**PUBLIC EMPLOYEES'** 

**RETIREMENT FUND OF INDIANA** 

**ACTUARIAL VALUATION** 

JULY 1, 2003

### PUBLIC EMPLOYEES' RETIREMENT FUND OF INDIANA

# ACTUARIAL VALUATION

VALUATION DATE

July 1, 2003

VALUATION YEAR

July 1, 2003 - June 30, 2003

# TABLE OF CONTENTS

	PAGE
Summary of Actuarial Valuation	5
Actuarial Certification	8
FUNDING EXHIBITS	
Summary of Contributions	9
Contribution Breakdown and Comparison	10
Actuarial Present Value of Accumulated Benefits for Non-Retired Members	14
Statement of Changes in the Present Value of Accumulated Plan Benefits for Non-Retired Members	16
ASSET EXHIBITS	
Statement of Income	17
Development of Actuarial Value of Assets	18
Allocation of Assets	19
GASB #25 and #27 DISCLOSURES	
Schedule of Funding Progress	20
Schedule of Employer Contributions	20
Development of Net Pension Obligation	21

# TABLE OF CONTENTS -Continued-

	PAGE
DATA SUMMARIES	
Summary of Employee Data	23
Scheduled Amortization of Unfunded Actuarial Accrued Liability	24
HISTORICAL EXHIBITS	
Ten Year History of Contribution Rates	26
Ten Year Historical Investment Experience	27
Ten Year Historical Member Information	28
Ten Year Historical Funding Information	30
BASIS FOR VALUATION	
Actuarial Methods	32
Actuarial Assumptions	33
Summary of Major Plan Provisions	34

#### PUBLIC EMPLOYEES' RETIREMENT FUND OF INDIANA

#### Summary of Actuarial Valuation as of July 1, 2003

#### **Introduction**

As of the valuation date there were 143,082 active members, 52,956 pensioners and 11,897 terminated members entitled to future benefits. See the exhibit labeled <u>Summary of Employee Data</u> for a breakdown of the members between state employees and employees of political subdivisions.

We have established the following contributions as of July 1, 2003:

	With Fresh Start and 4-Year Phase-In			
	State	Political Subdivisions	Total	
Total Annual Cost	\$ 54,579,389	\$ 111,995,323	\$ 166,574,712	
Cost as Percentage of Anticipated Payroll (Interest adjusted to mid-year)	3.8%	4.7%	4.4%	

This Valuation is the second 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, 2003. Refer to the exhibit titled <u>Summary of Major Plan Provisions</u> for a brief description of benefits provided by this plan.

The Total Annual Cost is composed of employer normal cost of \$186,500,290 and an amortization payment of negative \$19,925,578. As of July 1, 2003, the Unfunded Actuarial Accrued Liability is negative \$259,378,781. A breakdown and a comparison with the results of the prior valuation is provided in the exhibit titled <u>Contribution Breakdown and Comparison</u>.

### Introduction, Continued

The Total Annual Cost for 2003, as a percent of anticipated payroll decreased to 4.4% as compared to 5.9% for 2002. The Fund had experience losses primarily from investments yielding less than the assumed 7.25% (estimated return for the 2002 plan year was 3.5% on an actuarial value basis). These experience losses were more than offset by changes in actuarial assumptions. In terms of actual dollars, the Total Annual Cost decreased by \$50,502,136 from \$217,076,848 for the 2002 plan year to \$166,574,712 for the 2003 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 2% actuarial assumption for COLA was limited to 5 years from the valuation date.

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

#### 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

Using market value, the assets consist of 44.5% in common stock, 9.2% in corporate bonds and notes, 11.4% in U.S. Treasury and Agency Obligations, 12.2% in mortgage securities, 11.5% in international stock and foreign bonds, 6.7% in cash and cash equivalents, 0.1% in real estate investments, 7.0% in other assets, 6.7% in securities lending capital, and negative 9.3% in net receivables and liabilities. Based on the actuarial value, the entire asset portfolio had net investment income for the 2002-2003 plan year that resulted in an estimated yield of 3.5%. See the exhibit labeled <u>Ten Year Historical Investment Experience</u> 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, 2003 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, 2003 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.

