GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

ACORN PUB LIB DIST REGULAR

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

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April 17, 2017

Acorn Pub Lib Dist
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 Acorn Pub Lib Dist only in its entirety and only with the permission of Acorn Pub Lib Dist.

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 Acorn Pub Lib Dist. 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 Mark Buis
Mark Buis
FSA, EA, MAAA

By Pieterse
Francois Pieterse
ASA, MAAA

SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY
AS OF DECEMBER 31, 2016

Actuarial Valuation Date		December 31, 2016
Measurement Date of the Net Pension Liability		December 31, 2016
Fiscal Year End		June 30, 2017
Membership		
Number of		
- Retirees and Beneficiaries		22
- Inactive, Non-Retired Members		16
- Active Members		12
- Total		50
Covered Valuation Payroll[1]	$	406,209
Net Pension Liability		
Total Pension Liability/(Asset)	$	2,988,888
Plan Fiduciary Net Position		2,674,713
Net Pension Liability/(Asset)	$	314,175
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		89.49%
Net Pension Liability as a Percentage of Covered Valuation Payroll		77.34%
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		7.49%
Total Pension Expense/(Income)	$	89,079

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 0	$ 48,013
Changes in assumptions	0	3,062
Net difference between projected and actual earnings on pension plan investments	137,449	0
Total	$ 137,449	$ 51,075

(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.

SECTION B

FINANCIAL STATEMENTS

PENSION EXPENSE/(INCOME) UNDER GASB STATEMENT NO. 68
CALENDAR YEAR ENDED DECEMBER 31, 2016

A. Expense/(Income)

1. Service Cost	$	41,320
2. Interest on the Total Pension Liability		216,262
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		(18,279)
5. Projected Earnings on Plan Investments (made negative for addition here)		(192,251)
6. Other Changes in Plan Fiduciary Net Position		16,718
7. Recognition of Outflow (Inflow) of Resources due to Liabilities		(21,772)
8. Recognition of Outflow (Inflow) of Resources due to Assets		47,081
9. Total Pension Expense/(Income)	**$**	**89,079**

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	$	(39,542)
2. Assumption Changes (gains) or losses	$	(3,199)
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}		2.8184
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	$	(14,030)
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes	$	(1,135)
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	$	(15,165)
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	$	(25,512)
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes	$	(2,064)
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	$	(27,576)
B. Outflows (Inflows) of Resources due to Assets		
1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	$	16,074
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	$	3,215
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	$	12,859

* *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

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Due to Liabilities	$ 44,121	$ 65,893	$ (21,772)
2. Due to Assets	47,081	0	47,081
3. Total	$ 91,202	$ 65,893	$ 25,309

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	$ 0	$ 63,621	$ (63,621)
2. Assumption changes	44,121	2,272	41,849
3. Net difference between projected and actual earnings on pension plan investments	47,081	0	47,081
4. Total	$ 91,202	$ 65,893	$ 25,309

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	$ 0	$ 48,013	$ (48,013)
2. Assumption changes	0	3,062	$ (3,062)
3. Net difference between projected and actual earnings on pension plan investments	137,449	0	137,449
4. Total	$ 137,449	$ 51,075	$ 86,374

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

Year Ending December 31	Net Deferred Outflows of Resources
2017	$ 8,417
2018	34,671
2019	40,072
2020	3,214
2021	0
Thereafter	0
Total	$ 86,374

