City of St. Albans, West Virginia
Policemen's Pension and Relief Fund

GASB Statement Nos. 67 and 68 Plan Reporting and Accounting Schedules

June 30, 2017

GRS

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January 24, 2018

Ms. Barbara Hughes, City Treasurer
City of St. Albans
1499 MacCorkle Avenue
St. Albans, WV 25177

Sgt. Philip A. Bass
Pension Board Secretary
City of St. Albans Policemen's Pension and Relief Fund

Dear Ms. Hughes and Sgt. Bass:

This report provides accounting and financial information that is intended to comply with the Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 for the City of St. Albans, West Virginia Policemen's Pension and Relief Fund ("Plan"). These calculations have been made on a basis that is consistent with our understanding of these accounting standards.

GASB Statement No. 67 is the accounting standard that applies to the stand-alone financial reports issued by retirement systems, on behalf of fiscal years beginning after June 15, 2013. GASB Statement No. 68 establishes accounting and financial reporting for state and local government employers who provide their employees (including former employees) pension benefits through a trust, and applies to fiscal years beginning after June 15, 2014.

This report contains GASB Statement Nos. 67 and 68 reporting information applicable to the plan year ending June 30, 2017, and the sponsor's fiscal year ending June 30, 2017.

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 Nos. 67 and 68. The calculation of the Plan's liability for this report may not be applicable for funding purposes of the Plan. A calculation of the Plan's liability for purposes other than satisfying the requirements of GASB Statement Nos. 67 and 68 may produce significantly different results. This report may be provided to parties other than the City of St. Albans, West Virginia Policemen's Pension and Relief Fund ("Plan") only in its entirety and only with the permission of the Plan. GRS is not responsible for unauthorized use of this report.

West Virginia Code §8-22-20 (c)(4), requires a review of the actuarial assumptions and methods at least once every five years and that the Actuary shall provide a report to the oversight board with recommendations on any changes to the actuarial process. Consequently, an experience review was performed for the period July 1, 2009, through June 30, 2014. The actuarial assumptions and methods were recommended by the Actuary in the report *2016 Experience Review for the Years July 1, 2009, to July 1, 2014*, and approved by the Municipal Pensions Oversight Board, and were first applied beginning with the actuarial valuation for the plan year ending June 30, 2016.

Our actuarial valuation and projections assume the sponsor will make the contributions required by state statute. To the extent the sponsor does not make the statutory required contribution the results contained in this report could be significantly different.

This report is based upon information, furnished to us by the Plan, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. If your understanding of this information is different, please let us know. This information was checked for internal consistency, but it was not audited.

To the best of our knowledge, the information contained in this report is accurate and fairly represents the actuarial position of the City of St. Albans, West Virginia Policemen's Pension and Relief Fund for GASB Statement Nos. 67 and 68 accounting purposes. 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.

Alex Rivera and Lance J. Weiss are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Alex Rivera

Alex Rivera, FSA, EA, MAAA, FCA

Lance J. Weiss

Lance J. Weiss, EA, MAAA, FCA

Auditor's Note – This information is presented in draft form for review by the Plan's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the Plan's financial statements.

This actuarial valuation report assumes the following:

- The Plan Sponsor first adopted GASB Statement No. 68 effective for the fiscal year end June 30, 2015.
- The Net Pension Liability as of the first year of adoption, i.e. fiscal year end June 30, 2015, was based on a projection of actuarial liabilities from July 1, 2014, to June 30, 2015, and the market value of assets as of June 30, 2015.
- The Pension Expense for fiscal year end June 30, 2015, recognizes deferred inflows and outflows for the fiscal year end June 30, 2015.
- The Pension Expense for fiscal years after June 30, 2015, recognizes deferred inflows and outflows beginning with the fiscal year end June 30, 2015.

The Plan Sponsor may need to adjust the results in this report if a different policy is implemented. Examples of different policies include:

- Adopting GASB Statement No. 68 effective for fiscal years ending prior to June 30, 2015.
- Using an earlier measurement date, such as using a measurement date of June 30, 2014, for purposes of completing financial reporting for the fiscal year end June 30, 2015.
- Recognizing deferred inflows and outflows prior to the initial year of adoption, such as recognizing deferred inflows and outflows starting with the fiscal year end June 30, 2014.

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SECTION A

EXECUTIVE SUMMARY

Executive Summary
as of June 30, 2017

		2017
Actuarial Valuation Date		June 30, 2016
Pension Plan's Fiscal Year Ending Date (Measurement Date & Reporting Date)		June 30, 2017
Membership[a]		
Number of		
- Retirees and Beneficiaries		18
- Inactive, Nonretired Members		-
- Active Members		24
- Total		42
Expected Payroll	$	1,078,997
Net Pension Liability		
Total Pension Liability[b]	$	14,935,440
Plan Fiduciary Net Position		6,845,425
Net Pension Liability	$	8,090,015
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		45.83%
Net Pension Liability as a Percentage of Covered Payroll		749.77%
Development of the Single Discount Rate		
Single Discount Beginning of Year		5.5000%
Single Discount Rate End of Year		5.5000%
Long-Term Expected Rate of Return		5.5000%
Long-Term Municipal Bond Rate Beginning of Year[c]		2.8500%
Long-Term Municipal Bond Rate End of Year[c]		3.5600%
Year Plan is projected to be fully funded		2049
Year assets are expected to be depleted for closed plan		N/A
GASB No. 68 Pension Expense	$	1,164,950

Deferred Outflows and Deferred Inflows of Resources to be recognized in Future Pension Expenses

	Deferred Outflows of Resources	Deferred (Inflows) of Resources
Difference between expected and actual non-investment experience	$ 29,295	$ (255,214)
Changes in assumptions	1,542,353	-
Net difference between projected and actual earnings on pension plan investments	451,364	(173,778)
Total	$ 2,023,012	$ (428,993)

[a] *Census data measured as of June 30, 2016.*

[b] *Total pension liability projected from July 1, 2016, to June 30, 2017, based on the results of July 1, 2016, actuarial valuation.*

[c] *Based on the 20-Year Municipal GO Index of mixed maturity general obligation municipal bonds as of the weekly rate closest to but not later than the Measurement Date.*

Discussion

Accounting Standard

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67 establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability. Similarly, GASB Statement No. 68 establishes standards for state and local government employers (as well as non-employer contributing entities) to 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 additional non-actuarial required information, such as notes regarding accounting policies and investments, is not included in this report and the retirement system and/or plan sponsor will be responsible for preparing and disclosing that information to comply with these accounting standards.

