

Alsip Merrionette Pk Lib Dist Regular

GASB Statement No. 68 Employer Reporting

Accounting Schedules

December 31, 2021



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March 24, 2022

Alsip Merrionette Pk Lib Dist
Illinois Municipal Retirement Fund

Ladies and Gentlemen:

The accounting schedules submitted in this report are required under the Governmental Accounting Standards Board (GASB) Statement No. 68 "Accounting and Financial Reporting for Pensions."

Our calculations for this report were prepared for the purpose of complying with the requirements of GASB Statement No. 68. These calculations have been made on a basis that is consistent with our understanding of these accounting standards. These results are subject to review by the fund's auditor and may be revised.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement No. 68. The Net Pension Liability is not an appropriate measure for measuring the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligation. The Net Pension Liability is not an appropriate measure for assessing the need for or amount of future employer contributions. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement No. 68 may produce significantly different results. This report may be provided to parties other than Alsip Merrionette Pk Lib Dist only in its entirety and only with the permission of Alsip Merrionette Pk Lib Dist. GRS is not responsible for unauthorized use of this report.

This report is based upon information, furnished to us by the Illinois Municipal Retirement Fund (IMRF), concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. If your understanding of this information is different than ours, please let us know and do not use or distribute this report until those differences have been resolved to your satisfaction. This information was checked for internal consistency, but it was not audited.

This report complements the actuarial valuation report that was provided to the IMRF and should be considered in conjunction with that report. Please see the actuarial valuation report as of December 31, 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 Alsip Merrionette Pk Lib Dist. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board. 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.

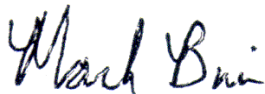
This report was prepared during the recent and still-developing COVID-19 pandemic, which is likely to influence demographic, economic, and health care experience, at least in the short term. Results in this report are developed based on available data without adjustment. We will continue to monitor these 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	33
- Inactive, Non-Retired Members	18
- Active Members	21
- Total	72
Covered Valuation Payroll ⁽¹⁾	\$ 1,033,826

Net Pension Liability

Total Pension Liability/(Asset)	\$ 5,762,757
Plan Fiduciary Net Position	6,428,386
Net Pension Liability/(Asset)	\$ (665,629)
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	111.55%
Net Pension Liability as a Percentage of Covered Valuation Payroll	(64.39)%

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)	\$ (241,575)

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	\$ 20,498	\$ 150
Changes in assumptions	0	21,160
Net difference between projected and actual earnings on pension plan investments	114,673	773,151
Total	\$ 135,171	\$ 794,461

⁽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	\$	91,678
2. Interest on the Total Pension Liability		393,113
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		(46,522)
5. Projected Earnings on Plan Investments (made negative for addition here)		(403,077)
6. Other Changes in Plan Fiduciary Net Position		(66,958)
7. Recognition of Outflow (Inflow) of Resources due to Liabilities		18,589
8. Recognition of Outflow (Inflow) of Resources due to Assets		(228,398)
9. Total Pension Expense/(Income)	\$	(241,575)

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 194 years. Additionally, the total plan membership (active employees and inactive employees) was 69. 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 2.8145 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	\$ 30,491
2. Assumption Changes (gains) or losses	\$ 0
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	2.8145
4. Outflow (Inflow) of Resources to be recognized in the current pension expense for the difference between expected and actual experience of the Total Pension Liability	\$ 10,834
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	\$ 10,834
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	\$ 19,657
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	\$ 19,657

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$ (482,614)
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	\$ (96,523)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$ (386,091)

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	\$ 40,966	\$ 22,377	\$ 18,589
2. Due to Assets	114,672	343,070	(228,398)
3. Total	\$ 155,638	\$ 365,447	\$ (209,809)

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	\$ 40,966	\$ 156	\$ 40,810
2. Assumption changes	0	22,221	\$ (22,221)
3. Net difference between projected and actual earnings on pension plan investments	114,672	343,070	(228,398)
4. Total	\$ 155,638	\$ 365,447	\$ (209,809)

