

Alsip Park Dist Regular

GASB Statement No. 68 Employer Reporting
Accounting Schedules
December 31, 2019



Table of Contents

Page

Certification Letter

Section A Executive Summary

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

Section B Financial Statements

Pension Expense/(Income) Under GASB Statement No. 68	7
Statement of Outflows and Inflows Arising from Current Period	8
Statement of Outflows and Inflows Arising from Current and Prior Periods	9
Recognition of Deferred Outflows and Inflows of Resources.....	10
Schedule of Changes in Net Pension Liability and Related Ratios Current Period	11
Sensitivity of Net Pension Liability/(Asset) to the Single Discount Rate Assumption	11
Multiyear Schedule of Changes in Net Pension Liability and Related Ratios	12
Multiyear Schedule of Contributions	13
Notes to Schedule of Contributions.....	14
Development of Market Value of Assets	15
Schedule of Contributions	15
Summary of Actuarial Methods and Assumptions Used in the Calculation of the Total Pension Liability	16

Section C Calculation of the Single Discount Rate

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

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



March 26, 2020

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 by us.

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, 2019 for additional discussions of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

Alsip Park Dist
Illinois Municipal Retirement Fund
March 26, 2020
Page 2

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.

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:sc



SECTION A

EXECUTIVE SUMMARY

Executive Summary as of December 31, 2019

Actuarial Valuation Date	December 31, 2019
Measurement Date of the Net Pension Liability	December 31, 2019
Fiscal Year End	April 30, 2020

Membership

Number of	
- Retirees and Beneficiaries	23
- Inactive, Non-Retired Members	32
- Active Members	30
- Total	85
Covered Valuation Payroll ⁽¹⁾	\$ 1,115,881

Net Pension Liability

Total Pension Liability/(Asset)	\$ 6,798,231
Plan Fiduciary Net Position	6,140,477
Net Pension Liability/(Asset)	\$ 657,754
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	90.32%
Net Pension Liability as a Percentage of Covered Valuation Payroll	58.94%

Development of the Single Discount Rate as of December 31, 2019

Long-Term Expected Rate of Investment Return	7.25%
Long-Term Municipal Bond Rate ⁽²⁾	2.75%
Last year ending December 31 in the 2020 to 2119 projection period for which projected benefit payments are fully funded	2119
Resulting Single Discount Rate based on the above development	7.25%
Single Discount Rate calculated using December 31, 2018 Measurement Date	7.25%
Total Pension Expense/(Income)	\$ 423,520

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	\$ 85,128	\$ 116,236
Changes in assumptions	87,075	8,225
Net difference between projected and actual earnings on pension plan investments	431,932	687,088
Total	\$ 604,135	\$ 811,549

⁽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, 2019. 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, 2019.

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, 2019 Annual Actuarial Valuation report dated March 13, 2020);
- 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 pages A-3, B-5 and Section D of the December 31, 2019 Annual Actuarial Valuation report dated March 13, 2020, 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 employer's prior fiscal year-end date. 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, 2019 and a measurement date of December 31, 2019.

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 2.75% (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 the 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 2119 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, 2019

A. Expense/(Income)

1. Service Cost	\$	109,822
2. Interest on the Total Pension Liability		476,155
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		(50,227)
5. Projected Earnings on Plan Investments (made negative for addition here)		(383,650)
6. Other Changes in Plan Fiduciary Net Position		242,339
7. Recognition of Outflow (Inflow) of Resources due to Liabilities		31,497
8. Recognition of Outflow (Inflow) of Resources due to Assets		(2,416)
9. Total Pension Expense/(Income)	\$	423,520

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 300.83 years. Additionally, the total plan membership (active employees and inactive employees) was 84. 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 3.5813 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, 2019

A. Outflows (Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total Pension Liability (gains) or losses	\$ (161,266)
2. Assumption Changes (gains) or losses	\$ 0
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	3.5813
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	\$ (45,030)
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	<u>\$ (45,030)</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	\$ (116,236)
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	<u>\$ (116,236)</u>

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$ (642,918)
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	\$ (128,584)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$ (514,334)

