

**ALSIP MERRIONETTE PK LIB DIST REGULAR
GASB STATEMENT NO. 68 EMPLOYER REPORTING
ACCOUNTING SCHEDULES
DECEMBER 31, 2015**

TABLE OF CONTENTS

	<u>Page</u>
Certification Letter	
Section A	Executive Summary
	Executive Summary 1
	Discussion 2 - 4
	Other Observations 5 - 6
Section B	Financial Statements
	Pension Expense/(Income) under GASB Statement No. 68 7
	Statement of Outflows and Inflows Arising from Current Period 8
	Statement of Outflows and Inflows Arising from Current and Prior Periods 9
	Schedule of Changes in Net Pension Liability and Related Ratios Current Period.... 10
	Sensitivity of Net Pension Liability/(Asset) to the Single Discount Rate Assumption 10
	Multiyear Schedule of Changes in Net Pension Liability and Related Ratios..... 11
	Multiyear Schedule of Contributions 12
	Notes to Schedule of Contributions 13
	Development of Market Value of Assets 14
	Summary of Actuarial Methods and Assumptions used in the Calculation of the Total Pension Liability..... 15
Section C	Calculation of the Single Discount Rate
	Calculation of the Single Discount Rate 16
	Projection of Contributions 17 - 18
	Projection of Plan Fiduciary Net Position..... 19 - 20
	Present Values of Projected Benefits 21 - 22
	Projection of Plan Net Position and Benefit Payments 23
Section D	Glossary of Terms..... 24 - 27

April 15, 2016

Alsip Merrionette Pk Lib Dist
Illinois Municipal Retirement System

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 system'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 Alsip Merrionette Pk Lib Dist only in its entirety and only with the permission of Alsip Merrionette Pk 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 otherwise audited.

Please see the actuarial valuation report for the Illinois Municipal Retirement Fund as of December 31, 2015 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 relates to Alsip Merrionette Pk 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
FSA, EA, MAAA

By 

Francois Pieterse
ASA, MAAA

SECTION A
EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

AS OF DECEMBER 31, 2015

Actuarial Valuation Date	December 31, 2015
Measurement Date of the Net Pension Liability	December 31, 2015
Fiscal Year End	June 30, 2016

Membership

Number of	
- Retirees and Beneficiaries	23
- Inactive, Non-Retired Members	20
- Active Members	20
- Total	63
Covered Valuation Payroll	\$ 885,645

Net Pension Liability

Total Pension Liability/(Asset)	\$ 4,524,900
Plan Fiduciary Net Position	3,843,008
Net Pension Liability/(Asset)	\$ 681,892
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	84.93%
Net Pension Liability as a Percentage of Covered Valuation Payroll	76.99%

Development of the Single Discount Rate as of December 31, 2015

Long-Term Expected Rate of Investment Return	7.50%
Long-Term Municipal Bond Rate*	3.57%
Last year ending December 31 in the 2016 to 2115 projection period for which projected benefit payments are fully funded	2090
Resulting Single Discount Rate based on the above development	7.48%

Single Discount Rate calculated using December 31, 2014 Measurement Date 7.49%

Total Pension Expense/(Income) \$ 194,018

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	\$ 41,857	\$ 0
Changes in assumptions	74,378	0
Net difference between projected and actual earnings on pension plan investments	245,256	0
Total	\$ 361,491	\$ 0

**Source: "State & local bonds" rate from Federal Reserve statistical release (H.15) as of December 31, 2015. The statistical release describes this rate as "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.*

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 system 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, 2015.

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, 2015 Annual Actuarial Valuation report dated April 1, 2016);
- 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, 2015 Annual Actuarial Valuation report dated April 1, 2016, 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 system 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, 2015 and a measurement date of December 31, 2015.

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 3.57% (based on the weekly rate closest to but not later than the measurement date of the "state & local bonds" rate from Federal Reserve statistical release (H.15)); and the resulting single discount rate is 7.48%.

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 2090 and a discount rate of 7.48%. 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, 2015

A. Expense/(Income)

1. Service Cost	\$ 88,511
2. Interest on the Total Pension Liability	315,641
3. Current-Period Benefit Changes	0
4. Employee Contributions (made negative for addition here)	(39,854)
5. Projected Earnings on Plan Investments (made negative for addition here)	(286,759)
6. Other Changes in Plan Fiduciary Net Position	(29,998)
7. Recognition of Outflow (Inflow) of Resources due to Liabilities	82,574
8. Recognition of Outflow (Inflow) of Resources due to Assets	63,903
9. Total Pension Expense/(Income)	<u>\$ 194,018</u>

**STATEMENT OF OUTFLOWS AND INFLOWS ARISING FROM CURRENT REPORTING
PERIOD
CALENDAR YEAR ENDED DECEMBER 31, 2015**

A. Outflows (Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total Pension Liability (gains) or losses	\$ 35,073
2. Assumption Changes (gains) or losses	\$ 5,578
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	3.2940
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	\$ 10,648
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes	\$ 1,693
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	<u>\$ 12,341</u>
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	\$ 24,425
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes	\$ 3,885
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	<u>\$ 28,310</u>

