Alsip Park Dist Regular

GASB Statement No. 68 Employer Reporting Accounting Schedules
December 31, 2017



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April 6, 2018

Alsip Park 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 Alsip Park Dist only in its entirety and only with the permission of Alsip Park Dist. GRS is not responsible for unauthorized use of this report.

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.

This report complements the actuarial valuation report that was provided to the Illinois Municipal Retirement Fund and should be considered in conjunction with that report. Please see the actuarial valuation report as of December 31, 2017 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 Alsip Park 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,

Mark Buis, FSA, EA, FCA, MAAA

Francois Pieterse, ASA, FCA, MAAA

SECTION A

EXECUTIVE SUMMARY

Executive Summary as of December 31, 2017

Actuarial Valuation Date Measurement Date of the Net Pension Liability Fiscal Year End	December 31, 2017 December 31, 2017 April 30, 2018		
Membership			
Number of			
- Retirees and Beneficiaries		22	
- Inactive, Non-Retired Members		30	
- Active Members		27	
- Total		79	
Covered Valuation Payroll ⁽¹⁾	\$	999,847	
Net Pension Liability			
Total Pension Liability/(Asset)	\$	5,958,544	
Plan Fiduciary Net Position		5,662,973	
Net Pension Liability/(Asset)	\$	295,571	
Plan Fiduciary Net Position as a Percentage			
of Total Pension Liability		95.04%	
Net Pension Liability as a Percentage			
of Covered Valuation Payroll		29.56%	
Development of the Single Discount Rate as of December 31, 2017			
Long-Term Expected Rate of Investment Return		7.50%	
Long-Term Municipal Bond Rate ⁽²⁾		3.31%	
Last year ending December 31 in the 2018 to 2117 projection period			
for which projected benefit payments are fully funded		2117	
Resulting Single Discount Rate based on the above development		7.50%	
Single Discount Rate calculated using December 31, 2016 Measurement Date		7.50%	
Total Pension Expense/(Income)	\$	85,125	

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

 		ed Inflows esources
\$ 117,066	\$	77,322
3,720		135,561
148,146		345,508
\$ 268,932	\$	558,391
	of Resources \$ 117,066 3,720 148,146	\$ 117,066 \$ 3,720 148,146

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

Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of December 29, 2017. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax exempt securities.



⁽²⁾ Source:

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, 2017.

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, 2017 Annual Actuarial Valuation report dated March 22, 2018);
- 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, 2017 Annual Actuarial Valuation report dated March 22, 2018, 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, 2017 and a measurement date of December 31, 2017.

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 3.31% (based on the daily 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 2117 and a discount rate of 7.50%. 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, 2017

A. Expense/(Income)

9. Total Pension Expense/(Income)	\$ 85,125
8. Recognition of Outflow (Inflow) of Resources due to Assets	(15,607)
7. Recognition of Outflow (Inflow) of Resources due to Liabilities	(51,681)
6. Other Changes in Plan Fiduciary Net Position	49,068
5. Projected Earnings on Plan Investments (made negative for addition here)	(368,003)
4. Employee Contributions (made negative for addition here)	(47,402)
3. Current-Period Benefit Changes	0
2. Interest on the Total Pension Liability	422,508
1. Service Cost	\$ 96,242



Statement of Outflows and Inflows Arising from Current Reporting Period Calendar Year Ended December 31, 2017

A. Outflows (Inflows) of Resources due to Liabilities	
1. Difference between expected and actual experience	
of the Total Pension Liability (gains) or losses	\$ 145,089
2. Assumption Changes (gains) or losses	\$ (184,589)
3. Recognition period for Liabilities: Average of the	
expected remaining service lives of all employees {in years}	3.1399
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	\$ 46,208
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for	
Assumption Changes	\$ (58,788)
6. Outflow (Inflow) of Resources to be recognized in the current pension expense	
due to Liabilities	\$ (12,580)
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	\$ 98,881
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for	
Assumption Changes	\$ (125,801)
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses	
due to Liabilities	\$ (26,920)
B. Outflows (Inflows) of Resources due to Assets	
1. Net difference between projected and actual earnings on	
pension plan investments (gains) or losses	\$ (431,885)
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	\$ (86,377)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses	
due to Assets	\$ (345,508)