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS CURRENT PERIOD
CALENDAR YEAR ENDED DECEMBER 31, 2016

A. Total pension liability		
1. Service Cost	$	41,320
2. Interest on the Total Pension Liability		216,262
3. Changes of benefit terms		0
4. Difference between expected and actual experience of the Total Pension Liability		(39,542)
5. Changes of assumptions		(3,199)
6. Benefit payments, including refunds of employee contributions		(185,261)
7. Net change in total pension liability	$	29,580
8. Total pension liability – beginning		2,959,308
9. Total pension liability – ending	**$**	**2,988,888**
B. Plan fiduciary net position		
1. Contributions – employer	$	54,067
2. Contributions – employee		18,279
3. Net investment income		176,177
4. Benefit payments, including refunds of employee contributions		(185,261)
5. Other (Net Transfer)		(16,718)
6. Net change in plan fiduciary net position	$	46,544
7. Plan fiduciary net position – beginning		2,628,169
8. Plan fiduciary net position – ending	**$**	**2,674,713**
C. Net pension liability/(asset)	**$**	**314,175**
D. Plan fiduciary net position as a percentage of the total pension liability		**89.49%**
E. Covered Valuation payroll	**$**	**406,209**
F. Net pension liability as a percentage of covered valuation payroll		**77.34%**

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

	1% Decrease 6.50%		Current Single Discount Rate Assumption 7.50%		1% Increase 8.50%	
Total Pension Liability	$	3,335,764	$	2,988,888	$	2,702,700
Plan Fiduciary Net Position		2,674,713		2,674,713		2,674,713
Net Pension Liability/(Asset)	$	661,051	$	314,175	$	27,987

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	$ 41,320	$ 45,113	$ 45,510							
Interest on the Total Pension Liability	216,262	215,370	204,264							
Benefit Changes	0	0	0							
Difference between Expected and Actual Experience	(39,542)	(73,747)	(74,938)							
Assumption Changes	(3,199)	(3,272)	137,945							
Benefit Payments and Refunds	(185,261)	(161,747)	(151,901)							
Net Change in Total Pension Liability	29,580	21,717	160,880							
Total Pension Liability - Beginning	2,959,308	2,937,591	2,776,711							
Total Pension Liability - Ending (a)	$ 2,988,888	$ 2,959,308	$ 2,937,591							
Plan Fiduciary Net Position										
Employer Contributions	$ 54,067	$ 55,364	$ 60,939							
Employee Contributions	18,279	17,682	18,137							
Pension Plan Net Investment Income	176,177	13,009	155,067							
Benefit Payments and Refunds	(185,261)	(161,747)	(151,901)							
Other	(16,718)	57,736	(14,609)							
Net Change in Plan Fiduciary Net Position	46,544	(17,956)	67,633							
Plan Fiduciary Net Position - Beginning	2,628,169	2,646,125	2,578,492							
Plan Fiduciary Net Position - Ending (b)	$ 2,674,713	$ 2,628,169	$ 2,646,125							
Net Pension Liability/(Asset) - Ending (a) - (b)	314,175	331,139	291,466							
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	89.49%	88.81 %	90.08 %							
Covered Valuation Payroll	$ 406,209	$ 392,931	$ 405,722							
Net Pension Liability as a Percentage of Covered Valuation Payroll	77.34%	84.27 %	71.84 %							

MULTIYEAR SCHEDULE OF CONTRIBUTIONS

Last 10 Calendar Years

Calendar Year Ending December 31,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Valuation Payroll	Actual Contribution as a % of Covered Valuation Payroll
2014	$ 61,345	$ 60,939	$ 406	$ 405,722	15.02%
2015	55,364	55,364	0	392,931	14.09%
2016	54,066 *	54,067	(1)	406,209	13.31%

* *Estimated based on contribution rate of 13.31% and covered valuation payroll of $406,209. 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)	$	319,549
2. Employer Contribution Reserve (EAF assets from IMRF)		502,092
3. Annuitant Reserve		1,847,580
4. Miscellaneous Adjustment*		5,492
5. Net Market Value	$	2,674,713

* *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	$	54,067
b.) Accelerated payments and Reserve Payments		-
	$	**54,067**
2. Member		
a.) Wage Reporting	$	18,279
b.) Member Payments (i.e. ERI, Pension Payments)		-
Sub-total (Amount used for valuation on Schedule of Changes Page 10)	**$**	**18,279**
c.) Voluntary Additional Plan	$	0
Total Member Contributions (a+b+c)	**$**	**18,279**
Total Employer and Member Contributions (1+2)	**$**	**72,346**

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.

