



# **OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM**

**ANNUAL ACTUARIAL VALUATION OF  
DEFINED BENEFIT ALLOWANCES  
TRADITIONAL AND COMBINED PLANS  
DECEMBER 31, 2005**

**GRS**

Gabriel Roeder Smith & Company

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December 11, 2006

The Retirement Board  
Ohio Public Employees Retirement System  
Columbus, Ohio

Ladies and Gentlemen:

The results of the *December 31, 2005 annual actuarial valuation* 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 and projections of retiree health and Medicare are covered in separate reports.) The purpose of the valuation is to measure the system's funding progress in accordance with previously established contribution rates and funding policy.

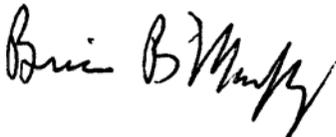
The individual member statistical data required for the valuations was furnished by your Executive Director and Staff, together with pertinent data on financial operations. Their cooperation in furnishing these materials is acknowledged with appreciation.

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.

The valuation was completed in accordance with standards of practice prescribed by the Actuarial Standards Board and in conformance with Chapter 145 of the Revised Code of Ohio. To the best of our knowledge this report is complete and accurate and the actuarial methods and assumptions produced results which are reasonable.

Respectfully submitted,

Norman L. Jones, F.S.A.

A handwritten signature in black ink that reads "Brian B. Murphy". The signature is written in a cursive style with a large, stylized initial "B".

Brian B. Murphy, F.S.A.

NLJ/BBM/bd

# **SECTION I**

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## **Executive Summary**

## INTRODUCTION

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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, 2005 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.

A summary of the primary valuation results as of December 31, 2005 is presented on the following page.

**SUMMARY OF PENSION DEFINED BENEFIT VALUATION RESULTS**  
**TRADITIONAL AND COMBINED PLANS**  
**DECEMBER 31**  
**(\$ IN MILLIONS)**

	2005					2004	
	State	Local	Law		Total Law	Grand Total	Grand Total
			Public Safety	Law Enforcement			
<b>A. Demographic Information</b>							
1. Active Number Counts							
a. Traditional Plan	113,008	232,589	135	7,976	8,111	353,708	350,835
b. Combined Plan	<u>1,612</u>	<u>3,484</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>5,096</u>	<u>4,452</u>
c. Total	114,620	236,073	135	7,976	8,111	358,804	355,287
2. Active Payroll							
a. Traditional Plan	4,275	6,956	6	395	401	11,632	11,313
b. Combined Plan	<u>64</u>	<u>110</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>174</u>	<u>141</u>
c. Total	4,339	7,066	6	395	401	11,806	11,454
3. Retired Number Counts	53,813	96,836	102	3,184	3,286	153,935	149,296
4. Deferred / Inactive Number Counts	95,693	198,308	13	685	698	294,699	274,959
5. Member Directed Active Number Counts	<u>1,773</u>	<u>3,530</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>5,303</u>	<u>4,596</u>
6. Total Number Counts	265,899	534,747	250	11,845	12,095	812,741	784,138
<b>B. Defined Benefit Assets</b>							
1. Market Value (MV)	23,064	32,492	(24)	2,171	2,147	57,702	53,576
2. Rate of Return on MV						9.05%	12.19%
3. Funding Value (FV)	21,773	30,674	(23)	2,050	2,027	54,473	50,452
4. Rate of Return on FV						9.41%	9.08%
5. Ratio of FV to MV						94.4%	94.2%
<b>C. Defined Benefit Actuarial Results</b>							
1. Normal Cost as a % of Payroll	14.71%	14.60%	17.91%	18.72%	18.72%	14.78%	14.75%
2. Actuarial Accrued Liability (AAL)							
a. Active	12,288	17,973	14	1,203	1,217	31,478	30,243
b. Retired	11,310	15,484	21	1,110	1,131	27,925	25,698
c. Deferred/Inactive	<u>722</u>	<u>1,003</u>	<u>0</u>	<u>17</u>	<u>17</u>	<u>1,742</u>	<u>1,663</u>
d. Total	24,320	34,461	35	2,330	2,365	61,146	57,604
3. Unfunded AAL (UAAL)	2,547	3,787	58	280	338	6,673	7,152
4. Funded Ratio	89.5 %	89.0 %	(65.3)%	88.0 %	85.7 %	89.1 %	87.6 %
<b>D. Contribution Rates</b>							
	CY 2007					CY 2006	
1. Pension Contributions							
a. Employer Normal Cost	5.21%	5.10%	8.16%	8.62%	8.63%	5.26%	5.71%
b. Member Contribution Rate	9.50%	9.50%	9.75%	10.10%	10.09%	9.52%	9.04%
c. UAAL Contribution Rate	<u>3.56%</u>	<u>3.75%</u>	<u>4.01%</u>	<u>3.55%</u>	<u>3.54%</u>	<u>3.68%</u>	<u>3.54%</u>
d. Total	18.27%	18.35%	21.92%	22.27%	22.26%	18.46%	18.29%
2. Retiree Health Contribution Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	4.50%
3. Total Employer Contribution Rate	13.77%	13.85%	17.17%	17.17%	17.17%	13.94%	13.75%
<b>E. Amortization Years to Fully Amortize UAAL *</b>	22	18	N/A	29	41	20	24

\* 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 2007. See page XII-8 for additional explanation.

**SUMMARY OF PENSION DEFINED BENEFIT VALUATION RESULTS**  
**TRADITIONAL PLAN**  
**DECEMBER 31**  
**(\$ IN MILLIONS)**

	2005					2004	
	State	Local	Law		Total Law	Grand Total	Grand Total
			Public Safety	Law Enforcement			
<b>A. Demographic Information</b>							
1. Active Number Counts	113,008	232,589	135	7,976	8,111	353,708	350,835
2. Active Payroll	4,275	6,956	6	395	401	11,632	11,313
3. Retired Number Counts	53,813	96,836	102	3,184	3,286	153,935	149,296
4. Deferred / Inactive Number Counts	<u>95,651</u>	<u>198,178</u>	<u>13</u>	<u>685</u>	<u>698</u>	<u>294,527</u>	<u>274,902</u>
5. Total Number Counts	262,472	527,603	250	11,845	12,095	802,170	775,033
<b>B. Defined Benefit Assets</b>							
1. Market Value (MV)	23,050	32,465	(24)	2,171	2,147	57,662	53,554
2. Rate of Return on MV						9.05%	12.19%
3. Funding Value (FV)	21,760	30,647	(23)	2,050	2,027	54,433	50,430
4. Rate of Return on FV						9.41%	9.08%
5. Ratio of FV to MV						94.4%	94.2%
<b>C. Defined Benefit Actuarial Results</b>							
1. Normal Cost as a % of Payroll	14.66%	14.55%	17.91%	18.72%	18.72%	14.73%	14.73%
2. Actuarial Accrued Liability (AAL)							
a. Active	12,271	17,942	14	1,203	1,217	31,431	30,212
b. Retired	11,310	15,484	21	1,110	1,131	27,925	25,698
c. Deferred/Inactive	<u>722</u>	<u>1,003</u>	<u>0</u>	<u>17</u>	<u>17</u>	<u>1,742</u>	<u>1,663</u>
d. Total	24,304	34,430	35	2,330	2,365	61,099	57,573
3. Unfunded AAL (UAAL)	2,544	3,783	58	280	338	6,666	7,143
4. Funded Ratio	89.5 %	89.0 %	(65.3)%	88.0 %	85.7 %	89.1 %	87.6 %
<b>D. Contribution Rates</b>							
	CY 2007					CY 2006	
1. Pension Contributions							
a. Employer Normal Cost	5.16%	5.05%	8.16%	8.62%	8.63%	5.21%	5.69%
b. Member Contribution Rate	9.50%	9.50%	9.75%	10.10%	10.09%	9.52%	9.04%
c. UAAL Contribution Rate	<u>3.61%</u>	<u>3.80%</u>	<u>4.01%</u>	<u>3.55%</u>	<u>3.54%</u>	<u>3.73%</u>	<u>3.57%</u>
d. Total	18.27%	18.35%	21.92%	22.27%	22.26%	18.46%	18.30%
2. Retiree Health Contribution Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	4.50%
3. Total Employer Contribution Rate	13.77%	13.85%	17.17%	17.17%	17.17%	13.94%	13.76%
<b>E. Amortization Years to Fully Amortize UAAL *</b>							
	22	18	N/A	29	41	20	24

\* 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 2007. See page XII-8 for additional explanation.

**SUMMARY OF PENSION DEFINED BENEFIT VALUATION RESULTS  
COMBINED PLAN  
DECEMBER 31  
(\$ IN MILLIONS)**

	2005		2004	
	State	Local	Grand Total	Grand Total
<b>A. Demographic Information</b>				
1. Active Number Counts	1,612	3,484	5,096	4,452
2. Active Payroll	64	110	174	141
3. Retired Number Counts	0	0	0	0
4. Deferred / Inactive Number Counts	<u>42</u>	<u>130</u>	<u>172</u>	<u>57</u>
5. Total Number Counts	1,654	3,614	5,268	4,509
<b>B. Defined Benefit Assets</b>				
1. Market Value (MV)	13	27	40	22
2. Rate of Return on MV			7.77%	7.69%
3. Funding Value (FV)	13	27	40	22
4. Rate of Return on FV			7.83%	7.78%
5. Ratio of FV to MV			100.0%	100.0%
<b>C. Defined Benefit Actuarial Results</b>				
1. Normal Cost as a % of Payroll	7.19%	7.13%	7.15%	7.12%
2. Actuarial Accrued Liability (AAL)				
a. Active	16	31	47	31
b. Retired	0	0	0	0
c. Deferred/Inactive	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
d. Total	<u>16</u>	<u>31</u>	<u>47</u>	<u>31</u>
3. Unfunded AAL (UAAL)	3	4	7	9
4. Funded Ratio	81.9 %	86.7 %	85.0 %	71.6 %
<b>D. Contribution Rates</b>				
	CY 2007		CY 2006	
1. Pension Contributions				
a. Employer Normal Cost	7.19%	7.13%	7.15%	7.12%
b. Member Contribution Rate	0.00%	0.00%	0.00%	0.00%
c. UAAL Contribution Rate	<u>1.58%</u>	<u>1.72%</u>	<u>1.67%</u>	<u>2.03%</u>
d. Total	8.77%	8.85%	8.82%	9.15%
2. Retiree Health Contribution Rate	5.00%	5.00%	5.00%	4.50%
3. Total Employer Contribution Rate	13.77%	13.85%	13.82%	13.65%
<b>E. Amortization Years to Fully Amortize UAAL *</b>				
	2	1	1	2

\* 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 2007. See page XII-8 for additional explanation.

## COMMENTS

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*The December 31, 2005 actuarial valuations of members indicate* the following about the portion of employer contribution rates allocated to financing retirement allowances:

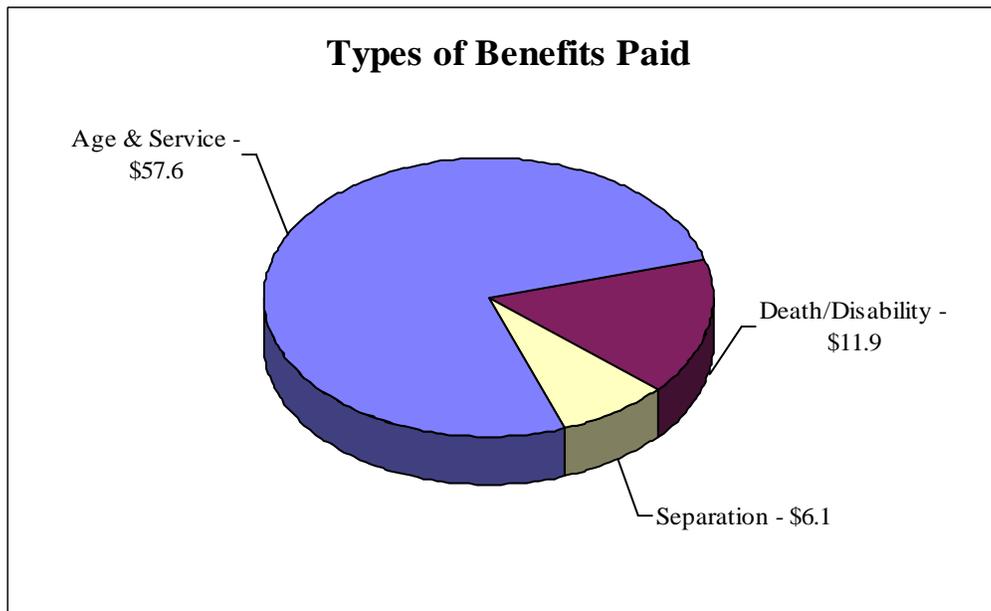
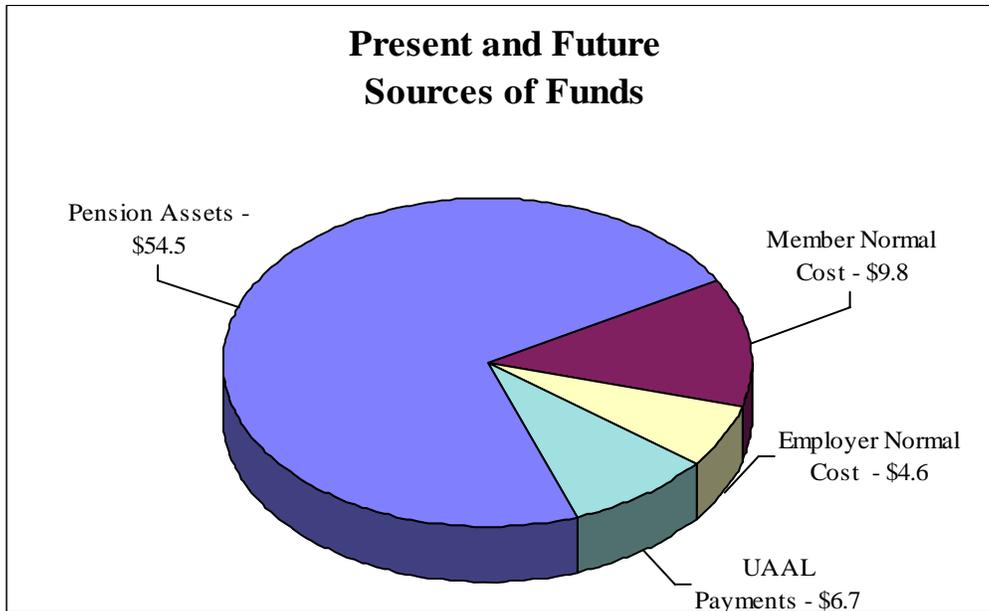
- The employer rates are sufficient to fully fund the cost of benefit commitments being made to members for service currently being rendered.
- After satisfying current cost requirements, the remaining portion of the employer rates provides sufficient funds to amortize unfunded actuarial accrued liabilities over a period of 21 years for the System in total.