^{*} 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, 2017

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

	Outflows		Inflows		Net Outflows of Resources	
	of Resources			Resources		
1. Due to Liabilities	\$	68,645	\$	120,326	\$	(51,681)
2. Due to Assets		70,770		86,377		(15,607)
3. Total	\$	139,415	\$	206,703	\$	(67,288)

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

	Outflows		Inflows		Net Outflows	
	of l	Resources	of Resources		of Resources	
1. Differences between expected and actual experience	\$	64,836	\$	54,640	\$	10,196
2. Assumption changes		3,809		65,686	\$	(61,877)
3. Net difference between projected and actual						
earnings on pension plan investments		70,770		86,377		(15,607)
4. Total	\$	139,415	\$	206,703	\$	(67,288)

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 Difference of the control of the c						
1. Differences between expected and actual experience	\$	117,066	\$	77,322	\$	39,744
2. Assumption changes		3,720		135,561	\$	(131,841)
3. Net difference between projected and actual						
earnings on pension plan investments		148,146		345,508		(197,362)
4. Total	\$	268,932	\$	558,391	\$	(289,459)

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

Year Ending December 31	Net Deferred Outflo of Resources		
2018	\$	(67,820)	
2019		(53,731)	
2020		(81,531)	
2021		(86,377)	
2022		0	
Thereafter		0	
Total	\$	(289,459)	



Schedule of Changes in Net Pension Liability and Related Ratios Current Period Calendar Year Ended December 31, 2017

A. Total pension liability	
1. Service Cost	\$ 96,242
2. Interest on the Total Pension Liability	422,508
3. Changes of benefit terms	0
 Difference between expected and actual experience of the Total Pension Liability 	145,089
5. Changes of assumptions	(184,589)
6. Benefit payments, including refunds	
of employee contributions	(212,057)
7. Net change in total pension liability	\$ 267,193
8. Total pension liability – beginning	5,691,351
9. Total pension liability – ending	\$ 5,958,544
B. Plan fiduciary net position	
1. Contributions – employer	\$ 126,481
2. Contributions – employee	47,402
3. Net investment income	799,888
4. Benefit payments, including refunds	
of employee contributions	(212,057)
5. Other (Net Transfer)	 (49,068)
6. Net change in plan fiduciary net position	\$ 712,646
7. Plan fiduciary net position – beginning	 4,950,327
8. Plan fiduciary net position – ending	\$ 5,662,973
C. Net pension liability/(asset)	\$ 295,571
D. Plan fiduciary net position as a percentage	
of the total pension liability	95.04%
E. Covered Valuation payroll	\$ 999,847
F. Net pension liability as a percentage	
of covered valuation payroll	29.56%

Sensitivity of Net Pension Liability/(Asset) to the Single Discount Rate Assumption

Current Single Discount Rate Assumption 1% Decrease 1% Increase 6.50% 7.50% 8.50% Total Pension Liability \$ 6,805,482 \$ 5,958,544 \$ 5,275,884 Plan Fiduciary Net Position 5,662,973 5,662,973 5,662,973 Net Pension Liability/(Asset) \$ 1,142,509 295,571 \$ (387,089)



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,	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Total Pension Liability										
Service Cost	\$ 96,242 \$	109,139 \$	113,280							
Interest on the Total Pension Liability	422,508	411,317	378,708							
Benefit Changes	0	0	0							
Difference between Expected and Actual Experience	145,089	(186,602)	74,069							
Assumption Changes	(184,589)	(23,556)	15,147							
Benefit Payments and Refunds	(212,057)	(141,258)	(116,864)							
Net Change in Total Pension Liability	267,193	169,040	464,340							
Total Pension Liability - Beginning	5,691,351	5,522,311	5,057,971							
Total Pension Liability - Ending (a)	\$ 5,958,544 \$	5,691,351 \$	5,522,311							
Plan Fiduciary Net Position										
Employer Contributions	\$ 126,481 \$	111,845 \$	113,877							
Employee Contributions	47,402	42,870	46,927							
Pension Plan Net Investment Income	799,888	312,759	23,176							
Benefit Payments and Refunds	(212,057)	(141,258)	(116,864)							
Other	(49,068)	40,740	(96,914)							
Net Change in Plan Fiduciary Net Position	712,646	366,956	(29,798)							
Plan Fiduciary Net Position - Beginning	4,950,327	4,583,371	4,613,169							
Plan Fiduciary Net Position - Ending (b)	\$ 5,662,973 \$	4,950,327 \$	4,583,371							
Net Pension Liability/(Asset) - Ending (a) - (b)	295,571	741,024	938,940							
Plan Fiduciary Net Position as a Percentage										
of Total Pension Liability	95.04%	86.98%	83.00%							
Covered Valuation Payroll	\$ 999,847 \$	952,673 \$	1,042,824							
Net Pension Liability as a Percentage										
of Covered Valuation Payroll	29.56%	77.78%	90.04%							



