

MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS OF WEST VIRGINIA CONSOLIDATED ACTUARIAL VALUATION REPORT

FOR THE YEAR BEGINNING JULY 1, 2011

January 30, 2013

Mr. Blair Taylor Executive Director West Virginia Municipal Pensions Oversight Board 1700 MacCorkle Avenue, SE – 3<sup>rd</sup> Floor Charleston, West Virginia 25314

Subject: Consolidated Actuarial Valuation Report for the Year Beginning July 1, 2011

Dear Mr. Taylor:

Upon the request of the Municipal Pensions Oversight Board, we have performed an actuarial valuation as of July 1, 2011, of the Municipal Policemen's and Firemen's Pension and Relief Funds ("the Funds") in the State of West Virginia. This valuation has been performed in accordance with the West Virginia Code Chapter 8, Article 22, Sections 16 through 28, inclusive.

The primary purpose of the study is to assess the adequacy of the funding policy currently in use by each participating Fund as defined in West Virginia Code §8-22-20 which states the "minimum standard for actuarial soundness." The assessment of the adequacy of the current funding policy was based on individual actuarial valuations as of July 1, 2011, for each participating Fund and the valuations performed in eight prior plan years. The four statutory funding policies currently available to Plan Sponsors include the Standard Funding Policy as defined in West Virginia Code §8-22-20(c)(1), the Alternative Funding Policy as defined in West Virginia Code §8-22-20(e), and the Conservation Funding Policy as defined in West Virginia Code §8-22-20(f).

The individual valuations were performed using a consistent and uniform set of actuarial assumptions and methods in order to establish a basis for comparing the actuarial soundness of the Funds. The assumptions and methods were recommended by the actuary, in the report *Actuarial Assumptions and Experience Review for the Period July 1, 2002, through July 1, 2009*, and approved by the Municipal Pensions Oversight Board.

This report also reviews, for Plan Sponsors currently using the Standard Funding Policy, the impact of switching to the Optional Funding Policy and for Plan Sponsors currently using the Alternative Funding Policy, the impact of switching to either the Optional Funding Policy or the Conservation Funding Policy.

We did not review the investment policy or the administrative practices of the individual Funds.

Mr. Blair Taylor West Virginia Municipal Pensions Oversight Board Page 2

Each valuation is based upon:

**Asset Values** – Reconciliation of the market value of assets during the plan year ending June 30, 2011, and the market value of assets held as of June 30, 2011, by investment category, as provided by the sponsor of each participating Fund.

**Plan Provisions** – A summary of the key plan provisions valued is set forth in Section VII of the report: Summary of Principal Funding Policies and Plan Provisions.

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

**Actuarial Assumptions** – The actuarial assumptions used in the valuations are set forth in Section VI of the report: Actuarial Assumptions and Methods.

The actuarial valuation results disclosed in this report are based on (1) plan membership data and asset values provided by each of the individual plan sponsors, (2) actuarial assumptions and actuarial methods described in Section VI of this report, and (3) the provisions of the Funds as defined in the West Virginia Code Chapter 8, Article 22, Sections 16 through 28, inclusive. Based on these items, we certify these results to be true and correct.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: 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.

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.

The signing actuaries are independent of the plan sponsor. The undersigned 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.

Respectfully yours,

Alex Rivera, F.S.A., E.A., MAAA

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# **SECTION I**EXECUTIVE SUMMARY

#### CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

#### **Executive Summary**

Upon the request of the Municipal Pensions Oversight Board ("MPOB"), we have performed an actuarial study as of July 1, 2011, of the Municipal Policemen's and Firemen's Pension and Relief Funds ("the Funds") of West Virginia. The primary objective of the study is to perform individual actuarial valuations for each Fund in order to provide each plan sponsor information on:

- The funding requirements for fiscal year ending June 30, 2013,
- The Fund's eligibility to receive an allocation of the premium tax for fiscal year ending June 30, 2013,
- The Fund's eligibility to provide Supplemental Benefits for the plan year beginning July 1, 2013, and,
- The advantages and disadvantages of switching to one of the available funding policy options, including the Optional Funding Policy and Conservation Funding Policy as defined in West Virginia Code §8-22-20.

The individual actuarial valuation reports have been delivered to each plan sponsor. Appendix I contains a summary of the key valuation results for each Fund.

Another objective of the study is to review the overall adequacy of the current and available funding policies. For this purpose, we reviewed the actuarial valuations as July 1, 2011, actuarial projections of the current and available funding policy options, and historical valuation results.

The valuation as of July 1, 2011 includes the following change from the prior year valuation:

- We assumed that each Fund will receive the State premium tax allocation until the Fund reaches 100% funded, even if the premium tax allocation exceeds the amortization of the unfunded liability. In all cases, however, the employer contribution will not be less than the normal cost.
- The premium tax allocation was updated to include the Base Allocation and Excess Allocation as defined in the State Statutes. Page 36 of the report provides the details of the allocation methodology and its use in our projections. The updated methodology did significantly change the premium tax allocation when compared to the last valuation.

The four funding policies available to plan sponsors are summarized below:

- West Virginia Code §8-22-20(c)(1) defines the Standard Funding Policy. Under this policy, employer contributions equal the net employer normal cost, plus an amortization of the unfunded actuarial liability, and less the State premium tax allocation applicable to the plan year. The amortization is based a 40-year closed period from July 1, 1991, using a level dollar amortization (20 years as of July 1, 2011). The Standard Funding Policy is consistent with generally accepted actuarial standards of practice.
- West Virginia Code §8-22-20(c)(1) defines the Alternative Funding Policy. Under this policy, employer contributions equal 107% of the prior year's employer contribution. The Alternative

#### CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

Funding Policy is not consistent with generally accepted actuarial standards of practice because the policy does not reflect emerging experience gains and losses, and may not produce an actuarially sound pattern of contributions or funded ratio.

- West Virginia Code §8-22-20(e)(1) defines the Optional Funding Policy, which allows plan sponsors, using either the Standard Funding Policy or Alternative Funding Policy, to close the current local Plan, and finance obligations on an actuarially determined basis as follows: The actuarially determined employer contribution is equal to the net employer normal cost, plus an amortization of the unfunded actuarial liability, less the State premium tax allocation applicable to the plan year. The closed amortization period as of July 1, 2011, is 20 years for sponsors who previously used the Standard Funding Policy and 38.5 years for sponsors who previously used the using the Alternative Funding Policy. Members hired after the adoption date of the Optional Funding Policy are covered in the recently established statewide pension plan The Municipal Police Officers and Firefighters Retirement System.
- West Virginia Code §8-22-20(f)(1) defines the Conservation Funding Policy, which allows plan sponsors using the Alternative Funding Policy, to close the current local Plan, and finance obligations on a pay-as-you-go basis. Sponsors using the Conservation Funding Policy are required to assign a portion of the State premium tax allocation and member contributions to an accumulation account that is projected to grow to 100% of the remaining actuarial liabilities at the end of a 35-year projection period. Members hired after the adoption date of the Conservation Funding Policy are covered in the recently established statewide pension plan—the Municipal Police Officers and Firefighters Retirement System.

The details of the Standard, Alternative, Optional, and Conservation funding policies are presented in Section VII of the report.

The key findings of the actuarial study include:

- Standard plans (nine plans as of July 1, 2011) or former Standard plans that selected the Optional policy (six plans as of July 1, 2011) are projected to be fully funded by the end of the 20-year projection period. This contribution policy satisfies the actuarial standard of practice.
- As of July 1, 2011, five former Alternative plans have selected the Optional policy. These plans are projected to be fully funded as of 2050. This group includes two very large severely underfunded plans.
- As of July 1, 2011, two former Alternative plans have selected the Conservation policy. This policy may provide near-term contribution relief; however, because the contributions are based on pay-as-you-go funding, the contributions could be more volatile.
- In general, the Alternative Funding Policy produces contributions that grow at an annual rate of 7%, which is three percentage points higher than the assumed wage inflation assumption of 4%. This policy produces an ever increasing contribution pattern for which it may be difficult to budget. As of July 1, 2011, 31 of the 53 plans are financed using the Alternative Funding Policy.

#### CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

- Over the next 30 years, 11 out of 31 Alternative Plans are projected to have contribution rates that exceed 40% of pay. Also after 30 years, only 14 out of 31 Alternative plans are projected to have funded ratios that exceed 80%.
- One key concern of the Alternative Funding Policy is the level of required annual contributions relative to the net employer normal cost and amortization of the unfunded actuarial liability. A sound funding policy generally finances, on an annual basis, the normal cost plus a portion, generally 6% to 8%, of the unfunded actuarial liability.

The following table shows a distribution of FY 2013 and projected FY 2033 Alternative Funding Policy contributions, made by the sponsor and State, expressed in terms of the net normal cost plus a percentage of the unfunded actuarial liability.

Employer Contributions Plus State Premium Tax Allocation	Number of Alternative Plans Satisfying Conditions in			
State Hemania Tax Hadeatan	FY 2013	FY 2033		
100% of Net Normal Cost plus 0% to 2% of Unfunded Actuarial Liability	16	3		
100% of Net Normal Cost plus 2% to 4% of Unfunded Actuarial Liability	7	7		
100% of Net Normal Cost plus 4% to 6% of Unfunded Actuarial Liability	6	6		
100% of Net Normal Cost plus 6% or more of Unfunded Actuarial Liability	2	15		

- Only eight of the 31 Alternative plans in Fiscal Year 2013 are contributing at a level that approximates a sound funding basis. This increases to 21 out of the 31 Alternative plans when we look at projected contributions in Fiscal Year 2033. (However, that takes into account 20 years of 7 percent increases in the annual contribution requirement.)
- For purposes of evaluating the Optional and Conservation funding policies, we performed open group projections for Standard and Alternative plans, and assumed the sponsor would select either the Optional or Conservation Funding Policy in the year that employer contributions are lower. Based on this rule, all Standard Plans would experience a reduction in employer contribution if the Optional Funding Policy was adopted in FY 2013. This occurs because the net employer normal cost rate for the local plan is higher than the statutory contribution rate of 8.5% to 10.5% of pay under the Municipal Police Officers and Firefighters Retirement System.
- For the Alternative Plans, the year that Optional or Conservation policy contributions are lower was not as apparent. The following table shows the year when contributions under the Optional or Conservation policy are expected to be lower than contributions under the Alternative policy:

#### CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

	Number of Alternative Plans						
Year Sponsor Contributions are lower	If Optional Policy is selected	If Conservation Policy is selected					
2013 to 2014	2	9					
2015 to 2019	4	4					
2020 to 2029	4	7					
2030 to 2039	6	8					
After 2040	15	3					

- This table shows that only two Alternative plans are projected to receive immediate contribution relief if the Optional policy is selected. This table also shows that nine Alternative plans are projected to receive immediate contribution relief if the Conservation policy is selected.
- The Optional Funding Policy is based on sound actuarial principles and is projected to produce a reasonable pattern of contributions and funded ratios. The Conservation Funding Policy depends on the level of actual retirements and benefit payments made during the year, and could produce significant contribution volatility for the sponsor. The volatility is even greater for smaller plans that have fewer active members. That is, one or two unexpected retirements could significantly impact the sponsor's budget.
- The Optional and Conservation Funding policies may not be viable options for many of the Alternative Plans. However, we strongly encourage the plan sponsor to consider not only the affordability of the funding policy but also the projected patterns of contributions and funded ratios in future years.
- Sponsors using the Alternative Funding Policy may want to consider making additional contributions in excess of the statutory minimum to ensure a reasonable pattern of growth in the funded ratio.

#### Other observations include:

- Our valuation assumes the sponsor is required to contribute at least the normal cost in order to receive the State premium tax allocation. One plan with a funded ratio of 109% as of July 1, 2011, is projected to experience an increasing funded ratio. At some point, the sponsor may no longer need additional contributions. For example, a plan that is at least 125% funded on a present value of future benefit basis, may have a sufficient cushion for future adverse experience.
- In some cases, the asset information did not clearly disclose the proportion that was invested or is expected to be invested in equities. Because the discount rate depends on the equity allocation, we recommend that the sponsor provide more details on the fund's investment policy.

The remainder of the report provides additional details supporting the preceding findings and observations.



# **SECTION II**

VALUATION RESULTS

#### CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

#### Actuarial Valuation Results as of July 1, 2011

#### Valuation Methodology

- Individual actuarial valuations as of July 1, 2011, were performed for each Fund that participated in the study. We received usable census and asset information for all 53 Funds in the State. The table on page 13 shows a summary of the key valuation results as of July 1, 2011, for the participating Funds. The results are broken out among Funds that have elected the Standard, Alternative, Optional or Conservation Funding Policy.
- The actuarial valuations were based on assumptions and methods recommended by GRS, in the report *Actuarial Assumptions and Experience Review for the Period July 1, 2002, through July 1, 2009*, and approved by the Municipal Pensions Oversight Board.
- A gain/loss analysis of changes in assets and liabilities from the previous valuation was performed.
   In addition, the actuarial projections from the current valuation were analyzed and trends were reviewed.
- Actuarial projections (30-year open group) were performed assuming the employer would make contributions under the funding policy selected by the Plan sponsor either the Standard Funding Policy, the Alternative Funding Policy, the Optional Funding Policy or the Conservation Funding Policy.
- The key indicators used to assess the funding adequacy were the funded ratio and the employer contribution expressed as a percentage of payroll. The funded ratio is defined as the market value of assets divided by the actuarial accrued liability. In our opinion, a Fund that has a funded ratio of less than 70% or a required contribution rate in excess of 30% of payroll could be at financial risk of not being sustainable at some point in the future i.e., not being able to pay the promised benefits, or of having a contribution requirement that is too large to be affordable.

#### Key findings for Plans using the Standard Funding Policy

- Nine plans, (or about 17% of all 53 participating Funds), covering only 2.8% of plan participants, and 2% of total liabilities are financed using the Standard Funding Policy. Most Funds using this funding policy are Class III municipalities (eight in Class III and one in Class II).
- For most Funds using the Standard Funding Policy, the funded ratios as of July 1, 2011, range from 20% to 73% and the 2011 contribution rates range from 33% to 74% of payroll.
- The average employer contribution rate is 51% of payroll.
- The average funded ratio for all Standard plans is 50%. The unfunded actuarial accrued liability for Funds using the Standard policy is approximately \$11.6 million or 1.2% of the total unfunded liabilities for all Funds.

#### CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

• On a projected basis, the funded ratio for all Funds using the Standard Funding Policy increases steadily and approaches 100% by 2031 (as required by State Statutes). In addition, the projected contribution rates are generally level or decline steadily. These relationships are a direct consequence of the funding method and are consistent with the historical valuation results.

#### Key findings for Plans using the Alternative Funding Policy

- Thirty one plans (or about 58.5% of all 53 participating Funds), covering 60% of plan participants, are financed using the Alternative Funding Policy.
- The average employer contribution rate is 32% of payroll.
- The average funded ratio is only 24%. The unfunded actuarial accrued liability for Funds using the Alternative policy is approximately \$516 million or 54.2% of the total unfunded liabilities for all Funds.
- On a projected basis, after 30 years, only 14 out of 31 Alternative Plans are projected to be at least 80% funded.

#### Key findings for Plans that switched from the Alternative Funding Policy to the Optional Funding Policy

- Five plans that were previously using the Alternative Funding Policy (or about 9.4% of all 53 participating Funds), covering 15.1% of plan participants, are now financed using the Optional Funding Policy.
- The average employer contribution rate is 97% of payroll.
- The average funded ratio is only 18%. The unfunded actuarial accrued liability for these Funds is approximately \$157.7 million or 16.6% of the total unfunded liabilities for all Funds.
- Under the Optional Funding Policy, all plans that switched from Alternative are by definition projected to be 100% funded by the end of the amortization period in 40 years. However, the funded ratios will increase at a very slow rate for many years and leave the plans vulnerable if there is another significant market downturn.
- Contributions to the closed local plans are projected to decrease in future years as new hires enter the Municipal Police Officers and Firefighters Retirement System.

#### Key findings for Plans that switched from the Standard Funding Policy to the Optional Funding Policy

- Six plans, (or about 11.3% of all 53 participating Funds), covering only 1.8% of plan participants, and 1.1% of total liabilities are financed using the Optional Funding Policy that switched from the Standard policy. All of the Funds using this funding policy are Class III municipalities.
- The average employer contribution rate is 47% of payroll.

- The average funded ratio for these six plans is 62% and the unfunded actuarial accrued liability is approximately \$5.1 million or 0.5% of the total unfunded liabilities for all Funds.
- On a projected basis, the funded ratio for these Funds increases steadily and approaches 100% by 2031 (as required by State Statutes). In addition, the projected contribution rates are generally level or decline steadily. These relationships are a direct consequence of the funding method and are consistent with the historical valuation results.

#### Key findings for Plans using the Conservation Funding Policy

- Two plans or about 3.8% of all 53 participating Funds, covering 20.5% of plan participants, are financed using the Conservation Funding Policy. These two plans are both Class I municipalities.
- The average employer contribution rate is 49% of payroll.
- The average funded ratio is only 7.1%. The unfunded actuarial accrued liability for Funds using the Conservation policy is approximately \$262.4 million or 27.5% of the total unfunded liabilities for all Funds.
- Employer contributions will be used directly to pay benefits not covered by member contributions or the premium tax allocation. As such, employer contributions to sponsors currently using the Conservation policy plans are projected to increase each year for the next 25 years as projected benefit payments increase.
- The Conservation Funding Policy defers contributions and produces virtually no significant growth in the funded ratio until the last 10 years of the projection period. This policy is not consistent with generally accepted actuarial principles.

#### Historical Comparison of Funded Ratios and Contribution Rates by Funding Policy

Funds using the Alternative Funding Policy, in general, have much lower funded ratios, when compared to Funds using the Standard Funding Policy. The following tables compare the historical averages of funded ratios and contributions rates at each respective valuation date:

# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

			Optional P		al Policy	Optiona	l Policy				
<b>Funded Ratio</b>	Stan	dard	Alter	native	Pla	ans	Pla	ans	Consei	rvation	
As of July 1	Policy	Plans	Policy	Plans	From Standard		From Alt	ernative	Policy Plans		
-	Number	Average	Number	Average	Number	Average	Number	Average	Number	Average	
2011	9	50%	31	24%	6	62%	5	18%	2	7%	
2010	14	44%	32	22%	1	57%	4	12%	2	7%	
2009	14	52%	37	19%	NA	NA	NA	NA	NA	NA	
2007	13	59%	34	22%	NA	NA	NA	NA	NA	NA	
2006	13	55%	36	21%	NA	NA	NA	NA	NA	NA	
2005	13	55%	36	21%	NA	NA	NA	NA	NA	NA	
2004	11	56%	38	21%	NA	NA	NA	NA	NA	NA	
2003	13	56%	38	21%	NA	NA	NA	NA	NA	NA	
2002	11	60%	38	21%	NA	NA	NA	NA	NA	NA	

As of the July 1, 2011 valuation, six Standard plans selected the Optional Funding Policy, five Alternative plans selected the Optional Funding Policy, and two Alternative plans selected the Conservation Funding Policy

C4-il4i					Optiona	l Policy	Optiona	l Policy		
Contribution	Stan	dard	Alternative		Pla	ans	Pla	ans	Consei	rvation
Rate	Policy	Plans	Policy Plans		From S	tandard	From Alt	ernative	<b>Policy Plans</b>	
As of July 1	Number	Average 1	Number	Average	Number	Average	Number	Average	Number	Average
2011	8	51%	31	32%	6	47%	5	97%	2	49%
2010	13	33%	32	30%	1	45%	4	103%	2	31%
2009	13	34%	37	39%	NA	NA	NA	NA	NA	NA
2007	12	30%	34	37%	NA	NA	NA	NA	NA	NA
2006	12	30%	36	35%	NA	NA	NA	NA	NA	NA
2005	12	31%	36	36%	NA	NA	NA	NA	NA	NA
2004	10	33%	38	36%	NA	NA	NA	NA	NA	NA
2003	12	33%	38	34%	NA	NA	NA	NA	NA	NA
2002	10	29%	38	32%	NA	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>1</sup>One outlying Standard Policy Fund, excluded from this table, is closed to new employees, has seven retired members, no active members, and no payroll.

#### CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

- Sponsors using the Standard Funding Policy and former Standard plans that selected the Optional Funding Policy are required to contribute the net normal cost plus a 20-year (from July 1, 2011) closed level dollar amortization of the unfunded actuarial liability. By definition, these Funding Policies produce a projected funded ratio of 100% at the end of 20 years and are consistent with generally accepted actuarial standards of practice.
- Because the net employer normal cost rate for Standard plans (generally around 25% of pay) is higher than the statutory contribution rate of 8.5% to 10.5% of pay under the Municipal Police Officers and Firefighters Retirement System, all Standard plans would experience a reduction in employer contributions if the Optional Funding policy was adopted, with no significant impact to the funded ratio. In fact, five Standard plans recognized this relationship and converted from the Standard Funding Policy to the Optional Funding Policy for the July 1, 2011 actuarial valuation.
- Sponsors using the Alternative Funding Policy are only required to contribute 107% of the prior year's contribution. The Alternative Funding Policy is not consistent with generally accepted actuarial standards of practice because the policy does not reflect emerging gains and losses and may not produce an actuarially sound pattern of contributions and funded ratio. As a direct result of this funding policy, Alternative plans are on average half as well funded as Standard plans.
- Unlike Standard plans, Alternative plans are generally not expected to receive immediate contribution relief from switching to the Optional policy because the Alternative policy contributions in many cases are considerably lower than the actuarially based contributions defined under the Optional policy. However, plan sponsors currently using the Alternative Funding Policy may find it more affordable in the long run to switch to the Optional Funding Policy even if it means an increase in the employer contributions in the short term.
- As an alternative to switching to the Optional Funding Policy, sponsors of Alternative plans may want to consider making additional contributions in excess of the statutory minimum to ensure a reasonable pattern of growth in the funded ratio.
- Standard plans and former Standard plans that have selected the Optional Policy are projected to be 100% funded by the end of the 20 year amortization period in 2031. Under the Alternative Funding Policy, only 10% of plans are projected to be fully funded by 2031.
- The following table compares the percentage of funds that are projected to be fully funded by 2031 for each historical valuation:

## CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

Valuation		Percentage of Plans that are Projected to be Fully Funded by 2031									
As of July 1	Standard Alternative		Optional from Standard	Optional from Alternative b	Conservation						
2011	100%	10%	100%	20%	0%						
2010	100%	9% <sup>a</sup>	100%	0%	0%						
2009	100%	32%	NA	NA	NA						
2007	100%	35%	NA	NA	NA						
2006	100%	36%	NA	NA	NA						
2005	100%	44%	NA	NA	NA						
2004	100%	42%	NA	NA	NA						
2003	100%	39%	NA	NA	NA						
2002	100%	32%	NA	NA	NA						

<sup>&</sup>lt;sup>a</sup> The significant decrease from 32% in 2009 to 9% in 2010 for Alternative Plans is primarily the result of the changes in assumptions.

<sup>&</sup>lt;sup>b</sup> Former Alternative plans that selected the Optional policy are projected to be fully funded by 2050.

# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

### **Comparison of Historical Valuation Results**

The following table compares basic historical data for plans that have participated in the actuarial valuation studies. Adjusting for the net impact of non-participating plans in each respective valuation cycle, pay has historically increased by approximately 3% to 6% per year, and benefits have increased by 4% to 9% per year.

(\$ in Millions)	2011	2010	2009	2007	2006	2005	2004	2003	2002
Participating Plans	53	53	51	47	49	49	49	51	49
Payroll	\$78.1	\$77.1	\$75.2	\$66.5	\$67.4	\$63.7	\$60.8	\$59.7	\$57.6
Benefits Paid	\$53.9	\$51.8	\$50.2	\$43.3	\$43.5	\$40.0	\$38.1	\$35.8	\$33.3

The following table compares historical actuarial information. The key observation is that the funded ratio has remained relatively flat over the last ten-year period. The change in assumptions in 2010 increased the actuarial liability and normal cost.

(\$ in Millions)	2011	2010	2009	2007	2006	2005	2004	2003	2002
Assets	\$236.1	\$205.5	\$186.9	\$191.5	\$183.4	\$173.6	\$165.0	\$153.8	\$148.3
Liability	\$1,188.8	\$1,181.7	\$941.6	\$827.8	\$843.0	\$785.4	\$755.0	\$700.1	\$659.6
Funded Ratio	20%	17%	20%	23%	22%	22%	22%	22%	22%
Net Employer Normal									
Cost % of Pay	31%	32%	22%	23%	23%	26%	26%	25%	25%

The following table compares historical contributions. The employer contribution rates have increased primarily because contributions under the Alternative Funding Policy increase at an annual rate of 7% while payroll has increased by 3% to 6% annually. The State contributions depend on the premium volume for property casualty insurance.

(\$ in Millions)	2011	2010	2009	2007	2006	2005	2004	2003	2002
Net Employer Contributions (% of Pay)	\$36.1	\$30.6	\$29.2	\$24.1	\$23.2	\$22.8	\$21.9	\$20.4	\$18.2
	46%	40%	39%	36%	34%	36%	36%	34%	32%
State Premium Tax Allocation (% of Pay)	\$16.2	\$16.9	\$16.9	\$16.3	\$16.4	\$15.5	\$13.2	\$10.6	\$9.9
	21%	22%	23%	25%	24%	24%	22%	18%	17%

#### CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

The following tables compare the funded ratio and the employer contribution rate under the various funding policies. In general, the funded ratios increased due to favorable investment and demographic experience. The change in funded ratios and contribution rates was also impacted by plans that switched from either the Alternative or Standard policy to the Optional policy. During the plan year end June 30, 2011, five Standard plans and one Alternative plan switched to the Optional policy. This is the primary reason why the contribution rate for Standard plans increased from 33% for 2010 to 51% for 2011.

(\$ in Millions)	2011	2010	2009	2007	2006	2005	2004	2003	2002
Funded Ratio									
- Standard Plans	50%	44%	52%	59%	55%	55%	56%	56%	60%
- Alternative Plans	24%	22%	19%	22%	21%	21%	21%	21%	21%
- Optional from Standard	62%	57%	NA						
- Optional from Alternative	18%	12%	NA						
- Conservation Plans	7%	7%	NA						
<b>Contributions Rates</b>									
% of Pay									
- Standard Plans	51%	33%	34%	30%	30%	31%	33%	33%	29%
- Alternative Plans	32%	30%	39%	37%	35%	36%	36%	34%	32%
- Optional from Standard	47%	45%	NA						
- Optional from Alternative	97%	103%	NA						
- Conservation Plans	49%	31%	NA						

The details of the historical actuarial valuations are shown on pages 13 to 21. A gain/loss analysis, reconciling the unfunded liability from June 30, 2010 to June 30, 2011, is shown on pages 22 and 23. During the plan year ending June 30, 2011, the Funds in the aggregate experienced an investment return on the market value of assets of approximately 13.8%.

		(	Optional Policy (	Optional Policy		
	Standard	Alternative	From	From	Conservation	All
_	Policy	Policy	Standard	Alternative	Policy	Plans a
Number of Plans	9	31	6	5	2	5
Plan Membership						
(a) Actives	60	1,043	41	228	342	1,71
(b) Annuitants	45	1,222	26	345	436	2,07
(c) Inactives	2	17	2	2	2	
(d) Total	107	2,282	69	575	780	3,8
Payroll	\$2,372,552	\$45,188,591	\$1,454,996	\$11,013,903	\$18,088,004	\$78,118,04
Expected Benefit Payments	\$1,008,409	\$30,440,731	\$535,144	\$9,510,954	\$12,360,288	\$53,855,52
Actuarial Accrued Liabilities						
(a) Actives	\$9,454,191	\$232,770,392	\$5,017,183	\$60,477,604	\$95,875,431	\$403,594,8
(b) Annuitants	\$13,051,284	\$437,117,870	\$8,016,378	\$131,061,049	\$185,353,388	\$774,599,9
(c) Inactives	\$680,468	\$7,550,252	\$487,265	\$840,177	\$1,046,188	\$10,604,3
(d) Total	\$23,185,943	\$677,438,514	\$13,520,826	\$192,378,830	\$282,275,007	\$1,188,799,1
Market Value of Assets	\$11,572,237	\$161,461,617	\$8,437,958	\$34,697,287	\$19,913,060	\$236,082,1
Unfunded Liability	\$11,613,706	\$515,976,897	\$5,082,868	\$157,681,543	\$262,361,947	\$952,716,9
Funded Ratio	50%	24%	62%	18%	7%	20
Net Employer Normal Cost	\$582,261	\$13,940,854	\$348,714	\$3,351,670	\$5,931,071	\$24,154,5
(% of Payroll)	25%	31%	24%	30%	33%	31
Employer Contributions <sup>b</sup>	\$1,210,963	\$14,653,455	\$688,184	\$10,697,857	\$8,826,759	\$36,077,2
(% of Payroll)	51%	32%	47%	97%	49%	46
Additional Solvency Cont.						
- To Receive State Allocation	NA	\$49,700	NA	NA	NA	\$49,7
- To Provide COLA Benefits	NA	\$412,800	NA	NA	NA	\$412,8
Employee Contributions	\$168,613	\$3,340,093	\$105,842	\$771,798	\$1,447,041	\$5,833,3
(% of Payroll)	7%	7%	7%	7%	8%	7
State Premium Tax Allocation	\$465,857	\$9,589,663	\$302,959	\$2,485,488	\$3,325,087	\$16,169,0
(% of Payroll)	20%	21%	21%	23%	18%	2

 <sup>&</sup>lt;sup>a</sup> All Funds participating in the Study
 <sup>b</sup> Includes additional contributions required to satisfy the 15-year solvency test.

	Standard Policy	Alternative Policy	Optional Policy From Standard	Optional Policy From Alternative	Conservation Policy	All Plans <sup>a</sup>
Number of Plans	14	32	1	4	2	53
Plan Membership						
(a) Actives	102	1,060	3	221	373	1,759
(b) Annuitants	67	1,213	5	336	430	2,051
(c) Inactives	3	17	0	2	3	25
(d) Total	172	2,290	8	559	806	3,835
Payroll	\$3,795,035	\$45,071,900	\$92,237	\$9,461,141	\$18,682,917	\$77,103,230
Expected Benefit Payments	\$1,406,298	\$29,407,920	\$144,227	\$9,054,976	\$11,825,294	\$51,838,715
Actuarial Accrued Liabilities						
(a) Actives	\$15,361,788	\$239,608,193	\$108,201	\$59,901,808	\$99,195,128	\$414,175,118
(b) Annuitants	\$20,567,424	\$428,940,757	\$2,147,331	\$128,583,898	\$175,826,505	\$756,065,913
(c) Inactives	\$1,006,182	\$8,196,343	\$0	\$470,098	\$1,744,672	\$11,417,29
(d) Total	\$36,935,394	\$676,745,293	\$2,255,532	\$188,955,804	\$276,766,305	\$1,181,658,328
Market Value of Assets	\$16,397,598	\$147,483,305	\$1,295,724	\$22,135,392	\$18,158,879	\$205,470,898
Unfunded Liability	\$20,537,796	\$529,261,988	\$959,808	\$166,820,412	\$258,607,426	\$976,187,430
Funded Ratio	44%	22%	57%	12%	7%	17%
Net Employer Normal Cost	\$1,059,028	\$14,032,690	\$28,397	\$3,351,223	\$5,976,689	\$24,448,027
(% of Payroll)	28%	31%	31%	35%	32%	32%
Employer Contributions <sup>b</sup>	\$1,247,458	\$13,702,790	\$41,485	\$9,779,829	\$5,819,568	\$30,591,130
(% of Payroll)	33%	30%	45%	103%	31%	40%
Additional Solvency Cont.	\$0	\$103,700	\$0	\$0	\$0	\$103,700
(% of Payroll)	0%	0%	0%	0%	0%	0%
Employee Contributions	\$267,404	\$3,276,495	\$6,957	\$743,384	\$1,494,634	\$5,788,874
(% of Payroll)	7%	7%	8%	8%	8%	8%
State Premium Allocation	\$770,495	\$10,085,334	\$34,660	\$2,490,451	\$3,559,970	\$16,940,91
(% of Payroll)	20%	22%	38%	26%	19%	229

<sup>&</sup>lt;sup>a</sup> All Funds participating in the Study <sup>b</sup> Includes additional contributions required to satisfy the 15-year solvency test.

# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

	Standard Policy	Alternative Policy	All Plans <sup>a</sup>
Number of Plans	14	37	51
Plan Membership			
(a) Actives	101	1,641	1,742
(b) Annuitants	67	1,978	2,045
(c) Inactives	3	15	18
(d) Total	171	3,634	3,805
Payroll	\$3,573,526	\$71,580,258	\$75,153,784
Expected Benefit Payments	\$1,390,383	\$48,832,891	\$50,223,275
Actuarial Accrued Liabilities			
(a) Actives	\$11,789,127	\$301,411,654	\$313,200,781
(b) Annuitants	\$17,477,678	\$604,165,298	\$621,642,976
(c) Inactives	\$788,784	\$6,014,992	\$6,803,776
(d) Total	\$30,055,589	\$911,591,944	\$941,647,533
Market Value of Assets	\$15,693,437	\$171,175,902	\$186,869,340
Unfunded Liability	\$14,362,152	\$740,416,042	\$754,778,193
Funded Ratio	52%	19%	20%
Net Employer Normal Cost	\$762,890	\$16,133,448	\$16,896,338
(% of Payroll)	21%	23%	22%
Employer Contributions <sup>b</sup>	\$1,224,637	\$27,967,262	\$29,191,899
(% of Payroll)	34%	39%	39%
Additional Solvency Contribution	\$0	\$474,000	\$474,000
(% of Payroll)	0%	1%	1%
Employee Contributions	\$250,146	\$5,263,059	\$5,513,205
(% of Payroll)	7%	7%	7%
STO Contributions	\$792,755	\$16,126,389	\$16,919,144
(% of Payroll)	22%	23%	23%

<sup>&</sup>lt;sup>a</sup> All Funds participating in the Study

b Includes additional contributions required to satisfy the 15-year solvency test.



# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

	Standard Policy	Alternative Policy	All Plans <sup>a</sup>
Number of Plans	13	34	47
Plan Membership			
(a) Actives	98	1,520	1,618
(b) Annuitants	61	1,793	1,854
(c) Inactives	2	12	14
(d) Total	161	3,325	3,486
Payroll	\$3,251,345	\$63,275,523	\$66,526,868
Expected Benefit Payments	\$1,202,195	\$42,095,395	\$43,297,589
Actuarial Accrued Liabilities			
(a) Actives	\$10,063,087	\$267,421,335	\$277,484,422
(b) Annuitants	\$14,875,664	\$530,001,592	\$544,877,256
(c) Inactives	\$810,110	\$4,661,022	\$5,471,132
(d) Total	\$25,748,861	\$802,083,949	\$827,832,810
Market Value of Assets	\$15,313,492	\$176,162,897	\$191,476,389
Unfunded Liability	\$10,435,369	\$625,921,052	\$636,356,421
Funded Ratio	59%	22%	23%
Net Employer Normal Cost	\$702,981	\$14,351,782	\$15,054,763
(% of Payroll)	22%	23%	23%
Employer Contributions b	\$963,272	\$23,142,236	\$24,105,508
(% of Payroll)	30%	37%	36%
Additional Solvency Contribution	\$0	\$122,200	\$122,200
(% of Payroll)	0%	0%	0%
Employee Contributions	\$227,596	\$4,658,652	\$4,886,248
(% of Payroll)	7%	7%	7%
STO Contributions	\$723,782	\$15,609,895	\$16,333,677
(% of Payroll)	22%	25%	25%

<sup>&</sup>lt;sup>a</sup> All Funds participating in the Study

b Includes additional contributions required to satisfy the 15-year solvency test.



# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

	Standard Policy	Alternative Policy	All Plans <sup>a</sup>
Number of Plans	13	36	49
Plan Membership			
(a) Actives	98	1,576	1,674
(b) Annuitants	59	1,870	1,929
(c) Inactives	3	16	19
(d) Total	160	3,462	3,622
Payroll	\$3,172,617	\$64,238,581	\$67,411,198
Expected Benefit Payments	\$1,130,221	\$42,330,567	\$43,460,788
Actuarial Accrued Liabilities			
(a) Actives	\$9,855,624	\$273,763,730	\$283,619,354
(b) Annuitants	\$14,153,641	\$537,519,952	\$551,673,593
(c) Inactives	\$1,140,177	\$6,521,924	\$7,662,101
(d) Total	\$25,149,442	\$817,805,606	\$842,955,048
Market Value of Assets	\$13,949,937	\$169,437,715	\$183,387,652
Unfunded Liability	\$11,199,505	\$648,367,891	\$659,567,396
Funded Ratio	55%	21%	22%
Net Employer Normal Cost	\$687,676	\$14,784,563	\$15,472,239
(% of Payroll)	22%	23%	23%
Employer Contributions <sup>b</sup>	\$959,122	\$22,286,154	\$23,245,276
(% of Payroll)	30%	35%	34%
Additional Solvency Contribution	\$0	\$318,400	\$318,400
(% of Payroll)	0%	0%	0%
Employee Contributions	\$222,084	\$4,518,957	\$4,741,041
(% of Payroll)	7%	7%	7%
STO Contributions	\$719,852	\$15,722,898	\$16,442,750
(% of Payroll)	23%	24%	24%

<sup>&</sup>lt;sup>a</sup> All Funds participating in the Study

<sup>&</sup>lt;sup>b</sup> Includes additional contributions required to satisfy the 15-year solvency test.



# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

	Standard Policy	Alternative Policy	All Plans <sup>a</sup>
Number of Plans	13	36	49
Plan Membership			
(a) Actives	98	1,538	1,636
(b) Annuitants	56	1,843	1,899
(c) Inactives	3	16	19
(d) Total	157	3,397	3,554
Payroll	\$3,090,873	\$60,575,277	\$63,666,150
Expected Benefit Payments	\$1,000,615	\$38,986,489	\$39,987,104
Actuarial Accrued Liabilities			
(a) Actives	\$9,572,481	\$259,044,462	\$268,616,943
(b) Annuitants	\$13,194,282	\$495,728,632	\$508,922,914
(c) Inactives	\$1,152,250	\$6,702,706	\$7,854,956
(d) Total	\$23,919,013	\$761,475,800	\$785,394,813
Market Value of Assets	\$13,274,806	\$160,330,681	\$173,605,487
Unfunded Liability	\$10,644,207	\$601,145,119	\$611,789,326
Funded Ratio	55%	21%	22%
Net Employer Normal Cost	\$734,723	\$15,521,855	\$16,256,578
(% of Payroll)	24%	26%	26%
Employer Contributions <sup>b</sup>	\$966,163	\$21,855,312	\$22,821,475
(% of Payroll)	31%	36%	36%
Additional Solvency Contribution	\$0	\$148,100	\$148,100
(% of Payroll)	0%	0%	0%
Employee Contributions	\$216,362	\$4,240,270	\$4,456,632
(% of Payroll)	7%	7%	7%
STO Contributions	\$684,373	\$14,788,263	\$15,472,636
(% of Payroll)	22%	24%	24%

<sup>&</sup>lt;sup>a</sup> All Funds participating in the Study

<sup>&</sup>lt;sup>b</sup> Includes additional contributions required to satisfy the 15-year solvency test.



# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

	Standard Policy	Alternative Policy	All Plans <sup>a</sup>
Number of Plans	11	38	49
Plan Membership			
(a) Actives	82	1,556	1,638
(b) Annuitants	44	1,838	1,882
(c) Inactives	4	19	23
(d) Total	130	3,413	3,543
Payroll	\$2,645,345	\$58,164,328	\$60,809,673
Expected Benefit Payments	\$817,375	\$37,232,629	\$38,050,004
Actuarial Accrued Liabilities			
(a) Actives	\$8,715,444	\$247,124,232	\$255,839,676
(b) Annuitants	\$9,906,433	\$479,290,042	\$489,196,475
(c) Inactives	\$1,735,383	\$8,214,836	\$9,950,219
(d) Total	\$20,357,260	\$734,629,110	\$754,986,370
Market Value of Assets	\$11,337,047	\$153,631,629	\$164,968,676
Unfunded Liability	\$9,020,213	\$580,997,481	\$590,017,694
Funded Ratio	56%	21%	22%
Net Employer Normal Cost	\$634,768	\$14,888,690	\$15,523,458
(% of Payroll)	24%	26%	26%
Employer Contributions <sup>b</sup>	\$863,889	\$21,083,233	\$21,947,122
(% of Payroll)	33%	36%	36%
Additional Solvency Contribution	\$0	\$297,800	\$297,800
(% of Payroll)	0%	1%	0%
Employee Contributions	\$185,175	\$4,071,500	\$4,256,675
(% of Payroll)	7%	7%	7%
STO Contributions	\$554,688	\$12,630,939	\$13,185,627
(% of Payroll)	21%	22%	22%

<sup>&</sup>lt;sup>a</sup> All Funds participating in the Study

<sup>&</sup>lt;sup>b</sup> Includes additional contributions required to satisfy the 15-year solvency test.



# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

	Standard Policy	Alternative Policy	All Plans <sup>a</sup>
Number of Plans	13	38	51
Plan Membership			
(a) Actives	90	1,574	1,664
(b) Annuitants	54	1,803	1,857
(c) Inactives	4	20	24
(d) Total	148	3,397	3,545
Payroll	\$2,622,810	\$57,048,004	\$59,670,814
Expected Benefit Payments	\$930,283	\$34,850,467	\$35,780,750
Actuarial Accrued Liabilities			
(a) Actives	\$8,240,132	\$238,615,771	\$246,855,903
(b) Annuitants	\$11,489,270	\$432,861,565	\$444,350,835
(c) Inactives	\$1,234,644	\$7,621,597	\$8,856,241
(d) Total	\$20,964,046	\$679,098,933	\$700,062,979
Market Value of Assets	\$11,821,357	\$141,967,245	\$153,788,602
Unfunded Liability	\$9,142,689	\$537,131,688	\$546,274,377
Funded Ratio	56%	21%	22%
Net Employer Normal Cost	\$609,926	\$14,087,362	\$14,697,288
(% of Payroll)	23%	25%	25%
Employer Contributions <sup>b</sup>	\$869,831	\$19,551,652	\$20,421,483
(% of Payroll)	33%	34%	34%
Additional Solvency Contribution	\$0	\$523,600	\$523,600
(% of Payroll)	0%	1%	1%
Employee Contributions	\$183,597	\$3,993,360	\$4,176,957
(% of Payroll)	7%	7%	7%
STO Contributions	\$549,204	\$10,028,187	\$10,577,391
(% of Payroll)	21%	18%	18%

<sup>&</sup>lt;sup>a</sup> All Funds participating in the Study

<sup>&</sup>lt;sup>b</sup> Includes additional contributions required to satisfy the 15-year solvency test.



# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

	Standard Policy	Alternative Policy	All Plans <sup>a</sup>
Number of Plans	11	38	49
Plan Membership			
(a) Actives	81	1,608	1,689
(b) Annuitants	47	1,768	1,815
(c) Inactives	3	11	14
(d) Total	131	3,387	3,518
Payroll	\$2,298,860	\$55,330,792	\$57,629,652
Expected Benefit Payments	\$762,622	\$32,488,541	\$33,251,164
Actuarial Accrued Liabilities			
(a) Actives	\$7,695,680	\$229,543,573	\$237,239,253
(b) Annuitants	\$9,205,427	\$408,061,797	\$417,267,224
(c) Inactives	\$589,689	\$4,514,105	\$5,103,794
(d) Total	\$17,490,796	\$642,119,475	\$659,610,271
Market Value of Assets	\$10,560,331	\$137,697,562	\$148,257,893
Unfunded Liability	\$6,930,465	\$504,421,913	\$511,352,378
Funded Ratio	60%	21%	22%
Net Employer Normal Cost (% of Payroll)	\$519,401	\$13,793,772	\$14,313,173
Employer Contributions <sup>b</sup>	\$656,205	\$17,520,877	\$18,177,082
(% of Payroll)	29%	32%	32%
Additional Solvency Contribution	\$0	\$476,400	\$476,400
(% of Payroll)	0%	1%	1%
Employee Contributions	\$160,922	\$3,873,158	\$4,034,080
(% of Payroll)	7%	7%	7%
STO Contributions	\$490,542	\$9,443,944	\$9,934,487
(% of Payroll)	21%	17%	17%

<sup>&</sup>lt;sup>a</sup> All Funds participating in the Study <sup>b</sup> Includes additional contributions required to satisfy the 15-year solvency test.



#### CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

#### (Gain) / Loss Analysis

The Funds experienced an aggregate actuarial gain of \$33,394,489 during the plan year ending June 30, 2011. The key factors contributing to the experience gain included:

- **Asset Performance:** The Funds, in the aggregate, experienced an investment return of 13.8% on the market value of assets during the plan year ending June 30, 2011, which compares to the expected annual return of 5.3%. The difference in actual versus expected return produced an asset gain of \$16,677,533.
- **Demographic Experience:** An actuarial valuation is based on the expectation of certain events such as salary increases, retirement, disability, mortality, and termination. Demographic or liability experience gains and losses are generated when the actual occurrence of such events are different from the expectation. Between June 30, 2010 and June 30, 2011, the Funds experienced an aggregate net liability gain of \$16,716,956. The net liability gain of \$16,716,956 (or 1.4% of expected liabilities) is within the range of reasonable variation and is primarily the result of the following factors:
  - Salary growth rates during the plan year July 1, 2010 to June 30, 2011 that were less than the assumed rate of 5%;
  - Cost-of-living adjustments during the plan year July 1, 2010 to June 30, 2011 that were less than the assumed rate of 3%; and
  - More terminations than expected.

#### (Gain) / Loss Analysis

	Standard Policy	Alternative Policy	Optional Policy From Standard	Optional Policy From Alternative	Conservation Policy	All Plans
Number of Plans:	9	31	6	5	2	53
1. (a) Liability as of 7/1/2010	\$24,703,546	\$670,901,061	\$14,487,380	\$194,800,060	\$276,766,281	\$1,181,658,328
(b) Gross Normal Cost due 7/1/2010	767,613	16,965,473	479,365	4,205,510	7,438,412	29,856,373
(c) Interest on (a) and (b) to 6/30/2011 <sup>a</sup>	1,450,289	35,276,240	848,174	10,132,983	14,210,234	61,917,920
(d) Benefit Payments with interest to 6/30/2011 <sup>a</sup>	1,007,808	29,835,427	538,263	9,527,077	12,111,319	53,019,894
(e) Effect of Assumption Changes on Unfunded AAL at 6/30/2011	(393,495)	(8,772,668)	(772,117)	(4,958,331)	0	(14,896,611
(f) Expected Liability at $7/1/2011$ [(a) + (b) + (c) - (d) + (e)]	25,520,145	684,534,639	14,504,539	194,653,145	286,303,608	1,205,516,076
(g) Actual Liability at 7/1/2011	\$23,185,943	\$677,438,514	\$13,520,826	\$192,378,830	\$282,275,007	\$1,188,799,120
(h) Liability (Gain)/Loss [(g) - (f)]	(\$2,334,202)	(\$7,096,125)	(\$983,713)	(\$2,274,315)	(\$4,028,601)	(\$16,716,956
2. (a) Market Value of Assets as of 7/1/2010	\$10,257,384	\$143,250,760	\$7,435,939	\$26,367,936	\$18,158,879	\$205,470,898
(b) Adjustment to Market Value of Assets at Beginning of Year b	(89,969)	(2,483)	79,323	(60,925)	0	(74,054
(c) Interest on (a) and (b) to 6/30/2011 <sup>a</sup>	629,904	7,392,951	426,732	1,313,894	907,944	10,671,425
(d) Contributions with interest to 6/30/2011 <sup>a</sup>	1,165,200	28,560,291	692,375	14,768,614	11,169,771	56,356,251
(e) Benefit Payments with interest to 6/30/2011 <sup>a</sup>	1,007,808	29,835,427	538,263	9,527,077	12,111,319	53,019,894
(f) Expected Assets at $6/30/2011$ [(a) + (b) + (c) + (d) - (e)]	10,954,711	149,366,092	8,096,106	32,862,442	18,125,275	219,404,626
(g) Actual Assets at 7/1/2011	\$11,572,237	\$161,461,617	\$8,437,958	\$34,697,287	\$19,913,060	\$236,082,159
(h) Asset (Gain)/Loss [(f) - (g)]	(\$617,526)	(\$12,095,525)	(\$341,852)	(\$1,834,845)	(\$1,787,785)	(\$16,677,533
3. Total (Gain)/Loss [1(h) + 2(h)]	(\$2,951,728)	(\$19,191,650)	(\$1,325,565)	(\$4,109,160)	(\$5,816,386)	(\$33,394,489

<sup>&</sup>lt;sup>a</sup> Interest based on assumptions used for each specific plan as of June 30, 2010. <sup>b</sup> Seven plans restated their Market Value of Assets as of June 30, 2010.

# Valuation Data as of July 1, 2011

# **Summary of Participant Activity**

	Actives	Retirees	Disabled	Deferred Vested	Spouses and Beneficiaries	Totals
Total Participants July 1, 2010:	1,759	1,255	292	25	504	3,835
New Actives:	73					73
Returned to Actives Status:						0
Data Corrections/Other Changes:					3	3
Vested Terminations:	(7)			7		0
Non-Vested Terminations:	(48)					(48)
Disabled:	(8)	(1)	9			0
Retirements:	(52)	60	(2)	(6)		0
Deaths with Beneficiary:	(2)	(23)	(4)		29	0
Deaths w/o Beneficiary:	(1)	(13)	(5)	(1)	(25)	(45)
Expired Annuity or Stop Payment:					(5)	(5)
Net Changes:	(45)	23	(2)	0	2	(22)
Total Participants June 30, 2011:	1,714	1,278	290	25	506	3,813

# Distribution of Active Employees by Age and Length of Service

Attained			Yea	ars of Servi	ice to Valu	ation Date	-				Valuation
Age	Less than 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35	<b>Totals</b>	Payroll
Under 20											\$ 0
20-24	23	62	1							86	3,033,372
25-29	19	172	59	2						252	10,170,123
30-34	8	109	152	35	1					305	13,024,597
35-39	2	59	97	155	45					358	16,304,934
40-44	1	3	64	116	136	44				364	17,345,504
45-49		2	3	27	77	97	18			224	11,677,276
50-54		1	2	5	24	48	11	9	1	101	5,374,255
55-59					3	10	3	4	1	21	1,019,669
60-64									3	3	168,316
65-69											0
Over 70											0
Totals	53	408	378	340	286	199	32	13	5	1,714	\$ 78,118,046
		Averages	<b>.</b>								
		Age:		37.9	years						
		Service:		10.8	years						
		Annual Pa	ıy:	\$45,576							

# CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

# **Participants Summary**

Active Participants	July 1, 2010	July 1, 2011
Number of Actives	1,759	1,714
Total Annual Pay	\$77,103,230	\$78,118,046
Average Age	37.6	37.9
Average Service	10.9	10.8

Inactive Participants	Jı	uly 1, 2010	Ju	ıly 1, 2011
Туре	No.	Annual Benefit	No.	Annual Benefit
Retirees	1,255	\$38,450,062	1,278	\$40,198,397
Surviving Spouses	504	\$5,753,780	506	\$6,004,126
Disabled Members	292	\$5,860,752	290	\$5,975,064
Deferred Vested Members	25	\$620,582	25	\$622,642

# **SECTION III**

ACTUARIAL PROJECTIONS
CURRENT FUNDING POLICY

#### CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

#### **Actuarial Projections - Current Funding Policy - Distribution of Plans**

The tables below show a distribution of the number of Plans, by funding policy selected, that are projected to have an employer contribution rate or funded ratio that falls within a certain range. The projections are based on the actuarial valuation as of July 1, 2011. For purposes of comparing the relationship of the projected distributions, we have selected five representative years in the 40-year projection period: 2011, 2021, 2031, 2041, and 2051.

#### **Funded Ratio Comparison**

The table below summarizes the distribution of the projected funded ratios for all Funds.

		2011 Valuation						
		Number of Plans						
	Target			Optional	Optional			
Projection	Funded	Standard	Alternative	From	From	Conservation		
Period	Ratio	Plans	Plans	Standard	Alternative	Plans		
	Greater Than:							
2011	20%	9	19	6	4	0		
2021	40%	8	8	6	3	0		
2031	60%	9	8	6	2	0		
2041	80%	9	14	6	2	0		
2051	100%	9	20	6	5	2		
Of Total Number of Plans:		9	31	6	5	2		

#### Standard Plans or former Standard Plans that switched to the Optional Policy

Based on the 2011 valuation results, 100% of Standard Plans or former Standard Plans that switched to the Optional Funding Policy, have a funded ratio greater than 20% as of June 30, 2011, and are projected to be fully funded by 2031. Factors that may cause the projected funded ratio to increase at a slower rate include:

- Emerging actuarial losses in the future, including decreases in assets and increases in liabilities at a rate higher than expected, and
- Actual contributions less than expected projected contributions, which may occur if future valuations include more conservative assumptions such as improvements to the mortality table.

### CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2011

#### Alternative Plans

Based on the 2011 valuation, 61% of the Alternative plans had a funded ratio of at least 20% as of June 30, 2011.

The projected funded ratios for Alternative plans are expected to increase at a much slower rate than Standard plans. By 2031, approximately only 26% of the Alternative plans are expected to be funded at over 60% compared to 100% for the Standard plans.

Our projections assume sponsors will elect the Standard policy if the funded ratio exceeds 80% and the Standard policy contribution is lower than the Alternative policy contribution. Switching to the Standard policy tends to stabilize the growth of the funded ratio. We project that by 2041, 14 of the 31 remaining Alternative policy plans, or 45%, will have switched to the Standard policy.

#### Former Alternative Plans that switched to the Optional Policy

Former Alternative Plans that switched to the Optional Policy are projected to be fully funded by 2050. Five former Alternative Plans, some being very large and severely underfunded, have selected the Optional Policy. The Optional Policy is similar to the Standard Policy with the exception of the amortization period.

#### Conservation Plans

Plans using the Conservation Funding Policy are projected to experience a very slow growth in the funded ratio. This policy effectively defers the contributions needed to produce a sustainable growth in the funded ratio.

#### **Contribution Rate Comparison**

The table below summarizes the distribution of the projected contribution rates for all Funds. For comparison purposes, we have assumed a target contribution rate of less than 40% for all projection years.

		2011 Valuation						
		Number of Plans						
	Target			Optional	Optional			
Projection	Contribution	Standard	Alternative	From	From	Conservation		
Period	Rate	Plans	Plans	Standard	Alternative	Plans		
	Less Than:							
2011	40%	4	23	2	1	0		
2021	40%	7	16	5	2	0		
2031	40%	8	8	6	3	0		
2041	40%	8	11	6	5	0		
2051	40%	8	20	6	5	2		
Of Total Number of Plans:		9	31	6	5	2		

Under the Optional Policy and Conservation Policy, contributions are based on total payroll and includes the contributions made to the Municipal Police Officers and Firefighters Retirement System.

#### Standard Plans or former Standard Plans that switched to the Optional Policy

The percentage of Standard plans and former Standard plans that have switched to the Optional Policy with a 2011 contribution rate less than 40% of payroll is 40%. In the long-term, we would expect the contribution rate to decrease as plans become fully funded. Once the plans become fully funded, the contribution rate should approach the normal cost rate of approximately 25% to 35%.

#### Alternative Plans

Based on the 2011 valuation, 74% of the Alternative plans had a contribution rate for 2011 of less than 40%.

In the short-term, the percentage of Alternative plans with a 2011 contribution rate less than 40% is greater than the percentage for Standard plans. However, by 2031, only 26% of Alternative plans compared to 89% of Standard plans are projected to have a contribution rate of less than 40%. The Alternative plans with a projected contribution rate of less than 40% generally have reached a funded ratio of 80% and have triggered the Standard Funding Policy, following a period in which employer contributions rates were very high.

#### Former Alternative Plans that switched to the Optional Policy

The Optional plans will eventually produce contribution rates that are less than 40%, as the unfunded actuarial liability decreases.

#### Conservation Plans

The Conservation plans are projected to experience an increase in contributions as the number of retired members increases. Eventually, plan obligations will decrease as the number of retirees decreases. However, this is not projected to occur until the end of the 40-year projection period.

#### **Key Observations**

The projections indicate that Funds using the Standard policy are expected to have stable contribution rates that will produce increasing funded ratios, which ultimately approach 100% by 2031. Funds using the Alternative policy will generally have lower initial contribution rates that increase exponentially and will generally produce funded ratios that increase at a slower rate when compared to the Standard policy. However, several Alternative plans are projected to switch to the Standard policy after the funded ratio approaches 80% resulting in a more stable funded ratio and contribution pattern.

Optional policy plans are projected to experience a steady but slow growth in the funded ratio. Conservation policy plans are projected to experience very little growth in the funded ratio, and contributions are effectively deferred.

## **SECTION IV**

ACTUARIAL PROJECTIONS
FUNDING POLICY CHOICES

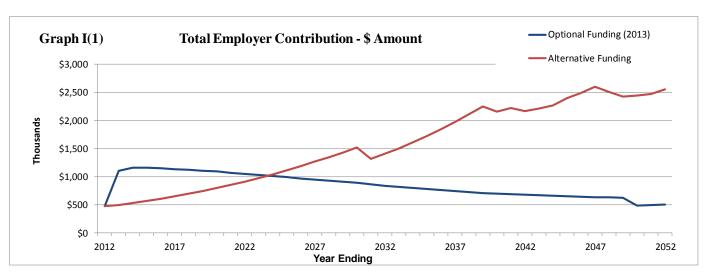
#### MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS OF WEST VIRGINIA

#### CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

#### Impact of Optional Funding Policy under West Virginia Code §8-22-20(e)(1)

West Virginia Code §8-22-20(e)(1) allows Plan Sponsors using either the Standard or Alternative Funding Policy to close their current local police officers and firefighters pension Fund, and provide benefits to future members through the recently established statewide cost sharing plan—the Municipal Police Officers and Firefighters Retirement System. The employer's contributions under the Municipal Police Officers and Firefighters Retirement System are fixed at 10.5% of pay, which is considerably less than the employer's normal cost rate. The key impact of West Virginia Code §8-22-20(e)(1) with respect to plan funding for Funds financing benefits under the Standard and Alternative policies is as follows:

- Sponsors financing benefits under the Standard policy are expected to receive immediate contribution relief by switching to the Optional policy with no significant impact to the projected funded ratio. This occurs because employer contributions for new entrants under the Municipal Police Officers and Firefighters Retirement System are fixed at 10.5% of pay, whereas the expected employer contributions for new entrants under the local plan are approximately equal to the higher net employer normal cost rate of pay.
- Sponsors currently financing benefits under the Alternative policy are generally not expected to receive immediate contribution relief from switching to the Optional policy because the Alternative policy contributions in many cases are considerably lower than the actuarially based contributions defined under the Optional policy.
- Plan sponsors currently using the Alternative Funding Policy may find it more affordable in the long run to switch to the Optional Funding Policy even if it means an increase in the employer contributions in the short term. The following graph, for a representative plan, shows the difference in employer contributions between the two funding policies over the next 40 years:

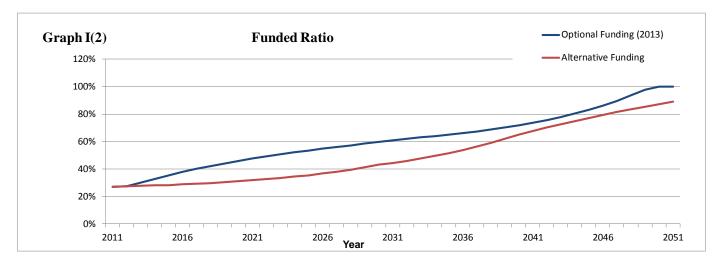


As the above graph illustrates, contributing more under the Optional policy for the next 12 years produces huge cost reductions in the following 28 years.

# MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS OF WEST VIRGINIA

#### CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

The following is the impact on the funded ratio of this switch:



The above graph illustrates that contributing more under the Optional policy for the next 12 years results in a better funded ratio and a more secure plan over the following 28 years than staying under the Alternative Funding Policy.

#### Impact of Conservation Funding Policy under West Virginia §8-22-20 (f)(1)

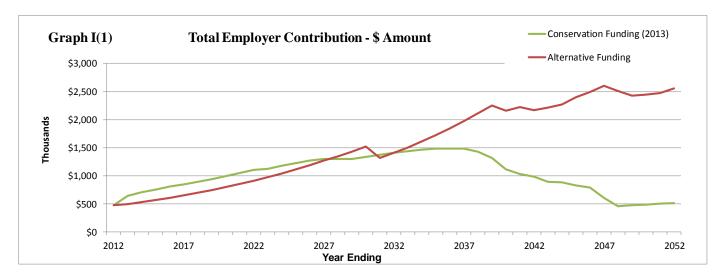
West Virginia Code §8-22-20(f)(1) allows Plan Sponsors using the Alternative Funding Policy to close their current local police officers and firefighters pension Fund, and provide benefits to future members through the recently established statewide cost sharing plan—the Municipal Police Officers and Firefighters Retirement System. The employer's contributions under the Municipal Police Officers and Firefighters Retirement System are fixed at 10.5% of pay, which is considerably less than the employer's normal cost. The key impact of West Virginia Code §8-22-20(f)(1) with respect to plan funding for Funds currently financing benefits under the Alternative policy follows:

- Sponsors currently financing benefits under the Alternative policy are generally not expected to
  receive immediate contribution relief by switching to the Conservation policy because the
  Alternative policy contributions in many cases are considerably lower than the benefit payments
  (net of member contributions or the premium tax allocation) defined under the Conservation
  policy.
- Plan sponsors currently using the Alternative Funding Policy may find it more affordable in the long run to switch to the Conservation Funding Policy even if it means an increase in the employer contributions in the short term. Because retirements and resulting benefit payments are not totally predictable, employer contributions under the Conservation policy are expected to be more volatile, especially for smaller plans, creating significant contribution risk for employers electing the conservation policy.

# MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS OF WEST VIRGINIA

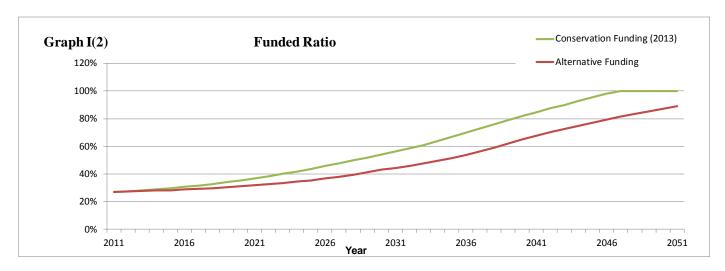
#### CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

The following graph, for a representative Plan, shows the difference in employer contributions between the two funding policies over the next 40 years:



As the graph illustrates, contributing slightly more under the Conservation policy for the next 20 years produces huge cost savings in the later years. Because retirements and resulting benefit payments are not totally predictable, employer contributions under the Conservation policy are expected to be more volatile, especially for smaller plans, creating significant contribution risk for employers electing the conservation policy.

The following is the impact on the funded ratio of this switch:



As the above graph illustrates, contributing more under the Conservation policy for the next 20 years results in a better funded ratio and a more secure plan than staying under the Alternative Funding Policy. Because retirements and resulting benefit payments are not totally predictable, employer contributions under the Conservation policy are expected to be more volatile, especially for smaller plans, creating significant contribution risk for employers electing the conservation policy.



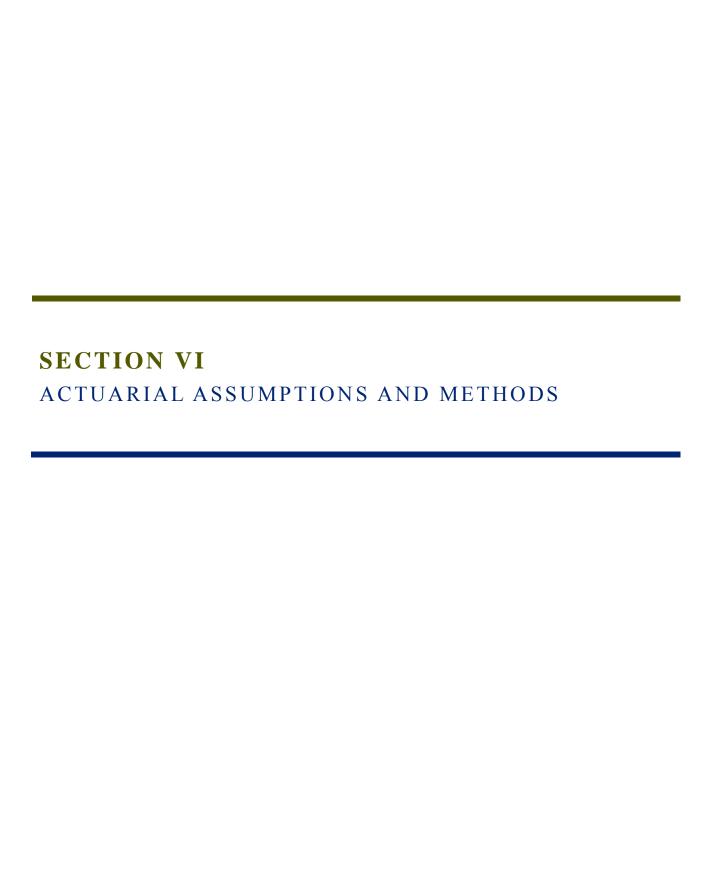
#### **Conclusions and Recommendations**

Based on the results of July 1, 2011 valuation and projections, we have the following general conclusions:

- Most Funds using the Standard policy, or former Standard plans that elected the Optional policy, are using a funding policy which is consistent with actuarial standards and is expected to provide a reasonable level of funding in a reasonable period of time. We recommend that these Funds continue to make contributions based on these policies.
- The other three funding policies available to Plan Sponsors (including the Alternative, Optional from Alternative, and Conservation Funding Policies) were designed to provide and offer Plan Sponsors additional contribution flexibility and/or affordability. As such, each of these funding policies has some disadvantages as compared to the Standard Funding Policy.
- Under the Alternative Funding Policy, contributions are a function of the 1990 contribution (or five-year average since 1984 if greater) increased by 7% each year since 1990. This method of funding does not directly reflect any emerging experience gains or losses. For example, most Funds experienced investment losses in plan years ending June 30, 2008, and June 30, 2009 and investment gains in the plan year ended June 30, 2011. The Alternative Funding Policy does not recognize any of these losses or gains.
- The sponsor's initial Alternative contribution effective for plan year 1991 is the greater of 107% of the amount contributed for the plan year ending June 30, 1990, or the five-year average of contributions made since 1984. In many cases, this starting point contribution was so low that the current year's contributions, even with many years of 7.0% increases, is still significantly less than the normal cost. This means that switching to the Optional Funding Policy will likely require a large increase in annual contributions.
- One key funding objective for public pension plans is to ensure the funding policy produces inter-generational equity among taxpayers. The Alternative Funding Policy generally defers the funding of plan costs into the future, creating a financial burden for future taxpayers.
- The Alternative Funding Policy assumes employer contributions will increase at a rate of 7%. In order to produce a level contribution rate, this funding method would require a 7% increase in payroll. In general, based on historical experience, we would expect annual payroll increases in the 3% to 6% range. Consequently, the Alternative Funding Policy can eventually produce contribution rates that exceed 100% of payroll.
- Many of the Funds using the Alternative Funding Policy are very poorly funded and will require a significantly higher level of contributions in the near future in order to bring the funded ratio to a more secure level. We recommend that these Funds consider immediately increasing their level of annual contributions. However, we recognize that affordability is a key concern for these Funds.

#### **Conclusions and Recommendations (Continued)**

- Under the Optional Funding Policy, contributions to the closed local plan are projected to decrease in future years as new hires enter the Municipal Police Officers and Firefighters Retirement System. At the same time, all Funds under the Optional Funding Policy by definition are projected to be 100% funded by the end of the amortization period in 40 years. However, the funded ratio for those Funds that are currently very poorly funded will increase at a very slow rate for many years and leave the Fund vulnerable if there is another significant market downturn.
- The Conservation funding method is basically a "pay-as-you-go" funding method. In other words, employer contributions are based on actual retirement and disabilities. This method does not directly reflect any emerging experience gains or losses. For example, most Funds experienced investment losses in plan years ending June 30, 2008, and June 30, 2009 and investment gains in the plan year ended June 30, 2011. The Conservation method does not recognize any of these losses or gains.
- Employer contributions under the Conservation funding method are based on actual retirements and disabilities which could vary significantly from year to year based on actual plan experience. There is no mechanism under the Conservation method to smooth out annual fluctuations in contribution requirements.
- Our valuations assume the sponsor is required to contribute at least the normal cost in order to receive the State premium tax allocation. One plan with a funded ratio of 109% as of July 1, 2011, is projected to experience an increasing funded ratio. At some point, the sponsor may no longer need additional contributions. For example, a plan that is at least 125% funded on a present value of future benefit basis, may have a sufficient cushion for future adverse experience.
- In some cases, the asset information did not clearly disclose the proportion that was invested or is expected to be invested in equities. Because the discount rate depends on the equity allocation, we recommend that the sponsor provide more details on the fund's investment policy.



# MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS OF WEST VIRGINIA

#### CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

## **Actuarial Assumptions and Methods**

#### **Discount Rate**

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

Funded Ratio as of Valuation Date <sup>1</sup>	Liquidity Ratio <sup>2</sup>	Equity Exposure <sup>3</sup>	Projected Funded Ratio after 15 Years <sup>1</sup>	Proposed Discount Rate	Number of Plans Satisfying Conditions
60% or more	10	50% or more	70% or more	7.0%	2
40% or more	8	40% or more	60% or more	6.5%	7
30% or more	6	30% or more	50% or more	6.0%	7
15% or more	4	n/a	40% or more	5.5%	14
Less than 15%	n/a	n/a	Less than 40%	5.0%	23

<sup>&</sup>lt;sup>1</sup> Funded ratios based on a 6.5% investment return assumption for plans using an actuarially sound policy (Standard or Optional) and a 6.0% investment return assumption for other plans (Alternative or Conservation).

<sup>&</sup>lt;sup>3</sup> Based on investment policy.

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<sup>&</sup>lt;sup>2</sup> Liquidity ratio equals assets as of the valuation date divided by expected benefits for the year.

#### **Actuarial Assumptions and Methods (CONT'D)**

#### 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 recently established 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, 2013.
- (4) The total available premium tax allocation, net of expenses, as of September 1, 2012, includes a Base Allocation of \$8,709,689, an Excess Allocation of \$7,937,104 and an Expired Premium Tax Allocation of \$509,127.
- (5) Based on the average number of plan participants for the 12 month period ending June 30, 2012, all Pension and Relief Funds reported a total of 1,709 eligible active members, and 2,102 eligible retired members.
- (6) The total premium tax allocation is assumed to increase by 0% in calendar years ending 2012, and 2013, 2% in calendar years ending 2014, and 2015, and 3% in calendar years ending on and after 2016.

# MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS OF WEST VIRGINIA

## CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

## **Actuarial Assumptions and Methods (CONT'D)**

General Inflation	3.00%
Expected Salary Increase	General Inflation: 3.00% plus  Wage Inflation: 1.00% plus  Service Based Increase:
	Years of       Increase         1       9.0%         2       4.5%         3 - 4       2.0%         after 4 years of service       1.0%
Post-retirement COLA	3.00% on first \$15,000 of Annual Benefit and on the accumulated supplemental pension amounts for prior years.
Increase in State Insurance Premium Tax Allocation	0% for 2 years 2% for years 3 & 4 3% on and after year 5
Cost Method	Entry–Age–Normal
Amortization Policies:	For GASB 25/27 Accounting: 30–Year Closed
Alternative Plans and former Alternative Plans that selected the Conservation Policy	Level-Percentage-of-Pay Amortization (from July 1, 2010).
Standard Plans and former Standard Plans that selected the Optional Policy	For funding and GASB 25/27 Accounting: 40 – Year Closed Level-Dollar Amortization (from July 1, 1991).
Former Alternative Plans that selected the Optional Policy	For funding: 40 – Year Closed Level-Dollar Amortization (from January 1, 2010). For GASB 25/27 Accounting: 30–Year Closed Level- Percentage-of-Pay Amortization (from July 1, 2010).
Asset Method	Market Value

# MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS OF WEST VIRGINIA

## CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2011

## **Actuarial Assumptions and Methods (CONT'D)**

<u></u>	
Turnover	Sample Rates –         Age       Rates         25       10%         35       4%         45       2%         50       0%
Retirement	Age     Rates       50-51     45%       52-54     30%       55     45%       56     35%       57     55%       58     100%
Mortality	Active: 85 percent of 1994 Group Annuity Mortality  Post-Retirement: 1994 Group Annuity Mortality  Disabled: 1994 Group Annuity Mortality set forward 4 years
Disability	Sample Rates –         Age       Rates <sup>a</sup> 30       0.27%         40       0.57%         50       0.87%       a Assumes 40% duty related and 60% non-duty related.
Percent Married	90%
Spouse Age	Females 3 years younger than males



SUMMARY OF PRINCIPAL FUNDING POLICIES AND PLAN PROVISIONS

#### **Summary of Funding Policies**

According to the West Virginia Code §8-22-20, Funds may satisfy the minimum standard for actuarial soundness by using one of the following policies:

#### **Standard Funding Policy**

Contributions under the Standard Funding Policy include:

- The employer contribution equals the normal cost, net of employee contributions, plus a 40-year amortization of the unfunded actuarial liability less the allocable portion of the State premium tax fund for municipal pension and relief funds. The amortization is based on a 40-year closed period commencing on July 1, 1991. As of June 30, 2011, there are 20 years left in the amortization period. The employer contribution cannot be less than the normal cost
- The employee contributions equal 7.0% of pay for members hired before January 1, 2010, and 9.5% of pay if hired after January 1, 2010. However, if elected by the Board of trustees of the Plan, member contributions may be increased up to 9.5% of pay.
- The State provides a premium tax allocation to the Fund based on the number of plan members and a demonstration that the actuarially determined contributions have been made on a timely basis.

#### **Alternative Funding Policy**

Contributions under the Alternative Policy are determined as follows:

- The sponsor's initial Alternative contribution effective for plan year 1991 is the greater of 107% of the amount contributed for the plan year ending June 30, 1990, or the five-year average of contributions made since 1984.
- Sponsor contributions made in subsequent years cannot be less than 107% of the contribution made in the prior fiscal year.
- The actuary must certify in writing that the Fund is projected to be solvent under the Alternative contribution method for the next consecutive 15-year period. A plan is deemed to be solvent if projected assets are greater than zero over the 15-year projection period.
- Beginning September 1, 2003, any municipality which elected the Alternative funding method has the option of reverting to the Standard funding method if the plan's funded ratio is greater than 80%. In this case, the standard minimum contribution equals the normal cost plus the amortization of the unfunded liability over a period of not more than 40 years commencing from July 1, 1991, less the allocable portion of the state premium tax fund for municipal pension and relief funds.

- Plan members hired before January 1, 2010, contribute 7.0% of pay; however, if elected by the Board of trustees of the Plan, member contributions may be increased up to 9.5% of pay. Employees hired after January 1, 2010, contribute 9.5% of pay.
- The State provides a premium tax allocation to the Fund based on the number of plan members and a demonstration that the employer's statutory contributions have been made on a timely basis.

#### **Optional Funding Policy**

The Optional Funding Policy is defined in West Virginia Code §8-22-20(e)(1), and is effective for plan years beginning after January 1, 2010. The Optional Funding Policy is available to plan sponsors using either the Standard Funding Method or Alternative Funding Method. The key features of the Optional Method are summarized below:

The existing local Plan is closed, and new employees are covered in the Municipal Police Officers and Firefighters Retirement System. Contributions to the Municipal Police Officers and Firefighters Retirement System include:

- Employer contributions from 8.5% to 10.5% of pay. Currently, Employers contribute 8.5% of pay.
- Employee contributions of 8.5% of pay.

Contributions to the closed local Plan include:

- Employer contributions equal to the normal cost, net of employee contributions, plus a closed period amortization, on a level dollar basis, of the unfunded actuarial liability net of premium tax allocation applicable to the plan year. The closed amortization period, from July 1, 2011, equals 20 years for Standard Plans and 38.5 years for the Alternative Plans.
- Employee contributions of 7.0% of pay if hired before January 1, 2010, which may be increased by up to 2.5% of pay if elected by the Board of trustees of the Plan. Employees hired after January 1, 2010, contribute 9.5% of pay.
- The premium tax allocation assigned to the Fund for the plan year.

#### **Conservation Funding Policy**

The Conservation Funding Policy is defined in West Virginia Code §8-22-20(f)(1), and is effective for plan years beginning after April 1, 2011. The Conservation Funding Policy is available to plan sponsors using the Alternative Funding Method. The key features of the Conservation Method are summarized below:

The existing local Plan is closed, and new employees are covered in the multiple employer statewide plan - Municipal Police Officers and Firefighters Retirement System. Contributions to the Municipal Police Officers and Firefighters Retirement System include:

- Employer contributions from 8.5% to 10.5% of pay. Currently, Employers contribute 8.5% of pay.
- Employee contributions of 8.5% of pay.

Contributions to the closed local Plan are made to two asset accounts as follows:

- The first asset account (Benefit Payment Account) is used to finance benefits and expenses for the fiscal year on a pay-as-you-go basis. Sources to pay current year benefits and expenses include minimum employee contributions of 6.5% of pay, a portion of the premium tax allocation not assigned to the accumulation account as defined below, and employer contributions (typically made from the City's general assets).
- The second account (Accumulation Account) cannot be used to pay benefits and expenses until assets exceed actuarial liabilities (i.e., the funded ratio exceeds 100%). Contributions to the accumulation account include employee contributions of 1.5% of pay and a percentage of premium tax allocation. The percentage of premium tax allocation is based on the amounts needed to produce 100% funding of liabilities in 35 years, from adoption, considering assets from both the benefit payment account and the accumulation account. This account also includes the Fund's assets prior to the adoption of Conservation Funding Policy.

#### **Changes from the Prior Valuation**

We assumed that each Fund will receive the State premium tax allocation until the Fund reaches 100% funded, even if the premium tax allocation exceeds the amortization of the unfunded liability. In all cases, however, the employer contribution will not be less than the normal cost.

The premium tax allocation was updated to include the Base Allocation and Excess Allocation as defined in the State Statutes. Page 36 of the report provides the details of the allocation methodology and its use in our projections. The updated methodology did not significantly change the premium tax allocation when compared to the last valuation.

#### **Summary of Principal Plan Provisions**

**Employee Eligibility** — All compensated employees of the Police and Fire Departments hired before July 1, 2011 are eligible to participate in the Policemen's or Firemen's Pension and Relief Funds respectively.

**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 from 7.0% to 9.5% of compensation. Participating employees hired on or after January 1, 2010 contribute 9.5% of pay.

**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 cut 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.



APPENDICES - PROJECTION DATA

Class I

## **Summary of Valuation Results**

<b>Municipality</b>	<u>Charl</u>	<u>eston</u>	<u>Hunti</u>	ngton	Morga	<u>ntown</u>	<u>Parke</u>	rsburg	Whe	eling
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
Plan Membership										
-Actives	163	179	95	101	60	47	61	55	82	91
-Annuitants	216	220	124	179	57	52	71	100	108	122
-Inactives	0	2	0	1	1	0	1	1	3	1
Total	379	401	219	281	118	99	133	156	193	214
Payroll	\$8,873,921	\$9,214,083	\$5,170,926	\$4,583,449	\$3,001,888	\$2,198,698	\$2,675,699	\$2,320,931	\$3,440,508	\$3,788,537
Benefit Payments	\$6,083,286	\$6,277,002	\$3,640,779	\$4,919,715	\$1,791,646	\$1,378,709	\$1,836,475	\$2,378,721	\$2,441,369	\$2,771,694
Actuarial Accrued Liabilities										
-Actives	\$44,670,293	\$51,205,138	\$29,496,721	\$26,299,834	\$13,965,942	\$12,991,839	\$14,055,163	\$14,500,198	\$16,451,496	\$22,500,249
-Annuitants	\$91,412,547	\$93,940,841	\$49,449,689	\$68,691,311	\$27,536,743	\$20,258,471	\$28,830,353	\$35,550,029	\$31,539,678	\$36,425,455
-Inactives	\$0	\$1,046,188	\$0	\$494,061	\$533,934	\$0	\$481,995	\$506,821	\$1,531,469	\$206,368
Total	\$136,082,840	\$146,192,167	\$78,946,410	\$95,485,206	\$42,036,619	\$33,250,310	\$43,367,511	\$50,557,048	\$49,522,643	\$59,132,072
Market Value of Assets	\$11,449,507	\$8,463,553	\$16,648,665	\$8,896,199	\$13,362,968	\$10,466,073	\$9,450,058	\$8,887,864	\$13,105,407	\$12,154,353
Unfunded Actuarial Accrued Liability	\$124,633,333	\$137,728,614	\$62,297,745	\$86,589,007	\$28,673,651	\$22,784,237	\$33,917,453	\$41,669,184	\$36,417,236	\$46,977,719
Funded Ratio	8%	6%	21%	9%	32%	31%	22%	18%	26%	21%
Net Employer Normal Cost	\$2,875,259	\$3,055,812	\$1,456,881	\$1,545,377	\$948,638	\$754,169	\$888,331	\$808,816	\$910,083	\$1,092,402
Employer Contribution <sup>a</sup>	\$4,321,014	\$4,505,745	\$4,724,218	\$5,366,227	\$588,368	\$477,648	\$830,540	\$1,831,473	\$1,588,783	\$1,547,067
(% of Payroll)	49%	49%	91%	117%	20%	22%	31%	79%	46%	41%
Additional Solvency Contribution b										
- To Receive State Tax Premium Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
- To Provide Supplemental COLA Benefits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
State Premium Tax Allocation	\$1,602,821	\$1,722,266	\$971,131	\$1,171,483	\$505,975	\$424,572	\$580,151	\$648,153	\$813,430	\$891,668
Employee Contribution	\$709,914	\$737,127	\$361,965	\$320,841	\$213,325	\$158,446	\$188,158	\$163,296	\$248,924	\$266,753
Interest Rate	5.0%	5.0%	5.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.5%	5.5%
Funding Policy	Conservation	Conservation	Optional from Alternative	Optional from Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative

<sup>&</sup>lt;sup>a</sup> Includes additional solvency contribution.

<sup>&</sup>lt;sup>b</sup> Additional contributions needed in 2011 to satisfy the 15-year solvency test.

