

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.

By:

A handwritten signature in blue ink that reads "Matthew A. Strom".

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

A handwritten signature in blue ink that reads "Tanya Dybal".

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	<u>(2,616,171,056)</u>	<u>(2,530,657,411)</u>
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%	

*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.

Net Pension Liability	1% Decrease (6.75%)	Current 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>	<u>(207,978,699)</u>
Net change in Total Pension Liability	\$129,908,434	\$129,498,898
Total Pension Liability – beginning	<u>3,863,515,726</u>	<u>3,734,016,828</u>
Total Pension Liability – ending	<u>\$3,993,424,160</u>	<u>\$3,863,515,726</u>
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>	<u>2,360,491,075</u>
Plan Fiduciary Net Position – ending	<u>\$2,616,171,056</u>	<u>\$2,530,657,411</u>
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.

*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 Liability	Plan Fiduciary Net Position	Net Pension Liability
	(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	--	--	--
• 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					
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	<u>19,386,394</u>	<u>0</u>
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>	<u>4,608,132</u>
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 recognized 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.

5896225v3/13475.006

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

Employer Name	Covered Payroll	Employer's Proportionate 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	8,650,947	1.23315700%
Belfield Public School	1,637,915	0.23347807%
Beulah School	3,555,146	0.50677145%
Billings Co. School Dist.	848,687	0.12097678%
Bismarck Public Schools	74,264,596	10.58611318%
Bismarck State College	-	0.00000000%
Blessed John Paul II Catholic Sch Network	-	0.00000000%
Bottineau School	3,849,361	0.54871056%
Bowbells School	612,593	0.08732255%
Bowman School	2,945,220	0.41982906%
Burke Central School	1,003,631	0.14306350%
Burleigh County Spec. Ed.	117,449	0.01674181%
Carrington School	2,921,503	0.41644826%
Cavalier School	2,308,894	0.32912329%
Center Stanton School	1,586,576	0.22615995%
Central Cass School	3,935,508	0.56099057%
Central Elementary School	-	0.00000000%
Central Valley School	1,336,672	0.19053708%
Dakota Prairie School	2,035,168	0.29010482%
Devils Lake School	10,821,543	1.54256645%
Dickinson School	22,201,680	3.16475838%
Divide School	2,508,494	0.35757553%
Drake School	483,917	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%

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

Employer Name	Covered Payroll	Employer's Proportionate Share Allocation
Gst Educational Services	1,783,059	0.25416781%
Halliday School	280,182	0.03993877%
Hankinson School	1,559,779	0.22234004%
Harvey School	2,253,165	0.32117945%
Hatton Eielson Psd	1,203,702	0.17158274%
Hazelton - Moffit School	906,274	0.12918562%
Hazen School	2,772,477	0.39520525%
Hebron School	1,121,990	0.15993511%
Hettinger School	1,378,657	0.19652184%
Hillsboro School	2,646,943	0.37731084%
Hope School	750,602	0.10699527%
Horse Creek Elem. School	40,100	0.00571608%
James River Multidistrict Spec Ed Unit	1,334,268	0.19019447%
Jamestown School	13,519,117	1.92709460%
Kenmare School	1,750,587	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	0.27297468%
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	0.12004852%
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%
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%
Mott-Regent School	1,348,084	0.19216380%

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

Employer Name	Covered Payroll	Employer's Proportionate Share Allocation
Mt Pleasant School	1,717,486	0.24482060%
Munich School	1,082,119	0.15425165%
N Central Area Career And Tech Center	-	0.00000000%
Napoleon School	1,513,829	0.21579014%
Naughton Rural School	105,170	0.01499159%
Nd Center For Distance Education	1,404,997	0.20027652%
Nd Dept Of Public Instruction	185,243	0.02640563%
Nd School For Blind	684,479	0.09756961%
Nd School For Deaf	945,356	0.13475661%
Nd United	155,114	0.02211088%
Nd Youth Correctional Cnt	1,176,353	0.16768434%
Nedrose School	3,072,119	0.43791790%
Nelson County	13,521	0.00192735%
Nesson School	1,837,917	0.26198747%
New England School	1,486,390	0.21187876%
New Rockford Sheyenne School	1,799,363	0.25649178%
New Salem-Almont	2,060,302	0.29368763%
New Town School	5,399,683	0.76970263%
Newburg United District	832,843	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	0.08343221%
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	0.06751936%
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	-	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	0.13287395%
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 Name	Covered Payroll	Employer's Proportionate 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%

