

Alsip Park Dist Regular

GASB Statement No. 68 Employer Reporting
Accounting Schedules
December 31, 2020



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March 26, 2021

Alsip Park Dist
Illinois Municipal Retirement Fund

Ladies and Gentlemen:

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

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

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

This report is based upon information, furnished to us by 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, 2020 for additional discussions of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

To the best of our knowledge, the information contained in this report is accurate, and fairly represents the GASB 68 information related to Alsip Park Dist. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

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 herein.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted,



Mark Buis, FSA, EA, FCA, MAAA



Francois Pieterse, ASA, FCA, MAAA

MB/FP:bd



SECTION A

EXECUTIVE SUMMARY

Executive Summary as of December 31, 2020

Actuarial Valuation Date	December 31, 2020
Measurement Date of the Net Pension Liability	December 31, 2020
Fiscal Year End	April 30, 2021

Membership

Number of	
- Retirees and Beneficiaries	24
- Inactive, Non-Retired Members	35
- Active Members	29
- Total	88
Covered Valuation Payroll ⁽¹⁾	\$ 1,069,494

Net Pension Liability

Total Pension Liability/(Asset)	\$ 7,093,383
Plan Fiduciary Net Position	6,999,526
Net Pension Liability/(Asset)	\$ 93,857
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	98.68%
Net Pension Liability as a Percentage of Covered Valuation Payroll	8.78%

Development of the Single Discount Rate as of December 31, 2020

Long-Term Expected Rate of Investment Return	7.25%
Long-Term Municipal Bond Rate ⁽²⁾	2.00%
Last year ending December 31 in the 2021 to 2120 projection period for which projected benefit payments are fully funded	2120
Resulting Single Discount Rate based on the above development	7.25%

Single Discount Rate calculated using December 31, 2019 Measurement Date 7.25%

Total Pension Expense/(Income) \$ (56,834)

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	\$ 47,907	\$ 71,206	
Changes in assumptions	26,840	55,970	
Net difference between projected and actual earnings on pension plan investments	283,551	810,414	526,863 WP 23
Total	358,298 74,747	937,590 654,039	
	+ 47,210 = 121,957		

⁽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, 2020. 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, 2020.

The pension expense recognized each fiscal year is equal to the change in the net pension liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the certain changes in the liability and investment experience.

Notes to Financial Statements

GASB Statement No. 68 requires the notes of the employer's financial statements to disclose the total pension expense, the pension plan's liabilities and assets, and deferred outflows of resources and inflows of resources related to pensions.

In addition, GASB Statement No. 68 requires the notes of the financial statements for the employers to include certain additional information, including (page numbers refer to page numbers from this report unless specified otherwise):

- A description of the types of benefits provided by the plan, as well as automatic or ad hoc COLAs (please see pages B-1 - B-5 of the December 31, 2020 Annual Actuarial Valuation report dated March 15, 2021);
- 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 (page 14 and page 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, 2020 Annual Actuarial Valuation report dated March 15, 2021, 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, 2020 and a measurement date of December 31, 2020.

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 2.00% (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 2120 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, of 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, 2020

A. Expense/(Income)

1. Service Cost	\$ 118,112
2. Interest on the Total Pension Liability	487,532
3. Current-Period Benefit Changes	0
4. Employee Contributions (made negative for addition here)	(74,173)
5. Projected Earnings on Plan Investments (made negative for addition here)	(444,870)
6. Other Changes in Plan Fiduciary Net Position	(47,367)
7. Recognition of Outflow (Inflow) of Resources due to Liabilities	55,084
8. Recognition of Outflow (Inflow) of Resources due to Assets	(151,152)
9. Total Pension Expense/(Income)	\$ (56,834)

Recognition of Deferred Outflows and Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in 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 299.94 years. Additionally, the total plan membership (active employees and inactive employees) was 85. 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 3.5287 years.

