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# *Indiana Public Retirement System*

Judges' Retirement System

Actuarial Valuation as of  
June 30, 2014



December 8, 2014

Board of Trustees  
The State of Indiana Public Employees' Retirement Fund  
1 North Capitol, Suite 001  
Indianapolis, IN 46204

**Re: Certification of the Actuarial Valuations of the Indiana Public Retirement System as of as of June 30, 2014**

Dear Board of Trustees:

Actuarial valuations are performed annually for the Indiana Public Retirement System ("INPRS") defined benefit pension plans ("Plans"). The results of the latest actuarial valuations for all plans other than the Teachers' Retirement Fund were prepared as of June 30, 2014 and are presented in individual valuation reports pursuant to the engagement letter between INPRS and PricewaterhouseCoopers LLP ("PwC"), dated June 7, 2010. The reports are intended to provide the Board of Trustees ("Board") with information on the funded status of the Plans, development of the contribution rates, and certain financial statement disclosure information.

Under Indiana statutes, employer contribution rates and amounts, as applicable, are adopted annually for each Plan by the Board. The contributions are actuarially determined based on the funding policy, actuarial assumptions, and actuarial methods adopted by the Board. Contributions determined by the actuarial valuation become effective either twelve or eighteen months after the valuation date, depending on the applicable employer. Therefore, contribution rates and amounts determined by the June 30, 2014 actuarial valuation and adopted by the Board will become effective on either July 1, 2015 or January 1, 2016. If new legislation is enacted between the valuation date and the date the contributions become effective, the Board may adjust the recommended contributions before adopting them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

**Financing Objectives and Funding Policy**

In setting contribution levels, the Board's principal objectives have been:

- To set contributions such that the unfunded actuarial accrued liability ("UAAL") will be amortized over a period not greater than 30 years.
- To set contributions such that they remain relatively level over time.

To accomplish this, the Board's funding policy requires that employer contributions be equal to the sum of the employer normal cost (which pays the current year cost of benefits accruing) and an amortization of the UAAL in equal installments.

**Progress Toward Realization of Financing Objectives**

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a Plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches 100%. The combined funded ratio for all Plans (excluding the Teachers' Retirement Fund) increased by 3.6% from the preceding year to 87.0%, primarily due to asset returns exceeding the 6.75% assumptions and cost-of-living adjustments being less than assumed.

**Benefit Provisions**

The benefit provisions reflected in the valuation reports are those which were in effect at June 30, 2014, as set forth in the related Indiana statutes. There were no material changes in benefit provisions since the 2013 valuations.

**Assets and Member Data**

The valuations were based on asset values of the trust funds as of June 30, 2014 and member census data as of June 30, 2013, adjusted for certain activity during fiscal year 2014. All asset information and member data were provided by INPRS. While certain checks for reasonableness were performed, the data was used unaudited. The accuracy of the results presented in the reports is dependent upon the accuracy and completeness of the underlying asset and census information.



### Actuarial Assumptions and Methods

The majority of the actuarial assumptions used in the June 30, 2014 valuations were adopted by the Board pursuant to the experience studies completed in September 2011, which reflected the experience period from July 1, 2005 through June 30, 2010, and were first used in the June 30, 2011 valuation. The actuarial assumptions for interest rate and mortality were updated for the June 30, 2012 valuation. Minor assumptions were updated for the June 30, 2013 valuation including the interest rate on member account balances and certain demographic assumptions for Prosecuting Attorneys' Retirement Fund due to plan changes. There were no updates to the actuarial assumptions for the June 30, 2014 valuation. However, the June 30, 2014 valuations are the first valuations that incorporate member census data as of a date one year prior to the valuation date. Standard actuarial techniques were used to roll forward valuation results from June 30, 2013 to June 30, 2014.

The actuarial assumptions and methods are summarized in the Actuarial Assumptions and Methods section of each valuation report. We believe the actuarial assumptions and methods are reasonable for the purposes of the valuation reports and comply with the parameters set forth in Statements No. 27, No. 50, No. 67 and No. 68 of the Governmental Accounting Standards Board ("GASB"). Different assumptions and methods may be reasonable for other purposes. As such, the results presented in the valuation reports should only be relied upon for the intended purpose.

### Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of each Plan administered by INPRS (other than the Teachers' Retirement Fund) as of June 30, 2014 based on the underlying census data, asset information and selected assumptions and methods. This information is presented in several schedules and exhibits in this report, including the following:

- Schedule of Funding Progress (Included in the Historical Summary)
- Summary of Actuarial Assumptions & Methods
- Analysis of Financial Experience (Unfunded Actuarial Accrued Liability Reconciliation)
- Solvency Test (Included in the Historical Summary)
- Schedule of Active Member Valuation Data
- Schedule of Retirants and Beneficiaries

This report contains certain accounting information required to be included in the System's Comprehensive Annual Financial Report. This information for the system has been prepared in accordance with our understanding of GASB No.67. This report also contains employer accounting information prepared in accordance with our understanding of GASB No. 27 and 50, as well as the new requirements under GASB No. 68.

To the best of our knowledge this actuarial statement is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with our understanding of the requirements of Indiana state law. The undersigned actuaries are members of the Society of Actuaries and other professional organizations, including the American Academy of Actuaries, and meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States relating to pension plans. There is no relationship between the PwC practitioners involved in this engagement and INPRS that may impair our objectivity.

This document has been prepared pursuant to an engagement letter between INPRS and PwC, and is intended solely for the use and benefits of INPRS and not for reliance by any other person.

Respectfully submitted,

Ms. Cindy Fraterrigo  
Member, American Academy of Actuaries  
Fellow of the Society of Actuaries  
Enrolled Actuary (No. 14-06229)

Mr. Sheldon Gamzon  
Member, American Academy of Actuaries  
Fellow of the Society of Actuaries  
Enrolled Actuary (No. 14-03238)

Mr. Brandon Robertson  
Member, American Academy of Actuaries  
Associate of the Society of Actuaries  
Enrolled Actuary (No. 14-07568)

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## SECTION I - EXECUTIVE SUMMARY

### **HIGHLIGHTS OF THE ACTUARY'S REPORT**

This report presents the results of the actuarial valuation of the Judges' Retirement System ("JRS") and has been prepared to present the current funded status of the Plan, contribution requirements for fiscal year 2016 (July 1, 2015 through June 30, 2016), and certain financial statement disclosure information. The valuation was performed using census data for plan members as of June 30, 2013, adjusted for certain activity during fiscal year 2014, as provided by INPRS and summarized in Section IV, asset information as of June 30, 2014 provided by INPRS, the actuarial assumptions and methods approved by the Board and summarized in Section V, and the plan provisions effective June 30, 2014 summarized in Section VI.

#### **Contributions**

JRS is a State appropriated fund. All employer contributions are made by the State of Indiana. The actuarially determined contribution for fiscal 2016 is \$16.9 million, compared to \$19.0 million for fiscal 2015. It is our understanding the State has budgeted contributions of \$21.0 million and \$16.9 million for fiscal 2015 and 2016, respectively.

Members of JRS contribute 6% of their compensation during their first 22 years of membership. If a JRS member terminates employment with less than 8 years of service, the accumulated contributions with interest can be withdrawn as a lump sum or the member may direct the JRS to make a direct rollover of the distribution amount. When a member becomes vested, the member's account balance may not be refunded and is instead combined with the employer contributions in order to fund the member's future retirement annuity benefit.

#### **Funded Status**

The funded status of JRS is measured by the funded ratio, which is the ratio of the assets available for benefits to a benefit liability measure for JRS. While there are several such measures that could be appropriately used, the benefit liability measure that ties most closely to INPRS's funding strategy is the Actuarial Accrued Liability ("AAL").

Using the Actuarial Value of Assets ("AVA"), an asset value that smoothes the market gains and losses over four (4) years, the JRS AAL funded ratio increased from 84.1% at June 30, 2013 to 90.3% at June 30, 2014. The increase is primarily due to the recognition of an investment gain for 2013 in the AVA development and salary/cost-of-living increases that were less than assumed.

#### **Investment Experience**

For the fiscal year ending June 30, 2014, the INPRS actual time-weighted return net of fees was 13.7%. Based on the value of assets allocated to JRS as of the prior valuation date and contribution and benefit payment activity during the year, the allocation of returns to JRS represent a return of approximately 13.7% on market value and 8.6% on actuarial value. The return on actuarial value is different due to the smoothing of returns greater or less than expected returns over four years.

#### **Cost-of-Living Adjustment**

Benefits for retired members increase automatically based on the annual pay increase granted for the position the member held at the time of retirement. The annual cost-of-living assumption for the valuation is 4.0%, which is the same as the salary increase assumption for active members. No salary/cost-of-living increase took effect on July 1, 2014.

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## SECTION I - EXECUTIVE SUMMARY

### **HIGHLIGHTS OF THE ACTUARY'S REPORT (CONTINUED)**

#### **Changes in Actuarial Assumptions**

There were no assumption changes for the June 30, 2014 valuation.

#### **Changes in Plan Provisions**

It is our understanding that there were no changes to the Plan that impacted the pension benefits during the fiscal year.

#### **Changes in Actuarial Methods**

Member census data as of June 30, 2013 was used in the valuation and adjusted, where appropriate, to reflect changes between June 30, 2013 and June 30, 2014. Standard actuarial roll forward techniques were then used to project the liabilities computed as of June 30, 2013 to the June 30, 2014 measurement date.