* 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, 2019

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	\$ 160,859	\$ 129,362	\$ 31,497
2. Due to Assets	212,545	214,961	(2,416)
3. Total	\$ 373,404	\$ 344,323	\$ 29,081

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	\$ 100,624	\$ 67,712	\$ 32,912
2. Assumption changes	60,235	61,650	\$ (1,415)
3. Net difference between projected and actual earnings on pension plan investments	212,545	214,961	(2,416)
4. Total	\$ 373,404	\$ 344,323	\$ 29,081

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	\$ 85,128	\$ 116,236	\$ (31,108)
2. Assumption changes	87,075	8,225	78,850
3. Net difference between projected and actual earnings on pension plan investments	431,932	687,088	(255,156)
4. Total	\$ 604,135	\$ 811,549	\$ (207,414)

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
2020	\$ 1,281
2021	(67,129)
2022	(12,984)
2023	(128,582)
2024	0
Thereafter	0
Total	\$ (207,414)

Recognition of Deferred Outflows and Inflows of Resources

Reporting Date - December 31, 2019

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	(22,682)	0	0.0000
2017	145,089	3.1399	46,208	6,465	0.1399
2018	187,495	3.4456	54,416	78,663	1.4456
2019	(161,266)	3.5813	(45,030)	(116,236)	2.5813
Total			\$ 32,912	\$ (31,108)	
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	(2,862)	0	0.0000
2017	(184,589)	3.1399	(58,788)	(8,225)	0.1399
2018	207,545	3.4456	60,235	87,075	1.4456
2019	0	3.5813	0	0	2.5813
Total			\$ (1,415)	\$ 78,850	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2015	\$ 320,825	5.0000	\$ 64,165	\$ 0	0.0000
2016	33,026	5.0000	6,605	6,606	1.0000
2017	(431,885)	5.0000	(86,377)	(172,754)	2.0000
2018	708,876	5.0000	141,775	425,326	3.0000
2019	(642,918)	5.0000	(128,584)	(514,334)	4.0000
Total			\$ (2,416)	\$ (255,156)	

Schedule of Changes in Net Pension Liability and Related Ratios Current Period Calendar Year Ended December 31, 2019

A. Total pension liability	
1. Service Cost	\$ 109,822
2. Interest on the Total Pension Liability	476,155
3. Changes of benefit terms	0
4. Difference between expected and actual experience of the Total Pension Liability	(161,266)
5. Changes of assumptions	0
6. Benefit payments, including refunds of employee contributions	(278,443)
7. Net change in total pension liability	\$ 146,268
8. Total pension liability – beginning	6,651,963
9. Total pension liability – ending	<u><u>\$ 6,798,231</u></u>
B. Plan fiduciary net position	
1. Contributions – employer	\$ 114,936
2. Contributions – employee	50,227
3. Net investment income	1,026,568
4. Benefit payments, including refunds of employee contributions	(278,443)
5. Other (Net Transfer)	(242,339)
6. Net change in plan fiduciary net position	\$ 670,949
7. Plan fiduciary net position – beginning	5,469,528
8. Plan fiduciary net position – ending	<u><u>\$ 6,140,477</u></u>
C. Net pension liability/(asset)	<u><u>\$ 657,754</u></u>
D. Plan fiduciary net position as a percentage of the total pension liability	90.32%
E. Covered Valuation payroll	\$ 1,115,881
F. Net pension liability as a percentage of covered valuation payroll	58.94%

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	\$ 7,769,223	\$ 6,798,231	\$ 6,010,960
Plan Fiduciary Net Position	6,140,477	6,140,477	6,140,477
Net Pension Liability/(Asset)	\$ 1,628,746	\$ 657,754	\$ (129,517)



