

**MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION
AND RELIEF FUNDS OF WEST VIRGINIA**
CONSOLIDATED ACTUARIAL VALUATION REPORT
FOR THE YEAR BEGINNING JULY 1, 2012



**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF
FUNDS OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2012**

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October 17, 2013

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

Subject: Consolidated Actuarial Valuation Report for the Year Beginning July 1, 2012

Dear Mr. Taylor:

Upon the request of the Municipal Pensions Oversight Board, we have performed an actuarial valuation as of July 1, 2012, 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 actuarial valuation 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, 2012, for each participating Fund and the valuations performed in nine 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(c)(1), the Optional 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.

Each valuation is based upon:

Asset Values – Reconciliation of the market value of assets during the plan year ending June 30, 2012, and the market value of assets held as of June 30, 2012, 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.

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

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

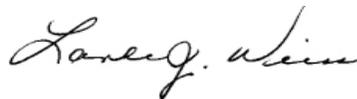
This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor. 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, FSA., EA, MAAA, FCA
Senior Consultant



Lance Weiss, EA, MAAA, FCA
Senior Consultant

SECTION I

EXECUTIVE SUMMARY

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

CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2012

Executive Summary

Upon the request of the Municipal Pensions Oversight Board ("MPOB"), we have performed an actuarial study as of July 1, 2012, 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, 2014,
- The Fund's eligibility to receive an allocation of the premium tax for fiscal year ending June 30, 2014,
- The Fund's eligibility to provide Supplemental Benefits for the plan year beginning July 1, 2014, 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, 2012, actuarial projections of the current and available funding policy options, and historical valuation results.

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 (19 years as of July 1, 2012). 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 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, 2012, is 19 years for sponsors who previously used the Standard Funding Policy and 37.5 years for sponsors who previously used

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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 (eight plans as of July 1, 2012) or former Standard plans that selected the Optional policy (seven plans as of July 1, 2012) are projected to be fully funded by the end of the 19-year projection period. This contribution policy is consistent with generally accepted actuarial standards of practice.
- As of July 1, 2012, 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, 2012, 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, 2012, 31 of the 53 plans are financed using the Alternative Funding Policy.
- At the end of 30 years, only 12 out of 31 Alternative plans are projected to have contribution rates that are less than 40% of pay, and only one alternative plan is are projected to never have a contribution rate exceeding 40% of pay. Also after 30 years, only 15 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.

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The following table shows a distribution of FY 2014 and projected FY 2034 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	
	FY 2014	FY 2034
100% of Net Normal Cost plus 0% to 2% of Unfunded Actuarial Liability	15	3
100% of Net Normal Cost plus 2% to 4% of Unfunded Actuarial Liability	8	6
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 (Sound Policy)	2	16

- Only eight of the 31 Alternative plans in Fiscal Year 2014 are expected to be contributing at a level that approximates a sound funding basis. This increases to 22 out of the 31 Alternative plans when we look at projected contributions in Fiscal Year 2034. (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 2014. 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:

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Year Municipality Contributions are lower	Number of Alternative Plans	
	If Optional Policy is selected	If Conservation Policy is selected
2014	2	7
2015 to 2019	1	1
2020 to 2029	6	10
2030 to 2039	7	8
After 2040	15	5

- 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 seven 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. In addition, 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 112% as of July 1, 2012, 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.

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- One of the key factors used to set the discount rate is the percentage of assets allocated to equities. If available, we used the target equity asset allocation contained in the Plan’s investment policy. Otherwise, we used the percentage of assets invested in equities as of the valuation date. Our preference is to use the target allocation in the investment policy.
- The discount rate was increased for six plans and decreased for three plans.
- The valuation projections do not reflect additional one-time State revenue expected to be paid during fiscal year end June 30, 2013.
- GASB No. 67 is replacing GASB No. 25 for pension plan financial reporting requirements (effective in fiscal year ending June 30, 2014) and GASB No. 68 is replacing GASB No. 27 for employer financial reporting (effective in fiscal year ending June 30, 2015). For plans that are projected to have zero assets in the future, on a closed group basis, the discount rate used for GASB Nos. 67 and 68 financial reporting purposes will be based on a blended rate of the long-term investment return rate and a 20-year tax-exempt municipal bond index rate. Under the new accounting standards, the unfunded actuarial liability will need to be recognized on the plan sponsor’s balance sheet. The new accounting standards will not impact the current contribution policies.

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

SECTION II
VALUATION RESULTS

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF FUNDS
OF WEST VIRGINIA
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Actuarial Valuation Results as of July 1, 2012

Valuation Methodology

- Individual actuarial valuations as of July 1, 2012, 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 14 shows a summary of the key valuation results as of July 1, 2012, 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 (40-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

- Eight plans, (or about 15.1% of all 53 participating Funds), covering only 2.5% of plan participants, and 1.8% of total liabilities are financed using the Standard Funding Policy. Most Funds using this funding policy are Class III municipalities (seven in Class III and one in Class II).
- For Funds using the Standard Funding Policy, the funded ratios as of July 1, 2012, range from 24% to 70% and the 2012 contribution rates range from 24% to 55% of payroll.
- The average employer contribution rate is 42% of payroll.
- The average funded ratio for all Standard plans is 47%. The unfunded actuarial accrued liability for Funds using the Standard policy is approximately \$11.8 million or 1.2% of the total unfunded liabilities for all Funds.

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- 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 33% of payroll.
- The average funded ratio is only 23%. The unfunded actuarial accrued liability for Funds using the Alternative policy is approximately \$546 million or 54.7% of the total unfunded liabilities for all Funds.
- After 30 years only 15 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 14.9% of plan participants, are now financed using the Optional Funding Policy.
- The average employer contribution rate is 95% of payroll.
- The average funded ratio is only 20%. The unfunded actuarial accrued liability for these Funds is approximately \$160.5 million or 16.1% 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

- Seven plans, (or about 13.2% of all 53 participating Funds), covering only 2.1% of plan participants, and 1.3% 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 36% of payroll.

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- The average funded ratio for these seven plans is 63% and the unfunded actuarial accrued liability is approximately \$6.0 million or 0.6% 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 20.1% of plan participants, are financed using the Conservation Funding Policy. These two plans are both Class I municipalities.
- The average employer contribution rate is 50% of payroll.
- The average funded ratio is only 7.1%. The unfunded actuarial accrued liability for Funds using the Conservation policy is approximately \$274.3 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:

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Funded Ratio As of July 1	Standard Policy Plans		Alternative Policy Plans		Optional Policy Plans From Standard		Optional Policy Plans From Alternative		Conservation Policy Plans	
	Number	Average	Number	Average	Number	Average	Number	Average	Number	Average
2012	8	47%	31	23%	7	63%	5	20%	2	7%
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, 2012 valuation, seven Standard plans selected the Optional Funding Policy, five Alternative plans selected the Optional Funding Policy, and two Alternative plans selected the Conservation Funding Policy.

Contribution Rate ² As of July 1	Standard Policy Plans		Alternative Policy Plans		Optional Policy Plans From Standard		Optional Policy Plans From Alternative		Conservation Policy Plans	
	Number	Average ¹	Number	Average	Number	Average	Number	Average	Number	Average
2012	7	42%	31	33%	7	36%	5	95%	2	50%
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

¹ One outlying Standard Policy Fund, excluded from this table, is closed to new employees, has six retired members, no active members, and no payroll.

² As a percentage of payroll.

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- 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 19-year (from July 1, 2012) 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 19 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, seven Standard plans recognized this relationship and converted from the Standard Funding Policy to the Optional Funding Policy for the July 1, 2012 actuarial valuation.
- Sponsors using the Alternative Funding Policy are 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 19 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:

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Valuation As of July 1	Percentage of Plans that are Projected to be Fully Funded by 2031				
	Standard	Alternative	Optional from Standard	Optional from Alternative ^b	Conservation
2012	100%	10%	100%	0%	0%
2011	100%	10%	100%	20%	0%
2010	100%	9% ^a	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

^a The significant decrease from 32% in 2009 to 9% in 2010 for Alternative Plans is primarily the result of the changes in assumptions.

^b Former Alternative plans that selected the Optional policy are projected to be fully funded by 2050.

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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 total benefits paid have increased by 4% to 9% per year.

(\$ in Millions)	2012	2011	2010	2009	2007	2006	2005	2004	2003	2002
Participating Plans	53	53	53	51	47	49	49	49	51	49
Payroll	\$80.1	\$78.1	\$77.1	\$75.2	\$66.5	\$67.4	\$63.7	\$60.8	\$59.7	\$57.6
Benefits Paid	\$56.1	\$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 eleven-year period. The change in assumptions in 2010 increased the actuarial liability and normal cost.

(\$ in Millions)	2012	2011	2010	2009	2007	2006	2005	2004	2003	2002
Assets	\$245.6	\$236.1	\$205.5	\$186.9	\$191.5	\$183.4	\$173.6	\$165.0	\$153.8	\$148.3
Liability	\$1,243.9	\$1,188.8	\$1,181.7	\$941.6	\$827.8	\$843.0	\$785.4	\$755.0	\$700.1	\$659.6
Funded Ratio	20%	20%	17%	20%	23%	22%	22%	22%	22%	22%
Net Employer Normal Cost % of Pay	30%	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)	2012	2011	2010	2009	2007	2006	2005	2004	2003	2002
Net Employer Contributions	\$36.6	\$36.1	\$30.6	\$29.2	\$24.1	\$23.2	\$22.8	\$21.9	\$20.4	\$18.2
(% of Pay)	46%	46%	40%	39%	36%	34%	36%	36%	34%	32%
State Premium Tax Allocation	\$17.0	\$16.2	\$16.9	\$16.9	\$16.3	\$16.4	\$15.5	\$13.2	\$10.6	\$9.9
(% of Pay)	21%	21%	22%	23%	25%	24%	24%	22%	18%	17%

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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, 2012, one Standard plan and no Alternative plans switched to the Optional policy. Also, more than half of the Optional-from-Standard plans and 29% of the Standard plans have increased their assumed interest rate. This is the primary reason why the contribution rate for Optional-from-Standard plans decreased from 47% for 2011 to 36% for 2012 and why the contribution rate for Standard plans decreased from 51% for 2011 to 42% for 2012.

(\$ in Millions)	2012	2011	2010	2009	2007	2006	2005	2004	2003	2002
Funded Ratio										
- Standard Plans	47%	50%	44%	52%	59%	55%	55%	56%	56%	60%
- Alternative Plans	23%	24%	22%	19%	22%	21%	21%	21%	21%	21%
- Optional from Standard	63%	62%	57%	NA						
- Optional from Alternative	20%	18%	12%	NA						
- Conservation Plans	7%	7%	7%	NA						
Contributions Rates										
% of Pay										
- Standard Plans	42%	51%	33%	34%	30%	30%	31%	33%	33%	29%
- Alternative Plans	33%	32%	30%	39%	37%	35%	36%	36%	34%	32%
- Optional from Standard	36%	47%	45%	NA						
- Optional from Alternative	95%	97%	103%	NA						
- Conservation Plans	50%	49%	31%	NA						

The details of the historical actuarial valuations are shown on pages 14 to 23. A gain/loss analysis, reconciling the unfunded liability from June 30, 2011 to June 30, 2012, is shown on pages 24 and 25. During the plan year ending June 30, 2012, the Funds in the aggregate experienced an investment return on the market value of assets of approximately 1.7%.

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	Standard Policy	Alternative Policy	Optional Policy From Standard	Optional Policy From Alternative	Conservation Policy	All Plans ^a
Number of Plans	8	31	7	5	2	53
Plan Membership						
(a) Actives	54	1,047	47	214	328	1,690
(b) Annuitants	41	1,235	30	349	435	2,090
(c) Inactives	2	14	2	5	2	25
(d) Total	97	2,296	79	568	765	3,805
Payroll	\$2,257,353	\$47,188,291	\$1,822,891	\$10,829,347	\$18,016,906	\$80,114,788
Expected Benefit Payments	\$962,258	\$31,799,022	\$652,237	\$9,841,302	\$12,811,676	\$56,066,495
Actuarial Accrued Liabilities						
(a) Actives	\$9,425,810	\$244,054,976	\$6,354,597	\$62,959,294	\$102,052,640	\$424,847,317
(b) Annuitants	\$11,910,495	\$459,265,394	\$9,554,856	\$134,315,553	\$192,252,521	\$807,298,819
(c) Inactives	\$754,460	\$6,855,334	\$542,148	\$2,488,472	\$1,099,482	\$11,739,896
(d) Total Liabilities	\$22,090,765	\$710,175,704	\$16,451,601	\$199,763,319	\$295,404,643	\$1,243,886,032
Market Value of Assets	\$10,286,118	\$164,540,590	\$10,407,930	\$39,234,716	\$21,095,390	\$245,564,744
Unfunded Liability	\$11,804,647	\$545,635,114	\$6,043,671	\$160,528,603	\$274,309,253	\$998,321,288
Funded Ratio	47%	23%	63%	20%	7%	20%
Net Employer Normal Cost	\$543,077	\$14,189,885	\$439,871	\$3,111,036	\$5,795,971	\$24,079,840
(% of Payroll)	24%	30%	24%	29%	32%	30%
Employer Contributions ^b	\$948,695	\$15,748,962	\$649,913	\$10,268,139	\$9,006,949	\$36,622,658
(% of Payroll)	42%	33%	36%	95%	50%	46%
Additional Solvency Cont.						
- To Receive State Allocation	NA	\$26,100	NA	NA	NA	\$26,100
- To Provide COLA Benefits	NA	\$342,400	NA	NA	NA	\$342,400
Employee Contributions	\$162,967	\$3,561,950	\$137,055	\$760,692	\$1,441,353	\$6,064,017
(% of Payroll)	7%	8%	8%	7%	8%	8%
State Premium Tax Allocation	\$500,600	\$10,364,023	\$318,378	\$2,476,210	\$3,387,287	\$17,046,498
(% of Payroll)	22%	22%	17%	23%	19%	21%

^a All Funds participating in the Study.

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

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Summary of Key Valuation Results as of July 1, 2011

	Standard Policy	Alternative Policy	Optional Policy From Standard	Optional Policy From Alternative	Conservation Policy	All Plans ^a
Number of Plans	9	31	6	5	2	53
Plan Membership						
(a) Actives	60	1,043	41	228	342	1,714
(b) Annuitants	45	1,222	26	345	436	2,074
(c) Inactives	2	17	2	2	2	25
(d) Total	107	2,282	69	575	780	3,813
Payroll	\$2,372,552	\$45,188,591	\$1,454,996	\$11,013,903	\$18,088,004	\$78,118,046
Expected Benefit Payments	\$1,008,409	\$30,440,731	\$535,144	\$9,510,954	\$12,360,288	\$53,855,526
Actuarial Accrued Liabilities						
(a) Actives	\$9,454,191	\$232,770,392	\$5,017,183	\$60,477,604	\$95,875,431	\$403,594,801
(b) Annuitants	\$13,051,284	\$437,117,870	\$8,016,378	\$131,061,049	\$185,353,388	\$774,599,969
(c) Inactives	\$680,468	\$7,550,252	\$487,265	\$840,177	\$1,046,188	\$10,604,350
(d) Total Liabilities	\$23,185,943	\$677,438,514	\$13,520,826	\$192,378,830	\$282,275,007	\$1,188,799,120
Market Value of Assets	\$11,572,237	\$161,461,617	\$8,437,958	\$34,697,287	\$19,913,060	\$236,082,159
Unfunded Liability	\$11,613,706	\$515,976,897	\$5,082,868	\$157,681,543	\$262,361,947	\$952,716,961
Funded Ratio	50%	24%	62%	18%	7%	20%
Net Employer Normal Cost (% of Payroll)	\$582,261 25%	\$13,940,854 31%	\$348,714 24%	\$3,351,670 30%	\$5,931,071 33%	\$24,154,570 31%
Employer Contributions ^b (% of Payroll)	\$1,210,963 51%	\$14,653,455 32%	\$688,184 47%	\$10,697,857 97%	\$8,826,759 49%	\$36,077,218 46%
Additional Solvency Cont.						
- To Receive State Allocation	NA	\$49,700	NA	NA	NA	\$49,700
- To Provide COLA Benefits	NA	\$412,800	NA	NA	NA	\$412,800
Employee Contributions (% of Payroll)	\$168,613 7%	\$3,340,093 7%	\$105,842 7%	\$771,798 7%	\$1,447,041 8%	\$5,833,387 7%
State Premium Tax Allocation (% of Payroll)	\$465,857 20%	\$9,589,663 21%	\$302,959 21%	\$2,485,488 23%	\$3,325,087 18%	\$16,169,054 21%

^a All Funds participating in the Study.