Financial Statements

GASB Statement No. 68 requires state or local governments to recognize the net pension liability and the pension expense on their financial statements. 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.

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 liability and investment experience.

Pension plans that prepare their own, stand-alone financial statements, are required to present two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position in accordance with GASB Statement No. 67. The *statement of fiduciary net position* presents the assets and liabilities of the pension plan at the end of the pension plan's reporting period. The *statement of changes in fiduciary net position* presents additions, such as contributions and investment income, and deductions, such as benefit payments and expenses and net increase or decrease in the fiduciary net position.

Notes to Financial Statements

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

Both GASB Statements, No. 67 and 68, require the notes of the financial statements for the employers and pension plans, to include certain additional information. The list of additional disclosure items should include:

- A description of benefits provided by the plan;
- The type of employees and number of members covered by the pension plan;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The pension plan's investment policies;
- The pension plan's fiduciary net position, net pension liability and the pension plan's fiduciary net position as a percentage of the total pension liability;
- 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;
- Significant assumptions and methods used to calculate the total pension liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

Retirement systems that issue stand-alone financial statements are required to disclose additional information in accordance with GASB Statement No. 67. This information includes:

- The composition of the pension plan's board and the authority under which benefit terms may be amended;
- A description of how fair value is determined;
- Information regarding certain reserves and investments, which include concentrations of investments greater than or equal to 5%, receivables, and insurance contracts excluded from plan assets; and
- Annual money-weighted rate of return.

Required Supplementary Information

Statement No. 67 requires a 10-year fiscal history of:

- Sources of changes in the net pension liability;
- 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;
- Comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy; and
- The annual money-weighted rate of return on pension plan investments for each year.

These tables may be built prospectively as the information becomes available.

Measurement of the Net Pension Liability

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In traditional actuarial terms, this will be the accrued liability less the market value of assets.

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least once every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total pension liability is required to be rolled forward from the actuarial valuation date to the pension plan's fiscal year end.

The total pension liability shown in this report is based on an actuarial valuation performed as of July 1, 2016, and projected to the measurement date of June 30, 2017.

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 available and sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year mixed maturity general obligation bonds with an average AA credit rating (which is published by Fidelity) 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 5.5000%, the municipal bond rate is 3.5600% (based on the weekly rate closest to but not later than the measurement date of the "20-Year Municipal GO Index" as published by Fidelity), and the resulting single discount rate is 5.5000%.

Effective Date and Transition

GASB Statement No. 67 is effective for a pension plan's fiscal years beginning after June 15, 2013, and GASB Statement No. 68 is effective for a pension plan's fiscal years beginning after June 15, 2014; however, earlier application is encouraged by the GASB.

Assumption Changes

The actuarial assumptions and methods were recommended by the Actuary, in the report *2016 Experience Review for the Years July 1, 2009, to July 1, 2014,* approved by the Municipal Pension Oversight Board and became effective beginning with the actuarial valuation applicable to plan year end June 30, 2016. Since the last valuation as of June 30, 2016, and for purposes of the accounting actuarial valuation, the blended interest rate used to discount liabilities did not change from 5.5000%. The actuarial assumptions are disclosed in Section G of the report.

DROP Provisions

The Plan provides Deferred Retirement Option Program ("DROP") benefits to members who were eligible to retire from July 1, 2011, through June 30, 2016. The DROP provisions include:

- The member's benefit at retirement is based on service and final average salary as of the DROP election date,
- During the DROP period, the member may defer commencement of retirement for no more than five years before attaining age 65,
- During the DROP period, benefits accumulate in the member's DROP account without interest,
- During the DROP period, the member is required to contribute 9.5% of compensation, and
- During the DROP period, the member is considered a retired member for purposes of the premium tax allocation and eligibility to earn supplemental pension benefits.

As of June 30, 2016, one member elected to participate in the DROP for approximately 5 months, completed the DROP in May of 2016 and retired. The DROP member was valued as a retiree in the actuarial valuation. Under the DROP, the DROP member makes additional contributions which are projected to reduce potential losses due to the DROP. Changes in unfunded actuarial liability due to an accelerated retirement, reduced projected retirement benefit and additional contributions are recognized as a gain or loss in the actuarial valuation.

Section B

Financial Statements

Statement of Fiduciary Net Position
as of June 30, 2017

		2017
Assets		
Cash and Deposits	$	850,626
Receivables		
Contributions		13,011
Investment Income		-
Total Receivables	**$**	**13,011**
Investment		
Government Securities	$	437,430
Corporate Bonds		1,153,178
Corporate Stocks		3,386,936
Alternative Investments		1,004,244
Other		-
Total Investments	**$**	**5,981,788**
Total Assets	**$**	**6,845,425**
Liabilities		
Payables		-
Total Liabilities	**$**	**-**
Net Position Restricted for Pensions	**$**	**6,845,425**

Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2017

		2017
Additions		
Contributions		
Employer	$	283,360
State		226,843
Employee		92,335
Receivable Employer		-
Receivable State		-
Receivable Employee		13,011
Other		-
Total Contributions	**$**	**615,549**
Net investment gain (loss) from		
Net Appreciation (Depreciation)	$	421,995
Net Realized Gain (Loss) on Sale or Exchange		72,597
Interest and Dividends		113,767
Other income		-
Investment Expense		(45,092)
Receivable Investment Income		-
Payable Investment Expenses		-
Net Investment Income	**$**	**563,267**
Other Revenue	$	-
Total Additions	**$**	**1,178,816**
Deductions		
Benefit payments	$	637,013
Refunds		10,051
Pension Plan Administrative Expense		600
Other		-
Payable Benefits and Withdrawals		-
Payable Administrative Expenses		-
Total Deductions	**$**	**647,664**
Net Increase in Net Position	$	531,152
Net Position Restricted for Pensions		
Beginning of Year	**$**	**6,314,273**
End of Year	**$**	**6,845,425**

Long-Term Expected Return on Plan Assets

The investment policy covering the allocation of invested assets for the City of St. Albans, West Virginia Policemen's Pension and Relief Fund is established by the Board of Trustees and is subject to the limitations defined in West Virginia Code §8-22-22 and §8-22-22a.