Additionally, differences between projected and actual earnings on pension plan investments should be recognized in 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, 2020

A. Outflows (Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total Pension Liability (gains) or losses	\$ 33,017
2. Assumption Changes (gains) or losses	\$ (78,104)
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	3.5287
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	\$ 9,357
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes	\$ (22,134)
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	<u>\$ (12,777)</u>
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	\$ 23,660
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes	\$ (55,970)
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	<u>\$ (32,310)</u>

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$ (422,859)
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	\$ (84,572)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$ (338,287)

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, 2020

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	\$ 130,473	\$ 75,389	\$ 55,084
2. Due to Assets	148,381	299,533	(151,152)
3. Total	\$ 278,854	\$ 374,922	\$ (96,068)

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	\$ 70,238	\$ 45,030	\$ 25,208
2. Assumption changes	60,235	30,359	29,876
3. Net difference between projected and actual earnings on pension plan investments	148,381	299,533	(151,152)
4. Total	\$ 278,854	\$ 374,922	\$ (96,068)

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	\$ 47,907	\$ 71,206	\$ (23,299)
2. Assumption changes	26,840	55,970	\$ (29,130)
3. Net difference between projected and actual earnings on pension plan investments	283,551	810,414	(526,863)
4. Total	\$ 358,298	\$ 937,590	\$ (579,292)

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
2021	\$ (164,478)
2022	(110,333)
2023	(219,910)
2024	(84,571)
2025	0
Thereafter	0
Total	\$ (579,292)

Recognition of Deferred Outflows and Inflows of Resources

Reporting Date - December 31, 2020

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	\$ 0	1.0000	\$ 0	\$ 0	0.0000
2015	74,069	3.9763	0	0	0.0000
2016	(186,602)	3.4151	0	0	0.0000
2017	145,089	3.1399	6,465	0	0.0000
2018	187,495	3.4456	54,416	24,247	0.4456
2019	(161,266)	3.5813	(45,030)	(71,206)	1.5813
2020	33,017	3.5287	9,357	23,660	2.5287
Total			\$ 25,208	\$ (23,299)	
Deferred Outflow (Inflow) due to Assumption Changes					
2014	\$ 0	1.0000	\$ 0	\$ 0	0.0000
2015	15,147	3.9763	0	0	0.0000
2016	(23,556)	3.4151	0	0	0.0000
2017	(184,589)	3.1399	(8,225)	0	0.0000
2018	207,545	3.4456	60,235	26,840	0.4456
2019	0	3.5813	0	0	1.5813
2020	(78,104)	3.5287	(22,134)	(55,970)	2.5287
Total			\$ 29,876	\$ (29,130)	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2016	\$ 33,026	5.0000	\$ 6,606	\$ 0	0.0000
2017	(431,885)	5.0000	(86,377)	(86,377)	1.0000
2018	708,876	5.0000	141,775	283,551	2.0000
2019	(642,918)	5.0000	(128,584)	(385,750)	3.0000
2020	(422,859)	5.0000	(84,572)	(338,287)	4.0000
Total			\$ (151,152)	\$ (526,863)	

Schedule of Changes in Net Pension Liability and Related Ratios Current Period Calendar Year Ended December 31, 2020

A. Total pension liability

1. Service Cost	\$	118,112
2. Interest on the Total Pension Liability		487,532
3. Changes of benefit terms		0
4. Difference between expected and actual experience of the Total Pension Liability		33,017
5. Changes of assumptions		(78,104)
6. Benefit payments, including refunds of employee contributions		(265,405)
7. Net change in total pension liability	\$	295,152
8. Total pension liability – beginning		6,798,231
9. Total pension liability – ending	<u>\$</u>	<u>7,093,383</u>

B. Plan fiduciary net position

1. Contributions – employer	\$	135,185
2. Contributions – employee		74,173
3. Net investment income		867,729
4. Benefit payments, including refunds of employee contributions		(265,405)
5. Other (Net Transfer)		47,367
6. Net change in plan fiduciary net position	\$	859,049
7. Plan fiduciary net position – beginning		6,140,477
8. Plan fiduciary net position – ending	<u>\$</u>	<u>6,999,526</u>

C. Net pension liability/(asset)

\$ **93,857**

D. Plan fiduciary net position as a percentage of the total pension liability

98.68%

E. Covered Valuation payroll

\$ **1,069,494**

F. Net pension liability as a percentage of covered valuation payroll

8.78%

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	\$ 8,056,245	\$ 7,093,383	\$ 6,347,287
Plan Fiduciary Net Position	6,999,526	6,999,526	6,999,526
Net Pension Liability/(Asset)	\$ 1,056,719	\$ 93,857	\$ (652,239)

