Public Employees’
Retirement Fund Of Indiana
Actuarial Valuation
July 1, 2008

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# PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA 

Summary of Actuarial Valuation as of July 1, 2008

## Introduction

As of the valuation date there were 140,146 active members, 62,424 pensioners and 15,450 terminated members entitled to future benefits. See the exhibit labeled Summary of Employee Data for a breakdown of the members between state employees and employees of political subdivisions.

We have established the following contributions as of July 1, 2008:

|  | State |  | Political Subdivisions |  | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Total Annual Cost | $\$ 107,981,141$ |  | $\$ 202,590,260$ |  | $\$ 310,571,401$ |
| Cost as Percentage of Anticipated Payroll | $6.50 \%$ |  | $7.14 \%$ |  | $6.75 \%$ |

Beginning with the 2007 valuation, smoothing rules have been applied to the State employer contribution rate to help reduce wide variations in the employer contribution rates from year to year. These smoothing rules are also applied to individual political subdivisions participating in PERF. For the 2008 valuation, an additional smoothing rule was applied such that no employer contribution rate decreases from the employer contribution rate developed from the 2007 valuation. The PERF Board of Trustees approved this additional smoothing rule upon recommendation by the actuary and PERF management. The additional smoothing rule is intended for the 2008 valuation only, but may be extended to future valuations if deemed necessary.

This report reflects the plan provisions in effect as of July 1, 2008. Refer to the exhibit titled Summary of Major Plan Provisions for a brief description of benefits provided by this plan.

Prior to smoothing, the Total Annual Cost is composed of employer normal cost of $\$ 279,655,104$ and an amortization payment of $\$ 25,269,003$. As of July 1, 2008, the Unfunded Actuarial Accrued Liability is $\$ 323,105,125$. A breakdown and a comparison with the results of the prior valuation are provided in the exhibits titled Contribution Breakdown and Comparison.

Prior to smoothing, the Total Annual Cost for 2008, as a percent of anticipated payroll increased to $6.869 \%$ as compared to $6.727 \%$ for 2007. The Fund had experience losses from investments yielding less than the assumed $7.25 \%$ (estimated return for the 2007 plan year was $5.32 \%$ on an actuarial value basis). In terms of actual dollars and prior to smoothing, the Total Annual Cost increased by $\$ 20,240,065$ from $\$ 284,684,042$ for the 2007 plan year to $\$ 304,924,107$ for the 2008 plan year.
June 5, 2009 (I418)
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## Introduction, Continued

## Actuarial Methods and Assumptions

The Entry Age Normal Cost Method was continued for determining the cost of retirement benefits, death benefits, disability benefits, and termination benefits. Valuation assets continue to be developed on an actuarial basis.

The actuarial assumptions used in this Valuation have been reviewed and continued from the prior Valuation. The actuarial assumptions are deemed to be representative of actual and anticipated experience under the plan.

A brief explanation of the methods and a complete summary of the assumptions used may be found in the exhibits titled Actuarial Methods and Actuarial Assumptions.

## Valuation Data and Disclaimer

The valuation census data was provided by the Public Employees' Retirement Fund and transposed into a computer file for processing. Similar information has been furnished to us in the past, and the accuracy of this report depends on the accuracy of all data that has been furnished to us from time to time. Trust information was also furnished by the Public Employees' Retirement Fund. It is noted that we make no representation concerning the accuracy of any employee data or valuation information that has been furnished to us.

The Valuation has been prepared for the sole purpose of determining the contribution requirements for the respective plan year and for providing accounting data to meet the requirements of GASB \#25 and \#27. The figures in this Valuation should not be used as the basis for any other purpose for which it was not designed.

## Summary of Trust Experience

On an actuarial basis, the entire asset portfolio had net investment income for the 2007-2008 plan year that resulted in an estimated yield of $5.32 \%$. The approximate market basis return during the same time period was negative $8.33 \%$. See the exhibit labeled Ten Year Historical Investment Experience for more detail.

We will be pleased to furnish any additional information or answer any questions which may arise after your review of this report.

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## ACTUARIAL CERTIFICATION

The information and valuation results shown in this report are, to the best of my knowledge, complete and accurate and are based upon:

1. Employee census data as of July 1, 2008 submitted by the Director of the Public Employees' Retirement Fund. Although we did not audit this data, it appears to be sufficient and reliable for purposes of the report.
2. Financial data as of July 1, 2008 submitted by the Director of the Public Employees' Retirement Fund. Although we did not audit this data, it appears to be sufficient and reliable for purposes of the report.
3. Actuarial assumptions which were chosen by the PERF Board of Trustees after consultation with the actuary.
4. Generally accepted actuarial principles and in accordance with standards of practice prescribed by the Actuarial Standards Board.
5. Actuarial methods as stated in the report and our interpretation of plan provisions as summarized in the report.

Prepared and Submitted by
McCready and Keene, Inc.