Sincerely,

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

# SUMMARY OF CONTRIBUTIONS

		July 1, 2003		
	 State	Political Subdivisions		Total
	 With F	Fresh Start and 4-Year Pha	se-ir	1
TOTAL ANNUAL COST	\$ 54,579,389	\$ 111,995,323	\$	166,574,712
COST AS PERCENTAGE OF ANTICIPATED PAYROLL*	3.8%	4.7%		4.4%

	July 1, 2003				
		State	Political Subdivisions		Total
	<b>Prior to Fresh Start and 4-Year Phase-in</b>			in	
TOTAL ANNUAL COST	\$	65,189,783	\$ 124,050,710	\$	189,240,493
COST AS PERCENTAGE OF ANTICIPATED PAYROLL*		4.4%	5.1%		4.9%

\*Interest adjusted for mid-year contribution

May 21, 2004 (I418)

# CONTRIBUTION BREAKDOWN AND COMPARISON

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

		July 1, 2003	
		Political	
	State	Subdivisions	Total
TOTAL ANNUAL COST			
Employer Normal Cost	\$ 71,478,739	\$ 115,021,551	\$ 186,500,290
Amortization of Unfunded Actuarial Liability	(16,899,350)	(3,026,228)	(19,925,578)
Total	\$ 54,579,389	\$ 111,995,323	\$ 166,574,712
ANTICIPATED PAYROLL	\$ 1,491,661,265	\$ 2,460,568,258	\$3,952,229,523
TOTAL ANNUAL COST AS % OF ANTICIPATED PAYROLL (Interest Adjusted for Mid-Year Contribution)	3.792%	4.717%	4.367%

# DEVELOPMENT OF UNFUNDED ACTUARIAL LIABILITY

# With Fresh Start and 4-Year Phase-in

		July 1, 2003	
		Political	
	State	Subdivisions	Total
Actuarial Accrued Liability			
- Active Members	\$ 1,759,606,136	\$ 2,345,374,401	\$ 4,104,980,537
- Terminated Members	100,495,190	92,259,333	192,754,523
Total	\$ 1,860,101,326	\$ 2,437,633,734	4,297,735,060
Less: Non-Retired Member Assets	2,078,952,509	2,478,161,332	4,557,113,841
Equals: Actual Unfunded Actuarial Accrued Liability (UAAL)	\$ (218,851,183)	\$ (40,527,598)	(259,378,781)
Unfunded Actuarial Accrued Liability, Prior Year	\$ (51,612,094)	\$ 122,890,273	\$ 71,278,179
Less: Amortization of Unfunded Actuarial Liability, Prior Year	(3,975,918)	9,466,804	5,490,886
Plus: Interest for Full Year at 7.25%	(3,453,623)	\$ 8,223,202	<u>\$ 4,769,579</u>
Subtotal	\$ (51,089,799)	\$ 121,646,671	\$ 70,556,872
Plus: Increase (Decrease) Due to Change in Actuarial Assumptions	(341,666,004)	(437,303,725)	(778,969,728)
Equals: Expected Unfunded Actuarial Accrued Liability (UAAL)	\$ (392,755,803)	\$ (315,657,054)	\$ (708,412,856)
Experience (Gain)/Loss [Actual UAAL-Expected UAAL]	\$ 173,904,620	\$ 275,129,456	\$ 449,034,075

May 21, 2004 (I418)

# CONTRIBUTION BREAKDOWN AND COMPARISON, Continued

# **Prior to Fresh Start and 4-Year Phase-in**

		July 1, 2003	
TOTAL ANNUAL COST	State	Political Subdivisions	Total
Employer Normal Cost Amortization of Unfunded Actuarial Liability Total	\$ 72,501,421 (7,311,638) \$ 65,189,783	\$ 117,229,830 <u>6,820,880</u> \$ 124,050,710	\$ 189,731,251 (490,758) \$ 189,240,493
ANTICIPATED PAYROLL	\$ 1,524,695,265	\$ 2,513,984,529	\$ 4,038,679,794
TOTAL ANNUAL COST AS % OF ANTICIPATED PAYROLL (Interest Adjusted for Mid-Year Contribution)	4.431%	5.113%	4.856%

