

ARBOR PARK SD 145 REGULAR

GASB STATEMENT NO. 68 EMPLOYER REPORTING ACCOUNTING SCHEDULES DECEMBER 31, 2016

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April 17, 2017

Arbor Park SD 145 Illinois Municipal Retirement Fund

Ladies and Gentlemen:

The accounting schedules submitted in this report are required under the Governmental Accounting Standards Board (GASB) Statement No. 68 "Accounting and Financial Reporting for Pensions."

Our calculations for this report were prepared for the purpose of complying with the requirements of GASB Statement No. 68. These calculations have been made on a basis that is consistent with our understanding of these accounting standards. These results are subject to review by the fund's auditor and may be revised.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement No. 68. The Net Pension Liability is not an appropriate measure for measuring the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligation. The Net Pension Liability is not an appropriate measure for assessing the need for or amount of future employer contributions. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement Nos. 67 and 68 may produce significantly different results. This report may be provided to parties other than the Arbor Park SD 145 only in its entirety and only with the permission of Arbor Park SD 145.

This report is based upon information, furnished to us by IMRF, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. If your understanding of this information is different than ours, please let us know and do not use or distribute this report until those differences have been resolved to your satisfaction. This information was checked for internal consistency, but it was not audited.

Please see the actuarial valuation report for the Illinois Municipal Retirement Fund as of December 31, 2016 for additional discussions of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

To the best of our knowledge, the information contained in this report is accurate, and fairly represents the GASB 68 information related to Arbor Park SD 145. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board. Mark Buis and Francois Pieterse are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinions herein. The signing actuaries are independent of the plan sponsor.

Respectfully submitted,

By Wark Buis
FSA, EA, MAAA

By François Pieterse
ASA, MAAA



EXECUTIVE SUMMARY AS OF DECEMBER 31, 2016

Actuarial Valuation Date	Dec	ember 31, 2016
Measurement Date of the Net Pension Liability	Dec	ember 31, 2016
Fiscal Year End	Jı	ine 30, 2017
Membership		-
Number of		
- Retirees and Beneficiaries		241
- Inactive, Non-Retired Members		252
- Active Members		79
- Total		572
Covered Valuation Payroll ⁽¹⁾	\$	2,067,791
Net Pension Liability		
Total Pension Liability/(Asset)	. \$	12,329,628
Plan Fiduciary Net Position		10,660,527
Net Pension Liability/(Asset)	\$	1,669,101
Plan Fiduciary Net Position as a Percentage		
of Total Pension Liability		86.46%
Net Pension Liability as a Percentage		
of Covered Valuation Payroll		80.72%
Development of the Single Discount Rate as of December 31, 2016		
Long-Term Expected Rate of Investment Return		7.50%
Long-Term Municipal Bond Rate ⁽²⁾	•	3.78%
Last year ending December 31 in the 2017 to 2116 projection period		
for which projected benefit payments are fully funded		2116
Resulting Single Discount Rate based on the above development		7.50%
Single Discount Rate calculated using December 31, 2015 Measurement Date		7.48%
Total Pension Expense/(Income)	s	539,686

Deferred Outflows and Deferred Inflows of Resources by Source to be recognized in Future Pension Expenses

	 ed Outflows tes ources	 red Inflows esources
Difference between expected and actual experience	\$ 94,144	\$ 0
Changes in assumptions	0	5,384
Net difference between projected and actual earnings		
on pension plan investments	 553,022	 0
Total	\$ 647,166	\$ 5,384

⁽¹⁾ Does not necessarily represent Covered Employee Payroll as defined in GASB Statement Nos. 67-68.

⁽²⁾ Source: "20-Bond GO Index" is the Bond Buyer Index, general obligation, 20 years to maturity, mixed quality. In describing this Index, the Bond Buyer notes that the bonds' average credit quality is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA. The rate shown is as of December 29, 2016, the most recent date available on or before the measurement date.

DISCUSSION

Accounting Standard

For state and local government employers (as well as certain non-employers) that contribute to a Defined Benefit (DB) pension plan administered through a trust or equivalent arrangement, Governmental Accounting Standards Board (GASB) Statement No. 68 establishes standards for pension accounting and financial reporting. Under GASB Statement No. 68, the employer must account for and disclose the net pension liability, pension expense, and other information associated with providing retirement benefits to their employees (and former employees) on their basic financial statements.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards. A number of these disclosure items are provided in this report. However, certain information is not included in this report if it is not actuarial in nature, such as the notes to the financial statements regarding accounting policies and investments. As a result, the retirement fund and/or plan sponsor is responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards.

Financial Statements

GASB Statement No. 68 requires state and local government employers that contribute to DB pension plans to recognize the net pension liability and the pension expense on their financial statements, along with the related deferred outflows of resources and deferred inflows of resources. The net pension liability is the difference between the total pension liability and the plan's fiduciary net position. In traditional actuarial terms, this is analogous to the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

Paragraph 57 of GASB Statement No. 68 says, "Contributions to the pension plan from the employer subsequent to the measurement date of the collective net pension liability and before the end of the employer's reporting period should be reported as a deferred outflow of resources related to pensions." The information contained in this report does not incorporate any contributions made to IMRF subsequent to the measurement date of December 31, 2016.

The pension expense recognized each fiscal year is equal to the change in the net pension liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the certain changes in the liability and investment experience.

Notes to Financial Statements

GASB Statement No. 68 requires the notes of the employer's financial statements to disclose the total pension expense, the pension plan's liabilities and assets, and deferred outflows of resources and inflows of resources related to pensions.

In addition, GASB Statement No. 68 requires the notes of the financial statements for the employers to include certain additional information, including (page numbers refer to page numbers from this report unless specified otherwise):

- a description of the types of benefits provided by the plan, as well as automatic or ad hoc COLAs (please see pages B-1 B-5 of the December 31, 2016 Annual Actuarial Valuation report dated March 22, 2017);
- the number and classes of employees covered by the benefit terms (page 1);
- for the current year, sources of changes in the net pension liability (page 10);
- significant assumptions and methods used to calculate the total pension liability (page 15);
- inputs to the single discount rate (page 16);
- certain information about mortality assumptions and the dates of experience studies (page 13 and page 15);
- the date of the valuation used to determine the total pension liability (page 1);
- information about changes of assumptions or other inputs and benefit terms (pages 13 and 15);
- the basis for determining contributions to the plan, including a description of the plan's funding policy, as well as member and employer contribution requirements (please see page A-3, B-5 and Section D of the December 31, 2016 Annual Actuarial Valuation report dated March 22, 2017, as well as page 13);
- the total pension liability, fiduciary net position, net pension liability, and the pension plan's fiduciary net position as a percentage of the total pension liability (page 10);
- the net pension liability using a discount rate that is 1% higher and 1% lower than used to calculate the total pension liability and net pension liability for financial reporting purposes (page 10); and
- a description of the fund that administers the pension plan (to be provided by IMRF).