## PUBLIC EMPLOYEES' RETIREMENT FUND

OF INDIANA

## SUMMARY OF CONTRIBUTIONS

|  | July 1, 2008 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | State** | Political Subdivisions |  | Total |
| TOTAL ANNUAL COST | \$ 107,981,141 | \$ 202,590,260 | \$ | 310,571,401 |
| COST AS PERCENTAGE OF ANTICIPATED PAYROLL* | 6.50\% | 7.14\% |  | 6.75\% |

*Interest adjusted for mid-year contribution

## **Smoothing rules:

1. Any increase or decrease between the current year's true rate and the previous year's actual rate shall be limited to one-half the increase or decrease rounded up to the next $0.25 \%$ multiple.
2. After the smoothing described above, any decrease in the employer rate shall be equal to the excess, if any, of the decrease over $1 \%$.
3. The 2008 employer rate may not be less than the 2007 employer rate.

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## DEVELOPMENT OF FUNDED STATUS

|  |  | July 1, 2007 |  |  | July 1, 2008 |
| :--- | :--- | :--- | ---: | :--- | ---: |
|  | Total Actuarial Accrued Liability |  |  | $\$ 12,439,798,183$ |  |

## CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Unfunded Actuarial Accrued Liability, Prior Year
Asset Experience (Gain) or Loss
Plus: Liability Experience (Gain) or Loss
Plus: Additional Liability Due to Change in Actuarial Assumptions
Plus: Additional Liability Due to Change in Plan Provisions
Plus: Amortization of Existing Bases
Equals: Change in Unfunded Actuarial Accrued Liability
Unfunded Actuarial Accrued Liability, Current Year

| $2006-2007$ |  |
| :--- | ---: |
| $\$$ | $272,956,896$ |
| $\$$ | $(347,159,754)$ |
|  | $124,812,545$ |
| $171,016,502$ |  |
|  | - |
| $\$$ | $(2,762,220)$ |
| $\$$ | $218,863,969$ |


| $2007-2008$ |  |
| :--- | ---: |
| $\$$ | $218,863,969$ |
| $\$$ | $235,548,704$ |
|  | $(128,898,591)$ |
|  | - |
|  | $(2,408,958)$ |
| $\$$ | $104,241,156$ |
|  | $323,105,125$ |

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## CONTRIBUTION BREAKDOWN AND COMPARISON

## TOTAL ANNUAL COST

| Employer Normal Cost | \$ | 98,916,617 | \$ | 180,738,487 | \$ | 279,655,104 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amortization of Unfunded Actuarial Liability |  | 3,417,230 |  | 21,851,773 |  | 25,269,003 |
| Total | \$ | 102,333,847 | \$ | 202,590,260 | \$ | 304,924,107 |
| ANTICIPATED PAYROLL | \$ | 1,661,248,319 | \$ | 2,939,105,575 | \$ | 4,600,353,894 |
| TOTAL ANNUAL COST AS \% OF ANTICIPATED PAYROLL (Interest Adjusted for Mid-Year Contribution) |  | 6.383\% |  | 7.143\% |  | 6.869\% |

DEVELOPMENT OF UNFUNDED ACTUARIAL LIABILITY

Actuarial Accrued Liability

- Active Members
- Terminated Members

Total
Less: Non-Retired Member Assets
Equals: Actual Unfunded Actuarial Accrued Liability (UAAL)
Unfunded Actuarial Accrued Liability, Prior Year
Less: Amortization of Unfunded Actuarial Liability, Prior Year Plus: Interest for Full Year at 7.25\%
Equals: Expected UAAL
Plus: Increase (Decrease) Due to Change in Actuarial Assumptions Plus: Increase (Decrease) Due to Change in Plan Provisions Equals: Expected (UAAL)
Experience (Gain)/Loss [Actual UAAL-Expected UAAL]

July 1, 2008

| State | Political Subdivisions | Total |
| :---: | :---: | :---: |
| \$ 98,916,617 | \$ 180,738,487 | \$ 279,655,104 |
| 3,417,230 | 21,851,773 | 25,269,003 |
| \$ 102,333,847 | \$ 202,590,260 | \$ 304,924,107 |
| \$ 1,661,248,319 | \$ 2,939,105,575 | \$ 4,600,353,894 |
| 6.383\% | 7.143\% | 6.869\% |

July 1, 2008

| State | Political Subdivisions | Total |
| :---: | :---: | :---: |
| \$ 2,272,481,545 | \$ 3,427,008,829 | \$ 5,699,490,374 |
| 241,309,734 | 240,724,092 | 482,033,826 |
| \$ 2,513,791,279 | \$ 3,667,732,921 | \$ 6,181,524,200 |
| 2,469,431,611 | 3,388,987,464 | 5,858,419,075 |
| \$ 44,359,668 | \$ 278,745,457 | \$ 323,105,125 |
| \$ (15,570,370) | \$ 234,434,339 | \$ 218,863,969 |
| $(1,199,457)$ | 18,240,572 | 17,041,115 |
| $(1,041,891)$ | \$ 15,674,048 | \$ 14,632,157 |
| \$ (15,412,804) | \$ 231,867,815 | \$ 216,455,011 |
| - | - |  |
| \$ (15,412,804) | \$ 231,867,815 | \$ 216,455,011 |
| \$ 59,772,472 | \$ 46,877,642 | \$ 106,650,114 |
|  |  | - 10 |

