

## Alsip Park Dist Regular

GASB Statement No. 68 Employer Reporting Accounting Schedules
December 31, 2023



### **Table of Contents**



FOR3S00-0001BJ8

#### **Page**

#### **Certification Letter**

Section A	Executive Summary
	Executive Summary1
	Discussion
	Other Observations 5 - 6
Section B	Financial Statements
	Pension Expense/(Income) under GASB Statement No. 687
	Statement of Outflows and Inflows Arising from Current Reporting Period8
	Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods 9
	Recognition of Deferred Outflows and Inflows of Resources
	Schedule of Changes in Net Pension Liability and Related Ratios Current Period 11
	Sensitivity of Net Pension Liability/(Asset) to the Single Discount Rate Assumption 11
	Multiyear Schedule of Changes in Net Pension Liability and Related Ratios12
	Multiyear Schedule of Contributions
	Notes to Schedule of Contributions
	Development of Market Value of Assets
	Schedule of Contributions
	Summary of Actuarial Methods and Assumptions Used in the Calculation of the
	Total Pension Liability
Section C	Calculation of the Single Discount Rate
	Calculation of the Single Discount Rate17
	Projection of Contributions
	Projection of Plan Fiduciary Net Position20 - 21
	Present Values of Projected Benefits22 - 23
	Projection of Plan Net Position and Benefit Payments24
Section D	Glossary of Terms







March 29, 2024

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 No. 68 may produce significantly different results. This report may be provided to parties other than 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 the Illinois Municipal Retirement Fund (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 IMRF and should be considered in conjunction with that report. Please see the actuarial valuation report as of December 31, 2023 for additional discussions of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.



Alsip Park Dist Illinois Municipal Retirement Fund March 29, 2024 Page 2

To the best of our knowledge, the information contained in this report is accurate, and fairly represents the GASB Statement No. 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. If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the IMRF.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Mark Buis, Francois Pieterse and Bonita J. Wurst are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Mark Buis, FSA, EA, FCA, MAAA

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Bonita J. Wurst, ASA, EA, FCA, MAAA

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FOR3S00-0001BJ8

### **SECTION A**

**EXECUTIVE SUMMARY** 



#### FOR3S00-0001BJ8

## **Executive Summary** as of December 31, 2023

Actuarial Valuation Date	Decer	mber 31, 2023	
Measurement Date of the Net Pension Liability	Decer	mber 31, 2023	
Fiscal Year End	April 30, 2024		
Membership			
Number of			
- Retirees and Beneficiaries		25	
- Inactive, Non-Retired Members		45	
- Active Members		23	
- Total		93	
Covered Valuation Payroll <sup>1</sup>	\$	1,168,656	
Net Pension Liability			
Total Pension Liability/(Asset)	\$	7,993,873	
Plan Fiduciary Net Position		7,555,527	
Net Pension Liability/(Asset)	\$	438,346	
Plan Fiduciary Net Position as a Percentage			
of Total Pension Liability		94.52%	
Net Pension Liability as a Percentage			
of Covered Valuation Payroll		37.51%	
Development of the Single Discount Rate as of December 31, 2023			
Long-Term Expected Rate of Investment Return		7.25%	
Long-Term Municipal Bond Rate <sup>2</sup>		3.77%	
Last year ending December 31 in the 2024 to 2123 projection period			
for which projected benefit payments are fully funded		2123	
Resulting Single Discount Rate based on the above development		7.25%	
Single Discount Rate calculated using December 31, 2022 Measurement Date		7.25%	
Total Pension Expense/(Income)	\$	(206,708)	

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

			ed Outflows esources	 red Inflows Resources
Difference between expected and actua	I experience	\$	6,955	\$ 81,085
Changes in assumptions			4,749	0
Net difference between projected and a	ctual earnings			
on pension plan investments	376.	.146	913,551	537,405
Total		Ć ——	925,255	\$ 618,490
	387,850 + subse	equ <del>ent 33,</del>	109	81.08

<sup>&</sup>lt;sup>1</sup> Does not necessarily represent Covered-Employee Payroll as defined in GASB Statement No. 68. =421.039

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, 2023. 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.



<sup>2</sup> Source:

#### **Discussion**



FOR3S00-0001BJ8

#### **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 the IMRF subsequent to the measurement date of December 31, 2023.

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**

FOR3S00-0001BJ8

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 to B-5 of the December 31, 2023 Annual Actuarial Valuation report dated March 8, 2024);
- 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 11);
- Significant assumptions and methods used to calculate the total pension liability (page 16);
- Inputs to the single discount rate (page 17);
- Certain information about mortality assumptions and the dates of experience studies (pages 14 and 16);
- 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 14 and 16);
- 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, 2023 Annual Actuarial Valuation report dated March 8, 2024, as well as page 14);
- 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 11);
- 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 11); and
- A description of the fund that administers the pension plan (to be provided by the 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 12);
- 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 12); and
- Comparison of actual employer contributions to the actuarially determined contributions based on the plan's funding policy (page 13).

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







FOR3S00-0001BJ8

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 fiscal year-end date, consistently applied from period to period. 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, 2023 and a measurement date of December 31, 2023.

#### **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 7.25%, the municipal bond rate is 3.77% (based on the daily rate closest to but not later than the measurement date of the "20-Year Municipal GO AA Index" described on page 1), and the resulting Single Discount Rate is 7.25%.