Required Supplementary Information

The financial statements of employers also include required supplementary information showing the 10-year fiscal history of:

- sources of changes in the net pension liability (page 11);
- information about the components of the net pension liability and related ratios, including the pension plan's fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percent of covered-employee payroll (page 11); and
- comparison of actual employer contributions to the actuarially determined contributions based on the plan's funding policy (page 12).

These tables may be built prospectively as the information becomes available.

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. For the employer's financial reporting purposes, the net pension liability and pension expense should be measured as of the employer's "measurement date" which may not be earlier than the employer's prior fiscal year-end date. If the actuarial valuation used to determine the total pension liability is not calculated as of the measurement date, the total pension liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The total pension liability shown in this report is based on an actuarial valuation performed as of December 31, 2016 and a measurement date of December 31, 2016.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a single discount rate that reflects: (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the plan's projected fiduciary net position is not sufficient to pay benefits).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.50%; the municipal bond rate is 3.78% (based on the weekly rate closest to but not later than the measurement date of the "20-Bond Go Index" described on page 1 and the resulting Single Discount Rate is 7.50%.

OTHER OBSERVATIONS

General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected Plan Contributions and Funded Status

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.50% on the actuarial value of assets), it is expected that:

- (1) The employer normal cost as a percentage of pay will decrease to the level of Tier 2 normal cost as time passes as the majority of the active population will consist of Tier 2 members.
- (2) The unfunded liability will increase in dollar amount for several years before it begins to decrease.
- (3) The funded status of the plan will increase gradually towards a 100% funded ratio.

This funding policy results in a crossover date in 2116 and a discount rate of 7.5%. The projections in this report are strictly for the purposes of determining the GASB discount rate and are different from a funding projection for the ongoing plan.

Limitations of Assets as a Percent of Total Pension Liability Measurements

This report includes a measure of the plan fiduciary net position as a percent of total pension liability. Unless otherwise indicated, with regard to any such measurements presented in this report:

- (1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.
- (2) The measurement is inappropriate for assessing the need for or amount of future employer contributions.

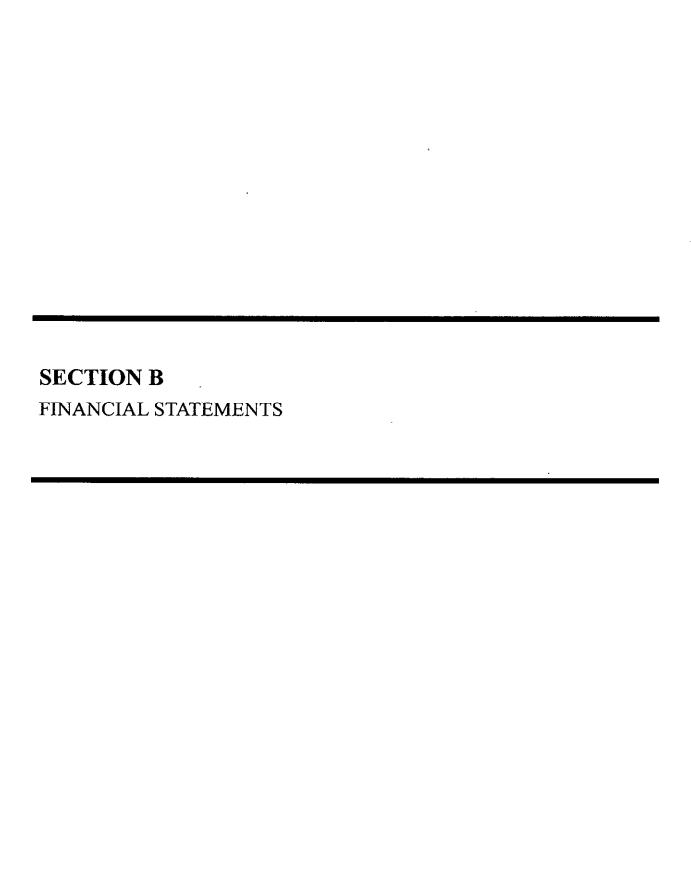
Limitations of Funded Status Measurements

Unless otherwise indicated, a funded ratio measurement presented in this report is based upon the actuarial accrued liability and the market value of assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

- (1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, in other words of transferring the obligations to a unrelated third party in an arm's length market value type transaction.
- (2) The measurement is dependent upon the actuarial cost method which, in combination with the plan's amortization policy, affects the timing and amounts of future contributions. The amount of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon actuarial assumptions. A funded ratio measurement in this report of 100% is not synonymous with no required future contributions. If the funded ratio were 100%, the plan would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit).

Limitation of Project Scope

Actuarial standards do not require the actuary to evaluate the ability of the plan sponsor or other contributing entity to make required contributions to the plan when due. Such an evaluation was not within the scope of this project and is not within the actuary's domain of expertise. Consequently, the actuary performed no such evaluation.