SECTION C

CALCULATION OF THE SINGLE DISCOUNT RATE

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	Contributions from Current Employees	Normal Cost Contributions	UAL Contributions	Total Contributions
0	$ 406,209				
1	381,506	$ 17,168	$ 24,791	$ 16,947	$ 58,906
2	362,238	16,301	21,310	17,135	54,746
3	349,090	15,709	20,433	18,204	54,346
4	340,074	15,303	20,006	19,359	54,668
5	334,034	15,032	19,684	20,608	55,324
6	330,992	14,895	19,538	21,312	55,744
7	328,607	14,787	19,397	22,058	56,242
8	326,743	14,703	19,254	22,830	56,787
9	324,427	14,599	19,086	23,629	57,313
10	321,287	14,458	18,869	24,456	57,782
11	317,842	14,303	18,635	25,312	58,249
12	313,035	14,087	18,322	26,197	58,606
13	307,948	13,858	17,963	27,114	58,935
14	302,692	13,621	17,597	28,063	59,281
15	297,604	13,392	17,242	29,046	59,680
16	294,028	13,231	16,918	30,062	60,211
17	290,949	13,093	16,683	31,114	60,890
18	287,301	12,929	16,388	32,203	61,520
19	283,593	12,762	16,092	33,330	62,184
20	280,302	12,614	15,794	34,497	62,905
21	277,119	12,470	15,532	35,704	63,707
22	269,196	12,114	14,981	36,954	64,049
23	260,460	11,721	14,366	38,248	64,334
24	255,424	11,494	13,936	39,586	65,016
25	249,245	11,216	13,525	40,971	65,712
26	242,487	10,912	13,038	42,406	66,355
27	237,409	10,683	12,647	0	23,331
28	227,130	10,221	12,009	0	22,230
29	208,936	9,402	10,964	(1)	20,365
30	190,649	8,579	9,891	0	18,470
31	176,127	7,926	8,980	0	16,906
32	152,992	6,885	7,679	0	14,564
33	119,919	5,396	5,971	0	11,368
34	88,767	3,995	4,455	0	8,450
35	57,297	2,578	2,956	(0)	5,534
36	35,077	1,578	1,907	(0)	3,485
37	27,475	1,236	1,600	0	2,836
38	23,418	1,054	1,389	0	2,443
39	16,502	743	966	0	1,708
40	9,234	416	555	0	971
41	6,423	289	428	(0)	717
42	5,036	227	352	(0)	579
43	3,651	164	261	0	425
44	2,527	114	182	0	296
45	2,083	94	150	0	244
46	1,718	77	124	0	201
47	1,417	64	102	(0)	165
48	1,169	53	84	(0)	137
49	964	43	70	0	113
50	794	36	57	0	92

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.

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	$ 653	$ 29	$ 47	$ 0	$ 77
52	538	24	39	0	63
53	251	11	18	(0)	29
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	0	0	0	0	0
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
77	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	0	0	0	0	0
93	0	0	0	0	0
94	0	0	0	0	0
95	0	0	0	0	0
96	0	0	0	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

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.

