www.pwc.com

# *The State of Indiana Public Employees' Retirement Fund*

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

## Actuarial Valuation as of June 30, 2010

pwc

April 20, 2011

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 State of Indiana Public Employees' Retirement Fund as of June 30, 2010**

Dear Board of Trustees:

Actuarial valuations are performed annually for the State of Indiana Public Employees' Retirement Fund ("Indiana PERF") defined benefit pension plans ("Plans"). The results of the latest actuarial valuations, which were prepared as of June 30, 2010, are presented in individual valuation reports for each fund and were prepared pursuant to the engagement letter between Indiana PERF 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 are adopted annually for each Plan by the Board. These rates are actuarially determined based on the Board's funding policy and adopted actuarial assumptions. Contribution rates determined by the actuarial valuation become effective either twelve or eighteen months after the valuation date, depending on the applicable employer. For example, the rates determined by the June 30, 2010 actuarial valuation and adopted by the Board will become effective on either July 1, 2011 or January 1, 2012. If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the recommended rates 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 the contribution rates, the Board's principal objectives have been:

- To set contribution rates such that the unfunded actuarial accrued liability ("UAAL") will be amortized over a 30-year period.
- To set contribution rates such that they remain relatively level over time.

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

In addition , the Board has adopted contribution rate smoothing rules for the Public Employees' Retirement Fund, the State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers' Retirement Plan, the 1977 Police Officers' and Firefighters' Pension and Disability Fund, and the Prosecuting Attorneys' Retirement Fund. The contribution rate smoothing rules vary based on the size of the employer and are periodically revised via Board Resolutions. The contribution rate smoothing rules reduce annual volatility in the contribution rates, by phasing in the effects of gains and losses over time.

For 2008, an additional smoothing rule was adopted which stated that any employer contribution amount or rate developed based on the 2008 valuation could not be less than the employer contribution amount or rate based on the prior year valuation. This smoothing rule was adopted in anticipation of the recent economic downturn. This additional smoothing rule was continued for the 2009 and 2010 valuations, but will be reconsidered in future years.

No membership growth is anticipated in setting the contribution rate. This is consistent with GASB #25, which prohibits anticipating membership growth in determining the minimum Annual Required Contribution ("ARC").

**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 decreased by 7.4% from the preceding year due to experience losses when compared to that anticipated by the actuarial assumptions.

**Benefit Provisions**
The benefit provisions reflected in the valuation reports are those which were in effect at June 30, 2010, as set forth in the related Indiana statutes. None of the Plans had any material changes in benefit provisions since the 2009 valuation.

**Assets and Member Data**
The valuations were based on asset values of the trust funds and member census data as of June 30, 2010. All asset and member data was provided by Indiana PERF. 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 actuarial assumptions and methods used in the valuations have been selected and approved by the Board. In our opinion, the 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 PERF as of June 30, 2010.

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).

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 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 PwC and Indiana PERF 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 Indiana PERF and PwC, and is intended solely for the use and benefits of Indiana PERF and not for reliance by any other person.

Respectfully submitted,

Cindy Fraterrigo — Sheldon A. Gamzon — Brandon A. Robertson


Ms. Cindy Fraterrigo
Member, American Academy of Actuaries
Fellow of the Society of Actuaries
Enrolled Actuary (No. 11-06229)

Mr. Sheldon Gamzon
Member, American Academy of Actuaries
Fellow of the Society of Actuaries
Enrolled Actuary (No. 11-03238)

Mr. Brandon Robertson
Member, American Academy of Actuaries
Associate of the Society of Actuaries
Enrolled Actuary (No. 11-07568)

TABLE OF CONTENTS

## 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 (the "C&E Fund") and has been prepared to present the current funded status of the Plan, contribution requirements for calendar year 2012 (January 1, 2012 through December 31, 2012), and certain financial statement disclosure information. The valuation was performed using census data for plan members as of as of June 30, 2010 provided by Indiana PERF, asset information as of June 30, 2010 provided by Indiana PERF, the actuarial assumptions and methods approved by the Board and summarized in Section V, and the plan provisions effective June 30, 2010 as summarized in Section VI.

### Contribution Rate

The C&E Fund contribution rate after reflecting the contribution smoothing rules is 20.75% for calendar year 2012, the same as last year. This contribution rate is equal to the prior year Actual Rate (after smoothing), plus a portion of the increase (or less a portion of the decrease) between the current year True Rate (prior to smoothing) and the prior year's Actual Rate, where the portion of the increase (or decrease) is calculated as one-half of the increase (or decrease) between the current year's True Rate and the prior year's Actual Rate, rounded up to the next quarter of a percent. The contribution rate determined by the June 30, 2010 valuation becomes effective on January 1, 2012. Therefore, the actual dollar amount of employer cost will depend on the actual payroll during calendar year 2012.

In addition to the smoothing rules stated above, an additional rule was implemented such that the current year Actual Rate cannot be less than the prior year Actual Rate. This additional smoothing rule applied for this year as the contribution rate would have decreased this year without this additional requirement.

Members of the C&E 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 C&E Fund to make a direct rollover of the distribution amount. When a member becomes vested with at least 15 years of service, the member account balance may not be refunded and is instead combined with the employee contributions in order to fund the member's future retirement annuity benefit.

### Funded Status

The funded status of the C&E Fund is measured by the funded ratio, which is the ratio of the assets available for benefits to total liability measure for the C&E Fund. While there are several such measures that could be appropriately used, the total liability measure that ties most closely to PERF'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 C&E Fund AAL funded ratio decreased from 76.3% at June 30, 2009 to 71.9% at June 30, 2010. The decrease is primarily due to a loss on the AVA from smoothing investment losses that occurred in 2008 and 2009, as well as the net effect of changes to the discount rate, cost-of-living, and mortality assumptions, which increased the AAL.

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

### Investment Experience

On a Market Value basis, from June 30, 2009 to June 30, 2010, the C&E Fund experienced an approximate investment return of 12.6%. However, on an Actuarial Value basis over the same time period, the C&E Fund experienced an approximate investment return of (1.3%). The negative investment return on the AVA can be attributed to th smoothing of prior losses that more than offset the gain on Market Value from June 30, 2009 to June 30, 2010.