***Experience.*** The computed amortization period, taking into account all scheduled increases in contribution rates is 20 years, compared with the 24 year period that had been reported in the December 31, 2004 valuation. This result was primarily due to favorable investment experience for the year ended December 31, 2005. Measured on a market value basis, investment return was over 9%. The market value of assets currently exceeds the funding value by \$3.2 Billion. Based upon the market value of assets, the funded percent would be 94% and the amortization period would be 8 years. Additional information concerning 2005 experience including other sources of gains and losses will be presented in a separate report of gain/loss experience.

***Conclusion.*** Based on the results of the December 31, 2005 regular annual actuarial valuation, it is our opinion that the Ohio Public Employees Retirement System continues to be in sound financial condition in accordance with actuarial principles of level percent of payroll financing.

**FINANCING \$75.6 BILLION\* OF DEFINED BENEFIT PROMISES  
FOR PRESENT ACTIVE AND RETIRED MEMBERS  
DECEMBER 31, 2005  
(DOLLAR AMOUNTS IN BILLIONS)**

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\* Present value of future benefits – all divisions combined.

**DEFINED BENEFIT ACTIVE MEMBERS IN VALUATION  
GROUP AVERAGES - COMPARATIVE STATEMENT**

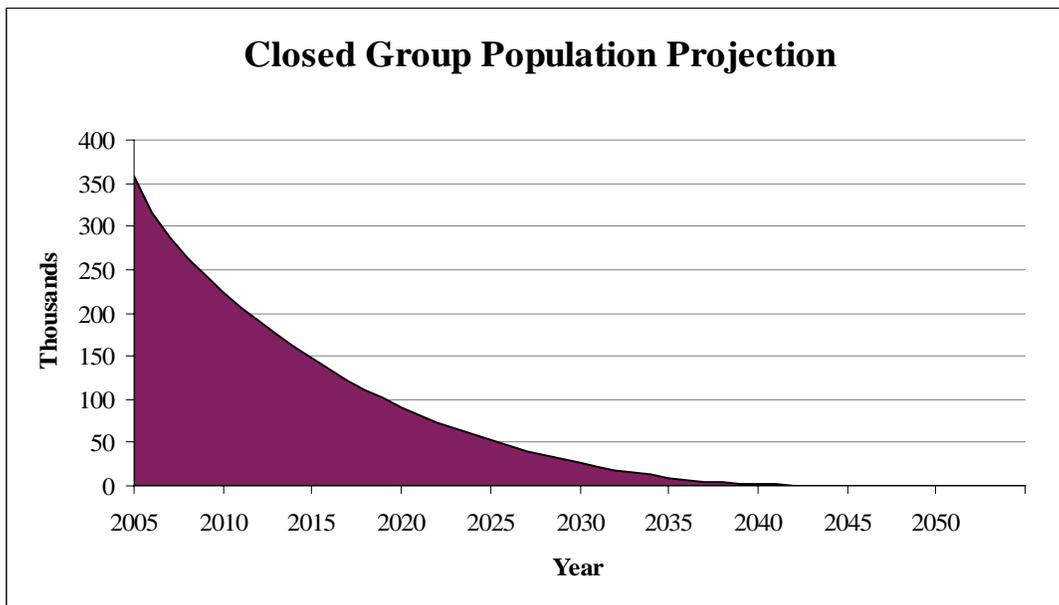
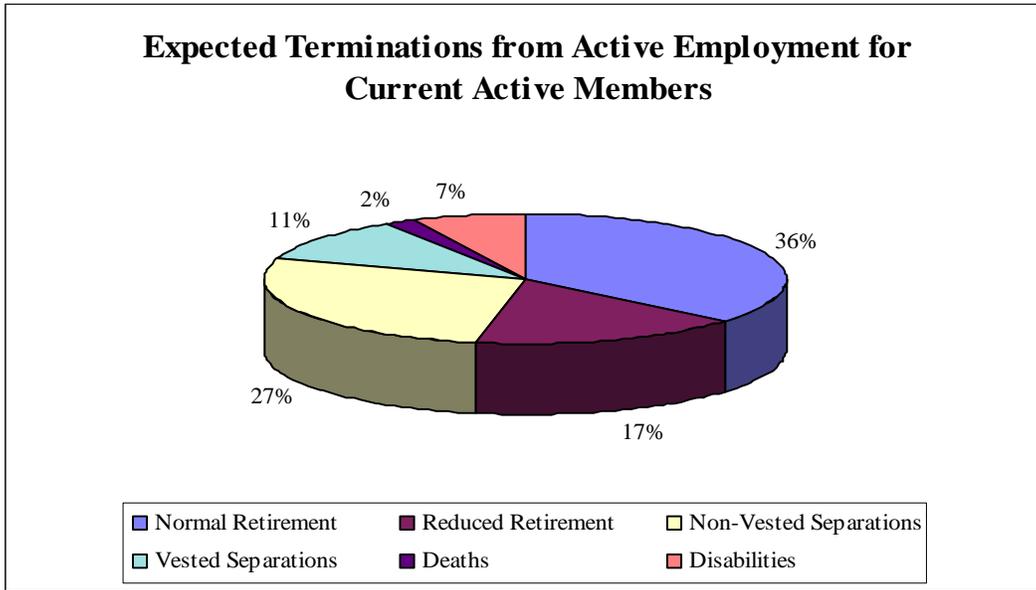
Valuation Group	Dec. 31	No. of Active Members	Group Averages				
			Attained Age	Accrued Service Yrs.	Annual Payroll		
					Average	Increase	
STATE	1975	83,220	40.6 yrs.	6.5 yrs.	\$ 9,441	6.4 %	@
	1980	92,872	39.4	7.3	13,934	8.1 %	@
	1985	89,256	39.2	8.4	18,677	7.4 %	@
	1990	98,939	40.7	8.1	25,281	6.2 %	@
	1995	114,596	40.4	8.8	27,962	2.0 %	@
	2000	113,099	41.6	9.7	34,201	4.1 %	
	2001	109,219	42.1	10.2	36,589	7.0 %	
	2002	110,017	42.0	10.2	37,531	2.6 %	
	2003	108,249	42.2	10.3	37,679	0.4 %	
	2004	110,207	42.2	10.3	37,794	0.3 %	
	2005	114,620	42.0	10.1	37,858	0.2 %	
LOCAL GOVT	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 %	
	2001	243,202	42.2	8.4	26,526	8.7 %	
	2002	247,377	42.2	8.3	27,171	2.4 %	
	2003	237,082	42.8	8.9	28,269	4.0 %	
	2004	236,907	43.1	9.0	29,110	3.0 %	
	2005	236,073	43.3	9.2	29,933	2.8 %	
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 %	
	2001	7,892	39.3	11.8	42,503	5.2 %	
	2002	8,030	39.4	12.0	44,420	4.5 %	
	2003	8,253	39.6	12.2	46,576	4.9 %	
	2004	8,173	39.7	12.4	48,045	3.2 %	
	2005	8,111	39.9	12.6	49,472	N/A	
<b>TOTAL</b>	<b>2003</b>	<b>353,584</b>	<b>42.5 yrs.</b>	<b>9.4 yrs.</b>	<b>\$ 31,577</b>	<b>-</b>	
	<b>2004</b>	<b>355,287</b>	<b>42.7</b>	<b>9.5</b>	<b>32,240</b>	<b>2.1 %</b>	
	<b>2005</b>	<b>358,804</b>	<b>42.8</b>	<b>9.5</b>	<b>32,906</b>	<b>2.1 %</b>	

@ 5-year annual compound rate.

\* Beginning with the December 31, 2005 valuation report, valuation results for the Law division are shown separately for Public Safety and Law Enforcement.

# DEVELOPMENT OF PRESENT DEFINED BENEFIT POPULATION DECEMBER 31, 2005

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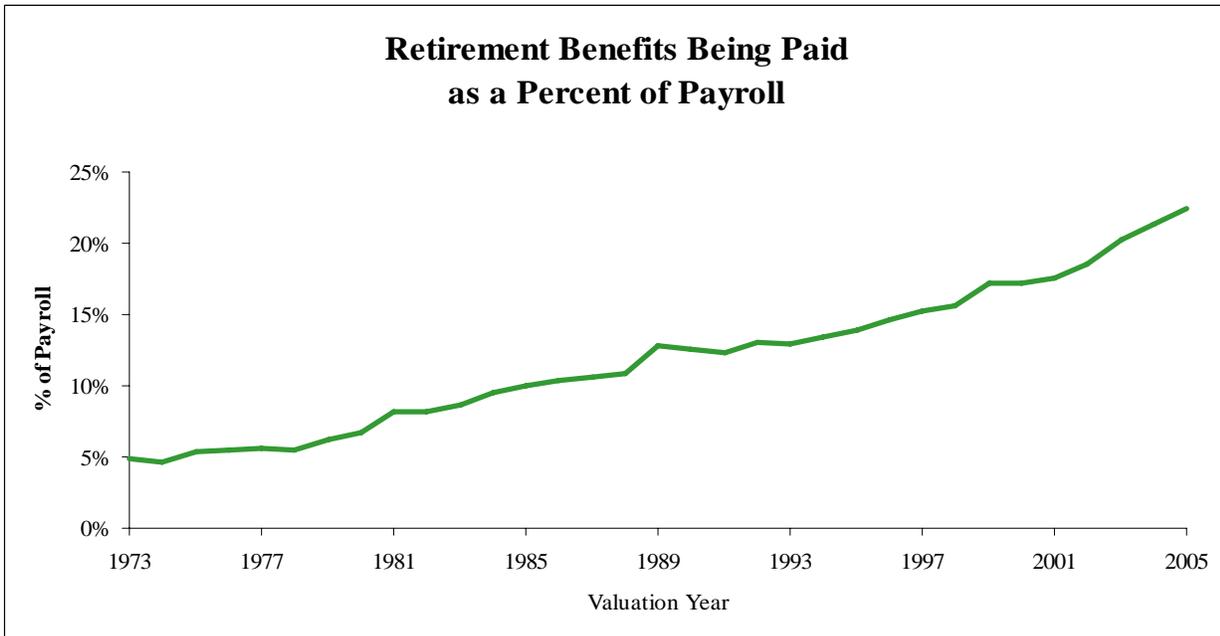
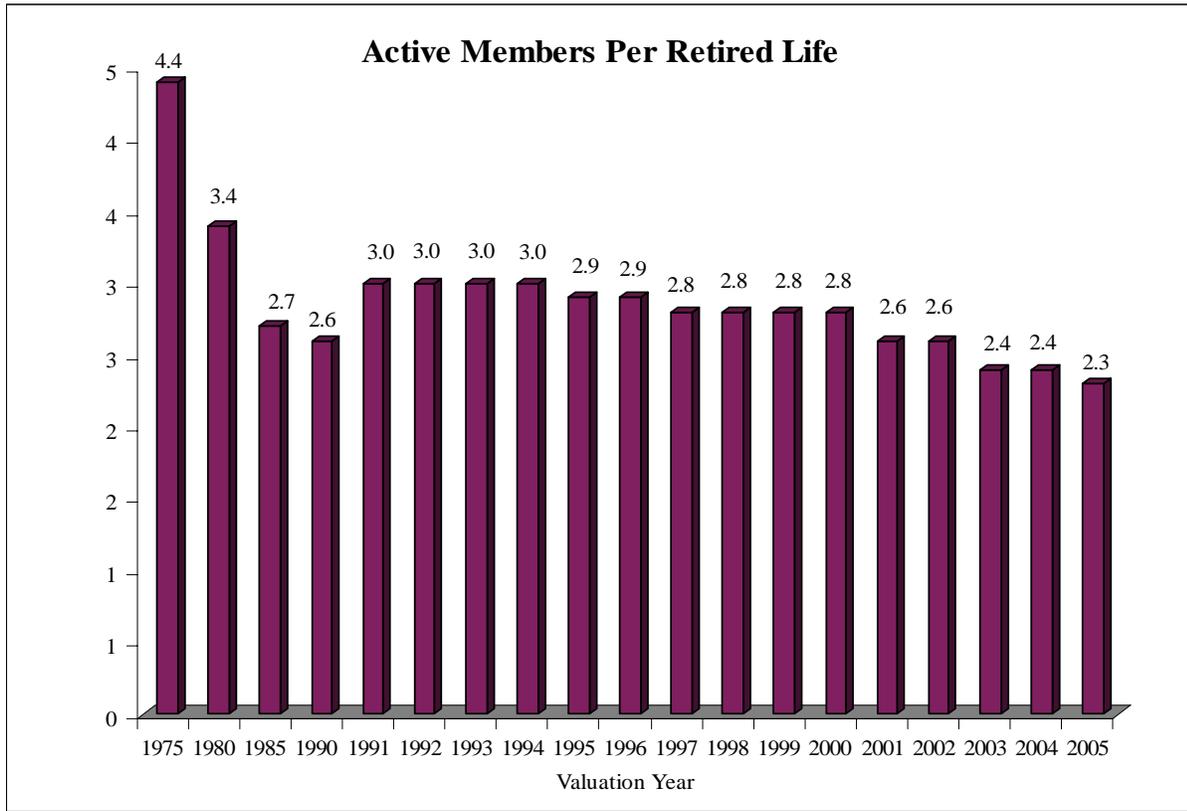


The charts show the expected future development of the present population in simplified terms. The defined benefit portion of the retirement system presently covers 358,804 active members. Eventually, 27% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for a monthly benefit. 64% 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. 9% of the present population is expected to become eligible for death-in-service or disability benefits. Within 9 years, over half of the covered membership is expected to consist of new hires.