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,	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Pension Liability										
Service Cost	\$ 109,822	\$ 105,468	\$ 96,242	\$ 109,139	\$ 113,280					
Interest on the Total Pension Liability	476,155	441,523	422,508	411,317	378,708					
Benefit Changes	0	0	0	0	0					
Difference between Expected and Actual Experience	(161,266)	187,495	145,089	(186,602)	74,069					
Assumption Changes	0	207,545	(184,589)	(23,556)	15,147					
Benefit Payments and Refunds	(278,443)	(248,612)	(212,057)	(141,258)	(116,864)					
Net Change in Total Pension Liability	146,268	693,419	267,193	169,040	464,340					
Total Pension Liability - Beginning	6,651,963	5,958,544	5,691,351	5,522,311	5,057,971					
Total Pension Liability - Ending (a)	\$ 6,798,231	\$ 6,651,963	\$ 5,958,544	\$ 5,691,351	\$ 5,522,311					
Plan Fiduciary Net Position										
Employer Contributions	\$ 114,936	\$ 135,372	\$ 126,481	\$ 111,845	\$ 113,877					
Employee Contributions	50,227	49,567	47,402	42,870	46,927					
Pension Plan Net Investment Income	1,026,568	(280,874)	799,888	312,759	23,176					
Benefit Payments and Refunds	(278,443)	(248,612)	(212,057)	(141,258)	(116,864)					
Other	(242,339)	151,102	(49,068)	40,740	(96,914)					
Net Change in Plan Fiduciary Net Position	670,949	(193,445)	712,646	366,956	(29,798)					
Plan Fiduciary Net Position - Beginning	5,469,528	5,662,973	4,950,327	4,583,371	4,613,169					
Plan Fiduciary Net Position - Ending (b)	\$ 6,140,477	\$ 5,469,528	\$ 5,662,973	\$ 4,950,327	\$ 4,583,371					
Net Pension Liability/(Asset) - Ending (a) - (b)	657,754	1,182,435	295,571	741,024	938,940					
Plan Fiduciary Net Position as a Percentage										
of Total Pension Liability	90.32%	82.22 %	95.04 %	86.98%	83.00 %					
Covered Valuation Payroll	\$ 1,115,881	\$ 1,101,487	\$ 999,847	\$ 952,673	\$ 1,042,824					
Net Pension Liability as a Percentage										
of Covered Valuation Payroll	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%

* Estimated based on contribution rate of 10.30% and covered valuation payroll of \$1,115,881.
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 2019 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 fiscal year in which contributions are reported.

Methods and Assumptions Used to Determine 2019 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): 24-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 19 years for most employers (three employers were financed over 28 years and four others were financed over 29 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	7.50%
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, an IMRF specific mortality table was 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, an IMRF specific mortality table was 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, an IMRF specific mortality table was 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, 2017 actuarial valuation.

Development of Market Value of Assets

Market Value of Assets as of December 31, 2019

1. Employee Contribution Reserve (MDF Assets from IMRF)	\$	1,214,557
2. Employer Contribution Reserve (EAF assets from IMRF)	\$	1,844,566
3. Annuitant Reserve	\$	3,077,323
4. Miscellaneous Adjustment*	\$	4,031
5. Net Market Value	\$	6,140,477

* Includes an adjustment factor of 0.0006568629 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	\$	114,936
b.) Accelerated payments and Reserve Payments		-
	\$	114,936

2. Member

a.) Wage Reporting	\$	50,215
b.) Member Payments (i.e. ERI, Pension Payments)		12
Sub-total (Amount used for valuation on Schedule of Changes Page 10)	\$	50,227

c.) Voluntary Additional Plan	\$	13,798
Total Member Contributions (a+b+c)	\$	64,025

