

Arbor Park SD 145 Regular

GASB Statement No. 68 Employer Reporting
Accounting Schedules
December 31, 2022



Table of Contents

Page

Certification Letter

Section A Executive Summary

Executive Summary.....	1
Discussion.....	2 - 4
Other Observations.....	5 - 6

Section B Financial Statements

Pension Expense/(Income) Under GASB Statement No. 68	7
Statement of Outflows and Inflows Arising from Current Reporting Period	8
Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods	9
Recognition of Deferred Outflows and Inflows of Resources.....	10
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 Ratios	12
Multiyear Schedule of Contributions.....	13
Notes to Schedule of Contributions.....	14
Development of Market Value of Assets	15
Schedule of Contributions	15
Summary of Actuarial Methods and Assumptions Used in the Calculation of the Total Pension Liability	16

Section C Calculation of the Single Discount Rate

Calculation of the Single Discount Rate.....	17
Projection of Contributions.....	18 - 19
Projection of Plan Fiduciary Net Position	20 - 21
Present Values of Projected Benefits.....	22 - 23
Projection of Plan Net Position and Benefit Payments	24

Section D Glossary of Terms..... 25 - 28



March 28, 2023

Arbor Park SD 145
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 Arbor Park SD 145 only in its entirety and only with the permission of Arbor Park SD 145. 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, 2022 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 Arbor Park SD 145. 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.

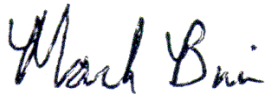
This report was prepared during the recent COVID-19 pandemic, which is likely to influence demographic, economic, and health care experience, at least in the short term. Results in this report are developed based on available data without adjustment. We will continue to monitor these developments and 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, 2022

Actuarial Valuation Date	December 31, 2022
Measurement Date of the Net Pension Liability	December 31, 2022
Fiscal Year End	June 30, 2023

Membership

Number of	
- Retirees and Beneficiaries	256
- Inactive, Non-Retired Members	274
- Active Members	89
- Total	619
Covered Valuation Payroll ⁽¹⁾	\$ 2,730,589

Net Pension Liability

Total Pension Liability/(Asset)	\$ 14,011,667
Plan Fiduciary Net Position	12,174,034
Net Pension Liability/(Asset)	\$ 1,837,633
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	86.88%
Net Pension Liability as a Percentage of Covered Valuation Payroll	67.30%

Development of the Single Discount Rate as of December 31, 2022

Long-Term Expected Rate of Investment Return	7.25%
Long-Term Municipal Bond Rate ⁽²⁾	4.05%
Last year ending December 31 in the 2023 to 2122 projection period for which projected benefit payments are fully funded	2122
Resulting Single Discount Rate based on the above development	7.25%

Single Discount Rate calculated using December 31, 2021 Measurement Date 7.25%

Total Pension Expense/(Income) \$ 357,453

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	\$ 12,622	\$ 0
Changes in assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	2,309,832	1,411,553
Total	\$ 2,322,454	\$ 1,411,553

⁽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 30, 2022. 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, 2022.

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, 2022 Annual Actuarial Valuation report dated March 10, 2023);
- 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, 2022 Annual Actuarial Valuation report dated March 10, 2023, 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, 2022 and a measurement date of December 31, 2022.

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 4.05% (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 2122 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, 2022

A. Expense/(Income)

1. Service Cost	\$	253,120
2. Interest on the Total Pension Liability		957,582
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		(126,048)
5. Projected Earnings on Plan Investments (made negative for addition here)		(1,033,725)
6. Other Changes in Plan Fiduciary Net Position		45,927
7. Recognition of Outflow (Inflow) of Resources due to Liabilities		77,190
8. Recognition of Outflow (Inflow) of Resources due to Assets		183,407
9. Total Pension Expense/(Income)	\$	357,453

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 661 years. Additionally, the total plan membership (active employees and inactive employees) was 600. 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 1.1017 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, 2022

A. Outflows (Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total Pension Liability (gains) or losses	\$	136,736
2. Assumption Changes (gains) or losses	\$	0
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}		1.1017
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	\$	124,114
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	\$	124,114
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	\$	12,622
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	\$	12,622

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$	2,887,290
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	\$	577,458
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$	2,309,832

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, 2022

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	\$ 124,114	\$ 46,924	\$ 77,190
2. Due to Assets	888,740	705,333	183,407
3. Total	\$ 1,012,854	\$ 752,257	\$ 260,597

