### Ohio Public Employees Retirement System

277 East Town Street Columbus, Ohio 43215-4642 1-800-222-PERS (7377) www.opers.org

August 31, 2009

Mr. Aristotle Hutras, Director Ohio Retirement Study Council 88 East Broad Street, Suite 1175 Columbus, OH 43215

Dear Mr. Hutras:

Enclosed is the 2008 Annual Actuarial Valuation of Defined Benefit Allowances Traditional and Combined Plans of the Ohio Public Employees Retirement System (OPERS) as required by Section 145.22 of the Ohio Revised Code. The purpose of the valuation is to measure the System's funding progress in accordance with previously established contribution rates and OPERS funding objectives.

The actuarial valuation concludes that the Ohio Public Employees Retirement System continues to be in sound financial condition based on the current contribution allocation between pension and retiree health care benefits and other valuation assumptions. The valuation incorporates the 2008 investment loss, as the funded ratio for the System decreased from 96.3% in 2007 to 75.3% in 2008. Correspondingly, the amortization period for the unfunded actuarial accrued pension liabilities increased from 14 years at the end of 2007 to 30 years at the end of 2008. This 30-year amortization period is within the 30-year amortization period required by Section 145.221 of the Ohio Revised Code.

As you are aware, the investment market performance in 2008 was poor, resulting in unprecedented low returns. OPERS' investment return for valuation purposes was a loss of 27.9% or \$24.6 billion. It is significant to note that because of OPERS' conservative actuarial assumptions, OPERS has recognized 76% of the total loss in the 2008 valuation report. OPERS uses a 12% market corridor as one of the actuarial assumptions. This means that regardless of the normal smoothing of gains and losses, the resulting actuarial or funding value cannot differ from the market value by more than 12%. Thus, of the \$24.6 billion loss in 2008, the current valuation report recognizes \$18.7 billion of the loss and defers only \$5.9 billion.

Thus, OPERS was able to achieve a 75.3% funding level despite conservative valuation assumptions. To put this in perspective, if OPERS did not use a market corridor just as many systems do not, OPERS would have been 90% funded. If OPERS used a 20% market corridor,

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which is common for those systems that do use a market corridor, OPERS would have been 81% funded.

While past market performance is not an indicator of current or future market performance, it is worth noting that OPERS experienced some of its strongest investment performance in the years since the last market downturn of 2000-2002. Specifically, OPERS total return on pension investments for 2007 was 8.53%, 15.10% for 2006, 9.30% for 2005, 12.50% for 2004, and 25.40% for 2003. Again, while not an indicator of current or future performance, historically down markets have lasted for a period of greater than one year and have often been followed by periods of high investment results. OPERS' goal is meeting the investment return goal over the long-term and we have. Periods of slow or even negative investment returns are to be expected. In response to these challenges, the OPERS Board has been evaluating and recommending changes to the plan design that if approved in legislation, will continue to reduce the plan liability and improve funding. These plan design changes are being evaluated in a thorough and deliberate manner as to allow the investment market sufficient time to recover.

The report evaluates the System's funding status for the defined benefit components of OPERS' pension plans. In total, OPERS has three pension plans ~ the Traditional Pension Plan, which is a defined benefit plan; the Member-Directed Plan, which is a defined contribution plan; and the Combined Plan, which has a defined benefit component for the employer contributions and a defined contribution component for the member contributions. The format of this valuation provides summary information for the *total* valuation results associated with the defined benefit allowances for both the Traditional and Combined Plans. Separate summaries are provided for the valuation results of the Traditional Plan and for the defined benefit component of the Combined Plan.

It is important to note that this valuation focuses only on the defined benefit pension plan components and excludes the results from the defined contribution components of the various plans and it excludes the health care assets. As a reminder, during 2004 OPERS segregated the assets associated with the funding of health care and established separate asset allocation and investment policies relative to those assets. Thus, to put this into perspective financially, the defined benefit components represent approximately \$49.4 billion, or 83.4% of OPERS' \$59.2 billion in total assets. The remaining System assets are comprised of the health care fund (approximately \$9.6 billion) and the defined contribution assets (approximately \$0.2 billion). Additionally, the report provides detailed information for the divisional components.

As noted in the report and in previous correspondence to you, OPERS has substantially completed a multi-year phase-in of member and employer contribution rate increases up to the statutory maximum, which began January 1, 2006. The only remaining contribution rate increase is the employer rate for the law enforcement division (which includes both law enforcement and public safety), which will increase from the current rate of 17.63% to the statutory maximum of 18.1% over the remaining two years of the six-year phase-in period.

Additionally, OPERS is currently in the implementation phase of SB 267 and is increasing the Public Safety member rate from the current 10.0% to 12.0% (four-year phase in period) and Law Enforcement member rate from the current 10.1% to 13.0% (five-year phase in period).

While the statute requires OPERS' funding level not exceed 30 years on a total basis (the cumulative of all divisions), historically the Public Safety and Law Enforcement divisions have

not only exceeded the 30-year requirement, but have had insufficient cash flow to cover the liability, thus resulting in amortization periods of infinity. As a result of a combination of contribution rate increases from SB 267 and adjustments to the member population, the Public Safety and Law Enforcement divisions' funding years in the 2008 report are 26 years and 32 years respectively.

In summary, in spite of a very difficult national economy during 2008, the OPERS Board of Trustees has made the decisions needed and proactively managed the fund to stay within the required 30-year funding level. The Board continues to make decisions that address the challenges ahead.

If you have any questions or need any additional information, please let me know.

Sincerely.

Chris DeRose Executive Director

### Enclosure

cc: Rep. Todd Book, Chair - ORSC

Sen. Kirk Schuring, Vice Chair - ORSC

Sen. Kevin Coughlin, Chair - Senate Health, Human Services and Aging

Rep. Joseph Koziura, Chair - House Financial Institutions, Real Estate, and Securities

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August 31, 2009

The Retirement Board Ohio Public Employees Retirement System Columbus, Ohio

### Ladies and Gentlemen:

The results of the *December 31, 2008 annual actuarial valuation of defined benefit allowances* of the Ohio Public Employees Retirement System, based upon Chapter 145 of the Code as amended, are presented in this report. The gain/loss analysis of experience by division, the annual actuarial valuation of retiree health and Medicare benefits, projections of defined benefit allowances and projections of retiree health and Medicare benefits are covered in separate reports. The purposes of the valuation are as follows:

- Measure the financial position of OPERS,
- Assist the board in establishing employer and employee contribution rates necessary to fund the pension defined benefits provided by OPERS,
- Determine the number of years required to amortize the unfunded actuarial accrued liabilities based upon established contribution rates,
- Provide actuarial reporting and disclosure information for the System's financial report, and analyze the experience of the System over the past year.

The individual member statistical data required for the valuations was furnished by your Executive Director and Staff, together with pertinent data on financial operations. Their cooperation in furnishing these materials is acknowledged with appreciation.

The actuarial assumptions used in the valuations are summarized in Section X of this report. The assumptions are established by the Retirement Board after consulting with the actuary.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, this report is complete and accurate and was made in accordance with standards of practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries. The actuarial assumptions used for the valuation produce results which, individually and in the aggregate, are reasonable.

The signing actuaries are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

Brie BMake

Brian B. Murphy, FSA, MAAA

Mita D. Drazilov, ASA, MAAA Randall J. Dziubek, ASA, MAAA

BBM/MDD:mrb

### SECTION I EXECUTIVE SUMMARY

Section 145.22 of the Revised Code of Ohio (ORC) provides in part as follows:

"(A) The public employees retirement board shall have prepared annually by or under the supervision of an actuary an actuarial valuation of the pension assets, liabilities, and funding requirements of the public employees retirement system as established pursuant to this chapter."

This report presents the results of the December 31, 2008 annual actuarial valuation of the Ohio Public Employees Retirement System (OPERS) Defined Benefit Allowances of the Traditional and Combined Plans. In conjunction with Chapter 145 of the ORC, the purposes of performing the annual valuation are as follows:

- Measure the financial position of OPERS,
- Assist the Board in establishing employer and employee contribution rates necessary to fund the pension defined benefits provided by OPERS,
- Determine the number of years required to amortize the unfunded actuarial accrued liabilities based upon established contribution rates,
- Provide actuarial reporting and disclosure information for the System's financial report, and
- Analyze the experience of the System over the past year.

### The report is presented as follows:

Section I - Executive Summary
Section II - Financial Information

Section III - Benefits and Conditions Evaluated

Section IV - Recommendations for Reserve Transfers

Section V - Active and Inactive Vested Valuation Results for State

Section VI - Active and Inactive Vested Valuation Results for Local Government

Section VII - Active and Inactive Vested Valuation Results for Public Safety

Section VIII - Active and Inactive Vested Valuation Results for Law Enforcement

Section IX - Allowances Being Paid to Retirees and Beneficiaries

Section X - Actuarial Methods and Assumptions

Section XI - Financial Principles

Section XII - Governmental Accounting Standards Board (GASB) Reporting

There have been no material benefit changes since the last valuation. Actuarial assumptions and methods are consistent with the prior actuarial valuation and are based upon an experience study issued October 30, 2006.

A summary of the primary valuation results as of December 31, 2008 is presented on the following page.

	2008					2007		
	General Law							
	<b>G</b>		Total	Public	Law	Total	Grand	Grand
A. De mographic Information	State	Local	General	Safety	Enforcement	Law	Total	Total
0 1								
Active Number Counts     a. Traditional Plan	112,785	228,884	341,669	127	8,173	8,300	349,969	257 7/2
b. Combined Plan	2,140	4,279	541,009 6,419	0	6,175 <u>0</u>	0,500 0	549,909 6,419	357,743 6,333
c. Total	114,925	233,163	348,088	127	8,173	8,300	356,388	364,076
2. Active Payroll	114,723	255,105	5-10,000	127	0,175	0,500	550,500	304,070
a. Traditional Plan	\$ 4,680	\$ 7,412	\$ 12,091	\$ 6	\$ 449	\$ 455	\$ 12,546	\$ 12,348
b. Combined Plan	100	<u>155</u>	255	0	0	0	255	236
c. Total	\$ 4,780	\$ 7,566	\$ 12,346	\$ 6	\$ 449	\$ 455	\$ 12,801	\$ 12,584
3. Retired Number Counts	58,885	106,269	165,154	137	3,725	3,862	169,016	163,511
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4. Deferred / Inactive Number Counts	131,594	233,102	364,696	21	899	920	365,616	331,877
5. Member Directed Active Number Counts	<u>2,472</u>	<u>5,083</u>	<u>7,555</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>7,555</u>	<u>7,192</u>
6. Total Number Counts	307,876	577,617	885,493	285	12,797	13,082	898,575	866,656
B. Defined Benefit Assets					<del>"</del>			
1. Market Value (MV)	\$ 19,541	\$ 27,844	\$ 47,385	\$ 35	\$ 1,968	\$ 2,003	\$ 49,389	\$ 70,044
2. Rate of Return on MV							(27.87)%	8.75%
3. Funding Value (FV)	\$ 21,886	\$ 31,185	\$ 53,071	\$ 39	\$ 2,205	\$ 2,244	\$ 55,315	\$ 67,151
4. Rate of Return on FV							(15.82)%	11.26%
5. Ratio of FV to MV							112.0%	95.9%
C. Defined Benefit Actuarial Results								
1. Normal Cost as a % of Payroll	15.44%	15.14%	15.25%	19.32%	20.03%	20.04%	15.44%	15.43%
2. Actuarial Accrued Liability (AAL)								
a. Active	\$ 13,999	\$ 20,390	\$ 34,389	\$ 18	\$ 1,475	\$ 1,493	\$ 35,882	\$ 34,845
b. Retired	14,398	19,624	34,022	30	1,434	1,464	35,486	32,923
c. Deferred/Inactive	<u>873</u>	<u>1,200</u>	2,073	<u>0</u>	<u>25</u>	<u>25</u>	<u>2,098</u>	1,966
d. Total	\$ 29,270	\$ 41,214	\$ 70,484	\$ 48	\$ 2,934	\$ 2,982	\$ 73,466	\$ 69,734
3. Unfunded AAL (UAAL)	\$ 7,384	\$ 10,029	\$ 17,412	\$ 9	\$ 729	\$ 738	\$ 18,150	\$ 2,582
4. Funded Ratio	74.8 %	75.7 %	75.3 %	81.3 %	75.2 %	75.3 %	75.3 %	96.3 %
D. Amortization Years to Fully Amortize UAAL *	37	26	30	26	32	32	30	14
E. Contribution Rates				CY 201	1			CY 2010
1. Pension Contributions								
a. Employer Normal Cost	5.44%	5.14%	5.25%	8.32%	8.43%	8.45%	5.38%	5.43%
b. Member Contribution Rate	10.00%	10.00%	10.00%	11.00%	11.60%	11.59%	10.06%	10.00%
c. UAAL Contribution Rate	4.56%	4.86%	4.75%	<u>5.78%</u>	<u>5.67%</u>	<u>5.65%</u>	<u>4.77%</u>	1.71%
d. Total	20.00%	20.00%	20.00%	25.10%	25.70%	25.69%	20.21%	17.14%
2. Retiree Health Contribution Rate	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	7.00%
3. Total Employer Contribution Rate	14.00%	14.00%	14.00%	18.10%	18.10%	18.10%	14.15%	14.14%
5. Total Employer Conditional Rate	17.0070	14.0070	14.0070	10.1070	10.1070	10.1070	17.1370	17.1770

<sup>\*</sup> Based on schedule of employer and member contribution rates shown on page III-3. For GASB purposes, amortization years are determined based upon scheduled contribution rate increases through 2011. See page XII-10 for additional

### DECEMBER 31 (\$ IN MILLIONS)

				2008				2007
		General	Total	Public	Law Law	Total	Grand	Grand
	State	Local	General	Safety	Enforcement	Law	Total	Total
A. Demographic Information								
1. Active Number Counts	112,785	228,884	341,669	127	8,173	8,300	349,969	357,743
2. Active Payroll	\$ 4,680	\$ 7,412	\$ 12,091	\$ 6	\$ 449	\$ 455	\$ 12,546	\$ 12,347
3. Retired Number Counts	58,883	106,255	165,138	137	3,725	3,862	169,000	163,505
4. Deferred / Inactive Number Counts	131,376	232,687	364,063	21	899	920	364,983	331,447
5. Total Number Counts	303,044	567,826	870,870	285	12,797	13,082	883,952	852,697
B. Defined Benefit Assets								
<ol> <li>Market Value (MV)</li> <li>Rate of Return on MV</li> </ol>	\$ 19,513	\$ 27,796	\$ 19,513	\$ 35	\$ 1,968	\$ 2,003	\$ 49,313 (27.87)%	\$ 69,960 8.75%
<ul><li>3. Funding Value (FV)</li><li>4. Rate of Return on FV</li></ul>	\$ 21,855	\$ 31,132	\$ 52,986	\$ 39	\$ 2,205	\$ 2,244	55,230 (15.82)%	\$ 67,067 11.26%
5. Ratio of FV to MV							112.0%	95.9%
C. Defined Benefit Actuarial Results								
1. Normal Cost as a % of Payroll	15.34%	15.04%	15.17%	19.32%	20.03%	20.04%	15.33%	15.35%
2. Actuarial Accrued Liability (AAL)  a. Active b. Retired c. Deferred/Inactive d. Total	\$ 13,953 14,398 <u>872</u> \$ 29,224	\$ 20,318 19,624 1,199 \$ 41,141	\$ 34,271 34,022 <u>2,071</u> \$ 70,364	\$ 18 30 <u>0</u> \$ 48	\$ 1,475 1,434 <u>25</u> \$ 2,934	\$ 1,493 1,464 <u>25</u> \$ 2,982	\$ 35,764 35,485 2.097 \$ 73,346	\$ 34,751 32,923 <u>1.965</u> \$ 69,639
3. Unfunded AAL (UAAL)	\$ 7,369	\$ 10,009	\$ 17,378	\$ 9	\$ 729	\$ 738	\$ 18,116	\$ 2,571
4. Funded Ratio	74.8 %	75.7 %	75.3 %	81.3 %	75.2 %	75.3 %	75.3 %	96.3 %
D. Amortization Years to Fully Amortize UAAL *	37	27	30	26	32	32	30	14
E. Contribution Rates				CY 2011				CY 2010
Pension Contributions     a. Employer Normal Cost     b. Member Contribution Rate     c. UAAL Contribution Rate     d. Total	5.34% 10.00% <u>4.66%</u> 20.00%	5.04% 10.00% <u>4.96%</u> 20.00%	5.17% 10.00% <u>4.83%</u> 20.00%	8.32% 11.00% <u>5.78%</u> 25.10%	8.43% 11.60% <u>5.67%</u> 25.70%	8.45% 11.59% <u>5.65%</u> 25.69%	5.27% 10.06% <u>4.88%</u> 20.21%	5.35% 10.00% <u>1.79%</u> 17.14%
2. Retiree Health Contribution Rate	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	7.00%
3. Total Employer Contribution Rate	14.00%	14.00%	14.00%	18.10%	18.10%	18.10%	14.15%	14.14%

<sup>\*</sup> Based on schedule of employer and member contribution rates shown on page III-3. For GASB purposes, amortization years are determined based upon scheduled contribution rate increases through 2011. See page XII-10 for additional explanation.

		2008		2007
	Ger	ne ral		
	State	Local	Grand Total	Grand Total
A. Demographic Information				
1. Active Number Counts	2,140	4,279	6,419	6,333
2. Active Payroll	\$ 100	\$ 155	\$ 255	\$ 236
3. Retired Number Counts	2	10	12	4
4. Deferred / Inactive Number Counts	<u>218</u>	<u>415</u>	<u>633</u>	<u>430</u>
5. Total Number Counts	2,360	4,704	7,064	6,767
B. Defined Benefit Assets				
<ol> <li>Market Value (MV)</li> <li>Rate of Return on MV</li> </ol>	\$ 28	\$ 48	\$ 76 (27.37)%	\$ 84 7.82%
<ul><li>3. Funding Value (FV)</li><li>4. Rate of Return on FV</li></ul>	\$ 31	\$ 54	\$ 85 (17.72)%	\$ 84 7.86%
5. Ratio of FV to MV			112%	100%
C. Defined Benefit Actuarial Results				
1. Normal Cost as a % of Payroll	17.18%	16.88%	16.99%	16.98%
<ul><li>2. Actuarial Accrued Liability (AAL)</li><li>a. Active</li><li>b. Retired</li><li>c. Deferred/Inactive</li><li>d. Total</li></ul>	\$ 46 0 \frac{1}{46}	\$ 72 0 \( \frac{1}{3}	\$ 118 0 \( \frac{1}{20}	\$ 94 0 \frac{1}{5}
3. Unfunded AAL (UAAL)	\$ 15	\$ 20	\$ 35	\$ 11
4. Funded Ratio	67.1 %	73.1 %	70.8 %	88.6 %
D. Contribution Rates		CY 2011		CY 2010
<ol> <li>Total Normal Cost</li> <li>Member Contribution Rate</li> <li>Employer Normal Cost</li> </ol>	17.18% 10.00% 7.18%	16.88% 10.00% 6.88%	16.99% 10.00% 6.99%	16.98% 10.00% 6.98%
4. Other Contributions #	6.82%	7.12%	7.01%	7.02%
5. Total Employer Contribution Rate	14.00%	14.00%	14.00%	14.00%

<sup>\*</sup> Based on schedule of employer and member contribution rates shown on page III-3.

# Other contributions includes amortisation narrows for the passion IIAAI mitigating contributions and contributions to

		2008			
		General			
	State	Local	Total General	Grand Total	Grand Total
A. Demographic Information					
1. Active Number Counts	2,472	5,083	7,555	7,555	7,192
2. Retired Number Counts	0	4	4	4	2
3. Deferred / Inactive Number Counts	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(</u>
4. Total Number Counts	2,472	5,087	7,559	7,559	7,196
B. Defined Benefit Assets					
Market Value (MV)     Rate of Return on MV	\$ 0	\$132,121	\$132,121	\$132,121 (34.18)%	\$27,470
<ul><li>3. Funding Value (FV)</li><li>4. Rate of Return on FV</li></ul>	\$ 0	\$147,976	\$147,976	\$147,976 (17.71)%	\$27,470
5. Ratio of FV to MV				112.0%	
C. Defined Benefit Actuarial Results			·		
1. Normal Cost as a % of Payroll					
Actuarial Accrued Liability (AAL)     a. Active     b. Retired     c. Deferred/Inactive     d. Total	\$ 0 0 0	\$ 0 166,354 0 166,354	\$ 0 166,354 0 166,354	\$ 0 166,354 0 166,354	\$ 27,18- 27,18-
3. Unfunded AAL (UAAL)	\$ 0	\$ 18,378	\$ 18,378	\$ 18,378	\$ 28
4. Funded Ratio				89.0 %	

The December 31, 2008 actuarial valuations of members indicate the following about the portion of employer contribution rates allocated to financing retirement allowances:

- The employer rates are sufficient to fully fund the cost of benefit commitments being made to members for service currently being rendered.
- After satisfying current cost requirements, the remaining portion of the employer rates
  provides sufficient funds to amortize unfunded actuarial accrued liabilities over a period of
  30 years for the System in total.

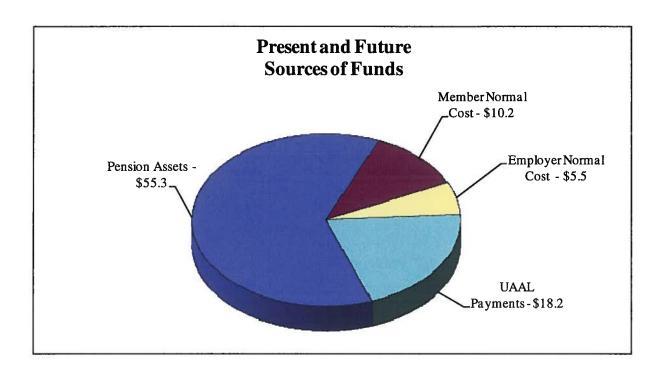
Experience. The computed amortization period, taking into account all scheduled increases in contribution rates is 30 years, compared with the 14 year period that had been reported in the December 31, 2007 valuation. This increase in amortization years was primarily due to unfavorable recognized investment experience for the year ended December 31, 2008. Measured on a market value basis, investment return was (27.87)%. This figure is based upon an actuarial calculation and may not agree with figures reported elsewhere. The funding value of assets currently exceeds the market value by \$5.9 billion. If market value of assets were the basis for the valuation, the funded percent would have been 67% and the amortization period would have been 56 years. Information concerning 2008 experience including other sources of gains and losses is presented on pages I-14 through I-16.

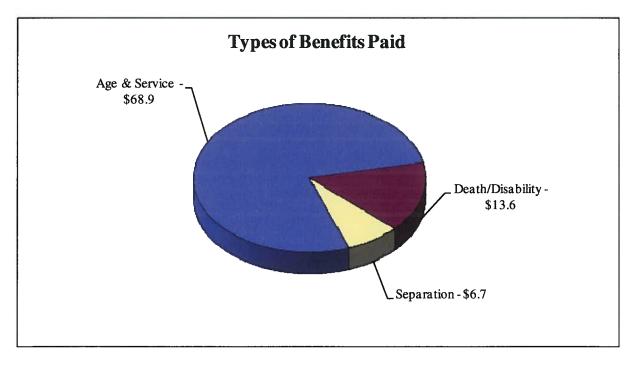
Asset Reserves. As of December 31, 2008, asset reserves maintained by division (State, Local Government, Public Safety, and Law Enforcement) were adjusted based on an analysis of historical information by OPERS staff. The end result of this analysis was a reduction in reserves attributable to the State division and an increase in reserves attributable to the Local Government, Public Safety and Law Enforcement divisions. These changes had no effect on valuation results for the System as a whole. However, certain division valuation results were affected by these changes. The estimated amounts shifted between the divisions were as follows (\$ in millions):

<b>State</b>	Local	<b>Public Safety</b>	Law Enforcement
(\$588.2)	\$346.7	\$94.9	\$146.6

Conclusion. Based on the results of the December 31, 2008 regular annual actuarial valuation, it is our opinion that the Ohio Public Employees Retirement System continues to operate in accordance with actuarial principles of level percent of payroll financing. However, the amortization period is likely to increase in the near future in the absence of significant gains in 2009.

### (DOLLAR AMOUNTS IN BILLIONS)

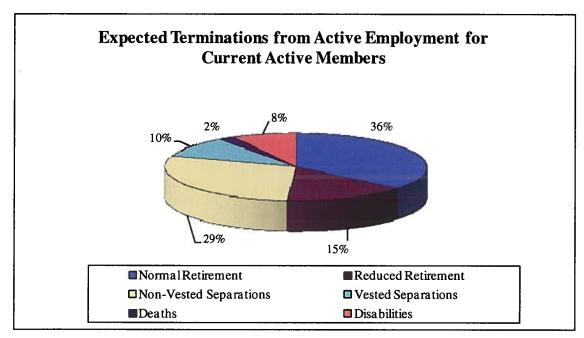


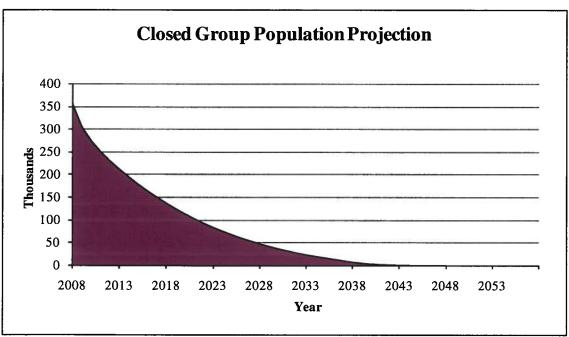


<sup>\*</sup> Present value of future benefits – all divisions combined.

