	to \$83.70/niaht +	tax)			
Effective 10/1/17:		,,,-,				521015		
Number of Nights:						Total Lodging \$		
MISCELLANEOUS ( Telephone Calls	Attach Receipts):			_				
Taxi, car rental, etc		-		_				
Other				_		Total Misc. \$		···
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Nor	th Dakota
	Teachers'
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	Retirement

## **TFFR Board Education Reporting Form**

Trustee Name:	Fiscal Year:	
-		

DATE	COURSE NAME	COURSE SPONSOR NCTR, Callan, Segal, NEA, NIRS, IFEBP, other	TYPE Orientation, Educ. Conf, Workshop, In-house educ, webinar, other	HOURS
			Total Hours	

Trustee Signature

Date

## **AUTHORIZATION FOR OUT OF STATE TRAVEL**

STATE OF NORTH DAKOTA SFN 2564 (8-96)

Department or Instit	ution					Dept. No.
ND RETIREMENT A	ND INVESTMENT OFFICE					190
Mailing Address (If	not "Inside Capitol" mail)					
	Y AVENUE, PO BOX 7100,	BISMARCK ND 5850	7 7100			
Person Traveling (L	ast Name)	(	(First Name)			
Destination(s) (City	and State)		suarran est autor			
METHOD OF TRAVE					—	
☐Train (1) ☐Bus (2)	☐ State Vehicle (3) ☐ Personal Vehicle		Commercial Air (5) Charter Plane (5)			re Plane (6) er (Explain)
Date to depart from	home	Date to return ho	me		<u>L</u> d	nclude vacation days?
					☐ Yes	■ No
REASON FOR TRIP Conference/Meetir		nar/Workshop/Training	(T) Ro	outine Wc	rk (W)	Other (X)
NAME OF MEETING	(DO NOT Abbreviate)					
TOTAL NUMBER OF	PERSONS FROM				NOTE: Su	bmit a separate SFN 2564
	R THIS TRIP/MEETING:					erson at the same time.
						······································
	ESTIMATED	COST OF TRIP (To Ne	earest Dollar)			COSTS WILL BE PAID BY
Transportation	Meals, Lodging, Etc.	Registration	Rental Car/Taxi		TOTAL	Department
\$	\$	\$	\$	Estim	ated \$	Other (Explain in Remarks)
REMARKS						
<del>*************************************</del>	Signature of Person	Traveling				 Date
	Orginature of F 013011	Travelling				Date
<del></del>	Supervisor Signa	ture				Date
	Deputy Executive D	rector				Date
	, ,					
-	Executive Direct	or				Date

## **CONFERENCE EXPENSE VOUCHER - BOARD MEMBERS**

RETIREMENT AND INVESTMENT OFFICE (8/05)

Month	h 20 _		Department			Official Position		
Name			Employee II	D	Dept. No. 190	Transaction Code 201	Fiscal Month	Biennium
Day	Points Covered by Travel (From/To)	Ho (Show A Depart	our AM or PM) Arrival	Vehicle Miles	Taxi & Other Trans. (Receipt)		Meals B - Breakfast L - Lunch D - Dinner	Lodging (Receipt)
				-				
				-	<u> </u>			
Purpo	ose of Travel and Explanation of E	Expenses:		<u> </u>		Lodging	521075	
	,	•				Meals Misc. Expenses	521080	
					Other Transpo	ortation in State ortation out of State	521025 521085	
					es out of State		521030 521090	T
	by certify that the within itemized statement reply and accurately states the days of service a				vel expenses		TOTAL	\$
EMPI	LOYEE SIGNATURE:		· ·	<u> </u>		<del></del>	Date:	
DEP/	ARTMENTAL APPROVAL:						_ Date:	·



3442 East Century Avenue | P.O. Box 7100 | Bismarck, ND 58507-7100 Telephone: 701-328-9885 | Toll Free: 800-952-2970| Fax: 701-328-9897|www.nd.gov/rio

## **Memorandum**

To:	TFFR Board
From:	RIO Compliance Officer
Date:	
RE:	Annual Affirmation of Code of Conduct Policy
memori policy i statem "I have I have	FFR Board Members' Code of Conduct and Ethics Policy, which is attached to this randum, details the Code of Ethical Responsibility for the TFFR Board. Item #11 of this indicates that each Board Member is required to reaffirm their understanding of this annually and disclose any conflicts of interest. Therefore, please read and sign the tent below to comply with this requirement.  For read and understand the TFFR Board Members' Code of Conduct and Ethics Policy. The disclosed any conflicts of interest as required by this policy."  (printed)
Signat	ure
Date_	
Detail	of any conflicts of interest (if any):



## **2019 State Investment Board Self-Evaluation** Introduction

The State Investment Board (SIB) has appointed the Executive Review Committee to develop a board self-evaluation.