SINGLE DISCOUNT RATE DEVELOPMENT
PROJECTION OF PLAN FIDUCIARY NET POSITION

Year	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	$ 2,674,713	$ 58,906	$ 183,400	$ 196,019	$ 2,746,238
2	2,746,238	54,746	195,741	200,776	2,806,020
3	2,806,020	54,346	205,892	204,871	2,859,344
4	2,859,344	54,668	214,224	208,576	2,908,363
5	2,908,363	55,324	219,730	212,073	2,956,030
6	2,956,030	55,744	225,076	215,467	3,002,165
7	3,002,165	56,242	232,256	218,681	3,044,831
8	3,044,831	56,787	237,764	221,698	3,085,553
9	3,085,553	57,313	241,225	224,644	3,126,286
10	3,126,286	57,782	243,988	227,615	3,167,695
11	3,167,695	58,249	246,623	230,641	3,209,963
12	3,209,963	58,606	248,943	233,739	3,253,365
13	3,253,365	58,935	250,879	236,935	3,298,356
14	3,298,356	59,281	252,649	240,256	3,345,244
15	3,345,244	59,680	258,515	243,572	3,389,981
16	3,389,981	60,211	259,665	246,904	3,437,432
17	3,437,432	60,890	258,636	250,526	3,490,212
18	3,490,212	61,520	261,972	254,385	3,544,145
19	3,544,145	62,184	265,182	258,336	3,599,483
20	3,599,483	62,905	263,287	262,583	3,661,683
21	3,661,683	63,707	263,673	267,263	3,728,981
22	3,728,981	64,049	269,572	272,106	3,795,564
23	3,795,564	64,334	267,762	277,177	3,869,313
24	3,869,313	65,016	264,508	282,853	3,952,674
25	3,952,674	65,712	262,111	289,219	4,045,495
26	4,045,495	66,355	259,058	296,316	4,149,109
27	4,149,109	23,331	255,096	302,649	4,219,992
28	4,219,992	22,230	265,500	307,542	4,284,263
29	4,284,263	20,365	279,688	311,771	4,336,711
30	4,336,711	18,470	283,328	315,501	4,387,354
31	4,387,354	16,906	287,678	319,081	4,435,663
32	4,435,663	14,564	300,220	322,156	4,472,163
33	4,472,163	11,368	322,726	323,947	4,484,752
34	4,484,752	8,450	347,803	323,861	4,469,260
35	4,469,260	5,534	372,242	321,692	4,424,243
36	4,424,243	3,485	383,810	317,814	4,361,732
37	4,361,732	2,836	383,151	313,126	4,294,543
38	4,294,543	2,443	380,873	308,156	4,224,269
39	4,224,269	1,708	385,228	302,698	4,143,448
40	4,143,448	971	388,087	296,504	4,052,835
41	4,052,835	717	386,049	289,774	3,957,277
42	3,957,277	579	383,213	282,706	3,857,349
43	3,857,349	425	380,925	275,290	3,752,139
44	3,752,139	296	377,730	267,513	3,642,218
45	3,642,218	244	373,967	259,405	3,527,900
46	3,527,900	201	369,796	250,983	3,409,289
47	3,409,289	165	365,199	242,255	3,286,511
48	3,286,511	137	360,135	233,232	3,159,745
49	3,159,745	113	354,553	223,930	3,029,234
50	3,029,234	92	348,406	214,367	2,895,287

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.

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

Year	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)
51	$ 2,895,287	$ 77	$ 341,654	$ 204,569	$ 2,758,278
52	2,758,278	63	334,265	194,565	2,618,641
53	2,618,641	29	326,594	184,373	2,476,449
54	2,476,449	0	317,922	174,027	2,332,554
55	2,332,554	0	308,411	163,585	2,187,729
56	2,187,729	0	298,220	153,099	2,042,607
57	2,042,607	0	287,358	142,614	1,897,864
58	1,897,864	0	275,840	132,183	1,754,206
59	1,754,206	0	263,679	121,856	1,612,383
60	1,612,383	0	250,880	111,691	1,473,194
61	1,473,194	0	237,475	101,745	1,337,464
62	1,337,464	0	223,521	92,079	1,206,022
63	1,206,022	0	209,107	82,752	1,079,667
64	1,079,667	0	194,357	73,818	959,128
65	959,128	0	179,409	65,328	845,048
66	845,048	0	164,408	57,325	737,964
67	737,964	0	149,505	49,842	638,301
68	638,301	0	134,838	42,908	546,371
69	546,371	0	120,515	36,540	462,396
70	462,396	0	106,626	30,754	386,524
71	386,524	0	93,277	25,555	318,801
72	318,801	0	80,582	20,943	259,162
73	259,162	0	68,664	16,909	207,407
74	207,407	0	57,637	13,433	163,203
75	163,203	0	47,586	10,488	126,105
76	126,105	0	38,579	8,037	95,564
77	95,564	0	30,670	6,038	70,931
78	70,931	0	23,880	4,441	51,492
79	51,492	0	18,178	3,193	36,507
80	36,507	0	13,502	2,241	25,246
81	25,246	0	9,772	1,534	17,007
82	17,007	0	6,884	1,022	11,145
83	11,145	0	4,711	662	7,096
84	7,096	0	3,126	417	4,387
85	4,387	0	2,009	255	2,633
86	2,633	0	1,251	151	1,534
87	1,534	0	754	87	867
88	867	0	441	49	474
89	474	0	250	26	251
90	251	0	138	14	127
91	127	0	73	7	61
92	61	0	37	3	27
93	27	0	17	1	11
94	11	0	7	1	5
95	5	0	3	0	2
96	2	0	2	0	1
97	1	0	1	0	0
98	0	0	0	0	0
99	0	0	0	0	0
100	0	0	0	0	0

