? \(\begin{aligned} \& Gabriel Roeder Smith \& Company<br>\& Consultants \& Actuaries\end{aligned}\) ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

GASB STATEMENT NO. 67 PLAN REPORTING AND
ACCOUNTING SCHEDULES - REVISED JUNE 30, 2014

November 25, 2014 - Revised
The Board of Trustees
Arkansas Public Employees Retirement System
Little Rock, Arkansas
Ladies and Gentlemen:
This revised report provides information required by the Arkansas Public Employees Retirement System (APERS) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67 "Financial Reporting for Pension Plans."

Our actuarial calculations for this report were prepared for the purpose of complying with the requirements of GASB Statement No. 67. These calculations have been made on a basis that is consistent with our understanding of this accounting standard. These calculations are made for all members of APERS other than those participating in the District Judges division of APERS. A separate GASB Statement No. 67 report will be issued for the cost sharing portion of the District Judges division.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement No. 67. The calculation of the plan's liability for this report may not be applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement No. 67 may produce significantly different results. This report may be provided to parties other than System only in its entirety and only with the permission of the Retirement Board.

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

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

Please see the actuarial valuation report as of June 30, 2014 for additional discussions of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

To the best of our knowledge, this report is complete, accurate, and in accordance with generally recognized actuarial methods. Mita D. Drazilov is a Member of the American Academy of Actuaries and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinion herein. The signing actuaries are independent of the plan sponsor.

Respectfully submitted,


Mita D. Drazilov, ASA, MAAA


David L. Hoffman

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## SECTION A

EXECUTIVE SUMMARY

## Executive Summary as of June 30, 2014

2014
Actuarial Valuation Date
Pension Plan's Fiscal Year Ending Date (Measurement Date \& Reporting Date)

June 30, 2014
June 30, 2014

## Membership

## Number of

- Retirees and Beneficiaries
- Inactive, Nonretired Members 13,514
- Active Members
- Total
Covered Payroll
45,841
91,269 \$ 1,745,242,112


## Net Pension Liability

Total Pension Liability
Plan Fiduciary Net Position
\$8,920,451,518
Net Pension Liability
$\begin{array}{r}7,512,167,348 \\ \hline \$ 1,408,284,170\end{array}$
Plan Fiduciary Net Position as a Percentage
of Total Pension Liability
84.21\%
Net Pension Liability as a Percentage
of Covered Payroll
80.69\%

## Development of the Single Discount Rate

Single Discount Rate
7.75\%
Long-Term Expected Rate of Return 7.75\%
Long-Term Municipal Bond Rate* 4.29\%
Last year ending June 30 in the 2015 to 2114 projection period for which projected benefit payments are fully funded2114

[^0]
## DISCUSSION

## Accounting Standard

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67, "Financial Reporting for Pension Plans," replaces the requirements of GASB Statement No. 25, "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans," and GASB Statement No. 50, "Pension Disclosures." GASB Statement No. 67 establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability of employers and non-employer contributing entities for benefits provided through the pension plan.

The following discussion provides a summary of the information that is required to be disclosed under this new accounting standard. A number of these disclosure items are provided in this report. However, certain information, such as notes regarding accounting policies and investments, is not included in this report, and your internal staff will be responsible for preparing that information to comply with this accounting standard.

## Financial Statements

GASB Statement No. 67 requires defined benefit pension plans to present two financial statements - a statement of fiduciary net position and a statement of changes in fiduciary net position.

The statement of fiduciary net position presents the following items as of the end of the pension plan's reporting period, such as:

- assets;
- deferred inflows and outflows of resources;
- liabilities; and
- fiduciary net position (assets, plus deferred outflows, minus liabilities, minus deferred inflows).

The statement of changes in fiduciary net position presents the following for the plan's reporting period:

- additions, such as contributions and investment income;
- deductions, such as benefit payments and expenses; and
- net increase or decrease in the fiduciary net position (the difference between additions and deductions).


## Notes to Financial Statements

GASB Statement No. 67 also requires the notes of the plan's financial statements to include additional disclosure information. This disclosure information should include:

- a description of the types of benefits provided by the plan, as well as automatic or ad hoc COLAs;
- the number and classes of employees covered by the benefit terms;
- the composition of the pension plan's Board and the authority under which benefit terms may be amended;
- a description of the plan's funding policy, which includes member and employer contribution requirements;
- the pension plan's investment policies;
- a description of how fair value is determined;
- concentrations of investments greater than or equal to $5 \%$;
- annual money-weighted rate of return on pension plan investments;
- the portion of the present value of benefits to be provided through the pension plan to current active and inactive plan members;
- the pension plan's fiduciary net position;
- the net pension liability;
- the pension plan's fiduciary net position as a percentage of the total pension liability;
- significant assumptions and methods used to calculate the total pension liability;
- inputs to the discount rates;
- certain information about mortality assumptions and the dates of experience studies; and
- a description of the terms of the plan's deferred retirement option program (DROP) and the total DROP balance for those members currently participating in the DROP.


## Required Supplementary Information

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

- sources of changes in the net pension liability;
- information about the components of the net pension liability and related ratios, including the pension plan's fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percent of covered-employee payroll;
- comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy; and
- the annual money-weighted rate of return on pension plan investments for each year.

The tables will be built prospectively as the information becomes available.

## Measurement of the Net Pension Liability

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

## Timing of the Valuation

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

The total pension liability shown in this report is based on an actuarial valuation performed as of June 30, 2014 and a measurement date of June 30, 2014.

## Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a single discount rate that reflects (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is $7.75 \%$; the municipal bond rate is $4.29 \%$ (based on the weekly rate closest to but not later than the measurement date of the 20-Year Bond Buyer Index as published by the Federal Reserve); and the resulting single discount rate is $7.75 \%$.

## Effective Date and Transition

GASB Statement No. 67 is effective for a pension plan's fiscal years beginning after June 15, 2013; this corresponds to the fiscal year ending June 30, 2014.

## SECTION B <br> FINANCIAL STATEMENTS

# Statement of Fiduciary Net Position as of June 30, 2014 

## To be provided by System

## Assets <br> Assets

## Cash and Deposits

Receivables
Accounts Receivable - Sale of Investments
Accrued Interest and Other Dividends
Contributions
Accounts Receivable - Other
Total Receivables


## Liabilities

Payables
Accounts Payable - Purchase of Investments
Accrued Expenses
Accounts Payable - Other
Total Liabilities

Net Position Restricted for Pensions

| $\$$ | - |
| :--- | :--- |
|  | - |
|  | - |
| $\$$ | - |

# Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2014 

|  | 2014 |
| :---: | :---: |
| Additions |  |
| Contributions |  |
| Employer | \$ 262,300,624 |
| Employee | 47,060,476 |
| Other | 8,769,727 |
| Total Contributions | \$ 318,130,827 |
| Investment Income |  |
| Net Appreciation in Fair Value of Investments | \$ 1,233,160,978 |
| Interest and Dividends | - |
| Less Investment Expense | $(27,814,115)$ |
| Net Investment Income | \$ 1,205,346,863 |
| Other | - |
| Total Additions | \$ 1,523,477,690 |
| Deductions |  |
| Benefit Payments, Including Refunds of Employee Contributions | \$ 422,524,099 |
| Pension Plan Administrative Expense | 6,837,483 |
| Other | 467,372 |
| Total Deductions | \$ 429,828,954 |
| Net Increase in Net Position | \$ 1,093,648,736 |
| Net Position Restricted for Pensions |  |
| Beginning of Year | \$ 6,418,518,612 |
| End of Year | \$7,512,167,348 |

# SECTION C REQUIRED SUPPLEMENTARY INFORMATION 

# Schedules of Required Supplementary Information Schedule of Changes in Net Pension Liability and Related Ratios Ultimately 10 Fiscal Years will be displayed 

