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Indiana Public Retirement System

State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers' Retirement Plan

Actuarial Valuation as of June 30, 2013

pwc

December 17, 2013

Board of Trustees
Indiana Public Retirement System
1 North Capitol, Suite 001
Indianapolis, IN 46204

Re: Certification of the Actuarial Valuations of the Indiana Public Retirement System as of June 30, 2013

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, 2013 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 determined by the June 30, 2013 actuarial valuation and adopted by the Board will become effective on either July 1, 2014 or January 1, 2015. 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 4.2% from the preceding year to 83.4%, primarily due to delayed recognition of prior asset gains from fiscal 2010 and 2011 in the Actuarial Value of Assets and additional contributions made to certain plans pursuant to 2012 House Bill 1376.

Benefit Provisions

The benefit provisions reflected in the valuation reports are those which were in effect at June 30, 2013, as set forth in the related Indiana statutes. Material changes in benefit provisions since the 2012 valuation include the decision to modify ASA annuitizations for Public Employees' Retirement Fund (PERF) starting October 1, 2014 and amending several features of Prosecuting Attorneys' Retirement Fund to be similar to Judges' Retirement System pursuant to 2013 House Bill 1057. There were no other material changes in benefit provisions since the 2012 valuations.

Assets and Member Data

The valuations were based on asset values of the trust funds and member census data as of June 30, 2013. 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, 2013 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 assumptions for Prosecuting Attorneys' Retirement Fund due to plan changes. 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. 25 and No. 27 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, 2013 based on the underlying census data, asset information and selected assumptions and methods.

This report contains the required accounting information to be included in the Comprehensive Annual Financial Report. This information has been prepared in accordance with our understanding of Governmental Accounting Standards No. 25 and No. 27 (as amended by No. 50). This report does not contain accounting information prepared in accordance with Governmental Accounting Standards No. 67 and No. 68, which will become effective for financial statements for fiscal years beginning after June 15, 2013 and June 15, 2014, respectively.

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 was not intended or written to be used, and it cannot be used, for the purpose of avoiding U.S. federal, state, or local tax penalties. This includes penalties that may apply if the transaction that is the subject of this document is found to lack economic substance or fails to satisfy any other similar rule of law. 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,

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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 State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers' Retirement Plan ("EG&C Fund") and has been prepared to present the current funded status of the Plan, contribution requirements for calendar year 2015 (January 1, 2015 through December 31, 2015), and certain financial statement disclosure information. The valuation was performed using census data for plan members as of June 30, 2013 provided by INPRS, asset information as of June 30, 2013 provided by INPRS, the actuarial assumptions and methods approved by the Board and summarized in Section V, and the plan provisions effective June 30, 2013 summarized in Section VI.

Contribution Rate

The Board sets, at its discretion, the applicable contribution rate upon considering the results of the actuarial valuation and other analysis as appropriate. The Board approved an employer contribution rate of 20.75% for calendar year 2015, the same as 2014. The contribution rate becomes effective on January 1, 2015. Therefore, the actual dollar amount of employer cost will depend on the actual payroll during calendar year 2015.

Members of the EG&C Fund contribute 4% of their compensation to the Plan. If a member terminates employment with less than 15 years of service, the accumulated contributions with interest can be withdrawn as a lump sum or the member may direct the EG&C Fund to make a direct rollover of the distribution amount. When a member becomes vested with at least 15 years of service, 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 the EG&C Fund is measured by the funded ratio, which is the ratio of the assets available for benefits to a benefit liability measure for the EG&C Fund. 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 EG&C Fund AAL funded ratio increased from 67.1% at June 30, 2012 to 83.5% at June 30, 2013. The increase is primarily due to an additional contribution of $14.6 million made to the Plan pursuant to 2012 House Bill 1376 and the recognition of investment gains from prior years in the AVA development.

Investment Experience

The assets of the EG&C Fund are commingled with the assets of other funds administered by INPRS. The overall INPRS return on the commingled funds was 6.0% during fiscal 2013. Based on the value of assets allocated to the EG&C Fund as of the prior valuation date and contribution and benefit payment activity during the year, the allocation of returns to the EG&C Fund represent a return of approximately 5.4% on market value and 8.0% 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.

HIGHLIGHTS OF THE ACTUARY'S REPORT (CONTINUED)

Cost-of-Living Adjustment

Cost-of-living increases for retired members have historically been granted on an "ad hoc" basis. No increase in monthly benefits was approved for retired members, disabled members, or beneficiaries at January 1, 2014. Instead a "13th check" was paid to each member (or survivor or beneficiary) in pay status during September 2013. The amount of the 13th check varied based on the years of creditable service the member earned prior to retirement.

Changes in Actuarial Assumptions

The interest crediting rate assumption on member contribution balances was decreased from 6.75% to 3.5%.

There were no other assumption changes for the June 30, 2013 valuation.

Changes in Plan Provisions

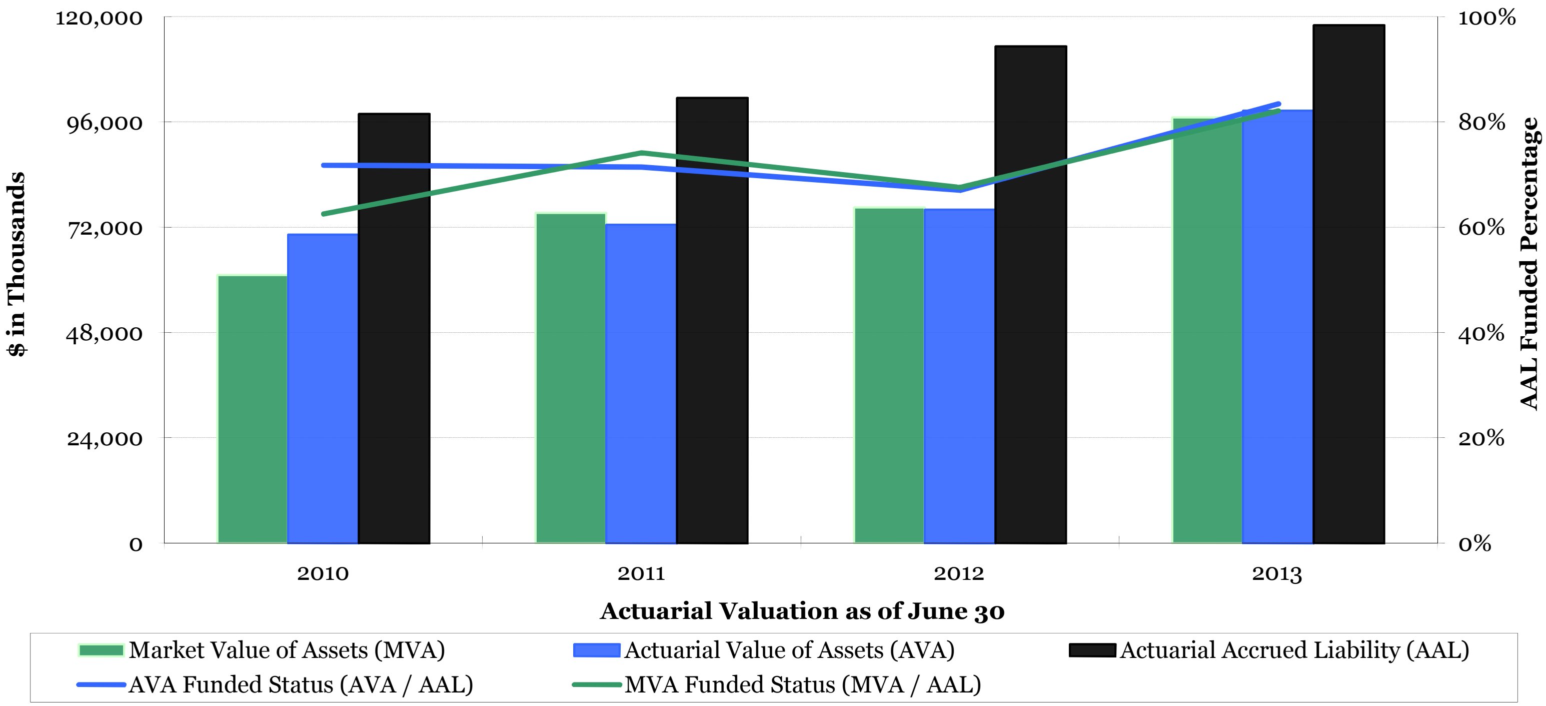
It is our understanding that there were no changes to the Plan that impacted the pension benefits during the fiscal year.

