City Of Wheeling, West Virginia Firemen's Pension and Relief Fund

Actuarial Valuation Report for the Year Beginning July 1, 2017

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September 14, 2018

Mr. Seth D. McIntyre
Finance Director
1500 Chapline Street, Rm 115
Wheeling, WV 26003

Mr. Rick Brown
Pension Board Secretary
City of Wheeling Firemen's Pension and Relief Fund

**Subject: City of Wheeling Firemen's Pension and Relief Fund
Actuarial Valuation Report for the Year Beginning July 1, 2017**

Dear Mr. McIntyre and Mr. Brown:

Upon the request of the Municipal Pensions Oversight Board, we have performed an actuarial valuation as of July 1, 2017, for the City of Wheeling, West Virginia Firemen's Pension and Relief Fund ("Fund" or "Plan"). This actuarial valuation has been performed in accordance with the West Virginia Code Chapter 8, Article 22, Sections 16 through 28, inclusive.

In accordance with West Virginia Code §8-22-20, this actuarial valuation report provides information on:

- The sponsor's funding requirements for the fiscal year ending June 30, 2019
- The Fund's eligibility to receive an allocation of the premium tax for the fiscal year ending June 30, 2019
- The Fund's eligibility to provide supplemental benefits for the plan year beginning July 1, 2019

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*, approved by the Municipal Pensions Oversight Board, and became effective for the actuarial valuation as of July 1, 2015.

This report is based on the sponsor's election to finance benefit obligations using the Optional funding policy as defined in West Virginia Code §8-22-20 (e)(1).

This actuarial valuation is based upon:

> **Plan Member Data –** Data for active members and persons receiving benefits from the Fund as of June 30, 2017, was provided by the Fund's staff. We have tested this data for reasonableness.

Asset Values – A reconciliation of market value of assets during the plan year ended June 30, 2017, and assets held as of June 30, 2017, by investment category, was provided by the Fund.

Plan Provisions – A summary of the key plan provisions valued are set forth in Section VI of the report: Summary of Principal Plan Provisions.

Actuarial Methods – Fund liabilities were measured using the Entry-Age Normal Actuarial Cost Method. The actuarial valuation was based on the market value of assets. The actuarial methods used in the actuarial valuation are set forth in Section V of the report: Actuarial Assumptions and Methods.

Actuarial Assumptions – The actuarial assumptions used include a discount rate of 5.50%. The actuarial assumptions used in the actuarial valuation are set forth in Section V of the report: Actuarial Assumptions and Methods.

The actuarial valuation results disclosed in this report are based on the data and actuarial assumptions and methods described above, and upon the provisions of the Plan as of the actuarial valuation date. Based on these items, we certify these results to be true and correct.

To the best of our knowledge, this actuarial statement is complete and accurate, and has been prepared in accordance with generally accepted actuarial principles and practices.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

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 herein.

Sincerely,

Alex Rivera   Lance J. Weiss

Alex Rivera, FSA, EA, MAAA, FCA
Senior Consultant

Lance Weiss, EA, MAAA, FCA
Senior Consultant

GRS

Contents

SECTION I

ACTUARIAL VALUATION RESULTS AS OF JULY 1, 2017

Executive Summary of Valuation Results as of July 1, 2017

Upon the request of the Municipal Pensions Oversight Board, we have performed an actuarial valuation as of July 1, 2017, for the City of Wheeling, West Virginia Firemen's Pension and Relief Fund ("Fund" or "Plan").

In accordance with West Virginia Code §8-22-20, this actuarial valuation report provides information on:

- The sponsor's funding requirements for the fiscal year ending June 30, 2019
- The Fund's eligibility to receive an allocation of the premium tax for the fiscal year ending June 30, 2019
- The Fund's eligibility to provide supplemental benefits for the plan year beginning July 1, 2019

This report is based on the sponsor's election to finance benefit obligations using the Optional funding policy as defined in West Virginia Code §8-22-20 (e)(1). The sponsor changed the funding policy used to determine contributions from the Alternative funding policy to the Optional funding policy, effective December 1, 2014.

The key features of the Optional funding policy, effective for plan years beginning after January 1, 2010, are summarized below:

- The current local Plan is closed to new employees
- New employees are covered in the multiple employer statewide plan – *Municipal Police Officers and Firefighters Retirement System*
- Benefits and expenses in the closed local Plan are financed by contributions made from the following sources:
    - Employee contributions of 7.0% of pay for members hired before January 1, 2010, increased by up to 2.5% of pay if elected by the Board of Trustees of the Plan. Employees hired on or after January 1, 2010, contribute 9.5% of pay;
    - The premium tax allocation assigned to the Fund for the plan year; and
    - Employer contributions equal to the normal cost, net of employee contributions, plus a 40-year closed period amortization from January 1, 2010, on a level dollar basis, of the unfunded actuarial accrued liability net of premium tax allocation applicable to the plan year.

Executive Summary of Valuation Results as of July 1, 2017 (Continued)

The following table provides the Plan's funded status:

Funded Status as of:	July 1, 2017
Assets	$24,682,410
Actuarial Accrued Liability	$70,807,951
Unfunded Actuarial Accrued Liability	$46,125,541
Funded Ratio	34.86%

The following table provides the estimated employer contributions for the fiscal year ended June 30, 2018, under the Optional funding policy, based on the July 1, 2016 actuarial valuation produced by GRS:

Employer Contributions for FYE:	June 30, 2018
Estimated Payroll for PYE 06/30/2017	$3,263,322
Employer Normal Cost for PYE 06/30/2017	$1,155,427
Employer Normal Cost Rate for PYE 06/30/2017	35.4%
Employer Contribution for DROP Members[a]	$152,943
Amortization of Unfunded Actuarial Liability for PYE 06/30/2017	$3,149,157
State Insurance Premium Tax Allocation for FYE 06/30/2018	$992,904
Employer Contribution for FYE 06/30/2018	$3,464,623

[a] *Additional Employer Contribution for 8 DROP members equals 35.4% multiplied by DROP members' pay for plan year ending June 30, 2017 of $431,920, estimated as of July 1, 2016.*

The following table provides the estimated employer contributions for the fiscal year ended June 30, 2019, under the Optional funding policy, based on the July 1, 2017 actuarial valuation produced by GRS:

Estimated Employer Contributions for FYE:	June 30, 2019
Estimated Payroll for PYE 06/30/2018	$3,264,883
Employer Normal Cost for Active Members for PYE 06/30/2018	$1,164,056
Employer Normal Cost Rate for PYE 06/30/2018	35.7%
Employer Contribution for DROP Members[b]	$181,888
Amortization of Unfunded Actuarial Liability for PYE 06/30/2018	$2,995,650
State Insurance Premium Tax Allocation for FYE 06/30/2019	$999,956
Estimated Employer Contribution for FYE 06/30/2019 [c]	$3,341,638

[b] *Additional Employer Contribution for 8 DROP members equals 35.7% multiplied by DROP members' estimated pay for plan year ending June 30, 2018 of $510,151.*

[c] *The Employer Contribution cannot be less than the Employer Normal Cost.*

The actual minimum employer contribution for fiscal year ending June 30, 2019, will be based on the actual payroll for the plan year ended June 30, 2018.

The Plan provides Deferred Retirement Option Program ("DROP") benefits to members who were eligible to retire from November 10, 2015, 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 7.0% of compensation,
- During the DROP period, the City makes additional contributions for DROP members equal to DROP member pay for prior plan year multiplied by the normal cost rate developed for active members, 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, 2017, eight members elected to participate in the DROP.