Multiyear Schedule of Contributions

Last 10 Calendar Years

Calendar Year Ending December 31,	Actuarially Determined Contribution		C	Actual ontribution	Def	Contribution Deficiency (Excess)		Covered Valuation Pavroll	Actual Contribution as a % of Covered Valuation Payroll
December 31,	Col	ntribution		ontribution	(E	kcessj		Payroli	Covered Valuation Payroll
2015	\$	113,876	\$	113,877	\$	(1)	\$	1,042,824	10.92%
2016		111,844		111,845		(1)		952,673	11.74%
2017		126,481	*	126,481		0		999,847	12.65%

^{*} Estimated based on contribution rate of 12.65% and covered valuation payroll of \$999,847.



Notes to Schedule of Contributions

Summary of Actuarial Methods and Assumptions Used in the Calculation of the 2017 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 2017 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): 26-year closed 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 21 years for most employers (two employers were financed over $30\,$

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 2013). The IMPF specific

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, 2015 actuarial valuation

Development of Market Value of Assets

Market Value of Assets as of December 31, 2017

5. Net Market Value	\$ 5,662,973
4. Miscellaneous Adjustment*	\$ (465)
3. Annuitant Reserve	\$ 2,350,108
2. Employer Contribution Reserve (EAF assets from IMRF)	\$ 2,047,663
1. Employee Contribution Reserve (MDF Assets from IMRF)	\$ 1,265,667

^{*} Includes an adjustment factor of (0.0000820765) on Items 1 through 3 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	\$ 126,481
b.) Accelerated payments and Reserve Payments	 -
	\$ 126,481
2. Member	
a.) Wage Reporting	\$ 44,993
b.) Member Payments (i.e. ERI, Pension Payments)	2,409
Sub-total (Amount used for valuation on Schedule of Changes Page 10)	\$ 47,402
c.) Voluntary Additional Plan	\$ 13,488
Total Member Contributions (a+b+c)	\$ 60,890
Total Employer and Member Contributions (1+2)	\$ 187,371



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 2.50%

Salary Increases 3.39% to 14.25%

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 2017 valuation pursuant to an experience

study of the period 2014-2016.

Mortality For non-disabled retirees, an IMRF specific mortality table was used with

fully generational projection scale MP-2017 (base year 2015). 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-2017 (base year 2015). 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-2017 (base year 2015). 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, 2017 Illinois Municipal Retirement Fund annual actuarial valuation report.





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 3.31%; 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