### DEVELOPMENT OF UNFUNDED ACTUARIAL LIABILITY

# Prior to Fresh Start and 4-Year Phase-in

		July 1, 2003	
		Political	
	State	Subdivisions	Total
Actuarial Accrued Liability			
- Active Members	\$ 1,809,823,127	\$ 2,414,910,411	\$ 4,224,733,538
- Terminated Members	98,287,930	96,499,281	194,787,211
Total	\$ 1,908,111,057	\$ 2,511,409,692	\$ 4,419,520,749
Less: Non-Retired Member Assets	2,078,952,509	2,478,161,332	4,557,113,841
Equals: Actual Unfunded Actuarial Accrued Liability (UAAL)	\$ (170,841,452)	\$ 33,248,360	\$ (137,593,092)
Unfunded Actuarial Accrued Liability, Prior Year	\$ 61,989,091	\$ 207,690,784	\$ 269,679,875
Less: Amortization of Unfunded Actuarial Liability, Prior Year	9,600,900	19,388,683	28,989,583
Plus: Interest for Full Year at 7.25%	3,798,144	13,651,902	17,450,046
Plus: Increase (Decrease) Due to Change in Actuarial Assumptions	(345,440,484)	(443,626,407)	(789,066,891)
Equals: Expected Unfunded Actuarial Accrued Liability (UAAL)	\$ (289,254,149)	\$ (241,672,404)	\$ (530,926,553)
Experience (Gain)/Loss [Actual UAAL-Expected UAAL]	\$ 118,412,697	\$ 274,920,764	\$ 393,333,461

### CONTRIBUTION BREAKDOWN AND COMPARISON

# With Fresh Start and 4-Year Phase-in

		July 1, 2002	
TOTAL ANNUAL COST	State	Political Subdivisions	Total
Employer Normal Cost Amortization of Unfunded Actuarial Liability Total	\$ 83,616,958 (3,975,918) \$ 79,641,040	\$ 127,969,004 <u>9,466,804</u> \$ 137,435,808	\$ 211,585,962 5,490,886 \$ 217,076,848
ANTICIPATED PAYROLL	\$ 1,475,076,791	\$ 2,310,165,016	\$ 3,785,241,807
TOTAL ANNUAL COST AS % OF ANTICIPATED PAYROLL (Interest Adjusted for Mid-Year Contribution)	5.6%	6.2%	5.9%

### DEVELOPMENT OF UNFUNDED ACTUARIAL LIABILITY

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

		July 1, 2002	
	State	Political Subdivisions	Total
Actuarial Accrued Liability			
- Active Members	\$ 1,899,604,451	\$ 2,483,743,495	\$ 4,383,347,946
- Terminated Members	110,573,395	103,937,268	214,510,663
Total	\$ 2,010,177,846	\$ 2,587,680,763	\$ 4,597,858,609
Less: Non-Retired Member Assets	2,061,789,940	2,464,790,490	4,526,580,430
Equals: Actual Unfunded Actuarial Accrued Liability (UAAL)	\$ (51,612,094)	\$ 122,890,273	\$ 71,278,179

# CONTRIBUTION BREAKDOWN AND COMPARISON, Continued

# Prior to Fresh Start and 4-Year Phase-in

		July 1, 2002	
TOTAL ANNUAL COST	State	Political Subdivisions	Total
Employer Normal Cost Amortization of Unfunded Actuarial Liability Total	\$ 84,580,744 <u>9,600,900</u> \$ 94,181,644	\$ 129,387,950 <u>19,388,683</u> \$ 148,776,633	\$ 213,968,694
ANTICIPATED PAYROLL	\$ 1,501,201,217	\$ 2,350,559,741	\$ 3,851,760,958
TOTAL ANNUAL COST AS % OF ANTICIPATED PAYROLL (Interest Adjusted for Mid-Year Contribution)	6.5%	6.6%	6.5%