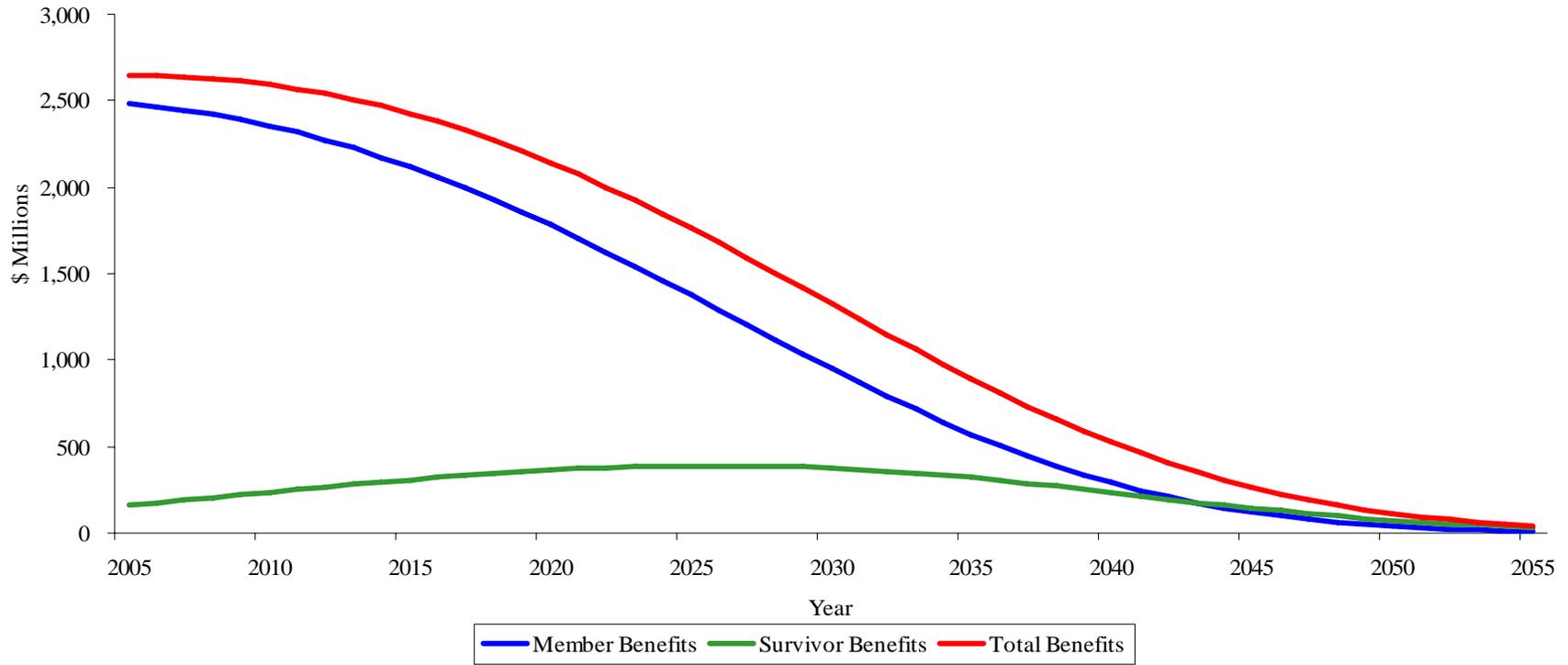
# ACTIVE/RETIRED MEMBER STATISTICS

## DECEMBER 31, 2005

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



Total future payments:	\$68.5 billion
From present assets:	\$27.9 billion
From future earnings:	\$40.6 billion

**ALL DIVISIONS**  
**DEFINED BENEFIT ACTIVE MEMBERS IN VALUATION**  
**DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Ages	Years of Service To Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19	12,858							12,858
Tot. Pay	\$77,722,537							\$77,722,537
Avg. Pay	\$6,045							\$6,045
20-24	28,093	547						28,640
Tot. Pay	\$338,633,961	\$11,024,926						\$349,658,887
Avg. Pay	\$12,054	\$20,155						\$12,209
25-29	21,945	5,759	173					27,877
Tot. Pay	\$515,865,032	\$194,826,298	\$5,830,319					\$716,521,649
Avg. Pay	\$23,507	\$33,830	\$33,701					\$25,703
30-34	15,612	11,772	3,391	114				30,889
Tot. Pay	\$409,756,942	\$449,925,808	\$137,813,178	\$4,196,219				\$1,001,692,147
Avg. Pay	\$26,246	\$38,220	\$40,641	\$36,809				\$32,429
35-39	14,228	11,148	9,217	3,625	141			38,359
Tot. Pay	\$366,318,045	\$428,117,988	\$413,511,851	\$161,616,573	\$6,601,084			\$1,376,165,541
Avg. Pay	\$25,746	\$38,403	\$44,864	\$44,584	\$46,816			\$35,876
40-44	13,544	10,162	8,114	9,112	3,981	379		45,292
Tot. Pay	\$334,532,115	\$374,184,044	\$352,010,989	\$438,774,350	\$191,108,968	\$17,400,428		\$1,708,010,894
Avg. Pay	\$24,700	\$36,822	\$43,383	\$48,153	\$48,005	\$45,911		\$37,711
45-49	13,184	10,269	8,255	8,516	7,691	5,737	222	53,874
Tot. Pay	\$317,348,022	\$364,495,282	\$336,573,618	\$400,733,451	\$392,782,327	\$283,981,129	\$10,891,165	\$2,106,804,994
Avg. Pay	\$24,071	\$35,495	\$40,772	\$47,057	\$51,070	\$49,500	\$49,059	\$39,106
50-54	10,819	8,573	7,692	7,680	6,240	7,321	2,163	50,488
Tot. Pay	\$257,064,040	\$292,073,534	\$303,710,297	\$346,867,644	\$313,024,948	\$391,426,408	\$118,045,557	\$2,022,212,428
Avg. Pay	\$23,760	\$34,069	\$39,484	\$45,165	\$50,164	\$53,466	\$54,575	\$40,053
55-59	7,987	6,560	6,205	6,556	5,054	4,392	2,545	39,299
Tot. Pay	\$175,955,516	\$217,971,975	\$235,812,997	\$285,098,856	\$239,886,164	\$232,299,556	\$149,162,070	\$1,536,187,134
Avg. Pay	\$22,030	\$33,227	\$38,004	\$43,487	\$47,465	\$52,892	\$58,610	\$39,090
60-64	4,037	3,144	2,852	2,915	2,355	1,724	991	18,018
Tot. Pay	\$67,913,938	\$93,456,081	\$100,846,777	\$120,823,363	\$105,363,813	\$81,175,419	\$56,918,594	\$626,497,985
Avg. Pay	\$16,823	\$29,725	\$35,360	\$41,449	\$44,740	\$47,086	\$57,436	\$34,771
65-69	2,443	1,375	1,095	898	723	554	391	7,479
Tot. Pay	\$24,358,531	\$29,041,221	\$33,614,037	\$34,350,250	\$29,298,314	\$24,561,323	\$19,949,687	\$195,173,363
Avg. Pay	\$9,971	\$21,121	\$30,698	\$38,252	\$40,523	\$44,335	\$51,022	\$26,096
70 & Over	2,255	1,294	833	451	344	261	293	5,731
Tot. Pay	\$15,791,582	\$13,975,370	\$14,189,061	\$12,555,020	\$10,861,752	\$10,257,381	\$12,534,229	\$90,164,395
Avg. Pay	\$7,003	\$10,800	\$17,034	\$27,838	\$31,575	\$39,300	\$42,779	\$15,733
<b>Totals</b>	147,005	70,603	47,827	39,867	26,529	20,368	6,605	358,804
<b>Tot. Pay</b>	\$2,901,260,261	\$2,469,092,527	\$1,933,913,124	\$1,805,015,726	\$1,288,927,370	\$1,041,101,644	\$367,501,302	\$11,806,811,954
<b>Avg. Pay</b>	\$19,736	\$34,971	\$40,436	\$45,276	\$48,586	\$51,115	\$55,640	\$32,906

**ALL DIVISIONS  
DEFINED BENEFIT ACTIVE MEMBERS IN VALUATION  
DECEMBER 31, 2005  
BY GENDER AND YEARS OF SERVICE**

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Service Years	Active Member Count			Active Member Pays	
	Males	Females	Total	Total	Average
0	27,472	33,209	60,681	\$ 770,322,646	\$12,695
1	13,289	16,905	30,194	615,701,300	20,392
2	9,709	11,400	21,109	510,575,090	24,188
3	8,002	9,663	17,665	492,931,670	27,904
4	7,791	9,565	17,356	511,729,555	29,484
5	7,547	10,143	17,690	574,863,330	32,497
6	7,100	8,624	15,724	536,079,929	34,093
7	6,128	7,481	13,609	485,908,612	35,705
8	5,623	6,586	12,209	443,291,548	36,309
9	5,227	6,144	11,371	428,949,108	37,723
10	4,947	5,538	10,485	405,170,099	38,643
11	5,141	5,579	10,720	428,887,201	40,008
12	4,215	4,844	9,059	367,110,941	40,524
13	3,903	4,299	8,202	342,677,777	41,780
14	4,298	5,063	9,361	390,067,106	41,669
15 & Up	45,532	47,837	93,369	4,502,546,042	48,223
<b>Totals</b>	<b>165,924</b>	<b>192,880</b>	<b>358,804</b>	<b>\$11,806,811,954</b>	<b>\$32,906</b>

**SUMMARY OF PENSION EXPERIENCE**  
**(\$ IN MILLIONS)**

	2005		2004	
	Total \$	% of Accrued Liabilities	Total \$	% of Accrued Liabilities
<b>Beginning of Year</b>				
1. Total Accrued Liabilities	\$57,604.0	100.0 %	\$54,773.8	100.0 %
2. Valuation Assets	50,452.4	87.6 %	46,745.4	85.3 %
3. Unfunded Actuarial Accrued Liabilities	\$ 7,151.6	12.4 %	\$ 8,028.4	14.7 %
<b>Experience Gains(Losses)</b>				
4. Gains (losses) in economic risk areas				
a. Pay increases	\$ 301.7	0.5 %	\$ 733.1	1.3 %
b. Investment return	705.8	1.2 %	503.2	0.9 %
c. Total	1,007.5	1.7 %	1,236.3	2.2 %
5. Gains (losses) from decrement experience				
a. Service retirement	(26.7)	0.0 %	23.7	0.0 %
b. Disability retirement	(25.7)	0.0 %	(9.8)	0.0 %
c. Death-in-service	23.0	0.0 %	35.7	0.1 %
d. Other separations	(113.4)	(0.2)%	18.9	0.0 %
e. Total	<b>(142.8)</b>	<b>(0.2)%</b>	68.5	0.1 %
<b>6. Total experience gains (losses): (4c) + (5e)</b>	<b>\$ 864.7</b>	<b>1.5 %</b>	<b>\$ 1,304.8</b>	<b>2.3 %</b>
<b>End of Year</b>				
7. Total Accrued Liabilities	\$61,146.1	100.0 %	\$57,604.0	100.0 %
8. Valuation Assets	54,473.4	89.1 %	50,452.4	87.6 %
9. Unfunded Actuarial Accrued Liabilities	\$ 6,672.7	10.9 %	\$ 7,151.6	12.4 %

# **SECTION II**

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## **Financial Information**