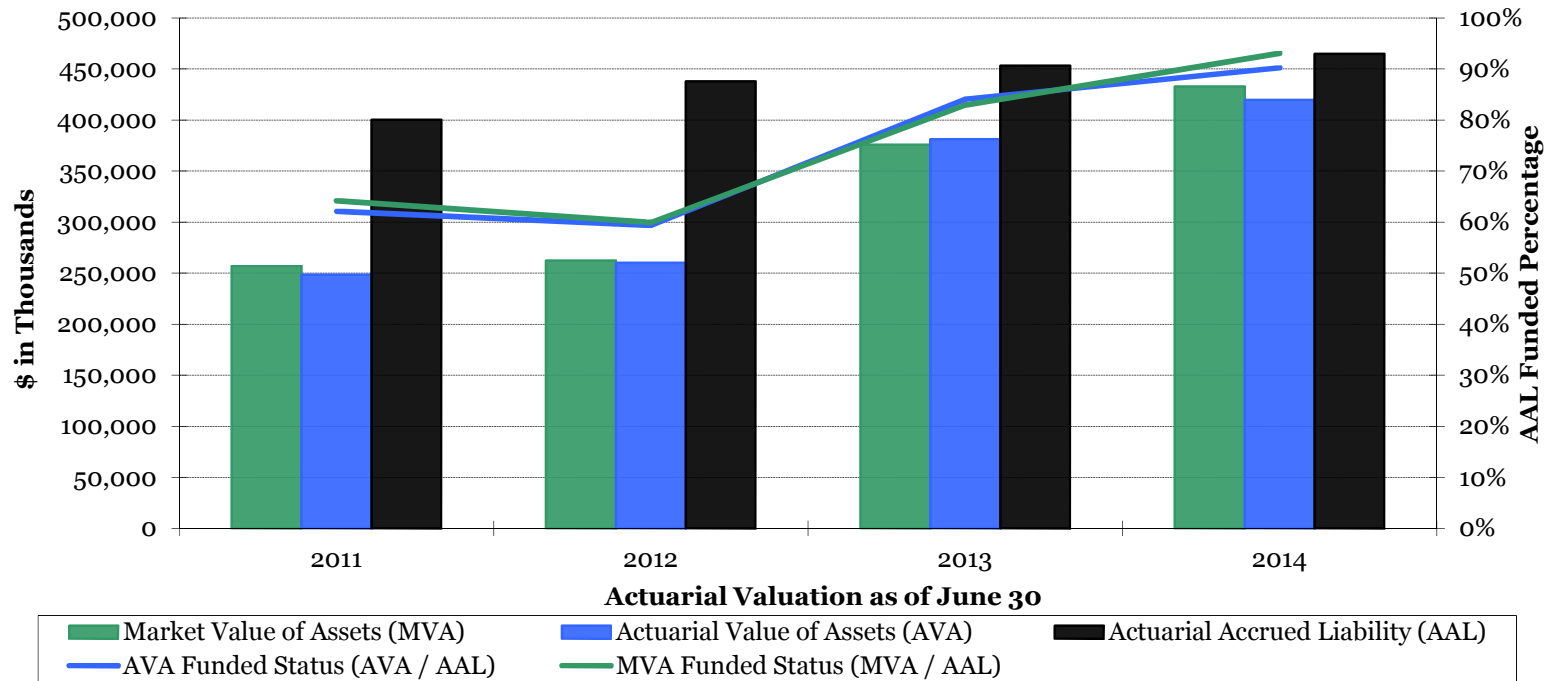
#### **Governmental Accounting Standards**

This report contains certain financial statement information, including notes and required supplemental information, prepared in accordance with our understanding of Governmental Accounting Standards No. 67 and No. 68 ("GASB 67" and "GASB 68") to assist INPRS with the implementation of the new standards. GASB 67 is effective for fiscal years beginning after June 15, 2013. GASB 68 is effective for employers sponsoring and/or participating in public pension plans for fiscal years beginning after June 15, 2014.

**SECTION I - EXECUTIVE SUMMARY**

**HISTORICAL SUMMARY**

**JRS – 4 Year History of Funded Status**



**Actuarial Valuation as of June 30:**

	<b>2011</b>	<b>2012</b>	<b>2013<sup>1</sup></b>	<b>2014</b>
Actuarial Accrued Liability (AAL)	\$400,273.5	\$437,854.5	\$453,109.9	\$464,854.6
Actuarial Value of Assets (AVA)	248,623.4	260,096.4	381,239.9	419,567.9
Market Value of Assets (MVA)	256,985.8	262,325.7	375,752.6	432,729.7
Unfunded Liability (AAL - AVA)	151,650.2	177,758.1	71,870.0	45,286.7
AVA Funded Status (AVA / AAL)	62.1%	59.4%	84.1%	90.3%
MVA Funded Status (MVA / AAL)	64.2%	59.9%	82.9%	93.1%

<sup>1</sup> Includes \$90.2 million of additional contributions due to 2012 HB 1376 during fiscal 2013.

SECTION I - EXECUTIVE SUMMARY

**HISTORICAL SUMMARY (CONTINUED)**

**Summary of Valuation Results <sup>1</sup>**

<b><u>Valuation Date</u></b>	<b><u>June 30, 2011</u></b>	<b><u>June 30, 2012</u></b>	<b><u>June 30, 2013</u></b>	<b><u>June 30, 2014</u></b>
Development of Actuarially Determined Contribution Amount:				
1. Anticipated Payroll	\$ 45,764,278	\$ 45,138,370	\$ 46,966,598	\$ 47,882,728
2. Normal Cost (Beginning of Year)				
a. Amount	\$ 15,281,754	\$ 16,084,590	\$ 15,301,638	\$ 15,283,088
b. Percentage of Payroll	33.39%	35.64%	32.58%	31.91%
3. Unfunded Actuarial Accrued Liability Annual Amortizations				
a. Amount	\$ 11,873,696	\$ 13,705,127	\$ 5,656,065	\$ 3,786,771
b. Percentage of Payroll	25.95%	30.36%	12.04%	7.91%
4. Expected Employee Contributions <sup>2</sup>				
a. Amount	\$ 2,678,007	\$ 2,684,888	\$ 2,721,671	\$ 2,774,759
b. Percentage of Payroll	5.85%	5.95%	5.79%	5.79%
5. Actuarially Determined Contribution Rate: (2)(b) + (3)(b) - (4)(b)	53.49%	60.05%	38.83%	34.03%
6. Estimated Actuarially Determined Contribution Amount				
a. Fiscal Year Beginning	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015
b. Anticipated Payroll: (1) x [(1 + 4.0%)]	\$ 47,594,849	\$ 46,943,905	\$ 48,845,262	\$ 49,798,038
c. Amount: (5) x (6)(b) <sup>3</sup>	<b>\$ 25,458,485</b>	<b>\$ 28,189,815</b>	<b>\$ 18,966,615</b>	<b>\$ 16,946,272</b>
<b><u>Fiscal Year</u></b>	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2015</u></b>	<b><u>2016</u></b>
State Appropriations <sup>4,5</sup>	<b>\$ 111,415,160</b>	<b>\$ 20,894,732</b>	<b>\$ 21,020,000</b>	<b>\$ 16,946,000</b>

<sup>1</sup> The contribution amounts shown were developed on a funding basis only and do not reflect accounting requirements.

<sup>2</sup> Only members with less than 22 years of service contribute to the plan. Anticipated payroll for active members with less than 22 years of service as of June 30, 2014 is \$46,245,991.

<sup>3</sup> Since the fiscal year to which contributions apply begins one year after the valuation date, the Actuarially Determined Contribution Amount is estimated by assuming payroll will increase 4.0% per year and then applying the Actuarially Determined Contribution Rate computed at the valuation date.

<sup>4</sup> JRS is a State appropriated fund. Employer contribution amounts are expected to be paid by the State of Indiana.

<sup>5</sup> Includes an additional contribution in the amount of \$90,187,160 made to the Plan during fiscal 2013 pursuant to 2012 HB 1376.



SECTION I - EXECUTIVE SUMMARY

**HISTORICAL SUMMARY (CONTINUED)**

**Summary of Valuation Results (Continued)**

	<u>June 30, 2011</u>	<u>June 30, 2012</u>	<u>June 30, 2013</u>	<u>June 30, 2014 <sup>1</sup></u>
Census Information				
Active				
Number	363	361	365	365
Average Age	54.3	54.9	54.6	54.6
Average Years of Service	8.3	8.9	8.8	8.8
Anticipated Payroll of Actives <sup>2</sup>	\$ 45,764,278	\$ 45,138,370	\$ 46,966,598	\$ 47,882,728
Inactive - Vested				
Number	66	72	67	67
Average Age	61.0	61.1	61.7	61.7
Average Years of Service	18.1	18.6	18.5	18.5
Inactive - Non-Vested <sup>3</sup>				
Number	31	28	32	32
Retiree/Beneficiary/Disabled				
Number	310	311	321	321
Average Age	75.1	75.4	75.2	75.2
Annual Benefits Payable <sup>4</sup>	\$ 16,787,212	\$ 17,027,599	\$ 18,474,014	\$ 18,474,014

<sup>1</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.

<sup>2</sup> Figures shown are the anticipated pay for the one-year period following the valuation date.

<sup>3</sup> As of June 30, 2013, inactive non-vested members entitled to a refund of their member contributions had balances totaling \$590,200.

<sup>4</sup> Figures shown reflect cost-of-living increases effective July 1 following the date of the census data.