### DEVELOPMENT OF UNFUNDED ACTUARIAL LIABILITY

# Prior to Fresh Start and 4-Year Phase-in

		July 1, 2002	
		Political	
	State	Subdivisions	Total
Actuarial Accrued Liability			
- Active Members	\$ 2,011,340,391	\$ 2,566,901,294	\$ 4,578,241,685
- Terminated Members	112,438,640	105,579,980	218,018,620
Total	\$ 2,123,779,031	\$ 2,672,481,274	\$ 4,796,260,305
Less: Non-Retired Member Assets	2,061,789,940	2,464,790,490	4,526,580,430
Equals: Actual Unfunded Actuarial Accrued Liability (UAAL)	\$ 61,989,091	\$ 207,690,784	\$ 269,679,875
Unfunded Actuarial Accrued Liability, Prior Year	\$ (167,121,220)	\$ (250,510,886)	\$ (417,632,106)
Less: Amortization of Unfunded Actuarial Liability, Prior Year	(7,234,726)	(14,320,368)	(21,555,094)
Plus: Interest for Full Year at 7.25%	(11,591,771)	(17,123,813)	(28,715,583)
Plus: Increase (Decrease) Due to Change in Actuarial Assumptions	0	0	0
Equals: Expected Unfunded Actuarial Accrued Liability (UAAL)	\$ (171,478,265)	\$ (253,314,331)	\$ (424,792,595)
Experience (Gain)/Loss [Actual UAAL-Expected UAAL]	\$ 233,467,356	\$ 461,005,115	\$ 694,472,471

May 21, 2004 (I418)

### ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS FOR NON-RETIRED MEMBERS

		July 1, 2003 Political	
	State	Subdivisions	Total
Vested Benefits			
- Active Members	\$ 888,532,540	\$ 1,131,963,784	\$ 2,020,496,323
- Terminated Members	98,287,930	96,499,281	194,787,211
Total	\$ 986,820,470	\$ 1,228,463,065	\$ 2,215,283,534
Nonvested Benefits	135,807,575	211,074,941	346,882,516
Total Non-Retired Actuarial Present Value of Accumulated Plan Benefits	\$ 1,122,628,045	\$ 1,439,538,006	\$ 2,562,166,050
Non-Retired Member Assets			
- Market Value	\$ 1,613,189,222	\$ 1,922,960,306	\$ 3,536,149,528
- Actuarial Value	2,078,952,509	2,478,161,332	4,557,113,841
Ratio of Assets to the Present Value of Vested Accumulated Plan Benefits			
- Market Value	1.635	1.565	1.596
- Actuarial Value	2.107	2.017	2.057
Ratio of Assets to the Present Value of Total Accumulated Plan Benefits			
- Market Value	1.437	1.336	1.380
- Actuarial Value	1.852	1.721	1.779

# ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS FOR NON-RETIRED MEMBERS

- Continued -

		July 1, 2002	
	~	Political	
	State	Subdivisions	Total
Vested Benefits			
- Active Members	\$ 943,561,099	\$ 1,166,288,531	\$ 2,109,849,630
- Terminated Members	112,438,640	105,579,980	218,018,620
Total	\$ 1,055,999,739	\$ 1,271,868,511	\$ 2,327,868,250
Nonvested Benefits	126,925,147	192,076,845	319,001,992
Total Non-Retired Actuarial Present Value of Accumulated Plan Benefits	\$ 1,182,924,886	\$ 1,463,945,356	\$ 2,646,870,242
Non-Retired Member Assets			
- Market Value	\$ 1,587,254,806	\$ 1,897,502,009	\$ 3,484,756,815
- Actuarial Value	2,061,789,940	2,464,790,490	4,526,580,430
Ratio of Assets to the Present Value of Vested Accumulated Plan Benefits			
- Market Value	1.503	1.492	1.497
- Actuarial Value	1.952	1.938	1.945
Ratio of Assets to the Present Value of Total Accumulated Plan Benefits			
- Market Value	1.342	1.296	1.317
- Actuarial Value	1.743	1.684	1.710

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

Actuarial I	Actuarial Present Value of Accumulated Plan Benefits, July 1, 2002					
Plus:	Increase Due to Additional Benefits Accumulated	255,528,536				
Less:	Transfers to Retired and Disabled Status	330,069,717				
Plus:	Increase Due to Decrease in the Discount Period (@7.25%)	210,423,911				
Plus:	Increase Due to Change in Plan Provisions	0				
Plus:	Increase (Decrease) Due to Change in Actuarial Assumptions	(407,790,814)				
Plus:	Actuarial Experience (Gain)/Loss and other Miscellaneous Items	187,203,892				
Equals	: Actuarial Present Value of Accumulated Plan Benefits, July 1, 2003	\$ 2,562,166,050				

