

Arlington Hgts SD 25 Regular

GASB Statement No. 68 Employer Reporting
Accounting Schedules
December 31, 2021



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March 24, 2022

Arlington Hgts SD 25
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 Arlington Hgts SD 25 only in its entirety and only with the permission of Arlington Hgts SD 25. 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, 2021 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 Statement No. 68 information related to Arlington Hgts SD 25. 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 IMRF.

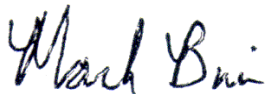
This report was prepared during the recent and still-developing COVID-19 pandemic, which is likely to influence demographic, economic, and health care experience, at least in the short term. Results in this report are developed based on available data without adjustment. We will continue to monitor these developments and their impact on the Plan. Actual experience will be reflected in each subsequent report, as experience emerges.

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 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 contained herein.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



Mark Buis, FSA, EA, FCA, MAAA



Francois Pieterse, ASA, FCA, MAAA

MB/FP:bd



SECTION A

EXECUTIVE SUMMARY

Executive Summary as of December 31, 2021

Actuarial Valuation Date	December 31, 2021
Measurement Date of the Net Pension Liability	December 31, 2021
Fiscal Year End	June 30, 2022

Membership

Number of	
- Retirees and Beneficiaries	328
- Inactive, Non-Retired Members	330
- Active Members	274
- Total	932
Covered Valuation Payroll ⁽¹⁾	\$ 8,784,307

Net Pension Liability

Total Pension Liability/(Asset)	\$ 54,661,898
Plan Fiduciary Net Position	59,077,578
Net Pension Liability/(Asset)	\$ (4,415,680)
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	108.08%
Net Pension Liability as a Percentage of Covered Valuation Payroll	(50.27)%

Development of the Single Discount Rate as of December 31, 2021

Long-Term Expected Rate of Investment Return	7.25%
Long-Term Municipal Bond Rate ⁽²⁾	1.84%
Last year ending December 31 in the 2022 to 2121 projection period for which projected benefit payments are fully funded	2121
Resulting Single Discount Rate based on the above development	7.25%
Single Discount Rate calculated using December 31, 2020 Measurement Date	7.25%

Total Pension Expense/(Income) \$ (1,072,588)

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 659,553	\$ 0
Changes in assumptions	0	104,159
Net difference between projected and actual earnings on pension plan investments	1,133,814	8,086,106
Total	\$ 1,793,367	\$ 8,190,265

⁽¹⁾ Does not necessarily represent Covered Employee Payroll as defined in GASB Statement No. 68.

⁽²⁾ Source: 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 31, 2021. 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.

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, 2021.

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 to B-5 of the December 31, 2021 Annual Actuarial Valuation report dated March 11, 2022);
- 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, 2021 Annual Actuarial Valuation report dated March 11, 2022, 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 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.

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 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, 2021 and a measurement date of December 31, 2021.

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 1.84% (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%.

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 7.25% 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 2121 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

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, 2021

A. Expense/(Income)

1. Service Cost	\$	793,584
2. Interest on the Total Pension Liability		3,733,309
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		(402,211)
5. Projected Earnings on Plan Investments (made negative for addition here)		(3,699,782)
6. Other Changes in Plan Fiduciary Net Position		54,731
7. Recognition of Outflow (Inflow) of Resources due to Liabilities		774,620
8. Recognition of Outflow (Inflow) of Resources due to Assets		(2,326,839)
9. Total Pension Expense/(Income)	\$	(1,072,588)

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 2,214 years. Additionally, the total plan membership (active employees and inactive employees) was 889. 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 2.4899 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 Arising from Current Reporting Period Calendar Year Ended December 31, 2021

A. Outflows (Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total Pension Liability (gains) or losses	\$	613,624
2. Assumption Changes (gains) or losses	\$	0
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}		2.4899
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	\$	246,445
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes	\$	0
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	\$	246,445
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	\$	367,179
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes	\$	0
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	\$	367,179

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$	(5,204,874)
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	\$	(1,040,975)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$	(4,163,899)

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, 2021

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

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Due to Liabilities	\$ 940,768	\$ 166,148	\$ 774,620
2. Due to Assets	1,133,815	3,460,654	(2,326,839)
3. Total	\$ 2,074,583	\$ 3,626,802	\$ (1,552,219)

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

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 940,768	\$ 0	\$ 940,768
2. Assumption changes	0	166,148	\$ (166,148)
3. Net difference between projected and actual earnings on pension plan investments	1,133,815	3,460,654	(2,326,839)
4. Total	\$ 2,074,583	\$ 3,626,802	\$ (1,552,219)

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

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows of Resources
1. Differences between expected and actual experience	\$ 659,553	\$ 0	\$ 659,553
2. Assumption changes	0	104,159	\$ (104,159)
3. Net difference between projected and actual earnings on pension plan investments	1,133,814	8,086,106	(6,952,292)
4. Total	\$ 1,793,367	\$ 8,190,265	\$ (6,396,898)

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

Year Ending December 31	Net Deferred Outflows of Resources
2022	\$ (1,096,901)
2023	(2,544,639)
2024	(1,714,384)
2025	(1,040,974)
2026	0
Thereafter	0
Total	\$ (6,396,898)

