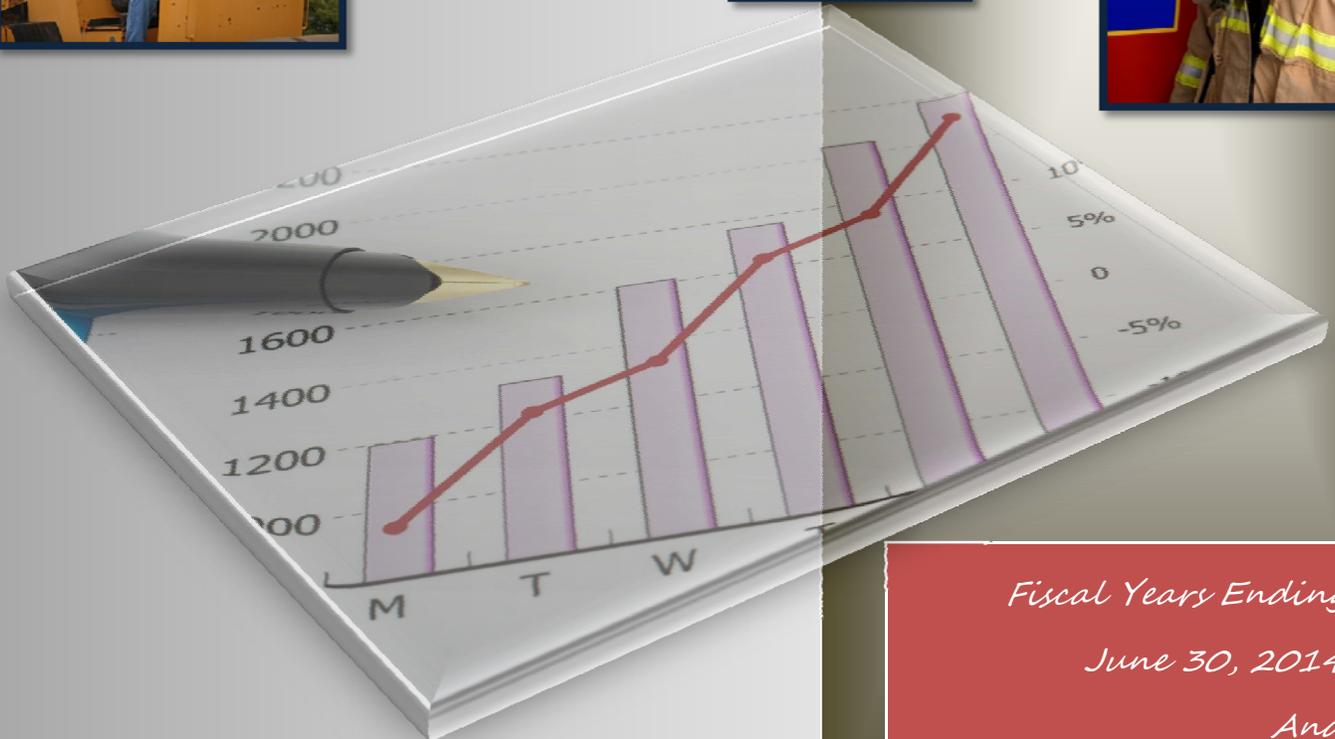


*Comprehensive  
Annual  
Financial  
Report*



*Consolidated  
Public Retirement  
Board*

*Pension Trust Funds  
of the State of West  
Virginia*



*Fiscal Years Ending  
June 30, 2014  
And  
June 30, 2013*



# **West Virginia Consolidated Public Retirement Board**

Pension Trust Funds of the State of West Virginia

## **COMPREHENSIVE ANNUAL FINANCIAL REPORT**

*For the Fiscal Years Ended June 30, 2014 and 2013*

---

### **The West Virginia Consolidated Public Retirement Board Administers the Following Retirement Plans:**

Public Employees' Retirement System  
Teachers' Retirement System  
State Police Death, Disability, and Retirement System  
State Police Retirement System  
Deputy Sheriff Retirement System  
Judges' Retirement System  
Emergency Medical Services Retirement System  
Municipal Police Officers & Firefighters Retirement System  
Teachers' Defined Contribution Retirement System

---

### **Contact Information:**

Jeffrey E. Fleck, Executive Director  
4101 MacCorkle Avenue, S.E.  
Charleston, WV 25304-1636  
(304) 558-3570 or (800) 654-4406  
CPRB@wv.gov

## Upper Laurel Creek Falls



*Waterfall in the New River Gorge area of Fayette County, West Virginia.  
Photograph by Kenneth Keifer*

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# **INTRODUCTORY SECTION**

## Dolly Sods Wilderness



*Located in the Monongahela National Forest in Grant,  
Randolph and Tucker Counties, West Virginia  
Photograph by Dave Miller*



State of West Virginia  
**Consolidated Public Retirement Board**

Board Members  
Governor Earl Ray Tomblin  
Auditor Glen B. Gainer III, Vice Chairman  
Treasurer John D. Perdue  
Acting Cabinet Secretary Jason Pizatella

Executive Director  
Jeffrey E. Fleck

4101 MacCorkle Ave, SE  
Charleston, West Virginia 25304-1636  
Telephone: 304-558-3570 or 800-654-4406  
Fax: 304-558-6337  
email: [cprb@wv.gov](mailto:cprb@wv.gov)  
[www.wvretirement.com](http://www.wvretirement.com)

Board Members  
David L. Wyant, Chairman  
Andy Bird  
Joseph Bunn  
Captain Michael G. Corsaro  
Angela Crank  
Joe Lynch  
D. Todd Murray  
Andrew Richardson  
David Stover  
C. Jeffrey Vallet

February 24, 2015

The Board of Directors  
The West Virginia Consolidated Public  
Retirement Board  
4101 MacCorkle Ave, S.E.  
Charleston, WV 25304

Dear Board Members:

It is with great pleasure that we submit our Comprehensive Annual Financial Report (CAFR) of the West Virginia Consolidated Public Retirement Board (WVCPRB) for the fiscal year ended June 30, 2014. The West Virginia Consolidated Public Retirement Board includes the Public Employees Retirement System (PERS), the Teachers Retirement System (TRS), the Teachers Defined Contribution Retirement System (TDCRS), the State Police Death, Disability Retirement System (SPDDRS), the State Police Retirement System (SPRS), the Deputy Sheriffs Retirement System (DSRS), the Judges Retirement System (JRS), the Emergency Medical Service Retirement System (EMSRS) and the Municipal Police Officers & Firefighters System (MPFRS). Each system is considered a component unit of the State of West Virginia for financial reporting purposes, and, as such, the financial information contained in this report is also included in the State of West Virginia's Comprehensive Annual Financial Report.

Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation including all disclosures, rests with the management of the WVCPRB. Sufficient internal controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements, supporting schedules, and statistical tables. We trust that you and the respective members of the Systems administered by the WVCPRB will find this report helpful in understanding your retirement system.

**Administration and Plan History**

The PERS, TRS, TDCRS, SPDDRS, SPRS, DSRS, JRS, EMSRS, and MPFRS operate under common management and are collectively referred to as The West Virginia Consolidated Public Retirement Board. In addition to executive management, these plans share accounting and information services, the costs of which are allocated to the funds on an equitable basis. The plans were established under various provisions of the Legislature to provide benefits to qualified persons employed by State-supported institutions, entities and components. Additional information regarding the administration and history of each system, including laws establishing the system and services provided, can be found in the Financial Section of this report in the Notes to the Financial Statements.

## **Financial Information**

The WV CPRB adopted Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*, during the fiscal year ended June 30, 2014. Effective with the adoption of GASB 67, each of the pension plans now has an actuarial valuation prepared for funding purposes and a separate actuarial valuation prepared for financial reporting purposes. The actuarial valuations prepared for financial reporting purposes have been prepared as of June 30, 2014, the end of the plan year, and were the source of much of the actuarial information presented in the Financial Section. The actuarial valuations included in the Actuarial Section of this CAFR have been prepared for funding purposes to assist the WV CPRB in determining contribution rates and have been prepared as of July 1, 2013, the beginning of the plan year.

*Accounting Method* - As required by Generally Accepted Accounting Principles (GAAP), the financial information of the PERS, TRS, TDCRS, SPDDRS, SPRS, DSRS, JRS, EMSRS, and MPFRS is reported on the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when the corresponding liability is incurred. Investments are reported at fair value.

*Internal Controls* - The management of the West Virginia Consolidated Public Retirement Board is responsible for maintaining the system of internal controls (system). The system provides management with reasonable, but not absolute, assurance regarding the safeguarding of assets against loss of unauthorized disposition and the reliability of the financial records from which the financial reports are prepared. The concept of reasonable assurance recognizes that the cost of a control should not exceed the resulting benefits.

*Summary Comparative Data* - Management's Discussion and Analysis (MD&A) includes a narrative introduction, an overview of the financial statements, including the notes and required supplementary information, and summary comparative data for fiscal years 2014 and 2013. Also, an analysis of significant variances between fiscal years 2014 and 2013 is provided in the MD&A.

## **Plan Funded Condition**

The funding objective of the WVCPRB pension trust funds is to meet long-term benefit requirements through contributions, which remain relatively level as a percent of member payroll over time, and through investment earnings. During the year ended June 30, 2013, the funded ratios of the eight defined benefit plans administered by the WVCPRB showed an increase. This was due to positive returns in the investment market during the 2013 fiscal year, which served as the basis for our beginning of year valuation date for funding purposes, but bolstered by continued funding of the closed amortization schedule of the Unfunded Actuarial Accrued Liability (UAAL). The funding percentages for PERS, TRS, SPDDRS, SPRS, DSRS, JRS, EMSRS, and MPFRS as of July 1, 2013 were 79.7%, 57.9%, 76.5%, 94.7%, 80.2%, 133.8%, 84.2% and 200.4%, respectively. Historical information concerning funding progress is presented in the Schedule of Funding Progress presented for each plan in the Actuarial Section of this CAFR.

## **Investment Activity**

Total investments for the WVCPRB increased in fiscal year 2014, primarily due to both an increase in the fair market value of the investments and the income they produced. The total assets for PERS, TRS, SPDDRS, SPRS, DSRS, JRS, EMSRS, MPFRS, and TDCRS at June 30, 2014 were \$5.761 billion, \$6.682 billion, \$601.1 million, \$120.6 million, \$162.7 million, \$165.2 million, \$53.6 million, \$1.2 million and \$408 million respectively compared to total asset balances for the PERS, TRS, SPDDRS, SPRS, DSRS, JRS, EMSRS, MPFRS, and TDCRS of \$4.999 billion, \$5.751 billion, \$520.3 million, \$96.1 million, \$135.8 million, \$141.5 million, \$42.9 million, \$529 thousand and \$362.0 million, respectively, for the fiscal year ended June 30, 2013.

Interest and dividend income for the PERS, TRS, SPDDRS, SPRS, DSRS, JRS, EMSRS, MPFRS, and TDCRS for the fiscal year ended June 30, 2014, was \$22.85 million, \$26.36 million, \$2.36 million,

\$482 thousand, \$701 thousand, \$669 thousand, \$214 thousand, \$3 thousand and \$2 thousand, respectively, compared to \$24.03 million, \$52.42 million, \$2.6 million, \$460 thousand, \$715 thousand, \$700 thousand, \$206 thousand, \$1 thousand and \$23 thousand, respectively, for the fiscal year ended June 30, 2013. The increase in fair value of investments for the PERS, TRS, SPDDRS, SPRS, DSRS, JRS, EMSRS, MPFRS, and TDCRS for the fiscal year 2014 was \$841.2 million, \$976.8 million, \$88.5 million, \$17.3 million, \$23.7 million, \$24.6 million, \$7.7 million, \$122 thousand and \$51.1 million, respectively, compared to the increase in fair value of investments of \$541.3 million, \$602.3 million, \$58.2 million, \$10.0 million, \$14.6 million, \$15.7 million, \$4.5 million, \$31 thousand and \$37.7 million, respectively, for fiscal year 2013. Additional information concerning investments, including investment policies and procedures, is located in the Investment Section of this Comprehensive Annual Financial Report.

### **Management's Discussion and Analysis**

GASB Statement No. 34 requires that management provide a narrative introduction, overview, and analysis to accompany the Financial Statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is intended to compliment the MD&A and should be read in conjunction with it. The MD&A can be found immediately following the Independent Auditor's Report in the Financial Section.

### **Professional Services**

Professional consultants are engaged by the Board to perform certain professional services that are essential to the effective operation of the respective plans. The Certification letters from our internal actuary are included in this report. The professional consultants engaged by the Board are listed in the Introductory Section of this report.

### **Financial Statement Audit**

Gibbons and Kawash, A.C., Certified Public Accountants, issued an unmodified ("clean") opinion on the West Virginia Consolidated Public Retirement Board's financial statements for the fiscal year ended June 30, 2014. The Independent Auditor's Report is located at the front of the Financial Section of this report.

### **Highlights and Initiatives**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the West Virginia Consolidated Public Retirement Board for its comprehensive annual financial report for the fiscal year ended June 30, 2013. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

During this fiscal year, the CPRB began the process of designing our new computer system that, when completed, will enhance the experience of the members and retirees as well as improve the accuracy and consistency in the administration of the plans. The first phase of our computer project, named COMPASS, is expected to "go live" in mid 2015.

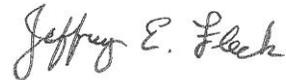
### **Acknowledgments**

The compilation of this report reflects the combined effort of the staff of the West Virginia Consolidated Public Retirement Board under the leadership of its Executive Director and the guidance of

the Board Members. It is intended to provide extensive and reliable information as a basis for making management decisions, determining compliance with legal provisions, and determining responsible stewardship of the funds of the PERS, TRS, TDCRS, SPDDRS, SPRS, DSRS, JRS, EMSRS, and MPFRS.

We would like to take this opportunity to express our gratitude to the staff, the Governor, the Board of Directors, the consultants, the Legislature, and the many people who have worked so diligently through continued cooperative efforts to assure the successful operation and financial soundness of the PERS, TRS, TDCRS, SPDDRS, SPRS, DSRS, JRS, EMSRS, and MPFRS systems.

Sincerely,



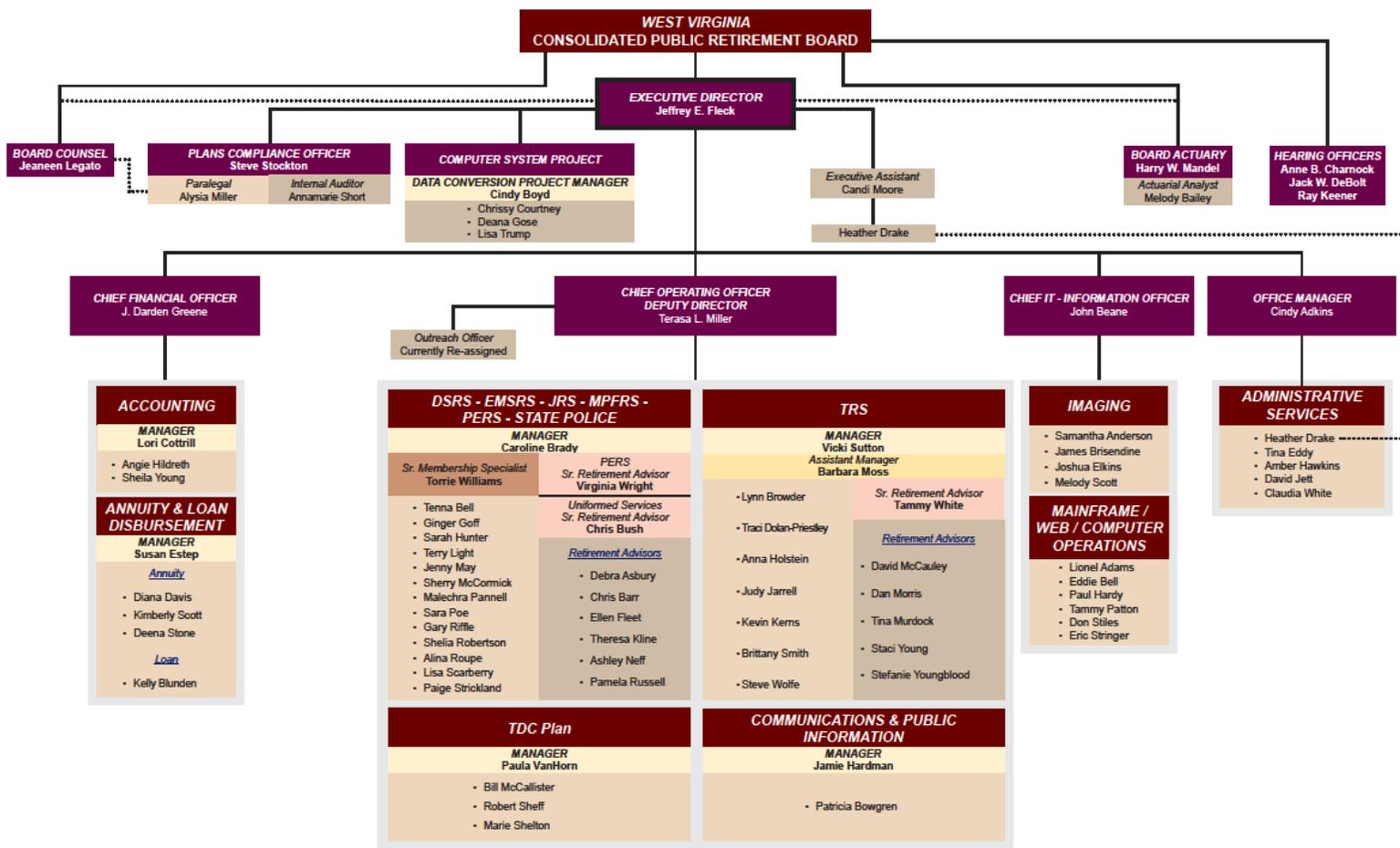
Jeffrey E. Fleck  
Executive Director



J. Darden Greene, CPA  
Chief Financial Officer

# INTRODUCTORY SECTION

## Organization Chart



**West Virginia Consolidated Public Retirement Board**

*Board of Trustees*

Chairman - David L. Wyant  
Governor - Earl Ray Tomblin  
State Auditor/Vice-Chairman - Glen B. Gainer, III  
State Treasurer - John D. Perdue  
Cabinet Secretary, State Department of Administration - Jason Pizatella  
Joseph Bunn  
Captain Michael G. Corsaro  
Joe Lynch  
D. Todd Murray  
Tony Payne  
Andrew Richardson

**INTRODUCTORY SECTION**

Staff and Advisors

---

**West Virginia Consolidated Public Retirement Board**

Administrative Staff

Executive Director - Jeffrey E. Fleck  
Executive Assistant - Candi E. Moore  
Chief Operating Officer/Deputy Director - Terasa L. Miller  
Administrative Services Manager - Cindy L. Adkins  
Chief Financial Officer - J. Darden Greene  
Accounting Manager - Lori A. Cottrill  
Annuity and Loan Disbursement Manager - Susan Estep  
Actuary - Harry W. Mandel  
Contract Legal Counsel - Jeaneen J. Legato  
TRS Manager - Vicki L. Sutton  
PERS/Uniformed Services Manager - Caroline Brady  
TDC Manager - Paula M. Vanhorn  
Communications/Public Information Manager - Jamie E. Hardman  
Compliance Officer - Stephen B. Stockton  
Chief IT/Information Officer - John J. Beane

Advisors

Bowles, Rice, LLP, Attorneys  
Buck Consultants, Consulting Actuary  
West Virginia Investment Management Board, Investment Manager  
Gibbons & Kawash, A.C., Independent Certified Public Accountants  
LRWL, Inc., Information Technology

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Government Finance Officers Association

**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

Presented to

**The West Virginia  
Consolidated Public Retirement  
Board**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2013**

Executive Director/CEO

## Canaan Valley National Wildlife Refuge



*Administered by the U.S. Fish and Wildlife Service, the Canaan Valley National Wildlife Refuge is located in Tucker County, West Virginia. White-tailed deer, raccoons, geese and squirrels are common, and mink bobcats, black bears and barred owls can be seen in the area.*

*Photography by Blake*

# **FINANCIAL SECTION**

## Bolivar Heights



*A plateau 668 feet high located in Jefferson County, West Virginia.  
Photography by Nicholas Delaney*

## INDEPENDENT AUDITOR'S REPORT

To the Members of the  
West Virginia Consolidated Public  
Retirement Board  
Charleston, West Virginia

### Report on the Financial Statements

We have audited the accompanying financial statements of the pension funds of the West Virginia Consolidated Public Retirement Board (the Board), pension trust funds of the State of West Virginia, as of and for the years ended June 30, 2014 and 2013, and the related notes to the financial statements, which collectively comprise the Board's basic financial statements as listed in the table of contents.

#### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### *Auditor's Responsibility*

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### *Opinions*

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of each of the pension funds of the West Virginia Consolidated Public Retirement Board, as of June 30, 2014 and 2013, and the respective changes in financial position thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.



## Emphasis of Matter

As disclosed in Note 1, the financial statements present only the pension trust funds of the State of West Virginia and do not purport to, and do not present fairly the financial position of the State of West Virginia, as of June 30, 2014 and 2013, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

## Other Matters

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 17 through 20, and the schedules of net pension liability and changes in net pension liability, schedules of contributions, schedules of investment returns, and the accompanying notes to required supplementary information on pages 60 through 64 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Board's basic financial statements. The accompanying schedules on pages 66 to 67 and the introductory, investment, actuarial, and statistical sections as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The accompanying schedules on pages 66 to 67 are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the accompanying schedules on pages 66 to 67 are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and, accordingly, we do not express an opinion or provide any assurance on them.

Charleston, West Virginia  
February 23, 2015

MANAGEMENT'S DISCUSSION AND ANALYSIS  
(Unaudited)

The Management of the West Virginia Consolidated Public Retirement Board (WV CPRB) provides this discussion and analysis as an overview of the WV CPRB's financial activities for the fiscal years ended June 30, 2014 and June 30, 2013. This section should be read in conjunction with the Independent Auditor's Report, the audited financial statements, and the accompanying notes to the financial statements.

**FINANCIAL HIGHLIGHTS**

- The net position restricted for pensions (total assets minus total liabilities) of the WV CPRB at June 30, 2014 was \$13.95 billion, increasing over \$1.9 billion (15.82%) from the net position restricted for pensions at June 30, 2013. The net position restricted for pensions of the Board at June 30, 2013 was \$12.04 billion, increasing over 1.2 billion (11.34%) from the net position restricted for pensions at June 30, 2012. The net position restricted for pensions is held in trust to meet future benefit obligations.
- Contribution revenue for fiscal year 2014 totaled \$929.74 million, an increase of 4.8% compared to fiscal year 2013. Contribution revenue for fiscal year 2013 totaled \$887.2 million; a decrease of 4.6% compared to fiscal year 2012 contribution revenue. These fluctuations were primarily due to changes in the employer contribution rate for the Public Employees Retirement System.
- Net investment income for fiscal year 2014 was \$2.084 billion and \$1.365 billion for fiscal year 2013. During these years, the WV CPRB received a notably higher investment return on its portfolio.
- Total benefits, refunds, and forfeitures paid for fiscal year 2014 were \$1.098 billion, an increase of 7.45% over fiscal year 2013 total benefits, refunds, and forfeitures paid of \$1.022 billion, which was an increase of 6.55% over fiscal year 2012.
- Total administrative expenses for fiscal year 2014 were \$10.3 million, a 4.2% increase from fiscal year 2013 administrative expenses of \$9.9 million, which was an increase of 3.22% from 2012.

**OVERVIEW OF THE FINANCIAL STATEMENTS**

The WV CPRB financial statements consist of the *Statements of Fiduciary Net Position*, the *Statements of Changes in Fiduciary Net Position*, and the *Notes to the Financial Statements*. In addition, *Required Supplementary Information* is presented, which includes this *Management's Discussion and Analysis*.

The *Statement of Fiduciary Net Position* and the *Statement of Changes in Fiduciary Net Position* report information about the fiduciary net position as of the end of the fiscal year and the changes in fiduciary net position during the fiscal year. These statements include all assets and liabilities using the accrual basis of accounting. Under the accrual basis of accounting, the current year's additions and deductions are included in the financial activity, regardless of when cash is received or paid. The difference between the total assets and total liabilities on the *Statements of Fiduciary Net Position*, or net position restricted for pensions, provides a measurement of the financial position of the WV CPRB as of the end of the fiscal year. The *Statements of Changes in Fiduciary Net Position* provide information on the activities that caused the financial position to change during the fiscal year. Over time, increases or decreases in the net position restricted for pensions of the WV CPRB are one indicator of the whether the systems' financial health is improving or deteriorating.

In addition to the two basic financial statements, the reader should also review the *Schedules of Net Pension Liability and Changes in Net Pension Liability*, *Schedules of Contributions*, and *Schedules of Investment Returns* to gain an understanding of the funded status of the WV CPRB over time. These schedules are Required Supplementary Information and provide an indication of the WV CPRB's ability to meet both the current and future benefit payment obligations. The *Notes to the Financial Statements* are also essential to the reader's understanding of the financial statements and provide additional information regarding the WV CPRB, such as descriptions of the plans administered by the WV CPRB, including contribution and benefit provisions, and information about the accounting policies and investment activities.

MANAGEMENT'S DISCUSSION AND ANALYSIS  
(Unaudited)

**ANALYSIS OF ASSETS, LIABILITIES AND NET POSITION RESTRICTED FOR PENSIONS**

At June 30, 2014, the WV CPRB had net position restricted for pensions of \$13.95 billion, an increase of over \$1.9 billion (15.88%) from \$12.04 billion at June 30, 2013. This followed the fiscal year 2013 increase of \$1.2 billion (11.34%) from the \$10.81 billion of net position restricted for pensions as of June 30, 2012. The assets of the WV CPRB consist primarily of investments. The increase in net position restricted for pensions is primarily the result of investment returns in equity markets. Condensed financial information comparing the WV CPRB plan assets for the past three fiscal years follows.

**FIDUCIARY NET POSITION (in thousands)**

|                                      | June 30, 2014        | June 30, 2013        | FY 14-13<br>Percentage<br>Change | June 30, 2012        | FY 13-12<br>Percentage<br>Change |
|--------------------------------------|----------------------|----------------------|----------------------------------|----------------------|----------------------------------|
| <b><u>ASSETS</u></b>                 |                      |                      |                                  |                      |                                  |
| Cash                                 | \$ 6,496             | \$ 14,351            | -54.73 %                         | \$ 8,288             | 73.15 %                          |
| Investments at fair value            | 13,788,090           | 11,848,184           | 16.37 %                          | 10,607,896           | 11.69 %                          |
| Contributions receivable             | 32,189               | 36,711               | -12.32 %                         | 34,470               | 6.50 %                           |
| Participant loans receivable         | 4,525                | 5,805                | -22.05 %                         | 7,303                | -20.51 %                         |
| Miscellaneous revenue receivable     | 179                  | 217                  | -17.51 %                         | 191                  | 13.61 %                          |
| Due from State of West Virginia      | <u>125,000</u>       | <u>145,000</u>       | -13.79 %                         | <u>165,000</u>       | -12.12 %                         |
|                                      | <u>13,956,479</u>    | <u>12,050,268</u>    | 15.82 %                          | <u>10,823,148</u>    | 11.34 %                          |
| <b><u>LIABILITIES</u></b>            |                      |                      |                                  |                      |                                  |
| Accrued expenses and other payables  | <u>6,939</u>         | <u>11,863</u>        | -41.51 %                         | <u>10,859</u>        | 9.25 %                           |
| Net position restricted for pensions | <u>\$ 13,949,540</u> | <u>\$ 12,038,405</u> | 15.88 %                          | <u>\$ 10,812,289</u> | 11.34 %                          |

**ANALYSIS OF ADDITIONS AND DEDUCTIONS TO NET POSITION RESTRICTED FOR PENSIONS**

Contributions to WV CPRB increased \$42.5 million (4.79%) over contributions for fiscal year 2013. With the increase of investment income of \$719 million (52.67%) for fiscal year 2014 compared to investment income for fiscal year 2013, the overall increase in revenues for 2014 was 33.72% compared to revenues for fiscal year 2013.

Contributions to the Board for fiscal year 2013 decreased by \$42.4 million (4.56%) over contributions for fiscal year 2012. With the increase of net investment income of \$1.261 billion for fiscal year 2013, the overall increase in revenues for 2013 was \$1.218 billion compared to revenues for fiscal year 2012.

Total benefits, refunds, and forfeitures paid during the ended June 30, 2014 were \$1.098 billion an increase of 7.4% over fiscal year 2013 total benefits, refunds, and forfeitures paid. Total benefits and refunds paid during the year ended June 30, 2013 were \$1.022 billion, an increase of 6.6% over fiscal year 2012. The increase in benefit expenses for each year is attributed to more retirees receiving benefits during the fiscal years. Total refunds paid increased \$3.4 million (11.88%) in fiscal year 2014 from fiscal year 2013. Total refunds paid had increased \$705,000 (2.54%) in fiscal year 2013 over fiscal year 2012.

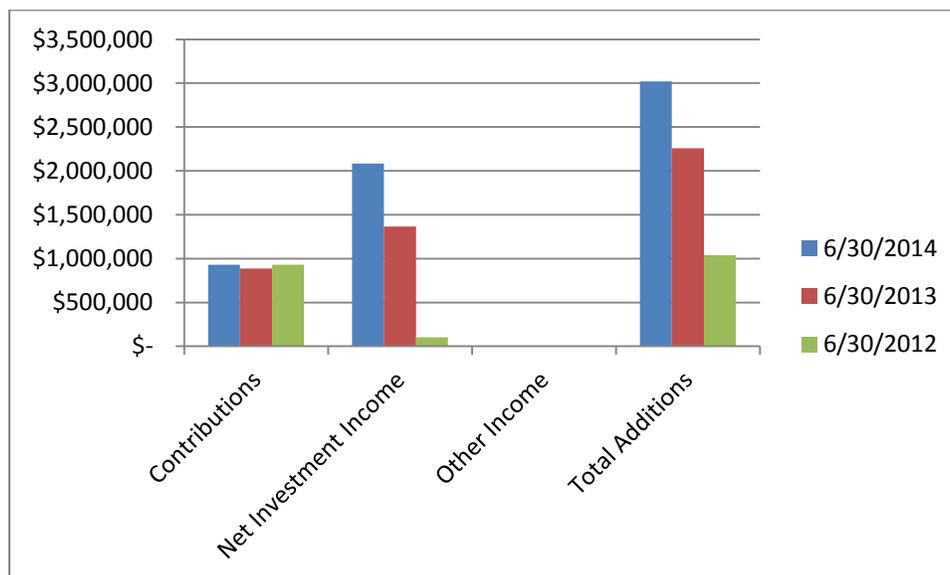
Administrative expenses for the year ended June 30, 2014 were \$10.3 million, an increase of 4.2% from fiscal year 2013 administrative expenses. The increase was primarily due to budgetary increases deemed necessary for several expense areas. Administrative expenses for the year ended June 30, 2013 were \$9.9 million, an increase of 3.21% over fiscal year 2012 administrative expenses.

MANAGEMENT'S DISCUSSION AND ANALYSIS  
(Unaudited)

**CHANGES IN FIDUCIARY NET POSITION (in thousands)**

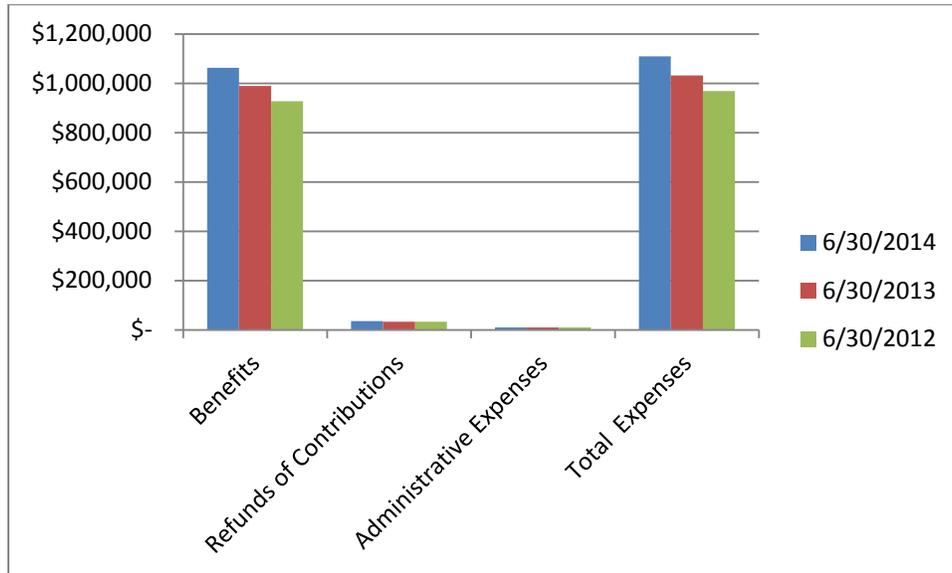
|  | 2014                 | 2013                 | FY 14-Y 13<br>Percentage<br>Change | 2012                 | FY 13-Y 12<br>Percentage<br>Change |
|--|----------------------|----------------------|------------------------------------|----------------------|------------------------------------|
| <b>Additions:</b>                            |                      |                      |                                    |                      |                                    |
| <b>Contributions:</b>                        |                      |                      |                                    |                      |                                    |
| Member contributions                         | \$ 169,056           | \$ 170,239           | -0.69 %                            | \$ 169,601           | .38 %                              |
| Employer contributions                       | 760,681              | 716,975              | 6.1 %                              | 759,998              | -5.7 %                             |
| Total contributions                          | <u>929,737</u>       | <u>887,214</u>       | 4.79 %                             | <u>929,599</u>       | -4.56 %                            |
| <b>Investment income:</b>                    |                      |                      |                                    |                      |                                    |
| Net increase in fair value of investments    | 2,031,000            | 1,284,292            | 58.14 %                            | 26,745               | 4701.99 %                          |
| Investment income                            | 53,633               | 81,116               | -33.88 %                           | 77,688               | 4.41 %                             |
| Net investment income                        | <u>2,084,633</u>     | <u>1,365,408</u>     | 52.67 %                            | <u>104,433</u>       | 1207.45 %                          |
| Other income                                 | 5,379                | 5,618                | -4.25 %                            | 5,854                | -4.03 %                            |
| Total additions                              | <u>3,019,749</u>     | <u>2,258,240</u>     | 33.72 %                            | <u>1,039,886</u>     | 117.16 %                           |
| <b>Deductions and transfers:</b>             |                      |                      |                                    |                      |                                    |
| Benefit expense                              | 1,062,473            | 989,067              | 7.42 %                             | 926,708              | 6.73 %                             |
| Refunds of contributions/w ithdraw als       | 35,793               | 33,126               | 8.05 %                             | 32,592               | 1.6 %                              |
| Administrative expense                       | 10,348               | 9,931                | 4.20 %                             | 9,622                | 3.21 %                             |
| Total deductions and transfers               | <u>1,108,614</u>     | <u>1,032,124</u>     | 7.41 %                             | <u>968,922</u>       | 6.52 %                             |
| Net increase in net position                 | 1,911,135            | 1,226,116            | 55.87 %                            | 70,964               | 1627.80 %                          |
| <b>Net position restricted for pensions:</b> |                      |                      |                                    |                      |                                    |
| Beginning of year                            | <u>12,038,405</u>    | <u>10,812,289</u>    | 11.34 %                            | <u>10,741,325</u>    | .66 %                              |
| End of year                                  | <u>\$ 13,949,540</u> | <u>\$ 12,038,405</u> | 15.88 %                            | <u>\$ 10,812,289</u> | 11.34 %                            |

**ADDITIONS BY TYPE (in thousands)**



MANAGEMENT'S DISCUSSION AND ANALYSIS  
(Unaudited)

**DEDUCTIONS BY TYPE (in thousands)**



**ECONOMIC FACTORS, FUTURE FUNDING PROVISIONS, OVERALL OUTLOOK**

The defined benefit plans are funded with the expectation that they will return 7.5 percent on the invested assets. When that return is not achieved, there is an increase in the net pension liability. The turmoil in the capital markets in fiscal year 2009 and the subsequent negative return for invested assets increased the net pension liability causing an increase in employer contributions in previous years. Positive returns during fiscal 2013 and 2014 along with conservative funding policies continue to reduce the net pension liability.

The return for fiscal 2014 exceeded the 7.5 percent target rate. The return in fiscal year 2014 follows a year where the target rate of 7.5 percent was also exceeded in 2013. In aggregate, the three years ending June 30, 2014 have produced an annualized return in excess of the 7.5 percent long term expectation. The ten-year average return also increased as a result of the positive returns during the fiscal year. Still, the world's economies continue to recover from the credit crisis of 2008, creating significant challenges in achieving investment performance goals.

**CONTACTING THE WV CPRB**

This report is designed to provide a financial overview of the WV CPRB to state legislators, members of the Board of Trustees of the WV CPRB, state officials, participating employers and any other interested parties. Questions or requests for additional information regarding the financial information presented in this report may be addressed in writing to the West Virginia Consolidated Public Retirement Board, 4101 MacCorkle Avenue, S.E Charleston WV 25304

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
STATEMENTS OF FIDUCIARY NET POSITION - PENSION FUNDS  
(In Thousands)

June 30, 2014

|                                      | Public Employees' Retirement System | Teachers' Retirement System | State Police Death, Disability and Retirement System | State Police Retirement System | Deputy Sheriff Retirement System | Judges' Retirement System | Emergency Medical Services Retirement System | Municipal Police Officers & Firefighters Retirement System | Teachers' Defined Contribution Retirement System | Total      |
|--------------------------------------|-------------------------------------|-----------------------------|--|--------------------------------|----------------------------------|---------------------------|--|--|--|------------|
| Cash                                 | \$ 289                              | \$ -                        | \$ 1   | \$ -                           | \$ 20                            | \$ -                      | \$ -   | \$ -   | \$ 6,181   | \$ 6,496   |
| Investments at fair value:           |                                     |                             |  |                                |                                  |                           |  |  |  |            |
| Mutual funds                         |                                     |                             |  |                                |                                  |                           |  |  |  |            |
| Large cap equity                     | 1,145,321                           | 1,324,099                   | 125,777  | 24,634                         | 32,947                           | 33,599                    | 10,916                                       | 230  | 400,030  | 400,030    |
| Non-large cap equity                 | 400,856                             | 463,970                     | 42,199   | 8,466                          | 11,449                           | 11,772                    | 3,755  | 76   | -  | 2,697,523  |
| International qualified              | 556,196                             | 640,632                     | 58,706   | 10,985                         | 15,281                           | 16,213                    | 4,850  | 100  | -  | 942,543    |
| International equity                 | 1,018,952                           | 1,178,932                   | 107,924  | 22,187                         | 29,604                           | 30,063                    | 9,851  | 202  | -  | 1,302,963  |
| Private equity                       | 549,804                             | 637,022                     | 54,936   | 11,232                         | 15,527                           | 16,136                    | 5,393  | 112  | -  | 2,397,715  |
| Real estate                          | 517,214                             | 598,156                     | 55,283   | 10,947                         | 14,771                           | 15,185                    | 4,853  | 101  | -  | 1,290,162  |
| Total return fixed income            | 558,951                             | 643,611                     | 59,807   | 12,251                         | 16,288                           | 16,522                    | 5,434  | 112  | -  | 1,216,510  |
| Core fixed income                    | 241,787                             | 275,801                     | 28,575   | 5,278                          | 7,009                            | 7,120                     | 2,336  | 49   | -  | 1,312,976  |
| Hedge fund                           | 577,172                             | 667,548                     | 65,821   | 12,688                         | 16,718                           | 16,970                    | 5,214  | 108  | -  | 564,955    |
| TRS annuity                          | -                                   | (17)                        | -  | -                              | -                                | -                         | -  | -  | -  | 1,362,239  |
| Short term fixed income              | 14,398                              | 168,607                     | 542  | 1,011                          | 496                              | 218                       | 345  | 52   | -  | 185,669    |
| TIPS                                 | 49,161                              | 57,015                      | 4,507  | 893                            | 1,401                            | 1,441                     | 396  | 8  | -  | 114,822    |
| Total investments at fair value      | 5,629,812                           | 6,655,376                   | 601,077  | 120,572                        | 161,491                          | 165,239                   | 53,343                                       | 1,150  | 400,030  | 13,788,090 |
| Contributions receivable             | 6,276                               | 23,063                      | -  | -                              | 744                              | -                         | 306  | 52   | 1,748  | 32,189     |
| Participant loans receivable         | -                                   | 4,074                       | -  | -                              | 451                              | -                         | -  | -  | -  | 4,525      |
| Miscellaneous revenue receivable     | 3                                   | 113                         | -  | -                              | 43                               | -                         | -  | -  | 20   | 179        |
| Due from State of West Virginia      | 125,000                             | -                           | -  | -                              | -                                | -                         | -  | -  | -  | 125,000    |
| Total assets                         | 5,761,380                           | 6,682,631                   | 601,078  | 120,572                        | 162,749                          | 165,239                   | 53,649                                       | 1,202  | 407,979  | 13,956,479 |
| LIABILITIES AND PLAN NET POSITION    |                                     |                             |  |                                |                                  |                           |  |  |  |            |
| Liabilities:                         |                                     |                             |  |                                |                                  |                           |  |  |  |            |
| Accrued expenses and other payable   | 271                                 | 538                         | 1  | -                              | 3                                | -                         | 3  | -  | 6,123  | 6,939      |
| Net position restricted for pensions | 5,761,109                           | 6,682,093                   | 601,077  | 120,572                        | 162,746                          | 165,239                   | 53,646                                       | 1,202  | 401,856  | 13,949,540 |

The accompanying notes are an integral part of these financial statements.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
 STATEMENTS OF FIDUCIARY NET POSITION - PENSION FUNDS  
 (In Thousands)

June 30, 2013

|  | Public Employees' Retirement System |           | Teachers' Retirement System |           | State Police Death, Disability and Retirement System |         | Deputy Sheriff Retirement System |        | Judges' Retirement System |         | Emergency Medical Services Retirement System |        | Municipal Police Officers & Firefighters Retirement System |     | Teachers' Defined Contribution Retirement System |         | Total   |            |            |
|--|-------------------------------------|-----------|-----------------------------|-----------|--|---------|----------------------------------|--------|---------------------------|---------|--|--------|--|-----|--|---------|---------|------------|------------|
|  |                                     |           |                             |           |  |         |                                  |        |                           |         |  |        |  |     |  |         |         |            |            |
| <b>ASSETS</b>                            |                                     |           |                             |           |  |         |                                  |        |                           |         |  |        |  |     |  |         |         |            |            |
| Cash                                     | \$                                  | 524       | \$                          | 3         | \$   | -       | \$                               | -      | \$                        | 25      | \$   | -      | \$   | -   | \$   | 13,799  | \$      | 14,351     |            |
| Investments at fair value:               |                                     |           |                             |           |  |         |                                  |        |                           |         |  |        |  |     |  |         |         |            |            |
| Mutual funds                             |                                     |           |                             |           |  |         |                                  |        |                           |         |  |        |  |     |  |         |         |            |            |
| Large cap equity                         |                                     | 904,359   |                             | 1,050,238 |  | 99,298  |                                  | 17,753 |                           | 25,011  |  | 7,891  |  | 89  |  | 346,816 |         | 346,816    |            |
| Non-large cap equity                     |                                     | 319,921   |                             | 368,809   |  | 33,901  |                                  | 6,206  |                           | 8,791   |  | 2,761  |  | 31  |  | -       |         | 2,131,059  |            |
| International qualified                  |                                     | 442,639   |                             | 509,827   |  | 46,721  |                                  | 8,576  |                           | 12,161  |  | 3,817  |  | 41  |  | -       |         | 749,751    |            |
| International equity                     |                                     | 803,747   |                             | 934,106   |  | 85,986  |                                  | 15,716 |                           | 22,205  |  | 7,007  |  | 81  |  | -       |         | 1,036,685  |            |
| Private equity                           |                                     | 471,951   |                             | 541,454   |  | 51,009  |                                  | 8,957  |                           | 12,933  |  | 4,049  |  | 45  |  | -       |         | 1,892,331  |            |
| Real estate                              |                                     | 398,384   |                             | 459,886   |  | 41,932  |                                  | 7,718  |                           | 10,952  |  | 3,441  |  | 35  |  | -       |         | 1,104,226  |            |
| Total return fixed income                |                                     | 588,504   |                             | 654,399   |  | 63,935  |                                  | 12,210 |                           | 16,692  |  | 5,371  |  | 60  |  | -       |         | 933,970    |            |
| Core fixed income                        |                                     | 315,251   |                             | 350,612   |  | 34,213  |                                  | 6,525  |                           | 8,933   |  | 2,873  |  | 32  |  | -       |         | 1,358,410  |            |
| Hedge fund                               |                                     | 493,933   |                             | 569,704   |  | 52,043  |                                  | 9,617  |                           | 13,612  |  | 4,281  |  | 46  |  | -       |         | 727,673    |            |
| TRS annuity                              |                                     | -         |                             | (94)      |  | -       |                                  | -      |                           | -       |  | -      |  | -   |  |         |         | 1,157,669  |            |
| Short term fixed income                  |                                     | 15,495    |                             | 169,739   |  | 1,297   |                                  | 980    |                           | 526     |  | 297    |  | 35  |  |         |         | 188,602    |            |
| TIPS                                     |                                     | 94,193    |                             | 108,903   |  | 9,988   |                                  | 1,834  |                           | 2,594   |  | 815    |  | 9   |  |         |         | 221,086    |            |
| Total investments at fair value          |                                     | 4,848,377 |                             | 5,717,583 |  | 520,323 |                                  | 96,092 |                           | 141,476 |  | 42,603 |  | 504 |  | 346,816 |         | 11,848,184 |            |
| Contributions receivable                 |                                     | 5,987     |                             | 28,320    |  | -       |                                  | -      |                           | 748     |  | 303    |  | 25  |  | 1,328   |         | 36,711     |            |
| Participant loans receivable             |                                     | -         |                             | 5,301     |  | -       |                                  | -      |                           | 504     |  | -      |  | -   |  | -       |         | 5,805      |            |
| Miscellaneous revenue receivable         |                                     | 3         |                             | 100       |  | -       |                                  | -      |                           | 70      |  | -      |  | -   |  | 44      |         | 217        |            |
| Due from State of West Virginia          |                                     | 145,000   |                             | -         |  | -       |                                  | -      |                           | -       |  | -      |  | -   |  | -       |         | 145,000    |            |
| Total assets                             |                                     | 4,999,891 |                             | 5,751,307 |  | 520,323 |                                  | 96,092 |                           | 141,476 |  | 42,906 |  | 529 |  | 361,987 |         | 12,050,268 |            |
| <b>LIABILITIES AND PLAN NET POSITION</b> |                                     |           |                             |           |  |         |                                  |        |                           |         |  |        |  |     |  |         |         |            |            |
| Liabilities:                             |                                     |           |                             |           |  |         |                                  |        |                           |         |  |        |  |     |  |         |         |            |            |
| Accrued expenses and other payables      |                                     | 258       |                             | 206       |  | 1       |                                  | -      |                           | 1       |  | 3      |  | -   |  | 11,394  |         | 11,863     |            |
| Net position restricted for pensions     |                                     | \$        | 4,999,633                   | \$        | 5,751,101  | \$      | 520,322                          | \$     | 96,092                    | \$      | 141,476                                      | \$     | 42,903   | \$  | 529  | \$      | 350,593 | \$         | 12,038,405 |

The accompanying notes are an integral part of these financial statements.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
 STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION - PENSION FUNDS  
 (In Thousands)

Year Ended June 30, 2014

|   | Public Employees' Retirement System | Teachers' Retirement System | State Police Death, Disability and Retirement System | State Police Retirement System | Deputy Sheriff Retirement System | Judges' Retirement System | Emergency Medical Service Retirement System | Municipal Police Officers & Firefighters Retirement System | Teachers' Defined Contribution Retirement System | Total         |
|---|-------------------------------------|-----------------------------|--|--------------------------------|----------------------------------|---------------------------|---|--|--|---------------|
| <b>Additions:</b>                         |                                     |                             |  |                                |                                  |                           |   |  |  |               |
| Contributions:                            |                                     |                             |  |                                |                                  |                           |   |  |  |               |
| Member contributions                      | \$ 60,899                           | \$ 90,612                   | \$ 545   | \$ 3,630                       | \$ 3,908                         | \$ 474                    | \$ 2,077                                    | \$ 279   | \$ 6,632   | \$ 169,056    |
| Employer contributions                    | 194,728                             | 141,840                     | 1,072  | 4,049                          | 5,977                            | 2,456                     | 2,442                                       | 279  | 10,284   | 363,127       |
| Other statutorily required contributions  | -                                   | 321,553                     | -  | -                              | -                                | -                         | -   | -  | -  | 321,553       |
| Other contributions - appropriations      | -                                   | 50,855                      | 25,146   | -                              | -                                | -                         | -   | -  | -  | 76,001        |
| Total contributions                       | 255,627                             | 604,860                     | 26,763   | 7,679                          | 9,885                            | 2,930                     | 4,519                                       | 558  | 16,916   | 929,737       |
| Investment income:                        |                                     |                             |  |                                |                                  |                           |   |  |  |               |
| Net increase in fair value of investments | 841,174                             | 976,822                     | 88,517   | 17,274                         | 23,737                           | 24,594                    | 7,660                                       | 122  | 51,100   | 2,031,000     |
| Investment income                         | 22,849                              | 26,358                      | 2,355  | 482                            | 701                              | 669                       | 214   | 3  | 2  | 53,633        |
| Net investment income                     | 864,023                             | 1,003,180                   | 90,872   | 17,756                         | 24,438                           | 25,263                    | 7,874                                       | 125  | 51,102   | 2,084,633     |
| Other income                              | 50                                  | 3,775                       | 739  | -                              | 556                              | -                         | 1   | -  | 258  | 5,379         |
| Total additions                           | 1,119,700                           | 1,611,815                   | 118,374  | 25,435                         | 34,879                           | 28,193                    | 12,394                                      | 683  | 68,276   | 3,019,749     |
| Deductions and transfers:                 |                                     |                             |  |                                |                                  |                           |   |  |  |               |
| Benefit expense                           | 342,683                             | 668,923                     | 37,566   | 682                            | 6,955                            | 4,374                     | 1,290                                       | -  | -  | 1,062,473     |
| Forfeitures                               | -                                   | -                           | -  | -                              | -                                | -                         | -   | -  | 3,919  | 3,919         |
| Refunds of contributions/withdrawals      | 10,929                              | 7,287                       | -  | 230                            | 839                              | 81                        | 459   | 7  | 12,030   | 31,862        |
| Transfers to (from) plans                 | (83)                                | 265                         | -  | -                              | (2)                              | (32)                      | (140)                                       | -  | (8)  | -             |
| Administrative expenses                   | 4,695                               | 4,348                       | 49   | 42                             | 91                               | 7                         | 41  | 3  | 1,072  | 10,348        |
| Disability recertification fees           | -                                   | -                           | 4  | 1                              | 6                                | -                         | 1   | -  | -  | 12            |
| Total deductions and transfers            | 358,224                             | 680,823                     | 37,619   | 955                            | 7,889                            | 4,430                     | 1,651                                       | 10   | 17,013   | 1,108,614     |
| Net increase in plan net position         | 761,476                             | 930,992                     | 80,755   | 24,480                         | 26,990                           | 23,763                    | 10,743                                      | 673  | 51,263   | 1,911,135     |
| Net position restricted for pensions:     |                                     |                             |  |                                |                                  |                           |   |  |  |               |
| Beginning of year                         | 4,999,633                           | 5,751,101                   | 520,322  | 96,092                         | 135,756                          | 141,476                   | 42,903                                      | 529  | 350,593  | 12,038,405    |
| End of year                               | \$ 5,761,109                        | \$ 6,682,093                | \$ 601,077   | \$ 120,572                     | \$ 162,746                       | \$ 165,239                | \$ 53,646                                   | \$ 1,202   | \$ 401,856                                       | \$ 13,949,540 |

The accompanying notes are an integral part of these financial statements.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
 STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION - PENSION FUNDS  
 (In Thousands)

Year Ended June 30, 2013

|   | Public Employees' Retirement System | Teachers' Retirement System | State Police Disability and Retirement System | State Police Retirement System | Deputy Sheriff Retirement System | Judges' Retirement System | Emergency Medical Service Retirement System | Municipal Police Officers & Firefighters Retirement System | Teachers' Defined Contribution Retirement System | Total         |
|---|-------------------------------------|-----------------------------|---|--------------------------------|----------------------------------|---------------------------|---|--|--|---------------|
| <b>Additions:</b>                         |                                     |                             |   |                                |                                  |                           |   |  |  |               |
| Contributions:                            |                                     |                             |   |                                |                                  |                           |   |  |  |               |
| Member contributions                      | \$ 60,943                           | \$ 91,818                   | \$ 628  | \$ 3,517                       | \$ 3,731                         | \$ 688                    | \$ 1,902                                    | \$ 151   | \$ 6,861   | \$ 170,239    |
| Employer contributions                    | 187,866                             | 149,224                     | 1,150   | 4,193                          | 5,704                            | 2,422                     | 2,308                                       | 151  | 11,236   | 364,254       |
| Other statutorily required contributions  | -                                   | 309,498                     | -   | -                              | -                                | -                         | -   | -  | -  | 309,498       |
| Other contributions - appropriations      | -                                   | 28,061                      | 15,162  | -                              | -                                | -                         | -   | -  | -  | 43,223        |
| Total contributions                       | 248,809                             | 578,601                     | 16,940  | 7,710                          | 9,435                            | 3,110                     | 4,210                                       | 302  | 18,097   | 887,214       |
| Investment income:                        |                                     |                             |   |                                |                                  |                           |   |  |  |               |
| Net increase in fair value of investments | 541,330                             | 602,272                     | 58,180  | 10,035                         | 14,629                           | 15,681                    | 4,476                                       | 31   | 37,658   | 1,284,292     |
| Investment income                         | 24,025                              | 52,424                      | 2,562   | 460                            | 715                              | 700                       | 206   | 1  | 23   | 81,116        |
| Net investment income                     | 565,355                             | 654,696                     | 60,742  | 10,495                         | 15,344                           | 16,381                    | 4,682                                       | 32   | 37,681   | 1,365,408     |
| Other income                              | 16                                  | 4,007                       | 811   | -                              | 522                              | -                         | 1   | -  | 261  | 5,618         |
| Total additions                           | 814,180                             | 1,237,304                   | 78,493  | 18,205                         | 25,301                           | 19,491                    | 8,893                                       | 334  | 56,039   | 2,258,240     |
| Deductions and transfers:                 |                                     |                             |   |                                |                                  |                           |   |  |  |               |
| Benefit expense                           | 322,731                             | 618,628                     | 35,464  | 577                            | 6,316                            | 4,351                     | 1,000                                       | -  | -  | 989,067       |
| Forfeitures                               | -                                   | -                           | -   | -                              | -                                | -                         | -   | -  | 4,641  | 4,641         |
| Refunds of contributions/withdrawals      | 10,413                              | 7,731                       | -   | 229                            | 664                              | -                         | 435   | 5  | 9,003  | 28,480        |
| Transfers to (from) plans                 | 112                                 | (35)                        | -   | -                              | -                                | (77)                      | -   | -  | -  | -             |
| Administrative expenses                   | 4,593                               | 4,276                       | 49  | 42                             | 89                               | 6                         | 38  | 2  | 836  | 9,931         |
| Disability recertification fees           | -                                   | -                           | 3   | -                              | 2                                | -                         | -   | -  | -  | 5             |
| Total deductions and transfers            | 337,849                             | 630,600                     | 35,516  | 848                            | 7,071                            | 4,280                     | 1,473                                       | 7  | 14,480   | 1,032,124     |
| Net increase in plan net position         | 476,331                             | 606,704                     | 42,977  | 17,357                         | 18,230                           | 15,211                    | 7,420                                       | 327  | 41,559   | 1,226,116     |
| Net position restricted for pensions:     |                                     |                             |   |                                |                                  |                           |   |  |  |               |
| Beginning of year                         | 4,523,302                           | 5,144,397                   | 477,345                                       | 78,735                         | 117,526                          | 126,265                   | 35,483                                      | 202  | 309,034  | 10,812,289    |
| End of year                               | \$ 4,999,633                        | \$ 5,751,101                | \$ 520,322                                    | \$ 96,092                      | \$ 135,756                       | \$ 141,476                | \$ 42,903                                   | \$ 529   | \$ 350,593                                       | \$ 12,038,405 |

The accompanying notes are an integral part of these financial statements.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS

**1 - DESCRIPTION OF ORGANIZATION**

Reporting Entity

During fiscal year 1991, the West Virginia State Legislature created the Consolidated Public Retirement Board (the Board) to administer nine of the State of West Virginia's ten retirement plans. The nine retirement plans included within these financial statements are the Public Employees' Retirement System (PERS), the Teachers' Retirement System (TRS), the State Police Death, Disability and Retirement System (SPDDRS), the State Police Retirement System (SPRS), the Deputy Sheriff Retirement System (DSRS), the Judges' Retirement System (JRS), the Emergency Medical Services Retirement System (EMSRS), Municipal Police Officers and Firefighters Retirement System (MPFRS) and the Teachers' Defined Contribution Retirement System (TDCRS). The Total Pension Funds column included in the statements of fiduciary net position and statements of changes in fiduciary net position is for informational purposes only. The net position of each plan is only available to satisfy the obligations of that plan. The retirement plans are reported as pension trust funds of the State of West Virginia (the State). The Governmental Employees Deferred Compensation Plan is administered by the West Virginia State Treasurer's Office and has been excluded from these financial statements in accordance with Governmental Accounting Standards Board (GASB) Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*.

An internal service fund (the Fund) is used for the administration of all plans administered by the Board. The Fund receives a service fee from each plan based upon the number of participants included in the plan. These fees are reported as administrative expenses in the financial statements of each retirement plan. The service fees are established to recover costs such that revenues of the Fund match expenses over time. These fees are legally restricted for the purpose of administering the plans and are not available for any other purpose. All administrative costs of the Board are paid from the Fund. The Fund is not subject to satisfaction of any judgment or award against any of the retirement plans, and the judgment or award shall be satisfied from assets of the particular retirement plan against which it is levied.

The Board is managed by a Board of Trustees, which consists of, by virtue of their position, the Governor, State Auditor, State Treasurer, and Secretary of the Department of Administration, together with the following gubernatorial appointments that are subject to the advice and consent of the State Senate: four residents of the State who are not participants in the retirement plans, one State and one non-State employee participant in PERS, and one participant each from TRS, SPDDRS, SPRS, DSRS, EMSRS, MPFRS and TDCRS.

Pursuant to the West Virginia Code, the Board submits a detailed budgetary schedule of administrative expenses to the Secretary of the Department of Administration prior to the beginning of each fiscal year. The fundamental purpose of budgetary control is to plan for the expected level of operations and to provide management with a tool to control deviation from such plan but does not constitute a legally adopted budget.

Basis of Accounting

The financial statements of the Board have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to governmental units. The GASB is the accepted standard setting body for establishing governmental accounting and financial reporting principles for governmental units. The accompanying pension fund financial statements have been prepared using the flow of economic resources measurement focus and the accrual basis of accounting. Plan member contributions are recognized in the period when contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide contributions. Benefits and refunds are recognized when

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**1 - DESCRIPTION OF ORGANIZATION (Continued)**

Basis of Accounting (Continued)

due and payable in accordance with the terms of each plan. The Board's assets are held primarily in accounts maintained by the State Treasurer, the West Virginia Investment Management Board (the IMB), and the third-party administrator of its defined contribution plan.

Cash

The State Treasurer has statutory responsibility for the daily cash management activities of the state's agencies, departments, boards and commissions. The amounts on deposit with the State Treasurer are available for immediate withdrawal and, accordingly, are presented as cash and cash equivalents in the accompanying financial statements.

Investments

All defined benefit plan funds not required to meet disbursement needs are invested in accordance with the West Virginia Code, as well as policies established by the IMB. The IMB has established various investment pools to provide for the investment of the defined benefit plans' assets. These investment pools are structured as multiparticipant variable net asset funds.