# STATEMENT OF INCOME

July 1, 2002 - June 30, 2003

			<u> </u>	Market Value
(1)	Net Value of Assets Available for Benefits, July 1, 2002		\$	7,953,029,890
(2)	Receipts			
	Employer Contributions:			
	State	\$ 80,795,703		
	Political Subdivisions	132,574,848		213,370,551
	Employee Contributions:			
	State	\$ 48,269,714		
	Political Subdivisions	80,557,891		128,827,605
	Investment Income and Dividends Net of Fees			339,257,704
	Security Lending Income Net of Fees			1,711,855
	Miscellaneous Income			497,637
	Total Receipts		\$	683,665,352
(3)	Disbursements			
	Benefits Paid During the Year		\$	322,750,816
	Refund of Contributions and Interest		Ŧ	29,636,787
	Administrative Expenses			9,246,962
	Net Transfers and Miscellaneous Disbursements			2,072,984
	Total Disbursements		\$	363,707,549
(4)	Net Value of Assets Available for Benefits, June 30, 2003 $(1) + (2) - (3)$		\$	8,272,987,693

# DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

		July 1, 2002		July 1, 2003
Actuarial Value, Prior June 30	\$	8,723,303,892	\$	8,994,853,508
Receipts				
Employer Contributions Made During the Year Employee Contributions Made During the Year Miscellaneous Income – Not Investment Related Expected Investment Income (@ 7.25%) - Beginning Value Expected Investment Income (@ 7.25%) - Contributions Miscellaneous Income	_	$119,376,765 \\208,020,151 \\0 \\632,439,532 \\11,868,138 \\1,696,863$	_	213,370,551 128,827,605 1,773,638 652,126,879 12,468,978 0
Total	\$	973,401,449	\$	1,008,567,651
Disbursements				
Benefits Paid During the Year Refund of Contributions and Interest Miscellaneous Expenses – Not Investment Related Expected Investment Expenses (@ 7.25%) - Disbursements Miscellaneous Expenses Total	\$	14,566,912 0 12,359,932 1,253,717	\$	322,750,816 29,636,787 3,846,622 12,913,491 0 369,147,716
Expected Actuarial Value, Current June 30	\$		\$	
Actual Market Value, Current June 30	\$		\$	8,272,987,693
Actuarial Value, Current June 30 [75% of Expected Actuarial Value] + [25% of Actual Market Value]	\$	8,994,853,508	\$	9,293,952,006

### ALLOCATION OF ASSETS

	July 1, 2002	July 1, 2003
Total Assets Available for Benefits		
- Market Value	7,953,029,893	8,272,987,693
- Actuarial Value	8,994,853,508	9,293,952,006
Less: Annuity Savings Account	1,886,124,000	1,971,864,095
Less: Retired and Disabled	2,582,149,078	2,764,974,070
Equals: Total Non-Retired Assets		
- Market Value	3,484,756,815	3,536,149,528
- Actuarial Value	4,526,580,430	4,557,113,841
Total Ledger Assets	5,323,362,832	5,534,146,903
- State Share of Total	2,424,712,461	2,524,674,385
- State Percent of Total	45.548510%	45.619938%
- Political Subdivisions Share of Total	2,898,650,371	3,009,472,518
- Political Subdivisions Percent of Total	54.451490%	54.380062%
State Portion (Based on Ledger Share)		
- Market Value	1,587,254,806	1,613,189,222
- Actuarial Value	2,061,789,940	2,078,952,509
Political Subdivisions Portion (Based on Ledger Share)		
- Market Value	1,897,502,009	1,922,960,306
- Actuarial Value	2,464,790,490	2,478,161,332

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 Employees Only)