EXHIBIT E
Schedule of Pension Amounts by Employer as of June 30, 2019

Employer Name	Discount Rate Sensitivity						Schedule of Contributions					Pension Expense	
	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
Tpu 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	0.19183632%	2,642,072	1,345,786	3,568,145	2,642,072	1,872,481	171,588	(171,588)	-	12.75%	286,654	(25,008)	261,646
Twin Buttes Elem. School	0.06410235%	882,852	449,696	1,192,300	882,852	625,692	57,336	(57,336)	-	12.75%	95,786	(19,645)	76,141
Underwood School	0.21038491%	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	0.48209650%	6,639,689	3,382,044	8,966,967	6,639,689	4,705,661	431,211	(431,211)	-	12.75%	720,380	8,463	728,843
Upper Valley Spec Ed	0.37068484%	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	0.22397766%	3,084,739	1,571,267	4,165,972	3,084,739	2,186,207	200,337	(200,337)	-	12.75%	334,682	(34,865)	299,817
Valley City School	0.86867340%	11,963,831	6,093,991	16,157,276	11,963,831	8,478,972	776,984	(776,984)	-	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	0.96188941%	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	0.23116820%	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 rounding.

EXHIBIT E (continued)

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

Employer Name	Deferred Outflows of Resources				Deferred Inflows of Resources				Deferred (Inflows)/Outflows Recognized In Future Pension Expense (Year Ended June 30):						
	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
										(23)	(24)	(25)	(26)	(27)	(28)
South Prairie Elem School	7,170	70,680	178,465	932,258	1,188,573	181,220	-	181,220	389,812	270,641	229,881	111,225	4,289	1,505	
South Valley Spec Ed	1,392	13,720	34,641	138,244	187,997	35,176	-	302,439	337,615	(38,535)	(61,665)	9,810	17,796	(3,431)	
Southwest Special Education Unit	193	1,902	4,803	1,102	8,000	4,877	-	3,281	8,158	2,224	(981)	(405)	393	(889)	
St. John'S School	7,806	76,954	194,306	141,208	420,274	197,306	-	56,875	254,181	140,723	10,970	(11,333)	36,035	(12,002)	
St. Thomas School	1,771	17,459	44,083	23,374	86,687	44,763	-	146,232	190,995	(3,928)	(33,364)	(37,213)	(13,903)	(16,734)	
Stanley School	10,570	104,199	263,099	415,012	792,880	267,160	-	134,406	401,566	265,827	90,139	33,947	82,384	(45,532)	
Starkweather School	1,522	15,008	37,894	51,628	106,052	38,479	-	150,024	188,503	(5,807)	(31,110)	(29,512)	(16,287)	(5,739)	
Sterling School	854	8,416	21,251	55,317	85,838	21,579	-	21,579	28,245	14,056	7,803	10,312	4,681	(839)	
Strasburg School District	2,797	27,570	69,614	157,535	257,516	70,689	-	57,010	127,699	52,367	5,879	28,494	35,465	(2,509)	
Surrey School	7,095	69,946	176,611	113,805	367,457	179,337	-	181,697	361,034	105,035	(12,902)	(31,846)	1,267	(24,186)	
Sweet Briar Elem School	334	3,291	8,310	35,639	47,574	8,438	-	-	8,438	13,602	8,052	7,176	7,767	2,152	
Tgu School District	7,118	70,167	177,170	-	254,455	179,905	-	546,419	726,324	(3,164)	(121,469)	(123,100)	(86,938)	(89,503)	
Thompson School	6,948	68,494	172,946	322,232	570,620	175,616	-	34,186	209,802	172,756	57,268	59,719	68,155	5,526	
Tioga School	9,382	92,489	233,532	413,763	749,166	237,137	-	42,333	279,470	279,025	123,079	26,877	36,690	(1,850)	