Commentary on Premium Tax Allocation

Under §8-22-19 of the West Virginia Code, the plan sponsor is required to deposit the statutory contribution on a monthly basis at a rate of one-twelfth of the annual requirement, in order to receive the premium tax allocation from the Municipal Pensions Security Fund. Revenues which are specifically collected for the Fund, including employee payroll contributions, must be deposited within five days of receipt.

Based upon discussions with the Municipal Pensions Oversight Board (MPOB), we understand the annual premium tax allocation is determined by September 1st each year. Municipalities can begin invoicing the MPOB for their share of the premium tax allocation after receiving their state provided actuarial study and after the municipality has made employer contributions to the local Plan. Each municipal treasurer shall use the invoice template provided by the MPOB to begin drawing down the state allocation for the municipal pension plan. This July 1, 2017, Actuarial Report from GRS is to be used by municipal pension plans to draw down the September 1, 2018, State Premium Tax Allocation which is allocated in Fiscal Year 2019. *The actuarial valuation and projection results assume the sponsor will make the statutory contributions on a monthly basis in accordance with statutes, and will be eligible to receive the premium tax allocation.*

Commentary on Solvency Projections and Supplemental Benefits

Under § 8-22-26a of the West Virginia Code, all retirees, surviving spouses and disabled pensioners are eligible for Supplemental Benefits that include automatic cost-of-living benefits commencing on the first day of July following two years of retirement. The benefit equals the percentage increase in the Consumer Price Index, limited to 4.0 percent (2.0 percent for certain disabled pensioners), multiplied by the sum of the allowable amount (first $15,000 of initial benefits paid) and the accumulated supplemental pensions paid in prior years.

The Court of Appeals decision requires that Supplemental Benefits be provided on "the allowable amount of the first $15,000 of the total annual pension paid in addition to the accumulated supplemental pension from the previous years." The decision implies that compound cost-of-living increases should be applied to both the allowable amount of $15,000 and the accumulated supplemental pension amounts for prior years. Additional Supplemental Benefits are payable only if the Plan satisfies the minimum standard for actuarial soundness as defined in West Virginia Code § 8-22-20. This minimum standard requires that the fund remain "solvent" over the next 15-year projection period. Based on discussions with the West Virginia Municipal Pensions Oversight Board, and our understanding of the administrative practices of other local police and fire pension funds in West Virginia, the "solvency" requirement generally means that the fund's market value of assets is projected to be greater than zero for all plan years prior to the end of the 15-year projection period. The projection is based on the most recent actuarial valuation and assumes the plan sponsor will make contributions according to the funding policy elected by the sponsor as defined by West Virginia Code, including any additional amounts needed to satisfy the 15-year solvency test on a closed group projection basis. *Although the 15-year solvency test may satisfy the minimum standard for actuarial soundness under the statutes, it is not necessarily consistent with generally accepted actuarial principles.*

The City of Wheeling has elected to fund benefits using the Optional funding policy as defined in West Virginia Code §8-22-20 (e)(1). Under this funding methodology, the fund's market value of assets is projected to be greater than zero for all plan years prior to the end of the 15-year projection period. Accordingly, this contribution methodology satisfies the minimum standard for actuarial soundness.

The Supplemental benefits for plan year beginning July 1, 2019, will be based on the Consumer Price Index for calendar year 2018, and the projected results of the July 1, 2017, actuarial valuation.

Additional Remarks on the Actuarial Valuation Results

Following are additional remarks on the actuarial valuation results as of July 1, 2017:

- 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 became effective beginning with the actuarial valuation as of July 1, 2015. The key assumptions are fully disclosed in Section V of the report.

- The interest rate used to discount liabilities remained the same for the July 1, 2016 and July 1, 2017 actuarial valuations.
    - The interest rate assumption was developed by reviewing the Plan's current funded ratio, the 15-year projected funded ratio, the ratio of assets to benefits, the percentage of assets allocated to equities and the funding policy selected. The details of the methodology used to select the discount rate are presented in Section V of the report. As of July 1, 2017, the Plan's funded ratio of 37% (using a testing interest rate of 6.00% for all plans using the Optional funding policy), ratio of assets

to benefits of 6.57, equity allocation of 55%, and 15-year projected funded ratio of 61%, resulted in a discount rate assumption of 5.50%.

- The Fund experienced an approximate annualized return of 10.73% on the market value of assets during the plan year ended June 30, 2017, which compares to the expected annualized return of 5.50%. The difference in actual versus expected return produced an asset (gain)/loss of ($1,127,337).

- An actuarial valuation is based on the expectation of certain events such as salary increases, retirement, disability, mortality, termination and cost of living increases. Demographic or liability experience (gains)/losses are generated when the actual occurrence of such events differs from the expectation. During the plan year ended June 30, 2017, the fund experienced a net liability (gain)/loss of ($1,178,068) due to these events.

Optional Funding

Following are additional remarks on the actuarial valuation projections under the current funding policy:

Based on the closed group projections shown in Table 1, page II-1 and assuming that the sponsor makes the statutory required contributions, if all actuarial assumptions are realized in the future, including an investment return of 5.50%:

- The funded ratio is projected to increase from 35% at June 30, 2017, to 58% at June 30, 2030, to 71% at June 30, 2040, and 100% at June 30, 2050.
- Employer contributions are expected to decrease steadily from $3,341,638 for the fiscal year end June 30, 2019, to $716,539 for fiscal year end June 30, 2049.

Please note that a funded ratio of only 35% at June 30, 2017, means that the Plan is underfunded. Although the Plan is projected to be 100% funded by 2050, the funded ratio is only projected to reach 50% in 2025 and 70% in 2040.

This actuarial valuation assumes that the City will be able to make future contributions on a timely basis. The ability of the Plan to become fully funded is heavily dependent on the City contributing the minimum employer contribution calculated under the Optional funding policy for each and every future year. We did not perform an analysis of the ability of the City to make future contributions. Such an analysis is not within the scope of our assignment or within our analytical skill set. Failure to receive City contributions on a timely basis could jeopardize the sustainability of the Plan.

Please understand that the minimum employer contribution calculated under the Optional funding policy as defined in West Virginia Code §8-22-20 (e)(1) is just that – the minimum that needs to be contributed each and every year. Because this is an underfunded Plan, we recommend that the plan sponsor consider making additional contributions (in excess of the minimum requirement) to ensure that there are sufficient assets available in the fund in all years to pay the promised benefits.

If the minimum employer contributions (calculated under the Optional funding policy) are not made or the investment return is less than the assumption of 5.50%, the funded ratio will be lower and the cash flow strain will be higher. If another significant market downtown occurs while the plan's funded ratio is low, the plan may need to liquidate a large amount of assets in order to pay benefits which could have a further adverse effect on the funded status of the Plan.

Under the Optional funding policy, the following experience could cause City contributions to change during the year:

- If the actual return on assets is *less* than the assumed return of 5.50%, then contributions will generally *increase*. Conversely, if the actual return is *greater* than the assumed return, contributions will generally *decrease*.
- If salaries *increase* by more than assumed, contributions could *increase*. If salaries *decrease* by more than assumed, contributions could *decrease.*
- If active members retire *sooner* than expected, contributions will generally *increase.* If active members retire *later* than expected, contributions will generally *decrease*.
- If active members become disabled during the year, contributions could increase.
- If retired members die *later* than expected, contributions will increase. If retired members die *sooner* than expected, contributions will decrease.
- If the general inflation is *greater* than assumed, supplemental benefits will be greater than assumed and contributions will *increase*. Conversely, if general inflation is *lower* than assumed, contributions will *decrease*.