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,	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Total Pension Liability										
Service Cost	\$ 118,112	\$ 109,822	\$ 105,468	\$ 96,242	\$ 109,139	\$ 113,280				
Interest on the Total Pension Liability	487,532	476,155	441,523	422,508	411,317	378,708				
Benefit Changes	0	0	0	0	0	0				
Difference between Expected and Actual Experience	33,017	(161,266)	187,495	145,089	(186,602)	74,069				
Assumption Changes	(78,104)	0	207,545	(184,589)	(23,556)	15,147				
Benefit Payments and Refunds	(265,405)	(278,443)	(248,612)	(212,057)	(141,258)	(116,864)				
Net Change in Total Pension Liability	295,152	146,268	693,419	267,193	169,040	464,340				
Total Pension Liability - Beginning	6,798,231	6,651,963	5,958,544	5,691,351	5,522,311	5,057,971				
Total Pension Liability - Ending (a)	\$ 7,093,383	\$ 6,798,231	\$ 6,651,963	\$ 5,958,544	\$ 5,691,351	\$ 5,522,311				
Plan Fiduciary Net Position										
Employer Contributions	\$ 135,185	\$ 114,936	\$ 135,372	\$ 126,481	\$ 111,845	\$ 113,877				
Employee Contributions	74,173	50,227	49,567	47,402	42,870	46,927				
Pension Plan Net Investment Income	867,729	1,026,568	(280,874)	799,888	312,759	23,176				
Benefit Payments and Refunds	(265,405)	(278,443)	(248,612)	(212,057)	(141,258)	(116,864)				
Other	47,367	(242,339)	151,102	(49,068)	40,740	(96,914)				
Net Change in Plan Fiduciary Net Position	859,049	670,949	(193,445)	712,646	366,956	(29,798)				
Plan Fiduciary Net Position - Beginning	6,140,477	5,469,528	5,662,973	4,950,327	4,583,371	4,613,169				
Plan Fiduciary Net Position - Ending (b)	\$ 6,999,526	\$ 6,140,477	\$ 5,469,528	\$ 5,662,973	\$ 4,950,327	\$ 4,583,371				
Net Pension Liability/(Asset) - Ending (a) - (b)	93,857	657,754	1,182,435	295,571	741,024	938,940				
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	98.68%	90.32 %	82.22 %	95.04 %	86.98%	83.00 %				
Covered Valuation Payroll	\$ 1,069,494	\$ 1,115,881	\$ 1,101,487	\$ 999,847	\$ 952,673	\$ 1,042,824				
Net Pension Liability as a Percentage of Covered Valuation Payroll	8.78%	58.94 %	107.35 %	29.56 %	77.78%	90.04 %				



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
2015	\$ 113,876	\$ 113,877	\$ (1)	\$ 1,042,824	10.92%
2016	111,844	111,845	(1)	952,673	11.74%
2017	126,481	126,481	(0)	999,847	12.65%
2018	135,373	135,372	1	1,101,487	12.29%
2019	114,936	114,936	0	1,115,881	10.30%
2020	135,184 *	135,185	(1)	1,069,494	12.64%

* Estimated based on contribution rate of 12.64% and covered valuation payroll of \$1,069,494.
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 2020 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 2020 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): 23-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 18 years for most employers (three employers were financed over 27 years and four others were 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, 2018 actuarial valuation.

Development of Market Value of Assets

Market Value of Assets as of December 31, 2020

1. Employee Contribution Reserve (MDF Assets from IMRF)	\$	1,367,180
2. Employer Contribution Reserve (EAF assets from IMRF)		2,518,788
3. Annuitant Reserve		3,091,151
4. Miscellaneous Adjustment*		22,407
5. Net Market Value	\$	6,999,526

* Includes an adjustment factor of 0.003211435 on Items 1 through 3 to ensure that Market Value of Assets for all employers balances to the total Market Value of IMRF. Miscellaneous adjustments are due to various items such as suspended annuity reserve, disability benefit reserve, death benefit reserve, supplemental benefit reserve, employers with no assets, etc.