Investments of the IMB Short-Term Fixed Income Pool are carried at amortized cost, which approximates fair value. The investments in the other IMB pools, except as noted below, are carried at fair value, which is determined by a third party pricing service based on asset portfolio pricing models and other sources. The IMB invests in private equity, real estate, and hedge funds, which are not publicly traded, and are carried at estimated fair value as provided by the IMB funds' management. The IMB may, in addition, consider other factors in assessing the fair value of these investments. Because these investments are not marketable, the estimated value is subject to uncertainty, and therefore, may differ from the value that would have been used had a ready market for the investment existed. Futures and option contracts are valued at the last settlement price established each day by the exchange on which they are traded. Interest rate swap values are based on market values received from third parties or are determined by valuation models. Foreign currency forward contracts are valued at either spot or forward month-end exchange rates. Investments in commingled investment pools are valued at the reported unit values of the individual funds as provided to the IMB fund's management.

The TDCRS investments are held by an investment company which also serves as the third party administrator for the plan. As prescribed by West Virginia Code, the TDCRS investments are allocated to participant accounts and the participants direct the investment of their individual account balances by selecting from a list of plan mutual funds or a long term fixed investment option.

The TDCRS investments are carried at fair value as determined by a third-party pricing service utilized by an investment management company. Investment income for the TDCRS is determined monthly and distributed to the individual participant accounts.

Investment Related Expenses

Investments are invested in multiparticipant pools and investment related expenses are not readily separable by participant in each pool. Investment income from the pools is reported net of investment expenses.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**1 - DESCRIPTION OF ORGANIZATION (Continued)**

Contributions Receivable

Contributions receivable represent funds owed to the Board from other government employer entities participating in the various retirement plans.

Participant Loans Receivable

The TRS makes loans to its members, hired prior to July 1, 2005, up to the lesser of one-half of a member's accumulated contributions or \$8,000, at an interest rate indexed to the interest rate used by the Board for determining actuarial contribution levels. TRS loans require repayment over varying terms, with a maximum term of five years.

During the 2008 First Special Session, the West Virginia Legislature passed House Bill 101 regarding retirement benefits for teachers and educational service personnel which became effective March 16, 2008. The legislation provided an opportunity for members of the Teachers' Defined Contribution Retirement System (TDCRS) to elect to transfer to the West Virginia Teachers' Retirement System (TRS). The transfer occurred on July 1, 2008 and a total of 15,152 TDCRS members transferred to TRS. These members were granted 75% service credit under TRS for their years of service in TDCRS. These members were also granted a one time opportunity to receive a loan in order to purchase the additional 25% service credit at a 7.5% interest rate and with a maximum term of five years. The last day to receive such a loan was June 30, 2010.

The DSRS also makes loans to its members, hired prior to July 1, 2005, up to the lesser of one-half of a member's accumulated contributions or \$8,000, at an interest rate indexed to the interest rate used by the Board for determining actuarial contribution levels. DSRS loans require repayment over varying terms, with a maximum term of five years.

Accrued Expenses and Other Payables

Accrued expenses and other payables primarily represent retirement annuity amounts due to new retirees.

Compensated Absences

Liabilities for compensated absences (annual leave) are recorded in the Internal Service Fund for the right of employees of the Board to receive compensation for future absences. When an employee of the Board is separated from employment with the Board for reasons other than retirement, all sick leave credited to that employee is considered nonvested and no reimbursement to the employee is provided. Accrued sick leave, if any, existing for employees of the Board upon their retirement, may be used either to extend benefits provided by the West Virginia Public Employees Insurance Agency or to increase retirement benefits. Other post-employment benefits other than pensions for employees of the Board are described in Note 6.

Accounting Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and disclosure of actuarial accrued liabilities, contingent assets, and contingent liabilities as of the financial statement date, and the reported amounts of additions and deductions for the reporting period. Actual amounts could differ from those estimates.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
 NOTES TO FINANCIAL STATEMENTS  
 (CONTINUED)

**1 - DESCRIPTION OF ORGANIZATION (Continued)**

Accounting Estimates (Continued)

The various retirement plans utilize various investment instruments. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the value of investment securities will occur in the near term and that such change could materially affect the amounts reported in the statements of fiduciary net position. Changes in the value of investment securities could affect the future funding status of the plans or require additional contributions to maintain the current funding status.

Reclassifications

Certain amounts in the 2013 financial statements have been reclassified to conform to the 2014 presentation.

**2 - PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION**

Funding policies for all plans have been established by and are changed from time-to-time by action of the State Legislature. While contribution rates are legislatively determined, actuarial valuations are performed to assist the Board and the State Legislature in determining contribution rates. The following information is provided for general information purposes only. Plan participants should refer to the respective West Virginia State Code Section for more complete information.

**Defined Benefit Plans**

Public Employees' Retirement System

*Plan Description* - PERS is a multiple employer defined benefit cost sharing public employee retirement system covering substantially all employees of the State and its component units, as well as employees of participating non-State governmental entities who are not participants of another state or municipal retirement system. The number of participating employers as of June 30, 2014 are as follows:

|                              | 2014 |
|------------------------------|------|
| West Virginia state agencies | 128  |
| Cities and towns             | 105  |
| Counties                     | 55   |
| Special districts            | 379  |
| Other                        | 6    |
|                              | 673  |

PERS provides retirement benefits as well as death and disability benefits. Qualification for normal retirement is age 60 with five years of service or at least age 55 with age and service equal to 80 or greater. The straight-life annuity retirement benefit is equivalent to 2% of average salary multiplied by years of service. Average salary is the average of the three consecutive highest annual earnings out of the last fifteen years of earnings. Terminated members with at least five years of contributory service who do not withdraw their accumulated contributions may elect to receive their retirement annuity beginning at age 62.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**2 - PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION (Continued)**

**Defined Benefit Plans (Continued)**

Public Employees' Retirement System (Continued)

Chapter 5, Article 10 of the West Virginia State Code assigns the authority to establish and amend the provisions of the plan to the State Legislature. In certain circumstances, this Article also permits members of TRS to transfer accumulated service credit and member contributions into PERS.

*Contributions* - Per Chapter 5, Article 10, members contribute 4.5% of annual earnings. State and non-state governmental employers' contribution rates were 14.5% and 14.0% of covered employees' annual earnings for fiscal years ending June 30, 2014 and 2013, respectively. Effective July 1, 2014 employer contribution rates decreased to 14.0% of members annual earnings. Contributions as a percentage of payroll for members are established by statutes, subject to legislative limitations and are not actuarially determined. Contributions as a percentage of payroll for employers are established by the Board. Employer contributions from State and non-State agencies for the fiscal years ended June 30, 2014 and 2013, were (in thousands):

|           | 2014       | 2013       |
|-----------|------------|------------|
| State     | \$ 131,905 | \$ 128,574 |
| Non-State | 62,893     | 59,292     |
|           | \$ 194,728 | \$ 187,866 |

Teachers' Retirement System

*Plan Description* - TRS is a multiple employer defined benefit cost sharing public employee retirement system covering all full-time employees of the 55 county public school systems in the State and certain personnel of the 13 State-supported institutions of higher education, State Department of Education and the Higher Education Policy Commission hired prior to July 1, 1991. Employees of the State-supported institutions of higher education and the Higher Education Policy Commission hired after June 30, 1991, are required to participate in the Higher Education Retirement System. TRS closed membership to new hires effective July 1, 1991. However, effective July 1, 2005, all new employees hired for the first time are required to participate in TRS. There were 86 employers and one non-employer contributing entity participating in TRS as of June 30, 2014.

During the 2008 First Special Session, the West Virginia Legislature passed House Bill 101 regarding retirement benefits for teachers and educational service personnel which became effective March 16, 2008. The legislation provided an opportunity for members of the Teachers' Defined Contribution Retirement System (TDCRS) to elect to transfer to the West Virginia Teachers' Retirement System (TRS). The transfer occurred on July 1, 2008 and a total of 15,152 TDCRS members transferred to TRS.

TRS provides retirement benefits as well as death and disability benefits. A member is eligible for normal retirement at age 60 with five years of service, age 55 with 30 years of service or any age with 35 years of service. A member may retire with 30 years of credited service at any age with the pension reduced actuarially if the member retires before age 55. Terminated members with at least five, but less than 20, years of credited service who do not withdraw their accumulated contributions are entitled to a deferred retirement commencing at age 62. Retirement benefits are equivalent to 2% of average annual salary multiplied by years of service. Average salary is the average of the 5 highest fiscal years of earnings during the last 15 fiscal years of earnings.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**2 - PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION (Continued)**

**Defined Benefit Plans (Continued)**

Teachers' Retirement System (Continued)

Chapter 18, Article 7A of the West Virginia State Code assigns the authority to establish and amend the provisions of the plan to the State Legislature.

*Contributions* - A member who withdraws from service for any cause other than death or retirement may request that the accumulated employee contributions plus interest be refunded.

TRS funding policy provides for member contributions based on 6% of members' gross salary. Contributions as a percentage of payroll for members and employers are established by State law and are not actuarially determined. Employers make the following contributions:

The State, county boards of education, and other employers contribute 15% of gross salary of their TRS members hired prior to July 1, 1991. The State, county boards of education, and other employers contribute 7.5% of the gross salary of their TRS covered employees hired for the first time after July 1, 2005 and for those TDCRS members who selected to transfer to TRS effective July 1, 2008. The other employers and county boards of education, utilizing funds made available through the State's School Aid Formula (SAF) contribute 7.5% of the gross salary of their TDCRS covered employees. In addition, the State contributes a certain percentage of fire insurance premiums paid by State residents to assist in extinguishing the TRS unfunded liability within 40 years of June 30, 1994. Other statutorily required contributions of \$321,552,626 and \$309,498,154 were made through the State's school aid formula during the years ended June 30, 2014 and 2013, respectively. Certain additional contributions of approximately \$50,855,000 and \$28,061,000 were made during the years ended June 30, 2014 and 2013, respectively, representing extra appropriations to reduce the unfunded liability.

State Police Death, Disability and Retirement System

*Plan Description* - SPDDRS is a single employer defined benefit public employee retirement system covering all West Virginia State Police (State Police) hired on or before March 11, 1994. This plan is closed to new entrants.

SPDDRS provides retirement benefits as well as death and disability benefits. A member is eligible for normal retirement at age 50 after 20 years of contributory service, or at any age upon completion of 25 years of service. There is no vesting in the State's contributions prior to ten years of service. Benefits payable to members retiring prior to age 50 are deferred until the normal retirement date. The annual retirement benefit is 5.5% of the members' aggregate salary, but not less than \$6,000 per year. Total service related disability benefits are equal to the member's annual salary, but not less than \$15,000 per year. Aggregate salary is the total salary paid to a member during his or her period of service, which may include up to 5 years of active military service credited at the average departmental salary. Aggregate salary for purposes of determining disability benefits may include salary that would have been earned had the participant served at least 25 years notwithstanding the disability. An annual cost-of-living adjustment of 3.75% is granted to retirees and beneficiaries. For service-connected total disability retirees, the adjustment begins at age 65. A member who terminates employment is entitled to a refund of his or her contributions plus interest.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**2 - PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION (Continued)**

**Defined Benefit Plans (Continued)**

State Police Death, Disability and Retirement System (Continued)

*Contributions* - SPDDRS funding policy provides for member contributions based on 9% of their annual earnings. The State makes contributions based on 15% of the annual payroll of State Police, as well as contributing all revenue generated by the sale of traffic accident reports, criminal investigation reports and other fees. In addition, certain additional contributions of approximately \$25,146,000 and \$15,162,000 were made during the years ended June 30, 2014 and 2013, respectively, representing extra appropriations to reduce the unfunded liability. Contributions, as a percentage of payroll for members and the employer, are established by State law and are not actuarially determined.

State Police Retirement System

*Plan Description* - SPRS is a single employer defined benefit public employee retirement system that was established for all State Police hired on or after March 12, 1994. SPRS provides retirement, death, and disability benefits. A member is eligible for normal retirement at age 50 with 25 years of service or age 52 with 20 years of credited service. A member is eligible for a reduced benefit with 20 years of credited service and retiring before age 52. The annual regular retirement benefit, paid monthly, is equal to 2.75% of the final average salary multiplied by the years of service. Final average salary is the average of the five highest calendar years of earnings during the last ten years of earnings. Annual retirement annuity adjustments are 1.0% for regular retirement and are payable on July 1 of each year after the member reaches 63 years of age.

*Contributions* - Members contribute 13% of annual base salary. Employer contribution rates were 14.5% and 15.5% of covered employees' annual base salary for fiscal years ending June 30, 2014 and 2013, respectively. Effective July 1, 2014 employer contribution rates will be reduced to 13.5% of members' annual earnings.

Chapter 15, Article 2 and Article 2A of the West Virginia State Code assigns the authority to establish and amend the provisions of the SPDDRS and SPRS plans to the State Legislature.

Deputy Sheriff Retirement System

*Plan Description* - DSRS, a multiple employer defined benefit cost sharing public employee retirement system, was established for all deputy sheriffs hired by all 55 county governments on or after July 1, 1998. The DSRS was also made available to any deputy sheriff employed in covered employment participating in PERS on the effective date so long as he/she made notification in writing before January 31, 1999, to both the County Commission in the county in which he/she was employed and the Board of his/her desire to transfer to the DSRS. Approximately 600 deputy sheriffs elected such transfer and as a result, approximately \$28,638,000 of accumulated member and employer contributions and interest were transferred from PERS to DSRS in fiscal year 1999, in accordance with Chapter 7, Article 14D of the West Virginia State Code. There were 55 employers participating in DSRS as of June 30, 2014.

DSRS provides retirement as well as death and disability benefits. A member is eligible for normal retirement under the following circumstances:

1. Attainment of the age of 50 years and completion of 20 or more years of service
2. Member is in covered employment, has attained the age of 60 years, and has completed five or more years of service
3. Attainment of the age of 62 years and has completed five or more years of service

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**2 - PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION (Continued)**

**Defined Benefit Plans (Continued)**

Deputy Sheriff Retirement System (Continued)

The annual regular retirement benefit is equal to 2.25% of a member's final average salary multiplied by the member's years of credited service. Final average salary refers to the average of the highest annual compensation received for covered employment by the member during any five consecutive plan years within the member's last ten years of service. A member may elect to receive retirement income payments equal to his/her accrued benefit in the normal form or in a variety of annuity options. The normal form signifies a monthly annuity which is 1/12 of the amount of a members accrued benefit which is payable for the member's life.

Benefit payments did not begin prior to January 1, 2000, except benefit payments resulting from disability.

Chapter 7, Article 14D of the West Virginia State Code assigns the authority to establish and amend the provisions of the plan to the State Legislature.

*Contributions* - Members contribute 8.5% of monthly base salary, and the Sheriff's Office/County Commission of the County in which the member is employed contributed an additional 13% of the member's monthly salary during years ended June 30, 2014 and 2013. Effective July 1, 2014 employer contribution rates were reduced to 12.5% of the member's monthly salary. In addition, the Sheriff's Office/County Commissions contribute certain fees charged for reports and other services provided by the sheriff's offices.

Judges' Retirement System

*Plan Description* - JRS is a single employer defined benefit public employee retirement system covering State judges and justices who elect to participate. JRS provides retirement as well as death and disability benefits. A member who was appointed or elected to the bench prior to July 2, 2005 is eligible for normal retirement upon the attainment of 24 years of service of which at least 12 years is as a sitting judge or justice, 16 years of service at age 65 of which at least 12 years is as a sitting judge or justice, or 8 full years of service after age 65. A member who was appointed or elected to the bench on or after July 2, 2005 is eligible for normal retirement upon the attainment of 24 years of service of which at least 14 years is as a sitting judge or justice, or 16 years of service at age 65 of which 14 years is as a sitting judge or justice. A member on the bench prior to July 2, 2005 is eligible for a deferred benefit upon termination of service prior to normal retirement provided the member completes 16 years of service of which 12 years of service is as a sitting judge or justice. A member of the bench on or after July 2, 2005 is eligible for a deferred benefit upon termination of service prior to normal retirement provided the member completes 16 years of service of which 14 years of service are as a sitting judge or justice.

The annual benefit paid to judges and justices on the bench prior to July 2, 2005 is 75% of the current annual salary of the office from which the participant retires, with surviving spouse and dependent child benefits. This benefit is proportionally increased upon increase in salary for active sitting judges and justices.

The annual benefit paid to judges and justices on the bench on or after July 2, 2005 is 75% of the member's final average salary. Final average salary means the average of the highest thirty-six consecutive month's compensation received as a judge or justice. No increases in benefits are given by virtue of increase in salary of active sitting judges or justices.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**2 - PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION (Continued)**

**Defined Benefit Plans (Continued)**

Judges' Retirement System (Continued)

Chapter 51, Article 9 of the West Virginia State Code assigns the authority to establish and amend the provisions of the plan to the State Legislature.

*Contributions* - JRS funding policy provides for member contributions based on 7% of their annual earnings. This policy also provides for periodic employer contributions at varying amounts appropriated annually by the State Legislature. However, annual appropriations are determined in consideration of the most recent actuarial valuation. Any participant who terminates before becoming eligible for benefits may elect to withdraw his or her contributions without interest.

Emergency Medical Services Retirement System (EMSRS)

*Plan Description* - The EMSRS Act was passed by the Legislature in March 2007. The legislation provided for a voluntary participation election of eligible emergency medical service officers and mandated that certain participation levels be reached by December 31, 2007, in order for the provisions of the Emergency Medical Services Retirement System to become effective. At the close of the election period, fifteen licensed EMS public employers, consisting of twelve eligible Public Employees Retirement System (PERS) political subdivisions and three eligible Non-PERS political subdivisions, passed corporate resolutions to become participating public employers of this retirement system. Statewide, over five hundred eligible Emergency Medical Services Officers elected to opt into this new retirement plan. The WV Emergency Medical Services Retirement System (EMSRS) became effective January 1, 2008. There were 14 employers participating in EMSRS as of June 30, 2014.

The statute prohibited any payout of benefits from the EMSRS fund prior to January 1, 2011, with the exception of duty disability retirement. An EMSRS member is eligible for "normal" retirement when one of the following occurs:

- Attainment of age 50 and the completion of 20 years of contributory service; or
- Attainment of age 50 when age plus contributory service equals 70 while still in covered employment; or
- Attainment of age 60 and completion of 10 years contributory service while still in covered employment; or
- Attainment of age 62 and completion of 5 years of contributory service.

An EMSRS member is eligible for "early retirement" when they reach age 45 and have completed 20 years of service.

Final Average Salary (FAS) is the average of the highest annual compensation received by the member during covered employment for any 5 consecutive plan years (Jan. 1- Dec. 31) within the last 10 years of service. The accrued benefit on behalf of any member is calculated as follows:

Final Average Salary x Years of Credited Service x Benefit Percentage

Annual Retirement Benefit Formula

2.75% x FAS x Years of Service for years 1-20  
2.0% x FAS x Years of Service for years 21-25  
1.0% x FAS x Years of Service for years 26-30

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**2 - PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION (Continued)**

**Defined Benefit Plans (Continued)**

Emergency Medical Services Retirement System (EMSRS) (Continued)

In accordance with provisions in statute, upon reaching a 75% funded level as of an actuarial valuation date, the Board shall increase the annual retirement benefit multiplier from 2.6% of final average salary to 2.75% of final average salary for years one through twenty of service credited.

Chapter 16, Article 5V of the West Virginia State Code assigns the authority to establish and amend the provisions of the plan to the State Legislature.

*Contributions* - Currently, the EMSRS employee contribution rate is 8.5% of gross monthly salary and the employer contribution rate is 10.5% of gross monthly salary.

Municipal Police Officers and Firefighters Retirement System (MPFRS)

*Plan Description* - The MPFRS Act was passed by the Legislature in November 2009, and become effective January 1, 2010. The legislation provided for any municipality or municipal subdivision employing municipal police officers or firefighters to elect to become a participating employer. MPFRS is a multiple employer defined benefit retirement system. The MPFRS had 98 participating members as of June 30, 2014. If there are fewer than 100 members on January 1, 2017, all members will be merged into the Emergency Medical Services Retirement System. All police officers and firefighters first employed in covered employment after the date the municipality or municipal subdivision elected to join MPFRS are required to be members of MPFRS. There were 16 employers participating in MPFRS as of June 30, 2014.

A MPFRS member is eligible for "normal" retirement when one of the following occurs:

- Attainment of age 50 and the completion of 20 years of contributory service; or
- Attainment of age 50 when age plus contributory service equals 70 while still in covered employment; or
- Attainment of age 60 and completion of 10 years contributory service while still in covered employment; or
- Attainment of age 62 and completion of 5 years of contributory service.

Final Average Salary (FAS) is the average of the highest annual compensation received by the member during covered employment for any 5 consecutive plan years (Jan. 1 - Dec. 31) within the last 10 years of service. The accrued benefit on behalf of any member is calculated as follows, not to exceed 67%:

Final Average Salary x Years of Credited Service x Benefit Percentage

Annual Retirement Benefit Formula

2.6% x FAS x Years of Credited Service for years 1-20  
2.0% x FAS x Years of Credited Service for years 21-25  
1.0% x FAS x Years if Credited Service for years 26-30

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
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**2 - PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION (Continued)**

**Defined Benefit Plans (Continued)**

Municipal Police Officers and Firefighters Retirement System (MPFRS) (Continued)

Chapter 8, Article 22A of the West Virginia State Code assigns the authority to establish and amend the provisions of the plan to the State Legislature.

*Contributions* - Currently, the MPFRS employee contribution rate is 8.5% of gross monthly salary and the employer contribution rate is 8.5% of gross monthly salary.

**Teachers' Defined Contribution Retirement System**

*Plan Description* - TDCRS is a multiple employer defined contribution retirement system, which is a money purchase pension plan covering primarily full-time employees of the State's 55 county public school systems, the State Department of Education, and the Schools for the Deaf and Blind who were hired between July 1, 1991 and June 30, 2005. TDCRS members also include former TRS plan members, including higher education employees, who have elected to transfer into or participate in TDCRS. TDCRS benefits depend solely on amounts contributed to the plan plus investment earnings. Employees are eligible to participate from the date of employment. TDCRS closed participation to new members effective June 30, 2005.

During the 2008 First Special Session, the West Virginia Legislature passed House Bill 101 regarding retirement benefits for teachers and educational service personnel which became effective March 16, 2008. The legislation provided an opportunity for members of the Teachers' Defined Contribution Retirement System (TDCRS) to elect to transfer to the West Virginia Teachers' Retirement System (TRS). The transfer occurred on July 1, 2008 and a total of 15,152 TDCRS members transferred to TRS.

The TDCRS provides members with a choice of 16 separate investment options made up of fixed income, balanced, large cap, mid cap, small cap, and international mutual funds, a money market fund and a fixed annuity.

*Contributions* - State law requires employees to contribute 4.5% of their gross compensation and the employers to contribute 7.5% of covered members' gross compensation. Employer contributions are comprised from amounts allocated to the employers through the State's School Aid Formula, forfeitures allotted from the TDCRS and county contributions. Employer contributions for each employee (and interest allocated to the employee's account) become partially vested after six years and fully vested after 12 complete years of service. If a terminated employee does not return to active participant status within five years, the nonvested employer contributions and earnings thereon are forfeited to reduce the employer's current period contribution requirement. Any such forfeitures arising from contributions, plus earnings thereon, will be used to reduce future employer contributions.

**3 - ACTUARIAL INFORMATION - DEFINED BENEFIT PLANS**

The total pension liabilities for financial reporting purposes were determined by actuarial valuations as of July 1, 2013 and rolled forward to June 30, 2014 using the actuarial assumptions and methods described in the *Actuarial Assumptions and Methods* section of this note. Due to changes in actuarial methods and assumptions related to the implementation of GASB Statement No. 67 during the year ended June 30, 2014, certain actuarial information was not available for prior years and is not presented.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
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**3 - ACTUARIAL INFORMATION - DEFINED BENEFIT PLANS (Continued)**

Membership in the plans described in Note 2, consisted of the following as of the plan valuation dates, July 1, 2013 and 2012:

|  | PERS          | TRS           | SPDDRS     | SPRS       | DSRS         | JRS        | EMSRS      | MPFRS     |
|--|---------------|---------------|------------|------------|--------------|------------|------------|-----------|
| As of July 1, 2013:  |               |               |            |            |              |            |            |           |
| Retirees and beneficiaries currently receiving benefits            | 24,205        | 33,007        | 705        | 19         | 299          | 57         | 45         | -         |
| Terminated members entitled to benefits but not yet receiving them | 3,909         | 1,615         | 4          | 8          | 77           | -          | 29         | -         |
| Terminated nonvested members                                       | 13,500        | 2,256         | 1          | 107        | 154          | 4          | 85         | 10        |
| Active members:  |               |               |            |            |              |            |            |           |
| Vested   | 23,491        | 25,403        | 99         | 264        | 655          | 28         | 251        | -         |
| Nonvested  | 13,146        | 10,190        | -          | 294        | 335          | 42         | 272        | 48        |
| <b>Total</b>   | <b>78,251</b> | <b>72,471</b> | <b>809</b> | <b>692</b> | <b>1,520</b> | <b>131</b> | <b>682</b> | <b>58</b> |
| As of July 1, 2012:  |               |               |            |            |              |            |            |           |
| Retirees and beneficiaries currently receiving benefits            | 23,460        | 31,913        | 710        | 18         | 283          | 55         | 34         | -         |
| Terminated members entitled to benefits but not yet receiving them | 3,847         | 1,563         | 3          | 7          | 70           | -          | 18         | -         |
| Terminated nonvested members                                       | 12,671        | 1,981         | 1          | 108        | 146          | 2          | 91         | 2         |
| Active members:  |               |               |            |            |              |            |            |           |
| Vested   | 23,570        | 25,669        | 108        | 226        | 639          | 24         | 255        | -         |
| Nonvested  | 13,003        | 10,138        | -          | 340        | 340          | 46         | 239        | 27        |
| <b>Total</b>   | <b>76,551</b> | <b>71,264</b> | <b>822</b> | <b>699</b> | <b>1,478</b> | <b>127</b> | <b>637</b> | <b>29</b> |

Schedule of Net Pension Liability

The schedules of net pension liability and changes in net pension liability, presented as required supplemental information (RSI) following the notes to the financial statements, present trend information about whether the actuarial values of plan fiduciary net position are increasing or decreasing over time relative to the actuarial values of the total pension liability. Selected information for each plan as of June 30, 2014, the most recent actuarial valuation date, is as follows (in thousands):

|        | Total Pension Liability | Plan Fiduciary Net Position | Net Pension Liability | Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |
|--------|-------------------------|-----------------------------|-----------------------|--|
| PERS   | \$ 6,113,764            | \$ 5,761,109                | \$ 352,655            | 94.23%   |
| TRS    | 10,115,959              | 6,682,093                   | 3,433,866             | 66.05%   |
| SPDDRS | 694,897                 | 601,077                     | 93,820                | 86.50%   |
| SPRS   | 114,386                 | 120,572                     | (6,186)               | 105.41%  |
| DSRS   | 179,680                 | 162,748                     | 16,932                | 90.58%   |
| JRS    | 111,253                 | 165,239                     | (53,986)              | 148.53%  |
| EMS    | 56,363                  | 53,647                      | 2,716                 | 95.18%   |
| MPFRS  | 498                     | 1,201                       | (703)                 | 241.16%  |

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**3 - ACTUARIAL VALUATIONS - DEFINED BENEFIT PLANS (Continued)**

Schedule of Net Pension Liability (Continued)

The West Virginia Supreme Court of Appeals upheld a lower court ruling in March 2014, that awarded military service credit for certain periods of armed conflict not previously recognized by PERS. The impact of this court ruling on the total pension liability of PERS, as presented above cannot be determined at this time.

Long-Term Expected Rates of Return

The long-term rates of return on pension plan investments were determined using the building block method in which estimates of expected real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentages and by adding expected inflation. Rates summarized in the following table include the inflation component and were used for all defined benefit plans:

|                                   |      |
|-----------------------------------|------|
| US Equity (Russell 3000)          | 7.6% |
| International Equity (ACWI ex US) | 8.5% |
| Core Fixed Income                 | 2.9% |
| High Yield                        | 4.8% |
| TPS                               | 2.9% |
| Real Estate                       | 6.8% |
| Private Equity                    | 9.9% |
| Hedge Funds                       | 5.0% |
| Inflation (CPI)                   | 2.2% |

Discount Rate

The discount rate used to measure the total pension liability was 7.5% for all defined benefit plans. The projections of cash flows used to determine the discount rates assumed that employer contributions will continue to follow the current funding policies. Based on those assumptions, the fiduciary net position of each defined benefit pension plan was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rates of return on pension plan investments were applied to all periods of projected benefit payments to determine the total pension liabilities of each plan.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**3 - ACTUARIAL VALUATIONS - DEFINED BENEFIT PLANS (Continued)**

Discount Rate (Continued)

Regarding the sensitivity of the net pension liability to changes in the discount rate, the following table presents the plans' net pension liabilities calculated using the current discount rate of 7.5% as well as the plans' net pension liabilities if they were calculated using a discount rate that is one percentage point lower or one percentage point higher (in thousands):

|        | Total Net Pension Liability |                         |              |
|--------|-----------------------------|-------------------------|--------------|
|        | 1% Decrease                 | Current                 | 1% Increase  |
|        | (6.5%)                      | Discount Rate<br>(7.5%) | (8.5%)       |
| PERS   | \$ 1,026,461                | \$ 352,655              | \$ (221,483) |
| TRS    | 4,458,218                   | 3,433,866               | 2,554,425    |
| SPDDRS | 187,585                     | 93,820                  | 17,538       |
| SPRS   | 16,129                      | (6,186)                 | (23,971)     |
| DSRS   | 41,845                      | 16,932                  | (3,639)      |
| JRS    | (41,203)                    | (53,986)                | (64,800)     |
| EMS    | 10,867                      | 2,716                   | (4,433)      |
| MPFRS  | (581)                       | (703)                   | (797)        |

Annual Money-Weighted Rates of Return

The following table provides the annual money-weighted rates of return, net of investment expenses, for the year ending June 30, 2014 for each defined benefit pension plan:

|        | Annual Money<br>Weighted Rate<br>Of Return |
|--------|--|
| PERS   | 17.94%                                     |
| TRS    | 17.85%                                     |
| SPDDRS | 17.86%                                     |
| SPRS   | 17.92%                                     |
| DSRS   | 17.94%                                     |
| JRS    | 17.95%                                     |
| EMS    | 17.90%                                     |
| MPFRS  | 17.03%                                     |

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**3 - ACTUARIAL VALUATIONS - DEFINED BENEFIT PLANS (Continued)**

Actuarial Assumptions and Methods

Significant assumptions used in the actuarial valuations are as follows:

|  | PERS  | TRS  | SPDDRS   |
|--|---|--|--|
| Actuarial cost method                      | Individual entry age normal cost with level percentage of payroll   | Individual entry age normal cost with level percentage of payroll  | Individual entry age normal cost with level percentage of payroll  |
| Asset valuation method                     | Fair value  | Fair value   | Fair value   |
| Amortization method                        | Level dollar, fixed period  | Level dollar, fixed period   | Level dollar, fixed period   |
| Amortization period                        | Through FY 2035   | Through FY 2034  | Through FY 2025  |
| Actuarial assumptions:                     |   |  |  |
| Investment rate of return                  | 7.5%  | 7.5%   | 7.5%   |
| Projected salary increases:                |   |  |  |
| PERS:                                      |   |  |  |
| State                                      | 4.25-6.0%   | -  | -  |
| Nonstate                                   | 4.25-6.0%   | -  | -  |
| TRS:                                       |   |  |  |
| Teachers                                   | -   | 3.75-5.25%   | -  |
| Non Teachers                               | -   | 3.40-6.50%   | -  |
| SPDDRS:                                    | -   | -  | 5.0% for first 2 yrs of service<br>4.5% for the next 3 yrs of service<br>4.0% for the next 5 yrs and<br>3.25% thereafter               |
| Inflation rate                             | 2.2%  | 2.2%   | 2.2%   |
| Discount rate                              | 7.5%  | 7.5%   | 7.5%   |
| Mortality rates                            | Healthy males - 1983 GAM<br>Healthy females - 1971 GAM<br>Disabled males - 1971 GAM<br>Disabled females - Revenue ruling 96-7 | Active - RP2000, non-annuitant monthly mortality table, retired - RP2000 healthy annuitant, scale AA; disabled - RP2000 disabled annuitant mortality table, scale AA | Active - RP2000 healthy annuitant mortality table, scale BB; retired and disabled - RP2000 healthy annuitant mortality table, scale BB |
| Withdrawal rates                           |   | Teachers: 1.2 - 30%<br>Non-teachers: 1.4 - 22.5%   | 0 - 2.67%  |
| State                                      | 1 - 26%   |  |  |
| Non-state                                  | 2 - 31.2%   |  |  |
| Disability rates                           | 0 - .8%   | 0 - .8%  | .05 - .4%  |
| Retirement rates                           | 15% - 100%  | 15% - 100%   | 20% - 100%   |
| Date range in most recent experience study | 2004 - 2009   | 2006 - 2010  | 2006 - 2011  |

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**3 - ACTUARIAL VALUATIONS - DEFINED BENEFIT PLANS (Continued)**

Actuarial Assumptions and Methods (Continued)

|                                      | SPRS   | DSRS   | JRS   |
|--------------------------------------|--|--|---|
| Actuarial cost method                | Individual entry age normal cost with level percentage of payroll  | Individual entry age normal cost with level percentage of payroll  | Individual entry age normal cost with level percentage of payroll                     |
| Actuarial valuation method           | Fair value   | Fair value   | Fair value  |
| Amortization method                  | Level dollar, fixed period   | Level dollar, fixed period   | Level dollar, fixed period  |
| Amortization period                  | Through FY 2030  | Through FY 2029  | -   |
| Actuarial assumptions:               |  |  |   |
| Investment rate of return            | 7.5%   | 7.5%   | 7.5%  |
| Projected salary increases           | 5.0% for first 2 yrs of service, 4.5% for next 3 yrs of service, 4.0% for the next 5 yrs, and 3.25% thereafter                     | 5.0% for first 2 yrs of service, 4.5% for next 3 yrs of service, 4.0% for the next 5 yrs, and 3.5% thereafter                      | 4.25%   |
| Inflation rate                       | 2.2%   | 2.2%   | 2.2%  |
| Discount rate                        | 7.5%   | 7.5%   | 7.5%  |
| Mortality rates                      | Active - RP2000 Non-annuitant mortality table, scale BB; retired and disabled - RP2000 healthy annuitant mortality table, scale BB | Active - RP2000 Non-annuitant mortality table, scale BB; retired and disabled RP2000 healthy annuitant mortality table, scale BB   | Active - N/A; retired and disabled RP2000 healthy annuitant mortality table, scale BB |
| Withdrawal rates                     | 0 - 7.6%   | .35% - 12.32%  | -   |
| Disability rates                     | .05 - .4%  | .05% - .4%   | -   |
| Retirement rates                     | 20% - 100%   | 20% - 100%   | 5% - 100%   |
| Date of most recent experience study | 2006 - 2011  | 2007 - 2011  | 2007 - 2012   |
|                                      | EMSRS  | MPFRS  |   |
| Actuarial cost method                | Individual entry age normal cost with level percentage of payroll  | Individual entry age normal cost with level percentage of payroll  |   |
| Actuarial valuation method           | Fair value   | Fair value   |   |
| Amortization method                  | Level dollar, fixed period   | Level dollar, fixed period   |   |
| Amortization period                  | Through FY 2038  | -  |   |
| Actuarial assumptions:               |  |  |   |
| Investment rate of return            | 7.5%   | 7.5%   |   |
| Projected salary increases           | By age from 4.75% at age 30 declining to 3.25% at age 65   | By age from 4.75% at age 30 declining to 3.25% at age 65   |   |
| Inflation rate                       | 2.2%   | 2.2%   |   |
| Discount rate                        | 7.5%   | 7.5%   |   |
| Mortality rates                      | Active - RP2000 non-annuitant mortality table, scale BB, retired and disabled - RP2000 healthy annuitant mortality table, scale BB | Active - RP2000 non-annuitant mortality table, scale BB; retired and disabled - RP2000 healthy annuitant mortality table, scale BB |   |
| Withdrawal rates                     | 3% - 14%   | 3% - 14%   |   |
| Disability rates                     | .008 - .285%   | .05 - .40%   |   |
| Retirement rates                     | 20% - 100%   | 20% - 100%   |   |
| Date of most recent experience study | N/A  | N/A  |   |

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS**

The Board has adopted investment guidelines that are consistent with those specified in the West Virginia Code. Those guidelines authorize the Board to invest with IMB in obligations of the United States and certain of its agencies, certificates of deposit, direct and general obligations of states, repurchase agreements relating to certain securities, equity securities, real estate, and guaranteed investment contracts. Plan assets of the defined benefit plans are invested by the IMB. Investments are managed by a third party administrator as the trustee for the TDCRS.

The IMB invests plan assets in accordance with West Virginia Code and policies established by the IMB. Individual defined benefit plan assets are invested by the IMB in the various IMB pools. The following is a summary of the investments held by IMB for each plan as of June 30, 2014 and 2013 (in thousands):

| June 30, 2014             | <u>PERS</u>               | <u>TRS</u>                | <u>SPDDRS</u>            | <u>SPRS</u>              | <u>DSRS</u>              | <u>JRS</u>               | <u>EMSRS</u>            | <u>MPOF</u>            |
|---------------------------|---------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|------------------------|
| Large cap equity          | \$1,145,321               | \$1,324,099               | \$ 125,777               | \$ 24,634                | \$ 32,947                | \$ 33,599                | \$ 10,916               | \$ 230                 |
| Non-large cap equity      | 400,856                   | 463,970                   | 42,199                   | 8,466                    | 11,449                   | 11,772                   | 3,755                   | 76                     |
| International qualified   | 556,196                   | 640,632                   | 58,706                   | 10,985                   | 15,281                   | 16,213                   | 4,850                   | 100                    |
| International equity      | 1,018,952                 | 1,178,932                 | 107,924                  | 22,187                   | 29,604                   | 30,063                   | 9,851                   | 202                    |
| Private equity            | 549,804                   | 637,022                   | 54,936                   | 11,232                   | 15,527                   | 16,136                   | 5,393                   | 112                    |
| Real estate               | 517,214                   | 598,156                   | 55,283                   | 10,947                   | 14,771                   | 15,185                   | 4,853                   | 101                    |
| Total return fixed income | 558,951                   | 643,611                   | 59,807                   | 12,251                   | 16,288                   | 16,522                   | 5,434                   | 112                    |
| Core fixed income         | 241,787                   | 275,801                   | 25,575                   | 5,278                    | 7,009                    | 7,120                    | 2,336                   | 49                     |
| Hedge fund                | 577,172                   | 667,548                   | 65,821                   | 12,688                   | 16,718                   | 16,970                   | 5,214                   | 108                    |
| TRS annuity               | -                         | (17)                      | -                        | -                        | -                        | -                        | -                       | -                      |
| Short term fixed income   | 14,398                    | 168,607                   | 542                      | 1,011                    | 496                      | 218                      | 345                     | 52                     |
| TIPS                      | 49,161                    | 57,015                    | 4,507                    | 893                      | 1,401                    | 1,441                    | 396                     | 8                      |
| <b>Total investments</b>  | <b><u>\$5,629,812</u></b> | <b><u>\$6,655,376</u></b> | <b><u>\$ 601,077</u></b> | <b><u>\$ 120,572</u></b> | <b><u>\$ 161,491</u></b> | <b><u>\$ 165,239</u></b> | <b><u>\$ 53,343</u></b> | <b><u>\$ 1,150</u></b> |
|                           |                           |                           |                          |                          |                          |                          |                         |                        |
| June 30, 2013             | <u>PERS</u>               | <u>TRS</u>                | <u>SPDDRS</u>            | <u>SPRS</u>              | <u>DSRS</u>              | <u>JRS</u>               | <u>EMSRS</u>            | <u>MPOF</u>            |
| Large cap equity          | \$ 904,359                | \$1,050,238               | \$ 99,298                | \$ 17,753                | \$ 25,011                | \$ 26,420                | \$ 7,891                | \$ 89                  |
| Non-large cap equity      | 319,921                   | 368,809                   | 33,901                   | 6,206                    | 8,791                    | 9,331                    | 2,761                   | 31                     |
| International qualified   | 442,639                   | 509,827                   | 46,721                   | 8,576                    | 12,161                   | 12,903                   | 3,817                   | 41                     |
| International equity      | 803,747                   | 934,106                   | 85,986                   | 15,716                   | 22,205                   | 23,483                   | 7,007                   | 81                     |
| Private equity            | 471,951                   | 541,454                   | 51,009                   | 8,957                    | 12,933                   | 13,828                   | 4,049                   | 45                     |
| Real estate               | 398,384                   | 459,886                   | 41,932                   | 7,718                    | 10,952                   | 11,622                   | 3,441                   | 35                     |
| Total return fixed income | 588,504                   | 654,399                   | 63,935                   | 12,210                   | 16,692                   | 17,239                   | 5,371                   | 60                     |
| Core fixed income         | 315,251                   | 350,612                   | 34,213                   | 6,525                    | 8,933                    | 9,234                    | 2,873                   | 32                     |
| Hedge fund                | 493,933                   | 569,704                   | 52,043                   | 9,617                    | 13,612                   | 14,433                   | 4,281                   | 46                     |
| TRS annuity               | -                         | (94)                      | -                        | -                        | -                        | -                        | -                       | -                      |
| Short term fixed income   | 15,495                    | 169,739                   | 1,297                    | 980                      | 526                      | 233                      | 297                     | 35                     |
| TIPS                      | 94,193                    | 108,903                   | 9,988                    | 1,834                    | 2,594                    | 2,750                    | 815                     | 9                      |
| <b>Total investments</b>  | <b><u>\$4,848,377</u></b> | <b><u>\$5,717,583</u></b> | <b><u>\$ 520,323</u></b> | <b><u>\$ 96,092</u></b>  | <b><u>\$ 134,410</u></b> | <b><u>\$ 141,476</u></b> | <b><u>\$ 42,603</u></b> | <b><u>\$ 504</u></b>   |

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Large Cap Equity

The Pool's objective is to exceed, net of external investment management fees, the S&P 500 Stock Index over three to five year periods. Assets are managed by INTECH Investment Management, LLC, and State Street Global Advisors.

The Pool holds equity securities of U.S. companies, exchange traded stock index futures, and money market funds with the highest credit rating. These types of securities are exposed to no or minimal credit risk, interest rate risk, custodial credit risk, or foreign currency risk. At June 30, 2014, the Pool, in accordance with West Virginia statutes, did not hold securities of any one issuer in excess of 5 percent of the value of the Pool and is not exposed to concentration of credit risk.

Non-Large Cap Equity

The Pool invests in the equities of small to mid-sized companies and its objective is to exceed, net of external investment management fees, the Russell 2500 Index over three to five year periods. Assets are managed by Aronson Johnson Ortiz, LP and Westfield Capital Management.

The Pool holds equity securities of U.S. companies and money market funds with the highest credit rating. These types of securities are exposed to no or minimal credit risk, interest rate risk, custodial credit risk, or foreign currency risk. The pool is restricted from investing more than 5 percent of the value of the Pool in any one company. At June 30, 2014, the Pool was in compliance with this restriction and is not exposed to concentration of credit risk.

International Qualified

The Pool invests in Silchester International Investors' International Value Equity Group Trust. The Pool's objective is to produce investment returns that exceed the Morgan Stanley Capital International's Europe Australasia Far East (EAFE) index by 200 basis points on an annualized basis over three to five year periods, net of external investment management fees. Only "qualified participants" (as defined by the *Internal Revenue Code*) may invest in the Pool.

The Pool invests in a collective trust fund that invests in equities denominated in foreign currencies. The value of this investment at June 30, 2014 was \$1,303,151,000. This investment, although denominated in U.S. dollars, is exposed to foreign currency risk through the underlying investments. West Virginia statute limits the amount of international securities to no more than 30 percent of the total assets managed by the IMB. At June 30, 2014, the IMB was in compliance with this limitation. The Pool is not exposed to credit risk, interest rate risk, custodial credit risk, or concentration of credit risk.

International Equity

This Pool invests in the equities of international companies. Assets are managed by Acadian Asset Management, LLC, Axiom International Investors, LLC, Brandes Investment Partners, L.P., LSV Asset Management, and Pictet Asset Management Limited. The objective of the Pool is to exceed, net of external investment management fees, Morgan Stanley Capital International's All Country World Free Ex US index over three to five year periods.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

International Equity (Continued)

The Pool is exposed to no or minimal credit risk, interest rate risk, or custodial credit risk. The Pool is restricted from investing more than 5 percent of the value of the Pool in any one company. At June 30, 2014 the Pool was in compliance with this restriction and is not exposed to concentration of credit risk. The Pool has both equity securities and cash that are denominated in foreign currencies and are exposed to foreign currency risks. The IMB Investment Policy Statement limits the amount of international securities to no more than 30 percent of the total assets managed by the IMB. At June 30, 2014 the IMB was in compliance with this limitation. The amounts at fair value (in U.S. dollars) of investments and cash denominated in foreign currencies as of June 30, 2014 are as follows (in thousands):

| <u>Currency</u>    | <u>Investments</u>  | <u>Cash</u>      | <u>Total</u>        | <u>Percent</u> |
|--------------------|---------------------|------------------|---------------------|----------------|
| Australian Dollar  | \$ 90,022           | \$ 674           | \$ 90,696           | 3.2%           |
| Brazil Real        | 95,376              | 1,232            | 96,608              | 3.4            |
| British Pound      | 280,040             | 379              | 280,419             | 9.8            |
| Canadian Dollar    | 115,598             | 423              | 116,021             | 4.1            |
| Czech Koruna       | 14,240              | 1                | 14,241              | 0.5            |
| Danish Krone       | 11,957              | -                | 11,957              | 0.4            |
| Emirati Dirham     | 3,497               | -                | 3,497               | 0.1            |
| Euro Currency Unit | 435,175             | 924              | 436,099             | 15.3           |
| Hong Kong Dollar   | 235,280             | 658              | 235,938             | 8.2            |
| Hungarian Forint   | 14,797              | 1                | 14,798              | 0.5            |
| Indian Rupee       | 89,933              | 1,126            | 91,059              | 3.2            |
| Indonesian Rupiah  | 12,473              | 92               | 12,565              | 0.4            |
| Israeli Shekel     | 12,876              | 103              | 12,979              | 0.5            |
| Japanese Yen       | 321,007             | 3,116            | 324,123             | 11.3           |
| Malaysian Ringgit  | 6,529               | 98               | 6,627               | 0.2            |
| Mexican Peso       | 32,670              | -                | 32,670              | 1.1            |
| New Taiwan Dollar  | 47,308              | 1,960            | 49,268              | 1.7            |
| New Zealand Dollar | 7,678               | 108              | 7,786               | 0.3            |
| Norwegian Krone    | 37,343              | 38               | 37,381              | 1.3            |
| Pakistan Rupee     | 5,669               | -                | 5,669               | 0.2            |
| Philippine Peso    | 9,975               | 30               | 10,005              | 0.3            |
| Polish Zloty       | 10,717              | 9                | 10,726              | 0.4            |
| Qatari Riyal       | 2,789               | -                | 2,789               | 0.1            |
| Singapore Dollar   | 20,246              | 1,220            | 21,466              | 0.8            |
| South African Rand | 49,744              | 404              | 50,148              | 1.8            |
| South Korean Won   | 207,761             | 951              | 208,712             | 7.3            |
| Swedish Krona      | 41,954              | 245              | 42,199              | 1.5            |
| Swiss Franc        | 86,527              | 22               | 86,549              | 3.0            |
| Thailand Baht      | 22,984              | 4                | 22,988              | 0.8            |
| Turkish Lira       | 61,288              | 101              | 61,389              | 2.1            |
| <b>Total</b>       | <b>\$ 2,383,453</b> | <b>\$ 13,919</b> | <b>\$ 2,397,372</b> | <b>83.8%</b>   |

This table excludes cash and investments held by the Pool that are denominated in U.S. dollars. The market value of the U.S. dollar denominated cash and investments is \$462,603 (in thousands) or 16.2 percent at June 30, 2014.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Short-Term Fixed Income

The main objective of the Pool is to maintain sufficient liquidity to fund withdrawals by the participant plans and to invest cash contributions until such time as the money can be transferred to other asset classes without sustaining capital losses. JP Morgan Investment Advisors, Inc. manages the Pool. The Pool's investment objective, net of external investment management fees, is to meet or exceed the Citigroup ninety - day T-bill index plus fifteen basis points.

*Credit risk*

The IMB limits the exposure to credit risk in the Pool by requiring all corporate bonds to be rated AA or higher. Commercial paper must be rated A1 by Standard & Poor's and P1 by Moody's. Additionally, the Pool must have at least 15 percent of its assets in United States Treasury issues.

The following table provides information on the weighted average credit ratings of the Pool's investments as of June 30, 2014 (in thousands):

| <u>Investment Type</u>        | <u>Moody's</u> | <u>S&amp;P</u> | <u>Carrying Value</u> | <u>Percent</u> |
|-------------------------------|----------------|----------------|-----------------------|----------------|
| Commercial paper              | P-1            | A-1            | \$ 84,989             | 25.0%          |
| U.S. Government agency issues | P-1            | A-1            | 114,269               | 33.6           |
| U.S. Treasury issues          | P-1            | A-1            | <u>141,285</u>        | <u>41.4</u>    |
| Total rated investments       |                |                | <u>\$ 340,543</u>     | <u>100.0%</u>  |

This table includes U.S. treasury notes received as collateral for a repurchase agreement with a fair value of \$85,732 (in thousands) as compared to the amortized cost of the repurchase agreement of \$84,205 (in thousands).

*Concentration of Credit Risk*

The Pool is restricted from investing more than 5 percent of the value of the Pool in any one corporate name. At June 30, 2014, the Pool was in compliance with this restriction and is not exposed to concentration of credit risk.

*Custodial Credit Risk*

At June 30, 2014, the Pool held no investments that were subject to custodial credit risk. Repurchase agreements are collateralized at 102 percent and the collateral is held in the name of the IMB. All remaining investments are held by the IMB's custodian in the name of the IMB.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Short-Term Fixed Income (Continued)

*Interest rate risk*

The weighted average maturity of the investments of the Pool is not to exceed 60 days. The maturity of floating rate notes is assumed to be the next interest rate reset date. The following table provides the weighted average maturities (WAM) for the various asset types in the Pool as of June 30, 2014 (in thousands):

| <u>Investment Type</u>        | <u>Carrying Value</u> | <u>WAM (days)</u> |
|-------------------------------|-----------------------|-------------------|
| Commercial paper              | \$ 84,989             | 27                |
| Repurchase agreement          | 84,205                | 1                 |
| U.S. Government agency issues | 114,269               | 46                |
| U.S. Treasury issues          | <u>55,553</u>         | 53                |
| Total investments             | <u>\$ 339,016</u>     | 31                |

*Foreign currency risk*

The Pool has no investments that are subject to foreign currency risk.

Total Return Fixed Income

The main objective of this Pool is to earn superior returns with low volatility by actively investing in the extended fixed income markets. Dodge & Cox, Franklin Templeton Investments, and Western Asset Management Company manage the Pool. The Pool's investment objective, net of external investment management fees, is to meet or exceed the Barclays Capital Universal index.

*Credit risk*

The IMB limits the exposure to credit risk in the Pool by maintaining at least an average rating of investment grade as defined by the Nationally Recognized Statistical Rating Organizations. The following table provides the weighted average credit ratings of the rated assets in the Pool as of June 30, 2014 (in thousands):

| <u>Investment Type</u>        | <u>Moody's</u> | <u>S&amp;P</u> | <u>Fair Value</u> | <u>Percent of Assets</u> |
|-------------------------------|----------------|----------------|-------------------|--------------------------|
| Corporate asset backed issues | Baa2           | A              | \$ 73,955         | 3.2%                     |
| Corporate CMO                 | Caa1           | B              | 63,110            | 2.7                      |
| Corporate CMO-interest only   | C1             | not rated      | 7,955             | 0.4                      |
| Corporate preferred security  | Ba1            | BB             | 10,512            | 0.5                      |
| Foreign asset backed issues   | A2             | A              | 17,691            | 0.8                      |
| Foreign corporate bonds       | Baa3           | BBB            | 245,728           | 10.6                     |
| Foreign government bonds      | Baa2           | BBB            | 192,350           | 8.3                      |
| Municipal bonds               | A1             | A              | 53,510            | 2.3                      |

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Total Return Fixed Income (Continued)

| <u>Investment Type</u>                       | <u>Moody's</u> | <u>S&amp;P</u> | <u>Fair Value</u>   | <u>Percent of Assets</u> |
|--|----------------|----------------|---------------------|--------------------------|
| Short-term issue                             | Aaa            | AAA            | 37,727              | 1.7                      |
| U.S. Corporate bonds                         | Baa2           | BBB            | 571,567             | 24.8                     |
| U.S. Government agency bonds                 | Aaa            | AA             | 2,469               | 0.1                      |
| U.S. Government agency CMO                   | Aaa            | AA             | 89,517              | 3.9                      |
| U.S. Government agency CMO interest only     | Aaa            | AA             | 11,490              | 0.5                      |
| U. S. Government agency MBS                  | Aaa            | AA             | 290,820             | 12.6                     |
| U. S. Government agency TBA                  | Aaa            | AA             | 888                 | 0.0                      |
| U.S. Treasury bonds                          | Aaa            | AA             | 183,531             | 7.9                      |
| U.S. Treasury inflation protected securities | Aaa            | AA             | <u>14,276</u>       | <u>0.6</u>               |
| Total rated investments                      |                |                | <u>\$ 1,867,096</u> | <u>80.9%</u>             |

Unrated investments include investments in other funds valued at \$418,593 (in thousands), investments made with cash collateral for securities loaned valued at \$23,881 (in thousands), and option contracts purchased valued at \$341 (in thousands). These unrated investments represent 19.1 percent of the fair value of the Pool's investments.

*Concentration of credit risk*

The Pool is restricted from investing more than 5 percent of the value of the Pool in any one corporate name. At June 30, 2014, the Pool was in compliance with this restriction and is not exposed to concentration of credit risk.

*Custodial credit risk*

At June 30, 2014, the Pool held no securities that were subject to custodial credit risk. Repurchase agreements, when held, are collateralized at 102 percent and the collateral is held in the name of the IMB. Investments in commingled funds are held in an account in the name of the IMB. All remaining securities are held by the IMB's custodian in the name of the IMB.

*Interest rate risk*

The IMB monitors interest rate risk of the Pool by evaluating the effective duration of the investments in the Pool. The following table provides the weighted average effective duration for the various asset types in the Pool as of June 30, 2014 (in thousands):

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Total Return Fixed Income (Continued)

| <u>Investment Type</u>                       | <u>Fair Value</u>   | <u>Effective Duration (years)</u> |
|--|---------------------|-----------------------------------|
| Corporate asset backed issues                | \$ 73,955           | 1.4                               |
| Corporate CMO                                | 63,110              | 1.5                               |
| Corporate CMO interest-only                  | 7,955               | 25.7                              |
| Foreign asset backed issues                  | 17,691              | 0.7                               |
| Foreign corporate bonds                      | 245,728             | 6.0                               |
| Foreign government bonds                     | 192,350             | 6.5                               |
| Investments in other funds                   | 418,593             | 4.2                               |
| Investments made with cash collateral        | 23,881              | 0.0                               |
| Municipal bonds                              | 53,510              | 9.0                               |
| Short term issues                            | 37,727              | 0.0                               |
| U.S. Corporate bonds                         | 571,567             | 6.3                               |
| U.S. Government agency bonds                 | 2,469               | 5.3                               |
| U.S. Government agency CMO                   | 89,517              | 2.4                               |
| U.S. Government agency CMO interest only     | 11,490              | (1.3)                             |
| U.S. Government agency MBS                   | 290,820             | 2.2                               |
| U.S. Government agency TBA                   | 888                 | 2.2                               |
| U.S. Treasury bonds                          | 183,531             | 10.5                              |
| U.S. Treasury inflation-protected securities | <u>14,276</u>       | 17.5                              |
| Total investments                            | <u>\$ 2,299,058</u> | 5.2                               |

The Pool invests in commercial and residential mortgage-backed securities, asset-backed securities, and collateralized mortgage obligations. The cash flows from these securities are based on the payment of the underlying collateral. The effective duration and yield to maturity of these securities are dependent on estimated prepayment assumptions that consider historical experience, market conditions and other criteria. Actual prepayments may vary with changes in interest rates. Rising interest rates often result in a slower rate of prepayments while declining rates tend to lead to faster prepayments. As a result, the fair values of these securities are highly sensitive to interest rate changes. At June 30, 2014, the Pool held \$462,892 (in thousands) of these securities. This represents approximately 20 percent of the value of the Pool's securities.

*Foreign currency risk*

The Pool has foreign government bonds and foreign corporate bonds that are denominated in foreign currencies and are exposed to foreign currency risks. The Pool also has foreign denominated future contracts and foreign exchange forward contracts. Additionally, the Pool has indirect exposure to foreign currency risk through its ownership interests in certain of the commingled investment pools. Approximately \$186,841 (in thousands), or 45 percent, of the commingled investment pools hold substantially all of their investments in foreign currencies. This represents approximately 8 percent of the value of the Pool's securities. The IMB Investment Policy Statement limits the amount of

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Total Return Fixed Income (Continued)

international securities to no more than 30 percent of the total assets managed by the IMB. At June 30, 2014 the IMB was in compliance with this limitation. The amounts at fair value (in U.S. dollars) of investments and cash denominated in foreign currencies as of June 30, 2014, are as follows (in thousands):

| Currency           | Investments       | Cash            | Total             | Percent     |
|--------------------|-------------------|-----------------|-------------------|-------------|
| Brazil Real        | \$ 15,469         | \$ 82           | \$ 15,551         | 0.7%        |
| British Pound      | -                 | 467             | 467               | 0.0         |
| Colombian Peso     | 1,772             | -               | 1,772             | 0.1         |
| Euro Currency Unit | 21,251            | 859             | 22,110            | 0.8         |
| German Mark        | 2,905             | -               | 2,905             | 0.1         |
| Ghanaian Cedi      | 1,323             | -               | 1,323             | 0.1         |
| Indian Rupee       | 2,938             | -               | 2,938             | 0.1         |
| Japanese Yen       | 23,303            | 447             | 23,750            | 1.0         |
| Kenyan Shilling    | 2,094             | -               | 2,094             | 0.1         |
| Mexican Peso       | 13,975            | 104             | 14,079            | 0.6         |
| New Zealand Dollar | 6,931             | -               | 6,931             | 0.3         |
| Nigerian Naira     | 3,697             | 3               | 3,700             | 0.2         |
| Polish Zloty       | 4,819             | -               | 4,819             | 0.2         |
| Russian Ruble      | 2,840             | -               | 2,840             | 0.1         |
| Serbian Dinar      | 1,326             | -               | 1,326             | 0.1         |
| South African Rand | 5,678             | 167             | 5,845             | 0.3         |
| Turkish Lira       | 3,890             | -               | 3,890             | 0.2         |
| Ugandan Shilling   | 1,426             | -               | 1,426             | 0.1         |
| Uruguayan Peso     | 2,643             | -               | 2,643             | 0.1         |
|                    | <u>\$ 118,280</u> | <u>\$ 2,129</u> | <u>\$ 120,409</u> | <u>5.2%</u> |

This table excludes investments held by the Pool that are denominated in U.S. dollars. The market value of the U.S. dollar denominated investments and cash is \$2,213,944. This represents 94.8 percent of the value of the Pool's investments.