At least once every five years, GRS performs an experience review analysis and updates the actuarial valuation assumptions. For example, if salary increases were consistently lower than assumed during the experience period, then the salary increase rate would likely be lowered. Or if more members retired than assumed, then the retirement rates would likely be increased. Any change in actuarial assumption will also impact the City's funded ratio. The objective of a change in assumptions is to reduce the level of experience gains and losses in future actuarial valuations.

Schedule A: Summary of Key Valuation Results

	No.	July 1, 2016	No.	July 1, 2017
Valuation Date		**July 1, 2016**		**July 1, 2017**
Valuation Interest Rate		5.50%		5.50%
Cost-of-Living Adjustment		2.75%		2.75%
Wage Inflation		3.75%		3.75%
Expected Payroll		$3,263,322		$3,264,883
Average Pay		$45,324		$47,317
Expected Benefit Payments		$3,371,639		$3,754,111
1. Actuarial Accrued Liability	No.		No.	
(a) Actives	72	$20,960,062	69	$22,844,438
(b) Retirees	87	$39,478,465	87	$39,492,731
(c) Survivors	35	$5,396,414	34	$5,284,787
(d) Disabled Members	7	$1,969,579	6	$1,757,942
(e) Deferred Vested Members	4	$1,950,322	3	$1,428,053
(f) Total	205	$69,754,842	199	$70,807,951
2. Present Value of Future Normal Costs		$11,971,236		$11,395,118
3. Present Value of Benefits (1(f) + 2)		$81,726,078		$82,203,069
4. Market Value of Assets		$20,727,586		$24,682,410
5. Unfunded Actuarial Accrued Liability (1(f) - 4)		$49,027,256		$46,125,541
6. Funded Ratio (4 / 1(f))		29.71%		34.86%
7. Net Employer Normal Cost				
(a) Normal Cost		$1,382,494		$1,391,221
(b) Administrative Expenses		$10,105		$10,723
(c) Gross Normal Cost (a + b)		$1,392,599		$1,401,944
(d) Employee Contribution Rate [a]		7.27%		7.29%
(e) Expected Employee Contributions		$237,172		$237,888
(f) Net Employer Normal Cost (c - e)		$1,155,427		$1,164,056
(% of Compensation)		35.41%		35.65%
8. Estimated Minimum Employer Contribution [b]		**FYE 2018**		**FYE 2019**
(a) Expected Payroll		$3,263,322		$3,264,883
(b) Estimated Employer Normal Cost		$1,155,427		$1,164,056
(c) Employer Normal Cost Rate		35.41%		35.65%
(d) Employer Contribution for DROP Members[c]		$152,943		$181,888
(e) Amortization of Unfunded Actuarial Liability		$3,149,157		$2,995,650
(f) State Insurance Premium Tax Allocation		$992,904		$999,956
(g) Estimated Employer Contribution[d] (b + d + e - f)		**$3,464,623**		**$3,341,638**

[a] *Blended rate reflecting 7.0% for members hired before January 1, 2010, and 9.5% for members hired after January 1, 2010.*

[b] *Estimated Minimum Employer Contribution is based on Optional funding policy and is assumed to be made in plan year ending June 30, 2019. The actual Minimum Employer Contribution will be based on actual payroll for plan year ended June 30, 2018.*

[c] *Estimated additional employer contribution for 8 DROP members is based on normal cost rate multiplied by DROP member pay and equals 35.41% times $431,920 for FYE 2018 and 35.65% times $510,151 for FYE 2019. The 8 DROP members are classified as retired members for purposes of supplemental benefits, premium tax allocation, and the valuation of liabilities.*

[d] *The Employer Contribution cannot be less than the Employer Normal Cost.*

Schedule B: (Gain)/Loss Analysis

Experience (Gain)/Loss for Plan Year Ended June 30, 2017

1.	(a) Actuarial Accrued Liability as of 7/1/2016	$69,754,842
	(b) Normal Cost due 7/1/2016	$1,382,494
	(c) Interest on (a) and (b) to 6/30/2017	$3,874,535
	(d) Benefit Payments with interest to 6/30/2017	$3,025,852
	(e) Effect of Assumption Changes	$0
	(f) Expected Liability at 7/1/2017 [(a) + (b) + (c) - (d) + (e)]	$71,986,019
	(g) Actual Liability at 7/1/2017	$70,807,951
	(h) Liability (Gain)/Loss [(g) - (f)]	**($1,178,068)**
2.	(a) Market Value of Assets as of 7/1/2016	$20,727,586
	(b) Interest on (a) to 6/30/2017	$1,140,017
	(c) Contributions with interest to 6/30/2017	$4,713,322
	(d) Benefit Payments with interest to 6/30/2017	$3,025,852
	(e) Expected Assets at 6/30/2017 [(a) + (b) + (c) - (d)]	$23,555,073
	(f) Actual Assets at 7/1/2017	$24,682,410
	(g) Asset (Gain)/Loss [(e) - (f)]	**($1,127,337)**
3.	Total (Gain)/Loss [1(h) + 2(g)]	**($2,305,405)**