Schedule of Contributions

Total Contributions

1. Employer

a.) Wage Reporting	\$	135,185
b.) Accelerated payments and Reserve Payments		-
	\$	135,185

2. Member

a.) Wage Reporting	\$	48,128
b.) Member Payments (i.e. ERI, Pension Payments)		26,045
Sub-total (Amount used for valuation on Schedule of Changes Page 11)	\$	74,173
c.) Voluntary Additional Plan	\$	12,867
Total Member Contributions (a+b+c)	\$	87,040

Total Employer and Member Contributions (1+2)	\$	222,225
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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	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.
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A detailed description of the actuarial assumptions and methods can be found in the December 31, 2020 Illinois Municipal Retirement Fund 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 2.00%; 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 Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

Single Discount Rate Development

Projection of Contributions

Year	Payroll for Current Employees	Contributions from Current Employees	Normal Cost Contributions	UAL Contributions	Total Contributions
2020	\$ 1,069,494				
2021	1,047,819	\$ 47,152	\$ 64,926	\$ 48,125	\$ 160,202
2022	976,719	43,952	55,398	35,861	135,211
2023	904,091	40,684	50,653	21,881	113,218
2024	842,651	37,919	47,127	5,955	91,001
2025	790,990	35,595	44,159	(4,467)	75,287
2026	749,861	33,744	41,715	(4,579)	70,880
2027	715,290	32,188	39,721	(4,693)	67,216
2028	683,931	30,777	37,776	(4,811)	63,742
2029	652,698	29,371	35,922	(4,931)	60,363
2030	619,632	27,883	33,980	(5,054)	56,809
2031	586,800	26,406	32,063	(5,180)	53,289
2032	554,709	24,962	30,200	(5,310)	49,852
2033	519,015	23,356	28,103	(5,443)	46,015
2034	480,813	21,637	25,891	(5,579)	41,949
2035	441,630	19,873	23,563	(5,718)	37,718
2036	406,029	18,271	21,463	(5,861)	33,873
2037	375,771	16,910	19,640	(6,008)	30,542
2038	343,070	15,438	17,727	(6,158)	27,007
2039	311,042	13,997	15,826	(6,312)	23,511
2040	281,392	12,663	14,122	(6,470)	20,315
2041	251,831	11,332	12,464	(6,631)	17,166
2042	223,764	10,069	10,854	(6,797)	14,126
2043	201,510	9,068	9,555	0	18,623
2044	183,565	8,260	8,523	0	16,783
2045	167,358	7,531	7,654	0	15,185
2046	154,383	6,947	6,923	0	13,871
2047	141,593	6,372	6,224	0	12,595
2048	128,961	5,803	5,541	0	11,344
2049	120,365	5,416	5,052	0	10,469
2050	114,400	5,148	4,700	0	9,848
2051	109,832	4,942	4,425	0	9,368
2052	106,495	4,792	4,196	0	8,988
2053	104,251	4,691	4,036	0	8,727
2054	90,666	4,080	3,456	0	7,536
2055	73,368	3,302	2,782	0	6,084
2056	68,011	3,060	2,559	0	5,619
2057	54,787	2,465	2,034	0	4,499
2058	39,075	1,758	1,447	0	3,205
2059	23,173	1,043	858	0	1,901
2060	6,447	290	241	0	531
2061	2,084	94	82	0	176
2062	796	36	34	0	70
2063	342	15	17	0	32
2064	219	10	11	0	21
2065	94	4	6	0	10
2066	1	0	0	0	0
2067	0	0	0	0	0
2068	0	0	0	0	0
2069	0	0	0	0	0
2070	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
2071	\$ 0	\$ 0	\$ 0	\$ 0	0
2072	0	0	0	0	0
2073	0	0	0	0	0
2074	0	0	0	0	0
2075	0	0	0	0	0
2076	0	0	0	0	0
2077	0	0	0	0	0
2078	0	0	0	0	0
2079	0	0	0	0	0
2080	0	0	0	0	0
2081	0	0	0	0	0
2082	0	0	0	0	0
2083	0	0	0	0	0
2084	0	0	0	0	0
2085	0	0	0	0	0
2086	0	0	0	0	0
2087	0	0	0	0	0
2088	0	0	0	0	0
2089	0	0	0	0	0
2090	0	0	0	0	0
2091	0	0	0	0	0
2092	0	0	0	0	0
2093	0	0	0	0	0
2094	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