Core Fixed Income

The main objective of this Pool is to generate investment income, provide stability and diversification, but not at the expense of total return. JP Morgan Investment Advisors, Inc. manages this Pool. This Pool's investment objective, net of external investment management fees, is to meet or exceed the Barclays Capital U.S. Aggregate index.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Core Fixed Income (Continued)

*Credit Risk*

The IMB limits the exposure to credit risk in the Pool by maintaining at least an average rating of investment grade as defined by the Nationally Recognized Statistical Rating Organizations. The following table provides the weighted average credit ratings of the rated assets in the Pool as of June 30, 2014 (in thousands):

| Investment Type                           | Moody's | S&P | Fair Value          | Percent<br>of Assets |
|---|---------|-----|---------------------|----------------------|
| Corporate asset backed issues             | A2      | AA  | \$ 42,858           | 4.0%                 |
| Corporate CMO                             | A2      | AA  | 108,098             | 10.2                 |
| Corporate CMO-interest only               | Ba3     | AAA | 1,607               | 0.2                  |
| Corporate CMO-principal only              | Ba2     | AA  | 389                 | 0.0                  |
| Foreign asset backed issues               | Aa1     | AA  | 3,394               | 0.3                  |
| Foreign corporate bonds                   | A2      | A   | 41,750              | 3.9                  |
| Foreign government bonds                  | Aa2     | AA  | 10,356              | 1.0                  |
| Municipal bonds                           | Aa2     | AA  | 8,378               | 0.8                  |
| Short-term issue                          | Aaa     | AAA | 33,771              | 3.2                  |
| U.S. Corporate bonds                      | A3      | A   | 203,346             | 19.1                 |
| U.S. Government agency bonds              | Aaa     | AA  | 24,449              | 2.3                  |
| U.S. Government agency CMO                | Aaa     | AA  | 164,375             | 15.4                 |
| U.S. Government agency CMO interest-only  | Aaa     | AA  | 8,997               | 0.8                  |
| U.S. Government agency CMO principal only | Aaa     | AA  | 12,688              | 1.2                  |
| U.S. Government agency MBS                | Aaa     | AA  | 200,083             | 18.8                 |
| U.S. Treasury issues                      | Aaa     | AA  | <u>165,535</u>      | <u>15.6</u>          |
| Total rated investments                   |         |     | <u>\$ 1,030,074</u> | <u>96.8%</u>         |

Unrated securities include investments made with cash collateral for securities loaned valued at \$34,417 (in thousands) or 3.2 percent of the fair value of the Pool's investments.

*Concentration of Credit Risk*

The Pool is restricted from investing more than 5 percent of the value of the Pool in any one corporate name. At June 30, 2014, the Pool was in compliance with this restriction and is not exposed to concentration of credit risk.

*Custodial Credit Risk*

At June 30, 2014, the Pool held no securities that were subject to custodial credit risk. All securities are held by the IMB's custodian in the name of the IMB.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Core Fixed Income (Continued)

*Interest Rate Risk*

The IMB monitors interest rate risk of the Pool by evaluating the effective duration of the investments in the Pool. The following table provides the weighted average effective duration for the various asset types in the Pool as of June 30, 2014 (in thousands):

| <u>Investment Type</u>                                      | <u>Fair Value</u>   | <u>Effective Duration (years)</u> |
|---|---------------------|-----------------------------------|
| Corporate asset backed issues                               | \$ 42,858           | 1.3                               |
| Corporate CMO   | 108,098             | 2.1                               |
| Corporate CMO interest-only                                 | 1,607               | (4.0)                             |
| Corporate CMO principal-only                                | 389                 | 2.8                               |
| Foreign asset backed issues                                 | 3,394               | 0.0                               |
| Foreign corporate bonds                                     | 41,750              | 6.3                               |
| Foreign government bonds                                    | 10,356              | 6.6                               |
| Investments made with cash collateral for securities loaned | 34,417              | 0.0                               |
| Municipal bonds   | 8,378               | 14.6                              |
| Short-term issue  | 33,771              | 0.0                               |
| U.S. Corporate bonds  | 203,346             | 6.3                               |
| U.S. Government agency bonds                                | 24,449              | 5.2                               |
| U.S. Government agency CMO                                  | 164,375             | 3.5                               |
| U.S. Government agency CMO interest-only                    | 8,997               | 1.8                               |
| U.S. Government agency CMO principal-only                   | 12,688              | 6.8                               |
| U.S. Government agency MBS                                  | 200,083             | 4.8                               |
| U.S. Treasury issues  | <u>165,535</u>      | 7.6                               |
| Total rated investments                                     | <u>\$ 1,064,491</u> | 4.9                               |

The Pool invests in commercial and residential mortgage-backed securities, asset-backed securities, and collateralized mortgage obligations. The cash flows from these securities are based on the payment of the underlying collateral. The effective duration and yield to maturity of these securities are dependent on estimated prepayment assumptions that consider historical experience, market conditions and other criteria. Actual prepayments may vary with changes in interest rates. Rising interest rates often result in a slower rate of prepayments while declining rates tend to lead to faster prepayments. As a result, the fair values of these securities are highly sensitive to interest rate changes. At June 30, 2014, the Pool held \$542,489 (in thousands) of these securities. This represents approximately 51 percent of the value of the Pool's securities.

*Foreign Currency Risk*

None of the securities held by the Pool are exposed to foreign currency risk.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

TIPS Pool

The Pool invests in Treasury Inflation-Protected Securities (TIPS) and its objective is to match the performance of the Barclay's Capital U.S. TIPS Bond Index on an annualized basis over rolling three year to five year periods, gross of fees. Assets are managed by State Street Global Advisors.

*Credit Risk*

The IMB limits the exposure to credit risk in the Pool by primarily investing in U.S. Treasury inflation protected securities. The following table provides the weighted average credit ratings of the rated assets in the Pool as of June 30, 2014 (in thousands):

| <u>Investment Type</u>                       | <u>Moody's</u> | <u>S&amp;P</u> | <u>Fair Value</u> | <u>Percent of Assets</u> |
|--|----------------|----------------|-------------------|--------------------------|
| Short-term issue                             | Aaa            | AAA            | \$ 244            | 0.0%                     |
| U.S. Treasury inflation-protected securities | Aaa            | AA             | <u>601,027</u>    | <u>100.0</u>             |
| Total rated investments                      |                |                | <u>\$ 601,271</u> | <u>100.0%</u>            |

*Concentration of Credit Risk*

The Pool is restricted from investing more than 5 percent of the value of the Pool in any one corporate name. At June 30, 2014, the Pool was in compliance with this restriction and is not exposed to concentration of credit risk.

*Custodial Credit Risk*

At June 30, 2014, the Pool held no securities that were subject to custodial credit risk. All securities are held by the IMB's custodian in the name of the IMB.

*Interest Rate Risk*

The IMB monitors interest rate risk of the Pool by evaluating the real modified duration of the investments in the Pool. The following table provides the weighted average real modified duration for the various asset types in the Pool as of June 30, 2014 (in thousands):

| <u>Investment Type</u>                       | <u>Fair Value</u> | <u>Real Modified Duration (years)</u> |
|--|-------------------|---------------------------------------|
| Short-term issue                             | \$ 244            | 0.0                                   |
| U.S. Treasury inflation-protected securities | <u>601,027</u>    | 7.8                                   |
| Total investments                            | <u>\$ 601,271</u> | 7.8                                   |

*Foreign Currency Risk*

None of the securities held by the Pool are exposed to foreign currency risk.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

TRS Annuity Pool

The Pool held an investment contract issued by the Variable Annuity Life Insurance Company (VALIC) strictly for the benefit of the Teachers Retirement System (TRS). On December 10, 2008, the IMB assumed responsibility for this investment as part of the restructuring of the Teachers Defined Contribution Retirement System (TDCRS), a separate retirement plan administered solely by the Consolidated Public Retirement System, whereby certain TDCRS participants elected to transfer the ownership of their individual TDCRS retirement accounts to the TRS in exchange for current participation in the TRS defined benefit plan. The final amount transferred under the contract was \$248,293 (in thousands).

The IMB initially requested the immediate redemption of the entire balanced but VALIC denied the request, claiming the amounts were subject to withdrawal restrictions. Effective April 23, 2009, the IMB, while reserving its rights under the contract, executed the appropriate forms with VALIC to elect to withdraw funds under the Five Year Equal Annual Installment method. By making this election the guaranteed minimum annual yield of 4.5 percent became the fixed rate for this contract. The first four withdrawals of \$55,058 (in thousands) each occurred on May 4, 2009, 2010, 2011, and 2012. The final withdrawal of \$55,191 (in thousands) occurred on May 8, 2013. On that date, all remaining income, net of all management fees, was distributed to TRS and all units of ownership in the Pool were redeemed.

In response to VALIC's denial to allow the IMB to liquidate the contract in its entirety, the IMB sued VALIC and the litigation is ongoing. The outcome of the litigation is unknown and accordingly the IMB has not accrued any potential revenues from the case. There are ongoing legal fees associated with this litigation and these expenses are accrued to the Pool. The funding for the payment of these expenses results from contributions by the TRS into the TRS Annuity Pool. No other management fees are charged to the Pool and none have been charged since the final withdrawal on May 8, 2013. Amounts recovered pursuant to the litigation, if any, will be recorded in the TRS Annuity Pool and distributed to the TRS. Once the case is resolved the TRS Annuity Pool will be closed.

Private Equity

The Pool holds investments in private equity funds, a hedge fund, and a commingled investment fund. Franklin Park Associates, LLC has been retained by the IMB to provide consulting services for the private equity funds. The hedge fund is managed by Bridgewater Associates, LP and the commingled investment fund is managed by State Street Global Advisors.

The Pool holds limited partnerships, shares of a hedge fund, a commingled investment fund, and a money market fund with the highest credit rating. The investments in limited partnerships and a hedge fund might be indirectly exposed to foreign currency risk, credit risk, interest rate risk, and/or custodial credit risk. The Pool is restricted from investing more than 10 percent of the IMB's total private equity exposure in a single fund. At June 30, 2014, the Pool was in compliance with this restriction and is not exposed to concentration of credit risk.

Real Estate

The Pool holds the IMB's investments in real estate funds, real estate limited partnerships and real estate investment trusts (REITs). Courtland Partners, Ltd. has been retained by the IMB to provide consulting services for the real estate funds and limited partnerships. The REITs are managed by European Investors, Inc., CBRE Clarion Securities, LLC., and Security Capital Research & Management Inc.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
 NOTES TO FINANCIAL STATEMENTS  
 (CONTINUED)

**4 - INVESTMENTS (Continued)**

Real Estate (Continued)

*Credit Risk*

The IMB limits the exposure to credit risk in the Pool by maintaining at least an average rating of investment grade as defined by the Nationally Recognized Statistical Rating Organizations. The following table provides the weighted average credit ratings of the rated assets in the Pool as of June 30, 2014 (in thousands):

| <u>Investment Type</u>  | <u>Moody's</u> | <u>S&amp;P</u> | <u>Fair Value</u> | <u>Percent of Assets</u> |
|-------------------------|----------------|----------------|-------------------|--------------------------|
| U.S. Corporate bonds    | Baa3           | BBB            | \$ 103,785        | 8.1%                     |
| Short-term issues       | Aaa            | AAA            | <u>69,872</u>     | <u>5.5</u>               |
| Total rated investments |                |                | <u>\$ 173,657</u> | <u>13.6%</u>             |

Unrated securities include equity securities valued at \$294,287 (in thousands), investments made with cash collateral for securities loaned valued at \$1,790 (in thousands), and private real estate partnerships and funds valued at \$811,041 (in thousands). These unrated securities represent 86.4 percent of the fair value of the pool's investments.

*Concentration of Credit Risk*

The Pool's investments in private real estate partnerships and funds might be indirectly exposed to concentration of credit risk.

*Custodial Credit Risk*

At June 30, 2014, the Pool held no securities that were subject to custodial credit risk. All securities except for the investments in private real estate partnerships and funds, are held by the IMB's custodian in the name of the IMB. The investments in private real estate partnerships and funds might be indirectly exposed to custodial credit risk.

*Interest Rate Risk*

The IMB monitors interest rate risk of the Pool by evaluating the effective duration of the investments in the Pool. The weighted average effective duration for U.S. corporate bonds was 1.6 years as of June 30, 2014. All remaining investments do not have an effective duration.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Real Estate (Continued)

*Foreign Currency Risk*

The Pool has real estate investment trusts, private real estate partnerships and funds, and cash that are denominated in foreign currencies and are exposed to foreign currency risks. The IMB Investment Policy Statement limits the amount of international securities to no more than 30 percent of the total assets managed by the IMB. At June 30, 2014, the IMB was in compliance with this limitation. The amounts at fair value (in U.S. dollars) of investments and cash denominated in foreign currencies as of June 30, 2014 are as follows (in thousands):

| <u>Currency</u>    | <u>Investments</u> | <u>Cash</u> | <u>Total</u>     | <u>Percent</u> |
|--------------------|--------------------|-------------|------------------|----------------|
| Australian Dollar  | \$ 3,790           | \$ -        | \$ 3,790         | 0.3%           |
| British Pound      | 5,721              | 4           | 5,725            | 0.4            |
| Canadian Dollar    | 1,591              | -           | 1,591            | 0.1            |
| Euro Currency Unit | 37,692             | 3           | 37,695           | 3.0            |
| Hong Kong Dollar   | 5,520              | -           | 5,520            | 0.4            |
| Japanese Yen       | 9,641              | -           | 9,641            | 0.8            |
| Singapore Dollar   | 2,307              | -           | 2,307            | 0.2            |
| Swedish Krona      | 851                | -           | 851              | 0.1            |
| Swiss Franc        | 218                | -           | 218              | 0.0            |
| Thailand Baht      | <u>504</u>         | -           | <u>504</u>       | <u>0.0</u>     |
| Total              | <u>\$ 67,835</u>   | <u>\$ 7</u> | <u>\$ 67,842</u> | <u>5.3%</u>    |

This table excludes investments held by the Pool that are denominated in U.S. dollars. The market value of the U.S. dollar denominated investments and cash is \$1,213,331 (in thousands). This represents 94.7 percent of the value of the Pool's investments.

Hedge Fund

The Pool was established to hold the IMB's investments in hedge funds. Albourne America, LLC has been retained by the IMB to provide consulting services for this investment strategy.

The Pool holds shares in hedge funds and shares of a money market fund with the highest credit rating. The investments in hedge funds might be indirectly exposed to foreign currency risk, credit risk, interest rate risk and/or custodial credit risk. The Pool is restricted from investing more than 10 percent of the value of the Pool with any single manager. At June 30, 2014, the Pool was in compliance with this restriction and is not exposed to concentration of credit risk.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

IMB Commitments

The IMB, with the assistance of its consultant, began implementing its plan to invest in private equity partnerships in February 2008. As of June 30, 2014, the IMB had made commitments to forty-two private equity general partnerships (in thousands):

| <u>Partnership Classification</u>   | <u>Total<br/>Commitment</u> | <u>Funded<br/>Commitment</u> | <u>Unfunded<br/>Commitment</u> |
|-------------------------------------|-----------------------------|------------------------------|--------------------------------|
| Corporate finance - buyout funds    | \$ 884,000                  | \$ 402,423                   | \$ 481,577                     |
| Corporate finance - distressed debt | 120,000                     | 66,981                       | 53,019                         |
| Corporate finance - growth equity   | 80,000                      | 62,214                       | 17,786                         |
| Corporate finance - mezzanine       | 50,000                      | 12,454                       | 37,546                         |
| Corporate finance - turnaround      | 250,000                     | 129,348                      | 120,652                        |
| Venture capital                     | <u>173,000</u>              | <u>78,602</u>                | <u>94,398</u>                  |
| Total                               | <u>\$ 1,557,000</u>         | <u>\$ 752,022</u>            | <u>\$ 804,978</u>              |

The IMB, with the assistance of its consultant, began implementing its plan to invest in real estate in February 2008. As of June 30, 2014, the IMB has made the following commitments to twenty-four real estate investment funds/partnerships (in thousands):

| <u>Partnership Classification</u> | <u>Total<br/>Commitment</u> | <u>Funded<br/>Commitment</u> | <u>Unfunded<br/>Commitment</u> |
|-----------------------------------|-----------------------------|------------------------------|--------------------------------|
| Core funds                        | \$ 615,000                  | \$ 390,955                   | \$ 224,045                     |
| Opportunistic funds               | 258,400                     | 151,754                      | 106,646                        |
| Value funds                       | <u>471,000</u>              | <u>165,693</u>               | <u>305,307</u>                 |
| Total                             | <u>\$ 1,344,400</u>         | <u>\$ 708,402</u>            | <u>\$ 635,998</u>              |

Investments and Deposits - TDCRS

*Credit Risk*

The TDCRS' investments are not rated as to credit risk.

*Concentration of Credit Risk*

As of June 30, 2014 and 2013, the TDCRS has investment balances with the following issuers which were greater than 5% of the total investment balance of the TDCRS (in thousands):

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**4 - INVESTMENTS (Continued)**

Investments and Deposits - TDCRS (Continued)

| Mutual Funds:                         | 2014              | 2013              |
|---------------------------------------|-------------------|-------------------|
| PIMCO Total Return Fund               | \$ 31,504         | \$ 34,004         |
| Valic Fixed Annuity Option            | 108,328           | 100,710           |
| Great West Secure Foundation Balanced | 34,377            | 29,723            |
| John Hancock Large Cap Equity         | 63,918            | 53,829            |
| Putnam Equity Income                  | 37,040            | 32,003            |
| Vanguard Large Cap Index              | 34,635            | 27,577            |
| Other (less than 5% individually)     | 90,228            | 68,970            |
|                                       | <u>\$ 400,030</u> | <u>\$ 346,816</u> |

*Custodial Credit Risk*

As of June 30, 2014, the TDCRS held no securities that were subject to custodial credit risk.

*Concentration of Credit Risk - Cash Deposits*

At June 30, 2014 TDCRS had \$5,760,000 on deposit with the West Virginia State Treasurer's Office and \$421,000 in depository accounts with financial institutions. The deposits with financial institutions, which had a bank balance of \$421,000, are either insured by the Federal Deposit Insurance Corporation or collateralized with securities held in TDCRS' name by its agent.

*Interest Rate Risk*

As of June 30, 2014, the TDCRS had the following investments and maturities (in thousands):

| Investment Type | Fair Value | Investment Maturities (in Years) |      |      |
|-----------------|------------|----------------------------------|------|------|
|                 |            | Less than 1                      | 1-5  | 6-10 |
| Mutual Funds    | \$ 400,030 | \$ 400,030                       | \$ - | \$ - |

*Foreign Currency Risk*

There are no securities held by TDCRS that are subject to foreign currency risk.

**5 - DUE FROM STATE OF WEST VIRGINIA**

The State of West Virginia reached a settlement with the United States Department of Health & Human Services in January 2011, requiring additional contributions of \$20 million per year for nine years from the State of West Virginia general fund to PERS. Contributions of \$5,000,000 are due quarterly on the 15<sup>th</sup> day after each quarter end, beginning on October 15, 2011. The remaining balance of the amount due from the state was \$125,000,000 and \$145,000,000 at June 30, 2014 and 2013, respectively.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
 NOTES TO FINANCIAL STATEMENTS  
 (CONTINUED)

**6 - POST EMPLOYMENT BENEFITS OTHER THAN PENSION**

Plan Description

The Board participates in the West Virginia Other Postemployment Benefits Plan (OPEB Plan) of the West Virginia Retiree Health Benefit Trust Fund, a cost sharing multiple-employer defined benefit postemployment healthcare plan administered by the West Virginia Public Employees Insurance Agency (WVPEIA). The OPEB Plan provides retiree post-employment health care benefits for participating state and local government employees. The provisions of the Code of West Virginia, 1931, as amended (the Code) assigned the authority to establish and amend benefit provisions to the WVPEIA board of trustees. The WVPEIA issues a publically available financial report that includes financial statements and required supplemental information for the OPEB Plan. That report may be obtained by writing to Public Employees Insurance Agency, 601 57<sup>th</sup> Street S.E., Suite 2, Charleston, West Virginia, 25303-2345, or by calling 1-888-680-7342.

Funding Policy

The Code requires the OPEB Plan to bill the participating employers 100% of the annual required contribution (ARC), an amount actuarially determined in accordance with GAAP. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost per year and amortize any unfunded actuarial liabilities (or funding excess) of the plan over a period not to exceed thirty years. State of West Virginia plan employers are billed per active health policy per month.

The Board's contributions to the OPEB Plan were, \$159,458, \$162,870, and \$150,795, and the billed ARC was \$212,862, \$188,142, and \$756,657. The Board's contributions to the OPEB Plan as a percentage of the billed ARC were 74.9%, 86.6%, and 19.9%, of the ARC, respectively, for the years ending June 30, 2014 and 2013, and 2012. This resulted in a net ARC liability of \$2,138,727 and \$2,085,323, which is included in the Board's internal service fund and recovered from all plans as part of the Board's service fee.

**7 - EMPLOYEE BENEFIT PLANS**

The Board's employees are eligible to participate in PERS. The key provisions of the PERS plan are described in Note 2. Per the plan provisions, Board and employee contributions for the three years ended June 30, 2014, 2013, and 2012, are as follows, which equal their required contributions to the plan (in thousands):

|                        | 2014   | 2013   | 2012   |
|------------------------|--------|--------|--------|
| Board contributions    | \$ 435 | \$ 407 | \$ 425 |
| Employee contributions | 135    | 131    | 132    |
| Total contributions    | \$ 570 | \$ 538 | \$ 557 |

**8 - CONTINGENCIES**

The Board is engaged in various legal actions that it considers to be in the ordinary course of business. Some of these cases involve potentially significant amounts for which legal counsel is unable to render an opinion on the outcome. Further, the financial impact of some cases is dependent upon judicial rulings in favor of petitioners and would have to be actuarially determined, inasmuch as the relief sought is an increase in the petitioners' annuity benefit. Accordingly, the financial statement impact of such cases cannot be determined at the present time. As legal actions are resolved, the Board recognizes the liability in its financial statements in the period the amount can be estimated.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO FINANCIAL STATEMENTS  
(CONTINUED)

**9 - RISK MANAGEMENT**

The Board is exposed to various risks of loss related to torts; theft or damage to, and destruction of assets; errors and omissions; injuries to, and illnesses of employees; medical liabilities; and natural disasters.

Health insurance coverage for the Board's employees is obtained through its participation in the West Virginia Public Employees Insurance Agency (PEIA). PEIA provides the following basic employee benefit coverage to all participants: hospital, surgical, group major medical, basic group life, accidental death, and prescription drug coverage for active and retired employees of the State of West Virginia and various related State and non-State agencies. Additionally, the Board has obtained coverage for job-related injuries through the purchase of a policy through a commercial carrier. In exchange for the payment of premiums to PEIA and a commercial carrier, the Board has transferred its risks related to health coverage for employees and job-related injuries of employees. Furthermore, the Board is a participant in the self-insured public entity risk pool administered by the Board of Risk and Insurance Management. Coverage is in the amount of \$1,000,000 per occurrence for general liability and property damage.

There have been no significant reductions in insurance coverage from the prior year. Additionally, the amount of settlements has not exceeded insurance coverage in the past three years.

**10 - NEW ACCOUNTING PRONOUNCEMENTS**

Management has adopted GASB Statement No. 67, *Financial Reporting for Pension Plans*, which required enhanced note disclosures and certain required supplementary information, in order to provide more information about measures of net pension liabilities and explanations of how and why those liabilities change from year to year. This statement also improved comparability of reported information for pension plans by defining the actuarial valuation methods that can be used for developing the valuation of the benefit obligations of the respective pension plans.

Adoption of GASB 67 had no impact on the net position of the pension plans. Changes in the presentation of the financial statements, notes to the financial statements, and required supplementary information (RSI) were required by GASB 67. Comparative information for the year ended June 30, 2013 has not been presented for disclosure in the notes to financial statements and in certain RSI as presentation of the information for prior years was not practical.

GASB has issued Statement No. 68, *Accounting and Financial Reporting for Pensions*, effective for the year ended June 30, 2015. Statement 68 will require the Board to recognize a liability equal to its proportionate share of the net pension liability of the PERS for its employees. The effect on the administrative expenses of the pension plans administered by the Board has not been determined.

GASB has issued Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date - an Amendment of GASB Statement No. 68*. Statement 71 addresses an issue regarding application of the transition provisions of Statement 68. Contributions to a defined benefit pension plan between the measurement date of the reported net pension liability and the end of the reporting period are required to be recognized as deferred outflows of resources. The requirements of Statement 71 are effective simultaneously with Statement 68.

**REQUIRED SUPPLEMENTARY INFORMATION**

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULES OF NET PENSION LIABILITY AND CHANGES IN NET PENSION LIABILITY  
(In Thousands)

Fiscal Years Ending June 30, 2014

|  | PERS         | TRS          | SPDDRS    | SPRS       | DSRS      | JRS         | EMSRs     | MPFRS    |
|--|--------------|--------------|-----------|------------|-----------|-------------|-----------|----------|
| Total pension liability:   |              |              |           |            |           |             |           |          |
| Service cost   | \$ 132,500   | \$ 147,149   | \$ 2,215  | \$ 5,890   | \$ 5,716  | \$ 2,819    | \$ 3,010  | \$ 237   |
| Interest   | 439,670      | 730,336      | 49,797    | 8,017      | 12,612    | 7,948       | 3,879     | 28       |
| Differences between actual and expected experience                     | -            | -            | -         | -          | -         | -           | -         | -        |
| Assumption changes   | -            | -            | -         | -          | -         | -           | -         | -        |
| Benefit payments   | (369,669)    | (691,861)    | (37,046)  | (1,024)    | (7,908)   | (5,253)     | (1,476)   | (31)     |
| Net change in total pension liability                                  | 202,501      | 185,624      | 14,966    | 12,883     | 10,420    | 5,514       | 5,413     | 234      |
| Total pension liability - beginning                                    | 5,911,263    | 9,930,335    | 679,931   | 101,503    | 169,260   | 105,739     | 50,950    | 264      |
| Total pension liability - ending (a)                                   | 6,113,764    | 10,115,959   | 694,897   | 114,386    | 179,680   | 111,253     | 56,363    | 498      |
| Plan fiduciary net position:   |              |              |           |            |           |             |           |          |
| Contributions - employer   | 194,728      | 141,840      | 1,072     | 4,049      | 5,977     | 2,456       | 2,442     | 279      |
| Contributions - member   | 60,899       | 90,612       | 545       | 3,630      | 3,908     | 474         | 2,077     | 279      |
| Other statutorily required contributions                               | -            | 321,553      | -         | -          | -         | -           | -         | -        |
| Other contributions - appropriations                                   | -            | 50,855       | 25,146    | -          | -         | -           | -         | -        |
| Net investment income  | 864,023      | 1,003,180    | 90,872    | 17,756     | 24,438    | 25,263      | 7,874     | 125      |
| Benefit payments   | (353,529)    | (676,475)    | (37,566)  | (913)      | (7,792)   | (4,423)     | (1,609)   | (7)      |
| Administrative expense   | (4,695)      | (4,348)      | (53)      | (42)       | (97)      | (7)         | (42)      | (3)      |
| Other  | 50           | 3,775        | 739       | -          | 556       | -           | 1         | -        |
| Net change in plan fiduciary net position                              | 761,476      | 930,992      | 80,755    | 24,480     | 26,990    | 23,763      | 10,743    | 673      |
| Plan fiduciary net position - beginning                                | 4,999,633    | 5,751,101    | 520,322   | 96,092     | 135,756   | 141,476     | 42,903    | 529      |
| Plan fiduciary net position - ending (b)                               | 5,761,109    | 6,682,093    | 601,077   | 120,572    | 162,746   | 165,239     | 53,646    | 1,202    |
| Net pension liability - ending (a) - (b)                               | \$ 352,655   | \$ 3,433,866 | \$ 93,820 | \$ (6,186) | \$ 16,934 | \$ (53,986) | \$ 2,717  | \$ (704) |
| Plan fiduciary net position as a percentage of total pension liability | 94.23%       | 66.05%       | 86.50%    | 105.41%    | 90.58%    | 148.53%     | 95.18%    | 241.37%  |
| Covered-employee payroll   | \$ 1,389,850 | \$ 1,493,515 | \$ 5,988  | \$ 27,701  | \$ 45,106 | \$ 8,870    | \$ 22,548 | \$ 1,833 |
| Net pension liability as a percentage of covered-employee payroll      | 25.37%       | 229.92%      | 1566.80%  | (22.33%)   | 37.54%    | (608.64%)   | 12.05%    | (38.35%) |

See Independent Auditor's Report and Notes to Required Supplementary Information.

**FINANCIAL STATEMENTS**

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULES OF CONTRIBUTIONS  
(In Thousands)

| Year Ended June 30 | Actuarially<br>Determined<br>Contribution | Actual<br>Contribution | Contribution<br>Deficiency<br>(Excess) | Covered Payroll | Actual<br>Contribution as<br>a % of Covered<br>Payroll |
|--------------------|---|------------------------|--|-----------------|--|
| <b>PERS</b>        |   |                        |  |                 |  |
| 2014               | \$ 201,528                                | \$ 194,728             | \$ 6,800                               | \$ 1,389,850    | 14.01 %  |
| 2013               | 194,259                                   | 187,576                | 6,683                                  | 1,382,647       | 13.57  |
| 2012               | 181,481                                   | 191,009                | (9,528)                                | 1,327,717       | 14.39  |
| 2011               | 192,577                                   | 160,494                | 32,083                                 | 1,315,441       | 12.20  |
| 2010               | 158,329                                   | 139,282                | 19,047                                 | 1,274,485       | 10.93  |
| 2009               | 128,036                                   | 128,010                | 26                                     | 1,219,388       | 10.50  |
| 2008               | 125,069                                   | 127,670                | (2,601)                                | 1,191,130       | 10.72  |
| 2007               | 121,770                                   | 123,195                | (1,425)                                | 1,159,715       | 10.62  |
| 2006               | 124,033                                   | 133,596                | (9,563)                                | 1,162,098       | 11.50  |
| 2005               | 119,164                                   | 118,735                | 429                                    | 1,134,111       | 10.47  |
| <b>TRS (1)</b>     |   |                        |  |                 |  |
| 2014               | \$ 454,983                                | \$ 514,248             | \$ (59,265)                            | \$ 1,493,515    | 34.43 %  |
| 2013               | 483,013                                   | 486,781                | (3,768)                                | 1,510,082       | 32.24  |
| 2012               | 458,047                                   | 482,232                | (24,185)                               | 1,505,749       | 32.03  |
| 2011               | 471,171                                   | 501,090                | (29,919)                               | 1,500,761       | 33.39  |
| 2010               | 487,886                                   | 445,977                | 41,909                                 | 1,499,232       | 29.75  |
| 2009               | 404,457                                   | 381,363                | 23,094                                 | 1,409,437       | 27.06  |
| 2008               | 345,412                                   | 371,387                | (25,975)                               | 828,939         | 44.80  |
| 2007               | 327,068                                   | 1,485,379              | (1,158,311)                            | 759,206         | 195.65   |
| 2006               | 347,802                                   | 661,172                | (313,370)                              | 735,614         | 89.88  |
| 2005               | 334,533                                   | 352,999                | (18,466)                               | 784,415         | 45.00  |
| <b>SPDDRS</b>      |   |                        |  |                 |  |
| 2014               | \$ 25,146                                 | \$ 26,218              | \$ (1,072)                             | \$ 5,988        | 437.84 %   |
| 2013               | 15,162                                    | 16,210                 | (1,048)                                | 6,779           | 239.12   |
| 2012               | 22,051                                    | 23,297                 | (1,246)                                | 8,001           | 291.18   |
| 2011               | 25,940                                    | 25,131                 | 809                                    | 8,960           | 280.48   |
| 2010               | 12,416                                    | 12,169                 | 247                                    | 10,215          | 119.13   |
| 2009               | 4,018                                     | 4,679                  | (661)                                  | 10,400          | 44.99  |
| 2008               | 5,693                                     | 5,352                  | 341                                    | 10,997          | 48.67  |
| 2007               | 6,227                                     | 6,024                  | 203                                    | 11,128          | 54.13  |
| 2006               | 10,567                                    | 76,554                 | (65,987)                               | 11,252          | 680.36   |
| 2005               | 27,953                                    | 252,947                | (224,994)                              | 12,273          | 2,061.00   |
| <b>SPRS</b>        |   |                        |  |                 |  |
| 2014               | \$ 4,017                                  | \$ 4,049               | \$ (32)                                | \$ 27,701       | 14.62 %  |
| 2013               | 4,289                                     | 4,193                  | 96                                     | 27,670          | 15.15  |
| 2012               | 4,327                                     | 4,544                  | (217)                                  | 24,725          | 18.38  |
| 2011               | 4,770                                     | 4,570                  | 200                                    | 23,635          | 19.34  |
| 2010               | 3,537                                     | 3,005                  | 532                                    | 22,382          | 13.43  |
| 2009               | 2,434                                     | 2,340                  | 94                                     | 20,285          | 11.54  |
| 2008               | 2,262                                     | 2,318                  | (56)                                   | 18,850          | 12.30  |
| 2007               | 1,904                                     | 2,176                  | (272)                                  | 15,870          | 13.71  |
| 2006               | 1,717                                     | 1,821                  | (104)                                  | 14,311          | 12.72  |
| 2005               | 1,588                                     | 1,702                  | (114)                                  | 13,233          | 12.86  |
| <b>DSRS (3)</b>    |   |                        |  |                 |  |
| 2014               | \$ 6,399                                  | \$ 5,977               | \$ 422                                 | \$ 45,106       | 13.25 %  |
| 2013               | 6,216                                     | 5,704                  | 512                                    | 43,583          | 13.09  |
| 2012               | 6,058                                     | 5,431                  | 627                                    | 42,366          | 12.82  |
| 2011               | 4,866                                     | 4,227                  | 639                                    | 41,109          | 10.28  |
| 2010               | 4,652                                     | 4,053                  | 599                                    | 39,067          | 10.37  |
| 2009               | 4,448                                     | 4,277                  | 171                                    | 37,366          | 11.45  |
| 2008               | 4,134                                     | 4,237                  | (103)                                  | 34,605          | 12.24  |
| 2007               | 3,857                                     | 3,894                  | (37)                                   | 31,967          | 12.18  |
| 2006               | 3,608                                     | 3,763                  | (155)                                  | 29,837          | 12.61  |
| 2005               | 2,912                                     | 3,569                  | (657)                                  | 28,326          | 12.60  |

(Continued)

**FINANCIAL STATEMENTS**

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULES OF CONTRIBUTIONS

(In Thousands)

(Continued)

| Year Ended June 30 | Actuarially<br>Determined<br>Contribution | Actual<br>Contribution | Contribution<br>Deficiency<br>(Excess) | Covered Payroll | Actual<br>Contribution as<br>a % of Covered<br>Payroll |
|--------------------|---|------------------------|--|-----------------|--|
| <b>JRS</b>         |   |                        |  |                 |  |
| 2014               | \$ 2,640                                  | \$ 2,456               | \$ 184                                 | \$ 8,870        | 27.69 %  |
| 2013               | 2,317                                     | 2,422                  | (105)                                  | 8,860           | 27.34  |
| 2012               | 2,317                                     | 3,997                  | (1,680)                                | 8,860           | 45.11  |
| 2011               | 2,385                                     | 3,954                  | (1,569)                                | 8,256           | 47.89  |
| 2010               | 2,467                                     | 3,854                  | (1,387)                                | 8,140           | 47.35  |
| 2009               | 2,537                                     | 6,034                  | (3,497)                                | 8,261           | 73.04  |
| 2008               | 2,508                                     | 6,034                  | (3,526)                                | 8,261           | 73.04  |
| 2007               | 3,088                                     | 6,034                  | (2,946)                                | 8,029           | 75.15  |
| 2006               | 4,104                                     | 6,758                  | (2,654)                                | 8,145           | 82.97  |
| 2005               | 4,398                                     | 6,758                  | (2,360)                                | 6,325           | 106.85   |
| <b>EMSRS</b>       |   |                        |  |                 |  |
| 2014               | \$ 2,368                                  | \$ 2,442               | \$ (74)                                | \$ 22,548       | 10.83 %  |
| 2013               | 2,233                                     | 2,308                  | (75)                                   | 21,263          | 10.85  |
| 2012               | 2,361                                     | 2,272                  | 89                                     | 22,488          | 10.10  |
| 2011               | 2,243                                     | 2,264                  | (21)                                   | 21,362          | 10.60  |
| 2010               | 2,135                                     | 2,190                  | (55)                                   | 20,338          | 10.77  |
| 2009               | 1,840                                     | 3,779                  | (1,939)                                | 17,525          | 21.56  |
| <b>MPFRS</b>       |   |                        |  |                 |  |
| 2014               | \$ 156                                    | \$ 279                 | \$ (123)                               | \$ 1,833        | 15.22 %  |
| 2013               | 82  | 151                    | (69)                                   | 966             | 15.63  |
| 2012               | 29  | 72                     | (43)                                   | 343             | 20.99  |
| 2011               | 18  | 31                     | (13)                                   | 208             | 14.90  |

**Notes:**

<sup>(1)</sup> Contributions for the Teachers Retirement System include employer contributions and interest from out-of-state services and surcharges on fire and casualty insurance policies which are specifically identified to fund the plan per West Virginia State Code Section 33-3-14d and 33-33-33.

<sup>(2)</sup> Contributions for SPDDRS include employer contributions and other payments designated by WV State Code Section 15-2-26 - Payments to members for court attendance and mileage; rewards for apprehending wanted persons; fees for traffic accident reports and photographs; fees for criminal investigation reports and photographs; fees for criminal history record checks; and fees

<sup>(3)</sup> Contributions for DSRS include employer contributions and various other fees designated for the fund from charges and fees per WV State Code Section 7-14E-2 and 17A-3-17 - Charges for obtaining reports (i.e., accident reports); fees for performing certain services (adult private employment finger printing for federal firearm permits, motor vehicle number identification, adult

See Independent Auditor's Report and Notes to Required Supplementary Information.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULES OF INVESTMENT RETURNS

Fiscal Year Ending June 30, 2014

| <u>Plan</u> | <u>Annual Return<sup>1</sup></u> |
|-------------|----------------------------------|
| PERS        | 17.94%                           |
| TRS         | 17.85%                           |
| SPDDRS      | 17.86%                           |
| SPRS        | 17.92%                           |
| DSRS        | 17.94%                           |
| JRS         | 17.95%                           |
| EMSRS       | 17.90%                           |
| MPFRS       | 17.03%                           |

<sup>1</sup> Annual money-weighted rate of return, net of investment expenses

See Independent Auditor's Report and Notes to Required Supplementary Information.

WEST VIRGINIA CONSOLIDATED PUBLIC RETIREMENT BOARD  
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

1 - ACTUARIAL ASSUMPTIONS AND METHODS

The information presented in the Schedules of Net Pension Liability and Changes in Net Pension Liability and Schedules of Investment Returns was based on the actuarial valuations as of July 1, 2013 and rolled forward to June 30, 2014 using the actuarial assumptions and methods described in Note 3 to the Financial Statements, Actuarial Valuations - Defined Benefit Plans.

The information presented in the Schedule of Contributions was based on the actuarial valuations as of July 1, 2013 using the actuarial assumptions and methods as follows:

|  | PERS  | TRS  | SPDDRS  | SPRS  | DSRS  | JRS   | EMSRS   | MPFRS   |   |
|--|---|--|---|---|---|---|---|---|---|
| Actuarial cost method                      | Entry age normal cost   | Entry age normal cost  | Entry age normal cost   | Entry age normal cost, level percentage of payroll  | Entry age normal cost, level percentage of payroll  | Entry age normal cost   | Entry age normal cost with aggregate normal cost level percentage of payroll                                    | Entry age normal cost with aggregate normal cost level percent  |   |
| Asset valuation method                     | Four-year smoothing   | Market value   | Market value  | Market value  | Market value  | Market value  | Market value  | Market value  |   |
| Amortization method                        | Level dollar  | Level dollar   | Level dollar  | Level dollar  | Level percentage of open group payroll plus fee deposits  | Level dollar  | Level dollar  | Level dollar  |   |
| Amortization period                        | Through FY 2035   | Through FY 2034  | Through FY 2025   | Through FY 2030   | Through FY 2029   | -   | Through FY 2039   | -   |   |
| Actuarial assumptions:                     | 7.5%  | 7.5%   | 7.5%  | 7.5%  | 7.5%  | 7.5%  | 7.5%  | 7.5%  |   |
| Investment rate of return                  | 4.25% - 6.00%   | -  | -   | -   | -   | -   | -   | -   |   |
| Projected salary increases:                | 4.25% - 6.00%   | -  | -   | -   | -   | -   | -   | -   |   |
| PERS:                                      |   |  |   |   |   |   |   |   |   |
| State                                      | -   | 3.75% - 5.25%  | -   | -   | -   | -   | -   | -   |   |
| Nonstate                                   | -   | 3.40% - 6.50%  | -   | -   | -   | -   | -   | -   |   |
| Teachers                                   | -   | -  | -   | -   | -   | -   | -   | -   |   |
| Non Teachers                               | -   | -  | -   | -   | -   | -   | -   | -   |   |
| Other plans                                | -   | -  | 5.0% per year for the first 2 years of service; 4.5% for the next 3 years; 4.0% for the next 5 years and 3.25% thereafter   | 5.0% per annum for the first 2 years of service; 4.5% for the next 3 years; 4.0% for the next 5 years and 3.25% thereafter  | 5.0% for the first 2 years of service; 4.5% for the next 3 years; 4.0% for the next 5 years and 3.5% thereafter   | 4.25%   | By age from 4.75% at age 30 declining to 3.25% at age 65  | By age from 4.75% at age 30 declining to 3.25% at age 65  |   |
| Inflation rate                             | 3.0%  | 3.0%   | 3.0%  | 3.0%  | 3.0%  | 3.0%  | 3.0%  | 3.0%  |   |
| Mortality rates                            | Healthy males - 1983 GAM; healthy females - 1971 GAM; set back 1 year; disabled males - 1971 GAM, set forward 8 years; disabled females - revenue ruling 96-7 | Active - RP2000 non-annuitant table, retired - RP2000 healthy annuitant table; disabled males - RP2000 disabled annuitant table, setback 2 years; disabled females - RP2000 disabled annuitant table, setback 1 year | Active - RP2000 annuitant table, scale BB; retired - RP2000 healthy annuitant table, scale BB; disabled - RP2000 health annuitant table, scale BB, set forward 1 year | Active - RP2000 annuitant table, scale BB; retired - RP2000 healthy annuitant table, scale BB; disabled - RP2000 health annuitant table, scale BB, set forward 1 year | Active - RP2000 annuitant table, scale BB; retired - RP2000 healthy annuitant table, scale BB; disabled - RP2000 health annuitant table, scale BB, set forward 1 year | Active - RP2000 annuitant table, scale BB; retired - RP2000 healthy annuitant table, scale BB; disabled - RP2000 health annuitant table, scale BB, set forward 1 year | Retired - RP2000 health annuitants, scale BB; disabled - RP2000 health annuitants, scale BB, set forward 1 year | Active - RP2000 non-annuitant table, scale BB; retired - RP2000 healthy annuitant table, scale BB; disabled - RP2000 health annuitant table, scale BB, set forward 1 year | Active - RP2000 non-annuitant table, scale BB; retired - RP2000 healthy annuitant table, scale BB; disabled - RP2000 health annuitant table, scale BB, set forward 1 year |
| Withdrawal rates                           | State: 1% - 26%<br>Non-state: 2% - 31.2%  | Teachers: 1.2% - 30%<br>Non-teachers: 1.4% - 22.5%   | 0% - 2.67%  | 0% - 7.6%   | .35% - 12.32%   | -   | 3% - 14%  | 3% - 14%  |   |
| Disability rates                           | 0% - .8%  | 0% - .8%   | .05%-.4%  | .05% - .4%  | .05% - .4%  | -   | .008% - .285%   | .05% - .40%   |   |
| Retirement rates                           | 15% - 100%  | 15% - 100%   | 20% - 100%  | 20% - 100%  | 20% - 100%  | 5% - 100%   | 20% - 100%  | 20% - 100%  |   |
| Date range in most recent experience study | 2004 - 2009   | 2006 - 2010  | 2006 - 2011   | 2006 - 2011   | 2007 - 2011   | 2007 - 2012   | N/A   | N/A   |   |

2 - HISTORICAL TREND INFORMATION

Generally accepted accounting principles require 10 years of historical trend information to be included in the various schedules of RSI that are presented. Due to changes in actuarial methods and assumptions related to the implementation of GASB Statement No. 67 Financial Reporting for Pension Plans during fiscal year ending June 30, 2014, historical trend information is not readily available for fiscal years ending prior to June 30, 2014 and is not presented.

**SUPPLEMENTARY INFORMATION**

**FINANCIAL SECTION**  
Schedule of Administrative Expenses

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Schedule of Administrative Expenses  
Years Ended June 30, 2014 and 2013

|  | 2014                 | 2013                |
|--|----------------------|---------------------|
| Salaries   | \$ 3,035             | \$ 2,978            |
| Employee Benefits  | 1,036                | 1,057               |
| Other Post Employment Benefits Contributions                     | 212                  | 187                 |
| Occupancy  | 426                  | 441                 |
| Computer Services  | 463                  | 487                 |
| Legal  | 408                  | 314                 |
| External Actuarial Services                                      | 207                  | 211                 |
| Accounting and Auditing  | 71                   | 101                 |
| Consulting Services  | 309                  | 30                  |
| Third Party Administrator's Fees*                                | 444                  | 381                 |
| Disability Exams   | 119                  | 132                 |
| Office Expenses  | 399                  | 311                 |
| Postage  | 165                  | 146                 |
| Depreciation   | 158                  | 129                 |
| Insurance  | 35                   | 39                  |
| Travel   | 39                   | 44                  |
| Miscellaneous  | 34                   | 39                  |
|  | <u>\$ 7,560</u>      | <u>\$ 7,027</u>     |
| <br>Administrative Fees Collected from the<br>Retirement Systems | <br><u>\$ 10,253</u> | <br><u>\$ 9,918</u> |

The excess of fees collected over administrative costs incurred is allocated to reserves for information technology improvements currently in progress and other long-term costs. Fees are assessed to recover costs such that the fees collected match expenses over time.

\*Third Party Administrative fees relate to the Teacher's Defined Contribution Retirement System only.

See Independent Auditor's Report.

**FINANCIAL SECTION**  
Schedule of Payments to Consultants

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The following were payments to consultants for the year ended June 30, 2014:

|                         |    |         |
|-------------------------|----|---------|
| Legal:                  |    |         |
| Bowles, Rice, LLP       | \$ | 296,037 |
| Actuary:                |    |         |
| Buck Consultants        | \$ | 207,525 |
| Audit:                  |    |         |
| Gibbons & Kawash, A.C.  | \$ | 59,920  |
| Information Technology: |    |         |
| LRWL, Inc.              | \$ | 453,475 |

See Independent Auditor's Report.

**Bridge over the Kanawha River, Charleston, WV**



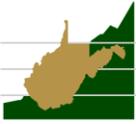
*View of the South Side Bridge, Charleston, West Virginia  
Photography by Amanda Miller*

# **INVESTMENT SECTION**

**Monarch Butterfly on Mexican Sunflower**



*The Monarch Butterfly (Danaus Plexippus) was designated West Virginia's official state butterfly on March 1, 1995 by the Legislature, after declaration by Senate Concurrent Resolution No. 11  
Photography by Jack Taylor*



## West Virginia Investment Management Board

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Charleston, West Virginia 25301

Phone: (304) 345-2672  
Fax: (304) 345-5939  
Website: [www.wvimb.org](http://www.wvimb.org)

December 18, 2014

Consolidated Public Retirement Board  
4101 MacCorkle Avenue, SE  
Charleston, WV 25304-1636

On behalf of the West Virginia Investment Management Board (IMB), it is with pleasure that I submit the investment section of the Consolidated Public Retirement Board's comprehensive annual financial report for the fiscal year ended June 30, 2014.

As described in more detail herein, the IMB is a public body corporate, an independent organization statutorily charged with the responsibility for investing all assets of the State of West Virginia with long time horizons. These assets include the assets of all eight of the defined benefit pension plans administered by the Consolidated Public Retirement Board. As an investment fiduciary, the IMB's only focus is to invest the assets entrusted to it in the best interest of the beneficiaries. Note that in this section, the defined benefit pension plans, as a group, are generally referred to as "Participant Plans." To a large extent, each participant plan's performance is a function of the assets in which it invests. As such, a review of asset class performance for the year may be helpful.

A number of factors led to a strong year in virtually all asset classes. The first half of the fiscal year saw improvement in economic fundamentals and increasing confidence among investors in the Federal Reserve's ability to manage a tapering of its quantitative easing policy. Elsewhere, loose monetary policy helped lift Europe, and emerging markets seemed to regain their footing after what may have been an overreaction in fiscal year 2013. The second half of the year saw the US markets stumble initially over Federal Reserve policy uncertainty and particularly bad winter weather. Meanwhile, geopolitical tensions in various corners of the world demonstrated how interrelated global markets can be. The world seemed to shrug off these initial concerns, however, with the US stock market finishing the fiscal year up 25.2 percent (Russell 3000) while international markets were up 21.8 percent for the fiscal year (MSCI All Country World ex US, net<sup>1</sup>). Fixed income and real estate were also up at 5.2 percent (Barclay's Universal) and 11.2 percent (NCREIF), respectively.

The IMB's relative performance in each asset class was generally very good in fiscal year 2014. The best relative performance came from the international equity portfolio which outperformed its benchmark by 2.8 percent. The US equity and fixed income portfolios were pedestrian by comparison, but still outperformed their respective benchmarks by 0.6 percent. The private equity portfolio is still somewhat immature, so comparisons to benchmarks are problematic, but it certainly helped diversify risk in the portfolio, an important goal. The real estate and hedge fund portfolios provide an alternative to fixed income as diversifying assets. They both have served that purpose well, adding value relative to fixed income, especially in the past year. While their primary role in the portfolio is diversification of fixed income, both have also outperformed their benchmarks for the past fiscal year and extended periods.

*Our mission is to exercise our best independent judgment in providing prudent and professional investment management for the exclusive benefit of the beneficiaries.*

**Consolidated Public Retirement Board  
December 18, 2014**

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For general comparison purposes, the IMB uses the Public Employees' Retirement System (PERS) as a proxy for the other pension plans because of its similarity to other statewide public pension plans throughout the nation. As of June 30, 2014, the return for PERS was up 17.9 percent net of expenses for the fiscal year. Of greater significance is the longer-term performance. In that regard, over the ten-year period ending June 30, 2014, the IMB's annualized return was 7.8 percent versus the policy benchmark of 6.9 percent. This represents millions of dollars in value added by trustees and staff. The other defined benefit pension plans enjoyed similar returns for the fiscal year ending June 30, 2014, ranging from 18.0 percent for the Judges' Retirement System to 17.0 percent for the Municipal Police Officers' and Firefighters' Retirement System. Since asset allocations are virtually the same for each plan, differences in the returns for the various pension plans are a function of the differences in the timing of cash flows into and out of each plan and relative levels of cash equivalent securities necessary to make benefit payments.

Note that since last year, the only strategic change made to the portfolios was to increase equity allocations, where circumstances allowed, at the expense of fixed income. This reflects a longer-term assessment of the relative attractiveness of fixed income given the current low level of interest rates. In addition, note that the IMB was able to convince the Legislature to allow it greater latitude in investing by passing legislation that eliminated restrictions on investable asset classes, subject to the prudent investor standard of care.

As an investor, the IMB's capacity to generate return on assets is largely a function of growth in the world capital markets. Diversification helps smooth the volatility in capital markets, but growth is the engine of returns. While a recovery appears to be on the horizon for the US economy, the rest of the developed world is wrestling with geopolitical issues that complicate its path forward. In addition, both have varying degrees of structural problems related to aging populations and societal commitments that are a drain on resources. The emerging markets of the world have excellent prospects for growth, but the path forward is less certain. The IMB looks to these markets for growth, but with a cautious eye. In short, the world is full of challenges for an investor. The staff looks forward to helping trustees meet the challenges as fiscal year 2015 unfolds.

Sincerely,



Craig Slaughter, JD, CFA  
Executive Director/Chief Investment Officer

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<sup>i</sup> The benchmark index, referenced in the Equity Pool Section of the Annual Report, is blended benchmarks across time to reflect the changing allocations in the portfolio. The MSCI All Country World ex US, net, is used for simplicity and consistency in a discussion of international market returns.

## **INVESTMENT SECTION**

### Investment Background, Philosophy, and Objectives

---

The West Virginia Investment Management Board came into existence in the spring of 1997 after years of hard work modernizing the State's investment management structure. This structural modernization was widely acknowledged as a necessary precursor to the passage of a constitutional referendum to allow investment in stocks. The risks were perceived to be too great to be managed by anything but a modern, professional entity.

Although the West Virginia Investment Management Board's predecessors, the West Virginia State Board of Investments and the West Virginia Trust Fund, Inc., brought about vast improvements, each had significant shortcomings. However, with the creation of the West Virginia Investment Management Board, the State achieved a balance between control and independence that helps foster efficient and prudent investment management of long-term assets well into the future.

The beginning of the modern era in investment management by the State goes back to the late 1970s with the consolidation of the investment authority for the State's defined benefit plans, employment security plans, and other assets into a newly created West Virginia State Board of Investments. One of the goals of the legislation was to achieve economies of scale by commingling like assets.

Significantly, this newly created West Virginia Board of Investments was staffed by the State Treasury and the board itself was made up of the State's Governor, Treasurer, and Auditor.

Although a step in the right direction, the initial West Virginia State Board of Investments lacked proper or sufficient control features. After a few problems in the 1980s, principally involving its short-term pool, the Consolidated Fund, the board was expanded to seven members, adding four members from the private sector including an attorney experienced in financial matters and a Certified Public Accountant.

In the fall of 1990, the Legislature took a huge leap forward by creating a staff for the West Virginia State Board of Investments separate from the staff of the Treasury. This provided clear accountability to the Board of Investments – something that did not exist previously. Other very important control features included: (1) a statutory requirement for an Internal Auditor, (2) an annual external audit by a certified public accounting firm, and (3) monthly reporting requirements to government leaders in accordance with generally accepted accounting principles. This last feature dictated that all pools with a weighted average maturity in excess of 90 days must be marked-to-market (carried at market value), something that had not been done in the 1980s.

At the same time, the West Virginia Board of Investments made its first tepid step towards a diversified portfolio to be invested in stocks domiciled in the United States. Although it made some initial stock purchases in 1993, which were subsequently liquidated at a gain, the statute was challenged and the West Virginia Supreme Court ruled that investing in equities was unconstitutional.

In 1996, in an effort to satisfy the constitutional strictures, the Legislature carved out the pension and employment security funds with long time horizons and placed them in a trust to be managed by a new entity called the West Virginia Trust Fund, Inc. The creation of the trust as a vehicle to allow investment in stocks was also challenged and was struck down, failing to satisfy the constitutional concerns of the Supreme Court. It did, however, bring about three very important changes. The Legislature, demonstrating impeccable managerial foresight, granted the West Virginia Trust Fund, Inc. control over its own budget. With the same foresight, the Legislature imposed personal fiduciary liability on the board and staff of the West Virginia Trust Fund, Inc. Of no less importance was the creation of representative roles for members of the retirement systems and employment security systems.

With the failure of the West Virginia Trust Fund, Inc., it and the West Virginia State Board of Investments were replaced in 1997 by a new entity, the present day West Virginia Investment Management Board. The basic modernization process was complete. All of the improvements made in the Board of Investments and the West Virginia Trust Fund, Inc. were incorporated into the new entity.

The Legislature, for policy reasons, transferred the Consolidated Fund on July 8, 2005 to a newly created West Virginia Board of Treasury Investments, chaired by the State Treasurer. This was widely perceived as a policy move to ensure direct governmental oversight of State general and special revenue funds. The West Virginia Investment Management Board continues to manage the retirement funds, the employment security funds, and other assets with long time horizons.

In 2007, the Legislature expanded the investable universe of assets, increasing the allowable allocation to public equity and international securities, while also providing for a significant allocation to “alternative investments,” loosely defined as hedge funds and private equity. Then, in 2014, the Legislature eliminated the percentage limitations on allowable asset classes or securities, joining most of its peers in recognizing the prudent investor standard of care is the most effective control on investor behavior for institutions.

The West Virginia Investment Management Board was created during the 1997 legislative session and is cited as the *West Virginia Investment Management Board Act* (the Act). The legislative findings of the Act make it clear that the West Virginia Investment Management Board was intended to be a professional, apolitical, financial management organization dedicated to the interests of the State’s teachers, public employees and workers in general. The Act was intended to give the West Virginia Investment Management Board “...the authority to develop, implement and maintain an efficient and modern system for the investment and management of the State’s money.” In order to accomplish this purpose, the Act further stated that the West Virginia Investment Management Board must “...operate as an independent board with its own full-time staff of financial professionals immune to changing political climates...” [West Virginia Code §12-6-1(a)(b)] The Act also mandates that the assets contributed by the public employee and employer to the 401(a) Plans and the assets of the Workers’ Compensation Fund and the Coal Workers’ Pneumoconiosis Fund, are “declared to be irrevocable trusts, available for no use or purpose other than for the benefit of those public employees...workers, miners and their beneficiaries...” [West Virginia Code §12-6-1(c)(d)] The West Virginia Investment Management Board is further “empowered by this Article to act as Trustee of the irrevocable trusts created by this Article, and to manage and invest other state funds.” [West Virginia Code §12-6-1a(f)]

The standard of care mandated by the Statute is that codified in the “Uniform Prudent Investor Act,” Article 6C of Chapter 44 of the *West Virginia Code*. The West Virginia Investment Management Board is further subject to the following requirements:

- (a) *Trustees shall discharge their duties with respect to the 401(a) Plans for the exclusive purpose of providing benefits to participants and their beneficiaries;*
- (b) *Trustees shall diversify fund investments so as to minimize the risk of large losses unless, under the circumstances, it is clearly prudent not to do so;*
- (c) *Trustees shall defray reasonable expenses of investing and operating the funds under management;*
- (d) *Trustees shall discharge their duties in accordance with the trust documents and instruments governing the trusts or other funds under the management insofar as the documents and instruments are consistent with provisions of this Article; and*
- (e) *The duties of the Board apply only with respect to those assets deposited with or otherwise held by it. [West Virginia Code §12-6-11]*

Governance of the West Virginia Investment Management Board is vested, by statute, in a thirteen-member Board of Trustees. Three members of the Board serve by virtue of their office: the Governor, the Auditor, and the Treasurer. The other ten are appointed by the Governor and confirmed by the Senate. All appointees must have experience in pension management, institutional management or financial markets. In addition, one must be an attorney experienced in finance and investment matters and another must be a Certified Public Accountant. Only six of the ten appointed Trustees may be from

## **INVESTMENT SECTION**

### Investment Background, Philosophy, and Objectives

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the same political party. The Governor serves as Chairman of the Board. A Vice-Chairman is elected by the Trustees. A Secretary, who need not be a member of the Board, is also elected by the Trustees to keep a record of the proceedings of the Board.

A member of each defined benefit retirement plan is designated by the Consolidated Public Retirement Board to represent the Participant Plans' interests. Likewise, the West Virginia Insurance Commission designates a representative for the Coal Workers' Pneumoconiosis Fund and the Workers' Compensation Old Fund. Each of the Representatives may designate up to three persons to comprise a committee representing their respective plan's beneficiaries. The Representatives and Committee Members do not have a vote but have the right to be heard at the annual meetings of the Board and are subject to the same code of conduct and requirements of confidentiality that apply to the Trustees.

The day-to-day management of the West Virginia Investment Management Board is delegated to the Executive Director who is appointed by the Board and serves at its will and pleasure. The Executive Director acts as an advisor to the Board on all matters.

The staff of the West Virginia Investment Management Board is divided into two principal divisions - Investments and Operations.

The Operations Division is focused on providing the back office support necessary for the organization to function on a day-to-day basis. The Investments Division is structured to devote its time and resources to staying current with new developments and research in the investment field and being prepared to apply this knowledge to the investment of assets for the West Virginia Investment Management Board.

The primary objective of the investment pools is to provide benefits to its participants and beneficiaries. Based on general beliefs about the investment return available from a well-diversified, prudently invested portfolio, the Board has adopted specific investment objectives for each Participant Plan.