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$ 267,717
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	\$ 53,543
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$ 214,174

* 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, 2015**

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

	<u>Outflows of Resources</u>	<u>Inflows of Resources</u>	<u>Net Outflows of Resources</u>
1. Due to Liabilities	\$ 82,574	\$ 0	\$ 82,574
2. Due to Assets	63,903	0	63,903
3. Total	<u>\$ 146,477</u>	<u>\$ 0</u>	<u>\$ 146,477</u>

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

	<u>Outflows of Resources</u>	<u>Inflows of Resources</u>	<u>Net Outflows of Resources</u>
1. Differences between expected and actual experience	\$ 24,572	\$ 0	\$ 24,572
2. Assumption changes	58,002	0	58,002
3. Net difference between projected and actual earnings on pension plan investments	63,903	0	63,903
4. Total	<u>\$ 146,477</u>	<u>\$ 0</u>	<u>\$ 146,477</u>

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

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>	<u>Net Deferred Outflows of Resources</u>
1. Differences between expected and actual experience	\$ 41,857	\$ 0	\$ 41,857
2. Assumption changes	74,378	0	74,378
3. Net difference between projected and actual earnings on pension plan investments	245,256	0	245,256
4. Total	<u>\$ 361,491</u>	<u>\$ 0</u>	<u>\$ 361,491</u>

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

<u>Year Ending December 31</u>	<u>Net Deferred Outflows of Resources</u>
2016	\$ 146,477
2017	93,936
2018	67,533
2019	53,545
2020	0
Thereafter	0
Total	<u>\$ 361,491</u>

P-2

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
CURRENT PERIOD
CALENDAR YEAR ENDED DECEMBER 31, 2015

A. Total pension liability

1. Service Cost	\$	88,511
2. Interest on the Total Pension Liability		315,641
3. Changes of benefit terms		0
4. Difference between expected and actual experience of the Total Pension Liability		35,073
5. Changes of assumptions		5,578
6. Benefit payments, including refunds of employee contributions		(179,626)
7. Net change in total pension liability	\$	265,177
8. Total pension liability – beginning		A 4,259,723
9. Total pension liability – ending	\$	C 4,524,900

A - B = 436,777
C - D = 681,892
Δ in NPL = 245,115

B. Plan fiduciary net position

1. Contributions – employer		110,794
2. Contributions – employee		39,854
3. Net investment income		19,042
4. Benefit payments, including refunds of employee contributions		(179,626)
5. Other (Net Transfer)		29,998
6. Net change in plan fiduciary net position	\$	20,062
7. Plan fiduciary net position – beginning		B 3,822,946
8. Plan fiduciary net position – ending	\$	D 3,843,008

C. Net pension liability/(asset)

\$	681,892
----	---------

D. Plan fiduciary net position as a percentage of the total pension liability

84.93%

E. Covered Valuation payroll

\$	885,645
----	---------

F. Net pension liability as a percentage of covered valuation payroll

76.99%

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

	1% Decrease 6.48%	Current Single Discount Rate Assumption 7.48%	1% Increase 8.48%
Total Pension Liability	\$ 5,128,746	\$ 4,524,900	\$ 4,026,403
Plan Fiduciary Net Position	3,843,008	3,843,008	3,843,008
Net Pension Liability/(Asset)	\$ 1,285,738	\$ 681,892	\$ 183,395

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,	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Pension Liability										
Service Cost	\$ 88,511	\$ 89,003								
Interest on the Total Pension Liability	315,641	284,241								
Benefit Changes	0	0								
Difference between Expected and Actual Experience	35,073	45,280								
Assumption Changes	5,578	183,111								
Benefit Payments and Refunds	(179,626)	(174,571)								
Net Change in Total Pension Liability	265,177	427,064								
Total Pension Liability - Beginning	4,259,723	3,832,659								
Total Pension Liability - Ending (a)	\$ 4,524,900	\$ 4,259,723								
Plan Fiduciary Net Position										
Employer Contributions	\$ 110,794	\$ 100,218								
Employee Contributions	39,854	34,928								
Pension Plan Net Investment Income	19,042	218,328								
Benefit Payments and Refunds	(179,626)	(174,571)								
Other	29,998	45,191								
Net Change in Plan Fiduciary Net Position	20,062	224,094								
Plan Fiduciary Net Position - Beginning	3,822,946	3,598,852								
Plan Fiduciary Net Position - Ending (b)	\$ 3,843,008	\$ 3,822,946								
Net Pension Liability/(Asset) - Ending (a) - (b)	681,892	436,777								
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	84.93%	89.75 %								
Covered Valuation Payroll	\$ 885,645	\$ 800,174								
Net Pension Liability as a Percentage of Covered Valuation Payroll	76.99%	54.59 %								