**FINANCIAL DATA FOR CALENDAR YEAR 2005**  
**CONSOLIDATED ASSET RECONCILIATION**  
**ALL PLANS, ALL DIVISIONS**

	<u>Traditional Pension Plan</u>	<u>DB Portion of Combined Pension Plan</u>	<u>Total Pension Defined Benefit</u>	<u>401(h) Health Care</u>	<u>Member Directed VEBA</u>	<u>Total Health Care</u>	<u>DC Portion of Combined Pension Plan</u>	<u>Member Directed</u>	<u>Total Defined Contribution</u>	<u>Total 2005</u>
Beginning Market Value @ 12/31/04										
Assets Held in Trust for Benefits	\$ 53,464,390,790	\$ 22,051,498	\$ 53,486,442,289	\$ 11,609,113,357	\$ 7,978,960	\$ 11,617,092,316	\$ 21,411,957	\$ 33,579,873	\$ 54,991,830	\$ 65,158,526,435
Assets Held for Upcoming Year Budget	89,924,420	-	89,924,420	-	-	-	-	-	-	89,924,420
Total Beginning Market Value @ 12/31/04	\$ 53,554,315,210	\$ 22,051,498	\$ 53,576,366,709	\$ 11,609,113,357	\$ 7,978,960	\$ 11,617,092,316	\$ 21,411,957	\$ 33,579,873	\$ 54,991,830	\$ 65,248,450,855
External Cash Flows:										
Revenues:										
Member Contributions / Deposits	\$ 1,027,553,641	\$ 71,351	\$ 1,027,624,992	\$ -	\$ -	\$ -	\$ 13,907,066	\$ 12,505,646	\$ 26,412,711	\$ 1,054,037,704
Employer Contributions	1,157,407,274	15,635,373	1,173,042,647	460,534,741	7,252,580	467,787,322	2,309	12,424,690	12,426,998	1,653,256,967
Retiree Paid Health Care Premiums	-	-	-	63,307,285	-	63,307,285	-	-	-	63,307,285
Refund from HC Vendors	-	-	-	4,024,854	-	4,024,854	-	-	-	4,024,854.00
Other Income / Cancelled Warrants	432,348	-	432,348	548,364	-	548,364	-	-	-	980,712
Total Revenues	\$ 2,185,393,263	\$ 15,706,724	\$ 2,201,099,987	\$ 528,415,245	\$ 7,252,580	\$ 535,667,825	\$ 13,909,374	\$ 24,930,335	\$ 38,839,710	\$ 2,775,607,521
Disbursements:										
Refunds of Member Accounts	\$ (215,398,602)	\$ -	\$ (215,398,602)	\$ -	\$ -	\$ -	\$ (1,390,162)	\$ (3,447,236)	\$ (4,837,398)	\$ (220,236,000)
Retirement Benefits	(2,679,084,743)	-	(2,679,084,743)	-	-	-	-	-	-	(2,679,084,743)
Retiree Paid Post Retirement Health Care	-	-	-	(63,307,285)	-	(63,307,285)	-	-	-	(63,307,285)
ER Paid Post Retirement Health Care	-	-	-	(1,009,439,571)	(1,757)	(1,009,441,327)	-	-	-	(1,009,441,327)
ER Paid Post Retirement Medicare	-	-	-	(80,094,041)	-	(80,094,041)	-	-	-	(80,094,041)
Administrative Expenses	(63,287,759)	-	(63,287,759)	(11,931,692)	(872,252)	(12,803,944)	(4,531,943)	(4,231,571)	(8,763,514)	(84,855,216)
Total Disbursements	\$ (2,957,771,104)	\$ -	\$ (2,957,771,104)	\$ (1,164,772,589)	\$ (874,009)	\$ (1,165,646,597)	\$ (5,922,104)	\$ (7,678,807)	\$ (13,600,911)	\$ (4,137,018,613)
Net External Cash Flow	\$ (772,377,841)	\$ 15,706,724	\$ (756,671,117)	\$ (636,357,344)	\$ 6,378,571	\$ (629,978,773)	\$ 7,987,270	\$ 17,251,528	\$ 25,238,798	\$ (1,361,411,092)
Inter-Plan Activity										
Member Balance Transfers & Plan Switches	\$ 124,446	\$ 71,382	\$ 195,828	\$ -	\$ -	\$ -	\$ (73,298)	\$ (122,530)	\$ (195,828)	\$ -
DCP Fixed Assets Advanced by TP	(838,435)	-	(838,435)	-	82,996	82,996	421,665	333,774	755,439	-
DCP Start up Costs	-	-	-	-	-	-	-	-	-	-
Interest on 12/31/04 Advance Balance	1,443,089	-	1,443,089	-	(124,138)	(124,138)	(596,811)	(722,140)	(1,318,951)	-
Income Applied to Advance (Loan) Balance	-	(362,684)	(362,684)	-	-	-	362,684	-	362,684	-
Total Inter-Plan Activity	\$ 729,099	\$ (291,302)	\$ 437,798	\$ -	\$ (41,141)	\$ (41,141)	\$ 114,240	\$ (510,896)	\$ (396,656)	\$ -
Investment Income:										
Interest and Dividends	\$ 1,215,305,849	\$ 664,096	\$ 1,215,969,945	\$ 224,518,471	\$ 262,008	\$ 224,780,479	\$ 669,234	\$ 989,198	\$ 1,658,432	\$ 1,442,408,857
Other Ordinary Investment Income	2,232,586,474	1,219,983	2,233,806,457	272,804,486	481,323	273,285,809	754,010	1,114,506	1,868,517	2,508,960,783
Realized Capital Value Changes	1,511,188,353	825,779	1,512,014,132	382,822,937	325,797	383,148,734	1,541,505	2,278,506	3,820,011	1,898,982,878
External Asset Management Fees	(79,532,403)	(21,110)	(79,553,513)	(7,188,895)	(8,328)	(7,197,223)	(134,278)	(200,690)	(334,969)	(87,085,704)
Rounding	-	-	-	(0)	-	(0)	-	-	-	(0)
Investment Return	\$ 4,879,548,273	\$ 2,688,749	\$ 4,882,237,022	\$ 872,956,999	\$ 1,060,800	\$ 874,017,799	\$ 2,830,471	\$ 4,181,521	\$ 7,011,992	\$ 5,763,266,813
Ending Market Value @ 12/31/05	\$ 57,662,214,741	\$ 40,155,669	\$ 57,702,370,411	\$ 11,845,713,012	\$ 15,377,190	\$ 11,861,090,202	\$ 32,343,938	\$ 54,502,026	\$ 86,845,964	\$ 69,650,306,576

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

Year Ended December 31	2004	2005	2006	2007	2008
A. Funding Value Beginning of Year	\$46,745,327,239	\$50,452,283,552			
B. Market Value End of Year	53,576,366,709	57,702,370,411			
C. Market Value Beginning of Year	48,240,974,050	53,576,366,709			
D. Non-Investment/Administrative Net Cash Flow					
D1. Member Contributions	1,019,798,241	1,027,624,992			
D2. Employer Contributions (Less Other Income/Cancelled Warrants)	1,126,005,161	1,173,474,994			
D3. Refund of Member Accounts	(207,121,143)	(215,398,602)			
D4. Retirement Benefits	(2,454,131,826)	(2,679,084,743)			
D5. Member Balance Transfers	245,452	195,828			
D6. Total Net Cash Flow: D1+D2+D3+D4+D5	(515,204,115)	(693,187,531)			
E. Investment Return					
E1. Market Total:B-C-D6	5,850,596,774	4,819,191,233			
E2. Assumed Rate of Return	8.00%	8.00%			
E3. Assumed Amount of Return	3,719,018,015	4,008,455,183			
E4. Amount Subject to Phase-In: E1-E3	2,131,578,759	810,736,050			
F. Phased-In Recognition of Investment Return					
F1. Current year: 0.25xE4	532,894,690	202,684,013			
F2. First Prior Year	1,555,151,363	532,894,690	\$202,684,013		
F3. Second Prior Year	(1,584,903,640)	1,555,151,363	532,894,690	\$202,684,013	
F4. Third Prior Year		(1,584,903,640)	1,555,151,365	532,894,689	\$202,684,011
F5. Total Phase-Ins	503,142,413	705,826,426	2,290,730,068	735,578,702	202,684,011
G. Funding Value End of Year					
G1. Preliminary Funding Value End of Year: A+D6+E3+F5	\$50,452,283,552	\$54,473,377,630			
G2. Upper Corridor Limit: 112% x B	60,005,530,714	64,626,654,860			
G3. Lower Corridor Limit: 88% x B	47,147,202,703	50,778,085,961			
G4. Funding Value End of Year	\$50,452,283,552	\$54,473,377,630			
H. Difference Between Market and Funding Value	\$3,124,083,157	3,228,992,781	\$938,262,713	\$202,684,011	
I. Recognized Rate of Return	9.08%	9.41%			
J. Market Rate of Return	12.19%	9.05%			
K. Ratio of Funding Value to Market Value	94%	94%			

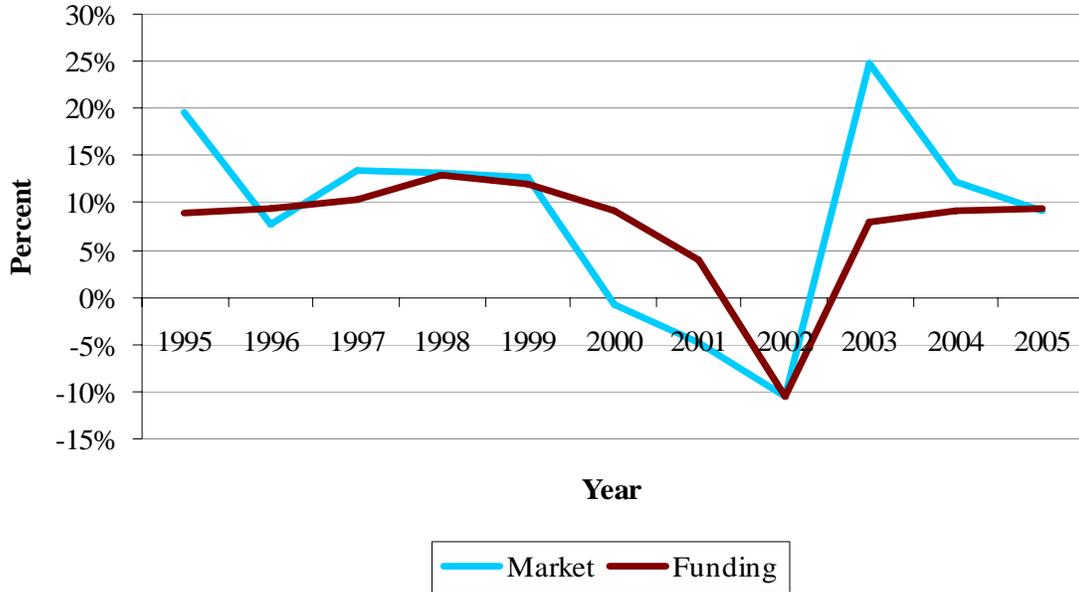
The Funding Value of Assets recognizes assumed investment return (line E3) fully each year. Differences between actual and assumed investment return (line E4) are phased in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend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

**ALLOCATION OF FUNDING VALUE OF ASSETS AMONG DIVISIONS  
DECEMBER 31, 2005**

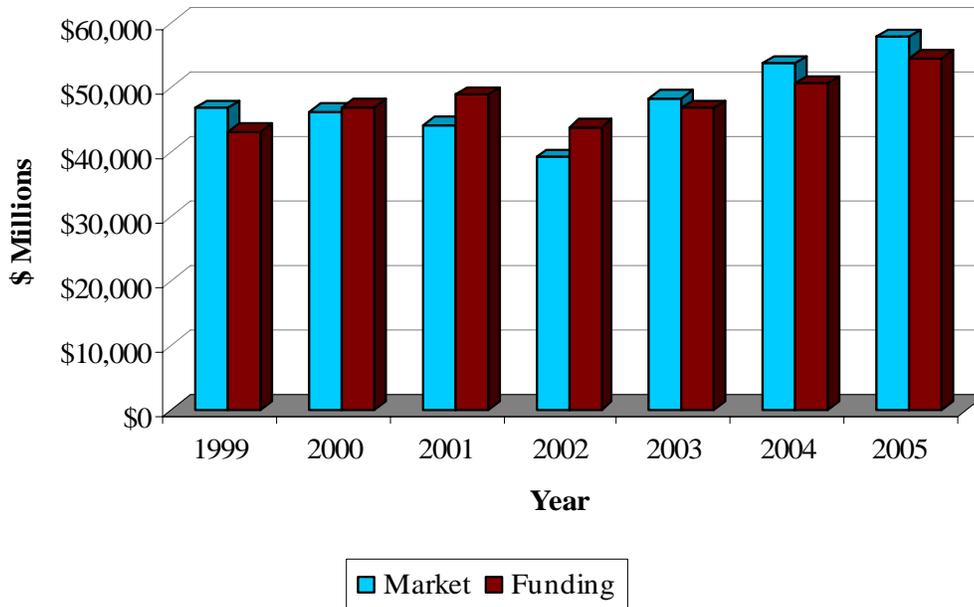
	<u>State</u>	<u>Local</u>	<u>Law</u>	
			<u>Public Safety</u>	<u>Law Enforcement</u>
(1) Employer Accumulation Fund-Traditional Plan	\$ 8,033,567,718	\$ 11,431,325,762	\$ (45,851,968)	\$ 746,961,622
(2) Employer Accumulation Fund-Combined Plan	13,387,123	26,768,546	0	0
(3) Retired Assets-Traditional Plan	<u>10,799,082,434</u>	<u>14,732,445,309</u>	<u>17,423,570</u>	<u>1,037,822,582</u>
(4) Subtotal: (1)+(2)+(3)	\$ 18,846,037,276	\$ 26,190,539,617	\$ (28,428,398)	\$ 1,784,784,204
(5) Member Deposits from Participant Data-Traditional Plan				
(a) Active Member Deposits	4,307,026,444	6,503,099,619	5,478,707	422,455,124
(b) Inactive Member Deposits	<u>416,083,569</u>	<u>600,107,588</u>	<u>136,531</u>	<u>9,123,556</u>
(c) Total Member Deposits: (a)+(b)	4,723,110,013	7,103,207,207	5,615,238	431,578,680
(6) Share of Total Member Deposits	38.51%	57.92%	0.05%	3.52%
(7) Employee Savings Fund Allocated According to (6)	3,778,246,862	5,682,203,096	4,491,904	345,240,909
(8) Subtotal: (4)+(7)	22,624,284,138	31,872,742,713	(23,936,494)	2,130,025,113
(9) Assets Without Division Allocated According to (8)	403,429,746	568,345,607	(426,829)	37,981,997
(10) Assets Held For Upcoming Year Budget Allocated According to (8)	<u>35,942,821</u>	<u>50,635,692</u>	<u>(38,028)</u>	<u>3,383,935</u>
(11) <b>Total Employer +Employee Defined Benefit Assets: (8)+(9)+(10)</b>	<b>\$ 23,063,656,705</b>	<b>\$ 32,491,724,012</b>	<b>\$ (24,401,350)</b>	<b>\$ 2,171,391,045</b>
(12) Share of Defined Benefit Market Value	39.97 %	56.31 %	(0.04)%	3.76 %
(13) Market Value Adjustment Allocated According to (12)	(1,290,629,492)	(1,818,218,931)	1,365,486	(121,509,844)
(14) <b>Funding Value of Defined Benefit Assets (11)+(13)</b>	<b>\$ 21,773,027,213</b>	<b>\$ 30,673,505,081</b>	<b>\$ (23,035,864)</b>	<b>\$ 2,049,881,201</b>

# COMPARISON OF DEFINED BENEFIT ASSETS

## Comparison of Rates of Return



## Comparison of Defined Benefit Asset Values



## **SECTION III**

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### **Benefits and Conditions Evaluated**

## **BENEFITS AND CONDITIONS EVALUATED**

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### **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). The 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). Ohio 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.

## **BENEFITS AND CONDITIONS EVALUATED**

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### **TERMS**

*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 9.0% of earnable salary in 2006. 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 effective 1/1/2001. Remaining Law enforcement members (Public Safety) contribute 9.0% of earnable salary in 2006.

*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).

## BENEFITS AND CONDITIONS EVALUATED

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### CONTRIBUTIONS (CONT'D)

*Health Care Preservation Plan (HCPP).* Both employer and member contribution rates are scheduled to increase over the next few years in accordance with the HCPP. The following table shows total scheduled employer contribution rates (includes contributions for both the pension and retiree health programs):

<b>Year</b>	<b>State</b>	<b>Local Government</b>	<b>Law Enforcement</b>	<b>Public Safety</b>
2005	13.31%	13.55%	16.70%	16.70%
2006	13.54	13.70	16.93	16.93
2007	13.77	13.85	17.17	17.17
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:

<b>Year</b>	<b>All Divisions</b>
2005	4.00%
2006	4.50
2007	5.00
2008 and Later	5.50

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

<b>Year</b>	<b>State</b>	<b>Local Government</b>	<b>Law Enforcement</b>	<b>Public Safety</b>
2005	8.50%	8.50%	10.10%	9.00%
2006	9.00	9.00	10.10	9.00
2007	9.50	9.50	10.10	9.75
2008 and Later	10.00	10.00	10.10	10.00

## TRADITIONAL PENSION PLAN

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### 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 Age	OR	Years of Service Credit	Percentage of 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.