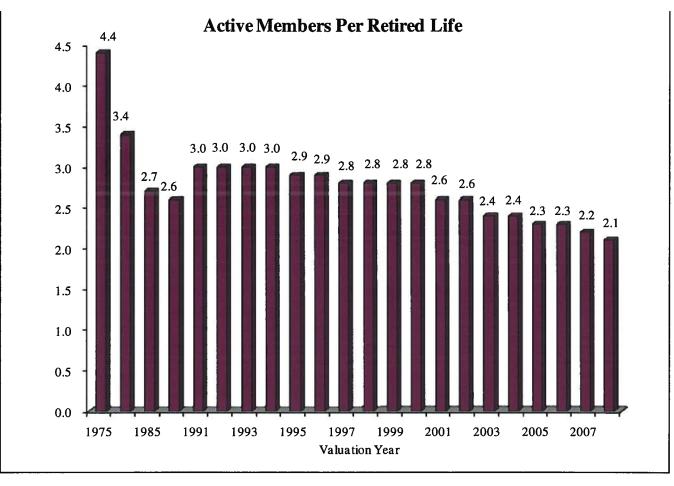
		A	4		Annual Payroll		
77 1 d G	D 21	Active	Attained	Accrued _			
Valuation Group	Dec. 31	Members	Age	Service Yrs.	Average	Increase	
STATE	1975	83,220	40.6 yrs.	6.5 yrs.	\$ 9,441	6.4 %	@
	1980	92,872	39.4	7.3	13,934	8.1 %	@
	1985	89,256	39.2	8.4	18,677	7.4 %	@
	1990	98,939	40.7	8.1	25,281	6.2 %	@
	1995	114,596	40.4	8.8	27,962	2.0 %	@
	2000	113,099	41.6	9.7	34,201	4.1 %	@
	2005	114,620	42.0	10.1	37,858	0.2 %	
	2006	115,930	42.0	10.1	39,005	3.0 %	
	2007	118,466	41.7	9.9	39,695	1.8 %	
	2008	114,925	42.0	10.1	41,590	4.8 %	
LOCALGOVT	1975	149,557	40.8 yrs.	6.1 yrs.	\$ 8,771	4.3 %	@
	1980	160,797	40.7	7.4	13,035	8.2 %	@
	1985	158,285	40.1	8.3	15,983	6.2 %	@
	1990	173,220	41.5	7.9	19,506	4.1 %	@
	1995	223,431	41.2	7.6	20,384	0.9 %	@
	2000	245,831	41.8	8.1	24,401	3.7 %	@
	2005	236,073	43.3	9.2	29,933	2.8 %	
	2006	237,981	43.4	9.2	30,399	1.6 %	
	2007	237,225	43.6	9.3	31,354	3.1 %	
	2008	233,163	44.0	9.5	32,451	3.5 %	
LAW *	1975	2,111	35.0 yrs.	4.9 yrs.	\$ 10,467	-	
	1980	3,019	36.1	6.8	16,846	10.0 %	@
	1985	4,207	36.5	8.4	20,103	5.5 %	@
	1990	5,804	38.6	9.9	26,936	6.0 %	@
	1995	6,605	39.3	11.1	32,441	3.2 %	@
	2000	8,045	39.3	11.7	40,387	4.5 %	@
	2005	8,111	39.9	12.6	49,472	3.0 %	
	2006	8,219	40.0	12.7	50,983	3.1 %	
	2007	8,385	40.2	12.8	52,816	3.6 %	
	2008	8,300	40.5	13.1	54,809	3.8 %	
TOTAL	2003	353,584	42.5 yrs.	9.4 yrs.	\$ 31,577		
	2004	355,287	42.7	9.5	32,240	2.1 %	
	2005	358,804	42.8	9.5	32,906	2.1 %	
	2006	362,130	42.9	9.5	33,621	2.2 %	
	2007	364,076	42.9	9.6	34,562	2.8 %	
	2008	356,388	43.2	9.8	35,919	3.9 %	
	4000	220,200	73.4	2.0	JJ,717	3.7 70	

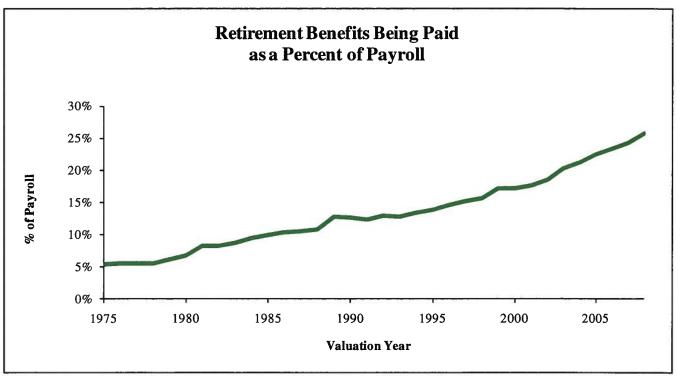
 <sup>5-</sup>year annual compound rate.
 Beginning with the December 31, 2005 valuation report, valuation results for the Law division are shown separately



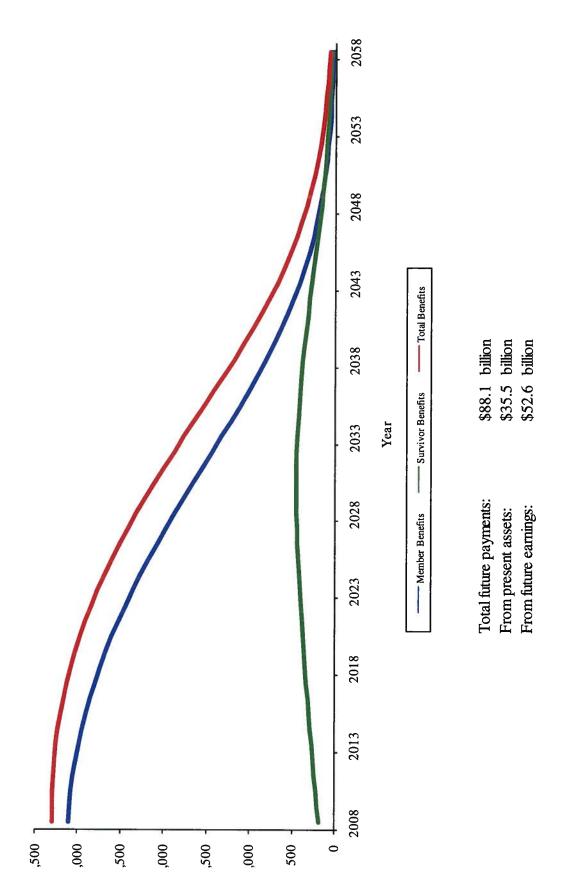


The charts show the expected future development of the present population in simplified terms. The defined benefit portion of the Retirement System presently covers 356,388 active members. Eventually, 29% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for a monthly benefit. 61% of the present population is expected to receive monthly retirement benefits either by retiring directly from active service, or by separating from service without withdrawing contributions. 10% of the present population is expected to become eligible for death-in-service or disability benefits. Within 8 years, over half of the covered membership is expected to consist of new hires.





## PROJECTED FUTURE BENEFIT PAYMENTS ON BEHALF OF PRESENT RETIRED LIVES



### DECEMBER 31, 2008 BY ATTAINED AGE AND YEARS OF SERVICE

Attained	Attained Years of Service To Valuation Date							
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
15-19	13,095							13,09
Tot. Pay	\$81,929,731							\$81,929,7
Avg. Pay	\$6,257							\$6,2.
20-24	29,570	438						30,00
Tot. Pay	\$366,690,613	\$9,355,210						\$376,045,8
Avg. Pay	\$12,401	\$21,359						\$12,5
25-29	22,604	5,113	252	-				27,96
Tot. Pay	\$579,315,065	\$185,242,899	\$8,937,228					\$773,495,1
Avg. Pay	\$25,629	\$36,230	\$35,465	ļ				\$27,6.
30-34	15,293	10,382	3,471	151				29,29
Tot. Pay	\$443,410,853	\$435,246,113	\$154,574,486	\$6,611,341				\$1,039,842,7
Avg. Pay	\$28,994	\$41,923	\$44,533	\$43,784				\$35,4
Avgray	Ψ20,774	Ψ41,725	Ψ11,555	\$13,701				φυυ,τ
35-39	13,660	9,721	9,355	3,148	131			36,01
Tot. Pay	\$393,761,258	\$410,599,832	\$450,781,985	\$157,386,126	\$6,062,196			\$1,418,591,3
Avg. Pay	\$28,826	\$42,238	\$48,186	\$49,996	\$46,276			\$39,3
40-44	12,259	8,522	8,072	7,944	3,472	146		40,41
Tot. Pay	\$342,516,155	\$346,921,373	\$387,133,124	\$423,489,579	\$184,334,870	\$7,328,262		\$1,691,723,3
Avg. Pay	\$27,940	\$40,709	\$47,960	\$53,309	\$53,092	\$50,194		\$41,8.
	1							
45-49	12,011	8,843	8,105	7,584	8,246	4,348	261	49,39
Tot. Pay	\$321,292,823	\$342,675,280	\$364,068,877	\$391,345,150	\$462,058,676	\$238,723,063	\$14,297,200	\$2,134,461,0
Avg. Pay	\$26,750	\$38,751	\$44,919	\$51,601	\$56,034	\$54,904	\$54,779	\$43,20
50-54	10,689	8,423	8,043	7,299	7,083	7,151	2,524	51,21
Tot. Pay	\$274,940,412	\$309,977,625	\$344,550,747	\$354,569,603	\$383,225,867	\$414,353,935	\$146,386,269	\$2,228,004,4
Avg. Pay	\$25,722	\$36,801	\$42,839	\$48,578	\$54,105	\$57,943	\$57,998	\$43,5
55-59	7,860	6,559	6,068	6,506	5,782	4,590	3,182	40,54
Tot. Pay	\$191,042,092	\$237,843,473	\$252,788,901	\$303,652,761	\$297,908,876	\$262,220,950	\$204,137,211	\$1,749,594,2
Avg. Pay	\$24,306	\$36,262	\$41,659	\$46,673	\$51,523	\$57,129	\$64,154	\$43,1.
				•				
60-64	4,842	4,079	3,518	3,693	3,493	2,386	1,668	23,67
Tot. Pay	\$93,260,616	\$137,441,310	\$137,673,273	\$166,430,944	\$170,874,844	\$128,802,372	\$105,427,728	\$939,911,0
Avg. Pay	\$19,261	\$33,695	\$39,134	\$45,067	\$48,919	\$53,983	\$63,206	\$39,69
65-69	2,681	1,557	1,199	1,039	917	650	543	8,58
Tot. Pay	\$30,634,694	\$39,352,172	\$40,734,296	\$41,838,281	\$42,565,170	\$33,122,694	\$31,363,174	\$259,610,4
Avg. Pay	\$11,427	\$25,274	\$33,974	\$40,268	\$46,418	\$50,958	\$57,759	\$30,2
70.8.0	0.445	1 200	700	522	204	201	244	
70 & Over Tot. Pay	2,445	1,390 \$16,568,655	780	533 \$14,159,061	384 \$13,998,539	291	344 \$17,399,857	6,16
, ,	\$18,571,482 \$7,506	\$10,308,633	\$14,854,110 \$19,044	\$14,139,061		\$12,301,164		\$107,852,8
Avg. Pay	\$7,596				\$36,455	\$42,272	\$50,581	\$17,4
Totals	147,009	65,027	48,863	37,897	29,508	19,562	8,522	356,3
Tot. Pay	\$3,137,365,794	\$2,471,223,942	\$2,156,097,027	\$1,859,482,846	\$1,561,029,038	\$1,096,852,440	\$519,011,439	\$12,801,062,53
Avg. Pay	\$21,341	\$38,003	\$44,125	\$49,067	\$52,902	\$56,071	\$60,903	\$35,9

### BY GENDER AND YEARS OF SERVICE

Service	Ac	tive Member Co	unt	Active Mem	ber Pays
Years	Males	Females	Total	Total	Average
0	27,165	32,324	59,489	\$ 747,117,152	\$12,559
ľ	14,378	17,238	31,616	697,322,091	22,056
2	10,193	12,534	22,727	634,773,838	27,930
3	8,178	10,021	18,199	555,527,736	30,525
4	6,687	8,291	14,978	502,624,977	33,558
5	5,964	6,983	12,947	450,816,405	34,820
6	5,535	6,765	12,300	455,803,273	37,057
7	5,903	7,111	13,014	483,831,662	37,178
8	6,079	7,964	14,043	556,207,142	39,607
9	5,783	6,940	12,723	524,565,460	41,230
10	5,130	6,193	11,323	481,894,468	42,559
11	4,671	5,461	10,132	433,451,461	42,780
12	4,429	5,161	9,590	426,128,287	44,435
13	4,097	4,628	8,725	392,319,762	44,965
14	4,379	4,714	9,093	422,303,049	46,443
15 & Up	46,131	49,358	95,489	5,036,375,763	52,743
Totals	164,702	191,686	356,388	\$12,801,062,526	\$35,919

	2008	3	200	7
		% of Accrued		% of Accrued
	Total \$	Liabilities	Total \$	Liabilities
Beginning of Year				
1. Total Accrued Liabilities	\$69,733.55	100.0 %	\$66,160.73	100.0 %
1. Total Accided Liabilities	φος, 155.55	100.0 %	ψου,1ου.75	100.0 70
2. Valuation Assets	67,151.34	96.3 %	61,295.59	92.6 %
3. Unfunded Actuarial Accrued				!
Liabilities	\$ 2,582.21	3.7 %	\$ 4,865.14	7.4 %
Experience Gains(Losses)				
4. Gains (losses) in economic				
risk areas				
a. Pay increases	\$ 220.00	0.3 %	\$ 202.61	0.3 %
b. Investment return	(15,837.36)	(22.7)%	1,979.23	3.0 %
c. Total	(15,617.36)	(22.4)%	2,181.84	3.3 %
5. Gains (losses) from				
decrement experience				:
a. Service retirement	10.03	0.0 %	(30.60)	0.0 %
b. Disability retirement	41.02	0.1 %	37.79	0.1 %
c. Death-in-service	31.71	0.0 %	29.70	0.0 %
d. Other separations	(25.88)	0.0 %	(127.94)	(0.2)%
e. Total	56.88	0.1 %	(91.05)	(0.1)%
C Tradal amountains a subset				
6. Total experience gains (losses): (4c) + (5e)	<b>\$</b> (15,560.48)	(22.3)%	\$ 2,090.79	3.2 %
(100000)1 (10) 1 (10)	¥ (20)200010)	(22.0) //	4 -,020.7	
End of Year				
7. Total Accrued Liabilities	\$73,465.65	100.0 %	\$69,733.55	100.0 %
8. Valuation Assets	55,315.17	75.3 %	67,151.34	96.3 %
9. Unfunded Actuarial Accrued				
Liabilities	\$ 18,150.48	24.7 %	\$ 2,582.21	3.7 %

S (0

	2008	8	200′	7
		% of Accrued		% of Accrued
	Total \$	Liabilities	Total \$	Liabilities
Beginning of Year				
1. Total Accrued Liabilities	\$69,638.54	100.0 %	\$66,088.52	100.0 %
	,		,	
2. Valuation Assets	67,067.18	96.3 %	61,234.91	92.7 %
3. Unfunded Actuarial Accrued				
Liabilities	\$ 2,571.36	3.7 %	\$ 4,853.61	7.3 %
Experience Gains (Losses)				
4. Gains (losses) in economic				
risk areas	ф <b>220.21</b>	0.2 %	Ф 202.20	0.2 %
a. Pay increases	\$ 220.21	0.3 %	\$ 202.39	0.3 %
b. Investment return	(15,813.52)	(22.7)%	1,979.33 2,181.72	3.0 %
c. Total	(15,593.31)	(22.4)%	2,181.72	3.3 %
5. Gains (losses) from				
decrement experience				
a. Service retirement	10.09	0.0 %	(30.57)	0.0 %
b. Disability retirement	39.08	0.1 %	36.67	0.1 %
c. Death-in-service	31.65	0.0 %	29.48	0.0 %
d. Other separations	(27.86)	0.0 %	(129.01)	(0.2)%
e. Total	52.96	0.1 %	(93.43)	(0.1)%
6. Total experience gains				
(losses): (4c) + (5e)	<b>\$</b> (15,540.35)		\$ 2,088.29	
End of Year				
7. Total Accrued Liabilities	\$73,345.90	100.0 %	\$69,638.54	100.0 %
8. Valuation Assets	55,230.35	75.3 %	67,067.18	96.3 %
9. Unfunded Actuarial Accrued				
Liabilities	\$ 18,115.55	24.7 %	\$ 2,571.35	3.7 %

	2008	3	20	07
	Total \$	% of Accrued Liabilities	Total \$	% of Accrued Liabilities
Beginning of Year				
	*****	100.0	4	400.0 ~
1. Total Accrued Liabilities	\$95.01	100.0 %	\$72.21	100.0 %
2. Valuation Assets	84.16	88.6 %	60.68	84.0 %
3. Unfunded Actuarial Accrued				
Liabilities	\$ 10.85	11.4 %	\$ 11.53	16.0 %
Experience Gains (Losses)				
4. Gains (losses) in economic			:	
a. Pay increases	\$ (0.21)	(0.2)%	\$ 0.22	0.3 %
b. Investment return	(23.83)	(25.1)%	(0.10)	(0.1)%
c. Total	(24.04)	(25.3)%	0.12	0.2 %
5. Gains (losses) from				
decrement experience				
a. Service retirement	(0.06)	(0.1)%	(0.03)	0.0 %
b. Disability retirement	1.94	2.0 %	1.12	1.6 %
c. Death-in-service	0.05	0.1 %	0.21	0.3 %
d. Other separations	1.98	2.1 %	1.08	1.5 %
e. Total	3.91	4.1 %	2.38	3.4 %
6. Total experience gains				
(losses): (4c) + (5e)	\$ (20.13)	(21.2)%	\$ 2.50	3.6 %
End of Year				
7. Total Accrued Liabilities	\$119.59	100.0 %	\$95.01	100.0 %
8. Valuation Assets	84.68	70.8 %	84.16	88.6 %
9. Unfunded Actuarial Accrued				
Liabilities	\$ 34.91	29.2 %	\$ 10.86	11.4 %

### **SECTION II**FINANCIAL INFORMATION

# FINANCIAL DATA FOR CALENDAR YEAR 2008 CONSOLIDATED ASSET RECONCILIATION ALL PLANS, ALL DIVISIONS

		IQ	OB Portion of	DB Po	DB Portion of			Member	Total	DC Portion of		
	Traditional Pension Plan		Combined Pension Plan	Men Direct	Member- Directed Plan	Total Pension Defined Benefit	401(h) Health Care	Directed VEBA	Health Care	Combined Pension Plan	Member Directed	Total Define Contributio
ng Market Value @ 12/31/07 sets Held in Trust for Benefits sets Held for Upcoming Year Budget	8	,857,517,078 \$ 102,124,000	83,964,349	€9	27,470	\$ 69,941,508,898	\$ 13,282,947,482	\$ 37,227,685 \$	13,320,175,168	\$ 72,900,216 \$	123,919,447	\$ 196,819,61
	\$ 69,959,641,07	41,078 \$	83,964,349	69	27,470	\$ 70,043,632,898	\$ 13,282,947,482	\$ 37,227,685 \$	\$ 13,320,175,168	\$ 72,900,216	\$ 123,919,447	\$ 196,819,6
ıl Cash Flows: venues:												
Member Contributions	\$ 1,253,053,82	53,821 \$	158,957	<del>69</del>		\$ 1,253,212,778	•	•	•		\$ 25,688,905	\$ 50,812,1:
Member Deposits - (Purch Svc & Voluntary Deposits	56,7	56,739,147				56,739,147	- 0	1 1	- >	684,633	198,265	882,8
Employer Contributions)  Employer Contributions   Employer Contribution    Employer Denote its (Purch Suc HDI Penaltite)	892,6	892,693,746	5,696		, ,	913,046,745	6/0,106,198	11,505,614	903,126,687	(5.281)	24,411,834	6,114,47
Retiree Paid Health Care Premiums	2	-	20,0		,	1	82,695,255		82,695,255	-	ļ ,	1
Refund from HC Vendors (Formulary & Guarantees)			,		,	•	66,343,541		66,343,541	•	,	•
Medicare Part D Reimbursements		,	•		,		63,310,194	t	63,310,194	,		1
Other Income / Cancelled Warrants	1,021,007	- 1		- 1	,			- 1	- 1		H	- 1
Total Revenues	\$ 2,260,1	\$ 169'61	20,517,652	<del>69</del>		\$ 2,280,637,343	\$ 1,104,525,053	\$ 11,566,967 \$	1,116,092,020	\$ 25,802,572	\$ 50,324,225	\$ 76,126,7
sbusements: Definds of Member Accounts	8 010	\$ (159/08/21/2)	(244 524)	4	,	(213.047.175)	, ,	<del>6</del> 9	1	\$ (3.379.199)	\$ (4.874.451)	\$ (8253.6
Retirement Benefits	٣	6	(11,910)		(37,904)	(3,388,912,610)	_		1			
Retiree Paid Post Retirement Health Care		. '	· ·		· . '		(82,695,255)	ι	(82,695,255)		•	,
ER Paid Post Retirement Health Care			•		,	•	(1,185,499,752)	(128,346)	(1,185,628,098)	1	1	•
ER Paid Post Retirement Medicare			•		•	•	(103,934,337)	r	(103,934,337)	,	•	r
RMA Funding		•	•			,		, ;	(5,016,830)			' !
Administrative Expenses	- 1	- 1	,	- 1		- 1	-	(842,363)	- 1	(3,105,221)		- 1
Total Disbursements	\$ (3,672,9	(3,672,933,868) \$	(256,434)	<del>69</del>	(37,904)	\$ (3,673,228,206)	(1,394,447,102)	\$ (012,076) \$	(1,395,417,812)	\$ (6,484,420)	\$ (7,793,196)	\$ (14,277,6
t External Cash Flow	\$ (1,412,814,17	314,176) \$	20,261,218	<b>↔</b>	(37,904)	\$ (1,392,590,863)	\$ (289,922,050)	\$ 10,596,257 \$	(279,325,793)	\$ 19,318,152	\$ 42,531,029	\$ 61,849,1
lan Activity												
inber Balance Transfers & Plan Switches	\$ 2,3	2,361,836 \$	(1,385,723)	<del>\$</del>	175,451	\$ 1,151,565	, \$	\$	- 000	_	\$ (852,929)	\$ (1,151,5
Priced Assets Advanced by IP	<u>ج</u> ج	(180,135)				(180,133)		267'06	767'00	100,001	71,075,045)	0,621
ugation Rate erest on 12/31/07 Advance Balance	, C. 1.	1,019,101	-			101,610,1		. )		(488,905)	(530,195)	(1,019,1
come Applied to Advance (Loan) Balance		. "	•				,	١	·	r	,	
Total Inter-Plan Activity	\$ 7,1	7,109,354 \$	(3,318,329)	\$	175,451	\$ 3,966,476	· •	\$ 56,292 \$	56,292	\$ (718,684)	\$ (3,304,084)	\$ (4,022,7
nent Income: erest and Dividends	\$ 1,714,914,47	\$ 014,470	2,254,873	<b>↔</b>	2,932	\$ 1,717,172,274	89	\$ 171,620,1 \$	323,072,648	\$ 1,410,090	\$ 2,300,498	\$ 3,710,5
her Ordinary Investment Income	(951,6	(951,610,822)	(1,251,235)	_	(1,627)	(952,863,684)		(571,090)	23,166,244	1 9		
alized Capital Value Changes	(19,897,254,038)	254,038)	(26,162,106)	<u> </u>	(34,018)	(19,923,450,162)	(3,7	(11,940,931)	(3,745,990,599)	(29,448,675)	(48,044,191)	(77,492,8
ternal Asset Management Fees	(10/,	(10/,1/4,/11)	(140,920)	_	(183)	(10/,315,814)	(8,0/4,498)	(94,519) -	(8,/36,610)	(118,404)	(194,199)	711C)
Investment Return	\$ (19,241,125,101)	\$ (101,22)	(25,299,388)	\$	(32,897) \$	\$ (19,266,457,386)	(3,396,943,356)	\$ (11,547,169) \$	(3,408,490,524)	\$ (28,157,049)	\$ (45,936,492)	\$ (74,093,5
Market Value @ 12/31/08	\$ 49,312,811,154	\$11,154 \$	75,607,850	<del>69</del>	132,121	\$ 49,388,551,125	\$ 9,596,082,077	\$ 36,333,066 \$	9,632,415,142	\$ 63,342,635	\$ 117,209,900	\$ 180,552,5

# (BASED UPON 4 YEAR PHASE-IN OF DIFFERENCES BETWEEN ACTUAL AND ASSUMED RETURN DEVELOPMENT OF FUNDING VALUE OF PENSION DEFINED BENEFIT ASSETS

Year Ended December 31	2007	2008	2009	2010	2011
A. Funding Value Beginning of Year	\$61,295,587,289	\$67,151,335,838			
B. Market Value End of Year	70,043,632,898	49,388,551,125			
C. Market Value Beginning of Year	65,357,872,046	70,043,632,898			
D. Non-Investment/Administrative Net Cash Flow					
D1. Member Contributions	1,238,466,808	1,309,951,925			
D2. Employer and other Non-Member Contributions	1,123,277,122	972,661,363			
D3. Refund of Member Accounts	(213,008,103)	(213,047,175)			
D4. Retirement Benefits	(3,136,985,597)	(3,388,912,610)			
D5. Member Balance Transfers	626,328	1,151,565			
D6. Total Net Cash Flow: D1+D2+D3+D4+D5	(987,623,442)	(1,318,194,932)			
E. Investment Return					
E1. Market Total: B-C-D6	5,673,384,294	(19,336,886,841)			
E2. Assumed Rate of Return	8.00%	8.00%			
E3. Assumed Amount of Return	4,864,142,045	5,319,379,070			
E4. Amount Subject to Phase-In: E1-E3	809,242,249	(24,656,265,911)			
F. Phased-In Recognition of Investment Return					
F1. Current year: 0.25xE4	202,310,562	(6,164,066,478)			
F2. First Prior Year	1,041,340,682	202,310,562	(\$1,975,542,045)		
F3. Second Prior Year	202,684,013	1,041,340,682		(\$1,975,542,045)	
F4. Third Prior Year	532,894,689	202,684,011	ı	•	(\$1,975,542,045)
F5. Total Phase-Ins	1,979,229,946	(4,717,731,223)	(1,975,542,045)	(1,975,542,045)	(1,975,542,045)
G. Funding Value End of Year					
G1. Preliminary Funding Value End of Year: A+D6+E3+F5	\$67,151,335,838	\$66,434,788,753			
G2. Upper Corridor Limit: 112% x B	78,448,868,846	55,315,177,260			
G3. Lower Corridor Limit: 88% x B	61,638,396,950	43,461,924,990			
C+. ruinding value taid of 1 cal	90,777,777,970	002,111,010,000			
H. Difference Between Market and Funding Value	2,892,297,060	(5,926,626,135)	(3,951,084,090)	(1,975,542,045)	•
I. Recognized Rate of Return	11.26 %	(15.82)%			
J. Market Rate of Return	8.75 %	(27.87)%			
K. Ratio of Funding Value to Market Value	% 96	112 %			

unding Value of Assets recognizes assumed investment return (line E3) fully each year. Differences between actual and assumed inv (line E4) are phased in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, Fundir s will tend to be greater than market value. If assumed rates are exactly realized for 3 consecutive years, funding value will become sets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Funding x value.

## ALLOCATION OF FUNDING VALUE OF ASSETS AMONG DIVISIONS **DECEMBER 31, 2008**

# TRADITIONAL, COMBINED AND MEMBER DIRECTED PLANS

			Total DB System		
			Public	Law	
	State	Local	Safety	Enforcement	$\mathbf{T}_{0}$
Employer Accumulation Fund					
(a) Allocated Amounts	\$ 1,482,731,208	\$ 2,262,396,775	\$ 721,910	\$ 147,757,672	\$ 3,89
(b) Unallocated Amounts Allocated by I(a)	5,311,924	8,190,115	2,634	539,189	2. 1
(c) Total EAF	\$ 1,488,043,132	\$ 2,270,586,890	\$ 724,544	\$ 148,296,861	\$ 3,90
Employee Savings Fund					
(a) Total Member Deposits	\$ 5,058,087,959	\$ 7,724,947,054	\$ 6,060,757	\$ 492,441,055	\$13,28
(b) ESF Allocated by (2)(a)	\$ 4,397,190,843	\$ 6,715,662,119	\$ 5,268,718	\$ 428,087,288	\$11,5
Retired Assets					
(a) Allocated Amounts	\$13,613,575,551	\$18,773,364,615	\$28,914,280	\$1,387,843,245	\$33,8(
(b) Additional and DC Annuities	423,334	24,649,703	01	OI	( 41
(c) Total Retiree Assets	\$13,613,998,885	\$18,798,014,318	\$28,914,280	\$1,387,843,245	\$33,87
Subtotal: $(1)(c)+(2)(b)+(3)(c)$	\$19,499,232,860	\$27,784,263,327	\$34,907,542	\$1,964,227,394	\$49,28
Assets Held For Upcoming Year Budget Allocated According to (4)	41,913,167	59,703,607	75,140	4,228,086	≍ı
Fotal Employer +Employee Defined Benefit Assets: (4)+(5)	\$19,541,146,027	\$27,843,966,934	\$34,982,682	\$1,968,455,480	\$49,388
Market Value Adjustment Allocated According to (6)	2,344,937,523	3,341,276,032	4,197,922	236,214,657	5.9.
Funding Value of Defined Benefit Assets (6)+(7)	\$21,886,083,550	\$31,185,242,966	\$39,180,604	\$2,204,670,137	\$55,315

Public Employees Retirement System

## ALLOCATION OF FUNDING VALUE OF ASSETS AMONG DIVISIONS **DECEMBER 31, 2008** TRADITIONAL PLAN

'			Traditional Plan		
			Public	Law	: :
•	State	Local	Safety	Enforcement	1
imployer Accumulation Fund (EAF)					
(a) Allocated Amounts	\$ 1,455,162,920	\$ 2,215,137,192	\$ 721,910	\$ 147,757,672	\$ 3,5
(b) Unallocated Amounts Allocated by (1)(a)	5,310,099	8,083,355	2,634	539,189	
(c) Total EAF	\$ 1,460,473,019	\$ 2,223,220,547	\$ 724,544	\$ 148,296,861	\$ 3,5
imployee Savings Fund (ESF)					
(a) Total Member Deposits (Accumulated by Determined Division)	\$ 5,058,010,320	\$ 7,724,780,562	\$ 6,060,757	\$ 492,441,055	\$13,
(b) ESF Allocated by (2)(a)	\$ 4,397,013,402	\$ 6,715,281,604	\$ 5,268,718	\$ 428,087,288	\$11;
letired Assets					
(a) Allocated Amounts	\$13,613,576,057	\$18,773,341,262	\$28,914,280	\$1,387,843,245	\$33,
(b) Additional Annuities	393,909	24,456,417	01	0	
(c) Total Retiree Assets	\$13,613,969,966	\$18,797,797,679	\$28,914,280	\$1,387,843,245	\$33,
$\frac{1}{100}$	\$19,471,456,387	\$27,736,299,830	\$34,907,542	\$1,964,227,394	\$49,
Assets Held For Upcoming Year Budget Allocated According to (4)	41,913,167	59,703,607	75,140	4,228,086	
[otal Employer +Employee Defined Benefit Assets: (4)+(5)	\$19,513,369,554	\$27,796,003,437	\$34,982,682	\$1,968,455,480	\$49,31
darket Value Adjustment Allocated According to (6)	2,341,604,346	3,335,520,412	4,197,922	236,214,657	<u>'</u>
iunding Value of Defined Benefit Assets (6)+(7)	\$21,854,973,900	\$31,131,523,849	\$39,180,604	\$2,204,670,137	\$55,23