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	\$ 20,498	\$ 150	\$ 20,348
2. Assumption changes	0	21,160	\$ (21,160)
3. Net difference between projected and actual earnings on pension plan investments	114,673	773,151	(658,478)
4. Total	\$ 135,171	\$ 794,461	\$ (659,290)

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	\$ (151,578)
2023	(247,795)
2024	(163,395)
2025	(96,522)
2026	0
Thereafter	0
Total	\$ (659,290)

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	\$ 45,280	3.2519	\$ 0	\$ 0	0.0000
2015	35,073	3.2940	0	0	0.0000
2016	26,227	3.3349	0	0	0.0000
2017	(115,776)	2.9178	0	0	0.0000
2018	(104,289)	2.9236	0	0	0.0000
2019	91,237	3.0279	30,132	841	0.0279
2020	(462)	2.9522	(156)	(150)	0.9522
2021	30,491	2.8145	10,834	19,657	1.8145
Total			\$ 40,810	\$ 20,348	
Deferred Outflow (Inflow) due to Assumption Changes					
2014	\$ 183,111	3.2519	\$ 0	\$ 0	0.0000
2015	5,578	3.2940	0	0	0.0000
2016	(11,516)	3.3349	0	0	0.0000
2017	(154,375)	2.9178	0	0	0.0000
2018	140,580	2.9236	0	0	0.0000
2019	0	3.0279	0	0	0.0279
2020	(65,602)	2.9522	(22,221)	(21,160)	0.9522
2021	0	2.8145	0	0	1.8145
Total			\$ (22,221)	\$ (21,160)	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2017	\$ (432,266)	5.0000	\$ (86,454)	\$ 0	0.0000
2018	573,361	5.0000	114,672	114,673	1.0000
2019	(466,112)	5.0000	(93,222)	(186,446)	2.0000
2020	(334,356)	5.0000	(66,871)	(200,614)	3.0000
2021	(482,614)	5.0000	(96,523)	(386,091)	4.0000
Total			\$ (228,398)	\$ (658,478)	

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	\$	91,678
2. Interest on the Total Pension Liability		393,113
3. Changes of benefit terms		0
4. Difference between expected and actual experience of the Total Pension Liability		30,491
5. Changes of assumptions		0
6. Benefit payments, including refunds of employee contributions		(257,869)
7. Net change in total pension liability	\$	257,413
8. Total pension liability – beginning		5,505,344
9. Total pension liability – ending	<u>\$</u>	<u>5,762,757</u>
B. Plan fiduciary net position		
1. Contributions – employer	\$	110,413
2. Contributions – employee		46,522
3. Net investment income		885,691
4. Benefit payments, including refunds of employee contributions		(257,869)
5. Other (Net Transfer)		66,958
6. Net change in plan fiduciary net position	\$	851,715
7. Plan fiduciary net position – beginning		5,576,671
8. Plan fiduciary net position – ending	<u>\$</u>	<u>6,428,386</u>
C. Net pension liability/(asset)	<u>\$</u>	<u>(665,629)</u>
D. Plan fiduciary net position as a percentage of the total pension liability		111.55%
E. Covered Valuation payroll⁽¹⁾	\$	1,033,826
F. Net pension liability as a percentage of covered valuation payroll		(64.39)%

⁽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

	Current Single Discount		
	1% Decrease 6.25%	Rate Assumption 7.25%	1% Increase 8.25%
Total Pension Liability	\$ 6,455,540	\$ 5,762,757	\$ 5,218,905
Plan Fiduciary Net Position	6,428,386	6,428,386	6,428,386
Net Pension Liability/(Asset)	\$ 27,154	\$ (665,629)	\$ (1,209,481)