Fiscal year ending June 30,
2014
Total Pension Liability
Service Cost
Interest on the Total Pension Liability
Benefit Changes

| Difference between Expected and Actual Experience | $(22,177,672)$ |
| :--- | ---: |
| Assumption Changes | $214,180,852$ |
| Benefit Payments | $(413,068,752)$ |
| Refunds | $(9,455,347)$ |
| Net Change in Total Pension Liability | $586,035,565$ |
| Total Pension Liability - Beginning | $8,334,415,953$ |
| Total Pension Liability - Ending (a) | $\$ 8,920,451,518$ |
| Plan Fiduciary Net Position |  |
| Employer Contributions | $262,300,624$ |
| Employee Contributions | $47,060,476$ |
| Pension Plan Net Investment Income | $1,205,346,863$ |
| Benefit Payments | $(413,068,752)$ |
| Refunds | $(9,455,347)$ |
| Pension Plan Administrative Expense | $(6,837,483)$ |
| Other | $8,302,355$ |
| Net Change in Plan Fiduciary Net Position | $1,093,648,736$ |
| Plan Fiduciary Net Position - Beginning | $6,418,518,612$ |
| Plan Fiduciary Net Position - Ending (b) | $\$ 7,512,167,348$ |
| Net Pension Liability - Ending (a) - (b) | $1,408,284,170$ |
| Plan Fiduciary Net Position as a Percentage |  |
| of Total Pension Liability | $84.21 \%$ |
| Covered Employee Payroll | $\$ 1,745,242,112$ |
| Net Pension Liability as a Percentage | $80.69 \%$ |
| $\quad$ of Covered Employee Payroll |  |
| Notes to Schedule: |  |
| N/A |  |

\$ 160,292,473
656,264,011
(22,177,672)
214,180,852
$(413,068,752)$
586,035,565
$\begin{array}{r}8,334,415,953 \\ \hline \$ 8,920,451,518 \\ \hline\end{array}$
\$ 262,300,624
47,060,476
1,205,346,863
(413,068,752)
$(9,455,347)$
$(6,837,483)$
$\begin{array}{r}8,302,355 \\ \hline 1,093,648,736\end{array}$
$\begin{array}{r}6,418,518,612 \\ \hline \$ 7,512,167,348 \\ \hline 1,408,284,170\end{array}$
84.21 \%
\$ 1,745,242,112
80.69 \%

N/A

# Schedules of Required Supplementary Information Schedule of the Net Pension Liability Ultimately 10 Fiscal Years will be displayed 

| FY Ending June 30, | Total Pension Liability | Plan Net <br> Position | Net Pension Liability | Plan Net Position as a \% of Total Pension Liability | Covered <br> Payroll | Net Pension Liability as a \% of Covered Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | \$8,920,451,518 | \$7,512,167,348 | \$ 1,408,284,170 | 84.21\% | \$1,745,242,112 | 80.69\% |

# Schedule of Contributions <br> (\$ in millions) 

Last 10 Fiscal Years

| FY Ending June 30, | Actuarially Determined Contribution |  | Actual <br> Contribution |  |  |  | Covered Payroll | Actual Contribution as a \% of Covered Payroll* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2005 | \$ | 135.0 | \$ | 135.0 | \$ | - | \$ 1,215 | 11.09\% |
| 2006 |  | 158.2 |  | 158.2 |  | - | 1,267 | 12.54\% |
| 2007 |  | 163.2 |  | 163.2 |  | - | 1,303 | 12.54\% |
| 2008 |  | 173.5 |  | 173.5 |  | - | 1,380 | 12.54\% |
| 2009 |  | 159.2 |  | 159.2 |  | - | 1,434 | 11.01\% |
| 2010 |  | 169.6 |  | 169.6 |  | - | 1,523 | 11.00\% |
| 2011 |  | 195.6 |  | 195.6 |  | - | 1,623 | 12.46\% |
| 2012 |  | 229.6 |  | 229.6 |  | - | 1,686 | 13.47\% |
| 2013 |  | 249.5 |  | 249.5 |  | - | 1,693 | 14.24\% |
| 2014 |  | 262.3 |  | 262.3 |  | - | 1,745 | 14.88\% |

* Actual contributions are based on covered payroll at the time of the contribution. This payroll is not reported to the actuary. The covered payroll shown on this page is the valuation payroll.


## Notes to Schedule of Contributions

Valuation Date:
June 30, 2014
Methods and Assumptions Used to Determine Contribution Rates:
Actuarial Cost Method
Amortization Method
Remaining Amortization Period
Asset Valuation Method
Inflation
Salary Increases
Investment Rate of Return
Retirement Age

Mortality
Entry Age Normal
Level Percentage of Payroll, Closed
23 years
4-Year smoothed market; $25 \%$ corridor
$3.75 \%$ wage inflation, $2.75 \%$ price inflation
$3.75 \%$ to $10.35 \%$ including inflation
7.75\%

Experience-based table of rates that are specific to the type of eligibility condition.

Based on RP-2000 Combined Healthy mortality table, projected to 2020 using Projection Scale BB, set-forward 2 years for males and 1 year for females.

## Other Information:

## Notes

There were no benefit changes during the year.

# Schedule of Investment Returns Multiyear 

## To be provided by System

## Last 10 Fiscal Years

| FY Ending | Annual |
| :---: | ---: |
| June 30, | Return $^{1}$ |

2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
${ }^{1}$ Annual money-weighted rate of return, net of investment expenses.

SECTION D<br>NOTES TO FINANCIAL STATEMENTS

## Long-Term Expected Return on Plan Assets

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future 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 percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for the 10 -year period from 2014 to 2023 were provided by plan's investment consultant(s). For each major asset class that is included in the pension plan's target asset allocation as of June 30, 2014, these best estimates, provided by the plan's investment consultant, are summarized in the following table:

## Asset Allocation

| Asset Class | Target Allocation | Long-Term Expected Real Rate of Return |
| :---: | :---: | :---: |
| Domestic Fixed Income | 9.00\% | 0.50\% |
| Fixed Income Defensive | 9.00\% | 0.80\% |
| Large Cap Domestic Equity | 20.00\% | 6.65\% |
| Smal/Mid Cap Domestic Equity | 17.00\% | 7.90\% |
| International Equity | 12.00\% | 7.00\% |
| Emerging Market Equity | 12.00\% | 9.20\% |
| Private Equity | 2.50\% | 11.30\% |
| Hedge Funds | 2.50\% | 3.19\% |
| Real Estate | 16.00\% | 5.10\% |
| Total | 100.00\% |  |
| Total Real Rate of Return |  | 5.91\% |
| Plus: Price Inflation - Actuary's Assumption |  | 2.75\% |
| Less: Admin and Investment Expenses* |  | 0.50\% |
| Net Expected Return |  | 8.16\% |

## Single Discount Rate

A single discount rate of $7.75 \%$ was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of $7.75 \%$. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of $7.75 \%$, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

# Sensitivity of Net Pension Liability to the Single Discount Rate Assumption 

| Current Single <br> $\mathbf{1 \%}$ Decrease <br> 6.75\% |  |  |
| :---: | :---: | :---: |
| Rate Assumption | $\mathbf{1 \%}$ Increase |  |
| $\$ 2,532,388,229$ | $\$ 1,408,284,170$ | $\$ 471,793,815$ |

## Disclosure Regarding the Deferred Retirement Option Program

## To Be Provided by the System

## Summary of Population Statistics

| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 31,914 |
| :--- | :--- |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 13,514 |
| Active Plan Members | 45,841 |
| Total Plan Members | 91,269 |

## SECTION E <br> SUMMARY OF BENEFITS

# Summary of Provisions Evaluated <br> (ExCludes Special Provisions for General Assembly) (LaSt CHANGED AS OF 7/1/2009) 

The Old Contributory Plan is available to persons who became members of APERS before January 1, 1978. The Non-Contributory Plan applies to all persons first hired after January 1, 1978 and before July 1, 2005 in APERS-covered employment. The New Contributory Plan applies to all persons hired after July 1, 2005 in APERS-covered employment or Non-Contributory members who elected to participate in the New Contributory Plan.

New Contributory Plan

Non-Contributory Plan

## Voluntary Retirement

With a full benefit, after either (a) age 65 with 5 years of service, or (b) 28 years of actual service, regardless of age. For sheriff and public safety members, the age 65 requirement is reduced 1 month for each 2 months of actual service, but not below age 55 (age 52 for sheriff members with a minimum of 10 years of actual service).