### 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 provided to retired members, disabled members, or beneficiaries as of July 1, 2010.

### Changes in Actuarial Assumptions

For the June 30, 2010 valuation, the Board approved the following assumption changes:

- The interest rate (net of administrative and investment expenses) was lowered from 7.25% to 7.0%.
- The cost-of-living increase assumption changed from 1.5% compounded annually to 1.0% compounded annually.
- The mortality assumption was changed from the 1994 Group Annuity Mortality Basic Table for healthy lives and 115% of 1994 Group Annuity Mortality Basic Table for disabled lives to the IRS 2008 Static Mortality Table projected forward five (5) years with Scale AA for both healthy and disabled lives.

### Changes in Plan Provisions

There have been no changes in the plan provisions since the June 30, 2009 valuation.

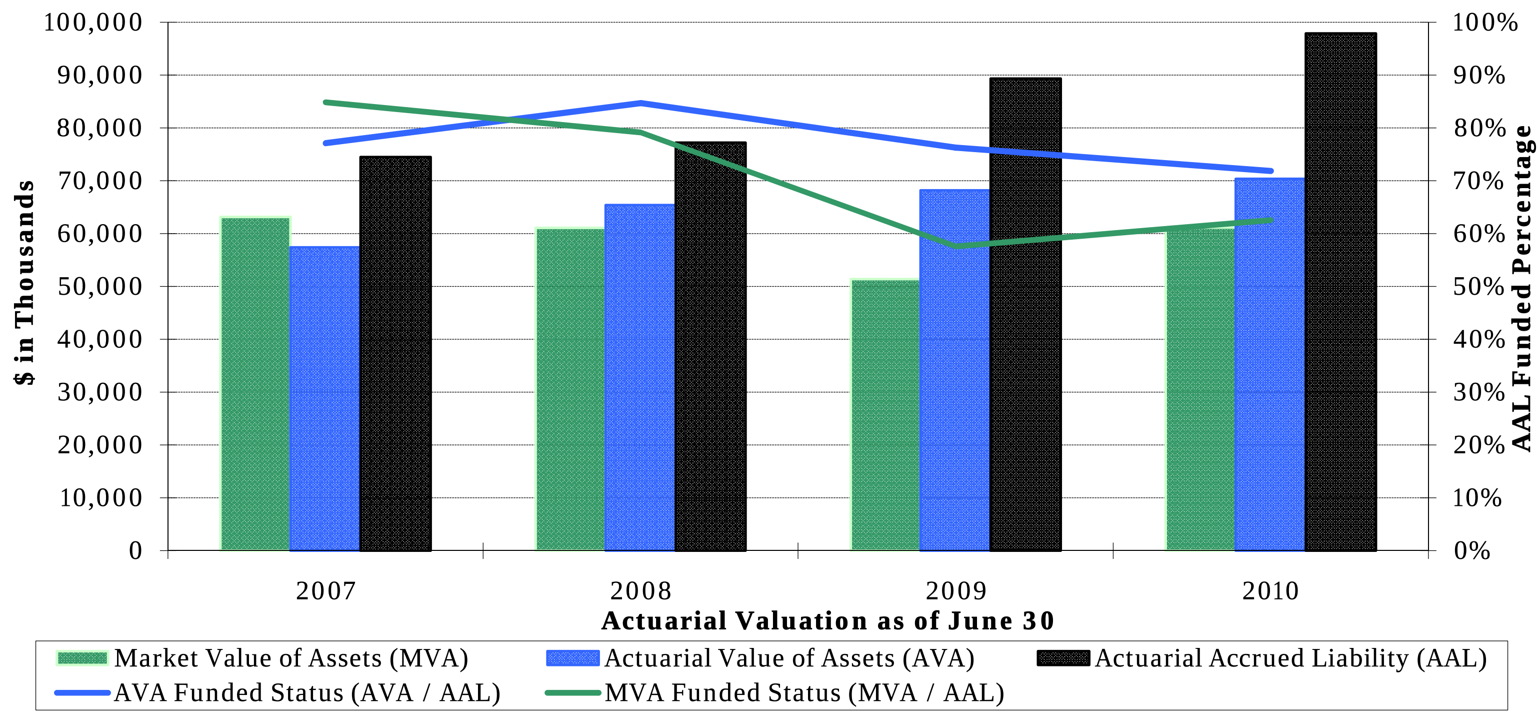
### Changes in Actuarial Methods

For the June 30, 2010 valuation, the Board approved the following method changes:

- The method of amortizing gains and losses was changed from a level dollar, fresh start method with a decreasing amortization period starting at 30 years on June 30, 2007 to a level dollar, closed ended 30-year method under which a new base is established each year beginning July 1, 2010.
- The AVA was updated to include a 20% corridor, where the AVA cannot be more than 120% or less than 80% of the Market Value of Asset ("MVA") after the four-year smoothing of gains and losses is applied.

## HISTORICAL SUMMARY

**C&E Fund – 4 Year History of Funded Status [1]**




| Actuarial Valuation as of June 30: | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| Actuarial Accrued Liability (AAL) | $74,451.1 | $77,176.7 | $89,295.6 | $97,861.6 |
| Actuarial Value of Assets (AVA) | 57,414.3 | 65,375.1 | 68,169.9 | 70,326.8 |
| Market Value of Assets (MVA) | 63,172.2 | 61,075.5 | 51,404.2 | 61,174.5 |
| Unfunded Liability (AAL - AVA) | 17,036.8 | 11,801.5 | 21,125.7 | 27,534.8 |
| AVA Funded Status (AVA / AAL) | 77.1% | 84.7% | 76.3% | 71.9% |
| MVA Funded Status (MVA / AAL) | 84.9% | 79.1% | 57.6% | 62.5% |