MULTIYEAR SCHEDULE OF CONTRIBUTIONS

Last 10 Calendar Years

<u>Calendar Year Ending December 31,</u>	<u>Actuarially Determined Contribution</u>	<u>Actual Contribution</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Valuation Payroll</u>	<u>Actual Contribution as a % of Covered Valuation Payroll</u>
2014	\$ 95,861	\$ 100,218	\$ (4,357)	\$ 800,174	12.52%
2015	110,794 *	110,794	0	885,645	12.51%

* Estimated based on contribution rate of 12.51% and covered valuation payroll of \$885,645.
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 2015 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 2015 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): 28-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 23 years for most employers (two employers were financed over 32 years).
Asset Valuation Method	5-Year smoothed market; 20% corridor
Wage growth	4.00%
Price Inflation	3.0% -- approximate; No explicit price inflation assumption is used in this valuation.
Salary Increases	4.40% to 16.00% 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 2011 valuation pursuant to an experience study of the period 2008 - 2010.
Mortality	RP-2000 Combined Healthy Mortality Table, adjusted for mortality improvements to 2020 using projection scale AA. For men 120% of the table rates were used. For women 92% of the table rates were used. For disabled lives, the mortality rates are the rates applicable to non-disabled lives set forward 10 years.

Other Information:

Notes There were no benefit changes during the year.

* Based on Valuation Assumptions used in the December 31, 2013 actuarial valuation

DEVELOPMENT OF MARKET VALUE OF ASSETS**Market Value of Assets as of December 31, 2015**

1. Employee Contribution Reserve (MDF Assets from IMRF)	\$	768,307
2. Employer Contribution Reserve (EAF assets from IMRF)		1,141,584
3. Annuitant Reserve		1,932,488
4. Miscellaneous Adjustment*		629
5. Net Market Value	\$	3,843,008

* Includes an adjustment factor of .000163582 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.

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	7.48%
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 2014). 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 2014). 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 2014). 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, 2015 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 3.57%; and the resulting single discount rate is 7.48%.

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	\$ 885,645				
1	838,863	\$ 37,749	\$ 61,447	\$ 39,064	\$ 138,259
2	800,764	36,034	57,221	34,264	127,519
3	766,449	34,490	54,083	36,250	124,823
4	730,641	32,879	51,629	38,386	122,893
5	696,977	31,364	49,180	40,687	121,231
6	663,245	29,846	46,800	43,169	119,815
7	629,849	28,343	44,318	44,680	117,342
8	598,824	26,947	42,016	46,244	115,207
9	566,568	25,496	39,640	47,862	112,998
10	533,413	24,004	37,214	49,538	110,755
11	504,014	22,681	35,063	51,271	109,015
12	478,898	21,550	33,173	53,066	107,789
13	454,998	20,475	31,381	54,923	106,779
14	429,338	19,320	29,526	53,978	102,824
15	404,302	18,194	27,643	53,049	98,886
16	385,213	17,335	26,223	52,136	95,694
17	370,560	16,675	25,078	51,239	92,992
18	354,344	15,945	23,875	50,357	90,177
19	339,252	15,266	22,757	49,490	87,513
20	329,878	14,845	21,996	48,638	85,479
21	322,482	14,512	21,439	47,801	83,752
22	312,299	14,053	20,669	46,979	81,701
23	301,628	13,573	19,873	46,170	79,616
24	293,308	13,199	19,237	45,376	77,811
25	285,342	12,840	18,601	44,595	76,036
26	279,013	12,556	18,105	43,827	74,487
27	274,481	12,352	17,729	43,073	73,153
28	265,057	11,928	17,067	42,331	71,326
29	242,575	10,916	15,523	41,603	68,042
30	218,918	9,851	13,791	40,887	64,530
31	179,832	8,092	11,114	40,183	59,390
32	133,478	6,007	8,342	39,492	53,841
33	110,351	4,966	7,128	38,812	50,905
34	96,113	4,325	6,208	38,144	48,677
35	85,921	3,866	5,481	37,487	46,835
36	66,262	2,982	4,161	36,842	43,985
37	43,962	1,978	2,831	36,208	41,017
38	34,022	1,531	2,360	35,585	39,476
39	27,207	1,224	1,947	34,973	38,144
40	21,528	969	1,558	34,371	36,897
41	17,139	771	1,242	33,779	35,792
42	13,873	624	1,004	33,198	34,826
43	11,349	511	822	32,626	33,959
44	9,257	417	672	32,065	33,153
45	7,637	344	554	31,513	32,411
46	6,298	283	453	30,971	31,707
47	5,060	228	366	30,438	31,031
48	4,029	181	292	29,914	30,387
49	2,691	121	194	29,399	29,714
50	1,543	69	111	28,893	29,073