With a reduced benefit, after age 55 with 5 years of service or any age with 25 years of service. The reduction is equal to $1 / 2$ of $1 \%$ for each month retirement proceeds normal retirement age or $1 \%$ for each month below 28 years of actual service, whichever is less.

With a full benefit, after either (a) age 65 with 5 years of service, or (b) 28 years of actual service, regardless of age. For sheriff and public safety members, the age 65 requirement is reduced 1 month for each 2 months of actual service, but not below age 55 (age 52 for sheriff members with a minimum of 10 years of actual service).

With a reduced benefit, after age 55 with 5 years of service or any age with 25 years of service. The reduction is equal to $1 / 2$ of $1 \%$ for each month retirement proceeds normal retirement age or $1 \%$ for each month below 28 years of actual service, whichever is less.

## Final Average Compensation (FAC)

Average of highest 36 calendar months of covered compensation.

## Full Age \& Service Retirement Benefit

$2.00 \%$ of FAC times years of service ( $2.03 \%$ for service prior to July 1, 2007), plus $.5 \%$ of FAC times years of service over 28 years for service after July 1 , 2009. The minimum monthly benefit is $\$ 150$ minus any age and beneficiary option reductions.

Average of highest 36 calendar months of covered compensation.
$1.72 \%$ of FAC times years and months of credited service ( $1.75 \%$ for service prior to July 1, 2007), plus . $5 \%$ of FAC times years of service over 28 years for service after July 1, 2009. If retirement is prior to age 62, an additional $.33 \%$ of FAC times years of service will be paid until age 62. The portion of the APERS benefit based on service before 1978 cannot be less than the amount provided by contributory provisions in effect at the time of retirement. The minimum monthly benefit is $\$ 150$ minus any age and beneficiary option reductions.

## Summary of Provisions Evaluated

## New Contributory Plan

## Benefit Increases After Retirement

Annually, there will be a cost-of-living adjustment equal to $3 \%$ of the current benefit.

Annually, there will be a cost-of-living adjustment equal to $3 \%$ of the current benefit.

## Member Contribution Rates

5\% of covered compensation (pre-tax). Member contributions are refundable if APERS-covered employment terminates before a monthly benefit is payable. Members will earn interest on the contributions at a rate of $4 \%$ annually.

## Vested Retirement Benefits

5 years service, and leaving APERS-covered employment before full retirement age. Deferred full retirement benefit, based on service and pay at termination, begins at age 65 . A death benefit is payable to surviving spouse of member who dies before benefit commencement.

In place of deferred full benefit, at age 55 or older a qualifying member can elect an immediate reduced benefit.

## Total and Permanent Disability

Disabled after 5 years of service, including credit for 18 of the 24 months preceding disability.

Amount is computed as an age \& service benefit, based on service and pay at disability.

No employee contributions for service after January 1, 1978. If there is service before January 1, 1978, contributions for that period are refundable later in the same manner as under the Contributory Plan.

5 years service and leaving APERS-covered employment before full retirement age. Deferred full retirement benefit, based on service and pay at termination, begins at age 65 . A death benefit is payable to surviving spouse of member who dies before benefit commencement.

In place of deferred full benefit, at age 55 or older a qualifying member can elect an immediate reduced benefit.

Disabled after 5 years of service, including credit for 18 of the 24 months preceding disability.

Amount is computed as an age \& service benefit, based on service and compensation at disability.

## Summary of Provisions Evaluated

## New Contributory Plan

## Death After Retirement

If death occurs before total monthly benefit payments equal member's accumulated contributions, the difference is refunded.

A retiring member can also elect an optional form of benefit, which provides beneficiary protection paid for by reducing the retired member's benefit amount. Should the member elect a straight life benefit and decease within 12 months of the date of retirement, a benefit may be payable to the surviving spouse under certain conditions.

## Death While in APERS-Covered Employment

Member's accumulated contributions are refundable

If the member had 5 years service, monthly benefits are payable instead. Surviving spouse receives a benefit computed as if member had retired and elected the Joint \& 75\% Survivor Option. Payment begins immediately.

Each dependent child receives benefit of $10 \%$ of compensation (maximum of $25 \%$ for all children).

Dependent parents benefits are payable if neither spouse nor children's benefits are payable.

Member contributions before 1978 are protected in the same manner as under the Contributory Plan.

A retiring member can also elect an optional form of benefit, which provides beneficiary protection paid for by reducing the retired member's benefit amount. Should the member elect a straight life benefit and decease within 12 months of the date of retirement, a benefit may be payable to the surviving spouse under certain conditions.

Member's accumulated contributions before 1978 are refundable.

If the member had 5 years service, monthly benefits are payable instead. Surviving spouse receives a benefit computed as if member had retired and elected the Joint \& 75\% Survivor Option. Payment begins immediately.

Each dependent child receives benefit of $10 \%$ of compensation (maximum of $25 \%$ for all children).

Dependent parents benefits are payable if neither spouse nor children's benefits are payable.

## Summary of Provisions Evaluated Credited SERVICE

## Membership Group

## Service Credits

Public Safety Members (including State 1-1/2 times regular rate with 5 years actual service Capitol Police and Wildlife Sub-Division required to meet benefit eligibility rules. members) hired before July 1, 1997

Governor (hired before July 1, 1999)

Elected State Constitutional Officers
(hired before July 1, 1999)
General Assembly
3 times regular rate with 5 years actual service required to meet death-in-service eligibility and 4 years actual service required for other benefit eligibility.

2-1/2 times regular rate with 5 years actual service required to meet benefit eligibility.

Regular crediting rate with 5 years of actual service required to meet death-in-service eligibility and 10 years of actual service required for other benefit eligibility.

2 times regular rate with 5 years actual service required to meet benefit eligibility.
(municipal and county officials)
All Other Members

## Arkansas Public Employees Deferred Retirement Option Plan

Members with 28 years of actual service in APERS or in combination with a reciprocal system are eligible to participate.

Members, for a maximum of 7 years, may continue employment and have $75 \%$ of their accrued benefit (at date of participation with 30 or more years of service) paid into the Deferred Retirement Option Plan in lieu of any further benefit accruals.

The payments into the Deferred Retirement Option Plan accumulate with interest at a rate established by the Board. The interest is paid on the mean balance and is paid to the member at termination of active membership in either a lump sum or as an annuity.

Employer contributions continue for members participating in the DROP.

# Summary of Provisions Evaluated GENERAL ASSEMBLY DIVISION Additional Benefit Provisions 

## VOLUNTARY RETIREMENT ELIGIBILITY

Age 65 with 10 or more years of credited service, 28 years of actual service regardless of age, or age 55 with 12 or more years of actual service, 10 of which must be as a member of the General Assembly. In addition, a member of the General Assembly who was a member of the General Assembly on July 1, 1979, or holding any other Arkansas elective office on July 1, 1979, is eligible to retire with 17.5 years of actual service regardless of age.

## VESTING

Termination of employment prior to normal retirement age after completing 10 or more years of credited service.

## Retirement Benefit

$\$ 35.00$ per month times years of General Assembly service. The amount is $\$ 40.00$ per month per year of service for any member who served as Speaker of the House of Representatives or President Pro Tempore of the Senate.

## DISABILITY

Eligibility: 10 years of credited service.
Amount: Accrued retirement benefit.

## DEATH-IN-SERVICE

Eligibility: 5 years of service.
Amount - Less than 10 years in General Assembly: Same as for regular members.
Amount - 10 or more years in General Assembly: $100 \%$ of the benefit the member would have been entitled to had he or she been at retirement age payable to an eligible surviving spouse.

## DEATH-AFTER-RETIREMENT

$100 \%$ of the benefit the member was receiving payable to an eligible surviving spouse.

## Participation

A member of the General Assembly may, at any time, elect either (i) to be covered by regular benefit provisions, or (ii) to discontinue an APERS membership.

## SECTION F

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

# Summary of Assumptions Used For APERS ACTUARIAL VALUATIONS ASSUMPTIONS AdOPTED BY BOARD OF TRUSTEES After Consulting With Actuary 

In accordance with Section 24-4-105 of the Arkansas Code, the Board of Trustees adopts the actuarial assumptions used for actuarial valuation purposes.

