Public Employees’
Retirement Fund Of Indiana
Actuarial Valuation
July 1, 2005

PUBLIC EMPLOYEES’ RETIREMENT FUND OF INDIANA

VALUATION DATE

VALUATION YEAR

July 1, 2005

July 1, 2005 - June 30, 2006

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

## Summary of Actuarial Valuation as of July 1, 2005

## Introduction

As of the valuation date there were 141,428 active members, 57,121 pensioners and 10,531 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, 2005:

|  | State |  | Political Subdivisions | Total |
| :---: | :---: | :---: | :---: | :---: |
| Total Annual Cost | \$ | 87,947,466 | \$ 161,721,639 | \$ 249,669,105 |
| Cost as Percentage of Anticipated Payroll (Interest adjusted to mid-year) |  | 5.5\% | 6.3\% | 6.0\% |

This Valuation is the fourth to reflect census data as reported by a new database system. The previous database system reported salaries on a calendar year basis and reported service through the March 31 preceding the valuation date. The new database system reports both salary and service on a fiscal year basis. Also, the new database system may have created an increase of about $\$ 70$ million in liabilities associated with prior service earned by active members. Due to the fiscal impact of the more current data, this valuation has been prepared in such a manner as to phase-in the changes brought about by the new database system over a four-year period on a pro rata basis. This phase-in will ease the transition to the census data reporting by the new database system.

This report reflects the plan provisions in effect as of July 1, 2005. Refer to the exhibit titled Summary of Major Plan Provisions for a brief description of benefits provided by this plan.

The Total Annual Cost is composed of employer normal cost of $\$ 220,065,372$ and an amortization payment of $\$ 29,603,733$. As of July 1, 2005, the Unfunded Actuarial Accrued Liability is $\$ 386,384,977$. A breakdown and a comparison with the results of the prior valuation is provided in the exhibit titled Contribution Breakdown and Comparison.

## Introduction, Continued

The Total Annual Cost for 2005, as a percent of anticipated payroll increased to $6.0 \%$ as compared to $5.0 \%$ for 2004. The Fund had experience losses primarily from investments yielding less than the assumed $7.25 \%$ (estimated return for the 2004 plan year was $7.0 \%$ on an actuarial value basis) and from changes in actuarial assumptions. In terms of actual dollars, the Total Annual Cost increased by $\$ 47,038,490$ from $\$ 202,630,615$ for the 2004 plan year to $\$ 249,669,105$ for the 2005 plan year.

## 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 revised from the prior Valuation. The COLA actuarial assumption was changed from $0.5 \%$ annually to $1.0 \%$ annually. The COLA assumption is applied for the lifetime of the benefit recipients.

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 2004-2005 plan year that resulted in an estimated yield of $7.0 \%$. The approximate market basis return during the same time period was $9.2 \%$. 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.

## 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:

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, 2005 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, 2005 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 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.
Douglas Todd
A.S.A., M.A.A.A., E.A.
Senior Actuary

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## SUMMARY OF CONTRIBUTIONS

TOTAL ANNUAL COST

COST AS PERCENTAGE OF ANTICIPATED PAYROLL*

|  | July 1, 2005 |  |
| :---: | :---: | :---: |
| State | Political Subdivisions | Total |
| \$ 87,947,466 | \$ 161,721,639 | \$ 249,669,105 |

5.5\%
6.3\%
6.0\%
*Interest adjusted for mid-year contribution

## CONTRIBUTION BREAKDOWN AND COMPARISON

|  | July 1, 2005 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State |  | Political Subdivisions |  | Total |  |
| TOTAL ANNUAL COST |  |  |  |  |  |  |
| Employer Normal Cost | \$ | 84,918,777 | \$ | 135,146,595 | \$ | 220,065,372 |
| Amortization of Unfunded Actuarial Liability |  | 3,028,689 |  | 26,575,044 |  | 29,603,733 |
| Total | \$ | 87,947,466 | \$ | 161,721,639 | \$ | 249,669,105 |
| ANTICIPATED PAYROLL | \$ | 1,645,247,889 | \$ | 2,673,202,425 | \$ | 4,318,450,314 |
| TOTAL ANNUAL COST AS \% OF ANTICIPATED PAYROLL (Interest Adjusted for Mid-Year Contribution) |  | 5.539\% |  | 6.269\% |  | 5.991\% |

