

North Dakota Teachers' Fund for Retirement

**Governmental Accounting Standards Board
Statement Nos 67 and 68
Actuarial Valuation as of July 1, 2022**



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

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November 2, 2022

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 Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 Actuarial Valuation based on a June 30, 2022, measurement date for employer reporting as of June 30, 2022. It contains various information that will need to be disclosed in order for North Dakota Teachers' Fund for Retirement employers to comply with GASB 67 and 68.

It is important to note that GASB 67 and 68 only define pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for pension funding purposes. The assumptions used in this valuation are the same as those used in the July 1, 2022 Actuarial Valuation report dated October 20, 2022. Additional details can be found in that report.

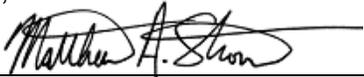
This report was prepared in accordance with generally accepted actuarial principles and practices. The census and financial information on which our calculations were based was supplied by the staff of the Retirement and Investment Office. That assistance is gratefully acknowledged.

The 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.

The actuarial calculations were completed under the supervision of Matthew Strom, FSA, MAAA, EA and Tanya Dybal, FSA, MAAA EA. 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. 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 
Matthew Strom, FSA, MAAA, EA
Senior Vice President and Actuary


Tanya Dybal, FSA, MAAA, EA
Vice President and Actuary

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 as of June 30, 2022. 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, 2022, provided by the North Dakota Retirement and Investment Office;
- The assets of the Fund as of June 30, 2022, 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.

Highlights of the valuation

The following are key observations regarding this actuarial valuation:

- GASB 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.

Section 1: Actuarial Valuation Summary

- 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 fair value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) on a fair value basis. The NPL increased from \$1.05 billion as of June 30, 2021, to \$1.46 billion as of June 30, 2022, primarily as a result of a lower-than-expected investment return for the fiscal year ending June 30, 2022. Changes in these values during the prior fiscal year ending June 30, 2022, can be found in *Exhibit 5*.
- The discount rate used to determine the TPL and NPL was 7.25% as of both June 30, 2021, and June 30, 2022. The detailed calculations used in this derivation were provided separately.

Section 1: Actuarial Valuation Summary

Summary of key valuation results

Disclosure elements for fiscal year ending June 30		2022	2021
Disclosure elements for fiscal year ending June 30:	• Service cost	\$92,335,934	\$87,088,239
	• Total Pension Liability	4,479,973,211	4,336,060,141
	• Plan Fiduciary Net Position	3,023,920,243	3,282,404,830
	• Net Pension Liability	1,456,052,968	1,053,655,311
	• Pension fiduciary net position as a percentage of total pension liability	67.5%	75.7%
Schedule of contributions for fiscal year ending June 30:	• Actuarially determined contribution	\$97,341,070	\$101,655,277
	• Actual contributions	100,331,347	98,264,202
	• Contribution deficiency / (excess)	(2,990,277)	3,391,075
Demographic data for plan year ending June 30:	• Number of retired members and beneficiaries	9,438	9,262
	• Number of vested terminated members	1,827	1,754
	• Number of active non-vested members	1,423	1,213
	• Number of active members	11,802	11,627
Key assumptions as of June 30:	• Investment rate of return	7.25%	7.25%
	• Municipal Bond Index	3.54%	2.16%
	• Inflation rate	2.30%	2.30%
	• Projected salary increases	3.80% to 14.80% varying by service	3.80% to 14.80% varying by service

Section 1: Actuarial Valuation Summary

Important information about actuarial valuations

In order to prepare a valuation, 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. Even where they appear precise, outside factors may change how they operate. 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 fair value of assets as of the valuation date, as provided by TFFR.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments, if applicable. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.
Models	<p>Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.</p> <p>The blended discount rate used for calculating total pension liability is based on a model developed by our Actuarial Technology and Systems unit. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.</p>

Section 1: Actuarial Valuation Summary

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.

Actuarial results in this report are not rounded, but that does not imply precision.

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 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, 2022	July 1, 2021
Retired members and beneficiaries	9,438	9,262
Vested inactive members	1,827	1,754
Non-Vested inactive members	1,423	1,213
Active members		
Vested	8,326	8,306
Non-Vested	<u>3,476</u>	<u>3,321</u>
Total active members	11,802	11,627
Total membership	24,490	23,856

Active Membership By Plan Eligibility

	July 1, 2022	July 1, 2021
Tiered 1 Grandfathered	824	1,089
Tiered 1 Non-Grandfathered	3,025	3,058
Tier 2	<u>7,953</u>	<u>7,480</u>
Total active membership	11,802	11,627

Section 2: GASB 67 and 68 Information

Exhibit 2 – Net pension liability

Reporting Date for Employer under GASB 68	June 30, 2022	June 30, 2021
Components of the Net Pension Liability		
Total Pension Liability	\$4,479,973,211	\$4,336,060,141
Plan Fiduciary Net Position	<u>(3,023,920,243)</u>	<u>(3,282,404,830)</u>
Net Pension Liability	1,456,052,968	1,053,655,311
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	67.5%	75.7%

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, 2022.

Actuarial assumptions. The total pension liability as of June 30, 2022, which was measured by an actuarial valuation as of July 1, 2022, used the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.30%
Salary increases	3.80% to 14.80%, varying by service, including inflation and productivity
Investment rate of return	7.25%, net of pension plan investment expense, including inflation
Cost-of-living adjustments	None

For active and inactive members, mortality rates were based on the PubT-2010 Employee table projected with generational improvement using Scale MP-2019. For healthy retirees, mortality rates were based on 104% of the PubT-2010 Retiree table for retirees and to 95% of the PubT-2010 Contingent Survivor table for beneficiaries, both projected with generational improvement using Scale MP-2019. For disability retirees, mortality rates were based on the PubNS-2010 Non-Safety Disabled Mortality table projected with generational improvement using Scale MP-2019.

The actuarial assumptions used were based on the results of an experience study dated March 19, 2020. They are the same as the assumptions used in the July 1, 2022, funding actuarial valuation for TFFR.

Section 2: GASB 67 and 68 Information

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 June 30, 2022, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
Global Equities	55.00%	6.61%
Global Fixed Income	26.00%	0.35%
Global Real Estate	18.00%	4.60%
Cash Equivalents	<u>1.00%</u>	<u>-1.05%</u>
Total	100.00%	

* As reported by the North Dakota Retirement and Investment Office.

Discount rate: The long-term expected rate of return on pension plan investments is 7.25%. 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, 2022, is 3.54%, as published by The Bond Buyer.

The discount rate used to measure the total pension liability was 7.25% as of June 30, 2022. 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, 2022, 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, 2022. 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, 2022.

Section 2: GASB 67 and 68 Information

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, calculated using the discount rate of 7.25%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate.

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Net pension liability as of June 30, 2018*	\$1,799,744,383	\$1,332,858,315	\$944,554,161
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, 2020	2,038,548,355	1,530,503,462	1,108,292,065
Net pension liability as of June 30, 2021	1,582,102,595	1,053,655,311	614,833,478
Net pension liability as of June 30, 2022	2,000,483,274	1,456,052,968	1,004,516,629

* Net pension liability on or before June 30, 2019, were based on 6.75% (1% Decrease), 7.75% (Current Discount) and 8.75% (1% Increase) discount rates.

Section 2: GASB 67 and 68 Information

Exhibit 5 – Schedule of changes in Net Pension Liability

Reporting Date for Employer under GASB 68	June 30, 2022	June 30, 2021
Total Pension Liability		
Service cost	\$92,335,934	\$87,088,239
Interest	311,929,245	300,698,090
Change of benefit terms	0	0
Differences between expected and actual experience	(8,504,654)	8,366,320
Changes of assumptions	0	0
Benefit payments, including refunds of member contributions	(251,847,455)	(241,128,271)
Net change in Total Pension Liability	\$143,913,070	\$155,024,378
Total Pension Liability – beginning	<u>4,336,060,141</u>	<u>4,181,035,763</u>
Total Pension Liability – ending	<u>\$4,479,973,211</u>	<u>\$4,336,060,141</u>
Plan Fiduciary Net Position		
Contributions – employer	\$100,331,347	\$98,264,202
Contributions – employee	92,462,223	90,557,210
Contributions – purchased service credit	2,017,055	2,559,121
Contributions – other	25,166	126,112
Net investment income	(198,880,583)	684,172,530
Benefit payments, including refunds of member contributions	(251,847,455)	(241,128,271)
Administrative expense	(2,592,340)	(2,678,375)
Other	<u>0</u>	<u>0</u>
Net change in Plan Fiduciary Net Position	(\$258,484,587)	\$631,872,529
Plan Fiduciary Net Position – beginning	<u>3,282,404,830</u>	<u>2,650,532,301</u>
Plan Fiduciary Net Position – ending	<u>\$3,023,920,243</u>	<u>\$3,282,404,830</u>
Net Pension Liability – ending	<u>\$1,456,052,968</u>	<u>\$1,053,655,311</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	67.5%	75.7%
Covered employee payroll	\$786,912,450	\$770,699,600
Plan Net Pension Liability as percentage of covered employee payroll	185.0%	136.7%

Section 2: GASB 67 and 68 Information

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- Employee Payroll	Contributions as a Percentage of Covered Employee 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%
2020	93,688,429	93,032,453	655,976	729,660,661	12.75%
2021	101,655,277	98,264,202	3,391,075	770,699,600	12.75%
2022	97,341,070	100,331,347	(2,990,277)	786,912,450	12.75%

See accompanying notes to this schedule on next page.

Section 2: GASB 67 and 68 Information

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	21 years as of July 1, 2022 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 fair 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 fair value of assets (adjusted for receipts and disbursements during the year).
Investment rate of return	7.25%, net of pension plan investment expense
Inflation rate	2.30%
Projected salary increases	3.80% to 14.80%, varying by service, includes inflation and productivity
Mortality*	Post-retirement Non-Disabled: 104% of the PubT-2010 Retiree table for retirees and to 95% of the PubT-2010 Contingent Survivor table for beneficiaries, both projected with generational improvement using Scale MP-2019. Pre-retirement Non-Disabled: PubT-2010 Employee table projected with generational improvement using Scale MP-2019 Disabled: PubNS-2010 Non-Safety Disabled Mortality table projected with generational improvement using Scale MP-2019.
Other assumptions	Same as those used in the July 1, 2022, funding actuarial valuation.

* The mortality rates were based on historical and current demographic data, as used in the experience study dated March 19, 2020. 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.

Section 3: Additional Information for GASB 68

Exhibit A: Reconciliation of Collective Net Pension Liability

	Increase/(Decrease) For Fiscal Year Ending June 30, 2022		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balance at the beginning of the year	\$4,336,060,141	\$3,282,404,830	\$1,053,655,311
Changes for the year			
Service cost	92,335,934		92,335,934
Interest	311,929,245		311,929,245
Differences between expected and actual experience	(8,504,654)		(8,504,654)
Contributions – employer		100,331,347	(100,331,347)
Contributions – member		92,462,223	(92,462,223)
Contributions – purchased service credit		2,017,055	(2,017,055)
Contributions – other		25,166	(25,166)
Net Investment income		(198,880,583)	198,880,583
Benefit payments, including refunds of employee contributions	(251,847,455)	(251,847,455)	--
Administrative expense	--	(2,592,340)	2,592,340
Change of assumptions	--	--	--
Change of benefit terms	--	--	--
Net Change	143,913,070	(258,484,587)	402,397,657
Balances at end of year	\$4,479,973,211	\$3,023,920,243	\$1,456,052,968

Section 3: Additional Information for GASB 68

As shown in Exhibit A, during the plan year that ended June 30, 2022, the changes in net pension liability due to differences between expected and actual demographic experience is a decrease of \$8,504,654. The average expected remaining service lives of all members is 8 years, determined as of July 1, 2021 (the beginning of the measurement period ending June 30, 2022). Therefore, of the \$8,504,654 demographic gain, \$1,063,082 is recognized in pension expense in the current year and \$7,441,572 is reflected as a deferred inflow of resources related to pensions.

Based on the assumed investment return of 7.25%, the expected net investment income for the year was \$235,813,705. As shown in Exhibit A, the actual net investment income for the year was -\$198,880,583. The difference between actual and expected investment experience is an increase in net pension liability of \$434,694,288, which is recognized over a 5-year period. Of this amount, \$86,938,858 is reflected in the current year and \$347,755,430 is reflected as a deferred outflow of resources related to pensions.

Section 3: Additional Information for GASB 68

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 2022	Outstanding Balance at June 30, 2022
Outflows					
Investments	2019	\$59,163,355	5 years	\$11,832,671	\$11,832,671
Investments	2020	114,538,151	5 years	22,907,630	45,815,260
Assumptions	2020	51,813,028	7 years	7,401,861	29,607,444
Demographics	2021	8,366,320	8 years	1,045,790	6,274,740
Investments	2022	434,694,288	5 years	86,938,858	347,755,430
Total Outflows				\$130,126,810	\$441,285,545
Inflows					
Demographics	2016	\$8,092,800	7 years	\$1,156,116	\$0
Demographics	2017	10,748,944	7 years	1,535,563	1,535,566
Demographics	2018	27,939,071	7 years	3,991,296	7,982,591
Investments	2018	30,002,998	5 years	6,000,598	0
Demographics	2019	23,494,914	7 years	3,356,416	10,069,250
Demographics	2020	20,732,097	7 years	2,961,728	11,846,912
Investments	2021	493,904,813	5 years	98,780,963	296,342,887
Demographics	2022	8,504,654	8 years	1,063,082	7,441,572
Total Inflows				\$118,845,762	\$335,218,778

Section 3: Additional Information for GASB 68

Exhibit B: Collective Deferred Outflow of Resources and Deferred Inflows of Resources Related to Pensions *(continued)*

	June 30, 2022	June 30, 2021
Deferred Outflows of Resources		
Difference between expected an actual experience in the Total Pension Liability	\$6,274,740	\$7,320,530
Changes in assumptions	29,607,444	37,009,305
Net difference between projected and actual earnings on pension plan investments	<u>109,060,474</u>	<u>N/A</u>
Total Deferred Outflows of Resources	\$144,942,658	\$44,329,835
Deferred Inflows of Resources		
Difference between expected and actual experience in the Total Pension Liability	\$38,875,891	\$44,435,438
Changes of assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	<u>N/A</u>	<u>308,736,216</u>
Total Deferred Inflows of Resources	\$38,875,891	\$353,171,654
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Year Ended June 30:		
2022	N/A	(\$74,594,728)
2023	\$18,437,759	(67,438,017)
2024	8,140,655	(77,735,121)
2025	(10,775,680)	(96,651,456)
2026	91,361,697	5,485,923
2027	(17,292)	1,045,790
Thereafter	(1,080,372)	1,045,790
Net deferred outflows/(inflows) of resources	\$106,066,767	(\$308,841,819)

Section 3: Additional Information for GASB 68

Exhibit C below shows the individual components of collective pension expense, which totaled \$87,820,418 for the fiscal year that ended June 30, 2022.

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 \$402,397,657 and employer contributions were \$100,331,347. The net value of deferred outflows and deferred inflows of resources as of the end of the current fiscal year is \$106,066,767 compared to the net value as of the end of the prior fiscal of -\$308,841,819 for a change of \$414,908,586. Therefore, the pension expense for the fiscal year that ended June 30, 2022, is \$402,397,657 + \$100,331,347 - \$414,908,586, or \$87,820,418.