## ECONOMIC ASSUMPTIONS

The investment return rate used in making the valuation was $7.75 \%$ per year, compounded annually (net after investment and administrative expenses). This rate of return is not the assumed real rate of return. The real rate of return is the portion of investment return which is more than the wage inflation rate. Considering the assumed wage inflation rate of $3.75 \%$, the $7.75 \%$ investment return rate translates to an assumed net real rate of return of $4.0 \%$. This assumption was first used for the June 30, 2014 valuation and for the District Judges division for the June 30, 2014 valuation.

Pay increase assumptions for individual active members are shown on pages 27 and 28. Part of the assumption for each age is for a merit and/or seniority increase, and the other $3.75 \%$ recognizes wage inflation. These assumptions were first used for the June 30, 2014 valuation and for the District Judges division for the June 30, 2014 valuation.

Total active member payroll is assumed to increase $3.75 \%$ a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. This assumption was first used for the June 30, 2014 valuation and for the District Judges division for the June 30, 2014 valuation.

The number of active members is assumed to continue at the present number.

## NON-ECONOMIC ASSUMPTIONS

The mortality table used to measure retired life mortality was the RP-2000 Combined Healthy mortality table, projected to 2020 using Projection Scale BB, set-forward 2 years for males and 1 year for females. Related values are shown on page 24. Based upon the experience observed during the most recent experience study, it appears that at the time of the study the current table provides for an approximate $15 \%$ margin for future mortality improvement. This assumption was first used for the June 30, 2013 valuation.

The probabilities of retirement for members eligible to retire are shown on pages 24 through 26. These probabilities were first used for the June 30, 2013 valuation and for the June 30, 2007 valuation for the District Judges division.

The probabilities of withdrawal from service, death-in-service and disability are shown for sample ages on pages 27 and 28. These probabilities were first used for the June 30, 2013 valuation and for the District Judges division for the June 30, 2013 valuation.

The individual entry-age normal actuarial cost method of the valuation was used in determining liabilities and normal cost. For calculating actuarially determined contributions, for members who are assumed to enter the DROP, normal costs are assumed to be collected until the ultimate date of retirement. For GASB Statement No. 67 purposes for members who are assumed to enter the DROP, the date of entry into the DROP was considered to be the plan member's retirement date.

Differences in the past between assumed experience and actual experience (actuarial gains and losses) become part of actuarial accrued liabilities.

Unfunded actuarial accrued liabilities are amortized to produce contribution amounts (principal and interest) which are level percent-of-payroll contributions.

Recognizing the special circumstances of the General Assembly division, modifications of the above assumptions were made where appropriate.

Present assets (cash \& investments) were valued on a market related basis in which differences between actual and assumed returns are phased-in over a four-year period. The funding value of assets may not deviate from the market value of assets by more than $25 \%$.

The data about persons now covered and about present assets were furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA).

## Single Life Retirement Values BASED ON RP -2000 COMBINED, PROJECTED TO 2020 7.75\% INTEREST JUNE 30, 2014

| Sample <br> Attained <br> Ages | Present Value of <br> \$1.00 Monthly for Life |  | Present Value of <br> \$1.00 Monthly for Life <br> Increasing 3\% Annually |  | Future Life <br> Expectancy (Years) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women | Men | Women |
| 40 | $\$ 148.79$ | $\$ 151.36$ | $\$ 213.63$ | $\$ 220.62$ | 40.56 | 44.21 |
| 45 | 144.51 | 147.87 | 202.83 | 211.12 | 35.81 | 39.39 |
| 50 | 138.75 | 143.19 | 189.86 | 199.70 | 31.13 | 34.64 |
| 55 | 131.27 | 136.95 | 174.68 | 186.08 | 26.58 | 29.98 |
| 60 | 121.95 | 128.83 | 157.43 | 170.13 | 22.23 | 25.44 |
| 65 | 110.72 | 118.82 | 138.40 | 152.20 | 18.14 | 21.14 |
| 70 | 97.36 | 107.05 | 117.68 | 132.83 | 14.35 | 17.16 |
| 75 | 82.38 | 93.70 | 96.25 | 112.51 | 10.95 | 13.56 |
| 80 | 66.49 | 78.92 | 75.15 | 91.71 | 8.02 | 10.35 |
| 85 | 50.66 | 63.41 | 55.53 | 71.45 | 5.60 | 7.59 |


| Sample <br> Attained <br> Ages | Benefit <br> Increasing <br> 3.0\% Yearly | Portion of Age 60 <br> Lives Still Alive |  |
| :---: | :---: | :---: | :---: |
|  |  | Men | Women |
| 60 | $\$ 100$ | $100 \%$ | $100 \%$ |
| 65 | 116 | 96 | 97 |
| 70 | 134 | 90 | 92 |
| 75 | 155 | 80 | 84 |
| 80 | 180 | 66 | 72 |

The mortality table was set forward 10 years for disabilities.

Based on RP-2000 Combined Healthy mortality table, projected to 2020 using Projection Scale BB, set-forward 2 years for males and 1 year for females.

## State and Local Government Division Age-Based Retirement <br> June 30, 2014

| Retirement Ages (with less than 28 years of service) | Percent of Eligible Active Members Retiring Within Next Year |  |
| :---: | :---: | :---: |
|  | Unreduced | Reduced |
| 55 |  | 2 \% |
| 56 |  | 2 |
| 57 |  | 3 |
| 58 |  | 3 |
| 59 |  | 4 |
| 60 |  | 5 |
| 61 |  | 5 |
| 62 |  | 18 |
| 63 |  | 17 |
| 64 |  | 13 |
| 65 | 23 \% |  |
| 66 | 23 |  |
| 67 | 23 |  |
| 68 | 15 |  |
| 69 | 15 |  |
| 70 | 17 |  |
| 71 | 17 |  |
| 72 | 17 |  |
| 73 | 17 |  |
| 74-77 | 20 |  |
| 78 | 15 |  |
| 79 | 20 |  |
| 80-82 | 20 |  |
| 83 | 20 |  |
| 84 | 20 |  |
| 85 \& Over | 100 |  |

A member was assumed eligible for unreduced retirement after attaining age 65 with 5 years of service or 28 years regardless of age. A member was assumed eligible for reduced retirement after attaining age 55 with 10 or more years of service. These rates represent the point at which members ultimately terminate employment (after participating in the DROP, for those that do).

## State and Local Government Division SERVICE BASED RETIREMENT JUNE 30, 2014

| Service | Percent of Eligible Active Members <br> Retiring Within Next Year |
| :---: | :---: |
|  |  |
| 28 | $15 \%$ |
| 29 | 13 |
| 30 | 11 |
| 31 | 11 |
| 32 | 12 |
| 33 | 12 |
| 34 | 12 |
| 35 | 20 |
| 36 | 25 |
| 37 | 25 |
| 38 | 30 |
| 39 | 30 |
| $40 \&$ Over | 100 |

GENERAL ASSEMBLY DIVISION<br>Probabilities of Retirement for Members Eligible to Retire<br>JUNE 30, 2014

| Retire ment <br> Ages | Percent of Eligible Active Members <br> Retiring Within Next Year |
| :---: | :---: |
|  |  |
| 50 | $30 \%$ |
| 51 | 30 |
| 52 | 30 |
| 53 | 30 |
| 54 | 30 |
| 55 | 30 |
| 56 | 30 |
| 57 | 30 |
| 58 | 30 |
| 59 | 30 |
| 60 | 30 |
| 61 | 30 |
| 62 | 50 |
| 63 | 30 |
| 64 | 30 |
| 65 | 50 |
| 66 | 30 |
| $67-79$ | 20 |
| 80 Over | 100 |

Member may retire at age 50 with 20 or more years of service, age 60 with 16 or more years of service, or age 65 with 8 or more years of service.