SECTION I - EXECUTIVE SUMMARY

**HISTORICAL SUMMARY (CONTINUED)**

**Summary of Valuation Results (Continued)**

	<u>June 30, 2011</u>	<u>June 30, 2012</u>	<u>June 30, 2013</u>	<u>June 30, 2014</u>
<b>Actuarial Accrued Liability</b>				
Member Contribution Balance	\$ 24,359,001	\$ 27,699,555	\$ 29,060,096	\$ 32,060,323
Retiree/Beneficiary/Disabled	198,796,748	205,340,787	224,131,485	216,043,506
Active and Inactive	<u>177,117,795</u>	<u>204,814,117</u>	<u>199,918,312</u>	<u>216,750,744</u>
Total	\$ 400,273,544	\$ 437,854,459	\$ 453,109,893	\$ 464,854,573
<b>Actuarial Value of Assets (AVA)</b>				
Member Contribution Balance	\$ 24,359,001	\$ 27,699,555	\$ 29,060,096	\$ 32,060,323
Retiree/Beneficiary/Disabled	198,796,748	205,340,787	224,131,485	216,043,506
Active and Inactive	<u>25,467,608</u>	<u>27,056,065</u>	<u>128,048,344</u>	<u>171,464,084</u>
Total	\$ 248,623,357	\$ 260,096,407	\$ 381,239,925	\$ 419,567,913
<b>Market Value of Assets (MVA)</b>				
Member Contribution Balance	\$ 24,359,001	\$ 27,699,555	\$ 29,060,096	\$ 32,060,323
Retiree/Beneficiary/Disabled	198,796,748	205,340,787	224,131,485	216,043,506
Active and Inactive	<u>33,830,004</u>	<u>29,285,340</u>	<u>122,560,981</u>	<u>184,625,900</u>
Total	\$ 256,985,753	\$ 262,325,682	\$ 375,752,562	\$ 432,729,729
<b>Unfunded Actuarial Accrued Liability: AAL - AVA</b>				
Member Contribution Balance	\$ -	\$ -	\$ -	\$ -
Retiree/Beneficiary/Disabled	-	-	-	-
Active and Inactive	<u>151,650,187</u>	<u>177,758,052</u>	<u>71,869,968</u>	<u>45,286,660</u>
Total	\$ 151,650,187	\$ 177,758,052	\$ 71,869,968	\$ 45,286,660
<b>Funded Percentage <sup>1</sup></b>				
Member Contribution Balance	100.0%	100.0%	100.0%	100.0%
Retiree/Beneficiary/Disabled	100.0%	100.0%	100.0%	100.0%
Active and Inactive	<u>14.4%</u>	<u>13.2%</u>	<u>64.1%</u>	<u>79.1%</u>
Total	62.1%	59.4%	84.1%	90.3%
<b>Summary of Assumptions</b>				
Valuation Interest Rate	7.00%	6.75%	6.75%	6.75%
Salary Scale	4.0%	4.0%	4.0%	4.0%
Cost-of-Living Assumption	4.0%	4.0%	4.0%	4.0%

<sup>1</sup> In determining the funded percentage, the assets are allocated first to member contribution balances, then to the retiree/beneficiary/disabled liability, and then to the active/inactive liability.

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## SECTION II - FUNDING

### **FUNDING**

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SECTION II - FUNDING

A. Development of Funded Status

	<b>June 30, 2013</b>	<b>June 30, 2014</b>
1. Actuarial Accrued Liability		
a. Member Contribution Account	\$ 29,060,096	\$ 32,060,323
b. Retirees, Beneficiaries, and Disableds	224,131,485	216,043,506
c. Actives and Inactives	199,918,312	216,750,744
d. Total: (1)(a) + (1)(b) + (1)(c)	\$ 453,109,893	\$ 464,854,573
2. Actuarial Value of Assets <sup>1</sup>		
a. Member Contribution Account	\$ 29,060,096	\$ 32,060,323
b. Retirees, Beneficiaries, and Disableds	224,131,485	216,043,506
c. Actives and Inactives	128,048,344	171,464,084
d. Total: (2)(a) + (2)(b) + (2)(c)	\$ 381,239,925	\$ 419,567,913
3. Unfunded Actuarial Accrued Liability <sup>1</sup>		
a. Member Contribution Account: (1)(a) - (2)(a)	\$ -	\$ -
b. Retirees, Beneficiaries, and Disableds: (1)(b) - (2)(b)	-	-
c. Actives and Inactives: (1)(c) - (2)(c)	71,869,968	45,286,660
d. Total: (1)(d) - (2)(d)	\$ 71,869,968	\$ 45,286,660
4. Funded Percentage <sup>1</sup>		
a. Member Contribution Account: (2)(a) / (1)(a)	100.0%	100.0%
b. Retirees, Beneficiaries, and Disableds: (2)(b) / (1)(b)	100.0%	100.0%
c. Actives and Inactives: (2)(c) / (1)(c)	64.1%	79.1%
d. Total: (2)(d) / (1)(d)	84.1%	90.3%

<sup>1</sup> In determining the funded percentage, the assets are allocated first to member contribution balances, then to the retiree/beneficiary/disabled liability, and then to the active/inactive liability.

SECTION II - FUNDING

**B. Unfunded Actuarial Accrued Liability Reconciliation**

	<b>June 30, 2013</b>	<b>June 30, 2014</b>
1. Unfunded Actuarial Accrued Liability, Prior Year	\$ 177,758,052	\$ 71,869,968
2. Unfunded Actuarial Accrued Liability (Gain) / Loss		
a. Actuarial Value of Assets Experience	\$ 6,315,459	\$ (9,370,863)
b. Actuarial Accrued Liability Experience	(9,673,242)	-
c. Additional Liability Due to Cost-of-Living Adjustments	(3,809,540) <sup>1</sup>	(16,025,822) <sup>4</sup>
d. Additional Liability Due to Changes in Actuarial Assumptions	185,587 <sup>2</sup>	-
e. Additional Liability Due to Changes in Plan Provisions	-	-
f. Total New Amortization Bases:	\$ (6,981,736)	\$ (25,396,685)
(2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e)		
g. Reduction in Existing Bases Due to Prior Year Contributions, Net of Interest	(98,906,348) <sup>3</sup>	(1,186,623)
h. Change in Unfunded Actuarial Accrued Liability:	\$ (105,888,084)	\$ (26,583,308)
(2)(f) + (2)(g)		
3. Unfunded Actuarial Accrued Liability, Current Year: (1) + (2)(h)	\$ 71,869,968	\$ 45,286,660

<sup>1</sup> Salary/Cost-of-Living Adjustment (COLA) of 3.1% was effective July 1, 2013 rather than the assumed increase of 4.0%.

<sup>2</sup> The interest crediting rate assumption on member contribution balances was increased from 0% to 3.5%.

<sup>3</sup> Includes a contribution of \$90,187,160 made to the Plan pursuant to 2012 HB 1376.

<sup>4</sup> No Salary/Cost-of-Living Adjustment (COLA) was effective July 1, 2014 rather than the assumed increase of 4.0%.

SECTION II - FUNDING

**C. Actuarial Accrued Liability Reconciliation**

1. June 30, 2013 Actuarial Accrued Liability	\$ 453,109,893	
2. Normal Cost	15,301,638	
3. Actual Benefit Payments <sup>1</sup>	18,523,738	
4. Interest of 6.75% on (1) + (2) - (3)/2	<u>30,992,602</u>	
5. Expected June 30, 2014 Actuarial Accrued Liability: (1) + (2) - (3) + (4)	\$ 480,880,395	
	<u>Dollar Change</u>	<u>Percent Change</u>
	<u>in Liability</u>	<u>in Liability</u>
6. (Gain)/Loss Components		
a. Census	\$ -	0.0%
b. Salary/Cost-of-Living Adjustment <sup>2</sup>	(16,025,822)	(3.3%)
c. Assumption Changes	<u>-</u>	<u>0.0%</u>
d. Total: (6)(a) + (6)(b) + (6)(c)	\$ (16,025,822)	(3.3%)
7. Actual June 30, 2014 Actuarial Accrued Liability: (5) + (6)(d)	<b>\$ 464,854,573</b>	

<sup>1</sup> Includes refunds of accumulated member contributions and net interfund transfers.

<sup>2</sup> No Salary/Cost-of-Living Adjustment (COLA) was effective as of July 1, 2014, rather than the assumed increase of 4.0%.

SECTION II - FUNDING

**D. Reconciliation of Market Value of Assets**

	<b>June 30, 2013</b>	<b>June 30, 2014</b>
1. Market Value of Assets, Prior June 30	\$ 262,325,682	\$ 375,752,562
2. Receipts		
a. Employer Contributions	\$ 111,417,613	\$ 20,894,700
b. Member Contributions	2,631,374	2,855,956
c. Investment Income and Dividends Net of Fees	16,878,268	51,829,063
d. Security Lending Income Net of Fees	80,082	61,119
e. Transfers In	120,134	4,050
f. Miscellaneous Income	4,806	6,053
g. Total Receipts: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f)	\$ 131,132,277	\$ 75,650,941
3. Disbursements		
a. Benefits Paid During the Year	\$ 17,526,495	\$ 18,527,788
b. Refund of Contributions and Interest	53,042	-
c. Administrative and Project Expenses	125,860	145,986
d. Transfers Out	-	-
e. Miscellaneous Disbursements	-	-
f. Total Disbursements: (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e)	\$ 17,705,397	\$ 18,673,774
4. Market Value of Assets, Current June 30: (1) + (2)(g) - (3)(f)	<b>\$ 375,752,562</b>	<b>\$ 432,729,729</b>
5. Market Value of Assets Approximate Annual Rate of Return <sup>1</sup>	5.4%	13.7%

<sup>1</sup> Based on individual fund experience. Net of expenses and assuming cash flows occur at mid-year.

SECTION II - FUNDING

**E. Reconciliation of Actuarial Value of Assets**

1.	Market Value of Assets, June 30, 2013	\$	375,752,562
2.	Market Value of Assets, June 30, 2014		432,729,729
3.	Expected Earnings/Expenses		
a.	Expected Investment Earnings at 6.75% on June 30, 2013 Market Value		25,363,298
b.	Receipts with Expected Investment Earnings at 6.75% <sup>1</sup>		24,562,685
c.	Disbursements with Expected Investment Earnings at 6.75% <sup>1</sup>		19,153,101
4.	Expected Assets, June 30, 2014: (1) + (3)(a) + (3)(b) - (3)(c)	\$	406,525,444
5.	2013-2014 Gain/(Loss): (2) - (4)		26,204,285
6.	Smoothing of Gain/(Loss)		
	<u>Year</u>	<u>Gain/(Loss)</u>	<u>% Unrecognized</u>
a.	2013-2014	\$ 26,204,285	75%
b.	2012-2013	\$ (4,134,555)	50%
c.	2011-2012	\$ (17,696,480)	25%
7.	Preliminary Actuarial Value of Assets, June 30, 2013: (2) - (6)(a) - (6)(b) - (6)(c)	\$	419,567,913
8.	Corridor		
a.	120% of Market Value: 1.2 x (2)		519,275,675
b.	80% of Market Value: 0.8 x (2)		346,183,783
9.	Actuarial Value of Assets, June 30, 2014: (7), but not greater than (8)(a) or less than (8)(b)	\$	<b>419,567,913</b>
10.	Actuarial Value of Assets as a Percent of Market Value: (9) / (2)		97.0%
11.	Actuarial Value of Assets Approximate Annual Rate of Investment Return <sup>1</sup>		8.6%

<sup>1</sup> Assumes cash flows occur at mid-year.