FOR3S00-0001BJ8

## 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 7.25% 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 2123 and a discount rate of 7.25%. 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, if transferring the obligations to an 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**



FOR3S00-0001BJ8

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.





FOR3S00-0001BJ8

### **SECTION B**

FINANCIAL STATEMENTS



## Pension Expense/(Income) under GASB State Calendar Year Ended December 31, 2023

FOR3S00-0001BJ8

#### A. Expense/(Income)

9. Total Pension Expense/(Income)	\$ (206,708)
8. Recognition of Outflow (Inflow) of Resources due to Assets	 (86,238)
7. Recognition of Outflow (Inflow) of Resources due to Liabilities	(50,652)
6. Other Changes in Plan Fiduciary Net Position	(184,157)
5. Projected Earnings on Plan Investments (made negative for addition here)	(492,588)
4. Employee Contributions (made negative for addition here)	(52,590)
3. Current-Period Benefit Changes	0
2. Interest on the Total Pension Liability	549,874
1. Service Cost	\$ 109,643

#### **Recognition of Deferred Outflows and Inflows of Resources**

Differences between expected and actual experience and changes in assumptions are recognized in the pension expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with a retirement benefit through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the current measurement period, the expected remaining service lives of all active employees in the plan was approximately 230 years. Additionally, the total plan membership (active employees and inactive employees) was 91. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 2.5275 years.

Additionally, differences between projected and actual earnings on pension plan investments should be recognized in the pension expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the pension expense as a level dollar amount over the closed period identified above.





# Statement of Outflows and Inflows Aris Current Reporting Period Calendar Year Ended December 31, 2023

#### A. Outflows (Inflows) of Resources Due to Liabilities

1. Difference between expected and actual experience	
of the Total Pension Liability (gains) or losses	\$ (57,846)
2. Assumption Changes (gains) or losses	\$ 7,858
3. Recognition period for Liabilities: Average of the	
expected remaining service lives of all employees {in years}	2.5275
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	\$ (22,887)
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for	
Assumption Changes	\$ 3,109
6. Outflow (Inflow) of Resources to be recognized in the current pension expense	
due to Liabilities	\$ (19,778)
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	\$ (34,959)
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for	
Assumption Changes	\$ 4,749
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses	
due to Liabilities	\$ (30,210)
B. Outflows (Inflows) of Resources Due to Assets	
1. Net difference between projected and actual earnings on	
pension plan investments (gains) or losses	\$ (244,077)
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	\$ (48,815)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses	
due to Assets	\$ (195,262)

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 Arisi Current and Prior Reporting Periods Calendar Year Ended December 31, 2023

FOR3S00-0001BJ8

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

	Oı	utflows		Inflows	I	Net Outflows
	of R	esources	of	Resources		of Resources
1. Due to Liabilities	\$	35,759	\$	86,411	\$	(50,652)
2. Due to Assets		304,517		390,755		(86,238)
3. Total	\$	340,276	\$	477,166	\$	(136,890)

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

	C	Outflows	ı	nflows	Ne	et Outflows
	of I	Resources	of F	Resources	of	Resources
1. Differences between expected and actual experience	\$	32,650	\$	74,709	\$	(42,059)
2. Assumption changes		3,109		11,702	\$	(8,593)
3. Net difference between projected and actual						
earnings on pension plan investments		304,517		390,755		(86,238)
4. Total	\$	340,276	\$	477,166	\$	(136,890)

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

	Deferred Outflows of Resources				Net Deferred Outflows of Resources	
1. Differences between expected and actual experience	\$	6,955	\$	81,085	\$	(74,130)
2. Assumption changes		4,749		0		4,749
3. Net difference between projected and actual						
earnings on pension plan investments		913,551		537,405		376,146
4. Total	\$	925,255	\$	618,490	\$	306,765

#### 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				
2024	\$	(16,604)			
2025		116,484			
2026		255,702			
2027		(48,817)			
2028		0			
Thereafter		0			
Total	Ś	306.765			





## Recognition of Deferred Outflows and Inflows Reporting Date - December 31, 2023

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		Initial Recognition	Current Year	Remaining	Remaining Recognition
Year Established	Initial Amount	Period	Recognition	Recognition	Period
	(Inflow) Due to Diff		•	•	Liabilities
2014	\$ 0	1.0000	\$ 0	\$ 0	0.0000
2015	74,069	3.9763	0	0	0.0000
2016	(186,602)	3.4151	0	0	0.0000
2017	145,089	3.1399	0	0	0.0000
2018	187,495	3.4456	0	0	0.0000
2019	(161,266)	3.5813	0	0	0.0000
2020	33,017	3.5287	4,946	0	0.0000
2021	90,067	3.2510	27,704	6,955	0.2510
2022	(149,770)	2.8901	(51,822)	(46,126)	0.8901
2023	(57,846)	2.5275	(22,887)	(34,959)	1.5275
Total			\$ (42,059)	\$ (74,130)	
<b>Deferred Outflow</b>	(Inflow) Due to Ass	umption Change	es		
2014	\$ 0	1.0000	\$ 0	\$ 0	0.0000
2015	15,147	3.9763	0	0	0.0000
2016	(23,556)	3.4151	0	0	0.0000
2017	(184,589)	3.1399	0	0	0.0000
2018	207,545	3.4456	0	0	0.0000
2019	0	3.5813	0	0	0.0000
2020	(78,104)	3.5287	(11,702)	0	0.0000
2021	0	3.2510	0	0	0.2510
2022	0	2.8901	0	0	0.8901
2023	7,858	2.5275	3,109	4,749	1.5275
Total			\$ (8,593)	\$ 4,749	
	(Inflow) Due to Diff	erences betwe	en Projected and Ac	tual Earnings on Pl	an Investments
2019	\$ (642,918)	5.0000	\$ (128,582)	\$ 0	0.0000
2020	(422,859)	5.0000	(84,572)	(84,571)	1.0000
2021	(643,930)	5.0000	(128,786)	(257,572)	2.0000
2022	1,522,585	5.0000	304,517	913,551	3.0000
2023	(244,077)	5.0000	(48,815)	(195,262)	4.0000
Total			\$ (86,238)	\$ 376,146	