Turtle Lake-Mercer School	3,773	37,190	93,904	136,730	271,597	95,353	-	145,443	240,796	37,575	(25,129)	(527)	32,084	(2,815)	
Twin Buttes Elem. School	1,261	12,427	31,378	37,426	82,492	31,862	-	90,610	122,472	1,267	(19,687)	(17,170)	5,878	(3,968)	
Underwood School	4,137	40,786	102,983	-	147,906	104,573	-	280,201	384,774	6,404	(62,362)	(65,450)	(39,770)	(46,731)	
United School	9,481	93,461	235,986	331,152	670,080	239,629	-	259,406	499,035	165,739	8,155	32,970	67,298	(65,001)	
Upper Valley Spec Ed	7,290	71,862	181,450	158,356	418,958	184,251	-	205,917	390,168	130,511	9,347	(27,984)	7,744	(48,667)	
Valley - Edinburg School	4,405	43,421	109,637	136,188	293,651	111,329	-	379,149	490,478	38,204	(35,005)	(33,265)	(62,632)	(68,503)	
Valley City School	17,083	168,404	425,215	71,134	681,836	431,779	-	881,463	1,313,242	49,499	(234,443)	(122,523)	(84,063)	(150,319)	
Velva School	7,476	73,696	186,080	92,433	359,685	188,952	-	213,913	402,865	90,930	(33,325)	(24,378)	7,276	(45,729)	
Wahpeton School	18,916	186,476	470,844	-	676,236	478,113	-	775,880	1,253,993	117,739	(196,677)	(219,659)	(95,766)	(132,984)	
Ward County	84	825	2,082	577	3,568	2,114	-	2,060	4,174	986	(406)	(541)	(47)	(328)	
Warwick School	4,546	44,815	113,157	133,416	295,934	114,903	-	395,728	510,631	20,475	(55,086)	(109,465)	(52,146)	(18,018)	
Washburn School	5,137	50,637	127,856	209,148	392,778	129,829	-	79,318	209,147	111,683	26,304	18,574	19,840	11,225	
West Fargo School	180,774	1,782,075	4,499,671	11,417,005	17,879,525	4,569,136	-	-	4,569,136	5,941,082	2,936,348	2,010,417	1,972,160	227,335	
West River Student Services	1,918	18,909	47,744	123,181	191,752	48,481	-	168,265	216,746	27,538	(4,342)	(25,417)	(12,769)	(21,583)	
Westhope School	3,110	30,663	77,423	57,216	168,412	78,618	-	112,029	190,647	45,444	(6,255)	(30,750)	(6,436)	(22,484)	
White Shield School	4,647	45,807	115,661	318,511	484,626	117,447	-	152,100	269,547	81,643	4,407	9,762	45,185	37,421	
Williams Co School Dist #8	6,758	66,624	168,224	391,227	632,833	170,821	-	171,096	341,917	117,793	5,461	17,378	67,452	42,647	
Williston School	58,259	574,321	1,450,139	3,273,362	5,356,081	1,472,526	-	74,933	1,547,459	1,936,835	968,479	381,856	333,095	46,774	
Wilmac Special Education	12,032	118,609	299,482	1,449,656	1,879,779	304,105	-	200,893	504,998	522,830	322,843	222,093	196,796	22,812	
Wilton School	4,023	39,683	100,148	124,388	268,222	101,694	-	50,904	152,598	82,832	15,958	6,152	17,900	(12,781)	
Wing School	2,039	20,100	50,752	43,513	116,404	51,536	-	68,894	120,430	25,764	(8,124)	(8,264)	6,678	(14,874)	
Wishek School	3,716	36,636	92,505	48,779	161,636	93,933	-	52,428	146,361	63,157	1,386	(9,874)	10,589	(19,347)	
Wolford School	1,517	14,955	37,760	37,605	91,837	38,343	-	75,171	113,514	21,436	(3,781)	(13,640)	(2,596)	(10,738)	
Wynndere School	3,959	39,027	98,542	38,565	180,093	100,063	-	237,767	337,830	7,315	(58,490)	(49,013)	(20,774)	(36,451)	
Yellowstone Elem. School	1,420	14,003	35,357	29,199	79,979	35,903	-	100,711	136,614	10,603	(13,006)	(24,362)	(7,870)	(18,421)	
Zealand School	1,166	11,492	29,016	70,035	111,709	29,464	-	161,489	190,953	(10,313)	(29,691)	(25,042)	4,169	(4,318)	
Grand Totals:	1,966,554	19,386,394	48,949,897	53,354,203	123,657,048	49,705,576	-	53,354,203	103,059,779	32,623,247	(63,924)	(4,207,318)	2,949,393	(7,347,711)	(3,356,418)