SECTION II

ACTUARIAL PROJECTIONS

Actuarial Projections, Table 1

Valuation Plan Year End 30-Jun	Number		Total Assets										
	Active	Pay Status	Assets (boy)	Benefit Payments	Expenses	Employer Contributions[a]	Member Contributions[b]	Premium Tax Allocation Contributions	Investment Income	Assets (eoy)	Actuarial Accrued Liability	Unfunded Liability	Funded Ratio
2017	69	130	$20,727,586	$2,944,868	$10,436	$3,341,690	$281,234	$964,251	$2,322,953	$24,682,410	$70,807,951	$46,125,541	35%
2018	63	133	24,682,410	3,754,111	10,723	3,464,623	273,599	992,904	1,383,749	27,032,452	72,285,403	45,252,951	37%
2019	58	134	27,032,452	3,519,634	10,846	3,341,638	230,560	999,956	1,515,048	29,589,174	74,025,005	44,435,831	40%
2020	53	137	29,589,174	3,677,464	10,975	3,054,754	224,132	1,041,949	1,644,562	31,866,132	75,652,078	43,785,946	42%
2021	48	139	31,866,132	3,847,393	11,104	2,970,515	215,222	1,071,082	1,763,444	34,027,899	77,131,789	43,103,890	44%
2022	43	141	34,027,899	3,998,351	11,233	2,886,010	205,803	1,100,292	1,876,486	36,086,906	78,470,587	42,383,681	46%
2023	38	143	36,086,906	4,163,308	11,357	2,796,402	194,279	1,129,891	1,983,313	38,016,125	79,633,065	41,616,940	48%
2024	34	144	38,016,125	4,314,714	11,478	2,693,273	183,333	1,162,089	2,083,086	39,811,714	80,627,843	40,816,129	49%
2025	30	145	39,811,714	4,450,232	11,598	2,595,503	173,860	1,191,581	2,176,054	41,486,882	81,472,043	39,985,161	51%
2026	28	144	41,486,882	4,598,479	11,714	2,505,174	165,051	1,222,236	2,262,305	43,031,454	82,150,881	39,119,427	52%
2027	25	144	43,031,454	4,714,682	11,826	2,422,536	158,072	1,251,352	2,342,459	44,479,365	82,699,852	38,220,487	54%
2028	22	144	44,479,365	4,831,511	11,938	2,348,765	149,514	1,281,434	2,417,504	45,833,133	83,102,567	37,269,434	55%
2029	18	145	45,833,133	4,977,168	12,048	2,266,339	137,004	1,314,174	2,486,318	47,047,752	83,296,728	36,248,976	56%
2030	16	144	47,047,752	5,111,759	12,161	2,161,202	124,297	1,348,998	2,547,216	48,105,544	83,279,800	35,174,256	58%
2031	13	144	48,105,544	5,227,642	12,271	2,053,793	113,260	1,382,037	2,599,929	49,014,649	83,071,932	34,057,283	59%
2032	11	143	49,014,649	5,343,899	12,378	1,955,681	101,118	1,415,976	2,644,702	49,775,848	82,660,858	32,885,010	60%
2033	9	142	49,775,848	5,446,226	12,480	1,856,612	88,736	1,451,182	2,681,721	50,395,393	82,050,328	31,654,935	61%
2034	7	141	50,395,393	5,536,946	12,577	1,758,214	76,967	1,486,433	2,711,299	50,878,784	81,246,139	30,367,355	63%
2035	6	140	50,878,784	5,621,377	12,669	1,662,009	65,177	1,523,436	2,733,667	51,229,027	80,247,369	29,018,342	64%
2036	5	138	51,229,027	5,672,540	12,753	1,569,027	56,014	1,560,587	2,749,776	51,479,138	79,091,884	27,612,746	65%
2037	4	136	51,479,138	5,707,120	12,828	1,490,109	48,169	1,595,140	2,761,175	51,653,783	77,796,529	26,142,746	66%
2038	3	133	51,653,783	5,745,218	12,892	1,415,965	38,887	1,632,756	2,768,502	51,751,783	76,345,393	24,593,610	68%
2039	2	131	51,751,783	5,778,600	12,945	1,337,939	29,356	1,671,814	2,771,669	51,771,016	74,735,617	22,964,601	69%
2040	1	128	51,771,016	5,788,229	12,985	1,258,235	21,689	1,713,060	2,771,213	51,733,999	72,991,987	21,257,988	71%
2041	1	125	51,733,999	5,759,486	13,011	1,185,250	17,118	1,754,331	2,768,972	51,687,174	71,160,628	19,473,454	73%
2042	1	122	51,687,174	5,713,107	13,022	1,122,181	13,841	1,796,850	2,767,008	51,660,925	69,260,958	17,600,033	75%
2043	0	119	51,660,925	5,665,182	13,018	1,063,864	10,196	1,840,534	2,766,369	51,663,688	67,290,996	15,627,308	77%
2044	0	115	51,663,688	5,609,668	12,998	1,003,338	6,615	1,887,637	2,767,567	51,706,178	65,255,759	13,549,581	79%
2045	0	112	51,706,178	5,534,112	12,963	943,760	4,465	1,934,682	2,771,556	51,813,566	63,177,583	11,364,017	82%
2046	0	108	51,813,566	5,447,457	12,911	885,776	3,020	1,983,696	2,779,532	52,005,222	61,068,444	9,063,222	85%
2047	0	105	52,005,222	5,352,242	12,844	829,547	2,022	2,033,495	2,792,457	52,297,657	58,937,224	6,639,567	89%
2048	0	101	52,297,657	5,250,314	12,761	773,251	1,264	2,084,887	2,811,155	52,705,139	56,790,565	4,085,426	93%
2049	0	98	52,705,139	5,142,291	12,663	716,539	720	2,137,266	2,836,368	53,241,079	54,634,736	1,393,657	97%
2050	0	94	53,241,079	5,028,594	12,549	14,376	386	1,430,486	2,830,696	52,475,879	52,475,879	0	100%
2051	0	91	52,475,879	4,909,578	12,421	12,984	259	0	2,752,989	50,320,113	50,320,113	0	100%
2052	0	87	50,320,113	4,787,019	12,278	12,656	174	0	2,637,740	48,171,386	48,171,386	0	100%
2053	0	84	48,171,386	4,661,685	12,122	12,276	70	0	2,522,952	46,032,877	46,032,877	0	100%
2054	0	80	46,032,877	4,533,454	11,952	11,952	0	0	2,408,807	43,908,230	43,908,230	0	100%
2055	0	77	43,908,230	4,402,281	11,769	11,769	0	0	2,295,510	41,801,459	41,801,459	0	100%
2056	0	73	41,801,459	4,268,852	11,573	11,573	0	0	2,183,258	39,715,865	39,715,865	0	100%
2057	0	70	39,715,865	4,133,303	11,363	11,363	0	0	2,072,228	37,654,790	37,654,790	0	100%
2058	0	67	37,654,790	3,995,691	11,140	11,140	0	0	1,962,603	35,621,702	35,621,702	0	100%

[a] *Employer Contributions include additional amounts for DROP members of $152,943 for plan year end June 30, 2018, and $181,888 for plan year end June 30, 2019.*
[b] *Member Contributions include additional amounts for DROP members of $35,711 for plan year end June 30, 2018.*