## TRADITIONAL PENSION PLAN

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### **AGE & SERVICE BENEFITS – LAW MEMBERS (PUBLIC SAFETY) ELIGIBLE TO RETIRE UNDER OHIO 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 credits.

## **TRADITIONAL PENSION PLAN**

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### **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.

# TRADITIONAL PENSION PLAN

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## 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*

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

### *Schedule 2*

<u>Years of Service</u>	<u>Annual Benefit as a % of Deceased Member's FAS</u>
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 spouse, the spouse receives the greater of 25% of FAS or \$250.

## TRADITIONAL PENSION PLAN

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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 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).

## TRADITIONAL PENSION PLAN

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**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.

**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:

<b>Service Credit at Retirement</b>	<b>Amount of Death Benefit</b>
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 service and final average salary at time of leaving service.

## TRADITIONAL PENSION PLAN

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### 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.

## COMBINED PLAN

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### 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.

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

**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 Age	OR	Years of Service Credit	Percentage of 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).

**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.

## **COMBINED PLAN**

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### **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:

- 1) 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 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).

## COMBINED PLAN

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***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.

## COMBINED PLAN

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**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.

## COMBINED PLAN

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**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.]

## **MEMBER-DIRECTED PLAN**

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**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
- 2) 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.

## **MEMBER-DIRECTED PLAN**

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### **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).

## MEMBER-DIRECTED PLAN

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### 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%

**SAMPLE BENEFIT COMPUTATION – TRADITIONAL PLAN  
STATE OR LOCAL MEMBER - NORMAL RETIREMENT  
RETIRING DECEMBER 31, 2005  
UNDER BENEFIT PROVISIONS EVALUATED**

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**Data:**

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

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**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: $(1 - 0.81174) \times (F) =$	<u>4,428</u>
H.	Benefit Payable to Retiree while Spouse is Alive: $(F) - (G) =$	19,092
I.	Benefit Payable to Spouse after Retiree's Death	19,092
J.	Benefit Payable to Retiree after Spouse's Death	23,520

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**Projected Benefits:**

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2006	\$ 19,092	\$ 19,092	\$ 23,520
2007	19,665	19,665	24,226
2008	20,238	20,238	24,931
2009	20,810	20,810	25,637
2010	21,383	21,383	26,342
2011	21,956	21,956	27,048
2012	22,529	22,529	27,754
2013	23,101	23,101	28,459
2014	23,674	23,674	29,165
2015	24,247	24,247	29,870

**SAMPLE BENEFIT COMPUTATION – TRADITIONAL PLAN  
STATE OR LOCAL MEMBER - EARLY RETIREMENT  
RETIRING DECEMBER 31, 2005  
UNDER BENEFIT PROVISIONS EVALUATED**

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**Data:**

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

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**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: $(1 - 0.81174) \times (H) =$	<u>2,757</u>
J.	Benefit Payable to Retiree while Spouse is Alive: $(H) - (I)$	11,886
K.	Benefit Payable to Spouse after Retiree's Death	11,886
L.	Benefit Payable to Retiree after Spouse's Death	14,643

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**Projected Benefits:**

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2006	\$ 11,886	\$ 11,886	\$ 14,643
2007	12,243	12,243	15,082
2008	12,599	12,599	15,522
2009	12,956	12,956	15,961
2010	13,313	13,313	16,400
2011	13,669	13,669	16,840
2012	14,026	14,026	17,279
2013	14,382	14,382	17,718
2014	14,739	14,739	18,158
2015	15,095	15,095	18,597

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**SAMPLE BENEFIT COMPUTATION – TRADITIONAL PLAN**  
**SECTION 145.33 (B)(2)(b) PUBLIC SAFETY**  
**MEMBER - NORMAL RETIREMENT**  
**RETIRING DECEMBER 31, 2005**  
**UNDER BENEFIT PROVISIONS EVALUATED**

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**Data:**

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

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**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: $(1 - 0.87869) \times (F) =$	<u>2,537</u>
H.	Benefit Payable to Retiree while Spouse is Alive: $(F) - (G) =$	18,378
I.	Benefit Payable to Spouse after Retiree's Death	18,378
J.	Benefit Payable to Retiree after Spouse's Death	20,915

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**Projected Benefits:**

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2006	\$ 18,378	\$ 18,378	\$ 20,915
2007	18,929	18,929	21,542
2008	19,481	19,481	22,170
2009	20,032	20,032	22,797
2010	20,583	20,583	23,425
2011	21,135	21,135	24,052
2012	21,686	21,686	24,680
2013	22,237	22,237	25,307
2014	22,789	22,789	25,935
2015	23,340	23,340	26,562

**SAMPLE BENEFIT COMPUTATION – TRADITIONAL PLAN**  
**SECTION 145.33 (B)(2)(a) LAW ENFORCEMENT**  
**MEMBER - NORMAL RETIREMENT**  
**RETIRING DECEMBER 31, 2005**  
**UNDER BENEFIT PROVISIONS EVALUATED**

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**Data:**

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

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**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: $(1 - 0.87869) \times (F) =$	<u>3,172</u>
H.	Benefit Payable to Retiree while Spouse is Alive: $(F) - (G) =$	22,972
I.	Benefit Payable to Spouse after Retiree's Death	22,972
J.	Benefit Payable to Retiree after Spouse's Death	26,144

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**Projected Benefits:**

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2006	\$ 22,972	\$ 22,972	\$ 26,144
2007	23,661	23,661	26,928
2008	24,350	24,350	27,713
2009	25,039	25,039	28,497
2010	25,729	25,729	29,281
2011	26,418	26,418	30,066
2012	27,107	27,107	30,850
2013	27,796	27,796	31,634
2014	28,485	28,485	32,419
2015	29,174	29,174	33,203

---

**SAMPLE BENEFIT COMPUTATION – TRADITIONAL PLAN  
STATE OR LOCAL MEMBER – TERMINATION BENEFIT  
RETIRING DECEMBER 31, 2005  
UNDER BENEFIT PROVISIONS EVALUATED**

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**Data:**

A.	<u>\$32,000</u>	Final Average Earnings
B.	<u>15</u>	Years of Credited Service
C.	<u>45</u>	Age of Member
D.	<u>42</u>	Age of Spouse
E.	<u>60:57</u>	Ages at Which Benefits are Payable
F.	<u>100%</u>	Percentage of Pension to Continue to Spouse after retiree's death (Retiree makes the choice of 100% Joint and Survivor with Pop-Up)
G.	<u>\$44,000</u>	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: $(H) \times (I) =$	8,976
K.	Reduction for Line F Election: $(1 - 0.80366) \times (J) =$	<u>1,762</u>
L.	Benefit Payable to Retiree while Spouse is Alive: $(J) - (K) =$	7,214
M.	Benefit Payable to Spouse after Retiree's Death	7,214
N.	Benefit Payable to Retiree after Spouse's Death	8,976
O.	In lieu of a lifetime benefit, terminnee may elect to receive a refund of accumulated contributions with interest plus an additional 67% of eligible accumulated contributions because terminnee had more than 10 years of service.	73,480

---

**Projected Benefits:**

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2006	\$ 7,214	\$ 7,214	\$ 8,976
2007	7,430	7,430	9,245
2008	7,647	7,647	9,515
2009	7,863	7,863	9,784
2010	8,080	8,080	10,053
2011	8,296	8,296	10,322
2012	8,513	8,513	10,592
2013	8,729	8,729	10,861
2014	8,945	8,945	11,130
2015	9,162	9,162	11,400

---

**SAMPLE BENEFIT COMPUTATION – TRADITIONAL PLAN**  
**SECTION 145.33 (B)(2)(a) PUBLIC SAFETY / LAW ENFORCEMENT**  
**MEMBER – TERMINATION BENEFIT**  
**RETIRING DECEMBER 31, 2005**  
**UNDER BENEFIT PROVISIONS EVALUATED**

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**Data:**

A.	<u>    \$38,000    </u>	Final Average Earnings
B.	<u>      15      </u>	Years of Credited Service
C.	<u>      37      </u>	Age of Retiree
D.	<u>      34      </u>	Age of Spouse
E.	<u>    52:49    </u>	Ages at Which Benefits are Payable
F.	<u>    100%    </u>	Percentage of Pension to Continue to Spouse after retiree's death (Retiree makes the choice of 100% Joint and Survivor with Pop-Up)
G.	<u>   \$46,000   </u>	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: $(1 - 0.86085) \times (H) =$	<u>1,190</u>
J.	Benefit Payable to Retiree while Spouse is Alive: $(H) - (I) =$	7,360
K.	Benefit Payable to Spouse after Retiree's Death	7,360
L.	Benefit Payable to Retiree after Spouse's Death	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

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**Projected Benefits:**

Year Ended December 31,	Retiree's Benefit (Both Alive)	Spouse's Benefit (After Retiree's Death)	Retiree's Benefit (After Spouse's Death)
2006	\$ 7,360	\$ 7,360	\$ 8,550
2007	7,581	7,581	8,807
2008	7,802	7,802	9,063
2009	8,022	8,022	9,320
2010	8,243	8,243	9,576
2011	8,464	8,464	9,833
2012	8,685	8,685	10,089
2013	8,906	8,906	10,346
2014	9,126	9,126	10,602
2015	9,347	9,347	10,859

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## **SECTION IV**

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### **Recommendations for Reserve Transfers**

## **DECEMBER 31, 2005 RETIRED LIFE VALUATION RESERVE TRANSFERS**

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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 and IV-3 should be netted off the "Other" column on pages IV-2 and IV-3.

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**RESERVE TRANSFERS AFFECTING THE EMPLOYER ACCUMULATION FUND  
DECEMBER 31, 2005**

	Assets Before Transfers	Transfers		Assets After Transfers	Liabilities	Ratio
		Accrued	Other			
<b>State</b>						
A&PR FUND						
SR	\$8,656,404,508	\$137,603,771	\$122,458,281	\$8,916,466,560	\$8,916,466,560	
MP	10,137,727	0	309,253	10,446,980	10,446,980	
AA	176,054	0	221,491	397,545	397,545	
JR	(1,410,954)	0	1,410,954	0	0	
CR	20,940,354	0	11,920,946	32,861,300	32,861,300	
DR	1,595,429,070	23,400,850	80,002,120	1,698,832,040	1,698,832,040	
BD	87,116,182	6,791,779	101,044,639	194,952,600	194,952,600	
<b>TOTAL A&amp;PR</b>	<b>10,368,792,941</b>	<b>167,796,400</b>	<b>317,367,684</b>	<b>10,853,957,025</b>	<b>10,853,957,025</b>	<b>100.0%</b>
SBF						
S-1	98,068,983	0	2,779,859	100,848,842	100,848,842	
S-2	332,220,510	0	23,183,024	355,403,534	355,403,534	
<b>TOTAL SBF</b>	<b>430,289,493</b>	<b>0</b>	<b>25,962,883</b>	<b>456,252,376</b>	<b>456,252,376</b>	<b>100.0%</b>
<b>TOTAL STATE</b>	<b>\$10,799,082,434</b>	<b>\$167,796,400</b>	<b>\$343,330,567</b>	<b>\$11,310,209,401</b>	<b>\$11,310,209,401</b>	<b>100.0%</b>
<b>Local</b>						
A&PR FUND						
SR	\$11,710,437,942	\$226,003,177	\$229,557,933	\$12,165,999,052	\$12,165,999,052	
MP	25,068,344	0	(118,089)	24,950,255	24,950,255	
AA	(844,476)	0	11,907,563	11,063,087	11,063,087	
JR	(385,653)	0	385,653	0	0	
CR	30,166,708	0	14,628,097	44,794,805	44,794,805	
DR	2,139,558,476	22,078,168	70,826,295	2,232,462,939	2,232,462,939	
BD	86,184,266	6,258,888	129,288,977	221,732,131	221,732,131	
<b>TOTAL A&amp;PR</b>	<b>13,990,185,607</b>	<b>254,340,233</b>	<b>456,476,429</b>	<b>14,701,002,269</b>	<b>14,701,002,269</b>	<b>100.0%</b>
SBF						
S-1	156,821,260	0	5,168,992	161,990,252	161,990,252	
S-2	585,438,443	0	35,960,394	621,398,837	621,398,837	
<b>TOTAL SBF</b>	<b>742,259,703</b>	<b>0</b>	<b>41,129,386</b>	<b>783,389,089</b>	<b>783,389,089</b>	<b>100.0%</b>
<b>TOTAL LOCAL</b>	<b>\$14,732,445,310</b>	<b>\$254,340,233</b>	<b>\$497,605,815</b>	<b>\$15,484,391,358</b>	<b>\$15,484,391,358</b>	<b>100.0%</b>

**RESERVE TRANSFERS AFFECTING THE EMPLOYER ACCUMULATION FUND  
DECEMBER 31, 2005**

	Assets Before Transfers	Transfers		Assets After Transfers	Liabilities	Ratio
		Accrued	Other			
<b>Public Safety</b>						
A&PR FUND						
SR	\$2,823,514	\$0	\$621,340	\$3,444,854	\$3,444,854	
MP	202,868	0	(202,868)	0	0	
AA	0	0	0	0	0	
JR	41,874	0	(41,874)	0	0	
CR	6,402	0	(6,402)	0	0	
DR	6,620,089	0	(629,982)	5,990,107	5,990,107	
BD	(741,644)	0	1,398,224	656,580	656,580	
TOTAL A&PR	8,953,103	0	1,138,438	10,091,541	10,091,541	100.0%
SBF						
S-1	0	0	0	0	0	
S-2	8,470,467	0	2,168,037	10,638,504	10,638,504	
TOTAL SBF	8,470,467	0	2,168,037	10,638,504	10,638,504	100.0%
<b>TOTAL PUBLIC SAFETY</b>	<b>\$17,423,570</b>	<b>\$0</b>	<b>\$3,306,475</b>	<b>\$20,730,045</b>	<b>\$20,730,045</b>	<b>100.0%</b>
<b>Law Enforcement</b>						
A&PR FUND						
SR	\$594,140,495	\$12,890,066	\$22,009,954	\$629,040,515	\$629,040,515	
MP	151,370	0	(151,370)	0	0	
AA	(88,585)	0	88,585	0	0	
JR	776,689	0	(776,689)	0	0	
CR	2,027,069	0	(1,856,127)	170,942	170,942	
DR	387,084,167	2,928,386	26,504,838	416,517,391	416,517,391	
BD	25,278,246	453,233	9,577,556	35,309,035	35,309,035	
TOTAL A&PR	1,009,369,451	16,271,685	55,396,747	1,081,037,883	1,081,037,883	100.0%
SBF						
S-1	7,723,818	0	(374,051)	7,349,767	7,349,767	
S-2	20,729,313	0	768,306	21,497,619	21,497,619	
TOTAL SBF	28,453,131	0	394,255	28,847,386	28,847,386	100.0%
<b>TOTAL LAW ENFORCEMENT</b>	<b>\$1,037,822,582</b>	<b>\$16,271,685</b>	<b>\$55,791,002</b>	<b>\$1,109,885,269</b>	<b>\$1,109,885,269</b>	<b>100.0%</b>
<b>GRAND TOTAL</b>	<b>\$26,586,773,896</b>	<b>\$438,408,318</b>	<b>\$900,033,859</b>	<b>\$27,925,216,073</b>	<b>\$27,925,216,073</b>	<b>100.0%</b>

# SECTION V

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## State Division

## STATE DIVISION

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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, 2005*

Groups	Number	Annual Payroll	Average		
			Pay	Age	Service
Men	50,851	\$2,067,407,056	\$40,656	42.2 yrs.	10.4 yrs.
Women	63,769	2,271,872,653	35,627	41.8	9.8
<b>Totals</b>	<b>114,620</b>	<b>\$4,339,279,709</b>	<b>\$37,858</b>	<b>42.0 yrs.</b>	<b>10.1 yrs.</b>

Also included in the valuation were 95,693 inactive members eligible for deferred retirement allowances or contribution refunds and 3,154 members active in the money purchase plan.