GASB Statement Nos. 67 and 68 require the disclosure of certain information contained in the investment policy including the target asset allocation by major asset class and the long-term expected real rate of return by major asset class. This information is generally available from the investment consultant, investment manager or plan trustee.

Information on the target asset allocation and long-term real return by major asset class was not provided to the actuary.

The discount rate used by the actuary for the purpose of developing the statutory contribution requirement, including the statutory solvency requirement, is shown in the Actuarial Assumptions Section of this report. This same discount rate is also used by the actuary to determine the GASB Statement Nos. 67 and 68 single discount rate.

Money-Weighted Rate of Return

GASB Statement Nos. 67 and 68 also require the disclosure of the money weighted rate of return, net of investment expenses, using monthly data. This information was not provided to the actuary, but should be available from the investment consultant, investment manager or plan trustee.

SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Required Supplementary Information
Schedule of Changes in Net Pension Liability and Related Ratios Multiyear

Fiscal year ending June 30	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Total Pension Liability										
Service Cost	$ 438,163	$ 315,503	$ 325,644	$ 317,661						
Interest on the Total Pension Liability	784,070	746,053	715,104	710,736						
Benefit Changes	-	-	-	-						
Difference between Expected and Actual Experience	34,579	(72,607)	(380,568)	-						
Assumption Changes	-	2,206,756	-	-						
Benefit Payments	(637,013)	(525,224)	(448,618)	(388,544)						
Refunds	(10,051)	-	-	(14,416)						
Net Change in Total Pension Liability	609,748	2,670,481	211,562	625,437						
Total Pension Liability - Beginning	14,325,692	11,655,211	11,443,649	10,818,212						
Total Pension Liability - Ending (a)	$ 14,935,440	$ 14,325,692	$ 11,655,211	$ 11,443,649						
Plan Fiduciary Net Position										
Employer Contributions	$ 510,203	$ 474,110	$ 443,192	$ 609,472						
Employee Contributions	105,346	116,759	113,195	103,725						
Pension Plan Net Investment Income	563,267	(147,927)	124,608	553,537						
Benefit Payments	(637,013)	(525,224)	(448,618)	(388,544)						
Refunds	(10,051)	-	-	(14,416)						
Pension Plan Administrative Expense	(600)	(600)	(600)	(650)						
Other	-	-	-	-						
Net Change in Plan Fiduciary Net Position	531,152	(82,882)	231,777	863,124						
Plan Fiduciary Net Position - Beginning	6,314,273	6,397,155	6,165,378	5,302,254						
Plan Fiduciary Net Position - Ending (b)	$ 6,845,425	$ 6,314,273	$ 6,397,155	$ 6,165,378						
Net Pension Liability - Ending (a) - (b)	8,090,015	8,011,419	5,258,056	5,278,271						
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	45.83 %	44.08 %	54.89 %	53.88 %						
Covered Employee Payroll	$ 1,078,997	$ 1,154,810	$ 1,182,275	$ 1,137,414						
Net Pension Liability as a Percentage of Covered Employee Payroll	749.77 %	693.74 %	444.74 %	464.06 %						

Notes to Schedule:

Schedules of Required Supplementary Information
Schedule of the Net Pension Liability Multiyear

Last 10 Fiscal Years (which may be built prospectively)

FY Ending June 30	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2008						
2009						
2010						
2011						
2012						
2013						
2014	$ 11,443,649	$ 6,165,378	$ 5,278,271	53.88%	$ 1,137,414	464.06%
2015	$ 11,655,211	$ 6,397,155	$ 5,258,056	54.89%	$ 1,182,275	444.74%
2016	$ 14,325,692	$ 6,314,273	$ 8,011,419	44.08%	$ 1,154,810	693.74%
2017	$ 14,935,440	$ 6,845,425	$ 8,090,015	45.83%	$ 1,078,997	749.77%

Schedule of Contributions Multiyear

Fiscal Year Ended	Actuarially Determined Contribution (a)	Employer Contribution (b)	State Contribution (c)	Percentage Contributed [(b)+(c)]/(a)	Covered Payroll (f)	Actual Contribution as a % of Covered Payroll [(b)+(c)]/(f)
6/30/2013	$ 422,787	$ 226,175	$ 180,588	96%	$ 953,653	43%
6/30/2014	$ 478,959	$ 231,307	$ 378,165	127%	$ 1,137,414	54%
6/30/2015	$ 467,987	$ 247,498	$ 195,694	95%	$ 1,182,275	37%
6/30/2016	$ 706,172	$ 264,823	$ 209,287	67%	$ 1,154,810	41%
6/30/2017	$ 743,605	$ 283,360	$ 226,843	69%	$ 1,078,997	47%

Notes to Schedule of Contributions

The information requested in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Measurement Date	June 30, 2017, measurement date based on actuarial liabilities as of July 1, 2016
Actuarial Cost Method	Entry Age Normal, Level-Percentage-of-Pay
Actuarial Value of Assets	Market value used for GASB Statement Nos. 67 and 68 reporting
Contribution Policy and Amortization Method	The sponsor finances benefits using the Alternative funding policy as defined in state statute. Sponsor contributions are equal to 107 percent of the prior year contribution. The plan also receives state contributions based on an allocation of premium tax that depends on the number of active and retired members. This funding policy does not directly amortize the unfunded actuarial liability. However, projected sponsor, state and member contributions along with projected investment earnings are expected to fully fund the projected actuarial liability for current plan members by 2049.

Actuarial Assumptions:

Investment Rate of Return	5.5000% per year
GASB 67/68 Discount Rate	5.5000% per year at June 30, 2017, and 5.5000% at June 30, 2016
Projected Salary Increases	Service-based increases: 20.00% in year 1, 6.50% in year 2, reducing over years of service down to 1.25% in years 30-34. 0% increases for service over 34
Cost of Living Increases	2.75% on first $15,000 of Annual Benefit and on the accumulated supplemental pension amounts for prior years

SECTION D

NOTES TO FINANCIAL STATEMENTS

Single Discount Rate

A GASB Statement Nos. 67 and 68 single discount rate of 5.5000% was used to measure the total pension liability as of June 30, 2017. This single discount rate was based on the expected rate of return on pension plan investments of 5.5000%, and the municipal bond rate of 3.5600%. The projection of cash flows used to determine this single discount rate assumed that the Plan sponsor would make the statutory required contribution as defined by the funding policy. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make projected future benefit payments, on behalf of current plan members for all future plan years. Therefore, the single discount rate of 5.5000% was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 5.5000%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