Actuarial Projections, Table 2

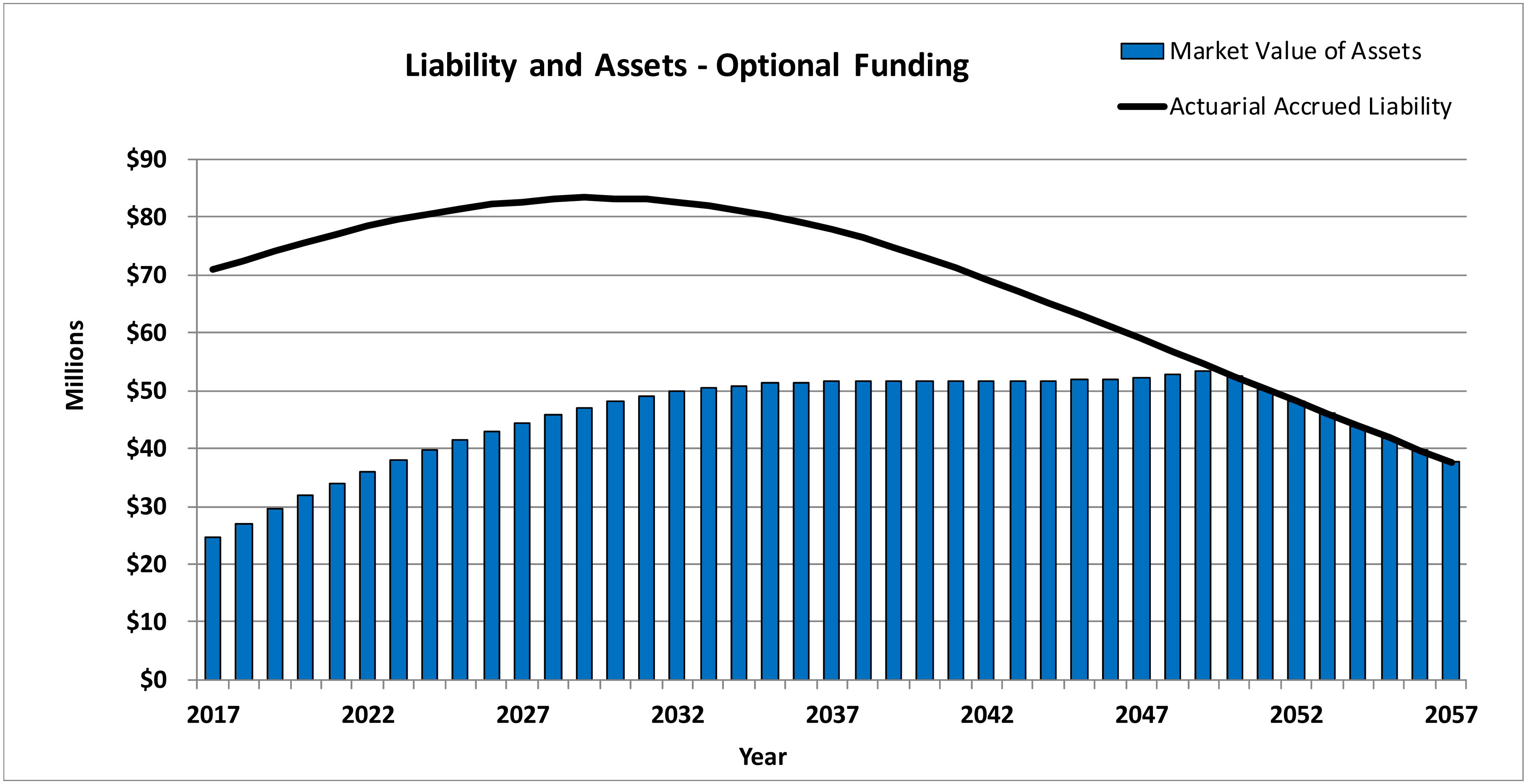
Valuation Plan Year End 30-Jun [a]	Closed Group Payroll	Active Employee Contributions	Gross Normal Cost	Net Employer Normal Cost	Amortization of UAAL	Premium Tax Allocation Contributions	Net Employer Amortization	Expenses	Employer Contribution Closed Plan [c]
				Employer Contributions					
2018	$3,264,883	$237,888	1,391,221	1,153,333	$2,995,650	$999,956	$1,995,694	$10,723	3,341,638
2019	3,158,832	230,560	1,342,621	1,112,061	2,973,796	1,041,949	1,931,847	10,846	3,054,754
2020	3,065,162	224,132	1,297,698	1,073,566	2,957,056	1,071,082	1,885,974	10,975	2,970,515
2021	2,935,592	215,222	1,237,180	1,021,958	2,953,240	1,100,292	1,852,948	11,104	2,886,010
2022	2,798,307	205,803	1,171,517	965,714	2,949,346	1,129,891	1,819,455	11,233	2,796,402
2023	2,630,667	194,279	1,093,216	898,937	2,945,068	1,162,089	1,782,979	11,357	2,693,273
2024	2,470,975	183,333	1,019,017	835,684	2,939,921	1,191,581	1,748,340	11,478	2,595,503
2025	2,331,958	173,860	954,789	780,929	2,934,883	1,222,236	1,712,647	11,598	2,505,174
2026	2,202,091	165,051	896,837	731,786	2,930,388	1,251,352	1,679,036	11,714	2,422,536
2027	2,098,190	158,072	850,173	692,101	2,926,272	1,281,434	1,644,838	11,826	2,348,765
2028	1,971,323	149,514	795,246	645,732	2,922,843	1,314,174	1,608,669	11,938	2,266,339
2029	1,787,535	137,004	716,309	579,305	2,918,846	1,348,998	1,569,848	12,048	2,161,202
2030	1,600,658	124,297	634,925	510,628	2,913,041	1,382,037	1,531,004	12,161	2,053,793
2031	1,437,454	113,260	565,913	452,653	2,906,732	1,415,976	1,490,756	12,271	1,955,681
2032	1,268,542	101,118	495,419	394,301	2,901,114	1,451,182	1,449,932	12,378	1,856,612
2033	1,102,076	88,736	425,566	336,830	2,895,338	1,486,433	1,408,905	12,480	1,758,214
2034	944,305	76,967	360,418	283,451	2,889,418	1,523,436	1,365,982	12,577	1,662,009
2035	792,676	65,177	298,476	233,299	2,883,646	1,560,587	1,323,059	12,669	1,569,027
2036	675,289	56,014	250,550	194,536	2,877,960	1,595,140	1,282,820	12,753	1,490,109
2037	575,356	48,169	210,843	162,674	2,873,219	1,632,756	1,240,463	12,828	1,415,965
2038	461,803	38,887	166,646	127,759	2,869,101	1,671,814	1,197,287	12,892	1,337,939
2039	346,795	29,356	123,269	93,913	2,864,437	1,713,060	1,151,377	12,945	1,258,235
2040	252,778	21,689	88,768	67,079	2,859,518	1,754,331	1,105,187	12,985	1,185,250
2041	196,789	17,118	67,993	50,875	2,855,145	1,796,850	1,058,295	13,011	1,122,181
2042	156,841	13,841	53,165	39,324	2,852,052	1,840,534	1,011,518	13,022	1,063,864
2043	114,748	10,196	38,534	28,338	2,849,619	1,887,637	961,982	13,018	1,003,338
2044	74,343	6,615	24,952	18,337	2,847,107	1,934,682	912,425	12,998	943,760
2045	49,926	4,465	16,570	12,105	2,844,404	1,983,696	860,708	12,963	885,776
2046	33,616	3,020	11,051	8,031	2,842,100	2,033,495	808,605	12,911	829,547
2047	22,355	2,022	7,285	5,263	2,840,031	2,084,887	755,144	12,844	773,251
2048	13,868	1,264	4,436	3,172	2,837,873	2,137,266	700,607	12,761	716,539
2049	7,805	720	2,433	1,713	2,834,788	1,430,486	643,439	12,663	14,376 [b]
2050	4,064	386	1,228	842	0	0	0	12,549	12,984 [b]
2051	2,728	259	824	565	0	0	0	12,421	12,656 [b]
2052	1,829	174	554	380	0	0	0	12,278	12,276 [b]
2053	742	70	225	155	0	0	0	12,122	11,952 [b]
2054	0	0	0	0	0	0	0	11,952	11,769 [b]
2055	0	0	0	0	0	0	0	11,769	11,573 [b]
2056	0	0	0	0	0	0	0	11,573	11,363 [b]
2057	0	0	0	0	0	0	0	11,363	11,140 [b]

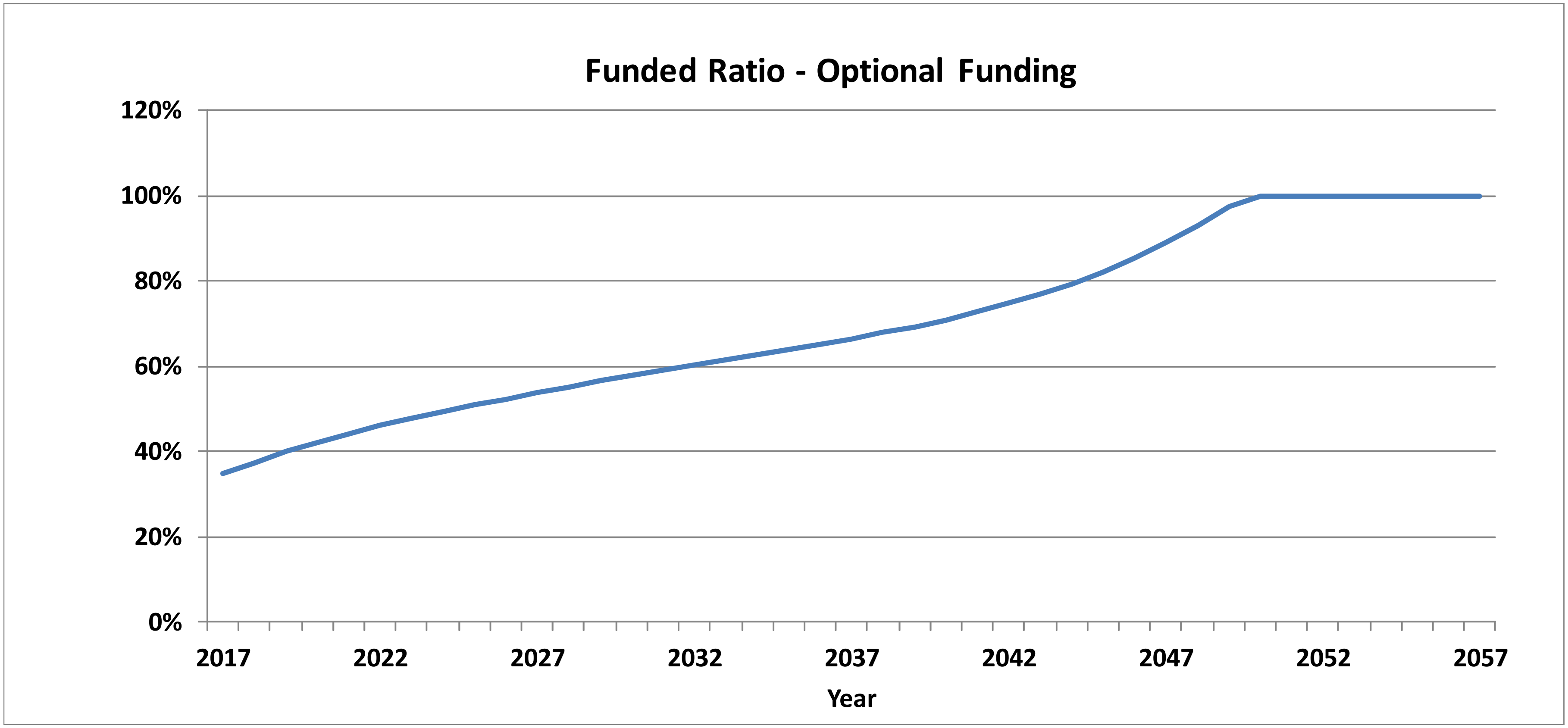
[a] *Assumes employer makes contributions for the applicable valuation plan year in the following fiscal year.*