	•	Contributions from	Normal Cost	UAL	
Year	Employees	Current Employees	Contributions	Contributions	Total Contributions
2017	\$ 999,847				
2018	1,023,445	\$ 46,055	\$ 71,554	\$ 39,120	\$ 156,729
2019	970,668	43,680	56,967	34,326	134,974
2020	928,878	41,800	54,240	28,833	124,873
2021	890,522	40,074	52,088	22,556	114,718
2022	840,039	37,802	49,218	15,393	102,413
2023	784,422	35,299	45,882	15,778	96,959
2024	739,164	33,262	43,090	16,173	92,525
2025	700,004	31,500	40,669	16,577	88,746
2026	668,858	30,099	38,794	16,991	85,883
2027	642,067	28,893	37,113	17,416	83,422
2028	617,205	27,774	35,615	17,852	81,242
2029	590,821	26,587	33,977	18,298	78,861
2030	561,593	25,272	32,240	18,755	76,267
2031	533,299	23,998	30,564	19,224	73,786
2032	505,457	22,746	28,918	19,705	71,369
2033	471,997	21,240	26,911	20,197	68,348
2034	433,251	19,496	24,574	20,702	64,772
2035	393,140	17,691	22,144	21,220	61,055
2036	356,911	16,061	19,963	21,750	57,774
2037	326,577	14,696	18,073	22,294	55,063
2038	294,730	13,263	16,166	22,852	52,280
2039	263,423	11,854	14,215	23,423	49,492
2040	234,434	10,550	12,466	24,008	47,023
2041	206,627	9,298	10,804	24,609	44,711
2042	182,214	8,200	9,330	25,224	42,754
2043	163,992	7,380	8,203	0	15,583
2044	150,027	6,751	7,342	0	14,094
2045	137,517	6,188	6,608	0	12,797
2046	126,729	5,703	5,978	0	11,680
2047	116,416	5,239	5,376	0	10,615
2048	106,645	4,799	4,810	0	9,609
2049	99,884	4,495	4,397	0	8,891
2050	94,722	4,262	4,067	0	8,329
2051	72,454	3,260	3,032	0	6,293
2052	45,256	2,037	1,894	0	3,930
2053	36,545	1,645	1,573	0	3,217
2054	32,626	1,468	1,388	0	2,856
2055	30,060	1,353	1,246	0	2,599
2056	27,850	1,253	1,127	0	2,380
2057	26,536	1,194	1,032	0	2,226
2058	25,893	1,165	987	0	2,152
2059	16,547	745	626	0	1,370
2060	4,752	214	182	0	395
2061	1,700	77	71	0	148
2062	837	38	40	0	78
2063	485	22	26	0	48
2064	295	13	17	0	31
2065	131	6	8	0	14
2066	1	0	0	0	0
2067	0	0	0	0	0
	· ·	ū	ū	ū	· ·



Single Discount Rate Development Projection of Contributions (Concluded)

	Payroll for Current	Contributions from	Normal Cost	UAL			
Year	Employees	Current Employees	Contributions	Contributions	Total Contributions		
2068	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0		
2069	0	0	0	0	0		
2070	0	0	0	0	0		
2071	0	0	0	0	0		
2072	0	0	0	0	0		
2073	0	0	0	0	0		
2074	0	0	0	0	0		
2075	0	0	0	0	0		
2076	0	0	0	0	0		
2077	0	0	0	0	0		
2078	0	0	0	0	0		
2079	0	0	0	0	0		
2080	0	0	0	0	0		
2081	0	0	0	0	0		
2082	0	0	0	0	0		
2083	0	0	0	0	0		
2084	0	0	0	0	0		
2085	0	0	0	0	0		
2086	0	0	0	0	0		
2087	0	0	0	0	0		
2088	0	0	0	0	0		
2089	0	0	0	0	0		
2090	0	0	0	0	0		
2091	0	0	0	0	0		
2092	0	0	0	0	0		
2093	0	0	0	0	0		
2094 2095	0	0	0	0	0		
2095	0	0		0	0		
2096	0	0	0	0	0		
2098	0	0	0	0	0		
2099	0	0	0	0	0		
2100	0	0	0	0	0		
2100	0	0	0	0	0		
2102	0	0	0	0	0		
2102	0	0	0	0	0		
2103	0	0	0	0	0		
2105	0	0	0	0	0		
2106	0	0	0	0	0		
2107	0	0	0	0	0		
2108	0	0	0	0	0		
2109	0		0	0	0		
2110	0	0	0	0	0		
2111	0	0	0	0	0		
2112	0	0	0	0	0		
2113	0	0	0	0	0		
2114	0		0	0	0		
2115	0	0	0	0	0		
2116	0	0	0	0	0		
2117	0		0	0	0		