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

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Summary of Key Valuation Results as of July 1, 2010

	Standard Policy	Alternative Policy	Optional Policy From Standard	Optional Policy From Alternative	Conservation Policy	All Plans ^a
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	\$756,065,915
(c) Inactives	\$1,006,182	\$8,196,343	\$0	\$470,098	\$1,744,672	\$11,417,295
(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 ^b	\$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	\$16,940,910
(% of Payroll)	20%	22%	38%	26%	19%	22%

^a All Funds participating in the Study.

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

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Summary of Key Valuation Results as of July 1, 2009

	Standard Policy	Alternative Policy	All Plans^a
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 ^b	\$1,224,637	\$27,967,262	\$29,191,899
(% of Payroll)	34%	39%	39%
Additional Solvency Contributions	\$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%

^a All Funds participating in the Study.

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

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Summary of Key Valuation Results as of July 1, 2007

	Standard Policy	Alternative Policy	All Plans ^a
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 Contributions	\$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%

^a All Funds participating in the Study.

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

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Summary of Key Valuation Results as of July 1, 2006

	Standard Policy	Alternative Policy	All Plans ^a
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 ^b	\$959,122	\$22,286,154	\$23,245,276
(% of Payroll)	30%	35%	34%
Additional Solvency Contributions	\$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%

^a All Funds participating in the Study.

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

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Summary of Key Valuation Results as of July 1, 2005

	Standard Policy	Alternative Policy	All Plans ^a
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 ^b	\$966,163	\$21,855,312	\$22,821,475
(% of Payroll)	31%	36%	36%
Additional Solvency Contributions	\$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%

^a All Funds participating in the Study.

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

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Summary of Key Valuation Results as of July 1, 2004

	Standard Policy	Alternative Policy	All Plans ^a
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 ^b	\$863,889	\$21,083,233	\$21,947,122
(% of Payroll)	33%	36%	36%
Additional Solvency Contributions	\$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%

^a All Funds participating in the Study.

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

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Summary of Key Valuation Results as of July 1, 2003

	Standard Policy	Alternative Policy	All Plans ^a
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 ^b	\$869,831	\$19,551,652	\$20,421,483
(% of Payroll)	33%	34%	34%
Additional Solvency Contributions	\$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%

^a All Funds participating in the Study.

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

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Summary of Key Valuation Results as of July 1, 2002

	Standard Policy	Alternative Policy	All Plans ^a
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 ^b (% of Payroll)	\$656,205 29%	\$17,520,877 32%	\$18,177,082 32%
Additional Solvency Contributions (% of Payroll)	\$0 0%	\$476,400 1%	\$476,400 1%
Employee Contributions (% of Payroll)	\$160,922 7%	\$3,873,158 7%	\$4,034,080 7%
STO Contributions (% of Payroll)	\$490,542 21%	\$9,443,944 17%	\$9,934,487 17%

^a All Funds participating in the Study.

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

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF FUNDS
OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2012**

(Gain) / Loss Analysis

The Funds experienced an aggregate actuarial loss of \$25,533,017 during the plan year ending June 30, 2012. The key factors contributing to the experience gain included:

- **Asset Performance:** The Funds, in the aggregate, experienced an investment return of 1.7% on the market value of assets during the plan year ending June 30, 2012, which compares to the average expected annual return of 5.5%. The difference in actual versus expected return produced an asset loss of \$8,999,300.
- **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, 2011 and June 30, 2012, the Funds experienced an aggregate net liability loss of \$16,533,717. The net liability loss of \$16,533,717 (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, 2011 to June 30, 2012 that were greater than the assumed rate of 5%; and
 - Cost-of-living adjustments during the plan year July 1, 2011 to June 30, 2012 that were more than the assumed rate of 3%.

**MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS
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(Gain) / Loss Analysis

Experience (gain) loss for plan year ending June 30, 2012						
	Standard Policy	Alternative Policy	Optional Policy From Standard	Optional Policy From Alternative	Conservation Policy	All Plans
Number of Plans:	8	31	7	5	2	53
1. (a) Liability as of 7/1/2011	\$21,068,553	\$677,438,514	\$15,638,216	\$192,378,830	\$282,275,007	\$1,188,799,120
(b) Normal Cost due 7/1/2011	633,938	17,124,151	539,882	4,048,982	7,346,089	29,693,042
(c) Interest on (a) and (b) to 6/30/2012 ^a	1,322,638	36,309,191	997,933	10,386,107	14,481,055	63,496,924
(d) Benefit Payments with interest to 6/30/2012 ^a	925,917	31,196,126	678,690	9,803,183	12,651,523	55,255,439
(e) Effect of Assumption Changes on Unfunded AAL at 6/30/2012	(124,260)	1,677,250	(89,210)	(845,112)	0	618,668
(f) Expected Liability at 7/1/2012 [(a) + (b) + (c) - (d) + (e)]	21,974,952	701,352,980	16,408,131	196,165,624	291,450,628	1,227,352,315
(g) Actual Liability at 7/1/2012	\$22,090,765	\$710,175,704	\$16,451,601	\$199,763,319	\$295,404,643	\$1,243,886,032
(h) Liability (Gain)/Loss [(g) - (f)]	\$115,813	\$8,822,724	\$43,470	\$3,597,695	\$3,954,015	\$16,533,717
2. (a) Market Value of Assets as of 7/1/2011	\$9,901,444	\$161,795,744	\$10,019,106	\$34,697,287	\$19,913,060	\$236,326,641
(b) Adjustment to Market Value of Assets at Beginning of Year ^b	(115,156)	334,127	25,511	0	0	244,482
(c) Interest on (a) and (b) to 6/30/2012 ^a	614,339	8,531,526	628,146	1,495,820	995,653	12,265,484
(d) Contributions with interest to 6/30/2012 ^a	1,132,133	30,516,701	1,026,263	14,427,319	13,880,460	60,982,876
(e) Benefit Payments with interest to 6/30/2012 ^a	925,917	31,196,126	678,690	9,803,183	12,651,523	55,255,439
(f) Expected Assets at 6/30/2012 [(a) + (b) + (c) + (d) - (e)]	10,606,843	169,981,972	11,020,336	40,817,243	22,137,650	254,564,044
(g) Actual Assets at 7/1/2012	\$10,286,118	\$164,540,590	\$10,407,930	\$39,234,716	\$21,095,390	\$245,564,744
(h) Asset (Gain)/Loss [(f) - (g)]	\$320,725	\$5,441,382	\$612,406	\$1,582,527	\$1,042,260	\$8,999,300
3. Total (Gain)/Loss [1(h) + 2(h)]	\$436,538	\$14,264,106	\$655,876	\$5,180,222	\$4,996,275	\$25,533,017

^a Interest based on assumptions used for each specific plan as of June 30, 2011.

^b Seven plans restated their Market Value of Assets as of June 30, 2011.

**MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS
OF WEST VIRGINIA
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Valuation Data as of July 1, 2012

Summary of Participant Activity

	Actives	Retirees	Disabled	Deferred Vested	Spouses and Beneficiaries	Totals
Total Participants July 1, 2011:	1,714	1,278	290	25	506	3,813
New Actives:	73					73
Returned to Actives Status:						0
Data Corrections/Other Changes:					2	2
Vested Terminations:	(5)			5		0
Non-Vested Terminations:	(46)			(2)		(48)
Disabled:	(4)	(2)	6			0
Retirements:	(41)	46	(2)	(3)		0
Deaths with Beneficiary:	(1)	(15)	(6)		22	0
Deaths w/o Beneficiary:		(9)	(2)		(18)	(29)
Expired Annuity or Stop Payment:					(6)	(6)
Net Changes:	(24)	20	(4)	0	0	(8)
Total Participants June 30, 2012:	1,690	1,298	286	25	506	3,805

**MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS
OF WEST VIRGINIA
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Distribution of Active Employees by Age and Length of Service

Attained Age	Years of Service to Valuation Date									Totals	Valuation Payroll
	Less than 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35		
Under 20	1									1	\$ 32,430
20-24	17	59	1							77	2,929,353
25-29	21	144	72							237	9,722,611
30-34	11	96	153	45						305	13,537,514
35-39	3	53	85	142	47					330	15,520,581
40-44	2	7	58	121	153	36				377	18,881,727
45-49		1	5	31	82	102	19	1		241	12,830,018
50-54		2	2	7	25	33	20	6		95	5,143,777
55-59					4	12		5	3	24	1,345,872
60-64									3	3	170,905
65-69											0
Over 70											0
Totals	55	362	376	346	311	183	39	12	6	1,690	\$ 80,114,788
Averages _____											
Age: 38.3 years											
Service: 11.1 years											
Annual Pay: \$47,405											

**MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF FUNDS
OF WEST VIRGINIA
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Participants Summary

Active Participants	July 1, 2011	July 1, 2012
Number of Actives	1,714	1,690
Total Annual Pay	\$78,118,046	\$80,114,788
Average Age	37.9	38.3
Average Service	10.8	11.1

Inactive Participants	July 1, 2011		July 1, 2012	
Type	No.	Annual Benefit	No.	Annual Benefit
Retirees	1,278	\$40,198,397	1,298	\$41,998,514
Surviving Spouses	506	\$6,004,126	506	\$6,258,819
Disabled Members	290	\$5,975,064	286	\$6,032,005
Deferred Vested Members	25	\$622,642	25	\$651,525

SECTION III

ACTUARIAL PROJECTIONS – CURRENT FUNDING POLICY

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF FUNDS
OF WEST VIRGINIA
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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, 2012. For purposes of comparing the relationship of the projected distributions, we have selected five representative years in the 40-year projection period: 2012, 2022, 2032, 2042, and 2052.

Funded Ratio Comparison

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

Projection Period	Target Funded Ratio	2012 Valuation Number of Plans				
		Standard Plans	Alternative Plans	Optional From Standard	Optional From Alternative	Conservation Plans
2012	Greater Than: 20%	8	19	7	3	0
2022	40%	8	8	7	3	0
2032	60%	8	8	7	2	0
2042	80%	8	15	7	2	0
2052	100%	8	21	7	5	2
Of Total Number of Plans:		8	31	7	5	2

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

Based on the 2012 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, 2012, 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.

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF FUNDS
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Alternative Plans

Based on the 2012 valuation, 61% of the Alternative plans had a funded ratio of at least 20% as of June 30, 2012.

The projected funded ratios for Alternative plans are expected to increase at a much slower rate than Standard plans. By 2032, 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 2042, 15 of the 31 remaining Alternative policy plans, or 48%, 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.

Projection Period	Target Contribution Rate	2012 Valuation Number of Plans				
		Standard Plans	Alternative Plans	Optional From Standard	Optional From Alternative	Conservation Plans
2012	Less Than: 40%	6	21	4	1	0
2022	40%	4	14	5	2	0
2032	40%	8	7	7	3	0
2042	40%	8	12	7	5	0
2052	40%	8	21	7	5	2
Of Total Number of Plans:		8	31	7	5	2

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF FUNDS
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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 2012 contribution rate less than 40% of payroll is 67%. 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 2012 valuation, 68% of the Alternative plans had a contribution rate for 2012 of less than 40%.

In the short-term, the percentage of Alternative plans with a 2012 contribution rate less than 40% is comparable to the percentage for Standard plans. However, by 2032, only 23% of Alternative plans compared to 100% 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 close to the end of the 40-year projection period.

Key Observations

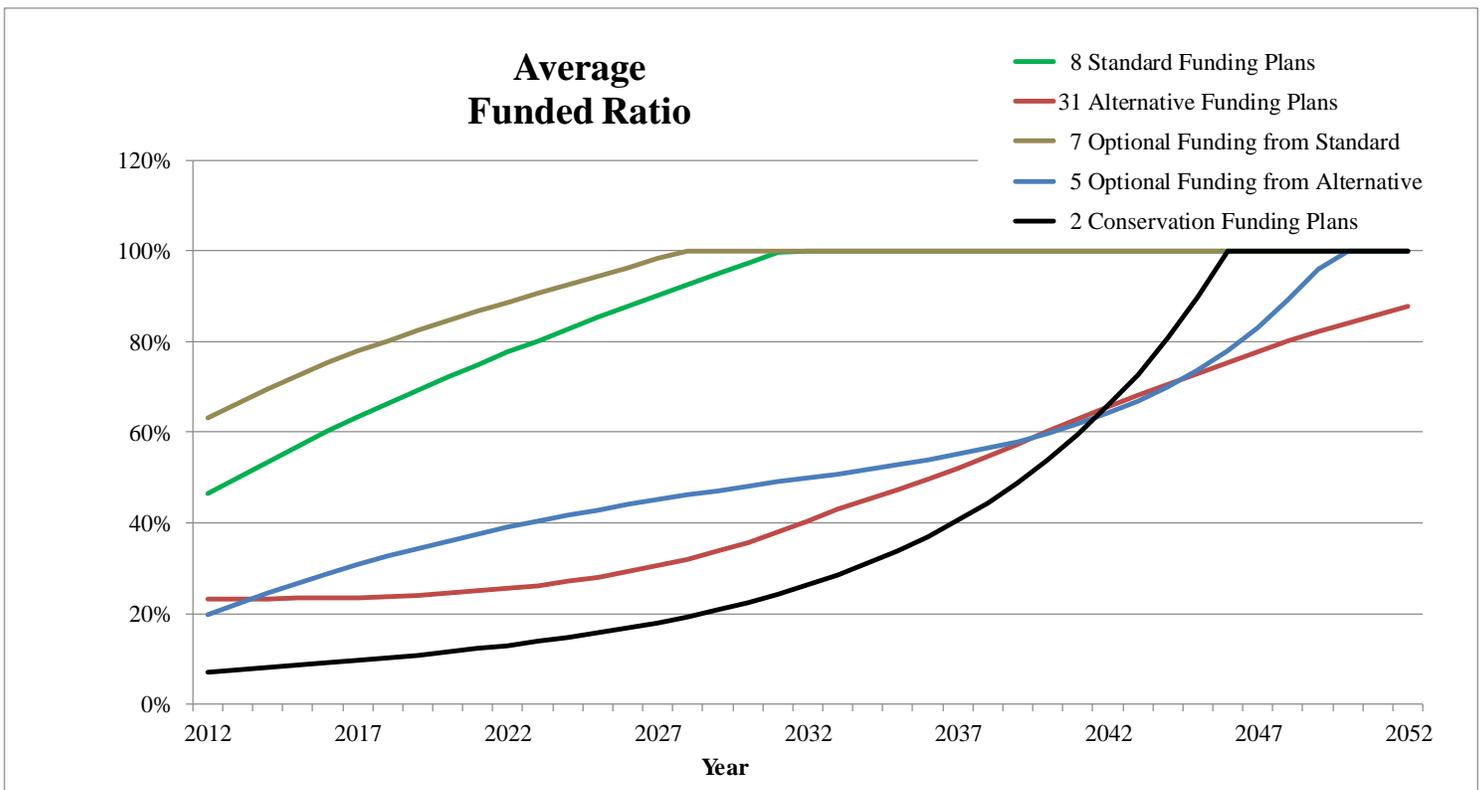
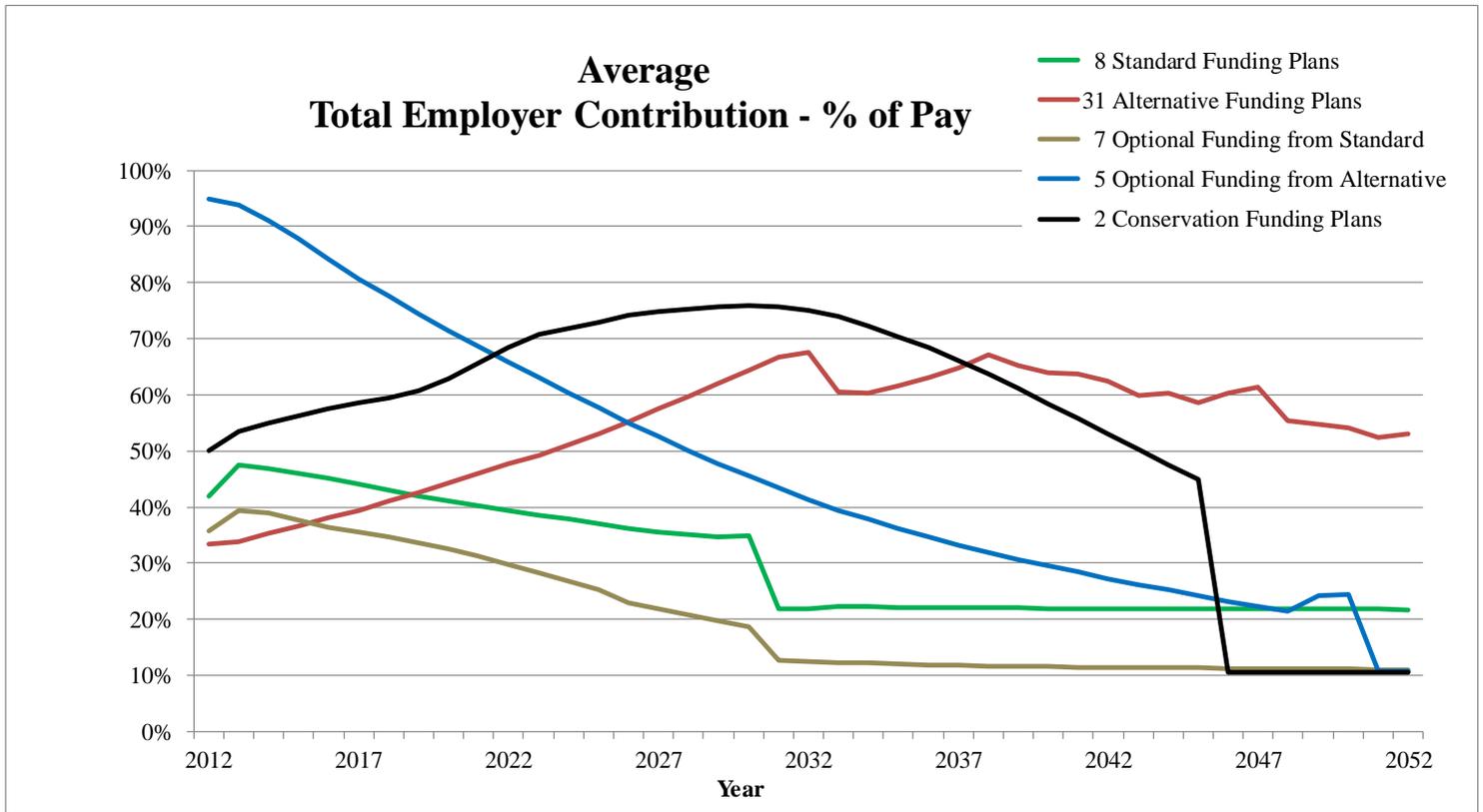
The projections indicate that Funds using the Standard policy are expected to have stable contribution rates that will produce increasing funded ratios, which ultimately approach 100% by 2031. Funds using the Alternative policy will generally have lower initial contribution rates that increase exponentially 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 slow growth in the funded ratio, and contributions are effectively deferred.