[b] *Amount required to remain at 100% funded.*

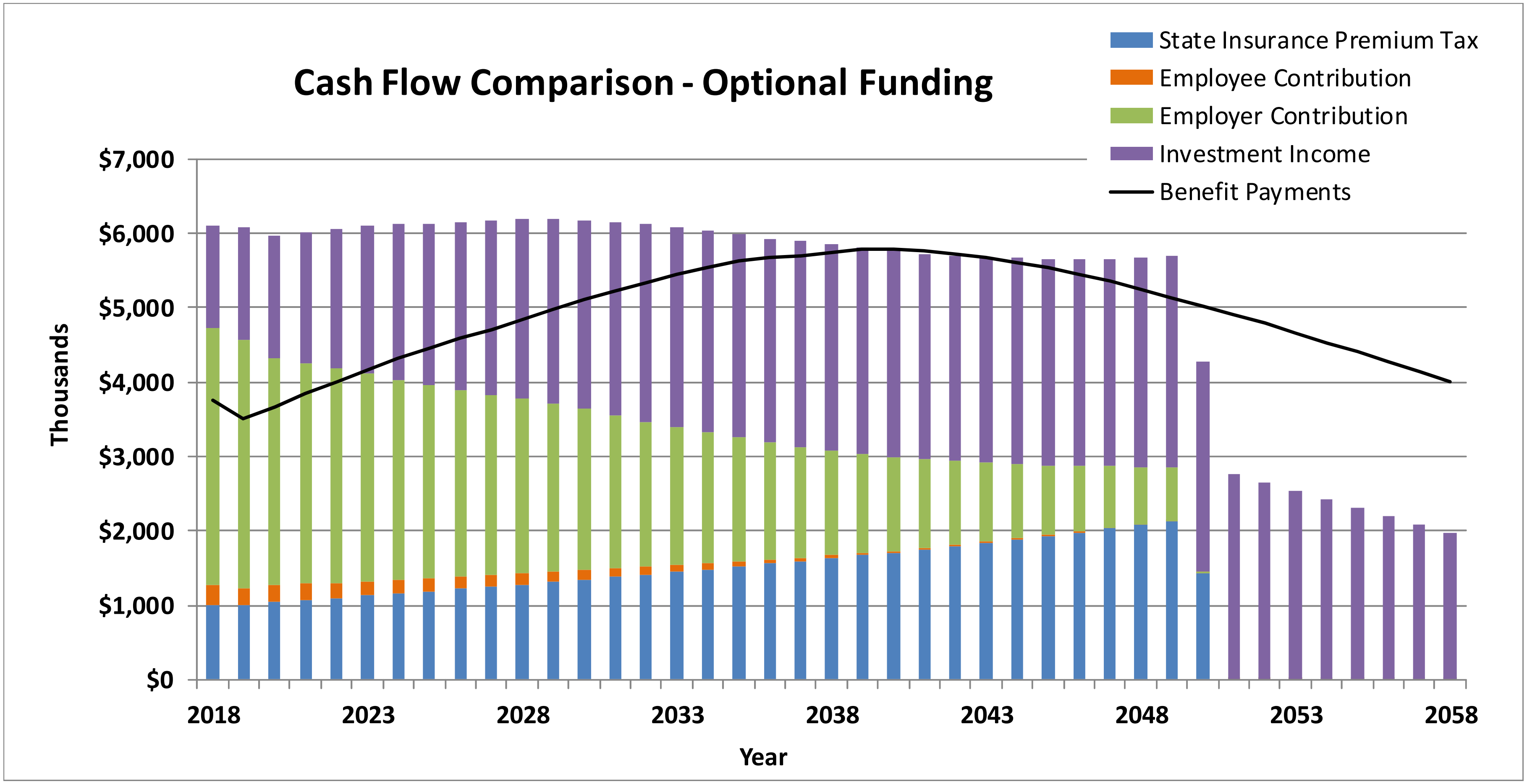
[c] *Employer Contribution for plan year end June 30, 2018, includes additional amount of $181,888 for DROP members.*

Actuarial Projections, Graph 1




Funded Ratio - Optional Funding
120%
100%
80%
60%
40%
20%
0%
2017
2022
2027
2032
2037
2042
2047
2052
2057
Year

Actuarial Projections, Graph 3



SECTION III

ACTUARIALLY DETERMINED CONTRIBUTION FOR GASB STATEMENT NOS. 67 AND 68 REPORTING

Actuarially Determined Contribution for GASB Statement Nos. 67 and 68 Reporting

Schedule C: Funding Progress and Employer Contributions

Valuation Date	**July 1, 2016**	**July 1, 2017**
Valuation Interest Rate	5.50%	5.50%
Cost-of-Living Adjustment	2.75%	2.75%
Wage Inflation	3.75%	3.75%
Actuarial Value of Assets	Market	Market
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Remaining Amortization Period [a]	24 Years, Level % of Pay	23 Years, Level % of Pay
Schedule of Funding Progress		
Actuarial Valuation Date	**July 1, 2016**	**July 1, 2017**
1. Market Value of Assets	$20,727,586	$24,682,410
2. Actuarial Accrued Liability	$69,754,842	$70,807,951
3. Unfunded Actuarial Accrued Liability (2 - 1)	$49,027,256	$46,125,541
4. Funded Ratio (1/2)	30%	35%
5. Expected Payroll	$3,263,322	$3,264,883
6. UAAL as Percentage of Covered Payroll (3/5)	1,502%	1,413%
Schedule of Employer Contributions [c]	**FYE 2017**	**FYE 2018**
1. Actuarially Determined Contribution		
(a) Employer Normal Cost	$1,155,427	$1,164,056
(b) Amortization of Unfunded Actuarial Accrued Liability	$2,459,570	$2,395,806
(c) Actuarially Determined Contribution (ADC) (a + b)	$3,614,997	$3,559,862
2. Employer Contribution [b]	$3,341,690	$3,464,623
3. Premium Tax Allocation	$964,251	$992,904
4. Percentage of ADC Contributed [(2 + 3)/1(c)]	119%	125%