# ALLOCATION OF FUNDING VALUE OF ASSETS AMONG DIVISIONS **DECEMBER 31, 2008** COMBINED PLAN

		,	Combined Plan		
			Public	Law	Ì
•	State	Local	Safety	Enforcement	Τ
mployer Accumulation Fund					
a) Allocated Amounts	\$27,568,288	\$47,402,884	0\$	<b>%</b>	<del>97</del> 7
b) Unallocated Amounts Allocated by (1)(a)	1,825	3,138	OI	Ō	
c) Total EAF	\$27,570,113	\$47,406,022	9\$	0\$	का
mployee Savings Fund					
a) Total Member Deposits (Reported by Division)	\$ 77,639	\$ 166,492	\$0	0\$	97
b) ESF Allocated by (2)(a)	\$ 177,441	\$ 380,515	\$0	0\$	<b>9</b> 7
etired Assets					
a) Allocated Amounts	(\$206)	\$23,353	\$0	\$0	<del>97</del>
b) DC Annuities	29,425	21,486	OI	OI	
c) Total Retiree Assets	\$ 28,919	\$ 44,839	\$0	\$	<del>0</del> 7
ubtotal: $(1)(c)+(2)(b)+(3)(c)$	\$27,776,473	\$47,831,376	\$0	\$0	<del>97</del>
ssets Held For Upcoming Year Budget Allocated According to (4)	0	0	0	OI	
otal Employer +Employee Defined Benefit Assets: (4)+(5)	\$27,776,473	\$47,831,376	0\$	0\$	\$7
larket Value Adjustment Allocated According to (6)	3,333,177	5,739,765	01	01	
unding Value of Defined Benefit Assets (6)+(7)	\$31,109,650	\$53,571,141	80	0\$	90 <del>97</del>

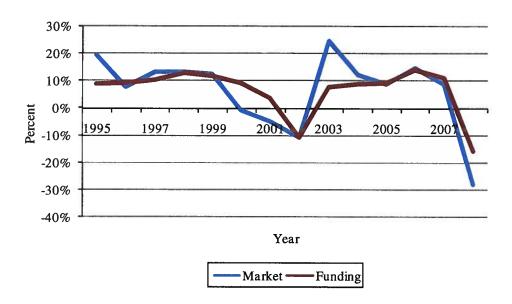
Public Employees Retirement System

# ALLOCATION OF FUNDING VALUE OF ASSETS AMONG DIVISIONS MEMBER DIRECTED PLAN **DECEMBER 31, 2008**

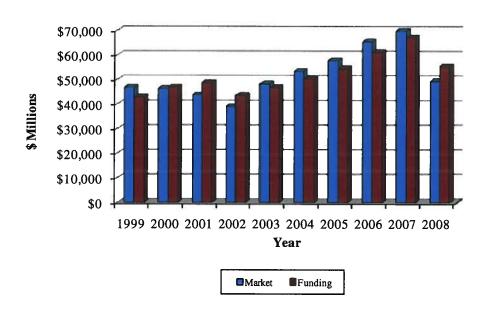
Member Directed Plan

			Public	Law	
	State	Local	Safety	Enforcement	Ţ
Employer Accumulation Fund					
(a) Allocated Amounts	\$0	(\$143,301)	\$0	0\$	
(b) Unallocated Amounts Allocated by 1(a)	0	103,622	0	01	
(c) Total EAF	\$0	(\$39,679)	\$0	<b>9</b> \$	
Employee Savings Fund					
(a) Total Member Deposits	<b>9</b>	\$	\$0	<b>%</b>	
(b) ESF Allocated by (2)(a)	0\$	0 \$	O\$	0\$	
Retired Assets					
(a) Allocated Amounts	0\$	0 \$	\$0	<b>%</b>	
(b) DC Annuities	0	171,800	0	OI	
(c) Total Retiree Assets	\$0	\$171,800	\$0	<b>\$</b>	
Subtotal: $(1)(c)+(2)(b)+(3)(c)$	\$0	\$132,121	\$0	<b>\$</b>	
Assets Held For Upcoming Year Budget Allocated According to (4)	0	OI	01	01	
Total Employer +Employee Defined Benefit Assets: (4)+(5)	0\$	\$132,121	0\$	0\$	
Market Value Adjustment Allocated According to (6)	0	15,855	0	01	
Funding Value of Defined Benefit Assets (6)+(7)	80	\$147,976	0\$	0\$	

# **Comparison of Rates of Return**



# **Comparison of Defined Benefit Pension Asset Values**



# **SECTION III**BENEFITS AND CONDITIONS EVALUATED



#### **PLANS**

Traditional Pension Plan. The Traditional Pension Plan is a defined benefit plan under which a member's retirement benefit is based on a formula. The formula is determined by years of contributing service and the average of the three highest years of earnable salary (or final average salary). OPERS investment professionals manage the investment of employee and employer contributions to ensure that funds are available to pay the formula benefit.

Combined Plan. The Combined Plan is a retirement plan with both a defined benefit and a defined contribution component. Under the defined benefit portion of the Combined Plan, the member's benefit is determined by a reduced formula (similar to the Traditional Pension Plan). OPERS investment professionals manage the investment of employer contributions to ensure that funds are available to pay the reduced formula benefit. Under the defined contribution portion of the Combined Plan, employee contributions are deposited into the member's individual defined contribution account and invested as directed by the member. The member's retirement benefit under this portion of the Combined Plan is based on employee contributions and the gains and losses on those contributions. The member directs the investment by selecting from among the nine professionally-managed OPERS Investment Options.

Member-Directed Plan. The Member-Directed Plan is a defined contribution plan under which employee and employer contributions are deposited into a member's individual defined contribution account and invested as directed by the member. The member's retirement benefit is based on employee and employer contributions and the gains and losses on those contributions. Under the Member-Directed Plan, the member directs the investment by selecting from nine professionally-managed OPERS Investment Options.

Final average salary ("FAS") means the average of the annual earnings for the 3 highest calendar years of compensation.

**Participant Contribution Account** is the account for each Participant in the Combined or Member-Directed Plan to which shall be credited the employee contributions.

*Miscellaneous Contribution Account* is the account to which shall be credited any voluntary after-tax contributions for members in the Combined and Member-Directed Plans.

**Rollover Account** is the account to which shall be credited any rollover amounts for members in the Combined or Member-Directed Plans.

*Employers' Accumulation Fund* is the fund to which shall be credited employer contributions for members in the Traditional or Combined Plan. There are separate accounts in the Employers' Accumulation Fund for the Combined Plan and the Traditional Pension Plan.

*Employer Contribution Account* is the fund to which shall be credited a portion of the employer contributions for members in the Member-Directed Plan.

## **CONTRIBUTIONS**

*Member contributions.* State and local government members contribute 10.0% of earnable salary in 2008. The maximum statutory rate is 10% of earnable salary.

Law enforcement members whose primary duties are to preserve the peace, to protect life and property, and to enforce the laws of the state contribute 10.1% of earnable salary increasing to 11.60% in 2011. Remaining Law enforcement members (Public Safety) contribute 10.1% of earnable salary increasing to 11.00% in 2011.

*Employer contributions*. Each employer contributes the remaining amounts necessary to finance OPERS benefits. Employer contributions are expressed as percents of member-covered payroll. The maximum statutory rate for state and local government employers is 14%. The maximum statutory rate for law enforcement employers is 18.1% (H.B. 416, effective 1/1/2001).

# **CONTRIBUTIONS (CONT'D)**

Health Care Preservation Plan (HCPP). The following table shows total scheduled employer contribution rates (includes contributions for both the pension and retiree health programs):

		Local	Law	Public
Year	State	Government	Enforcement	Safety
2008	14.00%	14.00%	17.40%	17.40%
2009	14.00	14.00	17.63	17.63
2010	14.00	14.00	17.87	17.87
2011 and Later	14.00	14.00	18.10	18.10

The portion of the above employer contribution rates scheduled to be allocated to the retiree health program are as follows:

	All	
Year	Divisions	
2009	5.5%	
2010	5.0%	
2011	4.0%	
2012	4.0%	
2013	3.0%	
2014	2.0%	
2015 and Later	0.0%	

Member contribution rates scheduled to be allocated to the pension program are as follows:

		Local	Law	Public
Year	State	Government	<b>Enforcement</b>	Safety
2009	10.00%	10.00%	10.10%	10.10%
2010	10.00%	10.00%	11.10%	10.50%
2011 and Later	10.00%	10.00%	11.60%	11.00%

#### AGE & SERVICE BENEFITS - STATE AND LOCAL GOVERNMENT MEMBERS

Age and service eligibility. A member who (i) has attained age 60 years and has 5 or more years of service credit or 60 contributing months, or (ii) has attained age 55 years and has 25 or more years of service credit, or (iii) has 30 or more years of service credit, may retire with an age and service retirement allowance.

Age and service allowance. A retiring member's age and service allowance is equal to Ohio service credit times the greater of \$86, or 2.2% of FAS for the first 30 years of service plus 2.5% for years of service over 30 years (H.B. 628). The allowance is then adjusted by factors based on attained age or years of service (whichever yields the higher percentage) as determined in the following schedule:

Attained		Years of	Percentage of
Age	OR	Service Credit	Base Amount
58		25	75%
59		26	80
60		27	85
61		N/A	88
N/A		28	90
62		N/A	91
63		N/A	94
N/A		29	95
64		N/A	97
65		30 or more	100

Maximum allowance is 100% of FAS or the limits under IRC Section 415(b). Minimum allowance is based upon twice the member's savings funding balance at retirement together with interest credits, annuitized with unisex factors that reflect plan interest and mortality assumptions, but not the plan's COLA.

#### REVISED CODE SECTION 145.33(B)(2)(B)

Age and service eligibility. A law member whose secondary duties are to preserve the peace, to protect life and property, and to enforce the laws of the state and who (i) has attained age 52 and has 25 or more years of credited service, or (ii) has attained age 62 and has 15 or more years of credited service, or (iii) has attained age 52 and has 15 or more years of credited service, may retire with an age and service allowance. A member covered by these provisions may retire at age 48 with 25 or more years of service subject to the reduction described in 145.33 (C)(1).

Age and service allowance. A retiring member's age and service allowance under eligibility (i) or (ii) above is equal to 2.5% of FAS times the first 25 years of service credit plus 2.1% of FAS times service credit in excess of 25 years (H.B. 628). Maximum allowance is 90% of FAS or the limits under IRC Section 415(b). A retiring member's age and service allowance under eligibility (iii) above is equal to 1.5% of FAS times years of service credit. Minimum allowance for all law members is based upon twice the member's savings fund balance at retirement together with interest credits.

# AGE & SERVICE BENEFITS - LAW MEMBERS (LAW ENFORCEMENT) ELIGIBLE TO RETIRE UNDER OHIO REVISED CODE SECTION 145.33(B)(2)(A)

Age and service eligibility. A law member whose primary duties are to preserve the peace, to protect life and property, and to enforce the laws of the state and who (i) has attained age 48 and has 25 or more years of credited service, or (ii) has attained age 62 and has 15 or more years of credited service, or (iii) has attained age 52 and has 15 or more years of credited service, may retire with an age and service allowance.

Age and service allowance. A retiring member's age and service allowance under eligibility (i) or (ii) above is equal to 2.5% of FAS times the first 25 years of service credit plus 2.1% of FAS times service credit in excess of 25 years (H.B. 628). Maximum allowance is 90% of FAS or the limits under IRC Section 415(b). A retiring member's age and service allowance under eligibility (iii) above is equal to 1.5% of FAS times years of service credit. Minimum allowance for all law members is based upon twice the member's savings fund balance at retirement together with interest

#### **DISABILITY RETIREMENT**

The disability program was revised in order to comply with the Older Workers Benefit Protection Act. Employees becoming members after July 29, 1992 are covered by the post July 29, 1992 program. Other members were able to elect coverage under the pre July 29, 1992 program (original plan) or elect to be covered by the post July 29, 1992 program (revised plan).

#### Features of the original plan are:

- a) Upon becoming permanently disabled after completion of at least 5 years or 60 contributing months of service but before attaining age 60, a member is eligible for a disability allowance. The service requirement is waived for Law Enforcement members with an on-duty illness or injury.
- b) The amount of the allowance is the service the member would have had if employment had continued to age 60 times (i) 2.2% of FAS (H.B. 628), or (ii) \$86, whichever produces the greater benefit.
- c) Maximum allowance is 75% of FAS, minimum allowance is 30% of FAS.

## Features of the revised plan are:

- a) A member may apply at any age after completion of 5 years or 60 contributing months of service. The service requirement is waived for Law Enforcement members with an on-duty illness or injury.
- b) A disability benefit equal to the greater of 45% of FAS or the actual service credit times 2.2% of FAS (H.B. 628) with no early retirement reduction (maximum 60% of FAS). The disability benefit period is to age 65 if the member is disabled prior to age 60. The benefit period declines gradually from 60 months for members disabled at ages 60 and 61 to 12 months for members disabled at age 69 or older.
- c) After the disability benefit ends, a service retirement benefit equal to the greater of (i) the accrued benefit based on actual service, or (ii) 2.2% of FAS (H.B. 628) times service credit including the period of disability (maximum 45% of FAS). In addition, an amount equal to the cost-of-living increases the member would have received had the member retired on the basis of age and service is paid.

### **SURVIVOR BENEFITS**

**Death while eligible to retire.** If a member dies in service after becoming eligible to retire with an age and service allowance and leaves a surviving spouse or other sole dependent beneficiary, the survivor receives the same amount that would have been paid had the member retired the last day of the month of death and elected the 100% joint and survivor form of payment.

Survivor (death-in-service) allowances. If a deceased member had at least 1-1/2 years of contributing service credit, with at least ¼ year of such service occurring within the 2-1/2 years prior to death, or was receiving a disability benefit, qualified survivors may receive the following monthly benefits. The benefit paid will be the greater of the applicable benefits paid under the following two schedules (H.B. 628):

Schedule 1

Number of Qualified Survivors	Annual Benefit as a % of	
Affecting the Benefit	<b>Deceased Member's FAS</b>	<b>Minimum Monthly Benefit</b>
1	25%	\$250
2	40%	\$400
3	50%	\$500
4	55%	\$500
5 or more	60%	\$500

#### Schedule 2

	Annual Benefit as a % of
Years of Service	<b>Deceased Member's FAS</b>
20	29%
21	33%
22	37%
23	41%
24	45%
25	48%
26	51%
27	54%
28	57%
29 or more	60%

Qualifying survivors who are paid benefits under Schedule 2 share equally in the benefits, except that

if there is a surviving spanse, the spanse receives the appeter of 250% of EAS or \$250.

A *qualified spouse* is the surviving spouse of a deceased member who is age 62 or at any age if the deceased member had 10 or more years of Ohio service credit or if the surviving spouse is caring for a qualified child or is adjudged physically or mentally incompetent.

A *qualified child* is a child who has never been married and under the age of 18 (or 22 if attending an approved school), or regardless of age is adjudged physically or mentally incompetent at the time of the member's death.

A *qualified parent* is a dependent parent aged 65 or older (earlier if mentally or physically incompetent) who received at least one-half support from the member during the 12-month period immediately preceding the member's death.

Qualified survivors of disability benefit recipients have the FAS used in calculating their benefits adjusted for each year between the effective date of the disability benefit and the recipient's date of death. The FAS is adjusted by the lesser of (1) 3% or (2) the actual average percentage change in the CPI.

# **BENEFITS AT RETIREMENT**

Optional Benefit Forms. Retiring members may elect to have benefits paid in straight life form, in a form that guarantees a minimum number of monthly payments, or in a form that provides a continuation of all or a portion of the monthly benefit to a beneficiary after the death of the retiree. If a retiring member elects benefits in other than straight life form, the monthly amount is adjusted. The adjustment is based upon interest, COLA, and mortality assumptions (with a blend of male and female mortality rates to produce unisex election factors consistent with the gender distribution of members electing optional forms of payment).

Payment (PLOP) (S.B.247). The PLOP is an option that allows a retiree to initially receive a partial lump sum benefit payment along with a reduced monthly retirement allowance. The lump sum payment cannot be less than 6 times or more than 36 times the monthly amount that would be payable to the member under the plan of payment selected and shall not result in a monthly allowance that is less than 50% of the monthly benefit. The total amount paid as a lump sum and monthly benefit shall be the actuarial equivalent of the amount that would have been paid had the lump sum not been selected.

**QEBA.** Qualified Excess Benefit Arrangement was established 01/01/2004 (H.B.190). The QEBA is operated in accordance with Internal Revenue Code Section 415(m). Under this arrangement the recipient may be paid the portion of his/her retirement benefit that was previously limited due to IRC Section 415(b).

**Post-retirement increases.** Each July after June 30, 1971 or the annual anniversary established 12 months after the initial date of retirement, each allowance is increased by 3.0% of the corresponding base allowance, except that no allowance shall exceed the limits established by Section 415 of the Internal Revenue Code.

**Post-retirement death benefit.** Upon the death of an age and service or disability retiree, a death benefit in the following amount is payable:

Service Credit	Amount of
at Retirement	Death Benefit
5 to 9 years	\$ 500
10 to 14 years	1,000
15 to 19 years	1,500
20 to 24 years	2,000
25 or more years	2,500

**Deferred benefits.** A member with at least 5 years of service credit who leaves service before being eligible for an immediate allowance and who does not withdraw accumulated contributions will be entitled to a deferred allowance at age 60. For law members, the age at which benefits commence depends on the amount of service credit. The amount of the allowance will be based on credited

### REFUND OF MEMBERS ACCUMULATED CONTRIBUTIONS

In the event a member leaves service prior to retirement, the member may elect to receive a refund of contributions with interest and may be eligible to receive an additional amount as described below. These refund provisions are available to all members. If a member dies prior to retirement and survivor benefits are not payable, the member's contributions with interest are paid to a designated beneficiary or other survivor. Interest is credited annually to member contribution balances. The rate of interest credited is determined by the OPERS Board and will not be greater than 6%. At the present time, 1% interest is credited to member contribution balances.

If the member has, or had at the time of death, at least 5 years but less than 10 years of qualified service, an additional 33% of the member's eligible contributions will be paid to the member or survivor. If the member has, or had at the time of death, at least 10 years of qualified service credit, an additional 67% of the member's eligible contributions will be paid to the member or survivor. The additional amount is not paid if the member is a re-employed retiree, or in the case of a deceased member, was receiving disability benefits at the time of death.

# **SUPPLEMENTAL BENEFITS**

Health Care Coverage. Health care coverage is available to persons being paid a monthly allowance from OPERS. Members retiring with a normal or early service retirement allowance after June 13, 1986 must have 10 or more years of qualified service credit to be eligible for this benefit.

*Medicare premiums*. Medicare part B premiums are paid for those eligible, upon proof of coverage. Members retiring with a normal or early service retirement allowance after June 13, 1986 must have 10 or more years of qualified service credit to be eligible for this benefit.

### **ADDITIONAL ANNUITY PROGRAM**

The additional annuity program provides Traditional Plan and re-employed retiree members the opportunity of supplementing their retirement income. Members make additional contributions (independent of the contributions described on page III-2) to an account that earns investment income based upon the return of the OPERS Stable Value Fund. At termination, the member may take the additional annuity account balance either as a lump sum or annuitized in monthly payments.

# **RE-EMPLOYED RETIREES**

Re-employed age and service retirees contribute to the "Money Purchase Plan". In most instances, re-employed retirees will continue to receive their retirement allowance during re-employment. Upon termination of re-employment, members are eligible to apply for either a refund of contributions prior to age 65 or a Money Purchase Plan benefit as a lump sum or annuity after age 65. The Money Purchase Plan benefit is equal to member contributions and allowable interest plus an additional matching amount. If monthly benefits are elected, joint and survivor options are also available.

#### AGE & SERVICE BENEFITS - STATE AND LOCAL GOVERNMENT MEMBERS\*

Eligibility. A member who (i) has attained age 60 years and has 5 or more years of service credit in the Plan or 60 contributing months in the Plan, or (ii) has attained age 55 years and has 25 or more years of service credit, or (iii) has 30 or more years of service credit, may retire under the Combined Plan with an age and service retirement allowance under the defined benefit portion of the Plan and with a retirement benefit under the defined contribution portion of the Plan.

Age and service retirement allowance (Defined Benefit portion of the Plan). A retiring member's age and service retirement allowance is equal to Ohio service credit in the Plan times 1.0% of FAS for the first 30 years of service plus 1.25% for years of service over 30 years. The allowance is then adjusted by factors based on attained age or years of service (whichever yields the higher percentage) as determined in the following schedule:

Attained		Years of	Percentage of
Age	OR	Service Credit	Base Amount
50		25	75%
58			
59		26	80
60		27	85
61		N/A	88
N/A		28	90
62		N/A	91
63		N/A	94
N/A		29	95
64		N/A	97
65		30 or more	100

Maximum allowance is 100% of FAS or the limits under IRC Section 415(b).

Retirement benefit (Defined Contribution portion of the Plan). The member's retirement benefit under this portion of the Combined Plan is based on the amounts credited to the Participant Contribution Account, Rollover Account, and Miscellaneous Account and the gains and losses on the amounts in those Accounts.

<sup>\*</sup>Law Enforcement and Public Safety members must contribute to the Traditional Pension Plan only.

#### **DISABILITY RETIREMENT**

A Combined Plan member may apply after completion of 5 years in the Plan or 60 contributing months of service in the Plan. Combined Plan members may be covered under the original or revised disability plan. Combined Plan members who apply for disability may:

- Take a lump sum distribution of the Participant Contribution Account, Rollover Account, and Miscellaneous Account and any additional amount they are entitled to from the Employers' Accumulation Fund, or
- 2) Transfer all service credit and the Participant's Accounts (as listed above) in the Combined Plan to the Traditional Pension Plan to be paid a disability benefit under the Traditional Pension Plan guidelines.

#### **SURVIVOR BENEFITS**

Combined Plan members are eligible for the same survivor benefits as those listed under the Traditional Pension Plan and must qualify for survivor benefits under the same guidelines as those members in the Traditional Pension Plan.

# **BENEFITS AT RETIREMENT**

Optional Benefit Forms under the Defined Benefit portion of the Plan. Retiring members may elect to have their age and service retirement allowance in straight life form, in a form that guarantees a minimum number of monthly payments, or in a form that provides a continuation of all or a portion of the monthly benefit to a beneficiary after the death of the retiree. If a retiring member elects benefits in other than straight life form, the monthly amount is adjusted. The adjustment is based upon interest, COLA, and mortality assumptions (with a blend of male and female mortality rates to produce unisex election factors consistent with the gender distribution of members electing optional forms of payment).

Optional Benefit Forms under the Defined Contribution portion of the Plan. Retiring members may elect to have retirement benefits paid in a partial lump sum, subject to any rules adopted by the Board; monthly annuity payments (with joint and survivor options) similar to those offered under the defined benefit portion of the Plan; periodic payments over a period certain; periodic payments of a specific monthly amount; payments with a deferred start date; or a combination of these options.

**PLOP.** Effective 01/01/2004, retiring members may also elect to receive a Partial Lump Sum Option Payment (PLOP) (S.B.247). The PLOP is an option that allows a retiree to initially receive a partial lump sum benefit payment along with a reduced monthly retirement allowance. The lump sum payment cannot be less than 6 times or more than 36 times the monthly amount that would be payable to the member under the plan of payment selected and shall not result in a monthly allowance that is less than 50% of the monthly benefit. The total amount paid as a lump sum and monthly benefit shall be the actuarial equivalent of the amount that would have been paid had the lump sum not been selected. The PLOP is available to Combined Plan members for the age and service retirement allowance under the defined benefit portion of the Plan and for the monthly annuity under the defined contribution portion of the Plan.

**QEBA.** Qualified Excess Benefit Arrangement was established 01/01/2004 (H.B.190). The QEBA is operated in accordance with Internal Revenue Code Section 415(m). Under this arrangement the recipient may be paid the portion of his/her retirement benefit that was previously limited due to IRC Section 415(b). The QEBA is available to Combined Plan members for the age and service retirement allowance under the defined benefit portion of the Plan.

**Post-retirement increases.** Each July after June 30, 1971 or the annual anniversary established 12 months after the initial date of retirement, each age and service retirement allowance under the defined benefit portion of the plan is increased by 3.0% of the corresponding base allowance, except that no allowance shall exceed the limits established by Section 415 of the Internal Revenue Code.

**Post-retirement death benefit.** Upon the death of an age and service retiree, a death benefit in the following amount is payable:

Service Credit at Retirement	Amount of Death Benefit
5 to 9 years	\$ 500
10 to 14 years	1,000
15 to 19 years	1,500
20 to 24 years	2,000
25 or more years	2,500

#### REFUNDS AND VESTING

A participant in the Combined Plan shall at all times be 100% vested in the Participant Contribution Account, Miscellaneous Contribution Account, and the Rollover Account.

If the member has at least 5 years but less than 10 years of qualified service credit in the Plan, an additional 33% of the member's eligible contributions will be paid from the Employers' Accumulation Fund. If the member has at least 10 years of qualified service credit in the Plan, an additional 67% of the member's eligible contributions will be paid to the member. Amounts paid to purchase service credit earn interest at the same rates as the Traditional Pension Plan and are payable as a refund.

In the event a member leaves service prior to retirement, the member may elect to receive a refund of their Participant Contribution Account, the Rollover Account, the Miscellaneous Account, and any additional amounts they are entitled to from the Employers' Accumulation Fund (as described above).

# **SUPPLEMENTAL BENEFITS**

Health Care Coverage. Health care coverage is available to persons being paid a monthly allowance from OPERS. Members retiring with a normal or early service retirement allowance after June 13, 1986 must have 10 or more years of qualified service credit to be eligible for this benefit.

Medicare premiums. Medicare part B premiums are paid for those eligible, upon proof of coverage. Members retiring with a normal or early service retirement allowance after June 13, 1986 must have 10 or more years of qualified service credit to be eligible for this benefit. [Although it is not mentioned under the Traditional Pension Plan either, Combined Plan members are eligible for the Medicare Part-A equivalent coverage under R.C. 145.325.]

AGE & SERVICE BENEFITS - STATE AND LOCAL GOVERNMENT MEMBERS. (Law Enforcement and Public Safety members must contribute to the Traditional Pension Plan Only.)

*Eligibility.* A participant who has attained age fifty-five (55) may retire under the Member-Directed Plan.

**Retirement benefits.** The member's retirement benefit is based on the value of the Participant Contribution Account, the Rollover Account, the Miscellaneous Account, and any vested portion of the Employer Contribution Account.

# **DISABILITY RETIREMENT**

Not available under the Member-Directed Plan. Members may:

- 1) If age fifty-five (55), terminate employment and begin receiving retirement benefits, or
- Take a lump sum distribution of their Participant Contribution Account, Rollover Account, Miscellaneous Account and any vested portion of the Employer Contribution Account.

# **SURVIVOR BENEFITS**

Not available under the Member-Directed Plan. Survivors must take a lump sum distribution of the member's Participant Contribution Account, Rollover Account, Miscellaneous Account and any vested portion of the Employer Contribution Account.

### **BENEFITS AT RETIREMENT**

Optional Benefit Forms. Retiring members may elect to have retirement benefits paid in a partial lump sum, subject to any rules adopted by the Board; monthly annuity payments (with joint and survivor options) similar to those offered under the defined benefit portion of the Combined Plan; periodic payments over a period certain; periodic payments of a specific monthly amount; payments with a deferred start date; or a combination of these options.

**PLOP.** Effective 01/01/2004, retiring members who elect a monthly annuity under the Member-Directed Plan may also elect to receive a Partial Lump Sum Option Payment (PLOP) (S.B.247). The PLOP is an option that allows a retiree to initially receive a partial lump sum benefit payment along with a reduced monthly annuity. The lump sum payment cannot be less than 6 times nor more than 36 times the monthly amount that would be payable to the member under the plan of payment selected and shall not result in a monthly annuity that is less than 50% of the monthly benefit. The total amount paid as a lump sum and monthly benefit shall be the actuarial equivalent of the amount that would have been paid had the lump sum not been selected. The PLOP is available to Member-Directed Plan members only if they elect a monthly annuity.

#### REFUNDS AND VESTING.

A participant shall at all times be 100% vested in the Participant Contribution Account, Miscellaneous Contribution Account, and the Rollover Account. A participant shall vest in the Employer Contribution Account according to the Participant's attained years of participation in the Plan as follows:

One year of participation	20%
Two years of participation	40%
Three years of participation	60%
Four years of participation	80%
Five years of participation	100%

In the event a member leaves service prior to retirement, the member may elect to receive a refund of their Participant Contribution Account, Rollover Account, and Miscellaneous Account and any vested amounts in the Employer Contribution Account (as described above).