Changes in Actuarial Methods

There have been no changes in the actuarial methods since the June 30, 2012 valuation.

HISTORICAL SUMMARY

EG&C Fund – 4 Year History of Funded Status



Actuarial Valuation as of June 30:	2010	2011	2012	2013
Actuarial Accrued Liability (AAL)	$97,861.7	$101,533.8	$113,282.6	$118,097.2
Actuarial Value of Assets (AVA)	70,326.8	72,599.4	76,007.0	98,608.5
Market Value of Assets (MVA)	61,174.5	75,305.7	76,543.3	97,018.8
Unfunded Liability (AAL - AVA)	27,534.9	28,934.4	37,275.6	19,488.7
AVA Funded Status (AVA / AAL)	71.9%	71.5%	67.1%	83.5%
MVA Funded Status (MVA / AAL)	62.5%	74.2%	67.6%	82.2%

HISTORICAL SUMMARY (CONTINUED)

Summary of Valuation Results [1]

Valuation Date	June 30, 2010	June 30, 2011	June 30, 2012	June 30, 2013
Development of Annual Required Contribution Rate:				
1. Anticipated Payroll	$ 26,709,051	$ 24,028,462	$ 25,752,100	$ 26,200,542
2. Normal Cost (Beginning of Year)				
a. Amount	$ 4,118,442	$ 3,377,658	$ 3,810,650	$ 3,841,382
b. Percentage of Payroll	15.42%	14.06%	14.80%	14.66%
3. Unfunded Actuarial Accrued Liability Annual Amortizations				
a. Amount	$ 2,129,167	$ 2,260,987	$ 2,857,333	$ 1,522,377
b. Percentage of Payroll	7.97%	9.41%	11.09%	5.81%
4. Expected Employee Contributions				
a. Amount	$ 1,068,362	$ 961,138	$ 1,030,084	$ 1,048,022
b. Percentage of Payroll	4.00%	4.00%	4.00%	4.00%
5. Annual Required Contribution Rate:				
a. Percentage of Payroll: (2)(b) + (3)(b) - 4(b)	**19.39%**	**19.47%**	**21.89%**	**16.47%**
b. Effective Date	January 1, 2012	January 1, 2013	January 1, 2014	January 1, 2015

Calendar Year	2012	2013	2014	2015
Approved Funding Rate	**20.75%**	**20.75%**	**20.75%**	**20.75%**

[1] The contribution rates shown were developed on a funding basis only and do not reflect accounting requirements.

HISTORICAL SUMMARY (CONTINUED)

Summary of Valuation Results (Continued)

	June 30, 2010	June 30, 2011	June 30, 2012	June 30, 2013
Census Information				
Active				
Number	471	440	468	473
Average Age	41.3	41.5	40.9	41.0
Average Years of Service	11.0	10.9	10.2	10.4
Covered Payroll of Actives	$ 26,709,051	$ 24,028,462	$ 25,752,100	$ 26,200,542
Inactive- Vested				
Number	4	5	4	4
Average Age	49.7	48.2	50.0	50.8
Average Years of Service	19.8	20.5	19.9	19.6
Inactive - Non-Vested [1]				
Number	52	59	61	87
Retiree/Beneficiary/Disabled				
Number	157	176	187	193
Average Age	69.1	68.4	68.2	68.3
Annual Benefits Payable	$ 3,134,088	$ 3,978,369	$ 4,452,452	$ 4,666,134

[1] For June 30, 2013, inactive non-vested members entitled to a refund of their member contributions totaling $252,767.

HISTORICAL SUMMARY (CONTINUED)

Summary of Valuation Results (Continued)

	June 30, 2010	June 30, 2011	June 30, 2012	June 30, 2013
Actuarial Accrued Liability (AAL)				
Member Contribution Balance	$ 6,219,590	$ 6,270,943	$ 6,531,863	$ 7,494,370
Retiree/Beneficiary/Disabled	36,043,925	46,695,123	53,928,711	56,027,923
Active and Inactive	55,598,169	48,567,782	52,822,070	54,574,934
Total	$ 97,861,684	$ 101,533,848	$ 113,282,644	$ 118,097,227
Actuarial Value of Assets (AVA)				
Member Contribution Balance	$ 6,219,590	$ 6,270,943	$ 6,531,863	$ 7,494,370
Retiree/Beneficiary/Disabled	36,043,925	46,695,123	53,928,711	56,027,923
Active and Inactive	28,063,267	19,633,383	15,546,429	35,086,227
Total	$ 70,326,782	$ 72,599,449	$ 76,007,003	$ 98,608,520
Market Value of Assets (MVA)				
Member Contribution Balance	$ 6,219,590	$ 6,270,943	$ 6,531,863	$ 7,494,370
Retiree/Beneficiary/Disabled	36,043,925	46,695,123	53,928,711	56,027,923
Active and Inactive	18,910,969	22,339,674	16,082,686	33,496,499
Total	61,174,484	75,305,740	76,543,260	97,018,792
Unfunded Actuarial Accrued Liability: AAL - AVA				
Member Contribution Balance	$ -	$ -	$ -	$ -
Retiree/Beneficiary/Disabled	-	-	-	-
Active and Inactive	27,534,902	28,934,399	37,275,641	19,488,707
Total	$ 27,534,902	$ 28,934,399	$ 37,275,641	$ 19,488,707
Funded Percentage: AVA / AAL				
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	50.5%	40.4%	29.4%	64.3%
Total	71.9%	71.5%	67.1%	83.5%
Summary of Assumptions				
Valuation Interest Rate	7.0%	7.0%	6.75%	6.75%
Salary Scale	4.5%	3.25%	3.25%	3.25%
Cost-of-Living Assumption	1.0%	1.0%	1.0%	1.0%