Single Discount Rate Development Projection of Plan Fiduciary Net Position

respection of rian riadelary free resident										
	Projected Beginning	Projected Total	Projected Benefit	Projected Investment	Projected Ending Plan					
Year	Plan Net Position	Contributions	Payments	Earnings at 7.50%	Net Position					
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)					
2018	\$ 5,662,973	\$ 156,729	\$ 224,992	\$ 422,209	\$ 6,016,919					
2019	6,016,919	134,973	245,144	447,212	6,353,960					
2020	6,353,960	124,873	263,987	471,425	6,686,272					
2021	6,686,272	114,718	284,553	495,217	7,011,654					
2022	7,011,654	102,413	319,768	517,871	7,312,170					
2023	7,312,170	96,960	355,370	538,898	7,592,657					
2024	7,592,657	92,525	384,218	558,709	7,859,673					
2025	7,859,673	88,746	415,915	577,428	8,109,932					
2026	8,109,932	85,884	445,333	595,009	8,345,492					
2027	8,345,492	83,422	467,731	611,761	8,572,944					
2028	8,572,944	81,241	494,234	627,764	8,787,715					
2029	8,787,715	78,861	524,923	642,654	8,984,307					
2030	8,984,307	76,267	553,246	656,260	9,163,588					
2031	9,163,588	73,786	588,194	668,328	9,317,508					
2032	9,317,508	71,369	618,617	678,662	9,448,921					
2032	9,448,921	68,348	644,990	687,436	9,559,715					
2033	9,559,715	64,772	674,219	694,538	9,644,806					
2034	9,644,806	61,055	704,306	699,675	9,701,230					
2035				•						
	9,701,230	57,774	727,370	702,936	9,734,571					
2037	9,734,571	55,063	749,580	704,519	9,744,573					
2038	9,744,573	52,280	773,054	704,303	9,728,101					
2039	9,728,101	49,492	794,735	702,166	9,685,025					
2040	9,685,025	47,024	814,784	698,106	9,615,370					
2041	9,615,370	44,711	832,769	692,135	9,519,447					
2042	9,519,447	42,754	844,435	684,439	9,402,205					
2043	9,402,205	15,583	850,186	674,434	9,242,036					
2044	9,242,036	14,094	852,074	662,297	9,066,353					
2045	9,066,353	12,797	851,808	649,082	8,876,423					
2046	8,876,423	11,680	848,785	634,908	8,674,226					
2047	8,674,226	10,615	845,079	619,840	8,459,602					
2048	8,459,602	9,609	838,254	603,958	8,234,915					
2049	8,234,915	8,891	827,957	587,459	8,003,308					
2050	8,003,308	8,329	815,475	570,527	7,766,689					
2051	7,766,689	6,293	827,477	552,264	7,497,769					
2052	7,497,769	3,930	831,071	531,876	7,202,504					
2053	7,202,504	3,217	815,190	510,289	6,900,821					
2054	6,900,821	2,856	795,396	488,379	6,596,659					
2055	6,596,659	2,599	774,198	466,338	6,291,398					
2056	6,291,398	2,380	752,122	444,248	5,985,904					
2057	5,985,904	2,226	727,865	422,223	5,682,489					
2058	5,682,489	2,152	701,911	400,420	5,383,150					
2059	5,383,150	1,370	691,205	378,335	5,071,650					
2060	5,071,650	395	675,510	355,515	4,752,050					
2061	4,752,050	148	648,105	332,545	4,436,637					
2062	4,436,637	78	618,949	309,960	4,127,726					
2063	4,127,726	48	588,992	287,893	3,826,675					
2064	3,826,675	31	558,621	266,432	3,534,517					
2065	3,534,517	14	528,075	245,644	3,252,100					
2066	3,252,100	0	496,905	225,610	2,980,806					
2067	2,980,806	0	465,457	206,421	2,721,770					



Single Discount Rate Development Projection of Plan Fiduciary Net Position (Concluded)