[a] *Suggested amortization policy to comply with GASB Statement Nos. 67 and 68 Standards.*
[b] *Estimated employer contribution for fiscal year ended June 30, 2018.*
[c] *Satisfies the Actuarially Determined Contribution as defined by GASB Statement Nos. 67 and 68.*

SECTION IV

ACTUARIAL VALUATION DATA
AS OF JULY 1, 2017

Actuarial Valuation Data as of July 1, 2017
Schedule D: Reconciliation of Assets

Plan Year Ending	June 30, 2016	June 30, 2017
A. Market Value of Assets Beginning of Year	$19,513,272	$20,727,586
Adjustment to Market Value of Assets at Beginning of Year	($844,433)	$0
Market Value of Assets Beginning of Year	$18,668,839	$20,727,586
1. Revenue During Fiscal Year		
(a) Employee Contribution	$277,761	$281,234
(b) Governmental Contribution		
(i) From Local Government	$3,743,927	$3,341,690
(ii) From State Government	$1,165,340	$964,251
(iii) Reallocation from State Government	$0	$0
(iv) Total	$4,909,267	$4,305,941
(c) Earnings on Investments		
(i) Net Appreciation/(Depreciation)	($593,687)	$1,802,159
(ii) Bond Interest	$214,037	$219,026
(iii) Dividends	$183,565	$227,949
(iv) Net Realized Gain (Loss) on Sale/Exchange	$53,664	$135,320
(v) Other	$0	$0
(vi) Less Investment Expense	($67,139)	($65,928)
(vii) Total	($209,560)	$2,318,526
(d) Other Revenue	$495	$4,427
(e) Receivable Investment Income/(Expense)	$0	$0
(f) Receivable Contribution [a]		
(i) From Employee Contributions	$0	$0
(ii) From Local Government	$0	$0
(iii) From State Government	$0	$0
(iv) Total	$0	$0
(g) Total Revenue (sum of (a) through (f))	$4,977,963	$6,910,128
2. Expenditures During Fiscal Year		
(a) Benefits Paid	$2,860,739	$2,944,868
(b) Withdrawals	$58,251	$0
(c) Administrative Expenses	$226	$10,436
(d) Payable Benefits and Withdrawals	$0	$0
(e) Payable Administrative Expenses	$0	$0
(f) Total Expenditures (sum of (a) through (e))	$2,919,216	$2,955,304
B. Market Value of Assets End of Year [A + 1(g) - 2(f)]	$20,727,586	$24,682,410
C. Approximate Return on Assets	(1.08)%	10.73%

[a] *Receivable contributions for each respective plan year ending.*

Actuarial Valuation Data as of July 1, 2017
Schedule E: Assets Held by Category

Plan Year Ending	June 30, 2016		June 30, 2017	
1. Cash and Short-term Investments	$1,315,498	6%	$96,425	0%
2. Government Securities				
(a) US Treasury Bills, Notes and Bonds	$3,750,834		$1,235,488	
(b) US State and Local Governmental Debt Securities	$0		$3,545,694	
(c) Foreign Governmental Debt Securities	$0		$0	
(d) Other	$0		$0	
(e) Total Government Securities (sum of (a) through (d))	$3,750,834	18%	$4,781,182	20%
3. Corporate Fixed Income				
(a) US Bonds	$3,720,813		$4,338,405	
(b) US Mortgage or other Asset Backed Securities	$337,118		$786,919	
(c) US Mutual Fund Shares (Bonds)	$0		$0	
(d) US Exchange Traded Funds (Bonds)	$0		$0	
(e) International Bonds	$0		$0	
(f) International Mutual Fund Shares (Bonds)	$0		$0	
(g) International Exchange Traded Funds (Bonds)	$0		$0	
(h) Total Corporate Fixed Income (sum of (a) through (g))	$4,057,931	20%	$5,125,324	21%
4. Corporate Equity				
(a) US Equity	$11,172,323		$13,652,479	
(b) US Mutual Fund Shares (Equity)	$0		$0	
(c) US Exchange Traded Funds (Equity)	$0		$0	
(d) International Equity	$0		$0	
(e) International Mutual Fund Shares (Equity)	$0		$0	
(f) International Exchange Traded Funds (Equity)	$0		$0	
(g) Total Corporate Equity (sum of (a) through (f))	$11,172,323	54%	$13,652,479	55%
5. Alternative Investments				
(a) Real Estate Investment Trust	$0		$0	
(b) Private Equity Fund	$0		$0	
(c) Hedge Funds	$0		$0	
(d) Other Alternative Investments	$0		$0	
(e) Total Alternative Investments (sum of (a) through (d))	$0	0%	$0	0%
6. Other	$431,000	2%	$1,027,000	4%
7. Receivable Contributions	$0			
(a) From Employee Contributions	$0		$0	
(b) From Local Government	$0		$0	
(c) From State Government	$0		$0	
(d) Total Receivable Contributions (sum of (a) through (c))	$0	0%	$0	0%
8. Accruals				
(a) Receivable (other than State and Local Contributions)	$0		$0	
(b) Less Payable	$0		$0	
(c) Total	$0	0%	$0	0%
Market Value of Assets End of Year [sum of (1) through (8)]	**$20,727,586**		**$24,682,410**	

Actuarial Valuation Data as of July 1, 2017
Schedule F: Summary of Participant Activity

	Actives	Retirees	Disabled	Deferred Vested	Spouses and Beneficiaries	Totals
Total Participants July 1, 2016:	**72**	**87**	**7**	**4**	**35**	**205**
New Actives:						**0**
Returned to Actives Status:						**0**
Data Corrections/Other Changes:	(2)	1				**(1)**
Vested Terminations:						**0**
Non-Vested Terminations:	(1)					**(1)**
Disabled:						**0**
Retirements:		1		(1)		**0**
Deaths with Beneficiary:		(1)			1	**0**
Deaths w/o Beneficiary:		(1)	(1)		(2)	**(4)**
Expired Annuity or Stop Payment:						**0**
Net Changes:	(3)	0	(1)	(1)	(1)	**(6)**
Total Participants June 30, 2017:	**69**	**87**	**6**	**3**	**34**	**199**

Actuarial Valuation Data as of July 1, 2017
Schedule G: Distribution of Active Employees by Age and Length of Service

Attained Age	Years of Service to Valuation Date: Less than 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35	Totals	Valuation Payroll[a]
Under 20											$ 0
20-24		1								**1**	**$ 45,309**
25-29		2	1							**3**	**$ 142,014**
30-34		2	6							**8**	**$ 367,890**
35-39			6	8	2					**16**	**$ 749,497**
40-44			1	3	6	1				**11**	**$ 550,461**
45-49				4	10	5	1			**20**	**$ 955,242**
50-54					2	2	2			**6**	**$ 313,473**
55-59					2		1		1	**4**	**$ 213,449**
60-64											**$ 0**
65-69											**$ 0**
Over 70											**$ 0**
Totals	**0**	**5**	**14**	**15**	**22**	**8**	**4**	**0**	**1**	**69**	**$ 3,337,334**

Averages

Age:	42.8	years
Service:	15.0	years
Annual Pay:	$48,367	[a]

[a] *Based on payroll at beginning of plan year.*

Actuarial Valuation Data as of July 1, 2017
Schedule H: Participants Summary

Active Participants	July 1, 2016	July 1, 2017
Number of Actives	72	69
Total Annual Pay[a]	$3,281,917	$3,337,334
Average Age	42.0	42.8
Average Service	14.1	15.0