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

## HISTORICAL SUMMARY (CONTINUED)

### Summary of Valuation Results [1]

| | June 30, 2007 | June 30, 2008 | June 30, 2009 | June 30, 2010 |
|---|---|---|---|---|
| Employer Contributions - Before Smoothing | | | | |
| Normal Cost (Beginning of Year) | $ 2,496,634 | $ 2,948,557 | $ 3,714,781 | $ 4,118,442 |
| Amortization of Unfunded Actuarial Accrued Liability | 1,325,840 | 918,419 | 1,662,273 | 2,129,167 |
| Interest Adjustment [2] | 138,565 | 140,178 | 194,918 | - |
| Employee Contributions | (697,833) | (853,337) | (1,009,533) | (1,068,362) |
| Total Contribution Amount | $ 3,263,206 | $ 3,153,817 | $ 4,562,439 | $ 5,179,247 |
| Contribution Rate | 18.4% | 14.8% | 18.1% | 19.4% |
| | | | | |
| Employer Contributions - After Smoothing | | | | |
| Contribution Amount | 3,675,828 | 4,426,685 | 5,236,952 | $ 5,542,128 |
| Contribution Rate [3] | 20.75% | 20.75% | 20.75% | 20.75% |

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

[2] Valuation results prior to June 30, 2010 included an interest adjustment to the middle of the year because the payroll used for computing contribution rates was not discounted to the beginning of the year.

[3] The Employer Contributions are based on the payroll as of June 30, 2010. Since the contribution rate determined by the June 30, 2010 valuation becomes effective on January 1, 2012, the actual dollar amount of employer cost will depend on the actual payroll during calendar year 2012. The amount shown is meant to illustrate the impact of contribution rate smoothing.

## HISTORICAL SUMMARY (CONTINUED)

### Summary of Valuation Results (Continued) [1]

| | June 30, 2007 | June 30, 2008 | June 30, 2009 | June 30, 2010 |
|---|---|---|---|---|
| Census Information | | | | |
| Active | | | | |
| Number | 344 | 410 | 443 | 471 |
| Average Age | 40.8 | 39.9 | 41.1 | 41.3 |
| Average Years of Service | 13.2 | 10.7 | 10.6 | 11.0 |
| Covered Payroll of Actives | $ 17,714,833 | $ 21,333,420 | $ 25,238,325 | $ 26,709,051 |
| Inactive- Vested | | | | |
| Number | 10 | 20 | 7 | 4 |
| Average Age | | | | 49.7 |
| Average Years of Service | | | | 19.8 |
| Inactive - Non-Vested [2] | | | | |
| Number | | | | 52 |
| Retiree/Beneficiary/Disabled | | | | |
| Number | 140 | 137 | 157 | 157 |
| Average Age | | | | 69.1 |
| Annual Benefits Payable | $ 2,175,546 | $ 2,518,337 | $ 3,055,992 | $ 3,134,088 |

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

[2] For June 30, 2010, inactive non-vested members entitled to a refund of their ASA balances totaling $86,432.

## HISTORICAL SUMMARY (CONTINUED)

### Summary of Valuation Results (Continued) [1]

| | June 30, 2007 | | June 30, 2008 | | June 30, 2009 | | June 30, 2010 | |
|---|---|---|---|---|---|---|---|---|
| **Actuarial Accrued Liability (AAL)** | | | | | | | | |
| ASA Balance | $ | 3,527,000 | $ | 4,314,000 | $ | 5,274,000 | $ | 6,219,590 |
| Retiree/Beneficiary/Disabled | | 24,606,333 | | 28,902,141 | | 35,039,233 | | 36,043,925 |
| Active and Inactive | | 46,317,761 | | 43,960,515 | | 48,982,351 | | 55,598,169 |
| Total | $ | 74,451,094 | $ | 77,176,656 | $ | 89,295,584 | $ | 97,861,684 |
| **Actuarial Value of Assets (AVA)** | | | | | | | | |
| ASA Balance | $ | 3,527,000 | $ | 4,314,000 | $ | 5,274,000 | $ | 6,219,590 |
| Retiree/Beneficiary/Disabled | | 24,606,333 | | 28,902,141 | | 35,039,233 | | 36,043,925 |
| Active and Inactive | | 29,280,962 | | 32,158,999 | | 27,856,644 | | 28,063,267 |
| Total | $ | 57,414,295 | $ | 65,375,140 | $ | 68,169,877 | $ | 70,326,782 |
| **Market Value of Assets (MVA)** | | | | | | | | |
| ASA Balance | $ | 3,527,000 | $ | 4,314,000 | $ | 5,274,000 | $ | 6,219,590 |
| Retiree/Beneficiary/Disabled | | 24,606,333 | | 28,902,141 | | 35,039,233 | | 36,043,925 |
| Active and Inactive | | 35,038,885 | | 27,859,371 | | 11,090,960 | | 18,910,969 |
| Total | $ | 63,172,218 | | 61,075,512 | | 51,404,193 | | 61,174,484 |
| **Unfunded Actuarial Accrued Liability: AAL - AVA** | | | | | | | | |
| ASA Balance | $ | - | $ | - | $ | - | $ | - |
| Retiree/Beneficiary/Disabled | | - | | - | | - | | - |
| Active and Inactive | | 17,036,799 | | 11,801,516 | | 21,125,707 | | 27,534,902 |
| Total | $ | 17,036,799 | $ | 11,801,516 | $ | 21,125,707 | $ | 27,534,902 |
| **Funded Percentage: AVA / AAL** | | | | | | | | |
| ASA Balance | | 100.0% | | 100.0% | | 100.0% | | 100.0% |
| Retiree/Beneficiary/Disabled | | 100.0% | | 100.0% | | 100.0% | | 100.0% |
| Active and Inactive | | 63.2% | | 73.2% | | 56.9% | | 50.5% |
| Total | | 77.1% | | 84.7% | | 76.3% | | 71.9% |
| **Summary of Assumptions** | | | | | | | | |
| Valuation Interest Rate | | 7.25% | | 7.25% | | 7.25% | | 7.0% |
| Salary Scale | | 4.5% | | 4.5% | | 4.5% | | 4.5% |
| Cost-of-Living Assumption | | 1.5% | | 1.5% | | 1.5% | | 1.0% |