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	\$ 124,114	\$ 46,924	\$ 77,190
2. Assumption changes	0	0	0
3. Net difference between projected and actual earnings on pension plan investments	888,740	705,333	183,407
4. Total	\$ 1,012,854	\$ 752,257	\$ 260,597

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	\$ 12,622	\$ 0	\$ 12,622
2. Assumption changes	0	0	0
3. Net difference between projected and actual earnings on pension plan investments	2,309,832	1,411,553	898,279
4. Total	\$ 2,322,454	\$ 1,411,553	\$ 910,901

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
2023	\$ (115,253)
2024	130,135
2025	318,561
2026	577,458
2027	0
Thereafter	0
Total	\$ 910,901

Recognition of Deferred Outflows and Inflows of Resources

Reporting Date - December 31, 2022

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	\$ (192,102)	1.2402	\$ 0	\$ 0	0.0000
2015	33,893	1.2621	0	0	0.0000
2016	425,635	1.2840	0	0	0.0000
2017	(354,752)	1.1703	0	0	0.0000
2018	133,408	1.2578	0	0	0.0000
2019	377,556	1.1962	0	0	0.0000
2020	(228,062)	1.1621	0	0	0.0000
2021	(237,052)	1.2468	(46,924)	0	0.0000
2022	136,736	1.1017	124,114	12,622	0.1017
Total			\$ 77,190	\$ 12,622	
Deferred Outflow (Inflow) due to Assumption Changes					
2014	\$ 495,070	1.2402	\$ 0	\$ 0	0.0000
2015	11,816	1.2621	0	0	0.0000
2016	(24,340)	1.2840	0	0	0.0000
2017	(389,040)	1.1703	0	0	0.0000
2018	290,097	1.2578	0	0	0.0000
2019	0	1.1962	0	0	0.0000
2020	(94,624)	1.1621	0	0	0.0000
2021	0	1.2468	0	0	0.0000
2022	0	1.1017	0	0	0.1017
Total			\$ 0	\$ 0	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2018	\$ 1,556,402	5.0000	\$ 311,282	\$ 0	0.0000
2019	(1,290,050)	5.0000	(258,010)	(258,010)	1.0000
2020	(942,120)	5.0000	(188,424)	(376,848)	2.0000
2021	(1,294,493)	5.0000	(258,899)	(776,695)	3.0000
2022	2,887,290	5.0000	577,458	2,309,832	4.0000
Total			\$ 183,407	\$ 898,279	

Schedule of Changes in Net Pension Liability and Related Ratios Current Period Calendar Year Ended December 31, 2022

A. Total pension liability	
1. Service Cost	\$ 253,120
2. Interest on the Total Pension Liability	957,582
3. Changes of benefit terms	0
4. Difference between expected and actual experience of the Total Pension Liability	136,736
5. Changes of assumptions	0
6. Benefit payments, including refunds of employee contributions	(834,467)
7. Net change in total pension liability	\$ 512,971
8. Total pension liability – beginning	13,498,696
9. Total pension liability – ending	<u><u>\$ 14,011,667</u></u>
B. Plan fiduciary net position	
1. Contributions – employer	\$ 292,992
2. Contributions – employee	126,048
3. Net investment income	(1,853,565)
4. Benefit payments, including refunds of employee contributions	(834,467)
5. Other (Net Transfer)	(45,927)
6. Net change in plan fiduciary net position	\$ (2,314,919)
7. Plan fiduciary net position – beginning	14,488,953
8. Plan fiduciary net position – ending	<u><u>\$ 12,174,034</u></u>
C. Net pension liability/(asset)	<u><u>\$ 1,837,633</u></u>
D. Plan fiduciary net position as a percentage of the total pension liability	86.88%
E. Covered Valuation payroll⁽¹⁾	\$ 2,730,589
F. Net pension liability as a percentage of covered valuation payroll	67.30%

⁽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	\$ 15,392,573	\$ 14,011,667	\$ 12,876,567
Plan Fiduciary Net Position	12,174,034	12,174,034	12,174,034
Net Pension Liability/(Asset)	\$ 3,218,539	\$ 1,837,633	\$ 702,533