1% Decrease 4.5000%	Current Single Discount Rate Assumption 5.5000%	1% Increase 6.5000%
$10,453,817	$8,090,015	$6,206,875

SECTION E

GASB STATEMENT NO. 68 PENSION EXPENSE

Net Pension Liability
for Fiscal Year ending June 30, 2017

A. Total Pension Liability		
1. Service Cost	$	438,163
2. Interest on the Total Pension Liability		784,070
3. Changes of benefit terms		-
4. Difference between expected and actual experience of the Total Pension Liability		34,579
5. Changes of assumptions		-
6. Benefit payments, including refunds of employee contributions		(647,064)
7. Net change in total pension liability	$	609,748
8. Total pension liability – beginning (July 1, 2016)		14,325,692
9. Total pension liability – ending (June 30, 2017)	**$**	**14,935,440**
B. Plan Fiduciary Net Position		
1. Contributions – employer	$	510,203
2. Contributions – employee		105,346
3. Net investment income		563,267
4. Benefit payments, including refunds of employee contributions		(647,064)
5. Pension Plan Administrative Expense		(600)
6. Other		-
7. Net change in plan fiduciary net position	$	531,152
8. Plan fiduciary net position – beginning (July 1, 2016)		6,314,273
9. Plan fiduciary net position – ending (June 30, 2017)	**$**	**6,845,425**
C. Net pension liability as of June 30, 2017	**$**	**8,090,015**
D. Plan Fiduciary Net Position as a Percentage of the Total Pension Liability		**45.83%**
E. Covered-employee Payroll	**$**	**1,078,997**
F. Net Pension Liability as a Percentage of Covered Employee Payroll		**749.77%**

Pension Expense
(for Fiscal Year ending June 30, 2017)

A. Expense

1. Service Cost	$	438,163
2. Interest on the Total Pension Liability		784,070
3. Current-Period Benefit Changes		-
4. Employee Contributions (made negative for addition here)		(105,346)
5. Projected Earnings on Plan Investments (made negative for addition here)		(346,044)
6. Pension Plan Administrative Expense		600
7. Other Changes in Plan Fiduciary Net Position		-
8. Recognition of Outflow/(Inflow) due to Non-investment Experience		(64,346)
9. Recognition of Outflow/(Inflow) due to Assumption Changes		332,201
10. Recognition of Outflow/(Inflow) due to Investment Experience		125,652
11. Total Pension Expense	**$**	**1,164,950**

B. Reconciliation of Net Pension Liability

1. Net Pension Liability beginning of year	**$**	**8,011,419**
2. Pension Expense		1,164,950
3. Employer Contributions		(510,203)
4. Change in Outflow/(Inflow) due to Non-investment Experience		98,925
5. Change in Outflow/(Inflow) due to Assumption Changes		(332,201)
6. Change in Outflow/(Inflow) due to Investment Experience		(342,875)
7. Net Pension Liability End of year	**$**	**8,090,015**

Schedule of Outflows and Inflows of Resources

	Non-Investment Experience				Assumption Changes				Investment Experience			
Plan Year Beginning	**7/1/2014**	**7/1/2015**	**7/1/2016**		**7/1/2014**	**7/1/2015**	**7/1/2016**		**7/1/2014**	**7/1/2015**	**7/1/2016**	
(Gain)/Loss	$ (380,568)	$ (72,607)	$ 34,579		$ -	$ 2,206,756	$ -		$ 279,625	$ 565,856	$ (217,223)	
Amortization Factor	6.483253	6.642826	6.544158		6.483253	6.642826	6.544158		5.000000	5.000000	5.000000	
Amortization Amount	$ (58,700)	$ (10,930)	$ 5,284		$ -	$ 332,201	$ -		$ 55,925	$ 113,171	$ (43,445)	
Amortization for Plan Year End				**Total**				**Total**				**Total**
6/30/2015	$ (58,700)			(58,700)	$ -			-	$ 55,925			55,925
6/30/2016	(58,700)	$ (10,930)		(69,630)	-	$ 332,201		332,201	55,925	$ 113,171		169,096
6/30/2017	**(58,700)**	**(10,930)**	**$ 5,284**	**(64,346)**	**-**	**332,201**	**$ -**	**332,201**	**55,925**	**113,171**	**$ (43,445)**	**125,652**
6/30/2018	(58,700)	(10,930)	5,284	(64,346)	-	332,201	-	332,201	55,925	113,171	(43,445)	125,652
6/30/2019	(58,700)	(10,930)	5,284	(64,346)	-	332,201	-	332,201	55,925	113,171	(43,445)	125,652
6/30/2020	(58,700)	(10,930)	5,284	(64,346)	-	332,201	-	332,201	-	113,171	(43,445)	69,727
6/30/2021	(28,367)	(10,930)	5,284	(34,013)	-	332,201	-	332,201	-	-	(43,445)	(43,445)
6/30/2022	-	(7,026)	5,284	(1,742)	-	213,548	-	213,548	-	-	-	-
6/30/2023	-	-	2,875	2,875	-	-	-	-	-	-	-	-
6/30/2024	-	-	-	-	-	-	-	-	-	-	-	-
6/30/2025	-	-	-	-	-	-	-	-	-	-	-	-
6/30/2026	-	-	-	-	-	-	-	-	-	-	-	-
Total	**$ (380,568)**	**$ (72,607)**	**$ 34,579**		**$ -**	**$ 2,206,756**	**$ -**		**$ 279,625**	**$ 565,856**	**$ (217,223)**	