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

**FUNDING**

## SECTION II - FUNDING

### A. Development of Funded Status [1]

| | | June 30, 2009 | June 30, 2010 |
|---|---|---|---|
| 1. | Actuarial Accrued Liability | | |
| a. | Annuity Savings Account | $ 5,274,000 | 6,219,590 |
| b. | Retirees, Beneficiaries, and Disabled | 35,039,233 | 36,043,925 |
| c. | Active and Inactive | 48,982,351 | 55,598,169 |
| d. | Total: (1)(a) + (1)(b) + (1)(c) | $ 89,295,584 | $ 97,861,684 |
| 2. | Actuarial Value of Assets | | |
| a. | Annuity Savings Account | $ 5,274,000 | $ 6,219,590 |
| b. | Retirees, Beneficiaries, and Disabled | 35,039,233 | 36,043,925 |
| c. | Active and Inactive | 27,856,644 | 28,063,267 |
| d. | Total: (2)(a) + (2)(b) + (2)(c) | $ 68,169,877 | $ 70,326,782 |
| 3. | Unfunded Actuarial Accrued Liability | | |
| a. | Annuity Savings Account | $ - | $ - |
| b. | Retirees, Beneficiaries, and Disabled | - | - |
| c. | Active and Inactive | 21,125,707 | 27,534,902 |
| d. | Total: (1)(d) - (2)(d) | $ 21,125,707 | $ 27,534,902 |
| 4. | Funded Status | | |
| a. | Annuity Savings Account | 100.0% | 100.0% |
| b. | Retirees, Beneficiaries, and Disabled | 100.0% | 100.0% |
| c. | Active and Inactive | 56.9% | 50.5% |
| d. | Total: (2)(d) / (1)(d) | 76.3% | 71.9% |

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

## B. Unfunded Actuarial Accrued Liability Reconciliation [1]

| | | June 30, 2009 | June 30, 2010 |
|---|---|---|---|
| 1. | Unfunded Actuarial Accrued Liability, Prior Year | $ 11,801,516 | $ 21,125,707 |
| 2. | Changes in Unfunded Actuarial Accrued Liability | | |
| a. | Actuarial Value of Assets Experience (Gain)/Loss | $ 5,440,203 | $ 5,255,972 |
| b. | Actuarial Accrued Liability Experience (Gain)/Loss | 4,013,382 | (1,834,660) |
| c. | Additional Liability Due to Transition from Prior Actuary | - | 912,215 |
| d. | Additional Liability Due to Changes in Actuarial Assumptions | - | 2,326,842 |
| e. | Additional Liability Due to Changes in Plan Provisions | - | - |
| f. | Total New Amortization Bases (2)(a) + (2)(b) + (2)(c) + 2(d) + (2)(e) | N/A | $ 6,660,369 |
| g. | Amortization of Existing Bases | (129,394) | (251,174) |
| h. | Change in Unfunded Actuarial Accrued Liability: (2)(f) + (2)(g) | $ 9,324,191 | $ 6,409,195 |
| 3. | Unfunded Actuarial Accrued Liability, Current Year: (1) + (2)(h) | $ 21,125,707 | $ 27,534,902 |

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

## C. Actuarial Accrued Liability Reconciliation

| | | | | |
|---|---|---|---|---|
| 1. | June 30, 2009 Actuarial Accrued Liability [1] | $ 89,295,584 | | |
| 2. | Normal Cost [1] | 3,714,781 | | |
| 3. | Actual Benefit Payments | 3,181,019 | | |
| 4. | Interest of 7.25% on (1) + (2) - (3)/2 | 6,627,941 | | |
| 5. | Expected June 30, 2010 Actuarial Accrued Liability: (1) + (2) - (3) + (4) | $ 96,457,287 | | |
| | | | **Dollar Change in Liability** | **Percent Change in Liability** |
| 6. | (Gain)/Loss Components | | | |
| | a. Transition from Prior Actuary | | $ 912,215 | 1.0% |
| | b. Census | | (1,834,660) | (1.9%) |
| | c. Mortality Assumption Change | | 3,895,692 | 4.0% |
| | d. Cost-of-living Assumption (COLA) Change | | (4,646,050) | (4.8%) |
| | e. Discount Rate Assumption Change | | 3,077,200 | 3.2% |
| | f. Total: (6)(a) + (6)(b) + (6)(c) + (6)(d) + (6)(e) | | $ 1,404,397 | 1.5% |
| 7. | Actual June 30, 2010 Actuarial Accrued Liability: (5) + (6)(f) | **$ 97,861,684** | | |

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

## D. Reconciliation of Market Value of Assets

| | | June 30, 2009 | June 30, 2010 |
|---|---|---|---|
| 1. | Market Value of Assets, Prior June 30 | $ 61,075,512 | $ 51,404,193 |
| 2. | Receipts | | |
| | a. Employer Contributions | $ 5,293,503 | $ 5,255,851 |
| | b. Employee Contributions | 1,025,337 | 1,010,064 |
| | c. Investment Income and Dividends Net of Fees | (12,950,651) | 6,709,728 |
| | d. Security Lending Income Net of Fees | - | 39,508 |
| | e. Net Transfers In | - | 8,523 |
| | f. Miscellaneous Income | 4,843 | - |
| | g. Total Receipts: | $ (6,626,968) | $ 13,023,674 |
| 3. | Disbursements | | |
| | a. Benefits Paid During the Year | $ 2,914,528 | $ 3,150,026 |
| | b. Refund of Contributions and Interest | 36,183 | 30,993 |
| | c. Administrative Expenses | 93,640 | 72,364 |
| | d. Net Transfers Out | - | - |
| | e. Miscellaneous Disbursements | - | - |
| | f. Total Disbursements: | $ 3,044,351 | $ 3,253,383 |
| 4. | Market Value of Assets, Current June 30: (1) + (2)(g) + (3)(f) | **$ 51,404,193** | **$ 61,174,484** |
| 5. | Market Value of Assets Approximate Annual Rate of Investment Return | (20.8%) | 12.6% |