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,	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total Pension Liability										
Service Cost	\$ 253,120	\$ 257,633	\$ 245,841	\$ 238,994	\$ 218,681	\$ 217,754	\$ 242,420	\$ 217,911	\$ 240,979	
Interest on the Total Pension Liability	957,582	948,883	947,525	897,692	874,444	904,517	846,188	816,194	764,359	
Benefit Changes	0	0	0	0	0	0	0	0	0	
Difference between Expected and Actual Experience	136,736	(237,052)	(228,062)	377,556	133,408	(354,752)	425,635	33,893	(192,102)	
Assumption Changes	0	0	(94,624)	0	290,097	(389,040)	(24,340)	11,816	495,070	
Benefit Payments and Refunds	(834,467)	(859,987)	(855,688)	(804,945)	(803,238)	(756,569)	(703,481)	(649,543)	(559,875)	
Net Change in Total Pension Liability	512,971	109,477	14,992	709,297	713,392	(378,090)	786,422	430,271	748,431	
Total Pension Liability - Beginning	13,498,696	13,389,219	13,374,227	12,664,930	11,951,538	12,329,628	11,543,206	11,112,935	10,364,504	
Total Pension Liability - Ending (a)	\$ 14,011,667	\$ 13,498,696	\$ 13,389,219	\$ 13,374,227	\$ 12,664,930	\$ 11,951,538	\$ 12,329,628	\$ 11,543,206	\$ 11,112,935	
Plan Fiduciary Net Position										
Employer Contributions	\$ 292,992	\$ 317,223	\$ 292,886	\$ 230,899	\$ 272,104	\$ 216,301	\$ 253,337	\$ 270,455	\$ 255,429	
Employee Contributions	126,048	119,808	116,798	108,121	100,401	91,154	92,944	96,371	88,024	
Pension Plan Net Investment Income	(1,853,565)	2,203,374	1,783,880	2,040,880	(703,549)	1,982,102	667,131	50,337	582,648	
Benefit Payments and Refunds	(834,467)	(859,987)	(855,688)	(804,945)	(803,238)	(756,569)	(703,481)	(649,543)	(559,875)	
Other	(45,927)	(78,470)	(768,713)	107,297	166,264	(689,907)	210,870	163,369	182,698	
Net Change in Plan Fiduciary Net Position	(2,314,919)	1,701,948	569,163	1,682,252	(968,018)	843,081	520,801	(69,011)	548,924	
Plan Fiduciary Net Position - Beginning	14,488,953	12,787,005	12,217,842	10,535,590	11,503,608	10,660,527	10,139,726	10,208,737	9,659,813	
Plan Fiduciary Net Position - Ending (b)	\$ 12,174,034	\$ 14,488,953	\$ 12,787,005	\$ 12,217,842	\$ 10,535,590	\$ 11,503,608	\$ 10,660,527	\$ 10,139,726	\$ 10,208,737	
Net Pension Liability/(Asset) - Ending (a) - (b)	1,837,633	(990,257)	602,214	1,156,385	2,129,340	447,930	1,669,101	1,403,480	904,198	
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	86.88%	107.34%	95.50%	91.35%	83.19%	96.25%	86.46%	87.84%	91.86%	
Covered Valuation Payroll⁽¹⁾	\$ 2,730,589	\$ 2,661,271	\$ 2,507,586	\$ 2,402,690	\$ 2,228,531	\$ 2,028,804	\$ 2,067,791	\$ 2,137,254	\$ 1,911,173	
Net Pension Liability as a Percentage of Covered Valuation Payroll	67.30%	(37.21)%	24.02%	48.13%	95.55%	22.08%	80.72%	65.67%	47.31%	

⁽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	\$ 254,377	\$ 255,429	\$ (1,052)	\$ 1,911,173	13.37%
2015	270,790	270,455	335	2,137,254	12.65%
2016	247,101	253,337	(6,236)	2,067,791	12.25%
2017	216,676	216,301	375	2,028,804	10.66%
2018	272,104	272,104	0	2,228,531	12.21%
2019	230,899	230,899	0	2,402,690	9.61%
2020	292,886	292,886	0	2,507,586	11.68%
2021	317,224	317,223	1	2,661,271	11.92%
2022	292,992 *	292,992	0	2,730,589	10.73%

* Estimated based on contribution rate of 10.73% and covered valuation payroll of \$2,730,589.
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 2022 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 2022 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): 21-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 16 years for most employers (five employers were financed over 17 years; one employer was financed over 18 years; two employers were financed over 19 years; one employer was financed over 20 years; three employers were financed over 25 years; four employers were financed over 26 years and one employer was financed over 27 years).
Asset Valuation Method	5-Year smoothed market; 20% corridor
Wage growth	2.75%
Price Inflation	2.25%
Salary Increases	2.85% 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, 2020 actuarial valuation.