### Schedule of Funding Progress

	(a)	(b)	(c)		(d)	UAAL
Actuarial	Non-Retired		Unfunded AAL	Funded		(Excess Assets)
Valuation Date	Actuarial Value	Actuarial Accrued	(UAAL)	Ratio	Annual	As % of Payroll
July 1	of Assets	Liability (AAL)	(b) - (a)	(a)/(b)	Covered Payroll	(c)/(d)
1994	\$ 1,176,778,954	\$ 1,106,510,954	\$ (70,268,000)	106.4%	\$ 1,176,139,559	(6.0%)
1995*	1,249,865,324	1,245,330,865	(4,534,459)	100.4%	1,205,288,325	(0.4%)
1996*	1,335,189,108	1,358,810,072	23,621,054	98.3%	1,235,465,458	1.9%
1997	1,447,332,235	1,465,185,818	17,853,583	98.8%	1,283,228,330	1.4%
1998	1,626,450,185	1,491,985,623	(134,464,562)	109.0%	1,229,903,410	(10.9%)
1999	1,828,584,443	1,583,485,563	(245,098,880)	115.5%	1,271,755,859	(19.3%)
2000	1,960,018,018	1,701,091,436	(258,926,582)	115.2%	1,371,496,425	(18.9%)
2001*	2,063,626,964	1,896,505,744	(167,121,220)	108.8%	1,429,768,169	(11.7%)
2002**	2,061,789,940	2,010,177,846	(51,612,094)	102.6%	1,475,076,791	(3.5%)
2003***	2,078,952,509	1,860,101,326	(218,851,183)	111.8%	1,491,661,265	(14.7%)

Schedule of Employer Contributions

Plan Year	Annual Required	Actual	% of
Ending June 30	Contribution (ARC)	Employer Contribution	ARC Contributed
1994	\$ 70,339,943	\$ 79,285,735	112.7%
1995	63,071,496	78,010,087	123.7%
1996	76,305,000	79,482,947	104.2%
1997	79,101,344	81,584,843	103.1%
1998	81,545,985	80,145,933	98.3%
1999	67,481,016	77,821,378	115.3%
2000	61,761,627	84,353,750	136.6%
2001	66,559,482	76,218,663	114.5%
2002	72,332,921	77,420,077	107.0%
2003	79,641,040	80,795,703	101.4%

\*Revised economic and/or noneconomic assumptions due to experience review.

\*\*New database system providing more up-to-date census data. \*\*\*2% Actuarial COLA assumption for 5 years only.

May 21, 2004 (I418)

# REQUIRED PENSION DISCLOSURE UNDER GASB #25 AND #27 (State Employees Only)

# Development of Net Pension Obligation (NPO)

(Dollar Amounts in Thousands)

	(1) Annual	(2) Interest	(3) ARC	(4)	(5) Net Pens	(6) Actual	(7) Change	(8)	(9) NPO
Year	Required	on NPO	Adjust	Amort.	Cost	Employer	in NPO	NPO	@ EOY
Beginning	Contrib	@ 7.25%	(8) / (4)	Factor	(1)+(2)-(3)	Contrib	(5) - (6)	@ BOY	(7) + (8)
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)

### REQUIRED PENSION DISCLOSURE UNDER GASB #25 AND #27 (All PERF)

# Schedule of Funding Progress

Actuarial Valuation Date July 1	(a) Actuarial Value of Assets	(b) Actuarial Accrued Liability (AAL)	(c) Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a)/(b)	(d) Annual Anticipated <u>Payroll</u>	UAAL (Excess Assets) As % of Payroll (c)/(d)
1996	\$ 5,776,620,844	\$ 5,818,934,842	\$ 42,313,998	99.3%	\$2,921,540,553	1.4%
1997	6,304,948,368	6,283,864,768	(21,083,600)	100.3%	3,056,390,214	(0.7%)
1998	6,914,956,789	6,630,150,847	(284,805,942)	104.3%	3,110,162,069	(9.2%)
1999	7,595,266,028	7,075,980,504	(519,285,524)	107.3%	3,250,197,264	(16.0%)
2000	8,267,656,599	7,699,885,278	(567,771,321)	107.4%	3,482,453,418	(16.3%)
2001	8,723,303,892	8,305,671,786	(417,632,106)	105.0%	3,587,079,638	(11.6%)
2002	8,994,853,508	9,066,131,687	71,278,179	99.2%	3,785,241,807	1.9%
2003	9,293,952,006	9,034,573,225	(259,378,781)	102.9%	3,952,229,523	(6.6%)