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	\$ 91,678	\$ 99,158	\$ 91,410	\$ 83,336	\$ 83,677	\$ 92,592	\$ 88,511	\$ 89,003		
Interest on the Total Pension Liability	393,113	380,645	356,876	349,605	352,926	334,517	315,641	284,241		
Benefit Changes	0	0	0	0	0	0	0	0		
Difference between Expected and Actual Experience	30,491	(462)	91,237	(104,289)	(115,776)	26,227	35,073	45,280		
Assumption Changes	0	(65,602)	0	140,580	(154,375)	(11,516)	5,578	183,111		
Benefit Payments and Refunds	(257,869)	(218,194)	(212,901)	(211,566)	(209,566)	(198,095)	(179,626)	(174,571)		
Net Change in Total Pension Liability	257,413	195,545	326,622	257,666	(43,114)	243,725	265,177	427,064		
Total Pension Liability - Beginning	5,505,344	5,309,799	4,983,177	4,725,511	4,768,625	4,524,900	4,259,723	3,832,659		
Total Pension Liability - Ending (a)	\$ 5,762,757	\$ 5,505,344	\$ 5,309,799	\$ 4,983,177	\$ 4,725,511	\$ 4,768,625	\$ 4,524,900	\$ 4,259,723		
Plan Fiduciary Net Position										
Employer Contributions	\$ 110,413	\$ 109,350	\$ 90,164	\$ 108,428	\$ 97,054	\$ 108,974	\$ 110,794	\$ 100,218		
Employee Contributions	46,522	48,332	44,755	40,788	37,521	36,565	39,854	34,928		
Pension Plan Net Investment Income	885,691	689,551	768,771	(235,083)	730,762	262,082	19,042	218,328		
Benefit Payments and Refunds	(257,869)	(218,194)	(212,901)	(211,566)	(209,566)	(198,095)	(179,626)	(174,571)		
Other	66,958	36,276	13,931	(74,960)	(188,358)	59,082	29,998	45,191		
Net Change in Plan Fiduciary Net Position	851,715	665,315	704,720	(372,393)	467,413	268,608	20,062	224,094		
Plan Fiduciary Net Position - Beginning	5,576,671	4,911,356	4,206,636	4,579,029	4,111,616	3,843,008	3,822,946	3,598,852		
Plan Fiduciary Net Position - Ending (b)	\$ 6,428,386	\$ 5,576,671	\$ 4,911,356	\$ 4,206,636	\$ 4,579,029	\$ 4,111,616	\$ 3,843,008	\$ 3,822,946		
Net Pension Liability/(Asset) - Ending (a) - (b)	(665,629)	(71,327)	398,443	776,541	146,482	657,009	681,892	436,777		
Plan Fiduciary Net Position as a Percentage										
of Total Pension Liability	111.55%	101.30 %	92.50 %	84.42 %	96.90 %	86.22%	84.93 %	89.75 %		
Covered Valuation Payroll⁽¹⁾	\$ 1,033,826	\$ 1,005,054	\$ 991,889	\$ 897,579	\$ 833,790	\$ 812,561	\$ 885,645	\$ 800,174		
Net Pension Liability as a Percentage										
of Covered Valuation Payroll	(64.39)%	(7.10)%	40.17 %	86.52 %	17.57 %	80.86%	76.99 %	54.59 %		

⁽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	\$ 95,861	\$ 100,218	\$ (4,357)	\$ 800,174		12.52%
2015	110,794	110,794	0	885,645		12.51%
2016	99,620	108,974	(9,354)	812,561		13.41%
2017	97,053	97,054	(1)	833,790		11.64%
2018	108,428	108,428	0	897,579		12.08%
2019	90,163	90,164	(1)	991,889		9.09%
2020	109,350	109,350	0	1,005,054		10.88%
2021	110,413 *	110,413	0	1,033,826		10.68%

* Estimated based on contribution rate of 10.68% and covered valuation payroll of \$1,033,826.

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)	\$	858,439
2. Employer Contribution Reserve (EAF assets from IMRF)		2,476,425
3. Annuitant Reserve		3,101,679
4. Miscellaneous Adjustment*		(8,157)
5. Net Market Value	\$	6,428,386

* 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	\$	110,413
b.) Accelerated payments and Reserve Payments		-
Total Employer Contributions (a+b)	\$	110,413

2. Member

a.) Wage Reporting	\$	46,522
b.) Member Payments (i.e., ERI, Pension Payments)		-
Sub-total (Amount used for valuation on Schedule of Changes Page 11)	\$	46,522

c.) Voluntary Additional Plan	\$	46,121
Total Member Contributions (a+b+c)	\$	92,643

