

Alsip Merrionette Pk Lib Dist Regular

GASB Statement No. 68 Employer Reporting

Accounting Schedules

December 31, 2019



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March 26, 2020

Alsip Merrionette Pk Lib Dist
Illinois Municipal Retirement Fund

Ladies and Gentlemen:

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

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

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

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

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

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	June 30, 2020

Membership

Number of	
- Retirees and Beneficiaries	25
- Inactive, Non-Retired Members	22
- Active Members	20
- Total	67
Covered Valuation Payroll ⁽¹⁾	\$ 991,889

Net Pension Liability

Total Pension Liability/(Asset)	\$ 5,309,799
Plan Fiduciary Net Position	4,911,356
Net Pension Liability/(Asset)	\$ 398,443
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	92.50%
Net Pension Liability as a Percentage of Covered Valuation Payroll	40.17%

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) \$ 39,808

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	\$ 61,105	\$ 32,947
Changes in assumptions	44,410	0
Net difference between projected and actual earnings on pension plan investments	349,293	545,797
Total	\$ 454,808	\$ 578,744

⁽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	\$ 91,410
2. Interest on the Total Pension Liability	356,876
3. Current-Period Benefit Changes	0
4. Employee Contributions (made negative for addition here)	(44,755)
5. Projected Earnings on Plan Investments (made negative for addition here)	(302,659)
6. Other Changes in Plan Fiduciary Net Position	(13,931)
7. Recognition of Outflow (Inflow) of Resources due to Liabilities	(40,953)
8. Recognition of Outflow (Inflow) of Resources due to Assets	(6,180)
9. Total Pension Expense/(Income)	<u>\$ 39,808</u>

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 187.73 years. Additionally, the total plan membership (active employees and inactive employees) was 62. 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 3.0279 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	\$ 91,237
2. Assumption Changes (gains) or losses	\$ 0
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	3.0279
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	\$ 30,132
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>\$ 30,132</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	\$ 61,105
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>\$ 61,105</u>

B. Outflows (Inflows) of Resources due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$ (466,112)
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	\$ (93,222)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$ (372,890)

* 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	\$ 80,852	\$ 121,805	\$ (40,953)
2. Due to Assets	173,495	179,675	(6,180)
3. Total	\$ 254,347	\$ 301,480	\$ (47,133)

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	\$ 32,767	\$ 72,089	\$ (39,322)
2. Assumption changes	48,085	49,716	\$ (1,631)
3. Net difference between projected and actual earnings on pension plan investments	173,495	179,675	(6,180)
4. Total	\$ 254,347	\$ 301,480	\$ (47,133)

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	\$ 61,105	\$ 32,947	\$ 28,158
2. Assumption changes	44,410	0	44,410
3. Net difference between projected and actual earnings on pension plan investments	349,293	545,797	(196,504)
4. Total	\$ 454,808	\$ 578,744	\$ (123,936)

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	\$ (18,132)
2021	(34,872)
2022	22,292
2023	(93,224)
2024	0
Thereafter	0
Total	\$ (123,936)

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	\$ 45,280	3.2519	\$ 0	\$ 0	0.0000
2015	35,073	3.2940	0	0	0.0000
2016	26,227	3.3349	2,635	0	0.0000
2017	(115,776)	2.9178	(36,418)	0	0.0000
2018	(104,289)	2.9236	(35,671)	(32,947)	0.9236
2019	91,237	3.0279	30,132	61,105	2.0279
Total			\$ (39,322)	\$ 28,158	
Deferred Outflow (Inflow) due to Assumption Changes					
2014	\$ 183,111	3.2519	\$ 0	\$ 0	0.0000
2015	5,578	3.2940	0	0	0.0000
2016	(11,516)	3.3349	(1,157)	0	0.0000
2017	(154,375)	2.9178	(48,559)	0	0.0000
2018	140,580	2.9236	48,085	44,410	0.9236
2019	0	3.0279	0	0	2.0279
Total			\$ (1,631)	\$ 44,410	
Deferred Outflow (Inflow) due to Differences Between Projected and Actual Earnings on Plan Investments					
2015	\$ 267,717	5.0000	\$ 53,545	\$ 0	0.0000
2016	26,388	5.0000	5,278	5,276	1.0000
2017	(432,266)	5.0000	(86,453)	(172,907)	2.0000
2018	573,361	5.0000	114,672	344,017	3.0000
2019	(466,112)	5.0000	(93,222)	(372,890)	4.0000
Total			\$ (6,180)	\$ (196,504)	