Total Employer and Member Contributions (1+2)	\$	178,961
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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	2.50%
Salary Increases	3.35% to 14.25%
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, an IMRF specific mortality table was 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, an IMRF specific mortality table was 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, an IMRF specific mortality table was 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.
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A detailed description of the actuarial assumptions and methods can be found in the December 31, 2019 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 2.75%; 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 and future 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
2019	\$ 1,115,881				
2020	1,105,262	\$ 49,737	\$ 68,945	\$ 64,697	\$ 183,379
2021	1,049,989	47,250	66,021	60,797	174,068
2022	988,277	44,472	61,746	56,235	162,454
2023	924,072	41,583	57,827	50,921	150,331
2024	871,946	39,238	54,478	44,754	138,470
2025	828,572	37,286	51,685	45,873	134,844
2026	795,449	35,795	49,540	47,019	132,354
2027	768,092	34,564	47,759	48,195	130,519
2028	743,111	33,440	46,058	49,400	128,898
2029	715,816	32,212	44,223	50,635	127,070
2030	684,041	30,782	42,192	51,901	124,875
2031	652,069	29,343	40,155	53,198	122,696
2032	621,011	27,946	38,118	54,528	120,592
2033	584,472	26,301	35,759	55,891	117,951
2034	541,809	24,381	32,986	57,289	114,657
2035	496,300	22,334	30,018	58,721	111,072
2036	454,710	20,462	27,275	60,189	107,926
2037	419,692	18,886	24,923	61,694	105,504
2038	382,486	17,212	22,447	63,236	102,895
2039	345,274	15,537	19,987	64,817	100,342
2040	310,590	13,977	17,701	66,437	98,114
2041	277,559	12,490	15,596	68,098	96,185
2042	247,818	11,152	13,653	69,801	94,606
2043	224,620	10,108	12,106	0	22,214
2044	205,679	9,256	10,880	0	20,136
2045	188,327	8,475	9,793	0	18,268
2046	174,398	7,848	8,912	0	16,760
2047	160,502	7,223	8,042	0	15,264
2048	146,506	6,593	7,194	0	13,787
2049	137,167	6,173	6,572	0	12,744
2050	130,976	5,894	6,144	0	12,038
2051	126,128	5,676	5,791	0	11,467
2052	122,481	5,512	5,501	0	11,013
2053	120,045	5,402	5,284	0	10,686
2054	104,611	4,708	4,532	0	9,239
2055	84,828	3,817	3,641	0	7,458
2056	78,756	3,544	3,364	0	6,908
2057	63,482	2,857	2,674	0	5,531
2058	45,296	2,038	1,899	0	3,937
2059	26,972	1,214	1,133	0	2,347
2060	7,599	342	322	0	664
2061	2,552	115	115	0	230
2062	1,027	46	53	0	99
2063	469	21	26	0	47
2064	316	14	20	0	34
2065	138	6	9	0	15
2066	1	0	0	0	0
2067	0	0	0	0	0
2068	0	0	0	0	0
2069	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
2070	\$ 0	\$ 0	\$ 0	\$ 0	0
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