Pension Expense/(Income) Under GASB Statement No. 68 Calendar Year Ended December 31, 2016

A. Expense/(Income)

1. Service Cost	\$ 242,420
2. Interest on the Total Pension Liability	846,188
3. Current-Period Benefit Changes	0
4. Employee Contributions (made negative for addition here)	(92,944)
5. Projected Earnings on Plan Investments (made negative for addition here)	(754,992)
6. Other Changes in Plan Fiduciary Net Position	(210,870)
7. Recognition of Outflow (Inflow) of Resources due to Liabilities	322,028
8. Recognition of Outflow (Inflow) of Resources due to Assets	187,856
9. Total Pension Expense/(Income)	\$ 539,686
	\

STATEMENT OF OUTFLOWS AND INFLOWS ARISING FROM CURRENT REPORTING PERIOD

CALENDAR YEAR ENDED DECEMBER 31, 2016

A. Outflows (Inflows) of Resources due to Liabilities	
1. Difference between expected and actual experience	
of the Total Pension Liability (gains) or losses	\$ 425,635
2. Assumption Changes (gains) or losses	\$ (24,340)
3. Recognition period for Liabilities: Average of the	
expected remaining service lives of all employees {in years}	1.2840
4. Outflow (Inflow) of Resources to be recognized in the current pension expense for the	
Difference between expected and actual experience	
of the Total Pension Liability	\$ 331,491
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for	
Assumption Changes	\$ (18,956)
6. Outflow (Inflow) of Resources to be recognized in the current pension expense	
due to Liabilities	\$ 312,535
7. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for the	
Difference between expected and actual experience	
of the Total Pension Liability	\$ 94,144
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for	
Assumption Changes	\$ (5,384)
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses	
due to Liabilities	\$ 88,760
B. Outflows (Inflows) of Resources due to Assets	
1. Net difference between projected and actual earnings on	
pension plan investments (gains) or losses	\$ 87,861
2. Recognition period for Assets {in years}	5.0000
3. Outflow (Inflow) of Resources to be recognized in the current pension expense	
due to Assets	\$ 17,572
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses	•
due to Assets	\$ 70,289

Please note that employer contributions made after the measurement date have not been reported as deferred outflows of resources. These employer contributions must be separately accounted for by the employer.

STATEMENT OF OUTFLOWS AND INFLOWS ARISING FROM CURRENT AND PRIOR REPORTING PERIODS

CALENDAR YEAR ENDED DECEMBER 31, 2016

A. Outflows and Inflows of Resources due to Liabilities and Assets to be recognized in Current Pension Expense

	O	utflows	1	nllows	Net	t Outflows
	of F	Resources	of R	esources	of F	Resources
1. Due to Liabilities	\$	340,984	\$	18,956	\$	322,028
2. Due to Assets		187,856		0		187,856
3. Total	\$	528,840	\$	18,956	\$	509,884

B. Outflows and Inflows of Resources by Source to be recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources		Net Outflows of Resources
1. Differences between expected and actual experience	338,530	\$	0 \$	338,530
2. Assumption changes	2,454	18,9	56 \$	(16,502)
3. Net difference between projected and actual				
earnings on pension plan investments	187,856	_	0	187,856
4. Total	528,840	\$ 18,9	56 \$	509,884

C. Deferred Outflows and Deferred Inflows of Resources by Source to be recognized in Future Pension Expenses

	Deferred Outflows of Resources_	Deferred Inflows of Resources	Net Deferred Outflows of Resources
1. Differences between expected and actual experience	\$ 94,144	\$ 0	\$ 94,144
2. Assumption changes	0	5,384	\$ (5,384)
3. Net difference between projected and actual			
earnings on pension plan investments	553,022	0	553,022
4. Total	\$ 647,166	\$ 5,384	\$ 641,782

D. Deferred Outflows and Deferred Inflows of Resources by Year to be recognized in Future Pension Expenses

Year Ending December 31	 rred Outflows esources
. 2017	\$ 276,616
2018	187,854
2019	159,739
2020	17,573
2021	0
Thereafter	0
Total	\$ 641,782

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS CURRENT PERIOD

CALENDAR YEAR ENDED DECEMBER 31, 2016



A. Total pension liability	A. *
1. Service Cost	\$ 242,420
2. Interest on the Total Pension Liability	846,188
3. Changes of benefit terms	0
4. Difference between expected and actual experience of the Total Pension Liability	425,635
5. Changes of assumptions	(24,340)
6. Benefit payments, including refunds	(= .,,
of employee contributions	(703,481)
7. Net change in total pension liability	\$ 786,422
8. Total pension liability – beginning	11,543,206
9. Total pension liability – ending	\$ 12,329,628
B. Plan fiduciary net position	 ·
1. Contributions – employer	\$ 253,337
2. Contributions – employee	92,944
3. Net investment income	667,131
4. Benefit payments, including refunds	
of employee contributions	(703,481)
5. Other (Net Transfer)	210,870
6. Net change in plan fiduciary net position	\$ 520,801
7. Plan fiduciary net position - beginning	 10,139,726
8. Plan fiduciary net position - ending	\$ 10,660,527
C. Net pension liability/(asset)	\$ 1,669,101
D. Plan fiduciary net position as a percentage	
of the total pension liability	86.46%
E. Covered Valuation payroll	\$ 2,067,791
F. Net pension liability as a percentage	
of covered valuation payroll	80.72%

SENSITIVITY OF NET PENSION LIABILITY/(ASSET) TO THE SINGLE DISCOUNT RATE ASSUMPTION

N			Curren	t Single Discount		
×	19	6 Decrease	Rate	e Assumption		1% Increase
**		6.50%		7.50% 8.50		8.50%
Total Pension Liability	\$	13,631,354	\$	12,329,628	\$	11,232,309
Plan Fiduciary Net Position		10,660,527		10,660,527		10,660,527
Net Pension Liability/(Asset)	\$	2,970,827	\$	1,669,101	\$	571,782
					•	

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION MULTIYEAR SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Calendar Years

(schedule to be built prospectively from 2014)