FUNDING

SECTION II - FUNDING

A. Development of Funded Status

			June 30, 2012		June 30, 2013
1.	Actuarial Accrued Liability				
	a. Member Contribution Account	$	6,531,863	$	7,494,370
	b. Retirees, Beneficiaries, and Disableds		53,928,711		56,027,923
	c. Actives and Inactives		52,822,070		54,574,934
	d. Total: (1)(a) + (1)(b) + (1)(c)	$	113,282,644	$	118,097,227
2.	Actuarial Value of Assets [1]				
	a. Member Contribution Account	$	6,531,863	$	7,494,370
	b. Retirees, Beneficiaries, and Disableds		53,928,711		56,027,923
	c. Actives and Inactives		15,546,429		35,086,227
	d. Total: (2)(a) + (2)(b) + (2)(c)	$	76,007,003	$	98,608,520
3.	Unfunded Actuarial Accrued Liability [1]				
	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)		37,275,641		19,488,707
	d. Total: (1)(d) - (2)(d)	$	37,275,641	$	19,488,707
4.	Funded Percentage [1]				
	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)		29.4%		64.3%
	d. Total: (2)(d) / (1)(d)		67.1%		83.5%

[1] 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.

B. Unfunded Actuarial Accrued Liability Reconciliation

		June 30, 2012	June 30, 2013
1.	Unfunded Actuarial Accrued Liability, Prior Year	$ 28,934,399	$ 37,275,641
2.	Unfunded Actuarial Accrued Liability (Gain) / Loss		
a.	Actuarial Value of Assets Experience	$ 2,723,092	$ 239,329
b.	Actuarial Accrued Liability Experience	2,516,383	(1,343,393)
c.	Additional Liability Due to Cost-of-Living Adjustments	(710,641) [1]	(501,916) [3]
d.	Additional Liability Due to Changes in Actuarial Assumptions	4,206,256 [2]	(40,954) [4]
e.	Additional Liability Due to Changes in Plan Provisions	-	-
f.	Total New Amortization Bases: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e)	$ 8,735,090	$ (1,646,934)
g.	Reduction in Existing Bases Due to Prior Year Contributions, Net of Interest	(393,848)	(16,140,000) [5]
h.	Change in Unfunded Actuarial Accrued Liability: (2)(f) + (2)(g)	$ 8,341,242	$ (17,786,934)
3.	Unfunded Actuarial Accrued Liability, Current Year: (1) + (2)(h)	$ 37,275,641	$ 19,488,707

[1] Retired members were provided a 13th check by October 1, 2012, rather than the assumed 1.0% COLA on January 1, 2013.

[2] Assumption changes include the change in discount rate from 7.0% to 6.75% and change in mortality table from the 2008 IRS Static Mortality projected five (5) years with Scale AA to the 2013 IRS Static Mortality projected five (5) years with Scale AA.

[3] Retired members were provided a 13th check by October 1, 2013, rather than the assumed 1.0% COLA on January 1, 2014.

[4] The interest crediting rate assumption on member contribution balances was decreased from 6.75% to 3.5%.

[5] Includes a contribution of $14,619,112 made to the Plan pursuant to 2012 HB 1376.

C. Actuarial Accrued Liability Reconciliation

1.	June 30, 2012 Actuarial Accrued Liability	$	113,282,644	
2.	Normal Cost		3,810,650	
3.	Actual Benefit Payments		4,849,917	
4.	Interest of 6.75% on (1) + (2) - (3)/2		7,740,113	
5.	Expected June 30, 2013 Actuarial Accrued Liability: (1) + (2) - (3) + (4)	$	119,983,490	
			Dollar Change in Liability	**Percent Change in Liability**
6.	(Gain)/Loss Components			
	a. Census	$	(1,343,393)	(1.1%)
	b. 13th Check vs. COLA [1]		(501,916)	(0.4%)
	c. Assumption Changes [2]		(40,954)	(0.1%)
	d. Total: (6)(a) + (6)(b) + (6)(c)	$	(1,886,263)	(1.6%)
7.	Actual June 30, 2013 Actuarial Accrued Liability: (5) + (6)(d)	**$**	**118,097,227**	

[1] Retired members will be provided a 13th check by October 1, 2013 rather than a 1.0% COLA on January 1, 2014.

[2] The interest crediting rate assumption on member contribution balances was decreased from 6.75% to 3.5%.

D. Reconciliation of Market Value of Assets

			June 30, 2012		June 30, 2013
1.	Market Value of Assets, Prior June 30	$	75,305,740	$	76,543,260
2.	Receipts				
	a. Employer Contributions	$	5,053,103	$	19,740,031
	b. Member Contributions		971,957		1,005,564
	c. Investment Income and Dividends Net of Fees		134,549		4,679,653
	d. Security Lending Income Net of Fees		25,466		21,335
	e. Transfers In		-		-
	f. Miscellaneous Income		-		-
	g. Total Receipts: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f)	$	6,185,075	$	25,446,583
3.	Disbursements				
	a. Benefits Paid During the Year	$	4,716,539	$	4,798,582
	b. Refund of Contributions and Interest		99,563		36,766
	c. Administrative and Project Expenses		131,453		121,134
	d. Transfers Out		-		14,569
	e. Miscellaneous Disbursements		-		-
	f. Total Disbursements: (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e)	$	4,947,555	$	4,971,051
4.	Market Value of Assets, Current June 30: (1) + (2)(g) - (3)(f)	**$**	**76,543,260**	**$**	**97,018,792**
5.	Market Value of Assets Approximate Annual Rate of Return [1]		0.0%		5.4%

[1] Assumes cash flows occur at mid-year.