As a member of the SIB you are being asked to participate in the board self-evaluation. There is five categories, for both the self-assessment and board assessment portions. The first 15 questions are self-assessment, followed by 12 questions for the board assessment portion, and ending with 2 open ended questions. After each category there is a comment section available to give explanation on your ratings or make comments.

Please contact the Supervisor of Audit Services, Sara Sauter, at 701-328-9896 or sasauter@nd.gov if you have any questions.

Survey responses are due by 5:00 p.m. on Friday May 10, 2019.

Thank you in advance for your participation.



# **2019 State Investment Board Self-Evaluation**Self-Assessment Board & Staff Roles

1. I believe I have the sk member.	kills and training ne	cessary to fulfill my	responsibilities as SII
Strongly Agree	Agree	Disagree	Strongly Disagree
2. I understand the aut been delegated to staff		n retained by the SIB	and what duties hav
Strongly Agree	Agree	Disagree	Strongly Disagree
3. I actively engage in E meaningful way, listeni and communicate my p	ng to others (i.e., bo	ontributing to the di pard members, staff, Disagree	scussions in a guests) Strongly Disagree
4. I make an effort to be do not understand.  Strongly Agree	e educated on the a	spects of the investr	nent program that I  Strongly Disagree
Ottoligty Agree	Agree	Disagree	Strongty Disagree
Comments for Board & St.	aff Roles		



Self-A	State Investme ssessment & Committee Struct		-Evaluation	
5. l u	nderstand board co	onduct, abide by	it, and avoid conflicts of	interest.
	Strongly Agree	Agree	Disagree	Strongly Disagree
6. I fi	nd my participatior	on the Board to	be stimulating and rewa	arding.
	Strongly Agree	Agree	Disagree	Strongly Disagree
7. I a	m comfortable with	the amount of ti	ime I devote as a Board ı Disagree	nember.  Strongly Disagree
	Olivingty Agree	Agree	Disagree	Strongty Disagree
8. If I and r	am not able to atte eview the informat	end the SIB meet ion presented at	ing, I make appropriate i the meeting.	notifications to staff  Strongly Disagree
Comn	nents for Board and C	ommittee Structur	re	



S	<b>019 State Investme</b> elf-Assessment pard Meetings	ent Board Self-E	valuation	
	9. I have participated in outlined responsibilities	an effective new mos and important org	ember orientation p anizational informa	rogram which tion.
	Strongly Agree	Agree	Disagree	Strongly Disagree
	10. I am prepared for Boinformed decisions.	oard meetings, readi	ng information in ac	dvance, so I can make
	Strongly Agree	Agree	Disagree	Strongly Disagree
	<b>Comments for Board Meet</b>	ings		



	Agree	Disagree	Strongly Disagre
Strongly Agree			
Strongly Agree	Agree	Disagree	Strongly Disagre
mments for Policy Makir	ng & Reviews		



Se Fir	119 State Investmelf-Assessment & nancial Management & 13. I understand the leg	Investment Practic	es	of me as a fiduciary.
	Strongly Agree	Agree	Disagree	Strongly Disagree
	14. I sufficiently unders			
	Strongly Agree	Agree	Disagree	Strongly Disagree
		U		O
	15. I am familiar with the any findings or recomm	nendations.	•	
	Strongly Agree	Agree	Disagree	Strongly Disagree
	Comments for Financial I	1anagement & Investr	ment Practices	



2019 State Investment Board Self-Evaluation Board Assessment Board & Staff Roles				
1	6. The Board members	are consistently p	repared for meetings a	and stays engaged.
	Strongly Agree	Agree	Disagree	Strongly Disagree
	$\circ$			
	7. The Board has healtl decision.	าy discussions on a	a topic before making a	a well-informed
	Strongly Agree	Agree	Disagree	Strongly Disagree
1 t	8. The Board recognize to staff.			
	Strongly Agree	Agree	Disagree	Strongly Disagree
			O	
	Comments for Board & Sta	ff Roles		