Schedule of Employer Contributions

Plan Year Ending June 30	Annual Required <u>Contribution (ARC)</u>	Actual Cash Basis Employer Contribution	% of <u>ARC Contributed</u>
1997	\$ 180,005,273	\$ 190,204,731	105.7%
1998	182,891,337	196,456,512	107.4%
1999	167,423,510	203,054,459	121.3%
2000	159,721,746	216,708,616	135.7%
2001	169,373,865	187,758,669	110.9%
2002	175,819,543	208,020,151	118.3%
2003	217,076,848	213,370,551	98.3%

### SUMMARY OF EMPLOYEE DATA

	_	July 1, 2002	J	uly 1, 2003
Active Members				
State		51,541		50,574
Political Subdivisions		91,693		92,508
Total		143,234		143,082
Retired Members and Beneficiaries Receiving Benefits		47,507		49,181
Annual Benefits Payable from Trust	\$	248,797,563	\$	273,821,963
Average Annual Benefit	\$	5,237	\$	5,568
Disabled Members Receiving Benefits		3,585		3,775
Annual Benefits Payable from Trust	\$	14,212,424	\$	15,845,234
Average Annual Benefit	\$	3,964	\$	4,197
Terminated Members Entitled to Future Benefits				
<u>STATE</u>		5,618		6,003
Deferred Annual Benefits*	\$	30,291,386	\$	22,570,666
Average Annual Benefits*	\$	5,392	\$	3,760
POLITICAL SUBDIVISIONS		5,954		5,894
Deferred Annual Benefits*	\$	22,146,218	\$	18,733,704
Average Annual Benefits*	\$	3,720	\$	3,178

\*July 1, 2002 amounts weighted with early retirement rates

# May 21, 2004 (I418)

# SCHEDULED AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

		STATE PORTION		
Date Base Established	Reason	Years Remaining at 7-1-2003	Amortization Amount	Balance at 7/1/2003
7/1/2002	Fresh Start	29	\$ (3,975,918)	\$ (51,089,799)
7/1/2003	Experience Loss	30	(13,396,675)	173,904,620
7/1/2003	Assumption Changes	30	(26,320,107)	(341,666,004)
Total			\$ (16,899,350)	\$ (218,851,183)

### SCHEDULED AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY -Continued-

		POLITICAL SUBDIVISION PORTION		
Date Base Established	Reason	Years Remaining at 7-1-2003	Amortization Amount	Balance at 7/1/2003
7/1/2002	Fresh Start	29	\$ 9,466,804	\$121,646,671
//1/2002	Flesh Stalt	29	φ 9,400,604	\$121,040,071
7/1/2003	Experience Loss	30	21,194,490	275,129,456
7/1/2003	Assumption Changes	30	(33,687,522)	(437,303,725)
Total			\$ (3,026,228)	\$ (40,527,598)

# TEN YEAR HISTORY OF CONTRIBUTION RATES

Valuation Date	State	Political Subdivisions	<u>Total</u>
July 1, 1993	6.2%	6.0%	6.1%
July 1, 1994	5.6%	5.7%	5.6%
July 1, 1995*	6.3%	6.0%	6.1%
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%

\* Plan changes and/or changes in actuarial assumptions

# TEN YEAR HISTORICAL INVESTMENT EXPERIENCE

	Estimated Annual Rate of Investment Return		
Year Ending June 30	Actuarial Basis	<u>Market Basis</u>	Actuarial Assumed <u>Interest Rate</u>
1993	9.69%	1.27%	7.50%
1994	9.32%	0.91%	7.50%
1995	8.61%	10.52%	7.00%
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%

### TEN YEAR HISTORICAL MEMBER INFORMATION

### Active Member Statistics

Year Ending June 30	Number	Total Anticipated <u>Annual Payroll</u>	Average <u>Annual Pay</u>	Percentage Increase In Average Pay
1994	138,788	\$2,736,533,511	\$19,717	2.14%
1995	139,931	2,833,328,063	20,248	2.69%
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%