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.

SINGLE DISCOUNT RATE DEVELOPMENT
PRESENT VALUES OF PROJECTED BENEFITS

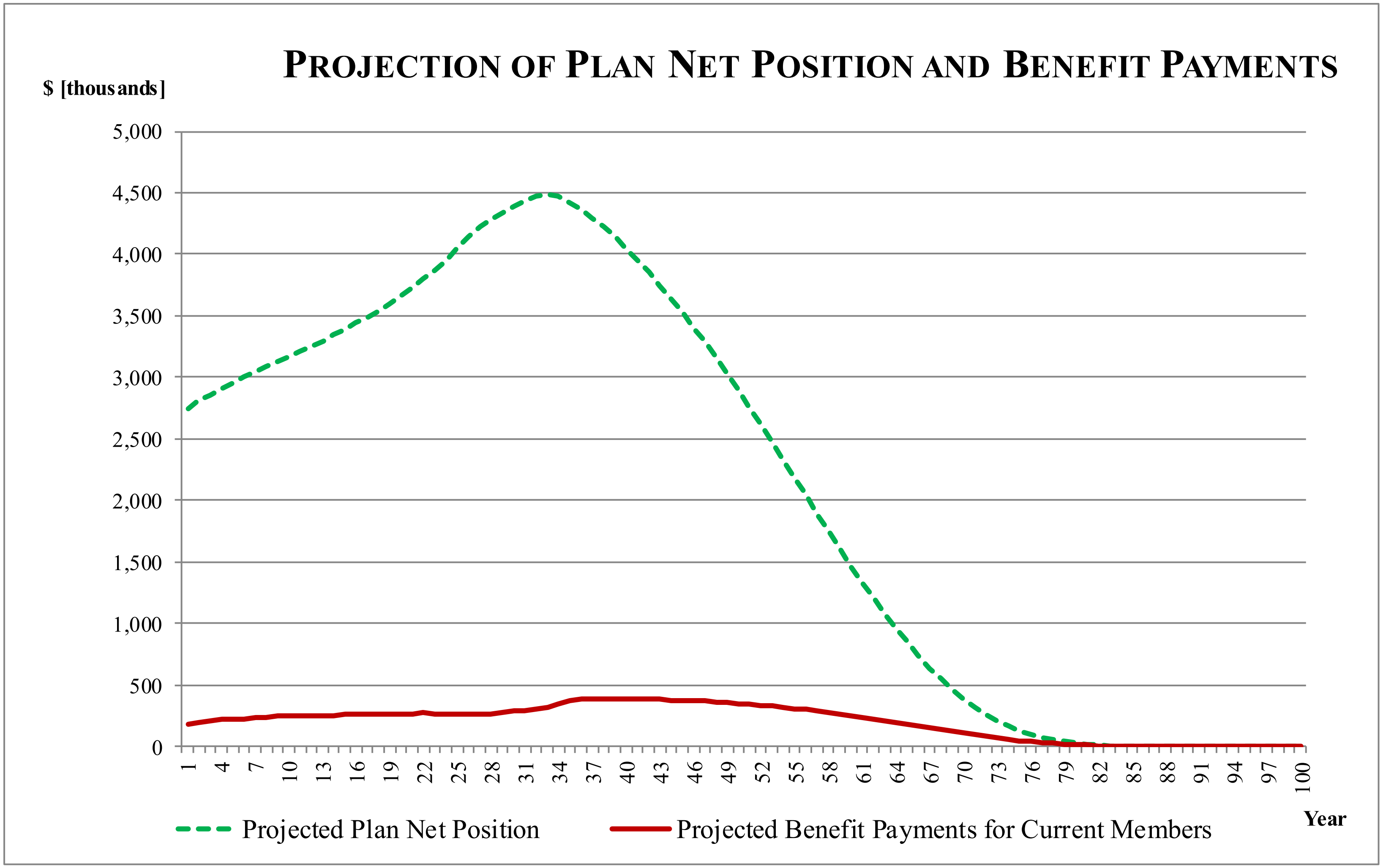
Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value 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)^(a-.5)
1	$ 2,674,713	$ 183,400	$ 183,400	$ 0	$ 176,887	$ 0	$ 176,887
2	2,746,238	195,741	195,741	0	175,618	0	175,618
3	2,806,020	205,892	205,892	0	171,838	0	171,838
4	2,859,344	214,224	214,224	0	166,318	0	166,318
5	2,908,363	219,730	219,730	0	158,691	0	158,691
6	2,956,030	225,076	225,076	0	151,211	0	151,211
7	3,002,165	232,256	232,256	0	145,149	0	145,149
8	3,044,831	237,764	237,764	0	138,224	0	138,224
9	3,085,553	241,225	241,225	0	130,452	0	130,452
10	3,126,286	243,988	243,988	0	122,741	0	122,741
11	3,167,695	246,623	246,623	0	115,410	0	115,410
12	3,209,963	248,943	248,943	0	108,368	0	108,368
13	3,253,365	250,879	250,879	0	101,592	0	101,592
14	3,298,356	252,649	252,649	0	95,171	0	95,171
15	3,345,244	258,515	258,515	0	90,586	0	90,586
16	3,389,981	259,665	259,665	0	84,641	0	84,641
17	3,437,432	258,636	258,636	0	78,424	0	78,424
18	3,490,212	261,972	261,972	0	73,893	0	73,893
19	3,544,145	265,182	265,182	0	69,581	0	69,581
20	3,599,483	263,287	263,287	0	64,263	0	64,263
21	3,661,683	263,673	263,673	0	59,868	0	59,868
22	3,728,981	269,572	269,572	0	56,937	0	56,937