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	\$	91,410
2. Interest on the Total Pension Liability		356,876
3. Changes of benefit terms		0
4. Difference between expected and actual experience of the Total Pension Liability		91,237
5. Changes of assumptions		0
6. Benefit payments, including refunds of employee contributions		(212,901)
7. Net change in total pension liability	\$	326,622
8. Total pension liability – beginning		4,983,177
9. Total pension liability – ending	\$	<u>5,309,799</u>

B. Plan fiduciary net position

1. Contributions – employer	\$	90,164
2. Contributions – employee		44,755
3. Net investment income		768,771
4. Benefit payments, including refunds of employee contributions		(212,901)
5. Other (Net Transfer)		13,931
6. Net change in plan fiduciary net position	\$	704,720
7. Plan fiduciary net position – beginning		4,206,636
8. Plan fiduciary net position – ending	\$	<u>4,911,356</u>

C. Net pension liability/(asset)

\$ 398,443

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

92.50%

E. Covered Valuation payroll

\$ 991,889

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

40.17%

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	\$ 5,990,766	\$ 5,309,799	\$ 4,752,292
Plan Fiduciary Net Position	4,911,356	4,911,356	4,911,356
Net Pension Liability/(Asset)	\$ 1,079,410	\$ 398,443	\$ (159,064)



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



Multiyear Schedule of Contributions

Last 10 Calendar Years

Calendar Year Ending December 31,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Valuation Payroll	Actual Contribution as a % of Covered Valuation Payroll
2014	\$ 95,861	\$ 100,218	\$ (4,357)	\$ 800,174	12.52%
2015	110,794	110,794	0	885,645	12.51%
2016	99,620	108,974	(9,354)	812,561	13.41%
2017	97,053	97,054	(1)	833,790	11.64%
2018	108,428	108,428	0	897,579	12.08%
2019	90,163 *	90,164	(1)	991,889	9.09%

* Estimated based on contribution rate of 9.09% and covered valuation payroll of \$991,889.
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)	\$ 1,029,256
2. Employer Contribution Reserve (EAF assets from IMRF)	\$ 1,794,144
3. Annuitant Reserve	\$ 2,084,732
4. Miscellaneous Adjustment*	\$ 3,224
5. Net Market Value	\$ 4,911,356

* 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	\$ 90,164
b.) Accelerated payments and Reserve Payments	-
	\$ 90,164

2. Member

a.) Wage Reporting	\$ 44,635
b.) Member Payments (i.e. ERI, Pension Payments)	120
Sub-total (Amount used for valuation on Schedule of Changes Page 10)	\$ 44,755

c.) Voluntary Additional Plan	\$ 31,217
Total Member Contributions (a+b+c)	\$ 75,972

Total Employer and Member Contributions (1+2)	\$ 166,136
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SECTION C