## **SUPPLEMENTAL BENEFITS**

Health Care Coverage. A portion of the employer contribution for Member-Directed participants is credited to a Retiree Medical Account (RMA). Amounts contributed to the RMA may be used after separation from service and a refund or retirement distribution is made to pay qualified health, dental and vision care expenses. Members vest in their RMA based on their attained years of participation in the Plan as follows:

1-2 years	0%
3 years	30%
4 years	40%
5 years	50%
6 years	60%
7 years	70%
8 years	80%
9 years	90%
10 years	100%

Effective January 1, 2009, the vesting schedule will be as follows:

Less than 1 year	0%
1 year	20%
2 years	40%
3 years	60%
4 years	80%
5 years	100%

# RETIRING DECEMBER 31, 2008 UNDER BENEFIT PROVISIONS EVALUATED

# Data:

A.	\$32,000	Final Average Earnings
В.	33	Years of Credited Service
C.	59	Age of Retiree
D.	56	Age of Spouse
E.	100%	Percentage of Pension to Continue to Spouse after retiree's death
•		(Retiree makes the choice of 100% Joint and Survivor with Pop-Up)

# **Computations:**

F.	Formula Benefit: $(0.022 \times 30 \text{ years} + 0.025 \times 3 \text{ years}) \times \$32,000 =$	\$ 23,520
G.	Reduction for Line E Election: $(1 - 0.84810) \times (F) =$	 3,573
H.	Benefit Payable to Retiree while Spouse is Alive: (F) - (G) =	19,947
	Benefit Payable to Spouse after Retiree's Death Benefit Payable to Retiree after Spouse's Death	19,947 23,520

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2009	\$ 19,947	\$ 19,947	\$ 23,520
2010	20,545	20,545	24,226
2011	21,144	21,144	24,931
2012	21,742	21,742	25,637
2013	22,341	22,341	26,342
2014	22,939	22,939	27,048
2015	23,537	23,537	27,754
2016	24,136	24,136	28,459
2017	24,734	24,734	29,165
2018	25,333	25,333	29,870

#### WILLIA DECEMBER 01, 2000

# **UNDER BENEFIT PROVISIONS EVALUATED**

# Data:

Α.	\$32,000	Final Average Earnings
В.	26	Years of Credited Service
C.	59	Age of Retiree
D.	56	Age of Spouse
E. ]	100%	Percentage of Pension to Continue to Spouse after retiree's death
_		(Retiree makes the choice of 100% Joint and Survivor with Pop-Up)

# **Computations:**

F.	Formula Benefit: $0.022 \times 26 \text{ years } \times 32,000 =$	\$ 18,304
G.	Adjustment factor for Early Retirement (from schedule)	80%
H.	Adjusted benefit: $(F) \times (G) =$	14,643
I.	Reduction for Line E Election: $(1 - 0.84810) \times (H) =$	 2,224
J.	Benefit Payable to Retiree while Spouse is Alive: (H) - (I)	12,419
	Benefit Payable to Spouse after Retiree's Death Benefit Payable to Retiree after Spouse's Death	12,419 14,643

Year Ended	Retiree's Benefit	Spouse's Benefit	Retiree's Benefit
December 31,	(Both Alive)	(After Retiree's Death)	(After Spouse's Death)
2009	\$ 12,419	\$ 12,419	\$ 14,643
2010	12,792	12,792	15,082
2011	13,164	13,164	15,522
2012	13,537	13,537	15,961
2013	13,910	13,910	16,400
2014	14,282	14,282	16,840
2015	14,655	14,655	17,279
2016	15,027	15,027	17,718
2017	15,400	15,400	18,158
2018	15 777	15 770	10 507

# MEMBER - NORMAL RETIREMENT RETIRING DECEMBER 31, 2008 UNDER BENEFIT PROVISIONS EVALUATED

# Data:

A.	\$38,000	Final Average Earnings
В.	28	Years of Credited Service
C.	49	Age of Retiree
D.	46	Age of Spouse
E.	100%	Percentage of Pension to Continue to Spouse after retiree's death
		(Retiree makes the choice of 100% Joint and Survivor with Pop-Up)

# **Computations:**

F.	Formula Benefit: $(0.025 \times 25 \text{ years} + 0.021 \times 3 \text{ years}) \times \$38,000 \times 80\% =$	\$ 20,915
G.	Reduction for Line E Election: $(1 - 0.91118) \times (F) =$	 1,858
H.	Benefit Payable to Retiree while Spouse is Alive: (F) - (G) =	19,057
	Benefit Payable to Spouse after Retiree's Death Benefit Payable to Retiree after Spouse's Death	19,057 20,915

Year Ended	Retiree's Benefit	Spouse's Benefit	Retiree's Benefit
December 31,	(Both Alive)	(After Retiree's Death)	(After Spouse's Death)
2009	\$ 19,057	\$ 19,057	\$ 20,915
2010	19,629	19,629	21,542
2011	20,200	20,200	22,170
2012	20,772	20,772	22,797
2013	21,344	21,344	23,425
2014	21,916	21,916	24,052
2015	22,487	22,487	24,680
2016	23,059	23,059	25,307
2017	23,631	23,631	25,935
2018	24,202	24,202	26,562

# SECTION 145.33 (B)(2)(a) LAW ENFORCEMENT MEMBER - NORMAL RETIREMENT RETIRING DECEMBER 31, 2008 UNDER BENEFIT PROVISIONS EVALUATED

# Data:

Α.	\$38,000	Final Average Earnings
B.	28	Years of Credited Service
C.	49	Age of Retiree
D.	46	Age of Spouse
E.	100%	Percentage of Pension to Continue to Spouse after retiree's death
		(Retiree makes the choice of 100% Joint and Survivor with Pop-Up)

# **Computations:**

F.	Formula Benefit: $(0.025 \times 25 \text{ years} + 0.021 \times 3 \text{ years}) \times \$38,000 =$	\$ 26,144
G.	Reduction for Line E Election: $(1 - 0.91118) \times (F) =$	2,322
H.	Benefit Payable to Retiree while Spouse is Alive: (F) - (G) =	23,822
I. J.	Benefit Payable to Spouse after Retiree's Death Benefit Payable to Retiree after Spouse's Death	23,822 26,144

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2009	\$ 23,822	\$ 23,822	\$ 26,144
2010	24,537	24,537	26,928
2011	25,251	25,251	27,713
2012	25,966	25,966	28,497
2013	26,681	26,681	29,281
2014	27,395	27,395	30,066
2015	28,110	28,110	30,850
2016	28,825	28,825	31,634
2017	29,539	29,539	32,419
2018	30,254	30,254	33,203

# METIMING DECEMBER 31, 2000

# UNDER BENEFIT PROVISIONS EVALUATED

# Data:

Α.	\$32,000	Final Average Earnings
В.	15	Years of Credited Service
C.	45	Age of Member
D.	42	Age of Spouse
E.	60:57	Ages at Which Benefits are Payable
F.	100%	Percentage of Pension to Continue to Spouse after retiree's death
		(Retiree makes the choice of 100% Joint and Survivor with Pop-Up)
G.	\$44,000	Accumulated Contributions with Interest at Termination Date

# **Computations:**

H.	Formula Benefit: $(0.022 \times 15 \text{ years} + 0.025 \times 0 \text{ years}) \times \$32,000 =$	\$ 10,560
I.	Adjustment factor for Early Retirement (from schedule)	85%
J.	Adjusted benefit: (H) $x$ (I) =	8,976
K.	Reduction for Line F Election: $(1 - 0.84024) \times (J) =$	 1,434
L.	Benefit Payable to Retiree while Spouse is Alive: $(J) - (K) =$	7,542
	Benefit Payable to Spouse after Retiree's Death Benefit Payable to Retiree after Spouse's Death	7,542 8,976
O.	In lieu of a lifetime benefit, terminee may elect to receive a refund of accumulated contributions with interest plus an additional 67% of eligible accumulated contributions because terminee had more than 10 years of service.	73,480
	The state of the s	. 5, . 55

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2009	\$ 7,542	\$ 7,542	\$ 8,976
2010	7,768	7,768	9,245
2011	7,995	7,995	9,515
2012	8,221	8,221	9,784
2013	8,447	8,447	10,053
2014	8,673	8,673	10,322
2015	8,900	8,900	10,592
2016	9,126	9,126	10,861
2017	9,352	9,352	11,130
2018	0 578	0 578	11 /100

# RETIRING DECEMBER 31, 2008 UNDER BENEFIT PROVISIONS EVALUATED

# Data:

Α.	\$38,000	Final Average Earnings
B.	15	Years of Credited Service
C.	37	Age of Retiree
D.	34	Age of Spouse
<b>E.</b>	52:49	Ages at Which Benefits are Payable
F.	100%	Percentage of Pension to Continue to Spouse after retiree's death
•		(Retiree makes the choice of 100% Joint and Survivor with Pop-Up)
G.	\$46,000	Accumulated Contributions at Termination Date

# **Computations:**

H.	Formula Benefit: $(0.015 \times 15 \text{ years}) \times \$38,000 =$	\$ 8,550
I.	Reduction for Line F Election: $(1 - 0.89538) \times (H) =$	 895
J.	Benefit Payable to Retiree while Spouse is Alive: $(H) - (I) =$	7,655
	Benefit Payable to Spouse after Retiree's Death Benefit Payable to Retiree after Spouse's Death	7,655 8,550
M.	In lieu of a lifetime benefit, terminee may elect to receive a refund of accumulated contributions with interest plus an additional 67% of eligible accumulated contributions because terminee had more than 10 years of service.	76,820

Year Ended	Retiree's Benefit	Spouse's Benefit	Retiree's Benefit
December 31,	(Both Alive)	(After Retiree's Death)	(After Spouse's Death)
2009	\$ 7,655	\$ 7,655	\$ 8,550
2010	7,885	7,885	8,807
2011	8,114	8,114	9,063
2012	8,344	8,344	9,320
2013	8,574	8,574	9,576
2014	8,803	8,803	9,833
2015	9,033	9,033	10,089
2016	9,263	9,263	10,346
2017	9,492	9,492	10,602
2018	9,722	9,722	10,859



Reserve transfers from the Employer Accumulation Fund to the A & PR Fund and/or Survivor Benefit Funds are recommended in the following instances.

- Whenever the December 31 valuation shows unfunded accrued liabilities or assets in excess of computed liabilities in any of the retired life funds.
- To adjust retired life reserves for the payment of health insurance premiums and Medicare reimbursements for the previous 12 month period if this has not already been done.
- To cover the cost of ad-hoc post retirement benefit increases.
- To adjust retired life reserves for any changes in computed liabilities resulting from assumption changes.

By making these annual adjustments in addition to the regular transfers when allowances are added to the rolls, the ratio of assets to liabilities for retired members and beneficiaries will stay at 100%. Year to year changes in this ratio before recommended transfers will normally be isolated to mortality experience within the retired life group.

In 1992, OPERS began making interim benefit payments for certain retirements to shorten the delay between the retirement effective date and receipt of the first monthly check. However, reserve transfers are not made until benefit amounts are final. Transfers for these cases have been accrued based upon supplemental information supplied by OPERS staff and are shown on the following page. The accruals, when added to other assets, are intended to put retired life reserves in the same position they would have been in if reserve transfers for the interim benefit cases had been coincident with benefit commencement.

It is recommended that the transfers shown on the following page be made from the Employer Accumulation Fund to the Annuity & Pension Reserve Fund and Survivor Benefit Funds as indicated. The Accrued Transfers is an estimate of pending future transfers for interim cases, and does not require a year end transfer. Any accrued transfers that have been made prior to OPERS' extract date and hence are not included in the "Accrued Transfers" column on pages IV-2 though IV-5 should be

# RESERVE TRANSFERS AFFECTING THE EMPLOYER ACCUMULATION FUND **DECEMBER 31, 2008** TRADITIONAL PLAN

	********	E	Thomas	Accepta Aftern	
	Before Transfers	Accrued	Other	Transfers	Lishilities
ota					
4&PR FUND					
SR	\$10,815,866,449	\$692,943,632	\$36,225,178	\$11,545,035,259	\$11,545,035,259
MP	17,261,573	535,829	\$(693,314)	17,104,088	17,104,088
AA	393,909	0	\$(116,541)	277,368	277,368
JR	068'69	0	\$(69,890)	0	0
R	45,716,342	351,862	5,280,296	51,348,500	51,348,500
DR	1,927,776,655	31,259,370	2,096,003	1,961,132,028	1,961,132,028
BD	292,310,767	8,873,321	4,307,779	305,491,867	305,491,867
FOTAL A&PR	13,099,395,585	733,964,014	47,029,511	13,880,389,110	13,880,389,110
SBF					
AA	0	0	0	0	0
S-1	101,895,012	1,542,100	\$(2,047,555)	101,389,557	101,389,557
S-2	412,679,369	2,256,336	1,298,338	416,234,043	416,234,043
FOTAL SBF	514,574,381	3,798,436	\$(749,217)	517,623,600	517,623,600
OTAL STATE	\$13,613,969,966	\$737,762,450	\$46,280,294	\$14,398,012,710	\$14,398,012,710
xal					
A&PR FUND					
SR	\$14,963,880,694	\$721,876,922	\$39,488,988	\$15,725,246,604	\$15,725,246,604
MP	46,219,252	661,064	(1,117,625)	45,762,691	45,762,691
AA	24,456,417	606,917	6,017,909	31,081,243	31,081,243
JR	72,121	0	(72,121)	0	0
8	62,146,616	83,774	6,479,981	68,710,371	68,710,371
DR	2,499,699,563	25,544,104	5,080,499	2,530,324,166	2,530,324,166
BD	342,133,236	11,013,175	8,140,674	361,287,085	361,287,085
FOTAL A&PR	17,938,607,899	759,785,956	64,018,305	18,762,412,160	18,762,412,160
SBF					
AA	0	0	0	0	0
S-1	165,364,946	958,716	(1,682,155)	164,641,507	164,641,507
S-2	693,824,835	3,384,615	(510,543)	696,698,907	206,869,969
FOTALSBF	859,189,781	4,343,331	(2,192,698)	861,340,414	861,340,414
)TAL LOCAL	\$18,797,797,680	\$764,129,287	\$61,825,607	\$19,623,752,574	\$19,623,752,574

# RESERVE TRANSFERS AFFECTING THE EMPLOYER ACCUMULATION FUND **DECEMBER 31, 2008** TRADITIONAL PLAN

	Assets	Trai	Transfers	Assets After		
	Before Transfers	Accrued	Other	Transfers	Liabilities	Ratio
Public Safety						
A&PR FUND						
SR	\$6,051,848	0 \$	\$(248,165)	\$5,803,683	\$5,803,683	
MP	0	0	0	0	0	
AA	0	0	0	0	0	
JR	0	0	0	0	0	
R	0	0	0	0	0	
DR	8,275,027	0	167,442	8,442,469	8,442,469	
BD	1,213,655	0	(8,906)	1,204,749	1,204,749	
TOTALA&PR	15,540,530	0	(679'68)	15,450,901	15,450,901	100.0%
SBF						
AA	0	0	0	0	0	
S-1	0	0	0	0	0	
S-2	13,373,750	606,114	420,684	14,400,548	14,400,548	
TOTALSBF	13,373,750	606,114	420,684	14,400,548	14,400,548	100.0%
TOTAL PUBLIC SAFETY	\$28,914,280	\$606,114	\$331,055	\$29,851,449	\$29,851,449	100.0%
Law Enforcement						
A & PR FUND						
SR	\$832,851,091	\$26,772,764	\$2,104,929	\$861,728,784	\$861,728,784	
MP	0	0	0	0	0	
AA	0	0	0	0	0	
JR	0	0	0	0	0	
ಕ್ಷ	259,181	0	151,207	410,388	410,388	
DR	471,065,063	7,141,930	3,530,721	481,737,714	481,737,714	
BD	52,417,129	1,715,377	3,541,670	57,674,176	57,674,176	
TOTAL A&PR	1,356,592,464	35,630,071	9,328,527	1,401,551,062	1,401,551,062	100.0%
SBF						
AA	0	0	0	0	0	
S-1	7,820,729	1,020,654	\$(212,194)	8,629,189	8,629,189	
S-2	23,430,051	95,147	108,543	23,633,741	23,633,741	
TOTALSBF	31,250,780	1,115,801	\$(103,651)	32,262,930	32,262,930	100.0%
TOTAL LAW ENFORCEMENT	\$ 1,387,843,244	\$ 36,745,872	\$ 9,224,876	\$ 1,433,813,992	\$ 1,433,813,992	100.0%
GRAND TOTAL	\$33,828,525,170	\$1,539,243,723	\$117,661,832	\$35,485,430,725	\$35,485,430,725	100.0%

# RESERVE TRANSFERS AFFECTING THE EMPLOYER ACCUMULATION FUND **DECEMBER 31, 2008** COMBINED PLAN

	Assets	Transfers	fers	Assets After		
	Before Transfers	Accrued	Other	Transfers	Liabilities	Ratio
State						
A & PR FUND						
SR	\$28,919	\$22,714	\$(28,726)	\$22,907	\$22,907	
MP	0	0	0	0	0	
AA	0	0	0	0	0	
Ж	0	0	0	0	0	
8	0	0	0	0	0	
DR	0	0	0	0	0	
BD	0	0	0	0	0	
TOTAL A&PR	28,919	22,714	(28,726)	22,907	22,907	
TOTAL STATE	\$28,919	\$22,714	(28,726)	\$22,907	\$22,907	CONTRACTOR CONTRACTOR
Local						
A & PR FUND						
SR	\$44,839	\$106,550	\$53,732	\$205,121	\$205,121	
MP	0	0	0	0	0	
AA	0	0	0	0	0	
ж.	0	0	0	0	0	
GR.	0	0	0	0	0	
DR	0	0	0	0	0	
BD	0	0	0	0	0	
TOTALA&PR	44,839	106,550	53,732	205,121	205,121	100.0%
TOTAL LOCAL	\$44,839	\$106,550	\$53,732	\$205,121	\$205,121	100.0%
GRAND TOTAL	\$73,758	\$129,264	\$25,006	\$228,028	\$228,028	100.0%

# RESERVE TRANSFERS AFFECTING THE EMPLOYER ACCUMULATION FUND MEMBER DIRECTED PLAN **DECEMBER 31, 2008**

	Assets	Transfers	sfers	Assets After		
	Before Transfers	Accrued	Other	Transfers	Liabilities	Ratio
State						
A & PR FUND						
SR	0 \$	0 \$	0 \$	0 \$	0	
MP	0	0	0	0	0	
AA	0	0	0	0	0	
Ж	0	0	0	0	0	
S)	0	0	0	0	0	
DR	0	0	0	0	0	
ВД	0	0	0	0	0	
TOTALA&PR	0	0	0	0	0	
TOTAL STATE	0 \$	0 \$	\$ 0	0 \$	0 \$	
Local						
A&PR FUND						
SR	\$171,800	\$141,401	\$(146,847)	\$166,354	\$166,354	
MP	0	0	0	0	0	
AA	0	0	0	0	0	
JR	0	0	0	0	0	
CR	0	0	0	0	0	
DR	0	0	0	0	0	
BD	0	0	0	0	0	
TOTAL A&PR	171,800	141,401	(146,847)	166,354	166,354	100.0%
TOTAL LOCAL	\$171,800	\$141,401	\$(146,847)	\$166,354	\$166,354	100.0%
GRAND TOTAL	\$171,800	\$141,401	\$(146,847)	\$166,354	\$166,354	100.0%

## **SECTION V**STATE DIVISION

Data on active, inactive, retired and money purchase members that was used in the valuation is tabulated briefly below.

Defined Benefit Active Members in Valuation December 31, 2008

		Annual		Average	
Groups	Number	Payroll	Pay	Age	Service
Men	51,289	\$2,255,728,945	\$43,981	42.1 yrs.	10.4 yrs.
Women	63,636	2,524,035,349	39,664	41.8	9.8
Totals	114,925	\$4,779,764,294	\$41,590	42.0 yrs.	10.1 yrs.

Also included in the valuation were 131,594 inactive members eligible for deferred retirement allowances or contribution refunds and 3,605 members active in the money purchase plan.

Retired Members in Valuation December 31, 2008

Fund / Type of Allowance	Number	Current Monthly Benefits	Actuarial Liabilities
A & PR Fund			
Superannuation Retirement	45,271	\$89,882,287	\$11,596,684,033
Disability Retirement	8,413	16,932,586	2,266,623,895
Money Purchase	396	171,445	17,104,088
Total A & PR Fund	54,080	106,986,318	13,880,412,016
Total SBF	4,805	4,591,809	517,623,600
Grand Total	58,885	\$111,578,127	\$14,398,035,616

# EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL DEFINED BENEFIT RETIREMENT ALLOWANCES **EMPLOYER CONTRIBUTIONS TO SUPPORT** STATE DIVISION

Valuation Date December 31		2008		2007
Contributions for		2011		2010
Normal Cost	Traditional Dan	Combined Don	Traditional and	Traditional and
Age and Service Allowances	8.38 %	3.66 %	8.55 %	8.54 %
Disability Allowances	2.52 %	1.96 %	2.51 %	2.51 %
Survivor's Benefits	0.42 %	0.31 %	0.42 %	0.42 %
Separation Benefits	4.02 %	1.25 %	3.96 %	3.97 %
Total Normal Cost	15.34 %	7.18 %	15.44 %	15.44 %
(Member Contributions)	10.00 %	0.00 %	10.00 %	10.00 %
Employer Normal Cost	5.34 %	7.18 %	5.44 %	5.44 %
Unfunded Actuarial Accrued Liabilities				
Total Available Contribution	4.66 %	2.82 %	4.56 %	1.56 %
Amortization Years	37	5	37	20
Total Pension Employer Contribution Rate	10.00 %	10.00 %	10.00 %	7.00 %

le term "Amortization Years" refers to the period sufficient to produce the Total Employer Contribution Rate for retirement allowa d survivor benefits and incorporates all scheduled employer and member contribution rate increases and scheduled employer allocations between the pension and retiree health programs.

# COMPARATIVE STATEMENT STATE DIVISION

	Contribution					Commut	ed Employe	r Contributi	Computed Employer Contributions as % of Pa	2
duation	Rate	Defined Bo	enefit Active	enefit Active Members in Valuation	Valuation		Unfunded			
Date	Effective		H	Annual Payroll		Normal	Accrued	Pension	Retiree	ت
ember 31	January 1	No.	Total	Average	Increase	Cost	Liability	Total	Health	<b>L</b> 88
			(\$Millions)							
994	1997	115,238	\$ 3,063	\$ 26,580	3.5 %	% 99.9	2.36 %	9.02 %	4.29 %	1;
995	1998	114,596	3,204	27,962	5.2 %	% 19.9	2.44 %	9.11 %	4:20 %	~
<b>@966</b>	1999	115,712	3,319	28,684	2.6 %	6.21 %	2.90 %	9.11 %	4.20 %	~
266	2000	114,036	3,405	29,858	4.1 %	6.21 %	2.80 %	9.01 %	4.30 %	7
866	2001	112,323	3,500	31,159	4.4 %	6.21 %	2.80 %	9.01 %	4.30 %	1:
#666	2002	112,761	3,592	31,851	2.2 %	7.68 %	0.63 %	8.31 %	5.00 %	7
000	2003	113,099	3,868	34,201	7.4 %	2.69 %	0.62 %	8.31 %	5.00 %	1:
001@	2004	109,219	3,996	36,589	7.0 %	6.17 %	3.14 %	9.31 %	4.00 %	=======================================
005	2005	110,017	4,129	37,531	2.6 %	5.95 %	3.36 %	9.31 %	4.00 %	13
003##	2006	108,249	4,079	37,679	0.4 %	5.70 %	3.34 %	9.04 %	4.50 %	
904	2007	110,207	4,165	37,794	0.3 %	5.67 %	2.60 %	8.27 %	5.50 %	
005@	2008	114,620	4,339	37,858	0.2 %	5.43 %	1.57 %	7.00 %	7.00 %	7
900	2009	115,930	4,522	39,005	3.0 %	4.97 %	2.03 %	7.00 %	7.00 %	17
2007	2010	118,466	4,703	39,695	1.8 %	5.44 %	1.56 %	7.00 %	7.00 %	17
800	2011	114,925	4,780	41,590	4.8 %	5.44 %	4.56 %	10.00 %	4.00 %	17

<sup># @ #</sup> 

After benefit changes. Revised actuarial assumptions. Combined Plan members are included beginning with the December 31, 2003 valuation.

### DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES DECEMBER 31, 2008

	T		Allocation l	у Е	ntry Age
		(1)	(2)		(3)
	1	Total	Portion		Actuarial
	1	Actuarial	Covered By		Accrued
		Present	Future Normal		Liabilities
Actuarial Present Value		Value	Cost Contributions		(1)-(2)
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$	13,880,412,016	-	\$	13,880,412,016
Allowances currently being paid from the Survivors Benefit Fund		517,623,600	-		517,623,600
Age and service allowances based on service rendered before and likely to be rendered after valuation date		15,528,341,091	3,109,901,917		12,418,439,174
Disability allowances likely to be paid present active members who become permanently disabled		2,134,945,536	936,109,590		1,198,835,946
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring		435,997,833	155,007,499		280,990,334
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members		2,499,860,472	1,526,269,554		973,590,918
Total	\$	34,997,180,548	\$ 5,727,288,560	\$	29,269,891,988
Actuarial Value of Assets					21,886,083,550
Unfunded Actuarial Accrued Liability				\$	7,383,808,438

#### COMPARATIVE STATEMENT (\$ IN MILLIONS EXCEPT AVERAGES)

			Active an	d Inactive M	ember Accru	ıed Liabilities	
	Defined	l Benefit		for Retiren	ent Allowand	es	
	Active	Payroll	Computed	Valuation		Amortization	Unfunded
Dec. 31	Total	Average	Total	Assets	Unfunded	Years	/Payroll
1994	\$3,063	\$26,580	\$ 7,182	\$5,956	\$1,226	21	0.40
1995	3,204	27,962	7,811	6,706	1,105	17	0.34
1996@	3,319	28,684	8,104	7,387	717	8	0.22
1997	3,405	29,858	8,591	8,268	323	3	0.09
1998	3,500	31,159	9,223	9,666	(443)	-	-
1999#	3,592	31,851	10,298	10,474	(176)	-	-
2000	3,868	34,201	11,273	11,558	(285)	-	-
2001@	3,996	36,589	11,352	11,863	(511)	-	-
2002	4,129	37,531	11,822	8,965	2,857	38	0.69
2003##	4,079	37,679	12,230	9,030	3,200	43	0.78
2004	4,165	37,794	12,441	9,664	2,777	34	0.67
2005@	4,339	37,858	13,326	10,296	3,030	39	0.70
2006	4,522	39,005	14,006	12,131	1,875	35	0.41
2007	4,703	39,695	14,526	13,442	1,084	20	0.23
2008	4,780	41,590	14,872	7,488	7,384	N/A	1.54

<sup>#</sup> After benefit changes.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded actuarial accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength, and vice-versa.

<sup>@</sup> Revised actuarial assumptions.

<sup>##</sup> Combined Plan members are included beginning with the December 31, 2003 valuation.