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	\$ 1,271	\$	57 \$	91 \$ 28,396	\$ 28,544
52	1,046		47	74 27,907	28,028
53	860		39	61 27,427	27,527
54	401		18	28 26,955	27,001
55	0		0	0 26,491	26,491
56	0		0	0 26,035	26,035
57	0		0	0 25,587	25,587
58	0		0	0 25,146	25,146
59	0		0	0 24,714	24,714
60	0		0	0 24,288	24,288
61	0		0	0 23,870	23,870
62	0		0	0 23,459	23,459
63	0		0	0 23,056	23,056
64	0		0	0 22,659	22,659
65	0		0	0 22,269	22,269
66	0		0	0 21,886	21,886
67	0		0	0 21,509	21,509
68	0		0	0 21,139	21,139
69	0		0	0 20,775	20,775
70	0		0	0 20,417	20,417
71	0		0	0 20,066	20,066
72	0		0	0 19,721	19,721
73	0		0	0 19,381	19,381
74	0		0	0 19,048	19,048
75	0		0	0 18,720	18,720
76	0		0	0 18,398	18,398
77	0		0	0 18,081	18,081
78	0		0	0 17,770	17,770
79	0		0	0 17,464	17,464
80	0		0	0 17,163	17,163
81	0		0	0 16,868	16,868
82	0		0	0 16,578	16,578
83	0		0	0 16,293	16,293
84	0		0	0 16,012	16,012
85	0		0	0 15,737	15,737
86	0		0	0 15,466	15,466
87	0		0	0 15,200	15,200
88	0		0	0 14,938	14,938
89	0		0	0 14,681	14,681
90	0		0	0 14,428	14,428
91	0		0	0 14,180	14,180
92	0		0	0 13,936	13,936
93	0		0	0 13,696	13,696
94	0		0	0 13,460	13,460
95	0		0	0 13,229	13,229
96	0		0	0 13,001	13,001
97	0		0	0 12,777	12,777
98	0		0	0 12,557	12,557
99	0		0	0 12,341	12,341
100	0		0	0 12,129	12,129

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	\$ 3,843,008	\$ 138,259	\$ 192,132	\$ 286,242	\$ 4,075,377
2	4,075,377	127,519	207,727	302,700	4,297,870
3	4,297,870	124,823	224,902	318,655	4,516,446
4	4,516,446	122,893	253,800	333,913	4,719,453
5	4,719,453	121,231	277,877	348,191	4,910,998
6	4,910,998	119,815	301,139	361,648	5,091,323
7	5,091,323	117,342	321,981	374,314	5,260,998
8	5,260,998	115,207	341,198	386,253	5,421,261
9	5,421,261	112,998	360,240	397,491	5,571,510
10	5,571,510	110,755	380,048	407,947	5,710,164
11	5,710,164	109,015	398,416	417,606	5,838,370
12	5,838,370	107,789	415,368	426,552	5,957,343
13	5,957,343	106,779	431,655	434,838	6,067,306
14	6,067,306	102,824	448,529	442,318	6,163,920
15	6,163,920	98,886	465,269	448,803	6,246,340
16	6,246,340	95,694	477,579	454,414	6,318,868
17	6,318,868	92,992	487,528	459,387	6,383,719
18	6,383,719	90,177	498,557	463,742	6,439,081
19	6,439,081	87,513	506,983	467,485	6,487,096
20	6,487,096	85,479	510,414	470,885	6,533,046
21	6,533,046	83,752	512,909	474,176	6,578,066
22	6,578,066	81,701	522,075	477,139	6,614,832
23	6,614,832	79,616	529,175	479,559	6,644,831
24	6,644,831	77,811	536,577	481,470	6,667,535
25	6,667,535	76,036	542,727	482,881	6,683,724
26	6,683,724	74,487	540,102	484,134	6,702,243
27	6,702,243	73,153	535,291	485,651	6,725,756
28	6,725,756	71,326	533,968	487,396	6,750,511
29	6,750,511	68,042	558,371	488,233	6,748,416
30	6,748,416	64,530	580,807	487,121	6,719,259
31	6,719,259	59,390	602,939	483,930	6,659,640
32	6,659,640	53,841	621,152	478,583	6,570,912
33	6,570,912	50,905	623,299	471,742	6,470,260
34	6,470,260	48,677	620,243	464,223	6,362,916
35	6,362,916	46,835	614,306	456,323	6,251,769
36	6,251,769	43,985	624,843	447,494	6,118,405
37	6,118,405	41,017	630,027	437,192	5,966,587
38	5,966,587	39,476	622,286	426,034	5,809,811
39	5,809,811	38,144	612,959	414,570	5,649,565
40	5,649,565	36,897	602,378	402,895	5,486,979
41	5,486,979	35,792	591,279	391,069	5,322,562
42	5,322,562	34,826	579,482	379,137	5,157,042
43	5,157,042	33,959	567,141	367,145	4,991,005
44	4,991,005	33,153	554,528	355,127	4,824,757
45	4,824,757	32,411	541,840	343,099	4,658,427
46	4,658,427	31,707	529,245	331,062	4,491,950
47	4,491,950	31,031	517,132	318,997	4,324,846
48	4,324,846	30,387	504,975	306,888	4,157,146
49	4,157,146	29,714	494,036	294,689	3,987,513
50	3,987,513	29,073	482,418	282,370	3,816,539