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA <br> CONTRIBUTION BREAKDOWN AND COMPARISON

|  | July 1, 2007 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State |  | Political Subdivisions |  | Total |  |
| TOTAL ANNUAL COST |  |  |  |  |  |  |
| Employer Normal Cost | \$ | 94,396,107 | \$ | 173,246,820 | \$ | 267,642,927 |
| Amortization of Unfunded Actuarial Liability |  | $(1,199,457)$ |  | 18,240,572 |  | 17,041,115 |
| Total | \$ | 93,196,650 | \$ | 191,587,392 | \$ | 284,684,042 |
| ANTICIPATED PAYROLL | \$ | 1,573,566,285 | \$ | 2,812,109,584 | \$ | 4,385,675,869 |
| TOTAL ANNUAL COST AS \% OF ANTICIPATED PAYROLL (Interest Adjusted for Mid-Year Contribution) |  | 6.137\% |  | 7,056\% |  | 6.727\% |

DEVELOPMENT OF UNFUNDED ACTUARIAL LIABILITY

|  | July 1, 2007 |  |  |
| :---: | :---: | :---: | :---: |
|  | State | Political Subdivisions | Total |
| Actuarial Accrued Liability |  |  |  |
| Active Members | \$ 2,140,761,696 | \$ 3,184,460,584 | \$ 5,325,222,280 |
| Terminated Members | 194,320,140 | 205,690,335 | 400,010,475 |
| Total | \$ 2,335,081,836 | \$ 3,390,150,919 | \$ 5,725,232,755 |
| Less: Non-Retired Member Assets | 2,350,652,206 | 3,155,716,580 | 5,506,368,786 |
| Equals: Actual Unfunded Actuarial Accrued Liability (UAAL) | \$ (15,570,370) | \$ 234,434,339 | \$ 218,863,969 |
| Unfunded Actuarial Accrued Liability, Prior Year | \$ 40,757,268 | \$ 232,199,628 | \$ 272,956,896 |
| Less: Amortization of Unfunded Actuarial Liability, Prior Year | 3,139,720 | 17,887,408 | 21,027,128 |
| Plus: Interest for Full Year at 7.25\% | 2,727,272 | \$ 15,537,636 | \$ 18,264,908 |
| Equals: Expected UAAL | \$ 40,344,820 | \$ 229,849,856 | \$ 270,194,676 |
| Plus: Increase (Decrease) Due to Change in Actuarial Assumptions | 72,553,863 | 98,462,639 | 171,016,502 |
| Plus: Increase (Decrease) Due to Change in Plan Provisions |  | - |  |
| Equals: Expected (UAAL) | \$ 112,898,683 | \$ 328,312,495 | \$ 441,211,178 |
| Experience (Gain)/Loss [Actual UAAL-Expected UAAL] | \$ (128,469,053) | \$ $(93,878,156)$ | \$ (222,347,209) |

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS

FOR NON-RETIRED MEMBERS

## Vested Benefits

- Active Members
- Terminated Members

Total
Nonvested Benefits
Total Non-Retired Actuarial Present Value of Accumulated Plan Benefits

Non-Retired Member Assets

- Market Value
- Actuarial Value

| July 1, 2008 |  |  |
| :---: | :---: | :---: |
| State | Political Subdivisions | Total |
| \$ 1,407,354,886 | \$ 2,010,460,879 | \$ 3,417,815,765 |
| 241,309,734 | 240,724,092 | 482,033,826 |
| \$ 1,648,664,620 | \$ 2,251,184,971 | \$ 3,899,849,591 |
| 168,391,735 | 329,145,752 | 497,537,487 |
| \$ 1,817,056,355 | \$2,580,330,723 | \$4,397,387,078 |
| \$ 2,171,567,250 | \$ 2,980,205,711 | \$ 5,151,772,961 |
| 2,469,431,611 | 3,388,987,464 | 5,858,419,075 |

Ratio of Assets to the Present Value of Vested Accumulated Plan Benefits

- Market Value $\quad 1.317 \quad 1.324 \quad 1.321$
- Actuarial Value

| 1.398 | 1.505 | 1.502 |
| :--- | :--- | :--- |
|  |  |  |
| 1.195 | 1.155 | 1.172 |
| 1.359 | 1.313 | 1.332 |

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS

FOR NON-RETIRED MEMBERS

|  | July 1, 2007 |  |  |
| :---: | :---: | :---: | :---: |
|  | State | Political Subdivisions | Total |
| Vested Benefits |  |  |  |
| - Active Members | \$ 1,329,379,000 | \$ 1,840,804,849 | \$ 3,170,183.849 |
| - Terminated Members | 194,320,140 | 205,960,335 | 400,010,475 |
| Total | \$ 1,523,699,140 | \$ 2,046,495,184 | \$ 3,570,194,324 |
| Nonvested Benefits | 164,539,059 | 320,815,943 | 485,355,002 |
| Total Non-Retired Actuarial Present Value of Accumulated Plan Benefits | \$ 1,688,238,199 | \$ 2,367,311,127 | \$ 4,055,549,326 |
| Non-Retired Member Assets |  |  |  |
| - Market Value | \$ 2,795,256,558 | \$ 3,752,591,491 | \$ 6,547,848,049 |
| - Actuarial Value | 2,350,652,206 | 3,155,716,580 | 5,506,368,786 |
| Ratio of Assets to the Present Value of Vested Accumulated Plan Benefits |  |  |  |
| - Market Value | 1.835 | 1.834 | 1.834 |
| - Actuarial Value | 1.543 | 1.542 | 1.542 |
| Ratio of Assets to the Present Value of Total Accumulated Plan Benefits |  |  |  |
| - Market Value | 1.656 | 1.585 | 1.615 |
| - Actuarial Value | 1.392 | 1.333 | 1.358 |