109,643

549,874

(57,846) 7,858

(290,612)

318,917

7,674,956

7,993,873

102,959

52,590

736,665

(290,612)

184,157

785,759

6,769,768

7,555,527

438,346

94.52%

37.51%

1,168,656

0

\$

\$

\$

\$

\$

\$

\$

# Schedule of Changes in Net Pension Liab Related Ratios Current Period Calendar Year Ended December 31, 2023

# A. Total pension liability 1. Service Cost 2. Interest on the Total Pension Liability 3. Changes of benefit terms 4. Difference between expected and actual experience

4. Difference between expected and actual experience	
of the Total Pension Liability	
5. Changes of assumptions	

6. Benefit payments, including refunds of employee contributions

7. Net change in Total Pension Liability8. Total Pension Liability – beginning

9. Total Pension Liability – ending

#### B. Plan fiduciary net position

2. Contributions – employee3. Net investment income

1. Contributions - employer

4. Benefit payments, including refunds of employee contributions5. Other (Net Transfer)

Net change in Plan Fiduciary Net Position
 Plan Fiduciary Net Position – beginning

Plan Fiduciary Net Position – ending
 Net pension liability/(asset)

D. Plan Fiduciary Net Position as a percentage of the Total Pension Liability

E. Covered Valuation payroll<sup>1</sup>

F. Net Pension Liability as a percentage of covered valuation payroll

<sup>1</sup> Does not necessarily represent Covered-Employee Payroll as defined in GASB Statement No. 68.

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

#### **Current Single Discount**

	1% Decrease		Ra	ate Assumption	1% Increase		
		6.25%		7.25%		8.25%	
Total Pension Liability	\$	9,019,980	\$	7,993,873	\$	7,185,030	
Plan Fiduciary Net Position		7,555,527		7,555,527		7,555,527	
Net Pension Liability/(Asset)	\$	1,464,453	\$	438,346	\$	(370,497)	



## 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 2015)

Calendar year ending December 31,	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability										
Service Cost	\$ 109,643 \$	108,154 \$	105,449 \$	118,112 \$	109,822 \$	105,468 \$	96,242 \$	109,139 \$	113,280	
Interest on the Total Pension Liability	549,874	535,555	506,820	487,532	476,155	441,523	422,508	411,317	378,708	
Benefit Changes	0	0	0	0	0	0	0	0	0	
Difference between Expected and Actual Experience	(57,846)	(149,770)	90,067	33,017	(161,266)	187,495	145,089	(186,602)	74,069	
Assumption Changes	7,858	0	0	(78,104)	0	207,545	(184,589)	(23,556)	15,147	
Benefit Payments and Refunds	 (290,612)	(303,735)	(310,967)	(265,405)	(278,443)	(248,612)	(212,057)	(141,258)	(116,864)	
Net Change in Total Pension Liability	318,917	190,204	391,369	295,152	146,268	693,419	267,193	169,040	464,340	
Total Pension Liability - Beginning	7,674,956	7,484,752	7,093,383	6,798,231	6,651,963	5,958,544	5,691,351	5,522,311	5,057,971	
Total Pension Liability - Ending (a)	\$ 7,993,873 \$	7,674,956 \$	7,484,752 \$	7,093,383 \$	6,798,231 \$	6,651,963 \$	5,958,544 \$	5,691,351 \$	5,522,311	
Plan Fiduciary Net Position										
Employer Contributions	\$ 102,959 \$	122,849 \$	138,854 \$	135,185 \$	114,936 \$	135,372 \$	126,481 \$	111,845 \$	113,877	
Employee Contributions	52,590	51,425	52,877	74,173	50,227	49,567	47,402	42,870	46,927	
Pension Plan Net Investment Income	736,665	(950,709)	1,148,054	867,729	1,026,568	(280,874)	799,888	312,759	23,176	
Benefit Payments and Refunds	(290,612)	(303,735)	(310,967)	(265,405)	(278,443)	(248,612)	(212,057)	(141,258)	(116,864)	
Other	 184,157	(205,467)	27,061	47,367	(242,339)	151,102	(49,068)	40,740	(96,914)	
Net Change in Plan Fiduciary Net Position	785,759	(1,285,637)	1,055,879	859,049	670,949	(193,445)	712,646	366,956	(29,798)	
Plan Fiduciary Net Position - Beginning	 6,769,768	8,055,405	6,999,526	6,140,477	5,469,528	5,662,973	4,950,327	4,583,371	4,613,169	
Plan Fiduciary Net Position - Ending (b)	\$ 7,555,527 \$	6,769,768 \$	8,055,405 \$	6,999,526 \$	6,140,477 \$	5,469,528 \$	5,662,973 \$	4,950,327 \$	4,583,371	
Net Pension Liability/(Asset) - Ending (a) - (b)	438,346	905,188	(570,653)	93,857	657,754	1,182,435	295,571	741,024	938,940	_
Plan Fiduciary Net Position as a Percentage										
of Total Pension Liability	94.52%	88.21%	107.62%	98.68%	90.32%	82.22%	95.04%	86.98%	83.00%	
Covered Valuation Payroll <sup>1</sup>	\$ 1,168,656 \$	1,142,782 \$	1,099,409 \$	1,069,494 \$	1,115,881 \$	1,101,487 \$	999,847 \$	952,673 \$	1,042,824	
Net Pension Liability as a Percentage										
of Covered Valuation Payroll	37.51%	79.21%	(51.91)%	8.78%	58.94%	107.35%	29.56%	77.78%	90.04%	