	Non-Investment Experience			Assumption Changes			Investment Experience		
Deferred Outflows/(Inflows) Recognized in Pension Expense for Current Plan Year End	**Outflows**	**(Inflows)**	**Net**	**Outflows**	**(Inflows)**	**Net**	**Outflows**	**(Inflows)**	**Net**
6/30/2017	$ 5,284	$ (69,630)	$ (64,346)	$ 332,201	$ -	$ 332,201	$ 169,096	$ (43,445)	$ 125,652
Deferred Outflows/(Inflows) Recognized in Pension Expense for Future Plan Years Ending									
6/30/2018	$ 5,284	$ (69,630)	$ (64,346)	$ 332,201	$ -	$ 332,201	$ 169,096	$ (43,445)	$ 125,652
6/30/2019	5,284	(69,630)	(64,346)	332,201	-	332,201	169,096	(43,445)	125,652
6/30/2020	5,284	(69,630)	(64,346)	332,201	-	332,201	113,171	(43,445)	69,727
6/30/2021	5,284	(39,297)	(34,013)	332,201	-	332,201	-	(43,445)	(43,445)
6/30/2022	5,284	(7,026)	(1,742)	213,548	-	213,548	-	-	-
6/30/2023	2,875	-	2,875	-	-	-	-	-	-
Total	$ 29,295	$ (255,214)	$ (225,919)	$ 1,542,353	$ -	$ 1,542,353	$ 451,364	$ (173,778)	$ 277,585
Change In Deferred Outflows/(Inflows) Recognized in Liability and Assets for Current Plan Year End									
6/30/2017			$ 98,925			$ (332,201)			$ (342,875)

SECTION F

SUMMARY OF BENEFITS

Employee Eligibility — All compensated employees of the Police Department hired before July 1, 2016, are eligible to participate in the Policemen's Pension and Relief Fund.

Average Annual Compensation — The average of any three twelve-consecutive-month periods of employment which produces the highest average annual compensation.

Each twelve-consecutive-month annual compensation is limited to 120% of the *Average Adjusted Salary* received by the member in the two consecutive twelve-consecutive-month periods immediately preceding the twelve-consecutive-month period used in determining benefits.

The *Average Adjusted Salary* is base salary (exclusive of all overtime and other pay) of the year used in determining benefits multiplied by the ratio of total salary (includes all overtime and other pay) to base salary from the respective preceding twelve-consecutive-month period.

Determining Years of Service Credit (Credited Service**)** — The number of years that the member has contributed to the employees retirement and benefit fund.

Prior Military Service — A city may provide that members who have been honorably discharged from the military shall receive up to two years prior service credit for military service prior to their employment with the city.

Current Military Service — Any current member who has been on qualified military service in the armed forces of the United States with an honorable discharge may, within six months from his or her date of discharge, be given credit for continuous service in the paid police or fire department.

Any member who has served in active duty with the armed forces of the United States, whether prior to or subsequent to becoming a member of a paid police or fire department, shall receive one additional percent for each year so served in active military duty, up to a maximum of four additional percent.

Absence from the service because of sickness or injury for a period of two years or less shall not be construed as time out of service.

Contributions — Participating employees contribute 9.5% of compensation. Participating employees hired on or after January 1, 2010, contribute 9.5% of pay. The municipality has elected to contribute the minimum employer contribution under the Alternative Method.

Normal Retirement — Members are eligible at the earlier of age 50 with 20 years of credited service or age 65.

Benefit Commencement — Annual retirement pension benefits commence upon retirement or upon the member attaining age fifty, whichever is later, payable in twelve monthly installments.

Accrued Benefit — The annual retirement benefit equals 60% of average annual compensation, not less than $6,000, plus an additional percentage of average annual compensation for service over 20 years equal to 2% for each year of service between 20 and 25 and 1% for each year of service between 25 and 30 years. Employees serving in the military are eligible for an additional 1% of average annual compensation for each year of military service up to four years. The maximum benefit is limited to 75% of average annual compensation. Benefits continue for life.

Disability Retirement — Members are eligible after earning five years of service. No service requirement if disability is service related.

The monthly disability benefit equals the greater of 60% of monthly salary at disability or $500. Employees serving in the military are eligible for an additional benefit of 1% of monthly salary at disability for each year of military service up to four years. Disability benefits, when aggregated with monthly state workers compensation benefits, shall not exceed 100% of the member's monthly compensation at the time of disability. Benefits continue for life or until recovery.

Death Benefits — Members are eligible after earning five years of service. No service requirement if death is service related. Retirees and terminated vested participants are also eligible.

The benefit is equal to 60% of the participant's benefit, but not less than $300 per month, payable to the spouse until death or remarriage. Other dependents (children, parents, brothers and sisters) are also eligible for death benefits. To each dependent child, twenty percent of the participant's benefit until the child attains eighteen or marries; to each dependent orphaned child, twenty-five percent of the participant's benefit until the child attains eighteen or marries; to each dependent parent, ten percent of the participant's benefit for life, and to each dependent brother or sister, the sum of fifty dollars per month (but a total not to exceed $100 per month) until such individual attains the age of eighteen years or marries.

In no case shall the payments to the surviving spouse and children be reduced below sixty-five percent of the total amount paid to all dependents.

Supplemental Pension Benefits — All retirees, surviving beneficiaries and disability pensioners are eligible for automatic cost-of-living benefits commencing on the first day of July following two years of retirement. The benefits equal the percentage increase in the Consumer Price Index, limited to 4% (2% for some disability retirees), multiplied by the sum of the allowable amount which is the first $15,000 of the total annual benefits paid and the accumulated supplemental pension amounts for prior years.

Termination Benefits — Any member who terminates employment prior to retirement will be entitled to a refund of contributions without interest.

Refunds — Any member who terminates from their department without receiving a retirement pension shall be refunded all deductions made from his salary, without interest. Any member who receives such a refund and subsequently wishes to reenter the department must repay to the pension fund all sums refunded with interest at the rate of eight percent annual.

SECTION G

ACTUARIAL VALUATION ASSUMPTIONS

Actuarial Valuation Assumptions

Investment return 7/1/2016 7/1/2017	 5.5000% 5.5000%
General Inflation	2.75%
Expected Salary Increase	General Inflation: 2.75% *plus* Wage Inflation: 1.00% *plus* Service Based Increase: Years of Service — Increase 1 — 20.00% 2 — 6.50% 3 — 3.50% 4 — 2.75% 5-9 — 2.50% 10-29 — 2.00% 30-34 — 1.25% after 34 years of service — 0.00%
Post-retirement COLA	2.75% on first $15,000 of Annual Benefit and on the accumulated supplemental pension amounts for prior years.
Increase in State Insurance Premium Tax Allocation	2.75% on and after year 1

Valuation Assumptions (continued)

Cost Method	Entry-Age Normal Level-Percentage-of-Pay The sponsor finances benefits using the Alternative funding policy as defined by state statute. This policy does not directly amortize the unfunded actuarial liability. The policy is projected to fully finance the closed group actuarial liability by 2049. 30 – Year Closed Level-Percentage-of-Pay Amortization for Actuarially Determined Contribution (from July 1, 2010). 24 years remaining as of July 1, 2016.
Asset Method	Market Value
Turnover	Sample Rates – <u>Age</u> <u>Rates</u> 25 9% 35 4% 45 2% 50 0%
Retirement	<u>Age</u> <u>Rates</u> 50 45% 51-55 30% 56-59 35% 60 100%