Recognition of Deferred Outflows and Inflows of Resources Reporting Date - December 31, 2021

Year Established	Initial Amount	Initial Recognition Period	Current Year Recognition	Remaining Recognition	Remaining Recognition Period
Deferred Outflow (Inflow) due to Differences Between Expected and Actual Experience on Liabilities					
2014	\$ 347,151	3.0847	\$ 0	\$ 0	0.0000
2015	265,732	3.0759	0	0	0.0000
2016	(35,527)	3.0673	0	0	0.0000
2017	711,424	3.0127	0	0	0.0000
2018	193,364	2.6732	0	0	0.0000
2019	840,609	2.7441	227,943	0	0.0000
2020	1,225,134	2.6269	466,380	292,374	0.6269
2021	613,624	2.4899	246,445	367,179	1.4899
Total			\$ 940,768	\$ 659,553	
Deferred Outflow (Inflow) due to Assumption Changes					
2014	\$ 1,806,494	3.0847	\$ 0	\$ 0	0.0000
2015	94,426	3.0759	0	0	0.0000
2016	(194,112)	3.0673	0	0	0.0000
2017	(1,388,230)	3.0127	0	0	0.0000
2018	1,190,789	2.6732	0	0	0.0000
2019	0	2.7441	0	0	0.0000
2020	(436,455)	2.6269	(166,148)	(104,159)	0.6269
2021	0	2.4899	0	0	1.4899
Total			\$ (166,148)	\$ (104,159)	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2017	\$ (3,976,403)	5.0000	\$ (795,279)	\$ 0	0.0000
2018	5,669,074	5.0000	1,133,815	1,133,814	1.0000
2019	(4,754,943)	5.0000	(950,989)	(1,901,976)	2.0000
2020	(3,367,053)	5.0000	(673,411)	(2,020,231)	3.0000
2021	(5,204,874)	5.0000	(1,040,975)	(4,163,899)	4.0000
Total			\$ (2,326,839)	\$ (6,952,292)	

Schedule of Changes in Net Pension Liability and Related Ratios Current Period Calendar Year Ended December 31, 2021

A. Total pension liability	
1. Service Cost	\$ 793,584
2. Interest on the Total Pension Liability	3,733,309
3. Changes of benefit terms	0
4. Difference between expected and actual experience of the Total Pension Liability	613,624
5. Changes of assumptions	0
6. Benefit payments, including refunds of employee contributions	(3,151,488)
7. Net change in total pension liability	\$ 1,989,029
8. Total pension liability – beginning	52,672,869
9. Total pension liability – ending	<u><u>\$ 54,661,898</u></u>
B. Plan fiduciary net position	
1. Contributions – employer	\$ 1,086,889
2. Contributions – employee	402,211
3. Net investment income	8,904,656
4. Benefit payments, including refunds of employee contributions	(3,151,488)
5. Other (Net Transfer)	(54,731)
6. Net change in plan fiduciary net position	\$ 7,187,537
7. Plan fiduciary net position – beginning	51,890,041
8. Plan fiduciary net position – ending	<u><u>\$ 59,077,578</u></u>
C. Net pension liability/(asset)	<u><u>\$ (4,415,680)</u></u>
D. Plan fiduciary net position as a percentage of the total pension liability	108.08%
E. Covered Valuation payroll⁽¹⁾	\$ 8,784,307
F. Net pension liability as a percentage of covered valuation payroll	(50.27)%

⁽¹⁾ 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

	1% Decrease 6.25%	Current Single Discount Rate Assumption 7.25%	1% Increase 8.25%
Total Pension Liability	\$ 60,311,521	\$ 54,661,898	\$ 50,052,266
Plan Fiduciary Net Position	59,077,578	59,077,578	59,077,578
Net Pension Liability/(Asset)	\$ 1,233,943	\$ (4,415,680)	\$ (9,025,312)