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	Projected Ending Plan Net	
	Plan Net Position		Contributions		Payments		Investment Earnings at 7.25%	Position	
	(a)		(b)		(c)		(d)	(e)=(a)+(b)-(c)+(d)	
2021	\$	6,999,526	\$	160,202	\$	280,778	\$	503,171	\$ 7,382,122
2022		7,382,122		135,211		311,935		528,910	7,734,308
2023		7,734,308		113,217		344,725		552,492	8,055,293
2024		8,055,293		91,001		373,832		573,935	8,346,398
2025		8,346,398		75,287		407,243		593,291	8,607,732
2026		8,607,732		70,880		438,336		610,973	8,851,249
2027		8,851,249		67,216		461,195		627,684	9,084,954
2028		9,084,954		63,743		489,609		643,492	9,302,580
2029		9,302,580		60,363		519,423		658,087	9,501,607
2030		9,501,607		56,809		548,391		671,358	9,681,384
2031		9,681,384		53,289		583,752		683,007	9,833,928
2032		9,833,928		49,852		615,609		692,810	9,960,981
2033		9,960,981		46,016		643,543		700,890	10,064,343
2034		10,064,343		41,949		673,572		707,169	10,139,890
2035		10,139,890		37,718		704,744		711,385	10,184,249
2036		10,184,249		33,873		729,240		713,592	10,202,474
2037		10,202,474		30,542		754,569		713,893	10,192,340
2038		10,192,340		27,007		780,645		712,103	10,150,805
2039		10,150,805		23,511		803,613		708,149	10,078,853
2040		10,078,853		20,316		825,307		702,046	9,975,908
2041		9,975,908		17,165		845,231		693,761	9,841,604
2042		9,841,604		14,126		859,508		683,407	9,679,629
2043		9,679,629		18,623		867,164		671,552	9,502,640
2044		9,502,640		16,783		871,212		658,510	9,306,721
2045		9,306,721		15,185		872,507		644,203	9,093,603
2046		9,093,603		13,871		869,963		628,796	8,866,306
2047		8,866,306		12,595		867,121		612,373	8,624,153
2048		8,624,153		11,344		860,459		595,009	8,370,048
2049		8,370,048		10,469		849,581		576,943	8,107,879
2050		8,107,879		9,848		835,757		558,406	7,840,375
2051		7,840,375		9,368		820,462		539,539	7,568,821
2052		7,568,821		8,988		802,458		520,479	7,295,830
2053		7,295,830		8,727		781,559		501,423	7,024,421
2054		7,024,421		7,536		774,869		481,941	6,739,029
2055		6,739,029		6,084		762,376		461,644	6,444,380
2056		6,444,380		5,619		738,619		441,111	6,152,491
2057		6,152,491		4,499		731,019		420,180	5,846,152
2058		5,846,152		3,205		716,034		398,458	5,531,781
2059		5,531,781		1,901		709,947		375,837	5,199,572
2060		5,199,572		531		695,209		352,228	4,857,122
2061		4,857,122		176		664,800		328,470	4,520,968
2062		4,520,968		70		632,641		305,241	4,193,638
2063		4,193,638		32		599,449		282,690	3,876,910
2064		3,876,910		21		565,664		260,930	3,572,197
2065		3,572,197		10		531,673		240,049	3,280,583
2066		3,280,583		0		497,006		220,141	3,003,719
2067		3,003,719		0		462,129		201,311	2,742,901
2068		2,742,901		0		427,473		183,636	2,499,063
2069		2,499,063		0		393,432		167,170	2,272,801
2070		2,272,801		0		360,418		151,942	2,064,325