In order to achieve a specified real rate of return, the Board relies on the prevailing financial theory, which currently is an investment strategy utilizing an appropriate long-term diversified asset allocation model. A prudently allocated investment program possesses a certain level of diversification, which produces risk reduction. In terms of level of impact, diversification should be considered along the following lines: (1) asset classes (stocks, bonds, cash, non-traditional, etc.), (2) geography/country, (3) industry, and (4) maturity. Asset allocation modeling takes into consideration specific unique circumstances of each Participant Plan, such as size, liquidity needs, and financial condition (funded status) as well as general business conditions. The factors mentioned here are not intended to be limiting; rather, they are outlined as a general indication of the importance of diversification to proper asset allocation. The Board determines the proper allocation among asset classes and managers based on advice and analysis provided by staff and/or external investment consultants.

The Board recognizes that even though its investments are subject to short-term volatility, it is critical that the Board maintain the appropriate time horizon for each Participant Plan. This prevents ad hoc revisions to its philosophy and policies in reaction to either speculation or short-term market fluctuations. In order to preserve this long-term view, the Board has adopted the following formal review schedule:

| <b>Agenda Item</b>                                | <b>Review Schedule</b>     |
|---|----------------------------|
| Investment Performance                            | Quarterly                  |
| Investment Policy                                 | Every Year                 |
| Policy Asset Allocation                           | Every Three Years          |
| Strategic Asset Allocation                        | Every Three Years          |
| Allocation Ranges                                 | Every Three Years          |
| Asset Allocation Review for Each Participant Plan | At Least Every Three Years |

The Board may hire investment managers to implement its objectives. These managers will be given specific tactical roles within the overall strategic investment plan. Depending on their assignments, the managers may be judged on some or all of the following: (1) consistency of philosophy, style and key personnel, (2) performance relative to an appropriate index or proxy group, and (3) ability to add incremental value after costs. The Board and staff shall monitor performance and supervise all fund managers.

In determining its philosophy towards risk, the Board considers, in addition to its fiduciary obligations and statutory requirements, each entity's purpose and characteristics, financial condition, liquidity needs, sources and level of contributions, income and general business conditions. Based upon these many factors, the Board identifies whether a more aggressive or more conservative approach is warranted for each Participant Plan.

### **INVESTMENT OBJECTIVES**

*"The Board, at its annual meeting...shall review, establish and modify, if necessary, the investment objectives of the individual participant plans, as incorporated in the investment policy statements of the respective trusts so as to provide for the financial security of the trust funds giving consideration to the following: (1) Preservation of Capital; (2) Diversification; (3) Risk Tolerance; (4) Rate of Return; (5) Stability; (6) Turnover; (7) Liquidity; and (8) Reasonable Costs of Fees." [West Virginia Code §12-6-12g]*

### **PARTICIPANT PLANS**

The Board's objective is to manage the Participant Plans' moneys in an efficient and economical manner, managing risk as it seeks to achieve the specific goals set out in each Participant Plan's investment program.

*Note* - Investments reported in the Investment Section are presented on the basis of accounting described in Note 1 of the Notes to Financial Statements included in the Financial Section of this report.

## INVESTMENT SECTION

### Investment Pool Objectives, Financial Highlights, and Performance

## EQUITY POOL

### OBJECTIVES

The main objective for the Equity Pool is to provide for long-term growth for all participants. The Equity Pool is comprised of separate strategic asset classes which, when taken in aggregate, enable adequate diversification. Separate investment pools have been established for each investment style or to comply with specific legal and accounting requirements. The strategic asset classes, the Neutral Target allocations to additional sub-components of the strategic asset classes, as well as the approved Allocation Ranges within which the Allocation Committee can operate, are outlined below:

| Category             | Strategic Allocation | Allocation Range    |
|----------------------|----------------------|---------------------|
| U.S. Equity          | 25.0%                | +/- 5% (20% to 30%) |
| International Equity | 25.0%                | +/- 5% (20% to 30%) |
| Total Equity Pool    | 50.0%                | +/- 5% (45% to 55%) |

*Note: Each Participant Plan has its own unique Strategic Allocation. The above example is for clarification purposes only.*

| Category   | Neutral Target*  | Allocation Range                                    |
|--|--|---|
| U.S. Large Cap vs.<br>U.S. Non-Large Cap                               | Large = 1 minus Non-Large<br>Non-Large = Russell 2500/Russell<br>3000    | 0.5 to 2.5 times<br>benchmark<br>Sum must equal 100 |
| U.S. Non-Large Value vs.<br>U.S. Non-Large Growth                      | Value vs. Growth<br>Percentage in Russell 2500                           | 0.5 to 2.5 times<br>benchmark<br>Sum must equal 100 |
| International Large vs.<br>International Small vs.<br>Emerging Markets | Large vs. Small vs. Emerging<br>Percentage in MSCI ACWI ex U.S.<br>(IMI) | 0.5 to 2.5 times<br>benchmark<br>Sum must equal 100 |

*\* The Neutral Target is established based on the listed indices and is reset, subject to Allocation Committee decisions, based on these index weights every June 30.*

## INVESTMENT SECTION

### Investment Pool Objectives, Financial Highlights, and Performance

## EQUITY POOL (Continued)

### MANAGEMENT STRUCTURE

The equity pools are managed by the following firms, in accordance with a particular investment style.

| Manager   | Style   |
|---|---|
| <b>Large Cap Domestic Equity Pool</b>                               |   |
| State Street Global Advisors  | Index Core                                    |
| INTECH Investment Management, LLC                                   | Quantitative Core                             |
| <b>Non-Large Cap Domestic Equity Pool</b>                           |   |
| Westfield Capital Management  | Growth at a Reasonable Price                  |
| AJO   | Relative Value                                |
| <b>International Qualified and International Nonqualified Pools</b> |   |
| <i>Developed Markets</i>  |   |
| Silchester International Investors                                  | All Country, Value                            |
| <b>International Equity Pool</b>                                    |   |
| <i>Developed Markets</i>  |   |
| LSV Asset Management  | All Country, Relative Value                   |
| <i>Small Capitalization</i>   |   |
| Pictet Asset Management Limited                                     | All Country, Growth at a Reasonable Price     |
| Acadian Asset Management, LLC                                       | All Country, Quantitative Core                |
| <i>Emerging Markets</i>   |   |
| Brandes Investment Partners, L.P.                                   | Emerging Market, Value                        |
| Axiom International Investors, LLC                                  | Emerging Market, Growth at a Reasonable Price |

### FINANCIAL HIGHLIGHTS (in \$000s)

Audited financial statements are prepared for each of the equity pools and available at [www.wvimb.org](http://www.wvimb.org). Financial Highlights for each pool are presented below.

| Composite          | Individual Pools per Audited Financial Statements  |
|--------------------|--|
| U.S. Large Cap     | Large Cap Domestic Equity Pool   |
| U.S. Non-Large Cap | Non-Large Cap Domestic Equity Pool   |
| International      | International Qualified Pool<br>International Nonqualified Pool<br>International Equity Pool |

#### Condensed Statement of Assets and Liabilities

|  | Large Cap Domestic Equity | Non-Large Cap Domestic Equity |
|--|---------------------------|-------------------------------|
| Investments                              | \$ 3,114,581              | \$ 1,154,207                  |
| Payable upon return of securities loaned | (17,058)                  | (76,478)                      |
| Cash                                     | 510                       | -                             |
| Receivable for investments sold          | 6,128                     | 19,282                        |
| Payable for investments purchased        | (9,324)                   | (21,228)                      |
| Other assets and liabilities             | 2,718                     | 600                           |
| Net assets - June 30, 2014               | \$ 3,097,555              | \$ 1,076,383                  |

**INVESTMENT SECTION**

Investment Pool Objectives, Financial Highlights, and Performance

**EQUITY POOL  
(Continued)**

**FINANCIAL HIGHLIGHTS (continued in \$000s)**

| <b>Condensed Statement of Assets and Liabilities</b> | <b>International Qualified</b> | <b>International Nonqualified</b> | <b>International Equity</b> |
|--|--------------------------------|-----------------------------------|-----------------------------|
| Investments  | \$ 1,303,151                   | \$ 153,093                        | \$ 2,846,080                |
| Payable upon return of securities loaned             | -                              | -                                 | (94,256)                    |
| Cash   | -                              | -                                 | 13,895                      |
| Receivable for investments sold                      | -                              | -                                 | 5,119                       |
| Payable for investments purchased                    | -                              | -                                 | (11,907)                    |
| Foreign currency contracts                           | -                              | -                                 | (22)                        |
| Other assets and liabilities                         | (58)                           | (7)                               | 5,514                       |
| Net assets - June 30, 2014                           | <u>\$ 1,303,093</u>            | <u>\$ 153,086</u>                 | <u>\$ 2,764,423</u>         |

| <b>Investments</b>  | <b>Large Cap Domestic Equity</b> |                              | <b>Non-Large Cap Domestic Equity</b> |                              |
|---|----------------------------------|------------------------------|--------------------------------------|------------------------------|
|   | <b>Fair Value</b>                | <b>Percent of Securities</b> | <b>Fair Value</b>                    | <b>Percent of Securities</b> |
| Domestic equities sector exposure:                          |                                  |                              |                                      |                              |
| Basic Materials   | \$ 112,465                       | 3.6%                         | \$ 107,876                           | 9.3%                         |
| Capital Goods   | 300,377                          | 9.6                          | 153,260                              | 13.3                         |
| Communications Services                                     | 55,643                           | 1.8                          | 2,209                                | 0.2                          |
| Consumer Discretionary                                      | 489,054                          | 15.7                         | 149,546                              | 13.0                         |
| Consumer Staples  | 291,467                          | 9.4                          | 10,262                               | 0.9                          |
| Energy  | 260,726                          | 8.4                          | 86,102                               | 7.5                          |
| Financial Services  | 477,604                          | 15.4                         | 250,103                              | 21.6                         |
| Health Care   | 458,193                          | 14.7                         | 141,539                              | 12.3                         |
| Technology  | 492,976                          | 15.8                         | 115,446                              | 10.0                         |
| Utilities   | 132,674                          | 4.3                          | 47,126                               | 4.1                          |
| Total domestic equities                                     | <u>3,071,179</u>                 | <u>98.7</u>                  | <u>1,063,469</u>                     | <u>92.2</u>                  |
| Futures   | 247                              | 0.0                          | -                                    | 0.0                          |
| Short-term issues   | 26,098                           | 0.8                          | 14,262                               | 1.2                          |
| Investments made with cash collateral for securities loaned | 17,057                           | 0.5                          | 76,476                               | 6.6                          |
| Total   | <u>\$ 3,114,581</u>              | <u>100.0%</u>                | <u>\$ 1,154,207</u>                  | <u>100.0%</u>                |

| <b>Investments</b>         | <b>International Qualified</b> |                              | <b>International Nonqualified</b> |                              |
|----------------------------|--------------------------------|------------------------------|-----------------------------------|------------------------------|
|                            | <b>Fair Value</b>              | <b>Percent of Securities</b> | <b>Fair Value</b>                 | <b>Percent of Securities</b> |
| Investments in other funds | <u>\$ 1,303,151</u>            | <u>100.0%</u>                | <u>\$ 153,093</u>                 | <u>100.0%</u>                |

**INVESTMENT SECTION**

Investment Pool Objectives, Financial Highlights, and Performance

**EQUITY POOL  
(Continued)**

**FINANCIAL HIGHLIGHTS (continued in \$000s)**

| Investments   | International Equity |                       |
|---|----------------------|-----------------------|
|   | Fair Value           | Percent of Securities |
| International equities country exposure:                    |                      |                       |
| Australia   | \$ 88,773            | 3.1%                  |
| Brazil  | 183,650              | 6.5                   |
| Canada  | 116,988              | 4.1                   |
| Cayman Islands  | 62,777               | 2.2                   |
| China   | 89,050               | 3.1                   |
| France  | 123,680              | 4.3                   |
| Germany   | 124,849              | 4.4                   |
| Hong Kong   | 54,152               | 1.9                   |
| India   | 106,585              | 3.7                   |
| Japan   | 321,535              | 11.3                  |
| Korea   | 207,656              | 7.3                   |
| Mexico  | 68,794               | 2.4                   |
| Russia  | 102,293              | 3.6                   |
| Switzerland   | 86,527               | 3.0                   |
| Taiwan  | 57,741               | 2.0                   |
| Turkey  | 61,288               | 2.2                   |
| United Kingdom  | 290,343              | 10.2                  |
| All others (none greater than 2%)                           | 560,805              | 19.8                  |
| Total international equities                                | 2,707,486            | 95.1                  |
| Short-term issues   | 44,341               | 1.6                   |
| Investments made with cash collateral for securities loaned | 94,253               | 3.3                   |
| <b>Total</b>  | <b>\$ 2,846,080</b>  | <b>100.0%</b>         |

**Progression of Net Assets**

|                                     | Large Cap Domestic Equity | Non-Large Cap Domestic Equity |
|-------------------------------------|---------------------------|-------------------------------|
| Net assets - June 30, 2013          | \$ 2,403,280              | \$ 844,102                    |
| Net increase from operations        | 598,635                   | 230,646                       |
| Net decrease from unit transactions | 95,640                    | 1,635                         |
| Net assets - June 30, 2014          | <b>\$ 3,097,555</b>       | <b>\$ 1,076,383</b>           |

**Progression of Net Assets**

|                                     | International Qualified | International Nonqualified | International Equity |
|-------------------------------------|-------------------------|----------------------------|----------------------|
| Net assets - June 30, 2013          | \$ 1,036,686            | \$ 122,091                 | \$ 2,129,214         |
| Net increase from operations        | 265,993                 | 30,946                     | 547,732              |
| Net increase from unit transactions | 414                     | 49                         | 87,477               |
| Net assets - June 30, 2014          | <b>\$ 1,303,093</b>     | <b>\$ 153,086</b>          | <b>\$ 2,764,423</b>  |

**INVESTMENT SECTION**

Investment Pool Objectives, Financial Highlights, and Performance

**EQUITY POOL  
(Continued)**

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of investment advisor fees.

| Period     | Large Cap Domestic Equity |         | Non-Large Cap Domestic Equity |              |
|------------|---------------------------|---------|-------------------------------|--------------|
|            | Actual                    | S&P 500 | Actual                        | Russell 2500 |
| One-year   | 25.0%                     | 24.6%   | 27.9%                         | 25.6%        |
| Three-year | 16.5%                     | 16.6%   | 16.0%                         | 15.5%        |
| Five-year  | 19.1%                     | 18.8%   | 23.0%                         | 21.6%        |
| Ten-year   | 7.9%                      | 7.8%    | 10.5%                         | 9.8%         |

| Period     | International Qualified |           | International Nonqualified |           | International Equity |                   |
|------------|-------------------------|-----------|----------------------------|-----------|----------------------|-------------------|
|            | Actual                  | MSCI EAFE | Actual                     | MSCI EAFE | Actual               | MSCI ACWI ex U.S. |
| One-year   | 25.7%                   | 24.1%     | 25.4%                      | 24.1%     | 25.1%                | 22.5%             |
| Three-year | 13.3%                   | 8.6%      | 13.0%                      | 8.6%      | 6.0%                 | 6.3%              |
| Five-year  | 15.9%                   | 12.3%     | 15.6%                      | 12.3%     | 13.6%                | 11.6%             |
| Ten-year   | 11.2%                   | 7.4%      | 10.9%                      | 7.4%      | 8.8%                 | 8.2%              |

\*Prior to January 2014, the International Equity Pool index was the MSCI ACWI ex U.S. (Standard).

**Large Cap Domestic Equity**

| Ten Largest Holdings     | Fair Value |
|--------------------------|------------|
| Apple Inc.               | \$ 85,784  |
| Exxon Mobil Corporation  | 63,617     |
| Google                   | 43,846     |
| Microsoft Corporation    | 39,799     |
| Johnson & Johnson        | 39,149     |
| General Electric Company | 33,036     |
| Wells Fargo & Company    | 32,808     |
| Pfizer Inc.              | 31,403     |
| Berkshire Hathaway Inc.  | 29,058     |
| Chevron Corporation      | 29,042     |

**Non-Large Cap Domestic Equity**

| Ten Largest Holdings        | Fair Value |
|-----------------------------|------------|
| Genworth Financial Inc.     | \$ 16,375  |
| Tesoro Corporation          | 13,231     |
| Huntsman Corporation        | 12,706     |
| Cubist Pharmaceuticals Inc. | 12,704     |
| Timken Company              | 12,661     |
| Genesee & Wyoming Inc.      | 12,428     |
| Ingram Micro Inc.           | 12,209     |
| Jones Lang LaSalle Inc.     | 11,874     |
| Packaging Corp. of America  | 10,766     |
| CONSOL Energy Inc.          | 10,489     |

## INVESTMENT SECTION

### Investment Pool Objectives, Financial Highlights, and Performance

#### EQUITY POOL (Continued)

#### INVESTMENT PERFORMANCE (Continued)

| <b>International Qualified</b>      |              |
|-------------------------------------|--------------|
| Largest Holdings                    | Fair Value   |
| Silchester International Investors' |              |
| Value Equity Group Trust            | \$ 1,303,151 |

| <b>International Nonqualified</b>   |            |
|-------------------------------------|------------|
| Largest Holdings                    | Fair Value |
| Silchester International Investors' |            |
| Value Equity Trust                  | \$ 153,093 |

| <b>International Equity</b>   |            |
|-------------------------------|------------|
| Ten Largest Holdings          | Fair Value |
| Lukoil - ADR                  | \$ 32,374  |
| Samsung Electronics Co. Ltd.  | 30,608     |
| Royal Dutch Shell             | 30,183     |
| Petroleo Brasileiro SA - ADR  | 23,072     |
| BP Amoco Plc.                 | 19,894     |
| Cemex SAB de CV - ADR         | 18,800     |
| United Phosphorus Ltd.        | 18,696     |
| Shinhan Financial Group       | 18,639     |
| Posco                         | 18,516     |
| China Mobile (Hong Kong) Ltd. | 17,974     |

A complete listing of the investments in each pool is available at [www.wvimb.org](http://www.wvimb.org).

#### EXPENSES

The IMB charges each investment pool for its direct investment-related expenses, such as investment advisor fees, custodian bank fees, and some professional service fees, and an allocated share of other expenses. The Equity Pool's expenses for the year, divided by the average net assets, are as follows:

| <b>Expense Ratios (in basis points)</b> | Large Cap Domestic Equity | Non-Large Cap Domestic Equity | International Qualified | International Nonqualified | International Equity |
|---|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|
| Investment advisor fees                 | 5.4                       | 33.0                          | 51.9                    | 61.9                       | 59.4                 |
| Trustee fees                            | 0.0*                      | 0.0*                          | 0.0*                    | 0.0*                       | 0.0*                 |
| Custodian bank fees                     | 0.3                       | 0.5                           | 0.0*                    | 0.0*                       | 5.0                  |
| Management fees                         | 2.8                       | 2.8                           | 2.8                     | 2.8                        | 2.8                  |
| Fiduciary bond fees                     | 0.0*                      | 0.0*                          | 0.0*                    | 0.0*                       | 0.0*                 |
| Professional service fees               | 0.5                       | 0.6                           | 0.6                     | 0.6                        | 0.6                  |
| <b>Total</b>                            | 9.0                       | 36.9                          | 55.3                    | 65.3                       | 67.8                 |

\* Expense Ratio rounds to less than 0.1 basis points.

**EQUITY POOL  
(Continued)**

**EXPENSES (Continued)**

| <b>Trading Costs</b>  | <b>Large Cap<br/>Domestic Equity</b> | <b>Non-Large Cap<br/>Domestic Equity</b> | <b>International<br/>Equity</b> | <b>Total</b> |
|---|--------------------------------------|--|---------------------------------|--------------|
| Net commission costs (in \$000s)  | \$ 1,014                             | \$ 1,206                                 | \$ 2,217                        | \$ 4,437     |
| Domestic equity commission rate<br>(cents per share)                        | 2.2                                  | 1.5                                      |                                 |              |
| International equity commission<br>rate (basis points per dollar<br>volume) |                                      |  | 10.4                            |              |

## SHORT-TERM FIXED INCOME POOL

### OBJECTIVES

The Short-Term Fixed Income Pool was created to maintain sufficient liquidity to meet the daily disbursements requested by the Plans and to invest any contributions until the time the money is transferred to other asset classes without sustaining capital losses and while earning a small return above inflation. The Short-Term Fixed Income Pool is structured as a money market fund where the goal is a stable dollar value per share, thus, preserving principal. The risk factors on this pool are low and managed through numerous maturity restrictions, diversification guidelines, and credit limits. The participants are paid on an income basis that includes interest income net of expenses.

### MANAGEMENT STRUCTURE

The Short-Term Fixed Income Pool is managed by JPMorgan Investment Advisors, Inc.

### FINANCIAL HIGHLIGHTS (in \$000s)

Audited financial statements for the Short-Term Fixed Income Pool are available at [www.wvimb.org](http://www.wvimb.org). Financial Highlights are presented below.

#### Condensed Statement of Assets and Liabilities

|                                   |                   |
|-----------------------------------|-------------------|
| Investments                       | \$ 339,016        |
| Other assets and liabilities, net | 54                |
| Net assets - June 30, 2014        | <u>\$ 339,070</u> |

#### Investments

|                               | Fair Value        | Percent of Securities |
|-------------------------------|-------------------|-----------------------|
| U.S. Treasury issues          | \$ 55,553         | 16.4%                 |
| U.S. government agency issues | 114,269           | 33.7                  |
| Commercial paper              | 84,989            | 25.1                  |
| Repurchase agreement          | 84,205            | 24.8                  |
| Total                         | <u>\$ 339,016</u> | <u>100.0%</u>         |

#### Progression of Net Assets

|                                     |                   |
|-------------------------------------|-------------------|
| Net assets - June 30, 2013          | \$ 319,205        |
| Net increase from operations        | 31                |
| Income distributions to unitholders | (18)              |
| Net increase from unit transactions | 19,852            |
| Net assets - June 30, 2014          | <u>\$ 339,070</u> |

**SHORT-TERM FIXED INCOME POOL**  
**(Continued)**

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of investment advisor fees.

| Period     | Actual | Citigroup 90 Day Treasury Bill* |
|------------|--------|---------------------------------|
| One-year   | 0.1%   | 0.1%                            |
| Three-year | 0.1%   | 0.2%                            |
| Five-year  | 0.1%   | 0.2%                            |
| Ten-year   | 1.8%   | 1.7%                            |

*\*Prior to January 2014, the Short-Term Fixed Income Pool index was the Citigroup 90 Day Treasury Bill plus 15 basis points.*

| Ten Largest Holdings                                     | Fair Value |
|--|------------|
| Repurchase Agreement, 0.05%, 7/1/2014                    | \$ 84,205  |
| Federal Home Loan Bank Discount Note, 0.0%, 7/2/2014     | 43,000     |
| US Treasury Bill, 0.0%, 7/24/2014                        | 15,000     |
| Federal Home Loan Bank Discount Note, 0.0%, 9/26/2014    | 8,998      |
| Federal Home Loan Bank Discount Note, 0.0%, 10/17/2014   | 8,998      |
| Govco LLC Commercial Paper, 8/11/2014                    | 7,999      |
| Toronto-Dominion Holdings USA Commercial Paper, 7/2/2014 | 7,000      |
| Fairway Finance Corporation Commercial Paper, 7/2/2014   | 7,000      |
| Nieuw Amsterdam Receivables Commercial Paper, 7/7/2014   | 7,000      |
| Sheffield Receivables Corp. Commercial Paper, 8/4/2014   | 6,999      |

**A complete listing of the investments in each pool is available at [www.wvimb.org](http://www.wvimb.org).**

**EXPENSES**

The IMB charges each investment pool for its direct investment-related expenses, such as investment advisor fees, custodian bank fees, and some professional service fees, and an allocated share of other expenses. The Short-Term Fixed Income Pool's expenses for the year, divided by the average net assets, are as follows:

| <b>Expense Ratios (in basis points)</b> |            |
|---|------------|
| Investment advisor fees                 | 5.0        |
| Trustee fees                            | 0.0*       |
| Custodian bank fees                     | 0.4        |
| Management fees                         | 3.0        |
| Fiduciary bond fees                     | 0.0*       |
| Professional service fees               | 0.6        |
| <b>Total</b>                            | <b>9.0</b> |

\* Expense Ratio rounds to less than 0.1 basis points.

## FIXED INCOME POOL

### OBJECTIVES

The main objectives for the Fixed Income Pool are to generate investment income, provide stability, and enhance diversification, but not at the expense of total return. Separate investment pools have been established for particular investment styles. Individually, these pools are the Total Return Fixed Income Pool and the Core Fixed Income Pool. The Strategic Allocation for the total Fixed Income Pool, the Neutral Target for the respective allocations to the Core Fixed Income and Total Return Fixed Income Pools, as well as the approved Allocation Ranges within which the Allocation Committee can operate, are outlined below:

| Investment Pools               | Strategic Allocation | Allocation Range    |
|--------------------------------|----------------------|---------------------|
| Core Fixed Income Pool         | --                   | --                  |
| Total Return Fixed Income Pool | --                   | --                  |
| Total Fixed Income Pools       | 20.0%                | +/- 5% (15% to 25%) |

*Note: Each Participant Plan has its own unique Strategic Allocation. The above example is for clarification purposes only.*

| Participant Plans | Neutral Target   | Allocation Range                             |
|-------------------|--|--|
| All plans         | 50% Total Return Income Pool<br>50% Core Fixed Income Pool | +/- 20% (30% to 70%)<br>+/- 20% (30% to 70%) |

### MANAGEMENT STRUCTURE

The fixed income pools are managed by the following firms, in accordance with a particular investment style.

| Manager                               | Style                         |
|---------------------------------------|-------------------------------|
| <b>Total Return Fixed Income Pool</b> |                               |
| Western Asset Management Company      | Core Plus Fixed Income        |
| Dodge & Cox                           | Core Plus Fixed Income        |
| Franklin Templeton Investments        | Emerging Markets Fixed Income |
| <b>Core Fixed Income Pool</b>         |                               |
| JPMorgan Investment Advisors, Inc.    | Core Fixed Income             |

**INVESTMENT SECTION**

Investment Pool Objectives, Financial Highlights, and Performance

**FIXED INCOME POOL  
(Continued)**

**FINANCIAL HIGHLIGHTS (in \$000s)**

Audited financial statements are prepared for each of the fixed income pools and are available at [www.wvimb.org](http://www.wvimb.org). Financial Highlights for each pool are presented below.

| <b>Condensed Statement of Assets and Liabilities</b> | <b>Total Return Fixed Income</b> | <b>Core Fixed Income</b> |
|--|----------------------------------|--------------------------|
| Investments  | \$ 2,302,100                     | \$ 1,064,491             |
| Payable upon return of securities loaned             | (23,882)                         | (34,418)                 |
| Cash   | 24,442                           | -                        |
| Receivable for investments sold                      | 4,165                            | 461                      |
| Payable for investments purchased                    | (7,794)                          | (2,045)                  |
| Other assets and liabilities                         | 6,140                            | 2,634                    |
| <b>Net assets - June 30, 2014</b>                    | <b>\$ 2,305,171</b>              | <b>\$ 1,031,123</b>      |

**Investments**

|   | <b>Total Return Fixed Income</b> |                                 | <b>Core Fixed Income</b> |                                 |
|---|----------------------------------|---------------------------------|--------------------------|---------------------------------|
|   | <b>Fair Value</b>                | <b>Percentage of Securities</b> | <b>Fair Value</b>        | <b>Percentage of Securities</b> |
| Corporate asset backed issues                               | \$ 73,955                        | 3.2%                            | \$ 42,858                | 4.0%                            |
| Corporate CMO   | 71,065                           | 3.1                             | 110,094                  | 10.3                            |
| Corporate preferred security                                | 10,512                           | 0.5                             | -                        | 0.0                             |
| Foreign asset backed issues                                 | 17,691                           | 0.8                             | 3,394                    | 0.3                             |
| Foreign corporate bonds                                     | 245,728                          | 10.7                            | 41,750                   | 3.9                             |
| Foreign currency forward contracts                          | 318                              | 0.0                             | -                        | 0.0                             |
| Foreign government bonds                                    | 192,350                          | 8.4                             | 10,356                   | 1.0                             |
| Futures contracts   | (1,659)                          | (0.1)                           | -                        | 0.0                             |
| Investments in other funds                                  | 418,593                          | 18.2                            | -                        | 0.0                             |
| Investments made with cash collateral for securities loaned | 23,881                           | 1.0                             | 34,417                   | 3.2                             |
| Municipal bonds   | 53,510                           | 2.3                             | 8,378                    | 0.8                             |
| Option contracts purchased                                  | 341                              | 0.0                             | -                        | 0.0                             |
| Option contracts written                                    | (279)                            | 0.0                             | -                        | 0.0                             |
| Short-term issues   | 37,727                           | 1.6                             | 33,771                   | 3.2                             |
| Swaps   | (6,191)                          | (0.3)                           | -                        | 0.0                             |
| U.S. corporate bonds  | 571,567                          | 24.8                            | 203,346                  | 19.1                            |
| U.S. government agency bonds                                | 2,469                            | 0.1                             | 24,449                   | 2.3                             |
| U.S. government agency CMO                                  | 101,007                          | 4.4                             | 186,060                  | 17.5                            |
| U.S. government agency MBS                                  | 291,708                          | 12.7                            | 200,083                  | 18.8                            |
| U.S. Treasury issues  | 197,807                          | 8.6                             | 165,535                  | 15.6                            |
| <b>Total</b>  | <b>\$ 2,302,100</b>              | <b>100.0%</b>                   | <b>\$ 1,064,491</b>      | <b>100.0%</b>                   |

**Progression of Net Assets**

|                                     | <b>Total Return Fixed Income</b> | <b>Core Fixed Income</b> |
|-------------------------------------|----------------------------------|--------------------------|
| Net assets - June 30, 2013          | \$ 2,312,832                     | \$ 1,277,767             |
| Net increase from operations        | 142,064                          | 47,479                   |
| Income distributions to unitholders | (61,598)                         | (37,373)                 |
| Net decrease from unit transactions | (88,127)                         | (256,750)                |
| <b>Net assets - June 30, 2014</b>   | <b>\$ 2,305,171</b>              | <b>\$ 1,031,123</b>      |

**FIXED INCOME POOL**  
**(Continued)**

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of investment advisor fees.

| Period     | Total Return Fixed Income |                             | Core Fixed Income |                                 |
|------------|---------------------------|-----------------------------|-------------------|---------------------------------|
|            | Actual                    | Barclays Capital Universal* | Actual            | Barclays Capital U.S. Aggregate |
| One-year   | 6.4%                      | 5.2%                        | 4.4%              | 4.4%                            |
| Three-year | 5.0%                      | 4.2%                        | 4.3%              | 3.7%                            |
| Five-year  | 7.6%                      | 5.6%                        | 5.8%              | 4.9%                            |
| Ten-year   | 6.1%                      | 5.3%                        | N/A               | N/A                             |

\*Prior to April 2008, the Total Return Fixed Income Pool index was a custom index.

| Total Return Fixed Income  |            |
|--|------------|
| Ten Largest Holdings   | Fair Value |
| Western Asset Opportunistic Structured Securities Portfolio, LLC | \$ 91,248  |
| Western Asset Opportunistic Asian Securities Portfolio, LLC      | 53,717     |
| Western Asset Emerging Markets Corporate Credit Portfolio, LLC   | 49,956     |
| Western Asset Opportunistic Non-Dollar Hedged Portfolio, LLC     | 49,025     |
| Western Asset Mortgage Backed Securities Portfolio, LLC          | 48,771     |
| Western Asset US Enhanced Cash, LLC                              | 40,265     |
| US Treasury Note, Zero Coupon, 11/15/2043                        | 39,378     |
| US Treasury Note, 0.38%, 1/15/2016                               | 34,053     |
| Western Asset Floating Rate High Income Fund, LLC                | 32,677     |
| Western Asset Emerging Markets Local Debt Portfolio, LLC         | 30,660     |

| Core Fixed Income                             |            |
|---|------------|
| Ten Largest Holdings                          | Fair Value |
| US Treasury Note, 8.875%, 8/15/2017           | \$ 11,650  |
| US Treasury STRIP, Zero Coupon, 2/15/2027     | 11,525     |
| RFCSP Strip Principal, Zero Coupon, 7/15/2020 | 8,939      |
| US Treasury STRIP, Zero Coupon, 8/15/2020     | 7,546      |
| US Treasury Note, 4.625%, 2/15/2017           | 7,163      |
| US Treasury Note, 3.125%, 4/30/2017           | 7,149      |
| US Treasury STRIP, Zero Coupon, 11/15/2017    | 7,111      |
| US Treasury STRIP, Zero Coupon, 11/15/2021    | 6,744      |
| US Treasury STRIP, Zero Coupon, 5/15/2020     | 6,704      |
| US Treasury STRIP, Zero Coupon, 2/15/2017     | 6,002      |

A complete listing of the investments in each pool is available at [www.wvimb.org](http://www.wvimb.org).

**FIXED INCOME POOL**  
**(Continued)**

**EXPENSES**

The IMB charges each investment pool for its direct investment-related expenses, such as investment advisor fees, custodian bank fees, and some professional service fees, and an allocated share of other expenses. The Fixed Income Pools' expenses for the operating period, divided by the average net assets, are as follows:

| <b>Expense Ratios (in basis points)</b> | <b>Total Return<br/>Fixed Income</b> | <b>Core Fixed<br/>Income</b> |
|---|--------------------------------------|------------------------------|
| Investment advisor fees                 | 20.6                                 | 15.0                         |
| Trustee fees                            | 0.0*                                 | 0.0*                         |
| Custodian bank fees                     | 0.5                                  | 0.7                          |
| Management fees                         | 2.8                                  | 2.8                          |
| Fiduciary bond fees                     | 0.0*                                 | 0.0*                         |
| Professional service fees               | 0.6                                  | 0.6                          |
| <b>Total</b>                            | <b>24.5</b>                          | <b>19.1</b>                  |

\* Expense Ratio rounds to less than 0.1 basis points.

## TIPS POOL

### OBJECTIVES

The objectives for the TIPS Pool are to enhance diversification, mitigate the risk of inflation, generate investment income, and to provide a relatively stable investment.

### MANAGEMENT STRUCTURE

The TIPS Pool is managed by State Street Global Advisors.

### FINANCIAL HIGHLIGHTS (in \$000s)

Audited financial statements for the TIPS Pool are available at [www.wvimb.org](http://www.wvimb.org). Financial Highlights are presented below.

#### Condensed Statement of Assets and Liabilities

|                                   |                   |
|-----------------------------------|-------------------|
| Investments                       | \$ 601,271        |
| Receivable for investments sold   | 101,602           |
| Payable for investments purchased | (100,645)         |
| Other assets and liabilities      | 2,244             |
| Net assets - June 30, 2014        | <u>\$ 604,472</u> |

#### Investments

|  | Fair Value        | Percent of Securities |
|--|-------------------|-----------------------|
| U.S. Treasury inflation protected issues | \$ 601,027        | 100.0%                |
| Short-term issues                        | 244               | 0.0                   |
| Total                                    | <u>\$ 601,271</u> | <u>100.0%</u>         |

#### Progression of Net Assets

|                                     |                   |
|-------------------------------------|-------------------|
| Net assets - June 30, 2013          | \$ 657,094        |
| Net increase from operations        | 25,397            |
| Net decrease from unit transactions | (78,019)          |
| Net assets - June 30, 2014          | <u>\$ 604,472</u> |

### INVESTMENT PERFORMANCE

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of investment advisor fees.

| Period     | Actual | Barclays Capital U.S. TIPS |
|------------|--------|----------------------------|
| One-year   | 4.5%   | 4.5%                       |
| Three-year | 3.6%   | 3.6%                       |

**TIPS POOL**  
**(Continued)**

**INVESTMENT PERFORMANCE (Continued)**

| Ten Largest Holdings  | Fair Value |
|---|------------|
| US Treasury Inflation Protected Security, 0.125%, 4/15/2016 | \$ 50,795  |
| US Treasury Inflation Protected Security, 0.625%, 1/15/2024 | 48,082     |
| US Treasury Inflation Protected Security, 0.125%, 1/15/2022 | 47,970     |
| US Treasury Inflation Protected Security, 0.125%, 4/15/2019 | 30,746     |
| US Treasury Inflation Protected Security, 0.125%, 4/15/2018 | 27,861     |
| US Treasury Inflation Protected Security, 0.125%, 4/15/2017 | 25,093     |
| US Treasury Inflation Protected Security, 0.375%, 7/15/2023 | 22,487     |
| US Treasury Inflation Protected Security, 0.125%, 7/15/2022 | 22,279     |
| US Treasury Inflation Protected Security, 0.125%, 1/15/2023 | 22,160     |
| US Treasury Inflation Protected Security, 0.625%, 7/15/2021 | 20,475     |

*A complete listing of the investments in each pool is available at [www.wvimb.org](http://www.wvimb.org).*

**EXPENSES**

The IMB charges each investment pool for its direct investment-related expenses, such as investment advisor fees, custodian bank fees, and some professional service fees, and an allocated share of other expenses. The TIPS Pool's expenses for the operating period, divided by the average net assets, are as follows:

**Expense Ratios (in basis points)**

|                           |            |
|---------------------------|------------|
| Investment advisor fees   | 2.3        |
| Trustee fees              | 0.0*       |
| Custodian bank fees       | 0.3        |
| Management fees           | 2.8        |
| Fiduciary bond fees       | 0.0*       |
| Professional service fees | 0.6        |
| <b>Total</b>              | <b>6.0</b> |

\* Expense Ratio rounds to less than 0.1 basis points.

**SPECIAL PURPOSE POOL**

The Board operates one special purpose pool: **TRS ANNUITY POOL**

**HISTORY (in \$000s)**

The Pool held an investment contract issued by the Variable Annuity Life Insurance Company (VALIC) strictly for the benefit of the Teachers Retirement System (TRS). On December 10, 2008, the IMB assumed responsibility for this investment as part of the restructuring of the Teachers Defined Contribution (TDC) plan, a separate retirement plan administered solely by the Consolidated Public Retirement System, whereby certain TDC participants elected to transfer the ownership of their individual TDC retirement accounts to the TRS in exchange for current participation in the TRS defined benefit plan. The final amount transferred under the contract was \$248,293.

The IMB initially requested the immediate redemption of the entire balance but VALIC denied the request, claiming the amounts were subject to withdrawal restrictions. Effective April 23, 2009, the IMB, while reserving its rights under the contract, executed the appropriate forms with VALIC to elect to withdraw funds under the Five Year Equal Annual Installment method. By making this election the guaranteed minimum annual yield of 4.5 percent became the fixed rate for this contract. The first four withdrawals of \$55,058 each occurred on May 4, 2009, 2010, 2011 and 2012. The final withdraw of \$55,191 occurred on May 8, 2013. On that date, all remaining income, net of all management fees, was distributed to TRS and all units of ownership in the Pool were redeemed.

In response to VALIC's denial to allow the IMB to liquidate the contract in its entirety, the IMB sued VALIC and the litigation is ongoing. The outcome of the litigation is unknown and accordingly the IMB has not accrued any potential revenues from the case. There are ongoing legal fees associated with this litigation and these expenses are accrued to the Pool. The funding for the payment of these expenses results from contributions by the TRS into the TRS Annuity Pool. No other management fees are charged to the Pool and none have been charged since the final withdrawal on May 8, 2013. Amounts recovered pursuant to the litigation, if any, will be recorded in the TRS Annuity Pool and distributed to the TRS. Once the case is resolved the TRS Annuity Pool will be closed.

**FINANCIAL HIGHLIGHTS (in \$000s)**

Audited financial statements for the TRSA are included in Section II of this report. Financial Highlights are presented below.

**Condensed Statement of Assets and Liabilities**

|                            |           |             |
|----------------------------|-----------|-------------|
| Assets                     | \$        | -           |
| Accrued expenses           |           | (17)        |
| Net assets - June 30, 2014 | <u>\$</u> | <u>(17)</u> |

**Progression of Net Assets**

|  |           |             |
|--|-----------|-------------|
| Net assets - June 30, 2013             | \$        | (94)        |
| Net decrease from operations           |           | (311)       |
| Net increase from capital transactions |           | 388         |
| Net assets - June 30, 2014             | <u>\$</u> | <u>(17)</u> |

## ALTERNATIVES POOL

### OBJECTIVES

The main objective for the Alternatives Pool is to provide diversification and risk reduction benefits for its participants' assets. Secondly, the Alternatives Pool should provide for long-term growth of its participants' assets.

The Alternatives Pool is comprised of one asset class, private equity, and one management style, hedge funds. Both are intended to enhance diversification when added to the total portfolio assets. Separate investment pools have been established for private equity and hedge funds.

The Private Equity Pool is comprised of the following categories and target range allocations as of June 30, 2014:

| Category          | Target Range |
|-------------------|--------------|
| Corporate Finance | 90-100%      |
| Venture Capital   | 0-10%        |
| U.S.              | 80-100%      |
| Non-U.S.          | 0-20%        |

The Hedge Fund Pool's strategies are comprised of the following strategic categories and target range allocations as of June 30, 2014:

| Category            | Target Range | Allocation Range |
|---------------------|--------------|------------------|
| <b>Core</b>         |              |                  |
| Relative Value      | 30-40%       | 25-55%           |
| Event Driven        | 15-25%       | 10-40%           |
| Long-Short Equity   | 20-30%       | 15-45%           |
| Directional         | 10-20%       | 5-25%            |
| <b>Supplemental</b> |              |                  |
| Long Biased         | 0-10%        | 0-15%            |
| Private Equity      | 0-3%         | 0-5%             |
| Private Credit      | 0-3%         | 0-5%             |
| Real Assets         | 0-3%         | 0-5%             |

### MANAGEMENT STRUCTURE

The selection of investments in the Hedge Fund and Private Equity Pools are made by each pool's subcommittee which includes the Executive Director, the Chief Investment Officer, the Chief Financial Officer/Chief Operating Officer, and two members selected from the Board. Investment recommendations are jointly made by the appropriate investment officer and the investment consultant to the subcommittee. The investment consultants are Franklin Park Associates, LLC for the Private Equity Pool and Albourne America, LLC for the Hedge Fund Pool.

## INVESTMENT SECTION

### Investment Pool Objectives, Financial Highlights, and Performance

### ALTERNATIVES POOL (Continued)

#### FINANCIAL HIGHLIGHTS (in \$000s)

Audited financial statements are prepared for each of the alternative pools and are available at [www.wvimb.org](http://www.wvimb.org). Financial Highlights for each pool are presented below.

| Condensed Statement of Assets and Liabilities | Private Equity      | Hedge Fund          |
|---|---------------------|---------------------|
| Investments                                   | \$ 1,355,246        | \$ 1,344,169        |
| Advance on investments in other funds         | -                   | 90,000              |
| Investment funds redeemed                     | -                   | 130,942             |
| Other assets and liabilities                  | (188)               | (118)               |
| Net assets - June 30, 2014                    | <u>\$ 1,355,058</u> | <u>\$ 1,564,993</u> |

| Investments                 | Private Equity      |                       | Hedge Fund          |                       |
|-----------------------------|---------------------|-----------------------|---------------------|-----------------------|
|                             | Fair Value          | Percent of Securities | Fair Value          | Percent of Securities |
| Hedge funds                 | \$ 462,724          | 34.1%                 | \$ 1,344,025        | 100.0%                |
| Investment in other funds   | 64,906              | 4.8                   | -                   | 0.0                   |
| Private equity partnerships | 784,620             | 57.9                  | -                   | 0.0                   |
| Short-term issue            | 42,996              | 3.2                   | 144                 | 0.0                   |
| Total                       | <u>\$ 1,355,246</u> | <u>100.0%</u>         | <u>\$ 1,344,169</u> | <u>100.0%</u>         |

| Progression of Net Assets                      | Private Equity      | Hedge Fund          |
|--|---------------------|---------------------|
| Net assets - June 30, 2013                     | \$ 1,155,164        | \$ 1,340,097        |
| Net increase from operations                   | 234,090             | 115,393             |
| Net increase (decrease) from unit transactions | (34,196)            | 109,503             |
| Net assets - June 30, 2014                     | <u>\$ 1,355,058</u> | <u>\$ 1,564,993</u> |

#### INVESTMENT PERFORMANCE

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of external investment management and/or partnership fees and expenses.

| Period     | Private Equity |                                     | Hedge Fund |                                  |
|------------|----------------|-------------------------------------|------------|----------------------------------|
|            | Actual         | Russell 3000 plus 300 basis points* | Actual     | HFRI FoF plus 100 basis points** |
| One-year   | 19.8%          | N/A                                 | 8.6%       | 4.8%                             |
| Three-year | 14.5%          | N/A                                 | 6.2%       | 4.5%                             |
| Five-year  | 15.8%          | 23.6%                               | 7.3%       | 4.4%                             |

\* Prior to January 2014, the Private Equity Pool index was the S&P 500 plus 500 basis points.

\*\* Prior to January 2014, the Hedge Fund index was LIBOR plus 400 basis points.

**ALTERNATIVES POOL**  
**(Continued)**

**INVESTMENT PERFORMANCE (Continued)**

| <b>Private Equity</b>                                |                   |
|--|-------------------|
| <b>Ten Largest Holdings</b>                          | <b>Fair Value</b> |
| Bridgewater All Weather Portfolio II, Ltd.           | \$ 462,724        |
| State Street Global Advisors Russell 3000 Index Fund | 64,906            |
| Castlelake II, LP                                    | 47,310            |
| Advent International GPE VI-A, LP                    | 45,885            |
| Welsh, Carson, Anderson & Stowe XI, LP               | 45,707            |
| Carlyle Partners V, LP                               | 45,666            |
| Natural Gas Partners IX, LP                          | 41,084            |
| NGP Natural Resources X, LP                          | 37,012            |
| LLR Equity Partners III, LP                          | 35,332            |
| Platinum Equity Capital Partners II, LP              | 34,795            |

| <b>Hedge Fund</b>                      |                   |
|--|-------------------|
| <b>Ten Largest Holdings</b>            | <b>Fair Value</b> |
| Double Black Diamond, Ltd.             | \$ 105,099        |
| Pine River Fund, Ltd.                  | 95,353            |
| CQS Diversified Fund (SPC) Ltd. SPA II | 92,157            |
| Davidson Kempner International, Ltd.   | 88,912            |
| AllBlue Limited                        | 85,023            |
| Perry Partners International, Inc.     | 79,198            |
| MW Eureka Fund                         | 77,070            |
| Magnetar Capital Fund II, Ltd.         | 75,554            |
| PFM Diversified Offshore Fund          | 69,966            |
| Bridgewater Pure Alpha Ltd.            | 61,093            |

**EXPENSES**

The IMB charges each investment pool for its direct investment-related expenses, such as investment advisor fees, custodian bank fees, and some professional service fees, and an allocated share of other expenses. The Private Equity Pool and Hedge Fund Pool's expenses for the year, divided by the average net assets, are as follows:

| <b>Expense Ratio (in basis points)</b> | <b>Private Equity</b> | <b>Hedge Fund</b> |
|--|-----------------------|-------------------|
| Investment advisor fees                | 0.1                   | N/A               |
| Trustee fees                           | 0.0*                  | 0.0*              |
| Custodian bank fees                    | 0.0*                  | 0.0*              |
| Management fees                        | 2.8                   | 2.8               |
| Fiduciary bond fees                    | 0.0*                  | 0.0*              |
| External fees/Fund closing costs       | 1.8                   | N/A               |
| Professional service fees              | 7.0                   | 3.7               |
| <b>Total</b>                           | <b>11.7</b>           | <b>6.5</b>        |

\* Expense Ratio rounds to less than 0.1 basis points.

## INVESTMENT SECTION

### Investment Pool Objectives, Financial Highlights, and Performance

#### REAL ESTATE POOL

##### OBJECTIVES

The main objective for the Real Estate Pool is to provide diversification and risk reduction benefits for its participants' assets. Secondly, the Real Estate Pool should provide for long-term growth of its participants' assets.

The Real Estate Pool is comprised of three categories. The target range allocations as of June 30, 2014, are as follows:

| Category      | Target | Allocation Range     |
|---------------|--------|----------------------|
| Core          | 50%    | +/- 20% (30% to 70%) |
| Value-Added   | 30%    | +/- 20% (10% to 50%) |
| Opportunistic | 20%    | +/- 10% (10% to 30%) |

##### MANAGEMENT STRUCTURE

The selection of investments in the Real Estate Pool is made by the Pool's subcommittee which includes the Executive Director, the Chief Investment Officer, the Chief Financial Officer/Chief Operating Officer, and two members selected from the Board. Investment recommendations are jointly made by the real estate investment officer and Courtland Partners, Ltd, the investment consultant to the subcommittee. The public real estate investments are managed by the following firms, in accordance with a particular investment style.

| Manager                                     | Style                                       |
|---|---|
| CBRE Clarion Securities, LLC                | Global Real Estate Investment Securities    |
| European Investors, Inc.                    | Global Real Estate Investment Securities    |
| Security Capital Research & Management Inc. | U.S. Debt and Equity Real Estate Securities |

##### FINANCIAL HIGHLIGHTS (in \$000s)

Audited financial statements for the Real Estate Pool are available at [www.wvimb.org](http://www.wvimb.org). Financial Highlights are presented below.

| <b>Condensed Statement of Assets and Liabilities</b> |                     |
|--|---------------------|
| Investments  | \$ 1,280,775        |
| Payable upon return of securities loaned             | (1,790)             |
| Cash   | 398                 |
| Receivable for investments sold                      | 434                 |
| Payable for investments purchased                    | (6,481)             |
| Foreign currency contracts                           | 1                   |
| Other assets and liabilities                         | 1,686               |
| Net assets - June 30, 2014                           | <u>\$ 1,275,023</u> |

**INVESTMENT SECTION**

## Investment Pool Objectives, Financial Highlights, and Performance

**REAL ESTATE POOL  
(Continued)****FINANCIAL HIGHLIGHTS (in \$000s) (Continued)**

| <b>Investments</b>  | <b>Fair Value</b>   | <b>Percent of Securities</b> |
|---|---------------------|------------------------------|
| Corporate bonds   | \$ 103,785          | 8.1%                         |
| Equity securities   | 294,287             | 23.0                         |
| Investments made with cash collateral for securities loaned | 1,790               | 0.1                          |
| Private real estate partnerships and funds                  | 811,041             | 63.3                         |
| Short-term issues   | 69,872              | 5.5                          |
| <b>Total</b>  | <b>\$ 1,280,775</b> | <b>100.0%</b>                |

**Progression of Net Assets**

|                                     |                     |
|-------------------------------------|---------------------|
| Net assets - June 30, 2013          | \$ 978,411          |
| Net increase from operations        | 118,777             |
| Net increase from unit transactions | 177,835             |
| <b>Net assets - June 30, 2014</b>   | <b>\$ 1,275,023</b> |

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of external investment management and/or partnership fees and expenses.

| <b>Period</b> | <b>Actual</b> | <b>NCREIF plus 100 basis points</b> |
|---------------|---------------|-------------------------------------|
| One-year      | 10.7%         | N/A                                 |
| Three-year    | 9.6%          | N/A                                 |
| Five-year     | 9.7%          | 8.9%                                |

**Equity Investments Including Partnerships and Funds**

| <b>Ten Largest Holdings</b>            | <b>Fair Value</b> |
|--|-------------------|
| RREEF America REIT II, Inc.            | \$ 157,958        |
| UBS Trumbull Property Fund             | 68,834            |
| UBS Trumbull Property Income Fund      | 57,991            |
| Harrison Street Core Property Fund, LP | 56,568            |
| Invesco Core Real Estate - U.S.A., LP  | 49,183            |
| Kennedy Wilson Real Estate Fund IV, LP | 44,270            |
| AG Core Plus Realty Fund III, LP       | 36,841            |
| PCCP First Mortgage II, LP             | 35,860            |
| DRA Growth & Income Fund VII           | 32,599            |
| CIM VI-1, LLC                          | 30,704            |

**REAL ESTATE POOL**  
**(Continued)**

**INVESTMENT PERFORMANCE (Continued)**

| <b>Debt Investments</b>                         |                   |
|---|-------------------|
| <b>Ten Largest Holdings</b>                     | <b>Fair Value</b> |
| Reckson Operating Partnership, 6.0%, 3/31/2016  | \$ 14,389         |
| Health Care REIT Inc., 3.63%, 3/15/2016         | 12,542            |
| Commonwealth, 6.25%, 8/15/2016                  | 7,864             |
| Health Care REIT Inc., 6.2%, 6/1/2016           | 7,623             |
| Hospitality Properties Trust, 6.3%, 6/15/2016   | 7,424             |
| Mid-America Apartments LP, 5.5%, 10/1/2015      | 7,145             |
| Reckson Operating Partnership, 5.88%, 8/15/2014 | 6,623             |
| Commonwealth, 6.25%, 6/15/2017                  | 5,367             |
| Mack-Cali Realty LP, 5.8%, 1/15/2016            | 5,326             |
| Hospitality Properties Trust, 5.13%, 2/15/2015  | 3,306             |

*A complete listing of the investments in each pool is available at [www.wvimb.org](http://www.wvimb.org).*

**EXPENSES**

The IMB charges each investment pool for its direct investment-related expenses, such as investment advisor fees, custodian bank fees, and some professional service fees, and an allocated share of other expenses. The Real Estate Pool's expenses for the year, divided by the average net assets, are as follows:

| <b>Expense Ratio (in basis points)</b> |             |
|--|-------------|
| Investment advisor fees                | 23.8        |
| Trustee fees                           | 0.0*        |
| Custodian bank fees                    | 0.7         |
| Management fees                        | 2.8         |
| Fiduciary bond fees                    | 0.0*        |
| External fees/Fund closing costs       | 5.7         |
| Professional service fees              | 4.8         |
| <b>Total</b>                           | <b>37.8</b> |

\* Expense Ratio rounds to less than 0.1 basis points.

## PUBLIC EMPLOYEES' RETIREMENT SYSTEM

### HISTORY

The Public Employees' Retirement System (PERS) was created in 1961.

### LIQUIDITY NEEDS

PERS is expected to have modest liquidity needs of approximately 1.0 percent to 2.0 percent per year for the foreseeable future.

### INVESTMENT OBJECTIVES

The investment objectives are as follows:

- Exceed the actuarial interest rate assumption of 7.5 percent per annum, net of fees.
- Reduce the unfunded liability while maintaining adequate liquidity to satisfy benefit payments and not subjecting PERS to an undue level of risk.

### ASSET ALLOCATION

Based upon a determination of the appropriate risk tolerance, the Board adopted the following broad asset allocation guidelines for the assets managed for PERS. Policy and Strategic Allocations are established on a market value basis.

| Asset Class                           | Policy Allocation | Strategic Allocation |
|---------------------------------------|-------------------|----------------------|
| Domestic Equity                       | 30.0%             | 27.5%                |
| International Equity                  | 30.0%             | 27.5%                |
| Private Equity                        | 0.0%              | 10.0%                |
| Fixed Income                          | 40.0%             | 15.0%                |
| Hedge Fund                            | 0.0%              | 10.0%                |
| Real Estate                           | 0.0%              | 10.0%                |
| Cash (included in Fixed Income above) | \$19,000,000*     |                      |

*\* IMB Staff has authority to change the cash allocation plus or minus 10 percent, as necessary, in consultation with the appropriate representative(s) from PERS.*

**PUBLIC EMPLOYEES' RETIREMENT SYSTEM**  
**(Continued)**

**FINANCIAL HIGHLIGHTS (in \$000s)**

**Progression of Plan Balance**

|                   |                            |
|-------------------|----------------------------|
| June 30, 2013     | \$ 4,848,377               |
| Contributions     | 267,482                    |
| Withdrawals       | (350,070)                  |
| Net               | <u>(82,588)</u>            |
| Investment income | 22,849                     |
| Net appreciation  | 841,174                    |
| June 30, 2014     | <u><u>\$ 5,629,812</u></u> |

| <b>Asset Allocation</b>    | <b>Amount</b>              | <b>Percent of Total</b> |
|----------------------------|----------------------------|-------------------------|
| Large Cap Domestic         | \$ 1,145,321               | 20.2%                   |
| Non-Large Cap Domestic     | 400,856                    | 7.1                     |
| International Qualified    | 556,196                    | 9.9                     |
| International Equity       | 1,018,952                  | 18.1                    |
| Short-Term Fixed Income    | 14,398                     | 0.3                     |
| Total Return Fixed Income* | 558,951                    | 9.9                     |
| Core Fixed Income*         | 241,787                    | 4.3                     |
| TIPS                       | 49,161                     | 0.9                     |
| Private Equity             | 549,804                    | 9.8                     |
| Real Estate                | 517,214                    | 9.2                     |
| Hedge Fund                 | 577,172                    | 10.3                    |
| Total                      | <u><u>\$ 5,629,812</u></u> | <u><u>100.0%</u></u>    |

\* Balances include the distribution declared by the pool on the last day of the month and reinvested to the participant's account on the first day of the following month.

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of fees.

| <b>Period</b> | <b>Actual</b> | <b>Target</b> |
|---------------|---------------|---------------|
| One-year      | 17.9%         | 7.5%          |
| Three-year    | 10.5%         | 7.5%          |
| Five-year     | 13.6%         | 7.5%          |
| Ten-year      | 7.8%          | 7.5%          |

## TEACHERS' RETIREMENT SYSTEM

### HISTORY

The Teachers' Retirement System (TRS) was created in 1941. It was closed to new members in 1991, but reopened to first-time hires as of July 1, 2005. Employees hired from 1991 through June 30, 2005, joined the Teachers' Defined Contribution Plan (TDC). In the spring of 2008, more than 78 percent of the participants in the Teachers' Defined Contribution Plan elected to transfer their TDC account balance to TRS and become participants in TRS. This transfer occurred in July 2008.

The Teachers' Employers Contribution Collection Account (TECCA) was a holding account for temporary reserve cash and this account was dissolved as of June 30, 2014.

### TRS LIQUIDITY NEEDS

TRS has a net negative cash flow position, and will likely continue to have substantial liquidity needs of at least 10 percent per year beginning in plan year 2014.

### TRS INVESTMENT OBJECTIVES

The investment objectives are as follows:

- Exceed the actuarial interest rate assumption of 7.5 percent per annum, net of fees.
- Reduce the unfunded liability while maintaining adequate liquidity to satisfy benefit payments and not subjecting TRS to an undue level of risk.

### TRS ASSET ALLOCATION

Based upon a determination of the appropriate risk tolerance, the Board adopted the following broad asset allocation guidelines for the assets managed for TRS. Policy and Strategic Allocations are established on a market value basis.

| Asset Class                           | Policy Allocation | Strategic Allocation |
|---------------------------------------|-------------------|----------------------|
| Domestic Equity                       | 30.0%             | 27.5%                |
| International Equity                  | 30.0%             | 27.5%                |
| Private Equity                        | 0.0%              | 10.0%                |
| Fixed Income                          | 40.0%             | 15.0%                |
| Hedge Fund                            | 0.0%              | 10.0%                |
| Real Estate                           | 0.0%              | 10.0%                |
| Cash (included in Fixed Income above) | \$35,000,000*     |                      |

*\* IMB Staff has authority to change the cash allocation plus or minus 10 percent, as necessary, in consultation with the appropriate representative(s) from TRS.*

**TEACHERS' RETIREMENT SYSTEM**  
(Continued)

**FINANCIAL HIGHLIGHTS (in \$000s)**

| Progression of Plan Balance | TRS                 | TECCA       |
|-----------------------------|---------------------|-------------|
| June 30, 2013               | \$ 5,717,583        | \$ -        |
| Contributions               | 608,301             | 342,690     |
| Withdrawals                 | (673,258)           | (342,692)   |
| Net                         | (64,957)            | (2)         |
| Investment income           | 26,357              | 1           |
| Net appreciation            | 976,393             | 1           |
| June 30, 2014               | <u>\$ 6,655,376</u> | <u>\$ -</u> |

| Asset Allocation           | TRS                 |                  |
|----------------------------|---------------------|------------------|
|                            | Amount              | Percent of Total |
| Large Cap Domestic         | \$ 1,324,099        | 19.9%            |
| Non-Large Cap Domestic     | 463,970             | 7.0              |
| International Qualified    | 640,632             | 9.6              |
| International Equity       | 1,178,932           | 17.7             |
| Short-Term Fixed Income    | 168,607             | 2.5              |
| Total Return Fixed Income* | 643,611             | 9.7              |
| Core Fixed Income*         | 275,801             | 4.1              |
| TIPS                       | 57,015              | 0.9              |
| TRS Annuity                | (17)                | 0.0              |
| Private Equity             | 637,022             | 9.6              |
| Real Estate                | 598,156             | 9.0              |
| Hedge Fund                 | 667,548             | 10.0             |
| Total                      | <u>\$ 6,655,376</u> | <u>100.0%</u>    |

\* Balances include the distribution declared by the pool on the last day of the month and reinvested to the participant's account on the first day of the following month.