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,	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Total Pension Liability										
Service Cost	\$ 793,584	\$ 837,511	\$ 826,609	\$ 777,672	\$ 848,202	\$ 866,048	\$ 869,695	\$ 915,435		
Interest on the Total Pension Liability	3,733,309	3,577,522	3,418,240	3,324,644	3,251,677	3,120,202	2,969,300	2,690,242		
Benefit Changes	0	0	0	0	0	0	0	0		
Difference between Expected and Actual Experience	613,624	1,225,134	840,609	193,364	711,424	(35,527)	265,732	347,151		
Assumption Changes	0	(436,455)	0	1,190,789	(1,388,230)	(194,112)	94,426	1,806,494		
Benefit Payments and Refunds	(3,151,488)	(2,914,449)	(2,873,366)	(2,509,401)	(2,320,450)	(2,115,056)	(2,021,132)	(1,798,506)		
Net Change in Total Pension Liability	1,989,029	2,289,263	2,212,092	2,977,068	1,102,623	1,641,555	2,178,021	3,960,816		
Total Pension Liability - Beginning	52,672,869	50,383,606	48,171,514	45,194,446	44,091,823	42,450,268	40,272,247	36,311,431		
Total Pension Liability - Ending (a)	\$ 54,661,898	\$ 52,672,869	\$ 50,383,606	\$ 48,171,514	\$ 45,194,446	\$ 44,091,823	\$ 42,450,268	\$ 40,272,247		
Plan Fiduciary Net Position										
Employer Contributions	\$ 1,086,889	\$ 973,463	\$ 813,477	\$ 912,384	\$ 919,875	\$ 943,309	\$ 896,167	\$ 916,975		
Employee Contributions	402,211	365,677	367,632	351,229	365,413	348,069	348,858	346,070		
Pension Plan Net Investment Income	8,904,656	6,688,762	7,616,869	(2,448,992)	6,780,945	2,489,530	180,413	2,091,460		
Benefit Payments and Refunds	(3,151,488)	(2,914,449)	(2,873,366)	(2,509,401)	(2,320,450)	(2,115,056)	(2,021,132)	(1,798,506)		
Other	(54,731)	344,528	372,955	543,908	(743,786)	384,179	358,469	360,607		
Net Change in Plan Fiduciary Net Position	7,187,537	5,457,981	6,297,567	(3,150,872)	5,001,997	2,050,031	(237,225)	1,916,606		
Plan Fiduciary Net Position - Beginning	51,890,041	46,432,060	40,134,493	43,285,365	38,283,368	36,233,337	36,470,562	34,553,956		
Plan Fiduciary Net Position - Ending (b)	\$ 59,077,578	\$ 51,890,041	\$ 46,432,060	\$ 40,134,493	\$ 43,285,365	\$ 38,283,368	\$ 36,233,337	\$ 36,470,562		
Net Pension Liability/(Asset) - Ending (a) - (b)	(4,415,680)	782,828	3,951,546	8,037,021	1,909,081	5,808,455	6,216,931	3,801,685		
Plan Fiduciary Net Position as a Percentage										
of Total Pension Liability	108.08%	98.51 %	92.16 %	83.32 %	95.78 %	86.83%	85.35 %	90.56 %		
Covered Valuation Payroll⁽¹⁾	\$ 8,784,307	\$ 8,117,039	\$ 7,992,929	\$ 7,804,690	\$ 7,779,557	\$ 7,734,843	\$ 7,633,456	\$ 7,545,460		
Net Pension Liability as a Percentage										
of Covered Valuation Payroll	(50.27)%	9.64 %	49.44 %	102.98 %	24.54 %	75.09%	81.44 %	50.38 %		

⁽¹⁾ Does not necessarily represent Covered Employee Payroll as defined in GASB Statement No. 68.



Multiyear Schedule of Contributions

Last 10 Calendar Years

Calendar Year Ending December 31,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Valuation Payroll	Actual Contribution as a % of	
					Covered	Valuation Payroll
2014	\$ 909,982	\$ 916,975	\$ (6,993)	\$ 7,545,460		12.15%
2015	896,168	896,167	1	7,633,456		11.74%
2016	931,275	943,309	(12,034)	7,734,843		12.20%
2017	908,652	919,875	(11,223)	7,779,557		11.82%
2018	898,320	912,384	(14,064)	7,804,690		11.69%
2019	805,687	813,477	(7,790)	7,992,929		10.18%
2020	973,233	973,463	(230)	8,117,039		11.99%
2021	1,053,238 *	1,086,889	(33,651)	8,784,307		12.37%

* Estimated based on contribution rate of 11.99% and covered valuation payroll of \$8,784,307.

This number should be verified by the auditor.

Notes to Schedule of Contributions

Summary of Actuarial Methods and Assumptions Used in the Calculation of the 2021 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 calendar year in which contributions are reported.

Methods and Assumptions Used to Determine 2021 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): 22-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 17 years for most employers (five employers were financed over 18 years; one employer was financed over 19 years; two employers were financed over 20 years; three employers were financed over 26 years; four employers were financed over 27 years and one employer was financed over 28 years).
Asset Valuation Method	5-Year smoothed market; 20% corridor
Wage growth	3.25%
Price Inflation	2.50%
Salary Increases	3.35% to 14.25% 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 2017 valuation pursuant to an experience study of the period 2014-2016.
Mortality	For non-disabled retirees, IMRF specific mortality rates were used with fully generational projection scale MP-2017 (base year 2015). The IMRF specific rates were developed from the RP-2014 Blue Collar Healthy Annuitant Mortality Table with adjustments to match current IMRF experience. For disabled retirees, IMRF specific mortality rates were 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 adjustments that were applied for non-disabled lives. For active members, IMRF specific mortality rates were 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.

* Based on Valuation Assumptions used in the December 31, 2019 actuarial valuation.