E. Reconciliation of Actuarial Value of Assets

1.	Market Value of Assets, June 30, 2012			$	76,543,260
2.	Market Value of Assets, June 30, 2013				97,018,792
3.	Expected Earnings/Expenses				
	a. Expected Investment Earnings at 6.75% on June 30, 2012 Market Value				5,166,670
	b. Receipts with Expected Investment Earnings at 6.75%[1]				21,445,759
	c. Disbursements with Expected Investment Earnings at 6.75%[1]				5,013,602
4.	Expected Assets, June 30, 2013: (1) + (3)(a) + (3)(b) - (3)(c)			$	98,142,087
5.	2012-2013 Gain/(Loss): (2) - (4)				(1,123,295)
6.	Smoothing of Gain/(Loss)				
	Year	Gain/(Loss)	% Unrecognized		
	a. 2012-2013	$ (1,123,295)	75%		(842,471)
	b. 2011-2012	$ (5,285,153)	50%		(2,642,577)
	c. 2010-2011	7,581,278	25%		1,895,320
7.	Preliminary Actuarial Value of Assets, June 30, 2013: (2) - (6)(a) - (6)(b) - (6)(c)			$	98,608,520
8.	Corridor				
	a. 120% of Market Value: 1.2 x (2)				116,422,550
	b. 80% of Market Value: 0.8 x (2)				77,615,034
9.	Actuarial Value of Assets, June 30, 2013: (7), but not greater than (8)(a) or less than (8)(b)			**$**	**98,608,520**
10.	Actuarial Value of Assets as a Percent of Market Value: (9) / (2)				101.6%
11.	Actuarial Value of Assets Approximate Annual Rate of Investment Return [1]				8.0%

[1] Assumes cash flows occur at mid-year.

F. Contribution Rate

		June 30, 2012		June 30, 2013
Development of Annual Required Contribution Rate:				
1. Anticipated Payroll	$	25,752,100	$	26,200,542
2. Normal Cost (Beginning of Year)				
a. Amount	$	3,810,650	$	3,841,382
b. Percentage of Payroll		14.80%		14.66%
3. Unfunded Actuarial Accrued Liability (UAAL) Annual Amortizations				
a. Amount	$	2,857,333	$	1,522,377
b. Percentage of Payroll		11.09%		5.81%
4. Expected Employee Contributions				
a. Amount	$	1,030,084	$	1,048,022
b. Percentage of Payroll		4.00%		4.00%
5. Annual Required Contribution Rate				
a. Percentage of Payroll: (2)(b) + (3)(b) - (4)(b)		**21.89%**		**16.47%**
b. Effective Date		January 1, 2014		January 1, 2015
Development of Funding Rate:				
6. Contribution received after June 30, 2012 pursuant to 2012 HB 1376	$	14,619,112 [1]		
7. UAAL Amortization Assuming HB 1376 Contribution is included in June 30, 2012 Assets				
a. Amount	$	1,723,069		
b. Percentage of Payroll		6.69%		
8. Funding Rate Reflecting HB 1376: (2)(b) - (4)(b) + (7)(b)		17.49%		
Approved Funding Rate:		**20.75%**		**20.75%**
Expected Percentage of Annual Required Contribution Contributed:				
9. Fiscal Year Beginning		July 1, 2013		July 1, 2014
10. Annual Required Contribution Rates for:				
a. July 1 - December 31		0.00%		21.89%
b. January 1 - June 30		21.89%		16.47%
11. Approved Funding Rates for:				
a. July 1 - December 31		20.75%		20.75%
b. January 1 - June 30		20.75%		20.75%
12. Expected Percentage of Annual Required Contribution Contributed: {[(11)(a) + (11)(b)] / 2} / {[(10)(a) + (10)(b)] / 2}		189.58%		108.19%

[1] Reduction in contribution rate if $14,619,112 of contributions received after June 30, 2012 pursuant to 2012 HB 1376 are included in assets as of June 30, 2012 and exisiting UAAL bases are reduced ratably due to the excess contribution.

G. Unfunded Actuarial Accrued Liability Amortization Schedule [1]

	Date Base Established	Reason	Remaining Unfunded [2]	Remaining Period	Amortization Amount
1.	6/30/2009	Actuarial Experience	$ 11,465,341	24	$ 915,986
2.	6/30/2010	Actuarial Experience and Changes in Actuarial Assumptions	3,702,954	27	282,586
3.	6/30/2011	Actuarial Experience and Changes in Actuarial Assumptions	986,025	28	74,276
4.	6/30/2012	Actuarial Experience and Changes in Actuarial Assumptions	4,981,321	29	370,750
5.	6/30/2013	Actuarial Experience and Changes in Actuarial Assumptions	(1,646,934)	30	(121,221)
	Total		$ 19,488,707		$ 1,522,377

[1] Valuation results prior to June 30, 2010 were calculated by the prior actuary.

[2] In addition to the amortization bases being reduced by the prior year amortization payments, the bases are also reduced pro rata by the contribution of $14,619,112 made to the Plan pursuant to 2012 HB1376.

H. History of Employer Contribution Rates [1,2]

1. Valuation Date	2. Effective Date	3. Contribution Rate
June 30, 2001	January 1, 2003	16.00%
June 30, 2002	January 1, 2004	16.00%
June 30, 2003	January 1, 2005	16.00%
June 30, 2004	January 1, 2006	16.00%
June 30, 2005	January 1, 2007	16.00%
June 30, 2006	January 1, 2008	20.50%
June 30, 2007	January 1, 2009	20.75%
June 30, 2008	January 1, 2010	20.75%
June 30, 2009	January 1, 2011	20.75%
June 30, 2010	January 1, 2012	20.75%
June 30, 2011	January 1, 2013	20.75%
June 30, 2012	January 1, 2014	20.75%
June 30, 2013	January 1, 2015	20.75%

[1] Valuation results prior to June 30, 2010 were calculated by the prior actuary.

[2] Prior to the June 30, 2011 valuation date, rates shown reflect application of the contribution rate smoothing rules.

I. Approximate Annual Rate of Return for Year Ending June 30, 2013 [1]

		Market Value of Assets	Actuarial Value of Assets
1.	Balance, beginning of year	$ 76,543,260	$ 76,007,003
2.	Balance, end of year	97,018,792	98,608,520
3.	Total increase: (2) - (1)	20,475,532	22,601,517
4.	Contributions and Transfers In	20,745,595	20,745,595
5.	Benefit payments and Transfers Out	4,849,917	4,849,917
6.	Net additions: (4) - (5)	15,895,678	15,895,678
7.	Net investment increase: (3) - (6)	4,579,854	6,705,839
8.	Average assets: [(1) + (2) - (7)] / 2	84,491,099	83,954,842
9.	Approximate rate of return: (7) / (8)	5.4%	8.0%

J. Historical Investment Experience

1.	2.	3.	4.
	Actual Rate of Investment Return		Actuarial Assumed
Year Ending June 30	Market Basis [2]	Actuarial Basis	Interest Rate
2004	16.3%	3.0%	7.25%
2005	9.8%	6.7%	7.25%
2006	10.7%	15.2%	7.25%
2007	18.2%	15.9%	7.25%
2008	(7.6%)	8.2%	7.25%
2009	(20.6%)	(0.9%)	7.25%
2010	13.9%	(1.3%)	7.25%
2011	20.1%	0.1%	7.0%
2012	0.7%	3.0%	7.0%
2013	6.0%	8.0%	6.75%

[1] Based on individual fund experience. Net of expenses and assuming cash flows occur at mid-year.