23	3,795,564	267,762	267,762	0	52,609	0	52,609
24	3,869,313	264,508	264,508	0	48,344	0	48,344
25	3,952,674	262,111	262,111	0	44,563	0	44,563
26	4,045,495	259,058	259,058	0	40,971	0	40,971
27	4,149,109	255,096	255,096	0	37,530	0	37,530
28	4,219,992	265,500	265,500	0	36,336	0	36,336
29	4,284,263	279,688	279,688	0	35,607	0	35,607
30	4,336,711	283,328	283,328	0	33,554	0	33,554
31	4,387,354	287,678	287,678	0	31,692	0	31,692
32	4,435,663	300,220	300,220	0	30,766	0	30,766
33	4,472,163	322,726	322,726	0	30,765	0	30,765
34	4,484,752	347,803	347,803	0	30,843	0	30,843
35	4,469,260	372,242	372,242	0	30,707	0	30,707
36	4,424,243	383,810	383,810	0	29,452	0	29,452
37	4,361,732	383,151	383,151	0	27,350	0	27,350
38	4,294,543	380,873	380,873	0	25,291	0	25,291
39	4,224,269	385,228	385,228	0	23,795	0	23,795
40	4,143,448	388,087	388,087	0	22,299	0	22,299
41	4,052,835	386,049	386,049	0	20,635	0	20,635
42	3,957,277	383,213	383,213	0	19,054	0	19,054
43	3,857,349	380,925	380,925	0	17,619	0	17,619
44	3,752,139	377,730	377,730	0	16,252	0	16,252
45	3,642,218	373,967	373,967	0	14,968	0	14,968
46	3,527,900	369,796	369,796	0	13,768	0	13,768
47	3,409,289	365,199	365,199	0	12,648	0	12,648
48	3,286,511	360,135	360,135	0	11,603	0	11,603
49	3,159,745	354,553	354,553	0	10,626	0	10,626
50	3,029,234	348,406	348,406	0	9,713	0	9,713