CALCULATION OF THE SINGLE DISCOUNT RATE

Calculation of the Single Discount Rate

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

The *Single Discount Rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.25%; the municipal bond rate is 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	\$ 991,889				
2020	986,018	\$ 44,371	\$ 61,659	\$ 40,005	\$ 146,035
2021	914,121	41,135	55,618	36,592	133,346
2022	848,806	38,196	51,138	32,642	121,977
2023	793,185	35,693	47,787	28,084	111,565
2024	741,308	33,359	44,588	22,835	100,782
2025	692,868	31,179	41,537	23,406	96,122
2026	652,300	29,354	38,846	23,991	92,190
2027	618,061	27,813	36,561	24,591	88,965
2028	586,581	26,396	34,465	25,206	86,068
2029	554,688	24,961	32,316	25,836	83,113
2030	524,854	23,618	30,265	26,482	80,365
2031	501,638	22,574	28,627	27,144	78,345
2032	481,598	21,672	27,244	27,822	76,738
2033	464,009	20,880	25,972	28,518	75,371
2034	451,100	20,300	25,026	29,231	74,556
2035	442,488	19,912	24,372	29,962	74,246
2036	435,718	19,607	23,869	30,711	74,187
2037	424,838	19,118	23,146	31,479	73,743
2038	411,825	18,532	22,315	32,266	73,113
2039	401,046	18,047	21,571	33,072	72,690
2040	391,196	17,604	20,925	33,899	72,428
2041	383,010	17,235	20,335	34,746	72,316
2042	375,666	16,905	19,833	35,615	72,353
2043	361,527	16,269	19,014	0	35,283
2044	338,272	15,222	17,657	0	32,879
2045	317,531	14,289	16,290	0	30,579
2046	300,063	13,503	15,126	0	28,628
2047	282,188	12,698	14,000	0	26,699
2048	261,315	11,759	12,705	0	24,464
2049	238,329	10,725	11,374	0	22,099
2050	219,857	9,894	10,340	0	20,233
2051	185,126	8,331	8,559	0	16,890
2052	147,774	6,650	6,788	0	13,438
2053	133,913	6,026	6,151	0	12,178
2054	126,395	5,688	5,743	0	11,431
2055	109,671	4,935	4,896	0	9,831
2056	87,871	3,954	3,879	0	7,833
2057	53,531	2,409	2,363	0	4,772
2058	18,553	835	839	0	1,674
2059	8,724	393	449	0	842
2060	5,429	244	322	0	566
2061	3,969	179	257	0	435
2062	2,986	134	200	0	334
2063	2,260	102	154	0	256
2064	1,381	62	94	0	156
2065	652	29	45	0	74
2066	519	23	35	0	58
2067	412	19	28	0	47
2068	327	15	22	0	36
2069	149	7	11	0	17

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 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)
2020	\$	4,911,356	\$ 146,035	\$ 252,372	\$ 352,286	\$ 5,157,305
2021		5,157,305	133,346	276,789	368,796	5,382,659
2022		5,382,659	121,977	300,199	383,895	5,588,332
2023		5,588,332	111,565	321,840	397,665	5,775,721
2024		5,775,721	100,782	342,819	410,119	5,943,804
2025		5,943,804	96,122	363,953	421,387	6,097,360
2026		6,097,360	92,190	382,793	431,709	6,238,466
2027		6,238,466	88,965	398,611	441,260	6,370,080
2028		6,370,080	86,067	415,786	450,088	6,490,449
2029		6,490,449	83,113	433,804	458,067	6,597,825
2030		6,597,825	80,365	450,803	465,149	6,692,537
2031		6,692,537	78,345	467,273	471,357	6,774,965
2032		6,774,965	76,738	479,941	476,825	6,848,587
2033		6,848,587	75,371	489,028	481,790	6,916,719
2034		6,916,719	74,556	495,720	486,462	6,982,017
2035		6,982,017	74,246	498,635	491,081	7,048,709
2036		7,048,709	74,187	500,025	495,865	7,118,737
2037		7,118,737	73,743	508,072	500,639	7,185,047
2038		7,185,047	73,112	514,240	505,205	7,249,124
2039		7,249,124	72,690	522,171	509,553	7,309,196
2040		7,309,196	72,428	528,967	513,657	7,366,314
2041		7,366,314	72,317	526,395	517,885	7,430,121
2042		7,430,121	72,353	522,217	522,662	7,502,919
2043		7,502,919	35,283	524,325	526,544	7,540,421
2044		7,540,421	32,879	544,860	528,446	7,556,886
2045		7,556,886	30,579	561,016	528,982	7,555,432
2046		7,555,432	28,628	562,810	528,744	7,549,994
2047		7,549,994	26,699	563,658	528,250	7,541,285
2048		7,541,285	24,464	571,600	527,256	7,521,406
2049		7,521,406	22,099	577,971	525,504	7,491,038
2050		7,491,038	20,233	575,256	523,333	7,459,348
2051		7,459,348	16,890	595,932	520,180	7,400,485
2052		7,400,485	13,438	606,376	515,417	7,322,964
2053		7,322,964	12,178	598,504	510,032	7,246,670
2054		7,246,670	11,431	587,984	504,849	7,174,966
2055		7,174,966	9,831	598,084	499,234	7,085,947
2056		7,085,947	7,833	608,284	492,346	6,977,842
2057		6,977,842	4,772	641,938	483,200	6,823,877
2058		6,823,877	1,674	660,836	471,254	6,635,969
2059		6,635,969	842	650,855	457,957	6,443,913
2060		6,443,913	566	638,301	444,470	6,250,648
2061		6,250,648	435	625,589	430,907	6,056,400
2062		6,056,400	334	613,940	417,235	5,860,030
2063		5,860,030	256	602,800	403,392	5,660,878
2064		5,660,878	156	592,331	389,323	5,458,025
2065		5,458,025	74	581,384	375,003	5,251,718
2066		5,251,718	58	570,201	360,444	5,042,019
2067		5,042,019	47	559,050	345,637	4,828,653
2068		4,828,653	36	547,811	330,568	4,611,446
2069		4,611,446	17	536,630	315,218	4,390,051