[2] INPRS actual rate of return net of fees (2012-2013), 2004-2011 PERF CRIF rate of return reported as Gross of fees.

K. Interest Rate Sensitivity

The investment return assumption (discount rate), as required by GASB, 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, 2012 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 Annual Required Contribution Rate (for the calendar year beginning January 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).

	0.75% Decrease: (6.0%)	0.25% Decrease: (6.5%)	Current Assumption: (6.75%)	0.75% Increase: (7.5%)	1.25% Increase: (8.0%)
Funded Status					
Actuarial Accrued Liability	$ 129,773,440	$ 121,801,469	$ 118,097,227	$ 107,986,742	$ 101,990,643
Actuarial Value of Assets	98,608,520	98,608,520	98,608,520	98,608,520	98,608,520
Unfunded Actuarial Accrued Liability	$ 31,164,920	$ 23,192,949	$ 19,488,707	$ 9,378,222	$ 3,382,123
Funded Ratio	76.0%	81.0%	83.5%	91.3%	96.7%
Annual Required Contribution Rate					
Normal Cost Rate	17.34%	15.49%	14.66%	12.47%	11.24%
UAAL Amortization Rate	8.51%	6.71%	5.81%	3.14%	1.36%
Expected Employee Contribution Rate	4.00%	4.00%	4.00%	4.00%	4.00%
Annual Required Contribution Rate	21.85%	18.20%	16.47%	11.61%	8.60%

ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27

A. Assumptions and Methods Under GASB #25 and #27

Under the Governmental Accounting Standards Board (GASB) Statements No. 25 and No. 27, as amended by GASB No. 50, certain information about the plan is required to be disclosed. The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	June 30, 2013
Actuarial Cost Method	Entry Age Normal (Level Percent of Payroll)
Amortization Method	Level Dollar
Amortization Period	30 Years, Closed
Actuarial Value of Assets	4-Year Smoothed Market Value with 20% Corridor
Actuarial Assumptions:	
Investment Rate of Return	6.75%
Future Salary Increases	3.25% (includes 3.0% wage inflation)
Cost-of-Living Increases	1.0% compounded annually

B. Membership Data

The plan consisted of the following membership as of June 30, 2013, the date of the latest actuarial valuation:

Retired members, beneficiaries and disabled members receiving benefits:	193
Terminated vested plan members entitled to but not yet receiving benefits:	4
Terminated non-vested plan members entitled to a distribution of contributions:	87
Active Plan Members:	473
Total membership:	757

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (Continued)

C. Statement of Fiduciary Net Position

1.	Assets			
	a.	Cash	$	11,202
	b.	Receivables		
		i. Contributions Receivable	$	-
		ii. Miscellaneous Receivables		-
		iii. Investments Receivable		10,227,669
		iv. Interest and Dividends		307,314
		v. Due From Other Funds		1,309
		vi. Total Receivables: (1)(b)(i) + (1)(b)(ii) + (1)(b)(iii) + (1)(b)(iv) + (1)(b)(v)	$	10,536,292
	c.	Total Investments		104,156,255
	d.	Net Capital Assets		12,501
	e.	Total Assets: (1)(a) + (1)(b)(vi) + (1)(c) + (1)(d)	$	114,716,250
2.	Liabilities			
	a.	Accounts Payable	$	3,279
	b.	Retirement Benefits Payable		-
	c.	Salaries and Benefits Payable		-
	d.	Investments Payable		12,023,827
	e.	Securities Lending Obligations		4,866,607
	f.	Securities Sold Under Agreement to Repurchase		779,271
	g.	Due To Other Funds		24,474
	h.	Total Liabilities: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f) + (2)(g)	$	17,697,458
3.	Net Position Restricted for Pension Benefits: (1)(e) - (2)(h)		**$**	**97,018,792**

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

D. Statement of Changes in Fiduciary Net Position

1.	Net Position as of June 30, 2012			$	76,543,260
2.	Revenue (Additions)				
	a.	Contributions			
		i.	Member Contributions	$	1,005,564
		ii.	Employer Contributions		19,740,031
		iii.	Other Contributions		-
		iv.	Total Contributions: (2)(a)(i) + (2)(a)(ii) + (2)(a)(iii)	$	20,745,595
	b.	Investment Income/Loss			
		i.	Investment Income/Loss	$	5,225,426
		ii.	Securities Lending Income		25,094
		iii.	Securities Lending Expenses		(3,759)
		iv.	Other Investment Expenses		(545,773)
		v.	Net Investment Income: (2)(b)(i) + (2)(b)(ii) + (2)(b)(iii) + (2)(b)(iv)	$	4,700,988
	c.	Other Additions			
		i.	Interfund Transfers	$	-
		ii.	Miscellaneous Income		-
		iii.	Total Other Additions: (2)(c)(i) + 2(c)(ii)	$	-
	d.	Total Revenue (Additions): (2)(a)(iv) + (2)(b)(v) + (2)(c)(iii)		$	25,446,583
3.	Expenses (Deductions)				
	a.	Pension and Disability Benefits		$	4,798,582
	b.	Death, Survivor, and Funeral Benefits			-
	c.	Distributions of Contributions and Interest			36,766
	d.	Interfund Transfers			14,569
	e.	Pensions Relief Distributions			-
	f.	Local Unit Withdrawals			-
	g.	Administrative and Project Expenses			121,134
	h.	Total Expenses (Deductions): (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e) + (3)(f) + (3)(g)		$	4,971,051
4.	Changes in Net Position Restricted for Pension Benefits: (2)(d) - (3)(h)			$	20,475,532
5.	Net Position as of June 30, 2013: (1) + (4)			**$**	**97,018,792**

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

E. Schedule of Funding Progress [1]

1. Actuarial Valuation Date June 30	2. Actuarial Value of Assets	3. Actuarial Accrued Liability (AAL)	4. Unfunded Actuarial Accrued Liability (UAAL)	5. AAL Funded Ratio	6. Current Payroll	7. UAAL as a % of Payroll
			(3) - (2)	(2) / (3)		(4) / (6)
2007	$ 57,414,295	$ 74,451,094	$ 17,036,799	77.1%	$ 17,714,833	96.2%
2008	65,375,140	77,176,656	11,801,516	84.7%	21,333,420	55.3%
2009	68,169,877	89,295,584	21,125,707	76.3%	25,238,325	83.7%
2010	70,326,782	97,861,684	27,534,902	71.9%	26,709,051	103.1%
2011	72,599,449	101,533,848	28,934,399	71.5%	24,028,462	120.4%
2012	76,007,003	113,282,644	37,275,641	67.1%	25,752,100	144.7%
2013	98,608,520	118,097,227	19,488,707	83.5%	26,200,542	74.4%

F. Schedule of Employer Contributions [1]

1. Year Ending June 30	2. Annual Required Contribution (ARC) [2]	3. Actual Employer Contribution	4. % of ARC
			(3) / (2)
2007	$ 3,127,500	$ 3,358,672	107.4%
2008	3,675,828	4,854,164	132.1%
2009	4,426,685	5,293,503	119.6%
2010	5,236,952	5,255,851	100.4%
2011	5,179,247	5,196,629	100.3%
2012	5,532,364	5,053,103	91.3%
2013	5,003,303	19,740,031	394.5%

[1] Valuation results prior to June 30, 2010 were calculated by the prior actuary.