Development of Market Value of Assets

Market Value of Assets as of December 31, 2022

1. Employee Contribution Reserve (MDF Assets from IMRF)	\$	2,066,766
2. Employer Contribution Reserve (EAF assets from IMRF)		2,040,461
3. Annuitant Reserve		8,114,047
4. Miscellaneous Adjustment*		<u>(47,240)</u>
5. Net Market Value	\$	12,174,034

* Includes an adjustment factor of (0.003865352) 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	\$	292,992
b.) Accelerated payments and Reserve Payments		<u>0</u>
Total Employer Contributions (a+b)	\$	292,992

2. Member

a.) Wage Reporting	\$	122,877
b.) Member Payments (i.e., ERI, Pension Payments)		<u>3,171</u>
Sub-total (Amount used for valuation on Schedule of Changes Page 11)	\$	126,048

c.) Voluntary Additional Plan	\$	<u>45,920</u>
Total Member Contributions (a+b+c)	\$	171,968

Total Employer and Member Contributions (1+2)	\$	464,960
--	-----------	----------------

Summary of Actuarial Methods and Assumptions Used in the Calculation of the Total Pension Liability

Methods and Assumptions Used to Determine Total Pension Liability:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Market Value of Assets
Price Inflation	2.25%
Salary Increases	2.85% to 13.75%
Investment Rate of Return ¹	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.

¹ *There were no changes in the investment rate of return since the December 31, 2021 valuation. There were no other changes to the methods and assumptions used to determine the Total Pension Liability.*

A detailed description of the actuarial assumptions and methods can be found in the December 31, 2022 IMRF annual actuarial valuation report.