Va Dourd				
2019 State Investme Board Assessment Board and Committee Str		Evaluation		
19. All Board members	regularly attend bo	oard meetings.		
Strongly Agree	Agree	Disagree	Strongly Disagree	
20. Standing and ad ho way.	c committees comp	olete their tasks in a	n effective and timely	
Strongly Agree	Agree	Disagree	Strongly Disagree	
21. Standing and ad hoo and timely manner.  Strongly Agree	Agree	Disagree	Strongly Disagree	
Comments for Board and	Committee Structure			



	Var Dudi u					
В	2019 State Investment Board Self-Evaluation Board Assessment Board Meetings					
	22. Board meetings are	generally well-run	and make good use	of members' time.		
	Strongly Agree	Agree	Disagree	Strongly Disagree		
	23. Board meetings allo presentations.	w the right allocati	on of time between	Board discussions and		
	Strongly Agree	Agree	Disagree	Strongly Disagree		
				0		
	<b>Comments for Board Meet</b>	ings				



	Va Board				
2019 State Investment Board Self-Evaluation Board Assessment Policy Making & Reviews					
24. The Board reviews policies on a regular basis and updates them as needed.				them as needed.	
	Strongly Agree	Agree	Disagree	Strongly Disagree	
	25. If a new policy is need discussed by the Board.	eded for the SIB, th	ne policy is clearly pr	esented to and	
	Strongly Agree	Agree	Disagree	Strongly Disagree	
	Comments for Policy Maki	ng & Reviews			



	<b>V</b> Board				
2019 State Investment Board Self-Evaluation Board Assessment Financial Management & Investment Practices					
	26. The Board regularly of the agency.	reviews the financ	cial, investment, and	portfolio performance	
	Strongly Agree	Agree	Disagree	Strongly Disagree	
j	27. The Board is regula investment performand	rly informed of eco ce.	nomic trends or cond	litions that can effect  Strongly Disagree	
	Comments for Financial M	lanagement & Invest	ment Practices		



2019 State Investment Board Self-Evaluation Overall Assessment
28. Any final comments, observations, or suggestions for the board self-evaluation
29. Are there any areas in the board self-evaluation that you would like to see addressed in the future?

## Teachers' Fund for Retirement (TFFR) Board Education Topics (2016 - Present)

## CONTEXTUAL COMPETENCY

Boards and board members understand and consider the culture, Definition: norms, and values of the

organization and profession it

governs.

ND Teacher Shortage

## **EDUCATIONAL COMPETENCY**

performance.

Definition:

Boards and board members take necessary steps to ensure they are well informed about the organization and the professions involved as well as the board's own roles, responsibilities, and

## INTERPERSONAL COMPETENCY

Boards and board members nurture the development of its members as a group, attends to the board's collective Definition: welfare, and fosters a sense of

cohensiveness.

Activity	Date
Annual Program Review 2016-19	Annual
ND Education Demographics	Oct 2016
ND Teacher Shortage	Jan 2017
ND Education Demographics	Sept 2018

Sept 2018

Date

Activity	Date
Investment Benchmarks	Jan 2016
Asset Liability Study Basics	Jan 2016
Fiduciary Duties	April 2016
Basics of Actuarial Valuations	Oct 2016
Audit Services Overview	March 2017
Open Meeting/Open Records	April 2017
Investment Basics - Callan College	July 2017
Employer Payment Plans	Sept 2017
Basics of Actuarial Valuations	Oct 2017
Securities Litigation	March 2018
Fiduciary Duties/Ethics	July 2018
Investment Perform & Benchmarks	July 2018
Basics of Actuarial Valuations	Oct 2018
Employer Reporting Overview	March 2019
Open Meeting/Open Records	April 2019
Fiduciary Duties	Sept 2019
Basics of Actuarial Valuations	Oct 2019
Experience Study Basics	Oct 2019

Activity	Date

## POLITICAL COMPETENCY

Boards and board members Definition: recognize the importance of healthy

Activity

relationships with all constituencies.

State Cyber Security Sept 2016

## ANALYTICAL COMPETENCY

Boards and board members recognize the complexities and subtleties of Definition: issues and utilize multiple perspectives to dissect problems and synthesize appropriate responses.