Development of Market Value of Assets

Market Value of Assets as of December 31, 2021

1. Employee Contribution Reserve (MDF Assets from IMRF)	\$	7,258,991
2. Employer Contribution Reserve (EAF assets from IMRF)		19,470,471
3. Annuitant Reserve		32,423,081
4. Miscellaneous Adjustment*		<u>(74,965)</u>
5. Net Market Value	\$	59,077,578

* Includes an adjustment factor of (0.0012673150) on Items 1 through 3 to ensure that Market Value of Assets for all employers balance 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	\$	1,053,160
b.) Accelerated payments and Reserve Payments		<u>33,729</u>
Total Employer Contributions (a+b)	\$	1,086,889

2. Member

a.) Wage Reporting	\$	395,265
b.) Member Payments (i.e., ERI, Pension Payments)		<u>6,946</u>
Sub-total (Amount used for valuation on Schedule of Changes Page 11)	\$	402,211

c.) Voluntary Additional Plan	\$	<u>127,373</u>
Total Member Contributions (a+b+c)	\$	529,584

Total Employer and Member Contributions (1+2)	\$	1,616,473
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SECTION C

CALCULATION OF THE SINGLE DISCOUNT RATE

Calculation of the Single Discount Rate

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

The *Single Discount Rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating 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 1.84%; and the resulting single discount rate is 7.25%.

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 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 Development Projection of Contributions

Year	Payroll for Current Employees	Contributions from Current Employees	Normal Cost Contributions	UAL Contributions	Total Contributions
2021	\$ 8,784,307				
2022	8,631,543	\$ 388,419	\$ 455,514	\$ 226,219	\$ 1,070,152
2023	7,875,740	354,408	410,933	43,028	808,369
2024	7,239,182	325,763	369,807	(165,007)	530,563
2025	6,695,146	301,282	340,685	(340,685)	301,281
2026	6,226,287	280,183	314,971	(314,971)	280,182
2027	5,806,987	261,314	292,605	(292,605)	261,315
2028	5,433,065	244,488	272,144	(272,144)	244,488
2029	5,097,799	229,401	253,325	(253,325)	229,401
2030	4,790,613	215,578	236,156	(236,156)	215,577
2031	4,505,421	202,744	220,754	(220,754)	202,744
2032	4,222,983	190,034	205,237	(205,237)	190,034
2033	3,945,103	177,530	190,556	(190,556)	177,530
2034	3,679,147	165,562	176,247	(176,247)	165,562
2035	3,401,518	153,068	161,596	(161,596)	153,068
2036	3,111,007	139,995	146,558	(146,558)	139,995
2037	2,835,660	127,605	132,460	(132,460)	127,604
2038	2,580,910	116,141	119,277	(119,277)	116,141
2039	2,350,847	105,788	107,477	(107,477)	105,788
2040	2,132,941	95,982	96,455	(96,455)	95,982
2041	1,928,662	86,790	86,259	(86,259)	86,790
2042	1,749,069	78,708	77,358	(77,358)	78,708
2043	1,590,670	71,580	69,562	0	141,142
2044	1,450,752	65,284	62,722	0	128,006
2045	1,325,793	59,661	56,529	0	116,190
2046	1,212,540	54,564	50,978	0	105,542
2047	1,103,711	49,667	45,635	0	95,301
2048	1,008,368	45,377	40,991	0	86,368
2049	915,378	41,192	36,665	0	77,857
2050	797,455	35,886	31,625	0	67,510
2051	697,816	31,402	27,465	0	58,867
2052	627,598	28,242	24,515	0	52,757
2053	554,455	24,950	21,437	0	46,388
2054	474,385	21,347	18,200	0	39,547
2055	372,799	16,776	14,229	0	31,004
2056	294,403	13,248	11,207	0	24,455
2057	247,095	11,119	9,382	0	20,501
2058	176,752	7,954	6,676	0	14,630
2059	110,472	4,971	4,172	0	9,144
2060	66,989	3,014	2,543	0	5,558
2061	36,885	1,660	1,408	0	3,068
2062	16,875	759	649	0	1,408
2063	5,088	229	200	0	429
2064	1,879	85	80	0	165
2065	963	43	45	0	88
2066	564	25	31	0	56
2067	344	15	20	0	36
2068	260	12	16	0	28
2069	116	5	6	0	12
2070	0	0	0	0	0
2071	0	0	0	0	0

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



Single Discount Rate Development Projection of Contributions (Concluded)

Year	Payroll for Current Employees	Contributions from Current Employees	Normal Cost Contributions	UAL Contributions	Total Contributions
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	0	0	0	0	0
2095	0	0	0	0	0
2096	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