Exhibit C: Collective Pension Expenses

Components of Pension Expense	Fiscal Year Ending June 30, 2022	Fiscal Year Ending June 30, 2021
Service cost	\$92,335,934	\$87,088,239
Interest on the Total Pension Liability	311,929,245	300,698,090
Projected earnings on plan investments	(235,813,705)	(190,267,717)
Member contributions	(92,462,223)	(90,557,210)
Contributions – purchased service credit	(2,017,055)	(2,559,121)
Contributions – other	(25,166)	(126,112)
Administrative expense	2,592,340	2,678,375
Current Year recognition of:		
Changes in assumptions	7,401,861	31,876,808
Difference between expected and actual experience	(13,018,411)	(11,639,717)
Difference between projected and actual earnings on pension plan investments	16,897,598	(90,688,425)
Change of benefit terms	0	0
Total pension expense	\$87,820,418	\$36,503,210

Section 3: Additional Information for GASB 68

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, 2022, 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, 2022, 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, 2022.

Section 3: Additional Information for GASB 68

EXHIBIT D Schedule of Employer Allocations as of June 30, 2022

Employer Name	Covered Payroll	Employer's Proportionate Share Allocation
Alexander School	\$ 1,683,942	0.21399356%
Anamoose School	802,268	0.10195133%
Apple Creek Elem School	413,177	0.05250609%
Ashley School	1,050,363	0.13347904%
Bakker Elem School	51,575	0.00655410%
Barnes County North	1,747,452	0.22206434%
Beach School	2,298,079	0.29203750%
Belcourt School	10,001,482	1.27097779%
Belfield Public School	1,466,695	0.18638605%
Beulah School	3,928,555	0.49923666%
Billings Co. School Dist.	1,002,948	0.12745353%
Bismarck Public Schools	84,464,921	10.73371266%
Blessed John Paul II Catholic Sch Network	-	0.00000000%
Bottineau School	4,154,381	0.52793431%
Bowbells School	693,834	0.08817167%
Bowman School	3,288,361	0.41788141%
Burke Central School	893,574	0.11355444%
Burleigh County Spec. Ed.	122,822	0.01560814%
Carrington School	2,917,266	0.37072310%
Cavalier School	2,505,133	0.31834966%
Center Stanton School	1,712,755	0.21765508%
Central Cass School	4,687,777	0.59571772%
Central Elementary School	-	0.00000000%
Central Regional Education Association	1,238,025	0.15732696%
Central Valley School	1,374,025	0.17460968%
Dakota Prairie School	2,270,176	0.28849160%
Devils Lake School	11,725,608	1.49007788%
Dickinson School	25,279,017	3.21243067%
Divide School	3,045,926	0.38707308%
Drake School	554,947	0.07052203%
Drayton School	1,437,551	0.18268245%
Dunseith School	4,056,962	0.51555447%
E Central Ctr Exc Childn	711,090	0.09036459%
Earl Elem. School	27,800	0.00353280%
Edgeley School	1,440,668	0.18307861%
Edmore School	652,995	0.08298195%
Eight Mile School	1,969,234	0.25024817%
Elgin-New Leipzig School	1,297,076	0.16483102%
Ellendale School	1,765,034	0.22429870%
Emerado Elementary School	752,321	0.09560410%
Enderlin Area School District	2,224,959	0.28274542%
Fairmount School	801,059	0.10179779%
Fargo Public Schools	84,040,157	10.67973402%
Fessenden-Bowdon School	1,159,245	0.14731560%
Finley-Sharon School	1,183,540	0.15040300%
Flasher School	1,404,159	0.17843900%
Fordville Lankin School	485,820	0.06173752%
Fort Ransom Elem School	198,943	0.02528144%
Fort Totten School	2,023,042	0.25708597%
Fort Yates School	980,956	0.12465883%
Gackle-Streeter Pub Sch	909,020	0.11551734%
Garrison School	2,528,284	0.32129160%
Glen Ullin School	1,110,245	0.14108878%
Glenburn School	1,835,152	0.23320917%
Goodrich School	188,776	0.02398939%
Grafton School	-	0.00000000%
Grafton School District	4,754,793	0.60423401%
Grand Forks School	50,955,420	6.47536073%
Great North West Cooperative	176,372	0.02241314%
Grenora School	1,537,603	0.19539700%

Section 3: Additional Information for GASB 68

EXHIBIT D Schedule of Employer Allocations as of June 30, 2022

Employer Name	Covered Payroll	Employer's Proportionate Share Allocation
Griggs County Central Sch	\$ 1,600,464	0.20338524%
Gst Educational Services	1,919,085	0.24387533%
Halliday School	294,766	0.03745853%
Hankinson School	1,655,584	0.21038992%
Harvey School	2,338,641	0.29719202%
Hatton Eielson Psd	1,314,059	0.16698920%
Hazelton - Moffit School	994,396	0.12636681%
Hazen School	3,241,652	0.41194573%
Hebron School	1,155,067	0.14678465%
Hettinger School	1,550,937	0.19709143%
Hillsboro School	2,959,778	0.37612548%
Hope School	-	0.00000000%
Hope-Page Public School District	1,583,351	0.20121062%
Horse Creek Elem. School	42,600	0.00541356%
James River Multidistrict Spec Ed Unit	1,178,496	0.14976200%
Jamestown School	14,074,558	1.78857987%
Kenmare School	1,881,053	0.23904220%
Kensal School	296,702	0.03770462%
Kidder County School District	2,188,284	0.27808484%
Killdeer School	4,078,425	0.51828193%
Kindred School	4,373,152	0.55573546%
Kulm School	1,047,713	0.13314227%
Lake Region Spec Ed	1,975,278	0.25101629%
Lakota School	1,242,655	0.15791522%
Lamoure School	1,582,085	0.20104973%
Langdon Area School	2,432,665	0.30914045%
Larimore School	2,113,753	0.26861350%
Leeds School	974,729	0.12386759%
Lewis And Clark School	2,583,404	0.32829622%
Lidgerwood School	1,251,394	0.15902581%
Linton School	1,675,087	0.21286831%
Lisbon School	4,020,068	0.51086600%
Litchville-Marion School	934,524	0.11875827%
Little Heart Elem. School	175,304	0.02227745%
Logan County	-	0.00000000%
Lone Tree Elem. School	287,764	0.03656870%
Lonetree Spec Ed Unit	-	0.00000000%
Maddock School	873,946	0.11106008%
Mandan Public Schools	23,882,708	3.03498927%
Mandaree School	1,562,031	0.19850121%
Manning Elem School	117,831	0.01497390%
Manvel Elem. School	1,084,977	0.13787766%
Maple Valley School	1,683,957	0.21399545%
Mapleton Elem. School	1,212,909	0.15413520%
Marmarth Elem. School	161,673	0.02054519%
Max School	1,266,983	0.16100688%
May-Port C-G School	2,876,271	0.36551347%
Mcclusky School	769,917	0.09784027%
Mckenzie County	49,635	0.00630757%
Mckenzie County School	11,569,778	1.47027513%
Medina School	1,158,561	0.14722870%
Menoken Elem School	238,950	0.03036551%
Midkota	1,531,586	0.19463228%
Midway School	1,417,750	0.18016615%
Milnor School	1,543,445	0.19613932%
Minnewaukan School	2,060,424	0.26183650%
Minot School	50,037,599	6.35872499%
Minto School	1,767,615	0.22462660%
Mohall Lansford Sherwood	2,111,328	0.26830535%
Montpelier School	819,467	0.10413704%

Section 3: Additional Information for GASB 68

EXHIBIT D Schedule of Employer Allocations as of June 30, 2022

Employer Name	Covered Payroll	Employer's Proportionate Share Allocation
Morton County	-	0.00000000%
Mott-Regent School	\$ 1,365,320	0.17350335%
Mt Pleasant School	1,983,045	0.25200330%
Munich School	1,065,904	0.13545401%
N Central Area Career And Tech Center	-	0.00000000%
Napoleon School	1,607,110	0.20422979%
Naughton Rural School	161,256	0.02049229%
Nd Center For Distance Education	1,993,195	0.25329306%
Nd Dept Of Public Instruction	288,366	0.03664525%
Nd School For Blind	700,538	0.08902358%
Nd School For Deaf	882,789	0.11218385%
Nd United	18,010	0.00228865%
Nd Youth Correctional Cnt	287,844	0.03657896%
Nedrose School	3,736,018	0.47476918%
Nelson County	10,864	0.00138060%
Nesson School	2,486,692	0.31600620%
New England School	1,737,629	0.22081602%
New Rockford Sheyenne School	1,864,113	0.23688952%
New Salem-Almont	2,259,757	0.28716753%
New Town School	7,046,089	0.89540955%
Newburg United District	809,511	0.10287179%
North Border School	2,614,164	0.33220521%
North Sargent School	1,517,878	0.19289037%
North Star	1,776,293	0.22572948%
North Valley Area Career	870,809	0.11066147%
Northern Cass School Dist	3,540,883	0.44997172%
Northern Plains Spec Ed	505,742	0.06426918%
Northwood School	2,122,687	0.26974876%
Oakes School	2,531,154	0.32165638%
Oberon Elem School	517,407	0.06575151%
Oliver - Mercer Spec Ed	1,027,559	0.13058109%
Page School	-	0.00000000%
Park River Area School District	2,220,065	0.28212354%
Parshall School	1,622,508	0.20618660%
Peace Garden Spec Ed	723,902	0.09199274%
Pembina Spec Ed Coop	130,251	0.01655219%
Pingree - Buchanan School	951,587	0.12092665%
Powers Lake School	1,419,483	0.18038644%
Richardton-Taylor	1,799,472	0.22867495%
Richland School	1,858,622	0.23619167%
Robinson School	-	0.00000000%
Rolette School	1,411,679	0.17939463%
Roosevelt School	379,403	0.04821414%
Roughrider Area Career And Tech Center	271,391	0.03448809%
Roughrider Service Program	206,712	0.02626874%
Rugby School	3,974,774	0.50511012%
Rural Cass Spec Ed	1,624,366	0.20642273%
Sargent Central School	1,733,157	0.22024773%
Sawyer School	866,760	0.11014700%
Scranton School	1,172,469	0.14899606%
Se Region Career And Tech	1,911,342	0.24289136%
Selfridge School	747,991	0.09505392%
Sheyenne Valley Area Voc	1,014,461	0.12891668%
Sheyenne Valley Spec Ed	1,642,417	0.20871664%
Slope County	27,975	0.00355497%
Solen - Cannonball School	1,844,198	0.23435878%
Souris Valley Spec Ed	1,196,250	0.15201821%
South Cent. Prairie Sp Ed	370,641	0.04710063%
South East Education Cooperative	796,023	0.10115782%
South Heart School	2,377,145	0.30208511%

Section 3: Additional Information for GASB 68

EXHIBIT D Schedule of Employer Allocations as of June 30, 2022

Employer Name	Covered Payroll	Employer's Proportionate Share Allocation
South Prairie School District	\$ 2,985,711	0.37942103%
South Valley Spec Ed	533,422	0.06778672%
Southwest Special Education Unit	116,600	0.01481740%
St. John's School	3,663,082	0.46550059%
St. Thomas School	-	0.00000000%
Stanley School	3,614,317	0.45930358%
Starkweather School	687,142	0.08732127%
Sterling School	156,453	0.01988193%
Strasburg School District	932,500	0.11850115%
Surrey School	2,689,900	0.34182968%
Sweet Briar Elem School	131,138	0.01666481%
Tgu School District	2,708,882	0.34424184%
Thompson School	2,850,391	0.36222461%
Tioga School	3,495,778	0.44423973%
Turtle Lake-Mercer School	1,419,773	0.18042321%
Twin Buttes Elem. School	585,068	0.07434976%
Underwood School	1,554,096	0.19749292%
United School	3,689,809	0.46889696%
Upper Valley Spec Ed	2,815,612	0.35780504%
Valley - Edinburg School	1,573,899	0.20000942%
Valley City School	6,588,925	0.83731358%
Velva School	2,981,294	0.37885969%
Wahpeton School	7,279,958	0.92512932%
Ward County	32,236	0.00409657%
Warwick School	1,898,331	0.24123786%
Washburn School	2,120,953	0.26952842%
West Fargo School	74,749,890	9.49913676%
West River Student Services	613,334	0.07794184%
Westhope School	1,296,951	0.16481512%
White Shield School	1,720,368	0.21862259%
Williams Co School Dist #8	-	0.00000000%
Williston Basin School Dist #7	29,137,357	3.70274441%
Williston School	-	0.00000000%
Wilmac Special Education	5,413,113	0.68789272%
Wilton School	1,710,674	0.21739059%
Wing School	659,687	0.08383227%
Wishek School	1,423,133	0.18085020%
Wolford School	-	0.00000000%
Wyndmere School	1,529,591	0.19437886%
Yellowstone Elem. School	614,419	0.07807972%
Zeeland School	514,817	0.06542234%
Grand Totals:	\$ 786,912,450	100.000000%