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

CONSOLIDATED ACTUARIAL STUDY AS OF July 1, 2012

The following graphs illustrate the differences in average employer contribution, as a percentage of pay, and the average funded ratio between all the funding policies over the next 40 years.



SECTION IV

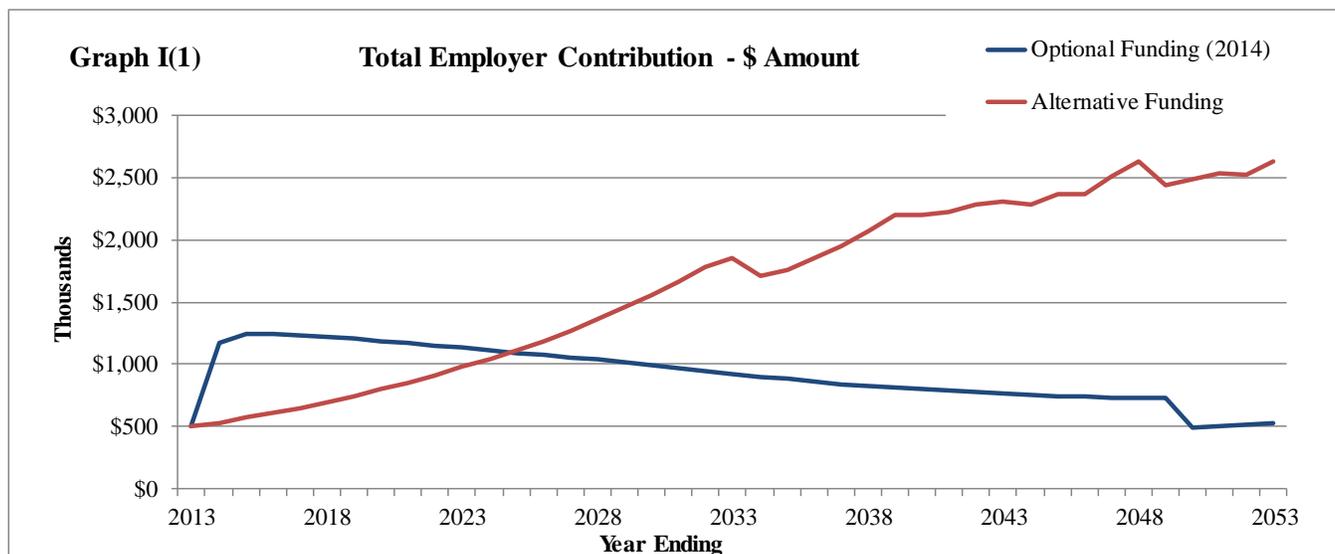
ACTUARIAL PROJECTIONS – FUNDING POLICY CHOICES

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF FUNDS
OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2012**

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:

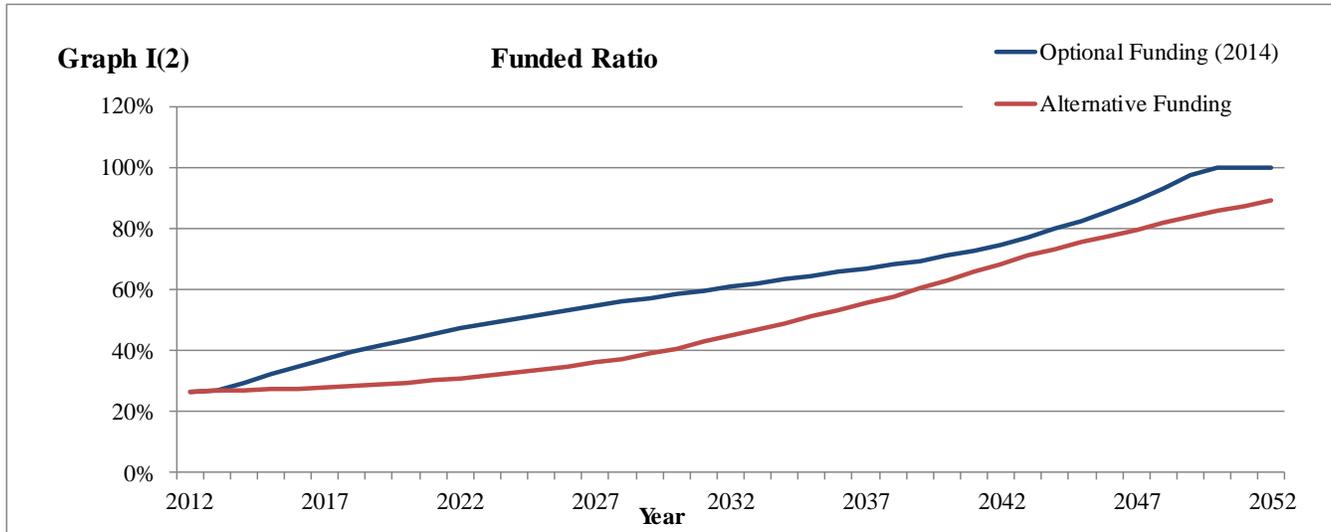
- Sponsors financing benefits under the Standard policy are expected to receive immediate contribution relief by switching to the Optional policy with no significant impact to the projected funded ratio. This occurs because employer contributions for new entrants under the Municipal Police Officers and 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
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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.

SECTION V
CONCLUSIONS AND RECOMMENDATIONS

**MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF
FUNDS OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2012**

Conclusions and Recommendations

Based on the results of July 1, 2012 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.

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF
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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 retirements 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 112% as of July 1, 2012, 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.
- Because the discount rate depends on the equity allocation, we recommend that the sponsor provide a copy of the fund’s investment policy. If the investment policy is not currently available, we recommend that the sponsor provide documentation on the fund’s asset allocation.
- The new accounting standards, GASB No. 67 (effective in FYE 2014) and GASB No. 68 (effective in FYE 2015), may require a decrease in the discount rate used to develop the unfunded actuarial liabilities and annual expense for financial reporting purposes. We recommend an evaluation of the potential accounting impact in the next valuation cycle as of July 1, 2013.

SECTION VI

ACTUARIAL ASSUMPTIONS AND METHODS

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF
FUNDS OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2012**

Actuarial Assumptions and Methods

Discount Rate

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

Funded Ratio as of Valuation Date ¹	Liquidity Ratio ²	Equity Exposure ³	Projected Funded Ratio after 15 Years ¹	Proposed Discount Rate	Number of Plans Satisfying Conditions
60% or more	10	50% or more	70% or more	7.0%	4
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%	5
15% or more	4	n/a	40% or more	5.5%	13
Less than 15%	n/a	n/a	Less than 40%	5.0%	24

¹ 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).

² Liquidity ratio equals assets as of the valuation date divided by expected benefits for the year.

³ Based on investment policy.

Discount Rate	5.0% – 7.0%
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**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF
FUNDS OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2012**

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 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, until they are 100% funded, even if the premium tax allocation exceeds the amortization of the unfunded liability. Consequently, the projections do not include any reallocation of Expired Premium Tax Allocation for plan years beginning on and after July 1, 2014.
- (4) The total available premium tax allocation, net of expenses, as of September 1, 2013, includes a Base Allocation of \$8,709,689, an Excess Allocation of \$7,167,752, and an Expired Premium Tax Allocation of \$136,417.
- (5) Based on the average number of plan participants for the 12 month period ending June 30, 2013, all Pension and Relief Funds reported a total of 1,710 eligible active members, and 2,113 eligible retired members.
- (6) The total premium tax allocation was assumed to increase by 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
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Actuarial Assumptions and Methods (CONT’D)

General Inflation	3.00%										
Expected Salary Increase	<p>General Inflation: 3.00% <i>plus</i></p> <p>Wage Inflation: 1.00% <i>plus</i></p> <p>Service Based Increase:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>Years of Service</u></th> <th style="text-align: center;"><u>Increase</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">9.0%</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">4.5%</td> </tr> <tr> <td style="text-align: center;">3 - 4</td> <td style="text-align: center;">2.0%</td> </tr> <tr> <td style="text-align: center;">after 4 years of service</td> <td style="text-align: center;">1.0%</td> </tr> </tbody> </table>	<u>Years of Service</u>	<u>Increase</u>	1	9.0%	2	4.5%	3 - 4	2.0%	after 4 years of service	1.0%
<u>Years of Service</u>	<u>Increase</u>										
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	2% for years 1 & 2 3% on and after year 3										
Cost Method	Entry–Age–Normal Level-Percentage-of-Pay										
<p>Amortization Policies:</p> <p>Alternative Plans and former Alternative Plans that selected the Conservation Policy</p> <p>Standard Plans and former Standard Plans that selected the Optional Policy</p> <p>Former Alternative Plans that selected the Optional Policy</p>	<p>For GASB 25/27 Accounting: 30–Year Closed Level-Percentage-of-Pay Amortization (from July 1, 2010).</p> <p>For funding and GASB 25/27 Accounting: 40 – Year Closed Level-Dollar Amortization (from July 1, 1991).</p> <p>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).</p>										
Asset Method	Market Value										

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF FUNDS
OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS OF JULY 1, 2012**

Actuarial Assumptions and Methods (CONT’D)

Turnover	Sample Rates –	
	<u>Age</u>	<u>Rates</u>
	25	10%
	35	4%
	45	2%
Retirement	Sample Rates –	
	<u>Age</u>	<u>Rates</u>
	50-51	45%
	52-54	30%
	55	45%
Mortality	Active: 85 percent of 1994 Group Annuity Mortality	
	Post-Retirement: 1994 Group Annuity Mortality	
	Disabled: 1994 Group Annuity Mortality set forward 4 years	
	Sample Rates –	
	<u>Age</u>	<u>Rates^a</u>
Disability	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	

SECTION VII

SUMMARY OF PRINCIPAL FUNDING POLICIES AND PLAN PROVISIONS

**MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF
FUNDS OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS JULY 1, 2012**

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, 2012, there are 19 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.

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF
FUNDS OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS JULY 1, 2012**

- 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, 2012, equals 19 years for Standard Plans and 37.5 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:

**MUNICIPAL POLICEMEN’S AND FIREMEN’S PENSION AND RELIEF
FUNDS OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS JULY 1, 2012**

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.

Summary of Principal Plan Provisions

Employee Eligibility — All compensated employees of the Police and Fire Departments hired before July 1, 2012 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.

**MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF
FUNDS OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS JULY 1, 2012**

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.

**MUNICIPAL POLICEMEN'S AND FIREMEN'S PENSION AND RELIEF
FUNDS OF WEST VIRGINIA
CONSOLIDATED ACTUARIAL STUDY AS JULY 1, 2012**

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.