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



Single Discount Rate Development Projection of Plan Fiduciary Net Position

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Investment Earnings at 7.25%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)
2022	\$ 59,077,578	\$ 1,070,152	\$ 3,431,979	\$ 4,199,006	\$ 60,914,758
2023	60,914,758	808,369	3,605,913	4,316,683	62,433,896
2024	62,433,896	530,563	3,759,785	4,411,446	63,616,121
2025	63,616,121	301,282	3,943,576	4,482,446	64,456,272
2026	64,456,272	280,183	4,086,958	4,537,498	65,186,995
2027	65,186,995	261,314	4,208,047	4,585,491	65,825,754
2028	65,825,754	244,488	4,324,226	4,627,064	66,373,080
2029	66,373,080	229,401	4,436,710	4,662,202	66,827,973
2030	66,827,973	215,578	4,547,600	4,690,740	67,186,690
2031	67,186,690	202,744	4,647,132	4,712,745	67,455,047
2032	67,455,047	190,034	4,740,413	4,728,426	67,633,093
2033	67,633,093	177,530	4,829,370	4,737,720	67,718,973
2034	67,718,973	165,562	4,917,520	4,740,381	67,707,396
2035	67,707,396	153,068	5,011,786	4,735,739	67,584,418
2036	67,584,418	139,995	5,095,891	4,723,362	67,351,884
2037	67,351,884	127,605	5,162,253	4,703,699	67,020,935
2038	67,020,935	116,141	5,210,113	4,677,592	66,604,554
2039	66,604,554	105,788	5,240,748	4,645,945	66,115,539
2040	66,115,539	95,982	5,257,439	4,609,547	65,563,630
2041	65,563,630	86,790	5,252,713	4,569,375	64,967,082
2042	64,967,082	78,708	5,225,467	4,526,808	64,347,131
2043	64,347,131	141,142	5,194,654	4,485,182	63,778,801
2044	63,778,801	128,006	5,143,130	4,445,346	63,209,023
2045	63,209,023	116,190	5,062,989	4,406,470	62,668,694
2046	62,668,694	105,542	4,974,053	4,370,085	62,170,268
2047	62,170,268	95,301	4,876,818	4,337,047	61,725,798
2048	61,725,798	86,368	4,760,246	4,308,657	61,360,577
2049	61,360,577	77,857	4,662,729	4,285,348	61,061,054
2050	61,061,054	67,510	4,568,767	4,266,611	60,826,407
2051	60,826,407	58,867	4,431,706	4,254,173	60,707,742
2052	60,707,742	52,757	4,302,007	4,249,971	60,708,462
2053	60,708,462	46,388	4,178,244	4,254,204	60,830,811
2054	60,830,811	39,547	4,060,426	4,267,027	61,076,959
2055	61,076,959	31,004	3,962,683	4,288,050	61,433,330
2056	61,433,330	24,455	3,817,663	4,318,818	61,958,940
2057	61,958,940	20,501	3,679,977	4,361,688	62,661,153
2058	62,661,153	14,630	3,585,712	4,415,747	63,505,817
2059	63,505,817	9,144	3,476,332	4,480,685	64,519,314
2060	64,519,314	5,558	3,347,055	4,558,640	65,736,457
2061	65,736,457	3,068	3,207,159	4,651,777	67,184,143
2062	67,184,143	1,408	3,064,190	4,761,767	68,883,129
2063	68,883,129	429	2,913,365	4,890,280	70,860,474
2064	70,860,474	165	2,756,552	5,039,214	73,143,300
2065	73,143,300	88	2,602,948	5,210,186	75,750,626
2066	75,750,626	56	2,453,598	5,404,536	78,701,619
2067	78,701,619	36	2,308,637	5,623,645	82,016,663
2068	82,016,663	28	2,168,409	5,868,979	85,717,260
2069	85,717,260	12	2,033,369	6,142,082	89,825,985
2070	89,825,985	0	1,903,480	6,444,590	94,367,095
2071	94,367,095	0	1,779,025	6,778,253	99,366,323

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



Single Discount Rate Development

Projection of Plan Fiduciary Net Position (Concluded)

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Investment Earnings at 7.25%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)
2072	\$ 99,366,323	\$ 0	\$ 1,660,207	\$ 7,144,929	\$ 104,851,045
2073	104,851,045	0	1,547,039	7,546,602	110,850,608
2074	110,850,608	0	1,439,439	7,985,402	117,396,572
2075	117,396,572	0	1,337,279	8,463,623	124,522,916
2076	124,522,916	0	1,240,363	8,983,735	132,266,289
2077	132,266,289	0	1,148,428	9,548,404	140,666,265
2078	140,666,265	0	1,061,193	10,160,509	149,765,581
2079	149,765,581	0	978,345	10,823,160	159,610,397
2080	159,610,397	0	899,558	11,539,715	170,250,554
2081	170,250,554	0	824,547	12,313,798	181,739,805
2082	181,739,805	0	753,056	13,149,315	194,136,065
2083	194,136,065	0	684,879	14,050,472	207,501,658
2084	207,501,658	0	619,910	15,021,792	221,903,540
2085	221,903,540	0	558,075	16,068,130	237,413,596
2086	237,413,596	0	499,340	17,194,701	254,108,957
2087	254,108,957	0	443,737	18,407,095	272,072,315
2088	272,072,315	0	391,333	19,711,305	291,392,288
2089	291,392,288	0	342,212	21,113,753	312,163,828
2090	312,163,828	0	296,484	22,621,318	334,488,662
2091	334,488,662	0	254,255	24,241,372	358,475,779
2092	358,475,779	0	215,628	25,981,814	384,241,965
2093	384,241,965	0	180,698	27,851,107	411,912,374
2094	411,912,374	0	149,498	29,858,323	441,621,199
2095	441,621,199	0	121,994	32,013,192	473,512,396
2096	473,512,396	0	98,091	34,326,155	507,740,460
2097	507,740,460	0	77,635	36,808,418	544,471,243
2098	544,471,243	0	60,414	39,472,013	583,882,843
2099	583,882,843	0	46,169	42,329,862	626,166,536
2100	626,166,536	0	34,606	45,395,841	671,527,771
2101	671,527,771	0	25,408	48,684,859	720,187,222
2102	720,187,222	0	18,250	52,212,924	772,381,895
2103	772,381,895	0	12,809	55,997,231	828,366,317
2104	828,366,317	0	8,774	60,056,245	888,413,788
2105	888,413,788	0	5,859	64,409,791	952,817,720
2106	952,817,720	0	3,810	69,079,149	1,021,893,059
2107	1,021,893,059	0	2,410	74,087,161	1,095,977,810
2108	1,095,977,810	0	1,481	79,458,338	1,175,434,668
2109	1,175,434,668	0	884	85,218,982	1,260,652,766
2110	1,260,652,766	0	512	91,397,307	1,352,049,561
2111	1,352,049,561	0	287	98,023,583	1,450,072,857
2112	1,450,072,857	0	157	105,130,277	1,555,202,977
2113	1,555,202,977	0	83	112,752,213	1,667,955,107
2114	1,667,955,107	0	43	120,926,744	1,788,881,808
2115	1,788,881,808	0	21	129,693,930	1,918,575,717
2116	1,918,575,717	0	10	139,096,739	2,057,672,445
2117	2,057,672,445	0	5	149,181,252	2,206,853,693
2118	2,206,853,693	0	2	159,996,893	2,366,850,583
2119	2,366,850,583	0	1	171,596,667	2,538,447,249
2120	2,538,447,249	0	0	184,037,426	2,722,484,674
2121	2,722,484,674	0	0	197,380,139	2,919,864,813