Section 3: Additional Information for GASB 68

EXHIBIT E
Schedule of Pension Amounts by Employer as of June 30, 2022

Employer Name	Discount Rate Sensitivity						Schedule of Contributions				Pension Expense		Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share	Total Employer Pension Expense
	Employer's Proportionate Share Allocation	Net Pension Liability	Covered Payroll	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)	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	Employer Contributions and Proportionate Share		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
Alexander School	0.21399356%	\$ 3,115,860	\$ 1,683,942	\$ 4,280,905	\$ 3,115,860	\$ 2,149,601	\$ 214,703	\$ -	12.75%	\$ 187,930	\$ 106,576	\$ 294,506		
Anamoose School	0.10195133%	1,484,465	802,268	2,039,519	1,484,465	1,024,118	102,289	102,289	12.75%	89,534	(23,961)	65,573		
Apple Creek Elem School	0.05250609%	764,516	413,177	1,050,376	764,516	527,432	52,680	52,680	12.75%	46,111	(2,977)	45,814		
Ashley School	0.13347904%	1,943,526	1,050,363	2,670,226	1,943,526	1,340,819	133,921	133,921	12.75%	117,222	(33,852)	83,370		
Bakker Elem School	0.00655410%	95,431	51,575	131,114	95,431	65,837	6,576	6,576	12.75%	5,756	1,814	7,570		
Barnes County North	0.22206494%	3,233,374	1,747,452	4,442,360	3,233,374	2,230,673	222,800	222,800	12.75%	195,018	(79,727)	115,291		
Beach School	0.29203750%	4,252,221	2,296,079	5,842,161	4,252,221	2,933,565	293,005	293,005	12.75%	256,469	(79,401)	177,068		
Belcourt School	1.27097779%	18,506,110	10,001,492	25,425,698	18,506,110	12,767,193	1,275,189	1,275,189	12.75%	1,116,178	(84,752)	1,031,426		
Bellfield Public School	0.18639605%	2,713,880	1,466,695	3,728,622	2,713,880	1,872,279	187,004	187,004	12.75%	163,685	(23,179)	101,506		
Beulah School	0.49923686%	7,269,150	3,926,655	9,987,146	7,269,150	5,014,915	500,891	500,891	12.75%	438,432	(66,818)	351,614		
Billings Co. School Dist.	0.12745353%	1,855,791	1,002,948	2,549,687	1,855,791	1,280,292	127,876	127,876	12.75%	111,930	(43,754)	155,684		
Bismarck Public Schools	10.73371266%	156,288,542	84,464,921	214,726,126	156,288,542	107,821,929	10,769,278	10,769,278	12.75%	9,426,391	(129,311)	9,297,080		
Blessed John Paul II Catholic Sch Network	0.00000000%	-	-	-	-	-	-	-	0.00%	-	(8,367)	(8,367)		
Bottineau School	0.52793431%	7,687,003	4,154,381	10,561,238	7,687,003	5,303,188	529,684	529,684	12.75%	463,634	(128,418)	335,216		
Bowbells School	0.08817167%	1,283,826	693,834	1,763,860	1,283,826	895,699	88,464	88,464	12.75%	77,433	5,060	82,493		
Bowman School	0.41788141%	6,084,575	3,288,361	8,359,648	6,084,575	4,197,688	419,266	419,266	12.75%	366,985	(37,622)	329,363		
Burke Central School	0.11355444%	1,653,413	893,574	2,271,638	1,653,413	1,140,673	113,931	113,931	12.75%	98,724	(20,309)	78,415		
Burleigh County Spec. Ed.	0.01560814%	227,263	122,822	312,238	227,263	156,786	15,660	15,660	12.75%	13,707	2,585	16,292		
Carrington School	0.37072310%	5,397,925	2,917,266	7,416,254	5,397,925	3,723,975	371,951	371,951	12.75%	325,571	(166,176)	159,395		
Cavalier School	0.31834966%	4,635,340	2,505,133	6,368,532	4,635,340	3,197,875	319,405	319,405	12.75%	279,576	(65,345)	224,231		
Center Stanton School	0.21765508%	3,169,173	1,712,755	4,354,153	3,169,173	2,186,381	218,376	218,376	12.75%	191,146	(21,465)	169,681		
Central Cass School	0.59571772%	8,673,966	4,687,777	11,917,233	8,673,966	5,984,084	597,692	597,692	12.75%	523,162	77,665	600,827		
Central Elementary School	0.00000000%	-	-	-	-	-	-	-	0.00%	-	(19,073)	(19,073)		
Central Regional Education Association	0.15732696%	2,290,764	1,238,025	3,147,300	2,290,764	1,580,375	157,848	157,848	12.75%	138,165	292,254	430,419		
Central Valley School	0.17460968%	2,542,409	1,374,025	3,493,037	2,542,409	1,753,983	175,188	175,188	12.75%	153,343	(45,088)	108,255		
Dakota Prairie School	0.28849160%	4,200,591	2,270,176	5,771,226	4,200,591	2,897,946	289,448	289,448	12.75%	253,355	8,512	261,867		
Devils Lake School	1.49007788%	21,696,323	11,725,608	29,808,759	21,696,323	14,968,080	1,495,015	1,495,015	12.75%	1,308,593	(277,356)	1,031,237		
Dickinson School	3.21243067%	46,774,692	25,279,017	64,774,692	46,774,692	32,269,400	3,223,075	3,223,075	12.75%	2,821,170	711,245	3,532,415		
Divide School	0.38707308%	5,635,989	3,045,926	7,743,332	5,635,989	3,888,213	388,356	388,356	12.75%	339,929	52,593	392,522		
Drake School	0.07052203%	1,026,838	554,947	1,410,781	1,026,838	708,406	70,756	70,756	12.75%	61,933	(24,414)	37,519		
Drayton School	0.18268245%	2,659,953	1,437,551	3,654,532	2,659,953	1,835,076	183,288	183,288	12.75%	160,432	(30,982)	129,450		
Dunseith School	0.51555447%	7,506,746	4,056,962	10,313,581	7,506,746	5,178,830	517,263	517,263	12.75%	452,762	183,054	635,816		
E Central Cir Exc Childn	0.09036459%	1,315,756	711,090	1,807,729	1,315,756	907,727	90,664	90,664	12.75%	79,359	(74,896)	4,463		
Earl Elem. School	0.00353280%	51,439	27,800	70,673	51,439	35,488	3,545	3,545	12.75%	3,103	(2,724)	379		
Edgeley School	0.18307861%	2,665,722	1,440,668	3,662,457	2,665,722	1,839,055	183,685	183,685	12.75%	160,780	(28,756)	132,024		
Edmore School	0.08298195%	1,208,261	652,995	1,660,040	1,208,261	833,567	83,257	83,257	12.75%	72,875	(53,472)	19,403		
Eight Mile School	0.25024817%	3,643,746	1,969,234	5,006,173	3,643,746	2,513,784	251,077	251,077	12.75%	219,769	46,770	266,539		
Elgin-New Leipzig School	0.16483102%	2,400,027	1,297,076	3,297,417	2,400,027	1,655,755	165,377	165,377	12.75%	144,755	4,313	149,068		
Ellendale School	0.22429870%	3,265,908	1,765,034	4,487,058	3,265,908	2,253,118	225,042	225,042	12.75%	196,980	(96,848)	100,132		
Emerado Elementary School	0.09560410%	1,392,046	752,321	1,912,544	1,392,046	960,359	95,921	95,921	12.75%	83,960	(10,051)	94,011		
Enderlin Area School District	0.28274542%	4,116,923	2,224,959	5,656,275	4,116,923	2,840,225	283,682	283,682	12.75%	248,308	(56,235)	192,073		
Fairmount School	0.10179779%	1,482,230	801,059	2,036,448	1,482,230	1,022,576	102,135	102,135	12.75%	89,399	(105,225)	(15,826)		
Fargo Public Schools	10.67973402%	155,502,584	84,040,157	213,646,293	155,502,584	107,279,704	10,715,121	10,715,121	12.75%	9,378,987	53,478	9,432,465		
Fessenden-Bowdon School	0.14731560%	2,144,993	1,159,245	2,947,024	2,144,993	1,479,810	147,804	147,804	12.75%	129,373	(9,617)	119,756		
Finley-Sharon School	0.15040300%	2,189,947	1,183,540	3,008,787	2,189,947	1,510,823	150,901	150,901	12.75%	132,085	(53,513)	78,572		
Flasher School	0.17843900%	2,598,166	1,404,159	3,569,642	2,598,166	1,792,449	179,030	179,030	12.75%	156,706	26,486	183,192		
Fordville Lanxin School	0.06173752%	898,931	485,820	1,235,049	898,931	620,164	61,942	61,942	12.75%	54,218	(53,245)	973		
Fort Ransom Elem School	0.02528144%	368,111	199,943	505,751	368,111	253,966	25,365	25,365	12.75%	22,202	(3,277)	18,925		
Fort Totten School	0.25708597%	3,743,308	2,023,042	5,142,962	3,743,308	2,582,471	257,938	257,938	12.75%	225,774	12,077	237,851		
Fort Yates School	0.12465883%	1,815,099	980,956	2,493,779	1,815,099	1,252,219	125,072	125,072	12.75%	109,476	(105,509)	3,967		
Gackle-Streeter Pub Sch	0.11551734%	1,681,994	909,020	2,310,905	1,681,994	1,160,391	115,900	115,900	12.75%	101,448	(4,669)	96,779		
Garrison School	0.32129160%	4,678,176	2,529,284	6,427,385	4,678,176	3,227,429	322,356	322,356	12.75%	282,160	(75,820)	206,340		
Glen Ullin School	0.14108878%	2,054,327	1,110,245	2,822,457	2,054,327	1,417,260	141,556	141,556	12.75%	123,905	(68,922)	54,983		
Glenburn School	0.23320917%	3,395,649	1,835,152	4,665,310	3,395,649	2,342,625	233,982	233,982	12.75%	204,805	(34,669)	170,136		
Goodrich School	0.02398839%	349,298	188,776	479,904	349,298	240,977	24,069	24,069	12.75%	21,068	(38,677)	(17,609)		
Grafton School	0.00000000%	-	-	-	-	-	-	-	0.00%	-	(1,200,284)	(1,200,284)		
Grafton School District	0.60423401%	8,797,967	4,754,793	12,097,600	8,797,967	6,069,631	606,236	606,236	12.75%	530,641	1,629,084	1,559,725		
Grand Forks School	6.47536073%	94,284,682	50,955,420	129,538,508	94,284,682	65,046,075	6,496,817	6,496,817	12.75%	5,686,689	(927,136)	4,759,553		
Great North West Cooperative	0.02241314%	326,347	176,372	448,371	326,347	225,144	22,487	22,487	12.75%	19,683	(5,200)	14,283		
Grenora School	0.19539700%	2,845,084	1,537,603	3,908,884	2,845,084	1,982,795	196,044	196,044	12.75%	171,598	25,849	197,447		

Section 3: Additional Information for GASB 68

EXHIBIT E

Schedule of Pension Amounts by Employer as of June 30, 2022

Employer Name	Discount Rate Sensitivity						Schedule of Contributions				Pension Expense		Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Total Employer Pension Expense	
	Employer's Proportionate Share Allocation	Net Pension Liability	Covered Payroll	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)	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	Contributions and Proportionate Share of Contributions		Total Employer Pension Expense
Griggs County Central Sch	0.20338524%	\$ 2,961,397	\$ 1,600,464	\$ 4,068,688	\$ 2,961,397	\$ 2,043,039	\$ 204,059	\$ 204,059	\$ -	12.75%	\$ 178,614	\$ (134,658)	\$ 43,956	
Gst Educational Services	0.24387533%	3,550,954	1,919,085	4,878,685	3,550,954	2,449,768	244,683	244,683	-	12.75%	214,172	24,192	238,364	
Halliday School	0.03745853%	545,416	294,766	749,352	545,416	376,277	37,583	37,583	-	12.75%	32,896	(61,250)	(28,354)	
Hankinson School	0.21038992%	3,063,389	1,655,584	4,208,815	3,063,389	2,113,402	211,087	211,087	-	12.75%	184,765	(50,604)	134,161	
Harvey School	0.29719202%	4,327,273	2,338,641	5,945,277	4,327,273	2,985,343	298,177	298,177	-	12.75%	260,995	(94,323)	166,672	
Hatton Eielson Psd	0.16698920%	2,431,451	1,314,059	3,340,591	2,431,451	1,677,434	167,543	167,543	-	12.75%	146,651	(21,671)	124,980	
Hazleton - Moffit School	0.12636681%	1,839,968	994,396	2,527,947	1,839,968	1,269,376	126,786	126,786	-	12.75%	110,976	14,260	125,236	
Hazen School	0.41194573%	5,998,148	3,241,652	8,240,905	5,998,148	4,138,063	413,311	413,311	-	12.75%	361,772	(76,742)	285,030	
Hebron School	0.14678465%	2,137,262	1,155,067	2,936,402	2,137,262	1,474,476	147,271	147,271	-	12.75%	128,907	(61,634)	67,273	
Hettinger School	0.19709143%	2,869,756	1,550,937	3,942,781	2,869,756	1,979,816	197,744	197,744	-	12.75%	173,087	(72,865)	100,222	
Hillsboro School	0.37612548%	5,476,586	2,959,778	7,524,327	5,476,586	3,778,243	377,372	377,372	-	12.75%	330,315	(9,123)	321,192	
Hope School	0.00000000%	-	-	-	-	-	-	-	-	0.00%	-	(171,456)	(171,456)	
Hope-Page Public School District	0.20121062%	2,929,733	1,583,351	4,025,185	2,929,733	2,021,194	201,877	201,877	-	12.75%	176,704	359,946	536,650	
Horse Creek Elem. School	0.00541356%	78,824	42,600	108,297	78,824	54,380	5,431	5,431	-	12.75%	4,754	(452)	4,302	
James River Multidistrict Spec Ed Unit	0.14976200%	2,180,614	1,178,496	2,995,964	2,180,614	1,504,384	150,258	150,258	-	12.75%	131,522	(97,078)	34,444	
Jamestown School	1.78857987%	26,042,670	14,074,558	35,780,241	26,042,670	17,966,582	1,794,506	1,794,506	-	12.75%	1,570,738	(530,807)	1,039,931	
Kenmare School	0.23904220%	3,480,581	1,881,053	4,781,999	3,480,581	2,401,219	239,834	239,834	-	12.75%	209,928	(52,523)	157,405	
Kensal School	0.03770462%	548,999	296,702	754,275	548,999	378,749	37,830	37,830	-	12.75%	33,112	(53,555)	(20,443)	
Kidder County School District	0.27808484%	4,049,063	2,188,284	5,563,041	4,049,063	2,793,408	279,006	279,006	-	12.75%	244,215	(120,050)	124,165	
Killdeer School	0.51828193%	7,546,459	4,078,425	10,368,143	7,546,459	5,206,228	519,999	519,999	-	12.75%	455,157	(198,734)	653,891	
Kindred School	0.55573546%	8,091,803	4,373,152	11,117,395	8,091,803	5,582,455	557,577	557,577	-	12.75%	488,049	(108,658)	596,707	
Kulm School	0.13314227%	1,938,622	1,047,713	2,663,489	1,938,622	1,337,436	133,583	133,583	-	12.75%	116,926	(65,402)	51,524	
Lake Region Spec Ed	0.25101629%	3,654,930	1,975,278	5,021,539	3,654,930	2,521,500	251,848	251,848	-	12.75%	220,444	(39,966)	180,478	
Lakota School	0.15791522%	2,299,329	1,242,655	3,159,068	2,299,329	1,586,285	158,438	158,438	-	12.75%	138,682	(33,451)	105,231	
Lamoure School	0.20104973%	2,927,391	1,582,085	4,021,966	2,927,391	2,019,578	201,716	201,716	-	12.75%	176,563	(84,655)	91,908	
Langdon Area School	0.30914045%	4,501,249	2,432,665	6,184,303	4,501,249	3,105,367	310,165	310,165	-	12.75%	271,488	(32,675)	238,813	
Larimore School	0.26861350%	3,911,155	2,113,753	5,373,568	3,911,155	2,698,267	269,504	269,504	-	12.75%	235,897	(87,156)	148,741	
Leeds School	0.12396759%	1,803,578	974,729	2,477,950	1,803,578	1,244,271	124,278	124,278	-	12.75%	108,781	(90,707)	18,074	
Lewis And Clark School	0.32829622%	4,780,167	2,583,404	6,567,511	4,780,167	3,297,790	329,384	329,384	-	12.75%	288,311	(152,060)	136,251	
Lidgerwood School	0.15902581%	2,315,500	1,251,394	3,181,285	2,315,500	1,597,441	159,553	159,553	-	12.75%	139,657	(29,589)	110,068	
Linton School	0.21286831%	3,099,475	1,675,087	4,258,395	3,099,475	2,138,298	213,574	213,574	-	12.75%	186,942	(84,196)	102,746	
Lisbon School	0.51086900%	7,438,490	4,020,068	10,219,789	7,438,490	5,131,734	512,559	512,559	-	12.75%	448,645	(30,324)	418,321	
Litchville-Marian School	0.11875827%	1,729,183	934,524	2,375,739	1,729,183	1,192,947	119,152	119,152	-	12.75%	104,294	(21,566)	82,728	
Little Heart Elem. School	0.02227745%	324,371	175,304	445,657	324,371	223,781	22,351	22,351	-	12.75%	19,564	(10,284)	29,848	
Logan County	0.00000000%	-	-	-	-	-	-	-	-	0.00%	-	(1,219)	(1,219)	
Lone Tree Elem. School	0.03656870%	532,460	287,764	731,551	532,460	367,339	36,690	36,690	-	12.75%	32,115	(859)	32,974	
Lonsdale Spec Ed Unit	0.00000000%	-	-	-	-	-	-	-	-	0.00%	-	(39,721)	(39,721)	
Maddock School	0.11106008%	1,617,094	873,946	2,221,738	1,617,094	1,115,617	111,428	111,428	-	12.75%	97,533	(82,586)	14,947	
Mandan Public Schools	3.03498927%	44,191,051	23,882,708	60,714,453	44,191,051	30,486,972	3,045,046	3,045,046	-	12.75%	2,665,340	164,357	2,829,697	
Mandaree School	0.19850121%	2,890,283	1,562,031	3,970,984	2,890,283	1,993,978	199,159	199,159	-	12.75%	174,325	(87,749)	86,576	
Manning Elem School	0.01437390%	218,028	117,831	299,550	218,028	150,415	15,024	15,024	-	12.75%	13,150	(1,351)	14,501	
Manvel Elem. School	0.13787766%	2,007,572	1,084,977	2,758,220	2,007,572	1,385,004	138,335	138,335	-	12.75%	121,085	31,216	152,301	
Maple Valley School	0.21399545%	3,115,887	1,683,957	4,280,943	3,115,887	2,149,620	214,705	214,705	-	12.75%	187,932	(72,997)	114,935	
Magleton Elem. School	0.15413520%	2,244,290	1,212,909	3,083,449	2,244,290	1,548,314	154,646	154,646	-	12.75%	135,362	(81,854)	217,216	
Marmarth Elem. School	0.02054519%	299,149	161,673	411,003	299,149	206,380	20,813	20,813	-	12.75%	18,043	(2,935)	15,108	
Max School	0.16100688%	2,344,345	1,266,983	3,220,916	2,344,345	1,617,341	161,540	161,540	-	12.75%	141,397	(36,871)	104,526	
May-Port C-G School	0.38551347%	5,322,070	2,876,271	7,312,036	5,322,070	3,671,644	366,725	366,725	-	12.75%	320,995	(110,164)	210,831	
Mcclosky School	0.09784027%	1,424,606	769,917	1,957,278	1,424,606	982,822	98,164	98,164	-	12.75%	85,924	(18,028)	67,896	
Mckenzie County	0.00630757%	91,842	49,635	126,182	91,842	63,361	6,328	6,328	-	12.75%	5,539	(2,677)	2,862	
Mckenzie County School	1.47027513%	21,407,985	11,569,778	29,412,608	21,407,985	14,769,158	1,475,147	1,475,147	-	12.75%	1,291,202	1,027,983	2,319,185	
Medina School	0.14722870%	2,143,728	1,158,561	2,945,286	2,143,728	1,478,937	147,717	147,717	-	12.75%	129,297	(4,886)	124,411	
Menoken Elem School	0.03036551%	442,138	238,950	607,457	442,138	305,027	30,466	30,466	-	12.75%	26,667	(17,197)	43,864	
Midkota	0.19463228%	2,833,949	1,531,586	3,893,586	2,833,949	1,995,114	195,277	195,277	-	12.75%	170,927	(58,623)	229,550	
Midway School	0.18016615%	2,623,315	1,417,750	3,604,194	2,623,315	1,809,799	180,763	180,763	-	12.75%	158,223	(71,751)	86,472	
Minor School	0.19613932%	2,855,892	1,543,445	3,923,734	2,855,892	1,970,252	196,789	196,789	-	12.75%	172,250	(68,012)	104,238	
Minnewaukan School	0.26183650%	3,812,478	2,060,424	5,237,995	3,812,478	2,630,191	262,704	262,704	-	12.75%	229,946	(2,322)	232,268	
Minot School	6.35872499%	92,586,404	50,037,599	127,205,230	92,586,404	63,874,540	6,379,794	6,379,794	-	12.75%	5,584,259	(776,389)	4,807,870	
Minto School	0.22462660%	3,270,682	1,767,615	4,493,618	3,270,682	2,256,412	225,371	225,371	-	12.75%	197,268	(75,468)	22,796	
Mohall Lansford Sherwood	0.26830535%	3,906,668	2,111,328	5,367,404	3,906,668	2,695,172	269,194	269,194	-	12.75%	235,627	(177,227)	58,400	
Montpelier School	0.10413704%	1,516,290	819,467	2,083,244	1,516,290	1,046,074	104,482	104,482	-	12.75%	91,454	(18,001)	73,453	