Attained		**************	Years of Se	rvice To Valuat	ion Date			<u> </u>
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
15-19	848							848
Tot. Pay	\$5,548,365				}			\$5,548,365
Avg. Pay	\$6,543							\$6,543
20-24	5,723	40						5,763
Tot. Pay	\$67,817,155	\$987,693						\$68,804,848
Avg. Pay	\$11,850	\$24,692						\$11,939
25-29	4,113	703	11					4,827
Tot. Pay	\$109,225,294	\$28,455,100	\$481,170					\$138,161,564
Avg. Pay	\$26,556	\$40,477	\$43,743					\$28,623
30-34	2,458	1,419	451	9				4,337
Tot. Pay	\$82,362,949	\$66,947,828	\$22,622,119	\$524,000				\$172,456,896
Avg. Pay	\$33,508	\$47,180	\$50,160	\$58,222	ļ			\$39,764
								•
35-39	1,996	1,326	1,529	433	10			5,294
Tot. Pay	\$70,557,280	\$65,334,085	\$83,235,982	\$25,533,452	\$577,291			\$245,238,090
Avg. Pay	\$35,349	\$49,272	\$54,438	\$58,969	\$57,729			\$46,324
40-44	1,578	1,062	1,271	1,472	605	19		6,007
Tot. Pay	\$56,110,398	\$53,253,971	\$70,803,736	\$91,161,095	\$37,089,038	\$1,086,985		\$309,505,223
Avg. Pay	\$35,558	\$50,145	\$55,707	\$61,930	\$61,304	\$57,210		\$51,524
45-49	1,442	1,006	1,148	1,250	1,702	824	33	7,405
Tot. Pay	\$49,673,733	\$48,893,722	\$62,563,670	\$76,165,649	\$107,920,885	\$49,040,582	\$2,017,610	\$396,275,851
Avg. Pay	\$34,448	\$48,602	\$54,498	\$60,933	\$63,408	\$59,515	\$61,140	\$53,515
			0.00	216	1.05	1 440	200	
50-54	1,180	902	963	916	1,256	1,443	392	7,052
Tot. Pay	\$41,797,338	\$43,199,279	\$54,131,556	\$56,336,002	\$78,135,215 \$62,210	\$93,975,498 \$65,125	\$25,050,514 \$63,904	\$392,625,402
Avg. Pay	\$35,421	\$47,893	\$56,211	\$61,502	\$02,210	\$03,123	\$03,904	\$55,676
55-59	899	688	739	755	916	842	625	5,464
Tot. Pay	\$29,370,841	\$35,588,178	\$40,521,948	\$44,439,307	\$55,954,255	\$54,831,645	\$46,244,298	\$306,950,472
Avg. Pay	\$32,671	\$51,727	\$54,833	\$58,860	\$61,085	\$65,121	\$73,991	\$56,177
60-64	478	412	427	461	490	389	335	2,992
Tot. Pay	\$13,260,636	\$19,095,978	\$23,245,964	\$28,094,175	\$29,229,446	\$25,845,926	\$26,499,119	\$165,271,244
Avg. Pay	\$27,742	\$46,349	\$54,440	\$60,942	\$59,652	\$66,442	\$79,102	\$55,238
		100	105	110	105	0.7	<b>5</b> 0	0.54
65-69	208	139	125	113	105	85	79	854
Tot. Pay	\$3,716,142 \$17,866	\$6,362,169 \$45,771	\$6,087,686 <sup>1</sup> \$48,701	\$7,205,834 \$63,768	\$6,696,572 \$63,777	\$5,803,242 \$68,273	\$6,381,801 \$80,782	\$42,253,446 \$49,477
Avg. Pay	\$17,500	\$43,771	\$ <del>48</del> ,701	φ0 <i>3</i> ,708	\$0.5,777	\$08,273	φου, / ο 2	₽ <del>4</del> 7,4 / /
70 & Over	198	77	48	33	27	29	34	446
Tot. Pay	\$1,728,491	\$1,334,780	\$1,834,781	\$1,477,309	\$1,594,207	\$1,769,713	\$2,898,263	\$12,637,544
Avg. Pay	\$8,730	\$17,335	\$38,225	\$44,767	\$59,045	\$61,025	\$85,243	\$28,335
Totals	21,121	7,774	6,712	5,442	5,111	3,631	1,498	51,289
Tot. Pay	\$531,168,622	\$369,452,783	\$365,528,612	\$330,936,823	\$317,196,909	\$232,353,591	\$109,091,605	\$2,255,728,945
Avg. Pay	\$25,149	\$47,524	\$54,459	\$60,812	\$62,062	\$63,992	\$72,825	\$43,981

Attained			Vears of S	Service To Valuat	ion Date		***	
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
15-19	1,032							1,032
Tot. Pay	\$5,835,896							\$5,835,896
Avg. Pay	\$5,655							\$5,655
'								
20-24	8,038	39						8,077
Tot. Pay	\$83,974,591	\$858,347						\$84,832,938
Avg. Pay	\$10,447	\$22,009	i					\$10,503
25-29	5,301	843	17					6,161
Tot. Pay	\$141,496,374	\$33,458,860	\$671,556					\$175,626,790
Avg. Pay	\$26,692	\$39,690	\$39,503					\$28,506
30-34	3,133	1,760	470	18				5,381
Tot. Pay	\$102,343,849	\$79,005,018	\$22,119,037	\$835,301				\$204,303,205
Avg. Pay	\$32,666	\$44,889	\$47,062	\$46,406				\$37,968
35-39	2,519	1,552	1,457	475	23			6,026
Tot. Pay	\$87,115,996	\$71,565,723	\$74,870,697	\$25,838,372	\$1,076,581			\$260,467,369
Avg. Pay	\$34,584	\$46,112	\$51,387	\$54,397	\$46,808			\$43,224
40-44	2,170	1,373	1,281	1,378	734	28		6,964
Tot. Pay	\$77,441,289	\$62,041,427	\$63,456,884	\$77,549,466	\$40,989,872	\$1,522,648		\$323,001,586
Avg. Pay	\$35,687	\$45,187	\$49,537	\$56,277	\$55,845	\$54,380		\$46,382
45-49	2,112	1,435	1,325	1,331	1,652	953	54	8,862
Tot. Pay	\$75,187,710	\$64,872,035	\$64,674,871	\$73,697,994	\$97,932,027	\$55,817,309	\$3,108,312	\$435,290,258
Avg. Pay	\$35,600	\$45,207	\$48,811	\$55,370	\$59,281	\$58,570	\$57,561	\$49,119
50-54	1,800	1,342	1,254	1,308	1,353	1,513	462	9,032
Tot. Pay	\$62,387,177	\$59,456,144	\$59,414,188	\$70,010,528	\$77,006,527	\$90,126,978	\$28,336,281	9,032 \$446,737,823
Avg. Pay	\$34,660	\$44,304	\$47,380	\$53,525	\$56,915	\$59,568	\$61,334	\$49,462
_ `	, ,		·			407,000	ψ01,551	ψ+2,+02
55-59	1,104	1,017	1,021	1,184	1,178	956	576	7,036
Tot. Pay	\$40,064,114	\$45,849,498	\$49,064,544	\$63,887,331	\$64,664,367	\$56,565,573	\$36,181,375	\$356,276,802
Avg. Pay	\$36,290	\$45,083	\$48,055	\$53,959	\$54,893	\$59,169	\$62,815	\$50,636
60-64	479	529	525	640	698	461	292	3,624
Tot. Pay	\$14,924,866	\$22,526,708	\$24,344,411	\$32,972,344	\$36,320,541	\$25,340,785	\$16,868,442	\$173,298,097
Avg. Pay	\$31,158	\$42,584	\$46,370	\$51,519	\$52,035	\$54,969	\$57,769	\$47,820
65-69	167	153	122	146	192	142	98	1,020
Tot. Pay	\$3,222,249	\$5,857,817	\$5,182,145	\$6,977,675	\$9,616,449	\$7,259,826	\$5,424,393	\$43,540,554
Avg. Pay	\$19,295	\$38,286	\$42,477	\$47,792	\$50,086	\$51,126	\$55,351	\$42,687
70 & Over	100	57	40					
Tot. Pay	\$1,451,855	57 \$1,188,077	40 \$1,565,082	51 \$2,172,976	66 \$3,076,112	48 \$2,385,931	59 \$2,983,998	421 \$14,824,031
Avg. Pay	\$1,431,833	\$20,843	\$39,127	\$2,172,970 \$42,607	\$46,608	\$49,707	\$2,983,998	\$14,824,031 \$35,211
Totals	27,955	10,100	7,512	6,531	5,896	4,101	1,541	63,636
Tot. Pay Avg. Pay	\$695,445,966 \$24,877	\$446,679,654 \$44,226	\$365,363,415 \$48,637	\$353,941,987 \$54,194	\$330,682,476 \$56,086	\$239,019,050 \$58,283	\$92,902,801 \$60,287	\$2,524,035,349
und Lah	\$24,011	\$ <del>44</del> ,220	\$48,03 <i>/</i>	\$34,194	\$30,066	\$38,28 <i>3</i>	\$0U,Z8/	\$39,664

Attained		Ye	ars of Ser	vice to Va	luation Da	te		Total
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number
15-19	395							395
20-24	15,039	2						15,041
25-29	29,775	130						29,905
30-34	25,004	425	20					25,449
35-39	17,199	586	186	11				17,982
40-44	9,242	783	423	109	11			10,568
45-49	7,363	895	614	252	72	15		9,211
50-54	6,947	852	682	359	161	52	3	9,056
55-59	5,607	785	727	402	157	33	2	7,713
60-64	3,071	425	286	119	52	5	1	3,959
65-69	1,267	114	42	13	3		2	1,441
70 & Over	820	28	15	8	2	1		874
Totals	121,729	5,025	2,995	1,273	458	106	8	131,594

#### SECTION VI LOCAL GOVERNMENT DIVISION

Data on active, inactive, retired and money purchase members that was used in the valuation is tabulated briefly below.

Defined Benefit Active Members in Valuation December 31, 2008

		Annual		Average	
Groups	Number	Payroll	Pay	Age	Service
Men Women	106,149 127,014	\$3,678,732,541 3,887,652,967	\$34,656 30,608	44.3 yrs. 43.7	9.7 yrs. 9.4
WOILE	127,014	3,007,032,707	50,000	43.7	7.4
Totals	233,163	\$7,566,385,508	\$32,451	44.0 yrs.	9.5 yrs.

Also included in the valuation were 233,102 inactive members eligible for deferred retirement allowances or contribution refunds and 13,576 members active in the money purchase plan.

Retired Members in Valuation December 31, 2008

		Current	Actuarial
Fund / Type of Allowance	Number	Monthly Benefits	Liabilities
A & PR Fund			
Superannuation Retirement	83,054	\$ 123,342,537	\$15,825,409,693
Disability Retirement	11,980	21,964,409	2,891,611,251
Money Purchase	1,316	453,446	45,762,691
Total A & PR Fund	96,350	145,760,392	18,762,783,635
Total SBF	9,919	7,698,726	861,340,414
Grand Total	106,269	\$153,459,118	\$19,624,124,049

# **EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL** DEFINED BENEFIT RETIREMENT ALLOWANCES **EMPLOYER CONTRIBUTIONS TO SUPPORT LOCAL GOVERNMENT DIVISION**

Valuation Date December 31		2008		2007
Contributions for		2011		2010
Normal Cost	Traditional Plan	Combined Plan	Traditional and Combined Plans	Traditional and Combined Plan
Age and Service Allowances	8.50 %	3.73 %	8.67 %	8.65 %
Disability Allowances	1.96 %	1.50 %	1.95 %	1.95 %
Survivor's Benefits	0.48 %	0.35 %	0.48 %	0.47 %
Separation Benefits	4.10 %	1.30 %	4.04 %	4.05 %
Total Normal Cost	15.04 %	6.88 %	15.14 %	15.12 %
(Member Contributions)	10.00 %	0.00 %	10.00 %	10.00 %
Employer Normal Cost	5.04 %	% 88.9	5.14 %	5.12 %
Unfunded Actuarial Accrued Liabilities				
Total Available Contribution	4.96 %	3.12 %	4.86 %	1.88 %
Amortization Years	27	4	26	6
Total Pension Employer Contribution Rate	10.00 %	10.00 %	10.00 %	7.00 %

te term "Amortization Years" refers to the period sufficient to produce the Total Employer Contribution Rate for retirement allows d survivor benefits and incorporates all scheduled employer and member contribution rate increases and scheduled employer allocations between the pension and retiree health programs.

io Public Employees Retirement System

# **LOCAL GOVERNMENT DIVISION** COMPARATIVE STATEMENT

	Contribution					Comput	Computed Employer Contributions as	r Contributi	ons as % of
luation	Rate	Defined B	Benefit Active Members in Valuation	Members in	Valuation	60	Unfunded		<b></b>
)ate	Effective		Ą	Annual Payroll	1	Normal	Accrued	Pension	Retiree
mber 31	January 1	No.	Total	Average	Increase	Cost	Liability	Total	Health
			(\$Millions)						
94	1997	221,987	\$4,366	\$19,666	4.2 %	6.16 %	2.28 %	8.44 %	5.11 %
95	1998	223,431	4,555	20,384	3.7 %	6.17 %	3.18 %	9.35 %	4.20 %
@96	1999	229,954	4,792	20,839	2.2 %	6.16 %	3.19 %	9.35 %	4.20 %
26	2000	231,668	4,976	21,481	3.1 %	6.15 %	3.10 %	9.25 %	4.30 %
86	2001	234,601	5,240	22,334	4.0 %	6.17 %	3.08 %	9.25 %	4.30 %
#66	2002	240,005	5,586	23,276	4.2 %	7.68 %	0.87 %	8.55 %	5.00 %
00	2003	245,831	5,999	24,401	4.8 %	7.68 %	0.87 %	8.55 %	5.00 %
01@	2004	243,202	6,451	26,526	8.7 %	6.14 %	3.41 %	9.55 %	4.00 %
02	2005	247,377	6,721	27,171	2.4 %	5.92 %	3.63 %	9.55 %	4.00 %
03##	2006	237,082	6,705	28,269	4.0 %	2.66 %	3.54 %	9.20 %	4.50 %
2	2007	236,907	968'9	29,110	3.0 %	5.57 %	2.78 %	8.35 %	5.50 %
05@	2008	236,073	7,066	29,933	2.8 %	5.00 %	2.00 %	7.00 %	7.00 %
90	2009	237,981	7,234	30,399	1.6 %	4.53 %	2.47 %	7.00 %	7.00 %
07	2010	237,225	7,438	31,354	3.1 %	5.12 %	1.88 %	7.00 %	7.00 %
80	2011	233,163	7,566	32,451	3.5 %	5.14 %	4.86 %	10.00 %	4.00 %

<sup># @ #</sup> 

After benefit changes. Revised actuarial assumptions. Combined Plan members are included beginning with the December 31, 2003 valuation.

### DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES DECEMBER 31, 2008

		Allocation l	oy Entry Age
	(1)	(2)	(3)
	Total	Portion	Actuarial
	Actuarial	Covered By	Accrued
	Present	Future Normal	Liabilities
Actuarial Present Value	Value	Cost Contributions	(1)-(2)
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$18,762,783,635	\$ -	\$18,762,783,635
Allowances currently being paid from the Survivors Benefit Fund	861,340,414	-	861,340,414
Age and service allowances based on service rendered before and likely to be rendered after valuation date	23,296,713,806	5,133,881,263	18,162,832,543
Disability allowances likely to be paid present active members who become permanently disabled	2,644,270,085	1,197,913,895	1,446,356,190
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	784,807,362	280,167,327	504,640,035
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	4,036,469,629	2,560,519,414	1,475,950,215
Total	\$50,386,384,931	\$9,172,481,899	\$41,213,903,032
Actuarial Value of Assets			31,185,242,966
Unfunded Actuarial Accrued Liability			\$ 10,028,660,066

### COMPARATIVE STATEMENT (\$ IN MILLIONS EXCEPT AVERAGES)

			Active a	and Inactive M	ember Accrue	d Liabilities	
	Define	d Benefit		for Retirem	ent Allowances	5	]
	Active	Payroll	Computed	Valuation		Amortization	Unfunded
Dec. 31	Total	Average	Total	Assets	Unfunded	Years	/Payroll
1994	\$ 4,366	\$19,666	\$ 9,894	\$ 7,814	\$2,080	28	0.48
1995	4,555	20,384	10,630	8,856	1,774	21	0.39
1996@	4,792	20,839	11,286	9,940	1,346	15	0.28
1997	4,976	21,481	11,973	11,218	755	5	0.15
1998	5,240	22,334	12,912	13,135	(223)	-	-
1999#	5,586	23,276	14,643	14,498	145	2	0.03
2000	5,999	24,401	15,881	16,131	(250)	-	- ,
2001@	6,451	26,526	15,983	16,651	(668)	-	_
2002	6,721	27,171	16,710	12,682	4,028	25	0.60
2003##	6,702	28,269	17,645	13,148	4,497	27	0.67
2004	6,896	29,110	18,269	14,223	4,046	23	0.59
2005@	7,066	29,933	19,484	14,921	4,563	25	0.65
2006	7,234	30,399	20,147	17,523	2,624	19	0.36
2007	7,438	31,354	20,838	19,656	1,182	9	0.16
2008	7,566	32,451	21,590	11,561	10,029	N/A	1.33

<sup>#</sup> After benefit changes.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength, and viceversa.

<sup>@</sup> Revised actuarial assumptions.

<sup>##</sup> Combined Plan members are included beginning with the December 31, 2003 valuation.

## DECEMBER 31, 2008 BY ATTAINED AGE AND YEARS OF SERVICE

Attained			Years of S	ervice To Valuati	ion Date			
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
15-19	5,232							5,232
Tot. Pay	\$35,635,639							\$35,635,639
Avg. Pay	\$6,811							\$6,811
20-24	7,893	150						8,043
Tot. Pay	\$111,238,107	\$3,654,605						\$114,892,712
Avg. Pay	\$14,093	\$24,364						\$14,285
25-29	5,508	1,461	102					7,071
Tot. Pay	\$132,768,630	\$51,997,074	\$3,885,445					\$188,651,149
Avg. Pay	\$24,105	\$35,590	\$38,093					\$26,680
30-34	3,984	2,675	953	39				7,651
Tot. Pay	\$107,400,698	\$110,203,321	\$42,517,221	\$1,768,948				\$261,890,188
Avg. Pay	\$26,958	\$41,198	\$44,614	\$45,358				\$34,230
35-39	3,814	2,796	2,385	868	27			9,890
Tot. Pay	\$103,587,035	\$118,221,303	\$113,268,198	\$43,627,305	\$1,334,539			\$380,038,380
Avg. Pay	\$27,160	\$42,282	\$47,492	\$50,262	\$49,427			\$38,427
40-44	3,522	2,532	2,345	2,152	869	31		11,451
Tot. Pay	\$91,832,869	\$103,324,658	\$115,727,872	\$112,741,536	\$46,635,604	\$1,665,888		\$471,928,427
Avg. Pay	\$26,074	\$40,808	\$49,351	\$52,389	\$53,666	\$53,738		\$41,213
45-49	3,362	2,626	2,386	2,297	2,293	1,174	82	14,220
Tot. Pay	\$83,291,873	\$101,258,936	\$110,151,398	\$119,253,074	\$125,488,588	\$66,189,709	\$4,745,854	\$610,379,432
Avg. Pay	\$24,775	\$38,560	\$46,166	\$51,917	\$54,727	\$56,380	\$57,876	\$42,924
50-54	3,219	2,472	2,344	2,234	2,143	2,063	844	15,319
Tot. Pay	\$74,876,037	\$89,796,977	\$102,506,960	\$107,719,559	\$116,464,910	\$121,210,199	\$50,877,725	\$663,452,367
Avg. Pay	\$23,261	\$36,326	\$43,732	\$48,218	\$54,347	\$58,754	\$60,282	\$43,309
55-59	2,742	2,058	1,748	1,897	1,565	1,377	1,123	12,510
Tot. Pay	\$58,175,544	\$69,023,580	\$71,825,306	\$88,661,668	\$83,794,826	\$81,013,872	\$73,442,266	\$525,937,062
Avg. Pay	\$21,216	\$33,539	\$41,090	\$46,738	\$53,543	\$58,834	\$65,398	\$42,041
60-64	2,143	1,504	1,065	1,019	913	677	587	7,908
Tot. Pay	\$36,097,076	\$48,703,208	\$41,117,543	\$45,233,671	\$46,131,579	\$37,856,406	\$37,927,244	\$293,066,727
Avg. Pay	\$16,844	\$32,382	\$38,608	\$44,390	\$50,527	\$55,918	\$64,612	\$37,060
65-69	1,476	722	470	309	244	178	161	3,560
Tot. Pay	\$15,120,671	\$15,467,100	\$15,685,263	\$11,585,064	\$11,133,665	\$8,719,178	\$9,977,577	\$87,688,518
Avg. Pay	\$10,244	\$21,423	\$33,373	\$37,492	\$45,630	\$48,984	\$61,973	\$24,632
70 & Over	1,436	875	407	249	128	88	111	3,294
Tot. Pay	\$10,522,952	\$9,923,184	\$6,549,472	\$5,484,630	\$3,794,982	\$3,356,006	\$5,540,714	\$45,171,940
Avg. Pay	\$7,328	\$11,341	\$16,092	\$22,027	\$29,648	\$38,136	\$49,916	\$13,713
Totals	44,331	19,871	14,205	11,064	8,182	5,588	2,908	106,149
Tot. Pay	\$860,547,131	\$721,573,946	\$623,234,678	\$536,075,455	\$434,778,693	\$320,011,258	\$182,511,380	\$3,678,732,541
Avg. Pay	\$19,412	\$36,313	\$43,874	\$48,452	\$53,138	\$57,268	\$62,762	\$34,656

## DECEMBER 31, 2008 BY ATTAINED AGE AND YEARS OF SERVICE

Attained			Years of S	ervice To Valuat	ion Date			
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
15-19	5,983							5,983
Tot. Pay	\$34,909,831	Ì						\$34,909,831
Avg. Pay	\$5,835							\$5,835
0004	2.210	205					-	= 0.0
20-24	7,743	205						7,948
Tot. Pay	\$97,512,995 \$12,594	\$3,684,065 \$17,971						\$101,197,060 \$12,732
Avg. Pay	\$12,394	\$17,971						\$12,/32
25-29	7,199	1,826	119					9,144
Tot. Pay	\$175,616,536	\$57,403,546	\$3,745,491					\$236,765,573
Avg. Pay	\$24,395	\$31,437	\$31,475					\$25,893
30-34	5,430	3,815	1,240	76				10,561
Tot. Pay	\$139,138,229	\$141,419,153	\$47,401,675	\$2,973,874				\$330,932,931
Avg. Pay	\$25,624	\$37,069	\$38,227	\$39,130				\$31,335
35-39	5,140	3,577	3,061	1,057	64			12,899
Tot. Pay	\$124,410,019	\$131,021,060	\$126,910,603	\$43,738,462	\$2,690,541			\$428,770,685
Avg. Pay	\$24,204	\$36,629	\$41,461	\$41,380	\$42,040			\$33,241
40-44	4,901	3,355	2,759	2,427	1,065	65		14,572
Tot. Pay	\$113,364,418	\$118,067,238	\$113,395,163	\$110,298,317	\$46,922,268	\$2,856,337		\$504,903,741
Avg. Pay	\$23,131	\$35,191	\$41,100	\$45,446	\$44,058	\$43,944		\$34,649
45-49	5,038	3,672	3,076	2,422	2,219	1,242	88	17,757
Tot. Pay	\$110,653,444	\$122,219,875	\$117,595,160	\$105,932,295	\$106,654,254	\$57,049,958	\$4,113,913	\$624,218,899
Avg. Pay	\$21,964	\$33,284	\$38,230	\$43,738	\$48,064	\$45,934	\$46,749	\$35,153
					·			
50-54	4,461	3,664	3,364	2,706	2,139	1,874	769	18,977
Tot. Pay	\$94,710,143	\$115,320,483	\$122,245,501	\$113,284,145	\$99,672,474	\$91,541,505	\$38,093,719	\$674,867,970
Avg. Pay	\$21,231	\$31,474	\$36,339	\$41,864	\$46,598	\$48,848	\$49,537	\$35,562
55-59	3,097	2,772	2,515	2,593	2,028	1,312	786	15,103
Tot. Pay	\$62,643,674	\$86,185,480	\$89,041,137	\$102,404,221	\$88,035,775	\$63,317,861	\$43,343,239	\$534,971,387
Avg. Pay	\$20,227	\$31,091	\$35,404	\$39,493	\$43,410	\$48,261	\$55,144	\$35,422
60-64	1,731	1,616	1,488	1,536	1,353	827	420	8,971
Tot. Pay	\$28,519,330	\$46,219,225	\$48,311,573	\$58,215,346	\$57,007,607	\$37,868,057	\$21,900,247	\$298,041,385
Avg. Pay	\$16,476	\$28,601	\$32,467	\$37,901	\$42,134	\$45,790	\$52,143	\$33,223
65-69	826	535	481	462	367	239	199	3,109
Tot. Pay	\$8,448,265	\$11,195,479	\$13,735,578	\$15,526,780	\$14,565,484	\$10,943,263	\$9,195,280	\$83,610,129
Avg. Pay	\$10,228	\$20,926	\$28,556	\$33,608	\$39,688	\$45,788	\$46,207	\$26,893
70 & Over	709	379	282	198	161	124	137	1,990
Tot. Pay	\$4,827,317	\$4,061,577	\$4,775,805	\$4,947,083	\$5,444,476	\$4,657,370	\$5,749,748	\$34,463,376
Avg. Pay	\$6,809	\$10,717	\$16,935	\$24,985	\$33,817	\$37,559	\$41,969	\$17,318
Totals	52,258	25,416	18,385	13,477	9,396	5,683	2,399	127,014
Tot. Pay	\$994,754,201	\$836,797,181	\$687,157,686	\$557,320,523	\$420,992,879	\$268,234,351	\$122,396,146	\$3,887,652,967
Avg. Pay	\$19,035	\$32,924	\$37,376	\$41,353	\$44,806	\$47,199	\$51,020	\$30,608

#### DECEMBER 31, 2008 BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Ye	ears of Sei	vice to Va	luation Da	te	·	Total
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number
15-19	2,291		:					2,291
20-24	29,714	17						29,731
25-29	36,995	332	2					37,329
30-34	32,621	819	63	2				33,505
35-39	25,631	1,361	380	34				27,406
40-44	18,184	1,459	709	173	17			20,542
45-49	17,931	1,690	1,040	394	99	20		21,174
50-54	18,591	1,944	1,334	598	231	55	1	22,754
55-59	14,813	1,833	1,406	627	247	45	6	18,977
60-64	9,004	994	570	231	99	13	3	10,914
65-69	4,519	284	85	30	11	5	1	4,935
70 & Over	3,316	168	40	10	6	4	:	3,544
Totals	213,610	10,901	5,629	2,099	710	142	11	233,102

## **SECTION VII**PUBLIC SAFETY DIVISION

Data on active, inactive, retired and money purchase members that was used in the valuation is tabulated briefly below.

Active Members in Valuation December 31, 2008

		Annual		Average	
Groups	Number	Payroll	Pay	Age	Service
Men	118	\$5,859,673	\$49,658	43.1 yrs.	11.5 yrs.
Women	9	359,406	39,934	43.9	10.9
Totals	127	\$6,219,079	\$48,969	43.2 yrs.	11.5 yrs.

Also included in the valuation were 21 inactive members eligible for deferred retirement allowances or contribution refunds and 0 members active in the money purchase plan.

Retired Members in Valuation December 31, 2008

		Current	Actuarial
Fund / Type of Allowance	Number	Monthly Benefits	Liabilities
A & PR Fund			
Superannuation Retirement	25	\$34,345	\$5,803,683
Disability Retirement	26	65,111	9,647,217
Money Purchase	0	0	0
Total A & PR Fund	51	99,456	15,450,900
Total SBF	86	100,817	14,400,548
Grand Total	137	\$200,273	\$29,851,448

#### RETIREMENT ALLOWANCES EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL

Valuation Date December 31	2008	2007
Contributions for	2011	2010
Normal Cost		
Age and Service Allowances	10.03 %	10.09 %
Disability Allowances	5.73 %	5.52 %
Survivor's Benefits	0.79 %	0.68 %
Separation Benefits	2.77 %	2.76 %
Total Normal Cost	19.32 %	19.05 %
(Member Contributions)	11.00 %	10.10 %
Employer Normal Cost	8.32 %	8.95 %
Unfunded Actuarial Accrued Liabilities		
Total Available Contribution	5.78 %	1.92 %
Amortization Years	26	N/A
Total Pension Employer Contribution Rate	14.10 %	10.87 %

N/A – The unfunded actuarial accrued liabilities are unable to be amortized based upon the total pension contribution rate.

The term "Amortization Years" refers to the period sufficient to produce the Total Employer Contribution Rate for retirement allowances and survivor benefits and incorporates all scheduled employer and member contribution rate increases and scheduled employer rate reallocations between the pension and retiree health programs.

# PUBLIC SAFETY DIVISION **COMPARATIVE STATEMENT\***

	Contribution					Compute	Computed Employer Contributions as % of Pay	r Contributi	ons as % of	Payı
aluation	Rate	A	Active Members in Valuation	in Valuatio	u u		Unfunded			
Date	Effective		Am	Annual Payroll		Normal	Accrued	Pension	Retiree	5
ember 31	January 1	No.	Total	Average	Increase	Cost	Liability	Total	Health	T
			(\$Thousands)							
002@	2008	135	8/0/9	45,023	6.7 %	9.01 %	1.39 %	10.40 %	7.00 %	17.
900	2009	127	5,851	46,067	2.3 %	8.73 %	1.90 %	10.63 %	7.00 %	17.0
200	2010	120	5,638	46,985	2.0 %	8.95 %	1.92 %	10.87 %	7.00 %	17.8
800	2011	127	6,219	48,969	4.2 %	8.32 %	5.78 %	14.10 %	4.00 %	18.

Prior to 2005, Public Safety and Law Enforcement results were reported together. Historical information prior to 2005 may be found on page VIII-3. Revised actuarial assumptions. \* @

#### TUDLIC SAPELLI DIVISION

## DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES DECEMBER 31, 2008

		Allocation by	Entry Age
	(1)	(2)	(3)
	Total	Portion	Actuarial
	Actuarial	Covered By	Accrued
	Present	Future Normal	Liabilities
Actuarial Present Value	Value	Cost Contributions	(1)-(2)
Allowances currently being paid from			
the Annuity & Pension Reserve Fund	\$15,450,900	\$ -	\$15,450,900
Allowances currently being paid from			
the Survivors Benefit Fund	14,400,548	-	14,400,548
Age and service allowances based on			
service rendered before and likely			
to be rendered after valuation date	19,780,047	5,184,855	14,595,192
Disability allowances likely to be paid			
present active members who become			
permanently disabled	5,361,695	2,827,483	2,534,212
Survivor benefits likely to be paid to			
spouses and children of present active			
members who die before retiring	809,955	369,441	440,514
Separation benefits (refunds of contributions			
and deferred allowances) likely to be paid			
to present active and inactive members	2,170,160	1,413,539	756,621
Total	\$57,973,305	\$9,795,318	\$48,177,987
Actuarial Value of Assets			39,180,604
Unfunded Actuarial Accrued Liability			\$8,997,383

#### COMPARATIVE STATEMENT \* (\$ IN MILLIONS EXCEPT AVERAGES)

	Defined	l Benefit	Active a	Active and Inactive Member Accrued Liabilities for Retirement Allowances						
	Active	Payroll	Computed	Computed Valuation Amortization						
Dec. 31	Total	Average	Total	Assets	Unfunded	Years	/Payroll			
2005@	\$6	\$45,023	\$16	\$(44)	\$60	N/A	10.00			
2006	6	46,067	16	(64)	80	N/A	13.33			
2007	6	46,985	18	(82)	100	N/A	16.67			
2008	6	48,969	18	9	9	79	1.50			

N/A – The unfunded actuarial accrued liabilities are unable to be amortized based upon the total pension contribution rate.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength, and viceversa.