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	
	Plan Net Position	Contributions			Investment	Projected Ending Plan
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)	
2020	\$ 6,140,477	\$ 183,379	\$ 268,479	\$ 442,154	\$ 6,497,530	
2021	6,497,530	174,068	284,827	467,126	6,853,897	
2022	6,853,897	162,453	316,054	491,437	7,191,733	
2023	7,191,733	150,331	348,483	514,343	7,507,924	
2024	7,507,924	138,469	375,502	535,882	7,806,773	
2025	7,806,773	134,844	405,982	556,334	8,091,970	
2026	8,091,970	132,354	434,599	575,903	8,365,629	
2027	8,365,629	130,519	455,741	594,925	8,635,331	
2028	8,635,331	128,898	482,650	613,462	8,895,041	
2029	8,895,041	127,070	511,670	631,193	9,141,634	
2030	9,141,634	124,874	541,023	647,947	9,373,432	
2031	9,373,432	122,696	577,253	663,384	9,582,259	
2032	9,582,259	120,592	609,586	677,298	9,770,562	
2033	9,770,562	117,951	638,754	689,817	9,939,577	
2034	9,939,577	114,656	671,598	700,783	10,083,419	
2035	10,083,419	111,072	706,125	709,855	10,198,220	
2036	10,198,220	107,926	733,729	717,083	10,289,499	
2037	10,289,499	105,503	761,291	722,632	10,356,344	
2038	10,356,344	102,895	790,270	726,354	10,395,322	
2039	10,395,322	100,341	816,747	728,146	10,407,062	
2040	10,407,062	98,114	841,799	728,025	10,391,402	
2041	10,391,402	96,185	864,374	726,017	10,349,230	
2042	10,349,230	94,606	880,786	722,319	10,285,369	
2043	10,285,369	22,214	890,738	714,756	10,131,601	
2044	10,131,601	20,136	896,949	703,313	9,958,100	
2045	9,958,100	18,268	900,320	690,547	9,766,596	
2046	9,766,596	16,760	900,022	676,620	9,559,954	
2047	9,559,954	15,264	899,471	661,605	9,337,352	
2048	9,337,352	13,787	895,519	645,554	9,101,175	
2049	9,101,175	12,744	887,014	628,697	8,855,602	
2050	8,855,602	12,038	875,417	611,281	8,603,505	
2051	8,603,505	11,467	862,345	593,449	8,346,076	
2052	8,346,076	11,013	846,757	575,325	8,085,657	
2053	8,085,657	10,686	828,281	557,091	7,825,152	
2054	7,825,152	9,239	823,994	538,305	7,548,703	
2055	7,548,703	7,458	814,884	518,524	7,259,801	
2056	7,259,801	6,908	793,628	498,316	6,971,397	
2057	6,971,397	5,531	788,847	477,528	6,665,608	
2058	6,665,608	3,937	777,366	455,710	6,347,890	
2059	6,347,890	2,347	772,600	432,789	6,010,426	
2060	6,010,426	664	760,201	408,704	5,659,594	
2061	5,659,594	230	731,486	384,276	5,312,614	
2062	5,312,614	99	700,740	360,211	4,972,184	
2063	4,972,184	47	668,946	336,660	4,639,946	
2064	4,639,946	34	636,587	313,725	4,317,118	
2065	4,317,118	15	604,065	291,477	4,004,547	
2066	4,004,547	0	570,817	270,000	3,703,729	
2067	3,703,729	0	537,240	249,386	3,415,876	
2068	3,415,876	0	503,648	229,713	3,141,941	
2069	3,141,941	0	470,268	211,042	2,882,715	

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



Single Discount Rate Development

Projection of Plan Fiduciary Net Position (Concluded)