### *Retired Members in Valuation December 31, 2005*

Fund / Type of Allowance	Number	Current Monthly Benefits	Actuarial Liabilities
A & PR Fund			
Superannuation Retirement	41,055	\$71,093,092	\$8,949,725,406
Disability Retirement	7,682	13,911,611	1,893,784,641
Money Purchase	272	109,739	10,446,980
Total A & PR Fund	49,009	85,114,442	10,853,957,027
Total SBF	4,804	4,134,370	456,252,375
Grand Total	53,813	\$89,248,812	\$11,310,209,402

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

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<b>Valuation Date December 31</b>	<b>2005</b>	<b>2004</b>
<b>Contributions for</b>	<b>2007</b>	<b>2006</b>
<b>Normal Cost</b>		
Age and Service Allowances	8.24 %	8.20 %
Disability Allowances	2.17 %	2.17 %
Survivor's Benefits	0.41 %	0.41 %
Separation Benefits	3.89 %	3.89 %
Total Normal Cost	14.71 %	14.67 %
(Member Contributions)	9.50 %	9.00 %
Employer Normal Cost	5.21 %	5.67 %
<b>Unfunded Actuarial Accrued Liabilities</b>		
Total Available Contribution	3.56 %	3.37 %
Amortization Years	22	27
<b>Total Pension Employer Contribution Rate</b>	<b>8.77 %</b>	<b>9.04 %</b>

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.

**STATE DIVISION  
COMPARATIVE STATEMENT**

Valuation Date December 31	Contribution Rate Effective January 1	Defined Benefit Active Members in Valuation				Computed Employer Contributions as % of Payroll				
		No.	Annual Payroll			Normal Cost	Unfunded Accrued Liability	Pension Total	Retiree Health	Grand Total
			Total	Average	Increase					
			(\$Millions)							
1991&	1993	107,025	\$ 2,693	\$ 25,163	(0.5)%	6.57 %	2.45 %	9.02 %	4.29 %	13.31 %
1992	1994	109,701	2,767	25,224	0.2 %	6.41 %	2.61 %	9.02 %	4.29 %	13.31 %
1993	1995	112,748	2,894	25,673	1.8 %	6.40 %	2.62 %	9.02 %	4.29 %	13.31 %
1994	1996	115,238	3,063	26,580	3.5 %	6.66 %	2.36 %	9.02 %	4.29 %	13.31 %
1995	1997	114,596	3,204	27,962	5.2 %	6.67 %	2.35 %	9.02 %	4.29 %	13.31 %
1996@	1998	115,712	3,319	28,684	2.6 %	6.21 %	2.81 %	9.02 %	4.29 %	13.31 %
1997	1999	114,036	3,405	29,858	4.1 %	6.21 %	2.90 %	9.11 %	4.20 %	13.31 %
1998	2000	112,323	3,500	31,159	4.4 %	6.21 %	2.90 %	9.11 %	4.20 %	13.31 %
1999#	2001	112,761	3,592	31,851	2.2 %	7.68 %	1.33 %	9.01 %	4.30 %	13.31 %
2000	2002	113,099	3,868	34,201	7.4 %	7.69 %	1.32 %	9.01 %	4.30 %	13.31 %
2001@	2003	109,219	3,996	36,589	7.0 %	6.17 %	2.14 %	8.31 %	5.00 %	13.31 %
2002	2004	110,017	4,129	37,531	2.6 %	5.95 %	3.36 %	9.31 %	4.00 %	13.31 %
2003##	2005	108,249	4,079	37,679	0.4 %	5.70 %	3.61 %	9.31 %	4.00 %	13.31 %
2004	2006	110,207	4,165	37,794	0.3 %	5.67 %	3.37 %	9.04 %	4.50 %	13.54 %
2005	2007	114,620	4,339	37,858	0.2 %	5.21 %	3.56 %	8.77 %	5.00 %	13.77 %

# After benefit changes.

@ Revised actuarial assumptions.

& Reflects inclusion of part-time, seasonal, and temporary employees in compliance with OBRA 90 and revised actuarial assumptions.

## Combined Plan members are included beginning with the December 31, 2003 valuation.

**STATE DIVISION**  
**DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES**  
**DECEMBER 31, 2005**

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Actuarial Present Value	(1) Total Actuarial Present Value	Allocation by Entry Age	
		(2) Portion Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1)-(2)
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$10,853,957,027	\$ -	\$10,853,957,027
Allowances currently being paid from the Survivors Benefit Fund	456,252,375	-	456,252,375
Age and service allowances based on service rendered before and likely to be rendered after valuation date	13,660,296,756	2,787,736,274	10,872,560,482
Disability allowances likely to be paid present active members who become permanently disabled	1,780,766,105	753,198,769	1,027,567,336
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	370,674,420	141,081,378	229,593,042
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	2,266,755,770	1,386,462,463	880,293,307
Total	\$29,388,702,453	\$5,068,478,884	\$24,320,223,569
Actuarial Value of Assets			21,773,027,213
Unfunded Actuarial Accrued Liability			\$ 2,547,196,356

**STATE DIVISION**  
**DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES**  
**COMPARATIVE STATEMENT**  
**(\$ IN MILLIONS EXCEPT AVERAGES)**

Dec. 31	Defined Benefit Active Payroll		Active and Inactive Member Accrued Liabilities for Retirement Allowances				Unfunded /Payroll
			Computed Total	Valuation Assets	Unfunded	Amort. Years	
	Total	Average					
1991&	\$2,693	\$25,163	\$ 5,528	\$4,030	\$1,498	32	0.56
1992	2,767	25,224	5,934	4,552	1,382	25	0.50
1993	2,894	25,673	6,671	5,357	1,314	22	0.45
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	13,010	10,463	2,547	24	0.59

# After benefit changes.

@ Revised actuarial assumptions.

& Reflects inclusion of part-time seasonal, and temporary employees in compliance with OBRA 90 and revised actuarial assumptions.

## Combined Plan members are included beginning with the December 31, 2003 valuation.

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.

**STATE DIVISION**  
**MALE ACTIVE MEMBERS IN DEFINED BENEFIT VALUATION**  
**DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Ages	Years of Service To Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19	791							791
Tot. Pay	\$5,360,995							\$5,360,995
Avg. Pay	\$6,777							\$6,777
20-24	4,730	42						4,772
Tot. Pay	\$58,569,899	\$1,174,116						\$59,744,015
Avg. Pay	\$12,383	\$27,955						\$12,520
25-29	3,674	738	6					4,418
Tot. Pay	\$88,019,814	\$27,946,427	\$197,397					\$116,163,638
Avg. Pay	\$23,957	\$37,868	\$32,900					\$26,293
30-34	2,403	1,743	441	7				4,594
Tot. Pay	\$70,572,143	\$73,336,773	\$19,954,971	\$315,990				\$164,179,877
Avg. Pay	\$29,368	\$42,075	\$45,249	\$45,141				\$35,738
35-39	1,945	1,597	1,695	555	10			5,802
Tot. Pay	\$59,555,823	\$69,093,784	\$86,300,300	\$28,547,092	\$466,669			\$243,963,668
Avg. Pay	\$30,620	\$43,265	\$50,915	\$51,436	\$46,667			\$42,048
40-44	1,726	1,323	1,377	1,775	760	46		7,007
Tot. Pay	\$53,762,580	\$58,166,449	\$69,278,847	\$98,520,124	\$40,989,535	\$2,343,976		\$323,061,511
Avg. Pay	\$31,149	\$43,966	\$50,311	\$55,504	\$53,934	\$50,956		\$46,106
45-49	1,490	1,136	1,079	1,412	1,627	1,017	27	7,788
Tot. Pay	\$45,789,407	\$50,259,255	\$53,842,915	\$77,108,448	\$92,162,762	\$54,432,403	\$1,307,297	\$374,902,487
Avg. Pay	\$30,731	\$44,242	\$49,901	\$54,609	\$56,646	\$53,523	\$48,418	\$48,138
50-54	1,209	921	913	1,123	1,193	1,411	336	7,106
Tot. Pay	\$39,098,882	\$41,345,817	\$47,308,601	\$59,540,530	\$67,034,731	\$82,810,611	\$20,218,413	\$357,357,585
Avg. Pay	\$32,340	\$44,892	\$51,817	\$53,019	\$56,190	\$58,689	\$60,174	\$50,290
55-59	852	698	789	844	842	781	520	5,326
Tot. Pay	\$26,737,129	\$30,922,851	\$40,776,790	\$45,955,241	\$47,072,084	\$49,600,261	\$35,391,677	\$276,456,033
Avg. Pay	\$31,382	\$44,302	\$51,682	\$54,449	\$55,905	\$63,509	\$68,061	\$51,907
60-64	380	328	355	373	314	229	194	2,173
Tot. Pay	\$8,850,636	\$13,927,621	\$18,235,310	\$20,422,791	\$17,184,051	\$13,725,188	\$14,135,939	\$106,481,536
Avg. Pay	\$23,291	\$42,462	\$51,367	\$54,753	\$54,726	\$59,935	\$72,866	\$49,002
65-69	169	113	117	69	87	54	50	659
Tot. Pay	\$2,497,959	\$3,972,543	\$6,153,232	\$4,020,172	\$5,115,605	\$3,486,263	\$3,708,464	\$28,954,238
Avg. Pay	\$14,781	\$35,155	\$52,592	\$58,263	\$58,800	\$64,560	\$74,169	\$43,937
70 & Over	187	73	47	36	27	18	27	415
Tot. Pay	\$1,545,994	\$1,179,515	\$1,938,176	\$1,680,959	\$1,485,846	\$1,243,676	\$1,707,307	\$10,781,473
Avg. Pay	\$8,267	\$16,158	\$41,238	\$46,693	\$55,031	\$69,093	\$63,234	\$25,979
<b>Totals</b>	19,556	8,712	6,819	6,194	4,860	3,556	1,154	50,851
<b>Tot. Pay</b>	\$460,361,261	\$371,325,151	\$343,986,539	\$336,111,347	\$271,511,283	\$207,642,378	\$76,469,097	\$2,067,407,056
<b>Avg. Pay</b>	\$23,541	\$42,622	\$50,445	\$54,264	\$55,867	\$58,392	\$66,264	\$40,656

**STATE DIVISION**  
**FEMALE ACTIVE MEMBERS IN DEFINED BENEFIT VALUATION**  
**DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Ages	Years of Service To Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19	1,051							1,051
Tot. Pay	\$5,856,265							\$5,856,265
Avg. Pay	\$5,572							\$5,572
20-24	7,368	39						7,407
Tot. Pay	\$78,770,049	\$906,118						\$79,676,167
Avg. Pay	\$10,691	\$23,234						\$10,757
25-29	4,819	882	17					5,718
Tot. Pay	\$117,507,082	\$30,938,206	\$608,590					\$149,053,878
Avg. Pay	\$24,384	\$35,077	\$35,799					\$26,067
30-34	2,904	1,844	466	16				5,230
Tot. Pay	\$83,951,462	\$71,904,067	\$19,999,781	\$697,794				\$176,553,104
Avg. Pay	\$28,909	\$38,994	\$42,918	\$43,612				\$33,758
35-39	2,551	1,760	1,620	636	42			6,609
Tot. Pay	\$75,951,181	\$69,592,460	\$74,600,321	\$28,901,605	\$2,176,288			\$251,221,855
Avg. Pay	\$29,773	\$39,541	\$46,050	\$45,443	\$51,816			\$38,012
40-44	2,322	1,562	1,378	1,793	796	99		7,950
Tot. Pay	\$69,110,706	\$60,800,531	\$63,060,261	\$88,291,454	\$40,168,292	\$4,841,728		\$326,272,972
Avg. Pay	\$29,763	\$38,925	\$45,762	\$49,242	\$50,463	\$48,906		\$41,041
45-49	2,250	1,607	1,410	1,638	1,516	1,293	40	9,754
Tot. Pay	\$66,736,283	\$62,541,867	\$63,199,085	\$78,558,581	\$78,780,843	\$64,755,981	\$2,106,781	\$416,679,421
Avg. Pay	\$29,661	\$38,918	\$44,822	\$47,960	\$51,966	\$50,082	\$52,670	\$42,719
50-54	1,750	1,397	1,321	1,496	1,213	1,577	369	9,123
Tot. Pay	\$53,247,274	\$54,914,623	\$58,787,946	\$71,476,080	\$63,589,483	\$83,065,370	\$19,522,124	\$404,602,900
Avg. Pay	\$30,427	\$39,309	\$44,503	\$47,778	\$52,423	\$52,673	\$52,905	\$44,350
55-59	1,020	1,055	1,001	1,323	1,024	950	436	6,809
Tot. Pay	\$29,255,014	\$40,894,565	\$44,495,028	\$61,334,234	\$50,055,110	\$49,079,555	\$23,599,265	\$298,712,771
Avg. Pay	\$28,681	\$38,763	\$44,451	\$46,360	\$48,882	\$51,663	\$54,127	\$43,870
60-64	407	424	386	575	469	392	164	2,817
Tot. Pay	\$10,409,102	\$15,916,039	\$15,847,922	\$25,701,908	\$22,417,304	\$18,636,744	\$8,072,406	\$117,001,425
Avg. Pay	\$25,575	\$37,538	\$41,057	\$44,699	\$47,798	\$47,543	\$49,222	\$41,534
65-69	146	116	134	191	124	128	72	911
Tot. Pay	\$2,387,376	\$3,852,182	\$5,468,071	\$8,212,285	\$5,643,912	\$5,936,767	\$3,359,110	\$34,859,703
Avg. Pay	\$16,352	\$33,208	\$40,807	\$42,996	\$45,515	\$46,381	\$46,654	\$38,265
70 & Over	121	43	36	42	51	43	54	390
Tot. Pay	\$1,147,504	\$995,092	\$1,120,458	\$1,611,256	\$1,995,464	\$2,022,037	\$2,490,381	\$11,382,192
Avg. Pay	\$9,484	\$23,142	\$31,124	\$38,363	\$39,127	\$47,024	\$46,118	\$29,185
<b>Totals</b>	26,709	10,729	7,769	7,710	5,235	4,482	1,135	63,769
<b>Tot. Pay</b>	\$594,329,298	\$413,255,750	\$347,187,463	\$364,785,197	\$264,826,696	\$228,338,182	\$59,150,067	\$2,271,872,653
<b>Avg. Pay</b>	\$22,252	\$38,518	\$44,689	\$47,313	\$50,588	\$50,946	\$52,115	\$35,627