## E. Reconciliation of Actuarial Value of Assets

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. | Market Value of Assets, June 30, 2009 | | | | $ | 51,404,193 |
| 2. | Market Value of Assets, June 30, 2010 | | | | | 61,174,484 |
| 3. | Expected Earnings/Expenses | | | | | |
| | a. Expected Investment Earnings at 7.25% on June 30, 2009 Market Value | | | | | 3,726,804 |
| | b. Expected Receipts and Investment Earnings at 7.25% | | | | | 6,501,886 |
| | c. Expected Disbursements and Investment Expenses at 7.25% | | | | | 3,296,331 |
| 4. | Expected Assets, June 30, 2010: (1) + (3)(a) + (3)(b) + (3)(c) | | | | $ | 58,336,552 |
| 5. | 2009-2010 Gain/(Loss): (2) - (4) | | | | | 2,837,932 |
| 6. | Smoothing of (Gain)/Loss | | | | | |
| | | Year | Gain/(Loss) | % Unrecognized | | |
| | a. | 2009-2010 | $ 2,837,932 | 75% | | 2,128,449 |
| | b. | 2008-2009 | (17,594,536) | 50% | | (8,797,268) |
| | c. | 2007-2008 | (9,933,914) | 25% | | (2,483,479) |
| 7. | Preliminary Actuarial Value of Assets, June 30, 2010: (2) - (6)(a) - (6)(b) - (6)(c) | | | | $ | 70,326,782 |
| 8. | Corridor | | | | | |
| | a. 120% of Market Value | | | | | 73,409,381 |
| | b. 80% of Market Value | | | | | 48,939,587 |
| 9. | Actuarial Value of Assets, June 30, 2010 | | | | **$** | **70,326,782** |
| 10. | Actuarial Value of Assets as a Percent of Market Value: (9) / (2) | | | | | 115.0% |
| 11. | Actuarial Value of Assets Approximate Annual Rate of Investment Return | | | | | (1.3%) |

## F. Contribution Rate

| | | June 30, 2010 | |
|---|---|---|---|
| | | $ | % of Payroll |
| 1. | Current Payroll | $ 26,709,051 | |
| 2. | Normal Cost (Beginning of Year) | 4,118,442 | 15.42% |
| 3. | Unfunded Actuarial Accrued Liability (UAAL) Amortizations | | |
| | a. UAAL Balance | 27,534,902 | |
| | b. Annual Amortization | 2,129,167 | 7.97% |
| 4. | Expected Employee Contributions | 1,068,362 | 4.00% |
| 5. | Employer Contributions - True Rate (Before Smoothing): (2) + (3)(b) - (4) | 5,179,247 | 19.39% |
| 6. | Prior Year Actual Rate | | 20.75% |
| 7. | Difference between True Rate and Prior Year Actual Rate: (5) - (6) | | (1.36%) |
| 8. | One-half the difference in (7), rounded up to the next quarter percent | | (0.75%) |
| 9. | Employer Contributions - Actual Rate (After Smoothing): [(6) + (8), not less than (6)] | **5,542,128** [1] | **20.75%** |

[1] The Employer Contributions are based on the payroll as of June 30, 2010. Since the contribution rate determined by the June 30, 2010 valuation becomes effective on January 1, 2012, the actual dollar amount of employer cost will depend on the actual payroll during calendar year 2012. The amount shown is meant to illustrate the impact of contribution rate smoothing.

## G. Unfunded Actuarial Accrued Liability Amortization Schedule [1]

| | Date Base Established | Reason | | Remaining Unfunded | Remaining Period | | Amortization Amount |
|---|---|---|---|---|---|---|---|
| 1. | 6/30/2009 | Actuarial Experience Loss | $ | 20,874,533 | 27 | $ | 1,627,545 |
| 2. | 6/30/2010 | Actuarial Experience Loss and Change in Actuarial Assumptions | | 6,660,369 | 30 | | 501,622 |
| 3. | Total | | $ | 27,534,902 | | $ | 2,129,167 |

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

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

| 1. Valuation Date | 2. Effective Date | 3. Contribution Rate |
|---|---|---|
| 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% |

[1] Valuation results prior to June 30, 2010 were calculated by the prior actuary.
[2] Rates shown reflect application of the contribution rate smoothing rules.

## I. Historical Investment Experience

| 1. | 2. | 3. | 4. |
|---|---|---|---|
| | Approximate Annual Rate of Investment Return | | Actuarial Assumed |
| Year Ending | Actuarial Basis | Market Basis | Interest Rate |
| June 30, 2001 | 5.4% | (2.6%) | |
| June 30, 2002 | 0.1% | (5.3%) | |
| June 30, 2003 | (0.9%) | 4.5% | |
| June 30, 2004 | 3.0% | 16.0% | |
| June 30, 2005 | 6.7% | 9.4% | |
| June 30, 2006 | 15.2% | 10.3% | |
| June 30, 2007 | 15.9% | 17.8% | 7.25% |
| June 30, 2008 | 8.2% | (8.1%) | 7.25% |
| June 30, 2009 | (0.9%) | (20.8%) | 7.25% |
| June 30, 2010 | (1.3%) | 12.6% | 7.25% |

## 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, 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, 2010 |
| Actuarial Cost Method | Entry Age Actuarial Cost Method |
| Amortization Method | Level Dollar |
| Amortization Period | 30 Years |
| Actuarial Value of Assets | 4-Year Smoothed Market Value with 20% Corridor |
| Actuarial Assumptions: | |
| Investment Rate of Return | 7.0% (changed from 7.25% as of June 30, 2009) |
| Future Salary Increases | 4.5% (includes 3.0% wage inflation) |
| Cost-of-Living Increases | 1.0% compounded annually (changed from 1.5% as of June 30, 2009) |