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



Single Discount Rate Development

Present Values of Projected Benefits

Year	Projected		Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of	Present Value of	Present Value of
	Beginning Plan Net Position	Projected Benefit Payments			Funded Benefit Payments using Expected Return Rate (v)	Unfunded Benefit Payments using Municipal Bond Rate (vf)	Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	$(f)=(d)*v^{(a)-.5}$	$(g)=(e)*vf^{(a)-.5}$	$(h)=(c)/(1+sdr)^{(a)-.5}$
2022	\$ 59,077,578	\$ 3,431,979	\$ 3,431,979	\$ 0	\$ 3,313,950	\$ 0	\$ 3,313,950
2023	60,914,758	3,605,913	3,605,913	0	3,246,529	0	3,246,529
2024	62,433,896	3,759,785	3,759,785	0	3,156,238	0	3,156,238
2025	63,616,121	3,943,576	3,943,576	0	3,086,737	0	3,086,737
2026	64,456,272	4,086,958	4,086,958	0	2,982,719	0	2,982,719
2027	65,186,995	4,208,047	4,208,047	0	2,863,488	0	2,863,488
2028	65,825,754	4,324,226	4,324,226	0	2,743,632	0	2,743,632
2029	66,373,080	4,436,710	4,436,710	0	2,624,710	0	2,624,710
2030	66,827,973	4,547,600	4,547,600	0	2,508,449	0	2,508,449
2031	67,186,690	4,647,132	4,647,132	0	2,390,070	0	2,390,070
2032	67,455,047	4,740,413	4,740,413	0	2,273,236	0	2,273,236
2033	67,633,093	4,829,370	4,829,370	0	2,159,343	0	2,159,343
2034	67,718,973	4,917,520	4,917,520	0	2,050,123	0	2,050,123
2035	67,707,396	5,011,786	5,011,786	0	1,948,179	0	1,948,179
2036	67,584,418	5,095,891	5,095,891	0	1,846,968	0	1,846,968
2037	67,351,884	5,162,253	5,162,253	0	1,744,541	0	1,744,541
2038	67,020,935	5,210,113	5,210,113	0	1,641,692	0	1,641,692
2039	66,604,554	5,240,748	5,240,748	0	1,539,716	0	1,539,716
2040	66,115,539	5,257,439	5,257,439	0	1,440,204	0	1,440,204
2041	65,563,630	5,252,713	5,252,713	0	1,341,641	0	1,341,641
2042	64,967,082	5,225,467	5,225,467	0	1,244,459	0	1,244,459
2043	64,347,131	5,194,654	5,194,654	0	1,153,492	0	1,153,492
2044	63,778,801	5,143,130	5,143,130	0	1,064,849	0	1,064,849
2045	63,209,023	5,062,989	5,062,989	0	977,396	0	977,396
2046	62,668,694	4,974,053	4,974,053	0	895,316	0	895,316
2047	62,170,268	4,876,818	4,876,818	0	818,475	0	818,475
2048	61,725,798	4,760,246	4,760,246	0	744,905	0	744,905
2049	61,360,577	4,662,729	4,662,729	0	680,322	0	680,322
2050	61,061,054	4,568,767	4,568,767	0	621,550	0	621,550
2051	60,826,407	4,431,706	4,431,706	0	562,148	0	562,148
2052	60,707,742	4,302,007	4,302,007	0	508,807	0	508,807
2053	60,708,462	4,178,244	4,178,244	0	460,764	0	460,764
2054	60,830,811	4,060,426	4,060,426	0	417,503	0	417,503
2055	61,076,959	3,962,683	3,962,683	0	379,909	0	379,909
2056	61,433,330	3,817,663	3,817,663	0	341,264	0	341,264
2057	61,958,940	3,679,977	3,679,977	0	306,719	0	306,719
2058	62,661,153	3,585,712	3,585,712	0	278,660	0	278,660
2059	63,505,817	3,476,332	3,476,332	0	251,897	0	251,897
2060	64,519,314	3,347,055	3,347,055	0	226,134	0	226,134
2061	65,736,457	3,207,159	3,207,159	0	202,035	0	202,035
2062	67,184,143	3,064,190	3,064,190	0	179,980	0	179,980
2063	68,883,129	2,913,365	2,913,365	0	159,554	0	159,554
2064	70,860,474	2,756,552	2,756,552	0	140,761	0	140,761
2065	73,143,300	2,602,948	2,602,948	0	123,932	0	123,932
2066	75,750,626	2,453,598	2,453,598	0	108,924	0	108,924
2067	78,701,619	2,308,637	2,308,637	0	95,561	0	95,561
2068	82,016,663	2,168,409	2,168,409	0	83,689	0	83,689
2069	85,717,260	2,033,369	2,033,369	0	73,172	0	73,172
2070	89,825,985	1,903,480	1,903,480	0	63,867	0	63,867
2071	94,367,095	1,779,025	1,779,025	0	55,656	0	55,656