Calendar year ending December 31,	_	2016		2015		2014	2013	2012	2011	2010	2009	2008	2007
Total Pension Liability													
Service Cost	\$	242,420	S	217.911	S	240,979							
Interest on the Total Pension Liability		846,188		816,194		764,359							
Benefit Changes		0		0		0							
Difference between Expected and Actual Experience		425,635		33,893		(192,102)							
Assumption Changes		(24,340)		11,816		495,070							
Benefit Payments and Refunds		(703,481)		(649,543)		(559,875)							
Net Change in Total Pension Liability		786,422		430,271		748,431	•						
Total Pension Liability - Beginning		11,543,206		11,112,935		10,364,504							
Total Pension Liability - Ending (a)	<u>\$</u>	12,329,628	\$	11,543,206	s	11,112,935							
Plan Fiduciary Net Position													
Employer Contributions	\$	253,337	\$	270,455	Ş	255,429							
Employee Contributions		92,944		96,371		88,024							
Pension Plan Net Investment Income		667,131		50,337		582,648							
Benefit Payments and Refunds		(703,481)		(649,543)		(559,875)							
Other		210,870		163,369		182,698							
Net Change in Plan Fiduciary Net Position		520,801		(69,011)		548,924							
Plan Fiduciary Net Position - Beginning		10,139,726		10,208,737		9,659,813							
Plan Fiduciary Net Position - Ending (b)	S	10,660,527	Ş	10,139,726	3	10,208,737							
Net Pension Liability/(Asset) - Ending (a) - (b)		1,669,101		1,403,480		904,198							
Plan Fiduciary Net Position as a Percentage													
of Total Pension Liability		80.46%		87.84 %		91.86 %							
Covered Valuation Payroll	\$	2,067,791	\$	2,137,254	\$	1,911,173							
Net Pension Liability as a Percentage													
of Covered Valuation Payroll		80.72%		65.67 %		47.31 %							

MULTIYEAR SCHEDULE OF CONTRIBUTIONS

Last 10 Calendar Years

Calendar Year Ending December 31,	nding Determined		Actual Contribution		Contribution Deficiency (Excess)		Covered Valuation Payroll		Actual Contribution as a % of Covered Valuation Payroll	
2014	\$	254,377	\$	255,429	\$	(1,052)	\$	1,911,173	13.37%	
2015		270,790		270,455		335		2,137,254	12.65%	
2016		247,101	•	253,337		(6,236)		2,067,791	12.25%	

^{*} Estimated based on contribution rate of 11.95% and covered valuation payroll of \$2,067,791. This number should be verified by the auditor.

NOTES TO SCHEDULE OF CONTRIBUTIONS

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED IN THE CALCULATION OF THE 2016 CONTRIBUTION RATE*

Valuation Date:

Notes

Actuarially determined contribution rates are calculated as of December 31 each year, which is 12 months prior to the beginning of the fiscal year in which

contributions are reported.

Methods and Assumptions Used to Determine 2016 Contribution Rates:

Actuarial Cost Method

Aggregate Entry Age Normal

Amortization Method

Level Percentage of Payroll, Closed

Remaining Amortization Period

Non-Taxing bodies: 10-year rolling period.

Taxing bodies (Regular, SLEP and ECO groups): 27-year closed period until

remaining period reaches 15 years (then 15-year rolling period).

Early Retirement Incentive Plan liabilities: a period up to 10 years selected by

the Employer upon adoption of ERI.

SLEP supplemental liabilities attributable to Public Act 94-712 were financed over 22 years for most employers (two employers were financed over 31 years).

Asset Valuation Method

5-Year smoothed market; 20% corridor

Wage growth

3.50%

Price Inflation

2.75% -- approximate; No explicit price inflation assumption is used in this

valuation.

Salary Increases

3.75% to 14.50% including inflation

Investment Rate of Return

7.50%

Retirement Age

Experience-based table of rates that are specific to the type of eligibility

condition. Last updated for the 2014 valuation pursuant to an experience study

of the period 2011-2013.

Mortality

For non-disabled retirees, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2012). The IMRF specific rates were developed from the RP-2014 Blue Collar Health Annuitant Mortality Table with adjustments to match current IMRF experience. For disabled retirees, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2012). The IMRF specific rates were developed from the RP-2014 Disabled Retirees Mortality Table applying the same adjustment that were applied for non-disabled lives. For active members, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2012). The IMRF specific rates were developed from the RP-2014 Employee

Mortality Table with adjustments to match current IMRF experience.

Other Information:

Notes

There were no benefit changes during the year.

^{*} Based on Valuation Assumptions used in the December 31, 2014 actuarial valuation

DEVELOPMENT OF MARKET VALUE OF ASSETS

Market Value of Assets as of December 31, 2016

1. Employee Contribution Reserve (MDF Assets from IMRF)	\$ 1,289,215
2. Employer Contribution Reserve (EAF assets from IMRF)	604,493
3. Annuitant Reserve	8,744,931
4. Miscellaneous Adjustment*	 21,888
5. Net Market Value	\$ 10,660,527

^{*} Includes an adjustment factor of .002057409 on Items 1 through 4 to ensure that Market Value of Assets for all employers balances to the total Market Value of IMRF. Miscellaneous adjustments are due to various items such as suspended annuity reserve, disability benefit reserve, death benefit reserve, supplemental benefit reserve, employers with no assets, etc.

SCHEDULE OF CONTRIBUTIONS

Total Contributions

1. Employer	
a.) Wage Reporting	\$ 246,698
b.) Accelerated payments and Reserve Payments	 6,639
	\$ 253,337
2. Member	
a.) Wage Reporting	\$ 92,912
b.) Member Payments (i.e. ERI, Pension Payments)	 32
Sub-total (Amount used for valuation on Schedule of Changes Page 10)	\$ 92,944
c.) Voluntary Additional Plan	\$ 13,208
Total Member Contributions (a+b+c)	\$ 106,152
Total Employer and Member Contributions (1+2)	\$ 359,489



SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED IN THE CALCULATION OF THE TOTAL PENSION LIABILITY

Methods and Assumptions Used to Determine Total Pension Liability:

Actuarial Cost Method

Entry Age Normal

Asset Valuation Method

Market Value of Assets

Price Inflation

2.75%

Salary Increases

3.75% to 14.50%

Investment Rate of Return

7.50%

Retirement Age

Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2014 valuation pursuant to an experience study

of the period 2011-2013.