### B. Membership Data

The plan consisted of the following membership as of June 30, 2010, the date of the latest actuarial valuation:

| | |
|---|---|
| Retired members, beneficiaries and disabled members receiving benefits: | 157 |
| Terminated vested plan members entitled to but not yet receiving benefits: | 4 |
| Teminated non-vested plan members entitled to refund of ASA balance: | 52 |
| Active Plan Members: | 471 |
| Total membership: | 684 |

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

### C. Statement of Plan Net Assets

| | | | | | |
|---|---|---|---|---|---|
| 1. | Assets | | | | |
| | a. | Cash and Cash Equivalents | | $ | 5,862,221 |
| | b. | Securities Lending Collateral | | | 11,318,587 |
| | c. | Receivables | | | |
| | | i. | Contributions Receivable | $ | 244,383 |
| | | ii. | Accrued Investment Income | | 205,821 |
| | | iii. | Receivables for Investment Securities | | 4,660,003 |
| | | iv. | Member Loans | | - |
| | | v. | Miscellaneous Receivables | | - |
| | | vi. | Due From Other Governmental Plans | | - |
| | | vii. | Due From Other Funds | | - |
| | | viii. | Total Receivables | $ | 5,110,207 |
| | d. | Investments | | | |
| | | i. | Debt Securities | $ | 18,406,973 |
| | | ii. | Equity Securities | | 22,111,025 |
| | | iii. | Mutual Funds | | 3,445,941 |
| | | iv. | Other Investments | | 12,054,451 |
| | | v. | Total Investments | $ | 56,018,390 |
| | e. | Capital Assets | | | - |
| | f. | Total Assets: (1)(a) + (1)(b) + (1)(c)(viii) + (1)(d)(v) + (1)(e) | | $ | 78,309,405 |
| 2. | Liabilities | | | | |
| | a. | Accounts Payable | | $ | 3,181 |
| | b. | Salaries and Benefits Payable | | | - |
| | c. | Investments Payable | | | 5,340,643 |
| | d. | Securities Lending Collateral | | | 11,318,587 |
| | e. | Due To Other Governmental Plans | | | - |
| | f. | Due To Other Funds | | | 472,510 |
| | g. | Total Current Liabilities | | $ | 17,134,921 |
| | h. | Compensated Absences - Long Term | | | - |
| | i. | Total Liabilities: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f) + (2)(g) + (2)(h) | | $ | 17,134,921 |
| 3. | Net Assets Held in Trust for Pension Benefits: (1)(f) - (2)(i) | | | **$** | **61,174,484** |

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

### D. Statement of Changes in Plan Net Assets

| | | | | | |
|---|---|---|---|---|---|
| 1. | Net Assets as of June 30, 2009 | | | $ | 51,404,193 |
| 2. | Revenue (Additions) | | | | |
| | a. | Contributions | | | |
| | | i. | Member Contributions | $ | 1,010,064 |
| | | ii. | Employer Contributions | | 5,255,851 |
| | | iii. | Other Contributions | | - |
| | | iv. | Total Contributions | $ | 6,265,915 |
| | b. | Investment Income/Loss | | | |
| | | i. | Investment Income/Loss | $ | 7,120,314 |
| | | ii. | Securities Lending Income | | 56,568 |
| | | iii. | Securities Lending Expenses | | (17,060) |
| | | iv. | Other Investment Expenses | | (410,586) |
| | | v. | Net Investment Income | $ | 6,749,236 |
| | c. | Other Additions | | | |
| | | i. | Intergovernmental Transfers | $ | 8,523 |
| | | ii. | Miscellaneous Income | | - |
| | | iii. | Total Other Additions | $ | 8,523 |
| | d. | Total Revenue (Additions): (2)(a)(iv) + (2)(b)(v) + (2)(c)(iii) | | $ | 13,023,674 |
| 3. | Expenses (Deductions) | | | | |
| | a. | Pension and Disability Benefits | | $ | 3,150,025 |
| | b. | Death, Survivor, and Funeral Benefits | | | - |
| | c. | Distributions of Contributions and Interest | | | 30,993 |
| | d. | Intergovernmental Transfers | | | - |
| | e. | Pensions Relief Distributions | | | - |
| | f. | Local Unit Withdrawals | | | - |
| | g. | Administrative Expenses | | | 72,364 |
| | h. | Total Expenses (Deductions): (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e) + (3)(f) + (3)(g) | | $ | 3,253,383 |
| 4. | Changes in Net Assets Held in Trust for Pension Benefits: (2)(d) - (3)(h) | | | $ | 9,770,291 |
| 5. | Net Assets as of June 30, 2010: (1) + (4) | | | **$** | **61,174,484** |

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

### E. Schedule of Funding Progress [1]

($ in Thousands)

| 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. Annual Anticipated Payroll | 7. UAAL as a % of Payroll |
|---|---|---|---|---|---|---|
| | | | (3) - (2) | (2) / (3) | | (4) / (6) |
| 2005 | $ 41,663 | $ 59,964 | $ 18,301 | 69.5% | $ 13,223 | 138.4% |
| 2006 | 48,496 | 64,765 | 16,269 | 74.9% | 14,892 | 109.2% |
| 2007 | 57,414 | 74,451 | 17,037 | 77.1% | 17,715 | 96.2% |
| 2008 | 65,375 | 77,177 | 11,802 | 84.7% | 21,333 | 55.3% |
| 2009 | 68,170 | 89,296 | 21,126 | 76.3% | 25,238 | 83.7% |
| 2010 | 70,327 | 97,862 | 27,535 | 71.9% | 26,709 | 103.1% |

### F. Schedule of Employer Contributions [1]

($ in Thousands)

| 1. Plan Year Ending June 30 | 2. Annual Required Contribution (ARC) | 3. Actual Employer Contribution | 4. % of ARC |
|---|---|---|---|
| | | | (3) / (2) |
| 2005 | $ 1,867 | $ 2,165 | 116.0% |
| 2006 | 2,710 | 2,498 | 92.2% |
| 2007 | 3,128 | 3,359 | 107.4% |
| 2008 | 3,676 | 4,854 | 132.1% |
| 2009 | 4,427 | 5,294 | 119.6% |
| 2010 | 5,237 | 5,256 | 100.4% |