SECTION C

CALCULATION OF THE SINGLE DISCOUNT RATE

Calculation of the Single Discount Rate

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

The *Single Discount Rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating 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 4.05%; 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	Contributions from				Total Contributions
	Payroll for Current Employees	Current Employees	Normal Cost Contributions	UAL Contributions	
2022	\$ 2,730,589				
2023	2,735,266	\$ 123,087	\$ 144,296	\$ 66,579	\$ 333,963
2024	2,455,035	110,477	122,954	89,289	322,720
2025	2,225,342	100,140	108,589	114,885	323,614
2026	2,029,023	91,306	98,206	143,771	333,283
2027	1,873,196	84,294	90,108	176,427	350,829
2028	1,747,452	78,635	83,367	180,838	342,841
2029	1,627,008	73,215	76,977	185,359	335,552
2030	1,501,129	67,551	70,428	189,993	327,971
2031	1,386,551	62,395	64,366	194,742	321,503
2032	1,278,777	57,545	58,857	199,611	316,013
2033	1,174,705	52,862	53,602	204,601	311,065
2034	1,082,394	48,708	48,961	209,716	307,385
2035	995,659	44,805	44,644	214,959	304,408
2036	918,932	41,352	40,840	220,333	302,525
2037	854,784	38,465	37,651	225,841	301,957
2038	800,576	36,026	34,946	231,487	302,459
2039	751,517	33,818	32,507	237,275	303,601
2040	690,368	31,067	29,726	243,206	303,998
2041	624,679	28,111	26,403	249,287	303,800
2042	576,343	25,935	23,676	255,519	305,130
2043	535,201	24,084	21,615	0	45,699
2044	497,229	22,375	19,786	0	42,161
2045	468,103	21,065	18,349	0	39,414
2046	446,688	20,101	17,333	0	37,434
2047	421,592	18,972	16,276	0	35,247
2048	390,774	17,585	14,970	0	32,555
2049	364,898	16,420	13,870	0	30,291
2050	347,208	15,624	13,095	0	28,719
2051	332,145	14,947	12,461	0	27,408
2052	314,651	14,159	11,711	0	25,871
2053	299,172	13,463	11,046	0	24,509
2054	265,488	11,947	9,750	0	21,697
2055	226,770	10,205	8,328	0	18,533
2056	211,866	9,534	7,760	0	17,294
2057	178,500	8,032	6,520	0	14,553
2058	139,572	6,281	5,098	0	11,379
2059	125,595	5,652	4,575	0	10,227
2060	118,350	5,326	4,311	0	9,637
2061	110,319	4,964	4,008	0	8,972
2062	105,277	4,737	3,825	0	8,562
2063	77,964	3,508	2,832	0	6,341
2064	34,379	1,547	1,249	0	2,796
2065	12,661	570	462	0	1,032
2066	5,185	233	188	0	421
2067	1,310	59	47	0	106
2068	331	15	12	0	27
2069	84	4	3	0	7
2070	21	1	1	0	2
2071	5	0	0	0	0
2072	1	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	Contributions from				Total Contributions
	Payroll for Current Employees	Current Employees	Normal Cost Contributions	UAL Contributions	
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
2122	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)
2023	\$ 12,174,034	\$ 333,963	\$ 912,205	\$ 862,023	\$ 12,457,814
2024	12,457,814	322,720	952,106	880,775	12,709,204
2025	12,709,204	323,614	993,996	897,541	12,936,362
2026	12,936,362	333,283	1,038,427	912,772	13,143,991
2027	13,143,991	350,829	1,071,184	927,283	13,350,918
2028	13,350,918	342,840	1,106,360	940,748	13,528,147
2029	13,528,147	335,551	1,139,445	952,159	13,676,412
2030	13,676,412	327,971	1,176,123	961,332	13,789,593
2031	13,789,593	321,503	1,213,056	967,992	13,866,033
2032	13,866,033	316,013	1,237,085	972,483	13,917,443
2033	13,917,443	311,065	1,263,198	975,104	13,940,414
2034	13,940,414	307,385	1,287,490	975,773	13,936,082
2035	13,936,082	304,408	1,306,401	974,679	13,908,768
2036	13,908,768	302,525	1,316,019	972,289	13,867,563
2037	13,867,563	301,957	1,321,712	969,079	13,816,887
2038	13,816,887	302,460	1,332,620	965,034	13,751,761
2039	13,751,761	303,600	1,328,614	960,496	13,687,243
2040	13,687,243	303,999	1,337,350	955,522	13,609,413
2041	13,609,413	303,800	1,342,169	949,700	13,520,745
2042	13,520,745	305,130	1,331,045	943,715	13,438,544
2043	13,438,544	45,699	1,319,414	928,930	13,093,760
2044	13,093,760	42,161	1,304,893	904,324	12,735,352
2045	12,735,352	39,414	1,278,629	879,177	12,375,314
2046	12,375,314	37,434	1,248,052	854,093	12,018,789
2047	12,018,789	35,247	1,220,060	829,164	11,663,141
2048	11,663,141	32,555	1,191,659	804,295	11,308,332
2049	11,308,332	30,291	1,153,958	779,834	10,964,498
2050	10,964,498	28,719	1,111,543	756,361	10,638,035
2051	10,638,035	27,408	1,067,702	734,207	10,331,947
2052	10,331,947	25,871	1,026,088	713,443	10,045,172
2053	10,045,172	24,509	983,277	694,128	9,780,532
2054	9,780,532	21,697	966,442	675,441	9,511,227
2055	9,511,227	18,533	942,346	656,662	9,244,076
2056	9,244,076	17,294	904,684	638,590	8,995,276
2057	8,995,276	14,553	903,563	620,495	8,726,760
2058	8,726,760	11,379	893,936	601,257	8,445,461
2059	8,445,461	10,227	857,731	582,111	8,180,068
2060	8,180,068	9,637	822,019	564,121	7,931,807
2061	7,931,807	8,972	789,984	547,240	7,698,035
2062	7,698,035	8,562	753,482	531,577	7,484,692
2063	7,484,692	6,341	771,936	515,373	7,234,469
2064	7,234,469	2,796	794,495	496,302	6,939,072
2065	6,939,072	1,032	776,915	475,449	6,638,637
2066	6,638,637	421	751,609	454,547	6,341,996
2067	6,341,996	106	724,744	433,986	6,051,345
2068	6,051,345	27	694,962	413,972	5,770,381
2069	5,770,381	7	667,230	394,589	5,497,746
2070	5,497,746	2	640,714	375,767	5,232,801
2071	5,232,801	0	615,434	357,459	4,974,826
2072	4,974,826	0	591,373	339,613	4,723,066