Year	Projected Beginning		Projected Total	Projected Benefit	Projected		Projected Ending Plan
	Plan Net Position	Contributions			Investment	Earnings at 7.25%	
	(a)	(b)	(c)	(d)	(e)=(a)+(b)-(c)+(d)		
2070	\$ 2,882,715	\$ 0	\$ 437,352	\$ 193,420	\$ 2,638,784		
2071	2,638,784	0	405,154	176,882	2,410,512		
2072	2,410,512	0	373,883	161,446	2,198,074		
2073	2,198,074	0	343,729	147,118	2,001,464		
2074	2,001,464	0	314,890	133,891	1,820,465		
2075	1,820,465	0	287,562	121,742	1,654,645		
2076	1,654,645	0	261,938	110,633	1,503,339		
2077	1,503,339	0	238,194	100,509	1,365,654		
2078	1,365,654	0	216,443	91,301	1,240,512		
2079	1,240,512	0	196,725	82,931	1,126,717		
2080	1,126,717	0	179,018	75,311	1,023,010		
2081	1,023,010	0	163,221	68,355	928,144		
2082	928,144	0	149,155	61,978	840,968		
2083	840,968	0	136,613	56,105	760,459		
2084	760,459	0	125,377	50,668	685,750		
2085	685,750	0	115,216	45,613	616,147		
2086	616,147	0	105,917	40,898	551,129		
2087	551,129	0	97,291	36,492	490,330		
2088	490,330	0	89,183	32,373	433,519		
2089	433,519	0	81,479	28,528	380,569		
2090	380,569	0	74,109	24,952	331,412		
2091	331,412	0	67,031	21,640	286,021		
2092	286,021	0	60,217	18,592	244,396		
2093	244,396	0	53,661	15,808	206,542		
2094	206,542	0	47,363	13,287	172,467		
2095	172,467	0	41,352	11,031	142,146		
2096	142,146	0	35,671	9,035	115,510		
2097	115,510	0	30,363	7,293	92,440		
2098	92,440	0	25,464	5,795	72,771		
2099	72,771	0	21,010	4,528	56,289		
2100	56,289	0	17,032	3,474	42,731		
2101	42,731	0	13,550	2,615	31,796		
2102	31,796	0	10,564	1,929	23,162		
2103	23,162	0	8,059	1,392	16,495		
2104	16,495	0	6,009	982	11,469		
2105	11,469	0	4,373	676	7,771		
2106	7,771	0	3,101	453	5,124		
2107	5,124	0	2,137	295	3,282		
2108	3,282	0	1,430	187	2,039		
2109	2,039	0	927	115	1,227		
2110	1,227	0	582	68	713		
2111	713	0	353	39	399		
2112	399	0	206	22	214		
2113	214	0	115	11	111		
2114	111	0	62	6	55		
2115	55	0	31	3	26		
2116	26	0	15	1	12		
2117	12	0	8	1	5		
2118	5	0	3	0	2		
2119	2	0	2	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}
2020	\$ 6,140,477	\$ 268,479	\$ 268,479	\$ 0	\$ 259,246	\$ 0	\$ 259,246
2021	6,497,530	284,827	284,827	0	256,440	0	256,440
2022	6,853,897	316,054	316,054	0	265,319	0	265,319
2023	7,191,733	348,483	348,483	0	272,767	0	272,767
2024	7,507,924	375,502	375,502	0	274,047	0	274,047
2025	7,806,773	405,982	405,982	0	276,262	0	276,262
2026	8,091,970	434,599	434,599	0	275,744	0	275,744
2027	8,365,629	455,741	455,741	0	269,612	0	269,612
2028	8,635,331	482,650	482,650	0	266,229	0	266,229
2029	8,895,041	511,670	511,670	0	263,157	0	263,157
2030	9,141,634	541,023	541,023	0	259,444	0	259,444
2031	9,373,432	577,253	577,253	0	258,106	0	258,106
2032	9,582,259	609,586	609,586	0	254,138	0	254,138
2033	9,770,562	638,754	638,754	0	248,296	0	248,296
2034	9,939,577	671,598	671,598	0	243,416	0	243,416
2035	10,083,419	706,125	706,125	0	238,629	0	238,629
2036	10,198,220	733,729	733,729	0	231,196	0	231,196
2037	10,289,499	761,291	761,291	0	223,665	0	223,665
2038	10,356,344	790,270	790,270	0	216,484	0	216,484
2039	10,395,322	816,747	816,747	0	208,612	0	208,612
2040	10,407,062	841,799	841,799	0	200,477	0	200,477
2041	10,391,402	864,374	864,374	0	191,937	0	191,937
2042	10,349,230	880,786	880,786	0	182,361	0	182,361
2043	10,285,369	890,738	890,738	0	171,955	0	171,955
2044	10,131,601	896,949	896,949	0	161,448	0	161,448
2045	9,958,100	900,320	900,320	0	151,100	0	151,100
2046	9,766,596	900,022	900,022	0	140,840	0	140,840
2047	9,559,954	899,471	899,471	0	131,239	0	131,239
2048	9,337,352	895,519	895,519	0	121,829	0	121,829
2049	9,101,175	887,014	887,014	0	112,515	0	112,515
2050	8,855,602	875,417	875,417	0	103,537	0	103,537
2051	8,603,505	862,345	862,345	0	95,097	0	95,097
2052	8,346,076	846,757	846,757	0	87,066	0	87,066
2053	8,085,657	828,281	828,281	0	79,409	0	79,409
2054	7,825,152	823,994	823,994	0	73,658	0	73,658
2055	7,548,703	814,884	814,884	0	67,919	0	67,919
2056	7,259,801	793,628	793,628	0	61,676	0	61,676
2057	6,971,397	788,847	788,847	0	57,160	0	57,160
2058	6,665,608	777,366	777,366	0	52,521	0	52,521
2059	6,347,890	772,600	772,600	0	48,670	0	48,670
2060	6,010,426	760,201	760,201	0	44,652	0	44,652
2061	5,659,594	731,486	731,486	0	40,061	0	40,061
2062	5,312,614	700,740	700,740	0	35,783	0	35,783
2063	4,972,184	668,946	668,946	0	31,850	0	31,850
2064	4,639,946	636,587	636,587	0	28,260	0	28,260
2065	4,317,118	604,065	604,065	0	25,004	0	25,004
2066	4,004,547	570,817	570,817	0	22,030	0	22,030
2067	3,703,729	537,240	537,240	0	19,333	0	19,333
2068	3,415,876	503,648	503,648	0	16,899	0	16,899
2069	3,141,941	470,268	470,268	0	14,712	0	14,712

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.