SECTION II - FUNDING

F. Contributions

	<b>June 30, 2013</b>	<b>June 30, 2014</b>
<b>Development of Actuarially Determined Contribution:</b>		
1. Anticipated Payroll	\$ 46,966,598	\$ 47,882,728
2. Normal Cost (Beginning of Year)		
a. Amount	\$ 15,301,638	\$ 15,283,088
b. Percentage of Payroll	32.58%	31.91%
3. Unfunded Actuarial Accrued Liability (UAAL) Annual Amortizations		
a. Amount	\$ 5,656,065	\$ 3,786,771
b. Percentage of Payroll	12.04%	7.91%
4. Expected Employee Contributions <sup>1</sup>		
a. Amount	\$ 2,721,671	\$ 2,774,759
b. Percentage of Payroll	5.79%	5.79%
5. Actuarially Determined Contribution Rate: (2)(b) + (3)(b) - (4)(b)	<b>38.83%</b>	<b>34.03%</b>
6. Estimated Actuarially Determined Contribution Amount		
a. Fiscal Year Beginning	July 1, 2014	July 1, 2015
b. Anticipated Payroll: (1) x [(1 + 4.0%)]	\$ 48,845,262	\$ 49,798,038
c. Amount: (5) x (6)(b) <sup>2</sup>	<b>\$ 18,966,615</b>	<b>\$ 16,946,272</b>
7. <b>Approved Funding Amount:</b> <sup>3</sup>	<b>\$ 21,020,000</b>	<b>\$ 16,946,000</b>
<b>Expected Percentage of Actuarially Determined Contribution Contributed: (7) / (6)(c)</b>	110.83%	100.00%

<sup>1</sup> Only members with less than 22 years of service contribute to the plan. Anticipated payroll for active members with less than 22 years of service as of June 30, 2014 is \$46,245,991.

<sup>2</sup> Since the fiscal year to which contributions apply begins one year after the valuation date, the Actuarially Determined Contribution Amount is estimated by assuming payroll will increase 4.0% per year and then applying the Actuarially Determined Contribution Rate computed at the valuation date.

<sup>3</sup> JRS is a State appropriated fund. Employer contribution amounts are expected to be paid by the State of Indiana.

SECTION II - FUNDING

**G. Unfunded Actuarial Accrued Liability Amortization Schedule <sup>1</sup>**

	<u>Date Base Established</u>	<u>Reason</u>	<u>Remaining Unfunded</u>	<u>Remaining Period</u>	<u>Amortization Amount</u>
1.	6/30/2009	Actuarial Experience	\$ 37,062,955	22	\$ 3,074,056
2.	6/30/2010	Actuarial Experience and Changes in Actuarial Assumptions	14,409,424	26	\$ 1,115,211
3.	6/30/2011	Actuarial Experience and Changes in Actuarial Assumptions	13,652,915	27	\$ 1,041,905
4.	6/30/2012	Actuarial Experience and Changes in Actuarial Assumptions	12,462,481	28	\$ 938,777
5.	6/30/2013	Actuarial Experience and Changes in Actuarial Assumptions	(6,904,430)	29	\$ (513,883)
6.	6/30/2014	Actuarial Experience	<u>(25,396,685)</u>	30	<u>\$ (1,869,295)</u>
	Total		\$ 45,286,660		\$ 3,786,771

<sup>1</sup> Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION II - FUNDING

**H. Approximate Annual Rate of Return for Year Ending June 30, 2014**<sup>1</sup>

	<u>Market Value of Assets</u>	<u>Actuarial Value of Assets</u>
1. Balance, beginning of year	\$ 375,752,562	\$ 381,239,925
2. Balance, end of year	432,729,729	419,567,913
3. Total increase: (2) - (1)	56,977,167	38,327,988
4. Contributions	23,760,759	23,760,759
5. Benefit payments <sup>2</sup>	18,527,788	18,527,788
6. Net additions: (4) - (5)	5,232,971	5,232,971
7. Net investment increase: (3) - (6)	51,744,196	33,095,017
8. Average assets: [(1) + (2) - (7)] / 2	378,369,048	383,856,411
9. Approximate rate of return: (7) / (8) <sup>1</sup>	13.7%	8.6%

**I. Historical Investment Experience**

<u>Year Ending June 30</u>	<u>Actual Rate of Investment Return</u>		<u>Actuarial Assumed Interest Rate</u>
	<u>Market Basis</u> <sup>3</sup>	<u>Actuarial Basis</u> <sup>1</sup>	
2005	9.8%	7.0%	7.25%
2006	10.7%	15.1%	7.25%
2007	18.2%	15.8%	7.25%
2008	(7.6%)	8.3%	7.25%
2009	(20.6%)	(1.0%)	7.25%
2010	13.9%	(1.7%)	7.25%
2011	20.1%	(0.6%)	7.0%
2012	0.7%	2.6%	7.0%
2013	6.0%	8.0%	6.75%
2014	13.7%	8.6%	6.75%

<sup>1</sup> Based on individual fund experience. Net of expenses and assuming cash flows occur at mid-year.

<sup>2</sup> Includes refunds of accumulated member contributions and net interfund transfers.

<sup>3</sup> INPRS actual time-weighted rate of return net of fees for 2012-2014. PERF CRIF time-weighted rate of return reported as gross of fees for 2005-2011.

SECTION II - FUNDING

**K. Interest Rate Sensitivity**

The investment return assumption (discount rate) should be based on an estimated long-term investment yield for the plan, with consideration given to the nature and mix of current and expected plan investments. Management and the Board continually monitor the investment rate of return assumption and the Board formally reviews the assumption and makes changes as appropriate. The Board last changed the assumption for the June 30, 2013 valuation from 7.0% to 6.75%.

To illustrate the importance of the investment rate of return, which is used to discount the actuarial liabilities of the Plan, the Funded Ratio and the Actuarially Determined Contribution Rate (for the fiscal year beginning July 1, 2015) are shown below at 6.75% (the current assumption), 6.0% (a three-fourths of a percent decrease), 6.5% (a one-fourth of a percent decrease), 7.5% (a three-fourths of a percent increase), and 8.0% (a one and one-fourth of a percent increase).

	<u>0.75% Decrease: (6.0%)</u>	<u>0.25% Decrease: (6.5%)</u>	<u>Current Assumption: (6.75%)</u>	<u>0.75% Increase: (7.5%)</u>	<u>1.25% Increase: (8.0%)</u>
<b><u>Funded Status</u></b>					
Actuarial Accrued Liability	\$ 506,020,278	\$ 477,967,797	\$ 464,854,573	\$ 428,786,912	\$ 407,189,373
Actuarial Value of Assets	<u>419,567,913</u>	<u>419,567,913</u>	<u>419,567,913</u>	<u>419,567,913</u>	<u>419,567,913</u>
Unfunded Actuarial Accrued Liability	\$ 86,452,365	\$ 58,399,884	\$ 45,286,660	\$ 9,218,999	\$ (12,378,540)
Funded Ratio	82.9%	87.8%	90.3%	97.8%	103.0%
<b><u>Actuarially Determined Contribution Rate</u></b>					
Normal Cost Percentage	36.98%	33.50%	31.91%	27.71%	25.29%
UAAL Amortization Percentage	13.37%	9.73%	7.91%	2.41%	0.00%
Expected Employee Contribution Percentage	<u>5.79%</u>	<u>5.79%</u>	<u>5.79%</u>	<u>5.79%</u>	<u>5.79%</u>
Actuarially Determined Contribution Rate	44.56%	37.44%	34.03%	24.33%	19.50%

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SECTION III - ACCOUNTING

**ACCOUNTING**

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SECTION III - ACCOUNTING

**PLAN FINANCIAL STATEMENTS UNDER GASB #67**

**A. Statement of Fiduciary Net Position under GASB #67 as of June 30, 2014**

1. Assets		
a. Cash	\$	3,596,844
b. Receivables		
i. Contributions Receivable	\$	97
ii. Miscellaneous Receivables		67,409
iii. Investments Receivable		7,441,228
iv. Foreign Exchange Contract Receivable		69,048,920
v. Interest and Dividends		1,229,319
vi. Due From Other Funds		-
vii. Total Receivables	\$	<u>77,786,973</u>
c. Total Investments		
i. Short-Term Investments	\$	-
ii. Pooled Short-Term Investments		20,532,738
iii. Pooled Fixed Income		151,680,160
iv. Pooled Equity		100,593,028
v. Pooled Alternative Investments		159,573,502
vi. Pooled Derivatives		456,003
vii. Securities Lending Collateral		37,826,476
viii. Total Investments	\$	<u>470,661,907</u>
d. Net Capital Assets		11,154
e. Prepaid Expenses		-
f. Total Assets: (1)(a) + (1)(b)(vii) + (1)(c)(viii) + (1)(d) + (1)(e)	\$	<u>552,056,878</u>
2. Liabilities		
a. Accounts Payable	\$	4,200
b. Retirement Benefits Payable		-
c. Salaries and Benefits Payable		-
d. Investments Payable		8,146,278
e. Foreign Exchange Contracts Payable		69,380,726
f. Securities Lending Obligations		37,826,476
g. Securities Sold Under Agreement to Repurchase		3,941,915
h. Due To Other Funds		27,554
i. Total Liabilities: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f) + (2)(g) + (2)(h)	\$	<u>119,327,149</u>
3. Fiduciary Net Position Restricted for Pensions: (1)(f) - (2)(i)	\$	<b>432,729,729</b>