Section 3: Additional Information for GASB 68

EXHIBIT E

Schedule of Pension Amounts by Employer as of June 30, 2022

Employer Name	Discount Rate Sensitivity						Schedule of Contributions				Pension Expense		Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer
	Employer's Proportionate Share Allocation	Net Pension Liability	Covered Payroll	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)	Statutory Required Contribution	Contributions In Relation to the Statutory Required Contribution	Contribution Deficiency/ (Excess)	Contributions as a Percentage of Covered Payroll	Proportionate Share of Pension Expense	Contributions Share of Contributions	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Morton County	0.00000000%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%	\$ -	(8,407)	(8,407)	
Mott-Regent School	0.17350335%	2,526,301	1,365,320	3,470,905	2,526,301	1,742,870	174,078	174,078	12.75%	152,371	(118,409)	33,962	
Mt Pleasant School	0.25200330%	3,669,302	1,983,045	5,041,284	3,669,302	2,531,415	252,838	252,838	12.75%	221,310	1,255	222,565	
Munich School	0.13545401%	1,972,282	1,065,904	2,709,735	1,972,282	1,380,658	135,903	135,903	12.75%	118,956	(299)	118,657	
N Central Area Career And Tech Center	0.00000000%	-	-	-	-	-	-	-	0.00%	-	(42,032)	(42,032)	
Napoleon School	0.20422979%	2,973,694	1,607,110	4,085,583	2,973,694	2,051,522	204,906	204,906	12.75%	179,355	(63,964)	115,391	
Naughton Rural School	0.02049229%	298,379	161,256	409,945	298,379	205,848	20,560	20,560	12.75%	17,996	16,673	34,669	
Nd Center For Distance Education	0.25329306%	3,688,081	1,993,195	5,067,085	3,688,081	2,544,371	254,132	254,132	12.75%	222,443	55,045	277,488	
Nd Dept Of Public Instruction	0.03664525%	533,574	288,366	733,082	533,574	368,108	36,767	36,767	12.75%	32,182	29,397	61,579	
Nd School For Blind	0.08902358%	1,296,230	700,538	1,780,902	1,296,230	894,257	89,319	89,319	12.75%	78,181	(31,249)	46,932	
Nd School For Deaf	0.11218385%	1,633,456	882,789	2,244,219	1,633,456	1,126,905	112,556	112,556	12.75%	98,520	(55,166)	43,354	
Nd United	0.00228865%	33,324	18,010	45,784	33,324	22,990	2,296	2,296	12.75%	2,010	(86,416)	(84,406)	
Nd Youth Correctional Cnt	0.03657896%	532,609	287,844	731,756	532,609	367,442	36,700	36,700	12.75%	32,124	(269,101)	(236,977)	
Nedrose School	0.47476918%	6,912,891	3,736,018	9,497,678	6,912,891	4,769,135	476,342	476,342	12.75%	416,944	422,104	839,048	
Nelson County	0.00138060%	20,102	10,864	27,619	20,102	13,868	1,385	1,385	12.75%	1,212	(973)	239	
Nesson School	0.31600620%	4,601,218	2,486,692	6,321,651	4,601,218	3,174,335	317,053	317,053	12.75%	277,518	140,475	417,993	
New England School	0.22081602%	3,215,198	1,737,629	4,417,388	3,215,198	2,218,134	221,548	221,548	12.75%	193,922	32,775	226,697	
New Rockford Shyenne School	0.23688952%	3,449,237	1,864,113	4,738,935	3,449,237	2,379,595	237,674	237,674	12.75%	208,037	(76,510)	131,527	
New Salem-Almont	0.28716753%	4,181,311	2,259,757	5,744,738	4,181,311	2,884,646	288,119	288,119	12.75%	252,192	8,387	260,579	
New Town School	0.89540955%	13,037,637	7,046,089	17,912,518	13,037,637	8,994,539	899,376	899,376	12.75%	786,352	392,196	1,178,548	
Newburg United District	0.10287179%	1,497,868	809,511	2,057,933	1,497,868	1,033,364	103,213	103,213	12.75%	90,342	6,770	97,112	
North Border School	0.33220521%	4,837,084	2,614,164	6,645,710	4,837,084	3,337,057	333,306	333,306	12.75%	291,744	(149,351)	142,393	
North Sargent School	0.19289037%	2,808,586	1,517,878	3,858,740	2,808,586	1,937,616	193,530	193,530	12.75%	169,397	(27,845)	141,552	
North Star	0.22572948%	3,296,741	1,776,293	4,515,680	3,296,741	2,267,490	226,477	226,477	12.75%	199,237	(45,161)	154,076	
North Valley Area Career	0.11066147%	1,611,290	870,809	2,213,764	1,611,290	1,111,613	111,028	111,028	12.75%	97,183	47,977	145,160	
Northern Cass School Dist	0.44967172%	6,551,827	3,540,883	9,001,609	6,551,827	4,520,041	451,463	451,463	12.75%	395,167	60,078	455,245	
Northern Plains Spec Ed	0.06426918%	935,793	505,742	1,285,694	935,793	645,595	64,482	64,482	12.75%	56,441	38,105	94,546	
Northwood School	0.28974876%	3,927,685	2,122,687	5,396,279	3,927,685	2,709,671	270,643	270,643	12.75%	236,894	82,750	319,644	
Oakes School	0.32165636%	4,683,487	2,531,154	6,434,882	4,683,487	3,231,092	322,722	322,722	12.75%	282,460	10,095	292,575	
Oberon Elem School	0.06575151%	957,377	517,407	1,315,348	957,377	680,485	65,969	65,969	12.75%	57,743	(8,088)	49,655	
Oliver - Mercer Spec Ed	0.13058109%	1,901,330	1,027,559	2,612,253	1,901,330	1,311,709	131,014	131,014	12.75%	114,677	(41,625)	73,052	
Page School	0.00000000%	-	-	-	-	-	-	-	0.00%	-	(199,580)	(199,580)	
Park River Area School District	0.28212354%	4,107,868	2,220,065	5,843,834	4,107,868	2,833,978	283,058	283,058	12.75%	247,762	(79,514)	168,248	
Parshall School	0.20618660%	3,002,186	1,622,508	4,124,728	3,002,186	2,071,179	206,870	206,870	12.75%	181,074	(104,101)	76,973	
Peace Garden Spec Ed	0.09199274%	1,339,463	723,902	1,840,299	1,339,463	924,082	92,298	92,298	12.75%	80,788	19,517	100,305	
Pembina Spec Ed Coop	0.01655219%	241,009	130,251	331,124	241,009	166,270	16,607	16,607	12.75%	14,536	258	14,794	
Pingree - Buchanan School	0.12092665%	1,760,756	951,587	2,419,117	1,760,756	1,214,728	121,327	121,327	12.75%	106,198	(7,199)	98,999	
Powers Lake School	0.18038644%	2,626,522	1,419,483	3,608,601	2,626,522	1,812,012	180,984	180,984	12.75%	158,416	27,772	186,188	
Richardton-Taylor	0.22867495%	3,329,628	1,799,472	4,574,604	3,329,628	2,297,078	229,433	229,433	12.75%	200,823	(78,987)	121,836	
Richland School	0.23619167%	3,439,076	1,858,622	4,724,975	3,439,076	2,372,585	236,974	236,974	12.75%	207,425	(32,352)	175,073	
Robinson School	0.00000000%	-	-	-	-	-	-	-	0.00%	-	(10,092)	(10,092)	
Rollette School	0.17939463%	2,612,081	1,411,679	3,588,760	2,612,081	1,802,049	179,989	179,989	12.75%	157,545	(16,576)	140,969	
Roosevelt School	0.04821414%	702,023	379,403	964,516	702,023	484,319	48,374	48,374	12.75%	42,342	(23,313)	19,029	
Roughrider Area Career And Tech Center	0.03448809%	502,165	271,391	689,928	502,165	346,439	34,602	34,602	12.75%	30,288	16,899	47,187	
Roughrider Service Program	0.02626674%	382,487	206,712	525,502	382,487	263,874	26,356	26,356	12.75%	23,069	(11,370)	11,699	
Rugby School	0.50511012%	7,354,671	3,974,774	10,104,643	7,354,671	5,073,915	506,784	506,784	12.75%	443,590	14,454	458,044	
Rural Cass Spec Ed	0.20642273%	3,005,624	1,624,366	4,129,452	3,005,624	2,073,551	207,107	207,107	12.75%	181,281	75,533	256,814	
Sargent Central School	0.22024773%	3,206,924	1,733,157	4,406,019	3,206,924	2,212,425	220,978	220,978	12.75%	193,422	1,135	194,557	
Sawyer School	0.11014700%	1,603,799	866,760	2,203,472	1,603,799	1,106,445	110,512	110,512	12.75%	96,732	(59,070)	37,662	
Scranton School	0.14899606%	2,169,462	1,172,469	2,980,641	2,169,462	1,496,690	149,490	149,490	12.75%	130,849	(45,992)	84,857	
Se Region Career And Tech	0.24289136%	3,536,627	1,911,342	4,859,001	3,536,627	2,439,884	243,696	243,696	12.75%	213,308	44,812	258,120	
Selfridge School	0.09505392%	1,384,035	747,991	1,901,538	1,384,035	954,832	95,369	95,369	12.75%	83,477	(66,395)	17,082	
Shyenne Valley Area Voc	0.12891668%	1,877,095	1,014,461	2,578,957	1,877,095	1,294,989	129,344	129,344	12.75%	113,215	30,116	143,331	
Shyenne Valley Spec Ed	0.20871664%	3,039,025	1,642,417	4,175,341	3,039,025	2,096,593	209,408	209,408	12.75%	183,296	(88,924)	94,372	
Slope County	0.00355497%	51,762	27,975	71,117	51,762	35,710	3,567	3,567	12.75%	3,122	(530)	2,592	
Solen - Cannonball School	0.23435878%	3,412,388	1,844,198	4,688,308	3,412,388	2,354,173	235,135	235,135	12.75%	205,815	(19,912)	185,903	
Souris Valley Spec Ed	0.15201821%	2,213,466	1,196,250	3,041,099	2,213,466	1,527,048	152,522	152,522	12.75%	133,503	(169,303)	(35,800)	
South Cent. Prairie Sp Ed	0.04710063%	685,810	370,641	942,240	685,810	473,134	47,257	47,257	12.75%	41,364	61,130	102,494	
South East Education Cooperative	0.10115782%	1,472,911	796,023	2,023,645	1,472,911	1,016,147	101,493	101,493	12.75%	88,837	172,833	261,670	
South Heart School	0.30208511%	4,398,519	2,377,145	6,043,162	4,398,519	3,034,495	303,086	303,086	12.75%	265,292	138,147	403,439	