SECTION VIII

APPENDICES – PROJECTION DATA

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class I

Summary of Valuation Results

<u>Municipality</u>	<u>Charleston</u>		<u>Huntington</u>		<u>Morgantown</u>		<u>Parkersburg</u>		<u>Wheeling</u>	
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
Plan Membership										
-Actives	156	172	91	92	60	47	63	56	88	92
-Annuitants	217	218	125	183	59	52	70	102	112	122
-Inactives	0	2	0	3	1	0	1	1	1	1
Total	373	392	216	278	120	99	134	159	201	215
Payroll	\$9,149,170	\$8,867,736	\$5,273,972	\$4,246,216	\$3,281,961	\$2,447,766	\$2,784,855	\$2,499,054	\$3,807,761	\$4,015,107
Benefit Payments	\$6,353,940	\$6,457,736	\$3,739,108	\$5,158,561	\$1,906,010	\$1,444,179	\$1,889,136	\$2,547,180	\$2,648,873	\$2,866,619
Actuarial Accrued Liabilities										
-Actives	\$48,787,125	\$53,265,515	\$32,698,634	\$25,566,271	\$15,134,310	\$14,732,321	\$15,229,184	\$14,243,810	\$16,798,565	\$24,735,398
-Annuitants	\$95,552,341	\$96,700,180	\$49,608,713	\$72,146,127	\$29,666,528	\$20,940,517	\$29,246,263	\$38,256,930	\$34,436,012	\$36,779,631
-Inactives	\$0	\$1,099,482	\$0	\$1,838,286	\$561,105	\$0	\$506,665	\$532,742	\$348,978	\$311,456
Total	\$144,339,466	\$151,065,177	\$82,307,347	\$99,550,684	\$45,361,943	\$35,672,838	\$44,982,112	\$53,033,482	\$51,583,555	\$61,826,485
Market Value of Assets	\$11,781,046	\$9,314,344	\$19,238,866	\$10,946,214	\$12,832,944	\$10,141,193	\$9,073,126	\$9,638,823	\$14,310,524	\$13,168,535
Unfunded Actuarial Accrued Liability	\$132,558,420	\$141,750,833	\$63,068,481	\$88,604,470	\$32,528,999	\$25,531,645	\$35,908,986	\$43,394,659	\$37,273,031	\$48,657,950
Funded Ratio	8%	6%	23%	11%	28%	28%	20%	18%	28%	21%
Net Employer Normal Cost	\$2,894,933	\$2,901,038	\$1,413,530	\$1,386,863	\$1,021,110	\$806,544	\$908,704	\$855,223	\$958,871	\$1,105,435
Employer Contribution ^a	\$4,384,448	\$4,622,501	\$4,252,960	\$5,423,744	\$629,554	\$511,083	\$888,678	\$1,959,676	\$1,699,998	\$1,655,362
(% of Payroll)	48%	52%	81%	128%	19%	21%	32%	78%	45%	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	\$1,654,567	\$1,732,720	\$1,026,327	\$1,108,964	\$577,834	\$460,168	\$618,740	\$622,008	\$857,488	\$936,589
Employee Contribution	\$731,934	\$709,419	\$369,178	\$297,235	\$236,097	\$178,628	\$199,340	\$180,812	\$284,781	\$284,462
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

^a Includes additional solvency contribution.^b Additional contributions needed in 2012
to satisfy the 15-year solvency test.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class II

Summary of Valuation Results

<u>Municipality</u>	<u>Beckley</u>		<u>Bluefield</u>		<u>Clarksburg</u>		<u>Fairmont</u>		<u>Martinsburg</u>	
	Police	Fire								
Plan Membership										
-Actives	42	40	21	18	46	41	33	42	47	35
-Annuitants	52	53	26	35	44	60	44	62	36	33
-Inactives	0	0	0	3	3	0	0	0	1	0
Total	94	93	47	56	93	101	77	104	84	68
Payroll	\$1,865,580	\$1,933,420	\$811,266	\$719,372	\$2,017,329	\$1,712,139	\$1,469,669	\$1,781,502	\$2,653,005	\$1,844,289
Benefit Payments	\$1,472,738	\$1,746,238	\$561,741	\$642,410	\$1,011,666	\$1,310,895	\$1,060,416	\$1,633,902	\$971,077	\$1,127,304
Actuarial Accrued Liabilities										
-Actives	\$6,675,939	\$12,480,978	\$4,098,671	\$3,823,887	\$9,302,642	\$10,173,481	\$8,008,902	\$9,761,790	\$12,128,032	\$8,556,238
-Annuitants	\$20,314,325	\$24,161,675	\$7,950,605	\$10,327,543	\$14,236,727	\$18,915,519	\$16,316,673	\$23,971,033	\$14,213,690	\$16,654,065
-Inactives	\$0	\$0	\$0	\$1,390,167	\$1,427,140	\$0	\$0	\$0	\$733,649	\$0
Total	\$26,990,264	\$36,642,653	\$12,049,276	\$15,541,597	\$24,966,509	\$29,089,000	\$24,325,575	\$33,732,823	\$27,075,371	\$25,210,303
Market Value of Assets	\$16,893,829	\$15,010,624	\$3,963,892	\$3,283,518	\$3,459,949	\$3,733,393	\$3,872,522	\$1,734,688	\$6,040,104	\$1,973,857
Unfunded Actuarial Accrued Liability	\$10,096,435	\$21,632,029	\$8,085,384	\$12,258,079	\$21,506,560	\$25,355,607	\$20,453,053	\$31,998,135	\$21,035,267	\$23,236,446
Funded Ratio	63%	41%	33%	21%	14%	13%	16%	5%	22%	8%
Net Employer Normal Cost	\$368,883	\$637,541	\$219,256	\$220,165	\$646,513	\$576,614	\$453,356	\$579,346	\$813,180	\$541,330
Employer Contribution ^a	\$366,499	\$480,213	\$240,671	\$296,664	\$717,343	\$724,179	\$577,207	\$785,179	\$488,619	\$600,590
(% of Payroll)	20%	25%	30%	41%	36%	42%	39%	44%	18%	33%
Additional Solvency Contribution ^d										
- 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	\$69,200	\$0	\$17,100
State Premium Tax Allocation	\$438,924	\$401,933	\$219,124	\$209,244	\$438,863	\$438,151	\$342,568	\$432,791	\$438,716	\$330,780
Employee Contribution	\$135,926	\$139,629	\$59,422	\$53,893	\$149,588	\$123,510	\$106,176	\$152,795	\$216,321	\$149,460
Interest Rate	6.5%	5.0%	5.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Funding Policy	Alternative									

^a Includes additional solvency contribution.^b Additional contributions needed in 2012
to satisfy the 15-year solvency test.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class II

Summary of Valuation Results

Class III

<u>Municipality</u>	<u>Moundsville</u>		<u>South Charleston</u>		<u>St. Albans</u>		<u>Vienna</u>	<u>Weirton</u>		<u>Belle</u>	<u>Charles</u>
	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Town</u> <u>Police</u>
Plan Membership											
-Actives	13	5	38	38	23	21	17	37	22	2	0
-Annuitants	13	16	34	39	11	23	12	44	19	5	6
-Inactives	2	0	0	0	1	0	1	0	0	0	0
Total	28	21	72	77	35	44	30	81	41	7	6
Payroll	\$552,648	\$190,909	\$1,645,032	\$1,579,569	\$953,653	\$913,506	\$790,978	\$1,593,506	\$918,877	\$83,976	\$0
Benefit Payments	\$278,636	\$338,998	\$855,697	\$1,037,976	\$366,779	\$544,387	\$367,412	\$1,298,233	\$609,699	\$138,368	\$122,157
Actuarial Accrued Liabilities											
-Actives	\$2,109,081	\$717,886	\$7,469,006	\$9,015,533	\$4,734,767	\$5,648,596	\$3,434,307	\$8,945,182	\$4,895,367	\$159,489	\$0
-Annuitants	\$3,637,559	\$4,441,953	\$12,978,178	\$16,335,602	\$4,619,818	\$8,101,379	\$4,317,308	\$18,888,624	\$7,686,990	\$1,987,365	\$1,808,203
-Inactives	\$650,186	\$0	\$0	\$0	\$501,132	\$0	\$443,014	\$0	\$0	\$0	\$0
Total	\$6,396,826	\$5,159,839	\$20,447,184	\$25,351,135	\$9,855,717	\$13,749,975	\$8,194,629	\$27,833,806	\$12,582,357	\$2,146,854	\$1,808,203
Market Value of Assets	\$3,479,592	\$973,857	\$2,236,511	\$1,592,824	\$4,898,647	\$2,248,835	\$4,631,966	\$4,022,752	\$6,906,215	\$1,299,823	\$433,362
Unfunded Actuarial Accrued Liability	\$2,917,234	\$4,185,982	\$18,210,673	\$23,758,311	\$4,957,070	\$11,501,140	\$3,562,663	\$23,811,054	\$5,676,142	\$847,031	\$1,374,841
Funded Ratio	54%	19%	11%	6%	50%	16%	57%	14%	55%	61%	24%
Net Employer Normal Cost	\$127,618	\$76,644	\$546,375	\$551,770	\$183,251	\$277,594	\$162,129	\$512,269	\$259,736	\$25,936	\$1,210
Employer Contribution ^a	\$235,250	\$240,707	\$292,679	\$526,110	\$216,175	\$183,517	\$273,584	\$481,016	\$201,849	\$60,427	\$110,655
(% of Payroll)	43%	126%	18%	33%	23%	20%	35%	30%	22%	72%	91%
Additional Solvency Contribution ^b											
- To Receive State Tax Premium Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,100	\$0	\$0	\$0
- To Provide Supplemental COLA Benefits	\$0	\$0	\$83,400	\$22,000	\$0	\$13,700	\$0	\$137,000	\$0	\$0	\$0
State Premium Tax Allocation	\$146,808	\$74,262	\$350,364	\$376,239	\$180,588	\$191,580	\$150,929	\$363,021	\$206,660	\$39,754	\$13,682
Employee Contribution	\$38,685	\$13,364	\$120,340	\$113,945	\$83,363	\$86,784	\$56,308	\$144,274	\$67,817	\$6,711	\$0
Interest Rate	6.5%	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

^a Includes additional solvency contribution.^b Additional contributions needed in 2012
to satisfy the 15-year solvency test.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class III

Summary of Valuation Results

<u>Municipality</u>	<u>Chester</u>			<u>Dunbar</u>			<u>Elkins</u>		<u>Grafton</u>		<u>Logan</u>		<u>Nitro</u>	
	Police	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire	
Plan Membership														
-Actives	5	13	14	9	3	6	6	7	8	16	14			
-Annuitants	2	12	20	9	5	5	4	1	2	11	10			
-Inactives	0	0	0	0	0	0	1	1	0	0	0			
Total	7	25	34	18	8	11	11	9	10	27	24			
Payroll	\$213,254	\$565,602	\$596,503	\$419,287	\$146,628	\$215,028	\$162,902	\$223,255	\$290,478	\$792,843	\$619,388			
Benefit Payments	\$52,932	\$325,999	\$530,549	\$240,124	\$88,344	\$61,040	\$88,965	\$16,189	\$29,990	\$234,697	\$214,761			
Actuarial Accrued Liabilities														
-Actives	\$1,210,763	\$1,867,422	\$2,599,520	\$1,732,438	\$575,829	\$777,394	\$539,469	\$861,931	\$846,121	\$2,454,321	\$3,674,303			
-Annuitants	\$507,561	\$4,481,201	\$8,214,989	\$3,048,100	\$938,104	\$838,167	\$1,370,718	\$234,160	\$348,353	\$3,933,002	\$2,863,765			
-Inactives	\$0	\$0	\$0	\$0	\$0	\$0	\$263,217	\$311,446	\$0	\$0	\$0			
Total	\$1,718,324	\$6,348,623	\$10,814,509	\$4,780,538	\$1,513,933	\$1,615,561	\$2,173,404	\$1,407,537	\$1,194,474	\$6,387,323	\$6,538,068			
Market Value of Assets	\$1,196,589	\$4,596,187	\$602,242	\$1,872,918	\$890,979	\$851,833	\$1,147,610	\$415,152	\$334,410	\$2,179,114	\$605,189			
Unfunded Actuarial Accrued Liability	\$521,735	\$1,752,436	\$10,212,267	\$2,907,620	\$622,954	\$763,728	\$1,025,794	\$992,385	\$860,064	\$4,208,209	\$5,932,879			
Funded Ratio	70%	72%	6%	39%	59%	53%	53%	29%	28%	34%	9%			
Net Employer Normal Cost	\$37,186	\$106,381	\$197,190	\$105,969	\$38,170	\$74,263	\$33,905	\$73,706	\$71,017	\$192,962	\$182,157			
Employer Contribution ^a	\$85,211	\$115,478	\$316,689	\$232,159	\$52,212	\$59,779	\$74,152	\$53,330	\$90,793	\$126,789	\$118,133			
(% of Payroll)	40%	20%	53%	55%	36%	28%	46%	24%	31%	16%	19%			
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	\$0			
State Premium Tax Allocation	\$45,899	\$119,849	\$146,730	\$88,576	\$33,026	\$54,087	\$41,778	\$66,947	\$62,487	\$136,634	\$114,829			
Employee Contribution	\$14,928	\$42,230	\$48,294	\$31,217	\$10,264	\$16,377	\$12,653	\$16,983	\$20,333	\$59,146	\$45,693			
Interest Rate	7.0%	7.0%	5.0%	6.0%	6.5%	5.5%	6.5%	5.5%	6.0%	6.0%	5.0%			
Funding Policy	Standard	Optional from Alternative	Alternative	Standard	Standard	Optional from Standard	Optional from Standard	Standard	Standard	Alternative	Alternative			

^a Includes additional solvency contribution.^b Additional contributions needed in 2012
to satisfy the 15-year solvency test.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class III

Summary of Valuation Results

<u>Municipality</u>	<u>Oak Hill</u> Police	<u>Point</u> <u>Pleasant</u> Police	<u>Princeton</u> Police	Fire	<u>Star City</u> Police	<u>Welch</u> Police	<u>Weston</u> Police	Fire	<u>Westover</u> Police	<u>Williamson</u> Police	Fire
Plan Membership											
-Actives	10	8	17	13	4	6	5	4	9	7	8
-Annuitants	5	6	18	14	5	2	4	4	3	7	14
-Inactives	0	0	1	0	0	1	0	0	0	0	0
Total	15	14	36	27	9	9	9	8	12	14	22
Payroll	\$384,670	\$316,695	\$711,063	\$512,726	\$155,295	\$301,123	\$173,473	\$131,553	\$358,497	\$181,784	\$238,918
Benefit Payments	\$126,201	\$114,100	\$421,161	\$324,976	\$84,773	\$43,889	\$45,110	\$68,416	\$79,674	\$97,976	\$268,558
Actuarial Accrued Liabilities											
-Actives	\$1,159,897	\$1,697,909	\$3,192,893	\$3,155,236	\$395,456	\$880,785	\$764,421	\$282,876	\$1,139,654	\$973,810	\$733,962
-Annuitants	\$1,724,704	\$1,950,681	\$6,152,203	\$5,010,798	\$1,483,629	\$593,687	\$708,706	\$1,161,441	\$1,089,534	\$1,512,306	\$3,934,934
-Inactives	\$0	\$0	\$542,300	\$0	\$0	\$278,931	\$0	\$0	\$0	\$0	\$0
Total	\$2,884,601	\$3,648,590	\$9,887,396	\$8,166,034	\$1,879,085	\$1,753,403	\$1,473,127	\$1,444,317	\$2,229,188	\$2,486,116	\$4,668,896
Market Value of Assets	\$3,231,709	\$817,387	\$3,420,869	\$2,572,330	\$1,177,473	\$1,544,399	\$510,742	\$555,140	\$1,515,169	\$903,677	\$1,487,251
Unfunded Actuarial Accrued Liability	(\$347,108)	\$2,831,203	\$6,466,527	\$5,593,704	\$701,612	\$209,004	\$962,385	\$889,177	\$714,019	\$1,582,439	\$3,181,645
Funded Ratio	112%	22%	35%	32%	63%	88%	35%	38%	68%	36%	32%
Net Employer Normal Cost	\$69,381	\$97,062	\$197,317	\$169,772	\$41,907	\$64,987	\$53,690	\$39,795	\$74,337	\$62,674	\$63,045
Employer Contribution ^a	\$96,505	\$234,833	\$201,566	\$126,779	\$39,588	\$53,182	\$50,751	\$70,353	\$71,035	\$113,288	\$112,916
(% of Payroll)	25%	74%	28%	25%	25%	18%	29%	53%	20%	62%	47%
Additional Solvency Contribution ^d											
- 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	\$0
State Premium Tax Allocation	\$0	\$68,122	\$169,853	\$126,113	\$41,205	\$42,753	\$39,054	\$37,253	\$71,884	\$67,267	\$91,766
Employee Contribution	\$28,523	\$22,169	\$51,227	\$35,891	\$11,765	\$23,007	\$12,934	\$10,831	\$27,615	\$13,794	\$17,946
Interest Rate	7.0%	5.5%	5.5%	5.0%	5.5%	6.5%	5.5%	6.0%	7.0%	5.5%	5.5%
Funding Policy	Optional from Standard	Optional from Standard	Alternative	Alternative	Alternative	Optional from Standard	Standard	Alternative	Optional from Standard	Alternative	Alternative

^a Includes additional solvency contribution.^b Additional contributions needed in 2012
to satisfy the 15-year solvency test.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation as of July 01, 2012**