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

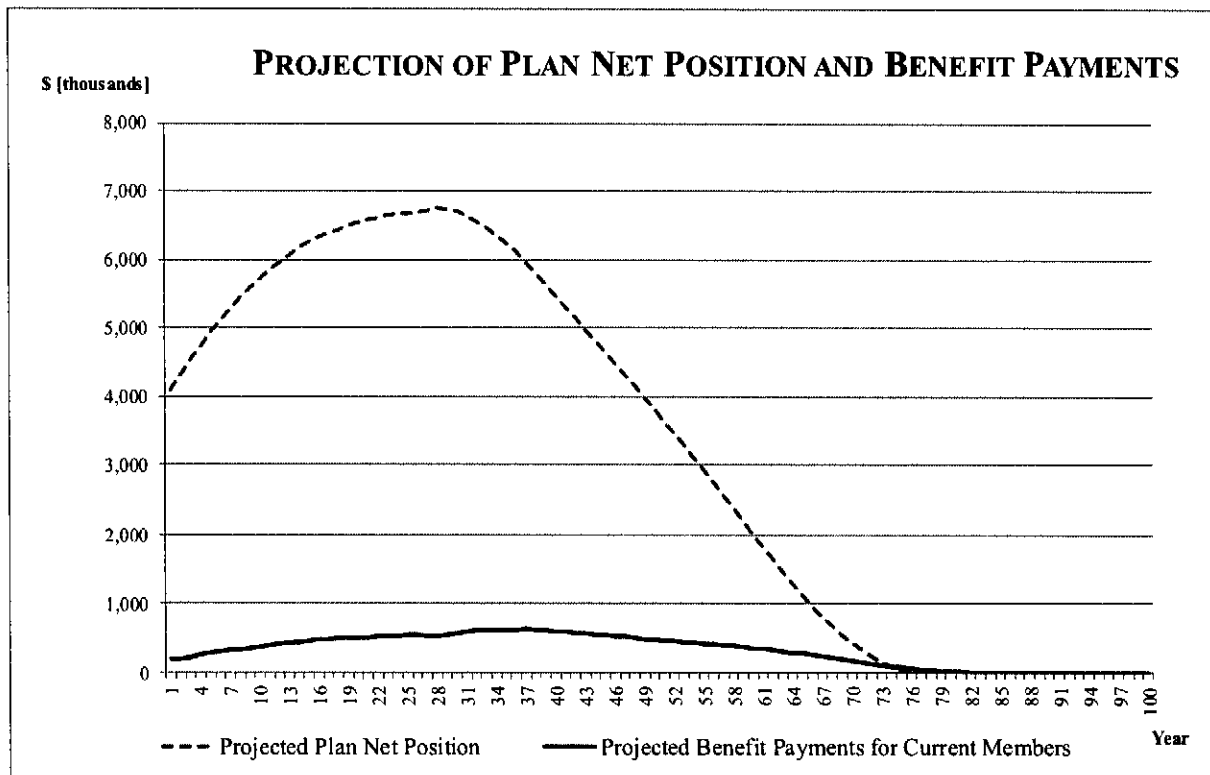
Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Investment Earnings at 7.50%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)
51	\$ 3,816,539	\$ 28,544	\$ 470,585	\$ 269,964	\$ 3,644,461
52	3,644,461	28,028	459,002	257,465	3,470,952
53	3,470,952	27,527	447,614	244,853	3,295,718
54	3,295,718	27,001	437,021	232,081	3,117,779
55	3,117,779	26,491	425,794	219,130	2,937,606
56	2,937,606	26,035	414,106	206,031	2,755,566
57	2,755,566	25,587	402,094	192,804	2,571,863
58	2,571,863	25,146	389,585	179,470	2,386,894
59	2,386,894	24,714	376,410	166,067	2,201,265
60	2,201,265	24,288	362,419	152,644	2,015,779
61	2,015,779	23,870	347,489	139,267	1,831,428
62	1,831,428	23,459	331,540	126,013	1,649,360
63	1,649,360	23,056	314,545	112,969	1,470,839
64	1,470,839	22,659	296,522	100,229	1,297,205
65	1,297,205	22,269	277,523	87,891	1,129,842
66	1,129,842	21,886	257,644	76,057	970,141
67	970,141	21,509	237,067	64,823	819,407
68	819,407	21,139	216,037	54,279	678,788
69	678,788	20,775	194,851	44,499	549,211
70	549,211	20,417	173,800	35,543	431,372
71	431,372	20,066	153,126	27,453	325,765
72	325,765	19,721	133,091	20,258	232,652
73	232,652	19,381	113,974	13,966	152,026
74	152,026	19,048	96,052	8,566	83,588
75	83,588	18,720	79,575	4,028	26,762
76	26,762	18,398	64,709	302	0
77	0	18,081	51,563	0	0
78	0	17,770	40,208	0	0
79	0	17,464	30,639	0	0
80	0	17,163	22,768	0	0
81	0	16,868	16,456	0	0
82	0	16,578	11,545	0	0
83	0	16,293	7,850	0	0
84	0	16,012	5,159	0	0
85	0	15,737	3,264	0	0
86	0	15,466	1,981	0	0
87	0	15,200	1,150	0	0
88	0	14,938	637	0	0
89	0	14,681	337	0	0
90	0	14,428	171	0	0
91	0	14,180	86	0	0
92	0	13,936	43	0	0
93	0	13,696	21	0	0
94	0	13,460	7	0	0
95	0	13,229	0	0	0
96	0	13,001	0	0	0
97	0	12,777	0	0	0
98	0	12,557	0	0	0
99	0	12,341	0	0	0
100	0	12,129	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 ^t ((a)-.5)	(g)=(e)*vf ^t ((a)-.5)	(h)=(f)/(1+sdr) ^t ((a)-.5)
1	\$ 3,843,008	\$ 192,132	\$ 192,132	\$ 0	\$ 185,309	\$ 0	\$ 185,324
2	4,075,377	207,727	207,727	0	186,372	0	186,416
3	4,297,870	224,902	224,902	0	187,703	0	187,778
4	4,516,446	253,800	253,800	0	197,043	0	197,153