### Non-Retired Inactive Vested Member Statistics

Year Ending June 30	<u>Number</u>	Average Annual Benefit*
1994	5,300	\$ 3,056
1995	5,871	3,011
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

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

# TEN YEAR HISTORICAL MEMBER INFORMATION -Continued-

### **Retired Member and Beneficiary Statistics**

Year Ending June 30	Number	Annual Benefit*	Average Annual Benefit*
1994	38,024	\$140,249,468	\$ 3,688
1995	39,610	152,231,035	3,843
1996	40,819	163,455,987	4,004
1997	42,050	176,509,450	4,198
1998	43,517	193,350,012	4,443
1999	44,594	203,097,160	4,554
2000	45,768	216,615,494	4,733
2001	47,203	230,791,087	4,889
2002	47,507	248,797,563	5,237
2003	49,181	273,821,963	5,568

### **Disabled Member Statistics**

1993	2,518	\$ 7,189,100	\$ 2,855
1994	2,666	7,843,643	2,942
1995	2,803	8,666,154	3,092
1996	2,966	9,516,383	3,208
1997	3,101	10,363,939	3,342
1998	3,257	11,433,222	3,510
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

\*Includes employee annuities

May 21, 2004 (I418)

## TEN YEAR HISTORICAL FUNDING INFORMATION

# Portion Of Actuarial Liability Provided for by Assets

# (In Thousands of Dollars)

Year Ending June 30	Accumulated Employee Contributions	Retired and Disabled	Non-Retired Member <u>Actuarial Liability</u>	Net Assets Available for Benefits, Actuarial Value
1994	\$ 966,872	\$ 1,342,286	\$ 2,402,380	\$ 4,835,817
	100%	100%	100%	
1995	1,046,516	1,561,103	2,685,974	5,312,016
	100%	100%	100%	
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%	

### 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 Employee <u>Contributions</u>	Retired and Disabled	Non-Retired Accumulated <u>Vested Benefits</u>	Non-Retired Total Accumulated Benefits	Net Assets Available for Benefits, Actuarial Value
1994	\$ 966,872	\$ 1,342,286	\$ 841,089	\$1,094,104	\$4,835,817
	100%	100%	100%	100%	
1995	1,046,516	1,658,027	1,289,703	1,604,165	5,312,016
	100%	100%	100%	100%	
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%	

#### ACTUARIAL METHODS

#### ACTUARIAL COST METHOD

Entry Age Normal Cost

ASSET VALUATION METHOD

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 40-year period (30-year period is being phased in commencing July 1, 1998). 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	7.25% net of administrative expenses
Future Salary Increases	Based on PERF experience 1995-2000.
Cost of Living Increases	An increase of 2.0% (compounded) is assumed to be applied to the pension benefit each year following retirement for 5 years following the valuation date. No increase is assumed to be applied to the PERF annuity benefit.
Mortality	UP-1994. Pre-retirement mortality based on PERF experience 1995-2000.
Disability	Based on PERF experience 1995-2000.
Termination	Select and ultimate tables based on PERF experience 1995-2000. Separate tables are used for state employees and political subdivision employees.
Retirement	Based on PERF experience 1995-2000.
Spouse's Benefit	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.
Administrative Expense	Netted against investment earnings

# 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:	
Normal Retirement	<ul> <li>Earliest of:</li> <li>(1) Age 65 with 10 years of creditable service;</li> <li>(2) Age 60 with 15 years of creditable service;</li> <li>(3) Sum of age and creditable service equal to 85 (but not earlier than age 55).</li> </ul>
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 federal Civil Service disability benefits.
Termination	10 years of creditable service and election not to take lump sum payment of employee account balance with interest.
Pre-Retirement Death	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.

### SUMMARY OF MAJOR PLAN PROVISIONS, Continued

#### AMOUNT OF BENEFITS:

Normal Retirement	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.
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 $1/10\%$ 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.
Late Retirement	The late retirement benefit is calculated in the same manner as the normal retirement benefit. Creditable service and earnings earned after normal retirement is included in the computation.
Disability Retirement	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.
Termination	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.

### SUMMARY OF MAJOR PLAN PROVISIONS, Continued

# AMOUNT OF BENEFITS:

Pre-Retirement Death	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.
Employee Contributions	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.