Mortality

For non-disabled retirees, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2012). The IMRF specific rates were developed from the RP-2014 Blue Collar Health Annuitant Mortality Table with adjustments to match current IMRF experience. For disabled retirees, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2012). The IMRF specific rates were developed from the RP-2014 Disabled Retirees Mortality Table applying the same adjustment that were applied for non-disabled lives. For active members, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2012). The IMRF specific rates were developed from the RP-2014 Employee

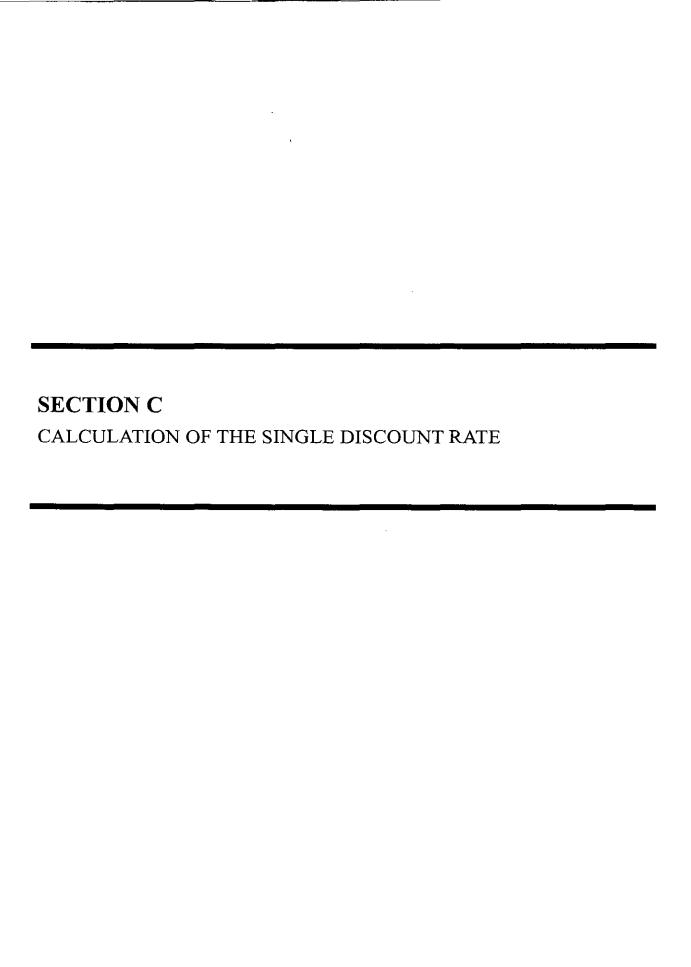
Mortality Table with adjustments to match current IMRF experience.

Other Information:

Notes

There were no benefit changes during the year.

A detailed description of the actuarial assumptions and methods can be found in the December 31, 2016 Illinois Municipal Retirement Fund annual actuarial valuation report.



CALCULATION OF THE SINGLE DISCOUNT RATE

GASB Statement No. 68 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a "risk-free" rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.50%; the municipal bond rate is 3.78%; and the resulting single discount rate is 7.50%.

The tables in this section provide background for the development of the single discount rate.

The Projection of Contributions table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities).

Expected Contributions are developed based on the following:

- Member Contributions for current members
- Normal Cost contributions for current members
- Unfunded Liability contributions for current and future members.

The Projection of Plan Fiduciary Net Position table shows the development of expected asset levels in future years.

The Present Values of Projected Benefit Payments table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF CONTRIBUTIONS

_ Year	Payroll for Current Employees	r Contributions from oyees Current Employees		Normal Cost Contributions		UAL. Contributions		Total ontributions
0	\$ 2,067,791							
1	1,917,062	\$ 86,268	\$	127,560	\$	71,283	\$	285,110
2	1,774,300	79,843		114,360	_	105,036	•	299,239
3	1,652,529	74,364		105,854		110,580		290,798
4	1,538,850	69,248		98,573		116,513		284,334
5	1,429,695	64,336		91,297		122,871		278,504
6	1,326,331	59,685		84,169		127,100		270,954
7	1,233,558	55,510		77,547		131,548		264,605
8	1,145,828	51,562		71,349		136,153		259,064
9	1,056,946	47,563		65,079		140,918		253,560
10	970,695	43,681		59,190		145,850		248,721
11	892,702	40,172		53,991		150,955		245,118
12	822,132	36,996		49,396		156,238		242,630
13	758,803	34,146		45,365		161,707		241,218
14	695,408	31,293		41,368		167,366		240,028
15	633,595	28,512		37,502		173,224		239,238
16	575,923	25,917		33,917		179,287		239,120
17	520,247	23,411		30,483		185,562		239,456
18	465,541	20,949		27,046		192,057		240,052
19	413,440	18,605		23,814		198,779		241,198
20	366,327	16,485		20.846		205,736		243,066
21	326,648	14,699		18,328		212,937		245,964
22	293,961	13,228		16,290		220,389		249,908
23	264,511	11,903		14,395		228,103		254,401
24	239,362	10,771		12,813		236,087		259,670
25	217,417	9,784		11,422		244,350		265,555
26	197,800	8,901		10,234		252,902		272,037
27	180,301	8,114		9,203		0		17,317
28	165,228	7,435		8,303		0		15,738
29	152,989	6,885		7,581		(0)		14,466
30	143,059	6,438		6,990		(0)		13,428
31	133,855	6,023		6,474		Ó		12,497
32	124,421	5,599		5,956		0		11,555
33	116,503	5,243		5,519		0		10,761
34	109,389	4,922		5,106		0		10,028
35	89,745	4,039		4,144		(0)		8,183
36	61,248	2,756		2,810		(0)		5,566
37	31,777	1,430		1,461		0		2,891
38	9,588	431		449		0		881
39	3,633	163		183		0		347
40	1.937	87		109		0		196
41	1,179	53		78		(0)		131
42	745	34		50		(0)		83
43	597	27		40		0		67
44	488	22		35		0		57
45	401	18		28		0		47
46	330	15		24		0		38
47	271	12		20		(0)		32
48	223	10		16		(0)		26
49	104	5		8		0		12 *
50	0	0		0		0		0

SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF CONTRIBUTIONS (CONCLUDED)