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)
2071	\$ 2,064,325	\$ 0	\$ 328,829	\$ 137,952	\$ 1,873,447
2072	1,873,447	0	299,009	125,175	1,699,613
2073	1,699,613	0	271,237	113,562	1,541,939
2074	1,541,939	0	245,693	103,040	1,399,285
2075	1,399,285	0	222,460	93,525	1,270,350
2076	1,270,350	0	201,553	84,922	1,153,719
2077	1,153,719	0	182,917	77,130	1,047,932
2078	1,047,932	0	166,438	70,047	951,541
2079	951,541	0	151,938	63,575	863,179
2080	863,179	0	139,187	57,623	781,615
2081	781,615	0	127,920	52,111	705,806
2082	705,806	0	117,853	46,974	634,927
2083	634,927	0	108,717	42,160	568,370
2084	568,370	0	100,270	37,636	505,736
2085	505,736	0	92,303	33,378	446,811
2086	446,811	0	84,659	29,379	391,530
2087	391,530	0	77,232	25,635	339,933
2088	339,933	0	69,957	22,154	292,130
2089	292,130	0	62,823	18,942	248,249
2090	248,249	0	55,851	16,009	208,407
2091	208,407	0	49,082	13,361	172,686
2092	172,686	0	42,590	11,003	141,099
2093	141,099	0	36,450	8,932	113,581
2094	113,581	0	30,734	7,140	89,987
2095	89,987	0	25,504	5,616	70,099
2096	70,099	0	20,805	4,341	53,635
2097	53,635	0	16,665	3,295	40,265
2098	40,265	0	13,094	2,453	29,624
2099	29,624	0	10,079	1,789	21,334
2100	21,334	0	7,590	1,276	15,020
2101	15,020	0	5,584	890	10,327
2102	10,327	0	4,008	606	6,925
2103	6,925	0	2,803	402	4,524
2104	4,524	0	1,908	260	2,875
2105	2,875	0	1,263	163	1,776
2106	1,776	0	811	100	1,065
2107	1,065	0	505	59	620
2108	620	0	304	34	349
2109	349	0	177	19	191
2110	191	0	100	10	101
2111	101	0	54	5	52
2112	52	0	29	3	26
2113	26	0	15	1	13
2114	13	0	7	1	7
2115	7	0	4	0	3
2116	3	0	2	0	2
2117	2	0	1	0	1
2118	1	0	0	0	1
2119	1	0	0	0	1
2120	1	0	0	0	1

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 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)
2021	\$ 6,999,526	\$ 280,778	\$ 280,778	\$ 0	\$ 271,121	\$ 0	\$ 271,121
2022	7,382,122	311,935	311,935	0	280,846	0	280,846
2023	7,734,308	344,725	344,725	0	289,387	0	289,387
2024	8,055,293	373,832	373,832	0	292,607	0	292,607
2025	8,346,398	407,243	407,243	0	297,212	0	297,212
2026	8,607,732	438,336	438,336	0	298,279	0	298,279
2027	8,851,249	461,195	461,195	0	292,618	0	292,618
2028	9,084,954	489,609	489,609	0	289,647	0	289,647
2029	9,302,580	519,423	519,423	0	286,513	0	286,513
2030	9,501,607	548,391	548,391	0	282,043	0	282,043
2031	9,681,384	583,752	583,752	0	279,935	0	279,935
2032	9,833,928	615,609	615,609	0	275,256	0	275,256
2033	9,960,981	643,543	643,543	0	268,294	0	268,294
2034	10,064,343	673,572	673,572	0	261,831	0	261,831
2035	10,139,890	704,744	704,744	0	255,429	0	255,429
2036	10,184,249	729,240	729,240	0	246,440	0	246,440
2037	10,202,474	754,569	754,569	0	237,763	0	237,763
2038	10,192,340	780,645	780,645	0	229,351	0	229,351
2039	10,150,805	803,613	803,613	0	220,139	0	220,139
2040	10,078,853	825,307	825,307	0	210,799	0	210,799
2041	9,975,908	845,231	845,231	0	201,294	0	201,294
2042	9,841,604	859,508	859,508	0	190,857	0	190,857
2043	9,679,629	867,164	867,164	0	179,540	0	179,540
2044	9,502,640	871,212	871,212	0	168,185	0	168,185
2045	9,306,721	872,507	872,507	0	157,049	0	157,049
2046	9,093,603	869,963	869,963	0	146,006	0	146,006
2047	8,866,306	867,121	867,121	0	135,691	0	135,691
2048	8,624,153	860,459	860,459	0	125,546	0	125,546
2049	8,370,048	849,581	849,581	0	115,580	0	115,580
2050	8,107,879	835,757	835,757	0	106,013	0	106,013
2051	7,840,375	820,462	820,462	0	97,038	0	97,038
2052	7,568,821	802,458	802,458	0	88,493	0	88,493
2053	7,295,830	781,559	781,559	0	80,362	0	80,362
2054	7,024,421	774,869	774,869	0	74,288	0	74,288
2055	6,739,029	762,376	762,376	0	68,149	0	68,149
2056	6,444,380	738,619	738,619	0	61,562	0	61,562
2057	6,152,491	731,019	731,019	0	56,810	0	56,810
2058	5,846,152	716,034	716,034	0	51,884	0	51,884
2059	5,531,781	709,947	709,947	0	47,966	0	47,966
2060	5,199,572	695,209	695,209	0	43,795	0	43,795
2061	4,857,122	664,800	664,800	0	39,048	0	39,048
2062	4,520,968	632,641	632,641	0	34,647	0	34,647
2063	4,193,638	599,449	599,449	0	30,610	0	30,610
2064	3,876,910	565,664	565,664	0	26,932	0	26,932
2065	3,572,197	531,673	531,673	0	23,603	0	23,603
2066	3,280,583	497,006	497,006	0	20,572	0	20,572
2067	3,003,719	462,129	462,129	0	17,836	0	17,836
2068	2,742,901	427,473	427,473	0	15,383	0	15,383
2069	2,499,063	393,432	393,432	0	13,201	0	13,201
2070	2,272,801	360,418	360,418	0	11,276	0	11,276