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of fees. A target rate of return has not been set for the TECCA plan.

| Period     | TRS    |        | TECCA  |
|------------|--------|--------|--------|
|            | Actual | Target | Actual |
| One-year   | 17.9%  | 7.5%   | 0.0%   |
| Three-year | 10.4%  | 7.5%   | 0.0%   |
| Five-year  | 13.3%  | 7.5%   | 0.1%   |
| Ten-year   | 7.5%   | 7.5%   | N/A    |

## STATE POLICE DEATH, DISABILITY AND RETIREMENT FUND

### HISTORY

The State Police Death, Disability and Retirement Fund (SPDDRF) was created in 1925.

### LIQUIDITY NEEDS

SPDDRF is now a closed plan and is expected to experience an increasingly negative cash flow position in the near future.

### INVESTMENT OBJECTIVES

The investment objectives are as follows:

- Exceed the actuarial interest rate assumption of 7.5 percent per annum, net of fees.
- Reduce the unfunded liability while maintaining adequate liquidity to satisfy benefit payments and not subjecting SPDDRF to an undue level of risk.

### ASSET ALLOCATION

Based upon a determination of the appropriate risk tolerance, the Board adopted the following broad asset allocation guidelines for the assets managed for SPDDRF. Policy and Strategic Allocations are established on a market value basis.

| Asset Class                           | Policy Allocation | Strategic Allocation |
|---------------------------------------|-------------------|----------------------|
| Domestic Equity                       | 30.0%             | 27.5%                |
| International Equity                  | 30.0%             | 27.5%                |
| Private Equity                        | 0.0%              | 10.0%                |
| Fixed Income                          | 40.0%             | 15.0%                |
| Hedge Fund                            | 0.0%              | 10.0%                |
| Real Estate                           | 0.0%              | 10.0%                |
| Cash (included in Fixed Income above) | \$3,200,000*      |                      |

*\* IMB Staff has authority to change the cash allocation plus or minus 10 percent, as necessary, in consultation with the appropriate representative(s) from SPDDRF.*

**STATE PLICE DEATH, DISABILITY AND RETIREMENT FUND  
(Continued)**

**FINANCIAL HIGHLIGHTS (in \$000s)**

**Progression of Plan Balance**

|                   |    |          |
|-------------------|----|----------|
| June 30, 2013     | \$ | 520,323  |
| Contributions     |    | 27,868   |
| Withdrawals       |    | (37,985) |
| Net               |    | (10,117) |
| Investment income |    | 2,355    |
| Net appreciation  |    | 88,516   |
| June 30, 2014     | \$ | 601,077  |

| <b>Asset Allocation</b>    | <b>Amount</b> | <b>Percent of Total</b> |
|----------------------------|---------------|-------------------------|
| Large Cap Domestic         | \$ 125,777    | 20.9%                   |
| Non-Large Cap Domestic     | 42,199        | 7.0                     |
| International Qualified    | 58,706        | 9.8                     |
| International Equity       | 107,924       | 18.0                    |
| Short-Term Fixed Income    | 542           | 0.1                     |
| Total Return Fixed Income* | 59,807        | 9.9                     |
| Core Fixed Income*         | 25,575        | 4.3                     |
| TIPS                       | 4,507         | 0.7                     |
| Private Equity             | 54,936        | 9.1                     |
| Real Estate                | 55,283        | 9.2                     |
| Hedge Fund                 | 65,821        | 11.0                    |
| Total                      | \$ 601,077    | 100.0%                  |

\* Balances include the distribution declared by the pool on the last day of the month and reinvested to the participant's account on the first day of the following month.

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of fees.

| <b>Period</b> | <b>Actual</b> | <b>Target</b> |
|---------------|---------------|---------------|
| One-year      | 17.9%         | 7.5%          |
| Three-year    | 10.5%         | 7.5%          |
| Five-year     | 13.6%         | 7.5%          |
| Ten-year      | 7.8%          | 7.5%          |

## STATE POLICE RETIREMENT SYSTEM

### HISTORY

The State Police Retirement System (SPRS) was created in 1994.

### LIQUIDITY NEEDS

SPRS is expected to be in a positive net cash flow position for the foreseeable future.

### INVESTMENT OBJECTIVES

The investment objectives are as follows:

- Exceed the actuarial interest rate assumption of 7.5 percent per annum, net of fees.
- Reduce the unfunded liability while maintaining adequate liquidity to satisfy benefit payments and not subjecting SPRS to an undue level of risk.

### ASSET ALLOCATION

Based upon a determination of the appropriate risk tolerance, the Board adopted the following broad asset allocation guidelines for the assets managed for SPRS. Policy and Strategic Allocations are established on a market value basis.

| Asset Class                           | Policy Allocation | Strategic Allocation |
|---------------------------------------|-------------------|----------------------|
| Domestic Equity                       | 30.0%             | 27.5%                |
| International Equity                  | 30.0%             | 27.5%                |
| Private Equity                        | 0.0%              | 10.0%                |
| Fixed Income                          | 40.0%             | 15.0%                |
| Hedge Fund                            | 0.0%              | 10.0%                |
| Real Estate                           | 0.0%              | 10.0%                |
| Cash (included in Fixed Income above) | \$75,000*         |                      |

*\* IMB Staff has authority to change the cash allocation plus or minus 10 percent, as necessary, in consultation with the appropriate representative(s) from SPRS.*

**STATE POLICE RETIREMENT SYSTEM**  
**(Continued)**

**FINANCIAL HIGHLIGHTS (in \$000s)**

**Progression of Plan Balance**

|                   |                          |
|-------------------|--------------------------|
| June 30, 2013     | \$ 96,092                |
| Contributions     | 7,679                    |
| Withdrawals       | (956)                    |
| Net               | <u>6,723</u>             |
| Investment income | 482                      |
| Net appreciation  | 17,275                   |
| June 30, 2014     | <u><u>\$ 120,572</u></u> |

| <b>Asset Allocation</b>    | <b>Amount</b>            | <b>Percent of Total</b> |
|----------------------------|--------------------------|-------------------------|
| Large Cap Domestic         | \$ 24,634                | 20.5%                   |
| Non-Large Cap Domestic     | 8,466                    | 7.0                     |
| International Qualified    | 10,985                   | 9.1                     |
| International Equity       | 22,187                   | 18.4                    |
| Short-Term Fixed Income    | 1,011                    | 0.8                     |
| Total Return Fixed Income* | 12,251                   | 10.2                    |
| Core Fixed Income*         | 5,278                    | 4.4                     |
| TIPS                       | 893                      | 0.7                     |
| Private Equity             | 11,232                   | 9.3                     |
| Real Estate                | 10,947                   | 9.1                     |
| Hedge Fund                 | 12,688                   | 10.5                    |
| Total                      | <u><u>\$ 120,572</u></u> | <u><u>100.0%</u></u>    |

\* Balances include the distribution declared by the pool on the last day of the month and reinvested to the participant's account on the first day of the following month.

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of fees.

| <b>Period</b> | <b>Actual</b> | <b>Target</b> |
|---------------|---------------|---------------|
| One-year      | 17.9%         | 7.5%          |
| Three-year    | 10.4%         | 7.5%          |
| Five-year     | 13.4%         | 7.5%          |
| Ten-year      | 7.8%          | 7.5%          |

## DEPUTY SHERIFF'S RETIREMENT SYSTEM

### HISTORY

The Deputy Sheriff's Retirement System (DSRS) was created in 1998.

### LIQUIDITY NEEDS

DSRS currently has positive net cash flows.

### INVESTMENT OBJECTIVES

The investment objectives are as follows:

- Exceed the actuarial interest rate assumption of 7.5 percent per annum, net of fees.
- Preserve the current well-funded position while not subjecting DSRS to an undue level of risk.

### ASSET ALLOCATION

Based upon a determination of the appropriate risk tolerance, the Board adopted the following broad asset allocation guidelines for the assets managed for DSRS. Policy and Strategic Allocations are established on a market value basis.

| Asset Class                           | Policy Allocation | Strategic Allocation |
|---------------------------------------|-------------------|----------------------|
| Domestic Equity                       | 30.0%             | 27.5%                |
| International Equity                  | 30.0%             | 27.5%                |
| Private Equity                        | 0.0%              | 10.0%                |
| Fixed Income                          | 40.0%             | 15.0%                |
| Hedge Fund                            | 0.0%              | 10.0%                |
| Real Estate                           | 0.0%              | 10.0%                |
| Cash (included in Fixed Income above) | \$250,000*        |                      |

*\* IMB Staff has authority to change the cash allocation plus or minus 10 percent, as necessary, in consultation with the appropriate representative(s) from DSRS.*

**DEPUTY SHERIFF'S RETIREMENT SYSTEM**  
**(Continued)**

**FINANCIAL HIGHLIGHTS (in \$000s)**

**Progression of Plan Balance**

|                   |                   |
|-------------------|-------------------|
| June 30, 2013     | \$ 134,410        |
| Contributions     | 10,113            |
| Withdrawals       | <u>(7,423)</u>    |
| Net               | 2,690             |
| Investment income | 655               |
| Net appreciation  | 23,736            |
| June 30, 2014     | <u>\$ 161,491</u> |

**Asset Allocation**

|                            | Amount            | Percent of Total |
|----------------------------|-------------------|------------------|
| Large Cap Domestic         | \$ 32,947         | 20.4%            |
| Non-Large Cap Domestic     | 11,449            | 7.1              |
| International Qualified    | 15,281            | 9.5              |
| International Equity       | 29,604            | 18.3             |
| Short-Term Fixed Income    | 496               | 0.3              |
| Total Return Fixed Income* | 16,288            | 10.1             |
| Core Fixed Income*         | 7,009             | 4.3              |
| TIPS                       | 1,401             | 0.9              |
| Private Equity             | 15,527            | 9.6              |
| Real Estate                | 14,771            | 9.1              |
| Hedge Fund                 | 16,718            | 10.4             |
| Total                      | <u>\$ 161,491</u> | <u>100.0%</u>    |

\* Balances include the distribution declared by the pool on the last day of the month and reinvested to the participant's account on the first day of the following month.

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of fees.

| Period     | Actual | Target |
|------------|--------|--------|
| One-year   | 17.9%  | 7.5%   |
| Three-year | 10.4%  | 7.5%   |
| Five-year  | 13.5%  | 7.5%   |
| Ten-year   | 7.8%   | 7.5%   |

## JUDGES' RETIREMENT SYSTEM

### HISTORY

The Judges' Retirement System (JRS) was created in 1949.

### LIQUIDITY NEEDS

JRS currently has slightly negative net cash flows.

### INVESTMENT OBJECTIVES

The investment objectives are as follows:

- Exceed the actuarial interest rate assumption of 7.5 percent per annum, net of fees.
- Reduce the unfunded liability while maintaining adequate liquidity to satisfy benefit payments and not subjecting JRS to an undue level of risk.

### ASSET ALLOCATION

Based upon a determination of the appropriate risk tolerance, the Board adopted the following broad asset allocation guidelines for the assets managed for JRS. Policy and Strategic Allocations are established on a market value basis.

| Asset Class                           | Policy Allocation | Strategic Allocation |
|---------------------------------------|-------------------|----------------------|
| Domestic Equity                       | 30.0%             | 27.5%                |
| International Equity                  | 30.0%             | 27.5%                |
| Private Equity                        | 0.0%              | 10.0%                |
| Fixed Income                          | 40.0%             | 15.0%                |
| Hedge Fund                            | 0.0%              | 10.0%                |
| Real Estate                           | 0.0%              | 10.0%                |
| Cash (included in Fixed Income above) | \$500,000*        |                      |

*\* IMB Staff has authority to change the cash allocation plus or minus 10 percent, as necessary, in consultation with the appropriate representative(s) from JRS.*

**JUDGES' RETIREMENT SYSTEM**  
(Continued)

**FINANCIAL HIGHLIGHTS (in \$000s)**

**Progression of Plan Balance**

|                   |                   |
|-------------------|-------------------|
| June 30, 2013     | \$ 141,476        |
| Contributions     | 3,130             |
| Withdrawals       | (4,629)           |
| Net               | (1,499)           |
| Investment income | 669               |
| Net appreciation  | 24,593            |
| June 30, 2014     | <u>\$ 165,239</u> |

| Asset Allocation           | Amount            | Percent of Total |
|----------------------------|-------------------|------------------|
| Large Cap Domestic         | \$ 33,599         | 20.3%            |
| Non-Large Cap Domestic     | 11,772            | 7.1              |
| International Qualified    | 16,213            | 9.8              |
| International Equity       | 30,063            | 18.2             |
| Short-Term Fixed Income    | 218               | 0.1              |
| Total Return Fixed Income* | 16,522            | 10.0             |
| Core Fixed Income*         | 7,120             | 4.3              |
| TIPS                       | 1,441             | 0.9              |
| Private Equity             | 16,136            | 9.8              |
| Real Estate                | 15,185            | 9.2              |
| Hedge Fund                 | 16,970            | 10.3             |
| Total                      | <u>\$ 165,239</u> | <u>100.0%</u>    |

\* Balances include the distribution declared by the pool on the last day of the month and reinvested to the participant's account on the first day of the following month.

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of fees.

| Period     | Actual | Target |
|------------|--------|--------|
| One-year   | 18.0%  | 7.5%   |
| Three-year | 10.4%  | 7.5%   |
| Five-year  | 13.5%  | 7.5%   |
| Ten-year   | 7.8%   | 7.5%   |

## EMERGENCY MEDICAL SERVICES RETIREMENT SYSTEM

### HISTORY

The Emergency Medical Services Retirement System (EMSRS) was created by the *Emergency Medical Services Retirement System Act* effective January 1, 2008, under *West Virginia Code §16-5V-4*. EMSRS members with benefits earned in the Public Employees' Retirement System (PERS) transferred their full membership and benefits under PERS to EMSRS on the effective date.

### LIQUIDITY NEEDS

EMSRS is expected to be in a positive net cash flow position for the foreseeable future.

### INVESTMENT OBJECTIVES

The investment objectives are as follows:

- Exceed the actuarial interest rate assumption of 7.5 percent per annum, net of fees.
- Maintain adequate liquidity to satisfy benefit payments while not subjecting EMSRS to an undue level of risk.

### ASSET ALLOCATION

Based upon a determination of the appropriate risk tolerance, the Board adopted the following broad asset allocation guidelines for the assets managed for EMSRS. Policy and Strategic Allocations are established on a market value basis.

| Asset Class                           | Policy Allocation | Strategic Allocation |
|---------------------------------------|-------------------|----------------------|
| Domestic Equity                       | 30.0%             | 27.5%                |
| International Equity                  | 30.0%             | 27.5%                |
| Private Equity                        | 0.0%              | 10.0%                |
| Fixed Income                          | 40.0%             | 15.0%                |
| Hedge Fund                            | 0.0%              | 10.0%                |
| Real Estate                           | 0.0%              | 10.0%                |
| Cash (included in Fixed Income above) | \$25,000*         |                      |

*\* IMB Staff has authority to change the cash allocation plus or minus 10 percent, as necessary, in consultation with the appropriate representative(s) from EMSRS.*

**EMERGENCY MEDICAL SERVICES RETIREMENT SYSTEM**  
(Continued)

**FINANCIAL HIGHLIGHTS (in \$000s)**

**Progression of Plan Balance**

|                   |    |         |
|-------------------|----|---------|
| June 30, 2013     | \$ | 42,603  |
| Contributions     |    | 4,420   |
| Withdrawals       |    | (1,553) |
| Net               |    | 2,867   |
| Investment income |    | 214     |
| Net appreciation  |    | 7,659   |
| June 30, 2014     | \$ | 53,343  |

**Asset Allocation**

|                            | Amount    | Percent of Total |
|----------------------------|-----------|------------------|
| Large Cap Domestic         | \$ 10,916 | 20.5%            |
| Non-Large Cap Domestic     | 3,755     | 7.0              |
| International Qualified    | 4,850     | 9.1              |
| International Equity       | 9,851     | 18.5             |
| Short-Term Fixed Income    | 345       | 0.6              |
| Total Return Fixed Income* | 5,434     | 10.2             |
| Core Fixed Income*         | 2,336     | 4.4              |
| TIPS                       | 396       | 0.7              |
| Private Equity             | 5,393     | 10.1             |
| Real Estate                | 4,853     | 9.1              |
| Hedge Fund                 | 5,214     | 9.8              |
| Total                      | \$ 53,343 | 100.0%           |

\* Balances include the distribution declared by the pool on the last day of the month and reinvested to the participant's account on the first day of the following month.

**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of fees.

| Period     | Actual | Target |
|------------|--------|--------|
| One-year   | 17.9%  | 7.5%   |
| Three-year | 10.4%  | 7.5%   |
| Five-year  | 13.4%  | 7.5%   |

**MUNICIPAL POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT SYSTEM**

**HISTORY**

Municipal Police Officers' and Firefighters' Retirement System (MPFRS) was created in 2010 for the purpose of providing retirement benefits for municipal police officers and paid professional firefighters hired into covered employment by participating municipalities on or after January 1, 2010.

**LIQUIDITY NEEDS**

There are no anticipated liquidity needs at this time.

**INVESTMENT OBJECTIVES**

The investment objectives are as follows:

- Exceed the actuarial interest rate assumption of 7.5 percent per annum, net of fees.
- Maintain adequate liquidity to satisfy benefit payments while not subjecting MPFRS to an undue level of risk.

**ASSET ALLOCATION**

| Asset Class          | Policy Allocation | Strategic Allocation |
|----------------------|-------------------|----------------------|
| Domestic Equity      | 30.0%             | 27.5%                |
| International Equity | 30.0%             | 27.5%                |
| Private Equity       | 0.0%              | 10.0%                |
| Fixed Income         | 40.0%             | 15.0%                |
| Hedge Fund           | 0.0%              | 10.0%                |
| Real Estate          | 0.0%              | 10.0%                |
| Cash                 | \$0               |                      |

**MUNICIPAL POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT SYSTEM**  
(Continued)

**FINANCIAL HIGHLIGHTS (in \$000s)**

**Progression of Plan Balance**

|                   |    |       |
|-------------------|----|-------|
| June 30, 2013     | \$ | 504   |
| Contributions     |    | 523   |
| Withdrawals       |    | (3)   |
| Net               |    | 520   |
| Investment income |    | 3     |
| Net appreciation  |    | 123   |
| June 30, 2014     | \$ | 1,150 |

**Asset Allocation**

|                            | Amount   | Percent of Total |
|----------------------------|----------|------------------|
| Large Cap Domestic         | \$ 230   | 20.0%            |
| Non-Large Cap Domestic     | 76       | 6.6              |
| International Qualified    | 100      | 8.7              |
| International Equity       | 202      | 17.6             |
| Short-Term Fixed Income    | 52       | 4.5              |
| Total Return Fixed Income* | 112      | 9.7              |
| Core Fixed Income*         | 49       | 4.3              |
| TIPS                       | 8        | 0.7              |
| Private Equity             | 112      | 9.7              |
| Real Estate                | 101      | 8.8              |
| Hedge Fund                 | 108      | 9.4              |
| Total                      | \$ 1,150 | 100.0%           |

\* Balances include the distribution declared by the pool on the last day of the month and reinvested to the participant's account on the first day of the following month.

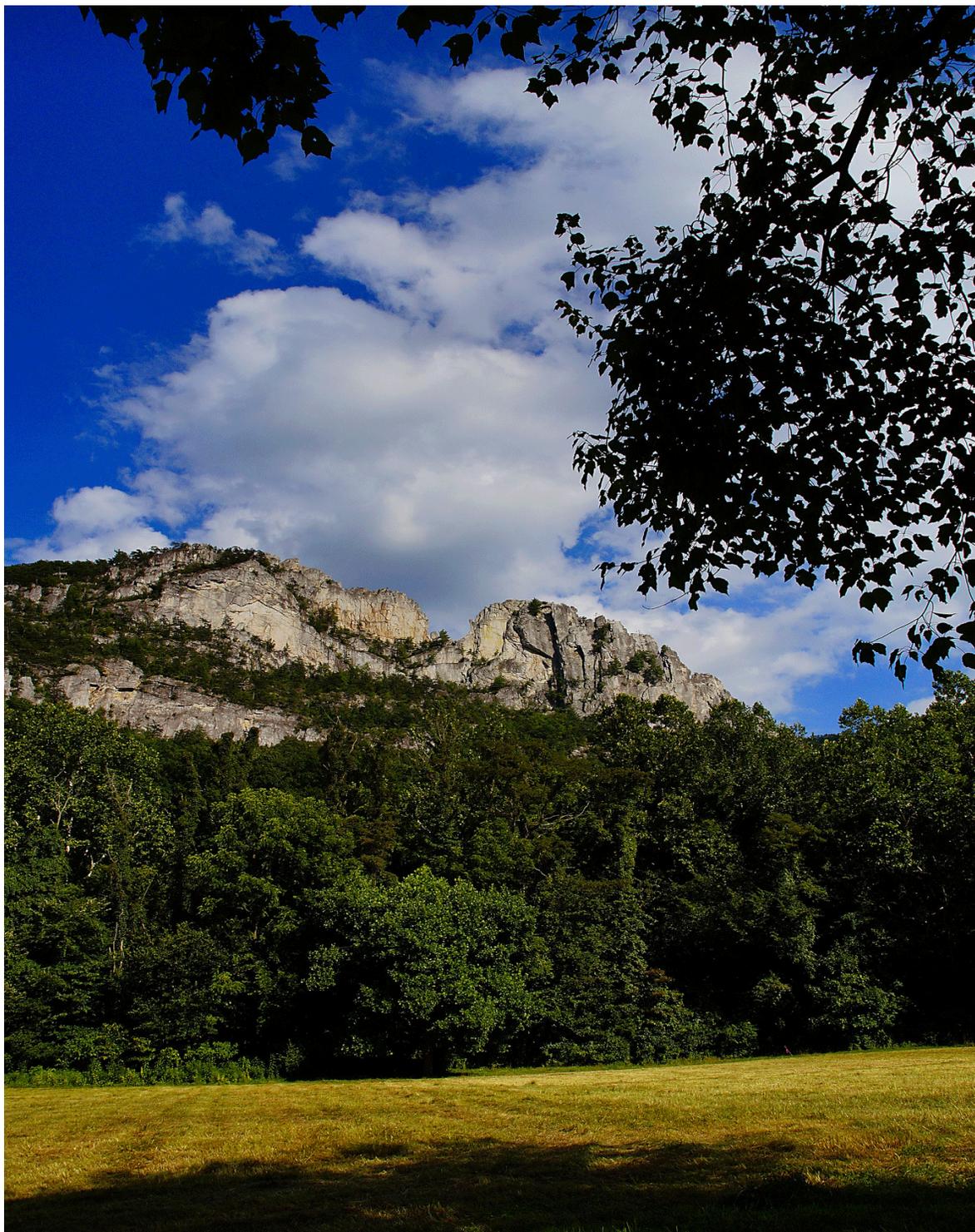
**INVESTMENT PERFORMANCE**

The IMB calculates total rates of return using the time-weighted rate of return methodology. The time-weighted method determines the rate of return exclusive of the effects of participant contributions or withdrawals. Actual rates of return are net of fees.

| Period     | Actual | Target |
|------------|--------|--------|
| One-year   | 17.0%  | 7.5%   |
| Three-year | 10.7%  | 7.5%   |

# **ACTUARIAL SECTION**

## Seneca Rocks National Recreation Area



*Located within the Monongahela National Forest of eastern West Virginia  
Photography by Blake*

## **ACTUARIAL SECTION**

### Overview

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The Actuarial Section of the comprehensive annual financial report provides information related to the actuarial valuations prepared for each of the pension plans for funding purposes. Other schedules provide information regarding the required contributions, benefits, and funded status of the plans.

Effective with the adoption of GASB 67 for this fiscal year, each of the pension plans has an actuarial valuation prepared for funding purposes and a separate actuarial valuation prepared for financial reporting purposes. The actuarial valuations included in this section of the comprehensive annual financial report have been prepared for funding purposes and have been prepared as of July 1, 2013, the beginning of the plan year. The actuarial valuations prepared for financial reporting purposes have been prepared as of June 30, 2014, the end of the plan year, and were the source of much of the actuarial information in the Financial Section.

The actuarial methods and assumptions used to prepare the actuarial valuations for funding purposes and for financial reporting purposes are nearly identical. The primary difference is in the asset valuation method for the Public Employees Retirement System (PERS). For financial reporting purposes, the fair value of the PERS assets as of the end of the fiscal year is used. For funding purposes, a four year smoothing of the actuarial gain or loss on PERS asset returns each year is used.

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State of West Virginia  
**Consolidated Public Retirement Board**

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Andrew Richardson  
David Stover  
C. Jeffrey Vallet

December 18, 2014

### Actuarial Review and Certification

This Report presents the results of the annual Actuarial Valuation of the West Virginia Public Employees' Retirement System (PERS) as of July 1, 2013. The purposes of the Actuarial Valuation are to determine the actuarial liabilities for the Plan for funding purposes and to determine if the expected contributions will be sufficient to meet or exceed the Plan's long term funding policy.

The valuation indicates that the expected state contributions of 14.0% of payroll plus the member contributions of 4.5% of payroll are sufficient to meet the annual funding requirement of the plan. This report contains supporting data and background information pertaining to the development of costs and related liabilities of the Plan. The valuation is based on membership data as of June 30, 2013, maintained by the West Virginia Consolidated Public Retirement Board (CPRB), and financial information received from the West Virginia Investment Management Board.

In performing the valuation, we relied on employee data and asset information provided by the administrative staff of the CPRB. In the case of employee data, each individual record was audited for reasonableness and internal consistency, although the validity of the information was not traced to source documents. With respect to plan assets, a general review for consistency with the information furnished from prior valuations was performed.

Certain tables presented in the Comprehensive Annual Financial Report (CAFR) are derived from the most recent valuations reported by Buck Consultants. The tables were prepared by the staff of the CPRB and examined by our internal actuarial staff. These tables include-

#### Financial Section

- Schedule of Employer Contributions

#### Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Solvency Test
- Schedule of Retirees and Beneficiaries
- Schedule of Funding Progress
- Changes in Unfunded Actuarial Liability

The Actuary hereby certifies that this Actuarial Valuation Report was completed in compliance with actuarial standards applicable to the purposes of the Actuarial Valuation. The Actuary further certifies that the actuarial methods and assumptions applied in completing the Actuarial Valuation as reasonable and appropriate for the purposes stated herein.

Respectfully Submitted:



Harry W. Mandel  
Board Actuary  
Member, American Academy of Actuaries  
Member Society of Pension Actuaries  
Enrolled Actuary #14-2527

**SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS**

**Valuation Date:** July 1, 2013

**Funding Method and Basis for Assumptions**

The valuation is prepared under the Entry Age Normal Cost Method with individually computed accrued liabilities. The Normal Cost is computed in aggregate. Entry is based on date of hire.

Experience studies are performed at least once in every five-year period. This valuation was prepared on the basis of assumptions that were recommended to and adopted by the Board on the basis of an experience study covering the period from July 1, 2004, to June 30, 2009. These assumptions will remain in effect for valuation purposes until such time as the Board adopts revised assumptions.

**Interest Rate and Expenses**

The valuation interest assumption is 7.50% annually, with no loading for plan expenses.

**Salary Scales**

Salary scales are used for the assumed increase in salary. Projected salary increases for State and Nonstate employees range from 4.25% to 6.0% per year. Assumed increases in salary for sample ages are as follows:

**Salary Scales**

| Age | State   | Nonstate |
|-----|---------|----------|
| 30  | 1.05500 | 1.05500  |
| 40  | 1.05000 | 1.05000  |
| 50  | 1.04500 | 1.04750  |
| 60  | 1.04250 | 1.04250  |

**Mortality**

The mortality tables are as follows:

- Healthy males: 1983 GAM male
- Healthy females: 1971 GAM female, set back 1 year
- Disabled males: 1971 GAM male, set forward 8 years
- Disabled females: Revenue Ruling 96-7 disabled female table

**Withdrawal from Service**

Specific tables have been created to reflect withdrawal rates. All withdrawals are assumed to result in refund of contributions if non-vested or a deferred annuity if vested. The liability for a refund of contributions for nonactive non-vested members as of the valuation date is assumed to be 60% of the total employee contribution balance of such members. Sample withdrawal rates are as follows:

**Withdrawal Rates**

| State (less than 1 year) |         |         |
|--------------------------|---------|---------|
| Age                      | Male    | Female  |
| 30                       | 0.21580 | 0.22100 |
| 40                       | 0.18200 | 0.18200 |
| 50                       | 0.15600 | 0.15600 |
| 60                       | 0.14300 | 0.14300 |

**Withdrawal Rates**

| State (1 to 2 years) |         |         |
|----------------------|---------|---------|
| Age                  | Male    | Female  |
| 30                   | 0.20625 | 0.20000 |
| 40                   | 0.15000 | 0.15000 |
| 50                   | 0.13750 | 0.12500 |
| 60                   | 0.12500 | 0.11250 |

**ACTUARIAL SECTION**  
Public Employees' Retirement System

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**Withdrawal Rates**

| State (2 to 3 years) |         |         |
|----------------------|---------|---------|
| Age                  | Male    | Female  |
| 30                   | 0.18200 | 0.17500 |
| 40                   | 0.13000 | 0.12500 |
| 50                   | 0.08800 | 0.10000 |
| 60                   | 0.06600 | 0.07500 |

**Withdrawal Rates**

| State (3 to 4 years) |         |         |
|----------------------|---------|---------|
| Age                  | Male    | Female  |
| 30                   | 0.15600 | 0.14400 |
| 40                   | 0.10400 | 0.09600 |
| 50                   | 0.07800 | 0.08400 |
| 60                   | 0.05200 | 0.06000 |

**Withdrawal Rates**

| State (4 to 5 years) |         |         |
|----------------------|---------|---------|
| Age                  | Male    | Female  |
| 30                   | 0.14000 | 0.11250 |
| 40                   | 0.08400 | 0.08750 |
| 50                   | 0.05600 | 0.07188 |
| 60                   | 0.02800 | 0.05000 |

**Withdrawal Rates**

| State (greater than 5 years) |         |         |
|------------------------------|---------|---------|
| Age                          | Male    | Female  |
| 30                           | 0.08400 | 0.08800 |
| 40                           | 0.04800 | 0.04500 |
| 50                           | 0.02400 | 0.03500 |
| 60                           | 0.01200 | 0.01000 |

**Withdrawal Rates**

| Nonstate (less than 1 year) |         |         |
|-----------------------------|---------|---------|
| Age                         | Male    | Female  |
| 30                          | 0.26400 | 0.25070 |
| 40                          | 0.21600 | 0.21850 |
| 50                          | 0.16800 | 0.17250 |
| 60                          | 0.13200 | 0.13800 |

**Withdrawal Rates**

| Nonstate (1 to 2 years) |         |         |
|-------------------------|---------|---------|
| Age                     | Male    | Female  |
| 30                      | 0.20400 | 0.21850 |
| 40                      | 0.15600 | 0.18975 |
| 50                      | 0.11000 | 0.13000 |
| 60                      | 0.10000 | 0.11000 |

**Withdrawal Rates**

| Nonstate (2 to 3 years) |         |         |
|-------------------------|---------|---------|
| Age                     | Male    | Female  |
| 30                      | 0.17600 | 0.18700 |
| 40                      | 0.12650 | 0.14000 |
| 50                      | 0.09000 | 0.11500 |
| 60                      | 0.08000 | 0.09500 |

**Withdrawal Rates**

| Nonstate (3 to 4 years) |         |         |
|-------------------------|---------|---------|
| Age                     | Male    | Female  |
| 30                      | 0.15400 | 0.15500 |
| 40                      | 0.10000 | 0.13000 |
| 50                      | 0.08000 | 0.10000 |
| 60                      | 0.06000 | 0.08000 |

**Withdrawal Rates**

| Nonstate (4 to 5 years) |         |         |
|-------------------------|---------|---------|
| Age                     | Male    | Female  |
| 30                      | 0.15000 | 0.15600 |
| 40                      | 0.09000 | 0.10800 |
| 50                      | 0.06600 | 0.08400 |
| 60                      | 0.04200 | 0.06000 |

**Withdrawal Rates**

| Nonstate (greater than 5 years) |         |         |
|---------------------------------|---------|---------|
| Age                             | Male    | Female  |
| 30                              | 0.09900 | 0.10000 |
| 40                              | 0.06000 | 0.06500 |
| 50                              | 0.04000 | 0.03500 |
| 60                              | 0.02000 | 0.02000 |

**Disablement Rates**

Sample rates of disablement are as follows:

**Disability Rates**

| State and Nonstate |         |         |
|--------------------|---------|---------|
| Age                | Male    | Female  |
| 30                 | 0.00030 | 0.00060 |
| 40                 | 0.00113 | 0.00113 |
| 50                 | 0.00488 | 0.00225 |
| 60                 | 0.00750 | 0.00750 |

**Retirement Rates**

The retirement rates are as follows:

**Retirement Rates**

| State and Nonstate |       |
|--------------------|-------|
| Age                | Rates |
| 55                 | 0.25  |
| 56                 | 0.15  |
| 57                 | 0.15  |
| 58                 | 0.15  |
| 59                 | 0.15  |
| 60                 | 0.15  |
| 61                 | 0.15  |
| 62                 | 0.30  |
| 63                 | 0.18  |
| 64                 | 0.18  |
| 65                 | 0.25  |
| 66                 | 0.20  |
| 67                 | 0.20  |
| 68                 | 0.20  |
| 69                 | 0.20  |
| 70+                | 1.00  |

**Family Composition**

It is assumed that 85% of males and 80% of females are married, with husbands 3 years older than wives. Remarriage rates are not used.

**Accrual of Future Service**

It is assumed that active members will accrue one year of service for each future year of employment.

**Noncontributory Service Loadings**

Noncontributory service for active members is estimated from member's contributory service by adjusting the present value of benefits projected from contributory service alone. A 10.8% load is used for male State employees and a 10.0% load is used for male Nonstate employees. A 2.4% load is used for female State and Nonstate employees.

### **Asset Valuation Method**

Four-year 25% level smoothing of actuarial gain or (loss) on trust fund return:

- Implemented over four years, prospectively commencing July 1, 2009 for the experience for the trust year ending June 30, 2009.
- Actuarial gain or (loss) on assets is calculated as the difference between the expected return under valuation assumptions based on the smoothed Actuarial Value of Assets and the actual trust fund return.
- Actuarial gain or (loss) is recognized at 25% of the original amount each year until fully recognized in the fourth year.
- Total accumulated deferred gain or (loss) amounts are used to adjust the reported Market Value of Assets to determine the actuarial Value of Assets.

### **Plan Contributions**

Both employee and employer contributions to the plan are assumed to be paid in the middle of the year.

**ACTUARIAL SECTION**  
Public Employees' Retirement System

**Schedule of Active Member Valuation Data**

| Valuation Date | Number | Annual Payroll   | Annual Average Pay | % Increase (Decrease)<br>in Average Pay |
|----------------|--------|------------------|--------------------|---|
| 6/30/2013      | 36,637 | \$ 1,389,850,000 | \$ 37,935.69       | 0.34536%                                |
| 6/30/2012      | 36,573 | 1,382,647,000    | 37,805.13          | 3.22886%                                |
| 6/30/2011      | 36,254 | 1,327,717,000    | 36,622.63          | 0.16204%                                |
| 6/30/2010      | 35,977 | 1,315,441,000    | 36,563.39          | 2.46763%                                |
| 6/30/2009      | 35,717 | 1,274,485,000    | 35,682.87          | 3.85707%                                |
| 6/30/2008      | 35,491 | 1,219,388,000    | 34,357.67          | 3.47423%                                |
| 6/30/2007      | 35,873 | 1,191,130,000    | 33,204.08          | 2.18204%                                |
| 6/30/2006      | 35,689 | 1,159,715,000    | 32,495.03          | 1.30770%                                |
| 6/30/2005      | 36,230 | 1,162,098,000    | 32,075.57          | 1.44394%                                |
| 6/30/2004      | 35,868 | 1,134,111,000    | 31,619.01          | -                                       |

**Schedule of Funding Progress (in thousands)**

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) Entry Age (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a Percentage of Covered Payroll ((b-a)/c) |
|--------------------------|-------------------------------|---|---------------------------|--------------------|---------------------|---|
| 7/1/2013                 | \$ 4,709,530                  | \$ 5,911,263                                    | \$ 1,201,733              | 79.7%              | \$ 1,389,850        | 86.5%   |
| 7/1/2012                 | 4,452,395                     | 5,735,775                                       | 1,283,380                 | 77.6%              | 1,382,647           | 92.8%   |
| 7/1/2011                 | 4,322,668                     | 5,515,252                                       | 1,192,584                 | 78.4%              | 1,327,717           | 89.8%   |
| 7/1/2010                 | 3,974,609                     | 5,325,830                                       | 1,351,221                 | 74.6%              | 1,315,441           | 102.7%  |
| 7/1/2009                 | 3,930,701                     | 4,930,158                                       | 999,457                   | 79.7%              | 1,274,485           | 78.4%   |
| 7/1/2008                 | 3,939,059                     | 4,677,027                                       | 737,968                   | 84.2%              | 1,219,388           | 60.5%   |
| 7/1/2007                 | 4,293,296                     | 4,426,051                                       | 132,755                   | 97.0%              | 1,191,130           | 11.1%   |
| 7/1/2006                 | 3,700,186                     | 4,264,700                                       | 564,514                   | 86.6%              | 1,159,715           | 48.7%   |
| 7/1/2005                 | 3,404,651                     | 4,074,385                                       | 669,734                   | 83.6%              | 1,162,098           | 57.6%   |
| 7/1/2004                 | 3,095,660                     | 3,870,201                                       | 774,541                   | 80.0%              | 1,134,111           | 68.3%   |

**Solvency Test (in thousands)**

| Valuation Date | Aggregate Accrued Liabilities For |                             |   | Reported Assets | % of Accrued Liabilities Covered by Reported Assets |           |          |
|----------------|-----------------------------------|-----------------------------|---|-----------------|---|-----------|----------|
|                | (1)                               | (2)                         | (3)   |                 | (1)   | (2)       | (3)      |
|                | Active Member Contributions       | Retirants and Beneficiaries | Active Members (Employer Financed Portions) |                 |   |           |          |
| 6/30/2013      | \$ 451,604                        | \$ 3,137,476                | \$ 2,322,182                                | \$ 4,709,530    | 100.0000%   | 100.0000% | 48.2499% |
| 6/30/2012      | 449,893                           | 2,949,168                   | 2,336,714                                   | 4,452,395       | 100.0000%   | 100.0000% | 45.0776% |
| 6/30/2011      | 434,454                           | 2,792,236                   | 2,288,562                                   | 4,322,668       | 100.0000%   | 100.0000% | 47.8894% |
| 6/30/2010      | 432,007                           | 2,893,949                   | 2,299,874                                   | 3,974,609       | 100.0000%   | 100.0000% | 41.2480% |
| 6/30/2009      | 426,936                           | 2,338,871                   | 2,164,351                                   | 3,930,701       | 100.0000%   | 100.0000% | 53.8219% |
| 6/30/2008      | 410,799                           | 2,189,262                   | 2,076,966                                   | 3,939,059       | 100.0000%   | 100.0000% | 64.4689% |
| 6/30/2007      | 405,476                           | 2,050,544                   | 1,970,031                                   | 4,293,296       | 100.0000%   | 100.0000% | 93.2613% |
| 6/30/2006      | 400,973                           | 1,906,367                   | 1,957,360                                   | 3,700,186       | 100.0000%   | 100.0000% | 71.1594% |
| 6/30/2005      | 407,811                           | 1,703,881                   | 1,962,993                                   | 3,404,651       | 100.0000%   | 100.0000% | 65.8667% |
| 6/30/2004      | 400,906                           | 1,571,758                   | 1,897,537                                   | 3,095,660       | 100.0000%   | 100.0000% | 59.1818% |

Note: Column 1 is calculated from table 1. Multiply the PV of future pay times the employee contribution rate.

**ACTUARIAL SECTION**  
Public Employees' Retirement System

**Schedule of Retirees and Beneficiaries Added and Removed**

| Fiscal<br>Year<br>Ended | Retirees Added |                      | Retirees Removed |                      | Retirees - Year End |                      | % Increase<br>in Annual<br>Allowances | Average<br>Annual<br>Allowance |
|-------------------------|----------------|----------------------|------------------|----------------------|---------------------|----------------------|---------------------------------------|--------------------------------|
|                         | Number         | Annual<br>Allowances | Number           | Annual<br>Allowances | Number              | Annual<br>Allowances |                                       |                                |
| 2013                    | 1,725          | \$31,593,996         | (980)            | \$ 9,613,212         | 24,205              | \$ 332,761,008       | 3.306%                                | \$13,747.61                    |
| 2012                    | 1,581          | 27,609,382           | (914)            | 7,997,833            | 23,460              | 312,198,792          | 3.141%                                | 13,307.71                      |
| 2011                    | 1,673          | 31,250,302           | (920)            | 7,834,867            | 22,793              | 294,084,936          | 4.160%                                | 12,902.42                      |
| 2010                    | 1,438          | 25,365,630           | (897)            | 7,382,382            | 22,040              | 273,012,324          | 4.017%                                | 12,387.13                      |
| 2009                    | 1,509          | 26,578,560           | (922)            | 7,186,068            | 21,499              | 256,026,485          | 4.124%                                | 11,908.76                      |
| 2008                    | 1,356          | 24,449,168           | (958)            | 7,351,692            | 20,912              | 239,172,379          | 4.636%                                | 11,437.09                      |
| 2007                    | 1,373          | 23,721,486           | (885)            | 6,811,456            | 20,514              | 224,224,742          | 4.447%                                | 10,930.33                      |
| 2006                    | 1,465          | 25,862,169           | (836)            | 6,123,031            | 20,026              | 209,571,080          | 7.047%                                | 10,464.95                      |
| 2005                    | 1,384          | 22,576,749           | (915)            | 6,455,362            | 19,367              | 189,617,882          | 5.498%                                | 9,775.63                       |
| 2004                    | 1,221          | 18,641,007           | (881)            | 5,766,920            | 18,928              | 175,390,530          | 0.000%                                | 9,266.19                       |

| Changes in Unfunded Actuarial Liability                    |                         |
|--|-------------------------|
| Unfunded Actuarial Liability, June 30, 2012                | <u>\$ 1,283,380,000</u> |
| Expected increase from amortization method                 | (18,300,000)            |
| Expected increase from contributions below actuarial rates | 6,394,000               |
| Investment experience (smoothed)                           | (156,806,000)           |
| Liability experience (including transfers)                 | 87,065,000              |
| Change in assumption                                       | -                       |
| Unfunded Actuarial Liability, June 30, 2013                | <u>\$ 1,201,733,000</u> |

**Schedule of Contributions**

The Schedule of Contributions is included in the Required Supplementary Information provided in the Financial Section of this Comprehensive Annual Financial Report.

**Plan Provisions**

A discussion of plan provisions is included in Note 2 to the financial statements included in the Financial Section.



State of West Virginia  
**Consolidated Public Retirement Board**

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Andrew Richardson  
David Stover  
C. Jeffrey Vallet

December 18, 2014

### Actuarial Review and Certification

This Report presents the results of the annual Actuarial Valuation of the West Virginia Teachers' Retirement System (TRS) as of July 1, 2013. The purposes of the Actuarial Valuation are to determine the actuarial liabilities for the Plan and to determine if the expected contributions will be sufficient to meet or exceed the Plan's long term funding policy.

This valuation presents the liabilities of the plan as of the valuation date and the projected Employer contribution for fiscal year 2015. Some key highlights are:

- The valuation was prepared based on an assumed interest rate of 7.5%.
- Based on the valuation results, the State contribution to TRS for fiscal year 2015 is \$454,721,000.
- The funded percentage of plan assets to the actuarial accrued liability at the valuation date is 58%, compared to 53% for the prior year.

This report contains supporting data and background information pertaining to the development of costs and related liabilities of the plan. The valuation is based on membership data as of June 30, 2013 maintained by the West Virginia Consolidated Public Retirement Board (CPRB), and financial information received from the West Virginia Investment Management Board.

In performing the valuation, we relied on employee data and asset information provided by the administrative staff of the CPRB. In the case of employee data, each individual record was audited for reasonableness and internal consistency, although the validity of the information was not traced to source documents. With respect to plan assets, a general review for consistency with the information furnished from prior valuations was performed.

Certain tables presented in the Comprehensive Annual Financial Report are derived from the most recent valuations reported by Buck Consultants. The tables were prepared by the staff of the CPRB and examined by our internal actuarial staff. These tables include-

#### Financial Section

- Schedule of Employer Contributions

### Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Solvency Test
- Schedule of Retirees and Beneficiaries
- Schedule of Funding Progress
- Changes in Unfunded Actuarial Liability

The Actuary hereby certifies that this Actuarial Valuation Report was completed in compliance with actuarial standards applicable to the purposes of the Actuarial Valuation. The Actuary further certifies that the actuarial methods and assumptions applied in completing the Actuarial Valuation as reasonable and appropriate for the purposes stated herein.

Respectfully Submitted:



Harry W. Mandel  
Board Actuary  
Member, American Academy of Actuaries  
Member Society of Pension Actuaries  
Enrolled Actuary #14-2527

**SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS**

**Valuation Date:** July 1, 2013

**Funding Method and Basis for Assumptions**

The valuation is prepared under the Entry Age Cost Method with individually computed accrued liabilities. The Normal Cost is computed in aggregate. Entry is based on adjusted date of hire (i.e. valuation date minus known past service).

Experience studies are performed at least once in every five-year period. This valuation was prepared on the basis of assumptions that were recommended to and adopted by the Board on the basis of an experience study covering the period from July 1, 2005, to June 30, 2010. These assumptions will remain in effect for valuation purposes until such time as the Board adopts revised assumptions.

**Interest Rate and Expenses**

The valuation interest assumption is 7.5% per annum, with no loading for plan expenses.

**Pre-Retirement Mortality**

Pre-retirement mortality rates are based on the results of the 2006-2010 experience study. The mortality tables used are the RP-2000 Non-Annuitant tables for in-service males and females. Sample pre-retirement mortality rates are as follows:

**Pre-Retirement Mortality  
RP-2000 Non-Annuitant Table**

| Age | State   | Nonstate |
|-----|---------|----------|
| 30  | 0.00044 | 0.00026  |
| 40  | 0.00108 | 0.00071  |
| 50  | 0.00214 | 0.00168  |
| 60  | 0.00488 | 0.00393  |

**Post-Retirement Mortality**

Post-retirement mortality rates are based on the results of the 2006-2010 experience study. The mortality tables used are as follows:

- Healthy males: RP-2000 Healthy Annuitant table, projected to 2020
- Healthy females: RP-2000 Healthy Annuitant table, projected to 2020
- Disabled males: RP-2000 Disabled Annuitant table, projected to 2020, setback 2 years
- Disabled females: RP-2000 Disabled Annuitant table, projected to 2020, setback 1 year

Sample post-retirement mortality rates are as follows:

**Post-Retirement Healthy Mortality  
RP-2000 Healthy Annuitant Table  
Projected to 2020 with Scale AA**

| Age | State   | Nonstate |
|-----|---------|----------|
| 60  | 0.00594 | 0.00561  |
| 70  | 0.01641 | 0.01515  |
| 80  | 0.05265 | 0.03987  |
| 90  | 0.16928 | 0.12400  |

**Post-Retirement Disabled Mortality  
RP-2000 Disabled Annuitant Table  
Projected to 2020 with Scale AA  
Set Back 2 Years for Males and  
Set Back 1 Year for Females**

| Age | State   | Nonstate |
|-----|---------|----------|
| 30  | 0.02042 | 0.00585  |
| 40  | 0.02001 | 0.00551  |
| 50  | 0.01912 | 0.00740  |
| 60  | 0.02849 | 0.01879  |
| 70  | 0.04293 | 0.03196  |
| 80  | 0.07670 | 0.05891  |
| 90  | 0.14672 | 0.12333  |

**Withdrawal from Service**

Withdrawal rates are based on the 2006-2010 experience study. Withdrawal rates are assumed to cease upon eligibility for retirement. All withdrawal is assumed to result in refund of contributions if non-vested or a deferred annuity if vested. Sample withdrawal rates are as follows:

**Withdrawal Rates**

| Teachers (less than 1 year) |         |         |
|-----------------------------|---------|---------|
| Age                         | Male    | Female  |
| 30                          | 0.26000 | 0.26000 |
| 40                          | 0.22000 | 0.22000 |
| 50                          | 0.18000 | 0.18000 |
| 60                          | 0.14000 | 0.14000 |

**Withdrawal Rates**

| Teachers (1 to 2 years) |         |         |
|-------------------------|---------|---------|
| Age                     | Male    | Female  |
| 30                      | 0.12100 | 0.11000 |
| 40                      | 0.08800 | 0.08000 |
| 50                      | 0.06600 | 0.06000 |
| 60                      | 0.05500 | 0.05000 |

**Withdrawal Rates**

| Teachers (2 to 3 years) |         |         |
|-------------------------|---------|---------|
| Age                     | Male    | Female  |
| 30                      | 0.06850 | 0.07400 |
| 40                      | 0.06350 | 0.05400 |
| 50                      | 0.05700 | 0.04000 |
| 60                      | 0.05000 | 0.04000 |

**Withdrawal Rates**

| Teachers (3 to 4 years) |         |         |
|-------------------------|---------|---------|
| Age                     | Male    | Female  |
| 30                      | 0.06000 | 0.04800 |
| 40                      | 0.04000 | 0.03600 |
| 50                      | 0.03000 | 0.03000 |
| 60                      | 0.03000 | 0.03000 |

**Withdrawal Rates**

| Teachers (4 to 5 years) |         |         |
|-------------------------|---------|---------|
| Age                     | Male    | Female  |
| 30                      | 0.04000 | 0.03600 |
| 40                      | 0.02000 | 0.02267 |
| 50                      | 0.01500 | 0.01500 |
| 60                      | 0.01500 | 0.01500 |

**Withdrawal Rates**

| Teachers (greater than 5 years) |         |         |
|---------------------------------|---------|---------|
| Age                             | Male    | Female  |
| 30                              | 0.02400 | 0.02400 |
| 40                              | 0.01904 | 0.01600 |
| 50                              | 0.01200 | 0.00800 |
| 60                              | 0.01600 | 0.01200 |

**ACTUARIAL SECTION**  
Teachers' Retirement System

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**Withdrawal Rates**

| Non-Teachers and State (less than 1 year) |         |         |
|---|---------|---------|
| Age                                       | Male    | Female  |
| 30  | 0.19500 | 0.19500 |
| 40  | 0.16500 | 0.16500 |
| 50  | 0.13500 | 0.13500 |
| 60  | 0.10500 | 0.10500 |

**Withdrawal Rates**

| Non-Teachers and State (1 to 2 years) |         |         |
|---------------------------------------|---------|---------|
| Age                                   | Male    | Female  |
| 30                                    | 0.11000 | 0.09900 |
| 40                                    | 0.08000 | 0.07200 |
| 50                                    | 0.06000 | 0.05400 |
| 60                                    | 0.05000 | 0.04500 |

**Withdrawal Rates**

| Non-Teachers and State (2 to 3 years) |         |         |
|---------------------------------------|---------|---------|
| Age                                   | Male    | Female  |
| 30                                    | 0.08500 | 0.06800 |
| 40                                    | 0.05500 | 0.04400 |
| 50                                    | 0.04000 | 0.03200 |
| 60                                    | 0.04000 | 0.03200 |

**Withdrawal Rates**

| Non-Teachers and State (3 to 4 years) |         |         |
|---------------------------------------|---------|---------|
| Age                                   | Male    | Female  |
| 30                                    | 0.06000 | 0.05400 |
| 40                                    | 0.04000 | 0.03600 |
| 50                                    | 0.03000 | 0.02700 |
| 60                                    | 0.03000 | 0.02700 |

**Withdrawal Rates**

| Non-Teachers and State (4 to 5 years) |         |         |
|---------------------------------------|---------|---------|
| Age                                   | Male    | Female  |
| 30                                    | 0.03750 | 0.03750 |
| 40                                    | 0.02250 | 0.02250 |
| 50                                    | 0.01500 | 0.01500 |
| 60                                    | 0.01125 | 0.01125 |

**Withdrawal Rates**

| Non-Teachers and State (greater than 5 years) |         |         |
|---|---------|---------|
| Age   | Male    | Female  |
| 30  | 0.03000 | 0.02450 |
| 40  | 0.01750 | 0.01750 |
| 50  | 0.01250 | 0.01316 |
| 60  | 0.01500 | 0.01400 |

**Disablement Rates**

Disablement rates are based on the 2006-2010 experience study. A sample of disablement rates follows:

**Disability Rates**

| Age | State   | Nonstate |
|-----|---------|----------|
| 30  | 0.00100 | 0.00080  |
| 40  | 0.00250 | 0.00200  |
| 50  | 0.00509 | 0.00376  |
| 60  | 0.00700 | 0.00880  |

**Retirement Rates**

Retirement rates are based on the 2006-2010 experience study. A schedule of retirement rates follows:

**Retirement Rates**

| Age | Teachers |        | Non-Teachers & State |        |
|-----|----------|--------|----------------------|--------|
|     | Male     | Female | Male                 | Female |
| 54  | 0.000    | 0.000  | 0.000                | 0.000  |
| 55  | 0.250    | 0.275  | 0.300                | 0.200  |
| 56  | 0.150    | 0.175  | 0.200                | 0.150  |
| 57  | 0.150    | 0.175  | 0.150                | 0.150  |
| 58  | 0.170    | 0.180  | 0.150                | 0.150  |
| 59  | 0.190    | 0.190  | 0.150                | 0.175  |
| 60  | 0.200    | 0.250  | 0.150                | 0.200  |
| 61  | 0.300    | 0.200  | 0.150                | 0.200  |
| 62  | 0.400    | 0.275  | 0.400                | 0.300  |
| 63  | 0.250    | 0.200  | 0.250                | 0.200  |
| 64  | 0.250    | 0.250  | 0.175                | 0.200  |
| 65  | 0.400    | 0.300  | 0.300                | 0.300  |
| 66  | 0.300    | 0.300  | 0.225                | 0.200  |
| 67  | 0.300    | 0.300  | 0.200                | 0.200  |
| 68  | 0.300    | 0.300  | 0.200                | 0.200  |
| 69  | 0.300    | 0.300  | 0.200                | 0.200  |
| 70+ | 1.000    | 1.000  | 1.000                | 1.000  |

**Salary Scales**

Salary scales are based on the 2006-2010 experience study. Projected salary increases are in the following ranges by group, with an underlying inflation rate of 3.0%:

| Group        | Range of Projected Salary Increases |
|--------------|-------------------------------------|
| Teachers     | 3.75% - 5.25%                       |
| Non-Teachers | 3.40% - 6.50%                       |

A sample of salaries from the salary scales is as follows:

**Salary Scales**

| Age | Teachers | Non-Teachers and State |
|-----|----------|------------------------|
| 30  | 4.750    | 5.500                  |
| 40  | 4.250    | 5.250                  |
| 50  | 3.850    | 4.400                  |
| 60  | 3.850    | 3.730                  |

**Accrual of Future Service**

Future service accrual factors are based on the 2006-2010 experience study. All active members will accrue 1.00 year of service for each future year of employment.

**Non-Contributory Service Loadings**

The load factor assumptions for non-contributory service (military, parochial or out-of-state teaching, transferred PERS service, and unused sick leave) are based on the 2006-2010 experience study and are as follows:

| Group        | Male   | Female |
|--------------|--------|--------|
| Teachers     | 1.0750 | 1.0400 |
| Non-Teachers | 1.0400 | 1.0275 |

**Family Composition**

It is assumed that 85% of males and 80% of females are married, with husbands 3 years older than wives. Remarriage rates are not used.

**Asset Valuation Method**

Assets for valuation purposes are included at Market Value.

**Plan Contribution**

Both employee and employer contributions to the plan are assumed to be paid in the middle of the year.