## State and Local Government Division Separations From Active Employment Before Service Retirement <br> JUNE 30, 2014

| Sample <br> Ages | Years of Service | Percent of Active Members Separating within the Next Year |  |  |  |  |  | Pay Increase Assumptions <br> For An Individual Employee |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Withdrawal |  | Death |  | Disability |  |  <br> Seniority | Base (Economy) | Increase <br> Next Year |
|  |  | Men | Women | Men | Women | Men | Women |  |  |  |
|  | 0 | 40.0 \% | 40.0 \% |  |  |  |  |  |  |  |
|  | 1 | 25.0 | 25.0 |  |  |  |  |  |  |  |
|  | 2 | 20.0 | 20.0 |  |  |  |  |  |  |  |
|  | 3 | 15.0 | 15.0 |  |  |  |  |  |  |  |
|  | 4 | 12.0 | 12.0 |  |  |  |  |  |  |  |
| 20 | 5+ | 10.0 | 10.0 | 0.02 \% | 0.01 \% | 0.01 \% | 0.01 \% | 6.60 \% | 3.75 \% | 10.35 \% |
| 25 |  | 10.0 | 10.0 | 0.02 | 0.01 | 0.05 | 0.05 | 5.10 | 3.75 | 8.85 |
| 30 |  | 8.8 | 8.8 | 0.03 | 0.01 | 0.08 | 0.08 | 3.20 | 3.75 | 6.95 |
| 35 |  | 6.2 | 6.2 | 0.04 | 0.02 | 0.10 | 0.10 | 2.30 | 3.75 | 6.05 |
| 40 |  | 4.4 | 4.4 | 0.06 | 0.03 | 0.15 | 0.15 | 1.90 | 3.75 | 5.65 |
| 45 |  | 3.4 | 3.4 | 0.08 | 0.05 | 0.20 | 0.20 | 1.50 | 3.75 | 5.25 |
| 50 |  | 2.7 | 2.7 | 0.13 | 0.08 | 0.40 | 0.40 | 1.10 | 3.75 | 4.85 |
| 55 |  | 1.9 | 1.9 | 0.22 | 0.12 | 0.70 | 0.70 | 0.80 | 3.75 | 4.55 |
| 60 |  | 1.2 | 1.2 | 0.37 | 0.21 | 1.00 | 1.00 | 0.70 | 3.75 | 4.45 |

Pay increase rates are age based only, and not service based.

# GENERAL ASSEMBLY DIVISION <br> Separations From Active Employment Before <br> SERVICE RETIREMENT <br> June 30, 2014 

| Sample Ages | Years of Service | Percent of Active Members Separating within the Next Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Withdrawal |  | Death |  | Disability |  |
|  |  | Men | Women | Men | Women | Men | Women |
|  | 0 | 30.0 \% | 30.0 \% |  |  |  |  |
|  | 1 | 25.0 | 25.0 |  |  |  |  |
|  | 2 | 20.0 | 20.0 |  |  |  |  |
|  | 3 | 15.0 | 15.0 |  |  |  |  |
|  | 4 | 12.0 | 12.0 |  |  |  |  |
| 20 | 5+ | 9.0 | 9.0 | 0.02 \% | 0.01 \% | 0.06 \% | 0.06 \% |
| 25 |  | 8.3 | 8.3 | 0.02 | 0.01 | 0.06 | 0.06 |
| 30 |  | 5.3 | 5.3 | 0.03 | 0.01 | 0.06 | 0.06 |
| 35 |  | 3.0 | 3.0 | 0.04 | 0.02 | 0.06 | 0.06 |
| 40 |  | 2.6 | 2.6 | 0.06 | 0.04 | 0.16 | 0.16 |
| 45 |  | 2.4 | 2.4 | 0.08 | 0.06 | 0.22 | 0.22 |
| 50 |  | 1.1 | 1.1 | 0.13 | 0.09 | 0.39 | 0.39 |
| 55 |  | 0.8 | 0.8 | 0.22 | 0.14 | 0.71 | 0.71 |
| 60 |  | 0.8 | 0.8 | 0.37 | 0.23 | 1.13 | 1.13 |

## SUMMARY OF ASSUMPTIONS USED June 30, 2014 <br> Miscellaneous and Technical Assumptions

Marriage Assumption. $80 \%$ of males and $80 \%$ of females are assumed to be married for purposes of death-in-service benefits. District Judges division - $100 \%$ of males and $100 \%$ of females are assumed to be married for purposes of death-in-service benefits. $80 \%$ of males and $80 \%$ of females are assumed to be married for purposes of death-after-retirement benefits for active member valuation purposes.

Pay Increase Timing. Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

Decrement Timing. Decrements of all types are assumed to occur mid-year.
Other Liability Adjustments. Active member non-refund normal costs and actuarial accrued liabilities were increased by $1.5 \%$ to reflect non-reported reciprocal service.

Eligibility Testing. Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

Benefit Service. Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity. Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

Normal Form of Benefit. The assumed normal form of benefit is the straight life form.
District Judges Division Old Plan Deferred Members. For members that are eligible for a deferred benefit in the Old Plan and are currently active in the New Plan, it is assumed that the deferred benefit will commence at the first age at which the member is eligible to receive the benefit.

Incidence of Contributions. Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.

DROP Duration. We assume on average the total DROP duration is 4 years for those members currently participating in the DROP.

# SUMMARY OF ASSUMPTIONS USED JUNE 30, 2014 <br> Miscellaneous and Technical Assumptions (Concluded) 

DROP Interest Credit. The current interest rate credit for DROP accounts is assumed to be $3.0 \%$.

Payroll for DROP Participants and Retired Members Returned to Work. Employers now contribute on the pays of DROP participants and retired members returned to work. We estimated payroll subject to this provision. For the June 30, 2014 valuation the estimated payroll for these members was $\$ 107,000,000$.

Pre-Retirement Mortality. The weighting of duty and ordinary deaths-in-service is $0 \% / 100 \%$.

## SECTION G <br> CALCULATION OF THE SINGLE DISCOUNT RATE

## CALCULATION OF THE SINGLE DISCOUNT RATE

GASB Statement No. 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a "risk-free" rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is $7.75 \%$; the municipal bond rate is $4.29 \%$; and the resulting single discount rate is $7.75 \%$.

The tables in this section provide background for the development of the single discount rate.
The Projection of Contributions table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities).

The Projection of Plan Fiduciary Net Position table shows the development of expected asset levels in future years.

The Present Values of Projected Benefit Payments table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

## Single Discount Rate Development Projection of Contributions

|  | Contributions <br> from Current <br> Employees |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| Year | Normal Cost | UAL <br> Contributions | Contributions |  |  |
|  |  |  |  |  |  |
| 0 |  |  |  |  |  |
| 1 | $\$$ | $47,241,953$ | $\$$ | $121,411,068$ | $\$ 127,333,065$ | | $\$ 295,986,086$ |
| :--- |
| 2 |