[2] For the year ending June 30, 2012, the ARC amount shown is based on the ARC Rate developed in the actuarial valuation completed one year prior to the beginning of the fiscal year multiplied by projected payroll for the fiscal year. Starting with the year ending June 30, 2013, the ARC amount is based on the ARC Rate developed in the actuarial valuation completed one year prior to the beginning of the fiscal year multiplied by actual payroll during the fiscal year.

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

G. Development of Net Pension Obligation (NPO)

1. Year Ending June 30	2. Annual Required Contribution (ARC)	3. Interest on NPO at Discount Rate	4. ARC Adjustment	5. Amortization Factor	6. Net Pension Cost (NPC)	7. Actual Employer Contribution	8. Change in NPO	9. NPO at Beginning of Year	10. NPO at End of Year
			(9) / (5)		(2) + (3) - (4)		(6) - (7)		(8) + (9)
2011	$ 5,179,247	$ (180,171)	$ (207,420)	12.4090	$ 5,206,496	$ 5,196,629	$ 9,867	$ (2,573,845)	$ (2,563,978)
2012	5,532,364	(179,478)	(206,622)	12.4090	5,559,508	5,053,103	506,405	(2,563,978)	(2,057,573)
2013	5,003,303	(138,886)	(161,667)	12.7272	5,026,084	19,740,031	(14,713,947)	(2,057,573)	(16,771,520)

H. Three-Year Trend Information

1. Year Ending June 30	2. Net Pension Cost (NPC)	3. Actual Employer Contribution	4. % of NPC
			(3) / (2)
2011	$ 5,206,496	$ 5,196,629	99.8%
2012	5,559,508	5,053,103	90.9%
2013	5,026,084	19,740,031	392.8%

I. Solvency Test [1]

Portion of Actuarial Liability Provided by Assets

($ in Thousands)

1. As of June 30	2. Member Contribution Balances	3. Retired and Beneficiaries	4. Non-Retired Members (Employer Financed Portion)	5. Total Actuarial Accrued Liabilities	6. Actuarial Value of Assets
2007	3,527,000	24,606,333	46,317,761	74,451,094	57,414,295
	100.0%	100.0%	63.2%	77.1%	
2008	4,314,000	28,902,141	43,960,515	77,176,656	65,375,140
	100.0%	100.0%	73.2%	84.7%	
2009	5,274,000	35,039,233	48,982,351	89,295,584	68,169,877
	100.0%	100.0%	56.9%	76.3%	
2010	6,219,590	36,043,925	55,598,169	97,861,684	70,326,782
	100.0%	100.0%	50.5%	71.9%	
2011	6,270,943	46,695,123	48,567,782	101,533,848	72,599,449
	100.0%	100.0%	40.4%	71.5%	
2012	6,531,863	53,928,711	52,822,070	113,282,644	76,007,003
	100.0%	100.0%	29.4%	67.1%	
2013	7,494,370	56,027,923	54,574,934	118,097,227	98,608,520
	100.0%	100.0%	64.3%	83.5%	

[1] Valuation results prior to June 30, 2010 were calculated by the prior actuary.

CENSUS DATA

SECTION IV - CENSUS DATA

A. Reconciliation of Participant Data

	Actives	Inactive Non-Vested With Member Contribution Balance	Inactive Vested	Disabled	Retired	Beneficiary	Total
Total as of June 30, 2012	468	61	4	2	144	41	720
New Entrants	46	-	-	-	-	-	46
Rehires	1	-	(1)	-	-	-	-
Non-Vested Terminations	(26)	26	-	-	-	-	-
Vested Terminations	(1)	-	1	-	-	-	-
Retirements	(7)	-	-	-	7	-	-
Disablements	(1)	-	-	1	-	-	-
Death with Beneficiary	-	-	-	-	(2)	2	-
Death without Beneficiary	-	-	-	-	-	(2)	(2)
Refunds	(7)	(1)	-	-	-	-	(8)
Data Adjustments	-	1	-	-	-	-	1
Total as of June 30, 2013	473	87	4	3	149	41	757

B. Census Information as of June 30, 2013

		Male	Female	Total
1.	Active			
	a. Number	427	46	473
	b. Average Age	41.3	38.9	41.0
	c. Average Years of Service	10.6	8.2	10.4
	d. Covered Payroll of Actives	$ 23,750,020	$ 2,450,522	$ 26,200,542
2.	Inactive - Vested			
	a. Number	4	-	4
	b Average Age	50.8	-	50.8
	c. Average Years of Service	19.6	-	19.6
3.	Inactive - Non-Vested			
	a. Number	71	16	87
4.	Retiree/Beneficiary/Disabled			
	a. Number	152	41	193
	b. Average Age	65.7	77.8	68.3
	c. Annual Benefits Payable	$ 4,315,416	$ 350,718	$ 4,666,134

C. Schedule of Active Member Valuation Data [1]

1. As of June 30	2. Active Members	3. Anticipated Payroll ($ in Thousands)	4. Average Pay (3) / (2)	5. Annual Percent Change
2005	262	$ 13,223	$ 50,469	24.1%
2006	310	14,892	48,038	(4.8%)
2007	344	17,715	51,497	7.2%
2008	410	21,333	52,033	1.0%
2009	443	25,238	56,971	9.5%
2010	471	26,709	56,707	(0.5%)
2011	440	24,028	54,609	(3.7%)
2012	468	25,752	55,026	0.8%
2013	473	26,201	55,393	0.7%

[1] Valuation results prior to June 30, 2010 were calculated by the prior actuary.

D. Schedule of Retirees, Beneficiaries, and Disabled Members [1]

1.	2.	3.	4.	5.	6.	7.	8.	9.
	Added		Removed		End of Year [2]			
Year Ending June 30	Number	Annual Allowances ($ in Thousands)	Number	Annual Allowances ($ in Thousands)	Number	Annual Allowances ($ in Thousands)	% Increase in Annual Allowances	Average Annual Allowances
2005	4	$ 114	4	$ 65	128	$ 1,787	2.8%	$ 13,962
2006	5	127	1	26	132	1,888	5.6%	14,304
2007	13	359	5	74	140	2,176	15.2%	15,539
2008	9	302	12	119	137	2,518	15.8%	18,382
2009	59	748	39	258	157	3,056	21.3%	19,465
2010	6	136	6	49	157	3,134	2.6%	19,962
2011	22	902	3	23	176	3,978	26.9%	22,602
2012	14	495	3	14	187	4,452	11.9%	23,810
2013	8	253	2	9	193	4,666	4.8%	24,177

[1] Valuation results prior to June 30, 2010 were calculated by the prior actuary.