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

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

## G. Development of Net Pension Obligation (NPO) [1]

($ in Thousands)

| 1. Plan Year Ending June 30 | 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) |
|---|---|---|---|---|---|---|---|---|---|
| 2008 | $ 3,676 | $ (41) | $ (46) | 12.1037 | $ 3,681 | $ 4,854 | $ (1,173) | $ (559) | $ (1,732) |
| 2009 | 4,427 | (126) | (143) | 12.1037 | 4,444 | 5,294 | (849) | (1,732) | (2,581) |
| 2010 | 5,237 | (187) | (213) | 12.1037 | 5,263 | 5,256 | 7 | (2,581) | (2,574) |

## H. Three-Year Trend Information [1]

($ in Thousands)

| 1. Plan Year Ending June 30 | 2. Net Pension Cost (NPC) | 3. Actual Employer Contribution | 4. % of NPC (3) / (2) |
|---|---|---|---|
| 2008 | $ 3,681 | $ 4,854 | 131.9% |
| 2009 | 4,444 | 5,294 | 119.1% |
| 2010 | 5,263 | 5,256 | 99.9% |

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

## I. Solvency Test [1]

Portion of Actuarial Liability Provided by Assets
($ in Thousands)

| 1.<br>As of June 30 | 2.<br>ASA Balances | 3.<br>Retired and Beneficiaries | 4.<br>Non-Retired Members (Employer Financed Portion) | 5.<br>Total Actuarial Accrued Liabilities | 6.<br>Actuarial Value of Assets |
|---|---|---|---|---|---|
| 2005 | $ 3,488 | $ 18,907 | $ 37,569 | $ 59,964 | $ 41,663 |
| | 100.0% | 100.0% | 51.3% | 69.5% | |
| 2006 | 3,644 | 20,870 | 40,251 | 64,765 | 48,496 |
| | 100.0% | 100.0% | 59.6% | 74.9% | |
| 2007 | 3,527 | 24,606 | 46,318 | 74,451 | 57,414 |
| | 100.0% | 100.0% | 63.2% | 77.1% | |
| 2008 | 4,314 | 28,902 | 43,961 | 77,177 | 65,375 |
| | 100.0% | 100.0% | 73.2% | 84.7% | |
| 2009 | 5,274 | 35,039 | 48,982 | 89,296 | 68,170 |
| | 100.0% | 100.0% | 56.9% | 76.3% | |
| 2010 | 6,220 | 36,044 | 55,598 | 97,862 | 70,327 |
| | 100.0% | 100.0% | 50.5% | 71.9% | |

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

## CENSUS DATA

## A. Reconciliation of Participant Data

| | Actives | Inactive Non-Vested ASA Balance | Inactive Vested | Disabled | Retired | Beneficiary | Total |
|---|---|---|---|---|---|---|---|
| Total as of June 30, 2009 | 443 | 64 | 7 | 2 | 109 | 46 | 671 |
| New Entrants | 24 | - | - | - | - | - | 24 |
| Rehires | 15 | (15) | - | - | - | - | - |
| Non-Vested Terminations | (4) | 4 | - | - | - | - | - |
| Vested Terminations | - | - | - | - | - | - | - |
| Retirements | (2) | - | (3) | - | 5 | - | - |
| Disablements | - | - | - | - | - | - | - |
| Death with Beneficiary | - | - | - | - | (2) | 2 | - |
| Death without Beneficiary | - | - | - | - | - | (6) | (6) |
| Refunds | (5) | (2) | - | - | - | - | (7) |
| Data Adjustments [1] | - | 1 | - | - | - | 1 | 2 |
| Total as of June 30, 2010 | 471 | 52 | 4 | 2 | 112 | 43 | 684 |

[1] Data adjustments are member records that were not included in the June 30, 2009 valuation date file provided by the prior actuary, but were included in the June 30, 2010 data received from Indiana PERF.

## B. Census Information[1]

| | | June 30, 2009 | June 30, 2010 |
|---|---|---|---|
| 1. | Active | | |
| | a. Number | 443 | 471 |
| | b. Average Age | | 41.3 |
| | c. Average Years of Service | | 11.0 |
| | d. Covered Payroll of Actives | $ 25,238,325 | $ 26,709,051 |
| 2. | Inactive - Vested | | |
| | a. Number | 7 | 4 |
| | b Average Age | | 49.7 |
| | c. Average Years of Service | | 19.8 |
| 3. | Inactive - Non-Vested[2] | | |
| | a. Number | | 52 |
| 4. | Retiree/Beneficiary/Disabled | | |
| | a. Number | 157 | 157 |
| | b. Average Age | | 69.1 |
| | c. Annual Benefits Payable | $ 3,055,992 | $ 3,134,088 |

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

[2] For June 30, 2010, inactive non-vested members entitled to a refund of their ASA balances totaling $86,432.

## C. Schedule of Active Member Valuation Data [1]

| 1. As of June 30 | 2. Active Members | 3. Annual Payroll ($ in Thousands) | 4. Average Pay (3) / (2) | 5. Annual Percent Increase |
|---|---|---|---|---|
| 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%) |

[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 Beginning June 30 | Number | Annual Allowances ($ in Thousands) | Number | Annual Allowances ($ in Thousands) | Number | Annual Allowances ($ in Thousands) | % Increase in Annual Allowances | Average Annual Allowances |
| 2004 | 4 | $ 114 | 4 | $ 65 | 128 | $ 1,787 | 2.8% | $ 13,962 |
| 2005 | 5 | 127 | 1 | 26 | 132 | 1,888 | 5.6% | 14,304 |
| 2006 | 13 | 359 | 5 | 74 | 140 | 2,176 | 15.2% | 15,539 |
| 2007 | 9 | 302 | 12 | 119 | 137 | 2,518 | 15.8% | 18,382 |
| 2008 | 59 | 748 | 39 | 258 | 157 | 3,056 | 21.3% | 19,465 |
| 2009 | 6 | 136 | 6 | 49 | 157 | 3,134 | 2.6% | 19,962 |