# Single Discount Rate Development Projection of Plan Fiduciary Net Position 

| Year | Projected Beginning Plan Net Position | Projected Total Contributions | Projected Benefit Payments | Projected Administrative Expenses | $\begin{gathered} \text { Projected } \\ \text { Investment } \\ \text { Earnings at } 7.75 \% \\ \hline \end{gathered}$ | Projected Ending Plan <br> Net Position |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) | (e) |  | )-(c)-(d)+(e) |
| 1 | \$ 7,512,167,348 | \$ 295,986,086 | \$ 619,711,414 | \$ | \$ 569,882,675 | \$ | 7,758,324,695 |
| 2 | 7,758,324,695 | 277,932,859 | 511,086,528 | - | 592,404,035 |  | 8,117,575,061 |
| 3 | 8,117,575,061 | 253,376,646 | 531,287,404 | - | 618,543,962 |  | 8,458,208,264 |
| 4 | 8,458,208,264 | 236,106,640 | 554,136,669 | - | 643,417,421 |  | 8,783,595,656 |
| 5 | 8,783,595,656 | 234,847,871 | 578,806,728 | - | 667,648,949 |  | 9,107,285,747 |
| 6 | 9,107,285,747 | 233,999,331 | 607,797,009 | - | 691,600,251 |  | 9,425,088,320 |
| 7 | 9,425,088,320 | 233,272,899 | 636,602,286 | - | 715,106,948 |  | 9,736,865,881 |
| 8 | 9,736,865,881 | 232,567,282 | 666,974,763 | - | 738,087,903 |  | 10,040,546,303 |
| 9 | 10,040,546,303 | 231,826,299 | 698,914,306 | - | 760,380,395 |  | 10,333,838,690 |
| 10 | 10,333,838,690 | 231,114,254 | 730,674,304 | - | 781,875,741 |  | 10,616,154,382 |
| 11 | 10,616,154,382 | 230,558,740 | 762,911,033 | - | 802,508,217 |  | 10,886,310,306 |
| 12 | 10,886,310,306 | 230,205,126 | 793,986,214 | - | 822,250,160 |  | 11,144,779,378 |
| 13 | 11,144,779,378 | 230,052,467 | 824,877,193 | - | 841,101,017 |  | 11,391,055,669 |
| 14 | 11,391,055,669 | 230,125,522 | 854,885,860 | - | 859,049,069 |  | 11,625,344,399 |
| 15 | 11,625,344,399 | 230,444,818 | 883,131,952 | - | 876,144,474 |  | 11,848,801,740 |
| 16 | 11,848,801,740 | 231,019,069 | 910,642,440 | - | 892,438,114 |  | 12,061,616,484 |
| 17 | 12,061,616,484 | 231,823,181 | 937,727,666 | - | 907,931,866 |  | 12,263,643,864 |
| 18 | 12,263,643,864 | 232,861,511 | 963,479,074 | - | 922,649,224 |  | 12,455,675,525 |
| 19 | 12,455,675,525 | 234,103,174 | 990,615,557 | - | 936,546,976 |  | 12,635,710,118 |
| 20 | 12,635,710,118 | 235,448,804 | 1,018,912,333 | - | 949,474,786 |  | 12,801,721,376 |
| 21 | 12,801,721,376 | 236,885,080 | 1,046,317,233 | - | 961,353,151 |  | 12,953,642,374 |
| 22 | 12,953,642,374 | 238,510,003 | 1,071,828,396 | - | 972,218,707 |  | 13,092,542,689 |
| 23 | 13,092,542,689 | 240,366,286 | 1,097,156,943 | - | 982,090,902 |  | 13,217,842,933 |
| 24 | 13,217,842,933 | 242,473,838 | 1,122,136,116 | - | 990,931,932 |  | 13,329,112,587 |
| 25 | 13,329,112,587 | 47,532,020 | 1,143,341,540 | - | 991,335,905 |  | 13,224,638,972 |
| 26 | 13,224,638,972 | 42,763,006 | 1,165,353,128 | - | 982,220,814 |  | 13,084,269,665 |
| 27 | 13,084,269,665 | 37,959,109 | 1,185,056,302 | - | 970,410,263 |  | 12,907,582,736 |
| 28 | 12,907,582,736 | 33,219,699 | 1,202,370,179 | - | 955,878,406 |  | 12,694,310,662 |
| 29 | 12,694,310,662 | 28,766,852 | 1,218,256,548 | - | 938,576,382 |  | 12,443,397,348 |
| 30 | 12,443,397,348 | 24,689,577 | 1,228,584,833 | - | 918,582,800 |  | 12,158,084,892 |
| 31 | 12,158,084,892 | 20,875,555 | 1,234,974,868 | - | 896,083,055 |  | 11,840,068,635 |
| 32 | 11,840,068,635 | 17,274,893 | 1,238,146,974 | - | 871,179,248 |  | 11,490,375,801 |
| 33 | 11,490,375,801 | 13,909,244 | 1,235,275,176 | - | 844,059,273 |  | 11,113,069,143 |
| 34 | 11,113,069,143 | 10,800,211 | 1,227,866,259 | - | 814,981,519 |  | 10,710,984,614 |
| 35 | 10,710,984,614 | 7,979,032 | 1,213,866,580 | - | 784,245,052 |  | 10,289,342,118 |
| 36 | 10,289,342,118 | 5,584,879 | 1,191,690,126 | - | 752,320,020 |  | 9,855,556,891 |
| 37 | 9,855,556,891 | 3,672,174 | 1,166,802,227 | - | 719,575,342 |  | 9,412,002,180 |
| 38 | 9,412,002,180 | 2,166,800 | 1,137,314,575 | - | 686,263,933 |  | 8,963,118,338 |
| 39 | 8,963,118,338 | 1,035,061 | 1,103,828,606 | - | 652,705,769 |  | 8,513,030,562 |
| 40 | 8,513,030,562 | 286,779 | 1,065,105,128 | - | 619,268,048 |  | 8,067,480,262 |
| 41 | 8,067,480,262 | - | 1,017,825,029 | - | 586,524,914 |  | 7,636,180,147 |
| 42 | 7,636,180,147 | - | 983,709,797 | - | 554,396,454 |  | 7,206,866,804 |
| 43 | 7,206,866,804 | - | 948,280,508 | - | 522,471,938 |  | 6,781,058,234 |
| 44 | 6,781,058,234 | - | 911,852,889 | - | 490,857,006 |  | 6,360,062,352 |
| 45 | 6,360,062,352 | - | 874,495,300 | - | 459,650,422 |  | 5,945,217,473 |
| 46 | 5,945,217,473 | - | 836,171,275 | - | 428,957,290 |  | 5,538,003,488 |
| 47 | 5,538,003,488 | - | 797,000,848 | - | 398,887,739 |  | 5,139,890,379 |
| 48 | 5,139,890,379 | - | 757,243,754 | - | 369,545,815 |  | 4,752,192,440 |
| 49 | 4,752,192,440 | - | 717,192,626 | - | 341,022,248 |  | 4,376,022,063 |
| 50 | 4,376,022,063 | - | 677,008,733 | - | 313,397,116 |  | 4,012,410,445 |

First year's benefit payments include distribution of the DROP reserve.