Section 3: Additional Information for GASB 68

EXHIBIT E Schedule of Pension Amounts by Employer as of June 30, 2022

Employer Name	Discount Rate Sensitivity						Schedule of Contributions				Pension Expense		
	Employer's Proportionate Share Allocation	Net Pension Liability	Covered Payroll	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)	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	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	0.37942103%	\$ 5,524,571	\$ 2,985,711	\$ 7,590,254	\$ 5,524,571	\$ 3,811,347	\$ 380,678	\$ 380,678	\$ -	12.75%	\$ 333,209	\$ 273,474	\$ 606,683
South Valley Spec Ed	0.06778672%	987,011	533,422	1,356,062	987,011	680,929	68,011	68,011	-	12.75%	59,531	(77,807)	(18,276)
Southwest Special Education Unit	0.01481740%	215,749	116,600	296,420	215,749	148,843	14,866	14,866	-	12.75%	13,013	8,524	21,537
St. John's School	0.46550059%	6,777,935	3,663,082	9,312,281	6,777,935	4,676,031	467,043	467,043	-	12.75%	408,805	133,812	542,617
St. Thomas School	0.00000000%	-	-	-	-	-	-	-	-	0.00%	-	(188,777)	(188,777)
Stanley School	0.45930358%	6,687,703	3,614,317	9,188,291	6,687,703	4,613,781	460,825	460,825	-	12.75%	403,362	(85,570)	317,792
Starkweather School	0.08732127%	1,271,444	687,142	1,746,847	1,271,444	877,157	87,611	87,611	-	12.75%	76,686	(8,282)	68,404
Sterling School	0.01988193%	289,491	156,453	397,735	289,491	199,717	19,948	19,948	-	12.75%	17,460	(35,107)	(17,647)
Strasburg School District	0.11850115%	1,725,440	932,500	2,370,596	1,725,440	1,190,364	118,894	118,894	-	12.75%	104,068	(11,069)	92,999
Surrey School	0.34182968%	4,977,221	2,689,900	6,838,246	4,977,221	3,433,736	342,962	342,962	-	12.75%	300,196	(49,238)	250,958
Sweet Briar Elem School	0.01666481%	242,648	131,138	333,377	242,648	167,401	16,720	16,720	-	12.75%	14,635	7,152	21,787
Tgu School District	0.34424184%	5,012,344	2,708,882	6,886,500	5,012,344	3,457,967	345,382	345,382	-	12.75%	302,315	(139,612)	162,703
Thompson School	0.36222461%	5,274,182	2,850,391	7,246,243	5,274,182	3,638,606	363,425	363,425	-	12.75%	318,107	89,889	407,996
Tioga School	0.44423973%	6,468,366	3,495,778	8,886,941	6,468,366	4,462,462	445,712	445,712	-	12.75%	390,133	(13,134)	376,999
Turtle Lake-Mercer School	0.18042321%	2,627,058	1,419,773	3,609,336	2,627,058	1,812,381	181,021	181,021	-	12.75%	158,448	(12,271)	146,177
Twin Buttes Elem. School	0.07434976%	1,082,572	585,068	1,487,355	1,082,572	746,856	74,596	74,596	-	12.75%	65,294	2,459	67,753
Underwood School	0.19749292%	2,875,602	1,554,096	3,950,813	2,875,602	1,963,849	198,147	198,147	-	12.75%	173,439	(79,581)	93,858
United School	0.46889696%	6,827,388	3,689,809	9,380,205	6,827,388	4,710,148	470,451	470,451	-	12.75%	411,787	26,655	438,442
Upper Valley Spec Ed	0.35780504%	5,209,831	2,815,612	7,157,830	5,209,831	3,594,211	358,991	358,991	-	12.75%	314,226	(37,623)	276,603
Valley - Edinburg School	0.20000942%	2,912,243	1,573,899	4,001,155	2,912,243	2,009,128	200,672	200,672	-	12.75%	175,649	(68,315)	107,334
Valley City School	0.83731358%	12,191,729	6,588,925	16,750,318	12,191,729	8,410,954	840,088	840,088	-	12.75%	735,332	(143,828)	591,504
Velva School	0.37885969%	5,516,398	2,981,294	7,579,025	5,516,398	3,805,709	380,115	380,115	-	12.75%	332,716	(6,855)	323,861
Wahpeton School	0.92512932%	13,470,373	7,279,958	18,507,057	13,470,373	9,293,078	928,195	928,195	-	12.75%	812,452	(241,674)	570,778
Ward County	0.00409657%	59,648	32,236	81,951	59,648	41,151	4,110	4,110	-	12.75%	3,586	(653)	2,945
Warwick School	0.24123786%	3,512,551	1,896,331	4,825,323	3,512,551	2,423,274	242,037	242,037	-	12.75%	211,856	(78,408)	133,448
Washburn School	0.28952842%	3,924,477	2,120,953	5,391,871	3,924,477	2,707,458	270,421	270,421	-	12.75%	236,701	44,944	281,645
West Fargo School	0.49913676%	138,312,463	74,749,890	190,028,642	138,312,463	95,420,408	9,530,612	9,530,612	-	12.75%	8,342,182	2,932,730	11,274,912
West River Student Services	0.07794184%	1,134,874	613,334	1,559,213	1,134,874	782,939	78,200	78,200	-	12.75%	68,449	(60,336)	8,113
Westhope School	0.16481512%	2,369,795	1,296,951	3,297,099	2,369,795	1,655,595	165,361	165,361	-	12.75%	144,741	(14,224)	130,517
White Shield School	0.21862259%	3,183,261	1,720,368	4,373,508	3,183,261	2,196,100	219,347	219,347	-	12.75%	191,995	(9,706)	182,289
Williams Co School Dist #8	0.00000000%	-	-	-	-	-	-	-	-	0.00%	-	(543,454)	(543,454)
Williston Basin School Dist #7	3.70274441%	53,913,920	29,137,357	74,072,783	53,913,920	37,194,683	3,715,013	3,715,013	-	12.75%	3,251,766	6,306,223	9,557,989
Williston School	0.00000000%	-	-	-	-	-	-	-	-	0.00%	-	(4,470,422)	(4,470,422)
Wilmac Special Education	0.68789272%	10,016,082	5,413,113	13,761,179	10,016,082	6,909,997	690,172	690,172	-	12.75%	604,110	380,502	984,612
Wilton School	0.21739059%	3,165,322	1,710,674	4,348,862	3,165,322	2,183,725	218,111	218,111	-	12.75%	190,913	37,037	227,950
Wing School	0.08383227%	1,220,642	659,687	1,677,051	1,220,642	842,109	84,110	84,110	-	12.75%	73,622	(41,160)	32,462
Wishek School	0.18085020%	2,633,275	1,423,133	3,617,878	2,633,275	1,816,670	181,449	181,449	-	12.75%	158,823	(21,610)	137,213
Wolford School	0.00000000%	-	-	-	-	-	-	-	-	0.00%	-	(159,898)	(159,898)
Wynndere School	0.19437886%	2,830,259	1,529,591	3,888,517	2,830,259	1,952,568	195,023	195,023	-	12.75%	170,704	(53,022)	117,682
Yellowstone Elem. School	0.07807972%	1,136,882	614,419	1,561,972	1,136,882	784,324	78,338	78,338	-	12.75%	68,570	(11,083)	57,487
Zealand School	0.06542234%	952,584	514,817	1,308,763	952,584	657,178	65,639	65,639	-	12.75%	57,454	(11,501)	45,953
Grand Totals:	100.000000%	\$ 1,456,052,968	\$ 786,912,450	\$ 2,000,483,274	\$ 1,456,052,968	\$ 1,004,516,629	\$ 100,331,347	\$ 100,331,347	\$ -	12.75%	\$ 87,820,418	\$ -	\$ 87,820,418

Section 3: Additional Information for GASB 68

EXHIBIT E (continued)

Schedule of Pension Amounts by Employer as of June 30, 2022

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	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	2023	2024	2025	2026	2027	Thereafter		
	(14)	(15)	(16)	(17)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)		
Alexander School	\$ 13,428	\$ 233,382	\$ 63,358	\$ 352,629	\$ 662,797	\$ 83,192	\$ 100,618	\$ 183,810	\$ 99,931	\$ 82,701	\$ 37,694	\$ 215,542	\$ 9,798	\$ 33,321		
Anamoose School	6,397	111,189	30,185	129,392	277,163	39,634	138,422	178,056	(556)	(14,722)	(34,801)	97,281	17,761	34,144		
Apple Creek Elem School	3,295	57,263	15,546	114,301	190,405	20,412	39,806	60,218	7,851	5,264	7,999	65,511	16,528	27,033		
Ashley School	8,375	145,573	39,520	38,673	232,141	51,891	-	107,807	159,178	1,684	(2,071)	(24,981)	113,592	(2,475)		
Bakker Elem School	411	7,148	1,941	12,335	21,835	2,548	7,056	9,606	3,519	2,286	320	6,694	246	(856)		
Barnes County North	13,934	242,184	65,748	36,516	358,382	86,329	156,791	243,120	1,843	(13,805)	(36,219)	197,430	(14,619)	(19,368)		
Beach School	18,325	318,497	86,465	148,193	571,480	113,532	316,914	430,446	(13,323)	(9,789)	(57,353)	238,427	(16,963)	35		
Belcourt School	79,751	1,386,134	376,304	1,049,767	2,891,956	494,104	771,003	1,265,107	218,026	140,339	(132,378)	1,225,383	33,758	143,722		
Belfield Public School	11,695	203,274	55,184	54,974	325,127	72,459	487,507	559,966	(40,027)	(47,106)	(95,961)	85,148	(51,929)	(84,965)		
Beulah School	31,326	544,470	147,811	143,126	866,733	194,083	350,344	544,427	45,008	25,234	(109,140)	445,107	(26,901)	(57,002)		
Billings Co. School Dist.	7,997	139,001	37,736	108,402	293,136	49,549	7,859	128,408	44,027	19,275	(8,655)	129,811	(9,937)	(10,791)		
Bismarck Public Schools	673,513	11,706,238	3,177,978	3,435,305	18,993,034	4,172,826	1,918,493	6,091,319	2,065,810	722,000	(1,155,730)	10,030,224	458,026	781,384		
Blessed John Paul II Catholic Sch Network	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Bottineau School	33,127	575,768	156,308	192,443	957,646	205,239	363,212	568,451	2,967	17,781	(114,083)	439,875	19,909	22,744		
Bowbells School	5,533	96,160	26,105	47,629	175,427	34,278	44,086	78,364	20,752	(1,861)	(11,794)	81,800	4,924	3,243		
Bowman School	26,221	455,743	123,724	202,080	807,768	162,455	344,863	507,318	70,949	34,564	(51,690)	384,119	(44,654)	(92,838)		
Burke Central School	7,125	123,843	33,621	109,126	273,715	44,145	374,244	418,389	(42,162)	(39,538)	(87,253)	47,801	(4,229)	(19,094)		
Burleigh County Spec. Ed.	979	17,022	4,621	13,866	36,488	6,068	9,975	16,043	7,106	3,841	(1,013)	12,127	(691)	(924)		
Carrington School	23,262	404,312	109,762	17,469	554,805	144,122	353,168	737,290	(8,311)	(73,525)	(152,388)	255,666	(47,333)	(79,594)		
Cavelier School	19,676	347,194	94,355	106,719	668,142	123,761	226,609	350,370	13,529	(3,256)	(62,033)	270,314	8,312	(13,091)		
Center Stanton School	13,687	237,376	64,442	84,876	400,353	84,611	179,046	263,661	29,631	9,786	(47,542)	184,096	(9,141)	(28,865)		
Central Cass School	37,380	649,693	176,377	523,753	1,387,203	231,591	113,672	345,263	229,228	156,481	43,754	611,136	(3,790)	5,130		
Central Elementary School	-	-	1,037	-	1,037	-	53,248	53,248	(17,887)	(16,902)	(17,422)	-	-	-		
Central Regional Education Association	9,872	171,582	46,580	1,446,331	1,674,365	61,162	2,075	63,237	321,262	305,061	275,301	435,991	91,605	181,906		
Central Valley School	10,956	190,430	58,621	8,658	261,741	67,881	175,131	243,012	6,008	(9,996)	(47,357)	131,377	(20,932)	(40,371)		
Dakota Prairie School	18,102	314,630	85,415	198,456	616,603	112,154	271,110	383,264	59,220	42,523	(45,066)	264,286	(32,441)	(55,183)		
Devils Lake School	93,499	1,625,086	441,174	310,090	2,469,849	579,281	948,814	1,528,095	108,643	31,537	(176,809)	1,272,195	(112,255)	(181,558)		
Dickinson School	201,572	3,503,492	951,119	2,994,907	7,651,090	1,248,861	857,667	2,106,528	1,273,406	899,688	125,301	3,015,925	168,344	61,898		
Divide School	24,288	422,144	114,602	314,814	875,848	150,478	129,525	280,003	124,680	67,514	(18,028)	410,059	3,486	8,134		
Drake School	4,425	76,912	20,880	59,313	161,530	27,416	40,919	68,335	217	11,637	(4,741)	66,478	6,548	13,056		
Drayton School	11,463	199,234	54,088	189,350	454,135	71,019	387,003	458,022	20,103	(22,591)	(48,045)	133,481	(19,960)	(66,875)		
Dunseith School	32,350	562,266	152,643	593,730	1,250,989	200,426	36,535	236,961	210,617	114,291	(346)	538,404	55,519	95,543		
E Central Cir Exc Childn	5,670	98,552	26,755	142,647	273,624	35,130	339,434	374,564	(38,718)	(47,193)	(61,756)	37,720	(5,205)	14,212		
Earl Elem. School	222	3,853	1,046	772	5,893	1,373	8,715	10,088	(1,778)	(1,930)	(2,963)	2,909	(202)	(232)		
Edgeley School	11,488	199,666	54,205	126,150	391,509	71,173	194,309	265,482	7,265	(6,793)	(16,933)	141,928	(1,731)	2,291		
Edmore School	5,207	90,501	24,569	29,058	149,335	32,280	306,214	338,474	(35,552)	(30,879)	(55,837)	25,408	(42,403)	(49,877)		
Eight Mile School	15,702	272,922	74,082	278,587	641,303	97,286	169,072	266,358	66,748	61,763	(26,028)	251,803	16,199	1,460		
Elgin-New Leipzig School	10,343	179,765	48,802	112,990	351,900	64,080	157,211	221,291	10,936	(10,897)	(39,636)	136,666	8,668	23,581		
Ellendale School	14,074	244,621	68,409	44,006	369,110	87,189	312,857	400,055	(32,690)	(33,300)	(48,270)	168,155	(30,929)	(56,911)		
Emerado Elementary School	5,999	104,266	28,306	79,996	218,567	37,167	38,229	75,396	33,076	19,821	(3,009)	98,232	(5)	(4,944)		
Enderlin Area School District	17,742	308,363	83,714	21,167	431,006	109,920	148,219	258,139	966	(32,933)	(58,108)	261,213	1,366	(2,667)		
Fairmount School	6,388	111,021	30,140	8,646	156,195	39,575	457,910	497,485	(69,252)	(79,206)	(102,786)	7,589	(45,318)	(52,318)		
Fargo Public Schools	670,126	11,647,369	3,161,996	6,574,719	22,054,210	4,151,842	3,490,306	7,642,148	2,043,121	1,319,650	(717,031)	10,298,512	371,419	1,096,390		
Fessenden-Bowdon School	9,244	160,663	43,616	33,682	247,205	57,270	176,105	233,375	6,272	(9,547)	(34,315)	114,626	(27,106)	(36,100)		
Finley-Sharon School	9,437	164,030	44,530	37,456	255,453	58,471	57,439	115,910	25,378	15,708	(16,193)	127,239	(4,874)	(7,913)		
Flasher School	11,197	194,606	52,831	145,150	403,784	69,370	99,458	168,828	57,759	25,323	(6,926)	175,956	(873)	(16,283)		
Fordville Lankin School	3,874	67,331	18,279	24,561	114,045	24,001	327,300	351,301	(37,539)	(39,600)	(47,084)	7,784	(44,147)	(76,671)		
Fort Ransom Elem School	1,586	27,572	7,485	35,136	71,779	9,828	11,356	21,184	5,199	3,284	(329)	27,703	5,026	9,713		
Fort Totten School	16,131	280,379	76,117	504,364	876,991	99,944	104,454	204,398	85,094	67,581	66,696	300,726	61,305	91,191		
Fort Yates School	7,822	135,954	36,908	52,734	233,418	48,462	506,438	554,900	(75,843)	(120,455)	(81,246)	39,090	(30,961)	(52,069)		
Gackle-Streeter Pub Sch	7,248	125,984	34,202	12,700	180,134	44,908	27,924	72,832	13,428	5,130	(17,439)	103,018	1,686	1,479		
Garrison School	20,160	350,402	95,126	9,742	475,430	124,905	223,834	348,739	607	(19,627)	(80,890)	274,031	(14,203)	(33,227)		
Glen Ullin School	8,853	153,872	41,773	68,978	273,476	54,850	330,549	385,399	(42,690)	(50,248)	(61,513)	110,979	(18,651)	(49,798)		
Glenburn School	14,633	254,339	69,047	69,535	407,554	90,662	465,472	556,134	(53,548)	(59,650)	(66,700)	148,317	(40,912)	(76,086)		
Goodrich School	1,505	26,163	7,103	11,222	45,993	9,326	221,386	230,712	(32,218)	(31,685)	(39,261)	(13,925)	(34,055)	(33,575)		
Grafton School	37,914	658,980	178,896	103,841	1,038,411	234,901	7,644,031	7,644,031	(1,184,909)	(1,145,243)	(1,073,096)	(1,070,101)	(1,016,511)	(2,950,350)		
Grafton School District	-	-	-	7,203,587	8,079,379	234,901	-	1,140,491	-	1,748,273	963,974	1,581,122	1,028,960	2,051,639		
Grand Forks School	406,312	7,062,059	1,917,189	3,365,560	14,358,574	2,517,354	-	-	-	-	-	5,222,028	(522,197)	(888,445)		
Great North West Cooperative	1,406	24,444	6,636	143,364	175,850	8,713	160,093	168,806	(3,561)	6,297	8,945	16,623	(14,461)	(6,799)		
Grenora School	12,261	213,101	57,852	389,746	672,960	75,962	145,432	221,394	68,265	52,190	12,369	188,387	45,182	85,173		