Optional Funding - Year of Crossover ^a

Alternative Plans

Plan Name	Year of Crossover FYE	Funded Ratio	Current Funds, Open		Current Funds, Closed		New Cost Sharing Fund		Total to Current closed Fund and New Cost Sharing Fund		Decrease Amount	Decrease % 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	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay		
Beckley Police	2025	70%	\$ 825,424	31%	\$ 785,027	31%	\$ 12,361	10.5%	\$ 797,388	30%	\$ 28,036	1.1%
Bluefield Police	2033	53%	931,323	64%	876,021	63%	7,813	10.5%	883,834	60%	47,489	3.2%
Bluefield Fire	2036	41%	1,406,343	99%	1,389,869	103%	7,717	10.5%	1,397,586	98%	8,757	0.6%
Clarksburg Police	2032	48%	2,594,292	73%	2,492,057	74%	19,370	10.5%	2,511,427	71%	82,865	2.3%
Clarksburg Fire	2034	41%	2,998,508	94%	2,888,222	98%	24,067	10.5%	2,912,289	91%	86,219	2.7%
Dunbar Fire	2031	28%	1,070,384	105%	1,005,359	105%	6,057	10.5%	1,011,416	100%	58,968	5.8%
Fairmont Police	2036	45%	2,584,074	89%	2,561,338	90%	6,247	10.5%	2,567,585	89%	16,489	0.6%
Fairmont Fire	2043	54%	5,732,603	133%	5,421,648	131%	18,482	10.5%	5,440,130	126%	292,473	6.8%
Parkersburg Police	2044	67%	7,238,379	104%	7,070,438	106%	33,142	10.5%	7,103,580	102%	134,799	1.9%
Parkersburg Fire	2020	29%	3,146,810	102%	3,061,277	105%	15,595	10.5%	3,076,872	100%	69,938	2.3%
St. Albans Police	2022	63%	397,428	32%	387,439	33%	8,772	10.5%	396,211	32%	1,217	0.1%
Star City Police	2015	65%	45,324	28%	44,663	28%	447	10.5%	45,111	27%	213	0.1%
Weirton Fire	2034	61%	835,764	49%	812,347	53%	17,527	10.5%	829,875	49%	5,889	0.3%
Weston Fire	2014	42%	75,278	56%	60,927	45%	129	10.5%	61,056	45%	14,222	10.5%
Wheeling Police	2021	40%	2,920,915	61%	2,799,259	63%	38,447	10.5%	2,837,707	59%	83,208	1.7%
Wheeling Fire	2029	40%	4,886,899	76%	4,623,986	80%	70,040	10.5%	4,694,026	73%	192,873	3.0%
Williamson Police	2014	40%	121,218	65%	93,286	51%	349	10.5%	93,635	50%	27,583	14.7%
Williamson Fire	2022	37%	207,591	67%	202,210	70%	2,187	10.5%	204,397	66%	3,194	1.0%

Plans that are projected to remain alternative ^b

Beckley Fire	2050	72%	\$ 6,280,844	106%
Martinsburg Police	2050	53%	5,462,011	67%
Martinsburg Fire	2050	81%	6,625,178	117%
Morgantown Police	2050	55%	8,234,099	82%
Morgantown Fire	2050	59%	6,684,594	89%
Nitro Police	2050	96%	1,419,594	60%
Nitro Fire	2050	68%	1,545,092	81%
Princeton Police	2050	100%	574,810	26%
Princeton Fire	2050	28%	1,004,225	64%
South Charleston Police	2050	35%	3,828,037	76%
South Charleston Fire	2050	93%	6,035,036	124%
St. Albans Fire	2050	44%	2,400,261	85%
Weirton Police	2050	71%	6,519,717	133%

^a Year of crossover means year sponsor contributions are lower if the sponsor decide to cover new entrants under the statewide cost sharing plan (West Virginia Municipal Police Officers and Firefighters Retirement System).

^b Alternative contributions are lower during the entire 40-year projection period from 1/1/2012.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation as of July 01, 2012**

Conservation Funding - Year of Crossover ^a

Alternative Plans

Plan Name	Year of Crossover FYE	Funded Ratio	Current Funds, Open		Current Funds, Closed		New Cost Sharing Fund		Total to Current closed Fund and New Cost Sharing Fund		Decrease Amount	Decrease % 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	Projected Employer Contribution Amount	Projected Employer Contribution % of Pay		
Beckley Police	2038	100%	\$ 714,489	18%	\$ 659,288	17%	\$ 12,205	10.5%	\$ 671,493	17%	\$ 42,996	1.1%
Beckley Fire	2038	23%	2,606,327	64%	2,459,992	71%	60,950	10.5%	2,520,942	62%	85,385	2.1%
Bluefield Police	2028	42%	664,020	53%	616,406	52%	7,465	10.5%	623,871	49%	40,149	3.2%
Bluefield Fire	2026	19%	714,914	68%	704,300	70%	4,648	10.5%	708,948	67%	5,966	0.6%
Clarksburg Police	2014	15%	767,557	37%	594,162	30%	12,694	10.5%	606,856	29%	160,701	7.7%
Clarksburg Fire	2022	15%	1,331,375	60%	1,287,437	63%	19,869	10.5%	1,307,305	59%	24,070	1.1%
Dunbar Fire	2020	6%	508,532	69%	499,425	75%	6,797	10.5%	506,222	69%	2,310	0.3%
Fairmont Police	2023	19%	1,072,299	54%	1,037,020	54%	6,882	10.5%	1,043,902	53%	28,397	1.4%
Fairmont Fire	2029	4%	2,223,203	78%	2,141,204	80%	18,145	10.5%	2,159,349	76%	63,854	2.2%
Martinsburg Fire	2030	7%	1,600,068	52%	1,570,133	55%	22,097	10.5%	1,592,230	52%	7,838	0.3%
Morgantown Police	2038	24%	3,416,859	50%	3,361,953	50%	18,371	10.5%	3,380,324	49%	36,535	0.5%
Morgantown Fire	2037	22%	2,592,400	52%	2,524,093	54%	32,790	10.5%	2,556,883	51%	35,517	0.7%
Nitro Police	2014	35%	135,664	17%	65,672	8%	2,433	10.5%	68,105	8%	67,559	8.3%
Nitro Fire	2042	38%	840,428	58%	567,888	41%	7,830	10.5%	575,718	39%	264,711	18.1%
Parkersburg Police	2028	22%	2,451,889	57%	2,360,497	58%	26,974	10.5%	2,387,472	55%	64,417	1.5%
Parkersburg Fire	2014	19%	2,096,853	81%	1,867,806	74%	6,173	10.5%	1,873,979	73%	222,874	8.7%
Princeton Police	2029	37%	447,448	39%	413,230	38%	6,112	10.5%	419,342	37%	28,106	2.5%
Princeton Fire	2044	16%	625,381	49%	612,040	49%	3,740	10.5%	615,780	48%	9,600	0.7%
South Charleston Fire	2030	9%	1,661,888	64%	1,579,989	63%	10,776	10.5%	1,590,765	61%	71,123	2.7%
St. Albans Police	2014	51%	231,307	24%	127,353	14%	6,037	10.5%	133,390	14%	97,917	10.0%
St. Albans Fire	2040	13%	1,140,347	56%	1,055,190	53%	3,690	10.5%	1,058,880	52%	81,467	4.0%
Star City Police	2014	64%	42,359	26%	36,996	24%	389	10.5%	37,385	23%	4,974	3.1%
Weirton Police	2032	1%	1,802,756	65%	1,738,956	69%	29,626	10.5%	1,768,582	63%	34,174	1.2%
Weirton Fire	2038	71%	1,095,516	57%	1,050,801	60%	18,263	10.5%	1,069,063	56%	26,453	1.4%
Weston Fire	2014	42%	75,278	56%	28,808	21%	129	10.5%	28,937	21%	46,341	34.2%
Wheeling Police	2015	30%	1,946,328	48%	1,870,258	50%	30,253	10.5%	1,900,511	47%	45,817	1.1%
Wheeling Fire	2020	25%	2,658,150	54%	2,594,497	57%	38,648	10.5%	2,633,145	53%	25,005	0.5%
Williamson Police	2014	40%	121,218	65%	34,963	19%	349	10.5%	35,312	19%	85,906	45.9%
Williamson Fire	2021	36%	194,010	64%	191,427	68%	2,107	10.5%	193,534	64%	476	0.2%

Plans that are projected to remain alternative ^b

Martinsburg Police	2052	59%	\$ 5,844,352	70%
South Charleston Police	2052	41%	4,096,000	79%

^a Year of crossover means year sponsor contributions are lower if the sponsor decide to cover new entrants under the statewide cost sharing plan (West Virginia Municipal Police Officers and Firefighters Retirement System).

^b Alternative contributions are lower during the entire 40-year projection period from 7/1/2012.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation as of July 01, 2012**

Standard Plans			Optional Funding - Year of Crossover ^a						Total to Current closed Fund and New Cost Sharing Fund		Decrease Amount	Decrease % of Pay
			Current Funds, Open		Current Funds, Closed		New Cost Sharing Fund		Projected Employer Contribution	Projected Employer Contribution		
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		
Charles Town Police ¹	2014	26%	\$ 100,009	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chester Police	2014	75%	\$ 38,428	17%	\$ 35,622	18%	\$ 2,064	10.5%	\$ 37,686	17%	\$ 742	0.3%
Elkins Police	2014	42%	277,518	64%	271,113	67%	3,062	10.5%	274,175	63%	3,343	0.8%
Elkins Fire	2014	61%	66,071	44%	65,744	44%	145	10.5%	65,889	44%	182	0.1%
Logan Police	2014	36%	109,377	48%	107,355	48%	685	10.5%	108,040	47%	1,337	0.6%
Logan Fire	2014	38%	87,712	29%	87,033	29%	327	10.5%	87,360	29%	352	0.1%
Vienna Police	2014	59%	349,009	43%	346,178	43%	1,663	10.5%	347,841	43%	1,168	0.1%
Weston Police	2014	38%	96,027	54%	94,139	55%	695	10.5%	94,834	53%	1,193	0.7%

^a Year of crossover means year sponsor contributions are lower if the sponsor decide to cover new entrants under the statewide cost sharing plan (West Virginia Municipal Police Officers and Firefighters Retirement System).

¹ One plan, Charles Town Police is closed to new entrants. Its contributions are expressed as a percentage of benefit payments.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class I

Comparison of Employer Contribution Rates

<u>Municipality</u>	<u>Charleston</u>		<u>Huntington</u>		<u>Morgantown</u>		<u>Parkersburg</u>		<u>Wheeling</u>	
	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										
2012	48%	52%	81%	128%	19%	21%	32%	78%	45%	41%
2022	64%	73%	55%	90%	28%	31%	47%	115%	65%	60%
2032	74%	76%	35%	56%	41%	45%	68%	135%	96%	88%
2042	53%	53%	23%	36%	60%	65%	100%	33%	24%	26%
2052	11%	11%	11%	11%	88%	96%	31%	33%	24%	26%
Optional Funding Policy										
2012	NA	NA	81%	128%	19%	21%	32%	78%	45%	41%
2022	NA	NA	55%	90%	28%	31%	47%	91%	54%	60%
2032	NA	NA	35%	56%	41%	45%	68%	57%	36%	62%
2042	NA	NA	23%	36%	60%	65%	100%	33%	23%	38%
2052	NA	NA	11%	11%	88%	96%	18%	11%	11%	11%
Conservation Funding Policy										
2012	48%	52%	NA	NA	19%	21%	32%	78%	45%	41%
2022	64%	73%	NA	NA	28%	31%	47%	82%	50%	58%
2032	74%	76%	NA	NA	41%	45%	53%	79%	48%	60%
2042	53%	53%	NA	NA	44%	47%	51%	11%	11%	46%
2052	11%	11%	NA	NA	46%	50%	43%	11%	11%	11%

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class II

Comparison of Employer Contribution Rates

<u>Municipality</u>	<u>Beckley</u>		<u>Bluefield</u>		<u>Clarksburg</u>		<u>Fairmont</u>		<u>Martinsburg</u>	
	Police	Fire								
Funding Policy	Alternative									
Current Funding Policy										
2012	20%	25%	30%	41%	36%	42%	39%	44%	18%	33%
2022	29%	36%	43%	60%	52%	62%	54%	62%	23%	40%
2032	42%	53%	64%	88%	76%	91%	79%	91%	34%	59%
2042	18%	78%	39%	129%	31%	133%	116%	133%	49%	86%
2052	18%	114%	26%	29%	31%	32%	29%	33%	72%	105%
Optional Funding Policy										
2012	20%	25%	30%	41%	36%	42%	39%	44%	18%	33%
2022	29%	36%	43%	60%	52%	62%	54%	62%	23%	40%
2032	23%	53%	60%	88%	68%	91%	79%	91%	34%	59%
2042	14%	78%	37%	72%	45%	60%	66%	126%	49%	86%
2052	11%	114%	12%	15%	12%	12%	13%	19%	72%	105%
Conservation Funding Policy										
2012	20%	25%	30%	41%	36%	42%	39%	44%	18%	33%
2022	29%	36%	43%	60%	46%	59%	53%	62%	23%	40%
2032	42%	53%	43%	62%	50%	60%	56%	72%	34%	57%
2042	15%	62%	43%	49%	44%	49%	48%	67%	49%	55%
2052	11%	58%	11%	39%	11%	32%	36%	55%	72%	55%

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class II

Comparison of Employer Contribution Rates

Class III

<u>Municipality</u>	<u>Moundsville</u>		<u>South Charleston</u>		<u>St. Albans</u>		<u>Vienna</u>	<u>Weirton</u>		<u>Belle</u>	<u>Charles Town</u>
	Police	Fire	Police	Fire	Police	Fire	Police	Police	Fire	Police	Police ¹
Funding Policy	Optional from Alternative	Optional from Alternative	Alternative	Alternative	Alternative	Alternative	Standard	Alternative	Alternative	Optional from Standard	Standard
Current Funding Policy											
2012	43%	126%	18%	33%	23%	20%	35%	30%	22%	72%	91%
2022	20%	94%	26%	49%	33%	29%	34%	42%	32%	57%	81%
2032	13%	52%	38%	71%	49%	43%	19%	67%	47%	14%	1%
2042	11%	31%	56%	104%	19%	63%	18%	98%	69%	12%	1%
2052	11%	11%	82%	34%	19%	92%	18%	144%	27%	11%	1%
Optional Funding Policy											
2012	43%	126%	18%	33%	23%	20%	35%	30%	22%	72%	NA
2022	20%	94%	26%	49%	31%	29%	29%	42%	32%	57%	NA
2032	13%	52%	38%	71%	17%	43%	11%	67%	47%	14%	NA
2042	11%	31%	56%	104%	12%	63%	10%	98%	30%	12%	NA
2052	11%	11%	82%	34%	11%	92%	10%	144%	11%	11%	NA
Conservation Funding Policy											
2012	NA	NA	18%	33%	23%	20%	NA	30%	22%	NA	NA
2022	NA	NA	26%	49%	52%	29%	NA	42%	32%	NA	NA
2032	NA	NA	38%	59%	12%	43%	NA	64%	47%	NA	NA
2042	NA	NA	56%	60%	11%	51%	NA	64%	57%	NA	NA
2052	NA	NA	82%	53%	12%	51%	NA	56%	13%	NA	NA

¹ Contributions as a percentage of expected benefit payments.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class III

Comparison of Employer Contribution Rates

<u>Municipality</u>	<u>Chester</u>		<u>Dunbar</u>		<u>Elkins</u>		<u>Grafton</u>		<u>Logan</u>		<u>Nitro</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	
Current Funding Policy												
2012	40%	20%	53%	55%	36%	28%	46%	24%	31%	16%	19%	
2022	16%	17%	78%	52%	37%	30%	37%	40%	26%	23%	28%	
2032	16%	13%	114%	24%	25%	14%	15%	33%	24%	34%	41%	
2042	16%	11%	32%	23%	23%	12%	12%	32%	22%	50%	60%	
2052	15%	11%	32%	23%	22%	11%	12%	32%	22%	23%	88%	
Optional Funding Policy												
2012	40%	20%	53%	55%	36%	28%	46%	24%	31%	16%	19%	
2022	13%	17%	78%	45%	32%	30%	37%	34%	24%	23%	28%	
2032	12%	13%	93%	15%	13%	14%	15%	14%	11%	34%	41%	
2042	15%	11%	63%	11%	12%	12%	12%	11%	11%	50%	60%	
2052	13%	11%	12%	11%	11%	11%	12%	11%	11%	21%	88%	
Conservation Funding Policy												
2012	NA	NA	53%	NA	NA	NA	NA	NA	NA	16%	19%	
2022	NA	NA	69%	NA	NA	NA	NA	NA	NA	19%	28%	
2032	NA	NA	64%	NA	NA	NA	NA	NA	NA	55%	41%	
2042	NA	NA	64%	NA	NA	NA	NA	NA	NA	11%	40%	
2052	NA	NA	38%	NA	NA	NA	NA	NA	NA	11%	32%	