Class II

## **Summary of Valuation Results**

<u>Municipality</u>	<u>Becl</u> Police	<u>kley</u> Fire	<u>Blue</u> Police	<u>field</u> Fire	<u>Clark</u> Police	<u>sburg</u> Fire	<u>Fairı</u> Police	<u>mont</u> Fire	<u>Martiı</u> Police	<u>ısburg</u> Fire
Plan Membership			22	10			22		40	
-Actives -Annuitants	45 50	41 50	23 26	18 36	46 44	42 59	33 48	41 60	49 37	35 32
-Amutants -Inactives	0	0	0	3	3	0	0	0	1	0
Total	95	91	49	57	93	101	81	101	87	67
Payroll	\$1,760,595	\$1,930,322	\$803,677	\$720,162	\$1,945,720	\$1,678,365	\$1,502,220	\$1,845,536	\$2,525,724	\$1,740,732
Benefit Payments	\$1,441,438	\$1,597,467	\$542,613	\$619,528	\$970,946	\$1,257,100	\$1,110,133	\$1,543,254	\$955,556	\$1,051,503
Actuarial Accrued Liabilities										
-Actives	\$5,570,283	\$12,040,923	\$3,556,077	\$3,707,201	\$8,767,923	\$9,567,472	\$7,779,957	\$11,004,546	\$10,603,382	\$8,010,249
-Annuitants	\$19,970,671	\$20,845,151	\$7,874,399	\$10,136,212	\$13,362,359	\$18,048,046	\$17,062,393	\$22,121,688	\$13,850,353	\$15,479,900
-Inactives	\$0	\$0	\$0	\$1,129,980	\$1,358,061	\$0	\$0	\$0	\$698,048	\$0
Total	\$25,540,954	\$32,886,074	\$11,430,476	\$14,973,393	\$23,488,343	\$27,615,518	\$24,842,350	\$33,126,234	\$25,151,783	\$23,490,149
Market Value of Assets	\$16,932,554	\$15,118,842	\$3,716,127	\$3,040,802	\$3,136,739	\$3,639,130	\$3,840,024	\$2,009,751	\$5,802,432	\$2,010,478
Unfunded Actuarial Accrued Liability	\$8,608,400	\$17,767,232	\$7,714,349	\$11,932,591	\$20,351,604	\$23,976,388	\$21,002,326	\$31,116,483	\$19,349,351	\$21,479,671
Funded Ratio	66%	46%	33%	20%	13%	13%	15%	6%	23%	9%
Net Employer Normal Cost	\$359,052	\$569,060	\$225,752	\$226,935	\$655,213	\$575,889	\$477,586	\$596,119	\$780,017	\$531,032
Employer Contribution <sup>a</sup>	\$342,522	\$448,797	\$224,926	\$277,256	\$670,414	\$676,803	\$542,082	\$736,448	\$433,365	\$530,322
(% of Payroll)	19%	23%	28%	38%	34%	40%	36%	40%	17%	30%
Additional Solvency Contribution b										
- To Receive State Tax Premium Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
- To Provide Supplemental COLA Benefits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$68,600	\$0	\$0
State Premium Tax Allocation	\$410,130	\$384,925	\$199,023	\$210,734	\$374,920	\$422,052	\$339,315	\$420,200	\$376,372	\$295,342
<b>Employee Contribution</b>	\$126,208	\$137,357	\$59,123	\$53,457	\$137,554	\$119,889	\$106,696	\$157,141	\$205,103	\$140,416
Interest Rate	6.5%	5.5%	5.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Funding Policy	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative

<sup>&</sup>lt;sup>a</sup> Includes additional solvency contribution.

<sup>&</sup>lt;sup>b</sup> Additional contributions needed in 2011 to satis

Class II

## **Summary of Valuation Results**

Class III

Municipality	Moun	dsville	South Ch	arlecton	St. A	lhanc	Vienna	Wai	rton	Belle	Charles Town
Numcipanty	Police	<u>usvine</u> Fire	Police	Fire	Police	Fire	Police	Police	Fire	Police	Police
Plan Membership											
-Actives	15	5	39	42	21	19	16	35	22	3	0
-Annuitants	14	17	33	37	12	24	12	47	17	5	7
-Inactives	1	0	0	0	0	0	1	2	1	0	0
Total	30	22	72	79	33	43	29	84	40	8	7
Payroll	\$579,635	\$178,818	\$1,616,805	\$1,731,497	\$889,302	\$834,750	\$721,406	\$1,504,955	\$952,008	\$117,666	\$0
Benefit Payments	\$293,728	\$362,051	\$819,966	\$972,211	\$367,359	\$530,191	\$347,794	\$1,358,348	\$565,911	\$133,827	\$131,854
Actuarial Accrued Liabilities											
-Actives	\$2,269,423	\$578,820	\$7,373,077	\$9,893,928	\$4,755,283	\$5,150,216	\$2,997,128	\$7,919,039	\$5,161,392	\$150,994	\$0
-Annuitants	\$4,084,530	\$4,674,869	\$12,073,680	\$14,493,505	\$4,648,026	\$7,943,654	\$4,186,002	\$20,133,127	\$6,354,630	\$1,962,161	\$1,972,969
-Inactives	\$346,116	\$0	\$0	\$0	\$0	\$0	\$415,525	\$442,306	\$661,270	\$0	\$0
Total	\$6,700,069	\$5,253,689	\$19,446,757	\$24,387,433	\$9,403,309	\$13,093,870	\$7,598,655	\$28,494,472	\$12,177,292	\$2,113,155	\$1,972,969
Market Value of Assets	\$3,300,432	\$1,061,605	\$2,207,004	\$1,360,382	\$4,811,972	\$2,271,226	\$4,505,543	\$4,225,903	\$6,793,473	\$1,283,873	\$400,200
Unfunded Actuarial Accrued Liability	\$3,399,637	\$4,192,084	\$17,239,753	\$23,027,051	\$4,591,337	\$10,822,644	\$3,093,112	\$24,268,569	\$5,383,819	\$829,282	\$1,572,769
Funded Ratio	49%	20%	11%	6%	51%	17%	59%	15%	56%	61%	20%
Net Employer Normal Cost	\$160,421	\$73,514	\$555,030	\$612,717	\$169,530	\$269,027	\$152,495	\$504,074	\$265,999	\$32,620	\$1,175
Employer Contribution <sup>a</sup>	\$232,668	\$226,973	\$273,532	\$491,692	\$212,033	\$181,511	\$303,101	\$506,799	\$188,644	\$68,172	\$104,882
(% of Payroll)	40%	127%	17%	28%	24%	22%	42%	34%	20%	58%	80%
Additional Solvency Contribution b											
- To Receive State Tax Premium Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,700	\$0	\$0	\$0
- To Provide Supplemental COLA Benefits	\$0	\$0	\$78,000	\$40,000	\$0	\$34,700	\$0	\$172,100	\$0	\$0	\$0
State Premium Tax Allocation	\$136,683	\$86,115	\$319,046	\$332,426	\$145,499	\$181,015	\$123,849	\$340,145	\$165,640	\$36,350	\$27,225
<b>Employee Contribution</b>	\$40,574	\$12,517	\$115,801	\$123,605	\$76,700	\$59,256	\$50,498	\$135,912	\$69,068	\$9,147	\$0
Interest Rate	6.0%	5.0%	5.0%	5.0%	6.5%	5.0%	6.5%	5.0%	6.0%	5.5%	5.0%
Funding Policy	Optional from Alternative	Optional from Alternative	Alternative	Alternative	Alternative	Alternative	Standard	Alternative	Alternative	Optional from Standard	Standard

<sup>&</sup>lt;sup>a</sup> Includes additional solvency contribution.

<sup>&</sup>lt;sup>b</sup> Additional contributions needed in 2011 to satis

Fire

12

10

<u>Nitro</u>

Policemen's and Firemen's Pension and Relief Funds of West Virginia Municipalities Actuarial Valuation

Class III

## **Summary of Valuation Results**

#### As of July 01, 2011 **Municipality** Chester <u>Dunbar</u> **Grafton Elkins** Logan **Police Police** Fire **Police** Fire **Police** Fire **Police** Fire **Police** Plan Membership -Actives 6 12 14 8 3 5 5 6 8 16 -Annuitants 11 20 10

-Amutants	2	11	20	9	3	)	4	1	_ <u>_</u>	10	10
-Inactives	0	0	0	0	0	0	1	1	0	0	0
Total	8	23	34	17	8	10	10	8	10	26	22
Payroll	\$246,899	\$501,075	\$572,506	\$350,829	\$140,117	\$165,239	\$126,195	\$177,517	\$271,989	\$750,661	\$561,310
Benefit Payments	\$44,953	\$294,681	\$518,131	\$230,600	\$86,083	\$59,244	\$86,731	\$15,276	\$28,495	\$245,382	\$205,097
Actuarial Accrued Liabilities											
-Actives	\$1,347,732	\$1,832,806	\$2,263,273	\$1,489,681	\$499,200	\$687,479	\$479,290	\$655,542	\$783,141	\$2,719,219	\$3,387,073
-Annuitants	\$560,597	\$4,160,650	\$8,120,610	\$3,061,478	\$947,030	\$815,519	\$1,334,518	\$221,971	\$364,375	\$3,872,035	\$2,920,899
-Inactives	\$0	\$0	\$0	\$0	\$0	\$0	\$246,935	\$264,943	\$0	\$0	\$0
Total	\$1,908,329	\$5,993,456	\$10,383,883	\$4,551,159	\$1,446,230	\$1,502,998	\$2,060,743	\$1,142,456	\$1,147,516	\$6,591,254	\$6,307,972
Market Value of Assets	\$1,096,330	\$4,790,386	\$553,525	\$1,873,299	\$894,976	\$756,978	\$1,055,715	\$390,328	\$230,438	\$2,075,606	\$485,101
Unfunded Actuarial Accrued Liability	\$811,999	\$1,203,070	\$9,830,358	\$2,677,860	\$551,254	\$746,020	\$1,005,028	\$752,128	\$917,078	\$4,515,648	\$5,822,871
Funded Ratio	57%	80%	5%	41%	62%	50%	51%	34%	20%	31%	8%
Net Employer Normal Cost	\$62,349	\$115,478	\$191,458	\$93,971	\$36,759	\$53,089	\$27,545	\$53,330	\$78,567	\$214,259	\$172,564
Employer Contribution <sup>a</sup>	\$105,232	\$147,771	\$295,971	\$260,020	\$48,737	\$88,676	\$97,399	\$131,893	\$96,515	\$118,494	\$110,405
(% of Payroll)	43%	29%	52%	74%	35%	54%	77%	74%	35%	16%	20%
Additional Solvency Contribution b											
- To Receive State Tax Premium Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
- To Provide Supplemental COLA Benefits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,400
State Premium Tax Allocation	\$37,251	\$120,076	\$140,452	\$70,311	\$32,992	\$49,581	\$39,023	\$37,819	\$47,274	\$112,741	\$91,893
Employee Contribution	\$17,283	\$35,901	\$46,299	\$25,190	\$9,808	\$12,234	\$9,360	\$13,021	\$19,039	\$54,984	\$40,134
Interest Rate	6.0%	6.5%	5.0%	6.0%	6.5%	5.5%	6.5%	6.0%	5.5%	5.5%	5.0%
Funding Policy	Standard	Optional from Alternative	Alternative	Standard	Standard	Optional from Standard	Optional from Standard	Standard	Standard	Alternative	Alternative

<sup>&</sup>lt;sup>a</sup> Includes additional solvency contribution.

<sup>&</sup>lt;sup>b</sup> Additional contributions needed in 2011 to satis

Class III

#### **Summary of Valuation Results**

**Point Municipality** Oak Hill Pleasant **Princeton Star City** Welch Weston Westover Williamson **Police** Police **Police** Fire **Police Police Police** Fire **Police Police** Fire **Plan Membership** -Actives 13 8 19 13 5 7 4 2 9 7 8 7 -Annuitants 17 14 2 3 14 6 0 0 0 0 0 -Inactives 0 0 1 0 0 0 Total 17 14 36 27 10 12 14 22 **Payroll** \$292,614 \$759,375 \$500,288 \$178,910 \$174,415 \$219,047 \$498,680 \$254,602 \$139,065 \$63,448 \$324,730 **Benefit Payments** \$102,953 \$94,899 \$259,944 \$113,832 \$364,535 \$320,017 \$64,272 \$38,557 \$45,062 \$66,316 \$78,292 **Actuarial Accrued Liabilities** -Actives \$1.625.575 \$1,383,175 \$3,758,172 \$2.853.852 \$702,126 \$690,670 \$647,447 \$252,447 \$1,034,320 \$872,726 \$635,669 -Annuitants \$1,994,503 \$5,284,288 \$4.936.451 \$1.044.003 \$549.570 \$653,792 \$1.152,725 \$1.083.070 \$1,465,093 \$3,783,243 \$1,360,107 -Inactives \$240,330 \$0 \$0 \$0 \$0 **Total** \$2,985,682 \$3,377,678 \$9,042,460 \$7,790,303 \$1,746,129 \$1,480,570 \$1,405,172 \$2,117,390 \$2,337,819 \$4,418,912 \$1,301,239 **Market Value of Assets** \$3,243,972 \$800,380 \$3,375,333 \$2,595,123 \$1,138,781 \$1,297,040 \$625,486 \$537,696 \$1,555,637 \$810,974 \$1,545,916 **Unfunded Actuarial Accrued Liability** (\$258,290) \$2,577,298 \$5,667,127 \$5,195,180 \$607,348 \$183,530 \$675,753 \$867,476 \$561,753 \$1,526,845 \$2,872,996 **Funded Ratio** 109% 24% 37% 33% 88% 48% 38% 73% 35% 35% **Net Employer Normal Cost** \$96,505 \$92,985 \$222,678 \$167,304 \$51.502 \$45,969 \$32.581 \$23,177 \$71.035 \$61,280 \$61,163 **Employer Contribution** <sup>a</sup> \$65,750 \$117,695 \$256,019 \$141,650 \$71,756 \$36,998 \$60,223 \$52,586 \$107,997 \$105,877 \$105,529 (% of Payroll) 19% 48% 24% 87% 14% 21% 24% 38% 104% 33% 61% Additional Solvency Contribution b - To Receive State Tax Premium Allocation \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$13,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 - To Provide Supplemental COLA Benefits **State Premium Tax Allocation** \$78,261 \$56,629 \$155,564 \$116,329 \$34.212 \$43,115 \$36,918 \$19,378 \$52,218 \$53.843 \$84.518 **Employee Contribution** \$4,441 \$35,745 \$20,483 \$54,086 \$35,020 \$13,359 \$18,873 \$9,735 \$24,039 \$13,209 \$16,373 **Interest Rate** 6.5% 5.5% 5.5% 5.0% 5.5% 7.0% 6.0% 6.0% 7.0% 5.5% 5.5% Optional from Optional from Alternative Optional from Standard Standard Alternative Alternative Alternative Alternative Alternative **Funding Policy** Standard Standard Standard

<sup>&</sup>lt;sup>a</sup> Includes additional solvency contribution.

<sup>&</sup>lt;sup>b</sup> Additional contributions needed in 2011 to satis

<b>Optional Funding -</b>	Year of	Crossover <sup>a</sup>
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Alternative Pla	ans		Current F	unds, Open		inds, Closed		haring Fund		ent closed Fund Sharing Fund		
Plan Name	Year of Crossover FYE	Funded Ratio	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay	Decrease Amount	Decrease % of Pay
Beckley Police	2022	72%	\$ 673,792	28%	\$ 632,206	28%	\$ 9,286	10.5%	\$ 641,492	27%	\$ 32,300	1.4%
Bluefield Police	2031	52%	813,453	58%	791,307	57%	3,016	10.5%	794,322	56%	19,131	1.4%
Bluefield Fire	2037	46%	1,504,787	100%	1,424,996	97%	4,329	10.5%	1,429,326	95%	75,461	5.0%
Clarksburg Police	2031	49%	2,424,572	71%	2,335,363	72%	18,399	10.5%	2,353,763	69%	70,809	2.1%
Clarksburg Fire	2033	42%	2,802,344	90%	2,700,199	95%	28,593	10.5%	2,728,793	87%	73,551	2.4%
Dunbar Fire	2030	28%	1,000,359	103%	949,663	103%	5,125	10.5%	954,787	98%	45,572	4.7%
Fairmont Police	2040	53%	3,387,193	99%	3,339,142	99%	8,015	10.5%	3,347,158	97%	40,035	1.2%
Fairmont Fire	2044	59%	6,133,885	129%	5,896,527	134%	37,061	10.5%	5,933,588	125%	200,297	4.2%
Parkersburg Police	2041	60%	5,908,673	94%	5,832,872	97%	28,512	10.5%	5,861,384	93%	47,289	0.7%
Parkersburg Fire	2019	28%	2,940,944	103%	2,875,207	107%	16,880	10.5%	2,892,086	101%	48,858	1.7%
St. Albans Police	2022	65%	397,428	33%	370,669	34%	10,305	10.5%	380,974	32%	16,454	1.4%
Star City Police	2020	75%	63,570	28%	61,868	29%	1,564	10.5%	63,432	28%	138	0.1%
Weirton Fire	2034	63%	835,764	46%	801,844	50%	23,679	10.5%	825,523	45%	10,241	0.6%
Weston Fire	2013	41%	70,353	108%	42,479	65%	28	10.5%	42,507	65%	27,846	42.6%
Wheeling Police	2020	38%	2,729,827	63%	2,613,589	64%	29,790	10.5%	2,643,379	61%	86,448	2.0%
Wheeling Fire	2028	39%	4,567,195	75%	4,441,300	80%	52,466	10.5%	4,493,765	74%	73,430	1.2%
Williamson Police	2013	38%	113,288	63%	87,696	49%	372	10.5%	88,068	49%	25,220	14.0%
Williamson Fire	2019	39%	169,456	63%	161,969	63%	1,332	10.5%	163,302	61%	6,154	2.3%
Plans that are projected	l to remain alterna	tive <sup>b</sup>										
Beckley Fire	2050	94%	\$ 4,904,753	83%								
Martinsburg Police	2050	62%	5,844,352	71%								
Martinsburg Fire	2050	95%	5,727,964	101%								
Morgantown Police	2050	73%	8,810,486	90%								
Morgantown Fire	2050	77%	7,152,516	100%								
Nitro Police	2050	87%	1,774,382	72%								
Nitro Fire	2050	72%	1,653,248	90%								
Princeton Police	2050	97%	1,562,074	65%								
Princeton Fire	2050	38%	1,074,521	66%								
South Charleston Police	2050	41%	4,096,000	78%								
South Charleston Fire	2050	87%	7,362,829	130%								
St. Albans Fire	2050	53%	2,568,279	94%								
Weirton Police	2050	70%	6,731,735	137%								

<sup>&</sup>lt;sup>a</sup> Year of crossover means year sponsor contributions are lower if the sponsor decide to cover new entrants under the newly established

statewidecost sharing plan (West Virginia Municipal Police Officers and Firefighters Retirement System).

b Alternative contributions are lower during the entire 40-year projection period from 1/1/2010.

Conservation Funding - Year of Crossover <sup>a</sup>

Alternative Pla	ns		Current F	unds, Open	Current Fu	ınds, Closed	New Cost S	haring Fund		ent closed Fund Sharing Fund		
Plan Name	Year of Crossover FYE	Funded Ratio	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay	Decrease Amount	Decrease % of Pay
Beckley Police	2035	100%	\$ 660,526	19%	\$ 616,580	18%	\$ 8,529	10.5%	\$ 625,109	18%	\$ 35,417	1.0%
Beckley Fire	2036	41%	2,276,467	58%	2,180,033	64%	54,489	54,489 10.5%		57%	41,945	1.1%
Bluefield Police	2025	41%	542,037	46%	520,986	46%	4,395	10.5%	525,382	45%	16,655	1.4%
Bluefield Fire	2027	20%	764,958	68%	710,956	64%	1,706	10.5%	712,663	64%	52,295	4.7%
Clarksburg Police	2013	14%	717,343	36%	525,681	28%	10,339	10.5%	536,020	27%	181,323	9.0%
Clarksburg Fire	2019	15%	1,086,799	53%	1,059,782	55%	14,823	10.5%	1,074,605	52%	12,194	0.6%
Dunbar Fire	2019	6%	475,264	67%	466,396	71%	5,186	10.5%	471,583	67%	3,681	0.5%
Fairmont Police	2026	18%	1,313,612	58%	1,283,171	59%	8,737	10.5%	1,291,908	57%	21,704	1.0%
Fairmont Fire	2029	4%	2,223,203	73%	2,133,017	77%	29,025	10.5%	2,162,042	71%	61,161	2.0%
Martinsburg Fire	2028	8%	1,397,562	50%	1,350,107	51%	16,019	10.5%	1,366,126	49%	31,436	1.1%
Morgantown Police	2035	29%	2,789,175	47%	2,638,109	47%	34,763	10.5%	2,672,872	45%	116,303	2.0%
Morgantown Fire	2035	28%	2,264,303	52%	2,084,578	51%	25,541	10.5%	2,110,119	49%	154,184	3.6%
Nitro Police	2013	32%	126,789	16%	75,373			10.5%	77,559	10%	49,230	6.4%
Nitro Fire	2013	8%	118,133	20%	97,257	17%	1,166	1,166 10.5%		17%	19,711	3.4%
Parkersburg Police	2027	25%	2,291,485	55%	2,217,195	57%	26,851	10.5%	2,244,046	54%	47,439	1.1%
Parkersburg Fire	2013	19%	1,959,676	82%	1,753,995	79%	17,677	10.5%	1,771,672	74%	188,004	7.9%
Princeton Police	2027	40%	390,819	33%	381,384	34%	7,719	10.5%	389,102	33%	1,717	0.1%
Princeton Fire	2043	21%	584,468	47%	562,352	47%	5,302	10.5%	567,654	45%	16,814	1.3%
South Charleston Fire	2031	10%	1,778,220	59%	1,690,413	59%	18,176	10.5%	1,708,589	56%	69,631	2.3%
St. Albans Police	2013	52%	216,175	24%	156,495	18%	6,632	10.5%	163,127	18%	53,048	5.8%
St. Albans Fire	2039	14%	1,065,745	57%	999,353	55%	4,464	10.5%	1,003,817	54%	61,928	3.3%
Star City Police	2013	66%	39,588	21%	26,980	17%	2,335	10.5%	29,315	16%	10,273	5.6%
Weirton Police	2033	1%	1,861,381	66%	1,811,756	71%	24,209	10.5%	1,835,965	66%	25,416	0.9%
Weirton Fire	2039	76%	1,172,202	55%	1,107,608	59%	25,712	10.5%	1,133,320	54%	38,882	1.8%
Weston Fire	2013	41%	70,353	108%	27,544	42%	28	10.5%	27,572	42%	42,781	65.5%
Wheeling Police	2013	28%	1,699,998	48%	1,573,228	48%	29,859	10.5%	1,603,086	45%	96,912	2.7%
Wheeling Fire	2019	24%	2,484,252	53%	2,394,850	55%	33,731	10.5%	2,428,580	52%	55,672	1.2%
Williamson Police	2013	38%	113,288	63%	23,629	13%	372	10.5%	24,001	13%	89,287	49.7%
Williamson Fire	2020	40%	181,318	65%	178,866	68%	1,367	10.5%	180,232	65%	1,086	0.4%
Plans that are projected	to remain alterna	tive <sup>D</sup>										
Martinsburg Police	2051	62%	5,844,352	71%								
South Charleston Police	2051	41%	\$ 4,096,000	78%								

<sup>&</sup>lt;sup>a</sup> Year of crossover means year sponsor contributions are lower if the sponsor decide to cover new entrants under the newly established statewidecost sharing plan (West Virginia Municipal Police Officers and Firefighters Retirement System).

b Alternative contributions are lower during the entire 40-year projection period from 7/1/2011.