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



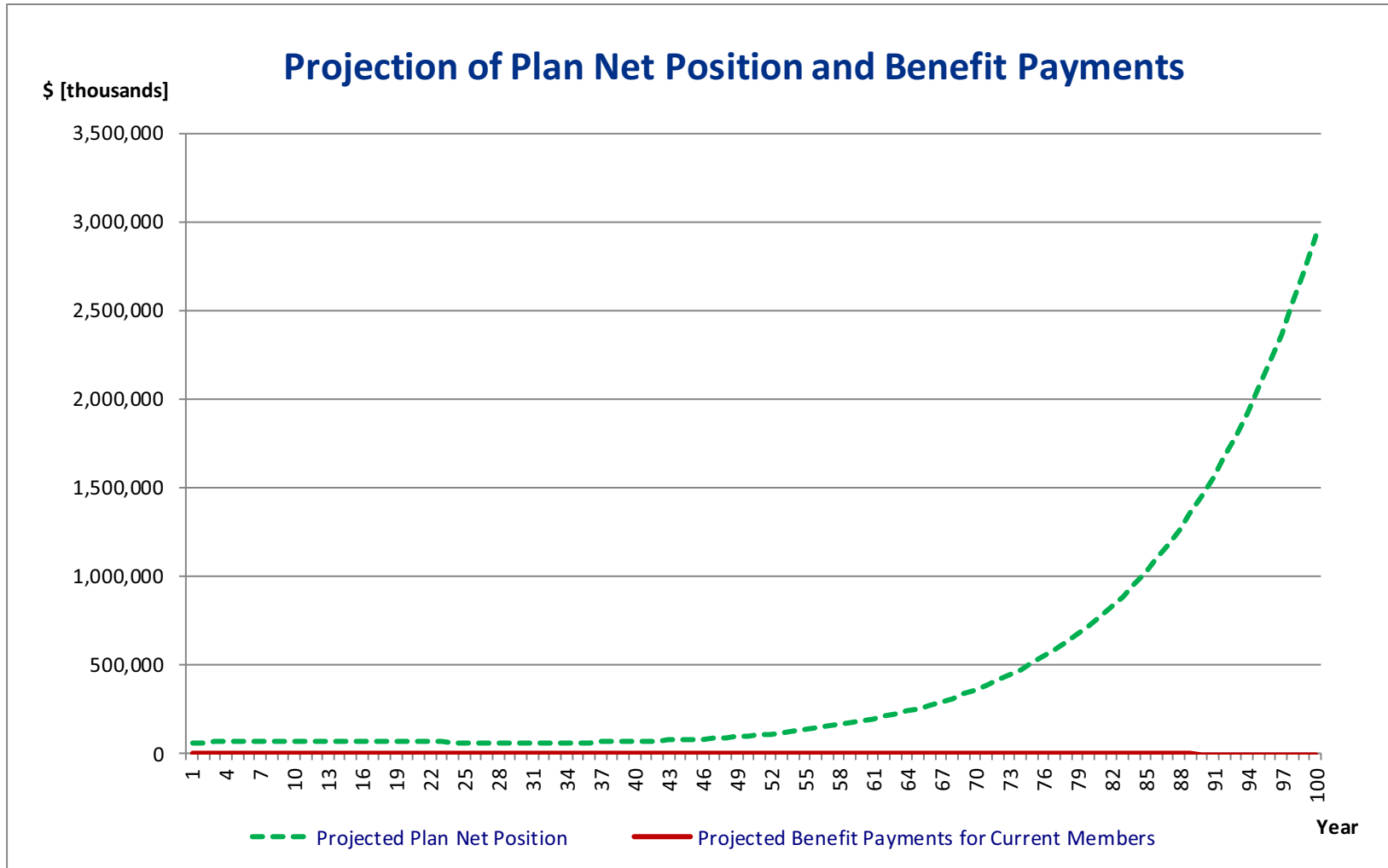
Single Discount Rate Development

Present Values of Projected Benefits (Concluded)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ^{(a)-.5}	(g)=(e)*vf ^{(a)-.5}	(h)=(c)/(1+sdr) ^{(a)-.5}
2072	\$ 99,366,323	\$ 1,660,207	\$ 1,660,207	\$ 0	\$ 48,428	\$ 0	\$ 48,428
2073	104,851,045	1,547,039	1,547,039	0	42,077	0	42,077
2074	110,850,608	1,439,439	1,439,439	0	36,504	0	36,504
2075	117,396,572	1,337,279	1,337,279	0	31,620	0	31,620
2076	124,522,916	1,240,363	1,240,363	0	27,346	0	27,346
2077	132,266,289	1,148,428	1,148,428	0	23,608	0	23,608
2078	140,666,265	1,061,193	1,061,193	0	20,340	0	20,340
2079	149,765,581	978,345	978,345	0	17,484	0	17,484
2080	159,610,397	899,558	899,558	0	14,989	0	14,989
2081	170,250,554	824,547	824,547	0	12,811	0	12,811
2082	181,739,805	753,056	753,056	0	10,909	0	10,909
2083	194,136,065	684,879	684,879	0	9,251	0	9,251
2084	207,501,658	619,910	619,910	0	7,807	0	7,807
2085	221,903,540	558,075	558,075	0	6,553	0	6,553
2086	237,413,596	499,340	499,340	0	5,467	0	5,467
2087	254,108,957	443,737	443,737	0	4,530	0	4,530
2088	272,072,315	391,333	391,333	0	3,725	0	3,725
2089	291,392,288	342,212	342,212	0	3,037	0	3,037
2090	312,163,828	296,484	296,484	0	2,454	0	2,454
2091	334,488,662	254,255	254,255	0	1,962	0	1,962
2092	358,475,779	215,628	215,628	0	1,551	0	1,551
2093	384,241,965	180,698	180,698	0	1,212	0	1,212
2094	411,912,374	149,498	149,498	0	935	0	935
2095	441,621,199	121,994	121,994	0	711	0	711
2096	473,512,396	98,091	98,091	0	533	0	533
2097	507,740,460	77,635	77,635	0	394	0	394
2098	544,471,243	60,414	60,414	0	286	0	286
2099	583,882,843	46,169	46,169	0	203	0	203
2100	626,166,536	34,606	34,606	0	142	0	142
2101	671,527,771	25,408	25,408	0	97	0	97
2102	720,187,222	18,250	18,250	0	65	0	65
2103	772,381,895	12,809	12,809	0	43	0	43
2104	828,366,317	8,774	8,774	0	27	0	27
2105	888,413,788	5,859	5,859	0	17	0	17
2106	952,817,720	3,810	3,810	0	10	0	10
2107	1,021,893,059	2,410	2,410	0	6	0	6
2108	1,095,977,810	1,481	1,481	0	3	0	3
2109	1,175,434,668	884	884	0	2	0	2
2110	1,260,652,766	512	512	0	1	0	1
2111	1,352,049,561	287	287	0	1	0	1
2112	1,450,072,857	157	157	0	0	0	0
2113	1,555,202,977	83	83	0	0	0	0
2114	1,667,955,107	43	43	0	0	0	0
2115	1,788,881,808	21	21	0	0	0	0
2116	1,918,575,717	10	10	0	0	0	0
2117	2,057,672,445	5	5	0	0	0	0
2118	2,206,853,693	2	2	0	0	0	0
2119	2,366,850,583	1	1	0	0	0	0
2120	2,538,447,249	0	0	0	0	0	0
2121	2,722,484,674	0	0	0	0	0	0
Totals					\$ 60,461,009	\$ -	\$ 60,461,009

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





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SECTION D

GLOSSARY OF TERMS

Glossary of Terms

Actuarial Accrued Liability (AAL)

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

Actuarial Assumptions

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

Accrued Service