**STATE DIVISION**  
**INACTIVE MEMBERS IN DEFINED BENEFIT VALUATION**  
**DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

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<b>Attained Ages</b>	<b>Years of Service to Valuation Date</b>							<b>Total Number</b>
	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30+</b>	
15-19	709							709
20-24	11,377	4						11,381
25-29	21,206	56						21,262
30-34	17,634	241	12					17,887
35-39	10,480	613	171	11				11,275
40-44	6,617	731	465	103	4			7,920
45-49	6,263	758	602	231	44	1		7,899
50-54	5,467	738	614	339	112	9		7,279
55-59	4,281	683	634	320	115	13		6,046
60-64	1,831	298	167	74	16	4		2,390
65-69	839	67	37	8	1	1	1	954
70 & Over	650	22	9	5	3	2		691
<b>Totals</b>	<b>87,354</b>	<b>4,211</b>	<b>2,711</b>	<b>1,091</b>	<b>295</b>	<b>30</b>	<b>1</b>	<b>95,693</b>

# **SECTION VI**

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## **Local Government Division**

## LOCAL GOVERNMENT DIVISION

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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, 2005*

Groups	Number	Annual Payroll	Average		
			Pay	Age	Service
Men	107,942	\$3,468,159,642	\$32,130	43.9 yrs.	9.4 yrs.
Women	128,131	3,598,105,674	28,081	42.9	8.9
<b>Totals</b>	<b>236,073</b>	<b>\$7,066,265,316</b>	<b>\$29,933</b>	<b>43.3 yrs.</b>	<b>9.2 yrs.</b>

Also included in the valuation were 198,308 inactive members eligible for deferred retirement allowances or contribution refunds and 11,531 members active in the money purchase plan.

### *Retired Members in Valuation December 31, 2005*

Fund / Type of Allowance	Number	Current Monthly Benefits	Actuarial Liabilities
A & PR Fund			
Superannuation Retirement	75,089	\$ 97,729,495	\$12,221,856,944
Disability Retirement	11,122	18,543,008	2,454,195,070
Money Purchase	823	256,959	24,950,255
Total A & PR Fund	87,034	116,529,462	14,701,002,269
Total SBF	9,802	7,048,567	783,389,088
Grand Total	96,836	\$123,578,029	\$15,484,391,357

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

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<b>Valuation Date December 31</b>	<b>2005</b>	<b>2004</b>
<b>Contributions for</b>	<b>2007</b>	<b>2006</b>
<b>Normal Cost</b>		
Age and Service Allowances	8.35 %	8.31 %
Disability Allowances	2.06 %	2.06 %
Survivor's Benefits	0.47 %	0.47 %
Separation Benefits	3.72 %	3.73 %
Total Normal Cost	14.60 %	14.57 %
(Member Contributions)	9.50 %	9.00 %
Employer Normal Cost	5.10 %	5.57 %
<b>Unfunded Actuarial Accrued Liabilities</b>		
Total Available Contribution	3.75 %	3.63 %
Amortization Years	18	21
<b>Total Pension Employer Contribution Rate</b>	<b>8.85 %</b>	<b>9.20 %</b>

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.

**LOCAL GOVERNMENT DIVISION  
COMPARATIVE STATEMENT**

Valuation Date December 31	Contribution Rate Effective January 1	Defined Benefit Active Members in Valuation				Computed Employer Contributions as % of Payroll				
		No.	Annual Payroll			Normal Cost	Unfunded Accrued Liability	Pension Total	Retiree Health	Grand Total
			Total	Average	Increase					
			(\$Millions)							
1991&	1993	211,835	\$3,789	\$17,884	(8.3)%	5.95 %	2.49 %	8.44 %	5.11 %	13.55 %
1992	1994	218,295	3,953	18,109	1.3 %	5.80 %	2.64 %	8.44 %	5.11 %	13.55 %
1993	1995	220,410	4,159	18,869	4.2 %	5.85 %	2.59 %	8.44 %	5.11 %	13.55 %
1994	1996	221,987	4,366	19,666	4.2 %	6.16 %	2.28 %	8.44 %	5.11 %	13.55 %
1995	1997	223,431	4,555	20,384	3.7 %	6.17 %	2.27 %	8.44 %	5.11 %	13.55 %
1996@	1998	229,954	4,792	20,839	2.2 %	6.16 %	2.28 %	8.44 %	5.11 %	13.55 %
1997	1999	231,668	4,976	21,481	3.1 %	6.15 %	3.20 %	9.35 %	4.20 %	13.55 %
1998	2000	234,601	5,240	22,334	4.0 %	6.17 %	3.18 %	9.35 %	4.20 %	13.55 %
1999#	2001	240,005	5,586	23,276	4.2 %	7.68 %	1.57 %	9.25 %	4.30 %	13.55 %
2000	2002	245,831	5,999	24,401	4.8 %	7.68 %	1.57 %	9.25 %	4.30 %	13.55 %
2001@	2003	243,202	6,451	26,526	8.7 %	6.14 %	2.41 %	8.55 %	5.00 %	13.55 %
2002	2004	247,377	6,721	27,171	2.4 %	5.92 %	3.63 %	9.55 %	4.00 %	13.55 %
2003##	2005	237,082	6,702	28,269	4.0 %	5.66 %	3.89 %	9.55 %	4.00 %	13.55 %
2004	2006	236,907	6,896	29,110	3.0 %	5.57 %	3.63 %	9.20 %	4.50 %	13.70 %
2005	2007	236,073	7,066	29,933	2.8 %	5.10 %	3.75 %	8.85 %	5.00 %	13.85 %

# After benefit changes.

@ Revised actuarial assumptions.

& Reflects inclusion of part-time, seasonal and temporary employees in compliance with OBRA 90 and revised actuarial assumptions.

## Combined Plan members are included beginning with the December 31, 2003 valuation.

**LOCAL GOVERNMENT DIVISION**  
**DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES**  
**DECEMBER 31, 2005**

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Actuarial Present Value	(1) Total Actuarial Present Value	Allocation by Entry Age	
		(2) Portion Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1)-(2)
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$14,701,002,269	\$ -	\$14,701,002,269
Allowances currently being paid from the Survivors Benefit Fund	783,389,088	-	783,389,088
Age and service allowances based on service rendered before and likely to be rendered after valuation date	20,707,843,527	4,854,343,686	15,853,499,841
Disability allowances likely to be paid present active members who become permanently disabled	2,625,770,565	1,239,307,587	1,386,462,978
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	692,646,101	273,576,356	419,069,745
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	3,621,561,742	2,304,124,621	1,317,437,121
Total	\$43,132,213,292	\$8,671,352,250	\$34,460,861,042
Actuarial Value of Assets			30,673,505,081
Unfunded Actuarial Accrued Liability			\$ 3,787,355,961

**LOCAL GOVERNMENT DIVISION**  
**DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES**  
**COMPARATIVE STATEMENT**  
**(\$ IN MILLIONS EXCEPT AVERAGES)**

Dec. 31	Defined Benefit Active Payroll		Active and Inactive Member Accrued Liabilities for Retirement Allowances				Unfunded /Payroll
			Computed Total	Valuation Assets	Unfunded	Amort. Years	
	Total	Average					
1991&	\$ 3,789	\$17,884	\$ 7,479	\$ 5,181	\$2,298	36	0.61
1992	3,953	18,109	8,147	6,046	2,101	27	0.53
1993	4,159	18,869	9,291	7,147	2,144	26	0.52
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	18,977	15,190	3,787	19	0.54

# After benefit changes.

@ Revised actuarial assumptions.

& Reflects inclusion of part-time, seasonal, and temporary employees in compliance with OBRA 90 and revised actuarial assumptions.

## Combined Plan members are included beginning with the December 31, 2003 valuation..

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 vice-versa.

**LOCAL GOVERNMENT DIVISION  
MALE ACTIVE MEMBERS IN DEFINED BENEFIT VALUATION  
DECEMBER 31, 2005  
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Ages	Years of Service To Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19	5,064							5,064
Tot. Pay	\$32,531,576							\$32,531,576
Avg. Pay	\$6,424							\$6,424
20-24	7,617	208						7,825
Tot. Pay	\$96,742,821	\$4,387,156						\$101,129,977
Avg. Pay	\$12,701	\$21,092						\$12,924
25-29	5,414	1,634	59					7,107
Tot. Pay	\$120,611,526	\$55,310,460	\$2,304,101					\$178,226,087
Avg. Pay	\$22,278	\$33,850	\$39,053					\$25,078
30-34	4,407	3,009	959	23				8,398
Tot. Pay	\$109,854,976	\$115,483,594	\$39,857,371	\$846,544				\$266,042,485
Avg. Pay	\$24,927	\$38,379	\$41,561	\$36,806				\$31,679
35-39	4,091	3,151	2,347	961	23			10,573
Tot. Pay	\$102,103,350	\$126,505,820	\$104,708,183	\$44,122,671	\$1,158,938			\$378,598,962
Avg. Pay	\$24,958	\$40,148	\$44,614	\$45,913	\$50,389			\$35,808
40-44	3,883	2,980	2,436	2,489	1,077	98		12,963
Tot. Pay	\$91,399,318	\$114,768,741	\$106,432,036	\$120,164,338	\$52,125,384	\$4,870,116		\$489,759,933
Avg. Pay	\$23,538	\$38,513	\$43,691	\$48,278	\$48,399	\$49,695		\$37,781
45-49	3,855	3,021	2,477	2,600	2,225	1,600	75	15,853
Tot. Pay	\$88,313,208	\$113,096,492	\$102,313,423	\$123,744,456	\$114,182,722	\$83,120,837	\$3,930,216	\$628,701,354
Avg. Pay	\$22,909	\$37,437	\$41,305	\$47,594	\$51,318	\$51,951	\$52,403	\$39,658
50-54	3,404	2,495	2,227	2,235	1,861	2,246	836	15,304
Tot. Pay	\$73,052,067	\$84,433,096	\$86,522,795	\$104,408,873	\$95,368,479	\$125,207,284	\$47,680,182	\$616,672,776
Avg. Pay	\$21,461	\$33,841	\$38,852	\$46,715	\$51,246	\$55,747	\$57,034	\$40,295
55-59	3,032	1,985	1,818	1,721	1,412	1,307	947	12,222
Tot. Pay	\$61,019,771	\$65,709,021	\$67,622,992	\$77,987,251	\$69,593,376	\$72,708,897	\$57,171,056	\$471,812,364
Avg. Pay	\$20,125	\$33,103	\$37,196	\$45,315	\$49,287	\$55,630	\$60,371	\$38,604
60-64	1,909	1,116	911	773	663	462	364	6,198
Tot. Pay	\$28,323,645	\$30,884,647	\$31,013,861	\$32,851,222	\$29,954,893	\$22,343,354	\$21,778,973	\$197,150,595
Avg. Pay	\$14,837	\$27,674	\$34,044	\$42,498	\$45,181	\$48,362	\$59,832	\$31,809
65-69	1,420	628	404	271	213	152	125	3,213
Tot. Pay	\$13,254,593	\$11,545,892	\$11,130,379	\$10,334,952	\$7,677,591	\$6,744,986	\$6,586,534	\$67,274,927
Avg. Pay	\$9,334	\$18,385	\$27,550	\$38,136	\$36,045	\$44,375	\$52,692	\$20,938
70 & Over	1,421	824	474	191	123	87	102	3,222
Tot. Pay	\$9,849,212	\$7,983,572	\$7,381,799	\$4,626,469	\$3,122,613	\$3,169,618	\$4,125,323	\$40,258,606
Avg. Pay	\$6,931	\$9,689	\$15,573	\$24,222	\$25,387	\$36,432	\$40,444	\$12,495
<b>Totals</b>	45,517	21,051	14,112	11,264	7,597	5,952	2,449	107,942
<b>Tot. Pay</b>	\$827,056,063	\$730,108,491	\$559,286,940	\$519,086,776	\$373,183,996	\$318,165,092	\$141,272,284	\$3,468,159,642
<b>Avg. Pay</b>	\$18,170	\$34,683	\$39,632	\$46,084	\$49,123	\$53,455	\$57,686	\$32,130