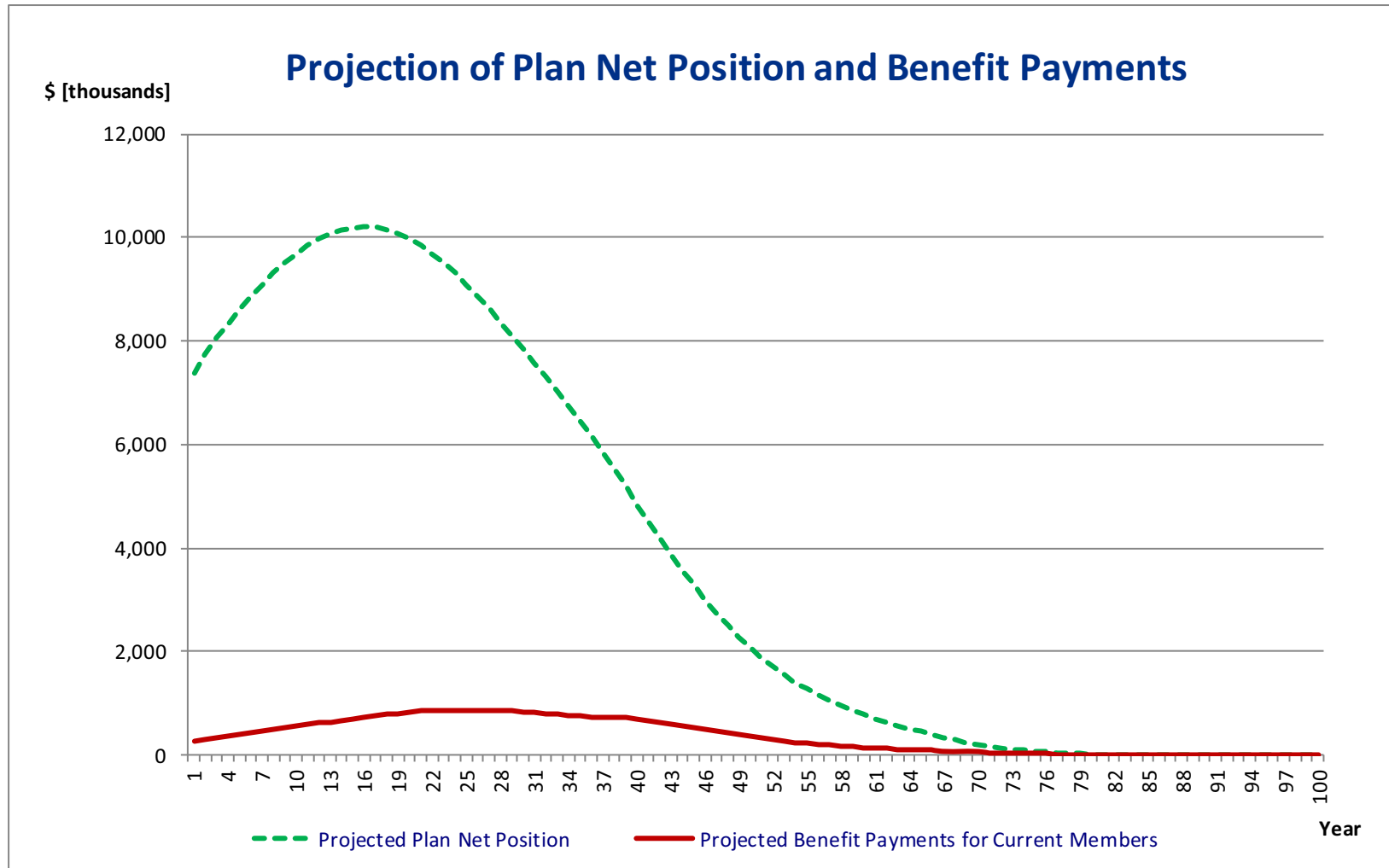
The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.