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	Projected Total	Projected Benefit	Projected	Projected Ending Plan
	Plan Net Position	Contributions	Payments	Investment Earnings at 7.25%	Net Position
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)
2073	\$ 4,723,066	\$ 0	\$ 568,321	\$ 322,181	\$ 4,476,925
2074	4,476,925	0	546,144	305,126	4,235,908
2075	4,235,908	0	524,685	288,416	3,999,639
2076	3,999,639	0	503,794	272,031	3,767,875
2077	3,767,875	0	483,348	255,956	3,540,483
2078	3,540,483	0	463,234	240,187	3,317,436
2079	3,317,436	0	443,365	224,723	3,098,794
2080	3,098,794	0	423,677	209,573	2,884,690
2081	2,884,690	0	404,119	194,747	2,675,318
2082	2,675,318	0	384,651	180,261	2,470,928
2083	2,470,928	0	365,219	166,135	2,271,844
2084	2,271,844	0	345,764	152,394	2,078,474
2085	2,078,474	0	326,241	139,070	1,891,303
2086	1,891,303	0	306,619	126,199	1,710,884
2087	1,710,884	0	286,899	113,821	1,537,806
2088	1,537,806	0	267,096	101,978	1,372,688
2089	1,372,688	0	247,256	90,714	1,216,146
2090	1,216,146	0	227,464	80,069	1,068,752
2091	1,068,752	0	207,804	70,083	931,032
2092	931,032	0	188,388	60,790	803,434
2093	803,434	0	169,354	52,217	686,297
2094	686,297	0	150,827	44,385	579,855
2095	579,855	0	132,946	37,305	484,214
2096	484,214	0	115,875	30,978	399,317
2097	399,317	0	99,766	25,397	324,948
2098	324,948	0	84,774	20,539	260,713
2099	260,713	0	71,035	16,372	206,051
2100	206,051	0	58,635	12,850	160,266
2101	160,266	0	47,637	9,923	122,552
2102	122,552	0	38,060	7,530	92,022
2103	92,022	0	29,868	5,608	67,761
2104	67,761	0	22,990	4,094	48,865
2105	48,865	0	17,329	2,926	34,461
2106	34,461	0	12,771	2,044	23,734
2107	23,734	0	9,187	1,394	15,941
2108	15,941	0	6,441	926	10,426
2109	10,426	0	4,394	599	6,631
2110	6,631	0	2,912	377	4,095
2111	4,095	0	1,872	230	2,453
2112	2,453	0	1,166	136	1,424
2113	1,424	0	702	78	800
2114	800	0	409	43	434
2115	434	0	229	23	229
2116	229	0	124	12	117
2117	117	0	64	6	59
2118	59	0	33	3	29
2119	29	0	16	2	14
2120	14	0	8	1	7
2121	7	0	4	0	4
2122	4	0	2	0	2

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		Unfunded Portion		Present Value of	Present Value of	Present Value of
	Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	of 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}
2023	\$ 12,174,034	\$ 912,205	\$ 912,205	\$ 0	\$ 880,834	\$ 0	\$ 880,834
2024	12,457,814	952,106	952,106	0	857,214	0	857,214
2025	12,709,204	993,996	993,996	0	834,433	0	834,433
2026	12,936,362	1,038,427	1,038,427	0	812,803	0	812,803
2027	13,143,991	1,071,184	1,071,184	0	781,765	0	781,765
2028	13,350,918	1,106,360	1,106,360	0	752,855	0	752,855
2029	13,528,147	1,139,445	1,139,445	0	722,955	0	722,955
2030	13,676,412	1,176,123	1,176,123	0	695,782	0	695,782
2031	13,789,593	1,213,056	1,213,056	0	669,119	0	669,119
2032	13,866,033	1,237,085	1,237,085	0	636,246	0	636,246
2033	13,917,443	1,263,198	1,263,198	0	605,759	0	605,759
2034	13,940,414	1,287,490	1,287,490	0	575,672	0	575,672
2035	13,936,082	1,306,401	1,306,401	0	544,641	0	544,641
2036	13,908,768	1,316,019	1,316,019	0	511,562	0	511,562
2037	13,867,563	1,321,712	1,321,712	0	479,045	0	479,045
2038	13,816,887	1,332,620	1,332,620	0	450,348	0	450,348
2039	13,751,761	1,328,614	1,328,614	0	418,643	0	418,643
2040	13,687,243	1,337,350	1,337,350	0	392,909	0	392,909
2041	13,609,413	1,342,169	1,342,169	0	367,669	0	367,669
2042	13,520,745	1,331,045	1,331,045	0	339,974	0	339,974
2043	13,438,544	1,319,414	1,319,414	0	314,222	0	314,222
2044	13,093,760	1,304,893	1,304,893	0	289,756	0	289,756
2045	12,735,352	1,278,629	1,278,629	0	264,731	0	264,731
2046	12,375,314	1,248,052	1,248,052	0	240,933	0	240,933
2047	12,018,789	1,220,060	1,220,060	0	219,608	0	219,608
2048	11,663,141	1,191,659	1,191,659	0	199,996	0	199,996
2049	11,308,332	1,153,958	1,153,958	0	180,577	0	180,577
2050	10,964,498	1,111,543	1,111,543	0	162,181	0	162,181
2051	10,638,035	1,067,702	1,067,702	0	145,254	0	145,254
2052	10,331,947	1,026,088	1,026,088	0	130,156	0	130,156
2053	10,045,172	983,277	983,277	0	116,294	0	116,294
2054	9,780,532	966,442	966,442	0	106,576	0	106,576
2055	9,511,227	942,346	942,346	0	96,894	0	96,894
2056	9,244,076	904,684	904,684	0	86,734	0	86,734
2057	8,995,276	903,563	903,563	0	80,770	0	80,770
2058	8,726,760	893,936	893,936	0	74,508	0	74,508
2059	8,445,461	857,731	857,731	0	66,658	0	66,658
2060	8,180,068	822,019	822,019	0	59,564	0	59,564
2061	7,931,807	789,984	789,984	0	53,373	0	53,373
2062	7,698,035	753,482	753,482	0	47,466	0	47,466
2063	7,484,692	771,936	771,936	0	45,341	0	45,341
2064	7,234,469	794,495	794,495	0	43,511	0	43,511
2065	6,939,072	776,915	776,915	0	39,672	0	39,672
2066	6,638,637	751,609	751,609	0	35,786	0	35,786
2067	6,341,996	724,744	724,744	0	32,174	0	32,174
2068	6,051,345	694,962	694,962	0	28,766	0	28,766
2069	5,770,381	667,230	667,230	0	25,751	0	25,751
2070	5,497,746	640,714	640,714	0	23,056	0	23,056
2071	5,232,801	615,434	615,434	0	20,650	0	20,650
2072	4,974,826	591,373	591,373	0	18,501	0	18,501