			and y rect	,	Concluded	
	Projected Beginning	Projected Total	Projected Benefit	Projected Investment	Projected Ending Plan	
Year	Plan Net Position	Contributions	Payments	Earnings at 7.50%	Net Position	
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)	
2068	\$ 2,721,770	\$ 0	\$ 434,028	\$ 188,151	\$ 2,475,892	
2069	2,475,892	0	402,826	170,859	2,243,925	
2070	2,243,925	0	372,083	154,594	2,026,435	
2071	2,026,435	0	342,033	139,388	1,823,791	
2072	1,823,791	0	312,866	125,264	1,636,189	
2073	1,636,189	0	284,755	112,229	1,463,664	
2074	1,463,664	0	257,886	100,279	1,306,057	
2075	1,306,057	0	232,439	89,395	1,163,013	
2076	1,163,013	0	208,589	79,545	1,033,970	
2077	1,033,970	0	186,495	70,681	918,155	
2078	918,155	0	166,268	62,739	814,626	
2079	814,626	0	147,958	55,649	722,317	
2080	722,317	0	131,555	49,330	640,092	
2081	640,092	0	116,983	43,699	566,809	
2082	566,809	0	104,101	38,677	501,386	
2082	501,386	0	92,749	34,189	442,826	
2083	442,826	0	82,752	30,165	390,239	
2085	390,239	0	73,915	26,546	342,870	
2086	342,870	0	66,039	23,284	300,115	
2087	300,115	0	58,954	20,338	261,499	
2087	261,499	0	52,526	17,678	226,652	
2089		0	46,654		195,279	
	226,652		•	15,281	•	
2090 2091	195,279	0	41,265	13,126	167,141	
	167,141		36,309	11,199	142,030	
2092	142,030	0	31,760	9,483	119,752	
2093	119,752	0	27,605	7,965	100,112	
2094	100,112	0	23,822	6,631	82,921	
2095	82,921	0	20,393	5,468	67,996	
2096	67,996	0	17,309	4,462	55,149	
2097	55,149	0	14,558	3,600	44,192	
2098	44,192	0	12,118	2,868	34,941	
2099	34,941	0	9,967	2,254	27,227	
2100	27,227	0	8,088	1,744	20,883	
2101	20,883	0	6,469	1,328	15,742	
2102	15,742	0	5,092	993	11,643	
2103	11,643	0	3,936	728	8,435	
2104	8,435	0	2,982	523	5,976	
2105	5,976	0	2,211	367	4,131	
2106	4,131	0	1,601	251	2,781	
2107	2,781	0	1,129	167	1,819	
2108	1,819	0	773	108	1,154	
2109	1,154	0	514	68	708	
2110	708	0	330	41	418	
2111	418	0	205	24	237	
2112	237	0	122	13	128	
2113	128	0	69	7	66	
2114	66	0	38	4	32	
2115	32	0	20	2	14	
2116	14	0	10	1	5	
2117	5	0	5	0	0	