Section 3: Additional Information for GASB 68

EXHIBIT E (continued)

Schedule of Pension Amounts by Employer as of June 30, 2022

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	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	2023	2024	2025	2026	2027	Thereafter		
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)		
Griggs County Central Sch	\$ 12,762	\$ 221,813	\$ 60,217	\$ 2,121	\$ 296,913	\$ 79,068	\$ -	\$ 417,943	\$ 497,011	\$ (35,970)	\$ (59,031)	\$ (95,658)	\$ 114,988	\$ (50,954)	\$ (73,472)		
Gst Educational Services	15,303	265,972	72,205	149,455	502,935	94,809	-	310,489	405,298	45,233	10,566	(50,187)	208,026	(42,488)	(73,513)		
Halliday School	2,350	40,852	11,091	9,292	63,585	14,562	-	123,121	137,683	(48,478)	(34,266)	(6,280)	30,095	(4,890)	(10,278)		
Hankinson School	13,201	229,452	62,291	20,539	325,483	81,791	-	126,194	207,985	17,438	2,109	(47,956)	170,034	(9,712)	(14,414)		
Harvey School	18,648	324,119	87,991	-	430,758	115,536	-	400,374	515,970	(58,751)	(66,346)	(107,688)	228,582	(30,924)	(50,624)		
Hatton Eielson Psd	10,478	182,119	49,441	68,220	310,258	64,919	-	106,192	171,111	18,354	6,057	(14,587)	144,284	(2,582)	(12,398)		
Hazelton - Moffitt School	7,929	137,816	37,414	138,371	321,530	49,126	-	118,820	167,946	20,009	7,324	(97)	109,106	3,665	13,577		
Hazen School	25,849	449,270	121,967	294,237	891,323	160,148	-	116,640	476,788	14,570	(9,277)	(101,631)	403,680	39,343	68,850		
Hebron School	9,210	160,084	43,459	19,770	232,523	57,064	-	277,913	334,977	(27,874)	(46,664)	(68,203)	111,802	(26,311)	(45,163)		
Hettinger School	12,367	214,949	58,354	48,568	334,238	76,621	-	122,869	199,490	(5,641)	(5,809)	(33,471)	181,111	(2,221)	779		
Hillsboro School	23,601	410,204	111,361	162,163	707,329	146,222	-	166,219	312,441	62,532	15,697	(66,669)	339,165	20,767	23,396		
Hope School	-	-	-	100,477	100,477	-	-	1,219,251	1,219,251	(182,209)	(164,203)	(182,320)	(189,625)	(200,207)	(200,210)		
Hope-Page Public School District	12,625	219,441	59,573	2,387,865	2,679,504	78,222	-	266,238	344,460	397,043	376,324	338,262	543,773	359,909	319,733		
Horse Creek Elem. School	340	5,904	1,603	13,404	21,251	2,105	-	21,984	24,089	3,159	(7,456)	(1,006)	4,450	(468)	(1,516)		
James River Multidistrict Spec Ed Unit	9,397	163,331	44,341	30,494	247,563	58,221	-	601,543	659,764	(72,801)	(101,000)	(138,189)	66,015	(56,570)	(109,656)		
Jamestown School	112,229	1,950,634	529,553	-	2,592,416	695,326	-	1,796,428	2,491,754	(74,729)	(230,384)	(518,871)	1,385,645	(174,858)	(286,142)		
Kenmare School	14,999	260,701	70,774	107,277	453,751	92,930	-	363,496	456,426	(3,183)	(33,413)	(72,040)	202,392	(28,410)	(68,020)		
Kensal School	2,366	41,121	11,163	40,415	95,065	14,658	-	115,192	129,850	(49,091)	(7,279)	(14,176)	29,015	4,626	2,120		
Kildler County School District	17,449	303,281	82,334	110,279	513,343	108,108	-	472,168	580,276	(52,607)	(36,149)	(102,286)	159,905	(15,964)	(15,822)		
Killdeer School	32,521	565,241	153,450	858,169	1,609,380	201,487	-	75,030	309,212	258,400	125,128	630,748	12,404	(3,528)	(3,528)		
Kindred School	34,871	608,088	164,539	617,630	1,223,128	216,047	-	216,047	238,988	170,826	41,730	599,684	69,870	86,073	86,073		
Kulm School	8,354	145,206	39,420	19,577	212,557	51,760	-	207,335	259,095	(29,989)	(17,081)	(51,429)	104,219	(17,759)	(34,499)		
Lake Region Spec Ed	15,751	273,760	74,320	130,358	534,189	97,585	-	396,179	493,764	38,295	17,282	(52,283)	193,770	(59,417)	(97,203)		
Lakota School	9,909	172,223	48,755	86,602	315,489	61,391	-	258,929	320,320	(7,408)	(21,004)	(71,724)	117,268	(13,349)	(8,614)		
Lamoure School	12,615	219,266	59,526	519	291,926	78,160	-	210,001	288,161	(33,519)	(41,854)	(63,985)	161,758	(6,481)	(13,154)		
Langdon Area School	19,398	337,150	91,529	260,479	708,556	120,181	-	635,548	755,729	127,704	(22,262)	(93,280)	187,862	(97,989)	(149,208)		
Larimore School	16,855	292,951	79,530	32,089	421,425	104,426	-	524,156	628,582	(50,851)	(69,842)	(136,697)	182,599	(47,026)	(85,340)		
Leeds School	7,772	135,091	36,674	-	179,537	48,155	-	345,314	393,469	(48,227)	(53,870)	(71,325)	67,642	(42,306)	(65,845)		
Lewis And Clark School	20,600	358,041	97,200	46,566	522,407	127,628	-	574,137	701,765	(60,164)	(122,711)	(137,289)	242,949	(24,135)	(58,009)		
Lidgerwood School	9,978	173,434	47,083	67,992	298,487	61,823	-	170,116	231,939	(8,414)	(21,830)	(28,873)	137,113	(9,393)	(2,052)		
Linton School	13,357	232,155	63,025	4,219	312,756	82,754	-	270,528	353,282	(36,956)	(37,053)	(79,427)	144,023	(11,408)	(19,706)		
Lisbon School	32,056	557,153	151,254	285,686	1,026,149	198,604	-	292,802	491,406	45,937	18,717	(89,384)	475,385	43,177	40,912		
Litchville-Marion School	7,452	129,518	35,161	49,617	221,748	46,168	-	89,401	135,569	(1,300)	(13,487)	(8,208)	105,771	357	3,046		
Little Heart Elem. School	1,398	24,296	6,596	43,359	75,649	8,661	-	8,917	17,578	16,087	9,512	2,639	24,792	3,276	1,764		
Logan County	-	-	-	-	-	-	-	5,538	5,538	(1,162)	(1,121)	(1,117)	(1,080)	(528)	(530)		
Lone Tree Elem. School	2,295	39,882	10,827	27,621	80,625	14,216	-	24,391	39,697	1,949	9,091	(997)	34,326	556	(1,899)		
Lonetree Spec Ed Unit	-	-	-	80,825	80,825	-	-	396,087	396,087	(41,140)	(40,098)	(54,223)	(41,175)	(54,320)	(84,306)		
Maddox School	6,969	121,123	32,882	4,026	165,000	43,176	-	299,934	343,110	(51,163)	(47,636)	(53,285)	58,804	(37,573)	(47,257)		
Mandan Public Schools	190,438	3,309,974	898,583	510,336	4,909,331	1,779,879	-	68,835	1,248,714	676,512	348,411	(2,350)	2,840,921	(2,601)	(2,601)		
Mandaree School	12,455	216,486	58,771	200,329	488,041	77,169	-	620,735	697,904	(59,560)	(13,846)	(40,780)	118,811	(80,296)	(133,802)		
Manning Elem. School	940	16,331	4,433	85,497	107,201	5,821	-	59,991	65,872	5,188	1,104	(3,217)	14,936	12,267	11,069		
Manvel Elem. School	8,651	150,370	40,822	123,525	323,368	53,601	-	45,376	98,977	51,082	34,693	10,540	120,687	2,335	5,054		
Maple Valley School	13,428	233,384	63,359	6,237	316,408	83,193	-	302,518	385,711	(15,659)	(43,929)	(82,185)	144,923	(23,411)	(49,041)		
Mapleton Elem. School	9,672	168,101	45,635	366,821	590,229	59,921	-	59,921	120,368	87,172	50,638	205,274	25,185	41,671	41,671		
Marmarth Elem. School	1,289	22,407	6,083	61,274	91,053	7,987	-	46,632	54,619	(9,054)	(1,579)	6,527	22,529	7,018	10,992		
Max School	10,103	175,595	47,670	76,383	309,751	62,593	-	160,303	222,896	(10,412)	(23,180)	(39,009)	139,030	11,614	8,812		
May-Port C-G School	22,935	398,631	108,219	142,219	672,004	142,097	-	498,139	640,236	(38,818)	(64,564)	(115,278)	283,767	(24,886)	(8,454)		
McClusky School	6,139	106,705	28,988	177,040	318,852	38,036	-	157,494	195,530	(11,049)	8,251	16,651	85,821	12,931	10,718		
Mckenzie County	396	6,879	1,868	2,011	11,154	2,452	-	3,265	5,717	1,387	264	(971)	5,723	(406)	(561)		
Mckenzie County School	92,256	1,603,489	435,311	3,381,029	5,512,085	571,583	-	575,810	1,147,393	1,132,371	917,774	512,447	1,734,278	82,854	(15,031)		
Medina School	9,238	160,568	43,591	62,029	275,426	57,236	-	135,155	192,391	4,469	(16,314)	(33,575)	132,977	(4,559)	219		
Menoken Elem. School	1,905	33,117	8,990	52,839	96,851	11,805	-	33,720	45,525	17,011	7,920	(75)	29,694	959	(4,182)		
Midkota	12,213	212,267	57,626	488,360	770,466	75,665	-	28,922	104,587	114,422	93,106	46,867	255,299	55,433	100,750		
Midway School	11,305	196,490	53,343	128,627	389,765	70,041	-	248,421	318,462	(51,299)	(50,757)	(38,103)	163,153	19,554	28,756		
Millnor School	12,307	213,910	58,072	98,173	382,462	76,251	-	235,084	311,335	8,876	4,377	(58,701)	160,045	(11,238)	(32,231)		
Minnaukan School	16,430	295,560	77,523	365,982	745,495	101,731	-	279,872	381,485	50,310	72,543	(17,669)	274,672	4,720	(20,345)		
Minot School	398,993	6,934,856	1,882,656	1,355,006	10,571,511	2,472,011	-	2,901,952	5,373,965	541,637	(26,462)	(1,031,590)	5,802,707	67,862	(156,607)		
Minto School	14,095	244,979	66,506	462,350	787,930	87,326	-	174,754	282,080	126,612	78,153	44,114	259,344	(2,113)	19,740		
Mohall Lansford Sherwood	16,835	292,615	79,438	388,888	104,306	104,306	-	409,152	513,458	(68,421)	(73,883)	(105,913)	185,161	(23,288)	(38,246)		
Montpelier School	6,534	113,572	30,832	1,970	152,908	40,484	-	118,176	158,660	(4,618)	(11,828)	(30,639)	75,065	(13,088)	(20,643)		

Section 3: Additional Information for GASB 68

EXHIBIT E (continued)
Schedule of Pension Amounts by Employer as of June 30, 2022