[a] *Excludes annual pay for 8 members participating in the DROP.*

Inactive Participants	July 1, 2016		July 1, 2017[b]	
Type	No.	Annual Benefit	No.	Annual Benefit
Retirees[c]	87	$2,665,440	87	$2,692,609
Survivors	35	$470,563	34	$466,782
Disabled Members	7	$135,347	6	$116,032
Deferred Vested Members	4	$123,232	3	$93,915

[b] *Data provided includes 1 non-vested member with an accumulated contribution balance of $24,457 as of July 1, 2017.*

[c] *Retiree data as of July 1, 2016, and July 1, 2017, includes 8 members classified as DROP members with accumulated DROP balances of $0 as of June 30, 2016, and $345,106 as of June 30, 2017.*

SECTION V

ACTUARIAL ASSUMPTIONS AND METHODS

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	6.5%
40% or more	8	40% or more	60% or more	6.0%
30% or more	6	30% or more	50% or more	5.5%
15% or more	4	n/a	40% or more	5.0%
Less than 15%	n/a	n/a	15% or more	4.5%
Less than 15%	n/a	n/a	Less than 15%	4.0%

[1]Funded ratios based on a 6.0% investment return assumption for plans using an actuarially sound policy (standard or optional) and a 5.5% investment return assumption for other plans (alternative or conservation).
[2]Liquidity ratio equals assets as of the actuarial valuation date divided by expected benefit payments for the year.
[3]Based on investment policy.

As of June 30, 2017	
Assets	$24,682,410
Liabilities using a 6.00% Discount Rate	$66,479,404
Funded Ratio	37%
Expected Benefit Payments	$3,754,111
Liquidity Ratio	6.57
Equity Exposure	55%
Projected Funded Ratio after 15 years	61%

Discount Rate	5.50%

The premium tax allocation is projected using the following methodology:

(1) The Base Allocation for all Pension and Relief Funds is a fixed amount equal to $8,709,689 in all future years. This amount is allocated to each individual Pension and Relief Fund in proportion to the number of eligible members, which includes active members covered in either the Pension and Relief Fund or the statewide plan, Municipal Police Officers and Firefighters Retirement System ("MPFRS").

(2) The Excess Allocation is equal to the excess of the current year premium tax assigned to all Pension and Relief Funds over the total Base Allocation. This amount is allocated to each individual Pension and Relief Fund in proportion to the number of eligible active and retired members covered in either the Pension and Relief Fund or the MPFRS.

(3) We have assumed all Pension and Relief Funds will make the minimum statutory contribution requirement and will receive 100% of both the Base Allocation and the Excess Allocation assigned to the individual plan. Consequently, the projections do not include any reallocation of Expired Premium Tax Allocation for plan years beginning on and after July 1, 2019.

(4) The total available premium tax allocation, net of expenses, as of September 1, 2018, includes a Base Allocation of $8,709,689, an Excess Allocation of $9,570,473, and an Expired Premium Tax Allocation of $237,031.

(5) For the plan year ending June 30, 2018, all Pension and Relief Funds reported a total of 1,717 eligible active members and 2,165 eligible retired members. The City of Wheeling Firemen's Pension and Relief Fund reported 92 eligible active members and 118 eligible retired members, based on the average number of plan participants for the 12-month period ending June 30, 2018. The Fund is eligible to receive a premium tax allocation of $999,956 for the fiscal year ending June 30, 2019.

(6) The total premium tax allocation was assumed to increase by 2.75% in calendar years ending on and after 2019.

Actuarial Assumptions and Methods
Used in the Valuation as of July 1, 2017 (Continued)

General Inflation	2.75%
Expected Salary Increase Service-based Increase:	General Inflation: 2.75% *plus* Wage Inflation Increment: 1.00% *plus* 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. Assumed to be payable to all members receiving payments.
Increase in State Insurance Premium Tax Allocation	2.75% on and after year 1
Cost Method	Entry-Age-Normal, Level-Percentage-of-Pay
Amortization Policies: Alternative Plans and former Alternative Plans that selected the Conservation Policy	For GASB 67/68 Accounting: 30 – Year Closed Level-Percentage-of-Pay Amortization (from July 1, 2010 – 23 years remaining as of July 1, 2017).
Standard Plans and former Standard Plans that selected the Optional Policy	For funding and GASB 67/68 Accounting: 40-Year Closed Level-Dollar Amortization (from July 1, 1991 – 14 years remaining as of July 1, 2017)
Former Alternative Plans that selected the Optional Policy	For funding: 40-Year Closed Level-Dollar Amortization (from January 1, 2010 – 32.5 years remaining as of July 1, 2017). For GASB 67/68 Accounting: 30-Year Closed Level-Percentage-of-Pay Amortization (from July 1, 2010 – 23 years remaining as of July 1, 2017)

Asset Method	Market Value
Turnover	Sample Rates – Age / Rates 25 / 9% 35 / 4% 45 / 2% 50 / 0%
Retirement	Age / Rates[a] 50 / 45% 51-55 / 30% 56-59 / 35% 60 / 100% [a]*Terminated vested participants are assumed to retire at age 50.*
Mortality	Active: RP-2014 Blue Collar Healthy Employee[b] 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 2-dimensional mortality improvement scales [b]*Assumes 10% of deaths are duty-related and 90% are non-duty related.*
Disability	Sample Rates – Age / Rates[c] 30 / 0.22% 40 / 0.50% 50 / 0.79% [c] *Assumes 60% duty related and 40% non-duty related.Also assumes 10% of non-duty disabled members receive a 20% reduction in benefits due to gainful employment.*
Percent Married	90%
Spouse Age	Females 3 years younger than males

Actuarial Assumptions and Methods
Used in the Valuation as of July 1, 2017 (Continued)

Administrative Expenses	Plan year end June 30, 2018, expense based on plan year end June 30, 2017 expense increased by general inflation assumption. Future expenses assumed to increase by the general inflation assumption.
Refunds Paid	Assumes non-vested inactive members as of July 1, 2017, with accumulated member contribution balances will receive a refund of their contributions during plan year end June 30, 2018.
Data Adjustments and Assumptions	Valued 8 individuals participating in the DROP as retired members. DROP members are assumed to retire as of June 30, 2018, and receive a distribution of their DROP balance as of June 30, 2018. One member marked active in the local plan as of July 1, 2016 was corrected to be active in the state-wide plan. One member marked active as of July 1, 2016 was corrected to be retired as of July 1, 2016.
Child Beneficiaries	Future survivor widow benefits are loaded by 12% to estimate impact of benefits provided to survivor children. The load assumes 90% of members are married with two children at time of death, and benefits for each child are paid for approximately 8 years.
General Projection Methodology	Closed group projections assume: (i) Salaries will increase and members will decrement as specified in the actuarial assumption section. (ii) Assets grow at the assumed rate of return. (iii) The sponsor makes the statutory required contribution on a timely bases. (iv) Non-vested members with accumulated plan balances as of July 1, 2017, will receive a refund during plan year end June 30, 2018.
Decrement Timing	Mid-Year

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Summary of Principal Plan Provisions
Actuarial Valuation as of July 1, 2017

Employee Eligibility — All compensated employees of the Fire Department hired before December 1, 2014 are eligible to participate in the City of Wheeling Firemen'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 7.0% 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 Optional funding policy.

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 18 or marries; to each dependent orphaned child, 25 percent of the participant's benefit until the child attains 18 or marries; to each dependent parent, 10 percent of the participant's benefit for life, and to each dependent brother or sister, the sum of 50 dollars per month (but a total not to exceed $100 per month) until such individual attains the age of 18 years or marries.

In no case shall the payments to the surviving spouse and children be reduced below 65 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.