Valuation Assumptions (continued)

Mortality	Active: RP-2014 Blue Collar Healthy Employee Post-Retirement: RP-2014 Blue Collar Healthy Annuitant Disabled: RP-2014 Blue Collar Healthy Annuitant set forward four years Tables above incorporate generational mortality improvement using MP-2014 two-dimensional mortality improvement scales
Disability	Sample Rates – <u>Age</u> — <u>Rates[a]</u> 30 — 0.22% 40 — 0.50% 50 — 0.79% [a] *Assumes 60% duty related and 40% non-duty related.*
Percent Married	90%
Spouse Age	Females 3 years younger than males

Discount Rate

The following table outlines the factors used to determine the discount rate:

Funded Ratio as of Valuation Date[1]	Liquidity Ratio [2]	Equity Exposure [3]	Projected Funded Ratio after 15 Years [1]	Discount Rate
60% or more	10	50% or more	70% or more	6.5000%
40% or more	8	40% or more	60% or more	6.0000%
30% or more	6	30% or more	50% or more	5.5000%
15% or more	4	n/a	40% or more	5.0000%
Less than 15%	n/a	n/a	15% or more	4.5000%
Less than 15%	n/a	n/a	Less than 15%	4.0000%

[1] Funded ratios based on a 6.0000% investment return assumption for plans using an actuarially sound policy (standard or optional) and a 5.5000% investment return assumption for other plans (alternative or conservation).

[2] Liquidity ratio equals assets as of the valuation date divided by expected benefit payments for the year.

[3] Based on investment policy.

As of June 30, 2016 [*]	
Assets	$6,314,273
Liabilities using a 5.50% discount rate	$14,360,270
Funded Ratio	44%
Expected Benefit Payments	$653,826
Liquidity Ratio	9.66
Equity Exposure	55%
Projected Funded Ratio after 15 years	55%

[*] *Based on funding valuation results as of June 30, 2016.*

Discount Rate	5.5000%

SECTION H

CALCULATION OF THE SINGLE DISCOUNT RATE

Calculation of the Single Discount Rate

GASB Statement Nos. 67 and 68 include specific requirements 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 available or 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) a tax-exempt municipal bond rate based on an index of 20-year mixed maturity general obligation bonds with an average AA credit rating (which is published by Fidelity) 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 5.5000%, the municipal bond rate is 3.5600%, and the resulting single discount rate is 5.5000%.

The sponsor finances benefits using the Alternative funding policy as defined in state statute. Sponsor contributions are equal to 107 percent of the prior year contribution. The plan also receives state contributions based on an allocation of premium tax that depends on the number of actives and retired members. This funding policy does not directly amortize the unfunded actuarial liability. The statutory contribution does not explicitly separate projected employer contributions between current plan members and future plan members.

For purposes of developing the single equivalent discount rate, we have assumed the actuarial liability for future members will be fully financed, to the extent that assets are available, and any remaining asset will be assigned to current plan members. Based on this assignment of assets and employer contributions, the projected actuarial liability for current plan members is projected to be fully financed by 2049.

The following tables show the assignment of assets and employer contributions and the projection of assets for current members as of the valuation date. Our projections assume the sponsor will make the required statutory contributions. The projections are based on the statutory funding actuarial valuation and projection report as of June 30, 2016.

GASB Statement Nos. 67 and 68 - Alternative Funding Policy
Assignment of assets which provides 100% financing of future member actuarial liability