**ACTUARIAL SECTION**  
Teachers' Retirement System

**Schedule of Active Member Valuation Data**

| Valuation Date | Number | Annual Payroll   | Annual Average Pay | % Increase (Decrease)<br>in Average Pay |
|----------------|--------|------------------|--------------------|---|
| 6/30/2013      | 35,593 | \$ 1,493,515,000 | 41,960.92          | -0.50251%                               |
| 6/30/2012      | 35,807 | 1,510,083,000    | 42,172.84          | 0.42227%                                |
| 6/30/2011      | 35,855 | 1,505,749,000    | 41,995.51          | -0.18532%                               |
| 6/30/2010      | 35,670 | 1,500,761,000    | 42,073.48          | 0.18898%                                |
| 6/30/2009      | 35,701 | 1,499,232,000    | 41,994.12          | 4.93487%                                |
| 6/30/2008      | 35,219 | 1,409,437,000    | 40,019.22          | -5.71859%                               |
| 6/30/2007      | 19,529 | 828,939,000      | 42,446.57          | 4.17553%                                |
| 6/30/2006      | 18,633 | 759,206,000      | 40,745.24          | -1.80560%                               |
| 6/30/2005      | 17,728 | 735,614,000      | 41,494.48          | 2.16317%                                |
| 6/30/2004      | 19,313 | 784,415,000      | 40,615.89          | -                                       |

**Schedule of Funding Progress (in thousands)**

| Actuarial<br>Valuation<br>Date | Actuarial<br>Value<br>of Assets<br>(a) | Actuarial<br>Accrued<br>Liability (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL (UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as a<br>Percentage<br>of Covered<br>Payroll<br>((b-a)/c) |
|--------------------------------|--|---|---------------------------------|--------------------------|---------------------------|---|
| 7/1/2013                       | \$ 5,751,101                           | \$ 9,930,335  | \$ 4,179,234                    | 57.9%                    | \$ 1,493,515              | 279.8%  |
| 7/1/2012                       | 5,144,397                              | 9,712,582   | 4,568,185                       | 53.0%                    | 1,510,082                 | 302.5%  |
| 7/1/2011                       | 5,074,665                              | 9,445,148   | 4,370,483                       | 53.7%                    | 1,505,749                 | 290.3%  |
| 7/1/2010                       | 4,143,540                              | 8,904,312   | 4,760,772                       | 46.5%                    | 1,500,761                 | 317.2%  |
| 7/1/2009                       | 3,554,771                              | 8,607,869   | 5,053,098                       | 41.3%                    | 1,499,232                 | 337.0%  |
| 7/1/2008                       | 4,133,883                              | 8,268,578   | 4,134,695                       | 50.0%                    | 1,409,437                 | 293.4%  |
| 7/1/2007                       | 3,665,993                              | 7,142,711   | 3,476,718                       | 51.3%                    | 828,939                   | 419.4%  |
| 7/1/2006                       | 2,174,464                              | 6,877,872   | 4,703,408                       | 31.6%                    | 759,206                   | 619.5%  |
| 7/1/2005                       | 1,627,355                              | 6,617,708   | 4,990,353                       | 24.6%                    | 735,614                   | 678.4%  |
| 7/1/2004                       | 1,427,475                              | 6,440,738   | 5,013,263                       | 22.2%                    | 784,415                   | 639.1%  |

**Solvency Test (in thousands)**

| Valuation<br>Date | Aggregate Accrued Liabilities For     |                                       |  | Reported<br>Assets | % of Accrued Liabilities Covered<br>by Reported Assets |          |         |
|-------------------|---------------------------------------|---------------------------------------|--|--------------------|--|----------|---------|
|                   | (1)<br>Active Member<br>Contributions | (2)<br>Retirants and<br>Beneficiaries | (3)<br>Active Members<br>(Employer Financed<br>Portions) |                    | (1)  | (2)      | (3)     |
| 6/30/2013         | \$ 764,280                            | \$ 6,264,695                          | \$ 2,901,360   | \$ 5,751,101       | 100.0000%  | 81.8199% | 0.0000% |
| 6/30/2012         | 754,285                               | 5,806,955                             | 3,151,342  | 5,144,397          | 100.0000%  | 78.4059% | 0.0000% |
| 6/30/2011         | 739,997                               | 5,438,589                             | 3,266,562  | 5,074,665          | 100.0000%  | 82.1331% | 0.0000% |
| 6/30/2010         | 687,828                               | 4,877,284                             | 3,339,200  | 4,143,540          | 100.0000%  | 74.4556% | 0.0000% |
| 6/30/2009         | 677,365                               | 4,511,170                             | 3,419,334  | 3,554,771          | 100.0000%  | 68.5120% | 0.0000% |
| 6/30/2008         | 630,240                               | 4,219,349                             | 3,418,989  | 4,133,883          | 100.0000%  | 85.2419% | 0.0000% |
| 6/30/2007         | 302,347                               | 3,985,211                             | 2,855,153  | 3,665,993          | 100.0000%  | 85.5031% | 0.0000% |
| 6/30/2006         | 282,706                               | 3,709,404                             | 2,885,762  | 2,174,464          | 100.0000%  | 54.4690% | 0.0000% |
| 6/30/2005         | 269,913                               | 3,405,508                             | 2,942,287  | 1,627,355          | 100.0000%  | 44.2767% | 0.0000% |
| 6/30/2004         | 302,622                               | 3,136,087                             | 3,001,229  | 1,427,475          | 100.0000%  | 41.5119% | 0.0000% |

**ACTUARIAL SECTION**  
Teachers' Retirement System

**Schedule of Retirees and Beneficiaries Added and Removed**

| Fiscal<br>Year<br>Ended | Retirees Added |                      | Retirees Removed |                      | Retirees - Year End |                      | % Increase<br>in Annual<br>Allowances | Average<br>Annual<br>Allowance |
|-------------------------|----------------|----------------------|------------------|----------------------|---------------------|----------------------|---------------------------------------|--------------------------------|
|                         | Number         | Annual<br>Allowances | Number           | Annual<br>Allowances | Number              | Annual<br>Allowances |                                       |                                |
| 2013                    | 2,210          | \$ 65,333,080        | (1,116)          | \$ 14,090,125        | 33,007              | \$ 661,061,157       | 4.442%                                | \$ 20,027.91                   |
| 2012                    | 1,850          | 52,405,063           | (980)            | 11,142,482           | 31,913              | 611,964,828          | 4.149%                                | 19,176.04                      |
| 2011                    | 2,039          | 55,816,157           | (1,123)          | 11,685,848           | 31,043              | 571,566,916          | 4.779%                                | 18,412.10                      |
| 2010                    | 1,952          | 50,384,790           | (1,070)          | 11,288,029           | 30,127              | 529,400,876          | 4.875%                                | 17,572.31                      |
| 2009                    | 1,766          | 43,023,575           | (1,043)          | 10,606,309           | 29,245              | 490,013,124          | 4.278%                                | 16,755.45                      |
| 2008                    | 1,625          | 41,174,835           | (1,143)          | 10,880,080           | 28,522              | 458,291,496          | 4.609%                                | 16,068.00                      |
| 2007                    | 1,756          | 42,148,636           | (1,105)          | 10,597,790           | 28,040              | 430,694,400          | 5.090%                                | 15,360.00                      |
| 2006                    | 1,658          | 27,450,240           | (1,020)          | 8,987,954            | 27,389              | 400,317,624          | 6.376%                                | 14,616.00                      |
| 2005                    | 1,785          | 39,146,121           | (1,084)          | 9,774,211            | 26,751              | 367,558,740          | 5.239%                                | 13,740.00                      |
| 2004                    | 1,776          | 26,796,873           | (1,167)          | 9,589,099            | 26,050              | 340,108,800          | 0.000%                                | 13,056.00                      |

| Changes in Unfunded Actuarial Liability                    |                         |
|--|-------------------------|
| Unfunded Actuarial Liability, June 30, 2012                | <u>\$ 4,568,185,000</u> |
| Expected increase from amortization method                 | (75,012,000)            |
| Expected increase from contributions below actuarial rates | (1,245,000)             |
| Investment experience (smoothed)                           | (270,000,000)           |
| Liability experience (including transfers)                 | (42,694,000)            |
| Change in assumption                                       | -                       |
| Unfunded Actuarial Liability, June 30, 2013                | <u>\$ 4,179,234,000</u> |

**Schedule of Contributions**

The Schedule of Contributions is included in the Required Supplementary Information provided in the Financial Section of this Comprehensive Annual Financial Report.

**Plan Provisions**

A discussion of plan provisions is included in Note 2 to the financial statements included in the Financial Section.

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State of West Virginia  
**Consolidated Public Retirement Board**

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Acting Cabinet Secretary Jason Pizatella

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December 18, 2014

### Actuarial Review and Certification

This Report presents the results of the annual Actuarial Valuation of the West Virginia State Police, Death, and Disability Retirement System (SPDDRS) as of July 1, 2013. The purposes of the Actuarial Valuation are to determine the actuarial liabilities for the Plan and to determine if the expected contributions will be sufficient to meet or exceed the Plan's long term funding policy.

Some key highlights are:

- The valuation was prepared based on an assumed interest rate of 7.50%.
- The State contribution is determined as the State normal cost plus a level-dollar amortization amount that will fund the unfunded actuarial liability by June 30, 2025. The required state contribution for Fiscal Year 2015 is \$20,860,000.

This report contains supporting data and background information pertaining to the development of costs and related liabilities of the plan. The valuation is based on membership data as of June 30, 2013, maintained by the West Virginia Consolidated Public Retirement Board (CPRB), and financial information received from the West Virginia Investment Management Board.

In performing the valuation, we relied on employee data and asset information provided by the administrative staff of the CPRB. In the case of employee data, each individual record was audited for reasonableness and internal consistency, although the validity of the information was not traced to source documents. With respect to plan assets, a general review for consistency with the information furnished from prior valuations was performed.

Certain tables presented in the Comprehensive Annual Financial Report are derived from the most recent valuations reported by Buck Consultants. The tables were prepared by the staff of the CPRB and examined by our internal actuarial staff. These tables include-

#### Financial Section

- Schedule of Employer Contributions

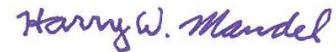
#### Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Solvency Test

- Schedule of Retirees and Beneficiaries
- Schedule of Funding Progress
- Changes in Unfunded Actuarial Liability

The Actuary hereby certifies that this Actuarial Valuation Report was completed in compliance with actuarial standards applicable to the purposes of the Actuarial Valuation. The Actuary further certifies that the actuarial methods and assumptions applied in completing the Actuarial Valuation as reasonable and appropriate for the purposes stated herein.

Respectfully Submitted:



Harry W. Mandel  
Board Actuary  
Member, American Academy of Actuaries  
Member Society of Pension Actuaries  
Enrolled Actuary #14-2527

**SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS**

**Valuation Date:** July 1, 2013

**Funding Method and Basis for Assumptions**

The valuation is prepared under the Entry Age Cost Method with individually computed accrued liabilities. The Normal Cost is computed in aggregate. Entry is based on date of hire.

Experience studies are performed at least once in every five-year period. This valuation was prepared on the basis of assumptions that were recommended to and adopted by the Board on the basis of an experience study covering the period from July 1, 2006, to June 30, 2011. These assumptions will remain in effect for valuation purposes until such time as the Board adopts revised assumptions.

**Interest Rate and Expenses**

The valuation interest assumption is 7.50% annually, with no loading for plan expenses.

**Pre-Retirement Mortality**

The male and female RP-2000 Non-Annuitant Mortality Table, projected to 2020 using Scale BB. It is assumed that 70% of deaths of members in service are duty-related.

**Post-Retirement Mortality**

Post-retirement mortality tables are as follows:

Healthy: RP-2000 Healthy Annuitants, projected to 2025 using Scale BB

Disabled: RP-2000 Healthy Annuitants, projected to 2025 using Scale BB, set forward 1 year

**Salary Scales**

Compensation is assumed to increase 5.00% per year for the first two years of service, 4.50% for the next 3 years, 4.00% for the next 5 years, and 3.25% per year thereafter. The inflation rate is 3.00%.

**Withdrawal from Service**

Withdrawal rates cease once an employee is eligible for normal retirement. A sample of withdrawal rates follows:

| Age | Rate of Withdrawal |
|-----|--------------------|
| 20  | 0.0267             |
| 30  | 0.0190             |
| 40  | 0.0114             |
| 50  | 0.0038             |

**Disablement Rates**

A sample of disablement rates, which cease once an employee is eligible for normal retirement, are as follows:

| Age | Rate of<br>Disablement | Type of<br>Disability | Probability |
|-----|------------------------|-----------------------|-------------|
| 20  | 0.0005                 | Duty-Related Full     | 0.25        |
| 30  | 0.0020                 | Duty-Related Partial  | 0.60        |
| 40  | 0.0060                 | Nonduty-Related       | 0.15        |
| 50  | 0.0040                 |                       |             |

**Family Composition**

90% of members are assumed to be married, with husbands 2 years older than their wives. Re-marriage rates are not used.

**Accrual of Future Service**

Active members are assumed to accrue 1 year of service for each future year of employment.

**Non-Contributory Service**

A 14.5% load is applied to the retirement liability for active members to represent additional benefit service credit at retirement as a result of the conversion of annual leave, sick leave, and additional credit for military service.

**Retirement Rates**

70% of members are assumed to retire when first eligible for unreduced benefits at the earlier of age 50 and 20 years of service or any age and 25 years of service. An active member who has already attained eligibility for normal retirement has a 20% probability of retiring each year thereafter with 100% retiring on or after attainment of age 55.

**Asset Valuation Method**

Assets for valuation purposes are included at Market Value.

**Plan Contributions**

Both employee and employer contributions are assumed to be paid in the middle of the year.

**ACTUARIAL SECTION**

State Police, Death, Disability, and Retirement System

**Schedule of Active Member Valuation Data**

| Valuation Date | Number | Annual Payroll | Annual Average Pay | % Increase (Decrease)<br>in Average Pay |
|----------------|--------|----------------|--------------------|---|
| 6/30/2013      | 99     | \$ 5,988,000   | \$ 60,484.85       | -3.63824%                               |
| 6/30/2012      | 108    | 6,779,000      | 62,768.52          | 4.33962%                                |
| 6/30/2011      | 133    | 8,001,000      | 60,157.89          | -1.30345%                               |
| 6/30/2010      | 147    | 8,960,000      | 60,952.38          | -2.73874%                               |
| 6/30/2009      | 163    | 10,215,000     | 62,668.71          | 4.24699%                                |
| 6/30/2008      | 173    | 10,400,000     | 60,115.61          | 4.41103%                                |
| 6/30/2007      | 191    | 10,997,000     | 57,575.92          | 5.54895%                                |
| 6/30/2006      | 204    | 11,128,000     | 54,549.02          | 4.41100%                                |
| 6/30/2005      | 213    | 11,306,000     | 53,078.21          | 2.06418%                                |
| 6/30/2004      | 237    | 12,325,000     | 52,004.74          | -                                       |

**Schedule of Funding Progress (in thousands)**

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) Entry Age (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a Percentage of Covered Payroll ((b-a)/c) |
|--------------------------|-------------------------------|---|---------------------------|--------------------|---------------------|---|
| 7/1/2013                 | \$ 520,322                    | \$ 679,931                                      | \$ 159,609                | 76.5%              | \$ 5,988            | 2665.5%   |
| 7/1/2012                 | 477,345                       | 663,341   | 185,996                   | 72.0%              | 6,779               | 2743.7%   |
| 7/1/2011                 | 481,994                       | 606,245   | 124,251                   | 79.5%              | 8,001               | 1552.9%   |
| 7/1/2010                 | 404,444                       | 590,729   | 186,285                   | 68.5%              | 8,960               | 2079.1%   |
| 7/1/2009                 | 362,927                       | 573,579   | 210,652                   | 63.3%              | 10,215              | 2062.2%   |
| 7/1/2008                 | 459,182                       | 547,623   | 88,441                    | 83.9%              | 10,400              | 850.4%  |
| 7/1/2007                 | 513,009                       | 527,393   | 14,384                    | 97.3%              | 10,997              | 130.8%  |
| 7/1/2006                 | 452,794                       | 506,828   | 54,034                    | 89.3%              | 11,128              | 485.6%  |
| 7/1/2005                 | 361,390                       | 485,429   | 124,039                   | 74.4%              | 11,252              | 1102.4%   |
| 7/1/2004                 | 118,080                       | 462,119   | 344,039                   | 25.6%              | 12,273              | 2803.2%   |

**Solvency Test**

| Valuation Date | Aggregate Accrued Liabilities For |                             |   | Reported Assets | % of Accrued Liabilities Covered by Reported Assets |           |          |
|----------------|-----------------------------------|-----------------------------|---|-----------------|---|-----------|----------|
|                | (1)                               | (2)                         | (3)   |                 | (1)   | (2)       | (3)      |
|                | Active Member Contributions       | Retirants and Beneficiaries | Active Members (Employer Financed Portions) |                 |   |           |          |
| 6/30/2013      | \$ 2,211,930                      | \$ 595,963,000              | \$ 83,968,000                               | \$ 520,322,000  | 100.0000%   | 86.9849%  | 0.0000%  |
| 6/30/2012      | 2,721,870                         | 579,033,000                 | 84,586,130                                  | 477,345,000     | 100.0000%   | 82.0526%  | 0.0000%  |
| 6/30/2011      | 3,420,540                         | 504,876,000                 | 97,948,460                                  | 481,994,000     | 100.0000%   | 94.8254%  | 0.0000%  |
| 6/30/2010      | 4,001,490                         | 484,787,000                 | 101,940,510                                 | 404,444,000     | 100.0000%   | 82.7442%  | 0.0000%  |
| 6/30/2009      | 4,806,360                         | 461,645,000                 | 107,127,640                                 | 362,927,000     | 100.0000%   | 77.8060%  | 0.0000%  |
| 6/30/2008      | 5,580,810                         | 440,958,000                 | 101,084,190                                 | 459,182,000     | 100.0000%   | 100.0000% | 12.5076% |
| 6/30/2007      | 6,243,840                         | 419,082,000                 | 102,067,160                                 | 513,009,000     | 100.0000%   | 100.0000% | 85.9073% |
| 6/30/2006      | 6,510,150                         | 400,494,000                 | 99,823,850                                  | 452,794,000     | 100.0000%   | 100.0000% | 45.8707% |
| 6/30/2005      | 7,168,230                         | 385,833,000                 | 99,596,000                                  | 361,390,000     | 100.0000%   | 91.7970%  | 0.0000%  |
| 6/30/2004      | 7,927,470                         | 358,635,000                 | 103,484,000                                 | 118,080,000     | 100.0000%   | 30.7037%  | 0.0000%  |

**ACTUARIAL SECTION**

State Police, Death, Disability, and Retirement System

**Schedule of Retirees and Beneficiaries Added and Removed**

| Fiscal Year Ended | Retirees Added |                   | Retirees Removed |                   | Retirees - Year End |                   | % Increase in Annual Allowances | Average Annual Allowance |
|-------------------|----------------|-------------------|------------------|-------------------|---------------------|-------------------|---------------------------------|--------------------------|
|                   | Number         | Annual Allowances | Number           | Annual Allowances | Number              | Annual Allowances |                                 |                          |
| 2013              | 16             | \$ 1,089,846      | (21)             | \$ 751,139        | 705                 | \$ 36,589,971     | 4.446%                          | \$51,900.67              |
| 2012              | 27             | 1,873,579         | (6)              | 172,507           | 710                 | 35,281,042        | 5.574%                          | 49,691.61                |
| 2011              | 22             | 1,496,421         | (17)             | 478,013           | 689                 | 32,429,754        | 4.443%                          | 47,067.86                |
| 2010              | 30             | 1,971,032         | (15)             | 547,180           | 684                 | 30,824,823        | 4.248%                          | 45,065.53                |
| 2009              | 21             | 1,328,897         | (14)             | 426,804           | 669                 | 28,920,348        | 4.808%                          | 43,229.22                |
| 2008              | 16             | 890,947           | (5)              | 142,622           | 662                 | 27,304,928        | 4.225%                          | 41,246.11                |
| 2007              | 17             | 1,003,174         | (11)             | 200,559           | 651                 | 25,762,801        | 4.242%                          | 39,574.20                |
| 2006              | 19             | 1,112,601         | (11)             | 380,973           | 645                 | 24,486,575        | 3.318%                          | 37,963.68                |
| 2005              | 28             | 1,530,766         | (13)             | 212,879           | 637                 | 23,406,196        | 5.420%                          | 36,744.42                |
| 2004              | 41             | 2,084,397         | (25)             | 613,074           | 622                 | 21,680,075        | 0.000%                          | 34,855.43                |

**Changes in Unfunded Actuarial Liability**

|  |                       |
|--|-----------------------|
| Unfunded Actuarial Liability, June 30, 2012                | <u>\$ 185,996,000</u> |
| Expected increase from amortization method                 | (9,273,000)           |
| Expected increase from contributions below actuarial rates | 8,023,000             |
| Investment experience (smoothed)                           | (25,600,000)          |
| Liability experience (including transfers)                 | 463,000               |
| Change in assumption                                       | -                     |
| Unfunded Actuarial Liability, June 30, 2013                | <u>\$ 159,609,000</u> |

**Schedule of Contributions**

The Schedule of Contributions is included in the Required Supplementary Information provided in the Financial Section of this Comprehensive Annual Financial Report.

**Plan Provisions**

A discussion of plan provisions is included in Note 2 to the financial statements included in the Financial Section.



State of West Virginia  
**Consolidated Public Retirement Board**

Board Members  
Governor Earl Ray Tomblin  
Auditor Glen B. Gainer III, Vice Chairman  
Treasurer John D. Perdue  
Acting Cabinet Secretary Jason Pizatella

Executive Director  
Jeffrey E. Fleck

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Joseph Bunn  
Captain Michael G. Corsaro  
Angela Crank  
Joe Lynch  
D. Todd Murray  
Andrew Richardson  
David Stover  
C. Jeffrey Vallet

December 18, 2014

### Actuarial Review and Certification

This Report presents the results of the annual Actuarial Valuation of the West Virginia State Police Retirement System (SPRS) as of July 1, 2013. The purposes of the Actuarial Valuation are to determine the actuarial liabilities for the Plan and to determine if the expected contributions will be sufficient to meet or exceed the Plan's long term funding policy.

Some key highlights are:

- The valuation was prepared based on an assumed interest rate of 7.50%.
- The valuation indicates that the expected state contribution of 14.5%, effective July 1, 2013, of payroll plus the member contribution of 13% of payroll is sufficient to meet the annual funding requirements of the plan.
- The funded percentage of plan assets to the actuarial accrued liability is 94.7%. Since the funded percentage exceeds 90%, the member contribution rate will decrease to 12% effective July 1, 2014.
- Based on a 15-year projection, the Plan will continue to have positive cash flow; i.e., contributions plus investment income are expected to exceed benefit payments and expenses through FY 2028. Contributions alone are expected to exceed benefit payments for the next 12 years.

This report contains supporting data and background information pertaining to the development of costs and related liabilities of the plan. The valuation is based on membership data as of June 30, 2013 maintained by the West Virginia Consolidated Public Retirement Board (CPRB), and financial information received from the West Virginia Investment Management Board.

In performing the valuation, we relied on employee data and asset information provided by the administrative staff of the CPRB. In the case of employee data, each individual record was audited for reasonableness and internal consistency, although the validity of the information was not traced to source documents. With respect to plan assets, a general review for consistency with the information furnished from prior valuations was performed.

Certain tables presented in the Comprehensive Annual Financial Report are derived from the most recent valuations reported by Buck Consultants. The tables were prepared by the staff of the CPRB and examined by our internal actuarial staff. These tables include-

### Financial Section

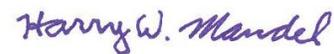
- Schedule of Employer Contributions

### Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Solvency Test
- Schedule of Retirees and Beneficiaries
- Schedule of Funding Progress
- Changes in Unfunded Actuarial Liability

The Actuary hereby certifies that this Actuarial Valuation Report was completed in compliance with actuarial standards applicable to the purposes of the Actuarial Valuation. The Actuary further certifies that the actuarial methods and assumptions applied in completing the Actuarial Valuation as reasonable and appropriate for the purposes stated herein.

Respectfully Submitted:



Harry W. Mandel  
Board Actuary  
Member, American Academy of Actuaries  
Member Society of Pension Actuaries  
Enrolled Actuary #14-2527

**SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS**

**Valuation Date:** July 1, 2013

**Funding Method and Basis for Assumptions**

The valuation is prepared under the Entry Age Normal Cost Method with individually computed accrued liabilities. The Normal Cost is computed in aggregate. Entry age is based on date of hire. The unfunded liability segments are amortized as a level dollar amount over their specified periods.

Experience studies are performed at least once in every five-year period. This valuation was prepared on the basis of assumptions that were recommended to and adopted by the Board on the basis of an experience study covering the period from July 1, 2006, to June 30, 2011. These assumptions will remain in effect for valuation purposes until such time as the Board adopts revised assumptions.

**Interest Rate and Expenses**

The valuation interest assumption is 7.50% annually, with no loading for plan expenses.

**Pre-Retirement Mortality**

The male and female RP-2000 Non-Annuitant Mortality Table, projected to 2020 using Scale BB. It is assumed that 70% of deaths of members in service are duty-related.

**Post-Retirement Mortality**

Post-retirement mortality tables are as follows:

Healthy: RP-2000 Healthy Annuitants, projected to 2025 using Scale BB

Disabled: RP-2000 Healthy Annuitants, projected to 2025 using Scale BB, set forward 1 year

**Salary Scales**

Compensation is assumed to increase 5.00% per year for the first two years of service, 4.50% for the next 3 years, 4.00% for the next 5 years, and 3.25% per year thereafter. This corresponds to an assumed underlying inflation rate of 3.00%.

**Withdrawal from Service**

Withdrawal rates cease once an employee is eligible for normal retirement. A sample of withdrawal rates follows:

| Age | Rate of Withdrawal |
|-----|--------------------|
| 20  | 0.0760             |
| 30  | 0.0542             |
| 40  | 0.0240             |
| 50  | 0.0114             |

**Disablement Rates**

No disablements are assumed to occur after the later of age 55 and the age first eligible for retirement. A sample of disablement rates follows:

| Age | Rate of<br>Disablement | Type of<br>Disability | Probability |
|-----|------------------------|-----------------------|-------------|
| 20  | 0.0005                 | Duty-Related Full     | 0.25        |
| 30  | 0.0020                 | Duty-Related Partial  | 0.60        |
| 40  | 0.0060                 | Nonduty-Related       | 0.15        |
| 50  | 0.0040                 |                       |             |

**Family Composition**

It is assumed that 90% of members are married, with husbands 3 years older than their wives. Re-marriage rates are not used.

**Accrual of Future Service**

It is assumed that active members will accrue one year of service for each future year of employment.

**Non-Contributory Service**

It is assumed that state troopers at retirement will have a 14.5% increase over contributory service added for all sources.

**Retirement Rates**

70% of members are assumed to retire when first eligible for unreduced benefits at the earlier of age 50 and 25 years of service or age 52 and 20 years of service. An active member who has already attained eligibility for normal retirement has a 20% probability of retiring each year thereafter with 100% retiring on or after attainment of age 55.

**Asset Valuation Method**

Assets for valuation purposes are included at Market Value.

**Plan Contributions**

Plan Contributions, both employee and employer, are assumed to be paid in the middle of the year.

**ACTUARIAL SECTION**  
State Police Retirement System

**Schedule of Active Member Valuation Data**

| Valuation Date | Number | Annual Payroll | Annual Average Pay | % Increase (Decrease)<br>in Average Pay |
|----------------|--------|----------------|--------------------|---|
| 6/30/2013      | 558    | \$ 27,701,000  | \$ 49,643.37       | 0.24679%                                |
| 6/30/2012      | 556    | 27,670,000     | 48,886.93          | 3.40895%                                |
| 6/30/2011      | 523    | 24,725,000     | 47,275.33          | -0.38876%                               |
| 6/30/2010      | 498    | 23,635,000     | 47,459.84          | 0.08509%                                |
| 6/30/2009      | 472    | 22,382,000     | 47,419.49          | 6.36366%                                |
| 6/30/2008      | 455    | 20,285,000     | 44,582.42          | 6.19366%                                |
| 6/30/2007      | 449    | 18,850,000     | 41,982.18          | 14.01588%                               |
| 6/30/2006      | 431    | 15,870,000     | 36,821.35          | 3.17500%                                |
| 6/30/2005      | 401    | 14,311,000     | 35,687.37          | 2.48106%                                |
| 6/30/2004      | 380    | 13,233,000     | 34,823.38          | -                                       |

**Schedule of Funding Progress (in thousands)**

| Actuarial<br>Valuation<br>Date | Actuarial<br>Value<br>of Assets<br>(a) | Actuarial<br>Accrued<br>Liability (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL (UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as a<br>Percentage<br>of Covered<br>Payroll<br>((b-a)/c) |
|--------------------------------|--|---|---------------------------------|--------------------------|---------------------------|---|
| 7/1/2013                       | \$ 96,092                              | \$ 101,503  | \$ 5,411                        | 94.7%                    | \$ 27,701                 | 19.5%   |
| 7/1/2012                       | 78,735                                 | 89,558  | 10,823                          | 87.9%                    | 27,670                    | 39.1%   |
| 7/1/2011                       | 70,756                                 | 79,036  | 8,280                           | 89.5%                    | 24,725                    | 33.5%   |
| 7/1/2010                       | 52,735                                 | 69,171  | 16,436                          | 76.2%                    | 23,635                    | 69.5%   |
| 7/1/2009                       | 40,321                                 | 61,628  | 21,307                          | 65.4%                    | 22,382                    | 95.2%   |
| 7/1/2008                       | 41,564                                 | 51,388  | 9,824                           | 80.9%                    | 20,285                    | 48.4%   |
| 7/1/2007                       | 40,350                                 | 40,786  | 436                             | 98.9%                    | 18,850                    | 2.3%  |
| 7/1/2006                       | 30,747                                 | 33,552  | 2,805                           | 91.6%                    | 15,870                    | 17.7%   |
| 7/1/2005                       | 25,297                                 | 26,050  | 753                             | 97.1%                    | 14,311                    | 5.3%  |
| 7/1/2004                       | 19,882                                 | 22,102  | 2,220                           | 90.0%                    | 13,233                    | 16.8%   |

**Solvency Test**

| Valuation<br>Date | Aggregate Accrued Liabilities For     |                                       |  | Reported<br>Assets | % of Accrued Liabilities Covered<br>by Reported Assets |           |          |
|-------------------|---------------------------------------|---------------------------------------|--|--------------------|--|-----------|----------|
|                   | (1)<br>Active Member<br>Contributions | (2)<br>Retirants and<br>Beneficiaries | (3)<br>Active Members<br>(Employer Financed<br>Portions) |                    | (1)  | (2)       | (3)      |
| 6/30/2013         | \$ 31,283,070                         | \$ 8,776,000                          | \$ 61,443,930  | \$ 96,092,000      | 100.0000%  | 100.0000% | 91.1936% |
| 6/30/2012         | 32,246,890                            | 7,702,000                             | 49,609,110   | 78,735,000         | 100.0000%  | 100.0000% | 78.1834% |
| 6/30/2011         | 30,712,110                            | 6,674,000                             | 41,649,890   | 70,756,000         | 100.0000%  | 100.0000% | 80.1200% |
| 6/30/2010         | 30,016,350                            | 6,695,000                             | 32,459,650   | 52,735,000         | 100.0000%  | 100.0000% | 49.3648% |
| 6/30/2009         | 28,706,730                            | 5,351,000                             | 27,570,270   | 40,321,000         | 100.0000%  | 100.0000% | 22.7175% |
| 6/30/2008         | 24,440,160                            | 4,449,000                             | 22,498,840   | 41,564,000         | 100.0000%  | 100.0000% | 56.3355% |
| 6/30/2007         | 25,036,800                            | 273,200                               | 13,017,200   | 40,350,000         | 100.0000%  | 100.0000% | 96.6506% |
| 6/30/2006         | 24,567,960                            | 2,178,000                             | 6,806,040  | 30,747,000         | 100.0000%  | 100.0000% | 78.6600% |
| 6/30/2005         | 21,276,000                            | 1,907,000                             | 2,867,000  | 25,297,000         | 100.0000%  | 100.0000% | 73.7356% |
| 6/30/2004         | 20,186,000                            | 1,916,000                             | 1,916,000  | 19,882,000         | 98.4940%   | 0.0000%   | 0.0000%  |

**ACTUARIAL SECTION**  
State Police Retirement System

**Schedule of Retirees and Beneficiaries Added and Removed**

| Fiscal Year Ended | Retirees Added |                   | Retirees Removed |                   | Retirees - Year End |                   | % Increase in Annual Allowances | Average Annual Allowance |
|-------------------|----------------|-------------------|------------------|-------------------|---------------------|-------------------|---------------------------------|--------------------------|
|                   | Number         | Annual Allowances | Number           | Annual Allowances | Number              | Annual Allowances |                                 |                          |
| 2013              | 2              | \$ 94,333         | (1)              | \$ 30,101         | 19                  | \$ 590,653        | 9.264%                          | \$ 31,087.00             |
| 2012              | 1              | 32,336            | -                | -                 | 18                  | 512,124           | 8.319%                          | 28,451.33                |
| 2011              | -              | -                 | -                | -                 | 17                  | 446,525           | 0.686%                          | 26,266.18                |
| 2010              | 4              | 176,822           | (1)              | 17,920            | 17                  | 443,482           | 0.909%                          | 26,087.18                |
| 2009              | 2              | 45,048            | -                | -                 | 14                  | 361,932           | 15.165%                         | 25,852.29                |
| 2008              | 4              | 101,750           | -                | -                 | 12                  | 269,376           | 8.147%                          | 22,448.00                |
| 2007              | 1              | 33,043            | -                | -                 | 8                   | 166,056           | 10.326%                         | 20,757.00                |
| 2006              | 1              | 17,383            | -                | -                 | 7                   | 131,700           | -0.286%                         | 18,814.29                |
| 2005              | -              | -                 | -                | -                 | 6                   | 113,210           | 0.984%                          | 18,868.33                |
| 2004              | 2              | 42,720            | -                | -                 | 6                   | 112,107           | 0.000%                          | 18,684.50                |

| Changes in Unfunded Actuarial Liability                    |               |
|--|---------------|
| Unfunded Actuarial Liability, June 30, 2012                | \$ 10,823,000 |
| Expected increase from amortization method                 | (399,000)     |
| Expected increase from contributions below actuarial rates | (391,000)     |
| Investment experience (smoothed)                           | (4,300,000)   |
| Liability experience (including transfers)                 | (322,000)     |
| Change in assumption                                       | -             |
| Unfunded Actuarial Liability, June 30, 2013                | \$ 5,411,000  |

**Schedule of Contributions**

The Schedule of Contributions is included in the Required Supplementary Information provided in the Financial Section of this Comprehensive Annual Financial Report.

**Plan Provisions**

A discussion of plan provisions is included in Note 2 to the financial statements included in the Financial Section.



State of West Virginia  
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Andrew Richardson  
David Stover  
C. Jeffrey Vallet

December 18, 2014

### Actuarial Review and Certification

This report presents the results of the annual Actuarial Valuation of the West Virginia Deputy Sheriff Retirement System (DSRS) as of July 1, 2013. The purposes of the Actuarial Valuation are to determine the actuarial liabilities for the Plan and to determine if the expected contributions will be sufficient to meet the Plan's long term funding policy.

As of the July 1, 2013 Actuarial Valuation date, the Actuarial Accrued Liability (AAL) attributable to past years of employment totals \$169,260,000. Trust Fund assets available to fund the AAL have a market value of \$135,756,000. The resulting Unfunded Actuarial Accrued Liability (UAAL) is \$33,504,000. The funded percentage is 80.2% on the valuation date.

The minimum funding policy for DSRS is to contribute no less than the annual Normal Cost plus the amount necessary to fund the UAAL by the end of FY2029. Amortization payments are calculated as a level percentage of expected total DSRS payroll plus level report fee deposits under West Virginia Code Section 7-14E-2. The required employer contribution under the funding policy for FY2014 is \$4,774,000. The Consolidated Public Retirement Board (CPRB) Board of Trustees continued the 13.0% employer contribution rate effective July 1, 2013. Total expected employer contributions at the current 13.0% of payroll contribution rate plus fee deposits of \$535,000 total \$6,399,000. The amount exceeds the amount necessary to meet the minimum funding policy by \$1,625,000. Preferred level dollar amortization applied to other WV State plans would require \$5,588,000.

The valuation reflects a continuation of the actuarial assumptions adopted as part of the July 1, 2012 Actuarial Valuation. The investment return rate of 12.82% provided an actuarial gain of about \$6,400,000 above the 7.5% assumed return rate. Fee contributions continued a slow slide resulting in average fees of \$536,000 over the last 5 years. The expected fee assumption was reduced to \$535,000 to reflect the experience in collections. Salary increases averaged 2.34%, lower than expected under the salary scale assumption.

In performing the valuation, we relied on employee data and asset information provided by the administrative staff of the West Virginia Consolidated Public Retirement Board (CPRB). In the case of employee data, each individual record was audited for reasonableness and internal consistency, although the validity of the information was not traced to source documents. With respect to plan assets, a general review for consistency with the information furnished from prior valuations was performed.

Certain tables presented in the Comprehensive Annual Financial Report are derived from the most recent valuations reported by the Board Actuary. The tables were prepared by the staff of the CPRB and examined by our internal actuarial staff. These tables include-

### Financial Section

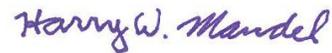
- Schedule of Employer Contributions

### Actuarial Section

- Summary of Actuarial Assumptions and Methods
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- Solvency Test
- Schedule of Retirees and Beneficiaries
- Schedule of Funding Progress
- Changes in Unfunded Actuarial Liability

The Board Actuary hereby certifies that this Actuarial Valuation Report was completed in compliance with actuarial standards applicable to the purposes of the actuarial valuation. The Board Actuary further certifies that the actuarial methods and assumptions applied in completing the actuarial valuation as reasonable and appropriate for the purposes stated herein.

Respectfully Submitted:



Harry W. Mandel  
Board Actuary  
Member, American Academy of Actuaries  
Member Society of Pension Actuaries  
Enrolled Actuary #14-2527

## **SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS**

### **Actuarial Valuation Date**

The actuarial valuation is completed as of the first day of the plan year, July 1, 2013. Actuarial calculations verify the adequacy of the expected funding for the fiscal year corresponding to the Plan year. The valuation is completed for the July 1 through June 30 plan year.

### **Actuarial Cost Method**

The valuation is completed applying the Entry Age Cost Method with Aggregate Normal Cost. The Actuarial Accrued Liability and the Normal Cost are determined on a level percentage of aggregate payroll funding basis.

Under the method, the Actuarial Accrued Liability is determined on an individual basis as a level percentage of payroll for each member. Inactive liabilities are valued on an accrued benefit basis.

The Total Normal Cost percentage of payroll requirement is calculated by dividing the excess of the Actuarial Present Value of Future benefits over the Actuarial Accrued Liability on an aggregate basis by the aggregate Present Value of Future Compensation for all active members. The Employer Normal Cost Percentage is calculated by subtracting the member contribution rate from the Total Normal Cost Percentage. The Employer Normal Cost is the Employer Normal Cost Percentage multiplied by the expected payroll for the valuation year.

### **Asset Valuation Method**

Trust Fund assets are valued at the reported market value of assets as of the actuarial valuation date. The market value includes accrued amounts as reflected in the annual accounting for the Trust Fund.

### **Amortization Method for Funding**

The funding target for DSRS is that the Unfunded Actuarial Accrued Liabilities are fully amortized by the end of fiscal year 2029. Amortization payments are calculated in the aggregate to remain a level percentage of future expected DSRS payroll determined on an open group projected payroll basis.

### **Interest Return and Discount Rate**

The interest rate assumption is a net return rate of 7.50% annually, net of investment and administrative expenses. The rate is applied to the interest return on Trust Fund assets as well as the discount rate on future expected benefit payments.

### **Healthy Life Mortality Rates**

Active members mortality is the RP2000 Non-Annuitant Mortality Table with mortality improvements projected to 2020 by Scale BB with separate rates for males and females. The projection year reflects additional law enforcement profession related mortality risks.

Retired members and their beneficiaries mortality is the RP2000 Healthy Annuitant Mortality Table with mortality improvements projected to 2025 by Scale BB with separate rates for males and females.

### **Disability Retirees Mortality Rates**

Member receiving disability retirement benefits mortality is the RP2000 Healthy Annuitant Mortality Table projected to 2025 by Scale BB and age set forward of 1 year, with separate rates for males and females.

**Salary Scale**

An annual salary increase rate of 5.0% in each of the first two years of service, decreasing to 4.5% for years three through five, 4.0% for years six through ten years and 3.5% for all years of service in excess of the first ten years.

**Payroll Growth Rate**

The total annual payroll for the active membership is assumed to increase at 3.5% per year for salary increase growth plus 1.5% per year for membership growth resulting in a total annual growth of 5.0%. This open group growth rate is applied in determining the percentage of payroll amortization requirements under the targeted DSRS funding of the UAAL by the end of Fiscal Year 2029. This growth rate includes projected newly hired deputy sheriffs and is an open group payroll projection rate.

**Withdrawal Rates**

Withdrawal rates predict termination of employment prior to unreduced retirement eligibility. A sample of withdrawal rates by age are:

| Age | Rate of Withdrawal |
|-----|--------------------|
| 30  | 0.0880             |
| 40  | 0.0528             |
| 50  | 0.0176             |

**Disability Rates**

Disability rates predict an active member becoming disabled prior to unreduced retirement eligibility. A sample of disability rates by age are:

| Age | Rate of Withdrawal |
|-----|--------------------|
| 30  | 0.0020             |
| 40  | 0.0060             |
| 50  | 0.0040             |

**Disability Rates - Type of Disability**

It is assumed that members eligible for unreduced retirement will elect retirement prior to becoming disabled. It is also assumed that retired members will not become disabled following retirement due to duty related causes incurred prior to retirement.

Disability retirement benefits vary by type of disability. Disability retirements are assumed to break down in the following types:

|                                   |     |
|-----------------------------------|-----|
| Duty Related Full Disability -    | 50% |
| Duty Related Partial Disability - | 25% |
| Non-Duty Full Disability -        | 20% |
| Non-Duty Partial Disability -     | 5%  |

### **Marriage Rate and Composition**

In determining the value of pre-retirement spousal death benefits, it is assumed that 90% of all members will be married at death. Males are assumed to be three years older than their female spouse.

### **Accrual of Future Service**

Employment as a deputy sheriff is considered a full time professional position. All active members are assumed to complete sufficient hours to accrue one year of service in each future year of employment.

### **Non-Contributory Service Credits for Military Service and Unused Leave at Retirement**

At Normal or Early retirement, a member is assumed to be granted 1.25 additional years of service for benefits due to allowable military service, plus 1.50 additional years for unused annual leave and/or unused sick leave for a total of 2.75 additional years.

### **Retirement Rates**

Members who become eligible for unreduced retirement benefits prior to age 65 are assumed to have a 20% probability of retiring in the year they first become eligible. For years following the year of first eligibility and prior to attaining age 65, an additional 20% are assumed to retire each year. At 65, 100% of remaining members are assumed to retire.

Members who become eligible for unreduced retirement benefits on or after the attainment of age 65 are assumed to retire in the year they first become eligible.

### **Plan Contributions**

Member and employer contributions are calculated as a percentage of total members' payroll. Amounts are deposited to the Trust Fund on a monthly basis. For interest calculation purposes, all amounts are treated as being deposited on an average of half way through the Plan year.

### **Fee Contributions under Section 7-14E-2**

A portion of fees generated by each sheriff department for reports are contributed to the DSRS Trust Fund. Fees are deposited throughout the year. For interest calculation purposes they are treated as being deposited on an average of half way through the Plan year.

Fees are estimated based upon historical amounts contributed to the Trust Fund. Total deposits for last year were \$520,000 with annual deposits during the last five years of \$536,000. Fee collections have demonstrated a slow downward trend. For the purposes of analyzing the adequacy of total funding for DSRS in meeting the DSRS funding target, an average annual fee income of \$535,000 has been assumed to continue in this and all future years.

**ACTUARIAL SECTION**  
Deputy Sheriff Retirement System

**Schedule of Active Member Valuation Data**

| Valuation Date | Number | Annual Payroll | Annual Average Pay | % Increase (Decrease)<br>in Average Pay |
|----------------|--------|----------------|--------------------|---|
| 6/30/2013      | 990    | \$ 45,106,000  | \$ 45,561.62       | 2.34454%                                |
| 6/30/2012      | 979    | 43,583,000     | 44,517.88          | 0.24561%                                |
| 6/30/2011      | 954    | 42,366,000     | 44,408.81          | 3.48983%                                |
| 6/30/2010      | 958    | 41,109,000     | 42,911.27          | 1.71203%                                |
| 6/30/2009      | 926    | 39,067,000     | 42,188.98          | 3.08447%                                |
| 6/30/2008      | 913    | 37,366,000     | 40,926.62          | 5.61326%                                |
| 6/30/2007      | 893    | 34,605,000     | 38,751.40          | 4.97924%                                |
| 6/30/2006      | 866    | 31,967,000     | 36,913.39          | 3.30200%                                |
| 6/30/2005      | 835    | 28,403,000     | 34,016.07          | -2.57688%                               |
| 6/30/2004      | 811    | 28,317,000     | 34,915.81          | 0.00000%                                |

**Schedule of Funding Progress (in thousands)**

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) Entry Age (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a Percentage of Covered Payroll ((b-a)/c) |
|--------------------------|-------------------------------|---|---------------------------|--------------------|---------------------|---|
| 7/1/2013                 | \$ 135,756                    | \$ 169,260                                      | \$ 33,504                 | 80.2%              | \$ 45,106           | 74.3%   |
| 7/1/2012                 | 117,526                       | 157,007   | 39,481                    | 74.9%              | 43,583              | 90.6%   |
| 7/1/2011                 | 113,574                       | 149,462   | 35,888                    | 76.0%              | 42,366              | 84.7%   |
| 7/1/2010                 | 92,692                        | 139,638   | 46,946                    | 66.4%              | 41,109              | 114.2%  |
| 7/1/2009                 | 78,220                        | 129,204   | 50,984                    | 60.5%              | 39,067              | 130.5%  |
| 7/1/2008                 | 89,852                        | 119,738   | 29,885                    | 75.0%              | 37,366              | 80.0%   |
| 7/1/2007                 | 93,983                        | 109,726   | 15,743                    | 85.7%              | 34,605              | 45.5%   |
| 7/1/2006                 | 77,899                        | 103,748   | 25,849                    | 75.1%              | 31,967              | 80.9%   |
| 7/1/2005                 | 68,914                        | 98,081  | 29,167                    | 70.3%              | 29,837              | 97.8%   |
| 7/1/2004                 | 59,715                        | 87,759  | 28,044                    | 68.0%              | 28,326              | 99.0%   |

**Solvency Test**

| Valuation Date | Aggregate Accrued Liabilities For |                             |   | Reported Assets | % of Accrued Liabilities Covered by Reported Assets |           |          |
|----------------|-----------------------------------|-----------------------------|---|-----------------|---|-----------|----------|
|                | (1)                               | (2)                         | (3)   |                 | (1)   | (2)       | (3)      |
|                | Active Member Contributions       | Retirants and Beneficiaries | Active Members (Employer Financed Portions) |                 |   |           |          |
| 6/30/2013      | \$ 30,881,010                     | \$ 77,437,000               | \$ 60,941,990                               | \$ 135,756,000  | 100.0000%   | 100.0000% | 45.0231% |
| 6/30/2012      | 30,037,300                        | 71,406,000                  | 55,563,700                                  | 117,526,000     | 100.0000%   | 100.0000% | 28.9446% |
| 6/30/2011      | 32,663,715                        | 64,464,000                  | 51,334,285                                  | 113,574,000     | 100.0000%   | 100.0000% | 30.0896% |
| 6/30/2010      | 31,989,920                        | 61,890,000                  | 45,758,080                                  | 92,692,000      | 100.0000%   | 98.7346%  | 0.0000%  |
| 6/30/2009      | 30,591,925                        | 59,534,000                  | 39,078,075                                  | 78,220,000      | 100.0000%   | 86.7897%  | 0.0000%  |
| 6/30/2008      | 27,768,140                        | 52,759,000                  | 39,213,860                                  | 89,852,000      | 100.0000%   | 100.0000% | 23.7872% |
| 6/30/2007      | 25,389,160                        | 44,387,000                  | 39,949,840                                  | 93,983,000      | 100.0000%   | 100.0000% | 60.5931% |
| 6/30/2006      | 23,229,565                        | 40,768,000                  | 39,750,435                                  | 77,899,000      | 100.0000%   | 100.0000% | 34.9718% |
| 6/30/2005      | 21,596,715                        | 34,816,000                  | 41,668,285                                  | 68,914,000      | 100.0000%   | 100.0000% | 30.0019% |
| 6/30/2004      | 20,734,050                        | 30,159,000                  | 36,865,950                                  | 59,715,000      | 100.0000%   | 100.0000% | 23.9298% |

**Schedule of Retirees and Beneficiaries Added and Removed**

| Fiscal Year Ended | Retirees Added |                   | Retirees Removed |                   | Retirees - Year End |                   | % Increase in Annual Allowances | Average Annual Allowance |
|-------------------|----------------|-------------------|------------------|-------------------|---------------------|-------------------|---------------------------------|--------------------------|
|                   | Number         | Annual Allowances | Number           | Annual Allowances | Number              | Annual Allowances |                                 |                          |
| 2013              | 28             | \$ 784,788        | (12)             | \$ 204,814        | 299                 | \$ 6,616,848      | 1.932%                          | \$ 22,129.93             |
| 2012              | 11             | 308,172           | -                | -                 | 283                 | 6,144,074         | 0.457%                          | 21,710.51                |
| 2011              | 15             | 375,268           | (3)              | 83,944            | 272                 | 5,878,382         | -0.097%                         | 21,611.70                |
| 2010              | 13             | 292,812           | (1)              | 17,194            | 260                 | 5,624,509         | 1.289%                          | 21,632.73                |
| 2009              | 32             | 843,276           | (11)             | 264,193           | 248                 | 5,296,624         | 2.072%                          | 21,357.35                |
| 2008              | 33             | 793,778           | (3)              | 47,990            | 227                 | 4,749,716         | 1.017%                          | 20,923.86                |
| 2007              | 15             | 429,466           | (1)              | 26,338            | 197                 | 4,080,498         | 1.123%                          | 20,713.19                |
| 2006              | 21             | 459,784           | -                | -                 | 183                 | 3,748,401         | 3.633%                          | 20,483.07                |
| 2005              | 21             | 526,589           | (4)              | 67,803            | 162                 | 3,201,942         | 4.101%                          | 19,765.07                |
| 2004              | 22             | 434,541           | (4)              | 73,712            | 145                 | 2,753,044         | 0.000%                          | 18,986.51                |

| Changes in Unfunded Actuarial Liability                    |               |
|--|---------------|
| Unfunded Actuarial Liability, June 30, 2012                | \$ 39,481,000 |
| Expected increase from amortization method                 | (83,000)      |
| Expected increase from contributions below actuarial rates | (891,000)     |
| Investment experience (smoothed)                           | (6,400,000)   |
| Liability experience (including transfers)                 | 1,397,000     |
| Change in assumption                                       | -             |
| Unfunded Actuarial Liability, June 30, 2013                | \$ 33,504,000 |

**Schedule of Contributions**

The Schedule of Contributions is included in the Required Supplementary Information provided in the Financial Section of this Comprehensive Annual Financial Report.

**Plan Provisions**

A discussion of plan provisions is included in Note 2 to the financial statements included in the Financial Section.

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State of West Virginia  
**Consolidated Public Retirement Board**

Board Members  
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Auditor Glen B. Gainer III, Vice Chairman  
Treasurer John D. Perdue  
Acting Cabinet Secretary Jason Pizatella

Executive Director  
Jeffrey E. Fleck

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Board Members  
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Andy Bird  
Joseph Bunn  
Captain Michael G. Corsaro  
Angela Crank  
Joe Lynch  
D. Todd Murray  
Andrew Richardson  
David Stover  
C. Jeffrey Vallet

December 18, 2014

### Actuarial Review and Certification

This Report presents the results of the annual Actuarial Valuation of the West Virginia Judges Retirement System (JRS) as of July 1, 2013. The purposes of the Actuarial Valuation are to determine the actuarial liabilities for the Plan and to determine if the expected contributions will be sufficient to meet or exceed the Plan's long term funding policy.

Some key highlights are:

- The valuation assumptions for mortality, salary scale, and cost-of-living adjustment were changed to reflect recommendations made in the most recent experience study. The net effect of these assumption changes was to increase the unfunded liability of the System by approximately \$4.0 million as of July 1, 2013.
- The member contribution rate decreased from 10.5% of salary to 7.0% of salary effective July 1, 2013.
- The valuation indicates that the recommended State contribution for Fiscal Year 2015, projected from the FY2014 valuation results, is \$2,845,000.
- The yield on investments for the year ending June 30, 2013 for valuation purposes (assuming mid-year transactions) was 13.03%, which is higher than the valuation assumed return of 7.50%. The yield on a time-weighted basis (excluding administrative expense) determined by the Investment Management Board was 13.00%

This report contains supporting data and background information pertaining to the development of costs and related liabilities of the plan. The valuation is based on membership data as of June 30, 2013 maintained by the West Virginia Consolidated Public Retirement Board (CPRB), and financial information received from the West Virginia Investment Management Board.

In performing the valuation, we relied on employee data and asset information provided by the administrative staff of the CPRB. In the case of employee data, each individual record was audited for reasonableness and internal consistency, although the validity of the information was not traced to source documents. With respect to plan assets, a general review for consistency with the information furnished from prior valuations was performed.

Certain tables presented in the Comprehensive Annual Financial Report are derived from the most recent valuations reported by Buck Consultants. The tables were prepared by the staff of the CPRB and examined by our internal actuarial staff. These tables include-

Financial Section

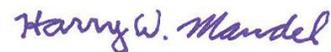
- Schedule of Employer Contributions

Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Solvency Test
- Schedule of Retirees and Beneficiaries
- Schedule of Funding Progress
- Changes in Unfunded Actuarial Liability

The Actuary hereby certifies that this Actuarial Valuation Report was completed in compliance with actuarial standards applicable to the purposes of the Actuarial Valuation. The Actuary further certifies that the actuarial methods and assumptions applied in completing the Actuarial Valuation as reasonable and appropriate for the purposes stated herein.

Respectfully Submitted:



Harry W. Mandel  
Board Actuary  
Member, American Academy of Actuaries  
Member Society of Pension Actuaries  
Enrolled Actuary #14-2527

## **SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS**

**Valuation Date:** July 1, 2013

### **Funding Method and Basis for Assumptions**

The valuation is prepared under the Entry Age Normal Cost Method with individually computed accrued liabilities. The Normal Cost is computed in aggregate. Entry is based on date of hire. Active liabilities include amounts calculated for judges currently participating in the Public Employees' Retirement System (PERS) who may in the future transfer into the Judges' Retirement System (JRS) with an adjustment for the anticipated transfer of required member contributions.

Experience studies are performed at least once in every five-year period. This valuation was prepared on the basis of assumptions that were recommended to and adopted by the Board on the basis of an experience study covering the period from July 1, 2007, to June 30, 2012. These assumptions will remain in effect for valuation purposes until such time as the Board adopts revised assumptions.

### **Interest Rate and Expenses**

The valuation interest assumption is 7.50% annually, with no loading for plan expenses.

### **Salary Scales and Normal Cost**

4.5% annually from the current valuation date. Increases are assumed to be delayed, occurring every few years. Missed increases are assumed to be made up at the CPI-U inflation rate for such missed year not less than 0%, but not more than the 3.0% inflation rate assumption. The valuation year salary scale increase of 4.25% is adjusted to include the missed inflation increases at the end of the valuation year. Retiree COLA increases are adjusted consistent with the salary scale adjustments since they are tied to current salaries. The most recent pay increase occurred at July 1, 2011.

### **Automatic Cost-of-Living Increases to Pensions**

Pensions for judges appointed or elected prior to July 2, 2005 are assumed to increase at the same time as active salaries increase, and by the same percentage.

### **Post-Retirement Mortality**

Post-retirement mortality tables are as follows:

Healthy: RP-2000 Healthy Annuitants, projected to 2025 using Scale BB

Disabled: RP-2000 Healthy Annuitants, projected to 2025 using Scale BB, set forward 1 year

### **Withdrawal from Service**

No withdrawal is assumed due to the small number of active members.

### **Retirement Rates and Service**

For those eligible to retire prior to age 65, 5% are assumed to retire each year through age 64 with 100% retiring at age 65. For those first eligible at age 65 or later, 100% are assumed to retire when they become eligible.

In determining eligibility, actual military service was provided both for judges participating in JRS and judges currently in PERS. No creditable prosecuting attorney service is assumed.

### **Transfers from PERS**

It is assumed that all judges in PERS who earn sufficient service to vest under JRS will join JRS. Liabilities for potential transfers from PERS are included in this valuation and are calculated as if the judge had always been a member of JRS. Accumulated member contributions under PERS are treated as an offset to plan liabilities for valuation purposes. The shortfall of PERS accumulated member contributions versus the amount they would have contributed under the plan had they always been a participant under JRS is recognized in the development of the normal cost.

### **Family Composition**

All judges are assumed to be married. Where spousal data is not available, it is assumed that male judges are five years older than their spouses and female judges are five years younger than their spouses. Surviving children's benefits were not explicitly valued.

### **Asset Valuation Method**

Assets for valuation purposes are included at Market Value.

### **Plan Contributions**

Plan contributions, both employee and employer, are assumed to be paid in the middle of the year.

**ACTUARIAL SECTION**  
Judges' Retirement System

**Schedule of Active Member Valuation Data**

| Valuation Date | Number | Annual Payroll | Annual Average Pay | % Increase (Decrease)<br>in Average Pay |
|----------------|--------|----------------|--------------------|---|
| 6/30/2013      | 50     | \$ 8,870,000   | \$ 177,400.00      | 0.11287%                                |
| 6/30/2012      | 50     | 8,860,000      | 177,200.00         | 0.00000%                                |
| 6/30/2011      | 50     | 8,860,000      | 177,200.00         | 13.75485%                               |
| 6/30/2010      | 53     | 8,256,000      | 155,773.58         | 3.33874%                                |
| 6/30/2009      | 54     | 8,140,000      | 150,740.74         | 9.48365%                                |
| 6/30/2008      | 60     | 8,261,000      | 137,683.33         | 0.00000%                                |
| 6/30/2007      | 60     | 8,261,000      | 137,683.33         | 6.31918%                                |
| 6/30/2006      | 62     | 8,029,000      | 129,500.00         | -6.19398%                               |
| 6/30/2005      | 59     | 8,145,000      | 138,050.85         | 28.77470%                               |
| 6/30/2004      | 59     | 6,325,000      | 107,203.39         | -                                       |

**Schedule of Funding Progress (in thousands)**

| Actuarial<br>Valuation<br>Date | Actuarial<br>Value<br>of Assets<br>(a) | Actuarial<br>Accrued<br>Liability (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL (UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as a<br>Percentage<br>of Covered<br>Payroll<br>((b-a)/c) |
|--------------------------------|--|---|---------------------------------|--------------------------|---------------------------|---|
| 7/1/2013                       | \$ 141,476                             | \$ 105,739  | \$ (35,737)                     | 133.8%                   | \$ 8,870                  | 0.0%  |
| 7/1/2012                       | 126,265                                | 98,115  | (28,150)                        | 128.7%                   | 8,860                     | 0.0%  |
| 7/1/2011                       | 124,583                                | 95,591  | (28,992)                        | 130.3%                   | 8,860                     | 0.0%  |
| 7/1/2010                       | 102,814                                | 96,008  | (6,806)                         | 107.1%                   | 8,256                     | 0.0%  |
| 7/1/2009                       | 88,310                                 | 93,185  | 4,875                           | 94.8%                    | 8,140                     | 59.9%   |
| 7/1/2008                       | 100,186                                | 97,965  | (2,221)                         | 102.3%                   | 8,261                     | 0.0%  |
| 7/1/2007                       | 104,127                                | 96,018  | (8,109)                         | 108.4%                   | 8,261                     | 0.0%  |
| 7/1/2006                       | 85,932                                 | 91,820  | 5,888                           | 93.6%                    | 8,029                     | 73.3%   |
| 7/1/2005                       | 74,757                                 | 90,528  | 15,771                          | 82.6%                    | 8,145                     | 193.6%  |
| 7/1/2004                       | 63,559                                 | 85,778  | 22,219                          | 74.1%                    | 6,325                     | 351.3%  |

**Solvency Test**

| Valuation<br>Date | Aggregate Accrued Liabilities For |                                |   | Reported<br>Assets | % of Accrued Liabilities Covered<br>by Reported Assets |           |           |
|-------------------|-----------------------------------|--------------------------------|---|--------------------|--|-----------|-----------|
|                   | (1)                               | (2)                            | (3)   |                    | (1)  | (2)       | (3)       |
|                   | Active Member<br>Contributions    | Retirants and<br>Beneficiaries | Active Members<br>(Employer Financed<br>Portions) |                    |  |           |           |
| 6/30/2013         | \$ 4,534,056                      | \$52,408,000                   | \$ 48,796,944                                     | \$ 141,476,000     | 100.0000%  | 100.0000% | 100.0000% |
| 6/30/2012         | 6,729,965                         | 48,319,000                     | 43,066,035  | 126,265,000        | 100.0000%  | 100.0000% | 100.0000% |
| 6/30/2011         | 6,908,063                         | 48,143,000                     | 40,539,937  | 124,583,000        | 100.0000%  | 100.0000% | 100.0000% |
| 6/30/2010         | 7,170,009                         | 48,116,000                     | 40,721,991  | 102,814,000        | 100.0000%  | 100.0000% | 100.0000% |
| 6/30/2009         | 7,023,660                         | 49,555,000                     | 26,606,340  | 88,310,000         | 100.0000%  | 100.0000% | 86.6826%  |
| 6/30/2008         | 5,999,595                         | 41,887,000                     | 50,078,405  | 100,186,000        | 100.0000%  | 100.0000% | 100.0000% |
| 6/30/2007         | 6,448,155                         | 44,809,000                     | 44,760,845  | 104,127,000        | 100.0000%  | 100.0000% | 100.0000% |
| 6/30/2006         | 6,484,380                         | 41,407,000                     | 43,928,620  | 85,932,000         | 100.0000%  | 100.0000% | 86.5964%  |
| 6/30/2005         | 7,874,414                         | 41,017,000                     | 41,636,526  | 74,757,000         | 100.0000%  | 100.0000% | 100.0000% |
| 6/30/2004         | 6,924,979                         | 43,340,000                     | 35,513,021  | 63,559,000         | 100.0000%  | 100.0000% | 37.4342%  |

**Schedule of Retirees and Beneficiaries Added and Removed**

| Fiscal<br>Year<br>Ended | Retirees Added |                      | Retirees Removed |                      | Retirees - Year End |                      | % Increase<br>in Annual<br>Allowances | Average<br>Annual<br>Allowance |
|-------------------------|----------------|----------------------|------------------|----------------------|---------------------|----------------------|---------------------------------------|--------------------------------|
|                         | Number         | Annual<br>Allowances | Number           | Annual<br>Allowances | Number              | Annual<br>Allowances |                                       |                                |
| 2013                    | 2              | \$ 189,000           | -                | \$ -                 | 57                  | \$ 4,461,705         | 0.759%                                | \$ 78,275.53                   |
| 2012                    | -              | -                    | (1)              | 87,199               | 55                  | 4,272,705            | 1.818%                                | 77,685.55                      |
| 2011                    | -              | -                    | -                | -                    | 56                  | 4,272,705            | 6.932%                                | 76,298.30                      |
| 2010                    | 1              | 72,533               | (3)              | 196,813              | 56                  | 3,995,663            | -0.646%                               | 71,351.13                      |
| 2009                    | 9              | 774,607              | -                | -                    | 58                  | 4,165,281            | 2.417%                                | 71,815.19                      |
| 2008                    | -              | -                    | (4)              | 283,040              | 49                  | 3,435,891            | -1.026%                               | 70,120.22                      |
| 2007                    | -              | -                    | -                | -                    | 53                  | 3,754,892            | 1.206%                                | 70,841.02                      |
| 2006                    | -              | -                    | -                | -                    | 53                  | 3,710,165            | 0.502%                                | 70,003.11                      |
| 2005                    | -              | -                    | (4)              | 207,000              | 54                  | 3,761,290            | 26.550%                               | 69,653.52                      |
| 2004                    | 1              | 55,040               | -                | -                    | 58                  | 3,192,335            | 0.000%                                | 55,040.26                      |

**Changes in Unfunded Actuarial Liability**

|  |                        |
|--|------------------------|
| Funded in excess of Actuarial Liability, June 30, 2012     | <u>\$ (28,150,000)</u> |
| Expected increase from amortization method                 | (2,111,000)            |
| Expected increase from contributions below actuarial rates | (2,000)                |
| Investment experience (smoothed)                           | (7,000,000)            |
| Liability experience (including transfers)                 | (2,517,000)            |
| Change in assumption                                       | 4,043,000              |
| Funded in excess of Actuarial Liability, June 30, 2013     | <u>\$ (35,737,000)</u> |

**Schedule of Contributions**

The Schedule of Contributions is included in the Required Supplementary Information provided in the Financial Section of this Comprehensive Annual Financial Report.