Total Employer and Member Contributions (1+2)	\$	203,056
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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	\$ 1,033,826				
2022	1,014,193	\$ 45,639	\$ 56,332	\$ 6,469	\$ 108,439
2023	927,957	41,758	49,792	(13,919)	77,631
2024	848,762	38,194	44,869	(37,020)	46,043
2025	778,302	35,024	41,067	(41,067)	35,023
2026	722,925	32,532	38,001	(38,001)	32,532
2027	677,438	30,485	35,408	(35,408)	30,485
2028	636,219	28,630	33,001	(33,001)	28,630
2029	595,814	26,812	30,728	(30,728)	26,812
2030	559,887	25,195	28,597	(28,597)	25,195
2031	532,842	23,978	26,899	(26,899)	23,978
2032	509,430	22,924	25,464	(25,464)	22,924
2033	487,834	21,953	24,142	(24,142)	21,953
2034	471,277	21,207	23,089	(23,089)	21,208
2035	459,894	20,695	22,349	(22,349)	20,695
2036	451,249	20,306	21,794	(21,794)	20,307
2037	438,369	19,727	21,085	(21,085)	19,727
2038	423,066	19,038	20,223	(20,223)	19,038
2039	411,082	18,499	19,487	(19,487)	18,499
2040	400,400	18,018	18,901	(18,901)	18,018
2041	391,199	17,604	18,351	(18,351)	17,603
2042	382,696	17,221	17,838	(17,838)	17,221
2043	367,395	16,533	17,052	0	33,584
2044	341,566	15,370	15,751	0	31,122
2045	317,421	14,284	14,417	0	28,701
2046	298,333	13,425	13,313	0	26,738
2047	279,658	12,585	12,313	0	24,898
2048	256,550	11,545	11,092	0	22,637
2049	230,408	10,368	9,825	0	20,193
2050	209,518	9,428	8,830	0	18,258
2051	173,271	7,797	7,165	0	14,962
2052	135,342	6,090	5,570	0	11,660
2053	120,549	5,425	4,961	0	10,386
2054	111,357	5,011	4,538	0	9,549
2055	104,146	4,687	4,172	0	8,859
2056	82,305	3,704	3,232	0	6,936
2057	46,788	2,105	1,833	0	3,938
2058	20,630	928	831	0	1,759
2059	8,137	366	353	0	719
2060	4,323	195	216	0	411
2061	2,871	129	161	0	290
2062	2,074	93	121	0	214
2063	1,542	69	95	0	164
2064	938	42	57	0	99
2065	454	20	28	0	48
2066	351	16	21	0	37
2067	271	12	16	0	28
2068	210	9	13	0	22
2069	94	4	6	0	10
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		Projected Total		Projected Benefit		Projected Investment		Projected Ending Plan	
	Plan	Net Position	Contributions	Payments	Earnings at 7.25%	Net Position				
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)					
2022	\$	6,428,386	\$	108,439	\$	324,043	\$	458,379	\$	6,671,162
2023		6,671,162		77,631		339,664		474,327		6,883,456
2024		6,883,456		46,042		358,126		487,935		7,059,309
2025		7,059,309		35,024		376,336		499,644		7,217,640
2026		7,217,640		32,532		392,039		510,475		7,368,608
2027		7,368,608		30,485		405,725		520,860		7,514,227
2028		7,514,227		28,630		420,770		530,815		7,652,903
2029		7,652,903		26,812		436,737		540,236		7,783,213
2030		7,783,213		25,195		453,554		549,027		7,903,880
2031		7,903,880		23,978		473,717		557,013		8,011,154
2032		8,011,154		22,924		486,539		564,297		8,111,835
2033		8,111,835		21,953		494,353		571,283		8,210,718
2034		8,210,718		21,207		499,355		578,247		8,310,817
2035		8,310,817		20,695		500,697		585,439		8,416,254
2036		8,416,254		20,306		499,176		593,123		8,530,507
2037		8,530,507		19,727		505,889		601,147		8,645,491
2038		8,645,491		19,038		510,721		609,286		8,763,094
2039		8,763,094		18,499		516,921		617,573		8,882,244
2040		8,882,244		18,018		521,979		626,014		9,004,297
2041		9,004,297		17,604		518,286		634,979		9,138,595
2042		9,138,595		17,221		513,235		644,882		9,287,463
2043		9,287,463		33,584		516,106		656,156		9,461,097
2044		9,461,097		31,122		538,570		667,856		9,621,504
2045		9,621,504		28,701		554,396		678,836		9,774,645
2046		9,774,645		26,738		555,334		689,835		9,935,885
2047		9,935,885		24,898		555,283		701,462		10,106,962
2048		10,106,962		22,637		565,325		713,427		10,277,701
2049		10,277,701		20,193		573,955		725,411		10,449,350
2050		10,449,350		18,258		571,842		737,862		10,633,628
2051		10,633,628		14,962		595,930		750,246		10,802,906
2052		10,802,906		11,660		606,565		762,023		10,970,024
2053		10,970,024		10,386		601,749		774,265		11,152,926
2054		11,152,926		9,549		594,692		787,747		11,355,530
2055		11,355,530		8,859		583,083		802,824		11,584,130
2056		11,584,130		6,936		596,132		818,865		11,813,798
2057		11,813,798		3,938		626,879		834,314		12,025,171
2058		12,025,171		1,759		642,353		849,010		12,233,587
2059		12,233,587		719		635,617		864,323		12,463,011
2060		12,463,011		411		622,949		881,396		12,721,869
2061		12,721,869		290		610,018		900,620		13,012,760
2062		13,012,760		214		598,087		922,131		13,337,019
2063		13,337,019		164		586,782		946,041		13,696,441
2064		13,696,441		99		576,412		972,466		14,092,594
2065		14,092,594		48		565,748		1,001,565		14,528,460
2066		14,528,460		37		554,953		1,033,550		15,007,094
2067		15,007,094		28		544,071		1,068,638		15,531,689
2068		15,531,689		22		532,842		1,107,071		16,105,940
2069		16,105,940		10		521,235		1,149,117		16,733,832
2070		16,733,832		0		508,479		1,195,093		17,420,446
2071		17,420,446		0		494,421		1,245,373		18,171,398