Single Discount Rate Development Present Values of Projected Benefits

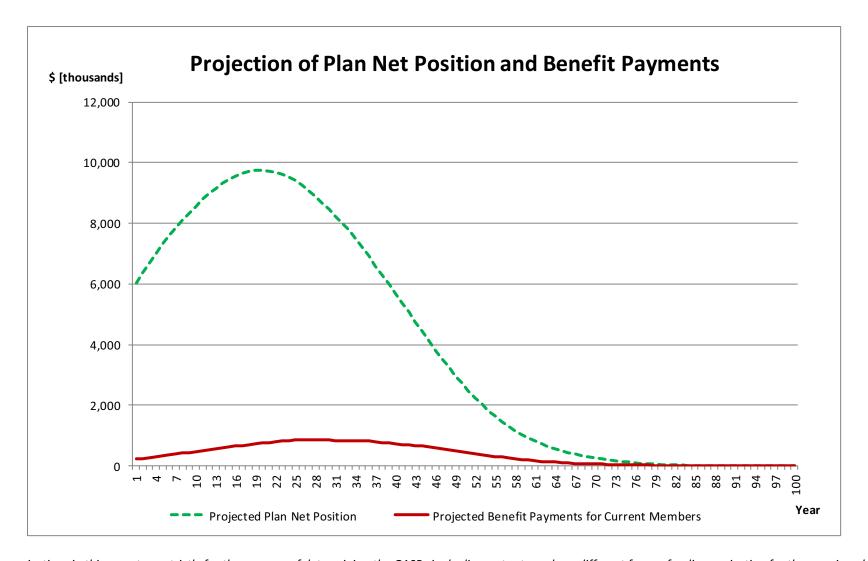
Year	Beg	Projected inning Plan Net Position	Pr	ojected Benefit Payments		inded Portion of enefit Payments	Uı	nfunded Portion of Benefit Payments	1	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present 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+s dr)^(a5)
2018	\$	5,662,973	\$	224,992	\$	224,992	ς	0	\$	217,002	·-· · · · · · ·	\$ 217,002
2019	Ŷ	6,016,919	~	245,144	Ψ.	245,144	~	0	~	219,942	0	219,942
2020		6,353,960		263,987		263,987		0		220,324	0	220,324
2021		6,686,272		284,553		284,553		0		220,919	0	220,919
2022		7,011,654		319,768		319,768		0		230,939	0	230,939
2023		7,312,170		355,370		355,370		0		238,745	0	238,745
2024		7,592,657		384,218		384,218		0		240,117	0	240,117
2025		7,859,673		415,915		415,915		0		241,791	0	241,791
2026		8,109,932		445,333		445,333		0		240,832	0	240,832
2027		8,345,492		467,731		467,731		0		235,297	0	235,297
2028		8,572,944		494,234		494,234		0		231,283	0	231,283
2029		8,787,715		524,923		524,923		0		228,506	0	228,506
2030		8,984,307		553,246		553,246		0		224,033	0	224,033
2031		9,163,588		588,194		588,194		0		221,568	0	221,568
2032		9,317,508		618,617		618,617		0		216,770	0	216,770
2033		9,448,921		644,990		644,990		0		210,243	0	210,243
2034		9,559,715		674,219		674,219		0		204,438	0	204,438
2035		9,644,806		704,306		704,306		0		198,661	0	198,661
2036		9,701,230		727,370		727,370		0		190,853	0	190,853
2037		9,734,571		749,580		749,580		0		182,959	0	182,959
2038		9,744,573		773,054		773,054		0		175,524	0	175,524
2039		9,728,101		794,735		794,735		0		167,857	0	167,857
2040		9,685,025		814,784		814,784		0		160,086	0	160,086
2041		9,615,370		832,769		832,769		0		152,204	0	152,204
2042		9,519,447		844,435		844,435		0		143,568	0	143,568
2043		9,402,205		850,186		850,186		0		134,461	0	134,461
2044		9,242,036		852,074		852,074		0		125,358	0	125,358
2045		9,066,353		851,808		851,808		0		116,576	0	116,576
2046		8,876,423		848,785		848,785		0		108,058	0	108,058
2047		8,674,226		845,079		845,079		0		100,080	0	100,080
2048		8,459,602		838,254		838,254		0		92,346	0	92,346
2049		8,234,915		827,957		827,957		0		84,848	0	84,848
2050		8,003,308		815,475		815,475		0		77,738	0	77,738
2051		7,766,689		827,477		827,477		0		73,379	0	73,379
2052		7,497,769		831,071		831,071		0		68,556	0	68,556
2053		7,202,504		815,190		815,190		0		62,554	0	62,554
2054		6,900,821		795,396		795,396		0		56,777	0	56,777
2055		6,596,659		774,198		774,198		0		51,408	0	51,408
2056		6,291,398		752,122		752,122		0		46,458	0	46,458
2057		5,985,904		727,865		727,865		0		41,823	0	41,823
2058		5,682,489		701,911		701,911		0		37,518	0	37,518
2059		5,383,150		691,205		691,205		0		34,368	0	34,368
2060		5,071,650		675,510		675,510		0		31,244	0	31,244
2061		4,752,050		648,105		648,105		0		27,885	0	27,885
2062		4,436,637		618,949		618,949		0		24,773	0	24,773
2063		4,127,726		588,992		588,992		0		21,929	0	21,929
2064		3,826,675		558,621		558,621		0		19,347	0	19,347
2065		3,534,517		528,075		528,075		0		17,013	0	17,013
2066		3,252,100		496,905		496,905		0		14,892	0	14,892
2067		2,980,806		465,457		465,457		0		12,977	0	12,977



Single Discount Rate Development Present Values of Projected Benefits (Concluded)