Year	Payroll for Current Employees	Contributions from Current Employees	Normal Cost Contributions	UAL Contributions	Total Contributions
51	s 0	\$ 0	\$ 0	\$ 0	\$ 0
52	0	0	0	0	0
53	0	0	0	0	0
54	0	0	0	0	0
55	0	0	0	0	0
56	0	0	0	0	0
57	0	0	0	0	0
58	0	0	0	0	0
59	0	0	0	0	0
60	0	0	0	0	0
61	0	0	0	0	0
62	0	0	0	0	0
63	0	0	0	0	0
64	0	0	0	0	0
65	0	0	0	0	0
66	0	0	0	0	0
67 68	0	0	0	0	0
69	0	0	0	0	0
70	0	0	0	0	0
71	0	0	0	0	0
72	0	0	0	0	0
73	0	0	0	0	0
74	0	0	0	0	0
75	0	0	0	0	0
76	0	0	0	0	0
7 7	0	0	0	0	0
78	0	0	0	0	0
79	0	0	0	0	0
80	0	0	0	0	0
81	0	0	0	0	0
82	0	0	0	0	0
83	0	0	0	0	0
84	0	0	0	0	0
85	0	0	0	0	0
86	0	0	0	0	0
87	0	0	0	0	0
88	0	0	0	0	0
89	0	0	0	0	0
90	0	0	0	0	0
91	0	0	0	0	0
92 93	0	0	0	0	0
93 94	0	0	0	0	0
95	0	0	0	0	0
96	0	0	0	0	0
97	0	n	0	0	0
98	0	0	0	0	0
99	0	0	0	0	0
100	0	0	0	0	0
				.,	

SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF PLAN FIDUCIARY NET POSITION

Yenr	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Investment Earnings at 7.50%	Projected Ending Plan Net Position	
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)	
1	\$ 10,660,527	\$ 285,110	\$ 798,872	\$ 780,622	\$ 10,927,387	
2	10,927,387	299,239	818,019	800,451	11,209.058	
3	11,209,058	290,798	844,494	820,291	11,475,654	
4	11,475,654	284,334	883,390	838,616	11,715,214	
5	11,715,214	278,504	917,680	855,105	11,931,142	
6	11,931,142	270,954	953,863	869,690	12,117,923	
7	12,117,923	264,605	991,999	882,060	12,272,589	
8	12,272,589	259,064	1,024,794	892,248	12,399,107	
9	12,399,107	253,560	1,056,926	900,351	12,496.091	
10	12,496,091	248,721	1,102,512	905,769	12,548,069	
11	12,548,069	245,118	1,139,781	908,162	12,561,567	
12	12,561,567	242,630	1,163,940	908,193	12,548,451	
13	12,548,451	241,218	1,184,668	906,394	12,511,395	
14	12,511,395	240,028	1,203,541	902,876	12,450,758	
15	12,450,758	239,238	1,219,315	897,718	12,368,399	
16	12,368,399	239,120	1,232,958	891,035	12,265,597	
17	12,265,597	239,456	1,244,458	882,914	12,143,508	
18	12,143,508	240,052	1,253,649	873,440	12,003.352	
19	12,003,352	241,198	1,259,553	862,753	11,847,750	
20	11,847,750	243,066	1,260,070	851,133	11,681,879	
21	11,681,879	245,964	1,257,237	838,904	11,509,510	
22	11,509,510	249,908	1,263,467	825,892	11,321,843	
23	11,321,843	254,401	1,251,301	812,430	11,137,373	
24	11,137,373	259,670	1,236,502	799,334	10,959,876	
25	10,959,876	265,555	1,217,977	786,921	10,794,374	
26	10,794,374	272,037	1,195,651		10,646,329	
27	10,646,329	17,317	1,171,058	755,992	10,248,579	
28	10,248,579	15,738	1,144,532	727,079	9,846.864	
29	9,846,864	14,466	1,113,477	698,047	9,445,899	
30	9,445,899	13,428	1,079,567	669,185	9,048,945	
31	9,048,945	12,497	1,043,682	640,700		
32	8,658,460	11,555	1,006,714	612,741	8,658,460 8,276,041	
33	8,276,041	10,761	967,285	585,482	8,276,041	
34	7,904,999	10,028	929,017	559,036	7,904,999	
35	7,545,046	8,183	903,580	532,908	7,545,046	
36	7,182,557	5,566	883,349	506,370	7,182,557	
37	6,811,145	2,891	871,947	478,835	6,811,145	
38	6,420,925	188	846,990	450,414	6,420,925	
39	6,025,230	347	804,870	422,268	6,025,230	
40	5,642,975	196	761,216	395,201	5,642,975	
41	5,277,156	131	718,480	369,336	5,277,156	
42	4,928,142	83	676.733	344,695	4,928,142	
43	4,596,188	67	636,349		4,596,188	
44	4,281,191	57	597,237	321,285 299,100	4,281,191	
45	3,983,111	47	559,522		3,983,111	
46	3,701,768	38	523,391	278,132	3,701,768	
47	3,436,776	32	488,939	258,362 239,756	3,436,776	
48	3,187,625	26	456,225	222,274	3,187,625	
49	2,953,700	12	425,400		2,953,700	
50	2,734,176	0		205,864	2,734,176	
- **	2,737,170	Ü	396,189	190,475	2,528,463	

SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF PLAN FIDUCIARY NET POSITION (CONCLUDED)

Year	Projected Beginning Plan Net Position			ected Benefit ayments	Projected investment Earnings at 7.50%	Projected Ending Plan Net Position	
	(a)	(b)	(c)		(d)	(e)=(a)+(b)-(c)+(d)	
51	\$ 2,528,463	\$ 0	\$	368,618	\$ 176,061	\$ 2,335,906	
52	2,335,906	0		342,712	162,574	2,155,768	
53	2,155,768	0		318,403	149,958	1,987,323	
54	1,987,323	0		295,631	138,163	1,829,856	
55	1,829,856	0		274,338	127,137	1,682,655	
56	1,682,655	0		254,467	116,829	1,545,018	
57	1,545,018	0		235,964	107,188	1,416,242	
58	1,416,242	0		218,751	98,163	1,295,655	
59	1,295,655	0		202,738	89,709	1,182,625	
60	1,182,625	0		187,835	81,780	1,076,570	
61	1,076,570	0		173,942	74,338	976,967	
62	976,967	0		160,962	67,346	883,351	
63	883,351	0		148,787	60,773	795,337	
64	795,337	0		137,312	54,594	712,619	
65	712,619	0		126,447	48,790	634,962	
66	634,962	0		116,115	43,347	562,193	
67	562,193	0		106,247	38,252	494,198	
68	494,198	0		96,787	33,501	430,912	
69	430,912	0		87,694	29,089		
70	372,307	0		78,950	25,016	372,307	
71	318,374	0		70,531	21,281	318,374 269,124	
72	269,124	0		62,423			
73	224,587	0		54,640	17,886	224,587	
74	184,779	0		47,220	14,832	184,779	
75	149,679	0			12,120	149.679	
76	119,207	0		40,216	9,745	119,207	
77	93,207	0		33,700	7,700	93.207	
78	71,438	0		27,739	5,969	71,438	
79				22,385	4,534	53,586	
80	53,586	0		17,681	3,368	39,273	
81	39,273	0		13,645	2,443	28,071	
82	28,071	0		10,270	1,727	19,528	
83	19,528	0		7,519	1,188	13,197	
	13,197	0		5,344	793	8,646	
84	8,646	0		3,680	513	5,479	
85	5,479	0		2,450	321	3,349	
86	3,349	0		1,572	193	1,970	
87	1,970	0		969	112	1,113	
88	1,113	0		572	62	604	
89	604	0		322	33	315	
90	315	0		174	17	159	
91	159	0		90	9	77	
92	77	0		46	4	36	
93	36	0		23	2	15	
94	15	0		11	1	5	
95	5	0		4	0	I	
96	I	0		1	0	0	
97	0	0		0	0	0	
98	0	0		0	0	0	
99	0	0		0	0	0	
100	0	0		0	0	0	