Optional Funding - Year of Crossover a

Standard Plans			Cı	Current Funds, Open			Current Funds, Closed			w Cost Sl	naring Fund			nt closed Fund Sharing Fund		
Plan Name	Year of Crossover FYE	Funded Ratio	Proj Emp Contr	jected ployer ribution nount	Projected Employer Contribution % of Pay	Pr Er Con	ojected nployer tribution mount	Projected Employer Contribution % of Pay	Pro Em	ojected aployer cribution mount	Projected Employer Contribution % of Pay	Pr Er Con	ojected nployer atribution amount	Projected Employer Contribution % of Pay	crease nount	Decrease % of Pay
Charles Town Police 1	2013	22%	\$	110,271	NA		NA	NA		NA	NA		NA	NA	NA	NA
Chester Police	2013	62%	\$	87,428	34%	\$	82,749	35%	\$	1,681	10.5%	\$	84,430	33%	\$ 2,998	1.2%
Elkins Police	2013	45%		236,946	66%		230,657	67%		1,604	10.5%		232,261	64%	4,685	1.3%
Elkins Fire	2013	64%		54,801	38%		53,316	37%		151	10.5%		53,467	37%	1,334	0.9%
Logan Police	2013	46%		54,857	30%		54,492	30%		138	10.5%		54,630	30%	227	0.1%
Logan Fire	2013	30%		95,018	34%		93,188	34%		330	10.5%		93,518	33%	1,500	0.5%
Vienna Police	2013	62%		281,949	38%		274,706	38%		1,724	10.5%		276,430	37%	5,519	0.7%
Weston Police	2013	52%		51,943	36%		49,678	37%		1,010	10.5%		50,688	35%	1,255	0.9%
Westover Police	2013	78%		73,051	22%		72,661	22%		207	10.5%		72,868	22%	183	0.1%

<sup>&</sup>lt;sup>a</sup> Year of crossover means year sponsor contributions are lower if the sponsor decide to cover new entrants under the newly established statewidecost sharing plan (West Virginia Municipal Police Officers and Firefighters Retirement System).

<sup>&</sup>lt;sup>1</sup>One plan, Charles Town Police is closed to new entrants. Its contributions are expressed as a percentage of benefit payments.

Class I

## **Comparison of Employer Contribution Rates**

<b>Municipality</b>	Char	leston	Hunti	ington	Morga	<u>intown</u>	Parke	rsburg	Whe	eling
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
Funding Policy	Conservation	Conservation	Optional from Alternative	Optional from Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative
Current Funding Policy										
2011	49%	52%	91%	117%	20%	22%	31%	79%	46%	41%
2021	58%	66%	55%	81%	29%	32%	45%	116%	68%	60%
2031	71%	72%	34%	50%	42%	47%	67%	169%	99%	87%
2041	52%	53%	22%	32%	61%	68%	97%	33%	25%	27%
2051	11%	11%	11%	11%	90%	100%	32%	33%	25%	27%
Optional Funding Policy										
2011	NA	NA	91%	117%	20%	22%	31%	79%	46%	41%
2021	NA	NA	55%	81%	29%	32%	45%	90%	55%	60%
2031	NA	NA	34%	50%	42%	47%	67%	58%	35%	62%
2041	NA	NA	22%	32%	61%	68%	90%	32%	22%	38%
2051	NA	NA	11%	11%	90%	100%	17%	11%	11%	11%
Conservation Funding Policy										
2011	49%	52%	NA	NA	20%	22%	31%	79%	46%	41%
2021	58%	66%	NA	NA	29%	32%	45%	81%	54%	57%
2031	71%	72%	NA	NA	42%	47%	52%	82%	49%	60%
2041	52%	53%	NA	NA	42%	44%	50%	11%	11%	44%
2051	11%	11%	NA	NA	44%	46%	43%	11%	11%	11%

Class II

## **Comparison of Employer Contribution Rates**

	Clarksburg	Beckley B	<b>Fairmont</b>	Martinsburg
Pol		Police Fire Police	Police Fire	Police Fire
Alter	Alternative Alternative Alternative	Alternative Alternative Alternative	Alternative Alternativ	e Alternative Alternative
inding Policy				
<b>2011</b> 19	34% 40%	19% 23% 28%	36% 40%	17% 30%
<b>2021</b> 28	50% 59%	28% 34% 41%	50% 56%	23% 40%
<b>2031</b> 42	74% 86%	42% 50% 60%	73% 82%	33% 58%
<b>2041</b> 19	32% 126%	19% 73% 44%	106% 120%	48% 85%
<b>2051</b> 19	32% 33%	19% 28% 27%	30% 32%	71% 101%
unding Policy				
	34% 40%	19% 23% 28%	36% 40%	17% 30%
<b>2021</b> 27	50% 59%	27% 34% 41%	50% 56%	23% 40%
<b>2031</b> 19	66% 86%	19% 50% 54%	73% 82%	33% 58%
<b>2041</b> 14	43% 58%	14% 73% 31%	92% 120%	48% 85%
<b>2051</b> 11	13% 13%	11% 23% 12%	15% 21%	71% 98%
on Funding Policy				
	34% 40%	19% 23% 28%	36% 40%	17% 30%
2021 28	43% 57%	28% 34% 41%	50% 56%	23% 40%
<b>2031</b> 42	48% 58%	42% 50% 41%	61% 70%	33% 56%
<b>2041</b> 16	44% 46%	16% 58% 39%	51% 62%	48% 54%
<b>2051</b> 11	11% 29%	11% 54% 11%	44% 56%	71% 54%

As of July 01, 2011

Class II

## **Comparison of Employer Contribution Rates**

Class III

			a a a		G. A	,,	¥7.	***		ъ. п	Charles
<u>Municipality</u>		<u>idsville</u>		<u>harleston</u> Fire		lbans Eine	<u>Vienna</u>	Police We	i <u>rton</u> Eine	<u>Belle</u>	Town Police 1
	Police	Fire	Police	rire	Police	Fire	Police	Police	Fire	Police	Police
Funding Policy	Optional from Alternative	Optional from Alternative	Alternative	Alternative	Alternative	Alternative	Standard	Alternative	Alternative	Optional from Standard	Standard
<b>Current Funding Policy</b>											
2011	40%	127%	17%	28%	24%	22%	42%	34%	20%	58%	80%
2021	26%	93%	25%	42%	33%	30%	30%	44%	29%	36%	83%
2031	13%	49%	36%	61%	49%	44%	20%	64%	42%	14%	119%
2041	11%	26%	53%	89%	19%	64%	19%	94%	62%	12%	0%
2051	11%	11%	78%	130%	19%	94%	19%	137%	27%	11%	0%
<b>Optional Funding Policy</b>											
2011	40%	127%	17%	28%	24%	22%	42%	34%	20%	58%	NA
2021	26%	93%	25%	42%	32%	30%	25%	44%	29%	36%	NA
2031	13%	49%	36%	61%	18%	44%	11%	64%	42%	14%	NA
2041	11%	26%	53%	89%	11%	64%	10%	94%	29%	12%	NA
2051	11%	11%	78%	130%	11%	94%	10%	137%	12%	11%	NA
<b>Conservation Funding Policy</b>											
2011	NA	NA	17%	28%	24%	22%	NA	34%	20%	NA	NA
2021	NA	NA	25%	42%	54%	30%	NA	44%	29%	NA	NA
2031	NA	NA	36%	56%	12%	44%	NA	64%	42%	NA	NA
2041	NA	NA	53%	57%	11%	50%	NA	66%	55%	NA	NA
2051	NA	NA	78%	54%	11%	50%	NA	62%	15%	NA	NA

<sup>&</sup>lt;sup>1</sup> Contributions as a percentage of expected benefit payments.

Class III

## **Comparison of Employer Contribution Rates**

Municipality	Chester	Dur	ıbar	Ell	kins	Gra	afton	Lo	gan	Ni	tro
<del></del>	Police	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
Funding Policy	Standard	Optional from Alternative	Alternative	Standard	Standard	Optional from Standard	Optional from Standard	Standard	Standard	Alternative	Alternative
<b>Current Funding Policy</b>											
2011	43%	29%	52%	74%	35%	54%	77%	74%	35%	16%	20%
2021	28%	19%	76%	52%	32%	30%	38%	29%	30%	23%	29%
2031	25%	12%	111%	26%	25%	14%	15%	30%	29%	34%	42%
2041	24%	11%	33%	25%	24%	12%	13%	30%	28%	50%	62%
2051	24%	11%	33%	25%	23%	11%	12%	29%	28%	72%	90%
Optional Funding Policy											
2011	43%	29%	52%	74%	35%	54%	77%	74%	35%	16%	20%
2021	19%	19%	76%	43%	26%	30%	38%	25%	26%	23%	29%
2031	15%	12%	92%	14%	13%	14%	15%	13%	12%	34%	42%
2041	11%	11%	62%	11%	12%	12%	13%	11%	11%	50%	62%
2051	11%	11%	13%	11%	11%	11%	12%	11%	11%	72%	90%
Conservation Funding Policy											
2011	NA	NA	52%	NA	NA	NA	NA	NA	NA	16%	20%
2021	NA	NA	68%	NA	NA	NA	NA	NA	NA	17%	40%
2031	NA	NA	62%	NA	NA	NA	NA	NA	NA	57%	54%
2041	NA	NA	64%	NA	NA	NA	NA	NA	NA	28%	43%
2051	NA	NA	40%	NA	NA	NA	NA	NA	NA	11%	11%

51%

36%

18%

11%

48%

61%

42%

15%

11%

Policemen's and Firemen's Pension and Relief Funds of West Virginia Municipalities Actuarial Valuation

2021

2031

2041

2051

Conservation Funding Policy 2011

2021

2031

2041

2051

As of July 01, 2011

Class III

16%

12%

11%

11%

NA

NA

NA

NA

NA

57%

13%

11%

11%

NA

NA

NA

NA

NA

27%

40%

59%

23%

19%

27%

36%

36%

32%

#### **Comparison of Employer Contribution Rates**

**Point Pleasant Municipality** Oak Hill **Princeton Star City** Welch Weston Westover Williamson Police **Police Police Police Police Police Police** Fire **Police** Fire Fire Optional from **Optional from** Optional from **Funding Policy** Standard Standard Standard Standard Alternative Alternative Alternative Standard Alternative Alternative Alternative **Current Funding Policy** 2011 87% 38% 24% 19% 14% 21% 24% 104% 33% 61% 48% 2021 16% 57% 27% 21% 30% 18% 28% 36% 21% 89% 71% 2031 12% 13% 40% 31% 28% 13% 23% 35% 21% 35% 103% 2041 11% 45% 28% 22% 21% 11% 59% 12% 35% 34% 26% 2051 11% 11% 28% 66% 28% 12% 22% 35% 21% 34% 26% **Optional Funding Policy** 2011 24% 87% 19% 14% 21% 24% 38% 104% 33% 61% 48%

23%

18%

14%

11%

21%

24%

17%

11%

11%

18%

13%

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12%

NA

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NA

23%

11%

11%

11%

NA

NA

NA

NA

NA

32%

13%

12%

11%

104%

75%

13%

12%

12%

16%

11%

11%

10%

NA

NA

NA

NA

NA

26%

15%

12%

11%

61%

39%

45%

12%

11%

21%

31%

45%

66%

14%

21%

31%

45%

43%

## **Comparison of Funded Ratios**

Actuarial Valuation Class I As of July 01, 2011

rvation (3% 44% 65% 11% (17% 17% 17% 17% 17% 17% 17% 17% 17% 17%	Fire  Conservation  6% 11% 24%	Police Optional from Alternative	Fire Optional from Alternative	Police Alternative	Fire Alternative	Police Alternative	Fire  Alternative	Police  Alternative	Fire Alternative
3% 4% 6%	6% 11% 24%	Alternative 21% 44%	Alternative 9%						
4% 6%	11% 24%	44%		32%	31%	2204	100/		
4% 6%	11% 24%	44%		32%	31%	220/	100/		
6%	24%		20%		5170	22%	18%	26%	21%
		5.40/	2770	27%	26%	23%	36%	44%	27%
1%		54%	41%	27%	26%	31%	90%	89%	53%
	59%	65%	54%	40%	41%	64%	100%	100%	100%
00%	100%	100%	100%	73%	77%	100%	100%	100%	100%
NA	NA	21%	9%	32%	31%	22%	18%	26%	21%
NA	NA	44%	29%	27%	26%	23%	34%	43%	27%
NA	NA	54%	41%	27%	26%	31%	50%	62%	50%
NA	NA	65%	54%	40%	41%	64%	68%	79%	76%
NA	NA	100%	100%	73%	77%	100%	100%	100%	100%
3%	6%	NA	NA	32%	31%	22%	18%	26%	21%
4%	11%	NA	NA	27%	26%	23%	26%	39%	27%
6%	24%	NA	NA	27%	26%	29%	47%	63%	42%
1%	59%	NA	NA	36%	35%	41%	100%	100%	74%
00%	100%	NA	NA	49%	51%	66%	100%	100%	100%
	NA NA NA NA NA NA NA 14% 66% 11%	NA N	NA NA 21% NA NA 44% NA NA 54% NA NA 65% NA NA 100%  8% 6% NA 44% 11% NA 66% 24% NA 11% 59% NA	NA NA 21% 9% NA NA 44% 29% NA NA 54% 41% NA NA 65% 54% NA NA 100% 100%  8% 6% NA NA NA NA 66% 24% NA NA NA NA NA 10%	NA NA 21% 9% 32% NA NA 44% 29% 27% NA NA NA 54% 41% 27% NA NA NA 100% 100% 73% NA NA 11% NA NA 32% NA NA NA NA NA 27% NA NA NA NA 27% NA NA NA NA 27% NA NA NA NA 36%	NA NA 21% 9% 32% 31% NA NA 44% 29% 27% 26% NA NA NA 65% 54% 40% 41% NA NA 100% 100% 73% 77%   8% 6% NA NA NA 32% 31% 77%   8% 6% NA NA NA 27% 26% 6% 24% NA NA NA 27% 26% 1% 59% NA NA NA 36% 35%	NA NA 21% 9% 32% 31% 22% NA NA NA 54% 41% 27% 26% 31% NA NA NA 65% 54% 40% 41% 64% NA NA 100% 100% 73% 77% 100% 100% 38% 6% NA NA NA NA 27% 26% 23% 6% 24% NA NA NA 27% 26% 23% 6% 24% NA NA NA 36% 35% 41%	NA NA 21% 9% 32% 31% 22% 18% NA NA 44% 29% 27% 26% 23% 34% NA NA NA 54% 41% 27% 26% 31% 50% NA NA NA 65% 54% 40% 41% 64% 68% NA NA 100% 100% 73% 77% 100% 100% 100% 38% 6% NA NA NA NA 27% 26% 23% 26% 6% 24% NA NA NA 27% 26% 29% 47% 10% 59% NA NA NA 36% 35% 41% 100%	NA NA 21% 9% 32% 31% 22% 18% 26% NA NA 44% 29% 27% 26% 23% 34% 43% NA NA 54% 41% 27% 26% 31% 50% 62% NA NA NA 65% 54% 40% 41% 64% 68% 79% NA NA 100% 100% 73% 77% 100% 100% 100% 100% 100% 100% 100%

As of July 01, 2011

## **Comparison of Funded Ratios**

Class II

<b>Municipality</b>	Bec	<u>kley</u>	<u>Blue</u>	<u>field</u>	<u>Clark</u>	sburg	<u>Fair</u>	mont	<u>Marti</u>	nsburg
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
Funding Policy	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative	Alternative
Current Funding Policy										
2011	66%	46%	33%	20%	13%	13%	15%	6%	23%	9%
2021	72%	38%	38%	19%	26%	17%	16%	1%	23%	5%
2031	90%	36%	55%	29%	52%	38%	27%	9%	27%	13%
2041	100%	55%	97%	72%	99%	89%	63%	47%	36%	41%
2051	100%	100%	100%	100%	100%	100%	100%	100%	62%	95%
Optional Funding Policy										
2011	66%	46%	33%	20%	13%	13%	15%	6%	23%	9%
2021	72%	38%	38%	19%	26%	17%	16%	1%	23%	5%
2031	81%	36%	55%	29%	52%	38%	27%	9%	27%	13%
2041	93%	55%	80%	66%	80%	73%	63%	47%	36%	41%
2051	100%	100%	100%	100%	100%	100%	100%	100%	62%	95%
Conservation Funding Policy										
2011	66%	46%	33%	20%	13%	13%	15%	6%	23%	9%
2021	72%	38%	38%	19%	19%	17%	16%	1%	23%	5%
2031	90%	36%	51%	25%	31%	27%	24%	7%	27%	12%
2041	100%	52%	76%	41%	61%	47%	39%	19%	36%	25%
2051	100%	92%	100%	63%	100%	89%	65%	42%	62%	48%

Class II

## **Comparison of Funded Ratios**

Class III

<b>Municipality</b>	Mour	ıdsville	South C	harleston	St A	<u>lbans</u>	<u>Vienna</u>	Wei	irton	<u>Belle</u>	Charles <u>Town</u>
<u>vrumerpunty</u>	Police	Fire	Police	Fire	Police Police	Fire	Police	Police	Fire	Police	Police
Funding Policy	Optional from Alternative	Optional from Alternative	Alternative	Alternative	Alternative	Alternative	Standard	Alternative	Alternative	Optional from Standard	Standard
<b>Current Funding Policy</b>											
2011	49%	20%	11%	6%	51%	17%	59%	15%	56%	61%	20%
2021	69%	24%	6%	6%	65%	11%	82%	4%	54%	77%	35%
2031	77%	29%	4%	11%	89%	9%	100%	1%	60%	100%	100%
2041	95%	40%	15%	37%	100%	20%	100%	19%	88%	100%	100%
2051	100%	100%	41%	87%	100%	53%	100%	70%	100%	100%	100%
<b>Optional Funding Policy</b>											
2011	49%	20%	11%	6%	51%	17%	59%	15%	56%	61%	NA
2021	69%	24%	6%	6%	65%	11%	82%	4%	54%	77%	NA
2031	77%	29%	4%	11%	77%	9%	100%	1%	60%	100%	NA
2041	95%	40%	15%	37%	88%	20%	100%	19%	78%	100%	NA
2051	100%	100%	41%	87%	100%	53%	100%	70%	100%	100%	NA
Conservation Funding Policy											
2011	NA	NA	11%	6%	51%	17%	NA	15%	56%	NA	NA
2021	NA	NA	6%	6%	69%	11%	NA	4%	54%	NA	NA
2031	NA	NA	4%	11%	100%	9%	NA	1%	60%	NA	NA
2041	NA	NA	15%	24%	100%	19%	NA	9%	88%	NA	NA
2051	NA	NA	41%	45%	100%	36%	NA	25%	100%	NA	NA