5	4,719,453	277,877	277,877	0	200,685	0	200,829
6	4,910,998	301,139	301,139	0	202,311	0	202,489
7	5,091,323	321,981	321,981	0	201,222	0	201,430
8	5,260,998	341,198	341,198	0	198,355	0	198,592
9	5,421,261	360,240	360,240	0	194,814	0	195,078
10	5,571,510	380,048	380,048	0	191,187	0	191,477
11	5,710,164	398,416	398,416	0	186,444	0	186,756
12	5,838,370	415,368	415,368	0	180,815	0	181,147
13	5,957,343	431,655	431,655	0	174,796	0	175,144
14	6,067,306	448,529	448,529	0	168,957	0	169,321
15	6,163,920	465,269	465,269	0	163,035	0	163,413
16	6,246,340	477,579	477,579	0	155,673	0	156,059
17	6,318,868	487,528	487,528	0	147,829	0	148,219
18	6,383,719	498,557	498,557	0	140,626	0	141,019
19	6,439,081	506,983	506,983	0	133,026	0	133,419
20	6,487,096	510,414	510,414	0	124,583	0	124,971
21	6,533,046	512,909	512,909	0	116,457	0	116,839
22	6,578,066	522,075	522,075	0	110,268	0	110,647
23	6,614,832	529,175	529,175	0	103,970	0	104,344
24	6,644,831	536,577	536,577	0	98,069	0	98,438
25	6,667,535	542,727	542,727	0	92,273	0	92,634
26	6,683,724	540,102	540,102	0	85,420	0	85,768
27	6,702,243	535,291	535,291	0	78,753	0	79,086
28	6,725,756	533,968	533,968	0	73,077	0	73,398
29	6,750,511	558,371	558,371	0	71,086	0	71,409
30	6,748,416	580,807	580,807	0	68,783	0	69,107
31	6,719,259	602,939	602,939	0	66,423	0	66,746
32	6,659,640	621,152	621,152	0	63,655	0	63,975
33	6,570,912	623,299	623,299	0	59,418	0	59,727
34	6,470,260	620,243	620,243	0	55,002	0	55,297
35	6,362,916	614,306	614,306	0	50,675	0	50,954
36	6,251,769	624,843	624,843	0	47,948	0	48,220
37	6,118,405	630,027	630,027	0	44,973	0	45,235
38	5,966,587	622,286	622,286	0	41,321	0	41,569
39	5,809,811	612,959	612,959	0	37,862	0	38,095
40	5,649,565	602,378	602,378	0	34,613	0	34,831
41	5,486,979	591,279	591,279	0	31,605	0	31,809
42	5,322,562	579,482	579,482	0	28,813	0	29,004
43	5,157,042	567,141	567,141	0	26,232	0	26,410
44	4,991,005	554,528	554,528	0	23,859	0	24,025
45	4,824,757	541,840	541,840	0	21,687	0	21,841
46	4,658,427	529,245	529,245	0	19,705	0	19,848
47	4,491,950	517,132	517,132	0	17,911	0	18,044
48	4,324,846	504,975	504,975	0	16,269	0	16,393
49	4,157,146	494,036	494,036	0	14,806	0	14,921
50	3,987,513	482,418	482,418	0	13,449	0	13,556