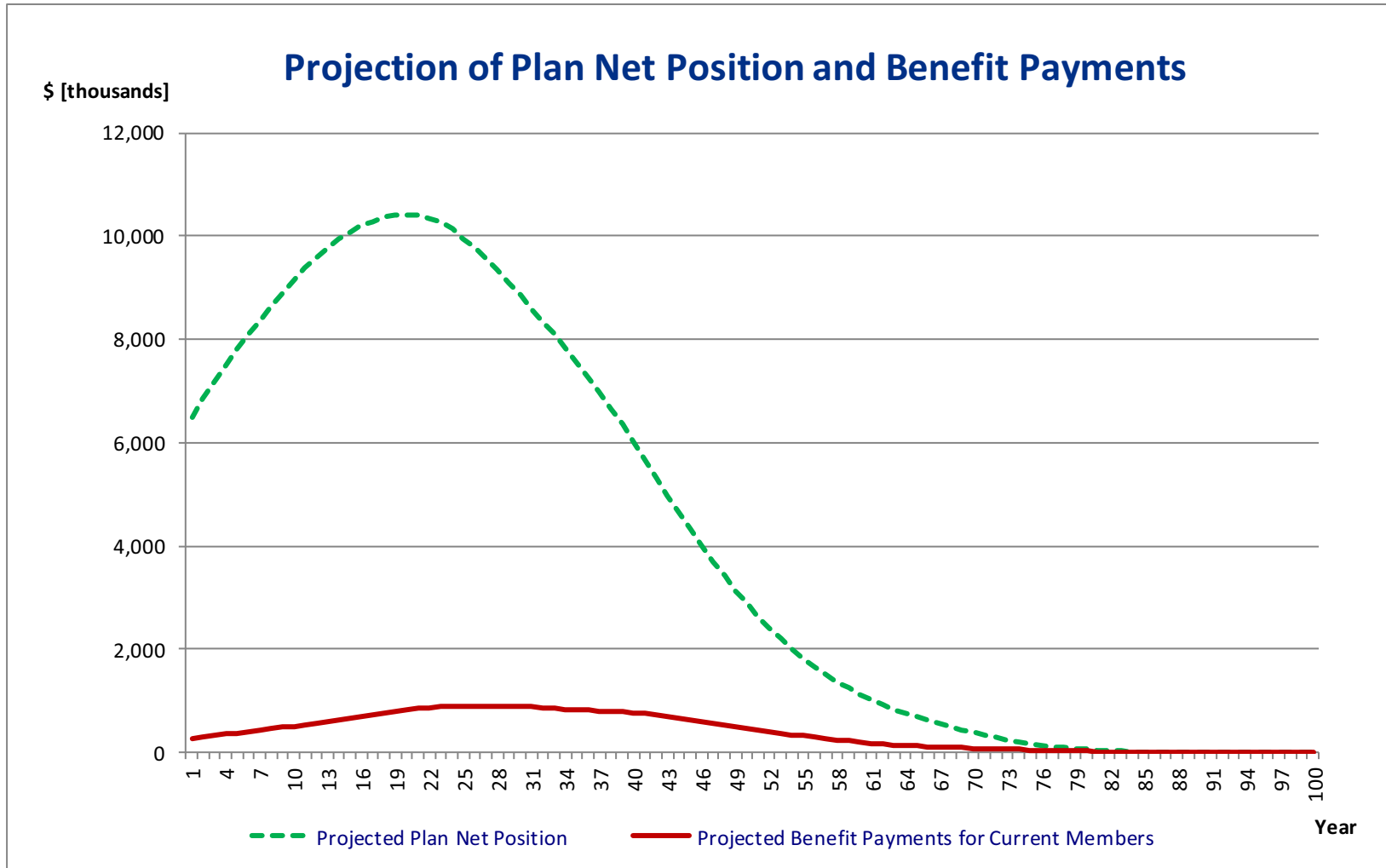
Single Discount Rate Development

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}
2070	\$ 2,882,715	\$ 437,352	\$ 437,352	\$ 0	\$ 12,758	\$ 0	\$ 12,758
2071	2,638,784	405,154	405,154	0	11,019	0	11,019
2072	2,410,512	373,883	373,883	0	9,482	0	9,482
2073	2,198,074	343,729	343,729	0	8,128	0	8,128
2074	2,001,464	314,890	314,890	0	6,942	0	6,942
2075	1,820,465	287,562	287,562	0	5,911	0	5,911
2076	1,654,645	261,938	261,938	0	5,021	0	5,021
2077	1,503,339	238,194	238,194	0	4,257	0	4,257
2078	1,365,654	216,443	216,443	0	3,607	0	3,607
2079	1,240,512	196,725	196,725	0	3,056	0	3,056
2080	1,126,717	179,018	179,018	0	2,593	0	2,593
2081	1,023,010	163,221	163,221	0	2,205	0	2,205
2082	928,144	149,155	149,155	0	1,878	0	1,878
2083	840,968	136,613	136,613	0	1,604	0	1,604
2084	760,459	125,377	125,377	0	1,373	0	1,373
2085	685,750	115,216	115,216	0	1,176	0	1,176
2086	616,147	105,917	105,917	0	1,008	0	1,008
2087	551,129	97,291	97,291	0	863	0	863
2088	490,330	89,183	89,183	0	738	0	738
2089	433,519	81,479	81,479	0	629	0	629
2090	380,569	74,109	74,109	0	533	0	533
2091	331,412	67,031	67,031	0	450	0	450
2092	286,021	60,217	60,217	0	377	0	377
2093	244,396	53,661	53,661	0	313	0	313
2094	206,542	47,363	47,363	0	258	0	258
2095	172,467	41,352	41,352	0	210	0	210
2096	142,146	35,671	35,671	0	169	0	169
2097	115,510	30,363	30,363	0	134	0	134
2098	92,440	25,464	25,464	0	105	0	105
2099	72,771	21,010	21,010	0	81	0	81
2100	56,289	17,032	17,032	0	61	0	61
2101	42,731	13,550	13,550	0	45	0	45