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)
2070	\$ 4,390,051	\$ 0	\$ 524,758	\$ 299,589	\$ 4,164,882
2071	4,164,882	0	512,145	283,714	3,936,450
2072	3,936,450	0	498,747	267,629	3,705,333
2073	3,705,333	0	484,388	251,385	3,472,330
2074	3,472,330	0	468,926	235,043	3,238,448
2075	3,238,448	0	452,258	218,680	3,004,870
2076	3,004,870	0	434,322	202,384	2,772,932
2077	2,772,932	0	415,110	186,253	2,544,076
2078	2,544,076	0	394,668	170,389	2,319,797
2079	2,319,797	0	373,093	154,897	2,101,602
2080	2,101,602	0	350,515	139,882	1,890,969
2081	1,890,969	0	327,098	125,445	1,689,317
2082	1,689,317	0	303,067	111,681	1,497,931
2083	1,497,931	0	278,680	98,675	1,317,926
2084	1,317,926	0	254,249	86,494	1,150,172
2085	1,150,172	0	230,077	75,193	995,288
2086	995,288	0	206,423	64,806	853,671
2087	853,671	0	183,545	55,354	725,480
2088	725,480	0	161,691	46,839	610,627
2089	610,627	0	141,089	39,246	508,784
2090	508,784	0	121,920	32,545	419,409
2091	419,409	0	104,286	26,693	341,816
2092	341,816	0	88,228	21,639	275,227
2093	275,227	0	73,779	17,326	218,774
2094	218,774	0	60,947	13,690	171,518
2095	171,518	0	49,688	10,665	132,495
2096	132,495	0	39,933	8,184	100,746
2097	100,746	0	31,602	6,179	75,322
2098	75,322	0	24,600	4,585	55,307
2099	55,307	0	18,815	3,340	39,832
2100	39,832	0	14,118	2,385	28,099
2101	28,099	0	10,377	1,668	19,390
2102	19,390	0	7,459	1,140	13,071
2103	13,071	0	5,238	761	8,594
2104	8,594	0	3,588	495	5,502
2105	5,502	0	2,392	314	3,424
2106	3,424	0	1,549	193	2,068
2107	2,068	0	973	115	1,211
2108	1,211	0	592	67	685
2109	685	0	348	37	375
2110	375	0	197	20	199
2111	199	0	108	11	101
2112	101	0	57	5	49
2113	49	0	29	3	23
2114	23	0	14	1	10
2115	10	0	6	0	4
2116	4	0	3	0	2
2117	2	0	1	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