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class III

Comparison of Employer Contribution Rates

<u>Municipality</u>	<u>Oak Hill</u> Police	<u>Point Pleasant</u> Police	<u>Princeton</u> Police	<u>Princeton</u> Fire	<u>Star City</u> Police	<u>Welch</u> Police	<u>Weston</u> Police	<u>Weston</u> Fire	<u>Westover</u> Police	<u>Williamson</u> Police	<u>Williamson</u> Fire
Funding Policy	Optional from Standard	Optional from Standard	Alternative	Alternative	Alternative	Optional from Standard	Standard	Alternative	OptionalStandard	Alternative	Alternative
Current Funding Policy											
2012	25%	74%	28%	25%	25%	18%	29%	53%	20%	62%	47%
2022	16%	59%	31%	22%	37%	21%	45%	78%	16%	91%	69%
2032	11%	12%	46%	32%	27%	13%	31%	30%	12%	34%	101%
2042	11%	11%	67%	47%	26%	12%	29%	30%	11%	34%	25%
2052	11%	11%	26%	69%	26%	11%	29%	30%	11%	33%	24%
Optional Funding Policy											
2012	25%	74%	28%	25%	25%	18%	29%	53%	20%	62%	47%
2022	16%	59%	31%	22%	24%	21%	39%	31%	16%	29%	62%
2032	11%	12%	46%	32%	19%	13%	11%	19%	12%	15%	44%
2042	11%	11%	67%	47%	11%	12%	11%	11%	11%	12%	26%
2052	11%	11%	26%	69%	11%	11%	11%	11%	11%	11%	11%
Conservation Funding Policy											
2012	NA	NA	28%	25%	25%	NA	NA	53%	NA	62%	47%
2022	NA	NA	31%	22%	27%	NA	NA	38%	NA	43%	60%
2032	NA	NA	39%	32%	16%	NA	NA	53%	NA	48%	49%
2042	NA	NA	39%	47%	11%	NA	NA	11%	NA	12%	50%
2052	NA	NA	36%	47%	11%	NA	NA	11%	NA	11%	11%

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class I

Comparison of Funded Ratios

<u>Municipality</u>	<u>Charleston</u>		<u>Huntington</u>		<u>Morgantown</u>		<u>Parkersburg</u>		<u>Wheeling</u>	
	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										
2012	8%	6%	23%	11%	28%	28%	20%	18%	28%	21%
2022	14%	12%	44%	29%	23%	22%	20%	37%	45%	28%
2032	27%	25%	54%	40%	21%	19%	28%	93%	91%	55%
2042	66%	65%	66%	55%	32%	33%	62%	100%	100%	100%
2052	100%	100%	100%	100%	63%	67%	100%	100%	100%	100%
Optional Funding Policy										
2012	NA	NA	23%	11%	28%	28%	20%	18%	28%	21%
2022	NA	NA	44%	29%	23%	22%	20%	35%	44%	28%
2032	NA	NA	54%	40%	21%	19%	28%	53%	64%	51%
2042	NA	NA	66%	55%	32%	33%	62%	72%	82%	78%
2052	NA	NA	100%	100%	63%	67%	100%	100%	100%	100%
Conservation Funding Policy										
2012	8%	6%	NA	NA	28%	28%	20%	18%	28%	21%
2022	14%	12%	NA	NA	23%	22%	20%	26%	40%	28%
2032	27%	25%	NA	NA	21%	19%	26%	48%	63%	44%
2042	66%	65%	NA	NA	29%	29%	38%	100%	100%	80%
2052	100%	100%	NA	NA	44%	45%	61%	100%	100%	100%

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class II

Comparison of Funded Ratios

<u>Municipality</u>	<u>Beckley</u>		<u>Bluefield</u>		<u>Clarksburg</u>		<u>Fairmont</u>		<u>Martinsburg</u>	
	Police	Fire								
Funding Policy	Alternative									
Current Funding Policy										
2012	63%	41%	33%	21%	14%	13%	16%	5%	22%	8%
2022	68%	29%	37%	18%	26%	16%	19%	1%	22%	4%
2032	85%	21%	53%	32%	52%	37%	35%	10%	24%	11%
2042	100%	33%	98%	79%	100%	91%	81%	54%	33%	38%
2052	100%	87%	100%	100%	100%	100%	100%	100%	59%	94%
Optional Funding Policy										
2012	63%	41%	33%	21%	14%	13%	16%	5%	22%	8%
2022	68%	29%	37%	18%	26%	16%	19%	1%	22%	4%
2032	79%	21%	53%	32%	52%	37%	35%	10%	24%	11%
2042	90%	33%	81%	69%	81%	74%	73%	54%	33%	38%
2052	100%	87%	100%	100%	100%	100%	100%	100%	59%	94%
Conservation Funding Policy										
2012	63%	41%	33%	21%	14%	13%	16%	5%	22%	8%
2022	68%	29%	37%	18%	20%	16%	19%	1%	22%	4%
2032	85%	21%	50%	26%	31%	25%	27%	7%	24%	10%
2042	100%	29%	73%	40%	61%	44%	43%	19%	33%	23%
2052	100%	56%	100%	66%	100%	81%	76%	45%	59%	45%

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class II

Comparison of Funded Ratios

Class III

<u>Municipality</u>	<u>Moundsville</u>		<u>South Charleston</u>		<u>St. Albans</u>		<u>Vienna</u>	<u>Weirton</u>		<u>Belle</u>	<u>Charles</u>
	Police	Fire	Police	Fire	Police	Fire	Police	Police	Fire	Police	Town Police
Funding Policy	Optional from Alternative	Optional from Alternative	Alternative	Alternative	Alternative	Alternative	Standard	Alternative	Alternative	Optional from Standard	Standard
Current Funding Policy											
2012	54%	19%	11%	6%	50%	16%	57%	14%	55%	61%	24%
2022	72%	26%	5%	6%	64%	10%	81%	4%	53%	77%	41%
2032	81%	33%	3%	13%	90%	8%	100%	2%	60%	100%	100%
2042	100%	46%	13%	45%	100%	19%	100%	26%	93%	100%	100%
2052	100%	100%	41%	100%	100%	51%	100%	87%	100%	100%	100%
Optional Funding Policy											
2012	54%	19%	11%	6%	50%	16%	57%	14%	55%	61%	NA
2022	72%	26%	5%	6%	64%	10%	81%	4%	53%	77%	NA
2032	81%	33%	3%	13%	77%	8%	100%	2%	60%	100%	NA
2042	100%	46%	13%	45%	89%	19%	100%	26%	79%	100%	NA
2052	100%	100%	41%	100%	100%	51%	100%	87%	100%	100%	NA
Conservation Funding Policy											
2012	NA	NA	11%	6%	50%	16%	NA	14%	55%	NA	NA
2022	NA	NA	5%	6%	69%	10%	NA	4%	53%	NA	NA
2032	NA	NA	3%	12%	100%	8%	NA	2%	60%	NA	NA
2042	NA	NA	13%	23%	100%	18%	NA	9%	92%	NA	NA
2052	NA	NA	41%	46%	100%	35%	NA	25%	100%	NA	NA

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class III

Comparison of Funded Ratios

<u>Municipality</u>	<u>Chester</u>			<u>Dunbar</u>			<u>Elkins</u>		<u>Grafton</u>		<u>Logan</u>		<u>Nitro</u>	
	Police	Police	Fire	Police	Police	Fire	Police	Fire	Police	Fire	Police	Police	Fire	Fire
Funding Policy	Standard	Optional from Alternative	Alternative	Standard	Standard	Standard	Optional from Standard	Optional from Standard	Standard	Standard	Alternative	Alternative	Alternative	Alternative
Current Funding Policy														
2012	70%	72%	6%	39%	59%	53%	53%	29%	28%	34%	9%			
2022	89%	82%	8%	71%	81%	85%	77%	79%	82%	46%	13%			
2032	100%	93%	37%	100%	100%	100%	100%	100%	100%	54%	21%			
2042	100%	100%	100%	100%	100%	100%	100%	100%	100%	73%	40%			
2052	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	77%			
Optional Funding Policy														
2012	70%	72%	6%	39%	59%	53%	53%	29%	28%	34%	9%			
2022	90%	82%	8%	69%	81%	85%	77%	79%	82%	46%	13%			
2032	100%	93%	36%	100%	100%	100%	100%	100%	100%	54%	21%			
2042	100%	100%	71%	100%	100%	100%	100%	100%	100%	73%	40%			
2052	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	77%			
Conservation Funding Policy														
2012	NA	NA	6%	NA	NA	NA	NA	NA	NA	34%	9%			
2022	NA	NA	8%	NA	NA	NA	NA	NA	NA	37%	13%			
2032	NA	NA	16%	NA	NA	NA	NA	NA	NA	56%	21%			
2042	NA	NA	32%	NA	NA	NA	NA	NA	NA	100%	39%			
2052	NA	NA	83%	NA	NA	NA	NA	NA	NA	100%	55%			

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class III

Comparison of Funded Ratios

<u>Municipality</u>	<u>Oak Hill</u> Police	<u>Point</u> <u>Pleasant</u> Police	<u>Princeton</u> Police	Fire	<u>Star City</u> Police	<u>Welch</u> Police	<u>Weston</u> Police	Fire	<u>Westover</u> Police	<u>Williamson</u> Police	Fire
Funding Policy	Optional from Standard	Optional from Standard	Alternative	Alternative	Alternative	Optional from Standard	Standard	Alternative	OptionalStandar rd	Alternative	Alternative
Current Funding Policy											
2012	112%	22%	35%	32%	63%	88%	35%	38%	68%	36%	32%
2022	116%	70%	34%	24%	80%	100%	75%	79%	90%	79%	39%
2032	130%	100%	42%	15%	100%	100%	100%	100%	100%	100%	79%
2042	180%	100%	66%	15%	100%	100%	100%	100%	100%	100%	100%
2052	354%	100%	100%	33%	100%	100%	100%	100%	100%	100%	100%
Optional Funding Policy											
2012	112%	22%	35%	32%	63%	88%	35%	38%	68%	36%	32%
2022	116%	70%	34%	24%	77%	100%	75%	62%	90%	59%	39%
2032	130%	100%	42%	15%	92%	100%	100%	76%	100%	70%	59%
2042	180%	100%	66%	15%	100%	100%	100%	88%	100%	91%	80%
2052	354%	100%	100%	33%	100%	100%	100%	100%	100%	100%	100%
Conservation Funding Policy											
2012	NA	NA	35%	32%	63%	NA	NA	38%	NA	36%	32%
2022	NA	NA	34%	24%	76%	NA	NA	53%	NA	51%	39%
2032	NA	NA	41%	15%	100%	NA	NA	76%	NA	83%	58%
2042	NA	NA	58%	15%	100%	NA	NA	100%	NA	100%	94%
2052	NA	NA	83%	27%	100%	NA	NA	100%	NA	100%	100%

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation as of July 01, 2012**

Reconciliation of Assets 6/30/2012

Class I

<u>Municipality</u>	<u>Charleston</u>		<u>Huntington</u>		<u>Morgantown</u>		<u>Parkersburg</u>		<u>Wheeling</u>	
	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>
A. Market Value of Assets as of July 1, 2011	\$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
Adjustment to Market Value of Assets at Beginning of Year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Market Value of Assets Beginning of Year	\$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
1. Revenue During Fiscal Year										
(a) Employee Contribution	\$706,773	\$690,127	\$364,589	\$315,386	\$259,883	\$178,325	\$210,735	\$199,969	\$276,566	\$314,714
(b) Governmental Contribution										
(i) From Local Government	\$4,321,014	\$4,505,745	\$4,716,399	\$5,387,924	\$588,369	\$502,786	\$830,540	\$1,831,471	\$2,032,298	\$1,937,830
(ii) From State Government	\$1,602,822	\$1,722,267	\$971,129	\$1,171,481	\$505,974	\$424,571	\$580,150	\$648,153	\$813,430	\$891,668
(iii) Total	\$5,923,836	\$6,228,012	\$5,687,528	\$6,559,405	\$1,094,343	\$927,357	\$1,410,690	\$2,479,624	\$2,845,728	\$2,829,498
(c) Earnings on Investments										
(i) Net Appreciation (Depreciation)	(\$638,762)	\$53,021	(\$201,407)	\$42,546	(\$629,702)	(\$475,290)	(\$261,920)	\$128,740	\$0	\$0
(ii) Bond Interest	\$178,206	\$39,938	\$178,365	\$12,814	\$213,319	\$158,624	\$151,563	\$487,160	\$0	\$0
(iii) Dividends	\$127,956	\$127,943	\$235,669	\$114,584	\$131,937	\$103,328	\$94,002	\$0	\$0	\$0
(iv) Net Realized Gain (Loss) on Sale or Exchange	\$261,757	\$0	\$0	\$0	\$261,861	\$214,601	\$0	\$0	\$0	\$0
(v) Other	\$0	\$0	\$0	\$0	\$69	\$319	\$596	\$100	\$671,753	\$627,837
(vi) Investment Expense	(\$114,815)	(\$40,487)	\$0	\$0	(\$111,008)	(\$86,951)	(\$79,285)	(\$90,832)	(\$55,237)	(\$39,732)
(vii) Total	(\$185,658)	\$180,415	\$212,627	\$169,944	(\$133,524)	(\$85,369)	(\$95,044)	\$525,168	\$616,516	\$588,105
(d) Other Revenue	\$0	\$0	\$0	\$0	\$0	(\$200)	\$0	\$0	\$1,762	\$2,262
(e) Receivable Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(f) Total Revenue (sum of (a) through (e))	\$6,444,951	\$7,098,554	\$6,264,744	\$7,044,735	\$1,220,702	\$1,020,113	\$1,526,381	\$3,204,761	\$3,740,572	\$3,734,579
2. Expenditures During Fiscal Year										
(a) Benefits Paid	\$6,089,284	\$6,201,250	\$3,589,017	\$4,955,650	\$1,743,783	\$1,334,799	\$1,836,337	\$2,444,151	\$2,529,422	\$2,719,000
(b) Withdrawals	\$12,904	\$39,511	\$22,506	\$10,433	\$5,352	\$8,994	\$66,976	\$9,323	\$0	\$0
(c) Administrative Expenses	\$11,224	\$7,002	\$63,020	\$28,637	\$1,591	\$1,200	\$0	\$328	\$6,033	\$1,397
(d) Total Expenditures (sum of (a) through (c))	\$6,113,412	\$6,247,763	\$3,674,543	\$4,994,720	\$1,750,726	\$1,344,993	\$1,903,313	\$2,453,802	\$2,535,455	\$2,720,397
B. Market Value of Assets as of June 30, 2012 [A + 1(f) - 2(d)]	\$11,781,046	\$9,314,344	\$19,238,866	\$10,946,214	\$12,832,944	\$10,141,193	\$9,073,126	\$9,638,823	\$14,310,524	\$13,168,535
C. Return on Assets	(1.7)%	2.0%	1.0%	2.2%	(1.0)%	(0.9)%	(1.0)%	5.8%	4.6%	4.7%

^a Receivable contributions for plan year ending June 30, 2012.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation as of July 01, 2012**