## DEVELOPMENT OF UNFUNDED ACTUARIAL LIABILITY

|  | July 1, 2005 |  |  |
| :---: | :---: | :---: | :---: |
|  | State | Political Subdivisions | Total |
| Actuarial Accrued Liability |  |  |  |
| - Active Members | \$ 2,077,253,827 | \$ 2,886,025,740 | \$ 4,963,279,567 |
| - Terminated Members | 112,082,894 | 99,414,922 | 211,497,816 |
| Total | \$ 2,189,336,721 | \$ 2,985,440,662 | \$ 5,174,777,383 |
| Less: Non-Retired Member Assets | 2,145,805,051 | 2,642,587,355 | 4,788,392,406 |
| Equals: Actual Unfunded Actuarial Accrued Liability (UAAL) | \$ 43,531,670 | \$ 342,853,307 | \$ 386,384,977 |
| Unfunded Actuarial Accrued Liability, Prior Year | \$ (119,162,911) | \$ 109,539,797 | \$ $(9,623,114)$ |
| Less: Amortization of Unfunded Actuarial Liability, Prior Year | $(9,393,835)$ | 8,510,477 | $(888,358)$ |
| Plus: Interest for Full Year at 7.25\% | $(7,958,258)$ | 7,324,626 | \$ (633,632) |
| Plus: Increase (Decrease) Due to Change in Actuarial Assumptions | 84,814,948 | 115,090,627 | 199,905,575 |
| Equals: Expected Unfunded Actuarial Accrued Liability (UAAL) | \$ (32,912,386) | \$ 223,444,573 | \$ 190,532,187 |
| Experience (Gain)/Loss [Actual UAAL-Expected UAAL] | \$ 76,444,056 | \$ 119,408,734 | \$ 195,852,790 |

## CONTRIBUTION BREAKDOWN AND COMPARISON

## With Fresh Start and 4-Year Phase-in

|  | July 1, 2004 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State |  | Political Subdivisions |  | Total |  |
| TOTAL ANNUAL COST |  |  |  |  |  |  |
| Employer Normal Cost | \$ | 79,041,240 | \$ | 124,472,733 | \$ | 203,513,973 |
| Amortization of Unfunded Actuarial Liability |  | $(9,393,835)$ |  | 8,510,477 |  | $(883,358)$ |
| Total | \$ | 69,647,405 | \$ | 132,983,210 | \$ | 202,630,615 |
| ANTICIPATED PAYROLL | \$ | 1,612,048,954 | \$ | 2,586,892,952 | \$ | 4,198,941,906 |
| TOTAL ANNUAL COST AS \% OF ANTICIPATED PAYROLL (Interest Adjusted for Mid-Year Contribution) |  | 4.477\% |  | 5.327\% |  | 5.001\% |

## DEVELOPMENT OF UNFUNDED ACTUARIAL LIABILITY

## With Fresh Start and 4-Year Phase-in

Actuarial Accrued Liability

- Active Members
- Terminated Members
Total $\quad$ Non-Retired Member Assets
Lesuals: 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\%
Plus: Increase (Decrease) Due to Change in Actuarial Assumptions
Equals: Expected Unfunded Actuarial Accrued Liability (UAAL)
Experience (Gain)/Loss [Actual UAAL-Expected UAAL]

| State | Political Subdivisions | Total |
| :---: | :---: | :---: |
| \$ 1,914,810,410 | \$ 2,609,441,704 | \$ 4,524,252,114 |
| 104,682,046 | 76,208,786 | 180,890,832 |
| \$ 2,019,492,456 | \$ 2,685,650,490 | \$ 4,705,142,946 |
| 2,138,655,367 | 2,576,110,693 | 4,714,766,060 |
| \$ (119,162,911) | \$ 109,539,797 | \$ (9,623,114) |
| \$ $(218,851,183)$ | \$ (40,527,598) | \$ (259,378,781) |
| $(16,899,350)$ | $(3,026,228)$ | $(19,925,578)$ |
| $(14,641,508)$ | \$ (2,718,849) | \$ (17,360,357) |
| 5,126,956 | 11,577,509 | 16,704,465 |
| \$ $(211,466,385)$ | \$ (28,642,710) | \$ (240,109,095) |
| \$ 92,303,474 | \$ 138,182,507 | \$ 230,485,981 |