## PUBLIC EMPLOYEES' RETIREMENT FUND OF INDIANA <br> STATEMENT OF CHANGES IN THE PRESENT VALUE OF ACCUMULATED PLAN BENEFITS FOR NON-RETIRED MEMBERS

Actuarial Present Value of Accumulated Plan Benefits, July 1, 2007\$ 4,055,549,326
Plus: Increase Due to Additional Benefits Accumulated ..... 303,263,816
Less: Transfers to Retired and Disabled Status ..... 449,261,919
Plus: Increase Due to Decrease in the Discount Period (@7.25\%) ..... 316,013,953
Plus: Increase Due to Change in Plan Provisions
Plus: Increase (Decrease) Due to Change in Actuarial Assumptions
Plus: Actuarial Experience (Gain)/Loss and other Miscellaneous Items$171,821,902$
Equals: Actuarial Present Value of Accumulated Plan Benefits, July 1, 2008 ..... \$ 4,397,387,078

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## STATEMENT OF INCOME

July 1, 2007 - June 30, 2008
(1) Net Value of Assets Available for Benefits, July 1, 2007
(2) Receipts

Employer Contributions:
State
Political Subdivisions
Member Contributions:
State
Political Subdivisions
Investment Income and Dividends Net of Fees
Security Lending Income Net of Fees
Transfers In
Miscellaneous Income
Total Receipts
(3) Disbursements

Benefits Paid During the Year
Refund of Contributions and Interest
Administrative Expenses
Transfers Out
Miscellaneous Disbursements
Total Disbursements
(4) Net Value of Assets Available for Benefits, June 30, 2008 (1) + (2) - (3)

```
Market Value
\$13,262,413,477
\$ 110,272,675
193,640,100
303,912,775
\$ 53,416,033
102,313,061
155,729,094
\((947,297,236)\)
$13,262,413,477
    303,912,775
```

$\qquad$

```
    $ (487,655,367)
    $ 501,636,888
        45,610,365
        153,552,514
            488,405
$ 701,288,171
$12,073,469,938
```


## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

Actuarial Value, Prior June 30

## Receipts

Employer Contributions Made During the Year
Member Contributions Made During the Year
Miscellaneous Income - Not Investment Related
Expected Investment Income (@ 7.25\%) - Beginning Value
Expected Investment Income (@ 7.25\%) - Contributions
Total

Disbursements
Benefits Paid During the Year
Refund of Contributions and Interest
Miscellaneous Expenses - Not Investment Related
Expected Investment Expenses (@ 7.25\%) - Disbursements
Total
Expected Actuarial Value, Current June 30
Actual Market Value, Current June 30
Actuarial Value, Current June 30
[75\% of Expected Actuarial Value] + [25\% of Actual Market Value]
July 1, 2007
\$ 11,177,971,455

| $259,819,709$ |
| ---: |
| $147,738,697$ |
| $2,988,770$ |
| $810,402,930$ |
| $14,882,335$ |
| $\$ \quad 1,235,832,441$ |


| \$ | $466,008,762$ |
| ---: | ---: |
| $48,334,477$ |  |
| $6,794,939$ |  |
|  | $18,891,259$ |
| $\$ \quad 540,029,437$ |  |

\$ 11,873,774,459
\$ 13,262,413,477
\$ 12,220,934,214

July 1, 2008
\$ 12,220,934,214

| $303,912,775$ |
| ---: |
| $155,729,094$ |
| - |
| $886,017,731$ |
| $16,662,018$ |
| $\$ \quad 1,362,321,618$ |

501,636,888
45,610,365
488,405
$19,855,418$
$\$ \quad 567,591,076$
\$ 13,015,664,756
\$ 12,073,469,938
\$ 12,780,116,052

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## ALLOCATION OF ASSETS

Total Assets Available for Benefits

- Market Value
- Actuarial Value

Less: Annuity Savings Account
Less: Retired and Disabled
Equals: Total Non-Retired Assets

- Market Value
- Actuarial Value

Total Ledger Assets

- State Share of Total
- State Percent of Total
- Political Subdivisions Share of Total
- Political Subdivisions Percent of Total

| July 1, 2007 | July 1, 2008 |
| :---: | :---: |
| \$ 13,262,413,477 | \$ 12,073,469,938 |
| 12,220,934,214 | 12,780,116,052 |
| \$ 2,707,176,269 | \$ 2,694,331,410 |
| \$ 4,007,389,159 | \$ 4,227,365,567 |
| \$ 6,547,848,049 | \$ 5,151,772,961 |
| 5,506,368,786 | 5,858,419,075 |
| \$ 6,769,495,765 | \$ 5,205,044,878 |
| \$ 2,889,877,271 | \$ 2,194,022,337 |
| 42.689698\% | 42.151843\% |
| \$ 3,879,618,494 | \$ 3,011,022,542 |
| 57.310302\% | 57.848157\% |

State Portion (Based on Ledger Share)

- Market Value
- Actuarial Value
$\$ 2,795,256,558$
$2,350,652,206$
\$ 2,171,567,250
$\$ 3,752,591,491$
$3,155,716,580$
\$ 2,980,205,711
- Market Value
- Actuarial Value

3,388,987,464

Each year the assets of the plan are allocated first to the Annuity Savings Account and second to retired and disabled lives. Residual assets are then allocated to non-retired members to determine necessary contribution levels for non-retired members.

# PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA <br> REQUIRED PENSION DISCLOSURE UNDER GASB \#25 AND \#27 <br> (State Members Only) 

Schedule of Funding Progress

*Plan changes and/or changes in actuarial assumptions.

# PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA 

## REQUIRED PENSION DISCLOSURE UNDER GASB \#25 AND \#27

(State Employees Only)
Development of Net Pension Obligation (NPO)
(Dollar Amounts in Thousands)

| Year Beginning | (1) <br> Annual <br> Required Contrib | (2) <br> Interest on NPO (a) 7.25\% | (3) <br> ARC <br> Adjust <br> (8) / (4) | (4) <br> Amort. <br> Factor | (5) <br> Net Pens <br> Cost $(1)+(2)-(3)$ | (6) <br> Actual <br> Employer <br> Contrib | (7) <br> Change <br> in NPO <br> (5) - (6) | $\begin{gathered} (8) \\ \text { NPO } \\ @ \text { BOY } \end{gathered}$ | (9) <br> NPO <br> @ EOY <br> (7) $+(8)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7/1/98 | 67,481 | (78) | (83) | 12.8933 | 67,486 | 77,821 | $(10,335)$ | $(1,072)$ | $(11,407)$ |
| 7/1/99 | 61,762 | (827) | (889) | 12.8280 | 61,824 | 84,354 | $(22,530)$ | $(11,407)$ | $(33,937)$ |
| 7/1/00 | 66,559 | $(2,460)$ | $(2,660)$ | 12.7581 | 66,759 | 76,219 | $(9,460)$ | $(33,937)$ | $(43,397)$ |
| 7/1/01 | 72,333 | $(3,146)$ | $(3,422)$ | 12.6830 | 72,609 | 76,304 | $(3,695)$ | $(43,397)$ | $(47,092)$ |
| 7/1/02 | 79,641 | $(3,414)$ | $(3,891)$ | 12.1037 | 80,118 | 80,796 | (678) | $(47,092)$ | $(47,770)$ |
| 7/1/03 | 54,579 | $(3,463)$ | $(3,947)$ | 12.1037 | 55,063 | 90,709 | $(35,646)$ | $(47,770)$ | $(83,416)$ |
| 7/1/04 | 69,647 | $(6,102)$ | $(6,953)$ | 12.1037 | 70,498 | 62,760 | 7,738 | $(84,159) *$ | $(76,421)$ |
| 7/1/05 | 87,947 | $(5,541)$ | $(6,314)$ | 12.1037 | 88,720 | 72,890 | 15,830 | $(76,421)$ | $(60,591)$ |
| 7/1/06 | 96,430 | $(4,393)$ | $(5,006)$ | 12.1037 | 97,043 | 89,801 | 7,242 | $(60,591)$ | $(53,349)$ |
| 7/1/07 | 99,135 | $(3,868)$ | $(4,408)$ | 12.1037 | 99,675 | 106,867 | $(7,192)$ | $(53,349)$ | $(60,541)$ |

* A negative $\$ 743$ thousand was included to represent the addition of the Toll Road Commission to the State account.


# PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA <br> REQUIRED PENSION DISCLOSURE UNDER GASB \#25 AND \#27 (All PERF) 

Schedule of Funding Progress

*Plan changes and/or changes in actuarial assumptions
June 5, 2009 (I418)

# PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA 

## SUMMARY OF EMPLOYEE DATA

July 1, $2007 \quad$ July 1, 2008

Active Members

## State <br> Political Subdivisions <br> Total

Retired Members and Beneficiaries Receiving Benefits
Annual Benefits Payable from Trust
Average Annual Benefit
Disabled Members Receiving Benefits
Annual Benefits Payable from Trust
Average Annual Benefit
Terminated Members Entitled to Future Benefits

| STATE |  | 6,871 | 7,259 |
| :--- | ---: | ---: | ---: |
| Deferred Annual Benefits | $\$$ | $30,496,298$ | $\$$ |
| Average Annual Benefits | $\$$ | $55,300,438$ |  |
| POLITICAL SUBDIVISIONS |  | $\$$ | 7,618 |
| Deferred Annual Benefits | $\$$ | $30,679,358$ | $\$$ |
| Average Annual Benefits | $\$$ | 3,875 | $\$$ |

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

Projected Retirements Over Next 10 Years

| Year | State | Political Subdivisions | Total |
| :---: | :---: | :---: | :---: |
| 2008-2009 | 1,487.39 | 2,967.58 | 4,454.97 |
| 2009-2010 | 1,460.02 | 2,803.84 | 4,263.86 |
| 2010-2011 | 1,468.09 | 2,843.41 | 4,311.50 |
| 2011-2012 | 1,482.38 | 2,963.76 | 4,446.14 |
| 2012-2013 | 1,501.83 | 3,090.79 | 4,592.62 |
| 2013-2014 | 1,509.34 | 3,163.38 | 4,672.72 |
| 2014-2015 | 1,553.84 | 3,306.95 | 4,860.79 |
| 2015-2016 | 1,554.23 | 3,442.16 | 4,996.39 |
| 2016-2017 | 1,576.99 | 3,587.27 | 5,164.26 |
| 2017-2018 | 1,568.66 | 3,634.93 | 5,203.59 |