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	\$ 18,171,398	\$ 0	\$ 478,921	\$ 1,300,369	\$ 18,992,847
2073	18,992,847	0	461,804	1,360,534	19,891,577
2074	19,891,577	0	442,972	1,426,363	20,874,967
2075	20,874,967	0	422,420	1,498,390	21,950,938
2076	21,950,938	0	400,237	1,577,188	23,127,889
2077	23,127,889	0	376,579	1,663,360	24,414,670
2078	24,414,670	0	351,691	1,757,538	25,820,516
2079	25,820,516	0	325,859	1,860,382	27,355,039
2080	27,355,039	0	299,408	1,972,577	29,028,208
2081	29,028,208	0	272,716	2,094,832	30,850,324
2082	30,850,324	0	246,147	2,227,882	32,832,059
2083	32,832,059	0	220,056	2,372,487	34,984,489
2084	34,984,489	0	194,782	2,529,438	37,319,145
2085	37,319,145	0	170,618	2,699,561	39,848,089
2086	39,848,089	0	147,847	2,883,721	42,583,963
2087	42,583,963	0	126,691	3,082,825	45,540,097
2088	45,540,097	0	107,290	3,297,836	48,730,642
2089	48,730,642	0	89,734	3,529,776	52,170,684
2090	52,170,684	0	74,065	3,779,737	55,876,356
2091	55,876,356	0	60,290	4,048,889	59,864,954
2092	59,864,954	0	48,379	4,338,486	64,155,061
2093	64,155,061	0	38,245	4,649,880	68,766,696
2094	68,766,696	0	29,754	4,984,526	73,721,468
2095	73,721,468	0	22,752	5,343,996	79,042,711
2096	79,042,711	0	17,078	5,729,988	84,755,621
2097	84,755,621	0	12,568	6,144,335	90,887,389
2098	90,887,389	0	9,055	6,589,013	97,467,347
2099	97,467,347	0	6,379	7,066,155	104,527,123
2100	104,527,123	0	4,389	7,578,060	112,100,794
2101	112,100,794	0	2,945	8,127,203	120,225,052
2102	120,225,052	0	1,926	8,716,248	128,939,373
2103	128,939,373	0	1,226	9,348,061	138,286,208
2104	138,286,208	0	760	10,025,723	148,311,171
2105	148,311,171	0	457	10,752,544	159,063,258
2106	159,063,258	0	267	11,532,077	170,595,067
2107	170,595,067	0	152	12,368,137	182,963,053
2108	182,963,053	0	84	13,264,818	196,227,788
2109	196,227,788	0	45	14,226,513	210,454,255
2110	210,454,255	0	24	15,257,933	225,712,165
2111	225,712,165	0	12	16,364,132	242,076,284
2112	242,076,284	0	6	17,550,530	259,626,808
2113	259,626,808	0	3	18,822,944	278,449,749
2114	278,449,749	0	1	20,187,607	298,637,354
2115	298,637,354	0	1	21,651,208	320,288,562
2116	320,288,562	0	0	23,220,921	343,509,482
2117	343,509,482	0	0	24,904,437	368,413,920
2118	368,413,920	0	0	26,710,009	395,123,929
2119	395,123,929	0	0	28,646,485	423,770,414
2120	423,770,414	0	0	30,723,355	454,493,769
2121	454,493,769	0	0	32,950,798	487,444,567