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 ((a)-.5)	(g)=(e)*vf ^a ((a)-.5)	(h)=(c)/(1+sdr) ^a ((a)-.5)
2020	\$ 4,911,356	\$ 252,372	\$ 252,372	\$ 0	\$ 243,692	\$ 0	\$ 243,692
2021	5,157,305	276,789	276,789	0	249,202	0	249,202
2022	5,382,659	300,199	300,199	0	252,009	0	252,009
2023	5,588,332	321,840	321,840	0	251,912	0	251,912
2024	5,775,721	342,819	342,819	0	250,194	0	250,194
2025	5,943,804	363,953	363,953	0	247,663	0	247,663
2026	6,097,360	382,793	382,793	0	242,874	0	242,874
2027	6,238,466	398,611	398,611	0	235,814	0	235,814
2028	6,370,080	415,786	415,786	0	229,347	0	229,347
2029	6,490,449	433,804	433,804	0	223,110	0	223,110
2030	6,597,825	450,803	450,803	0	216,180	0	216,180
2031	6,692,537	467,273	467,273	0	208,931	0	208,931
2032	6,774,965	479,941	479,941	0	200,088	0	200,088
2033	6,848,587	489,028	489,028	0	190,095	0	190,095
2034	6,916,719	495,720	495,720	0	179,670	0	179,670
2035	6,982,017	498,635	498,635	0	168,510	0	168,510
2036	7,048,709	500,025	500,025	0	157,556	0	157,556
2037	7,118,737	508,072	508,072	0	149,270	0	149,270
2038	7,185,047	514,240	514,240	0	140,869	0	140,869
2039	7,249,124	522,171	522,171	0	133,372	0	133,372
2040	7,309,196	528,967	528,967	0	125,975	0	125,975
2041	7,366,314	526,395	526,395	0	116,888	0	116,888
2042	7,430,121	522,217	522,217	0	108,121	0	108,121
2043	7,502,919	524,325	524,325	0	101,219	0	101,219
2044	7,540,421	544,860	544,860	0	98,073	0	98,073
2045	7,556,886	561,016	561,016	0	94,155	0	94,155
2046	7,555,432	562,810	562,810	0	88,071	0	88,071
2047	7,549,994	563,658	563,658	0	82,241	0	82,241
2048	7,541,285	571,600	571,600	0	77,762	0	77,762
2049	7,521,406	577,971	577,971	0	73,314	0	73,314
2050	7,491,038	575,256	575,256	0	68,037	0	68,037
2051	7,459,348	595,932	595,932	0	65,718	0	65,718
2052	7,400,485	606,376	606,376	0	62,349	0	62,349
2053	7,322,964	598,504	598,504	0	57,380	0	57,380
2054	7,246,670	587,984	587,984	0	52,560	0	52,560
2055	7,174,966	598,084	598,084	0	49,849	0	49,849
2056	7,085,947	608,284	608,284	0	47,272	0	47,272
2057	6,977,842	641,938	641,938	0	46,515	0	46,515
2058	6,823,877	660,836	660,836	0	44,648	0	44,648
2059	6,635,969	650,855	650,855	0	41,001	0	41,001
2060	6,443,913	638,301	638,301	0	37,492	0	37,492
2061	6,250,648	625,589	625,589	0	34,261	0	34,261
2062	6,056,400	613,940	613,940	0	31,350	0	31,350
2063	5,860,030	602,800	602,800	0	28,701	0	28,701
2064	5,660,878	592,331	592,331	0	26,296	0	26,296
2065	5,458,025	581,384	581,384	0	24,065	0	24,065
2066	5,251,718	570,201	570,201	0	22,007	0	22,007
2067	5,042,019	559,050	559,050	0	20,118	0	20,118
2068	4,828,653	547,811	547,811	0	18,381	0	18,381
2069	4,611,446	536,630	536,630	0	16,788	0	16,788

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.