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)
2071	\$ 2,064,325	\$ 328,829	\$ 328,829	\$ 0	\$ 9,592	\$ 0	\$ 9,592
2072	1,873,447	299,009	299,009	0	8,132	0	8,132
2073	1,699,613	271,237	271,237	0	6,878	0	6,878
2074	1,541,939	245,693	245,693	0	5,809	0	5,809
2075	1,399,285	222,460	222,460	0	4,905	0	4,905
2076	1,270,350	201,553	201,553	0	4,143	0	4,143
2077	1,153,719	182,917	182,917	0	3,506	0	3,506
2078	1,047,932	166,438	166,438	0	2,974	0	2,974
2079	951,541	151,938	151,938	0	2,532	0	2,532
2080	863,179	139,187	139,187	0	2,163	0	2,163
2081	781,615	127,920	127,920	0	1,853	0	1,853
2082	705,806	117,853	117,853	0	1,592	0	1,592
2083	634,927	108,717	108,717	0	1,369	0	1,369
2084	568,370	100,270	100,270	0	1,177	0	1,177
2085	505,736	92,303	92,303	0	1,011	0	1,011
2086	446,811	84,659	84,659	0	864	0	864
2087	391,530	77,232	77,232	0	735	0	735
2088	339,933	69,957	69,957	0	621	0	621
2089	292,130	62,823	62,823	0	520	0	520
2090	248,249	55,851	55,851	0	431	0	431
2091	208,407	49,082	49,082	0	353	0	353
2092	172,686	42,590	42,590	0	286	0	286
2093	141,099	36,450	36,450	0	228	0	228
2094	113,581	30,734	30,734	0	179	0	179
2095	89,987	25,504	25,504	0	139	0	139
2096	70,099	20,805	20,805	0	105	0	105
2097	53,635	16,665	16,665	0	79	0	79
2098	40,265	13,094	13,094	0	58	0	58
2099	29,624	10,079	10,079	0	41	0	41
2100	21,334	7,590	7,590	0	29	0	29
2101	15,020	5,584	5,584	0	20	0	20
2102	10,327	4,008	4,008	0	13	0	13
2103	6,925	2,803	2,803	0	9	0	9
2104	4,524	1,908	1,908	0	6	0	6
2105	2,875	1,263	1,263	0	3	0	3
2106	1,776	811	811	0	2	0	2
2107	1,065	505	505	0	1	0	1
2108	620	304	304	0	1	0	1
2109	349	177	177	0	0	0	0
2110	191	100	100	0	0	0	0
2111	101	54	54	0	0	0	0
2112	52	29	29	0	0	0	0
2113	26	15	15	0	0	0	0
2114	13	7	7	0	0	0	0
2115	7	4	4	0	0	0	0
2116	3	2	2	0	0	0	0
2117	2	1	1	0	0	0	0
2118	1	0	0	0	0	0	0
2119	1	0	0	0	0	0	0
2120	1	0	0	0	0	0	0
Totals					\$ 7,857,088	\$ -	\$ 7,857,088

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

<i>Actuarial Accrued Liability (AAL)</i>	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."
<i>Actuarial Assumptions</i>	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.
<i>Accrued Service</i>	Service credited under the fund which was rendered before the date of the actuarial valuation.
<i>Actuarial Equivalent</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Gain (Loss)</i>	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.
<i>Actuarial Present Value (APV)</i>	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.
<i>Actuarial Valuation</i>	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.
<i>Actuarial Valuation Date</i>	The date as of which an actuarial valuation is performed.
<i>Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)</i>	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.