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

Actuarial Equivalent

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

Actuarial Cost Method

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

Actuarial Gain (Loss)

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

Actuarial Present Value (APV)

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

Actuarial Valuation

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

Actuarial Valuation Date

The date as of which an actuarial valuation is performed.

Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)

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

Glossary of Terms (Continued)

Amortization Payment

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

Amortization Method

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

Cost-of-Living Adjustments

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

Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)

A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.

Covered Valuation Payroll

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

Deferred Inflows and Outflows

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

Discount Rate

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

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

Entry Age Actuarial Cost Method (EAN)

The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit 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)

<i>GASB</i>	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
<i>Fiduciary Net Position</i>	The fiduciary net position is the value of the assets of the trust.
<i>Long-Term Expected Rate of Return</i>	The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.
<i>Money-Weighted Rate of Return</i>	The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 68, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.
<i>Multiple-Employer Defined Benefit Pension Plan</i>	A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
<i>Municipal Bond Rate</i>	The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.
<i>Net Pension Liability (NPL)</i>	The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan.
<i>Non-Employer Contribution Entities</i>	Non-employer contribution entities are entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of the GASB Accounting statement plan members are not considered non-employer contribution entities.
<i>Normal Cost</i>	The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.
<i>Other Postemployment Benefits (OPEB)</i>	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other post-employment benefits do not include termination benefits.
<i>Real Rate of Return</i>	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
<i>Service Cost</i>	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.

Glossary of Terms (Concluded)

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.