2102	31,796	10,564	10,564	0	33	0	33
2103	23,162	8,059	8,059	0	23	0	23
2104	16,495	6,009	6,009	0	16	0	16
2105	11,469	4,373	4,373	0	11	0	11
2106	7,771	3,101	3,101	0	7	0	7
2107	5,124	2,137	2,137	0	5	0	5
2108	3,282	1,430	1,430	0	3	0	3
2109	2,039	927	927	0	2	0	2
2110	1,227	582	582	0	1	0	1
2111	713	353	353	0	1	0	1
2112	399	206	206	0	0	0	0
2113	214	115	115	0	0	0	0
2114	111	62	62	0	0	0	0
2115	55	31	31	0	0	0	0
2116	26	15	15	0	0	0	0
2117	12	8	8	0	0	0	0
2118	5	3	3	0	0	0	0
2119	2	2	2	0	0	0	0
Totals	\$ 7,718,888	\$ -	\$ 7,718,888	\$ -	\$ 7,718,888	\$ -	\$ 7,718,888

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)

<i>Amortization Payment</i>	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
<i>Amortization Method</i>	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).
<i>Cost-of-Living Adjustments</i>	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
<i>Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)</i>	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.
<i>Covered Valuation Payroll</i>	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.
<i>Deferred Inflows and Outflows</i>	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.
<i>Discount Rate</i>	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: <ol style="list-style-type: none">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; and2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.
<i>Entry Age Actuarial Cost Method (EAN)</i>	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 ages(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.