## 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

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

- Market Value
- Actuarial Value

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

- Market Value
- Actuarial Value

| July 1, 2005 |  |  |
| :---: | :---: | :---: |
| State | Political Subdivisions | Total |
| \$ 1,055,003,795 | \$ 1,398,830,513 | \$ 2,453,834,308 |
| 112,082,894 | 99,414,922 | 211,497,816 |
| \$ 1,167,086,689 | \$ 1,498,245,435 | \$ 2,665,332,124 |
| 152,289,450 | 258,320,405 | 410,609,855 |
| \$ 1,319,376,139 | \$ 1,756,565,840 | \$ 3,075,941,979 |
| \$ 2,112,972,486 | \$ 2,602,153,616 | \$ 4,715,126,102 |
| 2,145,805,051 | 2,642,587,355 | 4,788,392,406 |
| 1.810 | 1.737 | 1.769 |
| 1.839 | 1.764 | 1.797 |
| 1.601 | 1.481 | 1.533 |
| 1.626 | 1.504 | 1.557 |

## 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

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

- Market Value
- Actuarial Value

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

- Market Value
- Actuarial Value

July 1, 2004

| July 1, 2004 |  |  |
| :---: | :---: | :---: |
| State | Political Subdivisions | Total |
| \$ 951,367,747 | \$ 1,269,371,225 | \$ 2,220,738,972 |
| 100,057,983 | 75,690,239 | 175,748,222 |
| \$ 1,051,425,730 | \$ 1,345,061,464 | \$ 2,396,487,194 |
| 143,665,505 | 235,294,253 | 378,959,758 |
| \$ 1,195,091,235 | \$ 1,580,355,717 | \$ 2,775,446,952 |
| \$ 2,017,507,975 | \$ 2,430,182,976 | \$ 4,447,690,951 |
| 2,138,655,367 | 2,576,110,693 | 4,714,766,060 |
| 1.919 | 1.807 | 1.856 |
| 2.034 | 1.915 | 1.967 |
| 1.688 | 1.538 | 1.603 |
| 1.790 | 1.630 | 1.699 |

## STATEMENT OF CHANGES IN THE PRESENT VALUE OF ACCUMULATED PLAN BENEFITS <br> FOR NON-RETIRED MEMBERS

Actuarial Present Value of Accumulated Plan Benefits, July 1, 2004
Plus: Increase Due to Additional Benefits Accumulated ..... 240,530,664
Less: Transfers to Retired and Disabled Status ..... 447,260,626
Plus: Increase Due to Decrease in the Discount Period (@7.25\%) ..... 218,658,377
Plus: Increase Due to Change in Plan Provisions
Plus: Increase (Decrease) Due to Change in Actuarial Assumptions ..... 121,696,167
Plus: Actuarial Experience (Gain)/Loss and other Miscellaneous Items166,870,445
Equals: Actuarial Present Value of Accumulated Plan Benefits, July 1, 2005 ..... \$ 3,075,941,979

## STATEMENT OF INCOME

July 1, 2004 - June 30, 2005
(1) Net Value of Assets Available for Benefits, July 1, 2004
\$ 9,586,901,069
(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\$ 61,433,980144,889,060206,323,040
Transfers In
3,781,302
3,781,302- 49,696,33486,313,486136,009,820
892,626,825Total Receipts2,981,634
Miscellaneous Income ..... 560,407
(3) Disbursements
Benefits Paid During the YearRefund of Contributions and Interest\$ 375,843,083
35,008,830
Administrative Expenses15,688,303Transfers Out3,972,803
Miscellaneous Disbursements
Total Disbursements
(4) Net Value of Assets Available for Benefits, June 30, 2005 (1) + (2) - (3)
\$ 430,513,019
\$10,398,671,078
Market Value

## 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, 2004 |  | July 1, 2005 |
| :--- | :--- | :--- |
| $\$ 9.9,293,952,006$ |  | $\$ 953,976,178$ |


| $234,918,374$ | $206,323,040$ |  |
| ---: | ---: | ---: |
| $135,962,758$ | $136,009,820$ |  |
| $2,363,876$ | $2,981,634$ |  |
| $673,811,520$ | $714,413,273$ |  |
| $13,530,132$ | $12,517,650$ |  |
|  | $1,060,586,660$ | $\$ 1,072,245,417$ |

$$
361,453,610
$$

$$
\$ \quad 375,843,083
$$

$$
32,906,058
$$

$$
35,008,830
$$

3,972,803

|  | $14,396,364$ | $15,037,396$ |
| ---: | ---: | ---: |
|  | $411,537,452$ |  |