<sup>&</sup>lt;sup>1</sup> Does not necessarily represent Covered-Employee Payroll as defined in GASB Statement No. 68.







FOR3S00-0001BJ8

#### **Last 10 Calendar Years**

Calendar Year Ending December 31,	Actuarially Determined Contribution		Actual Contribution		Contribution Deficiency (Excess)		Covered Valuation Payroll		Actual Contribution as a % of Covered Valuation Payroll
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%
2018		135,373		135,372		1		1,101,487	12.29%
2019		114,936		114,936		0		1,115,881	10.30%
2020		135,184		135,185		(1)		1,069,494	12.64%
2021		138,855		138,854		1		1,099,409	12.63%
2022		122,849		122,849		0		1,142,782	10.75%
2023		102,959	*	102,959		0		1,168,656	8.81%

<sup>\*</sup> Estimated based on contribution rate of 8.81% and covered valuation payroll of \$1,168,656.

This number should be verified by the auditor.



#### **Notes to Schedule of Contribution**



FOR3S00-0001BJ8

## Summary of Actuarial Methods and Assumptions Used in the Calculation of the 2023 Contribution Rate<sup>1</sup>

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 calendar year in

which contributions are reported.

Methods and Assumptions Used to Determine 2023 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): 20-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 15 years for most employers (five employers were financed over 16 years; one employer was financed over 17 years; two employers were financed over 18 years; one employer was financed over 21 years; three employers were financed over 24 years; four employers were financed over 25 years and one employer

was financed over 26 years).

Asset Valuation Method 5-Year smoothed market; 20% corridor

Wage growth 2.75% Price Inflation 2.25%

Salary Increases 2.75% to 13.75% including inflation

Investment Rate of Return 7.25%

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

condition. Last updated for the 2020 valuation pursuant to an experience study

of the period 2017-2019.

Mortality For non-disabled retirees, the Pub-2010, Amount-Weighted, below-median

income, General, Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements

projected using scale MP-2020.

Other Information:

Notes There were no benefit changes during the year.



Based on Valuation Assumptions used in the December 31, 2021 actuarial valuation.

### **Development of Market Value of As**



FOR3S00-0001BJ8

#### Market Value of Assets as of December 31, 2023

5. Net Market Value	\$ 7,555,527
4. Miscellaneous Adjustment <sup>1</sup>	 136,712
3. Annuitant Reserve	3,340,616
2. Employer Contribution Reserve (EAF assets from IMRF)	2,377,131
1. Employee Contribution Reserve (MDF Assets from IMRF)	\$ 1,701,068

<sup>&</sup>lt;sup>1</sup> Includes an adjustment factor of 0.018427797 on Items 1 through 3 to ensure that Market Value of Assets for all employers balance to the total Market Value of the 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	\$ 102,959
b.) Accelerated Payments and Reserve Payments	 0
Total Employer Contributions (a+b)	\$ 102,959
2. Member	
a.) Wage Reporting	\$ 52,590
b.) Member Payments (i.e., ERI, Pension Payments)	 0
Sub-total (Amount used for valuation on Schedule of Changes Page 11)	\$ 52,590
c.) Voluntary Additional Plan	\$ 14,676
Total Member Contributions (a+b+c)	\$ 67,266
Total Employer and Member Contributions (1+2)	\$ 170,225





## Summary of Actuarial Methods and Assu FOR3SO 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 2.25%

Salary Increases 2.85% to 13.75%

Investment Rate of Return<sup>1</sup> 7.25%

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

condition. Last updated for the 2023 valuation pursuant to an experience study

of the period 2020-2022.

Mortality For non-disabled retirees, the Pub-2010, Amount-Weighted, below-median

income, General, Retiree, Male (adjusted 108.0%) and Female (adjusted 106.4%) tables, and future mortality improvements projected using scale MP-2021. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2021. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements

projected using scale MP-2021.

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, 2023 IMRF annual actuarial valuation report.