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	2023	2024	2025	2026	2027	Thereafter	
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	
Morton County	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,038	\$ 24,038	\$ (8,513)	\$ (8,379)	\$ (2,717)	\$ (1,519)	\$ (1,455)	\$ (1,455)	
Mott-Regent School	10,887	189,224	51,370	113,180	364,661	67,451	-	539,629	607,080	(79,139)	(66,286)	(77,668)	128,992	(57,849)	(90,469)	
Mt Pleasant School	15,813	274,836	74,612	268,071	633,332	97,969	-	236,986	334,955	46,462	34,947	2,376	245,542	(397)	(30,554)	
Munich School	8,499	147,727	40,104	48,174	244,504	52,699	-	180,367	233,226	8,977	(3,457)	(41,241)	89,157	(17,044)	(25,112)	
N Central Area Career And Tech Center	-	-	-	-	-	-	-	79,249	79,249	(40,413)	(38,536)	-	-	-	-	
Napoleon Rural School	12,815	222,734	60,467	371,804	667,820	79,396	-	449,827	529,223	(11,791)	(23,030)	(72,554)	160,338	48,702	36,993	
Naughton Rural School	1,286	22,349	6,087	37,676	103,378	7,967	-	1,166	9,163	15,268	9,455	28,429	10,002	11,146		
Nd Center For Distance Education	15,893	276,243	74,994	795,290	1,042,420	98,470	-	108,879	207,349	136,455	120,743	64,704	325,787	99,955	87,427	
Nd Dept Of Public Instruction	2,299	39,965	10,850	142,437	195,551	14,246	-	76,579	90,825	13,223	(3,204)	(9,631)	51,169	18,047	28,123	
Nd School For Blind	5,586	97,090	26,358	13,631	142,665	34,609	-	148,780	183,389	(20,793)	(16,331)	(39,985)	66,041	(14,332)	(15,325)	
Nd School For Deaf	7,039	122,348	33,215	8,552	171,154	43,612	-	266,248	309,860	(22,254)	(42,356)	(61,906)	62,075	(27,212)	(47,053)	
Nd United	144	2,496	678	2,623	5,941	890	-	348,317	349,207	(83,144)	(81,687)	(83,428)	(33,502)	(20,787)	(40,719)	
Nd Youth Correctional Cnt	2,295	39,893	10,830	20,942	73,960	14,220	-	1,462,706	1,476,926	(266,281)	(243,477)	(260,865)	(201,332)	(188,208)	(241,803)	
Nedrose School	29,791	517,786	140,567	732,380	1,420,524	184,571	-	31,628	216,199	260,870	204,114	72,664	497,282	71,350	98,044	
Nelson County	87	1,506	409	570	2,572	537	-	4,548	5,085	(732)	(888)	(1,221)	195	66	66	
Nesson School	19,829	344,638	93,561	629,924	1,087,952	122,850	-	33,273	156,123	177,319	161,969	58,473	386,594	63,529	83,944	
New England School	13,856	240,823	65,378	337,722	657,779	85,844	-	154,870	240,714	52,876	29,593	(9,613)	212,957	48,614	82,638	
New Rockford Shenyenne School	14,864	258,353	70,137	46,223	389,577	92,093	-	225,892	317,985	(1,825)	5,106	(57,914)	180,771	(22,678)	(31,868)	
New Salem-Almont	18,019	313,186	85,023	150,337	566,565	111,639	-	122,380	234,019	98,013	28,815	(29,382)	250,210	(10,444)	(4,666)	
New Town School	56,185	976,538	265,108	1,603,571	2,901,402	348,098	-	70,187	418,285	594,133	450,887	211,245	1,053,215	57,100	116,535	
Newburg United District	6,455	112,192	30,458	72,858	221,963	39,992	-	162,259	202,251	22,175	9,170	(27,941)	65,415	(22,426)	(26,682)	
North Border School	20,845	362,305	98,357	-	481,507	129,148	-	798,266	927,414	(139,592)	(128,971)	(159,906)	192,146	(87,637)	(121,946)	
North Sargent School	12,103	210,367	57,110	77,672	357,252	74,988	-	451,172	526,160	(36,652)	(43,994)	(98,535)	116,682	(32,487)	(73,920)	
North Star	14,164	246,162	68,833	42,012	389,191	87,274	-	244,895	332,649	(17,458)	(17,956)	(70,599)	179,474	(18,842)	(18,080)	
North Valley Area Career	5,944	120,688	32,764	274,360	434,756	43,021	-	13,077	56,008	78,162	39,016	151,249	23,648	33,169		
Northern Cass School Dist	28,325	490,741	133,225	128,935	781,136	174,931	-	278,995	453,926	118,196	(3,131)	(88,945)	362,387	(17,321)	(43,975)	
Northern Plains Spec Ed	4,033	70,092	19,028	236,871	330,024	24,985	-	18,776	43,761	52,517	36,393	23,741	92,161	36,043	45,409	
Northwood School	16,926	294,189	79,866	236,691	627,672	104,867	-	5,468	110,335	111,494	71,840	23,552	283,264	14,766	12,421	
Oakes School	20,183	350,800	95,234	398,162	864,379	125,047	-	205,994	331,041	82,841	68,415	(12,567)	366,428	18,383	8,858	
Oberon Elem School	4,126	71,709	19,467	397,649	492,951	25,561	-	213,789	239,550	47,706	23,234	12,733	51,190	43,584	75,155	
Oliver - Mercer Spec Ed	8,194	142,412	38,662	270,934	460,202	50,765	-	318,990	369,155	(17,682)	(7,432)	(34,118)	127,993	(3,698)	25,983	
Page School	-	-	-	74,299	74,299	-	-	1,179,222	1,179,222	(185,434)	(199,449)	(171,946)	(173,353)	(187,370)	(187,371)	
Park River Area School District	17,703	307,685	83,530	22,911	431,829	109,678	-	252,762	362,440	(5,944)	(43,832)	(77,288)	230,356	(9,536)	(24,369)	
Parshall School	12,938	224,868	61,047	128,650	427,503	80,157	-	753,580	833,737	(56,203)	(39,881)	(143,209)	84,171	(93,073)	(158,040)	
Peace Garden Spec Ed	5,772	100,328	27,237	142,283	275,620	35,763	-	65,799	101,562	35,855	23,788	(891)	114,641	482		
Pembina Spec Ed Coop	1,039	18,052	4,901	17,077	41,069	6,435	-	23,101	29,536	3,647	1,907	(4,710)	15,736	(1,907)	(3,142)	
Pingree - Buchanan School	7,588	131,883	35,803	102,713	277,987	47,011	-	98,140	145,151	12,493	1,253	(16,544)	135,738	623	(727)	
Powers Lake School	11,319	196,730	53,408	135,891	397,348	70,127	-	82,788	152,915	47,835	43,233	(2,184)	178,202	(5,449)	(17,204)	
Richardton-Taylor	14,349	249,394	67,705	96,533	427,981	88,899	-	531,529	620,428	(17,510)	(41,194)	(91,512)	153,250	(76,280)	(119,202)	
Richland School	14,820	257,592	69,930	223,864	566,206	91,822	-	69,927	161,744	64,649	22,738	(3,351)	237,719	27,911	54,797	
Robinson School	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Rolette School	11,257	195,649	53,114	99,380	359,400	69,741	-	118,194	187,935	20,225	(13,701)	(32,464)	169,592	8,865	18,947	
Roosevelt School	3,025	52,583	14,275	48,850	118,733	18,744	-	174,643	193,387	(20,518)	(3,445)	(20,992)	24,398	(24,767)	(28,329)	
Roughrider Area Career And Tech Center	2,164	37,613	10,211	145,243	195,231	13,408	-	369	13,777	42,177	28,492	22,154	57,274	12,625	18,753	
Roughrider Service Program	1,648	28,649	7,778	2,659	40,769	10,212	-	101,794	112,006	(32,397)	(52,705)	(24,759)	21,508	(1,456)	(1,351)	
Rugby School	31,694	550,875	149,550	208,421	904,540	196,366	-	182,437	378,803	115,936	68,005	(25,480)	478,532	(22,498)	(52,757)	
Rural Cass Spec Ed	12,952	225,126	61,116	414,188	713,382	80,249	-	141,110	221,359	113,760	130,306	31,403	216,618	8,447	(8,510)	
Sargent Central School	13,820	240,203	65,210	94,807	414,040	85,623	-	229,165	314,788	41,873	8,855	(53,699)	184,400	(27,533)	(54,643)	
Sawyer School	6,911	120,127	32,612	368,028	527,678	42,821	-	162,263	205,084	(25,777)	10,548	47,312	150,835	47,305	91,772	
Scranton School	9,349	162,496	44,114	18,514	234,473	57,924	-	229,958	287,882	(4,443)	(19,652)	(54,407)	96,103	(24,122)	(47,248)	
Se Region Career And Tech	15,241	264,898	79,144	198,896	550,949	94,426	-	515	94,941	86,096	56,678	10,987	251,394	24,381	26,473	
Selfridge School	5,964	103,666	28,143	13,426	151,199	36,953	-	462,407	499,360	(52,104)	(62,738)	(87,010)	14,305	(58,709)	(101,904)	
Shenyenne Valley Area Voc	8,089	140,597	38,169	129,166	316,021	50,118	-	55,931	106,049	51,196	49,794	13,749	110,733	(7,165)	(8,335)	
Shenyenne Valley Spec Ed	13,096	227,627	61,796	531,103	833,622	81,140	-	629,991	711,131	2,415	4,229	(49,606)	193,920	19,149	(47,616)	
Slope County	223	3,877	1,053	278	5,431	1,382	-	2,732	4,114	(861)	(54)	(861)	2,779	(345)	(431)	
Solen - Cannonball School	14,705	255,593	69,388	468,005	807,691	91,109	-	362,511	453,620	29,014	(14,402)	(34,392)	205,374	69,377	99,099	
Souris Valley Spec Ed	9,539	165,792	45,009	110,879	331,219	59,098	-	402,764	461,862	(106,646)	15,177	(47,636)	93,377	(32,722)	(52,194)	
South Cent. Prairie Sp Ed	2,955	51,368	13,945	329,988	398,256	18,311	-	39,521	70,091	57,832	70,091	68,796	116,920	10,880	8,268	
South East Education Cooperative	6,347	110,323	29,950	581,816	728,436	39,326	-	211,840	251,166	191,481	1,312	27,569	122,466	60,291	74,153	
South Heart School	18,955	329,455	89,440	523,703	981,553	117,438	-	182,533	299,971	177,333	133,565	46,608	320,741	6,313	(22,978)	

Section 3: Additional Information for GASB 68

EXHIBIT E (continued)
Schedule of Pension Amounts by Employer as of June 30, 2022

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	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	2023	2024	2025	2026	2027	Thereafter
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	
South Prairie School District	\$ 23,808	\$ 413,798	\$ 112,337	\$ 320,635	\$ 870,578	\$ 147,503	\$ -	\$ 50,308	\$ 197,811	\$ 198,683	\$ 90,219	\$ 1,111	\$ 374,899	\$ 9,538	\$ (1,684)
South Valley Spec Ed	4,253	73,929	20,070	120,956	26,353	-	89,314	115,667	13,030	21,323	(15,551)	54,740	10,516	19,483	
Southwest Special Education Unit	930	16,160	4,387	17,028	92,505	5,760	11,587	17,347	11,352	9,554	6,748	22,053	7,918	17,531	
St. John's School	29,209	507,677	137,823	737,011	1,411,720	180,968	-	66,003	246,971	238,599	183,504	93,907	553,733	54,993	40,614
St. Thomas School	-	-	-	11,567	11,567	-	-	1,074,500	1,074,500	(171,912)	(165,470)	(151,498)	(155,353)	(146,576)	(272,124)
Stanley School	28,820	500,919	135,988	95,322	761,049	178,558	-	826,720	1,005,278	9,085	(110,780)	(209,036)	277,497	(78,554)	(134,441)
Starkweather School	5,479	95,233	25,854	124,957	251,523	33,947	-	35,831	69,778	15,503	25,031	17,167	97,751	11,656	14,638
Sterling School	1,248	21,683	5,887	17,521	46,339	7,729	-	198,070	205,799	(32,039)	(35,247)	(46,261)	(26,573)	(7,335)	(12,005)
Strasburg School District	7,436	129,238	35,085	69,605	241,364	46,068	-	207,267	253,335	7,574	(15,328)	(56,051)	62,719	(5,920)	(4,964)
Surrey School	21,449	372,801	101,207	66,645	562,102	132,889	-	315,686	448,575	21,080	(2,421)	(88,242)	279,729	(38,712)	(57,907)
Sweet Briar Elem School	1,046	18,175	4,934	18,701	42,856	6,479	-	7,096	13,575	9,601	4,018	(1,577)	14,487	958	1,794
Taj School District	21,600	375,432	101,921	-	498,953	133,827	-	380,354	514,181	(65,883)	(66,625)	(104,380)	282,765	(26,349)	(34,756)
Thompson School	22,729	395,044	107,245	267,573	792,591	140,818	-	65,883	206,701	138,825	76,278	(14,473)	346,240	10,274	27,746
Tioga School	27,875	484,490	131,528	88,296	732,189	172,702	-	330,640	503,342	44,444	9,286	(86,065)	345,782	(36,065)	(48,535)
Turtle Lake-Mercer School	11,321	196,770	53,419	51,397	312,907	70,141	-	147,939	218,080	39,877	6,154	(43,207)	145,023	(21,294)	(31,725)
Twin Buttes Elem. School	4,665	81,086	22,013	163,053	270,817	28,904	-	31,013	59,917	34,627	23,727	4,771	84,859	21,562	41,354
Underwood School	12,392	215,387	58,473	-	286,252	76,777	-	234,835	311,675	(32,545)	(38,179)	(66,161)	157,450	(15,802)	(30,327)
United School	29,422	511,381	138,828	194,958	874,589	182,288	-	278,872	460,960	12,935	(18,005)	(99,059)	401,794	2,452	13,512
Upper Valley Spec Ed	22,451	390,224	105,937	178,279	696,891	139,100	-	329,740	468,840	37,547	(17,537)	(93,510)	301,662	(8,401)	8,290
Valley - Edinburg School	12,550	218,131	59,218	-	289,959	77,755	-	371,354	449,109	(78,834)	(80,237)	(94,133)	138,259	(19,420)	(26,846)
Valley City School	52,539	913,178	247,907	-	1,213,624	325,513	-	551,970	877,483	(13,155)	(78,181)	(208,480)	707,131	(23,194)	(49,979)
Velva School	23,772	413,186	112,171	221,288	770,417	147,285	-	311,754	459,039	65,448	12,574	(66,492)	345,662	(4,022)	(41,790)
Wahpeton School	58,049	1,008,950	273,907	278,659	1,619,565	359,652	-	920,234	1,279,886	(16,048)	(49,480)	(180,299)	782,729	(47,034)	(150,188)
Ward County	-	4,468	1,213	421	6,359	1,593	-	2,223	3,816	292	27	(861)	3,452	(175)	(192)
Warwick School	15,137	263,095	71,424	204,064	553,720	93,783	-	212,576	306,361	6,846	39,937	2,637	241,730	(21,422)	(22,369)
Washburn School	16,912	293,949	79,800	145,569	536,230	104,782	-	19,939	124,181	77,212	67,739	(8,892)	261,627	8,694	5,669
West Fargo School	596,046	10,359,804	2,812,452	6,571,705	20,340,007	3,692,874	-	-	3,692,874	3,988,027	2,211,617	43,544	9,214,132	488,399	701,413
West River Student Services	4,891	85,004	23,077	118,611	231,583	30,301	-	267,503	297,804	(40,298)	(47,094)	(32,568)	32,186	5,901	15,652
Westhope School	10,342	179,748	48,798	168,565	407,453	64,073	-	81,749	145,822	29,158	12,426	(4,334)	160,449	23,012	40,919
White Shield School	13,718	238,431	64,729	281,833	598,711	84,991	-	371,056	456,047	49,116	43,171	(8,375)	170,328	(65,124)	(55,454)
Williams Co School Dist #8	-	-	-	936,249	936,249	-	-	5,027,455	5,027,455	(517,975)	(507,392)	(523,571)	(575,291)	(625,140)	(1,341,837)
Williston Basin School Dist #7	232,338	4,038,231	1,096,288	44,143,563	49,510,420	1,439,475	-	-	1,439,475	6,988,926	6,607,651	5,907,227	9,689,113	6,305,583	12,572,445
Williston School	-	-	-	4,084,520	4,084,520	-	-	39,851,820	39,851,820	(4,731,201)	(4,712,470)	(4,735,903)	(4,976,920)	(5,460,181)	(11,150,625)
Willmac Special Education	43,163	750,219	203,667	1,323,378	2,320,427	267,424	-	110,096	377,520	438,251	256,433	166,484	761,138	139,984	180,617
Wilton School	13,641	237,087	64,364	206,034	521,126	84,513	-	35,645	120,158	74,225	42,226	11,283	220,889	17,356	34,989
Wing School	5,260	91,428	24,621	78,293	199,802	32,591	-	258,227	290,818	(18,181)	(37,690)	(48,015)	39,333	(4,782)	(21,680)
Wishek School	11,348	197,236	53,545	225,768	487,897	70,307	-	222,941	293,246	16,673	(10,426)	(43,468)	145,541	32,213	52,116
Wolford School	-	-	-	9,591	9,591	-	-	627,317	627,317	(154,375)	(154,574)	(159,273)	(149,504)	-	-
Wolfstene School	12,197	211,991	57,551	99,955	381,694	75,567	-	214,510	290,077	(3,351)	(18,314)	(26,995)	165,109	(16,116)	(8,717)
Yellowstone Elem. School	4,899	85,154	23,117	69,288	182,458	30,354	-	28,277	58,631	14,636	672	3,482	81,575	10,449	13,012
Zealand School	4,105	71,350	19,370	89,627	184,452	25,434	-	36,186	61,620	25,530	16,411	(8,065)	70,818	6,778	11,360
Grand Totals:	6,274,740	109,060,474	29,607,444	118,180,475	263,123,133	38,875,891	-	118,180,475	157,056,366	18,437,759	8,140,655	(10,775,680)	91,361,697	(17,292)	(1,080,372)

Note: Columns may not foot due to rounding.

Section 4: Actuarial Assumptions, Methods and Plan Provisions

Exhibit I: Actuarial Assumptions and Actuarial Cost Method

Investment Return Rate: 7.25% per annum, compounded annually, equal to an assumed 2.30% inflation rate plus a 5.18% real rate of return, less 0.23% for adverse deviation. (Adopted effective July 1, 2020).

Mortality Rates: The mortality rates were based on historical and current demographic data, as used in the experience study dated March 19, 2020. The underlying tables reasonably reflect the mortality experience of the Fund as of the measurement date.

Post-Retirement Non-Disabled: 104% of the Pub T-2010 Retiree Table and 95% of the Pub T-2010 Contingent Survivor Table with generational mortality improvement using Scale MP-2019. (Adopted effective July 1, 2020). Sample 2010 rates are as follows:

Age	Retiree Rates		Survivor Rates	
	Male	Female	Male	Female
55	0.23%	0.20%	0.78%	0.42%
60	0.37%	0.30%	0.96%	0.59%
65	0.62%	0.46%	1.31%	0.85%
70	1.11%	0.80%	2.02%	1.29%
75	2.11%	1.52%	3.21%	2.04%
80	4.00%	2.93%	5.09%	3.39%
85	7.53%	5.60%	8.31%	6.00%
90	13.79%	10.49%	13.70%	10.76%
95	23.21%	18.75%	21.66%	17.66%
100	33.91%	29.29%	30.98%	26.75%

The mortality tables are adjusted forward from 2010 using a generational projection to reflect future mortality improvement.