\$ 9,943,001,214 \$ 10,496,359,483
\$ 9,586,901,069 \$ 10,398,671,078
\$ 9,853,976,178 \$ 10,471,937,382

## ALLOCATION OF ASSETS

|  | July 1, 2004 | July 1, 2005 |
| :---: | :---: | :---: |
| Total Assets Available for Benefits |  |  |
| - Market Value | 9,586,901,069 | 10,398,671,078 |
| - Actuarial Value | 9,853,976,178 | 10,471,937,382 |
| Less: Annuity Savings Account | 2,211,326,472 | 2,382,280,021 |
| Less: Retired and Disabled | 2,927,883,646 | 3,301,264,955 |
| Equals: Total Non-Retired Assets |  |  |
| - Market Value | 4,447,690,951 | 4,715,126,102 |
| - Actuarial Value | 4,714,766,060 | 4,788,392,406 |
| Total Ledger Assets | 5,765,722,257 | 5,976,619,684 |
| - State Share of Total | 2,615,377,479 | 2,678,281,088 |
| - State Percent of Total | 45.360795\% | 44.812640\% |
| - Political Subdivisions Share of Total | 3,150,344,778 | 3,298,338,596 |
| - Political Subdivisions Percent of Total | 54.639205\% | 55.187360\% |
| State Portion (Based on Ledger Share) |  |  |
| - Market Value | 2,017,507,975 | 2,112,972,486 |
| - Actuarial Value | 2,138,655,367 | 2,145,805,051 |
| Political Subdivisions Portion (Based on Ledger Share) |  |  |
| - Market Value | 2,430,182,976 | 2,602,153,616 |
| - Actuarial Value | 2,576,110,693 | 2,642,587,355 |

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.

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

(State Members Only)
Schedule of Funding Progress


## 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 Required Contrib | (2) <br> Interest on NPO <br> @ 7.25\% | (3) <br> ARC <br> Adjust <br> (8) / (4) | (4) <br> Amort. <br> Factor | (5) <br> Net Pens Cost $(1)+(2)-(3)$ | (6) <br> Actual <br> Employer <br> Contrib | (7) <br> Change <br> in NPO <br> (5) - (6) | (8) <br> NPO <br> @ BOY | $\begin{gathered} (9) \\ \text { NPO } \\ @ \text { EOY } \\ \text { (7) + (8) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7/1/96 | \$ 79,101 | - | - | 12.5944 | \$ 79,101 | \$ 81,585 | \$ $(2,484)$ | - | \$ (2,484) |
| 7/1/97 | 81,546 | \$ (180) | \$ (192) | 12.9541 | 81,558 | 80,146 | 1,412 | \$ $(2,484)$ | $(1,072)$ |
| 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 | $(84,159) *$ | $(76,421)$ |

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


## REQUIRED PENSION DISCLOSURE UNDER GASB \#25 AND \#27 <br> (All PERF)

Schedule of Funding Progress

*Plan changes and/or changes in actuarial assumptions
May 5, 2006 (I418)

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## SUMMARY OF EMPLOYEE DATA

July 1, $2004 \quad$ July 1, 2005

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
$\frac{\text { STATE }}{\text { Deferred Annual Benefits }}$

Average Annual Benefits $\frac{\text { DOLITICAL SUBDIVISIONS }}{\text { Deferred Annual Benefits }}$| Average Annual Benefits |
| :--- |

50,773
92,140
142,913

50,436
\$ 308,061,648 \$ 334,909,825
\$ 6,108 \$ 6,327
3,918
17,649,672
4,505

5,559
\$ 22,120,663
3,979
4,325
\$ 14,584,130 \$ 17,448,776

## SCHEDULED AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

| Date Base Established | Reason | STATE PORTION |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Years Remaining at 7-1-2005 | Amortization Amount | Balance at 7/1/2005 |
| 7/1/2002 | Fresh Start | 27 | \$ $(3,975,918)$ | \$ $(49,928,863)$ |
| 7/1/2003 | Experience Loss | 28 | 13,396,675 | 170,257,333 |
| 7/1/2003 | Assumption Changes | 28 | $(26,320,107)$ | $(334,500,275)$ |
| 7/1/2004 | Experience Loss | 29 | 7,110,562 | 91,369,398 |
| 7/1/2004 | Assumption Changes | 29 | 394,953 | 5,075,073 |
| 7/1/2005 | Experience Loss | 30 | 5,888,838 | 76,444,056 |
| 7/1/2005 | Assumption Changes | 30 | 6,533,686 | 84,814,948 |
| Total |  |  | \$ 3,028,689 | \$ 43,531,670 |