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## SCHEDULED AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

| Date Base Established | Reason | STATE PORTION |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Years Remaining at 7-1-2008 | Amortization Amount | Balance at 7/1/2007 |
| 7/1/2008 | Fresh Start | 30 | \$ 3,417,230 | \$ 44,359,668 |

## PUBLIC EMPLOYEES' RETIREMENT FUND

OF INDIANA

## SCHEDULED AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

-Continued-

| Date Base Established | Reason | POLITICAL SUBDIVISION PORTION |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Years Remaining at 7-1-2008 | Amortization Amount | Balance at 7/1/2008 |
| 7/1/2006 | Fresh Start | 28 | \$ 17,887,408 | \$ 227,329,725 |
| 7/1/2007 | Actuarial Experience Gain | 29 | $(7,231,867)$ | $(92,928,145)$ |
| 7/1/2007 | Change in Assumptions | 29 | 7,585,031 | 97,466,235 |
| 7/1/2008 | Actuarial Experience Loss | 30 | 3,611,201 | 46,877,642 |
|  |  |  | \$ 21,851,773 | \$ 278,745,457 |

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

TEN YEAR HISTORY OF CONTRIBUTION RATES

| Valuation Date | $\underline{\text { State }}$ | Political Subdivisions | Total |
| :--- | :--- | :---: | :---: |
| July 1, 1998 | $5.7 \%$ | $5.5 \%$ | $5.6 \%$ |
| July 1, 1999 | $5.0 \%$ | $5.1 \%$ | $5.1 \%$ |
| July 1, 2000 | $5.0 \%$ | $5.0 \%$ | $5.0 \%$ |
| July 1, 2001* | $5.2 \%$ | $5.0 \%$ | $5.1 \%$ |
| July 1, 2002* | $5.6 \%$ | $6.2 \%$ | $5.9 \%$ |
| July 1, 2003* | $3.8 \%$ | $4.7 \%$ | $4.4 \%$ |
| July 1, 2004* | $4.5 \%$ | $5.3 \%$ | $5.0 \%$ |
| July 1, 2005* | $5.5 \%$ | $6.3 \%$ | $6.0 \%$ |
| July 1, 2006* | $6.3 \%$ | $6.9 \%$ | $6.7 \%$ |
| July 1, 2007* | $6.3 \% * *$ | $6.9 \%$ | $6.6 \%$ |
| July 1, 2008* | $6.50 \% * *$ | $7.14 \%$ | $6.75 \%$ |

*Plan changes and/or changes in actuarial assumptions
**After application of smoothing parameters.

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

TEN YEAR HISTORICAL INVESTMENT EXPERIENCE

| Year Ending June 30 | Estimated Annual Rate of Investment Return |  |  |
| :---: | :---: | :---: | :---: |
|  | Actuarial Basis | Market Basis | Actuarial Assumed Interest Rate |
| 1998 | 9.34\% | 13.27\% | 7.25\% |
| 1999 | 9.52\% | 10.04\% | 7.25\% |
| 2000 | 8.53\% | 5.80\% | 7.25\% |
| 2001 | 5.77\% | (2.14\%) | 7.25\% |
| 2002 | 3.08\% | (4.85\%) | 7.25\% |
| 2003 | 4.20\% | 3.48\% | 7.25\% |
| 2004 | 6.29\% | 16.19\% | 7.25\% |
| 2005 | 7.00\% | 9.23\% | 7.25\% |
| 2006 | 7.85\% | 10.44\% | 7.25\% |
| 2007 | 10.37\% | 17.74\% | 7.25\% |
| 2008 | 5.32\% | (8.33\%) | 7.25\% |


| PUBLIC EMPLOYEES' RETIREMENT FUND OF INDIANA |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| TEN YEAR HISTORICAL MEMBER INFORMATION |  |  |  |  |
| Active Member Statistics |  |  |  |  |
| Year Ending June 30 | Number | Total Anticipated Annual Payroll | Average Annual Pay | Percentage Increase In Average Pay |
| 1999 | 141,441 | 3,250,197,264 | 22,979 | 4.46\% |
| 2000 | 146,613 | 3,482,453,418 | 23,753 | 3.37\% |
| 2001 | 145,019 | 3,587,079,638 | 24,735 | 4.14\% |
| 2002 | 143,234 | 3,851,760,958 | 26,891 | 8.72\% |
| 2003 | 143,082 | 4,038,679,794 | 28,226 | 4.96\% |
| 2004 | 142,913 | 4,214,390,292 | 29,489 | 4.47\% |
| 2005 | 141,428 | 4,318,450,314 | 30,535 | 3.55\% |
| 2006 | 140,563 | 4,322,179,849 | 30,749 | 4.27\% |
| 2007 | 138,863 | 4,385,675,869 | 31,583 | 2.71\% |
| 2008 | 140,146 | 4,600,353,894 | 32,825 | 3.93\% |
| Non-Retired Inactive Vested Member Statistics |  |  |  |  |
| Year Ending June 30 |  | Number | Average Annual Benefit* |  |
| 1999 |  | 7,979 |  |  |
| 2000 |  | 8,368 |  |  |
| 2001 |  | 10,323 |  |  |
| 2002 |  | 11,572 |  |  |
| 2003 |  | 11,897 |  |  |
| 2004 |  | 9,884 |  |  |
| 2005 |  | 10,531 |  |  |
| 2006 |  | 11,552 |  |  |
| 2007 |  | 14,789 |  |  |
| 2008 |  | 15,450 |  |  |