**Plan Provisions**

A discussion of plan provisions is included in Note 2 to the financial statements included in the Financial Section.



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Andy Bird  
Joseph Bunn  
Captain Michael G. Corsaro  
Angela Crank  
Joe Lynch  
D. Todd Murray  
Andrew Richardson  
David Stover  
C. Jeffrey Vallet

December 18, 2014

### Actuarial Review and Certification

This Report presents the results of the annual Actuarial Valuation of the West Virginia Emergency Medical Services Retirement System (EMSRS) as of July 1, 2013. The purposes of the Actuarial Valuation are to determine the actuarial liabilities for the Plan and to determine if the expected contributions will be sufficient to meet or exceed the Plan's long term funding policy.

The July 1, 2013 Actuarial Valuation incorporates changes in actuarial assumptions approved by the Board as part of the 2013 Actuarial Assumption Review of EMSRS. The changes were estimated to increase the Actuarial Accrued Liabilities by about 5%, or \$2.2 million, due primarily to change in the mortality assumption to meet actuarial standards.

The Actuarial Accrued Liability (AAL) attributable to past years of employment totaled \$50,950,000. Assets in the EMSRS trust fund had a market value of \$42,903,000. The Unfunded Actuarial Accrued Liability (UAAL) was \$8,047,000. The resulting funded level for EMSRS is 84.2%. It is noted that the reduction in UAAL includes actuarial gains on investments due to an actuarial asset return rate of 12.43%, 4.93% above our 7.5% assumed rate.

The employer funding policy for EMSRS is to contribute at least the employer Normal Cost plus the amount necessary to fund the UAAL over 25 years from July 1, 2013. Funding payments are calculated as level dollar amortization payments. The actuarially required contribution (ARC) under the funding policy for FY2014 is \$1,561,000. The total expected employer contribution at the current 10.5% of payroll contribution rate is \$2,368,000. Expected EMSRS employer contributions exceed the ARC requirement by \$807,000. A change in the employer contribution rate is not recommended since the current 10.5% contribution rate is set as a long term rate. Additionally the current rate helps maintain improvements in the Plan's funded percentage.

In performing the valuation, we relied on employee data and asset information provided by the administrative staff of the West Virginia Consolidated Public Retirement Board (CPRB). In the case of employee data, each individual record was audited for reasonableness and internal consistency, although the validity of the information was not traced to source documents. With respect to plan assets, a general review for consistency with the information furnished from prior valuations was performed.

Certain tables presented in the Comprehensive Annual Financial Report are derived from the most recent valuations reported by the Board Actuary. The tables were prepared by the staff of the CPRB and examined by our internal actuarial staff. These tables include-

### Financial Section

- Schedule of Employer Contributions

### Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Solvency Test
- Schedule of Retirees and Beneficiaries
- Schedule of Funding Progress
- Changes in Unfunded Actuarial Liability

The Actuary hereby certifies that this Actuarial Valuation Report was completed in compliance with actuarial standards applicable to the purposes of the Actuarial Valuation. The Actuary further certifies that the actuarial methods and assumptions applied in completing the Actuarial Valuation as reasonable and appropriate for the purposes stated herein.

Respectfully Submitted:



Harry W. Mandel  
Board Actuary  
Member, American Academy of Actuaries  
Member Society of Pension Actuaries  
Enrolled Actuary #14-2527

## **SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS**

### **Actuarial Valuation Date**

The initial actuarial valuation was completed on the effective date of the plan, January 1, 2008. Subsequent fiscal year valuations are completed each July 1 for the July 1 through June 30 year. This valuation was completed July 1, 2013.

### **Actuarial Cost Method**

The valuation is completed applying the Entry Age Normal Cost Method with Aggregate Normal Cost determination. The Actuarial Accrued Liability and the Normal Cost are determined on a level percentage of aggregate expected future payroll basis.

The Actuarial Accrued Liability is determined on an individual basis as a level percentage of expected payroll for each member. Inactive liabilities are valued on an accrued benefit basis.

The Total Normal Cost percentage of payroll requirement is calculated by dividing the excess of the Actuarial Present Value of Future benefits over the Actuarial Accrued Liability on an aggregate basis by the aggregate Present Value of Future Compensation for all active members. The Employer Normal Cost Percentage is calculated by subtracting the member contribution rate from the Total Normal Cost Percentage. The Employer Normal Cost is the Employer Normal Cost Percentage multiplied by the expected payroll for the valuation year.

### **Asset Valuation Method**

Trust Fund assets are valued at the reported market value of assets reported by the Investment Management Board for the Trust Fund as of the actuarial valuation date. The market value includes accrued amounts as reflected in the annual accounting for the Trust Fund and included in the CPRB annual report.

### **Amortization Method for Funding**

The funding target for EMSRS is an Actuarial Required Contribution equal to the Employer Normal Cost plus amortization of the UAAL. The initial UAAL and subsequent experience through June 30, 2028 is to be fully amortized over 30 years from July 1, 2008 through June 30, 2038. Amortization payments are calculated as a level dollar amount each year over the remainder of the initial 30 year period. Experience on and after June 30, 2028 is amortized as a separate amortization item over 10 years from its determination.

Contributions in excess of the ARC, if any, shall be applied to improve the funded percentage of EMSRS until an actuarially acceptable funding level has been attained.

### **Interest Return and Discount Rate**

The interest rate assumption is a net return rate of 7.50% annually, net of investment and administrative expenses. The rate is applied for both the net investment return expected to be earned to the interest return on Trust Fund assets and the discount rate on expected future benefit payments.

### **Healthy Life Mortality Rates (Modified July 1, 2013)**

Active mortality is the RP2000 Non-Annuitant Table projected to 2020 by Scale BB. Inactive, regular retiree and beneficiary members' mortality is the RP2000 Healthy Annuitant Mortality Table projected to 2025 by scale BB with separate rates for males and females.

**Disability Retirees Mortality Rates (Modified July 1, 2013)**

For members receiving disability retirement benefits the RP2000 Healthy Annuitants Mortality Table projected to 2025 by scale BB with a set forward of 1 year and with separate rates for males and females.

**Salary Scale (Modified July 1, 2013)**

Annual salary increases are assumed by age on a unisex basis. Sample annual salary increases are as follows:

| Age      | Rate   |
|----------|--------|
| Under 31 | 1.0475 |
| 40       | 1.0400 |
| 50       | 1.0375 |
| 60       | 1.0350 |

**Payroll Growth Rate**

Total annual payroll for the active membership is assumed to increase at 3.0% annually. This growth rate includes projected new hires and is an open group payroll projection rate. This open group growth rate is applied in certain projections contained in the actuarial valuation report tables. The rate does not impact EMSRS liabilities nor the ARC.

**Withdrawal Rates (Modified July 1, 2013)**

Withdrawal rates predict termination of employment prior to unreduced retirement eligibility. A sample of unisex rates by age are:

| Age | Rate   |
|-----|--------|
| 30  | 0.0950 |
| 40  | 0.0650 |
| 50  | 0.0400 |
| 55  | 0.0000 |

**Disability Rates (Modified July 1, 2013)**

Disability rates predict an active member becoming disabled prior to unreduced retirement eligibility. A sample of disability rates by age and sex are:

| Age | Males   | Females |
|-----|---------|---------|
| 30  | 0.00030 | 0.00060 |
| 40  | 0.00113 | 0.00113 |
| 50  | 0.00488 | 0.00225 |
| 51+ | 0.00525 | 0.00285 |

It is assumed that members eligible for unreduced retirement will elect retirement prior to becoming disabled. It is also assumed that retired members will not become disabled following retirement due to duty related causes incurred prior to retirement.

Disability retirement benefits vary by duty and non-duty causes. Disability retirements are assumed to occur in the following percentages:

|                           |     |
|---------------------------|-----|
| Duty Related Disability - | 50% |
| Non-Duty Disability -     | 50% |

### **Marriage Rate and Composition**

In determining the value of pre-retirement spousal death benefits, it is assumed that 80% of all members will be married at death. Males are assumed to be three years older than their female spouse.

### **Cause of Death for Death Benefits**

Deaths from active employment are assumed to be from duty related causes 25% of the time with non-duty causes accounting for the remaining 75%.

### **Accrual of Future Service**

EMSRS employment is considered a full time professional position. All active members are assumed to complete sufficient hours to accrue one year of service in each future year of employment.

### **Non-Contributory Service Credits for Military Service and Unused Leave at Retirement**

At Normal or Early retirement, members are assumed to convert a part of their unused sick leave to additional retirement service credits. In addition, allowable military service credits are expected to be claimed for qualifying members. It is assumed that male members will be credited with an additional 7% of their contributory service credits and female members will be credited with an additional 1.75% of their contributory service credits.

### **Retirement Rates**

Members who become eligible for unreduced retirement benefits prior to age 65 are assumed to have a 30% probability of retiring in the year they first become eligible. For years following the year of first eligibility and prior to attaining age 65, an additional 20% are assumed to retire each year. At 65, 100% of remaining members are assumed to retire.

Members who first become eligible for unreduced retirement benefits on or after the attainment of age 65 are assumed to retire in the year they first become eligible.

### **Plan Contributions**

Member and employer contributions are calculated as a percentage of total members' payroll. Amounts are deposited to the Trust Fund on a monthly basis. For interest calculation purposes, all amounts are treated as being deposited on an average of half way through the Plan year.

**ACTUARIAL SECTION**  
Emergency Medical Services Retirement System

The EMSRS was established January 2008.

**Schedule of Active Member Valuation Data**

| Valuation Date | Number | Annual Payroll | Annual Average Pay | % Increase (Decrease)<br>in Average Pay |
|----------------|--------|----------------|--------------------|---|
| 6/30/2013      | 523    | \$ 22,548,000  | \$ 43,112.81       | 0.16333%                                |
| 6/30/2012      | 494    | 21,263,000     | 43,042.51          | 2.40014%                                |
| 6/30/2011      | 535    | 22,488,000     | 42,033.64          | 3.30336%                                |
| 6/30/2010      | 525    | 21,362,000     | 40,689.52          | 2.23398%                                |
| 6/30/2009      | 511    | 20,338,000     | 39,800.39          | 7.87553%                                |
| 6/30/2008      | 475    | 17,525,000     | 36,894.74          | 100.00%                                 |

**Schedule of Funding Progress (in thousands)**

| Actuarial<br>Valuation<br>Date | Actuarial<br>Value<br>of Assets<br>(a) | Actuarial<br>Accrued<br>Liability (AAL)<br>Entry Age<br>(b) | Unfunded<br>AAL (UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as a<br>Percentage<br>of Covered<br>Payroll<br>((b-a)/c) |
|--------------------------------|--|---|---------------------------------|--------------------------|---------------------------|---|
| 7/1/2013                       | \$ 42,903                              | \$ 50,950   | \$ 8,047                        | 84.2%                    | \$ 22,548                 | 35.7%   |
| 7/1/2012                       | 35,483                                 | 44,148  | 8,665                           | 80.4%                    | 21,263                    | 40.8%   |
| 7/1/2011                       | 32,366                                 | 39,225  | 6,859                           | 82.5%                    | 22,488                    | 30.5%   |
| 7/1/2010                       | 23,662                                 | 31,503  | 7,841                           | 75.1%                    | 21,362                    | 36.7%   |
| 7/1/2009                       | 17,173                                 | 29,969  | 9,796                           | 63.7%                    | 20,338                    | 48.2%   |
| 7/1/2008                       | 15,675                                 | 21,207  | 5,532                           | 73.9%                    | 17,525                    | 31.6%   |
| 1/1/2008                       | 14,323                                 | 19,492  | 5,169                           | 73.5%                    | 17,181                    | 30.1%   |

**Solvency Test**

| Valuation<br>Date | Aggregate Accrued Liabilities For |                                |   | Reported<br>Assets | % of Accrued Liabilities Covered<br>by Reported Assets |           |          |
|-------------------|-----------------------------------|--------------------------------|---|--------------------|--|-----------|----------|
|                   | (1)                               | (2)                            | (3)   |                    | (1)  | (2)       | (3)      |
|                   | Active Member<br>Contributions    | Retirants and<br>Beneficiaries | Active Members<br>(Employer Financed<br>Portions) |                    |  |           |          |
| 6/30/2013         | \$ 15,015,760                     | \$ 15,401,000                  | \$ 20,533,240                                     | \$ 42,903,000      | 100.0000%  | 100.0000% | 60.8099% |
| 6/30/2012         | 13,417,080                        | 10,034,000                     | 20,696,920  | 35,483,000         | 100.0000%  | 100.0000% | 58.1339% |
| 6/30/2011         | 14,357,945                        | 6,666,000                      | 18,201,055  | 32,366,000         | 100.0000%  | 100.0000% | 62.3154% |
| 6/30/2010         | 13,615,555                        | 1,341,000                      | 16,546,445  | 23,662,000         | 100.0000%  | 100.0000% | 52.6122% |
| 6/30/2009         | 13,025,995                        | 1,413,000                      | 12,530,005  | 17,173,000         | 100.0000%  | 100.0000% | 21.8197% |
| 6/30/2008         | 10,803,500                        | 143,000                        | 10,260,500  | 15,675,000         | 100.0000%  | 100.0000% | 46.0845% |

**Schedule of Retirees and Beneficiaries Added and Removed**

| Fiscal<br>Year<br>Ended | Retirees Added |                      | Retirees Removed |                      | Retirees - Year End |                      | % Increase<br>in Annual<br>Allowances | Average<br>Annual<br>Allowance |
|-------------------------|----------------|----------------------|------------------|----------------------|---------------------|----------------------|---------------------------------------|--------------------------------|
|                         | Number         | Annual<br>Allowances | Number           | Annual<br>Allowances | Number              | Annual<br>Allowances |                                       |                                |
| 2013                    | 11             | \$ 304,129           | -                | \$ -                 | 39                  | \$ 1,174,004         | 2.876%                                | \$30,102.67                    |
| 2012                    | 11             | 232,740              | -                | -                    | 28                  | 819,312              | -6.538%                               | 29,261.14                      |
| 2011                    | 17             | 433,704              | -                | -                    | 17                  | 532,236              | 100.000%                              | 31,308.00                      |
| 2010                    | -              | -                    | -                | -                    | -                   | -                    | 0.000%                                | -                              |
| 2009                    | -              | -                    | -                | -                    | -                   | -                    | 0.000%                                | -                              |
| 2008                    | -              | -                    | -                | -                    | -                   | -                    | 0.000%                                | -                              |

| Changes in Unfunded Actuarial Liability                    |                     |
|--|---------------------|
| Unfunded Actuarial Liability, June 30, 2012                | <u>\$ 8,665,000</u> |
| Expected increase from amortization method                 | (90,000)            |
| Expected increase from contributions below actuarial rates | (947,000)           |
| Investment experience (smoothed)                           | (1,800,000)         |
| Liability experience (including transfers)                 | (16,000)            |
| Change in assumption                                       | 2,235,000           |
| Unfunded Actuarial Liability, June 30, 2013                | <u>\$ 8,047,000</u> |

**Schedule of Contributions**

The Schedule of Contributions is included in the Required Supplementary Information provided in the Financial Section of this Comprehensive Annual Financial Report.

**Plan Provisions**

A discussion of plan provisions is included in Note 2 to the financial statements included in the Financial Section.

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State of West Virginia  
**Consolidated Public Retirement Board**

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Treasurer John D. Perdue  
Acting Cabinet Secretary Jason Pizatella

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David Stover  
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December 18, 2014

### Actuarial Review and Certification

This Report presents the results of the annual Actuarial Valuation of the West Virginia Municipal Police and Fire Retirement System (MPFRS) as of July 1, 2013. The purposes of the Actuarial Valuation are to determine the actuarial liabilities for the Plan and to determine if the expected contributions will be sufficient to meet or exceed the Plan's long term funding policy.

MPFRS was first effective January 1, 2010. Six members joined the plan during April of 2010, resulting in limited experience being reflected in the July 1, 2010 Actuarial Valuation. For the July 1, 2011, 2012, and 2013 Actuarial Valuations the number of active members on each valuation date increased to 9, 27, and 48, respectively.

The July 1, 2013 Actuarial Valuation reflects an actuarial assumption review which modified appropriate valuation assumptions. The assumption changes increased the Actuarial Accrued Liabilities by about 15%, due largely to a change in Mortality. The Actuarial Accrued Liability (AAL) attributable to past years of employment totaled \$264,000. Assets in the MPFRS trust fund had a market value of \$529,000. The Actuarial Accrued Liability remains fully funded since the July 1, 2011 valuation date. The funded percentage is 200.4%, recognizing \$265,000 of pre-funding.

The funding policy for MPFRS is to contribute at least the employer Normal Cost plus the amount necessary to fund the UAAL over 30 years from July 1, 2010. Funding payments are calculated as level dollar amortization payments. The actuarially required contribution (ARC) under the funding policy for FY2014 is \$88,000. The total expected employer contribution at the current 8.5% of payroll contribution rate is \$156,000. Benefits are not payable prior to January 1, 2017, extended from January 1, 2013. Membership must reach 100 by January 1, 2017, extended from 2014 under statute. If not met, the Plan will be merged into the Emergency Medical Services Retirement System.

In performing the valuation, we relied on employee data and asset information provided by the administrative staff of the West Virginia Consolidated Public Retirement Board (CPRB). In the case of employee data, each individual record was audited for reasonableness and internal consistency, although the validity of the information was not traced to source documents. With respect to plan assets, a general review for consistency with the information furnished from prior valuations was performed.

Certain tables presented in the Comprehensive Annual Financial Report are derived from the most recent valuations reported by the Board Actuary. The tables were prepared by the staff of the CPRB and examined by our internal actuarial staff. These tables include-

### Financial Section

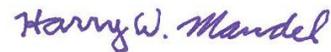
- Schedule of Employer Contributions

### Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Solvency Test
- Schedule of Retirees and Beneficiaries
- Schedule of Funding Progress
- Changes in Unfunded Actuarial Liability

The Actuary hereby certifies that this Actuarial Valuation Report was completed in compliance with actuarial standards applicable to the purposes of the Actuarial Valuation. The Actuary further certifies that the actuarial methods and assumptions applied in completing the Actuarial Valuation as reasonable and appropriate for the purposes stated herein.

Respectfully Submitted:



Harry W. Mandel  
Board Actuary  
Member, American Academy of Actuaries  
Member Society of Pension Actuaries  
Enrolled Actuary #14-2527

## **SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS**

### **Actuarial Valuation Date**

The initial actuarial valuation was completed on July 1, 2010, the first fiscal year with active members following the January 1, 2010 effective date. Subsequent valuations are completed each July 1 and this valuation was performed July 1, 2013. Actuarial calculations verify the adequacy of the funding through employer and member contribution for the fiscal year corresponding to the Plan year.

### **Actuarial Cost Method**

The valuation is completed applying the Entry Age Normal Cost Method with Aggregate Normal Cost determination. The Actuarial Accrued Liability and the Normal Cost are determined on a level percentage of aggregate expected future payroll.

Under the method, the Actuarial Accrued Liability is determined on an individual basis as a level percentage of expected compensation for each member. Inactive liabilities are valued on an accrued benefit basis.

The Total Normal Cost percentage of payroll requirement is calculated by dividing the excess of the Actuarial Present Value of Future benefits over the Actuarial Accrued Liability on an aggregate basis by the aggregate Present Value of Future Compensation for all active members. The Employer Normal Cost Percentage is calculated by subtracting the member contribution rate from the Total Normal Cost Percentage. The Employer Normal Cost is the Employer Normal Cost Percentage multiplied by the expected payroll for the valuation year.

### **Asset Valuation Method**

Trust Fund assets are valued at the reported market value of assets reported by the Investment Management Board for the Trust Fund as of the actuarial valuation date. The market value includes accrued amounts as reflected in the annual accounting for the Trust Fund and included in the CPRB annual report.

### **Amortization Method for Funding**

The funding target (the ARC) for MPFRS is equal to the Employer Normal Cost plus amortization of the UAAL. The initial UAAL was to be fully amortized over 30 years from July 1, 2010. Amortization payments were calculated as a level dollar amount each year over the 30 year period. Experience at July 1, 2013 demonstrates that the AAL was fully funded and that amortization for an UAAL component does not apply.

Contributions in excess of the ARC, if any, shall be applied to improve the funded percentage of MPFRS until an actuarially acceptable funding level has been attained.

### **Interest Return and Discount Rate**

The interest rate and return rate assumption is 7.50% annually, net of investment and administrative expenses. This rate is applied for both the net interest return expected to be earned on Trust Fund assets and the annual discount rate on expected future benefit payments.

### **Healthy Life Mortality Rates (Effective July 1, 2013)**

Active members' mortality of the RP2000 Non-annuitant Mortality Table projected to 2020 by Scale BB and with separate rates for males and females. Retired members' mortality of the RP2000 Healthy Annuitant Mortality Table projected to 2025 by Scale BB and with separate for males and females.

**Disability Retirees Mortality Rates (Effective July 1, 2013)**

Members receiving disability retirement benefits mortality of the RP2000 Healthy Annuitant Mortality Table projected to 2025 by Scale BB, Set Forward 1 year and with separate rates for males and females.

**Salary Scale**

Annual salary increase factors are assumed by age on a unisex basis with sample annual salary increases as follows:

| Age      | Rate   |
|----------|--------|
| Under 31 | 1.0475 |
| 40       | 1.0400 |
| 50       | 1.0375 |
| 60       | 1.0350 |

**Payroll Growth Rate**

Total annual payroll for the active membership is assumed to increase at 3.0% annually. This growth rate is applied in certain projections contained in the actuarial valuation report tables. The rate does not impact MPFRS liabilities nor the ARC. The growth rate was set based on current limited employer participation in MPFRS. The growth rate will need to be increased if additional employers begin participating in MPFRS.

**Withdrawal Rates (Modified July 1, 2013)**

Withdrawal rates predict termination of employment prior to unreduced retirement eligibility. A sample of unisex rates by age are:

| Age | Rate   |
|-----|--------|
| 30  | 0.0950 |
| 40  | 0.0650 |
| 50  | 0.0400 |
| 55  | 0.0000 |

**Disability Rates (Adopted July 1, 2013)**

Disability rates predict an active member becoming disabled prior to unreduced retirement eligibility. A sample of disability rates by age and sex are:

| Age | Males   | Females |
|-----|---------|---------|
| 30  | 0.00020 | 0.00220 |
| 40  | 0.00600 | 0.00600 |
| 50  | 0.00400 | 0.00400 |
| 51+ | 0.00400 | 0.00400 |

It is assumed that members eligible for unreduced retirement will elect retirement prior to becoming disabled. It is also assumed that retired members will not become disabled following retirement due to duty related causes incurred prior to retirement.

Disability retirement benefits vary by duty and non-duty causes. Disability retirements are assumed to occur in the following percentages:

|                           |     |
|---------------------------|-----|
| Duty Related Disability - | 75% |
| Non-Duty Disability -     | 25% |

### **Marriage Rate and Composition (Modified July 1, 2013)**

In determining the value of pre-retirement spousal death benefits, it is assumed that 90% of all members will be married at death. Males are assumed to be three years older than their female spouse.

### **Cause of Death for Death Benefits**

Deaths from active employment are assumed to be from duty related causes 25% of the time with non-duty causes accounting for the remaining 75%.

### **Accrual of Future Service**

MPFRS employment is considered a full time professional position. All active members are assumed to complete sufficient hours to accrue one year of service in each future year of employment.

### **Non-Contributory Service Credits for Military Service**

At Normal retirement, qualifying members are assumed to claim up to 2 allowable military service years as additional retirement service credits. It is assumed that male members will be credited with an additional 2% of their contributory service credits and female members will be credited with an additional 0.5% of their contributory service credits.

### **Retirement Rates (Modified July 1, 2013)**

Members who become eligible for unreduced retirement benefits prior to age 65 are assumed to have a 20% probability of retiring in the year they first become eligible. For years following the year of first eligibility and prior to attaining age 65, an additional 20% are assumed to retire each year. At 65, 100% of remaining members are assumed to retire.

Members who first become eligible for unreduced retirement benefits on or after the attainment of age 65 are assumed to retire in the year they first become eligible.

### **Plan Contributions**

Member and employer contributions are calculated as a percentage of total members' payroll. Amounts are deposited to the Trust Fund on a monthly basis. For interest calculation purposes, all amounts are treated as being deposited on an average of half way through the Plan year.

**ACTUARIAL SECTION**  
Municipal Police Officers & Firefighters' Retirement System

The MPFRS was established January 2010.

**Schedule of Active Member Valuation Data**

| Valuation Date | Number | Annual Payroll | Annual Average Pay | % Increase (Decrease) in Average Pay |
|----------------|--------|----------------|--------------------|--------------------------------------|
| 6/30/2013      | 48     | \$ 1,833,000   | \$ 38,187.50       | 6.73525%                             |
| 6/30/2012      | 27     | 966,000        | 35,777.78          | -6.12245%                            |
| 6/30/2011      | 9      | 343,000        | 38,111.11          | 9.82027%                             |
| 6/30/2010      | 6      | 208,000        | 34,703.17          | 100.00%                              |

**Schedule of Funding Progress (in thousands)**

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) Entry Age (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a Percentage of Covered Payroll ((b-a)/c) |
|--------------------------|-------------------------------|---|---------------------------|--------------------|---------------------|---|
| 7/1/2013                 | \$ 529                        | \$ 264  | \$ (265)                  | 200.4%             | \$ 1,833            | -14.5%  |
| 7/1/2012                 | 202                           | 90  | (112)                     | 224.4%             | 966                 | -11.6%  |
| 7/1/2011                 | 65                            | 23  | (42)                      | 282.6%             | 343                 | -12.2%  |
| 7/1/2010                 | 3                             | 4   | 1                         | 79.7%              | 208                 | 0.3%  |

**Solvency Test**

| Valuation Date | Aggregate Accrued Liabilities For |                                 |   | Reported Assets | % of Accrued Liabilities Covered by Reported Assets |         |         |
|----------------|-----------------------------------|---------------------------------|---|-----------------|---|---------|---------|
|                | (1) Active Member Contributions   | (2) Retirants and Beneficiaries | (3) Active Members (Employer Financed Portions) |                 | (1)   | (2)     | (3)     |
| 6/30/2013      | \$ 1,328,720                      | \$ 19,000                       | \$ (1,083,720)                                  | \$ 529,000      | 39.8130%  | 0.0000% | 0.0000% |
| 6/30/2012      | 665,380                           | 4,000                           | (579,380)                                       | 202,000         | 30.3590%  | 0.0000% | 0.0000% |
| 6/30/2011      | 238,850                           | 6,000                           | (221,850)                                       | 65,000          | 27.2140%  | 0.0000% | 0.0000% |
| 6/30/2010      | 144,665                           | -                               | (141,127)                                       | 3,000           | 2.0740%   | 0.0000% | 0.0000% |

**Schedule of Retirees and Beneficiaries Added and Removed**

| Fiscal Year Ended | Retirees Added |                   | Retirees Removed |                   | Retirees - Year End |                   | % Increase in Annual Allowances | Average Annual Allowance |
|-------------------|----------------|-------------------|------------------|-------------------|---------------------|-------------------|---------------------------------|--------------------------|
|                   | Number         | Annual Allowances | Number           | Annual Allowances | Number              | Annual Allowances |                                 |                          |
| 2013              | -              | \$ -              | -                | \$ -              | -                   | \$ -              | 0.000%                          | \$ -                     |
| 2012              | -              | -                 | -                | -                 | -                   | -                 | 0.000%                          | -                        |
| 2011              | -              | -                 | -                | -                 | -                   | -                 | 0.000%                          | -                        |
| 2010              | -              | -                 | -                | -                 | -                   | -                 | 0.000%                          | -                        |

**ACTUARIAL SECTION**  
Municipal Police Officers & Firefighters' Retirement System

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| <b>Changes in Unfunded Actuarial Liability</b>             |                     |
|--|---------------------|
| Unfunded Actuarial Liability, June 30, 2012                | <u>\$ (112,000)</u> |
| Expected increase from amortization method                 | (8,000)             |
| Expected increase from contributions below actuarial rates | (135,000)           |
| Investment experience (smoothed)                           | (3,000)             |
| Liability experience (including transfers)                 | (21,000)            |
| Change in assumption                                       | 14,000              |
| Unfunded Actuarial Liability, June 30, 2013                | <u>\$ (265,000)</u> |

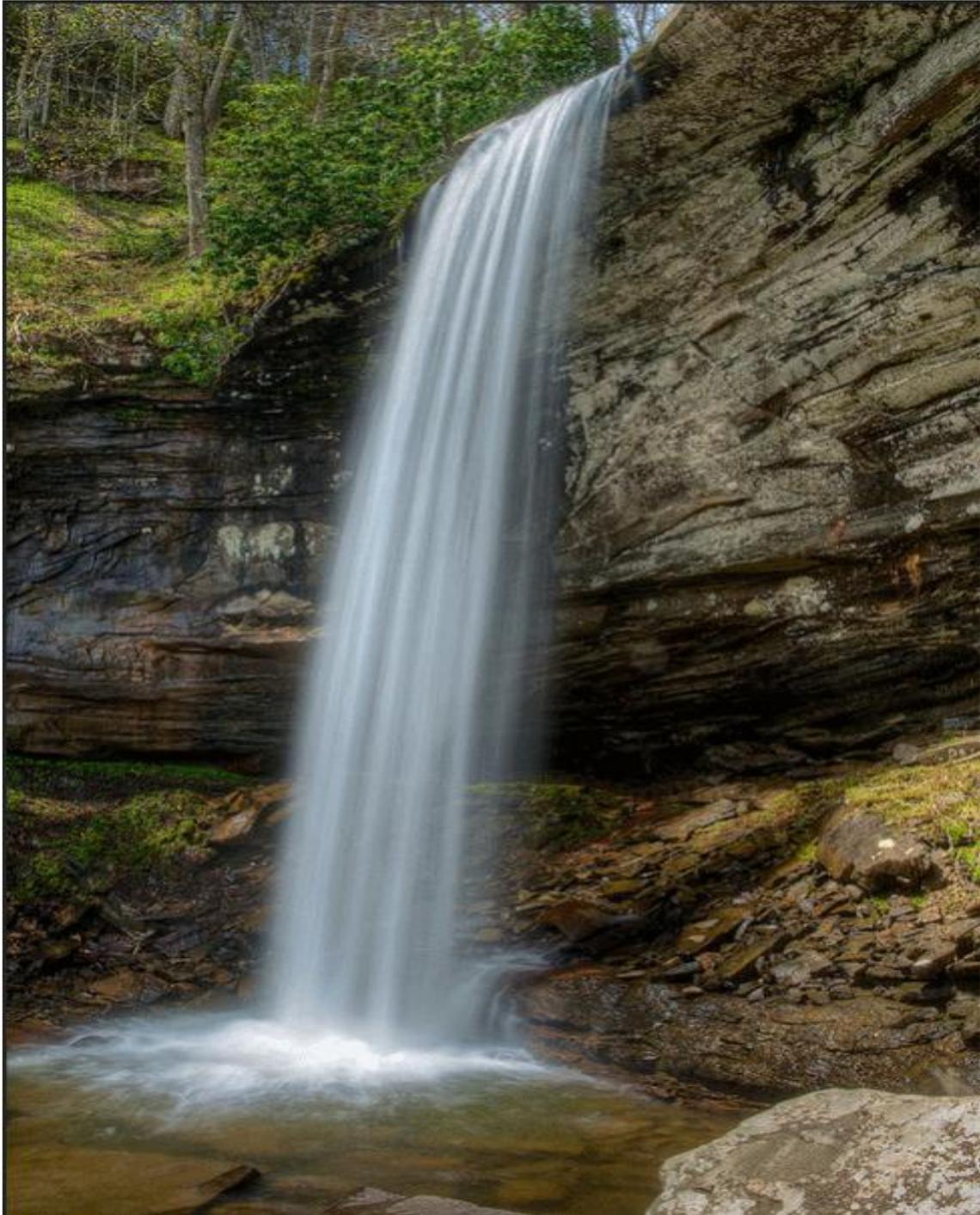
**Schedule of Contributions**

The Schedule of Contributions is included in the Required Supplementary Information provided in the Financial Section of this Comprehensive Annual Financial Report.

**Plan Provisions**

A discussion of plan provisions is included in Note 2 to the financial statements included in the Financial Section.

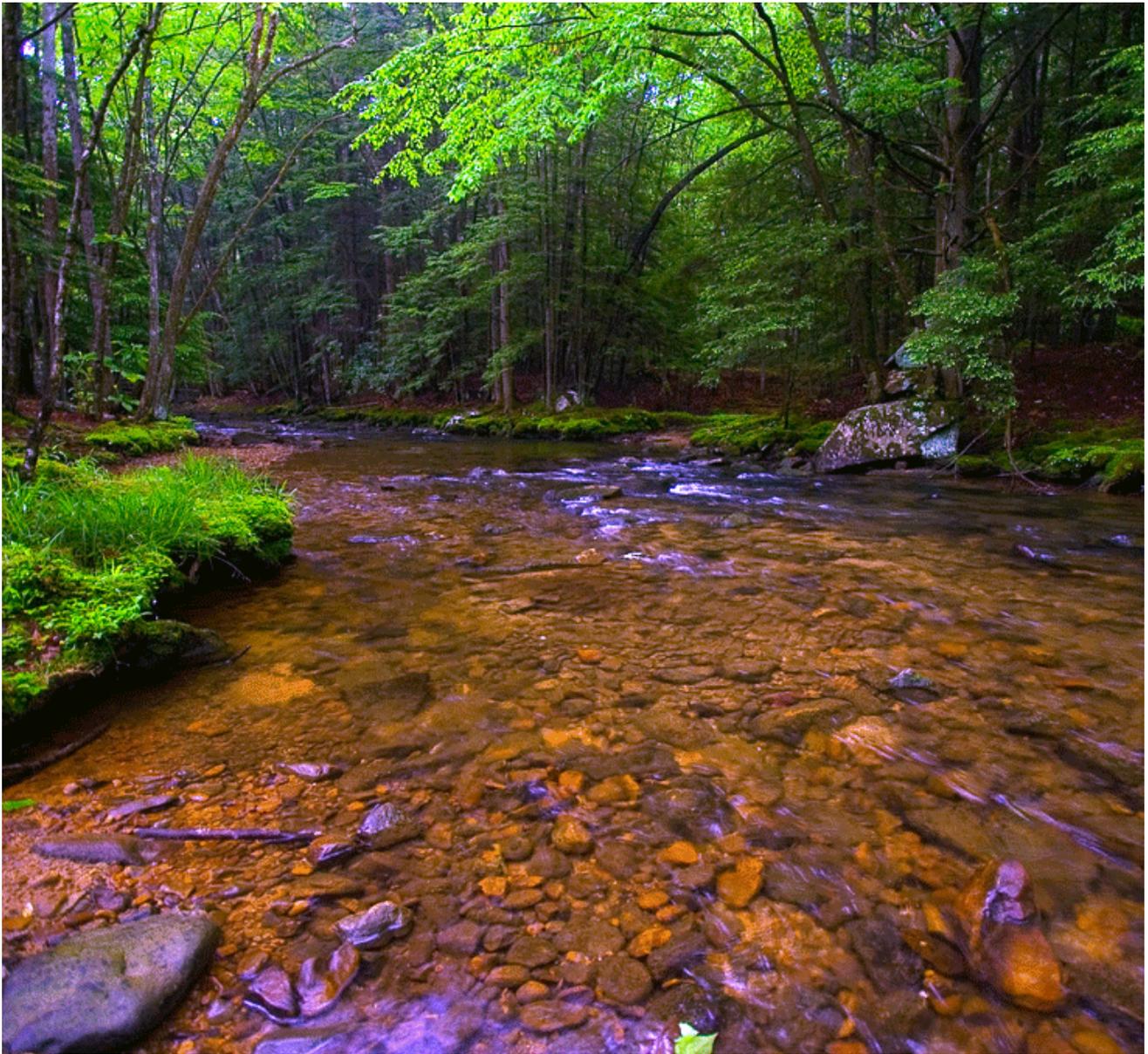
## Lower Falls at Hills Creek



*The Falls of Hills Creek are part of the Monongahela National Forest in Pocahontas County, West Virginia. Hills Creek rates as one of West Virginia's cleanest streams by the Department of Natural Resources  
Photography by Stephen Durrenberger*

# **STATISTICAL SECTION**

## Holly River State Park



*The Holly River State Park is located near the center of the State in Webster County, West Virginia, and is the second largest park in the West Virginia park system with a total of 8,101 acres.  
Photography by Dave Miller*

The statistical section of the comprehensive annual financial report provides information to the reader to assist in understanding the information in the financial statements, note disclosures, and required supplementary information regarding the Retirement Systems' overall financial health.

**Financial Trends**

These schedules contain trend information to help the reader understand how the Retirement Systems' financial performance has changed over time.

- Additions by Source, Deductions by Type, and Change in Net Assets
- Benefit by Type

**Retirees and Beneficiaries**

These schedules provide information concerning the retirees and beneficiaries receiving benefits.

- Retired Members by Type of Benefit
- Average Monthly Benefit Payments

**Participating Units**

This schedule provides information concerning units participating in the various Retirement Systems.

- Largest Employers

**STATISTICAL SECTION**

Additions by Source, Deductions by Type, and Change in Net Assets

**Public Employees Retirement System**  
(in thousands)

| Additions   |                      |                        |                   |              |
|-------------|----------------------|------------------------|-------------------|--------------|
| Fiscal Year | Member Contributions | Employer Contributions | Investment Income | Other Income |
| 2014        | \$ 60,899            | \$ 194,728             | \$ 864,023        | \$ 50        |
| 2013        | 60,943               | 187,866                | 565,355           | 16           |
| 2012        | 59,200               | 191,012                | 46,122            | 1,859        |
| 2011        | 57,714               | 160,493                | 757,302           | 1,030        |
| 2010        | 56,974               | 139,284                | 518,862           | 1,128        |
| 2009        | 56,360               | 131,143                | (619,017)         | 4,118        |
| 2008        | 53,958               | 125,992                | (276,789)         | 3,308        |
| 2007        | 52,239               | 121,183                | 345,498           | 4,600        |
| 2006        | 52,248               | 133,594                | 320,691           | -            |
| 2005        | 52,984               | 118,740                | 330,072           | -            |

| Deductions  |                  |                             |                         |           |                                   |
|-------------|------------------|-----------------------------|-------------------------|-----------|-----------------------------------|
| Fiscal Year | Benefit Payments | Service Transfers to (from) | Administrative Expenses | Refunds   | Total Change in Plan Net Position |
| 2014        | \$ 342,683       | \$ (83)                     | \$ 4,695                | \$ 10,929 | \$ 761,476                        |
| 2013        | 322,731          | 112                         | 4,593                   | 10,413    | 476,331                           |
| 2012        | 304,263          | (96)                        | 4,505                   | 10,844    | (21,323)                          |
| 2011        | 284,587          | (368)                       | 4,403                   | 9,880     | 678,037                           |
| 2010        | 265,263          | (188)                       | 4,340                   | 8,515     | 438,318                           |
| 2009        | 248,770          | (56)                        | 4,257                   | 10,422    | (390,789)                         |
| 2008        | 232,807          | 14,263                      | 4,188                   | 9,448     | (354,237)                         |
| 2007        | 217,540          | (443)                       | 4,097                   | 9,216     | 593,110                           |
| 2006        | 199,255          | (578)                       | 3,179                   | 9,142     | 295,535                           |
| 2005        | 183,292          | (679)                       | 2,289                   | 7,903     | 308,991                           |

**STATISTICAL SECTION**

Additions by Source, Deductions by Type, and Change in Net Assets

**Teachers' Defined Benefit Retirement System**  
(in thousands)

| Fiscal Year | Additions            |                        |                   |              |
|-------------|----------------------|------------------------|-------------------|--------------|
|             | Member Contributions | Employer Contributions | Investment Income | Other Income |
| 2014        | \$ 90,612            | \$ 514,248             | \$ 1,003,180      | \$ 3,775     |
| 2013        | 91,818               | 486,783                | 654,696           | 4,007        |
| 2012        | 91,976               | 482,236                | 46,118            | 38,874       |
| 2011        | 87,697               | 501,103                | 828,928           | 60,569       |
| 2010        | 103,706              | 417,403                | 533,448           | 39,818       |
| 2009        | 115,925              | 368,330                | (575,596)         | 41,963       |
| 2008        | 52,916               | 368,883                | (271,361)         | 3,625        |
| 2007        | 49,923               | 1,482,184              | 366,641           | 4,399        |
| 2006        | 48,201               | 658,644                | 147,173           | 72,844       |
| 2005        | 49,287               | 339,724                | 147,791           | 14,419       |

| Fiscal Year | Deductions       |                             |                         |          | Total Change in Plan Net Position |
|-------------|------------------|-----------------------------|-------------------------|----------|-----------------------------------|
|             | Benefit Payments | Service Transfers to (from) | Administrative Expenses | Refunds  |                                   |
| 2014        | \$ 668,923       | \$ 265                      | \$ 4,348                | \$ 7,287 | \$ 930,992                        |
| 2013        | 618,628          | (35)                        | 4,276                   | 7,731    | 606,704                           |
| 2012        | 577,427          | 53                          | 4,209                   | 7,783    | 69,732                            |
| 2011        | 535,010          | 418                         | 4,130                   | 7,614    | 931,125                           |
| 2010        | 494,230          | 62                          | 4,067                   | 7,247    | 588,769                           |
| 2009*       | 463,528          | (698,268)                   | 3,964                   | 5,143    | 176,255                           |
| 2008        | 434,285          | 436                         | 3,071                   | 3,748    | (287,477)                         |
| 2007        | 404,875          | 449                         | 2,968                   | 3,326    | 1,491,529                         |
| 2006        | 372,687          | 790                         | 2,282                   | 3,994    | 547,109                           |
| 2005        | 344,841          | 686                         | 1,716                   | 4,098    | 199,880                           |

\* See discussion later in this section of transfers of Teachers' Defined Contribution Retirement System members to the Teachers' Defined Benefit Retirement System as permitted by the West Virginia legislature.

**STATISTICAL SECTION**

Additions by Source, Deductions by Type, and Change in Net Assets

**State Police Death, Disability, and Retirement System**

| Additions   |                      |                        |                   |              |
|-------------|----------------------|------------------------|-------------------|--------------|
| Fiscal Year | Member Contributions | Employer Contributions | Investment Income | Other Income |
| 2014        | \$ 545               | \$ 26,218              | \$ 90,872         | \$ 739       |
| 2013        | 628                  | 16,312                 | 60,742            | 811          |
| 2012        | 724                  | 1,207                  | 4,381             | 22,767       |
| 2011        | 833                  | 1,389                  | 82,228            | 24,356       |
| 2010        | 909                  | 1,514                  | 3/44              | 10,655       |
| 2009        | 968                  | 1,688                  | (72,882)          | 1,917        |
| 2008        | 989                  | 1,701                  | (33,920)          | 3,656        |
| 2007        | 1,029                | 5,360                  | 78,121            | 680          |
| 2006        | 989                  | 77,630                 | 35,899            | 616          |
| 2005        | 1,053                | 252,367                | 11,667            | 579          |

| Deductions  |                  |                             |                         |         |                                   |
|-------------|------------------|-----------------------------|-------------------------|---------|-----------------------------------|
| Fiscal Year | Benefit Payments | Service Transfers to (from) | Administrative Expenses | Refunds | Total Change in Plan Net Position |
| 2014        | \$ 37,566        | \$ -                        | \$ 53                   | \$ -    | \$ 80,755                         |
| 2013        | 35,464           | -                           | 52                      | -       | 42,977                            |
| 2012        | 33,631           | -                           | 50                      | 47      | (4,649)                           |
| 2011        | 31,206           | -                           | 50                      | -       | 77,550                            |
| 2010        | 29,347           | -                           | 50                      | -       | 41,517                            |
| 2009        | 27,823           | -                           | 51                      | 72      | (96,255)                          |
| 2008        | 26,202           | -                           | 51                      | -       | (53,827)                          |
| 2007        | 24,794           | -                           | 51                      | 130     | 60,215                            |
| 2006        | 23,699           | -                           | 41                      | (10)    | 91,404                            |
| 2005        | 22,278           | -                           | 30                      | 48      | 243,310                           |

**STATISTICAL SECTION****Additions by Source, Deductions by Type, and Change in Net Assets****State Police Retirement System**

| Additions   |                      |                        |                   |              |
|-------------|----------------------|------------------------|-------------------|--------------|
| Fiscal Year | Member Contributions | Employer Contributions | Investment Income | Other Income |
| 2014        | \$ 3,630             | \$ 4,049               | \$ 17,756         | \$ -         |
| 2013        | 3,517                | 4,193                  | 10,495            | -            |
| 2012        | 3,375                | 4,544                  | 824               | 79           |
| 2011        | 3,065                | 4,570                  | 11,222            | 126          |
| 2010        | 3,005                | 3,396                  | 6,476             | 143          |
| 2009        | 2,594                | 2,594                  | (6,107)           | 176          |
| 2008        | 2,339                | 2,339                  | (2,834)           | -            |
| 2007        | 2,176                | 2,175                  | 5,632             | -            |
| 2006        | 1,874                | 1,821                  | 2,408             | -            |
| 2005        | 1,702                | 1,702                  | 2,271             | -            |

| Deductions  |                  |                             |                         |         |                                   |
|-------------|------------------|-----------------------------|-------------------------|---------|-----------------------------------|
| Fiscal Year | Benefit Payments | Service Transfers to (from) | Administrative Expenses | Refunds | Total Change in Plan Net Position |
| 2014        | \$ 682           | \$ -                        | \$ 43                   | \$ 230  | \$ 24,480                         |
| 2013        | 577              | -                           | 42                      | 229     | 17,357                            |
| 2012        | 477              | -                           | 39                      | 327     | 7,989                             |
| 2011        | 443              | -                           | 37                      | 482     | 18,021                            |
| 2010        | 369              | -                           | 35                      | 202     | 12,414                            |
| 2009        | 298              | -                           | 34                      | 168     | (1,243)                           |
| 2008        | 232              | -                           | 32                      | 366     | 1,214                             |
| 2007        | 135              | -                           | 31                      | 214     | 9,603                             |
| 2006        | 118              | -                           | 21                      | 514     | 5,450                             |
| 2005        | 112              | -                           | 15                      | 133     | 5,415                             |

**STATISTICAL SECTION**

Additions by Source, Deductions by Type, and Change in Net Assets

**Deputy Sheriffs Retirement System**

| Additions   |                      |                        |                   |              |
|-------------|----------------------|------------------------|-------------------|--------------|
| Fiscal Year | Member Contributions | Employer Contributions | Investment Income | Other Income |
| 2014        | \$ 3,908             | \$ 5,977               | \$ 24,438         | \$ 556       |
| 2013        | 3,731                | 5,704                  | 15,344            | 522          |
| 2012        | 3,567                | 5,431                  | 1,253             | 534          |
| 2011        | 3,505                | 4,221                  | 19,072            | 542          |
| 2010        | 3,335                | 4,053                  | 12,446            | 549          |
| 2009        | 3,160                | 3,962                  | (13,580)          | 555          |
| 2008        | 3,006                | 3,724                  | (6,354)           | 553          |
| 2007        | 2,837                | 3,365                  | 13,710            | 541          |
| 2006        | 2,674                | 3,212                  | 6,466             | 550          |
| 2005        | 2,482                | 3,098                  | 6,472             | 470          |

| Deductions  |                  |                             |                         |         |                                   |
|-------------|------------------|-----------------------------|-------------------------|---------|-----------------------------------|
| Fiscal Year | Benefit Payments | Service Transfers to (from) | Administrative Expenses | Refunds | Total Change in Plan Net Position |
| 2014        | \$ 6,955         | \$ (2)                      | \$ 97                   | \$ 839  | \$ 26,990                         |
| 2013        | 6,316            | -                           | 91                      | 664     | 18,230                            |
| 2012        | 5,985            | -                           | 86                      | 762     | 3,952                             |
| 2011        | 5,714            | -                           | 85                      | 659     | 20,882                            |
| 2010        | 5,327            | -                           | 81                      | 503     | 14,472                            |
| 2009        | 5,018            | -                           | 48                      | 633     | (11,632)                          |
| 2008        | 4,434            | -                           | 74                      | 552     | (4,131)                           |
| 2007        | 3,891            | 18                          | 71                      | 389     | 16,084                            |
| 2006        | 3,449            | -                           | 53                      | 415     | 8,985                             |
| 2005        | 3,029            | -                           | 37                      | 257     | 9,199                             |

**STATISTICAL SECTION**

Additions by Source, Deductions by Type, and Change in Net Assets

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**Judges Retirement System**

| Additions   |                      |                        |                   |              |
|-------------|----------------------|------------------------|-------------------|--------------|
| Fiscal Year | Member Contributions | Employer Contributions | Investment Income | Other Income |
| 2014        | \$ 474               | \$ 2,456               | \$ 25,263         | \$ -         |
| 2013        | 688                  | 2,422                  | 16,381            | -            |
| 2012        | 706                  | 3,954                  | 1,251             | -            |
| 2011        | 622                  | 3,954                  | 21,214            | -            |
| 2010        | 649                  | 3,954                  | 14,034            | -            |
| 2009        | 748                  | 6,034                  | (14,927)          | -            |
| 2008        | 736                  | 6,034                  | (7,035)           | -            |
| 2007        | 733                  | 6,034                  | 15,212            | -            |
| 2006        | 865                  | 6,758                  | 7,088             | -            |
| 2005        | 479                  | 6,758                  | 6,990             | -            |

| Deductions  |                  |                             |                         |         |                                   |
|-------------|------------------|-----------------------------|-------------------------|---------|-----------------------------------|
| Fiscal Year | Benefit Payments | Service Transfers to (from) | Administrative Expenses | Refunds | Total Change in Plan Net Position |
| 2014        | \$ 4,374         | \$ (32)                     | \$ 7                    | \$ 81   | \$ 23,763                         |
| 2013        | 4,351            | (77)                        | 6                       | -       | 15,211                            |
| 2012        | 4,274            | (51)                        | 6                       | -       | 1,682                             |
| 2011        | 4,014            | -                           | 7                       | -       | 21,769                            |
| 2010        | 3,937            | 103                         | 7                       | 86      | 14,504                            |
| 2009        | 3,719            | 5                           | 7                       | -       | (11,876)                          |
| 2008        | 3,669            | -                           | 7                       | -       | (3,941)                           |
| 2007        | 3,801            | (24)                        | 7                       | -       | 18,195                            |
| 2006        | 3,737            | (207)                       | 6                       | -       | 11,175                            |
| 2005        | 3,025            | -                           | 4                       | -       | 11,198                            |

**STATISTICAL SECTION**

Additions by Source, Deductions by Type, and Change in Net Assets

**Emergency Medical Services Retirement System\***

| Fiscal Year | Additions            |                        |                   |              |
|-------------|----------------------|------------------------|-------------------|--------------|
|             | Member Contributions | Employer Contributions | Investment Income | Other Income |
| 2014        | \$ 2,077             | \$ 2,442               | \$ 7,874          | \$ 1         |
| 2013        | 1,902                | 2,308                  | 4,682             | 1            |
| 2012        | 1,838                | 2,272                  | 361               | -            |
| 2011        | 1,894                | 2,264                  | 5,109             | 45           |
| 2010        | 1,772                | 2,190                  | 2,704             | 29           |
| 2009        | 1,749                | 2,030                  | (2,154)           | -            |
| 2008        | 722                  | 917                    | (621)             | -            |
| 2007        | -                    | -                      | -                 | -            |
| 2006        | -                    | -                      | -                 | -            |
| 2005        | -                    | -                      | -                 | -            |

| Fiscal Year | Deductions       |                             |                         |         | Total Change in Plan Net Position |
|-------------|------------------|-----------------------------|-------------------------|---------|-----------------------------------|
|             | Benefit Payments | Service Transfers to (from) | Administrative Expenses | Refunds |                                   |
| 2014        | \$ 1,290         | \$ (140)                    | \$ 42                   | \$ 459  | \$ 10,743                         |
| 2013        | 1,000            | -                           | 38                      | 435     | 7,420                             |
| 2012        | 651              | -                           | 39                      | 664     | 3,117                             |
| 2011        | 237              | (43)                        | 38                      | 376     | 8,704                             |
| 2010        | -                | -                           | 35                      | 171     | 6,489                             |
| 2009        | -                | (28)                        | 28                      | 127     | 1,498                             |
| 2008        | -                | (14,673)                    | -                       | 16      | 15,675                            |
| 2007        | -                | -                           | -                       | -       | -                                 |
| 2006        | -                | -                           | -                       | -       | -                                 |
| 2005        | -                | -                           | -                       | -       | -                                 |

\*The EMSRS was established in January 2008.

**STATISTICAL SECTION**

Additions by Source, Deductions by Type, and Change in Net Assets

**Municipal Police Officers & Firefighters Retirement System\***

| Fiscal Year | Additions            |                        |                   |              |
|-------------|----------------------|------------------------|-------------------|--------------|
|             | Member Contributions | Employer Contributions | Investment Income | Other Income |
| 2014        | \$ 279               | \$ 279                 | \$ 125            | \$ -         |
| 2013        | 151                  | 151                    | 32                | -            |
| 2012        | 72                   | 72                     | 4                 | -            |
| 2011        | 31                   | 31                     | -                 | -            |
| 2010        | 2                    | 1                      | -                 | -            |
| 2009        | -                    | -                      | -                 | -            |
| 2008        | -                    | -                      | -                 | -            |
| 2007        | -                    | -                      | -                 | -            |
| 2006        | -                    | -                      | -                 | -            |
| 2005        | -                    | -                      | -                 | -            |

| Fiscal Year | Deductions       |                             |                         |         | Total Change in Plan Net Position |
|-------------|------------------|-----------------------------|-------------------------|---------|-----------------------------------|
|             | Benefit Payments | Service Transfers to (from) | Administrative Expenses | Refunds |                                   |
| 2014        | \$ -             | \$ -                        | \$ 3                    | \$ 7    | \$ 673                            |
| 2013        | -                | -                           | 2                       | 5       | 327                               |
| 2012        | -                | -                           | 1                       | 10      | 137                               |
| 2011        | -                | -                           | -                       | -       | 62                                |
| 2010        | -                | -                           | -                       | -       | 3                                 |
| 2009        | -                | -                           | -                       | -       | -                                 |
| 2008        | -                | -                           | -                       | -       | -                                 |
| 2007        | -                | -                           | -                       | -       | -                                 |
| 2006        | -                | -                           | -                       | -       | -                                 |
| 2005        | -                | -                           | -                       | -       | -                                 |

\*The MPFRS was established in January 2010.

**STATISTICAL SECTION**

Additions by Source, Deductions by Type, and Change in Net Assets

**Teachers' Defined Contribution Retirement System**

| Fiscal Year | Additions            |                        |                   |              |
|-------------|----------------------|------------------------|-------------------|--------------|
|             | Member Contributions | Employer Contributions | Investment Income | Other Income |
| 2014        | \$ 6,632             | \$ 10,284              | \$ 51,102         | \$ 258       |
| 2013        | 6,861                | 11,236                 | 37,681            | 261          |
| 2012        | 7,008                | 11,749                 | 4,119             | 397          |
| 2011        | 6,755                | 12,817                 | 40,593            | 256          |
| 2010        | 6,932                | 10,129                 | 22,139            | 6            |
| 2009        | 6,250                | 10,342                 | (29,743)          | -            |
| 2008        | 34,110               | 52,982                 | (28,072)          | -            |
| 2007        | 30,599               | 55,072                 | 94,294            | -            |
| 2006        | 28,459               | 46,331                 | 46,288            | -            |
| 2005        | 26,602               | 45,175                 | 40,952            | -            |

| Fiscal Year | Deductions       |                             |                         |                         | Total Change in Plan Net Position |
|-------------|------------------|-----------------------------|-------------------------|-------------------------|-----------------------------------|
|             | Benefit Payments | Service Transfers to (from) | Administrative Expenses | Refunds and Forfeitures |                                   |
| 2014        | \$ -             | \$ (8)                      | \$ 1,072                | \$ 15,949               | \$ 51,263                         |
| 2013        | -                | -                           | 836                     | 13,644                  | 41,559                            |
| 2012        | -                | 94                          | 687                     | 12,155                  | 10,337                            |
| 2011        | -                | (7)                         | 437                     | 11,286                  | 48,705                            |
| 2010        | -                | 23                          | 891                     | 6,164                   | 32,128                            |
| 2009        | -                | 698,347                     | 986                     | 6,480                   | (718,964)                         |
| 2008        | -                | (26)                        | 2,625                   | 17,598                  | 38,823                            |
| 2007        | -                | -                           | 2,182                   | 18,233                  | 159,550                           |
| 2006        | -                | (8)                         | 1,515                   | 17,002                  | 102,569                           |
| 2005        | -                | (7)                         | 1,441                   | 10,280                  | 101,015                           |

The TDCRS is a multiple employer defined contribution retirement system, which is a money purchase pension plan covering primarily full-time employees of the State's 55 county public school systems, the State Department of Education, and the Schools for the Deaf and Blind who were hired between July 1, 1991 and June 30, 2005. TDCRS benefits depend solely on amounts contributed to the plan plus investment earnings. TDCRS closed participation to new members effective June 30, 2005.

In 2008, the West Virginia Legislature provided an opportunity for members of the TDCRS to elect to transfer to the West Virginia Teachers' Retirement System (TRS). The transfer occurred on July 1, 2008 and a total of 15,152 TDCRS members transferred to TRS.

**STATISTICAL SECTION**

Benefits by Type

The following schedules provide information on the benefits provided by type of benefit for each plan.