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)	$(f)=(d)*v^{((a)-.5)}$	$(g)=(c)*vf^{((a)-.5)}$	$(h)=((c)/(1+sdr)^{(a)-.5)}$
51	\$ 3,816,539	\$ 470,585	\$ 470,585	\$ 0	\$ 12,204	\$ 0	\$ 12,303
52	3,644,461	459,002	459,002	0	11,073	0	11,165
53	3,470,952	447,614	447,614	0	10,045	0	10,130
54	3,295,718	437,021	437,021	0	9,123	0	9,201
55	3,117,779	425,794	425,794	0	8,269	0	8,341
56	2,937,606	414,106	414,106	0	7,481	0	7,547
57	2,755,566	402,094	402,094	0	6,757	0	6,818
58	2,571,863	389,585	389,585	0	6,090	0	6,146
59	2,386,894	376,410	376,410	0	5,474	0	5,525
60	2,201,265	362,419	362,419	0	4,902	0	4,949
61	2,015,779	347,489	347,489	0	4,372	0	4,415
62	1,831,428	331,540	331,540	0	3,881	0	3,919
63	1,649,360	314,545	314,545	0	3,425	0	3,459
64	1,470,839	296,522	296,522	0	3,003	0	3,034
65	1,297,205	277,523	277,523	0	2,615	0	2,642
66	1,129,842	257,644	257,644	0	2,258	0	2,282
67	970,141	237,067	237,067	0	1,933	0	1,954
68	819,407	216,037	216,037	0	1,639	0	1,656
69	678,788	194,851	194,851	0	1,375	0	1,390
70	549,211	173,800	173,800	0	1,141	0	1,153
71	431,372	153,126	153,126	0	935	0	945
72	325,765	133,091	133,091	0	756	0	765
73	232,652	113,974	113,974	0	602	0	609
74	152,026	96,052	96,052	0	472	0	478
75	83,588	79,575	79,575	0	364	0	368
76	26,762	64,709	27,747	36,962	118	2,616	279
77	0	51,563	0	51,563	0	3,523	206
78	0	40,208	0	40,208	0	2,653	150
79	0	30,639	0	30,639	0	1,952	106
80	0	22,768	0	22,768	0	1,400	73
81	0	16,456	0	16,456	0	977	49
82	0	11,545	0	11,545	0	662	32
83	0	7,850	0	7,850	0	435	20
84	0	5,159	0	5,159	0	276	12
85	0	3,264	0	3,264	0	168	7
86	0	1,981	0	1,981	0	99	4
87	0	1,150	0	1,150	0	55	2
88	0	637	0	637	0	30	1
89	0	337	0	337	0	15	1
90	0	171	0	171	0	7	0
91	0	86	0	86	0	4	0
92	0	43	0	43	0	2	0
93	0	21	0	21	0	1	0
94	0	7	0	7	0	0	0
95	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0
97	0	0	0	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					\$ 5,245,473	\$ 14,874	\$ 5,260,348



SECTION D

GLOSSARY OF TERMS

GLOSSARY OF TERMS

<i>Actuarial Accrued Liability (AAL)</i>	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."
<i>Actuarial Assumptions</i>	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.
<i>Accrued Service</i>	Service credited under the system which was rendered before the date of the actuarial valuation.
<i>Actuarial Equivalent</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Gain (Loss)</i>	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.
<i>Actuarial Present Value (APV)</i>	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.
<i>Actuarial Valuation</i>	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.
<i>Actuarial Valuation Date</i>	The date as of which an actuarial valuation is performed.
<i>Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)</i>	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)

<i>Amortization Payment</i>	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
<i>Amortization Method</i>	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).
<i>Cost-of-Living Adjustments</i>	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
<i>Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)</i>	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.
<i>Covered Valuation Payroll</i>	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.
<i>Deferred Inflows and Outflows</i>	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.
<i>Discount Rate</i>	<p>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:</p> <ol style="list-style-type: none">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; and2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.
<i>Entry Age Actuarial Cost Method (EAN)</i>	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)

<i>GASB</i>	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
<i>Fiduciary Net Position</i>	The fiduciary net position is the value of the assets of the trust.
<i>Long-Term Expected Rate of Return</i>	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.
<i>Money-Weighted Rate of Return</i>	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.
<i>Multiple-Employer Defined Benefit Pension Plan</i>	A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
<i>Municipal Bond Rate</i>	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.
<i>Net Pension Liability (NPL)</i>	The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan.
<i>Non-Employer Contribution Entities</i>	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.
<i>Normal Cost</i>	The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.
<i>Other Postemployment Benefits (OPEB)</i>	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.
<i>Real Rate of Return</i>	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
<i>Service Cost</i>	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)

<i>Total Pension Expense</i>	<p>The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year:</p> <ol style="list-style-type: none">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; and9. Recognition of Outflow (Inflow) of Resources due to Assets.
<i>Total Pension Liability (TPL)</i>	<p>The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.</p>
<i>Unfunded Actuarial Accrued Liability (UAAL)</i>	<p>The UAAL is the difference between actuarial accrued liability and valuation assets.</p>
<i>Valuation Assets</i>	<p>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.</p>

PLEASE

KEEP THIS GASB FOOTNOTE DISCLOSURE STATEMENT FOR THE AUDITORS

**THIS STATEMENT CAN ALSO BE VIEWED AT IMRF.ORG
EMPLOYER DOCUMENT ARCHIVE**

This information is intended to provide your governmental unit with pension information required in the Notes to Financial Statements for your next annual financial report. The following information is patterned after illustration 6 shown on pages 32 and 33 of the Governmental Accounting Standards Board Statement No. 50 for an employer contributing to an agent-multiple-employer defined benefit pension plan.