Reconciliation of Assets 6/30/2012

Class II

<u>Municipality</u>	<u>Beckley</u>		<u>Bluefield</u>		<u>Clarksburg</u>		<u>Fairmont</u>		<u>Martinsburg</u>	
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
A. Market Value of Assets as of July 1, 2011	\$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
Adjustment to Market Value of Assets at Beginning of Year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Market Value of Assets Beginning of Year	\$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
1. Revenue During Fiscal Year										
(a) Employee Contribution	\$152,949	\$146,909	\$64,079	\$53,893	\$143,741	\$124,614	\$109,004	\$155,442	\$218,829	\$151,275
(b) Governmental Contribution										
(i) From Local Government	\$346,253	\$451,297	\$224,927	\$277,255	\$683,003	\$688,613	\$509,443	\$703,809	\$433,365	\$530,322
(ii) From State Government	\$410,130	\$384,925	\$401,733	\$464,354	\$343,614	\$386,810	\$339,315	\$420,200	\$376,372	\$295,342
(iii) Total	\$756,383	\$836,222	\$626,660	\$741,609	\$1,026,617	\$1,075,423	\$848,758	\$1,124,009	\$809,737	\$825,664
(c) Earnings on Investments										
(i) Net Appreciation (Depreciation)	\$141,213	\$92,689	\$12,442	(\$65,061)	\$18,157	\$3,831	\$0	(\$67,898)	(\$36,924)	\$15,065
(ii) Bond Interest	\$537,139	\$482,091	\$79,159	\$79,923	\$23,177	\$27,849	\$30,053	\$43,324	\$160,824	\$52,120
(iii) Dividends	\$0	\$0	\$4,645	\$61,956	\$44,411	\$50,872	\$92,247	\$21,621	\$0	\$0
(iv) Net Realized Gain (Loss) on Sale or Exchange	\$0	\$0	\$5,047	(\$14,880)	\$1,424	\$8,167	(\$8,506)	(\$8,890)	\$0	\$0
(v) Other	\$0	\$0	\$1,250	\$9,510	\$0	\$0	\$0	\$30	\$0	\$0
(vi) Investment Expense	(\$52,146)	(\$53,047)	\$0	\$0	(\$14,325)	(\$15,206)	\$0	\$0	(\$34,102)	(\$16,775)
(vii) Total	\$626,206	\$521,733	\$102,543	\$71,448	\$72,844	\$75,513	\$113,794	(\$11,813)	\$89,798	\$50,410
(d) Other Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$32,640	\$32,639	\$0	\$0
(e) Receivable Contribution	\$0	\$0	\$0	\$0	\$31,306	\$35,241	\$0	\$0	\$0	\$0
(f) Total Revenue (sum of (a) through (e))	\$1,535,538	\$1,504,864	\$793,282	\$866,950	\$1,274,508	\$1,310,791	\$1,104,196	\$1,300,277	\$1,118,364	\$1,027,349
2. Expenditures During Fiscal Year										
(a) Benefits Paid	\$1,432,829	\$1,563,774	\$540,385	\$624,234	\$934,152	\$1,210,228	\$1,046,503	\$1,570,717	\$859,626	\$1,062,294
(b) Withdrawals	\$85,757	\$0	\$0	\$0	\$10,846	\$0	\$23,772	\$274	\$18,172	\$0
(c) Administrative Expenses	\$55,677	\$49,308	\$5,132	\$0	\$6,300	\$6,300	\$1,423	\$4,349	\$2,894	\$1,676
(d) Total Expenditures (sum of (a) through (c))	\$1,574,263	\$1,613,082	\$545,517	\$624,234	\$951,298	\$1,216,528	\$1,071,698	\$1,575,340	\$880,692	\$1,063,970
B. Market Value of Assets as of June 30, 2012 [A + 1(f) - 2(d)]	\$16,893,829	\$15,010,624	\$3,963,892	\$3,283,518	\$3,459,949	\$3,733,393	\$3,872,522	\$1,734,688	\$6,040,104	\$1,973,857
C. Return on Assets	3.6%	3.4%	2.6%	2.3%	2.0%	1.9%	3.0%	(0.9)%	1.5%	2.5%

^a Receivable contributions for plan year ending June 30, 2012.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation as of July 01, 2012**

Reconciliation of Assets 6/30/2012

<u>Municipality</u>	Class II				Class III						
	<u>Moundsville</u>		<u>South Charleston</u>		<u>St. Albans</u>		<u>Vienna</u>	<u>Weirton</u>		<u>Belle</u>	<u>Charles Town</u>
	Police	Fire	Police	Fire	Police	Fire	Police	Police	Fire	Police	Police
A. Market Value of Assets as of July 1, 2011	\$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
Adjustment to Market Value of Assets at Beginning of Year	\$0	\$0	\$0	\$356,619	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Market Value of Assets Beginning of Year	\$3,300,432	\$1,061,605	\$2,207,004	\$1,717,001	\$4,811,972	\$2,271,226	\$4,505,543	\$4,225,903	\$6,793,473	\$1,283,873	\$400,200
1. Revenue During Fiscal Year											
(a) Employee Contribution	\$39,674	\$13,032	\$116,768	\$120,628	\$81,684	\$61,273	\$53,947	\$141,499	\$71,496	\$7,059	\$0
(b) Governmental Contribution											
(i) From Local Government	\$250,421	\$230,335	\$273,532	\$409,744	\$212,033	\$181,511	\$234,685	\$510,340	\$188,644	\$84,948	\$104,882
(ii) From State Government	\$136,683	\$86,115	\$602,228	\$332,426	\$145,499	\$181,015	\$60,884	\$340,145	\$165,640	\$36,350	\$29,922
(iii) Total	\$387,104	\$316,450	\$875,760	\$742,170	\$357,532	\$362,526	\$295,569	\$850,485	\$354,284	\$121,298	\$134,804
(c) Earnings on Investments											
(i) Net Appreciation (Depreciation)	\$10,182	(\$80,380)	(\$90,461)	\$0	(\$168,323)	(\$5,356)	(\$255,781)	\$0	\$0	(\$4,444)	\$0
(ii) Bond Interest	\$44,199	\$21,459	\$0	\$0	\$84,817	\$38,057	\$0	\$53,453	\$75,687	\$0	\$22,300
(iii) Dividends	\$0	\$0	\$62,325	\$9,856	\$47,670	\$21,769	\$157,399	\$49,346	\$82,771	\$32,376	\$0
(iv) Net Realized Gain (Loss) on Sale or Exchange	\$0	\$0	(\$20,038)	\$0	\$76,678	\$20,974	\$139,103	\$47,662	\$79,280	\$0	\$0
(v) Other	\$0	\$5	\$0	(\$45)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(vi) Investment Expense	\$0	\$0	(\$32,522)	(\$4,157)	(\$46,301)	(\$21,214)	\$0	(\$17,472)	(\$23,990)	\$0	\$0
(vii) Total	\$54,381	(\$58,916)	(\$80,696)	\$5,654	(\$5,459)	\$54,230	\$40,721	\$132,989	\$213,748	\$27,932	\$22,300
(d) Other Revenue	\$0	(\$5)	\$0	\$0	\$0	\$0	\$225	\$0	\$0	\$57	\$5,006
(e) Receivable Contribution	\$0	\$0	\$0	\$0	\$0	\$20,300	\$90,045	\$0	\$0	\$0	\$0
(f) Total Revenue (sum of (a) through (e))	\$481,159	\$270,561	\$911,832	\$868,452	\$433,757	\$498,329	\$480,507	\$1,124,973	\$639,528	\$156,346	\$162,110
2. Expenditures During Fiscal Year											
(a) Benefits Paid	\$284,289	\$356,924	\$824,142	\$988,879	\$344,381	\$517,666	\$327,421	\$1,322,128	\$523,367	\$133,105	\$128,065
(b) Withdrawals	\$17,290	\$0	\$55,533	\$0	\$2,059	\$1,564	\$0	\$0	\$0	\$7,291	\$0
(c) Administrative Expenses	\$420	\$1,385	\$2,650	\$3,750	\$642	\$1,490	\$26,663	\$5,996	\$3,419	\$0	\$883
(d) Total Expenditures (sum of (a) through (c))	\$301,999	\$358,309	\$882,325	\$992,629	\$347,082	\$520,720	\$354,084	\$1,328,124	\$526,786	\$140,396	\$128,948
B. Market Value of Assets as of June 30, 2012 [A + 1(f) - 2(d)]	\$3,479,592	\$973,857	\$2,236,511	\$1,592,824	\$4,898,647	\$2,248,835	\$4,631,966	\$4,022,752	\$6,906,215	\$1,299,823	\$433,362
C. Return on Assets	1.6%	(5.8)%	(3.7)%	0.1%	(0.1)%	2.4%	0.3%	3.1%	3.1%	2.2%	5.3%

^a Receivable contributions for plan year ending June 30, 2012.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation as of July 01, 2012**

Reconciliation of Assets 6/30/2012

Class III

<u>Municipality</u>	<u>Chester</u>		<u>Dunbar</u>		<u>Elkins</u>		<u>Grafton</u>		<u>Logan</u>		<u>Nitro</u>	
	<u>Police</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>	<u>Police</u>	<u>Fire</u>	
A. Market Value of Assets as of July 1, 2011	\$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	
Adjustment to Market Value of Assets at Beginning of Year	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Market Value of Assets Beginning of Year	\$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	
1. Revenue During Fiscal Year												
(a) Employee Contribution	\$17,126	\$39,571	\$46,548	\$30,769	\$10,264	\$16,086	\$9,115	\$16,959	\$24,510	\$67,395	\$42,435	
(b) Governmental Contribution												
(i) From Local Government	\$73,398	\$129,285	\$295,971	\$134,609	\$40,492	\$90,000	\$105,100	\$4,000	\$33,359	\$138,070	\$148,172	
(ii) From State Government	\$37,972	\$92,483	\$206,057	\$0	\$0	\$49,581	\$39,023	\$0	\$42,883	\$112,741	\$91,893	
(iii) Total	\$111,370	\$221,768	\$502,028	\$134,609	\$40,492	\$139,581	\$144,123	\$4,000	\$76,242	\$250,811	\$240,065	
(c) Earnings on Investments												
(i) Net Appreciation (Depreciation)	(\$10,552)	\$1,847	\$140	\$0	\$0	\$1,167	\$29,512	(\$310)	\$18,475	\$8,106	\$35,208	
(ii) Bond Interest	\$8,273	\$311,265	\$4,758	\$49,174	\$18,379	\$0	\$0	\$12,859	\$6,931	\$12,367	\$2,264	
(iii) Dividends	\$6,522	\$59,377	\$11,153	\$5,711	\$4,667	\$0	\$0	\$8,227	\$5,551	\$25,068	\$4,384	
(iv) Net Realized Gain (Loss) on Sale or Exchange	\$0	(\$478,244)	(\$1,171)	\$8,517	\$9,528	\$0	\$0	\$0	\$0	\$0	\$0	
(v) Other	\$6,593	\$0	\$0	\$0	\$0	\$4,411	\$6	\$0	\$0	\$0	\$0	
(vi) Investment Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$7,482)	(\$1,425)	
(vii) Total	\$10,836	(\$105,755)	\$14,880	\$63,402	\$32,574	\$5,578	\$29,518	\$20,776	\$30,957	\$38,059	\$40,431	
(d) Other Revenue	\$0	\$0	\$0	\$0	\$0	\$1,230	\$1,393	\$0	\$0	\$0	\$0	
(e) Receivable Contribution	\$10,524	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
(f) Total Revenue (sum of (a) through (e))	\$149,856	\$155,584	\$563,456	\$228,780	\$83,330	\$162,475	\$184,149	\$41,735	\$131,709	\$356,265	\$322,931	
2. Expenditures During Fiscal Year												
(a) Benefits Paid	\$39,216	\$314,693	\$506,394	\$223,507	\$84,008	\$57,094	\$84,904	\$12,711	\$23,537	\$250,173	\$202,262	
(b) Withdrawals	\$9,424	\$692	\$3,030	\$0	\$0	\$8,177	\$5,915	\$0	\$0	\$0	\$0	
(c) Administrative Expenses	\$957	\$34,398	\$5,315	\$5,654	\$3,319	\$2,349	\$1,435	\$4,200	\$4,200	\$2,584	\$581	
(d) Total Expenditures (sum of (a) through (c))	\$49,597	\$349,783	\$514,739	\$229,161	\$87,327	\$67,620	\$92,254	\$16,911	\$27,737	\$252,757	\$202,843	
B. Market Value of Assets as of June 30, 2012 [A + 1(f) - 2(d)]	\$1,196,589	\$4,596,187	\$602,242	\$1,872,918	\$890,979	\$851,833	\$1,147,610	\$415,152	\$334,410	\$2,179,114	\$605,189	
C. Return on Assets	0.9%	(2.9)%	1.7%	3.1%	3.3%	0.4%	2.6%	4.2%	9.9%	1.7%	8.7%	

^a Receivable contributions for plan year ending June 30, 2012.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation as of July 01, 2012**

Reconciliation of Assets 6/30/2012

<u>Municipality</u>	Class III										
	<u>Oak Hill</u> Police	<u>Point</u> <u>Pleasant</u> Police	<u>Princeton</u> Police	<u>Fire</u>	<u>Star City</u> Police	<u>Welch</u> Police	<u>Weston</u> Police	<u>Fire</u>	<u>Westover</u> Police	<u>Williamson</u> Police	<u>Fire</u>
A. Market Value of Assets as of July 1, 2011	\$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
Adjustment to Market Value of Assets at Beginning of Year	(\$72,331)	\$17,049	(\$11,870)	(\$8,442)	\$0	\$80,793	(\$115,156)	(\$2,185)	\$0	\$0	\$5
Market Value of Assets Beginning of Year	\$3,171,641	\$817,429	\$3,363,463	\$2,586,681	\$1,138,781	\$1,377,833	\$510,330	\$535,511	\$1,555,637	\$810,974	\$1,545,921
1. Revenue During Fiscal Year											
(a) Employee Contribution	\$33,873	\$21,270	\$56,825	\$35,891	\$11,291	\$21,664	\$11,156	\$9,410	\$28,228	\$13,794	\$17,946
(b) Governmental Contribution											
(i) From Local Government	\$115,308	\$24,000	\$171,650	\$101,757	\$24,365	\$66,623	\$37,000	\$64,000	\$66,000	\$105,877	\$105,529
(ii) From State Government	\$78,261	\$46,186	\$155,564	\$116,329	\$41,206	\$43,115	\$0	\$0	\$0	\$67,358	\$106,795
(iii) Total	\$193,569	\$70,186	\$327,214	\$218,086	\$65,571	\$109,738	\$37,000	\$64,000	\$66,000	\$173,235	\$212,324
(c) Earnings on Investments											
(i) Net Appreciation (Depreciation)	(\$21,646)	\$2,790	(\$40,641)	(\$29,489)	(\$4,561)	\$22,277	(\$1,053)	\$6,419	\$0	\$0	(\$59,693)
(ii) Bond Interest	\$41,684	\$16,806	\$45,846	\$32,651	\$12,447	\$18,626	\$6,717	\$7,253	\$42,306	\$3,726	\$41,484
(iii) Dividends	\$53,882	\$8,642	\$24,715	\$20,392	\$27,285	\$43,349	\$8,743	\$8,888	\$0	\$0	\$0
(iv) Net Realized Gain (Loss) on Sale or Exchange	(\$118,247)	\$0	\$34,144	\$18,063	\$13,399	(\$2,381)	(\$2,702)	(\$4,633)	\$0	\$0	\$0
(v) Other	\$393	\$0	\$2	\$0	\$0	\$624	\$0	\$0	(\$57,681)	\$0	\$0
(vi) Investment Expense	(\$22,990)	(\$9,644)	(\$15,548)	(\$4,132)	(\$4,688)	(\$3,275)	\$0	\$0	(\$14,860)	\$0	(\$14,105)
(vii) Total	(\$66,924)	\$18,594	\$48,518	\$37,485	\$43,882	\$79,220	\$11,705	\$17,927	(\$30,235)	\$3,726	(\$32,314)
(d) Other Revenue	\$5,806	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(e) Receivable Contribution	\$0	\$5,306	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(f) Total Revenue (sum of (a) through (e))	\$166,324	\$115,356	\$432,557	\$291,462	\$120,744	\$210,622	\$59,861	\$91,337	\$63,993	\$190,755	\$197,956
2. Expenditures During Fiscal Year											
(a) Benefits Paid	\$87,895	\$108,612	\$358,156	\$305,355	\$76,826	\$30,964	\$50,741	\$66,367	\$73,525	\$96,955	\$254,697
(b) Withdrawals	\$18,361	\$0	\$16,583	\$0	\$0	\$11,817	\$0	\$0	\$30,936	\$0	\$0
(c) Administrative Expenses	\$0	\$6,786	\$412	\$458	\$5,226	\$1,275	\$8,708	\$5,341	\$0	\$1,097	\$1,929
(d) Total Expenditures (sum of (a) through (c))	\$106,256	\$115,398	\$375,151	\$305,813	\$82,052	\$44,056	\$59,449	\$71,708	\$104,461	\$98,052	\$256,626
B. Market Value of Assets as of June 30, 2012 [A + 1(f) - 2(d)]	\$3,231,709	\$817,387	\$3,420,869	\$2,572,330	\$1,177,473	\$1,544,399	\$510,742	\$555,140	\$1,515,169	\$903,677	\$1,487,251
C. Return on Assets	(2.1)%	1.5%	1.4%	1.4%	3.9%	5.5%	0.7%	2.3%	(1.9)%	0.3%	(2.2)%