<sup>\*</sup> Prior to 2005, Public Safety and Law Enforcement results were reported together. Historical information prior to 2005 may be found on page VIII-5.

<sup>@</sup> Revised actuarial assumptions.

Attained			Years of S	ervice To Valua	tion Date			
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
15-19								
Tot. Pay			1			: <b>i</b>		
Avg. Pay								
20-24	2							2
Tot. Pay	\$62,620							\$62,620
Avg. Pay	\$31,310							\$31,310
		ŀ	ŀ	İ				
25-29	12	5	ļ					17
Tot. Pay	\$452,747	\$218,223						\$670,970
Avg. Pay	\$37,729	\$43,645						\$39,469
30-34	7	7	1					15
Tot. Pay	\$265,469	\$341,933	\$34,549					\$641,951
Avg. Pay	\$37,924	\$48,848	\$34,549					\$42,797
35-39	4	6	6	2				18
Tot. Pay	\$157,218	\$297,605	\$285,927	\$85,601				\$826,351
Avg. Pay	\$39,305	\$49,601	\$47,655	\$42,801				\$45,908
1								
40-44	2	2	2	5				11
Tot. Pay	\$172,918	\$96,212 \$48,106	\$113,323	\$289,461 \$57,892				\$671,914 \$61,083
Avg. Pay	\$86,459	\$46,100	\$56,662	\$37,092				\$01,083
45-49	2	2	2	3	2	4		15
Tot. Pay	\$92,399	\$87,980	\$97,466	\$129,711	\$121,067	\$293,839		\$822,462
Avg. Pay	\$46,200	\$43,990	\$48,733	\$43,237	\$60,534	\$73,460		\$54,831
50-54	3		2	5	3	2	2	17
Tot. Pay	\$109,118		\$82,837	\$323,137	\$194,229	\$63,438	\$154,247	\$927,006
Avg. Pay	\$36,373		\$41,419	\$64,627	\$64,743	\$31,719	\$77,124	\$54,530
55-59	1	1		4	3	2		11
Tot. Pay	\$58,548	\$97,204		\$271,685	\$155,067	\$130,810		\$713,314
Avg. Pay	\$58,548	\$97,204		\$67,921	\$51,689	\$65,405		\$64,847
		411,211		701,7			·	
60-64	2		2		3	2		9
Tot. Pay	\$81,384		\$93,913		\$127,891	\$89,451		\$392,639
Avg. Pay	\$40,692		\$46,957		\$42,630	\$44,726		\$43,627
65-69	1				1			2
Tot. Pay	\$52,688				\$35,806			\$88,494
Avg. Pay	\$52,688	1			\$35,806			\$44,247
70 & Over					1			1
Tot. Pay					\$41,952			\$41,952
Avg. Pay					\$41,952			\$41,952
Totals	36	23	15	19	13	10	2	118
Tot. Pay	\$1,505,109	\$1,139,157	\$708,015	\$1,099,595	\$676,012	\$577,538	\$154,247	\$5,859,673
Avg. Pay	\$41,809	\$49,529	\$47,201	\$57,873	\$52,001	\$57,754	\$77,124	\$49,658

Attained			Years of S	ervice To Valua	tion Date			
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
15-19								
Tot. Pay					İ			
Avg. Pay		i						
20-24				i				
Tot. Pay								
Avg. Pay		i						
25-29	2							2
Tot. Pay	\$90,352							\$90,352
Avg. Pay	\$45,176	ŀ						\$45,176
30-34		,						1
Tot. Pay		\$29,568						\$29,568
Avg. Pay		\$29,568						\$29,568
		, , , , , , ,						, ,
35-39							:	
Tot. Pay								
Avg. Pay		i						
40-44		1						1
Tot. Pay		\$48,994						\$48,994
Avg. Pay		\$48,994						\$48,994
45-49		,			1			2
Tot. Pay		\$52,237			\$45,108			\$97,345
Avg. Pay		\$52,237			\$45,108			\$48,673
		452,237			4.5,255			4 10,010
50-54		1				1		1
Tot. Pay						\$41,642		\$41,642
Avg. Pay						\$41,642		\$41,642
55-59					1			1
Tot. Pay					\$7,889			\$7,889
Avg. Pay					\$7,889			\$7,889
60-64		.						1
Tot. Pay		\$43,616						\$43,616
Avg. Pay		\$43,616						\$43,616
		4 10,020						4 - 2,2 - 2
65-69								
Tot. Pay								
Avg. Pay								
70 & Over								
Tot. Pay			j					
Avg. Pay								
Totals	2	4			2	1		9
Tot. Pay	\$90,352	I .	\$ -	\$ -	\$52,997	\$41,642	\$ -	\$359,406
Avg. Pay	\$45,176	\$43,604			\$26,499	\$41,642		\$39,934

Attained		Years of Service to Valuation Date							
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number	
15-19									
20-24	2							2	
25-29	2							2	
30-34	7	1						8	
35-39	4	1						5	
40-44	1							1	
45-49				1	1			2	
50-54									
55-59								-	
60-64	1							1	
65-69							:		
70 & Over									
Totals	17	2		1	1			21	

#### **SECTION VIII**

LAW ENFORCEMENT DIVISION

Data on active, inactive, retired and money purchase members that was used in the valuation is tabulated briefly below.

Active Members in Valuation December 31, 2008

		Annual		Average	
Groups	Number	Payroll	Pay	Age	Service
Men Women	7,146 1,027	\$396,179,864 52,513,781	\$55,441 51,133	40.5 yrs. 40.5	13.3 yrs.
Totals	8,173	\$448,693,645	\$54,900	40.5 yrs.	13.2 yrs.

Also included in the valuation were 899 inactive members eligible for deferred retirement allowances or contribution refunds and 36 members active in the money purchase plan.

Retired Members in Valuation December 31, 2008

		Current	Actuarial
Fund / Type of Allowance	Number	Monthly Benefits	Liabilities
A & PR Fund			
Superannuation Retirement	2,032	\$5,667,945	\$ 862,139,172
Disability Retirement	1,418	3,820,977	539,411,890
Money Purchase	0	0	0
Total A & PR Fund	3,450	9,488,922	1,401,551,062
Total SBF	275	257,772	32,262,931
Grand Total	3,725	\$9,746,694	\$1,433,813,993

## RETIREMENT ALLOWANCES EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL

Valuation Date December 31	2008	2007
Contributions for	2011	2010
Normal Cost		
Age and Service Allowances	12.09 %	12.09 %
Disability Allowances	5.22 %	5.22 %
Survivor's Benefits	0.59 %	0.60 %
Separation Benefits	2.13 %	2.14 %
Total Normal Cost	20.03 %	20.05 %
(Member Contributions)	11.60 %	10.10 %
Employer Normal Cost	8.43 %	9.95 %
Unfunded Actuarial Accrued Liabilities		
Total Available Contribution	5.67 %	0.92 %
Amortization Years	32	N/A
Total Pension Employer Contribution Rate	14.10 %	10.87 %

The term "Amortization Years" refers to the period sufficient to produce the Total Employer Contribution Rate for retirement allowances and survivor benefits and incorporates all scheduled employer and member contribution rate increases and scheduled employer rate reallocations between the pension and retiree health programs.

# LAW ENFORCEMENT DIVISION **COMPARATIVE STATEMENT\***

	Contribution					Comput	ed Employe	Computed Employer Contributions as	ons as % of Pay	Pay
aluation	Rate	A	Active Members in Valuation	in Valuatio	n n		Unfunded			
Date	Effective		Am	Annual Payroll		Normal	Accrued	Pension	Retiree	Ğ
cember 31	January 1	No.	Total	Average	Increase	Cost	Liability	Total	Health	Ι
			(\$Thousands)							
994	1997	6,252	\$196,467	\$31,425	3.8 %	9.71 %	1.10 %	10.81 %	5.89 %	16.
995	1998	6,605	214,273	32,441	3.2 %	% 69.6	2.81 %	12.50 %	4.20 %	16.
@966	1999	6,742	229,138	33,987	4.8 %	10.50 %	2.00 %	12.50 %	4.20 %	16.
266	2000	7,256	258,897	35,680	5.0 %	10.49 %	1.91 %	12.40 %	4.30 %	16.
866	2001	7,507	277,239	36,931	3.5 %	10.48 %	1.92 %	12.40 %	4.30 %	16.
#666	2002	7,766	299,040	38,506	4.3 %	11.54 %	0.16 %	11.70 %	5.00 %	16.
000	2003	8,045	324,918	40,387	4.9 %	11.59 %	0.11 %	11.70 %	5.00 %	16.
001@	2004	7,892	335,432	42,503	5.2 %	8.88 %	3.82 %	12.70 %	4.00 %	16.
000	2005	8,030	356,694	44,420	4.5 %	8.77 %	3.93 %	12.70 %	4.00 %	16.
003	2006	8,253	384,388	46,576	4.9 %	8.65 %	3.78 %	12.43 %	4.50 %	16.
900	2007	8,173	392,672	48,045	3.2 %	8.63 %	3.04 %	11.67 %	5.50 %	17.
002@	2008	7,976	395,189	49,547	3.0 %	9.65 %	0.75 %	10.40 %	7.00 %	17.
900	2009	8,092	413,182	51,061	3.1 %	9.65 %	0.98 %	10.63 %	7.00 %	17.
002	2010	8,265	437,223	52,901	3.6 %	9.95 %	0.92 %	10.87 %	7.00 %	17.
800	2011	8,173	448,694	54,900	3.8 %	8.43 %	5.67 %	14.10 %	4.00 %	17.

<sup>\* \*</sup> 

After benefit changes. Revised actuarial assumptions. Prior to 2005, Law Enforcement and Public Safety are combined for purposes of this schedule.

## DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES DECEMBER 31, 2008

		y Entry Age
(1)	(2)	(3)
Total	Portion	Actuarial
Actuarial	Covered By	Accrued
Present	Future Normal	Liabilities
Value	<b>Cost Contributions</b>	(1)-(2)
\$ 1,401,551,061	\$ -	\$ 1,401,551,061
32,262,931	_	32,262,931
		, ,
1,700,748,437	506,088,353	1,194,660,084
446 014 587	213 288 066	232,726,521
110,011,507	213,233,333	232,720,321
55,433,179	23,905,604	31,527,575
		:
100 004 000	00.001.046	40.050.054
129,984,820	89,031,946	40,952,874
\$3,765,995,015	\$832,313,969	\$2,933,681,046
		2,204,670,137
		\$ 729,010,909
	Total Actuarial Present Value  \$ 1,401,551,061  32,262,931  1,700,748,437  446,014,587	Total Actuarial Present Value Cost Contributions  \$ 1,401,551,061 \$ -  32,262,931 -  1,700,748,437 506,088,353  446,014,587 213,288,066  55,433,179 23,905,604

## COMPARATIVE STATEMENT \* (\$ IN MILLIONS EXCEPT AVERAGES)

	D. C.	I.D 64	Active an			ed Liabilities	
		l Benefit	Commutad	Valuation	ent Allowand	es Amortization	Unfunded
Dec. 31	Total	Payroll Average	Computed Total	Assets	Unfunded	Years	/Payroll
1994	\$196	\$31,425	\$ 580	\$ 555	\$ 25	13	0.13
1995	214	32,441	638	612	26	12	0.12
1996@	229	33,987	711	676	35	30	0.15
1997	259	35,680	821	773	48	10	0.19
1998	277	36,931	914	895	19	5	0.07
1999#	299	38,506	1,080	1,038	42	20	0.14
2000	325	40,387	1,175	1,137	38	18	0.12
2001@	335	42,503	1,071	1,149	(78)	-	-
2002	357	44,420	1,135	854	281	36	0.79
2003	384	46,576	1,170	838	332	41	0.86
2004	393	48,045	1,197	868	329	43	0.84
2005@	395	49,547	1,298	926	372	N/A	0.94
2006	413	51,061	1,356	1,069	287	N/A	0.69
2007	437	52,901	1,430	1,214	216	N/A	0.49
2008	449	54,900	1,500	771	729	N/A	1.62

<sup>#</sup> After benefit changes.

While no one or two numeric indices can fully describe the financial condition of a retirement plan, the ratio of unfunded actuarial accrued liabilities divided by active member payroll ("UNFUNDED / PAYROLL" above) is significant. Unfunded accrued liabilities represent plan debt, while active member payroll represents the plan's capacity to collect contributions to pay toward debt --- thus the ratio is a relative index of condition. The lower the ratio, the greater the financial strength, and viceversa.

<sup>@</sup> Revised actuarial assumptions.

<sup>\*</sup> Prior to 2005, Law Enforcement and Public Safety are combined for purposes of this schedule.

### BY ATTAINED AGE AND YEARS OF SERVICE

Attained			Years of S	ervice To Valuat	ion Date			
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
15-19								
Tot. Pay							:	
Avg. Pay								
		_						
20-24	157	3			1			160
Tot. Pay	\$5,605,626	\$151,437						\$5,757,063 \$35,982
Avg. Pay	\$35,705	\$50,479		İ				\$33,982
25-29	388	243	2					633
Tot. Pay	\$16,408,676	\$12,230,252	\$105,536					\$28,744,464
Avg. Pay	\$42,290	\$50,330	\$52,768					\$45,410
30-34	244	605	317	8				1,174
Tot. Pay	\$10,378,847	\$32,203,145	\$17,845,772	\$470,775				\$60,898,539
Avg. Pay	\$42,536	\$53,228	\$56,296	\$58,847				\$51,873
35-39	159	420	810	283	4			1,676
Tot. Pay	\$6,789,836	\$21,922,447	\$46,540,803	\$16,768,337	\$250,141			\$92,271,564
Avg. Pay	\$42,703	\$52,196	\$57,458	\$59,252	\$62,535			\$55,055
Avg. ray	Ψ+2,703	Ψ32,190	Ψ31,430	Ψ57,252	Ψ02,555			Ψ33,033
40-44	67	166	364	465	178	3		1,243
Tot. Pay	\$2,819,247	\$8,617,420	\$20,924,195	\$28,829,188	\$11,422,093	\$196,404		\$72,808,547
Avg. Pay	\$42,078	\$51,912	\$57,484	\$61,998	\$64,169	\$65,468		\$58,575
45-49	48	82	138	245	341	134	4	992
Tot. Pay	\$2,075,753	\$4,366,717	\$7,458,503	\$14,193,043	\$21,612,309	\$9,285,194	\$311,511	\$59,303,030
Avg. Pay	\$43,245	\$53,253	\$54,047	\$57,931	\$63,379	\$69,292	\$77,878	\$59,781
50-54	20	34	92	104	161	232	49	692
Tot. Pay	\$803,824	\$1,801,458	\$4,983,401	\$5,642,974	\$10,112,866	\$15,918,038	\$3,515,914	\$42,778,475
Avg. Pay	\$40,191	\$52,984	\$54,167	\$54,259	\$62,813	\$68,612	\$71,753	\$61,819
55-59	16	18	38	67	82	87	66	374
Tot. Pay	\$679,562	\$847,955	\$1,981,970	\$3,717,141	\$4,818,611	\$5,534,591	\$4,539,996	\$22,119,826
Avg. Pay	\$42,473	\$47,109	\$52,157	\$55,480	\$58,764	\$63,616	\$68,788	\$59,144
	İ					·		
60-64	9	15	9	32	28	23	32	148
Tot. Pay	\$377,324	\$799,375	\$465,444	\$1,686,131	\$1,600,382	\$1,387,561	\$2,115,882	\$8,432,099
Avg. Pay	\$41,925	\$53,292	\$51,716	\$52,692	\$57,157	\$60,329	\$66,121	\$56,974
65-69	3	8	1	8	8	6	5	39
Tot. Pay	\$74,679	\$469,607	\$43,624	\$499,386	\$517,194	\$397,185	\$350,557	\$2,352,232
Avg. Pay	\$24,893	\$58,701	\$43,624	\$62,423	\$64,649	\$66,198	\$70,111	\$60,314
70 & Over	2	2	3	2	1	2	3	15
Tot. Pay	\$40,867	\$61,037	\$128,970	\$77,063	\$46,810	\$132,144	\$227,134	\$714,025
Avg. Pay	\$20,434	\$30,519	\$42,990	\$38,532	\$46,810	\$66,072	\$75,711	\$47,602
Totals	1,113	1,596	1,774	1,214	803	487	159	7,146
Tot. Pay	\$46,054,241	\$83,470,850	\$100,478,218	\$71,884,038	\$50,380,406	\$32,851,117	\$11,060,994	\$396,179,864
Avg. Pay	\$41,378	\$52,300	\$56,639	\$59,213	\$62,740	\$67,456	\$69,566	\$55,441

## BY ATTAINED AGE AND YEARS OF SERVICE

Attained	<u></u>		Years of S	ervice To Valuat	ion Date			
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
15-19								
Tot. Pay								
Avg. Pay								
20-24	14	1	1				,	15
Tot. Pay	\$479,519	\$19,063						\$498,582
Avg. Pay	\$34,251	\$19,063		i				\$33,239
25-29	81	32	1					114
Tot. Pay	\$3,256,456	\$1,479,844	\$48,030					\$4,784,330
Avg. Pay	\$40,203	\$46,245	\$48,030					\$41,968
30-34	37	100	39	1				177
Tot. Pay	\$1,520,812	\$5,096,147	\$2,034,113	\$38,443				\$8,689,515
Avg. Pay	\$41,103	\$50,961	\$52,157	\$38,443				\$49,093
					_			
35-39	28	44	107	30	3			212
Tot. Pay	\$1,143,874	\$2,237,609	\$5,669,775	\$1,794,597	\$133,103			\$10,978,958
Avg. Pay	\$40,853	\$50,855	\$52,989	\$59,820	\$44,368			\$51,788
40-44	19	31	50	45	21			166
Tot. Pay	\$775,016	\$1,471,453	\$2,711,951	\$2,620,516	\$1,275,995			\$8,854,931
Avg. Pay	\$40,790	\$47,466	\$54,239	\$58,234	\$60,762			\$53,343
45-49	7	19	30	36	36	17		145
Tot. Pay	\$317,911	\$923,778	\$1,527,809	\$1,973,384	\$2,284,438	\$1,046,472		\$8,073,792
Avg. Pay	\$45,416	\$48,620	\$50,927	\$54,816	\$63,457	\$61,557		\$55,681
						22		100
50-54	6	9	24	26	28	23	6	122 \$6,573,773
Tot. Pay	\$256,775	\$403,284	\$1,186,304	\$1,253,258 \$48,202	\$1,639,646 \$58,559	\$1,476,637 \$64,202	\$357,869 \$59,645	\$53,883
Avg. Pay	\$42,796	\$44,809	\$49,429	\$40,202	\$30,339	\$04,202	φ39,043	\$33,663
55-59	1	5	7	6	9	14	6	48
Tot. Pay	\$49,809	\$251,578	\$353,996	\$271,408	\$478,086	\$826,598	\$386,037	\$2,617,512
Avg. Pay	\$49,809	\$50,316	\$50,571	\$45,235	\$53,121	\$59,043	\$64,340	\$54,532
60-64		2	2	5	8	7	2	26
Tot. Pay		\$53,200	\$94,425	\$229,277	\$457,398	\$414,186	\$116,794	\$1,365,280
Avg. Pay		\$26,600	\$47,213	\$45,855	\$57,175	\$59,169	\$58,397	\$52,511
			1					•
65-69				1		1	022.566	2 \$77.109
Tot. Pay				\$43,542			\$33,566 \$33,566	\$77,108
Avg. Pay		İ	ļ	\$43,542			\$33,566	\$38,554
70 & Over				l				
Tot. Pay				l				
Avg. Pay								
Totals	193	243	260	150	105	61	15	1,027
Tot. Pay	\$7,800,172	\$11,935,956	\$13,626,403	\$8,224,425	\$6,268,666	\$3,763,893	\$894,266	\$52,513,781
Avg. Pay	\$40,415	\$49,119	\$52,409	\$54,830	\$59,702	\$61,703	\$59,618	\$51,133

## BY ATTAINED AGE AND YEARS OF SERVICE

Attained		Yea	rs of Ser	vice to Va	aluation I	<b>Date</b>		Total
Ages	0-4	5-9	10-14	15-19	20-24	25-29	30+	Number
15-19					:			
20-24	10							10
25-29	63	9				!		72
30-34	115	27	4					146
35-39	125	32	20	2				179
40-44	109	28	21	9	1		:	168
45-49	60	16	16	15	8	1		116
50-54	36	10	11	9	10	2		78
55-59	40	8	13	8	2	1	2	74
60-64	24	3	4	3				34
65-69	10	1						11
70 & Over	10			1				11
Totals	602	134	89	47	21	4	2	899

### **SECTION IX**

ALLOWANCES BEING PAID TO RETIREES AND BENEFICIARIES

## AS OF DECEMBER 31, 2008

Year of			Post-Ret.		
Retirement	No.	Initial	Increase	Total	Average
2008	9,328	\$17,694,246	\$ 67,321	\$ 17,761,567	\$1,904
2007	9,046	17,021,405	584,185	17,605,590	1,946
2006	9,838	17,331,243	1,098,903	18,430,146	1,873
2005	9,230	16,644,743	1,551,973	18,196,716	1,971
2004	8,755	14,846,671	1,821,228	16,667,899	1,904
2003	8,289	14,145,078	2,154,807	16,299,885	1,966
2002	9,289	15,351,585	2,804,553	18,156,138	1,955
2001	7,669	11,982,450	2,540,120	14,522,570	1,894
2000	7,430	10,832,499	2,569,977	13,402,476	1,804
1999	6,549	9,046,847	2,296,742	11,343,589	1,732
1998	6,498	8,294,928	2,259,541	10,554,469	1,624
1997	6,123	7,967,254	2,375,963	10,343,217	1,689
1996	6,055	7,283,631	2,376,849	9,660,480	1,595
1995	5,470	6,363,458	2,236,154	8,599,612	1,572
1990-1994	21,743	21,433,665	9,467,699	30,901,364	1,421
1985-1989	18,634	15,242,858	9,274,818	24,517,676	1,316
1980-1984	11,269	6,037,516	5,095,655	11,133,171	988
1975-1979	5,620	2,149,617	2,992,734	5,142,351	915
1970-1974	1,571	381,602	817,212	1,198,814	763
1965-1969	403	85,761	266,341	352,102	874
1960-1964	173	37,790	120,905	158,695	917
Before 1960	34	6,533	29,152	35,685	1,050
TOTAL	169,016	\$220,181,380	\$54,802,832	\$274,984,212	\$1,627

Years of			Post-Ret.		
Service	No.	Initial	Increase	Total	Average
<5 or n/a	5,704	\$ 1,725,448	\$ 386,327	\$ 2,111,775	\$370
5	4,258	1,500,492	375,358	1,875,850	441
6	3,355	1,265,211	326,884	1,592,095	475
7	3,139	1,261,486	325,881	1,587,367	506
8	2,833	1,198,134	310,449	1,508,583	533
9	2,137	986,833	271,879	1,258,712	589
10	8,926	3,754,718	990,228	4,744,946	532
11	5,164	2,498,488	663,661	3,162,149	612
12	5,149	2,610,346	732,959	3,343,305	649
13	4,628	2,636,153	735,216	3,371,369	728
14	4,432	2,591,714	763,860	3,355,574	757
15	4,919	3,119,643	915,104	4,034,747	820
16	4,725	3,216,785	957,699	4,174,484	883
17	4,324	3,306,134	968,524	4,274,658	989
18	4,313	3,510,307	1,026,874	4,537,181	1,052
19	4,256	3,632,367	1,056,289	4,688,656	1,102
20	5,202	4,897,434	1,389,388	6,286,822	1,209
21	4,421	4,483,138	1,295,593	5,778,731	1,307
22	4,121	4,534,066	1,282,244	5,816,310	1,411
23	4,026	4,709,213	1,306,293	6,015,506	1,494
24	3,839	4,829,300	1,323,968	6,153,268	1,603
25	7,498	10,635,140	2,769,149	13,404,289	1,788
26	4,855	7,413,202	2,017,767	9,430,969	1,943
27	4,844	8,095,292	2,139,807	10,235,099	2,113
28	5,220	10,158,369	2,407,072	12,565,441	2,407
29	4,873	10,133,149	2,172,345	12,305,494	2,525
30	19,373	42,846,542	8,775,556	51,622,098	2,665
31	6,016	13,426,753	3,144,719	16,571,472	2,755
32	4,808	11,139,632	2,657,981	13,797,613	2,870
33	3,728	8,920,501	2,100,115	11,020,616	2,956
34	3,043	7,454,715	1,816,997	9,271,712	3,047
35	2,791	6,858,499	1,758,760	8,617,259	3,088
36	2,072	5,100,782	1,306,019	6,406,801	3,092
37	1,626	4,024,101	1,060,637	5,084,738	3,127
38	1,220	3,041,902	800,532	3,842,434	3,150
39	1,020	2,547,492	701,635	3,249,127	3,185
40 & Over	2,158	6,117,899	1,769,063	7,886,962	3,655

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(\$ MILLIONS)

	P	nnual Allow	ances			Ratio of	Ratio of
Valuation		\$	% of DB	Reported	Actuarial	Assets to	DB Active
Date	No.	Millions	Payroll	Assets*	Liabilities	Liabilities	to Retired
12/31/1979	60,887	\$ 207	6.4 %	\$ 2,209	\$ 2,154	102.6 %	4.3
12/31/1980	64,231	231	6.7 %	2,477	2,424	102.2 %	4.0
12/31/1981@	68,089	272	8.2 %	3,084	2,994	103.0 %	3.7
12/31/1982@	71,253	299	8.2 %	3,173	3,068	103.4 %	3.5
12/31/1983	74,442	333	8.7 % **	3,554	3,428	103.7 %	3.3
12/31/1984	77,493	386	9.5 % **	3,993	3,993	100.0 %	3.2
12/31/1985	80,999	429	10.0 % **	4,498	4,456	100.9 %	3.1
12/31/1986	84,892	474	10.4 % **	4,965	4,935	100.6 %	3.0
12/31/1987	86,924	518	10.6 % **	5,485	5,437	100.9 %	3.0
12/31/1988	89,972	581	10.9 % **	6,182	6,173	100.1 %	2.9
12/31/1989@	92,504	661	12.4 % **	6,985	6,911	101.1 %	2.9
12/31/1990	94,088	706	11.7 % **	7,438	7,338	101.4 %	3.0
12/31/1991	95,843	762	11.5 % **	8,014	7,904	101.4 %	3.4
12/31/1992	98,609	835	12.1 % **	8,814	8,692	101.4 %	3.4
12/31/1993	100,651	901	12.5 % **	9,390	9,356	100.4 %	3.4
12/31/1994	102,587	958	12.6 % **	9,964	9,893	100.7 %	3.3
12/31/1995	104,806	1,036	13.0 % **	10,808	10,737	100.7 %	3.3
12/31/1996@	107,617	1,141	13.7 % **	11,819	11,762	100.5 %	3.3
12/31/1997	110,470	1,233	14.3 % **	12,843	12,755	100.7 %	3.2
12/13/1998	113,000	1,327	14.7 % **	13,885	13,751	101.0 %	3.1
12/31/1999+	115,431	1,530	16.1 % **	14,978	16,139	92.8 %	3.1
12/31/2000	118,620	1,641	16.1 % **	16,980	16,980	100.0 %	3.1
12/31/2001@	121,875	1,775	16.5 % **	18,001	18,001	100.0 %	3.0
12/31/2002	126,409	1,958	17.5 % **	20,085	20,085	100.0 %	2.9
12/31/2003	130,433	2,136	19.1 % **	22,535	22,535	100.0 %	2.7
12/31/2004	134,535	2,311	20.2 % **	24,470	24,470	100.0 %	2.6
12/31/2005@	138,996	2,508	21.2 % **	27,084	27,084	100.0 %	2.6
12/31/2006	144,037	2,710	22.3 % **	29,304	29,304	100.0 %	2.5
12/31/2007	148,493	2,916	23.2 % **	31,547	31,547	100.0 %	2.5
12/31/2008	153,931	3,148	24.6 % **	34,060	34,060	100.0 %	2.3

<sup>\*</sup> Including certain recommended transfers and accrued transfers.

<sup>@</sup> Revised actuarial assumptions.

<sup>\*\*</sup> Excluding health insurance and Medicare payments.