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.

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 (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)^(a-.5)
51	$ 2,895,287	$ 341,654	$ 341,654	$ 0	$ 8,861	$ 0	$ 8,861
52	2,758,278	334,265	334,265	0	8,064	0	8,064
53	2,618,641	326,594	326,594	0	7,329	0	7,329
54	2,476,449	317,922	317,922	0	6,637	0	6,637
55	2,332,554	308,411	308,411	0	5,989	0	5,989
56	2,187,729	298,220	298,220	0	5,387	0	5,387
57	2,042,607	287,358	287,358	0	4,829	0	4,829
58	1,897,864	275,840	275,840	0	4,312	0	4,312
59	1,754,206	263,679	263,679	0	3,834	0	3,834
60	1,612,383	250,880	250,880	0	3,394	0	3,394
61	1,473,194	237,475	237,475	0	2,988	0	2,988
62	1,337,464	223,521	223,521	0	2,616	0	2,616
63	1,206,022	209,107	209,107	0	2,277	0	2,277
64	1,079,667	194,357	194,357	0	1,969	0	1,969
65	959,128	179,409	179,409	0	1,690	0	1,690
66	845,048	164,408	164,408	0	1,441	0	1,441
67	737,964	149,505	149,505	0	1,219	0	1,219
68	638,301	134,838	134,838	0	1,023	0	1,023
69	546,371	120,515	120,515	0	850	0	850
70	462,396	106,626	106,626	0	700	0	700
71	386,524	93,277	93,277	0	569	0	569
72	318,801	80,582	80,582	0	458	0	458
73	259,162	68,664	68,664	0	363	0	363
74	207,407	57,637	57,637	0	283	0	283
75	163,203	47,586	47,586	0	218	0	218
76	126,105	38,579	38,579	0	164	0	164
77	95,564	30,670	30,670	0	121	0	121
78	70,931	23,880	23,880	0	88	0	88
79	51,492	18,178	18,178	0	62	0	62
80	36,507	13,502	13,502	0	43	0	43
81	25,246	9,772	9,772	0	29	0	29
82	17,007	6,884	6,884	0	19	0	19
83	11,145	4,711	4,711	0	12	0	12
84	7,096	3,126	3,126	0	7	0	7
85	4,387	2,009	2,009	0	4	0	4
86	2,633	1,251	1,251	0	3	0	3
87	1,534	754	754	0	1	0	1
88	867	441	441	0	1	0	1
89	474	250	250	0	0	0	0
90	251	138	138	0	0	0	0
91	127	73	73	0	0	0	0
92	61	37	37	0	0	0	0
93	27	17	17	0	0	0	0
94	11	7	7	0	0	0	0
95	5	3	3	0	0	0	0
96	2	2	2	0	0	0	0
97	1	1	1	0	0	0	0
98	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0
				Totals	$ 3,373,077	$ -	$ 3,373,077

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.


PROJECTION OF PLAN NET POSITION AND BENEFIT PAYMENTS
$ [thousands]
5,000
4,500
4,000
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100
Year
Projected Plan Net Position
Projected Benefit Payments for Current Members

SECTION D

GLOSSARY OF TERMS

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 post-employment 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.