SECTION III - ACCOUNTING

**PLAN FINANCIAL STATEMENTS UNDER GASB #67**

**B. Statement of Changes in Fiduciary Net Position under GASB #67 for the Year Ended June 30, 2014**

1. Fiduciary Net Position as of June 30, 2013	\$	375,752,562
2. Additions		
a. Contributions		
i. Member Contributions	\$	2,855,956
ii. Employer Contributions		20,894,700
iii. Non-Employer Contributing Entity Contributions		-
iv. Total Contributions	\$	23,750,656
b. Investment Income/(Loss)		
i. Net Appreciation/(Depreciation) <sup>1, 2</sup>	\$	48,907,325
ii. Net Interest and Dividend Income		5,875,750
iii. Securities Lending Income		70,927
iv. Other Net Investment Income		74,004
v. Investment Expenses		(3,028,016)
vi. Securities Lending Expenses		(9,808)
vii. Total Investment Income/(Loss)	\$	51,890,182
c. Other Additions		
i. Interfund Transfers	\$	4,050
ii. Miscellaneous Receipts		6,053
iii. Total Other Additions	\$	10,103
d. Total Revenue (Additions): (2)(a)(iv) + (2)(b)(vii) + (2)(c)(iii)	\$	75,650,941
3. Deductions		
a. Pension and Disability Benefits	\$	18,527,788
b. Death, Survivor, and Funeral Benefits		-
c. Distributions of Contributions and Interest		-
d. Interfund Transfers		-
e. Pensions Relief Distributions		-
f. Local Unit Withdrawals		-
g. Administrative and Project Expenses		145,986
h. Total Expenses (Deductions): (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e) + (3)(f) + (3)(g)	\$	18,673,774
4. Net Increase (Decrease) in Fiduciary Net Position: (2)(d) - (3)(h)	\$	56,977,167
5. Fiduciary Net Position as of June 30, 2014: (1) + (4)	\$	<b>432,729,729</b>

<sup>1</sup> The calculation of realized gains and losses is independent of the calculation of the net change in the fair value of pension plan investments.

<sup>2</sup> Realized gains and losses on investments that had been held in more than one reporting period and sold in the current period were included as a change in the fair value reported in the prior period(s) and the current period.

SECTION III - ACCOUNTING

**EMPLOYER FINANCIAL STATEMENTS UNDER GASB #68**

**C. Net Pension Liability under GASB #68 for the Year Ended June 30, 2014**

1.	Total Pension Liability		
	a. Total Pension Liability - Beginning of year	\$	453,109,893
	b. Service cost <sup>1</sup>		15,301,638
	c. Interest cost <sup>2</sup>		30,992,602
	d. Experience (gains)/losses		(16,025,822)
	e. Assumption changes		-
	f. Plan amendments		-
	g. Benefit payments <sup>3</sup>		(18,527,788)
	h. Member reassignments <sup>4</sup>		4,050
	i. Total Pension Liability - End of year	\$	464,854,573
2.	Plan Fiduciary Net Position		
	a. Plan Fiduciary Net Position - Beginning of year	\$	375,752,562
	b. Employer contributions		20,894,700
	c. Employee contributions		2,855,956
	d. Non-employer contributing entity contributions		-
	e. Investment return		
	i. Expected investment return <sup>5</sup>	\$	28,572,603
	ii. Investment gain/(loss)		26,361,456
	iii. Total investment return	\$	54,934,059
	iv. Investment Expenses		(3,037,824)
	v. Net investment return		51,896,235
	f. Benefit payments <sup>3</sup>		(18,527,788)
	g. Member reassignments <sup>4</sup>		4,050
	h. Administrative and Project Expenses		(145,986)
	i. Plan Fiduciary Net Position - End of year	\$	432,729,729
3.	Net Pension Liability		
	a. Net Pension Liability: (1)(i) - (2)(i)	\$	<b>32,124,844</b>
	b. Plan Fiduciary Net Position as a Percentage of the Total Pension Liability : (2)(i) / (1)(i)		93.1%

<sup>1</sup> As of the beginning of the year.

<sup>2</sup> Includes interest of 6.75% on the beginning-of-year service cost.

<sup>3</sup> Includes refunds of accumulated member contributions.

<sup>4</sup> Includes net interfund transfers.

<sup>5</sup> 6.75%, net of investment expenses and assuming cash flows occur at mid-year.



SECTION III - ACCOUNTING

**EMPLOYER FINANCIAL STATEMENTS UNDER GASB #68**

**D. Deferred Inflows and Outflows of Resources under GASB #68 for the Year Ended June 30, 2014**<sup>1</sup>

Fiscal Year Established	Reason	Remaining Balance	Remaining Period	Annual Recognition
1. Liability experience gains / (losses)				
a. 2014		\$ 16,025,822	2.92	\$ 5,488,295
	Sub-Total	\$ 16,025,822		\$ 5,488,295
2. Assumption change gains / (losses)				
	None	\$ -	2.92	\$ -
	Sub-Total	\$ -		\$ -
3. Investment gains / (losses) <sup>2</sup>				
a. 2014	Investment gain	\$ 23,323,632	5.00	\$ 4,664,726
	Sub-Total	\$ 23,323,632		\$ 4,664,726
4. Total collective deferred inflows / (outflows): (1) + (2) + (3)		\$ <b>39,349,454</b>		\$ <b>10,153,021</b>

Amounts reported as collective deferred inflows / outflows of resources to be recognized in pension expense:

Year Ending June 30:

2014	\$ 10,153,021
2015	\$ 10,153,021
2016	\$ 9,713,958
2017	\$ 4,664,726
2018	\$ 4,664,728
2019	\$ -
Thereafter	\$ -

<sup>1</sup> The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2013 for GASB #68 purposes.

<sup>2</sup> Net of investment expenses.

SECTION III - ACCOUNTING

**EMPLOYER FINANCIAL STATEMENTS UNDER GASB #68**

**E. Pension Expense under GASB #68 for the Year Ended June 30, 2014**

1. Service cost		
a. Total service cost <sup>1</sup>	\$	15,301,638
b. Employee contributions		(2,855,956)
c. Administrative and Project Expenses		<u>145,986</u>
d. Net employer service cost: (1)(a) + (1)(b) + (1)(c)		12,591,668
2. Interest cost <sup>2</sup>		30,992,602
3. Expected return on assets <sup>3</sup>		(28,572,603)
4. Plan amendments		-
5. Recognition of deferred (inflows) / outflows of resources related to:		
a. Liability experience (gains) / losses		(5,488,295)
b. Assumption changes (gains) / losses		-
c. Investment (gains) / losses		<u>(4,664,726)</u>
d. Total: (5)(a) + (5)(b) + (5)(c)		(10,153,021)
6. Total collective pension expense: (1)(d) + (2) + (3) + (4) + (5)(d)	\$	<b>4,858,646</b>

<sup>1</sup> As of the beginning of the year.

<sup>2</sup> Includes interest of 6.75% on the beginning-of-year service cost.

<sup>3</sup> 6.75% net of investment expenses and assuming cash flows occur at mid-year. Includes a half year of interest on employee contributions and administrative expenses.

SECTION III - ACCOUNTING

**NOTES TO THE FINANCIAL STATEMENTS UNDER GASB #67 AND #68**

**F. Selected Notes to the Financial Statements under GASB #67 and #68**

1 JRS is a single-employer plan for GASB accounting purposes.

2. Significant actuarial assumptions and other inputs used to measure the total pension liability:

- Measurement Date	June 30, 2014		
- Valuation Date			
Assets:	June 30, 2014		
Liabilities	June 30, 2013 - Member census data as of June 30, 2013 was used in the valuation and adjusted, where appropriate, to reflect changes between June 30, 2013 and June 30, 2014. Standard actuarial roll forward techniques were then used to project the total pension liability computed as of June 30, 2013 to the June 30, 2014 measurement date.		
- Inflation	3.0%		
- Future Salary Increases	4.00%		
- Cost-of-Living Increases	4.00%		
- Mortality Assumption	2013 IRS Static Mortality Tables projected five (5) years with Scale AA		
- Experience Study	The most recent comprehensive experience study was completed in 2011 and was based on member experience between June 30, 2005 and June 30, 2010. The demographic assumptions were updated as needed for the June 30, 2011 actuarial valuation based on the results of the study. The mortality assumption was further updated for the June 30, 2012 valuation.		
- Discount Rate	The discount rate used to measure the total pension liability was 6.75% as of June, 30, 2014, and is equal to the long-term expected return on plan investments. The projection of cash flows used to determine the discount rate assumed that employer contributions would be made at the actuarially calculated amount computed in accordance with the current funding policy adopted by the Board, which requires payment of the normal cost and amortization of the unfunded actuarially accrued liability in level dollar installments over 30 years utilizing a closed period approach. Since the current funding policy was adopted, the state's contributions have been consistent with the amounts requested by the Board utilizing this policy. Based on this assumption, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members.		
- Discount Rate Sensitivity	1% Decrease (5.75%)	Current Rate (6.75%)	1% Increase (7.75%)
Net Pension Liability	\$ 85,442,608	\$ 32,124,844	\$ (14,741,586)

SECTION III - ACCOUNTING

**NOTES TO THE FINANCIAL STATEMENTS UNDER GASB #67 AND #68**

**F. Selected Notes to the Financial Statements under GASB #67 and #68 (Cont.)**

3. Classes of plan members covered: <sup>1</sup>	
- Retired members, beneficiaries and disabled members receiving benefits:	321
- Terminated vested plan members entitled to but not yet receiving benefits:	67
- Terminated non-vested plan members entitled to a distribution of contributions:	32
- Active Plan Members:	365
- Total membership:	<u>785</u>
4. Money-weighted rate of return:	
The money-weighted rate of return equals investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested. For the fiscal year ending June 30, 2014, the money-weighted return on the plan assets is 13.7%.	
5. The components of the Net Pension Liability for the JRS plan as of June 30, 2014, are as follows:	
- Total Pension Liability	\$ 464,854,573
- Plan Fiduciary Net Position	<u>432,729,729</u>
- Net Pension Liability	\$ 32,124,844
- Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	93.1%

<sup>1</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.