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.



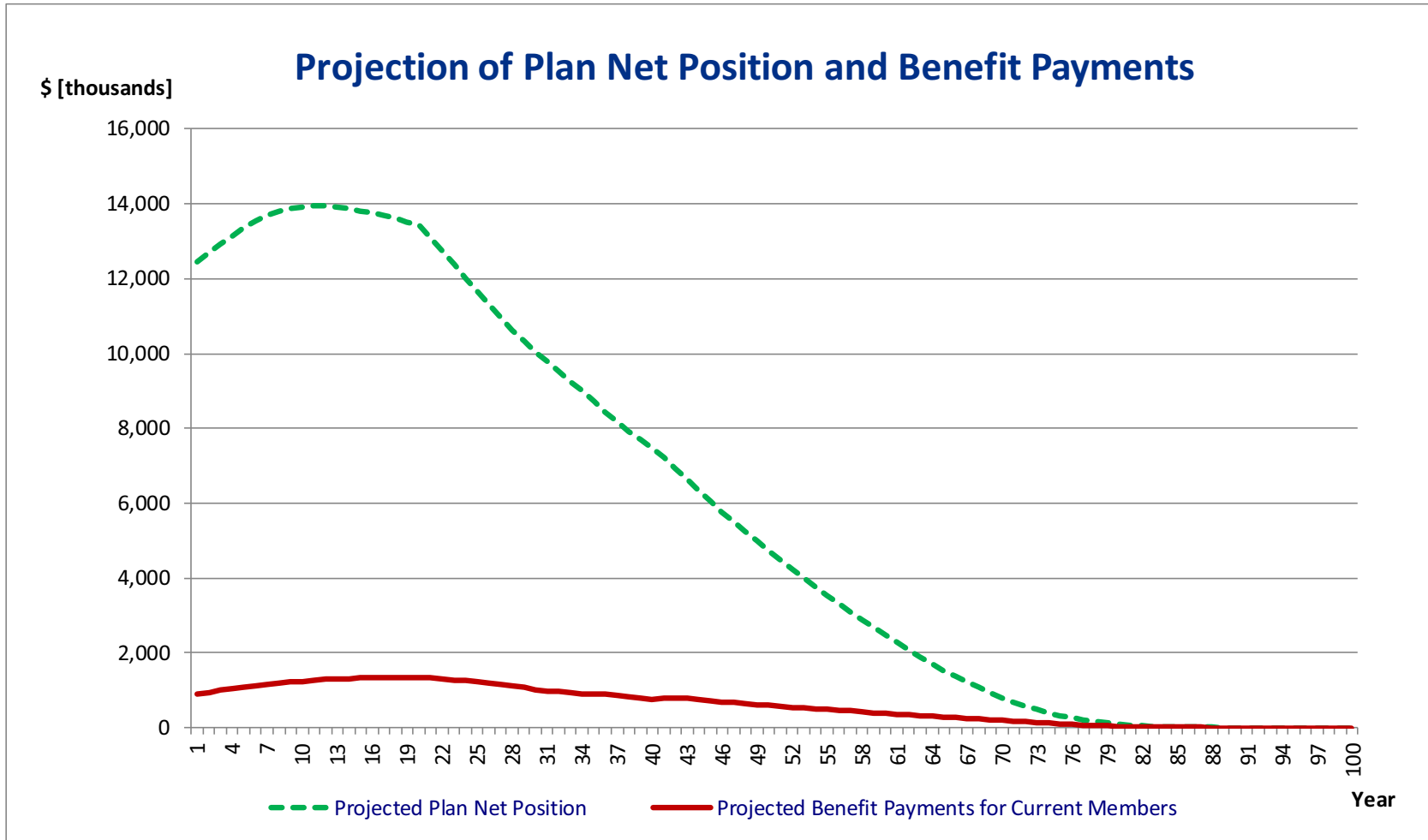
Single Discount Rate Development

Present Values of Projected Benefits (Concluded)

Year	Projected		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
2073	\$ 4,723,066	\$ 568,321	\$ 568,321	\$ 0	\$ 16,578	\$ 0	\$ 16,578
2074	4,476,925	546,144	546,144	0	14,854	0	14,854
2075	4,235,908	524,685	524,685	0	13,306	0	13,306
2076	3,999,639	503,794	503,794	0	11,912	0	11,912
2077	3,767,875	483,348	483,348	0	10,656	0	10,656
2078	3,540,483	463,234	463,234	0	9,522	0	9,522
2079	3,317,436	443,365	443,365	0	8,498	0	8,498
2080	3,098,794	423,677	423,677	0	7,572	0	7,572
2081	2,884,690	404,119	404,119	0	6,734	0	6,734
2082	2,675,318	384,651	384,651	0	5,976	0	5,976
2083	2,470,928	365,219	365,219	0	5,291	0	5,291
2084	2,271,844	345,764	345,764	0	4,670	0	4,670
2085	2,078,474	326,241	326,241	0	4,109	0	4,109
2086	1,891,303	306,619	306,619	0	3,601	0	3,601
2087	1,710,884	286,899	286,899	0	3,141	0	3,141
2088	1,537,806	267,096	267,096	0	2,727	0	2,727
2089	1,372,688	247,256	247,256	0	2,354	0	2,354
2090	1,216,146	227,464	227,464	0	2,019	0	2,019
2091	1,068,752	207,804	207,804	0	1,720	0	1,720
2092	931,032	188,388	188,388	0	1,454	0	1,454