As of July 01, 2011

Class III

## **Comparison of Funded Ratios**

Municipality	Chester	Dun	<u>ıbar</u>	Ell	<u>kins</u>	Gra	<u>ifton</u>	Lo	gan_	Ni	<u>itro</u>
	Police	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
Funding Policy	Standard	Optional from Alternative	Alternative	Standard	Standard	Optional from Standard	Optional from Standard	Standard	Standard	Alternative	Alternative
<b>Current Funding Policy</b>											
2011	57%	80%	5%	41%	62%	50%	51%	34%	20%	31%	8%
2021	83%	95%	9%	70%	81%	83%	76%	86%	79%	39%	11%
2031	100%	100%	36%	100%	100%	100%	100%	100%	100%	44%	17%
2041	100%	100%	100%	100%	100%	100%	100%	100%	100%	57%	35%
2051	100%	100%	100%	100%	100%	100%	100%	100%	100%	87%	72%
Optional Funding Policy											
2011	57%	80%	5%	41%	62%	50%	51%	34%	20%	31%	8%
2021	82%	95%	9%	69%	82%	83%	76%	87%	79%	39%	11%
2031	100%	100%	35%	100%	100%	100%	100%	100%	100%	44%	17%
2041	100%	100%	69%	100%	100%	100%	100%	100%	100%	57%	35%
2051	100%	100%	100%	100%	100%	100%	100%	100%	100%	87%	72%
Conservation Funding Policy											
2011	NA	NA	5%	NA	NA	NA	NA	NA	NA	31%	8%
2021	NA	NA	8%	NA	NA	NA	NA	NA	NA	33%	14%
2031	NA	NA	17%	NA	NA	NA	NA	NA	NA	47%	26%
2041	NA	NA	35%	NA	NA	NA	NA	NA	NA	95%	58%
2051	NA	NA	84%	NA	NA	NA	NA	NA	NA	100%	100%

## **Comparison of Funded Ratios**

Actuarial Valuation Class III
As of July 01, 2011

Municipality	Oak Hill Police	Point <u>Pleasant</u> Police	<u>Prin</u> Police	<u>ceton</u> Fire	Star City Police	<u>Welch</u> Police	We Police	eston Fire	<u>Westover</u> Police	<u>Willia</u> Police	a <u>mson</u> Fire
Funding Policy	Optional from Standard	Optional from Standard	Alternative	Alternative	Alternative	Optional from Standard	Standard	Alternative	Standard	Alternative	Alternative
<b>Current Funding Policy</b>											
2011	109%	24%	37%	33%	65%	88%	48%	38%	73%	35%	35%
2021	113%	70%	38%	27%	78%	100%	78%	82%	98%	78%	44%
2031	118%	100%	46%	19%	99%	100%	100%	100%	100%	100%	89%
2041	137%	100%	66%	20%	100%	100%	100%	100%	100%	100%	100%
2051	196%	100%	100%	38%	100%	100%	100%	100%	100%	100%	100%
<b>Optional Funding Policy</b>											
2011	109%	24%	37%	33%	65%	88%	48%	38%	73%	35%	35%
2021	113%	70%	38%	27%	78%	100%	78%	56%	100%	58%	43%
2031	118%	100%	46%	19%	93%	100%	100%	65%	100%	71%	60%
2041	137%	100%	66%	20%	100%	100%	100%	84%	100%	97%	78%
2051	196%	100%	100%	38%	100%	100%	100%	100%	100%	100%	100%
Conservation Funding Policy											
2011	NA	NA	37%	33%	65%	NA	NA	38%	NA	35%	35%
2021	NA	NA	38%	27%	78%	NA	NA	58%	NA	48%	44%
2031	NA	NA	45%	19%	100%	NA	NA	100%	NA	76%	66%
2041	NA	NA	63%	20%	100%	NA	NA	100%	NA	100%	100%
2051	NA	NA	87%	33%	100%	NA	NA	100%	NA	100%	100%

#### Reconciliation of Assets 6/30/2011

#### Class I

<u>Municipality</u>	<u>Charl</u> Police	<u>leston</u> Fire	<u>Hunti</u> Police	<u>ngton</u> Fire	<u>Morga</u> Police	<u>ntown</u> Fire	<u>Parker</u> Police	rsburg Fire	Whe Police	<u>eling</u> Fire
A. Market Value of Assets as of July 1, 2010 Adjustment to Market Value of Assets at Beginning of Year Market Value of Assets Beginning of Year	\$10,911,700 \$0 \$10,911,700	\$7,247,179 \$0 \$7,247,179	\$12,731,238 \$0 \$12,731,238	\$5,708,591 \$0 \$5,708,591	\$12,136,886 \$0 \$12,136,886	\$9,486,292 \$0 \$9,486,292	\$8,523,749 \$5,732 \$8,529,481	\$7,842,477 (\$5,661) \$7,836,816	\$10,547,210 \$0 \$10,547,210	\$9,962,473 \$0 \$9,962,473
1. Revenue During Fiscal Year										
(a) Employee Contribution	\$746,926	\$770,873	\$364,266	\$324,979	\$223,629	\$167,172	\$203,965	\$188,751	\$245,722	\$266,374
(b) Governmental Contribution (i) From Local Government (ii) From State Government (iii) Total	\$2,257,657 \$1,702,437 \$3,960,094	\$3,561,911 \$1,857,533 \$5,419,444	\$3,823,757 \$990,195 \$4,813,952	\$4,382,368 \$1,271,474 \$5,653,842	\$549,877 \$0 \$549,877	\$469,893 \$0 \$469,893	\$776,208 \$592,888 \$1,369,096	\$1,711,656 \$865,060 \$2,576,716	\$1,817,565 \$891,023 \$2,708,588	\$1,831,327 \$958,667 \$2,789,994
(c) Earnings on Investments (i) Net Appreciation (Depreciation) (ii) Bond Interest (iii) Dividends (iv) Net Realized Gain (Loss) on Sale or Exchange (v) Other (vi) Investment Expense (vii) Total	\$505,874 \$186,372 \$109,934 \$764,585 \$0 (\$103,752) \$1,463,013	\$1,118,919 \$20,989 \$114,899 \$27,870 \$0 (\$35,918) \$1,246,759	\$987,105 \$118,979 \$235,919 \$0 \$0 \$0 \$1,342,003	\$669,931 \$6,016 \$73,174 \$0 \$0 \$0 \$0 \$749,121	\$741,047 \$217,278 \$124,177 \$657,818 \$1,345 (\$113,259) \$1,628,406	\$551,952 \$170,172 \$96,264 \$528,511 \$1,651 (\$88,262) \$1,260,288	\$1,027,200 \$240,109 \$0 \$0 \$0 (\$81,737) \$1,185,572	\$355,509 \$251,157 \$0 \$0 \$0 (\$63,655) \$543,011	\$0 \$0 \$0 \$0 \$2,014,015 (\$51,104) \$1,962,911	\$0 \$0 \$0 \$0 \$1,866,931 (\$47,579) \$1,819,352
(d) Other Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$220	\$0	\$423	\$1,376
(e) Receivable Contribution	\$0	\$0	\$1,026,354	\$1,293,686	\$495,129	\$409,687	\$0	\$0	\$0	\$0
(f) Total Revenue (sum of (a) through (e))	\$6,170,033	\$7,437,076	\$7,546,575	\$8,021,628	\$2,897,041	\$2,307,040	\$2,758,853	\$3,308,478	\$4,917,644	\$4,877,096
2. Expenditures During Fiscal Year										
(a) Benefits Paid	\$5,576,566	\$6,055,225	\$3,579,925	\$4,798,330	\$1,656,567	\$1,319,555	\$1,838,276	\$2,245,337	\$2,357,815	\$2,683,909
(b) Withdrawals	\$31,487	\$152,643	\$0	\$0	\$11,897	\$4,869	\$0	\$10,604	\$0	\$0
(c) Administrative Expenses	\$24,173	\$12,834	\$49,223	\$35,690	\$2,495	\$2,835	\$0	\$1,489	\$1,632	\$1,307
(d) Total Expenditures (sum of (a) through (c))	\$5,632,226	\$6,220,702	\$3,629,148	\$4,834,020	\$1,670,959	\$1,327,259	\$1,838,276	\$2,257,430	\$2,359,447	\$2,685,216
B. Market Value of Assets as of June 30, 2011 [A + 1(f) - 2(d)]	\$11,449,507	\$8,463,553	\$16,648,665	\$8,896,199	\$13,362,968	\$10,466,073	\$9,450,058	\$8,887,864	\$13,105,407	\$12,154,353
C. Return on Assets	13.8%	17.0%	10.9%	17.6%	14.2%	14.1%	14.1%	6.7%	18.1%	17.9%

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending June 30, 2011.

#### Reconciliation of Assets 6/30/2011

#### Class II

<u>Municipality</u>	Becl	<u>kley</u>	Blue	field	<u>Clark</u>	sburg	<u>Fair</u>	<u>mont</u>	Martin	sburg
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
A. Market Value of Assets as of July 1, 2010	\$15,555,582	\$13,844,700	\$3,704,896	\$2,650,024	\$2,466,619	\$3,067,504	\$3,368,627	\$1,870,526	\$5,069,596	\$1,829,449
Adjustment to Market Value of Assets at Beginning of Year Market Value of Assets Beginning of Year	\$0 \$15,555,582	\$0 \$13,844,700	\$0 \$3,704,896	\$0 \$2,650,024	\$0 \$2,466,619	\$0 \$3,067,504	\$0 \$3,368,627	\$0 \$1,870,526	\$0 \$5,069,596	\$0 \$1,829,449
1. Revenue During Fiscal Year										
(a) Employee Contribution	\$145,233	\$131,794	\$53,956	\$46,935	\$139,497	\$130,423	\$108,901	\$156,674	\$197,953	\$140,800
(b) Governmental Contribution										
(i) From Local Government (ii) From State Government	\$320,114 \$425,748	\$419,436 \$401,113	\$210,212 \$193,522	\$259,117 \$240,570	\$632,410 \$392,329	\$638,438 \$437,874	\$476,114 \$353,292	\$657,766 \$442,494	\$384,357 \$376,526	\$468,275 \$302,314
(iii) Total	\$745,862	\$820,549	\$403,734	\$499,687	\$1,024,739	\$1,076,312	\$829,406	\$1,100,260	\$760,883	\$770,589
(c) Earnings on Investments										
(i) Net Appreciation (Depreciation) (ii) Bond Interest	\$69,164 \$169,800	\$64,872 \$411,426	\$21,537 \$102,749	\$264,810 \$75,935	\$383,368 \$21,244	\$469,644 \$27,264	\$0 \$37,565	\$243,224 \$37,873	\$530,196 \$131,689	\$253,980 \$43,494
(iii) Dividends	\$239,351	\$411,420	\$4,247	\$73,933 \$90,466	\$21,244 \$41.047	\$50,501	\$89,711	\$25,127	\$131,089	\$43,494 \$0
(iv) Net Realized Gain (Loss) on Sale or Exchange	\$1,421,511	\$1,418,493	(\$23,834)	\$16,117	\$7,627	\$15,205	\$453,650	\$5,739	\$0	\$0
(v) Other	\$0	\$0	\$0	\$0	\$57	\$55	\$0	\$30	\$0	\$0
(vi) Investment Expense (vii) Total	(\$53,318) \$1,846,508	(\$47,417) \$1,847,374	\$0 \$104,699	\$0 \$447,328	(\$12,296) \$441,047	(\$14,938) \$547,731	\$0 \$580,926	\$0 \$311,993	(\$27,952) \$633,933	(\$17,479) \$279,995
(d) Other Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$29,727	\$29,728	\$0	\$0
(e) Receivable Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(f) Total Revenue (sum of (a) through (e))	\$2,737,603	\$2,799,717	\$562,389	\$993,950	\$1,605,283	\$1,754,466	\$1,548,960	\$1,598,655	\$1,592,769	\$1,191,384
2. Expenditures During Fiscal Year										
(a) Benefits Paid	\$1,324,481	\$1,516,851	\$545,626	\$603,172	\$918,377	\$1,171,296	\$1,068,364	\$1,454,934	\$847,885	\$1,003,005
(b) Withdrawals	\$28,728	\$0	\$0	\$0	\$5,241	\$0	\$3,985	\$2,245	\$831	\$0
(c) Administrative Expenses	\$7,422	\$8,724	\$5,532	\$0	\$11,545	\$11,544	\$5,214	\$2,251	\$11,217	\$7,350
$ (d)  Total \ Expenditures \ (sum \ of \ (a) \ through \ (c)) $	\$1,360,631	\$1,525,575	\$551,158	\$603,172	\$935,163	\$1,182,840	\$1,077,563	\$1,459,430	\$859,933	\$1,010,355
B. Market Value of Assets as of June 30, 2011 [A + 1(f) - 2(d)]	\$16,932,554	\$15,118,842	\$3,716,127	\$3,040,802	\$3,136,739	\$3,639,130	\$3,840,024	\$2,009,751	\$5,802,432	\$2,010,478
C. Return on Assets	12.8%	14.6%	2.7%	17.1%	16.6%	17.4%	17.4%	17.4%	12.2%	15.3%

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending June 30, 2011.

#### Reconciliation of Assets 6/30/2011

Class II Class III Charles **Municipality** Moundsville **South Charleston** St. Albans <u>Vienna</u> Weirton **Belle** Town **Police** Police Fire **Police Police Police Police Police** Fire Fire Fire \$2,720,678 \$974,884 \$2,022,788 \$4,241,031 \$2,175,574 \$4,077,854 \$5,950,021 \$412,245 A. Market Value of Assets as of July 1, 2010 \$1,284,006 \$4,018,011 \$1,295,724 (\$17,680) (\$43,245) Adjustment to Market Value of Assets at Beginning of Year \$0 \$0 \$0 (\$89,969) \$0 \$0 (\$180)\$0 \$0 Market Value of Assets Beginning of Year \$2,702,998 \$931,639 \$2,022,788 \$1,284,006 \$4,241,031 \$2,175,574 \$3,928,042 \$4,077,854 \$5,950,021 \$1,295,544 \$412,245 1. Revenue During Fiscal Year (a) Employee Contribution \$50.278 \$12,403 \$121.699 \$129,308 \$78,855 \$57,381 \$53,021 \$143,032 \$68,864 \$11.035 \$0 (b) Governmental Contribution (i) From Local Government \$193,397 \$153,934 \$261,458 \$437,604 \$198,877 \$170,291 \$82,218 \$365,454 \$176,303 \$52,466 \$92,350 \$291,235 \$319,533 \$370,268 \$31,420 (ii) From State Government \$213,103 \$181,092 \$142,520 \$189,693 \$132,908 \$169,656 \$34,661 (iii) Total \$406,500 \$335,026 \$552,693 \$757,137 \$341,397 \$359,984 \$215,126 \$735,722 \$345,959 \$87,127 \$123,770 (c) Earnings on Investments \$140,897 (i) Net Appreciation (Depreciation) \$273,475 \$113,681 \$0 \$135,983 \$25,876 \$0 \$0 (\$11,949)\$0 (ii) Bond Interest \$78,597 \$97 \$0 \$54,259 \$7,547 \$42,415 \$24,814 \$0 \$0 \$663 \$67,265 \$0 \$51,467 \$215,336 \$0 (iii) Dividends \$0 \$0 \$16,238 \$117,619 \$58,531 \$0 (iv) Net Realized Gain (Loss) on Sale or Exchange \$51,521 \$11,089 \$286,881 \$0 \$259,623 \$127,577 \$33,090 \$491,525 \$689,766 \$0 \$0 (\$8) \$634,146 \$0 \$0 (v) Other \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 (vi) Investment Expense (\$95)(\$5,790)(\$30,818)(\$4,644)\$0 (\$21,770)\$0 (\$17,751)(\$5,890)\$0 (vii) Total \$403,498 \$143,794 \$323,425 \$147,569 \$518,139 \$190,214 \$667,236 \$579,500 \$906,759 \$30,466 \$663 (d) Other Revenue \$0 \$139 \$0 \$250 \$0 \$98 \$4,425 \$0 \$3,236 \$0 \$0 **Receivable Contribution** \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 (f) Total Revenue (sum of (a) through (e)) \$860,276 \$491,223 \$1,001,053 \$1,034,153 \$938,391 \$607,579 \$935,633 \$1,458,254 \$1,321,582 \$128,726 \$128,858 2. Expenditures During Fiscal Year (a) Benefits Paid \$257,434 \$357,741 \$794,942 \$952,256 \$322,168 \$511,927 \$332,139 \$1,303,795 \$470,100 \$140,063 \$140,903 Withdrawals \$1,222 \$0 \$15,979 \$2,544 \$0 \$0 \$0 \$0 \$0 \$334 \$0 \$2,977 \$45,282 \$0 \$25,993 \$8,030 \$0 \$0 (c) Administrative Expenses \$4,186 \$3,516 \$5,916 \$6,410 (d) Total Expenditures (sum of (a) through (c)) \$262,842 \$361,257 \$816,837 \$957,777 \$367,450 \$511,927 \$358,132 \$1,310,205 \$478,130 \$140,397 \$140,903 B. Market Value of Assets as of June 30, 2011 [A + 1(f) - 2(d)]\$3,300,432 \$1,061,605 \$2,207,004 \$1,360,382 \$4,811,972 \$2,271,226 \$4,505,543 \$4,225,903 \$6,793,473 \$1,283,873 \$400,200 C. Return on Assets 14.4% 15.1% 16.2% 15.9% 11.0% 8.9% 16.6% 14.8% 15.2% 2.5% 0.2%

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending June 30, 2011.

#### Reconciliation of Assets 6/30/2011

#### Class III

Municipality	Chester	Dunk	oar_	Elk	<u>ins</u>	Graf	fton	Log	an	Nit	ro
<u> </u>	Police	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
A. Market Value of Assets as of July 1, 2010 Adjustment to Market Value of Assets at Beginning of Year Market Value of Assets Beginning of Year	\$941,101 \$0 \$941,101	\$4,232,545 \$0 \$4,232,545	\$572,254 \$0 \$572,254	\$1,798,633 \$0 \$1,798,633	\$859,347 \$0 \$859,347	\$723,913 \$0 \$723,913	\$939,367 \$0 \$939,367	\$339,247 \$0 \$339,247	\$187,095 \$0 \$187,095	\$1,760,951 (\$2,559) \$1,758,392	\$300,809 \$25 \$300,834
1. Revenue During Fiscal Year											
(a) Employee Contribution	\$17,283	\$42,931	\$45,576	\$24,722	\$9,808	\$13,952	\$9,130	\$18,606	\$31,944	\$60,314	\$37,509
(b) Governmental Contribution (i) From Local Government (ii) From State Government (iii) Total	\$74,070 \$26,589 \$100,659	\$138,104 \$88,761 \$226,865	\$288,241 \$111,850 \$400,091	\$113,703 \$72,610 \$186,313	\$31,083 \$35,177 \$66,260	\$29,300 \$51,343 \$80,643	\$58,400 \$45,058 \$103,458	\$0 \$0 \$0	\$0 \$0 \$0	\$118,493 \$113,532 \$232,025	\$110,405 \$226,224 \$336,629
(c) Earnings on Investments (i) Net Appreciation (Depreciation) (ii) Bond Interest (iii) Dividends (iv) Net Realized Gain (Loss) on Sale or Exchange (v) Other (vi) Investment Expense (vii) Total	\$57,356 \$9,009 \$2,607 \$0 \$7,285 \$0 \$76,257	\$7,565 \$113,483 \$0 \$491,965 \$0 \$0 \$613,013	(\$2,907) \$10,067 \$0 \$43,248 \$0 \$0 \$50,408	\$0 \$56,071 \$4,391 \$46,487 \$0 \$0 \$106,949	\$0 \$24,354 \$2,172 \$19,767 \$0 \$0 \$46,293	\$2,686 \$0 \$0 \$0 \$5,866 \$0 \$8,552	\$86,445 \$0 \$0 \$0 \$4 \$0 \$86,449	\$27,206 \$11,414 \$6,544 \$0 \$0 \$0 \$0 \$0	\$26,870 \$5,338 \$2,728 \$0 \$0 \$0 \$34,936	\$278,958 \$8,926 \$28,397 \$10 \$2,573 (\$8,505) \$310,359	\$785 \$3,214 \$67 \$9 \$0 (\$1,422) \$2,653
(d) Other Revenue	\$0	\$0	\$0	\$0	\$0	\$1,050	\$1,470	\$0	\$0	\$0	\$0
(e) Receivable Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(f) Total Revenue (sum of (a) through (e))	\$194,199	\$882,809	\$496,075	\$317,984	\$122,361	\$104,197	\$200,507	\$63,770	\$66,880	\$602,698	\$376,791
2. Expenditures During Fiscal Year											
(a) Benefits Paid	\$38,272	\$274,272	\$498,319	\$236,925	\$82,914	\$65,590	\$79,163	\$12,689	\$23,537	\$233,383	\$192,448
(b) Withdrawals	\$0	\$21,727	\$2,545	\$0	\$0	\$0	\$0	\$0	\$0	\$49,626	\$0
(c) Administrative Expenses	\$698	\$28,969	\$13,940	\$6,393	\$3,818	\$5,542	\$4,996	\$0	\$0	\$2,475	\$76
(d) Total Expenditures (sum of (a) through (c))	\$38,970	\$324,968	\$514,804	\$243,318	\$86,732	\$71,132	\$84,159	\$12,689	\$23,537	\$285,484	\$192,524
B. Market Value of Assets as of June 30, 2011 [A + 1(f) - 2(d)]	\$1,096,330	\$4,790,386	\$553,525	\$1,873,299	\$894,976	\$756,978	\$1,055,715	\$390,328	\$230,438	\$2,075,606	\$485,101
C. Return on Assets	8.1%	13.8%	6.7%	5.6%	5.0%	0.4%	8.5%	13.2%	18.3%	17.5%	0.8%

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending June 30, 2011.