^a Receivable contributions for plan year ending June 30, 2012.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class I

Assets Held by Category as of 6/30/2012

<u>Municipality</u>	<u>Charleston</u>		<u>Huntington</u>		<u>Morgantown</u>		<u>Parkersburg</u>		<u>Wheeling</u>	
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
1. Cash and Short-term Investments	\$766,236	\$1,846,174	\$1,441,246	\$888,144	\$853,379	\$848,544	\$382,613	\$1,396,197	\$273,929	\$207,432
2. Government Securities										
(a) Treasury Notes and Bonds	\$2,651,643	\$1,470,477	\$2,729,947	\$899,369	\$2,750,498	\$2,023,301	\$2,170,841	\$2,383,027	\$2,975,620	\$2,711,629
(b) State and Municipal Bonds	\$0	\$0	\$951,396	\$0	\$0	\$0	\$0	\$10,228	\$0	\$0
(c) Total Government Securities	\$2,651,643	\$1,470,477	\$3,681,343	\$899,369	\$2,750,498	\$2,023,301	\$2,170,841	\$2,393,255	\$2,975,620	\$2,711,629
3. Corporate Bonds										
(a) Bonds	\$2,598,882	\$0	\$3,268,344	\$1,921,318	\$2,742,648	\$2,164,390	\$1,966,682	\$2,308,242	\$2,891,311	\$2,634,348
(b) Mortgage Backed Securities	\$0	\$0	\$990,641	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(c) Debentures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(d) Mutual Fund Shares (Bonds)	\$0	\$0	\$648,537	\$1,638,911	\$0	\$0	\$0	\$0	\$0	\$0
(e) Total Corporate Bonds	\$2,598,882	\$0	\$4,907,522	\$3,560,229	\$2,742,648	\$2,164,390	\$1,966,682	\$2,308,242	\$2,891,311	\$2,634,348
4. Corporate Stocks										
(a) Stocks	\$5,587,452	\$5,853,773	\$1,528,375	\$3,511,973	\$6,432,719	\$5,070,023	\$0	\$3,433,839	\$8,204,825	\$7,641,486
(b) Mutual Fund Shares (Stocks)	\$0	\$0	\$5,946,008	\$50,553	\$0	\$0	\$4,513,935	\$67,654	\$0	\$0
(c) Total Corporate Stocks	\$5,587,452	\$5,853,773	\$7,474,383	\$3,562,526	\$6,432,719	\$5,070,023	\$4,513,935	\$3,501,493	\$8,204,825	\$7,641,486
5. Other	\$40,120	\$398	\$0	\$0	\$53,700	\$34,935	\$39,055	\$39,636	-\$35,161	-\$26,360
6. Receivable Contribution ^a	\$136,713	\$143,522	\$1,734,372	\$2,035,946	\$0	\$0	\$0	\$0	\$0	\$0
Market Value of Assets as of June 30, 2012 [sum of (1) through (6)]	\$11,781,046	\$9,314,344	\$19,238,866	\$10,946,214	\$12,832,944	\$10,141,193	\$9,073,126	\$9,638,823	\$14,310,524	\$13,168,535

^a Receivable contributions for plan year ending June 30, 2012.

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class II

Assets Held by Category as of 6/30/2012

<u>Municipality</u>	<u>Beckley</u>		<u>Bluefield</u>		<u>Clarksburg</u>		<u>Fairmont</u>		<u>Martinsburg</u>	
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
1. Cash and Short-term Investments	\$1,197,859	\$865,737	\$268,309	\$134,086	\$961,720	\$1,090,457	\$786,078	\$183,352	\$844,310	\$280,021
2. Government Securities										
(a) Treasury Notes and Bonds	\$1,990,453	\$1,397,776	\$2,457,972	\$0	\$109,333	\$86,083	\$0	\$2,342	\$1,261,093	\$833,127
(b) State and Municipal Bonds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(c) Total Government Securities	\$1,990,453	\$1,397,776	\$2,457,972	\$0	\$109,333	\$86,083	\$0	\$2,342	\$1,261,093	\$833,127
3. Corporate Bonds										
(a) Bonds	\$3,735,070	\$3,236,420	\$1,070,568	\$1,499,415	\$161,787	\$38,179	\$0	\$840,216	\$104,277	\$0
(b) Mortgage Backed Securities	\$0	\$0	\$0	\$0	\$191,147	\$254,995	\$0	\$0	\$0	\$0
(c) Debentures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(d) Mutual Fund Shares (Bonds)	\$0	\$0	\$0	\$807,696	\$0	\$0	\$1,194,501	\$37,194	\$0	\$0
(e) Total Corporate Bonds	\$3,735,070	\$3,236,420	\$1,070,568	\$2,307,111	\$352,934	\$293,174	\$1,194,501	\$877,410	\$104,277	\$0
4. Corporate Stocks										
(a) Stocks	\$4,512,039	\$4,076,635	\$167,043	\$842,321	\$1,028,283	\$1,154,757	\$0	\$77,387	\$1,852,054	\$186,600
(b) Mutual Fund Shares (Stocks)	\$4,972,002	\$5,005,577	\$0	\$0	\$976,373	\$1,073,681	\$1,883,034	\$586,600	\$1,978,370	\$674,109
(c) Total Corporate Stocks	\$9,484,041	\$9,082,212	\$167,043	\$842,321	\$2,004,656	\$2,228,438	\$1,883,034	\$663,987	\$3,830,424	\$860,709
5. Other	\$76,276	\$43,554	\$0	\$0	\$0	\$0	\$6,217	\$4,905	\$0	\$0
6. Receivable Contribution ^a	\$410,130	\$384,925	\$0	\$0	\$31,306	\$35,241	\$2,692	\$2,692	\$0	\$0
Market Value of Assets as of June 30, 2012 [sum of (1) through (6)]	\$16,893,829	\$15,010,624	\$3,963,892	\$3,283,518	\$3,459,949	\$3,733,393	\$3,872,522	\$1,734,688	\$6,040,104	\$1,973,857

^a Receivable contributions for plan year ending

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Assets Held by Category as of 6/30/2012

Class II

Class III

Charles
Town
Police

<u>Municipality</u>	<u>Moundsville</u>		<u>South Charleston</u>		<u>St. Albans</u>		<u>Vienna</u>	<u>Weirton</u>		<u>Belle</u>	Charles Town Police
	Police	Fire	Police	Fire	Police	Fire	Police	Police	Fire	Police	
1. Cash and Short-term Investments	\$149,106	\$77,644	\$68,959	\$651,073	\$243,050	\$121,339	\$144,155	\$217,811	\$133,554	\$1,244,471	\$433,362
2. Government Securities											
(a) Treasury Notes and Bonds	\$1,419,615	\$126,084	\$0	\$100,046	\$848,949	\$358,661	\$662,759	\$0	\$201,173	\$19,002	\$0
(b) State and Municipal Bonds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$180,548	\$150,965	\$0	\$0
(c) Total Government Securities	\$1,419,615	\$126,084	\$0	\$100,046	\$848,949	\$358,661	\$662,759	\$180,548	\$352,138	\$19,002	\$0
3. Corporate Bonds											
(a) Bonds	\$0	\$102,023	\$0	\$50,668	\$1,116,305	\$546,646	\$619,821	\$1,317,378	\$1,506,403	\$0	\$0
(b) Mortgage Backed Securities	\$0	\$0	\$0	\$0	\$257,848	\$83,412	\$46,120	\$0	\$0	\$0	\$0
(c) Debentures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(d) Mutual Fund Shares (Bonds)	\$0	\$0	\$886,981	\$0	\$0	\$0	\$1,013,486	\$120,529	\$1,212,564	\$0	\$0
(e) Total Corporate Bonds	\$0	\$102,023	\$886,981	\$50,668	\$1,374,153	\$630,058	\$1,679,427	\$1,437,907	\$2,718,967	\$0	\$0
4. Corporate Stocks											
(a) Stocks	\$0	\$0	\$0	\$458,539	\$2,432,495	\$1,118,477	\$342,533	\$2,186,486	\$3,439,997	\$0	\$0
(b) Mutual Fund Shares (Stocks)	\$1,910,871	\$727,307	\$1,231,703	\$0	\$0	\$0	\$1,713,047	\$0	\$261,559	\$0	\$0
(c) Total Corporate Stocks	\$1,910,871	\$727,307	\$1,231,703	\$458,539	\$2,432,495	\$1,118,477	\$2,055,580	\$2,186,486	\$3,701,556	\$0	\$0
5. Other	\$0	-\$59,201	\$48,868	\$72	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6. Receivable Contribution ^a	\$0	\$0	\$0	\$332,426	\$0	\$20,300	\$90,045	\$0	\$0	\$36,350	\$0
Market Value of Assets as of June 30, 2012 [sum of (1) through (6)]	\$3,479,592	\$973,857	\$2,236,511	\$1,592,824	\$4,898,647	\$2,248,835	\$4,631,966	\$4,022,752	\$6,906,215	\$1,299,823	\$433,362

^a Receivable contributions for plan year ending

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Class III

Assets Held by Category as of 6/30/2012

<u>Municipality</u>	<u>Chester</u>		<u>Dunbar</u>		<u>Elkins</u>		<u>Grafton</u>		<u>Logan</u>		<u>Nitro</u>	
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Police	Fire
1. Cash and Short-term Investments	\$450,250		\$120,812	\$121,567	\$1,150,240	\$494,910	\$234,713	\$24,728	\$42,373	\$42,620	\$673,525	\$295,148
2. Government Securities												
(a) Treasury Notes and Bonds	\$76,166		\$1,939,514	\$102,979	\$0	\$0	\$438,613	\$0	\$0	\$0	\$200,092	\$310,041
(b) State and Municipal Bonds	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(c) Total Government Securities	\$76,166		\$1,939,514	\$102,979	\$0	\$0	\$438,613	\$0	\$0	\$0	\$200,092	\$310,041
3. Corporate Bonds												
(a) Bonds	\$0		\$0	\$0	\$0	\$0	\$0	\$653,517	\$244,863	\$139,499	\$0	\$0
(b) Mortgage Backed Securities	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(c) Debentures	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(d) Mutual Fund Shares (Bonds)	\$26,858		\$0	\$0	\$80,522	\$0	\$0	\$0	\$11,399	\$0	\$0	\$0
(e) Total Corporate Bonds	\$26,858		\$0	\$0	\$80,522	\$0	\$0	\$653,517	\$256,262	\$139,499	\$0	\$0
4. Corporate Stocks												
(a) Stocks	\$178,167		\$296	\$5,290	\$0	\$0	\$176,693	\$0	\$116,517	\$152,291	\$1,305,497	\$0
(b) Mutual Fund Shares (Stocks)	\$454,624		\$2,535,565	\$372,406	\$642,156	\$396,069	\$0	\$469,365	\$0	\$0	\$0	\$0
(c) Total Corporate Stocks	\$632,791		\$2,535,861	\$377,696	\$642,156	\$396,069	\$176,693	\$469,365	\$116,517	\$152,291	\$1,305,497	\$0
5. Other	\$0		\$0	\$0	\$0	\$0	\$1,814	\$0	\$0	\$0	\$0	\$0
6. Receivable Contribution ^a	\$10,524		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Market Value of Assets as of June 30, 2012 [sum of (1) through (6)]	\$1,196,589		\$4,596,187	\$602,242	\$1,872,918	\$890,979	\$851,833	\$1,147,610	\$415,152	\$334,410	\$2,179,114	\$605,189

^a Receivable contributions for plan year ending

**Policemen's and Firemen's
Pension and Relief Funds
of West Virginia Municipalities
Actuarial Valuation
As of July 01, 2012**

Assets Held by Category as of 6/30/2012

<u>Municipality</u>	Class III										
	<u>Oak Hill</u> Police	<u>Point</u> <u>Pleasant</u> Police	<u>Princeton</u> Police	<u>Fire</u>	<u>Star City</u> Police	<u>Welch</u> Police	<u>Weston</u> Police	<u>Fire</u>	<u>Westover</u> Police	<u>Williamson</u> Police	<u>Fire</u>
1. Cash and Short-term Investments	\$86,646	\$57,648	\$332,158	\$113,587	\$74,141	\$32,295	\$22,785	\$28,312	\$83,498	\$463,793	\$110,473
2. Government Securities											
(a) Treasury Notes and Bonds	\$699,354	\$252,593	\$119,703	\$40,567	\$200,640	\$0	\$188,303	\$189,303	\$338,739	\$0	\$232,838
(b) State and Municipal Bonds	\$99,492	\$0	\$646,154	\$465,909	\$0	\$128,623	\$0	\$0	\$0	\$0	\$0
(c) Total Government Securities	\$798,846	\$252,593	\$765,857	\$506,476	\$200,640	\$128,623	\$188,303	\$189,303	\$338,739	\$0	\$232,838
3. Corporate Bonds											
(a) Bonds	\$457,317	\$180,459	\$569,809	\$545,083	\$778,184	\$254,565	\$0	\$94,929	\$338,885	\$0	\$339,789
(b) Mortgage Backed Securities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$439,884	\$90,543
(c) Debentures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(d) Mutual Fund Shares (Bonds)	\$258,119	\$0	\$0	\$0	\$0	\$464,343	\$61,243	\$0	\$0	\$0	\$0
(e) Total Corporate Bonds	\$715,436	\$180,459	\$569,809	\$545,083	\$778,184	\$718,908	\$61,243	\$94,929	\$338,885	\$439,884	\$430,332
4. Corporate Stocks											
(a) Stocks	\$1,404,925	\$321,381	\$536,820	\$309,746	\$0	\$551,650	\$0	\$0	\$754,047	\$0	\$713,608
(b) Mutual Fund Shares (Stocks)	\$225,856	\$0	\$1,216,225	\$1,097,438	\$0	\$112,923	\$137,640	\$242,596	\$0	\$0	\$0
(c) Total Corporate Stocks	\$1,630,781	\$321,381	\$1,753,045	\$1,407,184	\$0	\$664,573	\$137,640	\$242,596	\$754,047	\$0	\$713,608
5. Other	\$0	\$0	\$0	\$0	\$0	\$0	\$100,771	\$0	\$0	\$0	\$0
6. Receivable Contribution ^a	\$0	\$5,306	\$0	\$0	\$124,508	\$0	\$0	\$0	\$0	\$0	\$0
Market Value of Assets as of June 30, 2012 [sum of (1) through (6)]	\$3,231,709	\$817,387	\$3,420,869	\$2,572,330	\$1,177,473	\$1,544,399	\$510,742	\$555,140	\$1,515,169	\$903,677	\$1,487,251

^a Receivable contributions for plan year ending