# Single Discount Rate Development Present Values of Projected Benefits 

| Year | Projected <br> Beginning Plan <br> Net Position | Projected Benefit Payments | Funded Portion of Benefit Payments | Unfunded Portion of Benefit Payments | Present Value of Funded Benefit Payments using Expected Return Rate (v) | Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf) | Present Value of Benefit <br> Payments using Single Discount Rate (sdr) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (a) | (b) | (c) | (d) | (e) | (f) $=(\mathrm{d})^{*} \mathrm{v}^{\wedge}((\mathrm{a})-.5)$ | (g) $=(\mathrm{e})^{*} \mathrm{vf} \wedge((\mathrm{a})-.5)$ | (h) $=\left((\mathrm{c}) /(1+\mathrm{sdr})^{\wedge}(\mathrm{a}-.5)\right.$ |
| 1 | \$ 7,512,167,348 | \$ 619,711,414 | \$ 619,711,414 | \$ | \$ 597,008,969 | \$ | \$ 597,008,969 |
| 2 | 7,758,324,695 | 511,086,528 | 511,086,528 | - | 456,949,824 | - | 456,949,824 |
| 3 | 8,117,575,061 | 531,287,404 | 531,287,404 | - | 440,845,409 | - | 440,845,409 |
| 4 | 8,458,208,264 | 554,136,669 | 554,136,669 | - | 426,733,182 | - | 426,733,182 |
| 5 | 8,783,595,656 | 578,806,728 | 578,806,728 | - | 413,671,705 | - | 413,671,705 |
| 6 | 9,107,285,747 | 607,797,009 | 607,797,009 | - | 403,147,086 | - | 403,147,086 |
| 7 | 9,425,088,320 | 636,602,286 | 636,602,286 | - | 391,882,510 | - | 391,882,510 |
| 8 | 9,736,865,881 | 666,974,763 | 666,974,763 | - | 381,048,109 | - | 381,048,109 |
| 9 | 10,040,546,303 | 698,914,306 | 698,914,306 | - | 370,575,805 | - | 370,575,805 |
| 10 | 10,333,838,690 | 730,674,304 | 730,674,304 | - | 359,550,325 | - | 359,550,325 |
| 11 | 10,616,154,382 | 762,911,033 | 762,911,033 | - | 348,411,489 | - | 348,411,489 |
| 12 | 10,886,310,306 | 793,986,214 | 793,986,214 | - | 336,522,615 | - | 336,522,615 |
| 13 | 11,144,779,378 | 824,877,193 | 824,877,193 | - | 324,469,075 | - | 324,469,075 |
| 14 | 11,391,055,669 | 854,885,860 | 854,885,860 | - | 312,086,419 | - | 312,086,419 |
| 15 | 11,625,344,399 | 883,131,952 | 883,131,952 | - | 299,209,277 | - | 299,209,277 |
| 16 | 11,848,801,740 | 910,642,440 | 910,642,440 | - | 286,338,710 | - | 286,338,710 |
| 17 | 12,061,616,484 | 937,727,666 | 937,727,666 | - | 273,647,591 | - | 273,647,591 |
| 18 | 12,263,643,864 | 963,479,074 | 963,479,074 | - | 260,939,549 | - | 260,939,549 |
| 19 | 12,455,675,525 | 990,615,557 | 990,615,557 | - | 248,992,053 | - | 248,992,053 |
| 20 | 12,635,710,118 | 1,018,912,333 | 1,018,912,333 | - | 237,683,964 | - | 237,683,964 |
| 21 | 12,801,721,376 | 1,046,317,233 | 1,046,317,233 | - | 226,521,361 | - | 226,521,361 |
| 22 | 12,953,642,374 | 1,071,828,396 | 1,071,828,396 | - | 215,354,407 | - | 215,354,407 |
| 23 | 13,092,542,689 | 1,097,156,943 | 1,097,156,943 | - | 204,587,918 | - | 204,587,918 |
| 24 | 13,217,842,933 | 1,122,136,116 | 1,122,136,116 | - | 194,195,646 | - | 194,195,646 |
| 25 | 13,329,112,587 | 1,143,341,540 | 1,143,341,540 | - | 183,633,813 | - | 183,633,813 |
| 26 | 13,224,638,972 | 1,165,353,128 | 1,165,353,128 | - | 173,706,846 | - | 173,706,846 |
| 27 | 13,084,269,665 | 1,185,056,302 | 1,185,056,302 | - | 163,938,552 | - | 163,938,552 |
| 28 | 12,907,582,736 | 1,202,370,179 | 1,202,370,179 | - | 154,370,044 | - | 154,370,044 |
| 29 | 12,694,310,662 | 1,218,256,548 | 1,218,256,548 | - | 145,159,782 | - | 145,159,782 |
| 30 | 12,443,397,348 | 1,228,584,833 | 1,228,584,833 | - | 135,861,193 | - | 135,861,193 |
| 31 | 12,158,084,892 | 1,234,974,868 | 1,234,974,868 | - | 126,745,082 | - | 126,745,082 |
| 32 | 11,840,068,635 | 1,238,146,974 | 1,238,146,974 | - | 117,930,983 | - | 117,930,983 |
| 33 | 11,490,375,801 | 1,235,275,176 | 1,235,275,176 | - | 109,194,849 | - | 109,194,849 |
| 34 | 11,113,069,143 | 1,227,866,259 | 1,227,866,259 | - | 100,733,106 | - | 100,733,106 |
| 35 | 10,710,984,614 | 1,213,866,580 | 1,213,866,580 | - | 92,421,888 | - | 92,421,888 |
| 36 | 10,289,342,118 | 1,191,690,126 | 1,191,690,126 | - | 84,207,339 | - | 84,207,339 |
| 37 | 9,855,556,891 | 1,166,802,227 | 1,166,802,227 | - | 76,518,522 | - | 76,518,522 |
| 38 | 9,412,002,180 | 1,137,314,575 | 1,137,314,575 | - | 69,220,168 | - | 69,220,168 |
| 39 | 8,963,118,338 | 1,103,828,606 | 1,103,828,606 | - | 62,349,993 | - | 62,349,993 |
| 40 | 8,513,030,562 | 1,065,105,128 | 1,065,105,128 | - | 55,835,442 | - | 55,835,442 |
| 41 | 8,067,480,262 | 1,017,825,029 | 1,017,825,029 | - | 49,519,167 | - | 49,519,167 |
| 42 | 7,636,180,147 | 983,709,797 | 983,709,797 | - | 44,417,072 | - | 44,417,072 |
| 43 | 7,206,866,804 | 948,280,508 | 948,280,508 | - | 39,737,677 | - | 39,737,677 |
| 44 | 6,781,058,234 | 911,852,889 | 911,852,889 | - | 35,462,810 | - | 35,462,810 |
| 45 | 6,360,062,352 | 874,495,300 | 874,495,300 | - | 31,563,748 | - | 31,563,748 |
| 46 | 5,945,217,473 | 836,171,275 | 836,171,275 | - | 28,009,739 | - | 28,009,739 |
| 47 | 5,538,003,488 | 797,000,848 | 797,000,848 | - | 24,777,376 | - | 24,777,376 |
| 48 | 5,139,890,379 | 757,243,754 | 757,243,754 | - | 21,848,164 | - | 21,848,164 |
| 49 | 4,752,192,440 | 717,192,626 | 717,192,626 | - | 19,204,270 | - | 19,204,270 |
| 50 | 4,376,022,063 | 677,008,733 | 677,008,733 | - | 16,824,376 | - | 16,824,376 |