Activity	Date
National Public Pension Issues	Oct 2016
QDRO's Explained	July 2017
Disability Benefits Explained	Sept 2017
Public Pension Actuarial Issues	Oct 2017
Environ, Social & Governance Invest	Jan 2018
Public Pension Actuarial Issues	Oct 2018
DB/DC/Hybrid/Cash Balance Plans	Oct 2018

## STRATEGIC COMPETENCY

Boards and board members envision and shape the organizational direction Definition: and help to ensure a strategic approach for the future.

Activity	Date
Pension Plan Governance (AON)	July 2016
Budget Planning (PAS Update)	April 2018
Board Governance & Policy Review	April 2019
Board Govern Best Practices (Mosaic)	July 2019
Mission Development	July 2019
Vision Development	Sept 2019
Core Values Development	Oct 2019

CONTEXTUAL COMP	ETENCY
Definition:	
Boards and board me organization and pro	embers understand and consider the culture, norms, and values of the fession it governs.
Examples:	
	sisting of issues impacting teachers and the profession, such as teacher phics, and how the fund impacts members.
Directions:	
In the first box, provi district within this co	de examples of all of the things you would like to know more about in you mpetency area.
Share with your group pertinent.	and come to consensus on the Top 3-5 topics that your group feels are the most
LIST THE TOP 3-5	

EDUCATIONAL COMPETENCY
Definition:
Boards and board members take necessary steps to ensure they are informed about the organizations and the professions involved, as well as the board's own roles, responsibilities and performance.
Examples:
Board education consisting of roles and responsibilities, policy development, and best practices in investments are all potential examples of board education in this competency area.
Directions:
In the first box, provide examples of all of the things you would like to know more about in your district within this competency area.
Share with your group and come to consensus on the Top 3-5 topics that your group feels are the most pertinent.

INTERPERSONAL COMPETENCY
Definition:
Boards and board members nurture the development of its members as a group, attends to the board's collective welfare, and fosters a sense of cohesiveness.
Examples:
Board education consisting of team-building activities, mentoring activities and special topics for discussion at board retreats are all potential examples of board education in this competency area.
Directions:
In the first box, provide examples of all of the things you would like to know more about in your district within this competency area.
Share with your group and come to consensus on the Top 3-5 topics that your group feels are the most pertinent.
LIST THE TOP 3-5

## **POLITICAL COMPETENCY**

Definition:
Boards and board members recognize the importance of healthy relationships with all constituencies.
Examples:
Board education consisting of community/business/agency partnerships and government collaborations are potential examples of board education in this competency area.
Directions:
In the first box, provide examples of all of the things you would like to know more about in your district within this competency area.
WHAT WOULD YOU LIKE TO KNOW MORE ABOUT?
Share with your group and come to consensus on the Top 3-5 topics that your group feels are the most pertinent.
LIST THE TOP 3-5

ANALYTICAL COMPETENCY
Definition:
Boards and board members recognize the complexities and subtleties of issues and utilize multiple perspectives to dissect problems and synthesize appropriate responses.
Examples:
Board education consisting of decision-making frameworks, and review and discussion of simulations/scenarios are all potential examples of board education in this competency area.
Directions:
In the first box, provide examples of all of the things you would like to know more about in your district within this competency area.
Share with your group and come to consensus on the Top 3-5 topics that your group feels are the most pertinent.
LIST THE TOP 3-5

## Mel Olson, TFFR Board Trustee

## Should TFFR Make a Concerted Effort to Change the Funds Image?

There is a common public misconception among many North Dakotans, including some educators and state policy makers, that the North Dakota Teachers' Fund for Retirement is a State funded retirement program. When, in reality, the fund is made up entirely of a portion of the educators' wage package plus investment earnings.

I believe the board and staff should discuss the possibility of implementing a PR effort to change the misconception. It may be as simple as a tag line on mailings, publications, etc. or perhaps a PR agency needs to be employed to assist with the effort.

Public School Educators' wage package typically contains salary and benefits

Educator's Wage Package= Salary

Insurance

Social Security

District's Contribution to TFFR = (Deferred Wages?) –or- (Retained Earnings?)

Others

Possible Message:

Deferred Wages + Investment Earnings = TFFR

Retained Earnings + Investment Earnings = TFFR