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	\$ 6,428,386	\$ 324,043	\$ 324,043	\$ 0	\$ 312,898	\$ 0	\$ 312,898
2023	6,671,162	339,664	339,664	0	305,811	0	305,811
2024	6,883,456	358,126	358,126	0	300,637	0	300,637
2025	7,059,309	376,336	376,336	0	294,567	0	294,567
2026	7,217,640	392,039	392,039	0	286,115	0	286,115
2027	7,368,608	405,725	405,725	0	276,087	0	276,087
2028	7,514,227	420,770	420,770	0	266,970	0	266,970
2029	7,652,903	436,737	436,737	0	258,369	0	258,369
2030	7,783,213	453,554	453,554	0	250,180	0	250,180
2031	7,903,880	473,717	473,717	0	243,638	0	243,638
2032	8,011,154	486,539	486,539	0	233,317	0	233,317
2033	8,111,835	494,353	494,353	0	221,039	0	221,039
2034	8,210,718	499,355	499,355	0	208,182	0	208,182
2035	8,310,817	500,697	500,697	0	194,631	0	194,631
2036	8,416,254	499,176	499,176	0	180,923	0	180,923
2037	8,530,507	505,889	505,889	0	170,961	0	170,961
2038	8,645,491	510,721	510,721	0	160,927	0	160,927
2039	8,763,094	516,921	516,921	0	151,870	0	151,870
2040	8,882,244	521,979	521,979	0	142,989	0	142,989
2041	9,004,297	518,286	518,286	0	132,380	0	132,380
2042	9,138,595	513,235	513,235	0	122,228	0	122,228
2043	9,287,463	516,106	516,106	0	114,603	0	114,603
2044	9,461,097	538,570	538,570	0	111,507	0	111,507
2045	9,621,504	554,396	554,396	0	107,025	0	107,025
2046	9,774,645	555,334	555,334	0	99,959	0	99,959
2047	9,935,885	555,283	555,283	0	93,193	0	93,193
2048	10,106,962	565,325	565,325	0	88,465	0	88,465
2049	10,277,701	573,955	573,955	0	83,744	0	83,744
2050	10,449,350	571,842	571,842	0	77,795	0	77,795
2051	10,633,628	595,930	595,930	0	75,592	0	75,592
2052	10,802,906	606,565	606,565	0	71,740	0	71,740
2053	10,970,024	601,749	601,749	0	66,359	0	66,359
2054	11,152,926	594,692	594,692	0	61,148	0	61,148
2055	11,355,530	583,083	583,083	0	55,901	0	55,901
2056	11,584,130	596,132	596,132	0	53,289	0	53,289
2057	11,813,798	626,879	626,879	0	52,249	0	52,249
2058	12,025,171	642,353	642,353	0	49,920	0	49,920
2059	12,233,587	635,617	635,617	0	46,057	0	46,057
2060	12,463,011	622,949	622,949	0	42,088	0	42,088
2061	12,721,869	610,018	610,018	0	38,428	0	38,428
2062	13,012,760	598,087	598,087	0	35,130	0	35,130
2063	13,337,019	586,782	586,782	0	32,136	0	32,136
2064	13,696,441	576,412	576,412	0	29,434	0	29,434
2065	14,092,594	565,748	565,748	0	26,936	0	26,936
2066	14,528,460	554,953	554,953	0	24,636	0	24,636
2067	15,007,094	544,071	544,071	0	22,521	0	22,521
2068	15,531,689	532,842	532,842	0	20,565	0	20,565
2069	16,105,940	521,235	521,235	0	18,757	0	18,757
2070	16,733,832	508,479	508,479	0	17,061	0	17,061
2071	17,420,446	494,421	494,421	0	15,468	0	15,468