Plan Year End 6/30	Open Group Actuarial Liability (a)	Closed Group Actuarial Liability (b)	Future Member Actuarial Liability (c) = (a)-(b)	Open Group Assets (d)	Future Member Assigned Assets (e)=min[(c), (d)]	Closed Group Assigned Assets (f)=(d)-(e)	Funded Ratio Current Members (g)=(f)/(b)	Funded Ratio Future Members (h)=(e)/(c)
2016	$14,360,270	$14,360,270	$0	$6,314,273	$0	$6,314,273	44.0%	100.0%
2017	14,929,319	14,929,315	4	6,614,908	4	6,614,904	44.3%	100.0%
2018	15,537,901	15,516,714	21,187	6,954,930	21,187	6,933,743	44.7%	100.0%
2019	16,166,528	16,092,458	74,070	7,316,140	74,070	7,242,070	45.0%	100.0%
2020	16,801,955	16,647,999	153,956	7,689,605	153,956	7,535,649	45.3%	100.0%
2021	17,450,555	17,178,190	272,365	8,079,682	272,365	7,807,317	45.5%	100.0%
2022	18,113,915	17,689,670	424,245	8,489,051	424,245	8,064,806	45.6%	100.0%
2023	18,798,739	18,183,253	615,486	8,923,555	615,486	8,308,069	45.7%	100.0%
2024	19,522,833	18,678,898	843,935	9,400,036	843,935	8,556,101	45.8%	100.0%
2025	20,297,229	19,186,893	1,110,336	9,929,863	1,110,336	8,819,527	46.0%	100.0%
2026	21,131,242	19,715,817	1,415,425	10,523,464	1,415,425	9,108,039	46.2%	100.0%
2027	22,004,292	20,243,240	1,761,052	11,170,769	1,761,052	9,409,717	46.5%	100.0%
2028	22,917,664	20,757,530	2,160,134	11,874,820	2,160,134	9,714,686	46.8%	100.0%
2029	23,891,254	21,279,223	2,612,031	12,653,916	2,612,031	10,041,885	47.2%	100.0%
2030	24,934,205	21,816,053	3,118,152	13,518,794	3,118,152	10,400,642	47.7%	100.0%
2031	26,009,829	22,328,349	3,681,480	14,449,077	3,681,480	10,767,597	48.2%	100.0%
2032	27,108,370	22,785,307	4,323,063	15,440,801	4,323,063	11,117,738	48.8%	100.0%
2033	28,257,168	23,212,353	5,044,815	16,521,592	5,044,815	11,476,777	49.4%	100.0%
2034	29,456,780	23,607,840	5,848,940	17,698,968	5,848,940	11,850,028	50.2%	100.0%
2035	30,707,016	23,962,863	6,744,153	18,979,133	6,744,153	12,234,980	51.1%	100.0%
2036	32,011,453	24,274,911	7,736,542	20,372,535	7,736,542	12,635,993	52.1%	100.0%
2037	33,361,628	24,528,290	8,833,338	21,880,445	8,833,338	13,047,107	53.2%	100.0%
2038	34,718,739	24,684,191	10,034,548	23,488,389	10,034,548	13,453,841	54.5%	100.0%
2039	36,073,684	24,726,911	11,346,773	25,197,636	11,346,773	13,850,863	56.0%	100.0%
2040	37,439,787	24,676,227	12,763,560	27,026,935	12,763,560	14,263,375	57.8%	100.0%
2041	38,822,285	24,539,558	14,282,727	28,993,398	14,282,727	14,710,671	60.0%	100.0%
2042	40,209,544	24,306,339	15,903,205	31,099,271	15,903,205	15,196,066	62.5%	100.0%
2043	41,609,503	23,984,891	17,624,612	33,365,745	17,624,612	15,741,133	65.6%	100.0%
2044	43,042,323	23,603,682	19,438,641	35,824,371	19,438,641	16,385,730	69.4%	100.0%
2045	44,513,885	23,173,232	21,340,653	38,496,533	21,340,653	17,155,880	74.0%	100.0%
2046	46,028,585	22,703,489	23,325,096	41,404,896	23,325,096	18,079,800	79.6%	100.0%
2047	47,591,891	22,200,112	25,391,779	44,569,632	25,391,779	19,177,853	86.4%	100.0%
2048	49,205,418	21,666,768	27,538,650	48,014,805	27,538,650	20,476,155	94.5%	100.0%
2049	50,876,228	21,107,905	29,768,323	50,876,228	29,768,323	21,107,905	100.0%	100.0%
2050	52,614,820	20,528,733	32,086,087	52,614,820	32,086,087	20,528,733	100.0%	100.0%
2051	54,429,942	19,932,287	34,497,655	54,429,942	34,497,655	19,932,287	100.0%	100.0%
2052	56,324,136	19,320,549	37,003,587	56,324,136	37,003,587	19,320,549	100.0%	100.0%
2053	58,302,050	18,696,170	39,605,880	58,302,050	39,605,880	18,696,170	100.0%	100.0%
2054	60,371,668	18,062,342	42,309,326	60,371,668	42,309,326	18,062,342	100.0%	100.0%
2055	62,538,573	17,420,945	45,117,628	62,538,573	45,117,628	17,420,945	100.0%	100.0%
2056	64,807,240	16,773,953	48,033,287	64,807,240	48,033,287	16,773,953	100.0%	100.0%

GASB Statement Nos. 67 and 68 - Alternative Funding Policy
Current member projection of assets and assignment of employer contributions

Plan Year End 6/30	Assets (boy)	Member Contributions	Administrative Expenses	Benefit Payments	Assigned Employer/State Contribution	Income on Cash Flow	Income on Assigned Contribution	Total Investment Income	Assets (eoy)
2016	$ 6,397,155	$116,759	$600	$525,224	$474,110	($147,927)	$0	(147,927)	$6,314,273
2017	6,314,273	102,505	4,300	653,826	510,216	332,005	14,031	346,036	6,614,904
2018	6,614,904	100,914	4,309	659,758	519,375	348,333	14,283	362,616	6,933,743
2019	6,933,743	98,874	4,331	694,076	528,459	364,869	14,533	379,401	7,242,070
2020	7,242,070	96,226	4,361	732,786	538,990	380,689	14,822	395,511	7,535,649
2021	7,535,649	93,216	4,399	773,532	545,744	395,631	15,008	410,639	7,807,317
2022	7,807,317	91,008	4,441	811,296	557,417	409,472	15,329	424,801	8,064,806
2023	8,064,806	88,976	4,488	848,269	568,842	422,560	15,643	438,203	8,308,069
2024	8,308,069	88,589	4,539	871,572	584,202	435,287	16,066	451,352	8,556,101
2025	8,556,101	89,050	4,594	888,503	602,431	448,474	16,567	465,041	8,819,527
2026	8,819,527	90,176	4,655	900,506	623,684	462,662	17,151	479,813	9,108,039
2027	9,108,039	89,421	4,723	926,258	647,630	477,799	17,810	495,609	9,409,717
2028	9,409,717	87,690	4,794	958,438	668,666	493,457	18,388	511,845	9,714,686
2029	9,714,686	87,717	4,868	978,039	693,624	509,690	19,075	528,765	10,041,885
2030	10,041,885	88,492	4,943	993,785	721,870	527,272	19,851	547,124	10,400,642
2031	10,400,642	85,827	5,020	1,033,878	753,479	545,826	20,721	566,547	10,767,597
2032	10,767,597	80,389	5,097	1,089,871	778,982	564,317	21,422	585,739	11,117,738
2033	11,117,738	76,731	5,175	1,125,893	808,657	582,481	22,238	604,719	11,476,777
2034	11,476,777	73,124	5,260	1,162,201	843,270	601,128	23,190	624,318	11,850,028
2035	11,850,028	68,982	5,348	1,202,877	879,585	620,422	24,189	644,611	12,234,980
2036	12,234,980	64,542	5,438	1,242,820	919,083	640,372	25,275	665,646	12,635,993
2037	12,635,993	59,060	5,530	1,291,264	961,466	660,942	26,440	687,382	13,047,107
2038	13,047,107	50,578	5,623	1,362,416	1,014,923	681,361	27,910	709,271	13,453,841
2039	13,453,841	41,201	5,716	1,441,919	1,072,673	701,284	29,499	730,783	13,850,863
2040	13,850,863	33,740	5,809	1,505,061	1,137,193	721,176	31,273	752,449	14,263,375
2041	14,263,375	27,080	5,902	1,559,042	1,209,698	742,194	33,267	775,461	14,710,671
2042	14,710,671	19,923	5,995	1,617,739	1,288,782	764,982	35,442	800,424	15,196,066
2043	15,196,066	13,576	6,088	1,666,846	1,376,422	790,151	37,852	828,003	15,741,133
2044	15,741,133	9,607	6,180	1,692,357	1,473,684	819,317	40,526	859,843	16,385,730
2045	16,385,730	6,669	6,272	1,708,421	1,580,466	854,244	43,463	897,707	17,155,880
2046	17,155,880	4,653	6,361	1,715,907	1,698,488	896,339	46,708	943,047	18,079,800
2047	18,079,800	3,156	6,448	1,717,716	1,821,898	947,061	50,102	997,163	19,177,853
2048	19,177,853	1,966	6,531	1,715,332	1,956,900	1,007,485	53,815	1,061,299	20,476,155
2049	20,476,155	1,114	6,608	1,708,395	1,232,683	1,079,057	33,899	1,112,955	21,107,905
2050	21,107,905	650	6,678	1,696,540	9,033	1,114,114	248	1,114,363	20,528,733
2051	20,528,733	363	6,740	1,681,273	8,306	1,082,670	228	1,082,898	19,932,287
2052	19,932,287	132	6,791	1,663,379	7,738	1,050,350	213	1,050,563	19,320,549
2053	19,320,549	-	6,832	1,642,447	7,420	1,017,275	204	1,017,479	18,696,170
2054	18,696,170	-	6,860	1,618,212	7,439	983,600	205	983,804	18,062,342
2055	18,062,342	-	6,873	1,591,642	7,444	949,470	205	949,674	17,420,945
2056	17,420,945	-	6,872	1,562,744	7,433	914,988	204	915,192	16,773,953