Post-Retirement Disabled: PubNS-2010 Non-Safety Disabled Mortality Table with generational mortality improvement using Scale MP-2019. (Adopted effective July 1, 2020).

Pre-Retirement Non-Disabled: Pub T-2010 Employee Table with generational mortality improvement using Scale MP-2019. (Adopted effective July 1, 2020).

Section 4: Actuarial Assumptions, Methods and Plan Provisions

Retirement Rates:

The following rates of retirement are assumed for members eligible to retire. (Adopted effective July 1, 2020).

Age	Unreduced Retirement*		Reduced Retirement
	Male	Female	Unisex
50-54	15.0%	15.0%	2.0%
55-56	15.0%	15.0%	2.0%
57	15.0%	15.0%	3.0%
58	15.0%	15.0%	3.5%
59	15.0%	15.0%	4.0%
60	15.0%	15.0%	5.0%
61	30.0%	25.0%	9.0%
62	30.0%	30.0%	10.0%
63	25.0%	30.0%	11.0%
64	35.0%	40.0%	12.0%
65	30.0%	35.0%	
66	25.0%	30.0%	
67	25.0%	20.0%	
68-74	20.0%	20.0%	
75	100.0%	100.0%	

* If a member reaches eligibility for unreduced retirement before age 65 under the rule of 85 (Grandfathered Tier 1) or the Rule of 90/Age 60 (Non-grandfathered Tier 1 and Tier 2), 12.5% is added to the rate at the age (and only this age) the member becomes first eligible for an unreduced retirement benefit.

Section 4: Actuarial Assumptions, Methods and Plan Provisions

Disability Rates:

Shown below for selected ages. (Adopted effective July 1, 2020).

Age	Unisex
20	0.0088%
25	0.0088%
30	0.0088%
35	0.0088%
40	0.0264%
45	0.0440%
50	0.0704%
55	0.1232%
60	0.2376%

Termination Rates:

Termination rates based on years from hire, for causes other than death, disability, or retirement. (Adopted effective July 1, 2020).

Years from Hire	Male	Female	Years from Hire	Male	Female
0	15.00%	15.00%	10	2.50%	2.75%
1	13.00%	11.00%	11-12	2.00%	2.50%
2	11.00%	9.50%	13	2.00%	2.25%
3	8.00%	7.50%	14	1.50%	2.25%
4	6.00%	6.00%	15-16	1.50%	1.75%
5	5.25%	5.50%	17-18	1.50%	1.50%
6	4.00%	4.50%	19-22	0.75%	1.25%
7	3.75%	4.00%	23-24	0.75%	1.00%
8	3.00%	2.75%	24+	0.75%	0.75%
9	2.50%	2.75%			

Termination rates eliminated at first retirement eligibility.

Section 4: Actuarial Assumptions, Methods and Plan Provisions

Salary Increase Rates:

Inflation rate of 2.30% plus productivity increase rate of 1.50%, plus step-rate/promotional increase as shown below. (Adopted effective July 1, 2020).

Years from Hire	Annual Step-Rate Promotional Component	Annual Total Salary Increase
0	11.00%	14.80%
1	3.00%	6.80%
2	2.75%	6.55%
3-4	2.50%	6.30%
5-6	2.00%	5.80%
7-8	1.75%	5.55%
9-11	1.50%	5.30%
12-13	1.25%	5.05%
14-15	1.00%	4.80%
16-18	0.75%	4.55%
19-22	0.50%	4.30%
23-29	0.25%	4.05%
30+	0.00%	3.80%

Payroll Growth Rate:

3.25% per annum. This assumption does not include any allowances for future increase in the number of members. (Adopted effective July 1, 2010).

Percent Married:

For valuation purposes, 75% of members are assumed to be married. Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses. (Adopted effective July 1, 1992).

Percent Electing a Deferred Termination Benefit:

Terminating members are assumed to elect the most valuable benefit at the time of termination. Termination benefits are assumed to commence at the first age at which unreduced benefits are available. (Adopted effective July 1, 1990).

Loading Factor for New Retirees:

The liability includes a 3% load for members who retired during the year leading up to the valuation date to reflect that their benefits are not finalized as of the valuation date.

Annual Administrative Expenses:

Annual administrative expenses of \$2,651,964 (actual expenses for the previous year, increased with inflation) are expected to be paid monthly for the year beginning July 1, 2022.

Section 4: Actuarial Assumptions, Methods and Plan Provisions

Actuarial Cost Method

Normal cost and actuarial accrued liability are calculated on an individual basis and are allocated by salary. Entry age is determined as the age at member's enrollment in TFFR. The actuarial accrued liability is the difference between the total present value of future benefits and the actuarial present value of future normal costs. The unfunded actuarial accrued liability (UAAL) is the excess of the actuarial accrued liability over the actuarial value of assets.

Amortization Period and Method:

The actuarially determined contribution (ADC) is determined as the sum of (a) the employer normal cost rate, and (b) a level percentage of payroll required to amortize the unfunded actuarial accrued liability over the 30-year closed period that began July 1, 2013.

Section 4: Actuarial Assumptions, Methods and Plan Provisions

Exhibit II: Summary of Plan Provisions

This exhibit summarizes the major provisions of TFFR included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Effective Date:	July 1, 1971															
Plan Year:	July 1 through June 30															
Administration	The Teachers' Fund for Retirement (TFFR) is administered by a Board of Trustees. A separate State Investment Board is responsible for the investment of the trust assets, although TFFR's Board establishes the asset allocation policy. The Retirement and Investment Office is the administrative agency for TFFR.															
Type of Plan:	TFFR is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is a cost-sharing multiple-employer public employee retirement system.															
Eligibility:	All certified teachers of any public school in the State participate in TFFR. This includes teachers, supervisors, principals, administrators, etc. Non-certified employees such as teacher's aides, janitors, secretaries, drivers, etc. are not allowed to participate in TFFR. Eligible employees become members at their date of employment.															
Member Contributions:	All active members contribute 11.75% of their salary per year. The employer may "pick up" the member's contribution under the provisions of Internal Revenue Code Section 414(h). The member contribution rate was increased from 7.75% to 9.75% effective July 1, 2012, and was increased to 11.75% effective July 1, 2014. The total addition of 4.00% to the member contribution rate will remain in effect until TFFR is 100% funded on an actuarial basis. At that point, the member contribution rate will revert to 7.75%.															
Salary:	A member's total earnings are used for salary purposes, including overtime, etc., and including nontaxable wages under a Section 125 plan, but excluding certain extraordinary compensation, such as fringe benefits or unused sick and vacation leave.															
Employer Contributions:	The district or other employer that employs a member contributes a percentage of the member's salary. This percentage consists of a base percentage of 7.75%, plus since July 1, 2008 additions as shown below.															
	<table border="1"> <thead> <tr> <th>Effective Date</th> <th>Addition to 7.75% Base Rate</th> <th>Employer Contribution Rate</th> </tr> </thead> <tbody> <tr> <td>July 1, 2008</td> <td>0.50%</td> <td>8.25%</td> </tr> <tr> <td>July 1, 2010</td> <td>1.00%</td> <td>8.75%</td> </tr> <tr> <td>July 1, 2012</td> <td>3.00%</td> <td>10.75%</td> </tr> <tr> <td>July 1, 2014</td> <td>5.00%</td> <td>12.75%</td> </tr> </tbody> </table>	Effective Date	Addition to 7.75% Base Rate	Employer Contribution Rate	July 1, 2008	0.50%	8.25%	July 1, 2010	1.00%	8.75%	July 1, 2012	3.00%	10.75%	July 1, 2014	5.00%	12.75%
Effective Date	Addition to 7.75% Base Rate	Employer Contribution Rate														
July 1, 2008	0.50%	8.25%														
July 1, 2010	1.00%	8.75%														
July 1, 2012	3.00%	10.75%														
July 1, 2014	5.00%	12.75%														
	However, the additions are subject to a "sunset" provision, so the contribution rate will revert to 7.75% once the funded ratio reaches 100%, measure using the actuarial value of assets. The contribution rate will not automatically increase if the funded ratio later falls back below 100%.															

Section 4: Actuarial Assumptions, Methods and Plan Provisions

Service:	Employees receive credit for service while a member. A member may also purchase credit for certain periods, such as time spent teaching at a public school in another state, by paying the actuarially determined cost of the additional service. Special rules and limits govern the purchase of additional service.
Tiers:	Members who join TFFR by June 30, 2008, are in Tier 1, while members who join later are in Tier 2. If a Tier 1 member terminates, takes a refund, and later rejoins TFFR after June 30, 2008, that member will be in Tier 2. As of June 30, 2013, Tier 1 members who are at least age 55 and vested (3 years of service) as of the effective date, or the sum of the member's age and service is at least 65, are considered Grandfathered, and previous plan provisions will not change. Tier 1 members who do not fit these criteria as of June 30, 2013, are considered Non-grandfathered. These members, along with Tier 2, have new plan provisions, as described below.
Final Average Compensation (FAC):	The average of the member's highest three (Tier 1 members) or five (Tier 2 members) plan year salaries. Monthly benefits are based on one-twelfth of this amount.
Normal Retirement:	<ol style="list-style-type: none">a. Eligibility:<ul style="list-style-type: none">• Tier 1 members may retire upon Normal Retirement on or after age 65 with credit for 3 years of service, or if earlier, when the sum of the member's age and service is at least 85. Effective as of June 30, 2013, Tier 1 members who are at least age 55 and vested (3 years of service) as of the effective date, or the sum of the member's age and service is at least 65, normal retirement eligibility will not change (participants are Grandfathered). For those who did not meet these criteria as of June 30, 2013 (Non-grandfathered), members may retire upon Normal Retirement on or after age 65 with credit for 3 years of service, or if earlier, when the sum of the member's age and service is at least 90, with a minimum age of 60.• Tier 2 members may retire upon Normal Retirement on or after age 65 with credit for 5 years of service, or if earlier, when the sum of the member's age and service is at least 90. Effective July 1, 2013, Tier 2 members may retire upon Normal Retirement on or after age 65 with credit for 5 years of service, or if earlier, when the sum of the member's age and service is at least 90, with a minimum age of 60.b. Monthly Benefit: 2.00% of FAC (monthly) times years of service.c. Payment Form: Benefits are paid as a monthly life annuity, with a guarantee that if the payments made do not exceed the member's contributions plus interest, determined as of the date of retirement, the balance will be paid in a lump-sum to the member's beneficiary. Optional forms of payment are available; see below.
Early Retirement:	<ol style="list-style-type: none">a. Eligibility: Tier 1 members may retire early after reaching age 55 with credit for three years of service, while Tier 2 members may retire early after reaching age 55 with credit for five years of service.b. Monthly Benefit: 2.00% of FAC (monthly) times years of service, multiplied by a factor that reduces the benefit 6% for each year from the earlier of (i) age 65, or (ii) the age at which current service plus age equals 85 (Tier 1 members) or 90 (Tier 2 members). Effective July 1, 2013 for members who are either Non-grandfathered Tier 1 or Tier 2: 2.00% of FAC (monthly) times years of service, multiplied by a factor that reduces the benefit 8% for each year from the earlier of (i) age 65, or (ii) the age at which current service plus age equals 90 with a minimum age of 60.

Section 4: Actuarial Assumptions, Methods and Plan Provisions

c. Payment Form: Same as for Normal Retirement above.

Disability:

- a. Eligibility: A member is eligible provided he/she has credit for at least one year of service. Effective July 1, 2013, a member is eligible provided he/she has credit for at least five years of service.
- b. Monthly Benefit: 2.00% of FAC (monthly) times years of service with a minimum 20 years of service. Effective July 1, 2013, 2.00% of FAC (monthly) times years of service.
- c. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement that is in excess of the sum of payments already received will be paid in a lump sum to the member's beneficiary.
- d. All alternative forms of payment other than level income and the partial lump-sum option are also permitted in the case of disability retirement. For basis recovery only, disability benefits are converted to normal retirement benefits when the member reaches normal retirement age or age 65, whichever is earlier.

Deferred Termination Benefit:

- a. Eligibility: A Tier 1 member with at least three years of service, or a Tier 2 member with at least five years of service, who does not withdraw his/her contributions from the fund, is eligible for a deferred termination benefit.
- b. Monthly Benefit: 2.00% of FAC (monthly) times years of service. Both FAC and service are determined at the time the member leaves active employment. Benefits may commence unreduced at age 65 or when the sum of the member's age and service is 85 (Grandfathered Tier 1 members) or 90 with a minimum age of 60 (Non-grandfathered Tier 1 and Tier 2 members). Reduced benefits may commence at or after age 55 if the member is not eligible for an unreduced benefit. Reductions are the same as for Early Retirement.
- c. Payment Form: The form of payment is the same as for Normal Retirement above.
- d. Death Benefit: A member who dies after leaving active service but before retiring is entitled to receive a benefit as described below.

Withdrawal (Refund) Benefit:

- a. Eligibility: Tier 1 members leaving covered employment with less than three years of service, and Tier 2 members leaving covered employment with less than five years of service, are eligible. Optionally, vested members may withdraw their contributions plus interest in lieu of the deferred benefits otherwise due.
- b. Benefit: The member who withdraws receives a lump-sum payment of his/her employee contributions, plus the interest credited on these contributions. Interest is credited at 6% per year prior to benefit commencement (0.5% per month).

Death Benefit:

- a. Eligibility: Death must have occurred while an active or an inactive, non-retired member.
- b. Benefit: Upon the death of a nonvested member, a refund of the member's contributions and interest is paid. Upon the death of a vested member, the beneficiary may elect (i) the refund benefit above, or (ii) a life annuity of the normal retirement benefit, determined under Option One below, based on FAC and service as of the date of death, but without applying any reduction for the member's age at death. In determining the reduction for Option One, members not eligible for normal retirement benefits use the Fund's option tables for disabled members.

Section 4: Actuarial Assumptions, Methods and Plan Provisions

Optional Forms of Payment:

There are optional forms of payment available on an actuarially equivalent basis, as follows:

Option 1 - A life annuity payable while either the participant or his beneficiary is alive, "popping-up" to the original life annuity if the beneficiary predeceases the member.

Option 2 - A life annuity payable to the member while both the member and beneficiary are alive, reducing to 50% of this amount if the member predeceases the beneficiary, and "popping-up" to the original life annuity if the beneficiary predeceases the member.

Option 3a - A life annuity payable to the member, with a guarantee that, should the member die prior to receiving 60 payments (five years), the payments will be continued to a beneficiary for the balance of the five-year period. (This option has been replaced by Option 3b. It is not available to employees who retire on or after August 1, 2003. Retirees who elected this option prior to that date are unaffected.)

Option 3b - A life annuity payable to the member, with a guarantee that, should the member die prior to receiving 240 payments (twenty years), the payments will be continued to a beneficiary for the balance of the twenty-year period. (This option replaced Option 3a effective August 1, 2003.)

Option 4 - A life annuity payable to the member, with a guarantee that, should the member die prior to receiving 120 payments (10 years), the payments will be continued to a beneficiary for the balance of the ten-year period.

Option 5 - A non-level annuity payable to the member, designed to provide a level total income when combined with the member's Social Security benefit. This option is not available to disabled retirees.

In addition, members may elect a partial lump-sum option (PLSO) at retirement. Under this option, a member receives an immediate lump sum equal to 12 times the monthly life annuity benefit and a reduced annuity. The reduction is determined actuarially. The member can then elect to receive the annuity benefit in one of the other optional forms, except that members who receive a PLSO may not elect Option 5 – the level income option. The PLSO is not available to disabled retirees or retirees who are not eligible for an unreduced retirement benefit.

Actuarial equivalence is based on tables adopted by the Board of Trustees.

Cost-of-living Increase:

From time to time, TFFR has been amended to grant certain post-retirement benefit increases. However, TFFR has no automatic cost-of-living increase features.

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