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.



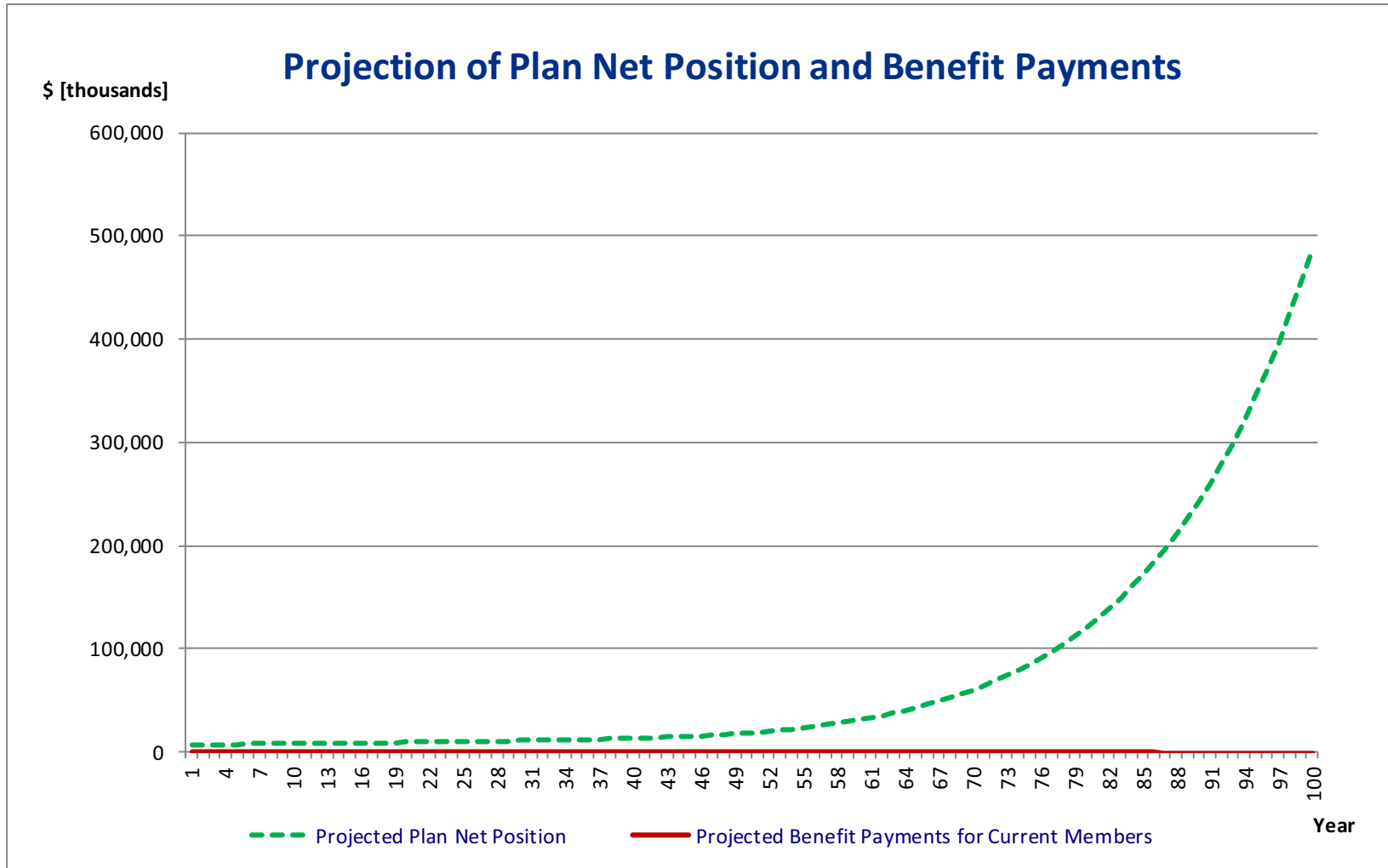
Single Discount Rate Development

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	\$ 18,171,398	\$ 478,921	\$ 478,921	\$ 0	\$ 13,970	\$ 0	\$ 13,970
2073	18,992,847	461,804	461,804	0	12,560	0	12,560
2074	19,891,577	442,972	442,972	0	11,234	0	11,234
2075	20,874,967	422,420	422,420	0	9,988	0	9,988
2076	21,950,938	400,237	400,237	0	8,824	0	8,824
2077	23,127,889	376,579	376,579	0	7,741	0	7,741
2078	24,414,670	351,691	351,691	0	6,741	0	6,741
2079	25,820,516	325,859	325,859	0	5,824	0	5,824
2080	27,355,039	299,408	299,408	0	4,989	0	4,989
2081	29,028,208	272,716	272,716	0	4,237	0	4,237
2082	30,850,324	246,147	246,147	0	3,566	0	3,566
2083	32,832,059	220,056	220,056	0	2,972	0	2,972
2084	34,984,489	194,782	194,782	0	2,453	0	2,453
2085	37,319,145	170,618	170,618	0	2,004	0	2,004
2086	39,848,089	147,847	147,847	0	1,619	0	1,619
2087	42,583,963	126,691	126,691	0	1,293	0	1,293
2088	45,540,097	107,290	107,290	0	1,021	0	1,021
2089	48,730,642	89,734	89,734	0	796	0	796
2090	52,170,684	74,065	74,065	0	613	0	613
2091	55,876,356	60,290	60,290	0	465	0	465