## SCHEDULED AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

-Continued-

| Date Base Established | Reason | POLITICAL SUBDIVISION PORTION |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Years Remaining at 7-1-2005 | Amortization Amount | Balance at 7/1/2005 |
| 7/1/2002 | Fresh Start | 27 | \$ 9,466,804 | \$ 118,882,447 |
| 7/1/2003 | Experience Loss | 28 | 21,194,490 | 269,359,191 |
| 7/1/2003 | Assumption Changes | 28 | $(33,687,522)$ | $(428,132,193)$ |
| 7/1/2004 | Experience Loss | 29 | 10,644,836 | 136,784,152 |
| 7/1/2004 | Assumption Changes | 29 | 891,869 | 11,460,349 |
| 7/1/2005 | Experience Loss | 30 | 9,198,605 | 119,408,734 |
| 7/1/2005 | Assumption Changes | 30 | 8,865,962 | 115,090,627 |
| Total |  |  | \$ 26,575,044 | \$342,853,307 |


| Valuation Date | State | Political Subdivisions | Total |
| :--- | :--- | :--- | :--- |
| July 1, 1996* | $6.6 \%$ | $6.2 \%$ | $6.4 \%$ |
| July 1, 1997 | $6.6 \%$ | $5.9 \%$ | $6.2 \%$ |
| 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* | $5.5 \%$ | $6.3 \%$ | $6.0 \%$ |

* Plan changes and/or changes in actuarial assumptions


## TEN YEAR HISTORICAL INVESTMENT EXPERIENCE

| Year Ending June 30 | Estimated Annual Rate of Investment Return |  |  |
| :---: | :---: | :---: | :---: |
|  | Actuarial Basis | Market Basis | Actuarial Assumed Interest Rate |
| 1996 | 7.96\% | 5.04\% | 7.25\% |
| 1997 | 8.57\% | 8.25\% | 7.25\% |
| 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\% |

## TEN YEAR HISTORICAL MEMBER INFORMATION

| Active Member Statistics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year Ending June 30 | Number | Total Anticipated Annual Payroll | Average Annual Pay | Percentage Increase <br> In Average Pay |
| 1996 | 142,336 | 2,921,540,553 | 20,526 | 1.37\% |
| 1997 | 142,011 | 3,056,390,214 | 21,522 | 4.86\% |
| 1998 | 141,383 | 3,110,162,069 | 21,998 | 2.21\% |
| 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\% |
| Non-Retired Inactive Vested Member Statistics |  |  |  |  |
| Year Ending June 30 |  | Number | Average Annual Benefit* |  |
| 1996 |  | 6,083 | 3,113 |  |
| 1997 |  | 5,741 | 3,349 |  |
| 1998 |  | 6,862 | 3,661 |  |
| 1999 |  | 7,979 | 3,611 |  |
| 2000 |  | 8,368 | 3,788 |  |
| 2001 |  | 10,323 | 3,982 |  |
| 2002 |  | 11,572 | 4,531 |  |
| 2003 |  | 11,897 | 3,472 |  |
| 2004 |  | 9,884 | 3,714 |  |
| 2005 |  | 10,531 | 3,828 |  |

*July 1, 2002 and earlier amounts weighted with early retirement rates
-Continued-

Retired Member and Beneficiary Statistics

| Year Ending June 30 |
| :---: |
| 1996 |
| 1997 |
| 1998 |
| 1999 |
| 2000 |
| 2001 |
| 2002 |
| 2003 |
| 2004 |
| 2005 |


| Number | Annual Benefit* | Average Annual Benefit* |
| :--- | :---: | :---: |
|  | $163,455,987$ | 4,004 |
| 42,050 | $176,509,450$ | 4,198 |
| 43,517 | $193,350,012$ | 4,443 |
| 44,594 | $203,097,160$ | 4,554 |
| 45,768 | $216,615,494$ | 4,733 |
| 47,203 | $230,791,087$ | 4,889 |
| 47,507 | $248,797,563$ | 5,237 |
| 49,181 | $273,821,963$ | 5,568 |
| 50,436 | $308,061,648$ | 6,108 |
| 52,936 | $334,909,825$ | 6,327 |