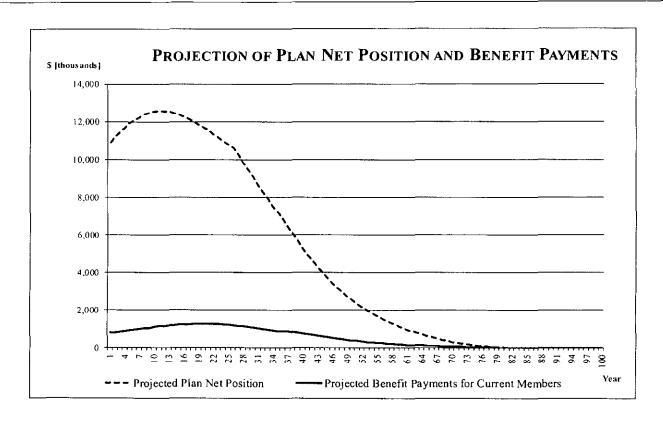
SINGLE DISCOUNT RATE DEVELOPMENT PRESENT VALUES OF PROJECTED BENEFITS

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)5)	(g)=(e)*vf^((a)5)	(h)=((c)/(1+sdr)^(a5)
1	\$ 10,660,527	\$ 798,872					\$ 770,500
2	10,927,387	818,019	818,019	0	733,923	0	733,923
3	11,209,058	844,494	844,494	0	704,815	0	704,815
4	11,475,654	883,390	883,390	0	685,840	0	685,840
5	11.715.214	917,680	917,680	0	662,756	0	662,756
6	11,931,142	953,863	953,863	()	640,825	0	640,825
7	12,117,923	991,999	991,999	0	619,950	0	619,950
8	12,272,589	1,024,794	1,024,794	0	595,763	U	595,763
9	12,399,107	1,056,926	1,056,926	0	571,574	Ü	571,574
10	12,496,091	1,102,512	1,102,512	0	554,630	0	554,630
11	12,548,069	1,139,781	1,139,781	U	533,375	O	533,375
12	12,561,567	1,163,940	1,163,940	0	506,679	0	506,679
13	12,548,451	1,184,668	1,184,668	0	479,723	0	479,723
14	12,511,395	1,203,541	1,203,541	0	453,364	0	453,364
15	12,450,758	1,219,315	1,219,315	0	427,261	0	427,261
16	12,368,399	1,232,958	1,232,958	0	401,899	0	401,899
17	12,265,597	1,244,458	1,244,458	O	377,347	0	377,347
18	12,143,508	1,253,649	1,253,649	0	353,613	0	353,613
19	12,003,352	1,259,553	1,259,553	0	330,491	0	330,491
20	11,847,750	1,260,070	1,260,070	0	307,560	O	307,560
21	11,681,879	1,257,237	1,257,237	0	285,459	0	285,459
22	11,509,510	1,263,467	1,263,467	0	266,859	0	266,859
23	11,321,843	1,251,301	1,251,301	0	245,851	0	245,851
24	11,137,373	1,236,502	1,236,502	0	225,993	0	225,993
25	10,959,876	1,217,977	1,217,977	0	207,077	0	207,077
26	10,794,374	t,195,651	1,195,651	0	189,099	0	189,099
27	10,646,329	1,171,058	1,171,058	0	172,288	0	172,288
28	10,248,579	1,144,532	1,144,532	0	156,637	0	156,637
29	9,846,864	1,113,477	1,113,477	0	141,756	0	141,756
30	9,445,899	1,079,567	1,079,567	0	127,850	0	127,850
31	9,048,945	1,043,682	1,043,682	0	114,977	0	114,977
32	8,658,460	1,006,714	1,006,714	0	103,167	0	103,167
33	8,276,041	967,285	967,285	0	92,210	0	92,210
34	7,904,999	929,017	929,017	. 0	82,383	0	82,383
35	7,545,046	903,580	903,580	0	74,537	0	74,537
36	7,182,557	883,349	883,349	0	67,785	0	67,785
37	6,811,145	871,947	871,947	0	62,242	0	62,242
38	6,420,925	846,990	846,990	0	56,242	0	56,242
39 40	6,025,230	804,870	804,870	0	49,716	0	49,716
	5,642,975	761,216	761,216	0	43,739	0	43,739
41 42	5,277,156	718,480	718,480	0	38,404	0	38,404
42	4,928,142	676,733	676,733	0	33,649	0	33,649
44	4,596,188	636,349	636,349	0	29,433	0	29,433
45	4,281,191	597,237	597,237	0	25,697	0	25,697
46	3,983,111 3,701,768	559,522	559,522	0	22,394	0	22,394
47	3,436,776	523,391 488 030	523,391	0	19,487	Ü	19,487
48	3,187,625	488,939	488,939	0	16,934	0	16,934
49	2,953,700	456,225 425,400	456,225	0	14,699	0	14,699
50	2,734,176		425,4(X)	0	12,749	0	12,749
50	2,734,170	396,189	396,189	0	11,045	0	11,045