<sup>&</sup>lt;sup>1</sup> There were no changes in the discount rate used to calculate the Total Pension Liability (TPL), since the December 31, 2022 valuation. Mortality and other demographic assumptions used to determine the TPL were updated after the December 31, 2022 valuation, based on the experience study results published in the January 4, 2024 experience study report for IMRF.



### **SECTION C**

**CALCULATION OF THE SINGLE DISCOUNT RATE** 





FOR3S00-0001BJ8

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 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 7.25%; the municipal bond rate is 3.77%; and the resulting SDR is 7.25%.

The tables in this section provide background for the development of the SDR.

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 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 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 Developmer Projection of Contributions**

FOR3S00-0001B.I8

	Payroll for Current	Contributions from	Normal Cost	UAL	
Year	Employees	Current Employees	Contributions	Contributions	Total Contributions
	,				
2023	\$ 1,168,656				
2024	1,091,851	\$ 49,133	\$ 61,595	\$ 24,836	\$ 135,564
2025	996,935	44,862	52,880	30,523	128,265
2026	917,175	41,273	48,195	36,928	126,396
2027	850,521	38,273	44,608	44,153	127,035
2028	793,565	35,710	41,542	36,462	113,715
2029	739,120	33,260	38,619	37,373	109,252
2030	689,089	31,009	35,868	38,308	105,185
2031	644,974	29,024	33,444	39,265	101,733
2032	602,587	27,116	31,067	40,247	98,430
2033	556,822	25,057	28,542	41,253	94,852
2034	510,698	22,981	25,924	42,285	91,191
2035	468,602	21,087	23,462	43,342	87,891
2036	432,628	19,468	21,404	44,425	85,297
2037	403,912	18,176	19,743	45,536	83,455
2038	373,640	16,814	18,078	46,674	81,566
2039	341,655	15,374	16,327	47,841	79,543
2040	311,630	14,023	14,707	49,037	77,767
2041	282,251	12,701	13,181	50,263	76,145
2042	252,377	11,357	11,585	51,520	74,462
2043	226,543	10,194	10,197	0	20,392
2044	204,692	9,211	9,031	0	18,242
2045	184,948	8,323	8,050	0	16,373
2046	167,489	7,537	7,174	0	14,711
2047	148,352	6,676	6,251	0	12,927
2048	130,071	5,853	5,378	0	11,231
2049	116,864	5,259	4,704	0	9,963
2050	106,798	4,806	4,204	0	9,010
2051	96,242	4,331	3,702	0	8,033
2052	86,533	3,894	3,260	0	7,154
2053	80,791	3,636	2,980	0	6,616
2054	77,313	3,479	2,798	0	6,277
2055	74,644	3,359	2,664	0	6,023
2056	72,090	3,244	2,530	0	5,774
2057	70,257	3,162	2,431	0	5,593
2058	68,840	3,098	2,362	0	5,459
2059	67,016	3,016	2,286	0	5,302
2060	65,172	2,933	2,216	0	5,149
2061	63,403	2,853	2,150	0	5,003
2062	61,602	2,772	2,083	0	4,855
2063	59,884	2,695	2,019	0	4,714
2064	51,211	2,304	1,721	0	4,026
2065	33,724	1,518	1,134	0	2,651
2066	21,618	973	724	0	1,697
2067	12,073	543	403	0	947
2068	3,006	135	101	0	236
2069	748	34	25	0	58
2070	186	8	6	0	14
2071	46	2	1	0	3
2072	11	1	0	0	1
2073	3	0	0	0	0





## Single Discount Rate Developmer Projection of Contributions (Concluded)

FOR3S00-0001B.I8

		Payroll for Current	Contributions from	Normal Cost	UAL			
_	Year	Employees	<b>Current Employees</b>	Contributions	Contributions	Total Contributions		
	2074	\$ 1	\$ 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 2091	0	0	0	0	0		
	2091	0	0	0	0	0		
	2092	0	0	0	0	0		
	2093	0	0	0	0	0		
	2094	0	0	0	0	0		
	2093	0	0	0	0	0		
	2097	0	0	0	0	0		
	2098	0	0	0	0	0		
	2099	0	0	0	0	0		
	2100	0	0	0	0	0		
	2101	0	0	0	0	0		
	2102	0	0	0	0	0		
	2103	0	0	0	0	0		
	2104	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	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	0		
	2115	0	0	0	0	0		
	2116	0	0	0	0	0		
	2117	0	0	0	0	0		
	2118	0	0	0	0	0		
	2119	0	0	0	0	0		
	2120	0	0	0	0	0		
	2121	0	0	0	0	0		
	2122	0	0	0	0	0		
	2123	0	0	0	0	0		