*July 1, 2002 and earlier amounts weighted with early retirement rates
June 5, 2009 (I418)

PUBLIC EMPLOYEES' RETIREMENT FUND OF INDIANA

TEN YEAR HISTORICAL MEMBER INFORMATION -Continued-

Retired Member and Beneficiary Statistics

| Year Ending June 30 | Number |
| :---: | :---: |
| 1999 | 44,594 |
| 2000 | 45,768 |
| 2001 | 47,203 |
| 2002 | 47,507 |
| 2003 | 49,181 |
| 2004 | 50,436 |
| 2005 | 52,936 |
| 2006 | 54,040 |
| 2007 | 55,960 |
| 2008 | 57,971 |


| Annual Benefit* | Average Annual Benefit* |
| :---: | :---: |
| $203,097,160$ | 4,554 |
| $216,615,494$ | 4,733 |
| $230,791,087$ | 4,889 |
| $248,797,563$ | 5,237 |
| $273,821,963$ | 5,568 |
| $308,061,648$ | 6,108 |
| $334,909,825$ | 6,327 |
| $355,485,118$ | 6,578 |
| $390,434,248$ | 6,977 |
| $413,098,677$ | 7,126 |

Disabled Member Statistics

| 1999 | 3,360 | $11,986,411$ | 3,567 |
| :--- | :--- | :--- | :--- |
| 2000 | 3,537 | $13,230,143$ | 3,740 |
| 2001 | 3,566 | $13,529,137$ | 3,794 |
| 2002 | 3,585 | $14,212,424$ | 3,964 |
| 2003 | 3,775 | $15,845,234$ | 4,197 |
| 2004 | 3,918 | $17,649,672$ | 4,505 |
| 2005 | 4,185 | $19,375,530$ | 4,630 |
| 2006 | 4,243 | $22,125,496$ | 5,215 |
| 2007 | 4,372 | $22,310,587$ | 5,103 |
| 2008 | 4,453 | $23,650,317$ | 5,311 |

*Includes employee annuities

## PUBLIC EMPLOYEES' RETIREMENT FUND

OF INDIANA

## TEN YEAR HISTORICAL FUNDING INFORMATION

| Year Ending June 30 | Portion Of Actuarial Liability Provided for by Assets |  |  | Net Assets <br> Available for Benefits, Actuarial Value $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
|  | (In Thousands of Dollars) |  |  |  |
|  | Accumulated <br> Employee Contributions | Retired and Disabled | Non-Retired Member Actuarial Liability |  |
| 1999 | 1,428,913 | 2,158,640 | 3,488,428 | 7,595,266 |
|  | 100\% | 100\% | 100\% |  |
| 2000 | 1,647,902 | 2,303,679 | 3,748,305 | 8,267,657 |
|  | 100\% | 100\% | 100\% |  |
| 2001 | 1,728,972 | 2,426,062 | 4,150,638 | 8,723,304 |
|  | 100\% | 100\% | 100\% |  |
| 2002 | 1,886,124 | 2,582,149 | 4,597,859 | 8,994,854 |
|  | 100\% | 100\% | 98.4\% |  |
| 2003 | 1,971,864 | 2,764,974 | 4,297,735 | 9,293,952 |
|  | 100\% | 100\% | 100\% |  |
| 2004 | 2,211,326 | 2,927,884 | 4,705,143 | 9,853,976 |
|  | 100\% | 100\% | 100\% |  |
| 2005 | 2,382,280 | 3,301,265 | 5,174,777 | 10,471,937 |
|  | 100.0\% | 100.0\% | 92.5\% |  |
| 2006 | 2,515,984 | 3,648,764 | 5,286,181 | 11,177,971 |
|  | 100.0\% | 100.0\% | 94.8\% |  |
| 2007 | 2,707,176 | 4,007,389 | 5,725,233 | 12,220,934 |
|  | 100\% | 100\% | 96.2\% |  |
| 2008 | 2,694,331 | 4,227,366 | 6,181,524 | 12,780,116 |
|  | 100.0\% | 100.0\% | 94.8\% |  |

PUBLIC EMPLOYEES' RETIREMENT FUND
OF INDIANA
TEN YEAR HISTORICAL FUNDING INFORMATION
-Continued-
Portion of Present Value of Accumulated Vested and Total Accumulated Benefits Provided for by Assets
(In Thousands of Dollars)
$\left.\begin{array}{crrrrr}\begin{array}{c}\text { Year Ending } \\ \text { June 30 }\end{array} & \begin{array}{c}\text { Accumulated } \\ \text { Employee } \\ \text { Contributions }\end{array} & \begin{array}{c}\text { Retired and } \\ \text { Disabled }\end{array} & & \begin{array}{c}\text { Non-Retired } \\ \text { Accumulated } \\ \text { Vested Benefits }\end{array} & \end{array} \begin{array}{c}\text { Non-Retired } \\ \text { Total }\end{array}\right)$