Section C

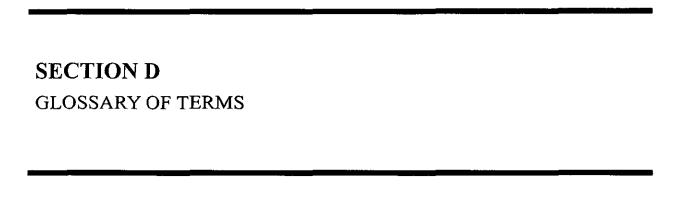
SINGLE DISCOUNT RATE DEVELOPMENT PRESENT VALUES OF PROJECTED BENEFITS (CONCLUDED)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (y)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(c)	(f)=(d)*v^((a)5)	(g)=(e)*vi^^((a)5)	(h)=((c)/(1+sdr)^(a5)
51	\$ 2,528,463	\$ 368,618	\$ 368,618	\$ 0	\$ 9,560	S 0	\$ 9,560
52	2,335,906	342,712	342,712	0	8,268	0	8,268
53	2,155,768	318,403	318,403	0	7,146	0	
54	1,987,323	295,631	295,631	0	6,172	0	
55	1,829,856	274,338	274,338	0	5,328	0	
56	1,682,655	254,467	254,467	0	4,597	0	4,597
57	1,545,018	235,964	235.964	0	3.965	0	3,965
58	1,416,242	218,751	218,751	0	3,420	0	
59	1,295,655	202,738	202,738	0	2,948	0	
60	1,182,625	187,835	187.835	0	2,541	0	2,541
61	1,076,570	173,942	173.942	0	2,189	0	
62	976,967	160,962	160,962	0	1,884	0	
63	883,351	148,787	148.787	0	1,620	0	
64	795,337	137,312	137.312	0	1,391	0	
65	712,619	126,447	126,447	0	1,191	0	1,191
66	634,962	116,115	116.115	0	810,1	0	1,018
67	562,193	106,247	106.247	0	866	0	866
68	494,198	96,787	96,787	0	734	0	734
69	430,912	87,694	87.694	0	619	0	619
70	372,307	78,950	78,950	0	518	0	518
71	318,374	70,531	70,531	0	431	0	431
72	269,124	62,423	62,423	0	355	0	355
73	224,587	54,640	54,640	0	289	0	289
74	184,779	47,220	47,220	0	232	0	232
7 5	149,679	40,216	40,216	0	184	0	184
76	119,207	33,700	33,700	0	143	0	143
77	93,207	27,739	27,739	0	110	0	110
78	71,438	22,385	22,385	0	82	0	82
79	53,586	17,681	17,681	0	61	0	61
80	39,273	13,645	13,645	0	43	0	43
81	28,071	10,270	10,270	0	30	0	30
82	19,528	7,519	7,519	n	21	0	21
83	13,197	5,344	5,344	0	14	0	14
84	8,646	3.680	3,680	0	9	0	9
85	5,479	2,450	2,450	0	5	0	5
86 87	3,349	1,572	1,572	0	3	0	3
88	1,970	969	969	0	2	0	2
89	1,113	572	572	0	I	0	I
90	604	322	322	0	1	0	l l
90 91	315	174	174	0	0	0	0
92	159	90	90	0	0	0	0
93	77	46	46	0	0	0	0
93 94	36 15	23	23	0	0	0	0
95	5	11	11	0	0	0	0
95 96	3	4 1	4	0	0	0	0
97	0	0	1	0	0	0	0
98	0	0	0	O ()	o o	0	0
99	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0
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GRS Gabriel Roeder Smith & Company

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GLOSSARY OF TERMS

Actuarial Accrued Liability (AAL)

The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."

Actuarial Assumptions

These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.

Accrued Service

Service credited under the fund which was rendered before the date of the actuarial valuation.

Actuarial Equivalent

A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

Actuarial Cost Method

A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.

Actuarial Gain (Loss)

The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.

Actuarial Present Value (APV)

The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.

Actuarial Valuation

The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total pension liability, and related actuarial present value of projected benefit payments for pensions.

Actuarial Valuation Date

The date as of which an actuarial valuation is performed.

Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC) A calculated contribution into a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically the Actuarially Determined Contribution has a normal cost payment and an amortization payment.

GLOSSARY OF TERMS (CONTINUED)

Amortization Payment

The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.

Amortization Method

The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be "open" (meaning, reset each year) or "closed" (the number of years remaining will decline each year.

Cost-of-Living Adjustments

Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.

Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan) A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.

Covered Valuation Payroll

The earnings of covered employees for the year ended on the valuation date, which is typically only the pensionable pay and does not include pay above any pay cap. It is not necessarily the same as payroll actually paid because it excludes all pay for people who exited during the year.

Deferred Inflows and Outflows

The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources.

Discount Rate

For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically:

- 1. The benefit payments to be made while the pension plans' fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and
- 2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

Entry Age Actuarial Cost Method (EAN)

The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.

GLOSSARY OF TERMS (CONTINUED)

GASB

The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.

Fiduciary Net Position

The fiduciary net position is the value of the assets of the trust.

Long-Term Expected Rate of Return

The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.

Money-Weighted Rate of Return

The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 68, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.

Multiple-Employer Defined Benefit Pension Plan A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.

Municipal Bond Rate

The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.

Net Pension Liability (NPL)

The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan.

Non-Employer Contribution Entities Non-employer contribution entities are entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of the GASB Accounting statement plan members are not considered non-employer contribution entities.

Normal Cost

The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.

Other Postemployment Benefits (OPEB)

All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.

Real Rate of Return

The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.

Service Cost

The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.

GLOSSARY OF TERMS (CONCLUDED)

Total Pension Expense

The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year:

- 1. Service Cost;
- 2. Interest on the Total Pension Liability;
- 3. Current-Period Benefit Changes;
- 4. Employee Contributions (made negative for addition here);
- 5. Projected Earnings on Plan Investments (made negative for addition here);
- 6. Pension Plan Administrative Expense;
- 7. Other Changes in Plan Fiduciary Net Position;
- 8. Recognition of Outflow (Inflow) of Resources due to Liabilities; and
- 9. Recognition of Outflow (Inflow) of Resources due to Assets.

Total Pension Liability (TPL)

The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.

Unfunded Actuarial Accrued Liability (UAAL)

The UAAL is the difference between actuarial accrued liability and valuation assets.

Valuation Assets

The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of the GASB Statement No. 68, the valuation asset is equal to the market value of assets.