Disabled Member Statistics

| 1996 | 2,966 | $9,516,383$ |
| :--- | ---: | ---: |
| 1997 | 3,101 | $10,363,939$ |
| 1998 | 3,257 | $11,433,222$ |
| 1999 | 3,360 | $11,986,411$ |
| 2000 | 3,537 | $13,230,143$ |
| 2,342 | 3,510 |  |
| 2001 | 3,566 | $13,529,137$ |
| 2002 | 3,585 | $14,212,424$ |
| 2003 | 3,775 | $15,845,234$ |
| 2004 | 3,918 | $17,649,672$ |
| 2005 | 4,185 | $19,375,530$ |

*Includes employee annuities

## 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 |
| :---: | :---: | :---: | :---: | :---: |
|  | (In Thousands of Dollars) |  |  |  |
|  | Accumulated <br> Employee Contributions | Retired and Disabled | Non-Retired Member Actuarial Liability |  |
| 1996 | 1,140,426 | 1,751,629 | 2,926,879 | 5,776,621 |
|  | 100\% | 100\% | 98.6\% |  |
| 1997 | 1,264,456 | 1,893,179 | 3,126,230 | 6,304,948 |
|  | 100\% | 100\% | 100\% |  |
| 1998 | 1,288,353 | 2,074,561 | 3,267,237 | 6,914,957 |
|  | 100\% | 100\% | 100\% |  |
| 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\% |  |

## 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)

| Year Ending June 30 | Accumulated <br> Employee <br> Contributions | Retired and Disabled | Non-Retired <br> Accumulated Vested Benefits | Non-Retired Total Accumulated Benefits | Net Assets <br> Available for Benefits, $\qquad$ Actuarial Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 1,140,426 | 1,751,629 | 1,307,888 | 1,639,205 | 5,776,621 |
|  | 100\% | 100\% | 100\% | 100\% |  |
| 1997 | 1,264,456 | 1,893,179 | 1,405,101 | 1,747,693 | 6,304,948 |
|  | 100\% | 100\% | 100\% | 100\% |  |
| 1998 | 1,288,353 | 2,074,561 | 1,511,289 | 1,859,857 | 6,914,957 |
|  | 100\% | 100\% | 100\% | 100\% |  |
| 1999 | 1,428,913 | 2,158,640 | 1,639,166 | 2,005,646 | 7,595,266 |
|  | 100\% | 100\% | 100\% | 100\% |  |
| 2000 | 1,647,901 | 2,303,679 | 1,785,795 | 2,168,889 | 8,267,657 |
|  | 100\% | 100\% | 100\% | 100\% |  |
| 2001 | 1,728,972 | 2,426,062 | 1,950,425 | 2,249,293 | 8,723,304 |
|  | 100\% | 100\% | 100\% | 100\% |  |
| 2002 | 1,886,124 | 2,582,149 | 2,327,868 | 2,646,870 | 8,994,854 |
|  | 100\% | 100\% | 100\% | 100\% |  |
| 2003 | 1,971,864 | 2,764,974 | 2,215,284 | 2,562,166 | 9,293,952 |
|  | 100\% | 100\% | 100\% | 100\% |  |
| 2004 | 2,211,326 | 2,927,884 | 2,396,487 | 2,775,447 | 9,853,976 |
|  | 100\% | 100\% | 100\% | 100\% |  |
| 2005 | 2,382,280 | 3,301,265 | 2,665,332 | 3,075,942 | 10,471,937 |
|  | 100.0\% | 100.0\% | 100.0\% | 100.0\% |  |

## 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.

## 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
Based on PERF experience 1995-2000.
An increase of $1.0 \%$ compounded annually (changed from $0.5 \%$ 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 1995-2000. Separate tables are used for state employees and political subdivision employees.

Based on PERF experience 1995-2000.
$90 \%$ 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

## 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:

Normal Retirement

Early Retirement
Late Retirement
Disability Retirement

Termination

Pre-Retirement Death

Earliest of:
(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).

Age 50 with 15 years of creditable service
Subject to continued employment after normal retirement
5 years of creditable service and qualified for Social Security disability benefits or federal Civil Service disability benefits.

10 years of creditable service and election not to take lump sum payment of employee account balance with interest.

If death occurs in service, 15 years of creditable service. If death occurs after separating from service, age 50 with 15 years of creditable service.

## 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.


## 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.