GASB Statement Nos. 67 and 68 - Alternative Funding Policy
Development of single equivalent discount rate

Plan Year End 6/30	Benefit Payments	Discount Rate	Discounted Benefit Payments	Single Discount Rate	Discounted Benefit Payments
2017	$653,826	5.5000%	$636,645	5.5000%	$636,645
2018	659,758	5.5000%	608,930	5.5000%	608,930
2019	694,076	5.5000%	607,208	5.5000%	607,208
2020	732,786	5.5000%	607,652	5.5000%	607,652
2021	773,532	5.5000%	608,000	5.5000%	608,000
2022	811,296	5.5000%	604,439	5.5000%	604,439
2023	848,269	5.5000%	599,038	5.5000%	599,038
2024	871,572	5.5000%	583,407	5.5000%	583,407
2025	888,503	5.5000%	563,735	5.5000%	563,735
2026	900,506	5.5000%	541,564	5.5000%	541,564
2027	926,258	5.5000%	528,011	5.5000%	528,011
2028	958,438	5.5000%	517,872	5.5000%	517,872
2029	978,039	5.5000%	500,913	5.5000%	500,913
2030	993,785	5.5000%	482,443	5.5000%	482,443
2031	1,033,878	5.5000%	475,741	5.5000%	475,741
2032	1,089,871	5.5000%	475,361	5.5000%	475,361
2033	1,125,893	5.5000%	465,472	5.5000%	465,472
2034	1,162,201	5.5000%	455,433	5.5000%	455,433
2035	1,202,877	5.5000%	446,799	5.5000%	446,799
2036	1,242,820	5.5000%	437,569	5.5000%	437,569
2037	1,291,264	5.5000%	430,925	5.5000%	430,925
2038	1,362,416	5.5000%	430,966	5.5000%	430,966
2039	1,441,919	5.5000%	432,337	5.5000%	432,337
2040	1,505,061	5.5000%	427,743	5.5000%	427,743
2041	1,559,042	5.5000%	419,985	5.5000%	419,985
2042	1,617,739	5.5000%	413,078	5.5000%	413,078
2043	1,666,846	5.5000%	403,429	5.5000%	403,429
2044	1,692,357	5.5000%	388,250	5.5000%	388,250
2045	1,708,421	5.5000%	371,502	5.5000%	371,502
2046	1,715,907	5.5000%	353,678	5.5000%	353,678
2047	1,717,716	5.5000%	335,593	5.5000%	335,593
2048	1,715,332	5.5000%	317,656	5.5000%	317,656
2049	1,708,395	5.5000%	299,878	5.5000%	299,878
2050	1,696,540	5.5000%	282,272	5.5000%	282,272
2051	1,681,273	5.5000%	265,149	5.5000%	265,149
2052	1,663,379	5.5000%	248,651	5.5000%	248,651
2053	1,642,447	5.5000%	232,722	5.5000%	232,722
2078	663,845	5.5000%	24,666	5.5000%	24,666
2103	6,117	5.5000%	60	5.5000%	60
Total Present Value			**$19,375,700**		**$19,375,700**

SECTION I

GLOSSARY OF TERMS

Glossary of Terms

Actuarial Accrued Liability (AAL)	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.
Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
Actuarial Gain (Loss)	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
Actuarial Present Value (APV)	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.
Actuarial Valuation	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total pension liability and related actuarial present value of projected benefit payments for pensions.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.

Glossary of Terms

Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)	A calculated contribution into a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically the Actuarially Determined Contribution has a normal cost payment and an amortization payment.
Amortization Method	The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be "open" (meaning, reset each year) or "closed" (the number of years remaining will decline each year.
Amortization Payment	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
Cost-of-Living Adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered-Employee Payroll	The payroll of covered employees, which is typically only the pensionable pay and does not include pay above any pay cap.
Deferred Inflows and Outflows	The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources.
Deferred Retirement Option Program (DROP)	A program that permits a plan member to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The plan member continues to provide service to the employer and is paid for the service by the employer after the DROP entry date; however, the pensions that would have been paid to the plan member are credited to an individual member account within the defined benefit pension plan until the end of the DROP period. Other variations for DROP exist and will be more fully detailed in the plan provision section of the valuation report.

Glossary of Terms

Discount Rate

For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically:
The benefit payments to be made while the pension plans' fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period and;
The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

Entry Age Actuarial Cost Method (EAN)

The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit 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.

Fiduciary Net Position

The fiduciary net position is the value of the assets of the trust.

GASB

The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.

Long-Term Expected Rate of Return

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.

Money-Weighted Rate of Return

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. 67, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.

Multiple-Employer Defined Benefit Pension Plan

A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.

Glossary of Terms

Municipal Bond Rate	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.
Net Pension Liability (NPL)	The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan.
Non-employer Contribution Entities	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.
Normal Cost	The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.
Other Postemployment Benefits (OPEB)	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.
Real Rate of Return	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
Service Cost	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
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 9. Recognition of Outflow/(Inflow) of Resources due to Assets

Glossary of Terms

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. 67, the valuation asset is equal to the market value of assets.