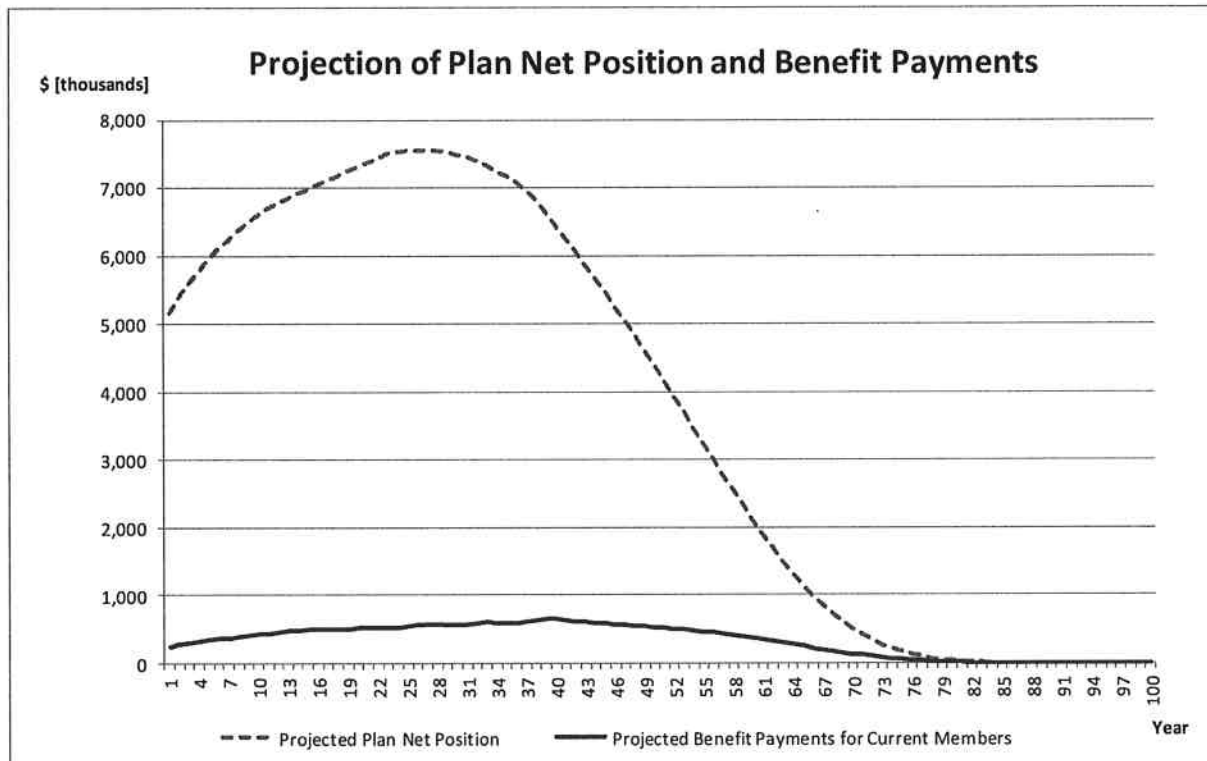
Single Discount Rate Development

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	\$ 4,390,051	\$ 524,758	\$ 524,758	\$ 0	\$ 15,307	\$ 0	\$ 15,307
2071	4,164,882	512,145	512,145	0	13,929	0	13,929
2072	3,936,450	498,747	498,747	0	12,648	0	12,648
2073	3,705,333	484,388	484,388	0	11,453	0	11,453
2074	3,472,330	468,926	468,926	0	10,338	0	10,338
2075	3,238,448	452,258	452,258	0	9,297	0	9,297
2076	3,004,870	434,322	434,322	0	8,325	0	8,325
2077	2,772,932	415,110	415,110	0	7,419	0	7,419
2078	2,544,076	394,668	394,668	0	6,576	0	6,576
2079	2,319,797	373,093	373,093	0	5,797	0	5,797
2080	2,101,602	350,515	350,515	0	5,078	0	5,078
2081	1,890,969	327,098	327,098	0	4,418	0	4,418
2082	1,689,317	303,067	303,067	0	3,817	0	3,817
2083	1,497,931	278,680	278,680	0	3,272	0	3,272
2084	1,317,926	254,249	254,249	0	2,784	0	2,784
2085	1,150,172	230,077	230,077	0	2,349	0	2,349
2086	995,288	206,423	206,423	0	1,965	0	1,965
2087	853,671	183,545	183,545	0	1,629	0	1,629
2088	725,480	161,691	161,691	0	1,338	0	1,338
2089	610,627	141,089	141,089	0	1,089	0	1,089
2090	508,784	121,920	121,920	0	877	0	877
2091	419,409	104,286	104,286	0	700	0	700
2092	341,816	88,228	88,228	0	552	0	552
2093	275,227	73,779	73,779	0	430	0	430
2094	218,774	60,947	60,947	0	331	0	331
2095	171,518	49,688	49,688	0	252	0	252
2096	132,495	39,933	39,933	0	189	0	189
2097	100,746	31,602	31,602	0	139	0	139
2098	75,322	24,600	24,600	0	101	0	101
2099	55,307	18,815	18,815	0	72	0	72
2100	39,832	14,118	14,118	0	50	0	50
2101	28,099	10,377	10,377	0	35	0	35
2102	19,390	7,459	7,459	0	23	0	23
2103	13,071	5,238	5,238	0	15	0	15
2104	8,594	3,588	3,588	0	10	0	10
2105	5,502	2,392	2,392	0	6	0	6
2106	3,424	1,549	1,549	0	4	0	4
2107	2,068	973	973	0	2	0	2
2108	1,211	592	592	0	1	0	1
2109	685	348	348	0	1	0	1
2110	375	197	197	0	0	0	0
2111	199	108	108	0	0	0	0
2112	101	57	57	0	0	0	0
2113	49	29	29	0	0	0	0
2114	23	14	14	0	0	0	0
2115	10	6	6	0	0	0	0
2116	4	3	3	0	0	0	0
2117	2	1	1	0	0	0	0
2118	0	0	0	0	0	0	0
2119	0	0	0	0	0	0	0
Totals					\$ 6,063,583	\$ -	\$ 6,063,583

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>	<p>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:</p> <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.