## Single Discount Rate Development Present Values of Projected Benefits (Concluded)

| Year |  | Projected Beginning Plan Net Position |  | Projected Benefit Payments |  | unded Portion of enefit Payments |  | Unfunded Portion of Benefit Payments | Present Value of Funded Benefit Payments using Expected Return Rate (v) | Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf) | Present Value of Benefit <br> Payments using <br> Single Discount Rate (sdr) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (a) |  | (b) |  | (c) |  | (d) |  | (e) | (f) $=(\mathrm{d}) * \mathrm{v}^{\wedge}((\mathrm{a})-.5)$ | (g) $=(\mathrm{e}) * \mathrm{vf} \wedge((\mathrm{a})-.5)$ | (h) $=\left((\mathrm{c}) /(1+\mathrm{sdr})^{\wedge}(\mathrm{a}-.5)\right.$ |
| 51 | \$ | 4,012,410,445 | \$ | 636,801,109 | \$ | 636,801,109 | \$ | \$ | \$ 14,686,937 | \$ | \$ 14,686,937 |
| 52 |  | 3,662,355,526 |  | 596,698,756 |  | 596,698,756 |  | - | 12,772,187 | - | 12,772,187 |
| 53 |  | 3,326,798,676 |  | 556,826,045 |  | 556,826,045 |  | - | 11,061,459 | - | 11,061,459 |
| 54 |  | 3,006,625,118 |  | 517,319,285 |  | 517,319,285 |  | - | 9,537,493 | - | 9,537,493 |
| 55 |  | 2,702,647,193 |  | 478,327,677 |  | 478,327,677 |  | - | 8,184,343 | - | 8,184,343 |
| 56 |  | 2,415,585,319 |  | 440,010,329 |  | 440,010,329 |  | - | 6,987,212 | - | 6,987,212 |
| 57 |  | 2,146,050,590 |  | 402,536,581 |  | 402,536,581 |  | - | 5,932,382 | - | 5,932,382 |
| 58 |  | 1,894,525,681 |  | 366,085,211 |  | 366,085,211 |  | - | 5,007,128 | - | 5,007,128 |
| 59 |  | 1,661,345,098 |  | 330,840,287 |  | 330,840,287 |  | - | 4,199,597 | - | 4,199,597 |
| 60 |  | 1,446,678,201 |  | 296,984,528 |  | 296,984,528 |  | - | 3,498,692 | - | 3,498,692 |
| 61 |  | 1,250,517,810 |  | 264,695,928 |  | 264,695,928 |  | - | 2,894,022 | - | 2,894,022 |
| 62 |  | 1,072,671,428 |  | 234,138,216 |  | 234,138,216 |  | - | 2,375,799 | - | 2,375,799 |
| 63 |  | 912,761,680 |  | 205,458,302 |  | 205,458,302 |  | - | 1,934,834 | - | 1,934,834 |
| 64 |  | 770,229,450 |  | 178,780,078 |  | 178,780,078 |  | - | 1,562,507 | - | 1,562,507 |
| 65 |  | 644,343,689 |  | 154,197,306 |  | 154,197,306 |  | - | 1,250,726 | - | 1,250,726 |
| 66 |  | 534,219,363 |  | 131,769,446 |  | 131,769,446 |  | - | 991,934 | - | 991,934 |
| 67 |  | 438,841,124 |  | 111,522,085 |  | 111,522,085 |  | - | 779,133 | - | 779,133 |
| 68 |  | 357,088,379 |  | 93,445,224 |  | 93,445,224 |  | - | 605,886 | - | 605,886 |
| 69 |  | 287,764,065 |  | 77,493,122 |  | 77,493,122 |  | - | 466,315 | - | 466,315 |
| 70 |  | 229,625,830 |  | 63,587,240 |  | 63,587,240 |  | - | 355,115 | - | 355,115 |
| 71 |  | 181,416,561 |  | 51,618,217 |  | 51,618,217 |  | - | 267,538 | - | 267,538 |
| 72 |  | 141,895,243 |  | 41,449,289 |  | 41,449,289 |  | - | 199,380 | - | 199,380 |
| 73 |  | 109,866,645 |  | 32,922,448 |  | 32,922,448 |  | - | 146,974 | - | 146,974 |
| 74 |  | 84,206,920 |  | 25,866,373 |  | 25,866,373 |  | - | 107,168 | - | 107,168 |
| 75 |  | 63,882,963 |  | 20,102,938 |  | 20,102,938 |  | - | 77,299 | - | 77,299 |
| 76 |  | 47,966,501 |  | 15,455,372 |  | 15,455,372 |  | - | 55,154 | - | 55,154 |
| 77 |  | 35,640,812 |  | 11,754,410 |  | 11,754,410 |  | - | 38,930 | - | 38,930 |
| 78 |  | 26,201,580 |  | 8,842,857 |  | 8,842,857 |  | - | 27,180 | - | 27,180 |
| 79 |  | 19,053,078 |  | 6,579,247 |  | 6,579,247 |  | - | 18,768 | - | 18,768 |
| 80 |  | 13,700,256 |  | 4,839,803 |  | 4,839,803 |  | - | 12,813 | - | 12,813 |
| 81 |  | 9,738,180 |  | 3,518,732 |  | 3,518,732 |  | - | 8,646 | - | 8,646 |
| 82 |  | 6,840,350 |  | 2,527,514 |  | 2,527,514 |  | - | 5,763 | - | 5,763 |
| 83 |  | 4,746,849 |  | 1,793,046 |  | 1,793,046 |  | - | 3,795 | - | 3,795 |
| 84 |  | 3,253,500 |  | 1,255,830 |  | 1,255,830 |  | - | 2,467 | - | 2,467 |
| 85 |  | 2,202,061 |  | 868,225 |  | 868,225 |  | - | 1,583 | - | 1,583 |
| 86 |  | 1,471,480 |  | 592,395 |  | 592,395 |  | - | 1,002 | - | 1,002 |
| 87 |  | 970,598 |  | 398,832 |  | 398,832 |  | - | 626 | - | 626 |
| 88 |  | 631,820 |  | 264,954 |  | 264,954 |  | - | 386 | - | 386 |
| 89 |  | 405,757 |  | 173,682 |  | 173,682 |  | - | 235 | - | 235 |
| 90 |  | 256,917 |  | 112,318 |  | 112,318 |  | - | 141 | - | 141 |
| 91 |  | 160,239 |  | 71,640 |  | 71,640 |  | - | 83 | - | 83 |
| 92 |  | 98,293 |  | 45,044 |  | 45,044 |  | - | 49 | - | 49 |
| 93 |  | 59,154 |  | 27,881 |  | 27,881 |  | - | 28 | - | 28 |
| 94 |  | 34,798 |  | 16,940 |  | 16,940 |  | - | 16 | - | 16 |
| 95 |  | 19,910 |  | 10,086 |  | 10,086 |  | - | 9 | - | 9 |
| 96 |  | 10,984 |  | 5,847 |  | 5,847 |  | - | 5 | - | 5 |
| 97 |  | 5,765 |  | 3,255 |  | 3,255 |  | - | 2 | - | 2 |
| 98 |  | 2,834 |  | 1,718 |  | 1,718 |  | - | 1 | - | 1 |
| 99 |  | 1,270 |  | 834 |  | 834 |  | - | 1 | - | 1 |
| 100 |  | 503 |  | 503 |  | 503 |  | - | - | - | - |
|  |  |  |  |  |  |  |  | Totals | \$ 10,269,624,739 | \$ | \$ 10,269,624,739 |



## SECTION H <br> GLOSSARY OF TERMS

## Glossary of Terms

Actuarial Accrued Liability (AAL)

## Actuarial Assumptions

## Accrued Service

## Actuarial Equivalent

## Actuarial Cost Method

## Actuarial Gain (Loss)

## Actuarial Present Value (APV)

## Actuarial Valuation

## Actuarial Valuation Date

Actuarially Determined
Contribution (ADC) or
Annual Required
Contribution (ARC)

The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."

These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.

Service credited under the system which was rendered before the date of the actuarial valuation.

A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.

The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.

The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.

The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total pension liability, and related actuarial present value of projected benefit payments for pensions.

The date as of which an actuarial valuation is performed.
A calculated contribution into a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically the Actuarially Determined Contribution has a normal cost payment and an amortization payment.

## GLOSSARY OF TERMS

## Amortization Payment

Amortization Method<br>Cost-of-Living Adjustments

Cost-Sharing Multiple-
Employer Defined Benefit
Pension Plan (cost-sharing
pension plan)
Covered-Employee Payroll

Deferred Retirement Option Program (DROP)

## Deferred Inflows and Outflows

The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.

The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be "open" (meaning, reset each year) or "closed" (the number of years remaining will decline each year.

Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.

A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.

The payroll of covered employees, which is typically only the pensionable pay and does not include pay above any pay cap.

A program that permits a plan member to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The plan member continues to provide service to the employer and is paid for the service by the employer after the DROP entry date; however, the pensions that would have been paid to the plan member are credited to an individual member account within the defined benefit pension plan until the end of the DROP period. Other variations for DROP exist and will be more fully detailed in the plan provision section of the valuation report.

The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources.

For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically:

1. The benefit payments to be made while the pension plans' fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and
2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

## GLOSSARY OF TERMS

Entry Age Actuarial Cost Method (EAN)

GASB

Fiduciary Net Position
Long-Term Expected Rate of Return

Money-Weighted Rate of Return

Multiple-Employer Defined
Benefit Pension Plan
Municipal Bond Rate

Net Pension Liability (NPL)

Non-Employer Contribution Entities

Normal Cost

The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.

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

The fiduciary net position is the value of the assets of the trust.
The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.

The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 67, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.

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

The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.

The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan.

Non-employer contribution entities are entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of the GASB Accounting statement plan members are not considered non-employer contribution entities.

The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.

## Glossary of Terms

## Other Postemployment Benefits (OPEB)

## Real Rate of Return

## Service Cost

Total Pension Expense

Total Pension Liability (TPL)

Unfunded Actuarial Accrued Liability (UAAL)

## Valuation Assets

All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.

The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.

The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.

The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year:

1. Service Cost
2. Interest on the Total Pension Liability
3. Current-Period Benefit Changes
4. Employee Contributions (made negative for addition here)
5. Projected Earnings on Plan Investments (made negative for addition here)
6. Pension Plan Administrative Expense
7. Other Changes in Plan Fiduciary Net Position
8. Recognition of Outflow (Inflow) of Resources due to Liabilities
9. Recognition of Outflow (Inflow) of Resources due to Assets

The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.

The UAAL is the difference between actuarial accrued liability and valuation assets.

The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of the GASB Statement No. 67, the valuation asset is equal to the market value of assets.

November 25, 2014 - Revised

Ms. Gail H. Stone, Executive Director
Arkansas Public Employees Retirement System
One Union National Plaza
124 West Capitol, Suite 400
Little Rock, Arkansas 72201
Dear Gail,
Please find the enclosed revised copies of the GASB Statement No. 67 Plan Reporting Accounting Schedules report of the Arkansas Public Employees Retirement System.

This report has an updated Sensitivity of Net Pension Liability schedule.
Sincerely,


Mita D. Drazilov, ASA, MAAA
MDD:dks:ah
Enclosures


[^0]:    * Based on the Bond Buyer 20-Bond Index of general obligation municipal bonds as of June, 2014 (i.e., the weekly rate closest to but not later than the Measurement Date).