## Single Discount Rate Developmer Projection of Plan Fiduciary Net Position

Projected **Projected Beginning Projected Total Projected Benefit Projected Ending Plan** Investment **Plan Net Position** Contributions Earnings at 7.25% **Net Position** Year **Payments** (e)=(a)+(b)-(c)+(d) 2024 Ś 7,555,527 135,564 \$ 329,754 \$ 540,860 7,902,197 2025 7.902.197 128,266 373.653 564.170 8,220,980 2026 8,220,980 126,396 414,286 585,768 8,518,857 2027 8,518,857 127,034 442,703 606,374 8,809,562 2028 8,809,562 113,715 476,842 625,760 9,072,195 2029 9.072.195 109.253 514.871 643.288 9.309.865 547,344 2030 9,309,865 105,185 659,217 9,526,923 2031 9,526,923 101,733 584,436 673,510 9,717,731 2032 9,717,731 98,430 619,798 685,967 9,882,330 2033 9.882.330 94,852 652.277 696,616 10,021,520 2034 10,021,520 91,191 685,928 705,378 10,132,161 2035 10,132,161 87,891 719,019 712,104 10,213,137 2036 10,213,137 85,297 744,757 716,965 10,270,642 2037 10.270.642 83.455 771,402 720.120 10,302,814 2038 10,302,814 81,566 799,005 721,402 10,306,777 2039 10,306,777 79,543 825,127 720,687 10,281,879 2040 10,281,879 77,768 849,634 717,946 10,227,958 2041 10.227.958 76.145 871.704 713.193 10.145.591 2042 10,145,591 74,462 888,739 706,554 10,037,869 2043 10,037,869 20,392 898,635 696,466 9,856,092 2044 9.856.092 18,242 904,940 682.986 9,652,381 2045 16.373 907.912 9,428,886 9.652.381 668,045 2046 9,428,886 14,711 909,635 651,721 9,185,683 2047 9,185,683 12,927 911,542 633,957 8,921,025 2048 8.921.025 11.231 907,061 614.869 8.640.063 2049 8,640,063 897,652 9,963 594,789 8,347,164 2050 8,347,164 9,010 884,903 573,974 8,045,245 2051 8,045,245 8,033 872,461 552,493 7,733,310 2052 7.733.310 7.154 856.248 530.424 7.414.640 2053 7,414,640 6,616 835,361 508,045 7,093,940 2054 7,093,940 6,277 813,885 485,547 6,771,878 2055 6,771,878 6,023 790,443 463,023 6,450,482 2056 6.450.482 5.774 763,944 440,657 6,132,969 5,593 2057 6,132,969 734,875 418,666 5,822,353 2058 5,822,353 5,459 704,243 397,233 5,520,803 2059 5,520,803 5,302 672,794 376,485 5,229,795 2060 5.229.795 5.149 640,531 356.531 4.950.944 2061 4,950,944 5,003 607,432 337,488 4,686,003 2062 4.686.003 4,855 573.782 319,472 4,436,548 2063 4,436,548 4,714 539,320 302,609 4.204.551 2064 4.204.551 4,026 522,753 286,355 3,972,178 2065 3,972,178 2,651 520,004 269,557 3,724,383 2066 3,724,383 1,697 498,844 252,311 3,479,547 2067 3.479.547 947 485,208 235.020 3.230.306 2068 236 465,581 3,230,306 217,624 2,982,585 2069 2,982,585 58 431,150 200,884 2,752,378 2070 2,752,378 14 397,354 185,396 2,540,433 2071 2.540.433 3 364.858 171.187 2.346.766 2072 1 334,250 158,236 2,346,766 2,170,752 2073 2,170,752 0 305,844 146,487 2,011,395





## Single Discount Rate Developmer

FOR3S00-0001BJ8

### **Projection of Plan Fiduciary Net Position (Concluded)**

Projected

					Projected	
		<b>Projected Beginning</b>	Projected Total	Projected Benefit	Investment	Projected Ending Plan
_	Year	Plan Net Position	Contributions	Payments	Earnings at 7.25%	Net Position
		(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)
	2074	\$ 2,011,395	\$ 0	\$ 279,545	\$ 135,870	\$ 1,867,721
	2075	1,867,721	0	255,536	126,309	1,738,494
	2076	1,738,494	0	233,872	117,711	1,622,333
	2077	1,622,333	0	214,555	109,978	1,517,755
	2078	1,517,755	0	197,528	103,002	1,423,229
	2079	1,423,229	0	182,685	96,678	1,337,222
	2080	1,337,222	0	169,860	90,899	1,258,261
	2081	1,258,261	0	158,839	85,567	1,184,989
	2082	1,184,989	0	149,391	80,591	1,116,188
	2083	1,116,188	0	141,272	75,892	1,050,809
	2084	1,050,809	0	134,240	71,403	987,971
	2085	987,971	0	128,069	67,067	926,969
	2086	926,969	0	122,552	62,840	867,257
	2087	867,257	0	117,502	58,691	808,447
	2088	808,447	0	112,750	54,597	750,294
	2089	750,294	0	108,153	50,544	692,685
	2090	692,685	0	103,583	46,530	635,633
	2091	635,633	0	98,933	42,560	579,260
	2092	579,260	0	94,112	38,644	523,793
	2093	523,793	0	89,046	34,804	469,550
	2094	469,550	0	83,693	31,062	416,919
	2095	416,919	0	78,033	27,447	366,333
	2096	366,333	0	72,072	23,992	318,253
	2097	318,253	0	65,858	20,728	273,123
	2098	273,123	0	59,464	17,684	231,343
	2099	231,343	0	52,989	14,885	193,240
	2100	193,240	0	46,558	12,352	159,034
	2101	159,034	0	40,290	10,095	128,839
	2102	128,839	0	34,307	8,119	102,651
	2103	102,651	0	28,720	6,419	80,350
	2104	80,350	0	23,610	4,984	61,725
	2105	61,725	0	19,039	3,797	46,482
	2106	46,482	0	15,043	2,834	34,273
	2107	34,273	0	11,630	2,071	24,714
	2108	24,714	0	8,786	1,479	17,406
	2109	17,406	0	6,478	1,031	11,960
	2110	11,960	0	4,654	701	8,007
	2111	8,007	0	3,255	465	5,216
	2112	5,216	0	2,212	299	3,303
	2113	3,303	0	1,460	188	2,031
	2114	2,031	0	934	114	1,211
	2115	1,211	0	578	67	700
	2116	700	0	346	38	392
	2117	392	0	200	21	213
	2118	213	0	112	11	112
	2119	112	0	60	6	58
	2120	58	0	31	3	30
	2121	30	0	16	2	16
	2122	16	0	8	1	9
	2123	9	0	4	1	6