[2] End of year annual allowances are not equal to the prior end of year annual allowances plus additions and less removals because of reductions for beneficiary benefits, data changes, and cost-of-living increases.

E. Distribution of Active Members by Age and Service

Attained Age	Distribution of Active Members by Age and Service as of June 30, 2013										
	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	14	9									23
25-29	13	27	11								51
30-34	4	15	61	2							82
35-39	6	10	38	14	1						69
40-44		10	31	11	20	6					78
45-49	2	4	15	5	7	13	6				52
50-54	1	5	10	1		4	24	3			48
55-59	1	5	20		1		5	14	4		50
60-64		3	12				1	2	2		20
65-69											
70&Up											
Total	41	88	198	33	29	23	36	19	6		473

F. Distribution of Inactive Vested Members by Age and Service

Attained Age	Distribution of Inactive Vested Members by Age and Service as of June 30, 2013					
	Under 15 years	15 to 19 years	20 to 24 years	25 to 29 years	Over 30 years	Total
<25						
25-29						
30-34						
35-39						
40-44		1				1
45-49		1				1
50-54		1				1
55-59						
60-64					1	1
65-69						
70&Up						
Total		3			1	4

G. Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired

Attained Age	Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired as of June 30, 2013							
	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	1							1
40-44								
45-49	1							1
50-54	8	1						9
55-59	24	2	2	1	1			30
60-64	24	13	4	1				42
65-69	4	18	7	3	5			37
70-74			12	8	5	2		27
75-79				7	2	2	1	12
80-84					4	6	6	16
85-89						5	5	10
90&Up						1	7	8
Total	62	34	25	20	17	16	19	193

H. Schedule of Benefit Recipients by Type of Benefit Option

Amount of Monthly Benefit	Number of Benefit Recipients by Benefit Option as of June 30, 2013: Retiree Single Life Annuity	Retiree 50% Joint and Survivor Annuity	Survivors	Disability	Total
$ 1 - 500	0	2	15	1	18
501 - 1,000	3	8	18	1	30
1,001 - 1,500	5	10	7	0	22
1,501 - 2,000	2	12	1	0	15
2,001 - 3,000	4	67	0	1	72
over 3,000	4	32	0	0	36
Total	18	131	41	3	193

I. Schedule of Average Benefit Payments as of June 30, 2013[1]

	Years of Credited Service: 0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
Average Monthly Defined Benefit	$ 2,141	$ -	$ -	$ 439	$ 886	$ 1,816	$ 2,571	$ 2,015
Average Final Average Salary	$ 58,827	$ -	$ -	$ 22,436	$ 36,499	$ 45,830	$ 52,650	$ 47,776
Number of Benefit Recipients	14	0	0	11	22	54	92	193

[1] For some members, average salary at retirement and years of credited service was not available. The average salary for each group excluded these members.

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	6.75% (net of administrative and investment expenses)
Interest on Member Balances	3.5% per year
Future Salary Increases	3.25% per year
Inflation	3.0% per year
Cost of Living Increases	1.0% per year in retirement
Mortality (Healthy and Disabled)	2013 IRS Static Mortality projected five (5) years with Scale AA
Disability	150% of 1964 OASDI Table. Illustrative rates shown below:

Age	Rate
20	0.0900%
25	0.1275%
30	0.1650%
35	0.2205%
40	0.3300%
45	0.5400%
50	0.9090%
55	1.5135%
60	2.4405%
65+	0.0000%

A. Actuarial Assumptions (continued)

Termination

Sarason T-1 Table. Illustrative rates shown below:

Age	Rate
20	5.4384%
25	4.8948%
30	3.7020%
35	2.3492%
40	1.1283%
45	0.2653%
50+	0.0000%

Retirement

Based on 2005 - 2010 experience. Illustrative rates shown below:

Age	Rate	Age	Rate
45	3%	54	4%
46 - 49	2%	55-59	15%
50	3%	60-64	20%
51 - 52	2%	65+	100%
53	3%		

Decrement Timing

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

Active Members in DROP

Members who are participating in the DROP are assumed to receive an annuity benefit commencing at the end of their DROP period as well as a lump sum payment equal to the number of years they were in the DROP times their annual annuity benefit. The annuity benefit is estimated based on salary and service at the time the member entered the DROP.

Spouse/Beneficiary

100% of members are assumed to be married or to have a dependent beneficiary. Males are assumed to be five (5) years older than females.

A. Actuarial Assumptions (continued)

Data Assumptions	Actives and inactives with either no date of birth and/or no gender are assumed to be age 41 and/or male. Spouse gender is assumed to be the opposite gender of the member. Retirees and disabled members that are not married and do not have a retirement option listed are assumed to elect a single life annuity. Retirees and disabled members that are married and do not have a retirement option listed are assumed to be receiving a 50% joint and survivor annuity. Beneficiaries that do not have a retirement option listed are assumed to receive monthly payments for life.
Changes in Assumptions	For the June 30, 2013 valuation, the Board approved the following assumption changes: - The interest crediting rate assumption on member contribution balances was lowered from 6.75% to 3.5%.

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 methods 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.

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.

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. Employer Contribution Rate

Based on the assumptions and methods previously described, an Actuarially Calculated Rate is computed. The Board considers this information, but has ultimate authority in setting the employer contribution rate.

B. Actuarial Methods (continued)

4. Anticipated Payroll

The Anticipated Payroll of $26,200,542 for the fiscal year beginning July 1, 2013 is equal to the actual payroll during the prior year for members who are still active on the valuation date of $25,375,832, adjusted for one year of assumed salary increases. The Anticipated Payroll does not include amounts for members who have reached the age at which retirement is assumed to occur immediately.

5. Changes in Actuarial Methods

There have been no changes in the actuarial methods since the June 30, 2012 valuation.

SUMMARY OF PLAN PROVISIONS

A. Summary of Plan Provisions

The benefit provisions for the EG&C Fund are set forth in IC 5-10-5.5. A summary of those defined pension benefit provisions is presented below:

Participation	All Indiana State Excise Police Officers, all Indiana State Conservation Enforcement officers, all Indiana Gaming Agents, and all Indiana Gaming Control Officers must become members as a condition of employment.