2093	803,434	169,354	169,354	0	1,218	0	1,218
2094	686,297	150,827	150,827	0	1,012	0	1,012
2095	579,855	132,946	132,946	0	832	0	832
2096	484,214	115,875	115,875	0	676	0	676
2097	399,317	99,766	99,766	0	542	0	542
2098	324,948	84,774	84,774	0	430	0	430
2099	260,713	71,035	71,035	0	336	0	336
2100	206,051	58,635	58,635	0	258	0	258
2101	160,266	47,637	47,637	0	196	0	196
2102	122,552	38,060	38,060	0	146	0	146
2103	92,022	29,868	29,868	0	107	0	107
2104	67,761	22,990	22,990	0	77	0	77
2105	48,865	17,329	17,329	0	54	0	54
2106	34,461	12,771	12,771	0	37	0	37
2107	23,734	9,187	9,187	0	25	0	25
2108	15,941	6,441	6,441	0	16	0	16
2109	10,426	4,394	4,394	0	10	0	10
2110	6,631	2,912	2,912	0	6	0	6
2111	4,095	1,872	1,872	0	4	0	4
2112	2,453	1,166	1,166	0	2	0	2
2113	1,424	702	702	0	1	0	1
2114	800	409	409	0	1	0	1
2115	434	229	229	0	0	0	0
2116	229	124	124	0	0	0	0
2117	117	64	64	0	0	0	0
2118	59	33	33	0	0	0	0
2119	29	16	16	0	0	0	0
2120	14	8	8	0	0	0	0
2121	7	4	4	0	0	0	0
2122	4	2	2	0	0	0	0
Totals					\$ 15,722,365	\$ -	\$ 15,722,365

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.





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.

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.