## Single Discount Rate Developmer Present Values of Projected Benefits

FOR3S00-0001BJ8

Year	Begin	rojected ning Plan Net Position	Pi	rojected Benefit Payments	Funded Portion of Benefit Payments	U	Infunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)		(b)		(c)	(d)		(e)	(f)=(d)*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=(c)/(1+sdr)^(a5)
2024	\$	7,555,527	\$	329,754	\$ 329,754	\$	0	\$ 318,413	\$ 0	\$ 318,413
2025		7,902,197		373,653	373,653		0	336,413	0	336,413
2026		8,220,980		414,286	414,286		0	347,782	0	347,782
2027		8,518,857		442,703	442,703		0	346,515	0	346,515
2028		8,809,562		476,842	476,842		0	348,006	0	348,006
2029		9,072,195		514,871	514,871		0	350,359	0	350,359
2030		9,309,865		547,344	547,344		0	347,279	0	347,279
2031		9,526,923		584,436	584,436		0	345,746	0	345,746
2032		9,717,731		619,798	619,798		0	341,880	0	341,880
2033		9,882,330		652,277	652,277		0	335,473	0	335,473
2034		10,021,520		685,928	685,928		0	328,933	0	328,933
2035		10,132,161		719,019	719,019		0	321,493	0	321,493
2036		10,213,137		744,757	744,757		0	310,491	0	310,491
2037		10,270,642		771,402	771,402		0	299,859	0	299,859
2038		10,302,814		799,005	799,005		0	289,594	0	289,594
2039		10,306,777		825,127	825,127		0	278,845	0	278,845
2040		10,281,879		849,634	849,634		0	267,717	0	267,717
2041		10,227,958		871,704	871,704		0	256,104	0	256,104
2042		10,145,591		888,739	888,739		0	243,458	0	243,458
2043		10,037,869		898,635	898,635		0	229,528	0	229,528
2044		9,856,092		904,940	904,940		0	215,514	0	215,514
2045		9,652,381		907,912	907,912		0	201,605	0	201,605
2046		9,428,886		909,635	909,635		0	188,334	0	188,334
2047		9,185,683		911,542	911,542		0	175,971	0	175,971
2048		8,921,025		907,061	907,061		0	163,269	0	163,269
2049		8,640,063		897,652	897,652		0	150,653	0	150,653
2050		8,347,164		884,903	884,903		0	138,474	0	138,474
2051		8,045,245		872,461	872,461		0	127,298	0	127,298
2052		7,733,310		856,248	856,248		0	116,487	0	116,487
2053		7,414,640		835,361	835,361		0	105,963	0	105,963
2054		7,093,940		813,885	813,885		0	96,260	0	96,260
2055		6,771,878		790,443	790,443		0	87,168	0	87,168
2056		6,450,482		763,944	763,944		0	78,551	0	78,551
2057		6,132,969		734,875	734,875		0	70,454	0	70,454
2058		5,822,353		704,243	704,243		0	62,953	0	62,953
2059		5,520,803		672,794	672,794		0	56,076	0	56,076
2060		5,229,795		640,531	640,531		0	49,778	0	49,778
2061		4,950,944		607,432	607,432		0	44,015	0	44,015
2062		4,686,003		573,782	573,782		0	38,766	0	38,766
2063		4,436,548		539,320	539,320		0	33,975	0	33,975
2064		4,204,551		522,753	522,753		0	30,705	0	30,705
2065		3,972,178		520,004	520,004		0	28,479	0	28,479
2066		3,724,383		498,844	498,844		0	25,473	0	25,473
2067		3,479,547		485,208	485,208		0	23,473	0	23,102
2068		3,230,306		465,581	465,581		0	20,669	0	20,669
2069		2,982,585		431,150	431,150		0	17,846	0	17,846
2070		2,752,378		397,354	397,354		0	15,336	0	15,336
2071		2,540,433		364,858	364,858		0	13,130	0	13,130
2071		2,346,766		334,250	334,250		0	11,215	0	11,215
2072		2,346,766		305,844	305,844		0		0	9,568
20/3		2,1/0,/32		303,644	303,644		U	9,568	U	9,508