Eligibility for Defined Pension Benefits

a.	Normal Retirement	Earliest of: - Age 65 (mandatory retirement) - 15 or more years of creditable service for members hired on or after age 50 - Age 55 with sum of age and creditable service equal to 85 or more - Age 50 with 25 or more years of creditable service
b.	Early Retirement	Age 45 with 15 or more years of creditable service
c.	Late Retirement	Subject to continued employment after normal retirement
d.	Disability Retirement	As determined by a disability medical panel
e.	Termination	15 or more years of creditable service and no longer active (i.e. vested inactive)
f.	Pre-Retirement Death	15 or more years of creditable service

A. Summary of Plan Provisions (continued)

Amount of Benefits

a.	Normal Retirement	The normal retirement benefit is a monthly annuity payable in a Joint and 50% Surviving Beneficiary form and is equal to 25% of average monthly earnings[1], plus 1-2/3% of average monthly earnings for years of creditable service more than 10 years.
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 member may elect to have the benefit commence prior to normal retirement provided the benefit is reduced by 1/4% for each month that the benefit commencement date precedes age 60.
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 are included in the computation.
d.	Disability Retirement	If disability occurs in the line of duty, the disability retirement benefit is the member's monthly salary multiplied by the degree of impairment and is payable commencing the month following disability date without reduction for early commencement. The benefit shall not be less than 20% of the member's salary if the member has more than 5 years of service, or 10% if 5 or less years of service. If disability does not occur in the line of duty, the disability retirement benefit is equal to 50% of the member's monthly salary multiplied by the degree of impairment and is payable commencing the month following disability date without reduction for early commencement. The benefit shall not be less that 10% of the member's salary if the member has more than 5 years of service, or 5% if 5 or less years of service.

[1] Average monthly earnings is the monthly average of earnings during the 5 years within the 10 years preceding retirement that produce the highest such average.

A. Summary of Plan Provisions (continued)

Amount of Benefits (continued)

e.	Termination	If termination is prior to earning 15 years of service, the member shall be entitled to a lump sum refund of employee contributions plus accumulated interest. If termination is after earning 15 years of service, the termination benefit is the accrued retirement benefit determined as of the termination date and payable commencing as of the normal retirement date. The member may elect to receive a reduced early retirement benefit beginning at age 45.
f.	Pre-Retirement Death	If death is prior to earning 15 years of service, the member's beneficiary or estate shall receive employee contributions plus accumulated interest. If death is after earning 15 years of service, the spouse or dependent beneficiary is entitled to receive the monthly survivor annuity under the assumption that the member retired on the day before the date of death.

Member Contributions — Each member is required to contribute at the rate of 4% of pay. These contributions are kept on deposit and credited with interest until such time as they are refunded or used to provide benefits at retirement.

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 or parent for their lifetime or the dependent until age 18. If the spouse's age is more than 5 years younger than the member, the benefit is actuarially adjusted.

A. Summary of Plan Provisions (continued)

Withdrawal from Fund	If a member's employment is terminated prior to eligibility for a retirement annuity, the member may withdraw their contributions from the Fund.
Deferred Retirement Option Plan (DROP)	Effective July 1, 2008, a DROP is established for all plan participants.

An employee may make a DROP election as provided in this chapter only if, immediately upon termination, he/she is eligible to receive an unreduced annual retirement allowance under the provisions of the EG&C Fund on his/her entry date into the DROP.

The DROP retirement benefit will be based on average annual salary and years of creditable service on the date the member enters the DROP.

Any member who chooses the DROP shall agree to the following:

- The member shall execute an irrevocable election to retire on the DROP retirement date and shall remain in active service until that date.
- While in the DROP, the member shall continue to make contributions to the EG&C Fund under the provisions of that fund.
- The member shall elect a DROP retirement date not less than 12 months and not more than 36 months after the member's DROP entry date.
- The member may not remain in the DROP after the date the member reaches any mandatory retirement age as set forth in the EG&C Fund.
- The member may make an election to enter the DROP only once in the member's lifetime.
- A member who retires on his/her DROP retirement date may elect to receive an annual retirement allowance.

A. Summary of Plan Provisions (continued)

Deferred Retirement Option Plan (DROP) (continued)	Any member who chooses the DROP shall agree to the following (continued): - Computed as if the member had never entered the DROP; or - Consisting of the DROP frozen benefit, plus an additional amount paid as the member elects, determined by multiplying the DROP frozen benefit by the number of months the member was in DROP. No cost of living increase is applied to a DROP frozen benefit while the participant is in the DROP. After the participant's DROP retirement date, cost of living increases determined under the EG&C Fund apply to the participant's annual retirement allowance.
Cost-of-Living Adjustments	The monthly annuity benefits for members in pay status are increased periodically to preserve purchasing power that is diminished due to inflation. Such increases are not guaranteed by Statute and have historically been provided on an "ad hoc" basis. A "13th check" will be paid to each member (or survivor or beneficiary) in pay status during September 2013. The amount of the 13th check varied based on the years of creditable service the member earned prior to retirement.
Changes in Provisions	No changes since prior valuation.

Definitions of Technical Terms

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

A. Definitions of Technical Terms

Actual Rate	For valuations prior to June 30, 2011, the contribution rate expressed as a percentage of covered payroll on an annual basis (not less than 0.0%) that is the result of applying applicable smoothing rules to the prior year Actual Rate and current year Actuarially Calculated Rate. Beginning with the June 30, 2011 valuation, the Board resolved to discontinue use of the smoothing rules for establishing contribution rates/amounts.
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 this means 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 procedure for determining an actuarially equivalent allocation of the Present Value of Future Benefits to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.
Actuarially Equivalent	A method of making the actuarial present value of two series of payments equal as of a given date using the same assumptions.
Actuarial Gain/(Loss)	The difference between actual unfunded Actuarial Accrued Liability and anticipated unfunded Actuarial Accrued Liability — during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.
Actuarial Present Value	The single amount now that is equal to a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

A. Definitions of Technical Terms (continued)

Actuarial Valuation Date	The date as of which an actuarial valuation is performed.
Actuarially Calculated Rate	The precise actuarial contribution rate expressed as a percentage of covered payroll that is determined by summing the Normal Cost and amortization of unfunded Actuarial Accrued Liability and dividing by anticipated payroll.
Amortization	The payment of a present value financial obligation on an installment basis over a future number of years.
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 actuarial method 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	The program for the amounts and timing of contributions to be made by plan members, employer, and other contributing entities (for example, state government contributions to a local government plan) to provide the benefits specified by a pension plan.
Level Dollar Amortization Method	The amount to be amortized is divided into equal dollar amounts to be paid over a given number of years; part of each payment is interest and part is principal (similar to a mortgage payment on a building). Because payroll can be expected to increase as a result of inflation, level dollar payments generally represent a decreasing percentage of payroll; in dollars adjusted for inflation, the payments can be expected to decrease over time.
Normal Cost (NC)	That portion of the present value of future benefits which is allocated to a valuation year 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.

A. Definitions of Technical Terms (continued)

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.
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.