**Public Employees Retirement System**  
(in thousands)

| Fiscal Year | Age & Service Benefits |           | Disability Benefits | Death Benefits & Refunds |             |
|-------------|------------------------|-----------|---------------------|--------------------------|-------------|
|             | Retirants              | Survivors |                     | Death                    | Resignation |
| 2014        | \$ 279,512             | \$ 27,880 | \$ 29,933           | \$ 803                   | \$ 10,013   |
| 2013        | 261,647                | 26,821    | 29,157              | 1,161                    | 9,175       |
| 2012        | 250,134                | 25,781    | 23,348              | 1,170                    | 9,674       |
| 2011        | 232,491                | 24,651    | 27,445              | 952                      | 8,982       |
| 2010        | 215,378                | 23,664    | 26,221              | 1,263                    | 7,216       |
| 2009        | 201,606                | 22,459    | 24,705              | 1,255                    | 9,167       |
| 2008        | 187,608                | 21,483    | 23,716              | 751                      | 8,697       |
| 2007        | 173,991                | 20,708    | 22,841              | 605                      | 8,611       |
| 2006        | 158,160                | 19,493    | 21,602              | 693                      | 8,449       |
| 2005        | 144,286                | 18,706    | 20,300              | 589                      | 7,314       |

**Teachers' Retirement System**  
(in thousands)

| Fiscal Year | Age & Service Benefits |           | Disability Benefits | Death Benefits & Refunds |             |
|-------------|------------------------|-----------|---------------------|--------------------------|-------------|
|             | Retirants              | Survivors |                     | Death                    | Resignation |
| 2014        | \$ 606,990             | \$ 24,327 | \$ 25,183           | \$ 2,418                 | \$ 5,666    |
| 2013        | 560,392                | 23,148    | 24,692              | 3,564                    | 5,250       |
| 2012        | 531,367                | 22,121    | 23,939              | 3,109                    | 4,674       |
| 2011        | 490,536                | 21,306    | 23,168              | 4,167                    | 3,447       |
| 2010        | 451,233                | 20,568    | 22,429              | 4,145                    | 3,102       |
| 2009        | 421,789                | 19,927    | 21,812              | 2,877                    | 2,266       |
| 2008        | 394,064                | 19,157    | 21,064              | 2,562                    | 1,186       |
| 2007        | 366,429                | 18,212    | 20,234              | 1,965                    | 1,361       |
| 2006        | 336,737                | 16,958    | 18,992              | 2,212                    | 1,782       |
| 2005        | 311,360                | 16,093    | 17,388              | 2,030                    | 2,068       |

**State Police Death, Disability, and Retirement System**  
(in thousands)

| Fiscal Year | Age & Service Benefits |           | Disability Benefits | Death Benefits & Refunds |             |
|-------------|------------------------|-----------|---------------------|--------------------------|-------------|
|             | Retirants              | Survivors |                     | Death                    | Resignation |
| 2014        | \$ 28,252              | \$ 2,209  | \$ 6,888            | \$ -                     | \$ -        |
| 2013        | 26,656                 | 2,044     | 6,685               | -                        | -           |
| 2012        | 25,475                 | 1,891     | 6,265               | -                        | 47          |
| 2011        | 23,398                 | 1,765     | 6,043               | -                        | -           |
| 2010        | 21,917                 | 1,551     | 5,879               | -                        | -           |
| 2009        | 20,897                 | 1,388     | 5,538               | -                        | 72          |
| 2008        | 19,849                 | 1,300     | 5,053               | -                        | -           |
| 2007        | 18,961                 | 1,213     | 4,620               | -                        | 130         |
| 2006        | 18,312                 | 1,092     | 4,293               | -                        | -           |
| 2005        | 17,347                 | 1,048     | 3,883               | -                        | 48          |

**STATISTICAL SECTION**

Benefits by Type

**State Police Retirement System**  
(in thousands)

| Fiscal Year | Age & Service Benefits |           | Disability Benefits | Death Benefits & Refunds |             |
|-------------|------------------------|-----------|---------------------|--------------------------|-------------|
|             | Retirants              | Survivors |                     | Death                    | Resignation |
| 2014        | \$ 316                 | \$ 22     | \$ 290              | \$ -                     | \$ 230      |
| 2013        | 266                    | 48        | 243                 | 8                        | 220         |
| 2012        | 243                    | 26        | 207                 | -                        | *           |
| 2011        | 226                    | 50        | 187                 | -                        | 1           |
| 2010        | 150                    | 34        | 185                 | -                        | *           |
| 2009        | 105                    | 39        | 153                 | -                        | *           |
| 2008        | 90                     | 34        | 109                 | -                        | *           |
| 2007        | 31                     | 18        | 86                  | -                        | *           |
| 2006        | 29                     | 18        | 71                  | -                        | 1           |
| 2005        | 30                     | 13        | 68                  | -                        | *           |

\* - under \$500,000

**Deputy Sheriffs Retirement System**  
(in thousands)

| Fiscal Year | Age & Service Benefits |           | Disability Benefits | Death Benefits & Refunds |             |
|-------------|------------------------|-----------|---------------------|--------------------------|-------------|
|             | Retirants              | Survivors |                     | Death                    | Resignation |
| 2014        | \$ 5,397               | \$ 261    | \$ 1,137            | \$ 75                    | \$ 900      |
| 2013        | 5,028                  | 250       | 976                 | -                        | 669         |
| 2012        | 4,818                  | 201       | 966                 | 43                       | 719         |
| 2011        | 4,635                  | 175       | 904                 | 35                       | 624         |
| 2010        | 4,325                  | 139       | 863                 | -                        | 503         |
| 2009        | 4,031                  | 100       | 887                 | 90                       | 543         |
| 2008        | 3,616                  | 53        | 812                 | 33                       | 519         |
| 2007        | 3,156                  | 28        | 706                 | 9                        | 380         |
| 2006        | 2,742                  | 25        | 681                 | -                        | 415         |
| 2005        | 2,384                  | 17        | 628                 | -                        | 257         |

**Judges Retirement System**  
(in thousands)

| Fiscal Year | Age & Service Benefits |           | Disability Benefits | Death Benefits & Refunds |             |
|-------------|------------------------|-----------|---------------------|--------------------------|-------------|
|             | Retirants              | Survivors |                     | Death                    | Resignation |
| 2014        | \$ 3,299               | \$ 969    | \$ 95               | \$ -                     | \$ 81       |
| 2013        | 3,181                  | 1,060     | 95                  | -                        | -           |
| 2012        | 3,098                  | 1,056     | 121                 | -                        | -           |
| 2011        | 3,115                  | 899       | -                   | -                        | -           |
| 2010        | 3,065                  | 872       | -                   | -                        | 86          |
| 2009        | 2,890                  | 828       | -                   | -                        | -           |
| 2008        | 2,815                  | 854       | -                   | -                        | -           |
| 2007        | 2,820                  | 981       | -                   | -                        | -           |
| 2006        | 2,718                  | 1,019     | -                   | -                        | -           |
| 2005        | 2,222                  | 803       | -                   | -                        | -           |

**STATISTICAL SECTION**

Benefits by Type

**Emergency Medical Services Retirement System\***

(in thousands)

| Fiscal Year | Age & Service Benefits |           | Disability Benefits | Death Benefits & Refunds |             |
|-------------|------------------------|-----------|---------------------|--------------------------|-------------|
|             | Retirants              | Survivors |                     | Death                    | Resignation |
| 2014        | \$ 1,019               | \$ 22     | \$ 228              | \$ 11                    | \$ 446      |
| 2013        | 760                    | 22        | 173                 | 38                       | 404         |
| 2012        | 517                    | 13        | 121                 | 32                       | 632         |
| 2011        | 237                    | -         | 24                  | -                        | 376         |
| 2010        | -                      | -         | -                   | -                        | 171         |
| 2009        | -                      | -         | -                   | 52                       | 75          |
| 2008        | -                      | -         | -                   | -                        | 16          |

\*The EMSRS was established in January 2008.

**Municipal Police Officers & Firefighters Retirement System\*\***

(in thousands)

| Fiscal Year | Age & Service Benefits |           | Disability Benefits | Death Benefits & Refunds |             |
|-------------|------------------------|-----------|---------------------|--------------------------|-------------|
|             | Retirants              | Survivors |                     | Death                    | Resignation |
| 2014        | \$ -                   | \$ -      | \$ -                | \$ -                     | \$ 10       |
| 2013        | -                      | -         | -                   | 2                        | 2           |
| 2012        | -                      | -         | -                   | -                        | 10          |
| 2011        | -                      | -         | -                   | -                        | -           |
| 2010        | -                      | -         | -                   | -                        | -           |

\*The MPFRS was established in January 2010.

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**STATISTICAL SECTION**  
Retired Members by Type of Benefit

**Public Employees Retirement System**

| Amount of<br>Monthly Benefit | Number of<br>Retirants | Type of Retirement |              |              |               | Option Selected |              |          |  |
|------------------------------|------------------------|--------------------|--------------|--------------|---------------|-----------------|--------------|----------|--|
|                              |                        | A                  | B            | C            | Maximum       | Opt-1           | Opt-2        | Other    |  |
| \$ 1 - 1,000                 | 13,395                 | 9,099              | 2,284        | 2,012        | 6,742         | 1,916           | 4,737        | -        |  |
| 1,001 - 2,000                | 7,777                  | 6,194              | 579          | 1,004        | 4,014         | 1,201           | 2,562        | -        |  |
| 2,001 - 3,000                | 2,732                  | 2,549              | 113          | 70           | 1,357         | 501             | 874          | -        |  |
| 3,001 - 4,000                | 828                    | 803                | 17           | 8            | 406           | 190             | 232          | -        |  |
| 4,001 - 5,000                | 270                    | 262                | 8            | -            | 111           | 67              | 92           | -        |  |
| Over 5,000                   | 99                     | 99                 | -            | -            | 59            | 17              | 23           | -        |  |
| <b>Totals</b>                | <b>25,101</b>          | <b>19,006</b>      | <b>3,001</b> | <b>3,094</b> | <b>12,689</b> | <b>3,892</b>    | <b>8,520</b> | <b>-</b> |  |

Type of Retirement

A - Service  
B - Survivor benefit  
C - Disability

Option

Maximum - Life Annuity  
Opt-1 - 100% Joint Survivorship  
Opt-2 - 50% Joint Survivorship  
Other

**Teachers' Retirement System**

| Amount of<br>Monthly Benefit | Number of<br>Retirants | Type of Retirement |              |              |               | Option Selected |              |           |  |
|------------------------------|------------------------|--------------------|--------------|--------------|---------------|-----------------|--------------|-----------|--|
|                              |                        | A                  | B            | C            | Maximum       | Opt-1           | Opt-2        | Other     |  |
| \$ 1 - 1,000                 | 11,119                 | 8,283              | 1,249        | 1,587        | 7,342         | 1,281           | 2,440        | 56        |  |
| 1,001 - 2,000                | 10,573                 | 9,420              | 429          | 724          | 6,786         | 1,459           | 2,316        | 12        |  |
| 2,001 - 3,000                | 7,412                  | 7,171              | 128          | 113          | 4,764         | 1,242           | 1,406        | -         |  |
| 3,001 - 4,000                | 3,044                  | 3,004              | 32           | 8            | 2,019         | 571             | 454          | -         |  |
| 4,001 - 5,000                | 809                    | 802                | 7            | -            | 576           | 136             | 97           | -         |  |
| Over 5,000                   | 357                    | 355                | 1            | 1            | 251           | 63              | 43           | -         |  |
| <b>Totals</b>                | <b>33,314</b>          | <b>29,035</b>      | <b>1,846</b> | <b>2,433</b> | <b>21,738</b> | <b>4,752</b>    | <b>6,756</b> | <b>68</b> |  |

Type of Retirement

A - Service  
B - Survivor benefit  
C - Disability

Option

Maximum - Life Annuity  
Opt-1 - 100% Joint Survivorship  
Opt-2 - 50% Joint Survivorship  
Other

**STATISTICAL SECTION**  
Retired Members by Type of Benefit

**State Police Death, Disability, and Retirement System**

| Amount of<br>Monthly Benefit | Number of<br>Retirants | Type of Retirement |           |            | Maximum   | Option Selected |            |          |
|------------------------------|------------------------|--------------------|-----------|------------|-----------|-----------------|------------|----------|
|                              |                        | A                  | B         | C          |           | Opt-1           | Opt-2      | Other    |
| \$ 1 - 1,000                 | 16                     | 6                  | 6         | 4          | 5         | -               | 11         | -        |
| 1,001 - 2,000                | 74                     | 24                 | 35        | 15         | 8         | -               | 66         | -        |
| 2,001 - 3,000                | 69                     | 45                 | 12        | 12         | 4         | -               | 65         | -        |
| 3,001 - 4,000                | 110                    | 84                 | 14        | 12         | -         | -               | 110        | -        |
| 4,001 - 5,000                | 173                    | 148                | 9         | 16         | 2         | -               | 171        | -        |
| Over 5,000                   | 296                    | 230                | 3         | 63         | -         | -               | 296        | -        |
| <b>Totals</b>                | <b>738</b>             | <b>537</b>         | <b>79</b> | <b>122</b> | <b>19</b> | <b>-</b>        | <b>719</b> | <b>-</b> |

Type of Retirement

A - Service  
B - Survivor benefit  
C - Disability

Option

Maximum - Life Annuity  
Opt-1 - 100% Joint Survivorship  
Opt-2 - 50% Joint Survivorship  
Other

**State Police Retirement System**

| Amount of<br>Monthly Benefit | Number of<br>Retirants | Type of Retirement |          |           | Maximum  | Option Selected |           |          |
|------------------------------|------------------------|--------------------|----------|-----------|----------|-----------------|-----------|----------|
|                              |                        | A                  | B        | C         |          | Opt-1           | Opt-2     | Other    |
| \$ 1 - 1,000                 | 1                      | 1                  | -        | -         | 1        | -               | -         | -        |
| 1,001 - 2,000                | 6                      | -                  | 1        | 5         | -        | -               | 6         | -        |
| 2,001 - 3,000                | 5                      | 3                  | -        | 2         | -        | 1               | 4         | -        |
| 3,001 - 4,000                | 5                      | 3                  | -        | 2         | 1        | -               | 4         | -        |
| 4,001 - 5,000                | 3                      | 2                  | -        | 1         | -        | 1               | 2         | -        |
| Over 5,000                   | -                      | -                  | -        | -         | -        | -               | -         | -        |
| <b>Totals</b>                | <b>20</b>              | <b>9</b>           | <b>1</b> | <b>10</b> | <b>2</b> | <b>2</b>        | <b>16</b> | <b>-</b> |

Type of Retirement

A - Service  
B - Survivor benefit  
C - Disability

Option

Maximum - Life Annuity  
Opt-1 - 100% Joint Survivorship  
Opt-2 - 50% Joint Survivorship  
Other

**STATISTICAL SECTION**  
Retired Members by Type of Benefit

**Deputy Sheriffs Retirement System**

| Amount of<br>Monthly Benefit | Number of<br>Retirants | Type of Retirement |           |           | Maximum    | Option Selected |            |          |
|------------------------------|------------------------|--------------------|-----------|-----------|------------|-----------------|------------|----------|
|                              |                        | A                  | B         | C         |            | Opt-1           | Opt-2      | Other    |
| \$ 1 - 1,000                 | 41                     | 33                 | 6         | 2         | 16         | 5               | 18         | 2        |
| 1,001 - 2,000                | 152                    | 118                | 11        | 23        | 49         | 31              | 70         | 2        |
| 2,001 - 3,000                | 100                    | 80                 | 2         | 18        | 28         | 26              | 45         | 1        |
| 3,001 - 4,000                | 22                     | 17                 | -         | 5         | 6          | 4               | 12         | -        |
| 4,001 - 5,000                | 5                      | 4                  | -         | 1         | 4          | -               | 1          | -        |
| Over 5,000                   | 2                      | 2                  | -         | -         | 2          | -               | -          | -        |
| <b>Totals</b>                | <b>322</b>             | <b>254</b>         | <b>19</b> | <b>49</b> | <b>105</b> | <b>66</b>       | <b>146</b> | <b>5</b> |

Type of Retirement

A - Service  
B - Survivor benefit  
C - Disability

Option

Maximum - Life Annuity  
Opt-1 - 100% Joint Survivorship  
Opt-2 - 50% Joint Survivorship  
Other

**Judges Retirement System**

| Amount of<br>Monthly Benefit | Number of<br>Retirants | Type of Retirement |           |          | Maximum  | Option Selected |           |          |
|------------------------------|------------------------|--------------------|-----------|----------|----------|-----------------|-----------|----------|
|                              |                        | A                  | B         | C        |          | Opt-1           | Opt-2     | Other    |
| \$ 1 - 1,000                 | -                      | -                  | -         | -        | -        | -               | -         | -        |
| 1,001 - 2,000                | -                      | -                  | -         | -        | -        | -               | -         | -        |
| 2,001 - 3,000                | -                      | -                  | -         | -        | -        | -               | -         | -        |
| 3,001 - 4,000                | 2                      | -                  | 2         | -        | -        | 1               | 1         | -        |
| 4,001 - 5,000                | 20                     | -                  | 20        | -        | -        | 1               | 19        | -        |
| Over 5,000                   | 37                     | 36                 | -         | 1        | -        | 9               | 28        | -        |
| <b>Totals</b>                | <b>59</b>              | <b>36</b>          | <b>22</b> | <b>1</b> | <b>-</b> | <b>11</b>       | <b>48</b> | <b>-</b> |

Type of Retirement

A - Service  
B - Survivor benefit  
C - Disability

Option

Maximum - Life Annuity  
Opt-1 - 100% Joint Survivorship  
Opt-2 - 50% Joint Survivorship  
Other

**STATISTICAL SECTION**  
Retired Members by Type of Benefit

**Emergency Medical Services Retirement System**

| Amount of<br>Monthly Benefit | Number of<br>Retirants | Type of Retirement |          |          | Maximum   | Option Selected |           |          |
|------------------------------|------------------------|--------------------|----------|----------|-----------|-----------------|-----------|----------|
|                              |                        | A                  | B        | C        |           | Opt-1           | Opt-2     | Other    |
| \$ 1 - 1,000                 | 5                      | 4                  | -        | 1        | 5         | -               | -         | -        |
| 1,001 - 2,000                | 19                     | 18                 | 1        | -        | 9         | 1               | 9         | -        |
| 2,001 - 3,000                | 16                     | 13                 | -        | 3        | 11        | 2               | 3         | -        |
| 3,001 - 4,000                | 9                      | 7                  | -        | 2        | 6         | 2               | 1         | -        |
| 4,001 - 5,000                | 3                      | 2                  | -        | 1        | 2         | -               | 1         | -        |
| Over 5,000                   | -                      | -                  | -        | -        | -         | -               | -         | -        |
| <b>Totals</b>                | <b>52</b>              | <b>44</b>          | <b>1</b> | <b>7</b> | <b>33</b> | <b>5</b>        | <b>14</b> | <b>-</b> |

Type of Retirement

A - Service  
B - Survivor benefit  
C - Disability

Option

Maximum - Life Annuity  
Opt-1 - 100% Joint Survivorship  
Opt-2 - 50% Joint Survivorship  
Other

**Municipal Police Officers & Firefighters Retirement System\***

| Amount of<br>Monthly Benefit | Number of<br>Retirants | Type of Retirement |          |          | Maximum  | Option Selected |          |          |
|------------------------------|------------------------|--------------------|----------|----------|----------|-----------------|----------|----------|
|                              |                        | A                  | B        | C        |          | Opt-1           | Opt-2    | Other    |
| \$ 1 - 1,000                 | -                      | -                  | -        | -        | -        | -               | -        | -        |
| 1,001 - 2,000                | -                      | -                  | -        | -        | -        | -               | -        | -        |
| 2,001 - 3,000                | -                      | -                  | -        | -        | -        | -               | -        | -        |
| 3,001 - 4,000                | -                      | -                  | -        | -        | -        | -               | -        | -        |
| 4,001 - 5,000                | -                      | -                  | -        | -        | -        | -               | -        | -        |
| Over 5,000                   | -                      | -                  | -        | -        | -        | -               | -        | -        |
| <b>Totals</b>                | <b>-</b>               | <b>-</b>           | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b>        | <b>-</b> | <b>-</b> |

Type of Retirement

A - Service  
B - Survivor benefit  
C - Disability

Option

Maximum - Life Annuity  
Opt-1 - 100% Joint Survivorship  
Opt-2 - 50% Joint Survivorship  
Other

\* This System was established in January 2010.

**STATISTICAL SECTION**

## Largest Employers

**Public Employees Retirement System**

| Units                     | 2014                   | 2013                   | 2012                   |
|---------------------------|------------------------|------------------------|------------------------|
| 1) Unit                   | State of West Virginia | State of West Virginia | State of West Virginia |
| Number of Active Members  | 23,076                 | 24,269                 | 24,268                 |
| Percent of Active Members | 65.69%                 | 66.24%                 | 66.35%                 |
| Total Active Members      | 35,127                 | 36,637                 | 36,573                 |

| Units                     | 2011                   | 2010                   | 2009                   |
|---------------------------|------------------------|------------------------|------------------------|
| 1) Unit                   | State of West Virginia | State of West Virginia | State of West Virginia |
| Number of Active Members  | 23,971                 | 23,758                 | 23,463                 |
| Percent of Active Members | 66.12%                 | 66.04%                 | 65.69%                 |
| Total Active Members      | 36,254                 | 35,977                 | 35,717                 |

| Units                     | 2008                   | 2007                   | 2006                   |
|---------------------------|------------------------|------------------------|------------------------|
| 1) Unit                   | State of West Virginia | State of West Virginia | State of West Virginia |
| Number of Active Members  | 23,222                 | 23,242                 | 23,342                 |
| Percent of Active Members | 65.43%                 | 64.79%                 | 65.40%                 |
| Total Active Members      | 35,491                 | 35,873                 | 35,689                 |

| Units                     | 2005                   |
|---------------------------|------------------------|
| 1) Unit                   | State of West Virginia |
| Number of Active Members  | 24,101                 |
| Percent of Active Members | 66.52%                 |
| Total Active Members      | 36,230                 |

**STATISTICAL SECTION**  
Largest Employers

**Teachers Retirement System**

| Units                     | 2014                                    | 2013                                    | 2012                                    | 2011                                    |
|---------------------------|---|---|---|---|
| 1) Unit                   | Kanawha County<br>Board of Education    |
| Number of Active Members  | 3,277                                   | 3,254                                   | 3,549                                   | 3,507                                   |
| Percent of Active Members | 9.31%                                   | 9.14%                                   | 9.91%                                   | 9.78%                                   |
| 2) Unit                   | Berkeley County<br>Board of Education   |
| Number of Active Members  | 2,247                                   | 2,092                                   | 2,109                                   | 2,097                                   |
| Percent of Active Members | 6.31%                                   | 5.88%                                   | 5.89%                                   | 5.85%                                   |
| 3) Unit                   | Wood County<br>Board of Education       |
| Number of Active Members  | 1,603                                   | 1,558                                   | 1,689                                   | 1,677                                   |
| Percent of Active Members | 4.56%                                   | 4.44%                                   | 4.72%                                   | 4.68%                                   |
| 4) Unit                   | Raleigh County<br>Board of Education    |
| Number of Active Members  | 1,512                                   | 1,446                                   | 1,561                                   | 1,482                                   |
| Percent of Active Members | 4.30%                                   | 4.12%                                   | 4.36%                                   | 4.13%                                   |
| 5) Unit                   | Cabell County<br>Board of Education     |
| Number of Active Members  | 1,422                                   | 1,401                                   | 1,486                                   | 1,399                                   |
| Percent of Active Members | 4.04%                                   | 3.99%                                   | 4.15%                                   | 3.90%                                   |
| 6) Unit                   | Harrison County<br>Board of Education   |
| Number of Active Members  | 1,392                                   | 1,393                                   | 1,432                                   | 1,402                                   |
| Percent of Active Members | 3.96%                                   | 3.97%                                   | 4.00%                                   | 3.91%                                   |
| 7) Unit                   | Monongalia County<br>Board of Education |
| Number of Active Members  | 1,288                                   | 1,251                                   | 1,443                                   | 1,399                                   |
| Percent of Active Members | 3.66%                                   | 3.56%                                   | 4.03%                                   | 3.90%                                   |
| 8) Unit                   | Mercer County<br>Board of Education     |
| Number of Active Members  | 1,162                                   | 1,177                                   | 1,271                                   | 1,119                                   |
| Percent of Active Members | 3.30%                                   | 3.35%                                   | 3.55%                                   | 3.12%                                   |
| 9) Unit                   | Jefferson County<br>Board of Education  | Jefferson County<br>Board of Education  | Marion County<br>Board of Education     | Marion County<br>Board of Education     |
| Number of Active Members  | 1,021                                   | 1,004                                   | 1,061                                   | 1,058                                   |
| Percent of Active Members | 2.90%                                   | 2.86%                                   | 2.96%                                   | 2.95%                                   |
| 0) Unit                   | Putnam County<br>Board of Education     |
| Number of Active Members  | 1,021                                   | 1,000                                   | 1,060                                   | 1,058                                   |
| Percent of Active Members | 2.90%                                   | 2.85%                                   | 2.96%                                   | 2.95%                                   |
| Total Active Members      | 35,189                                  | 35,593                                  | 35,807                                  | 35,855                                  |

**STATISTICAL SECTION**  
Largest Employers

**Teachers Retirement System (Continued)**

| Units                     | 2010                                    | 2009                                    | 2008                                    | 2007                                    |
|---------------------------|---|---|---|---|
| 1) Unit                   | Kanawha County<br>Board of Education    |
| Number of Active Members  | 3,477                                   | 3,480                                   | 3,468                                   | 1,942                                   |
| Percent of Active Members | 9.75%                                   | 9.75%                                   | 9.85%                                   | 9.94%                                   |
| 2) Unit                   | Berkeley County<br>Board of Education   |
| Number of Active Members  | 2,068                                   | 2,070                                   | 2,057                                   | 1,037                                   |
| Percent of Active Members | 5.80%                                   | 5.80%                                   | 5.84%                                   | 5.31%                                   |
| 3) Unit                   | Wood County<br>Board of Education       |
| Number of Active Members  | 1,689                                   | 1,677                                   | 1,662                                   | 902                                     |
| Percent of Active Members | 4.74%                                   | 4.70%                                   | 4.72%                                   | 4.62%                                   |
| 4) Unit                   | Raleigh County<br>Board of Education    |
| Number of Active Members  | 1,487                                   | 1,490                                   | 1,487                                   | 727                                     |
| Percent of Active Members | 4.17%                                   | 4.17%                                   | 4.22%                                   | 4.62%                                   |
| 5) Unit                   | Cabell County<br>Board of Education     |
| Number of Active Members  | 1,421                                   | 1,432                                   | 1,433                                   | 716                                     |
| Percent of Active Members | 3.98%                                   | 4.01%                                   | 4.07%                                   | 3.67%                                   |
| 6) Unit                   | Harrison County<br>Board of Education   |
| Number of Active Members  | 1,397                                   | 1,392                                   | 1,391                                   | 667                                     |
| Percent of Active Members | 3.92%                                   | 3.90%                                   | 3.95%                                   | 3.42%                                   |
| 7) Unit                   | Monongalia County<br>Board of Education |
| Number of Active Members  | 1,388                                   | 1,389                                   | 1,377                                   | 655                                     |
| Percent of Active Members | 3.89%                                   | 3.89%                                   | 3.95%                                   | 3.35%                                   |
| 8) Unit                   | Mercer County<br>Board of Education     |
| Number of Active Members  | 1,116                                   | 1,119                                   | 1,115                                   | 577                                     |
| Percent of Active Members | 3.13%                                   | 3.13%                                   | 3.17%                                   | 2.95%                                   |
| 9) Unit                   | Marion County<br>Board of Education     |
| Number of Active Members  | 1,052                                   | 1,051                                   | 1,048                                   | 572                                     |
| Percent of Active Members | 2.95%                                   | 2.94%                                   | 2.98%                                   | 2.93%                                   |
| 0) Unit                   | Putnam County<br>Board of Education     |
| Number of Active Members  | 1,051                                   | 1,047                                   | 1,044                                   | 568                                     |
| Percent of Active Members | 2.95%                                   | 2.93%                                   | 2.96%                                   | 2.91%                                   |
| Total Active Members      | 35,670                                  | 35,701                                  | 35,219                                  | 19,529                                  |

In July 2008, 15,152 members of the Teachers Defined Contribution Retirement System transferred to the Teachers Defined Benefit Retirement System.

**STATISTICAL SECTION**  
Largest Employers

**Teachers Retirement System (Continued)**

| Units                     | 2006                                    | 2005                                    |
|---------------------------|---|---|
| 1) Unit                   | Kanawha County<br>Board of Education    | Kanawha County<br>Board of Education    |
| Number of Active Members  | 1,812                                   | 1,809                                   |
| Percent of Active Members | 9.72%                                   | 10.20%                                  |
| 2) Unit                   | Berkeley County<br>Board of Education   | Berkeley County<br>Board of Education   |
| Number of Active Members  | 1,001                                   | 1,002                                   |
| Percent of Active Members | 5.37%                                   | 5.65%                                   |
| 3) Unit                   | Wood County<br>Board of Education       | Wood County<br>Board of Education       |
| Number of Active Members  | 877                                     | 878                                     |
| Percent of Active Members | 4.71%                                   | 4.95%                                   |
| 4) Unit                   | Raleigh County<br>Board of Education    | Raleigh County<br>Board of Education    |
| Number of Active Members  | 694                                     | 688                                     |
| Percent of Active Members | 3.72%                                   | 3.88%                                   |
| 5) Unit                   | Cabell County<br>Board of Education     | Cabell County<br>Board of Education     |
| Number of Active Members  | 692                                     | 691                                     |
| Percent of Active Members | 3.71%                                   | 3.90%                                   |
| 6) Unit                   | Harrison County<br>Board of Education   | Harrison County<br>Board of Education   |
| Number of Active Members  | 671                                     | 669                                     |
| Percent of Active Members | 3.60%                                   | 3.77%                                   |
| 7) Unit                   | Monongalia County<br>Board of Education | Monongalia County<br>Board of Education |
| Number of Active Members  | 642                                     | 638                                     |
| Percent of Active Members | 3.45%                                   | 3.60%                                   |
| 8) Unit                   | Mercer County<br>Board of Education     | Mercer County<br>Board of Education     |
| Number of Active Members  | 568                                     | 564                                     |
| Percent of Active Members | 3.05%                                   | 3.18%                                   |
| 9) Unit                   | Marion County<br>Board of Education     | Marion County<br>Board of Education     |
| Number of Active Members  | 566                                     | 558                                     |
| Percent of Active Members | 3.04%                                   | 3.15%                                   |
| 0) Unit                   | Putnam County<br>Board of Education     | Putnam County<br>Board of Education     |
| Number of Active Members  | 565                                     | 558                                     |
| Percent of Active Members | 3.03%                                   | 3.15%                                   |
| Total Active Members      | 18,633                                  | 17,728                                  |

**STATISTICAL SECTION**

Largest Employers

**State Police Death, Disability, and Retirement System**

| Units                     | 2014                   | 2013                   | 2012                   |
|---------------------------|------------------------|------------------------|------------------------|
| 1) Unit                   | State of West Virginia | State of West Virginia | State of West Virginia |
| Number of Active Members  | 73                     | 99                     | 108                    |
| Percent of Active Members | 100.00%                | 100.00%                | 100.00%                |

| Units                     | 2011                   | 2010                   | 2009                   |
|---------------------------|------------------------|------------------------|------------------------|
| 1) Unit                   | State of West Virginia | State of West Virginia | State of West Virginia |
| Number of Active Members  | 133                    | 147                    | 163                    |
| Percent of Active Members | 100.00%                | 100.00%                | 100.00%                |

| Units                     | 2008                   | 2007                   | 2006                   |
|---------------------------|------------------------|------------------------|------------------------|
| 1) Unit                   | State of West Virginia | State of West Virginia | State of West Virginia |
| Number of Active Members  | 173                    | 191                    | 204                    |
| Percent of Active Members | 100.00%                | 100.00%                | 100.00%                |

| Units                     | 2005                   |
|---------------------------|------------------------|
| 1) Unit                   | State of West Virginia |
| Number of Active Members  | 213                    |
| Percent of Active Members | 100.00%                |

**STATISTICAL SECTION**

Largest Employers

**State Police Retirement System**

| Units                     | 2014                   | 2013                   | 2012                   | 2011                   | 2010                   |
|---------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 1) Unit                   | State of West Virginia |
| Number of Active Members  | 596                    | 558                    | 556                    | 523                    | 498                    |
| Percent of Active Members | 100.00%                | 100.00%                | 100.00%                | 100.00%                | 100.00%                |

| Units                     | 2009                   | 2008                   | 2007                   | 2006                   | 2005                   |
|---------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 1) Unit                   | State of West Virginia |
| Number of Active Members  | 472                    | 455                    | 449                    | 431                    | 401                    |
| Percent of Active Members | 100.00%                | 100.00%                | 100.00%                | 100.00%                | 100.00%                |

**STATISTICAL SECTION**  
Largest Employers

**Deputy Sheriffs Retirement System**

| Units                        | 2014              | 2013              | 2012              | 2011              |
|------------------------------|-------------------|-------------------|-------------------|-------------------|
| 1) Unit                      | Kanawha County    | Kanawha County    | Kanawha County    | Kanawha County    |
| Number of Active Members     | 97                | 103               | 101               | 102               |
| Percentage of Active Members | 9.90%             | 10.40%            | 10.32%            | 10.42%            |
| 2) Unit                      | Berkeley County   | Berkeley County   | Berkeley County   | Berkeley County   |
| Number of Active Members     | 53                | 56                | 58                | 55                |
| Percentage of Active Members | 5.41%             | 5.66%             | 5.92%             | 5.77%             |
| 3) Unit                      | Harrison County   | Harrison County   | Harrison County   | Harrison County   |
| Number of Active Members     | 48                | 46                | 48                | 44                |
| Percentage of Active Members | 4.90%             | 4.65%             | 4.90%             | 4.61%             |
| 4) Unit                      | Cabell County     | Cabell County     | Cabell County     | Putnam County     |
| Number of Active Members     | 38                | 43                | 43                | 44                |
| Percentage of Active Members | 3.88%             | 4.34%             | 4.39%             | 4.61%             |
| 5) Unit                      | Putnam County     | Putnam County     | Monongalia County | Raleigh County    |
| Number of Active Members     | 37                | 42                | 42                | 42                |
| Percentage of Active Members | 3.78%             | 4.24%             | 4.29%             | 4.40%             |
| 6) Unit                      | Raleigh County    | Raleigh County    | Putnam County     | Cabell County     |
| Number of Active Members     | 37                | 42                | 40                | 41                |
| Percentage of Active Members | 3.78%             | 4.24%             | 4.09%             | 4.30%             |
| 7) Unit                      | Monongalia County | Monongalia County | Raleigh County    | Wood County       |
| Number of Active Members     | 34                | 39                | 40                | 39                |
| Percentage of Active Members | 3.47%             | 3.94%             | 4.09%             | 4.09%             |
| 8) Unit                      | Wood County       | Wood County       | Wood County       | Monongalia County |
| Number of Active Members     | 33                | 38                | 37                | 36                |
| Percentage of Active Members | 3.37%             | 3.84%             | 3.78%             | 3.77%             |
| 9) Unit                      | Fayette County    | Fayette County    | Fayette County    | Fayette County    |
| Number of Active Members     | 31                | 34                | 34                | 35                |
| Percentage of Active Members | 3.16%             | 3.43%             | 3.47%             | 3.67%             |
| 0) Unit                      | Ohio County       | Ohio County       | Mercer County     | Ohio County       |
| Number of Active Members     | 31                | 33                | 29                | 28                |
| Percentage of Active Members | 3.16%             | 3.33%             | 2.96%             | 3.67%             |
| Total Active Members         | 980               | 990               | 979               | 954               |

**STATISTICAL SECTION**  
Largest Employers

**Deputy Sheriffs Retirement System (Continued)**

| Units                        | 2010              | 2009              | 2008              | 2007              |
|------------------------------|-------------------|-------------------|-------------------|-------------------|
| 1) Unit                      | Kanawha County    | Kanawha County    | Kanawha County    | Kanawha County    |
| Number of Active Members     | 101               | 97                | 93                | 87                |
| Percentage of Active Members | 10.54%            | 10.48%            | 10.19%            | 9.74%             |
| 2) Unit                      | Berkeley County   | Berkeley County   | Berkeley County   | Berkeley County   |
| Number of Active Members     | 54                | 54                | 47                | 45                |
| Percentage of Active Members | 5.64%             | 5.83%             | 5.15%             | 5.04%             |
| 3) Unit                      | Harrison County   | Cabell County     | Raleigh County    | Raleigh County    |
| Number of Active Members     | 42                | 39                | 41                | 35                |
| Percentage of Active Members | 4.38%             | 4.21%             | 4.49%             | 3.92%             |
| 4) Unit                      | Cabell County     | Raleigh County    | Putnam County     | Putnam County     |
| Number of Active Members     | 41                | 39                | 35                | 33                |
| Percentage of Active Members | 4.28%             | 4.21%             | 3.83%             | 3.70%             |
| 5) Unit                      | Raleigh County    | Harrison County   | Cabell County     | Harrison County   |
| Number of Active Members     | 39                | 36                | 34                | 31                |
| Percentage of Active Members | 4.07%             | 3.89%             | 3.72%             | 3.47%             |
| 6) Unit                      | Monongalia County | Monongalia County | Harrison County   | Cabell County     |
| Number of Active Members     | 36                | 35                | 33                | 30                |
| Percentage of Active Members | 3.76%             | 3.78%             | 3.61%             | 3.36%             |
| 7) Unit                      | Putnam County     | Putnam County     | Monongalia County | Wood County       |
| Number of Active Members     | 36                | 35                | 32                | 29                |
| Percentage of Active Members | 3.76%             | 3.78%             | 3.50%             | 3.25%             |
| 8) Unit                      | Wood County       | Wood County       | Wood County       | Monongalia County |
| Number of Active Members     | 36                | 33                | 30                | 28                |
| Percentage of Active Members | 3.76%             | 3.56%             | 3.29%             | 3.14%             |
| 9) Unit                      | Fayette County    | Fayette County    | Fayette County    | Mercer County     |
| Number of Active Members     | 31                | 31                | 28                | 25                |
| Percentage of Active Members | 3.24%             | 3.35%             | 3.07%             | 2.80%             |
| 10) Unit                     | Ohio County       | Greenbrier County | Greenbrier County | Greenbrier County |
| Number of Active Members     | 28                | 26                | 26                | 24                |
| Percentage of Active Members | 2.92%             | 2.81%             | 2.85%             | 2.69%             |
| Total Active Members         | 958               | 926               | 913               | 893               |

**STATISTICAL SECTION**  
Largest Employers

**Deputy Sheriffs Retirement System (Continued)**

| Units                        | 2006              | 2005              |
|------------------------------|-------------------|-------------------|
| 1) Unit                      | Kanawha County    | Kanawha County    |
| Number of Active Members     | 81                | 76                |
| Percentage of Active Members | 9.35%             | 9.10%             |
| 2) Unit                      | Raleigh County    | Putnam County     |
| Number of Active Members     | 35                | 31                |
| Percentage of Active Members | 4.04%             | 3.71%             |
| 3) Unit                      | Berkley County    | Berkeley County   |
| Number of Active Members     | 32                | 30                |
| Percentage of Active Members | 3.70%             | 3.59%             |
| 4) Unit                      | Cabell County     | Raleigh County    |
| Number of Active Members     | 30                | 30                |
| Percentage of Active Members | 3.46%             | 3.59%             |
| 5) Unit                      | Harrison County   | Harrison County   |
| Number of Active Members     | 30                | 28                |
| Percentage of Active Members | 3.46%             | 3.35%             |
| 6) Unit                      | Putnam County     | Cabell County     |
| Number of Active Members     | 30                | 27                |
| Percentage of Active Members | 3.46%             | 3.23%             |
| 7) Unit                      | Wood County       | Wood County       |
| Number of Active Members     | 28                | 27                |
| Percentage of Active Members | 3.23%             | 3.23%             |
| 8) Unit                      | Monongalia County | Monongalia County |
| Number of Active Members     | 27                | 23                |
| Percentage of Active Members | 3.12%             | 2.75%             |
| 9) Unit                      | Mercer County     | Greenbrier County |
| Number of Active Members     | 23                | 22                |
| Percentage of Active Members | 2.66%             | 2.63%             |
| 10) Unit                     | Fayette County    | Mercer County     |
| Number of Active Members     | 21                | 21                |
| Percentage of Active Members | 2.42%             | 2.51%             |
| Total Active Members         | 866               | 835               |

**STATISTICAL SECTION**

Largest Employers

**Judges Retirement System**

| Units                     | 2014                    | 2013                    | 2012                    |
|---------------------------|-------------------------|-------------------------|-------------------------|
| 1) Unit                   | West Virginia Judiciary | West Virginia Judiciary | West Virginia Judiciary |
| Number of Active Members  | 50                      | 50                      | 50                      |
| Percent of Active Members | 100.00%                 | 100.00%                 | 100.00%                 |

| Units                     | 2011                    | 2010                    | 2009                    |
|---------------------------|-------------------------|-------------------------|-------------------------|
| 1) Unit                   | West Virginia Judiciary | West Virginia Judiciary | West Virginia Judiciary |
| Number of Active Members  | 50                      | 53                      | 54                      |
| Percent of Active Members | 100.00%                 | 100.00%                 | 100.00%                 |

| Units                     | 2008                    | 2007                    | 2006                    |
|---------------------------|-------------------------|-------------------------|-------------------------|
| 1) Unit                   | West Virginia Judiciary | West Virginia Judiciary | West Virginia Judiciary |
| Number of Active Members  | 60                      | 60                      | 62                      |
| Percent of Active Members | 100.00%                 | 100.00%                 | 100.00%                 |

| Units                     | 2005                    |
|---------------------------|-------------------------|
| 1) Unit                   | West Virginia Judiciary |
| Number of Active Members  | 59                      |
| Percent of Active Members | 100.00%                 |

**STATISTICAL SECTION**

Largest Employers

**Emergency Medical Services Retirement System**

| Units                     | 2014                                  | 2013                                  | 2012                                  |
|---------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 1) Unit                   | Kanawha County<br>Emergency Ambulance | Kanawha County<br>Emergency Ambulance | Kanawha County<br>Emergency Ambulance |
| Number of Active Members  | 182                                   | 192                                   | 187                                   |
| Percent of Active Members | 34.27%                                | 36.71%                                | 37.85%                                |
| 2) Unit                   | Cabell County EMS                     | Cabell County EMS                     | Cabell County EMS                     |
| Number of Active Members  | 108                                   | 118                                   | 113                                   |
| Percent of Active Members | 20.34%                                | 22.56%                                | 22.87%                                |
| 3) Unit                   |                                       |                                       |                                       |
| Number of Active Members  |                                       |                                       |                                       |
| Percent of Active Members |                                       |                                       |                                       |
| Total Active Members      | 531                                   | 523                                   | 494                                   |

| Units                     | 2011                                  | 2010                                  | 2009                                  |
|---------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 1) Unit                   | Kanawha County<br>Emergency Ambulance | Kanawha County<br>Emergency Ambulance | Kanawha County<br>Emergency Ambulance |
| Number of Active Members  | 193                                   | 184                                   | 173                                   |
| Percent of Active Members | 36.07%                                | 35.05%                                | 33.86%                                |
| 2) Unit                   | Cabell County EMS                     | Cabell County EMS                     | Cabell County EMS                     |
| Number of Active Members  | 115                                   | 101                                   | 87                                    |
| Percent of Active Members | 21.50%                                | 19.24%                                | 17.03%                                |
| 3) Unit                   |                                       |                                       |                                       |
| Number of Active Members  |                                       |                                       |                                       |
| Percent of Active Members |                                       |                                       |                                       |
| Total Active Members      | 535                                   | 525                                   | 511                                   |

| Units                     | 2008                                  |
|---------------------------|---------------------------------------|
| 1) Unit                   | Kanawha County<br>Emergency Ambulance |
| Number of Active Members  | 154                                   |
| Percent of Active Members | 32.42%                                |
| 2) Unit                   | Cabell County EMS                     |
| Number of Active Members  | 72                                    |
| Percent of Active Members | 15.16%                                |
| 3) Unit                   | Harrison County<br>Emergency Squad    |
| Number of Active Members  | 36                                    |
| Percent of Active Members | 7.58%                                 |
| Total Active Members      | 475                                   |

This plan was established in January 2008.

**STATISTICAL SECTION**

Largest Employers

**Municipal Police Officers and Firefighters Retirement System**

| Units                     | 2014                      | 2013                      | 2012                      |
|---------------------------|---------------------------|---------------------------|---------------------------|
| 1) Unit                   | City of Huntington Police | City of Huntington Police | City of Huntington Police |
| Number of Active Members  | 44                        | 27                        | 12                        |
| Percent of Active Members | 46.81%                    | 56.25%                    | 44.44%                    |
| 2) Unit                   | City of Charleston Police | City of Charleston Police | City of Charleston Police |
| Number of Active Members  | 34                        | 18                        | 7                         |
| Percent of Active Members | 36.17%                    | 37.50%                    | 25.93%                    |
| Total Active Members      | 94                        | 48                        | 27                        |

| Units                     | 2011                      | 2010                      |
|---------------------------|---------------------------|---------------------------|
| 1) Unit                   | City of Huntington Police | City of Huntington Police |
| Number of Active Members  | 9                         | 6                         |
| Percent of Active Members | 100.00%                   | 100.00%                   |
| 2) Unit                   |                           |                           |
| Number of Active Members  |                           |                           |
| Percent of Active Members |                           |                           |
| Total Active Members      | 9                         | 6                         |

This plan was established January 2010.

**STATISTICAL SECTION**  
Average Monthly Benefit Payments

The following schedules provide information on the average monthly benefit payments. Due to computer system limitations, data could only be extracted for 2005 and forward. These schedules exclude participants retiring with a reduced early retirement benefit with less than 10 years service. Complete data has not been consistently entered into the computer system for final average salary. Meaningful data could be not extracted for final average salary and this information has not been provided. A new computer system and related software is currently being designed with implementation of the new system to begin in 2015. Subsequent to implementation of the new software, as meaningful data becomes available, it will be included in the Statistical Section.

**Public Employees Retirement System**

|                            | Years Credited Service |        |          |          |           |
|----------------------------|------------------------|--------|----------|----------|-----------|
|                            | 10-14                  | 15-19  | 20-24    | 25-29    | 30 & over |
| <b>2013</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 529                 | \$ 741 | \$ 1,033 | \$ 1,404 | \$ 2,231  |
| Number of active retirants | 4,147                  | 3,727  | 4,085    | 3,857    | 5,943     |
| <b>2012</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 497                 | \$ 698 | \$ 983   | \$ 1,333 | \$ 2,156  |
| Number of active retirants | 4,048                  | 3,653  | 3,885    | 3,658    | 5,367     |
| <b>2011</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 466                 | \$ 665 | \$ 935   | \$ 1,271 | \$ 2,066  |
| Number of active retirants | 3,945                  | 3,599  | 3,749    | 3,394    | 4,714     |
| <b>2010</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 454                 | \$ 648 | \$ 909   | \$ 1,242 | \$ 2,028  |
| Number of active retirants | 3,926                  | 3,553  | 3,653    | 3,302    | 4,398     |
| <b>2009</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 436                 | \$ 627 | \$ 889   | \$ 1,214 | \$ 1,979  |
| Number of active retirants | 3,924                  | 3,529  | 3,564    | 3,170    | 4,123     |
| <b>2008</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 423                 | \$ 608 | \$ 866   | \$ 1,180 | \$ 1,983  |
| Number of active retirants | 3,939                  | 3,547  | 3,500    | 3,042    | 3,832     |
| <b>2007</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 413                 | \$ 595 | \$ 846   | \$ 1,149 | \$ 1,865  |
| Number of active retirants | 3,978                  | 3,530  | 3,416    | 2,930    | 3,571     |
| <b>2006</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 395                 | \$ 566 | \$ 813   | \$ 1,103 | \$ 1,767  |
| Number of active retirants | 3,984                  | 3,449  | 3,346    | 2,779    | 3,238     |
| <b>2005</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 382                 | \$ 550 | \$ 793   | \$ 1,070 | \$ 1,695  |
| Number of active retirants | 4,037                  | 3,439  | 3,286    | 2,646    | 2,988     |

**STATISTICAL SECTION**  
Average Monthly Benefit Payments

**Teachers Retirement System**

|                            | Years Credited Service |        |          |          |           |
|----------------------------|------------------------|--------|----------|----------|-----------|
|                            | 10-14                  | 15-19  | 20-24    | 25-29    | 30 & over |
| <b>2013</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 434                 | \$ 667 | \$ 1,008 | \$ 1,404 | \$ 2,409  |
| Number of active retirants | 2,192                  | 3,038  | 4,601    | 5,116    | 16,775    |
| <b>2012</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 395                 | \$ 622 | \$ 957   | \$ 1,322 | \$ 2,244  |
| Number of active retirants | 2,138                  | 3,003  | 4,629    | 4,873    | 15,154    |
| <b>2011</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 368                 | \$ 588 | \$ 909   | \$ 1,246 | \$ 2,082  |
| Number of active retirants | 2,132                  | 3,077  | 4,580    | 4,577    | 13,642    |
| <b>2010</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 355                 | \$ 578 | \$ 886   | \$ 1,217 | \$ 2,011  |
| Number of active retirants | 2,149                  | 3,129  | 4,539    | 4,496    | 12,976    |
| <b>2009</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 346                 | \$ 564 | \$ 868   | \$ 1,192 | \$ 1,948  |
| Number of active retirants | 2,153                  | 3,182  | 4,501    | 4,396    | 12,402    |
| <b>2008</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 339                 | \$ 554 | \$ 849   | \$ 1,162 | \$ 1,877  |
| Number of active retirants | 2,267                  | 3,257  | 4,460    | 4,308    | 11,772    |
| <b>2007</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 335                 | \$ 543 | \$ 827   | \$ 1,139 | \$ 1,806  |
| Number of active retirants | 2,358                  | 3,318  | 4,425    | 4,216    | 11,099    |
| <b>2006</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 323                 | \$ 521 | \$ 798   | \$ 1,097 | \$ 1,714  |
| Number of active retirants | 2,445                  | 3,327  | 4,387    | 4,109    | 10,426    |
| <b>2005</b>                |                        |        |          |          |           |
| Average monthly benefit    | \$ 315                 | \$ 511 | \$ 783   | \$ 1,069 | \$ 1,634  |
| Number of active retirants | 2,521                  | 3,323  | 4,304    | 3,992    | 9,803     |

**STATISTICAL SECTION**  
Average Monthly Benefit Payments

**State Police Death, Disability, and Retirement System**

|                           | Years Credited Service |          |          |          |           |
|---------------------------|------------------------|----------|----------|----------|-----------|
|                           | 10-14                  | 15-19    | 20-24    | 25-29    | 30 & over |
| <b>2013</b>               |                        |          |          |          |           |
| Average monthly benefit   | \$ 5,001               | \$ 4,913 | \$ 3,705 | \$ 4,433 | \$ 4,951  |
| Number of active retirees | 24                     | 22       | 91       | 405      | 88        |
| <b>2012</b>               |                        |          |          |          |           |
| Average monthly benefit   | \$ 4,383               | \$ 4,267 | \$ 3,313 | \$ 4,085 | \$ 4,549  |
| Number of active retirees | 25                     | 23       | 92       | 379      | 91        |
| <b>2011</b>               |                        |          |          |          |           |
| Average monthly benefit   | \$ 4,078               | \$ 4,208 | \$ 3,067 | \$ 3,768 | \$ 4,437  |
| Number of active retirees | 25                     | 25       | 97       | 353      | 90        |
| <b>2010</b>               |                        |          |          |          |           |
| Average monthly benefit   | \$ 4,060               | \$ 4,198 | \$ 2,993 | \$ 3,584 | \$ 4,270  |
| Number of active retirees | 25                     | 25       | 96       | 346      | 89        |
| <b>2009</b>               |                        |          |          |          |           |
| Average monthly benefit   | \$ 3,807               | \$ 3,735 | \$ 2,909 | \$ 3,425 | \$ 4,118  |
| Number of active retirees | 26                     | 22       | 97       | 344      | 90        |
| <b>2008</b>               |                        |          |          |          |           |
| Average monthly benefit   | \$ 3,649               | \$ 3,489 | \$ 2,805 | \$ 3,285 | \$ 3,929  |
| Number of active retirees | 25                     | 20       | 93       | 335      | 93        |
| <b>2007</b>               |                        |          |          |          |           |
| Average monthly benefit   | \$ 3,421               | \$ 3,094 | \$ 2,634 | \$ 3,181 | \$ 3,791  |
| Number of active retirees | 25                     | 19       | 95       | 331      | 91        |
| <b>2006</b>               |                        |          |          |          |           |
| Average monthly benefit   | \$ 3,106               | \$ 2,788 | \$ 2,595 | \$ 3,095 | \$ 3,675  |
| Number of active retirees | 23                     | 18       | 94       | 330      | 90        |
| <b>2005</b>               |                        |          |          |          |           |
| Average monthly benefit   | \$ 2,701               | \$ 2,687 | \$ 2,573 | \$ 2,912 | \$ 3,508  |
| Number of active retirees | 20                     | 18       | 99       | 303      | 91        |

**STATISTICAL SECTION**  
Average Monthly Benefit Payments

**State Police Retirement System**

|                            | Years Credited Service |          |          |          |           |
|----------------------------|------------------------|----------|----------|----------|-----------|
|                            | 10-14                  | 15-19    | 20-24    | 25-29    | 30 & over |
| <b>2013</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 2,575               | \$ 4,091 | \$ 3,004 | \$ 3,044 | \$ 4,469  |
| Number of active retirants | 4                      | 2        | 2        | 2        | 1         |
| <b>2012</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 2,525               | \$ 2,453 | \$ 2,957 | \$ 3,044 | \$ 4,469  |
| Number of active retirants | 4                      | 1        | 2        | 2        | 1         |
| <b>2011</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 2,500               | \$ -     | \$ 2,781 | \$ 3,044 | \$ 4,469  |
| Number of active retirants | 4                      | 0        | 1        | 2        | 1         |
| <b>2010</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 2,475               | \$ -     | \$ 2,754 | \$ 3,189 | \$ -      |
| Number of active retirants | 4                      | 0        | 1        | 1        | 0         |
| <b>2009</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,842               | \$ -     | \$ 1,708 | \$ -     | \$ -      |
| Number of active retirants | 3                      | 0        | 3        | 0        | 0         |
| <b>2008</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ -                   | \$ -     | \$ 1,159 | \$ -     | \$ 1,823  |
| Number of active retirants | 0                      | 0        | 2        | 0        | 3         |
| <b>2007</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ -                   | \$ -     | \$ 1,148 | \$ -     | \$ 1,805  |
| Number of active retirants | 0                      | 0        | 2        | 0        | 3         |
| <b>2006</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ -                   | \$ -     | \$ 1,136 | \$ -     | \$ 1,788  |
| Number of active retirants | 0                      | 0        | 2        | 0        | 3         |
| <b>2005</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ -                   | \$ -     | \$ 1,125 | \$ -     | \$ 1,634  |
| Number of active retirants | 0                      | 0        | 2        | 0        | 3         |

**STATISTICAL SECTION**  
Average Monthly Benefit Payments

**Deputy Sheriffs Retirement System**

|                            | Years Credited Service |          |          |          |           |
|----------------------------|------------------------|----------|----------|----------|-----------|
|                            | 10-14                  | 15-19    | 20-24    | 25-29    | 30 & over |
| <b>2013</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,333               | \$ 1,581 | \$ 1,521 | \$ 1,750 | \$ 2,412  |
| Number of active retirants | 15                     | 25       | 58       | 90       | 113       |
| <b>2012</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,238               | \$ 1,501 | \$ 1,453 | \$ 1,685 | \$ 2,265  |
| Number of active retirants | 10                     | 23       | 54       | 80       | 104       |
| <b>2011</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,150               | \$ 1,435 | \$ 1,420 | \$ 1,694 | \$ 2,203  |
| Number of active retirants | 8                      | 22       | 44       | 76       | 95        |
| <b>2010</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,219               | \$ 1,431 | \$ 1,379 | \$ 1,713 | \$ 2,189  |
| Number of active retirants | 7                      | 22       | 42       | 72       | 90        |
| <b>2009</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,324               | \$ 1,439 | \$ 1,434 | \$ 1,666 | \$ 2,133  |
| Number of active retirants | 7                      | 22       | 36       | 69       | 80        |
| <b>2008</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,446               | \$ 1,387 | \$ 1,392 | \$ 1,611 | \$ 2,123  |
| Number of active retirants | 7                      | 19       | 32       | 59       | 70        |
| <b>2007</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,599               | \$ 1,387 | \$ 1,363 | \$ 1,631 | \$ 2,038  |
| Number of active retirants | 6                      | 19       | 30       | 54       | 62        |
| <b>2006</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,791               | \$ 1,291 | \$ 1,338 | \$ 1,610 | \$ 2,012  |
| Number of active retirants | 5                      | 17       | 26       | 50       | 54        |
| <b>2005</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,557               | \$ 1,306 | \$ 1,333 | \$ 1,534 | \$ 1,966  |
| Number of active retirants | 3                      | 16       | 24       | 44       | 44        |

**STATISTICAL SECTION**  
Average Monthly Benefit Payments

**Judges Retirement System**

|                            | Years Credited Service |          |          |          |           |
|----------------------------|------------------------|----------|----------|----------|-----------|
|                            | 10-14                  | 15-19    | 20-24    | 25-29    | 30 & over |
| <b>2013</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 4,200               | \$ 5,861 | \$ 7,213 | \$ 7,964 | \$ 7,265  |
| Number of active retirants | 1                      | 26       | 14       | 7        | 5         |
| <b>2012</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 4,200               | \$ 5,690 | \$ 7,288 | \$ 7,964 | \$ 7,269  |
| Number of active retirants | 1                      | 29       | 14       | 7        | 4         |
| <b>2011</b>                |                        |          |          |          |           |
| Average monthly benefit    |                        | \$ 5,342 | \$ 6,536 | \$ 7,302 | \$ 6,331  |
| Number of active retirants |                        | 31       | 16       | 6        | 3         |
| <b>2010</b>                |                        |          |          |          |           |
| Average monthly benefit    |                        | \$ 5,302 | \$ 6,724 | \$ 7,302 | \$ 6,331  |
| Number of active retirants |                        | 31       | 16       | 6        | 3         |
| <b>2009</b>                |                        |          |          |          |           |
| Average monthly benefit    |                        | \$ 5,525 | \$ 6,558 | \$ 7,302 | \$ 3,867  |
| Number of active retirants |                        | 29       | 11       | 6        | 1         |
| <b>2008</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ -                   | \$ 5,529 | \$ 6,558 | \$ 7,302 | \$ 5,558  |
| Number of active retirants | 0                      | 33       | 11       | 6        | 2         |
| <b>2007</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ -                   | \$ 5,459 | \$ 7,213 | \$ 5,959 | \$ 5,558  |
| Number of active retirants | 0                      | 36       | 10       | 5        | 2         |
| <b>2006</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ -                   | \$ 5,416 | \$ 7,213 | \$ 5,959 | \$ 7,250  |
| Number of active retirants | 0                      | 37       | 10       | 5        | 1         |
| <b>2005</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ -                   | \$ 4,219 | \$ 5,597 | \$ 5,703 | \$ 4,750  |
| Number of active retirants | 0                      | 41       | 10       | 4        | 3         |

**STATISTICAL SECTION**  
Average Monthly Benefit Payments

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**Emergency Medical Services Retirement System**

|                            | Years Credited Service |          |          |          |           |
|----------------------------|------------------------|----------|----------|----------|-----------|
|                            | 10-14                  | 15-19    | 20-24    | 25-29    | 30 & over |
| <b>2013</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 2,030               | \$ 1,547 | \$ 2,076 | \$ 2,315 | \$ 2,939  |
| Number of active retirants | 8                      | 6        | 14       | 13       | 8         |
| <b>2012</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 1,281               | \$ 1,580 | \$ 2,164 | \$ 2,132 | \$ 2,521  |
| Number of active retirants | 4                      | 6        | 7        | 6        | 5         |
| <b>2011</b>                |                        |          |          |          |           |
| Average monthly benefit    | \$ 840                 | \$ 1,712 | \$ 1,945 | \$ 1,611 | \$ 3,102  |
| Number of active retirants | 1                      | 2        | 2        | 5        | 4         |

This plan was established in January 2008.

**Municipal Police Officers & Firefighters Retirement System**

The MPFRS was established in January 2010 and has no benefits or retirees to report.

## Black Bear



*The Black Bear, or Ursus Americanus, was selected in 1954-55 and adopted by the Legislature as the official state animal on March 23, 1973.  
Photography by Richard Strahin*