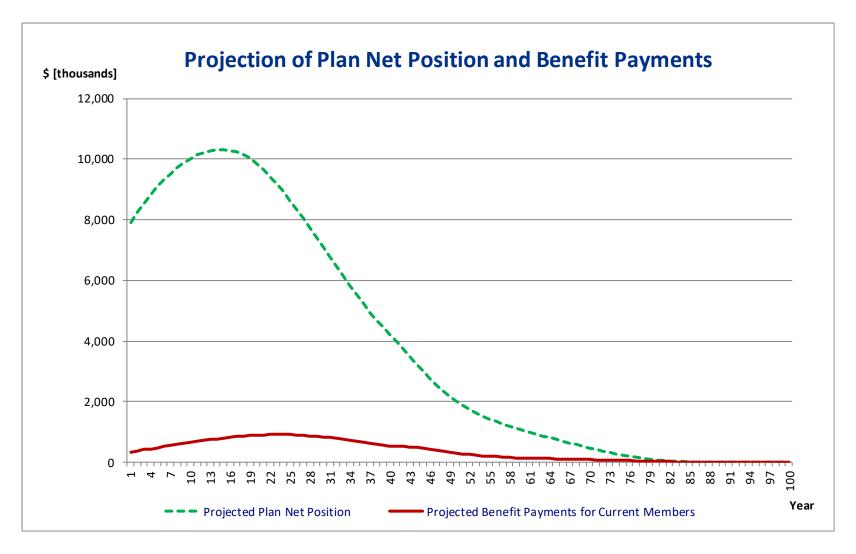


## Single Discount Rate Developmer FOR3 Present Values of Projected Benefits (Concluded)

FOR3S00-0001BJ8

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=(c)/(1+s dr)^(a5)
2074	\$ 2,011,395		\$ 279,545		\$ 8,154	\$ 0	\$ 8,154
2075	1,867,721	255,536	255,536	0	6,950	0	6,950
2076	1,738,494	233,872	233,872	0	5,931	0	5,931
2077	1,622,333	214,555	214,555	0	5,073	0	5,073
2078	1,517,755	197,528	197,528	0	4,355	0	4,355
2079	1,423,229	182,685	182,685	0	3,755	0	3,755
2080	1,337,222	169,860	169,860	0	3,256	0	3,256
2081	1,258,261	158,839	158,839	0	2,839	0	2,839
2082	1,184,989	149,391	149,391	0	2,489	0	2,489
2083	1,116,188	141,272	141,272	0	2,195	0	2,195
2084	1,050,809	134,240	134,240	0	1,945	0	1,945
2085	987,971	128,069	128,069	0	1,730	0	1,730
2086	926,969	122,552	122,552	0	1,543	0	1,543
2087	867,257	117,502	117,502	0	1,380	0	1,380
2088	808,447	112,750	112,750	0	1,234	0	1,234
2089	750,294	108,153	108,153	0	1,104	0	1,104
2090	692,685	103,583	103,583	0	986	0	986
2091	635,633	98,933	98,933	0	878	0	878
2092	579,260	94,112	94,112	0	779	0	779
2093	523,793	89,046	89,046	0	687	0	687
2094	469,550	83,693	83,693	0	602	0	602
2095	416,919	78,033	78,033	0	523	0	523
2096	366,333	72,072	72,072	0	451	0	451
2097	318,253	65,858	65,858	0	384	0	384
2098	273,123	59,464	59,464	0	323	0	323
2099	231,343	52,989	52,989	0	269	0	269
2100	193,240	46,558	46,558	0	220	0	220
2101	159,034	40,290	40,290	0	178	0	178
2102	128,839	34,307	34,307	0	141	0	141
2103	102,651	28,720	28,720	0	110	0	110
2104	80,350	23,610	23,610	0	84	0	84
2105	61,725	19,039	19,039	0	63	0	63
2106	46,482	15,043	15,043	0	47	0	47
2107	34,273	11,630	11,630	0	34	0	34
2108	24,714	8,786	8,786	0	24	0	24
2109	17,406	6,478	6,478	0	16	0	16
2110	11,960	4,654	4,654	0	11	0	11
2111	8,007	3,255	3,255	0	7	0	7
2112	5,216	2,212	2,212	0	5	0	5
2113	3,303	1,460	1,460	0	3	0	3
2114	2,031	934	934	0	2	0	2
2115	1,211	578	578	0	1	0	1
2116	700	346	346	0	1	0	1
2117	392	200	200	0	0	0	0
2118	213	112	112	0	0	0	0
2119	112	60	60	0	0	0	0
2120	58	31	31	0	0	0	0
2121	30	16	16	0	0	0	0
2122	16	8	8	0	0	0	0
2123	9	4	4	0 <b>Totals</b>	\$ 8,701,730	0	0









FOR3S00-0001BJ8

### **SECTION D**

**GLOSSARY OF TERMS** 

### **Glossary of Terms**



FOR3S00-0001BJ8

### 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)**



FOR3S00-0001BJ8

#### **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 age(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)**



FOR3S00-0001BJ8

**GASB** 

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

**Fiduciary Net Position** 

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

Long-Term Expected Rate of Return

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

Money-Weighted Rate of Return

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

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

**Municipal Bond Rate** 

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

**Net Pension Liability (NPL)** 

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

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

**Normal Cost** 

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

Other Postemployment Benefits (OPEB)

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

Real Rate of Return

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

Service Cost

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







FOR3S00-0001BJ8

#### **Total Pension Expense**

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

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

**Total Pension Liability (TPL)** 

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

Unfunded Actuarial Accrued Liability (UAAL)

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

Valuation Assets

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