SECTION III - ACCOUNTING

**REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #67 AND #68**

**G. Schedule of Changes in the Net Pension Liability and Plan Fiduciary Net Position under GASB #67 and #68**<sup>1</sup>

Year Ending June 30:	<b>2013</b>	<b>2014</b>
1. Total Pension Liability		
a. Total Pension Liability - Beginning of year	\$ 437,854,459	\$ 453,109,893
b. Service cost <sup>2</sup>	16,084,589	15,301,638
c. Interest cost <sup>3</sup>	30,047,576	30,992,602
d. Experience (gains)/losses	(13,602,915)	(16,025,822)
e. Assumption changes	185,587	-
f. Plan amendments	-	-
g. Benefit payments <sup>4</sup>	(17,579,537)	(18,527,788)
h. Member reassignments <sup>5</sup>	120,134	4,050
i. Total Pension Liability - End of year	\$ 453,109,893	\$ 464,854,573
2. Plan Fiduciary Net Position		
a. Plan Fiduciary Net Position - Beginning of year	\$ 262,325,682	\$ 375,752,562
b. Employer contributions	111,417,613	20,894,700
c. Employee contributions	2,631,374	2,855,956
d. Non-employer contributing entity contributions	-	-
e. Net investment return	16,963,156	51,896,235
f. Benefit payments <sup>4</sup>	(17,579,537)	(18,527,788)
g. Member reassignments <sup>5</sup>	120,134	4,050
h. Administrative and Project Expenses	(125,860)	(145,986)
i. Plan Fiduciary Net Position - End of year	\$ 375,752,562	\$ 432,729,729

<sup>1</sup> The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2012 for GASB #67 purposes and prospectively from June 30, 2013 for GASB #68 purposes.

<sup>2</sup> As of the beginning of the year.

<sup>3</sup> Includes interest of 6.75% on the beginning-of-year service cost.

<sup>4</sup> Includes refunds of accumulated member contributions.

<sup>5</sup> Includes net interfund transfers.

SECTION III - ACCOUNTING

**REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #67 AND #68**

**H. Schedule of Net Pension Liability and Related Ratios under GASB #67 and #68**<sup>1</sup>

1.  Year Ending	2.  Total Pension Liability	3.  Plan Fiduciary Net Position	4.  Net Pension Liability (2) - (3)	5.  Fiduciary Net Position as a Percentage of Total Pension Liability (3) / (2)	6.  Actual Covered Employee Payroll	7.  Net Pension Liability as a Percentage of Covered Payroll (4) / (6)
6/30/2013	\$ 453,109,893	\$ 375,752,562	\$ 77,357,331	82.9%	\$ 47,594,849	162.5%
6/30/2014	\$ 464,854,573	\$ 432,729,729	\$ 32,124,844	93.1%	\$ 46,041,085	69.8%

<sup>1</sup> The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2012 for GASB #67 purposes and prospectively from June 30, 2013 for GASB #68 purposes.

SECTION III - ACCOUNTING

**REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #67 AND #68**

**I. Schedule of Contributions under GASB #67 and #68**<sup>1,2</sup>

1.  Year Ending	2.  Actuarially Determined Contribution <sup>2</sup>	3.  Actual Employer Contributions	4.  Contribution Excess / (Deficiency) (Deficiency)  (3) - (2)	5.  Actual Covered Employee Payroll	6.  Contributions as a Percentage of Covered Payroll  (3) / (5)
6/30/2013	\$ 25,458,485	\$ 111,417,613	\$ 85,959,128	\$ 47,594,849	234.1%
6/30/2014	\$ 27,647,672	\$ 20,894,700	\$ (6,752,972)	\$ 46,041,085	45.4%

<sup>1</sup> The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2012 for GASB #67 purposes and prospectively from June 30, 2013 for GASB #68 purposes.

<sup>2</sup> The actuarially determined contribution amounts are based on the actuarially determined contribution rates developed in the actuarial valuation completed one year prior to the beginning of the fiscal year, multiplied by actual payroll during the fiscal year.

SECTION III - ACCOUNTING

**REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #67 AND #68**

**J. Schedule of Money-Weighted Returns under GASB #67 and #68<sup>1</sup>**

1.	2.
<u>Year Ending</u>	<u>Money-Weighted Rate of Return</u>
6/30/2013	5.2%
6/30/2014	13.7%

<sup>1</sup> The effort and cost to re-create financial statement information for 10 years was not practical. Information was prepared prospectively from June 30, 2012 for GASB #67 purposes and prospectively from June 30, 2013 for GASB #68 purposes.



SECTION III - ACCOUNTING

**REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27**

**K. Development of the Employers' Net Pension Obligation (NPO) under GASB #27 and #50**

1. Year Ending	2. Annual Required Contribution (ARC)	3. Interest on NPO at Discount Rate	4. ARC Adjustment (9) / (5)	5. Amortization Factor	6. Net Pension Cost (NPC) (2) + (3) - (4)	7. Actual Employer Contribution	8. Change in NPO (6) - (7)	9. NPO at Beginning of Year	10. NPO at End of Year (8) + (9)
6/30/2012	\$ 19,664,441	\$ (1,960,788)	\$ (2,257,334)	12.4090	\$ 19,960,987	\$ 18,896,172	\$ 1,064,815	\$ (28,011,256)	\$ (26,946,441)
6/30/2013	25,458,485	(1,818,885)	(2,117,232)	12.7272	25,756,832	111,417,613	(85,660,781)	(26,946,441)	(112,607,222)
6/30/2014	27,647,672	(7,600,987)	(8,847,761)	12.7272	28,894,446	20,894,700	7,999,746	(112,607,222)	(104,607,476)

**L. Three-Year Trend Information under GASB #27 and #50**

1. Year Ending	2. Net Pension Cost (NPC)	3. Actual Employer Contribution	4. % of NPC (3) / (2)
6/30/2012	\$ 19,960,987	\$ 18,896,172	94.7%
6/30/2013	25,756,832	111,417,613	432.6%
6/30/2014	28,894,446	20,894,700	72.3%

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SECTION IV - CENSUS DATA

**CENSUS DATA**

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SECTION IV - CENSUS DATA

**A. Reconciliation of Participant Data**<sup>1</sup>

	Actives	Inactive Non-Vested With Member Contribution Balance	Inactive Vested	Disabled	Retired	Beneficiary	Total
Total as of June 30, 2012	361	28	72	3	210	98	772
New Entrants	30	-	-	-	-	-	30
Rehires	2	-	(2)	-	-	-	-
Non-Vested Terminations	(5)	5	-	-	-	-	-
Vested Terminations	(6)	-	6	-	-	-	-
Retirements	(15)	-	(9)	-	24	-	-
Disablements	-	-	-	-	-	-	-
Death with Beneficiary	-	-	-	(1)	(10)	11	-
Death without Beneficiary	-	-	-	-	(3)	(11)	(14)
Refunds	(2)	(1)	-	-	-	-	(3)
Data Adjustments	-	-	-	-	-	-	-
Total as of June 30, 2013	365	32	67	2	221	98	785
Data Adjustments for Activity During Fiscal Year 2014	-	-	-	-	-	-	-
Adjusted Total as of June 30, 2013	365	32	67	2	221	98	785

<sup>1</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.

SECTION IV - CENSUS DATA

**B. Census Information as of June 30, 2013**<sup>1</sup>

	<u>Male</u>	<u>Female</u>	<u>Total</u>
1. Active			
a. Number	260	105	365
b. Average Age	55.2	53.2	54.6
c. Average Years of Service	9.3	7.6	8.8
d. Anticipated Payroll of Actives <sup>2</sup>	\$ 34,468,022	\$ 13,414,706	\$ 47,882,728
2. Inactive - Vested			
a. Number	54	13	67
b. Average Age	63.0	56.1	61.7
c. Average Years of Service	19.3	14.9	18.5
3. Inactive - Non-Vested <sup>3</sup>			
a. Number	27	5	32
4. Retiree/Beneficiary/Disabled			
a. Number	200	121	321
b. Average Age	73.0	78.7	75.2
c. Annual Benefits Payable <sup>4</sup>	\$ 14,273,191	\$ 4,200,823	\$ 18,474,014

<sup>1</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.

<sup>2</sup> Figures shown are the anticipated pay for the one-year period following the valuation date.

<sup>3</sup> As of June 30, 2013, inactive non-vested members entitled to a refund of their member contributions had balances totaling \$590,200.

<sup>4</sup> Figures shown reflect the 3.1% cost-of-living increase effective July 1, 2013. No cost-of-living increase was provided on July 1, 2014.

SECTION IV - CENSUS DATA

**C. Schedule of Active Member Valuation Data <sup>1</sup>**

1. Valuation Date	2. Active Members	3. Anticipated Payroll (\$ in Thousands) <sup>2</sup>	4. Average Pay <sup>2</sup> (3) / (2)	5. Annual Percent Increase
6/30/2005	282	\$ 32,231	\$ 114,293	22.3%
6/30/2006	274	34,065	124,323	8.8%
6/30/2007	258	29,712	115,164	(7.4%)
6/30/2008	267	33,729	126,327	9.7%
6/30/2009	288	36,196	125,680	(0.5%)
6/30/2010	291	36,722	126,192	0.4%
6/30/2011	363	45,764	126,072	(0.1%)
6/30/2012	361	45,138	125,037	(0.8%)
6/30/2013	365	46,967	128,676	2.9%
6/30/2014 <sup>3</sup>	365	47,883	131,186	2.0%

<sup>1</sup> Valuation results prior to June 30, 2010 were calculated by the prior actuary.

<sup>2</sup> Figures shown are the anticipated pay for the one-year period following the valuation date.

<sup>3</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.