Employers who have a fiscal year ending other than December 31 will have to adjust the information shown in the three - year trend information to reflect their fiscal year. IMRF has provided a template at www.IMRF.org for employers who have a fiscal year ending after December 31, 2015 or later, and who opted to use the optional phase-in rates to assist in calculating their net pension obligation.

This information should be shared with your auditors. Questions can be directed to Corey Lockwood at (630) 706-4226 or coreylockwood@imrf.org.

Alsip Merrionette Pk Lib Dist
Sarah J. Cottonaro
11960 S Pulaski Rd
Alsip IL 60803-1169

GASB 50 Disclosures

Note X. Pension Plan

Plan Description. The employer's defined benefit pension plan for Regular employees provides retirement and disability benefits, post retirement increases, and death benefits to plan members and beneficiaries. The employer plan is affiliated with the Illinois Municipal Retirement Fund (IMRF), an agent multiple-employer plan. Benefit provisions are established by statute and may only be changed by the General Assembly of the State of Illinois. IMRF issues a publicly available financial report that includes financial statements and required supplementary information (RSI). That report may be obtained on-line at www.imrf.org.

Funding Policy. As set by statute, your employer Regular plan members are required to contribute 4.50 percent of their annual covered salary. The statute requires employers to contribute the amount necessary, in addition to member contributions, to finance the retirement coverage of its own employees. The employer annual required contribution rate for calendar year 2015 was 12.51 percent. The employer also contributes for disability benefits, death benefits and supplemental retirement benefits, all of which are pooled at the IMRF level. Contribution rates for disability and death benefits are set by the IMRF Board of Trustees, while the supplemental retirement benefits rate is set by statute.

Annual Pension Cost. The required contribution for calendar year 2015 was \$110,794. (If you made an additional payment toward your unfunded amount, add this payment to your monthly contributions, based on payroll and recalculate the percentage of APC contributed.)

Calendar Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation
12/31/15	\$110,794	100%	\$0*
12/31/14	\$97,799	100%	\$0*
12/31/13	\$100,739	100%	\$0*

*If you utilized the phase-in contribution rate, the net pension obligation will have to be calculated.

The required contribution for 2015 was determined as part of the December 31, 2013, actuarial valuation using the entry age normal actuarial cost method. The actuarial assumptions at December 31, 2013, included (a) 7.5 percent investment rate of return (net of administrative and direct investment expenses), (b) projected salary increases of 4.00% a year, attributable to inflation, (c) additional projected salary increases ranging from 0.4% to 10% per year depending on age and service, attributable to seniority/merit, and (d) post retirement benefit increases of 3% annually. The actuarial value of your employer Regular plan assets was determined using techniques that spread the effects of short-term volatility in the market value of investments over a five-year period with a 20% corridor between the actuarial and market value of assets. The employer Regular plan's unfunded actuarial accrued liability at December 31, 2013 is being amortized as a level percentage of projected payroll on an open 28 year basis.

Funded Status and Funding Progress. As of December 31, 2015, the most recent actuarial valuation date, the Regular plan was 77.86 percent funded. The actuarial accrued liability for benefits was \$2,509,276 and the actuarial value of assets was \$1,953,763, resulting in an underfunded actuarial accrued liability (UAAL) of \$555,513. The covered payroll for calendar year 2015 (annual payroll of active employees covered by the plan) was \$885,645 and the ratio of the UAAL to the covered payroll was 63 percent.

The schedule of funding progress, presented as required supplemental information (RSI) following the notes to the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

GASB 50 RSI Information for Employers

Alsip Merrionette Pk Lib Dist
 EMPLOYER NUMBER: 05167R
 REQUIRED SUPPLEMENTARY INFORMATION
 Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) -Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
12/31/15	\$1,953,763	\$2,509,276	\$555,513	77.86	\$885,645	62.72
12/31/14	\$1,655,361	\$2,251,186	\$595,825	73.53	\$776,179	76.76
12/31/13	\$1,710,344	\$2,247,052	\$536,708	76.12	\$804,626	66.70

On a market value basis, the actuarial value of assets as of December 31, 2015 is \$1,909,891. On a market basis, the funded ratio would be 76.11%.

The actuarial value of assets and accrued liability cover active and inactive members who have service credit with Alsip Merrionette Pk Lib Dist. They do not include amounts for retirees. The actuarial accrued liability for retirees is 100% funded.