#### Reconciliation of Assets 6/30/2011

#### Class III

	Class III										
		Point									
<b>Municipality</b>	<u>Oak Hill</u>	<u>Pleasant</u>	<u>Princ</u>		Star City	<u>Welch</u>	Wes		Westover		<u>imson</u>
	Police	Police	Police	Fire	Police	Police	Police	Fire	Police	Police	Fire
A. Market Value of Assets as of July 1, 2010	\$2,618,789	\$737,356	\$2,894,860	\$2,313,781	\$1,079,345	\$1,120,790	\$584,271	\$494,058	\$1,207,403	\$736,359	\$1,420,458
Adjustment to Market Value of Assets at Beginning of Year	\$79,612	\$0	\$0	\$0	\$0	(\$109)	\$0	\$0	\$0	\$0	(\$20)
Market Value of Assets Beginning of Year	\$2,698,401	\$737,356	\$2,894,860	\$2,313,781	\$1,079,345	\$1,120,681	\$584,271	\$494,058	\$1,207,403	\$736,359	\$1,420,438
1. Revenue During Fiscal Year											
(a) Employee Contribution	\$34,402	\$20,483	\$54,649	\$35,020	\$10,027	\$31,341	\$9,867	\$2,635	\$22,573	\$10,689	\$15,000
(b) Governmental Contribution											
(i) From Local Government	\$68,029	\$24,000	\$132,383	\$67,063	\$49,000	\$62,079	\$34,371	\$50,533	\$66,000	\$98,950	\$98,625
(ii) From State Government	\$78,261	\$0	\$170,237	\$124,920	\$35,605	\$46,947	\$0	\$0	\$147,454	\$54,300	\$86,286
(iii) Total	\$146,290	\$24,000	\$302,620	\$191,983	\$84,605	\$109,026	\$34,371	\$50,533	\$213,454	\$153,250	\$184,911
(c) Earnings on Investments											
(i) Net Appreciation (Depreciation)	\$475,143	\$0	\$417,440	\$316,814	\$4,289	\$13,133	\$30,725	\$43,391	\$0	\$0	\$0
(ii) Bond Interest	\$0	\$0	\$63,813	\$55,092	\$17.057	\$16,128	\$6,196	\$6,424	\$23,571	\$5,579	\$191,922
(iii) Dividends	\$0	\$0	\$0	\$0	\$21,850	\$37,809	\$9,590	\$7,236	\$14,254	\$0	\$0
(iv) Net Realized Gain (Loss) on Sale or Exchange	\$0	\$0	\$0	\$0 \$0	\$3,684	\$7,168	\$6,418	\$9,055	\$0	\$0	\$0
(v) Other	\$4,613	\$135,784	\$0	\$0	\$0	\$1,956	\$0	\$0	\$148,182	\$0	\$0
(vi) Investment Expense	(\$17,142)	\$0	\$0	\$0	(\$9,001)	(\$2,945)	\$0	\$0	\$0	\$0	\$0
(vii) Total	\$462,614	\$135,784	\$481,253	\$371,906	\$37,879	\$73,249	\$52,929	\$66,106	\$186,007	\$5,579	\$191,922
(d) Other Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$42,928)
(e) Receivable Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(f) Total Revenue (sum of (a) through (e))	\$643,306	\$180,267	\$838,522	\$598,909	\$132,511	\$213,616	\$97,167	\$119,274	\$422,034	\$169,518	\$348,905
2. Expenditures During Fiscal Year											
(a) Benefits Paid	\$86,865	\$107,139	\$346,029	\$306,731	\$56,175	\$30,490	\$52,094	\$66,367	\$58,695	\$93,832	\$223,417
(b) Withdrawals	\$8,377	\$0	\$0	\$0	\$15,506	\$5,517	\$0	\$3,900	\$0	\$1,071	\$0
(c) Administrative Expenses	\$2,493	\$10,104	\$12,020	\$10,836	\$1,394	\$1,250	\$3,858	\$5,369	\$15,105	\$0	\$10
$(d)  Total \ Expenditures \ (sum \ of \ (a) \ through \ (c))$	\$97,735	\$117,243	\$358,049	\$317,567	\$73,075	\$37,257	\$55,952	\$75,636	\$73,800	\$94,903	\$223,427
B. Market Value of Assets as of June 30, 2011	\$2 242 072	\$900,290	¢2 275 222	¢2.505.122	¢1 120 701	¢1 207 040	\$625.496	\$527.606	¢1 555 627	\$910.074	¢1 545 017
[A + 1(f) - 2(d)]	\$3,243,972	\$800,380	\$3,375,333	\$2,595,123	\$1,138,781	\$1,297,040	\$625,486	\$537,696	\$1,555,637	\$810,974	\$1,545,916
C. Return on Assets	17.0%	17.8%	16.2%	15.9%	4.1%	6.1%	8.5%	12.5%	13.2%	0.7%	13.8%

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending June 30, 2011.

## Assets Held by Category as of 6/30/2011

Class I

<b>Municipality</b>	<b>Charleston</b>		<b>Huntington</b>		Morga	ntown	<u>Parker</u>	sburg	Wheeling		
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire	
1. Cash and Short-term Investments	\$1,438,412	\$623,567	\$2,580,819	\$999,032	\$423,431	\$457,163	\$86,382	\$1,039,661	\$516,419	\$493,904	
2. Government Securities											
(a) Treasury Notes and Bonds	\$2,326,109	\$2,594,529	\$1,596,151	\$0	\$2,719,460	\$2,089,106	\$2,299,079	\$1,988,559	\$3,560,847	\$3,279,691	
<ul><li>(b) State and Municipal Bonds</li><li>(c) Total Government Securities</li></ul>	\$0 \$2,326,109	\$0 \$2,594,529	\$0 \$1,596,151	\$0 \$0	\$0 \$2,719,460	\$0 \$2,089,106	\$10,855 \$2,309,934	\$9,388 \$1,997,947	\$0 \$3,560,847	\$0 \$3,279,691	
3. Corporate Bonds											
(a) Bonds	\$2,596,893	\$0	\$2,387,680	\$0	\$3,129,973	\$2,355,567	\$2,263,116	\$1,957,453	\$1,515,186	\$1,417,279	
(b) Mortgage Backed Securities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
(c) Debentures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<ul><li>(d) Mutual Fund Shares (Bonds)</li><li>(e) Total Corporate Bonds</li></ul>	\$0 \$2,596,893	\$0 \$0	\$1,152,074 \$3,539,754	\$0 \$0	\$0 \$3,129,973	\$0 \$2,355,567	\$374,296 \$2,637,412	\$323,743 \$2,281,196	\$0 \$1,515,186	\$0 \$1,417,279	
4. Corporate Stocks											
(a) Stocks	\$4,995,216	\$5,244,936	\$812,080	\$2,828,459	\$6,528,978	\$5,108,189	\$4,369,594	\$3,779,424	\$7,666,521	\$7,046,613	
<ul><li>(b) Mutual Fund Shares (Stocks)</li><li>(c) Total Corporate Stocks</li></ul>	\$0 \$4,995,216	\$0 \$5,244,936	\$4,469,779 \$5,281,859	\$547,222 \$3,375,681	\$0 \$6,528,978	\$0 \$5,108,189	\$0 \$4,369,594	\$0 \$3,779,424	\$0 \$7,666,521	\$0 \$7,046,613	
5. Other	\$92,877	\$521	-\$3,837	-\$2,153	\$65,997	\$46,361	\$41,040	-\$210,364	-\$153,566	-\$83,134	
6. Receivable Contribution <sup>a</sup>	\$0	\$0	\$3,653,919	\$4,523,639	\$495,129	\$409,687	\$5,696	\$0	\$0	\$0	
Market Value of Assets as of June 30, 2011 [sum of (1) through (6)]	\$11,449,507	\$8,463,553	\$16,648,665	\$8,896,199	\$13,362,968	\$10,466,073	\$9,450,058	\$8,887,864	\$13,105,407	\$12,154,353	

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending June 30, 2011.

Class II

## Assets Held by Category as of 6/30/2011

<u>Municipality</u>	<b>Beckley</b>		Blue	<u>Bluefield</u>		sburg	<u>Fair</u>	<u>mont</u>	<b>Martinsburg</b>		
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire	
1. Cash and Short-term Investments	\$187,614	\$891,642	\$253,616	\$166,939	\$267,358	\$251,135	\$803,962	\$96,440	\$792,316	\$357,751	
2. Government Securities											
<ul><li>(a) Treasury Notes and Bonds</li><li>(b) State and Municipal Bonds</li><li>(c) Total Government Securities</li></ul>	\$2,632,772 \$1,634,782 \$4,267,554	\$482,135 \$1,348,883 \$1,831,018	\$2,712,745 \$0 \$2,712,745	\$0 \$0 \$0	\$97,954 \$0 \$97,954	\$80,133 \$0 \$80,133	\$0 \$0 \$0	\$3,888 \$0 \$3,888	\$1,314,420 \$0 \$1,314,420	\$786,113 \$0 \$786,113	
3. Corporate Bonds											
<ul> <li>(a) Bonds</li> <li>(b) Mortgage Backed Securities</li> <li>(c) Debentures</li> <li>(d) Mutual Fund Shares (Bonds)</li> <li>(e) Total Corporate Bonds</li> </ul>	\$2,835,966 \$0 \$0 \$0 \$2,835,966	\$2,637,970 \$0 \$0 \$0 \$0 \$2,637,970	\$593,752 \$0 \$0 \$0 \$0 \$593,752	\$1,066,860 \$0 \$0 \$19,503 \$1,086,363	\$290,572 \$611,588 \$0 \$0 \$902,160	\$297,350 \$790,144 \$0 \$0 \$1,087,494	\$0 \$0 \$0 \$714,702 \$714,702	\$700,673 \$0 \$0 \$0 \$0 \$700,673	\$105,486 \$0 \$0 \$0 \$105,486	\$0 \$0 \$0 \$0 \$0	
4. Corporate Stocks  (a) Stocks (b) Mutual Fund Shares (Stocks) (c) Total Corporate Stocks	\$4,587,118 \$3,790,946 \$8,378,064	\$4,494,586 \$4,059,038 \$8,553,624	\$156,014 \$0 \$156,014	\$632,678 \$1,154,822 \$1,787,500	\$923,742 \$945,525 \$1,869,267	\$1,113,119 \$1,107,249 \$2,220,368	\$0 \$2,311,444 \$2,311,444	\$79,285 \$1,121,717 \$1,201,002	\$1,798,126 \$1,792,084 \$3,590,210	\$186,158 \$680,456 \$866,614	
5. Other	\$39,408	\$43,295	\$0	\$0	\$0	\$0	\$7,737	\$5,569	\$0	\$0	
6. Receivable Contribution <sup>a</sup>	\$1,223,948	\$1,161,293	\$0	\$0	\$0	\$0	\$2,179	\$2,179	\$0	\$0	
Market Value of Assets as of June 30, 2011 [ sum of (1) through (6)]	\$16,932,554	\$15,118,842	\$3,716,127	\$3,040,802	\$3,136,739	\$3,639,130	\$3,840,024	\$2,009,751	\$5,802,432	\$2,010,478	

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending.

## Assets Held by Category as of 6/30/2011

Class II

Class III

As of sury 01, 2011	Clubb II								,	Clubb III	C1 1
Municipality	<b>Moundsville</b>		South Charleston		St. Albans		<u>Vienna</u> <u>Weirton</u>			<b>Belle</b>	Charles <u>Town</u>
	Police	Fire	Police	Fire	Police	Fire	Police	Police	Fire	Police	Police
1. Cash and Short-term Investments	\$203,395	\$107,582	\$68,567	\$173,644	\$233,181	\$148,446	\$95,332	\$167,188	\$572,826	\$174,680	\$400,200
2. Government Securities											
(a) Treasury Notes and Bonds	\$0	\$102,588	\$0	\$151,005	\$1,028,058	\$476,498	\$733,023	\$207,508	\$0	\$25,167	\$0
<ul><li>(b) State and Municipal Bonds</li><li>(c) Total Government Securities</li></ul>	\$0 \$0	\$0 \$102,588	\$0 \$0	\$0 \$151,005	\$0 \$1,028,058	\$0 \$476,498	\$0 \$733,023	\$0 \$207,508	\$0 \$0	\$0 \$25,167	\$0 \$0
3. Corporate Bonds											
(a) Bonds	\$0	\$0	\$2,138,437	\$98,723	\$1,092,967	\$516,022	\$661,956	\$1,105,685	\$202,470	\$0	\$0
(b) Mortgage Backed Securities	\$0	\$115,430	\$0	\$0	\$0	\$0	\$66,281	\$0	\$0	\$0	\$0
(c) Debentures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(d) Mutual Fund Shares (Bonds)	\$1,937,979	\$195,256	\$0	\$0	\$0	\$0	\$771,294	\$42,805	\$2,325,824	\$1,049,365	\$0
(e) Total Corporate Bonds	\$1,937,979	\$310,686	\$2,138,437	\$98,723	\$1,092,967	\$516,022	\$1,499,531	\$1,148,490	\$2,528,294	\$1,049,365	\$0
4. Corporate Stocks											
(a) Stocks	\$0	\$0	\$0	\$627,808	\$2,457,766	\$1,130,260	\$319,149	\$583,926	\$1,084,059	\$0	\$0
(b) Mutual Fund Shares (Stocks)	\$1,159,058	\$540,749	\$0	\$0	\$0	\$0	\$1,858,508	\$2,103,155	\$2,608,294	\$0	\$0
(c) Total Corporate Stocks	\$1,159,058	\$540,749	\$0	\$627,808	\$2,457,766	\$1,130,260	\$2,177,657	\$2,687,081	\$3,692,353	\$0	\$0
5. Other	\$0	\$0	\$0	-\$10,331	\$0	\$0	\$0	\$15,636	\$0	\$0	\$0
6. Receivable Contribution <sup>a</sup>	\$0	\$0	\$0	\$319,533	\$0	\$0	\$0	\$0	\$0	\$34,661	\$0
Market Value of Assets as of June 30, 2011	\$2,200,422	¢1.061.605	\$2.207.004	¢1 260 202	¢4.911.072	¢2 271 226	¢4.505.542	¢4.225.002	¢ ( 702 ) 472	¢1 292 972	\$400,200
[ sum of (1) through (6)]	\$3,300,432	\$1,061,605	\$2,207,004	\$1,360,382	\$4,811,972	\$2,271,226	\$4,505,543	\$4,225,903	\$6,793,473	\$1,283,873	\$400,200

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending

## Assets Held by Category as of 6/30/2011

Class III

<u>Municipality</u>	<u>Chester</u>	<u>Dunbar</u>		Elki	<u>ins</u>	Grafton		<u>Logan</u>		<u>Nitro</u>	
<u> </u>	Police	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
1. Cash and Short-term Investments	\$438,170	\$386,854	\$209,075	\$1,013,787	\$396,569	\$198,427	\$32,345	\$22,763	\$39,714	\$364,837	\$171,923
2. Government Securities											
(a) Treasury Notes and Bonds	\$121,246	\$1,865,238	\$106,876	\$859,512	\$377,177	\$555,572	\$0	\$0	\$0	\$396,348	\$176,876
<ul><li>(b) State and Municipal Bonds</li><li>(c) Total Government Securities</li></ul>	\$0 \$121,246	\$0 \$1,865,238	\$0 \$106,876	\$0 \$859,512	\$0 \$377,177	\$0 \$555,572	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$396,348	\$0 \$176,876
3. Corporate Bonds											
(a) Bonds	\$0	\$0	\$0	\$0	\$0	\$0	\$595,601	\$227,759	\$97,450	\$0	\$0
(b) Mortgage Backed Securities (c) Debentures	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
(c) Debentures (d) Mutual Fund Shares (Bonds)	\$106,688	\$357,533	\$0 \$0	\$0 \$0	\$121,230	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0
(e) Total Corporate Bonds	\$106,688	\$357,533	\$0	\$0	\$121,230	\$0	\$595,601	\$227,759	\$97,450	\$0	\$0
4. Corporate Stocks											
(a) Stocks	\$75,000	\$2,170,880	\$29,552	\$0	\$0	\$0	\$0	\$139,806	\$93,274	\$1,311,796	\$0
(b) Mutual Fund Shares (Stocks) (c) Total Corporate Stocks	\$328,637 \$403,637	\$9,881 \$2,180,761	\$208,022 \$237,574	\$0 \$0	\$0 \$0	\$0 \$0	\$427,769 \$427,769	\$0 \$139,806	\$0 \$93,274	\$0 \$1,311,796	\$0 \$0
5. Other	\$0	\$0	\$0	\$0	\$0	\$2,979	\$0	\$0	\$0	\$0	\$0
6. Receivable Contribution <sup>a</sup>	\$26,589	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,625	\$136,302
Market Value of Assets as of June 30, 2011 [ sum of (1) through (6)]	\$1,096,330	\$4,790,386	\$553,525	\$1,873,299	\$894,976	\$756,978	\$1,055,715	\$390,328	\$230,438	\$2,075,606	\$485,101

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending

## Assets Held by Category as of 6/30/2011

Class III
Point

		Point									
Municipality	Oak Hill	Pleasant	Princ	eton	Star City	Welch	Wes	ton	Westover	Willia	mson
	Police	Police	Police	Fire	Police	Police	Police	Fire	Police	Police	Fire
1. Cash and Short-term Investments	\$77,264	\$17,000	\$1,496	\$126,124	\$133,657	\$127,154	\$130,230	\$28,228	\$104,228	\$373,509	\$70,919
2. Government Securities											
(a) Treasury Notes and Bonds	\$727,394	\$0	\$158,378	\$42,009	\$134,815	\$0	\$274,439	\$294,471	\$653,367	\$0	\$337,475
(b) State and Municipal Bonds	\$0	\$0	\$909,648	\$783,452	\$0	\$34,555	\$0	\$0	\$0	\$0	\$0
(c) Total Government Securities	\$727,394	\$0	\$1,068,026	\$825,461	\$134,815	\$34,555	\$274,439	\$294,471	\$653,367	\$0	\$337,475
3. Corporate Bonds											
(a) Bonds	\$481,962	\$0	\$439,477	\$370,582	\$674,720	\$241,644	\$0	\$0	\$0	\$0	\$349,477
(b) Mortgage Backed Securities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$437,465	\$0
(c) Debentures	\$313	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(d) Mutual Fund Shares (Bonds)	\$510,896	\$0	\$0	\$0	\$0	\$451,769	\$0	\$0	\$0	\$0	\$0
(e) Total Corporate Bonds	\$993,171	\$0	\$439,477	\$370,582	\$674,720	\$693,413	\$0	\$0	\$0	\$437,465	\$349,477
4. Corporate Stocks											
(a) Stocks	\$1,373,812	\$0	\$513,669	\$223,374	\$0	\$386,548	\$0	\$0	\$798,042	\$0	\$780,903
(b) Mutual Fund Shares (Stocks)	\$0	\$0	\$1,348,684	\$1,041,140	\$0	\$136,163	\$219,079	\$212,813	\$0	\$0	\$0
(c) Total Corporate Stocks	\$1,373,812	\$0	\$1,862,353	\$1,264,514	\$0	\$522,711	\$219,079	\$212,813	\$798,042	\$0	\$780,903
5. Other	-\$5,930	\$783,380	-\$7,889	\$0	\$0	-\$80,793	\$1,738	\$2,184	\$0	\$0	\$7,142
6. Receivable Contribution <sup>a</sup>	\$78,261	\$0	\$11,870	\$8,442	\$195,589	\$0	\$0	\$0	\$0	\$0	\$0
Market Value of Assets as of June 30, 2011 [ sum of (1) through (6)]	\$3,243,972	\$800,380	\$3,375,333	\$2,595,123	\$1,138,781	\$1,297,040	\$625,486	\$537,696	\$1,555,637	\$810,974	\$1,545,916

<sup>&</sup>lt;sup>a</sup> Receivable contributions for plan year ending