Year	Beg	Projected inning Plan Net Position	Pr	ojected Benefit Payments		nded Portion of nefit Payments	Uı	nfunded 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)	Dei	(d)		(e)	(f)=(d)*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=(c)/(1+sdr)^(a5)
(a) 2068	\$	(b) 2,721,770	۲	434,028	\$	(u) 434,028	\$	(e) 0	\$ 11,256	(g)=(e) · vi ··((a)5) \$ 0	\$ 11,256
2069	٦	2,475,892	ڔ	402,826	ب	402,826	ڔ	0	9,718	0	9,718
2070		2,473,892		372,083		372,083		0	8,350	0	8,350
2071		2,026,435		342,033		342,033		0	7,140	0	7,140
2071		1,823,791		312,866		312,866		0	6,076	0	6,076
2072		1,636,189		284,755		284,755		0	5,144	0	5,144
2073		1,463,664		257,886		257,886		0	4,334	0	4,334
2074		1,306,057		232,439		232,439		0	3,633	0	3,633
2076		1,163,013		208,589		208,589		0	3,033	0	3,033
2077		1,033,970		186,495		186,495		0	2,523	0	2,523
2078		918,155		166,268		166,268		0	2,092	0	2,092
2079		814,626		147,958		147,958		0	1,732	0	1,732
2079		722,317		131,555		131,555		0	1,432	0	1,432
2081		640,092		116,983		116,983		0	1,185	0	1,185
2081		566,809		104,101		104,101		0	981	0	981
2082		500,809		92,749		92,749		0	813	0	813
2083		442,826		82,752		82,752		0	675	0	675
2084		390,239		73,915		73,915		0	561	0	561
2086		342,870		66,039		66,039		0	466	0	466
2087		300,115		58,954		58,954		0	387	0	387
2087		261,499		52,526		52,526		0	321	0	321
2089		226,652		46,654		46,654		0	265	0	265
2090		195,279		41,265		41,265		0	218	0	218
2090		167,141		36,309		36,309		0	178	0	178
2091		142,030		31,760		31,760		0	145	0	145
2092								0		0	117
2093		119,752		27,605		27,605		0	117 94	0	94
2094		100,112		23,822		23,822		0	75	0	75
2095		82,921 67,996		20,393 17,309		20,393 17,309		0	59	0	75 59
2090		55,149		14,558		14,558		0	46	0	46
2098		44,192		12,118		12,118		0	36	0	36
2098		34,941		9,967		9,967		0	27	0	27
2100		27,227		8,088		8,088		0	21	0	21
2100		20,883		6,469		6,469		0	15	0	15
2101		15,742		5,092		5,092		0	11	0	11
2102		11,643		3,936		3,936		0	8	0	8
2103		8,435		2,982		2,982		0	6	0	6
				2,982				0	4	0	4
2105 2106		5,976 4,131		1,601		2,211 1,601		0	3	0	3
2107		2,781		1,129		1,129		0	2	0	2
2107		1,819		773		773		0	1	0	1
2109		1,154		514		514		0	1	0	1
2110		708		330		330		0	0	0	0
2110		418		205		205		0	0	0	0
		237		122				0	0		0
2112						122				0	
2113 2114		128 66		69 38		69 38		0	0	0	0
				20		20		0	0	0	0
2115 2116		32 14		10		10		0	0	0	0
2116		5		5		5		0	0	0	0
211/		5		5		5		Totals	\$ 6,770,016		\$ 6,770,016
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SECTION D

GLOSSARY OF **T**ERMS

Glossary of Terms

Actuarial Accrued Liability (AAL)

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

Actuarial Assumptions

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

Accrued Service

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

Actuarial Equivalent

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

Actuarial Cost Method

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

Actuarial Gain (Loss)

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

Actuarial Present Value (APV)

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

Actuarial Valuation

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

Actuarial Valuation Date

The date as of which an actuarial valuation is performed.

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



Glossary of Terms (Continued)

Amortization Payment

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

Amortization Method

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

Cost-of-Living Adjustments

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

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

Covered Valuation Payroll

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

Deferred Inflows and Outflows

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

Discount Rate

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

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

Entry Age Actuarial Cost Method (EAN)

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



Glossary of Terms (Continued)

GASB The Governmental Accounting Standards Board is an organization that exists in

order to promulgate accounting standards for governmental entities.

Fiduciary Net Position The fiduciary net position is the value of the assets of the trust.

Long-Term Expected Rate of

Return

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

Money-Weighted Rate of

Return

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

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

Municipal Bond Rate

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

Net Pension Liability (NPL)

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

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

Normal Cost

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

Other Postemployment Benefits (OPEB)

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

Real Rate of Return

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

Service Cost

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



Glossary of Terms (Concluded)

Total Pension Expense

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

- 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;
- 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.