SECTION IV - CENSUS DATA

**D. Schedule of Retirees, Beneficiaries, and Disabled Members <sup>1</sup>**

1.	2. Added		3. Removed		4. End of Year <sup>2</sup>		5.	6.	7.	8.	9.
Valuation Date	Number	Annual Allowances (\$ in Thousands) <sup>3</sup>	Number	Annual Allowances (\$ in Thousands) <sup>3</sup>	Number	Annual Allowances (\$ in Thousands) <sup>3</sup>	% Change in Annual Allowances <sup>3</sup>	Average Annual Allowances <sup>3</sup>	% Change in Annual Allowances <sup>3</sup>	Average Annual Allowances <sup>3</sup>	Average Annual Allowances <sup>3</sup>
6/30/2005	13	\$ 667	11	\$ 374	264	\$ 12,272	24.5%	\$ 46,485			
6/30/2006	12	868	7	474	269	12,983	5.8%	48,266			
6/30/2007	18	976	8	409	279	13,899	7.1%	49,819			
6/30/2008	23	1,257	26	991	276	14,754	6.1%	53,455			
6/30/2009	74	3,744	57	1,835	293	15,230	3.2%	51,978			
6/30/2010	11	627	6	339	298	15,390	1.1%	51,644			
6/30/2011	21	1,452	9	200	310	16,787	9.1%	54,152			
6/30/2012	7	444	6	194	311	17,028	1.4%	54,751			
6/30/2013	24	1,798	14	442	321	18,474	8.5%	57,551			
6/30/2014 <sup>4</sup>	-	-	-	-	321	18,474	0.0%	57,551			

<sup>1</sup> Valuation results prior to June 30, 2010 were calculated by the prior actuary.

<sup>2</sup> End of year annual allowances are not equal to the prior end of year annual allowances plus addition and less removals because of reductions for beneficiary benefits, data changes, and cost-of-living increases.

<sup>3</sup> Annual allowances reflect cost-of-living increases effective July 1 following the date of the census data.

<sup>4</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.

SECTION IV - CENSUS DATA

**E. Distribution of Active Members by Age and Service <sup>1</sup>**

Attained Age	Distribution of Active Members by Age and Service as of June 30, 2013 <sup>1</sup>										
	Under 1 year	1 to 4 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years	Over 40 years	Total
<25											
25-29											
30-34	2		1								3
35-39	2	9	4								15
40-44	6	20	7	4							37
45-49	6	21	14	7	2						50
50-54	4	20	13	20	3						60
55-59	6	19	19	16	19	9					88
60-64		11	17	15	12	7					62
65-69		8	6	12	10	8					44
70&Up			1	4		1					6
Total	26	108	82	78	46	25					365

<sup>1</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.

SECTION IV - CENSUS DATA

**F. Distribution of Inactive Vested Members by Age and Service <sup>1</sup>**

Attained Age	Distribution of Inactive Vested Members by Age and Service as of June 30, 2013 <sup>1</sup>							Total
	Under 5 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	Over 30 years	
<25								
25-29								
30-34								
35-39								
40-44								
45-49			1		1			2
50-54		1	5	1				7
55-59		1	4	1	10			16
60-64		2	4	5	8			19
65-69			1	1	13			15
70&Up					8			8
Total		4	15	8	40			67

<sup>1</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.



SECTION IV - CENSUS DATA

**G. Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired <sup>1</sup>**

Attained Age	Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired as of June 30, 2013 <sup>1</sup>							
	Under 5 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	Over 30 years	Total
<40								
40-44								
45-49								
50-54								
55-59	2	1		1			1	5
60-64	20	2						22
65-69	56	18	4	1	1	1	1	82
70-74	18	20	20	2	2		1	63
75-79	4	4	28	15	1	4	1	57
80-84		3	8	19	11	5	4	50
85-89		1	2	3	9	3	5	23
90&Up				1	3	5	10	19
Total	100	49	62	42	27	18	23	321

<sup>1</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.

<sup>2</sup> Six of the members do not have a date of retirement. For these members we assumed they retired at the earlier of June 30, 2013 and age 65.

SECTION IV - CENSUS DATA

**H. Schedule of Benefit Recipients by Type of Benefit Option**

1977 System						
Number of Benefit Recipients by Benefit Option as of June 30, 2013 <sup>1</sup>						
Amount of Monthly Benefit	Retiree Single Life Annuity	Retiree 50% Joint and Survivor Annuity	Survivors	Disabled	Total	
\$ 1 - 500	0	0	0	0	0	
501 - 1,000	0	0	0	0	0	
1,001 - 1,500	0	0	28	0	28	
1,501 - 2,000	0	0	10	0	10	
2,001 - 3,000	3	7	25	0	35	
over 3,000	12	125	16	0	153	
Total	15	132	79	0	226	

1985 System						
Number of Benefit Recipients by Benefit Option as of June 30, 2013 <sup>1</sup>						
Amount of Monthly Benefit	Retiree Single Life Annuity	Retiree 50% Joint and Survivor Annuity	Survivors	Disabled	Total	
\$ 1 - 500	0	0	0	0	0	
501 - 1,000	0	0	0	0	0	
1,001 - 1,500	0	0	4	0	4	
1,501 - 2,000	0	1	3	0	4	
2,001 - 3,000	0	1	8	0	9	
over 3,000	4	68	4	2	78	
Total	4	70	19	2	95	

<sup>1</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014. Distribution is based on monthly benefit accruals at July 1, 2013, including the 3.1% cost-of-living increase effective July 1, 2013. No cost-of-living increase was provided on July 1, 2014.

SECTION IV - CENSUS DATA

**I. Schedule of Average Benefit Payments as of June 30, 2013**<sup>1,2</sup>

1977 Plan
-----------

	Years of Credited Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
Average Monthly Defined Benefit <sup>3</sup>	\$ 2,731	\$ 2,308	\$ 4,123	\$ 4,718	\$ 5,340	\$ 6,780	\$ 6,538	\$ 4,684
Average Final Average Salary	\$ 97,749	\$ 104,482	\$ 117,268	\$ 109,347	\$ 111,517	\$ 111,708	\$ 122,579	\$ 112,457
Number of Benefit Recipients	45	15	32	30	50	31	23	226

1985 Plan
-----------

	Years of Credited Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
Average Monthly Defined Benefit <sup>3</sup>	\$ 5,813	\$ 3,163	\$ 4,059	\$ 5,606	\$ 6,395	\$ 4,032	\$ 6,706	\$ 5,063
Average Final Average Salary	\$ 130,798	\$ 106,483	\$ 110,912	\$ 120,148	\$ 128,389	-	-	\$ 120,661
Number of Benefit Recipients	24	4	34	17	12	3	1	95

<sup>1</sup> The valuation results as of June 30, 2014 were calculated using June 30, 2013 census data, adjusted for certain activity during fiscal year 2014.

<sup>2</sup> For some members average salary at retirement and years of credited service was not available. The average salary for each group excludes these members. Members with credited service information that is missing are counted in the "0-4" group.

<sup>3</sup> Figures shown reflect the 3.1% cost-of-living increase effective July 1, 2013. No cost-of-living increase was provided on July 1, 2014.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

**ACTUARIAL ASSUMPTIONS AND METHODS**

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B. Actuarial Methods	40

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

**A. Actuarial Assumptions**

The assumptions used in the valuation were selected and approved by the INPRS Board of Trustees. The demographic assumptions are reviewed every five years through a study of actual experience. In this way, the actuary provides guidance to the Board in selecting the assumptions. The actuary and other economic and investment professionals also provide advice to the Board for selecting the economic assumptions. In our opinion, the assumptions are reasonable for purposes of this valuation.

Interest Rate / Investment Return

Funding: 6.75% (net of administrative and investment expenses)  
Accounting: 6.75% (net of investment expenses)

Interest on Member Balances 3.5% per year

Future Salary Increases 4.0% per year beginning July 1, 2015. Actual salary increases of 3.1% on July 1, 2013 and 0.0% on July 1, 2014 are reflected in the liability valuation at June 30, 2014.

Inflation 3.0% per year

Cost of Living Increases 4.0% per year in deferral and retirement beginning July 1, 2015. Actual cost-of-living increase of 3.1% on July 1, 2013 and 0.0% on July 1, 2014 are reflected in the liability valuation at June 30, 2014.

Mortality (Healthy and Disabled) 2013 IRS Static Mortality projected five (5) years with Scale AA

Disability 1964 OASDI Table. Illustrative rates shown below:

<u>Age</u>	<u>Rate</u>
20	0.060%
25	0.085%
30	0.110%
35	0.147%
40	0.220%
45	0.360%
50	0.606%
55	1.009%
60	1.627%
65+	0.000%

**SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS**

**A. Actuarial Assumptions (continued)**

Termination

Based on 2005-2010 experience. Rates shown below:

<u>Age</u>	<u>Rate</u>
20-37	4%
38-65	7%
66+	4%

Retirement

Based on 2005-2010 experience. Rates shown below:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
55-61	20%	65	50%
62	25%	66-74	30%
63	15%	75+	100%
64	10%		

Decrement Timing

Decrements are assumed to occur at the beginning of the year.

Spouse/Beneficiary

90% of members are assumed to be married or to have a dependent beneficiary. Male members are assumed to be four (4) years older than their spouses and female members are assumed to be two (2) years younger than their spouses.

Data Assumptions

Actives and inactives with no date of birth and/or no gender are assumed to be age 57 and/or male. Spouse gender is assumed to be the opposite gender of the member.

Retirees and disabled members with an unknown marital status are assumed to be married. Retirees and disabled members that are not married are assumed to be receiving a single life annuity. Retirees and disabled members that are married are assumed to elect a 50% joint and survivor annuity.

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SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

**A. Actuarial Assumptions (continued)**

Changes in Assumptions

There have been no changes in the actuarial assumptions since the June 30, 2013 valuation.

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## SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

### **B. Actuarial Methods**

The actuarial methods used in this valuation were selected and approved by the Board. In general, the methods provide orderly funding of all benefits being accrued, as well as unfunded past-service benefit liabilities, over a period of thirty years. However, the smoothing method employed in determining the Actuarial Value of Assets may accelerate or lengthen the effective funding period, depending on whether gains or losses are experienced. In our opinion, the actuarial methods are reasonable for the purposes of this valuation.

#### 1. Actuarial Cost Method

The actuarial cost method is Entry Age Normal - Level Percent of Payroll.

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 30-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 30-year period. The purpose of the method is to give a smooth progression of the costs from year to year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants (actives and inactives). Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

#### 2. Asset Valuation Method

Actuarial Value of Assets is equal to a four-year smoothing of gains and losses on the Market Value of Assets, subject to a 20% corridor.