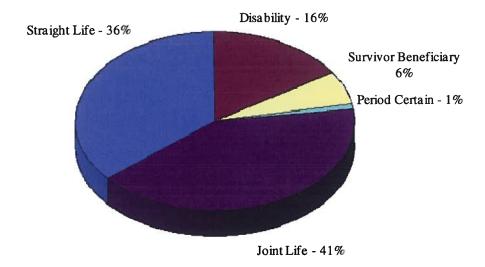
# TYPE OF BENEFIT, MONTHLY AMOUNT AND ACTUARIAL LIABILITIES RETIREES AND BENEFICIARIES DECEMBER 31, 2008 ANNUITY AND PENSION RESERVE FUND

Type of Allowance	Number	Current Total \$	Actuarial Liabilities
Superannuation Retirement			
Plan A - Joint & 50%	19,779	\$ 39,387,407	\$ 5,421,755,066
Plan B - Straight Life	60,182	95,626,172	11,108,882,784
Plan C - Special Joint & Survivor	14,207	30,437,602	4,359,630,977
Plan D - Joint & 100%	19,195	36,875,632	5,842,354,709
Plan E - Life & 0 to 5 Years Guaranteed	323	422,315	47,305,555
- Life & 6 to 10 Years Guaranteed	443	654,372	72,198,906
- Life & 11 to 15 Years Guaranteed	655	842,998	92,909,301
- Life & 16 to 20 Years Guaranteed	32	53,707	7,953,783
Money Purchase	1,712	624.891	62.866.779
Survivor Beneficiary - Life Benefit	15,486	14,530,637	1,333,391,319
Survivor Beneficiary - Temporary Benefit	80	96,272	3,654,180
Total Superannuation	132,094	\$219,552,005	\$28,352,903,359
Disability Retirement	21,837	\$ 42,783,083	\$ 5,707,294,252
Total from A & PR	153,931	\$262,335,088	\$34,060,197,611

# TYPE OF BENEFIT AND AMOUNT BY GENDER OF RECIPIENT RETIREES AND BENEFICIARIES DECEMBER 31, 2008 ANNUITY AND PENSION RESERVE FUND

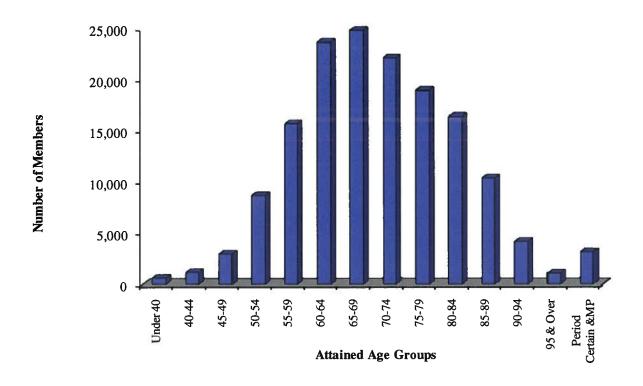
	N N	Men	M	Women	To	Total
		Monthly		Monthly		Moi
Type of Allowance	Number	Allowances	Number	Allowances	Number	Allow
rannuation Retirement						
ın A - Joint & 50%	13,950	\$29,544,023	5,829	\$ 9,843,384	19,779	\$ 39,
ın B - Straight Life	18,384	34,417,037	41,798	61,209,135	60,182	95,
ın C - Special Joint & Survivor	6,046	15,911,231	8,161	14,526,371	14,207	30,
ın D - Joint & 100%	16,004	32,120,701	3,191	4,754,931	19,195	36,
ın E - Life & 0 to 5 Years Guaranteed	146	211,887	177	210,428	323	
Life & 6 to 10 Years Guaranteed	238	378,155	205	276,217	443	NO
Life & 11 to 15 Years Guaranteed	412	544,714	243	298,284	655	
Life & 16 to 20 Years Guaranteed	21	38,515	11	15,192	32	
ey Purchase	1,210	508,315	505	116,576	1,712	Loise (N.
ivor Beneficiary - Life Benefit	1,253	739,466	14,233	13,791,171	15,486	14,
ivor Beneficiary - Temporary Benefit	23	22,317	57	73,955	80	159
l Superannuation	57,687	\$114,436,361	74,407	\$105,115,644	132,094	\$219,
bility Retirement	11,266	\$24,407,438	10,571	\$18,375,645	21,837	\$ 42,
I from A & PR	68,953	\$138,843,799	84,978	\$123,491,289	153,931	\$262,

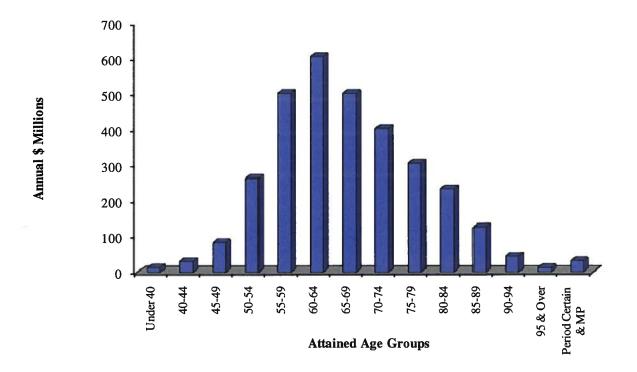
#### $\label{eq:Annuity} \textbf{Annuity and Pension Reserve Fund}$



### RETIREES AND BENEFICIARIES DECEMBER 31, 2008 CURRENT MONTHLY TOTAL \$ BY ATTAINED AGES

	Supe	rannuation	D	isability		Totals
Attained		Monthly		Monthly		Monthly
Ages	No.	Total \$	No.	Total \$	No.	Total \$
				<u> </u>		
Under 20	9	\$ 3,781			9	\$ 3,781
20-24	11	7,700			11	7,700
25-29	16	11,768	15	\$ 19,454	31	31,222
30-34	12	6,027	111	161,180	123	167,207
35-39	26	24,843	423	769,330	449	794,173
40-44	60	37,148	1,129	2,451,283	1,189	2,488,431
45-49	501	1,138,951	2,452	5,659,261	2,953	6,798,212
50-54	4,638	12,749,891	4,083	9,139,831	8,721	21,889,722
55-59	10,946	31,825,307	4,771	9,975,837	15,717	41,801,144
60-64	19,435	42,501,561	4,205	7,930,736	23,640	50,432,297
65-69	22,672	38,326,789	2,138	3,494,559	24,810	41,821,348
70-74	20,973	31,830,038	1,144	1,652,522	22,117	33,482,560
75-79	18,267	24,709,659	669	800,122	18,936	25,509,781
80-84	15,923	18,892,337	468	497,373	16,391	19,389,710
85-89	10,204	10,332,690	177	186,117	10,381	10,518,807
90-94	4,153	3,661,812	47	41,362	4,200	3,703,174
95 & Over	1,083	893,420	5	4,116	1,088	897,536
	·	-		·		
Period Certain &						
Money Purchase	3,165	2,598,283			3,165	2,598,283
Totals	132,094	\$219,552,005	21,837	\$42,783,083	153,931	\$262,335,088





# PERCENT OF RECIPIENTS BY AGE GROUPS AND YEAR

Attained Age Group	2008	2007	2006	2005	2004						
Age Group	2000	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Under 30	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
30-39	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%
40-49	2.7%	2.9%	3.1%	3.3%	3.4%	3.5%	3.5%	3.3%	3.2%	3.1%	2.9%
50-59	15.9%	15.9%	16.1%	15.8%	14.7%	13.7%	12.9%	11.7%	10.7%	9.8%	9.2%
60-69	31.5%	30.7%	29.6%	28.9%	28.8%	28.6%	28.3%	28.1%	28.2%	28.9%	29.1%
70-79	26.7%	27.2%	27.7%	28.5%	29.4%	30.4%	31.5%	32.7%	34.0%	35.5%	36.3%
80-89	17.4%	17.7%	17.9%	18.0%	18.2%	18.3%	18.4%	18.7%	18.5%	18.7%	18.6%
90 & Over	3.4%	3.3%	3.2%	3.2%	3.2%	3.2%	3.1%	3.1%	3.0%	3.1%	3.0%
Period Certain & MP	2.1%	1.9%	1.9%	1.8%	1.8%	1.8%	1.7%	1.8%	1.8%	0.3%	0.3%
TOTALS	100.1%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average Age	70.1	70.1	70.2	70.2	70.4	70.6	70.7	71.0	71.2	71.4	71.5

# SURVIVOR BENEFIT FUND TABULATED BY TYPE OF BENEFIT BEING PAID AND MONTHLY AMOUNT DECEMBER 31, 2008

Group	Number	Current Total	Actuarial Liabilities
S-1 - Survivo	r Benefit to Beneficia	•	ember
	Joint and Survivor C	omputation	
Men	121	\$ 114,814	\$ 11,231,131
Women	713	899,680	90,158,426
Totals	834	\$1,014,494	\$101,389,557
S-2 - Survivo	r Benefit to Beneficia	- <del>-</del>	ember
	Fixed Rate An	nount	
Widower - no child	563	\$ 535,222	\$ 66,803,646
Widower - child	64	59,337	10,049,302
Child's record	131	68,608	4,614,040
Parent	2	2,062	117,718
Other	0	0	0
Child only	202	148,838	7,541,379
Subtotals - male	962	814,067	\$ 89,126,085
Widower - no child	2,225	\$2,192,369	\$268,587,084
Widower - child	153	153,390	27,489,016
Child's record	190	100,070	7,623,515
Parent	1	889	61,600
Other	0	0	0
Child only	185	145,930	7,792,179
Subtotals - female	2,754	2,592,648	311,553,394
Totals	3,716	\$3,406,715	\$400,679,479
Total Ben	efits Being Paid from	Survivor Benefit F	und
Men	1,083	\$ 928,881	\$100,357,216
Women	3,467	3,492,328	401,711,820
Totals	4,550	\$4,421,209	\$502,069,036

## **DECEMBER 31, 2008**

_		Current	Actuarial
Group	Number	Total	Liabilities
S-1 - Survivo	r Benefit to Beneficia	ury of Deceased Mo	emher
5-1 - 5m vivo	Joint and Survivor C	•	
		•	
Men	184	\$ 138,304	\$ 13,446,530
Women	1,431	1,482,131	151,194,978
Totals	1,615	1,620,435	164,641,508
S-2 - Survivo	r Benefit to Beneficia	ry of Deceased M	ember
	Fixed Rate An	·	
Widower - no child	949	\$ 671,317	\$ 81,428,022
Widower - child	84	55,125	9,404,135
Child's record	217	94,966	6,922,737
Parent	2	1,444	76,321
Other	2	1,101	143,184
Child only	337	211,164	13,327,621
Subtotals - male	1,591	1,035,117	111,302,020
Widower - no child	5,051	\$4,013,296	\$475,489,798
Widower - child	328	281,205	49,804,202
Child's record	409	190,738	15,370,131
Parent	3	3,586	208,578
Other	2	1,682	195,273
Child only	344	208,088	11,295,686
Subtotals - female	6,137	4,698,595	552,363,668
Totals	7,728	5,733,712	663,665,688
Total Bend	efits Being Paid from	Survivor Benefit F	und
Men	1,775	\$1,173,421	\$124,748,550
Women	7,568	6,180,726	703,558,646
Totals	9,343	\$7,354,147	\$828,307,196

## Type of Benefit Being Paid and Monthly Amount December 31, 2008

-		~ .			Actuarial
Group	Number	Current	Total		Liabilities
S-1 - Surviv	or Benefit to Benefici	ary of Dece	ased Men	nbe r	
	Joint and Survivor	Computation	ı		
Men	0	\$	0		\$ 0
Women	0		0		0
Totals	0	\$	0		\$ 0
S-2 - Surviv	or Benefit to Benefici	ary of Dece	ased Men	nber	
	Fixed Rate A	mount			
Widower - no child	5	\$	4,484		\$ 430,628
Widower - child	0		0		0
Child's record	2		1,336		89,985
Other	0		0		0
Child only	5		4,219		235,935
Subtotals - male	12		10,039		756,548
Widower - no child	59	\$	76,948	\$	12,331,968
Widower - child	4		4,730		874,116
Child's record	3		2,084		139,288
Other	4		5,075		170,623
Child only	0		0		0
Subtotals - female	70		88,837		13,515,995
Totals	82	\$	98,876	\$	14,272,543
Total Ber	nefits Being Paid fron	Survivor B	enefit Fun	d	
Men	12	\$	10,039		\$ 756,548
Women	70		88,837		13,515,995
Totals	82	\$	98,876		\$14,272,543

## Type of Benefit Being Paid and Monthly Amount December 31, 2008

		Current	Actuarial
Group	Number	Total	Liabilities
	r Benefit to Beneficia	•	ember
	Joint and Survivor Co	omputation	
Men	0	\$ 0	\$ 0
Women	43	71,032	8,629,189
Totals	43	\$ 71,032	\$ 8,629,189
S-2 - Survivoi	r Benefit to Beneficia	ry of Deceased Me	ember
	Fixed Rate Am	ount	
Widower - no child	2	¢ 2076	\$ 453,276
Widower - no child Widower - child	3 2	\$ 2,976 1,814	\$ 453,276 335,080
Child's record	13	6,269	502,361
Other	0	0,209	
	15		0 555 175
Child only		11,099	555,475
Subtotals - male	33	22,158	1,846,192
Widower - no child	129	\$ 114,598	\$ 16,279,468
Widower - child	20	18,989	3,495,580
Child's record	21	9,602	617,810
Other	17	11,890	466,420
Child only	0	0	0
Subtotals - female	187	155,079	20,859,278
Totals	220	\$ 177,237	\$ 22,705,470
Total Bene	efits Being Paid from	Survivor Benefit Fi	und
Men	33	\$ 22,158	\$ 1,846,192
Women	230	226,111	29,488,467
Totals	263	\$ 248,269	\$ 31,334,659

# DEFERRED SURVIVOR BENEFICIARIES TABULATED BY GENDER AND DEFERRED AGE DECEMBER 31, 2008

		Current	Actuarial
Group	Number	Total	Liabilities
Widowers			:
Deferred to age 50	0	\$ 0	\$ 0
Deferred to age 62	77	52,013	4,851,899
Deferred to age 65	1	171	21,228
Total	78	52,184	4,873,127
Widows			
Deferred to age 50	3	2,522	390,056
Deferred to age 62	173	115,047	10,260,608
Deferred to age 65	1	847	30,772
Total	177	118,416	10,681,436
Totals	255	\$170,600	\$15,554,563

## TABULATED BY GENDER AND DEFERRED AGE DECEMBER 31, 2008

Group	Number	Current Total	Actuarial Liabilities
Отопр			
Widowers			
Deferred to age 50	0	\$ 0	\$ 0
Deferred to age 62	129	70,926	6,817,559
Deferred to age 65	0	0	0
Total	129	70,926	6,817,559
Widows			
Deferred to age 50	4	3,331	556,266
Deferred to age 62	443	270,322	25,659,391
Deferred to age 65	0	0	0
Total	447	273,653	26,215,657
Totals	576	\$344,579	\$33,033,216

## TABULATED BY GENDER AND DEFERRED AGE DECEMBER 31, 2008

Group	Number	Current Total	Actuarial Liabilities
Widowers			
Deferred to age 50	0	\$ 0	\$ 0
Total	0	0	0
Widows			
Deferred to age 50	0	\$ 0	\$ 0
Deferred to age 62	4	1,941	128,007
Total	4	1,941	128,007
Totals	4	\$1,941	\$128,007

## TABULATED BY GENDER AND DEFERRED AGE DECEMBER 31, 2008

Group	Number	Current Total	Actuarial Liabilities
Widowers			
Deferred to age 50	0	\$ 0	\$ 0
Deferred to age 62	1	608	80,319
Total	1	608	80,319
Widows			
Deferred to age 50	0	\$ 0	\$ 0
Deferred to age 62	11	8,895	847,952
Total	11	8,895	847,952
Totals	12	\$9,503	\$928,271

#### **DIVISIONS COMBINED**

	anara na séri waki	Monthly Al	lowances		\$ Mill	ions	Ratio of
Valuation	C	urrent	De	ferred	Reported	Actuarial	Assets to
Date	No.	Amount	No.	Amount	Assets+	Liabilities	Liabilities
6/30/1977	8,153	\$ 1,659,897	1,003	\$ 125,094	\$ 257.0	\$ 204.6	126 %
6/30/1978	8,559	1,799,580	1,004	135,944	301.2	224.5	134 %
6/30/1979	8,824	1,914,251	1,039	146,549	355.2	245.1	145 %
12/31/1979	8,971	2,033,403	1,044	155,890	383.0	259.5	148 %
12/31/1980	9,389	2,220,641	1,022	170,246	429.4	285.4	150 %
12/31/1981@	9,629	2,468,950	1,045	191,228	460.6	336.0	137 %
12/31/1982@	9,913	2,654,686	1,006	199,239	499.7	330.6	151 %
12/31/1983	10,132	2,812,639	1,020	225,475	454.7	352.8	129 %
12/31/1984*	11,819	3,119,531	990	248,373	492.2	451.1	109 %
12/31/1985	11,889	3,278,253	979	259,842	532.8	469.6	113 %
12/31/1986	12,054	3,489,915	960	268,931	575.5	451.2	128 %
12/31/1987	12,153	3,656,420	933	279,327	626.1	472.9	132 %
12/31/1988	12,237	3,822,085	941	283,026	490.8	490.8	100 %
12/31/1989@	12,198	4,177,540	941	320,792	525.3	522.1	101 %
12/31/1990	12,182	4,330,622	907	321,218	542.5	537.1	101 %
12/31/1991	12,268	4,528,326	860	314,414	567.9	557.1	102 %
12/31/1992	12,318	4,750,848	852	329,509	589.8	583.3	101 %
12/31/1993	12,437	4,985,681	862	345,937	620.7	607.7	102 %
12/31/1994	12,569	5,207,186	845	347,178	641.5	628.5	102 %
12/31/1995	12,608	5,408,577	866	376,573	668.9	652.4	103 %
12/31/1996@	12,724	5,822,113	878	395,594	711.6	710.6	100 %
12/31/1997	12,856	6,074,566	932	433,430	743.0	740.5	100 %
12/13/1998	13,079	6,337,739	1,060	500,514	780.2	779.6	100 %
12/31/1999#	13,236	7,345,740	989	550,153	801.4	910.9	88 %
12/31/2000	13,317	9,026,315	666	348,886	1,037.4	1,037.4	100 %
12/31/2001@	13,588	9,449,543	993	490,441	1,086.4	1,086.4	100 %
12/31/2002	13,708	9,764,826	902	470,284	1,120.2	1,120.2	100 %
12/31/2003	13,988	10,246,174	842	493,329	1,193.1	1,193.1	100 %
12/31/2004	13,903	10,503,169	858	524,733	1,227.1	1,227.1	100 %
12/31/2005@	14,108	10,948,727	831	528,162	1,289.3	1,289.3	100 %
12/31/2006	14,172	11,333,735	832	508,430	1,332.6	1,332.6	100 %
12/31/2007	14,186	11,714,551	832	510,846	1,375.9	1,375.9	100 %
12/31/2008	14,238	12,122,501	847	526,623	1,425.6	1,425.6	100 %

Revised actuarial assumptions.

Benefits increased.

<sup>#</sup> After benefit changes.

# SECTION X ACTUARIAL METHODS AND ASSUMPTIONS

#### THE TOTAL THE THE CALL THE CONTINUE OF THE CALLED

# ACTUARIAL VALUATIONS ASSUMPTIONS ADOPTED BY RETIREMENT BOARD AFTER CONSULTING WITH ACTUARY

The individual entry age actuarial cost method of valuation was used in determining liabilities and normal cost. Differences in the past between assumed experience and actual experience ("actuarial gains and losses") become part of actuarial accrued liabilities.

Unfunded actuarial accrued liabilities are amortized to produce payments (principal & interest) which are level percent of payroll contributions.

The actuarial assumptions used in the valuation are shown in this Section. Economic assumptions were established following the December 31, 2000 actuarial valuation. Decrement assumptions were revised following the December 31, 2005 actuarial valuation.

#### **ECONOMIC ASSUMPTIONS**

The investment return rate assumed in the valuations was 8.00% per year, compounded annually (net after administrative expenses).

The wage inflation rate assumed in this valuation was 4.00% per year. The wage inflation rate is defined to be the portion of total pay increases for an individual that are due to macro economic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes rated to individual merit and seniority effects.

No specific *price inflation* assumption is required to perform this valuation, since there are no benefits that are linked to price increases. However, a price inflation assumption on the order of 3.0% to 3.5% would be consistent with the other economic assumptions.

The assumed real rate of return over wage inflation is defined to be the portion of total investment return that is more than the assumed total wage growth rate. Considering other economic assumptions, the 8.00% investment return rate translates to an assumed real rate of return over wage inflation of 4.00%. The assumed real rate of return over price inflation would be higher – on the order of 4.5% to 5.5% – considering both an inflation assumption and an average expense provision.

**The active member population** (the sum of the Traditional and Combined Plan active members) is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll (the sum of the Traditional and Combined Plan active payroll) is assumed to grow at the wage inflation rate – 4.00% per year.

Pay increase assumptions for individual active members are shown for sample ages on pages X-5, X-6, X-7 & X-8. Part of the assumption for each age is for merit and/or seniority increase, and the other

The post-retirement mortality rates used in evaluating age and service and survivor benefit allowances to be paid were 110% of RP-2000 mortality table for males and 100% of RP-2000 mortality table for females with 15 years of projected mortality improvements. Related values are shown on page X-9. The mortality rates used in evaluating disability allowances were the RP-2000 mortality table for disabled lives, setback 4 years for males and setforward 4 years for females.

The probabilities of unreduced and reduced age and service retirement are shown on pages X-3 and X-4.

The probabilities of withdrawal from service, disability and death-in-service are shown for sample ages on pages X-5, X-6, X-7 & X-8. For withdrawal from service it was assumed that members terminating before age 35, members terminating with less than 5 years of service, and a percentage of all other members would withdraw their contributions and forfeit their entitlement to an employer financed benefit. The percentage is 100% at age 35 and is reduced for each year of age after 35, becoming 0% at age 55 (age 45 for law members).

For purposes of death-in-service and disability benefits, it is assumed that Combined Plan members will take a benefit from the Traditional Plan, unless a lump sum distribution from the Combined Plan would have a greater value.

Defined Contribution Accounts under the Combined Plan are assumed to earn 8% per year.

The Funding Value of Defined Benefit Assets recognizes assumed investment return fully each year. Differences between actual and assumed investment return are phased in over a closed 4-year period. Funding value is not permitted to deviate from market value by more than 12%. Traditional and Combined Plan retiree health funding values of assets are developed independently beginning with the December 31, 2004 valuation.

Present assets (cash & investments) at funding value are shown on pages II-2 through II-6.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.). Great care was taken in the production of this report, but there may be cases where schedules do not add, or where they do not exactly balance to other related schedules due to rounding.

<b>Percent of Eligible Active Members</b>	
Retiring Within Next Year	

	St	ate	Local Go	overnment	Public	Law
Ages	Men	Women	Men	Women	Safety	Enforcement
45	40%	30%	30%	30%		
46	40%	30%	30%	30%		
47	40%	30%	30%	30%		
48	40%	30%	30%	30%		20%
49	40%	30%	30%	30%		20%
50	40%	30%	30%	30%		20%
51	40%	30%	30%	30%		20%
52	35%	30%	30%	30%	30%	20%
53	35%	30%	30%	30%	30%	22%
54	35%	30%	30%	30%	25%	22%
55	30%	30%	30%	30%	25%	22%
56	25%	30%	28%	30%	25%	22%
57	25%	30%	28%	30%	25%	22%
58	25%	30%	28%	30%	20%	22%
59	25%	30%	25%	30%	20%	25%
60	30%	35%	25%	30%	35%	30%
61	30%	35%	25%	30%	35%	20%
62	30%	35%	35%	30%	35%	25%
63	30%	35%	35%	30%	35%	25%
64	35%	35%	30%	30%	35%	25%
65	30%	30%	20%	20%	35%	30%
66	25%	20%	20%	20%	35%	30%
67	20%	20%	15%	15%	35%	30%
68	20%	20%	15%	15%	35%	30%
69	20%	20%	15%	15%	35%	30%
70	20%	20%	15%	15%	100%	100%
71	20%	20%	15%	15%	100%	100%
72	20%	20%	15%	15%	100%	100%
73	20%	20%	15%	15%	100%	100%
74	20%	20%	15%	15%	100%	100%
75 & Over	100%	100%	100%	100%	100%	100%
Ref	1309	1310	1311	1312	1334	1335

			f Eligible Activing Within Ne		
	Sta	ate	Local Go	vernment	Public
Ages	Men	Women	Men	Women	Safety
48					15%
49				· ·	15%
50					15%
51			15%		
52					
53					
54					
55	11%	11%	10%	12%	
56	11%	11%	10%	12%	
57	11%	11%	10%	12%	
58	11%	11%	10%	12%	
59	11%	11%	10%	12%	
60	11%	12%	10%	12%	
61	11%	14%	10%	12%	
62	16%	15%	15%	12%	
63	16%	15%	15%	12%	
64	16%	15%	12%	12%	
Ref	1313	1314	758	1315	1336

SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT & INDIVIDUAL PAY INCREASE ASSUMPTIONS STATE

			Pe	reent of Ac	Percent of Active Members	SIS		Pay In	Pay Increase Assumptions	nptions
			Sepa	trating With	Separating Within the Next Year	Year		For An	For An Individual Employee	nployee
Sample	Years of	De	Death	With	Withdrawal	Disa	Disability	Merit &	Base	Incre
Ages	Service	Men	Women	Men	Women	Men	Women	Seniority	(Economy)	Next
	•			200						
	>			40.00%	40.00%					
	1			25.00%	25.00%					
	7			15.00%	17.00%					
	က			10.00%	12.00%					
	4			8.00%	%00.6					
25	5 & Over	0.04%	0.01%	7.04%	8.40%	0.15%	0.15%	4.30%	4.00%	8
30		0.04%	0.02%	5.44%	7.28%	0.18%	0.18%	3.00%	4.00%	7.(
35		0.08%	0.03%	4.20%	5.48%	0.32%	0.32%	2.20%	4.00%	6.2
40		0.11%	0.05%	3.32%	3.88%	0.52%	0.52%	1.80%	4.00%	5.8
45		0.15%	0.08%	2.58%	3.16%	0.72%	0.72%	1.40%	4.00%	7.5
20		0.21%	0.12%	2.18%	2.88%	0.92%	0.92%	1.20%	4.00%	5.2
55		0.36%	0.19%	2.10%	2.74%	1.36%	1.36%	0.90%	4.00%	4.5
09		0.67%	0.35%	2.10%	2.70%	2.20%	2.20%	0.70%	4.00%	4.7
Ref		#506x1sb0	#507x0.7sb0	47	443	#385x1	#385x1	301		i
				#870x1	#871x1					

The pay increase assumptions are age based only, and not service based.

SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT & Individual Pay Increase Assumptions **LOCAL GOVERNMENT** 

			Pe	reent of Ac	Percent of Active Members	<b>S</b> 20		Pay Inc	Pay Increase Assumptions	nptions
			Sepa	rating With	Separating Within the Next Year	Year		For An	For An Individual Employee	mployee
Sample	Years of	Deat	ath	Withc	Withdrawal	Disability	bility	Merit &	Base	Increa
Ages	Service	Men	Women	Men	Women	Men	Women	Seniority	(Economy)	Next Y
	0			40.00%	40.00%					
				25.00%	25.00%					
	2			15.00%	17.00%					
	3			10.00%	12.00%					
	4			8.00%	%00.6					
25	5 & Over	0.04%	0.01%	7.10%	8.40%	0.13%	0.12%	4.30%	4.00%	8.30
30		0.04%	0.02%	5.90%	7.04%	0.17%	0.13%	3.00%	4.00%	7.00
35		0.08%	0.03%	4.48%	5.50%	0.28%	0.21%	2.20%	4.00%	6.20
40		0.11%	0.05%	3.32%	4.18%	0.44%	0.33%	1.80%	4.00%	5.80
45		0.15%	0.08%	2.70%	3.40%	0.62%	0.45%	1.40%	4.00%	5.40
50		0.21%	0.12%	2.50%	3.14%	0.00%	0.66%	1.20%	4.00%	5.20
55		0.36%	0.19%	2.50%	3.04%	1.34%	0.98%	0.90%	4.00%	4.90
09		0.67%	0.35%	2.50%	3.00%	1.54%	1.35%	0.70%	4.00%	4.70
Ref		#506x1sb0	#507x0.7sb0	<i>L</i> Þ	443	#333x1	#334x1	301		
				#872x1	#873x1					

The pay increase assumptions are age based only, and not service based.

SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT & INDIVIDUAL PAY INCREASE ASSUMPTIONS PUBLIC SAFETY

			Pe	reent of Act	Percent of Active Members	22		Pay Inc	Pay Increase Assumptions	nptions
			Sepa	rating With	Separating Within the Next Year	Year		For An	For An Individual Employee	nployee
Sample	Years of	De	Death	Withc	Withdrawal	Disa	Disability	Merit &	Base	Incre
Ages	Service	Men	Women	Men	Women	Men	Women	Seniority	(Economy)	Next \
	C			2000 91	18 000%					
	- 0			12.00%	12.00%					
	2			8.00%	8.00%					
	3			7.00%	7.00%					
	4			7.00%	7.00%					
25	5 & Over	0.04%	0.01%	4.70%	4.22%	0.20%	0.20%	6.30%	4.00%	10.3
30		0.04%	0.02%	3.90%	3.16%	0.60%	0.60%	4.00%	4.00%	8.0
35		0.08%	0.03%	2.90%	2.80%	0.60%	0.90%	1.60%	4.00%	5.6
40		0.11%	0.05%	2.20%	2.80%	1.15%	1.15%	0.85%	4.00%	4.8
45		0.15%	0.08%	1.76%	2.32%	1.50%	1.50%	%09:0	4.00%	4.6
20		0.21%	0.12%	1.60%	2.00%	2.10%	2.10%	0.50%	4.00%	4.5
55		0.36%	0.19%	1.60%	2.00%	3.10%	3.10%	0.50%	4.00%	4.5
09		0.67%	0.35%	1.60%	2.00%	4.00%	4.00%	0.50%	4.00%	4.5
Ref		#506x1sb0	#507x0.7sb0	445	446	#386x1	#386x1	303		
				#874x1	#875x1					

The pay increase assumptions are age based only, and not service based.

## SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT & INDIVIDUAL PAY INCREASE ASSUMPTIONS LAW ENFORCEMENT

			Pe	reent of Ac	Percent of Active Members	SI		Pay In	Pay Increase Assumption	mptions
			Sepa	rating With	Separating Within the Next Year	Year		For An	For An Individual Employe	mploye
Sample	Years of	Des	ath	Withc	Withdrawal	Disa	Disability	Merit &	Base	Incr
Ages	Service	Men	Women	Men	Women	Men	Women	Seniority	(Economy)	Next
	0			15.00%	18.00%					
	1			%00.6	12.00%					
	7			7.00%	8.00%					
	3			2.00%	7.00%					
	4			5.00%	7.00%					
25	5 & Over	0.04%	0.01%	3.54%	3.80%	0.20%	0.20%	908.9	4.00%	10
30		0.04%	0.02%	2.66%	2.90%	0.60%	0.60%	4.00%	4.00%	∞
35		0.08%	0.03%	2.14%	2.30%	0.00%	0.90%	1.60%	4.00%	5.0
40		0.11%	0.05%	1.48%	1.50%	1.15%	1.15%	0.85%	4.00%	4.
V		5	800	200	1 200	100	£003	8070	8008	•
45		0.15%	0.08%	1.20%	1.30%	%0C.1	1.50%	0.00%	4.00%	
20		0.21%	0.12%	1.20%	1.20%	2.10%	2.10%	0.50%	4.00%	4
55		0.36%	0.19%	1.20%	1.20%	3.10%	3.10%	0.50%	4.00%	4
09		0.67%	0.35%	1.20%	1.20%	4.00%	4.00%	0.50%	4.00%	4
Ref		#506x1sb0	#507x0.7sb0	375	446	#386x1	#386x1	303		
				#876x1	#575x1					

The pay increase assumptions are age based only, and not service based.

Sample Attained	Monthly Increasing 3.	Value of \$1 V for Life O% Annually E After 1 Year)		re Life
Ages	Males	Females	Males	Females
50	\$175.27	¢100.54	21.40	24.20
	· ·	\$180.54	31.49	34.38
55	163.16	169.81	26.81	29.64
60	148.41	156.78	22.30	25.08
65	131.41	141.67	18.09	20.80
70	112.77	124.92	14.25	16.86
75	92.36	106.74	10.77	13.29
80	71.69	87.43	7.77	10.09
Ref:	:#397x1.1sb0	:#398x1sb0		]

**Marriage Assumption:** 

70% of males and 60% of females are assumed to be married for purposes of death-in-service benefits for State and Local members. 90% of males and 90% of females are assumed to be married for purposes of death-in-service benefits for Law members. Male spouses are assumed to be three years older than female spouses for active member valuation purposes. In retired or inactive cases where spouse information is needed, but not available, the three year age difference is also assumed.

**Pay Increase Timing:** 

Beginning of year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

Final Average Salary:

For present value of future benefit purposes, final average salary was calculated in accordance with pay increase assumptions, but was not permitted to fall below the final average salary reported in the data.

**Decrement Timing:** 

Decrements are assumed to occur mid-year.

**Eligibility Testing:** 

Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

**Decrement Relativity:** 

Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

**Decrement Operation:** 

Disability and mortality decrements do not operate during the first 5 years of service.

**Death after Disability:** 

Death after disability benefits were approximated by assuming that the disability benefit would be paid as a joint and 35% survivor benefit for people in the original disability plan and as a joint and 20% survivor benefit for people in the post 1992 plan.

**Service Credit Accruals:** 

It is assumed that members accrue one year of service credit per year. A (0.80)% factor is applied to State active member liabilities (other than for refunds) and a (1.00)% factor is applied to Local active member liabilities (other than for refunds) to recognize that a portion of the membership is part time.

**Miscellaneous Loads:** 

A load of approximately 0.60% of payroll is included in the computed normal cost to recognize subsidized service purchases. Law active accrued liabilities for retirement are reduced by 10% to recognize that total service reported is not entirely Law service, and that non-Law service cannot be used to satisfy Law eligibility conditions.

**Incidence of Contributions:** 

Contributions are assumed to be received continuously throughout the year based upon contribution rates presented in the Summary of Benefits, and the actual payroll payable at the time contributions are made.

**Benefit Service:** 

Exact fractional service is used to determine the amount of benefit payable.

**Normal Form of Benefit:** 

The assumed normal form of benefit is a straight life benefit, except where otherwise noted.

### **SECTION XI**FINANCIAL PRINCIPLES

Promises Made, and To Be Paid For. As each year is completed, OPERS in effect hands an "IOU" to each member then acquiring a year of service credit --- the "IOU" says: "The Ohio Public Employees Retirement System owes you one year's worth of retirement benefits, payments in cash commencing when you qualify for retirement."

The related key financial questions are:

Which generation of taxpayers contributes the money to cover the IOU?

The present taxpayers, who receive the benefit of the member's present year of service? Or the future taxpayers, who happen to be in Ohio at the time the IOU becomes a cash demand, years and often decades later?

The law governing OPERS financing intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year. With this financial objective, the employer contribution rate is expected to remain approximately level from generation to generation of taxpayers.

There are systems which have a design for deferring contributions to future taxpayers. Lured by a lower contribution rate now, they put aside the consequence that the contribution rate must then relentlessly grow to a level much higher than would be required if a level contribution pattern were followed.

An inevitable by-product of the level-cost design is the accumulation of reserve assets, for decades, and the income produced when the assets are invested. *Investment income* becomes *the*  $3^{rd}$  *and largest contributor* for benefits to employees, and is interlocked with the contribution amounts required from employees and employers.

Normal Cost (the cost of members' service being rendered this year) ... plus ...

Interest on Unfunded Actuarial Accrued Liabilities (unfunded actuarial accrued liabilities are the difference between: liabilities for service already rendered; and the accrued assets of OPERS).

Computing Contributions to Support Fund Benefits. From a given schedule of benefits and from employee and asset data, the actuary calculates the contribution rates to support the benefits by means of an actuarial valuation and a funding method.

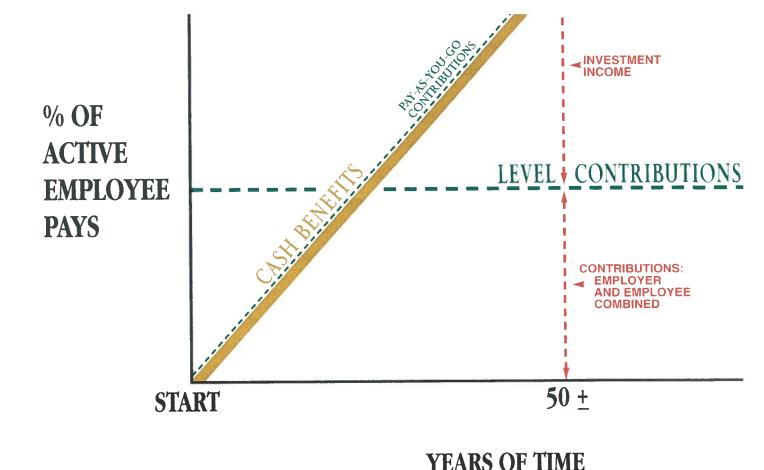
An actuarial valuation has a number of ingredients such as: the rate of investment return which plan assets will earn; the rates of withdrawal of active members who leave covered employment; the rates of mortality; the rates of disability; the rates of pay increases; and the assumed age or ages at actual retirement.

In an actuarial valuation, assumptions must be made as to what the above rates will be for the next year and for decades in the future. The assumptions are established by the Retirement Board after receiving the advice of the actuary.

Reconciling Differences Between Assumed Experience and Actual Experience. Once actual experience has occurred and has been observed, it will not coincide exactly with assumed experience, regardless of the skill of the actuary and the many calculations made. The future can not be predicted with 100% precision.

OPERS copes with these continually changing differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is *continuing adjustments in financial position*.





CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

Rates of investment return

Rates of pay increase

Changes in active member group size

Non-Economic Risk Areas

Ages at actual retirement

Rates of mortality

Rates of withdrawal of active members (turnover)

Rates of disability

The financing diagram on the opposite page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is thus an increasing contribution method; and, the level contribution method which attempts to equalize contributions between the generations.

**The actuarial valuation** is the mathematical process by which the level contribution rate is determined. The activity constituting the valuation may be summarized as follows:

A. Census Data, including:

Retired lives now receiving benefits

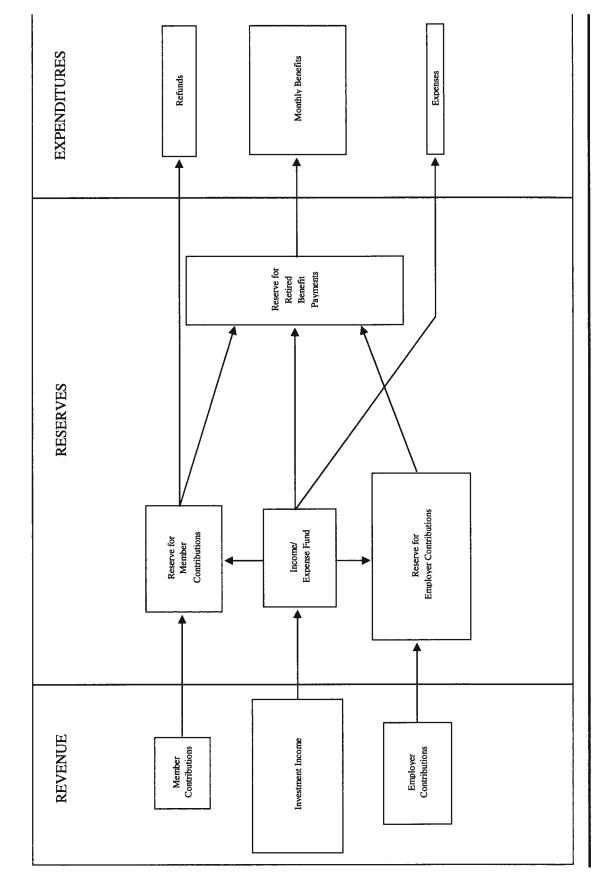
Former employees with vested benefits not yet payable

Active employees

- B. + Asset data (cash & investments)
- C. + Benefit provisions that establish eligibility and amounts of payments to members
- D. + Assumptions concerning future experience in various risk areas
- E. + *The funding method* for employer contributions (the long-term, planned pattern for employer contributions)
- F. + Mathematically combining the assumptions, the funding method, and the data
- G. = Determination of:

Plan Financial Position; and/or New Employer Contribution Rate

# Flow of Money Through the Retirement System



Public Employees Retirement System

Accrued Service. The service credited under the plan which was rendered before the date of the actuarial valuation.

Accumulated Benefit Obligation. The actuarial present value of vested and non-vested benefits based on service to date and past and current salary levels.

Actuarial Accrued Liability. The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

Actuarial Assumptions. Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent. A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries. The Society of Actuaries is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. It administers a series of examinations leading initially to Associateship and the designation A.S.A. and ultimately to Fellowship with the designation F.S.A.

**Amortization**. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Experience Gain (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

Funding Value of Assets. The value of current plan assets recognized for valuation purposes. Generally based on a phased-in recognition of all or a portion of market related investment return. Sometimes referred to as Actuarial Value of Assets.

**Normal Cost.** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

**Plan Termination Liability**. The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for future service and salary. The termination liability will generally be less than the liabilities computed on a "going concern" basis and is not normally determined in a routine actuarial valuation.

**Reserve Account.** An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability. The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

"Actuarial accrued liabilities" are the present value of the portions of promised benefits that are not covered by future normal cost contributions --- a liability has been established ("accrued") because the service has been rendered but the resulting monthly cash benefit may not be payable until years in the future.

If "actuarial accrued liabilities" at any time exceed the plan's accrued assets (cash & investments), the difference is "unfunded actuarial accrued liabilities." This is the common condition. If the plan's assets equaled the plan's "actuarial accrued liabilities", the plan would be termed "fully funded." This is an unusual condition.

Each time a plan adds a new benefit which applies to service already rendered, an "actuarial accrued liability" is created, which is also an "unfunded actuarial accrued liability" because the plan can't print instant cash to cover the value of the new benefit promises. Payment for such unfunded actuarial accrued liabilities is spread over a period of years, commonly in the 15-40 year range.

Unfunded actuarial accrued liabilities can occur in another way: if actual plan experience is less favorable than assumed, the difference is added to unfunded actuarial accrued liabilities. For example, in plans where benefits are directly related to an employee's pay near time of retirement, unfunded actuarial accrued liabilities increased rapidly during the 1970's because unexpected rates of pay increase created additional actuarial accrued liabilities which could not be matched by reasonable investment results. Most of the unexpected pay increases were the direct result of inflation, which is a very destructive force on financial stability.

The existence of unfunded actuarial accrued liabilities is not bad but the changes from year to year in amount of unfunded actuarial accrued liabilities are important--- "bad" or "good" or somewhere in between.

Nor are unfunded actuarial accrued liabilities a bill payable immediately, but it is important that policy-makers prevent the amount from becoming unreasonably high and it is vital for plans to have a sound method for making payments toward them so that they are controlled.

### SECTION XII GASB REPORTING

This information is presented in draft form for review by the System's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the System's financial statements.



### FOR COMPLIANCE WITH GASB STATEMENT NO. 25 (\$ AMOUNTS IN MILLIONS) TRADITIONAL, COMBINED, AND MEMBER DIRECTED PLANS

Valuation Year	Actuarial Accrued Liabilities (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
1991	\$22,027	\$18,108	\$3,919	82 %	\$6,651	59 %
1992	23,961	20,364	3,597	85 %	6,889	52 %
1993	26,506	23,063	3,443	87 %	7,236	48 %
1994	28,260	25,066	3,194	89 %	7,625	42 %
1995	30,556	27,651	2,905	90 %	7,973	36 %
1995*	30,224	27,651	2,573	91 %	7,973	32 %
1996	32,631	30,534	2,097	94 %	8,340	25 %
1997	34,971	33,846	1,125	97 %	8,640	13 %
1998	37,714	38,360	(646)	102 %	9,017	0 %
1999	43,070	43,060	10	100 %	9,477	0 %
2000	46,347	46,844	(497)	101 %	10,192	0 %
2001	49,095	48,748	347	99 %	10,782	3 %
2001*	47,492	48,748	(1,256)	103 %	10,782	0 %
2002	50,872	43,706	7,166	86 %	11,207	64 %
2003	54,774	46,746	8,028	85 %	11,165	72 %
2004	57,604	50,452	7,152	88 %	11,454	62 %
2005	61,146	54,473	6,673	89 %	11,807	57 %
2005*	62,498	54,473	8,025	87 %	11,807	68 %
2006	66,161	61,296	4,865	93 %	12,175	40 %
2007	69,734	67,151	2,583	96 %	12,583	21 %
2008	73,466	55,315	18,150	75 %	12,801	142 %

### FOR COMPLIANCE WITH GASB STATEMENT NO. 25 (\$ AMOUNTS IN MILLIONS) TRADITIONAL PLAN

			Unfunded			
	Actuarial		Actuarial			UAAL as a
	Accrued		Accrued	Ratio of	Active	% of Active
Valuation	Liabilities	Valuation	Liabilities	Assets	Member	Member
Year	(AAL)	Assets	(UAAL)	to AAL	Payroll	Payroll
1991	\$22,027	\$18,108	\$3,919	82 %	\$6,651	59 %
1992	23,961	20,364	3,597	85 %	6,889	52 %
1993	26,506	23,063	3,443	87 %	7,236	48 %
1994	28,260	25,066	3,194	89 %	7,625	42 %
1995	30,556	27,651	2,905	90 %	7,973	36 %
1995*	30,224	27,651	2,573	91 %	7,973	32 %
1996	32,631	30,534	2,097	94 %	8,340	25 %
1997	34,971	33,846	1,125	97 %	8,640	13 %
1998	37,714	38,360	(646)	102 %	9,017	0 %
1999	43,070	43,060	10	100 %	9,477	0 %
2000	46,347	46,844	(497)	101 %	10,192	0 %
2001	49,095	48,748	347	99 %	10,782	3 %
2001*	47,492	48,748	(1,256)	103 %	10,782	0 %
2002	50,872	43,706	7,166	86 %	11,207	64 %
2003	54,756	46,737	8,019	85 %	11,056	73 %
2004	57,573	50,430	7,143	88 %	11,313	63 %
2005	61,099	54,433	6,666	89 %	11,633	57 %
2005*	62,447	54,433	8,014	87 %	11,633	69 %
2006	66,089	61,235	4,854	93 %	11,971	41 %
2007	69,639	67,067	2,572	96 %	12,347	21 %
2008	73,346	55,230	18,116	75 %	12,546	144 %

<sup>\*</sup> Davierd actuarial accumptions

### (\$ AMOUNTS IN MILLIONS) COMBINED PLAN

Valuation Year	Actuarial Accrued Liabilities (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
1991						
1992						
1993						
1994						
1995						
1995						
1996						
1997						
1998			:			
1999						
2000						
2001						
2001						
2002					:	
2003	\$18	\$9	\$9	50 %	\$109	8 %
2004	31	22	9	71 %	141	6 %
2005	47	40	7	85 %	174	4 %
2005*	51	40	11	78 %	174	6 %
2006	72	61	11	85 %	205	5 %
2007	95	84	11	88 %	236	5 %
2008	120	85	35	71 %	255	14 %

<sup>\*</sup> Revised actuarial assumptions.

### MEMBER DIRECTED PLAN

Valuation Year	Actuarial Accrued Liabilities (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as a % of Active Member Payroll
1991						
1992						
1993						
1994						
1995						
1995						
1996						
1997				:		
1998						
1999						
2000						
2001						
2001						
2002						
2003						
2004						
2005						
2005*						
2006						
2007						
2008	166,354	147,976	18,378	89 %	NA	NA

<sup>\*</sup> Revised actuarial assumptions.

### **Traditional Plan**

Valuation Date December 31	Year Ended December 31	Annual Required Contributions
2004	2006	8.44%
2005	2008	7.12%
2006	2009	7.13%
2007	2010	7.14%
2008	2011	13.33%

### **Combined Plan**

Valuation Date December 31	Year Ended December 31	Annual Required Contributions
2004	2006	8.33%
2005	2008	7.29%
2006	2009	7.33%
2007	2010	7.22%
2008	2011	10.00%

<sup>\*</sup> The amounts reported in this schedule do not include contributions for post-employment healthcare benefits.

### SCHEDULE OF UNFUNDED ACTUARIAL ACCRUED LIABILITY@ TRADITIONAL, COMBINED AND MEMBER DIRECTED PLANS FOR COMPLIANCE WITH GASB STATEMENT NO. 25

			December 31, 2008	31, 2008		
	State	Local	General	Public Safety	Law Enforcement	
	Group	Group	Group	Group	Group	
Accrued Liabilities				:		YIO TO THE TOTAL PROPERTY OF THE TOTAL PROPE
Active and Inactive Members	\$ 14,871,856,372	\$21,589,778,983	\$36,461,635,355	\$18,326,539	\$1,499,867,053	\$37
Retirees and Beneficiaries	14,398,035,617	19,624,124,049	34,022,159,666	29,851,449	1,433,813,992	35
Total Accrued Liabilities	\$ 29,269,891,989	\$41,213,903,032	\$70,483,795,021	\$48,177,988	\$2,933,681,045	\$73
Assets						
Active and Inactive Members						
EAF*	\$ 704,006,400	\$ 1,444,477,159	\$ 2,148,483,559	\$ (212,625)	\$ 102,326,114	. ч <del>\$</del>
ESF	4,397,190,843	6,715,662,119	11,112,852,962	5,268,718	428,087,288	11
Unallocated	41,913,167	59,703,607	101,616,774	75,140	4,228,086	
Market Value Adjustment	2,344,937,523	3,341,276,032	5,686,213,555	4,197,922	236,214,657	41
Total Active and Inactive Assets	\$ 7,488,047,933	\$11,561,118,917	\$19,049,166,850	\$9,329,155	\$770,856,145	\$16
Retirees and Beneficiaries	•					
A & PR Fund*	\$13,880,412,017	\$18,762,783,635	\$32,643,195,652	\$15,450,901	\$1,401,551,062	\$37
SBF Fund*	517,623,600	861,340,414	1,378,964,014	14,400,548	32,262,930	1
Total R&B Assets	\$14,398,035,617	\$19,624,124,049	\$34,022,159,666	\$29,851,449	\$1,433,813,992	\$35
Total Assets	\$21,886,083,550	\$31,185,242,966	\$53,071,326,516	\$39,180,604	\$2,204,670,137	\$55
Unfunded Actuarial Accrued Liability	\$7,383,808,439	\$10,028,660,066	\$17,412,468,505	\$ 8,997,384	\$ 729,010,908	\$18

<sup>©</sup> The amounts reported in this schedule do not include contributions for post-employment healthcare benefits.

<sup>\*</sup> After reserve transfers.

### SCHEDULE OF UNFUNDED ACTUARIAL ACCRUED LIABILITY@ FOR COMPLIANCE WITH GASB STATEMENT NO. 25 TRADITIONAL PLAN

	N.		December 31 2008	31 2008		
	State	Local	General	Public Safety	Law Enforcement	
	Group	Group	Group	Group	Group	Total
Accrued Liabilities						
Active and Inactive Members	\$ 14,825,530,148	\$21,516,747,700	\$36,342,277,848	\$18,326,539	\$1,499,867,053	\$37,860,4
Retirees and Beneficiaries	14,398,012,710	19,623,752,574	34,021,765,284	29,851,449	1,433,813,992	35,485,4
Total Accrued Liabilities	\$ 29,223,542,858	\$41,140,500,274	\$70,364,043,132	\$48,177,988	\$2,933,681,045	\$73,345,9
Assets						
Active and Inactive Members						
EAF*	\$ 676,430,275	\$ 1,397,265,652	\$ 2,073,695,927	\$ (212,625)	\$ 102,326,114	\$ 2,175,8
ESF	4,397,013,402	6,715,281,604	11,112,295,006	5,268,718	428,087,288	11,545,6
Unallocated	41,913,167	59,703,607	101,616,774	75,140	4,228,086	105,9
Market Value Adjustment	2,341,604,346	3,335,520,412	5,677,124,758	4,197,922	236,214,657	5,917,5
Total Active and Inactive Assets	\$ 7,456,961,190	\$11,507,771,275	\$18,964,732,465	\$9,329,155	\$770,856,145	\$19,744,9
Retirees and Beneficiaries						
A & PR Fund*	\$13,880,389,110	\$18,762,412,160	\$32,642,801,270	\$15,450,901	\$1,401,551,062	\$34,059,8
SBF Fund*	517,623,600	861,340,414	1,378,964,014	14,400,548	32,262,930	1,425,6
Total R&B Assets	\$14,398,012,710	\$19,623,752,574	\$34,021,765,284	\$29,851,449	\$1,433,813,992	\$35,485,4
Total Accete	\$21.854.073.000	\$31 131 503 840	087 707 740	\$30 180 604	721 079 700 03	\$55,030,3
TOTAL PASSES		750,020,101,100	(+1,174,007,420	100,001,000	101,010,107,79	C,0C3,CC
Unfunded Actuarial Accrued Liability	\$7,368,568,958	\$10,008,976,425	\$17,377,545,383	\$ 8,997,384	\$ 729,010,908	\$18,115,55

The amounts reported in this schedule do not include contributions for post-employment healthcare benefits.After reserve transfers.

# SCHEDULE OF UNFUNDED ACTUARIAL ACCRUED LIABILITY@ FOR COMPLIANCE WITH GASB STATEMENT NO. 25

### COMBINED PLAN

			Dece	December 31, 2008		
	State	Local	General	Public Safety	Law Enforcement	
	Group	Group	Group	Group	Group	Tot
Accrued Liabilities						
Active and Inactive Members	\$ 46,326,224	\$ 73,031,283	\$119,357,507			\$119.
Retirees and Beneficiaries	22,907	205,121	228,028			
Total Accrued Liabilities	\$ 46,349,131	\$ 73,236,404	\$119,585,535			\$119
\$ 0.00 A						
Active and Inactive Members						
EAF*	\$27,576,125	\$47,245,740	\$74,821,865			\$74
ESF	177,441	380,515	557,956			
Unallocated	0	0	0			
Market Value Adjustment	3,333,177	5,739,765	9,072,942			6
Total Active and Inactive Assets	\$31,086,743	\$53,366,020	\$84,452,763			\$84
Dotton Donoffering						
Neurees and Deficialities A & DD E.md*	\$ 22,007	\$ 205 121	\$ 228 028			€
SBF Fund*						<del>)</del>
Total R&B Assets	\$ 22,907	\$ 205,121	\$ 228,028			\$
Total Assets	\$31,109,650	\$53,571,141	\$84,680,791			\$84
Unfunded Actuarial Accrued Liability	\$ 15,239,481	\$ 19,665,263	\$34,904,744			\$34

The amounts reported in this schedule do not include contributions for post-employment healthcare benefits.
 After reserve transfers.

# SCHEDULE OF UNFUNDED ACTUARIAL ACCRUED LIABILITY@ FOR COMPLIANCE WITH GASB STATEMENT NO. 25

### MEMBER DIRECTED PLAN

					Decen	December 31, 2008		
	State		Local	General	1	Public Safety	Law Enforcement	
	Group		Group	Group		Group	Group	Tota
Accrued Liabilities								
Active and Inactive Members	80	ઝ	•	<del>\$</del>	1			<del>∽</del>
Retirees and Beneficiaries	0		166,354	16	166,354			1
Total Accrued Liabilities	0\$	<del>69</del>	166,354	\$ 16	166,354			\$
Assets								
Active and Inactive Members								
EAF*	\$0		(\$34,233)	(\$3	(\$34,233)			\$
ESF	0		0		0			
Unallocated	0		0		0			
Market Value Adjustment	0		15,855		15,855			
Total Active and Inactive Assets	80		(\$18,378)	(\$1	(\$18,378)			\$)
Retirees and Beneficiaries								
A & PR Fund*	\$0	↔	166,354	\$ 16	166,354			<b>\$</b>
SBF Fund*	0		0		0			
Total R&B Assets	\$0	↔	166,354	\$ 16	166,354			\$
Total A scate	\$	¥	770 771	9	70 771			÷
Total Assets	O <del>¢</del>	<del>)</del>	14/,7/0		0/2,			9
Unfunded Actuarial Accrued Liability	\$0	↔	18,378	\$ 1	18,378			\$

<sup>@</sup> The amounts reported in this schedule do not include contributions for post-employment healthcare benefits.

<sup>\*</sup> After reserve transfers.

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest valuation date follows:

Valuation date	December 31, 2008
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Actuarial cost method Individual entry age

Amortization method for unfunded

actuarial accrued liabilities Level percent open

Equivalent Single Amortization Period (Years from December 31, 2010)

Traditional Plan 30 Combined Plan 4

Asset valuation method 4-year smoothed market

Actuarial assumptions:

Investment rate of return 8.00%

Projected salary increases

including wage inflation at 4.0% 4.5% - 10.3% Cost-of-living adjustments 3.0% simple

Membership of the Traditional and Combined Plans consisted of the following at December 31, 2008, the date of the latest actuarial valuation:

		Traditional	Combined	Member Directed	Total
Terminated pla	eneficiaries receiving benefits an members entitled to but beiving benefits	169,000	12	4	169,016
•	Less than 5 years of service	335,512	494	0	336,006
	5 or more years of service	29,471	139	0	29,610
	Total	364,983	633	0	365,616
Active plan me	embers				
-	Less than 5 years of service	143,037	3,972	0	147,009
	5 or more years of service	206,932	2,447	0	209,379
	Total	349,969	6,419	0	356,388
Total					
	Less than 5 years of service	478,549	4,466	0	483,015
	5 or more years of service	405,403	2,598	0	408,005
	Total	883,952	7,064	0	891,020