2092	59,864,954	48,379	48,379	0	348	0	348
2093	64,155,061	38,245	38,245	0	257	0	257
2094	68,766,696	29,754	29,754	0	186	0	186
2095	73,721,468	22,752	22,752	0	133	0	133
2096	79,042,711	17,078	17,078	0	93	0	93
2097	84,755,621	12,568	12,568	0	64	0	64
2098	90,887,389	9,055	9,055	0	43	0	43
2099	97,467,347	6,379	6,379	0	28	0	28
2100	104,527,123	4,389	4,389	0	18	0	18
2101	112,100,794	2,945	2,945	0	11	0	11
2102	120,225,052	1,926	1,926	0	7	0	7
2103	128,939,373	1,226	1,226	0	4	0	4
2104	138,286,208	760	760	0	2	0	2
2105	148,311,171	457	457	0	1	0	1
2106	159,063,258	267	267	0	1	0	1
2107	170,595,067	152	152	0	0	0	0
2108	182,963,053	84	84	0	0	0	0
2109	196,227,788	45	45	0	0	0	0
2110	210,454,255	24	24	0	0	0	0
2111	225,712,165	12	12	0	0	0	0
2112	242,076,284	6	6	0	0	0	0
2113	259,626,808	3	3	0	0	0	0
2114	278,449,749	1	1	0	0	0	0
2115	298,637,354	1	1	0	0	0	0
2116	320,288,562	0	0	0	0	0	0
2117	343,509,482	0	0	0	0	0	0
2118	368,413,920	0	0	0	0	0	0
2119	395,123,929	0	0	0	0	0	0
2120	423,770,414	0	0	0	0	0	0
2121	454,493,769	0	0	0	0	0	0
Totals					\$ 6,450,530	\$ -	\$ 6,450,530

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.