#### 3. State Appropriations

Based on the assumptions and methods previously described, an actuarially determined contribution amount is computed. The Board considers this information when requesting funds from the State.



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## SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

### **B. Actuarial Methods (continued)**

#### 4. Anticipated Payroll

The Anticipated Payroll of \$47,882,728 for the fiscal year beginning July 1, 2014 is equal to the actual payroll during the year ending June 30, 2014, increased with one year of salary scale, but does not include amounts for members who have reached the age at which retirement is assumed to occur immediately.

#### 5. Changes in Actuarial Methods

Member census data as of June 30, 2013 was used in the valuation and adjusted, where appropriate, to reflect changes between June 30, 2013 and June 30, 2014. Standard actuarial roll forward techniques were then used to project the liabilities computed as of June 30, 2013 to the June 30, 2014 measurement date. Prior to the June 30, 2014 valuation, census data as of the valuation date was used.

SECTION VI - SUMMARY OF PLAN PROVISIONS

**SUMMARY OF PLAN PROVISIONS**

Page

Summary of Plan Provisions

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SECTION VI - SUMMARY OF PLAN PROVISIONS

**Summary of Plan Provisions**

The benefit provisions for the JRS are set forth in IC 33-38-6, 33-38-7, and 33-38-8. A summary of those defined pension benefit provisions is presented below:

Participation                      All individuals serving as a judge or justice in Indiana as defined in IC 33-38-6-7. A judge who begins service before September 1, 1985 shall be a participant of the 1977 System (IC 33-38-7) and a judge who begins service after August 31, 1985 shall be a participant of the 1985 System (IC 33-38-8).

Eligibility for Defined Pension Benefits

- a. Normal Retirement      Earliest of:
  - Age 65 with 8 or more years of creditable service
  - Age 55 with sum of age and creditable service equal to 85 or more
  
- b. Early Retirement        Age 62 with 8 or more years of creditable service
  
- c. Late Retirement         Subject to continued employment after normal retirement
  
- d. Disability Retirement    A participant is considered disabled if two (2) physicians certify that the participant is totally incapacitated from earning a livelihood and that the condition is likely to be permanent
  
- e. Termination             8 or more years of creditable service and no longer active (i.e. vested inactive)
  
- f. Pre-Retirement Death   8 or more years of creditable service entitled to a future benefit

SECTION VI - SUMMARY OF PLAN PROVISIONS

**Summary of Plan Provisions (continued)**

Amount of Benefits

- a. Normal Retirement      The normal retirement benefit is a monthly annuity payable for life with a 50% continuation (or \$12,000 annually, if greater) to a surviving spouse or surviving dependent children. The benefit is equal to a percentage of earnings<sup>1</sup> in accordance with the following table:

<u>Years of Service</u>	<u>Percentage</u>
7 or less	0%
8	24%
9	27%
10	30%
11	33%
12	50%
13	51%
14	52%
15	53%
16	54%
17	55%
18	56%
19	57%
20	58%
21	59%
22 or more	60%

An additional percentage shall be calculated by prorating between applicable percentages, based on the number of months in a partial year of service.

<sup>1</sup> Earnings is the annual salary being paid for the office which the participant held at the time of separation from service.

SECTION VI - SUMMARY OF PLAN PROVISIONS

**Summary of Plan Provisions (continued)**

Amount of Benefits (continued)

- b. Early Retirement      The early retirement benefit is the accrued retirement benefit determined as of the early retirement date and payable commencing at the normal retirement date. A participant may elect to have the benefit commence prior to age 65 provided the benefit is reduced by 0.1% for each month that the benefit commencement date precedes age 65.
  
- c. Late Retirement      The late retirement benefit is calculated in the same manner as the normal retirement benefit. Creditable service and earnings earned after normal retirement is included in the computation.
  
- d. Disability Retirement      The disability retirement benefit is payable for the duration of the disability commencing the month following disability date with reduction for early commencement. The amount of monthly benefit shall be equal to a percentage of average monthly earnings in accordance with the following table:

<u>Years of Service</u>	<u>Percentage</u>
12 or less	50%
13	51%
14	52%
15	53%
16	54%
17	55%
18	56%
19	57%
20	58%
21	59%
22 or more	60%

An additional percentage shall be calculated by prorating between applicable percentages, based on the number of months in a partial year of service.

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SECTION VI - SUMMARY OF PLAN PROVISIONS

**Summary of Plan Provisions (continued)**

Amount of Benefits (continued)

- e. Termination                      The termination benefit is the accrued retirement benefit determined as of the termination date and payable commencing as of the normal retirement date. The participant may elect to receive a reduced early retirement benefit.
  
- f. Death Benefit                      If death occurs (a) while receiving benefits, (b) while in service as a judge with 8 or more years of service, or (c) while permanently disabled, the spouse or family of dependent children shall be eligible for a benefit equal to the greater of \$12,000 (effective July 1, 1977) annually or 50% of the benefit the participant was receiving or was entitled to receive at the time of death.

Spousal benefits are payable as a lifetime monthly pension.

- g. Post-Retirement Benefit Increases                      Participant benefits in the Judges 1977 Retirement, Disability, and Death System increase in the same ratio as the salary being paid for the office a participant held at the time of separation from service increases. Effective January 1, 2010, the Judges 1985 Retirement, Disability, and Death System will also have benefits increase in the same manner, on a prospective basis only.

Member Contributions

Each participant contributes 6% of his total salary until completion of 22 years of service.

Forms of Payment

- a. Single Life Annuity                      Member will receive a monthly benefit for life, but there are no monthly payments to anyone after death.
  
- b. Joint with One-Half Survivor Benefits                      Member will be paid a monthly benefit for life. After death, one-half (1/2) of the benefit will be paid to the spouse for their lifetime or the dependent until age 18 unless disabled. If the dependent child was named the beneficiary, once they are no longer entitled to the benefit, the spouse would receive the benefit for life.

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SECTION VI - SUMMARY OF PLAN PROVISIONS

**Summary of Plan Provisions (continued)**

Withdrawal from Fund	If member's employment is terminated prior to eligibility for a retirement annuity, the member may withdraw their contributions from the Fund.
Cost-of-Living Adjustments	Benefits for retired members increase automatically based on the annual pay increase granted for the position the member held at the time of retirement. The annual cost-of-living assumption for the valuation is 4.0%, which is the same as the salary increase assumption for active members.
Changes in Provisions	No changes since prior valuation.

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SECTION VII - DEFINITIONS OF TECHNICAL TERMS

**Definitions of Technical Terms**

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## SECTION VII - DEFINITIONS OF TECHNICAL TERMS

### **Definitions of Technical Terms**

Actuarial Accrued Liability (AAL)	That portion, as determined by a particular Actuarial Cost Method, of the Present Value of Future Benefits (PVFB) and expenses which is not provided for by future Normal Costs. Generally, the portion of the PVFB attributable to past service.
Actuarial Assumptions	Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided pension benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.
Actuarial Cost Method	A mathematical procedure for allocating the Present Value of Future Benefits to service periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.
Actuarially Equivalent	Having the same Actuarial Present Value, based on a set of Actuarial Assumptions.
Actuarial Gain/(Loss)	The difference between actual Unfunded Actuarial Accrued Liability and anticipated Unfunded Actuarial Accrued Liability resulting from differences between actual and expected plan experience between two valuation date
Actuarial Present Value	The single amount that is equal to a payment or series of payments in the future. It is determined by discounting future payments using predetermined Actuarial Assumptions for interest and by probabilities of payment.
Actuarial Valuation	The determination, as of an Actuarial Valuation Date, of the Present Value of Future Benefits, Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values.
Actuarial Valuation Date	The date as of which an Actuarial Valuation is performed.
Actuarially Determined Contribution	The precise actuarial contribution rate (expressed as a percentage of covered payroll) or amount determined in accordance with a Funding Policy, which generally reflects the Normal Cost and amortization of any Unfunded Actuarial Accrued Liability.

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**SECTION VII - DEFINITIONS OF TECHNICAL TERMS**

**Definitions of Technical Terms (continued)**

Amortization	The payment of a present value financial obligation on an installment basis over a future period.
Annual Required Contribution of the Employer (ARC)	The employer's periodic required contributions to a defined benefit pension plan, calculated in accordance with the plan provisions, Actuarial Assumptions, Actuarial Cost Method and other requirements prescribed by Governmental Accounting Standards No. 25 and No. 27.
Creditable Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Funding Policy	A set of principles, often including a prescribed Actuarial Cost Method, Actuarial Assumptions, and/or Unfunded Actuarial Accrued Liability Amortization Method, that guide the calculation of the Actuarially Determined Contribution and management decisions regarding funding.
Level Dollar Amortization	Amortization where the installments are equal dollar amounts during each period.
Level Percent Amortization	Amortization where the installments are an equal percent of employee payroll during each period.
Normal Cost (NC)	That portion of the Present Value of Future Benefits which is allocated to the year following the Actuarial Valuation Date by the Actuarial Cost Method. The normal cost is specific to the cost method used.
Plan Assets	Resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employer(s) or plan administrator, for the payment of benefits in accordance with the terms of the plan.
Plan Members	The individuals covered by the terms of a pension plan. The plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them, and retired employees and beneficiaries currently receiving benefits.

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SECTION VII - DEFINITIONS OF TECHNICAL TERMS

**Definitions of Technical Terms (continued)**

Present Value of Future Benefits (PVFB)

Projected benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members upon retirement) as a result of their service through the valuation date and their expected future service. The actuarial present value of projected future benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment (taking into account mortality, turnover, probability of participating in plan retirement, etc.). Alternatively, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay the projected benefits when due.

Unfunded Actuarial Accrued Liability (UAAL)

The difference between the Actuarial Accrued Liability and Plan Assets as of a particular date. Plan assets may be market value or a smoothed value.

Unfunded Actuarial Accrued Liability Amortization Method

A predetermined process by which any Unfunded Actuarial Accrued Liability will be amortized for calculating the Actuarially Determined Contribution.