# PUBLIC EMPLOYEES' RETIREMENT FUND 

OF INDIANA

## ACTUARIAL METHODS

## ACTUARIAL COST METHOD

## ASSET VALUATION METHOD

Entry Age Normal Cost

75\% of Expected
Actuarial Value Plus
$25 \%$ of Market Value

## Entry Age Normal Cost

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 unfunded actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date less the actuarial value of assets.

The effect of this valuation method is to amortize all actuarial gains and losses, resulting from experience different from that anticipated in our assumptions, over a 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.

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## ACTUARIAL ASSUMPTIONS

Interest

Future Salary Increases

Cost of Living Increases

Mortality
Disability
Termination

Retirement
Spouse's Benefit

Administrative Expense
$7.25 \%$ net of administrative expenses
Annual Increase of 4\% (Based on PERF experience 2000-2005).
An increase of $1.5 \%$ compounded annually is assumed to be applied to the pension benefit each year following retirement. No increase is assumed to be applied to the PERF annuity benefit.

UP-1994. Pre-retirement mortality based on PERF experience 1995-2000.
Based on PERF experience 1995-2000.
Select and ultimate tables based on PERF experience 2000-2005. Separate tables are used for state employees and political subdivision employees.

Based on PERF experience 2000-2005. Revised effective July 1, 2007
$90 \%$ of members are assumed either to be married or to have a dependent beneficiary. Males are assumed to be 3 years older than their spouses.

Netted against investment earnings

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## SUMMARY OF MAJOR PLAN PROVISIONS

## PARTICIPATION

All full time employees of the State of Indiana and all full time employees of political subdivisions which have adopted the plan must become members of PERF upon date of hire.

## ELIGIBILITY FOR ANNUITY BENEFITS:

|  | Earliest of: |
| :--- | :--- |
| Normal Retirement | (1) Age 65 with 10 years of creditable service; |
| (2) Age 60 with 15 years of creditable service; |  |
| (3) Sum of age and creditable service equal to 85 (but not earlier than age 55 ). |  |
| Early Retirement | Age 50 with 15 years of creditable service |
| Late Retirement | Subject to continued employment after normal retirement |
| Disability Retirement | 5 years of creditable service and qualified for Social Security disability benefits or <br> federal Civil Service disability benefits. |
| Termination | 10 years of creditable service and election not to take lump sum payment of employee <br> account balance with interest. |
| Pre-Retirement Death | If death occurs in service, 15 years of creditable service. If death occurs after <br> separating from service, age 50 with 15 years of creditable service. |

## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## SUMMARY OF MAJOR PLAN PROVISIONS, Continued

## AMOUNT OF BENEFITS:

Normal Retirement

Early Retirement

Late Retirement

Disability Retirement

Termination

The normal retirement benefit is an annuity payable for life with 60 months guaranteed and is equal to $1.1 \%$ of average monthly earnings* times years and months of creditable service earned.

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 $1 / 10 \%$ for each of the first 60 months and by $5 / 12 \%$ for each of the next 120 months that the benefit commencement date precedes the normal retirement date.

The late retirement benefit is calculated in the same manner as the normal retirement benefit. Creditable service and earnings earned after normal retirement is included in the computation.

The disability retirement benefit is the accrued retirement benefit determined as of the disability date and payable commencing the month following disability date without reduction for early commencement.

The termination benefit is the accrued retirement benefit determined as of the termination date and payable commencing at 65 . If the member has 15 or more years of creditable service, then the member may elect to receive a reduced early retirement benefit.

* Average monthly earnings is the monthly average of earnings during the 20 quarters (in groups of 4 consecutive quarters) preceding retirement that produce the highest such average. Earnings include basic salary, the member's $3 \%$ mandatory contribution paid by the employer, the member's salary reduction agreement under Section 125, 403(b) or 457 of the Internal Revenue Code, and up to $\$ 2,000$ of additional compensation received from the employer in anticipation of the member's termination or retirement.


## PUBLIC EMPLOYEES' RETIREMENT FUND <br> OF INDIANA

## SUMMARY OF MAJOR PLAN PROVISIONS, Continued

## AMOUNT OF BENEFITS:

Pre-Retirement Death

Employee Contributions

The spouse or dependent beneficiary is entitled to receive the monthly life annuity under the assumption that the member retired on the later of age 50 or the day before the date of death and elected the joint and full survivor option.

Each member is required to contribute to an employee annuity at the rate of $3 \%$ of pay (unless the employer has opted to make all or a portion of the contribution for the employee). These contributions are kept on deposit and credited with interest until such time as they are refunded or used to provide the annuity benefit at retirement.

The benefits provided by employee contributions are in addition to the benefits provided by employer contributions. The monthly annuity provided at a normal retirement age of 65 is equal to $\$ 1.00$ for each $\$ 108.79$ of accumulated employee contributions plus interest.