[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 addition and less removals because of 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, 2010 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 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 | 8 | 1 | | | | | | | | | 9 |
| 25-29 | 9 | 58 | 7 | | | | | | | | 74 |
| 30-34 | 7 | 39 | 19 | 7 | | | | | | | 72 |
| 35-39 | | 38 | 11 | 20 | 2 | | | | | | 71 |
| 40-44 | | 22 | 5 | 14 | 21 | 2 | | | | | 64 |
| 45-49 | 1 | 21 | 1 | 2 | 6 | 23 | 2 | | | | 56 |
| 50-54 | | 20 | 1 | 1 | | 4 | 23 | 11 | | | 60 |
| 55-59 | | 14 | | | | 1 | 5 | 16 | 6 | | 42 |
| 60-64 | | 10 | | | | | 2 | 7 | 3 | | 22 |
| 65-69 | | 1 | | | | | | | | | 1 |
| 70&Up | | | | | | | | | | | |
| Total | 25 | 224 | 44 | 44 | 29 | 30 | 32 | 34 | 9 | | 471 |

## 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, 2010 | | | | | |
|---|---|---|---|---|---|---|
| | 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, 2010 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 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 | 9 | 1 | | | | | | 10 |
| 55-59 | 11 | 3 | 2 | | | | | 16 |
| 60-64 | 20 | 6 | | 3 | | | | 29 |
| 65-69 | 1 | 19 | 9 | 4 | 2 | | | 35 |
| 70-74 | | 1 | 9 | 5 | 2 | 1 | | 18 |
| 75-79 | | | 1 | 5 | | 1 | 1 | 8 |
| 80-84 | | | | | 10 | 1 | 2 | 13 |
| 85-89 | | | | | 3 | 10 | 7 | 20 |
| 90&Up | | | | | | 3 | 5 | 8 |
| Total | 41 | 30 | 21 | 17 | 17 | 16 | 15 | 157 |

## ACTUARIAL ASSUMPTIONS AND METHODS

## A. Actuarial Assumptions

The assumptions used in the valuation were selected and approved by the Indiana PERF 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 | 7.0% (net of administrative and investment expenses) |
| Interest on Member ASA Balances | 7.0% per year |
| Future Salary Increases | 4.5% per year |
| Inflation | 3.0% per year |
| Cost of Living Increases | 1.0% per year in retirement. |
| Mortality (Healthy and Disabled) | 2008 IRS Static Mortality projected 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 actual experience. Illustrative rates shown below:

| Age | Rate | Age | Rate |
|---|---|---|---|
| 45 | 3% | 55 | 2% |
| 46 - 49 | 2% | 56 | 6% |
| 50 | 3% | 57 - 58 | 15% |
| 51 - 52 | 2% | 59 | 5% |
| 53 | 3% | 60 - 64 | 40% |
| 54 | 4% | 65+ | 100% |

Decrement Timing

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

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 40 and/or male. Spouse gender is assumed to be the opposite gender of the member.<br><br>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, 2010 valuation, the Board approved the following assumption changes:<br><br>- The interest rate (net of administrative and investment expenses) was lowered from 7.25% to 7.0%.<br><br>- The cost-of-living increase assumption changed from 1.5% compounded annually to 1.0% compounded annually.<br><br>- The mortality assumption was changed from the 1994 Group Annuity Mortality Basic Table for healthy lives and 115% of 1994 Group Annuity Mortality Basic Table for disabled lives to the IRS 2008 Static Mortality Table projected forward 5 years with Scale AA for both healthy and disabled lives. |

## 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 and contribution rates (i.e. the Actual Rate) 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, though we recommend periodic review of the contribution rate smoothing rules to ensure that funding of the benefits is not unreasonably deferred.

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. Contribution Rate Smoothing Methods

The contribution rate is equal to the prior year Actual Rate (after smoothing), plus a portion of the increase (or less a portion of the decrease) between the current year True Rate (prior to smoothing) and the prior year's Actual Rate, where the portion of the increase (or decrease) is calculated as one-half of the increase (or decrease) between the current year's True Rate and the prior year's Actual Rate, rounded up to the next quarter of a percent. The contribution rate determined by the June 30, 2010 valuation becomes effective on January 1, 2012. Therefore, the actual dollar amount of employer cost will depend on the actual payroll during fiscal year 2012.

## B. Actuarial Methods (continued)

4. Changes in Actuarial Methods

For the June 30, 2010 valuation, the Board approved the following method changes:

- The method of amortizing gains and losses was changed from a level dollar, fresh start method with a decreasing amortization period starting at 30 years on June 30, 2007 to a level dollar, closed ended 30-year method under which a new base is established each year beginning July 1, 2010.

- The AVA was updated to include a 20% corridor, where the AVA cannot be more than 120% or less than 80% of the Market Value of Assets after the four-year smoothing of gains and losses is applied.

**SUMMARY OF PLAN PROVISIONS**

# SECTION VI - SUMMARY OF PLAN PROVISIONS

## A. Summary of Plan Provisions

The benefit provisions for the C&E 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:<br>- Age 65 (mandatory retirement)<br>- 15 or more years of creditable service for members hired on or after age 50<br>- Age 55 with sum of age and creditable service equal to 85 or more<br>- 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.<br><br>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.<br><br>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.<br><br>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 C&E 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 C&E 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 C&E 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):<br>- Computed as if the member had never entered the DROP; or<br>- 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.<br>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 C&E 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. |
| Changes in Provisions | No changes since prior valuation. |

## Definitions of Technical Terms

## A. Definitions of Technical Terms

| | |
|---|---|
| Actual Rate | 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 True Rate. |
| 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. |
| 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. |
| True Rate | The precise actuarial contribution rate (not less than 0.0%) determined by summing the Normal Cost and amortization of unfunded Actuarial Accrued Liability and dividing by anticipated payroll. |