**LOCAL GOVERNMENT DIVISION**  
**FEMALE ACTIVE MEMBERS IN DEFINED BENEFIT VALUATION**  
**DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Ages	Years of Service To Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19	5,952							5,952
Tot. Pay	\$33,973,701							\$33,973,701
Avg. Pay	\$5,708							\$5,708
20-24	8,244	254						8,498
Tot. Pay	\$100,375,435	\$4,422,674						\$104,798,109
Avg. Pay	\$12,176	\$17,412						\$12,332
25-29	7,518	2,123	84					9,725
Tot. Pay	\$169,880,382	\$63,188,794	\$2,368,417					\$235,437,593
Avg. Pay	\$22,596	\$29,764	\$28,195					\$24,210
30-34	5,551	4,310	1,187	62				11,110
Tot. Pay	\$131,303,036	\$147,472,965	\$40,869,446	\$2,035,730				\$321,681,177
Avg. Pay	\$23,654	\$34,216	\$34,431	\$32,834				\$28,954
35-39	5,446	4,144	2,774	1,225	61			13,650
Tot. Pay	\$121,123,849	\$139,400,988	\$106,973,803	\$46,559,202	\$2,458,401			\$416,516,243
Avg. Pay	\$22,241	\$33,639	\$38,563	\$38,008	\$40,302			\$30,514
40-44	5,519	4,092	2,605	2,584	1,148	131		16,079
Tot. Pay	\$116,380,958	\$130,797,963	\$97,157,635	\$106,415,583	\$46,381,975	\$5,067,059		\$502,201,173
Avg. Pay	\$21,087	\$31,964	\$37,297	\$41,183	\$40,402	\$38,680		\$31,233
45-49	5,537	4,424	3,107	2,623	1,981	1,628	77	19,377
Tot. Pay	\$114,635,801	\$134,794,270	\$108,301,582	\$108,476,819	\$87,656,067	\$69,772,261	\$3,389,701	\$627,026,501
Avg. Pay	\$20,704	\$30,469	\$34,857	\$41,356	\$44,248	\$42,858	\$44,022	\$32,359
50-54	4,436	3,693	3,147	2,700	1,748	1,869	570	18,163
Tot. Pay	\$90,925,252	\$108,425,022	\$106,997,595	\$105,165,793	\$74,707,638	\$87,046,847	\$27,313,648	\$600,581,795
Avg. Pay	\$20,497	\$29,360	\$34,000	\$38,950	\$42,739	\$46,574	\$47,919	\$33,066
55-59	3,065	2,797	2,538	2,598	1,685	1,273	577	14,533
Tot. Pay	\$58,296,457	\$79,520,011	\$80,321,740	\$96,206,424	\$68,447,329	\$56,207,273	\$28,726,868	\$467,726,102
Avg. Pay	\$19,020	\$28,430	\$31,648	\$37,031	\$40,622	\$44,153	\$49,787	\$32,184
60-64	1,336	1,264	1,180	1,164	875	619	250	6,688
Tot. Pay	\$20,116,489	\$32,081,996	\$34,903,440	\$40,340,959	\$33,924,689	\$25,155,775	\$11,902,448	\$198,425,796
Avg. Pay	\$15,057	\$25,381	\$29,579	\$34,657	\$38,771	\$40,639	\$47,610	\$29,669
65-69	704	516	435	361	293	211	139	2,659
Tot. Pay	\$6,166,778	\$9,585,985	\$10,568,359	\$11,564,086	\$10,573,900	\$7,888,888	\$5,995,681	\$62,343,677
Avg. Pay	\$8,760	\$18,577	\$24,295	\$32,033	\$36,088	\$37,388	\$43,134	\$23,446
70 & Over	525	354	275	182	142	112	107	1,697
Tot. Pay	\$3,239,916	\$3,817,191	\$3,705,177	\$4,636,336	\$4,209,233	\$3,767,169	\$4,018,785	\$27,393,807
Avg. Pay	\$6,171	\$10,783	\$13,473	\$25,474	\$29,642	\$33,635	\$37,559	\$16,142
<b>Totals</b>	53,833	27,971	17,332	13,499	7,933	5,843	1,720	128,131
<b>Tot. Pay</b>	\$966,418,054	\$853,507,859	\$592,167,194	\$521,400,932	\$328,359,232	\$254,905,272	\$81,347,131	\$3,598,105,674
<b>Avg. Pay</b>	\$17,952	\$30,514	\$34,166	\$38,625	\$41,392	\$43,626	\$47,295	\$28,081

**LOCAL GOVERNMENT DIVISION  
INACTIVE MEMBERS IN DEFINED BENEFIT VALUATION  
DECEMBER 31, 2005  
BY ATTAINED AGE AND YEARS OF SERVICE**

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<b>Attained Ages</b>	<b>Years of Service to Valuation Date</b>							<b>Total Number</b>
	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30+</b>	
15-19	4,443							4,443
20-24	26,830	14						26,844
25-29	32,677	206	1					32,884
30-34	26,403	681	42					27,126
35-39	19,318	1,242	334	30				20,924
40-44	15,679	1,269	760	167	15			17,890
45-49	17,151	1,494	992	362	86	8		20,093
50-54	15,727	1,685	1,132	453	189	47	1	19,234
55-59	11,862	1,499	1,168	497	203	28	2	15,259
60-64	5,968	645	354	151	45	6		7,169
65-69	3,187	217	63	18	5	5	1	3,496
70 & Over	2,791	115	26	9	3	2		2,946
<b>Totals</b>	<b>182,036</b>	<b>9,067</b>	<b>4,872</b>	<b>1,687</b>	<b>546</b>	<b>96</b>	<b>4</b>	<b>198,308</b>

# **SECTION VII**

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## **Public Safety Division**

## PUBLIC SAFETY DIVISION

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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, 2005*

Groups	Number	Annual Payroll	Average		
			Pay	Age	Service
Men	115	\$5,304,296	\$46,124	40.7 yrs.	11.0 yrs.
Women	20	773,763	38,688	37.0	7.5
<b>Totals</b>	<b>135</b>	<b>\$6,078,059</b>	<b>\$45,023</b>	<b>40.2 yrs.</b>	<b>10.5 yrs.</b>

Also included in the valuation were 13 inactive members eligible for deferred retirement allowances or contribution refunds and 1 members active in the money purchase plan.

### *Retired Members in Valuation December 31, 2005*

Fund / Type of Allowance	Number	Current Monthly Benefits	Actuarial Liabilities
A & PR Fund			
Superannuation Retirement	16	\$20,663	\$3,444,854
Disability Retirement	18	41,771	6,646,687
Money Purchase	0	0	0
Total A & PR Fund	34	62,434	10,091,541
Total SBF	68	70,338	10,638,504
Grand Total	102	\$132,772	\$20,730,045

**PUBLIC SAFETY DIVISION  
EMPLOYER CONTRIBUTIONS TO SUPPORT  
RETIREMENT ALLOWANCES  
EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL**

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<b>Valuation Date December 31</b>	<b>2005</b>	<b>2004</b>
<b>Contributions for</b>	<b>2007</b>	<b>2006</b>
<b>Normal Cost</b>		
Age and Service Allowances	10.16 %	10.44 %
Disability Allowances	5.07 %	4.94 %
Survivor's Benefits	0.65 %	0.61 %
Separation Benefits	2.03 %	2.05 %
Total Normal Cost	17.91 %	18.04 %
(Member Contributions)	9.75 %	9.00 %
Employer Normal Cost	8.16 %	9.04 %
<b>Unfunded Actuarial Accrued Liabilities</b>		
Total Available Contribution	4.01 %	3.39 %
Amortization Years	N/A	N/A
<b>Total Pension Employer Contribution Rate</b>	<b>12.17 %</b>	<b>12.43 %</b>

*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.

**PUBLIC SAFETY DIVISION  
COMPARATIVE STATEMENT \***

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Valuation Date December 31	Contribution Rate Effective January 1	Active Members in Valuation				Computed Employer Contributions as % of Payroll				
		No.	Annual Payroll			Normal Cost	Unfunded Accrued Liability	Pension Total	Retiree Health	Grand Total
			Total	Average	Increase					
2005	2007	135	(\$Thousands) \$6,078	\$45,023	N/A	8.16 %	4.01 %	12.17 %	5.00 %	17.17 %

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

**PUBLIC SAFETY DIVISION**  
**DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES**  
**DECEMBER 31, 2005**

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Actuarial Present Value	(1) Total Actuarial Present Value	Allocation by Entry Age	
		(2) Portion Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1)-(2)
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$10,091,541	\$ -	\$10,091,541
Allowances currently being paid from the Survivors Benefit Fund	10,638,504	-	10,638,504
Age and service allowances based on service rendered before and likely to be rendered after valuation date	17,889,114	6,687,522	11,201,592
Disability allowances likely to be paid present active members who become permanently disabled	5,756,503	3,191,060	2,565,443
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	824,496	392,655	431,841
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	1,694,578	1,328,807	365,771
Total	\$46,894,736	\$11,600,044	\$35,294,692
Actuarial Value of Assets			(23,035,864)
Unfunded Actuarial Accrued Liability			\$58,330,556

**PUBLIC SAFETY DIVISION**  
**DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES**  
**COMPARATIVE STATEMENT \***  
**(\$ IN MILLIONS EXCEPT AVERAGES)**

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Dec. 31	Active Payroll		Active and Inactive Member Accrued Liabilities for Retirement Allowances				Unfunded /Payroll
			Computed Total	Valuation Assets	Unfunded	Amort. Years	
	Total	Average					
2005	\$6	\$45,023	\$ 15	\$ (43)	\$ 58	N/A	9.67

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

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

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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 vice-versa.

**PUBLIC SAFETY DIVISION**  
**MALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Ages	Years of Service To Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19								
Tot. Pay								
Avg. Pay								
20-24	1							1
Tot. Pay	\$43,365							\$43,365
Avg. Pay	\$43,365							\$43,365
25-29	14	6						20
Tot. Pay	\$594,038	\$270,257						\$864,295
Avg. Pay	\$42,431	\$45,043						\$43,215
30-34	7	11						18
Tot. Pay	\$278,903	\$441,599						\$720,502
Avg. Pay	\$39,843	\$40,145						\$40,028
35-39	2	9	5	2	1			19
Tot. Pay	\$80,681	\$411,804	\$238,127	\$94,101	\$70,483			\$895,196
Avg. Pay	\$40,341	\$45,756	\$47,625	\$47,051	\$70,483			\$47,116
40-44	4	3	2	5	1			15
Tot. Pay	\$135,008	\$120,787	\$132,287	\$227,791	\$59,555			\$675,428
Avg. Pay	\$33,752	\$40,262	\$66,144	\$45,558	\$59,555			\$45,029
45-49	2	2	2	6	3	2		17
Tot. Pay	\$94,492	\$64,382	\$124,513	\$294,050	\$145,948	\$116,073		\$839,458
Avg. Pay	\$47,246	\$32,191	\$62,257	\$49,008	\$48,649	\$58,037		\$49,380
50-54		1	3	2	2	2		10
Tot. Pay		\$34,861	\$157,376	\$88,329	\$97,707	\$131,717		\$509,990
Avg. Pay		\$34,861	\$52,459	\$44,165	\$48,854	\$65,859		\$50,999
55-59	2	1		4	1	1		9
Tot. Pay	\$113,727	\$28,932		\$150,926	\$57,461	\$63,338		\$414,384
Avg. Pay	\$56,864	\$28,932		\$37,732	\$57,461	\$63,338		\$46,043
60-64			1	1		1	1	4
Tot. Pay			\$33,695	\$44,538		\$46,888	\$144,818	\$269,939
Avg. Pay			\$33,695	\$44,538		\$46,888	\$144,818	\$67,485
65-69				2				2
Tot. Pay				\$71,739				\$71,739
Avg. Pay				\$35,870				\$35,870
70 & Over								
Tot. Pay								
Avg. Pay								
<b>Totals</b>	32	33	13	22	8	6	1	115
<b>Tot. Pay</b>	\$1,340,214	\$1,372,622	\$685,998	\$971,474	\$431,154	\$358,016	\$144,818	\$5,304,296
<b>Avg. Pay</b>	\$41,882	\$41,595	\$52,769	\$44,158	\$53,894	\$59,669	\$144,818	\$46,124

**PUBLIC SAFETY DIVISION**  
**FEMALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Ages	Years of Service To Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19								
Tot. Pay								
Avg. Pay								
20-24	1							1
Tot. Pay	\$40,979							\$40,979
Avg. Pay	\$40,979							\$40,979
25-29	4	1						5
Tot. Pay	\$131,146	\$44,354						\$175,500
Avg. Pay	\$32,787	\$44,354						\$35,100
30-34		2						2
Tot. Pay		\$77,563						\$77,563
Avg. Pay		\$38,782						\$38,782
35-39	3	1	1					5
Tot. Pay	\$113,577	\$42,998	\$39,031					\$195,606
Avg. Pay	\$37,859	\$42,998	\$39,031					\$39,121
40-44	1		2					3
Tot. Pay	\$46,443		\$86,331					\$132,774
Avg. Pay	\$46,443		\$43,166					\$44,258
45-49				1				1
Tot. Pay				\$38,327				\$38,327
Avg. Pay				\$38,327				\$38,327
50-54		1			1			2
Tot. Pay		\$39,313			\$38,070			\$77,383
Avg. Pay		\$39,313			\$38,070			\$38,692
55-59					1			1
Tot. Pay					\$35,631			\$35,631
Avg. Pay					\$35,631			\$35,631
60-64								
Tot. Pay								
Avg. Pay								
65-69								
Tot. Pay								
Avg. Pay								
70 & Over								
Tot. Pay								
Avg. Pay								
<b>Totals</b>	9	5	3	1	2			20
<b>Tot. Pay</b>	\$332,145	\$204,228	\$125,362	\$38,327	\$73,701	\$	-	\$773,763
<b>Avg. Pay</b>	\$36,905	\$40,846	\$41,787	\$38,327	\$36,851			\$38,688

**PUBLIC SAFETY DIVISION**  
**INACTIVE MEMBERS IN VALUATION DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

---

Attained Ages	Years of Service to Valuation Date							Total Number
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19								
20-24								
25-29	3							3
30-34	3	2						5
35-39	2	1						3
40-44	1							1
45-49								
50-54								
55-59	1							1
60-64								
65-69								
70 & Over								
<b>Totals</b>	<b>10</b>	<b>3</b>						<b>13</b>

# SECTION VIII



## Law Enforcement Division

## LAW ENFORCEMENT DIVISION

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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, 2005*

Groups	Number	Annual Payroll	Average		
			Pay	Age	Service
Men	7,016	\$350,967,811	\$50,024	40.0 yrs.	12.8 yrs.
Women	960	44,221,059	46,064	39.6	11.5
<b>Totals</b>	<b>7,976</b>	<b>\$395,188,870</b>	<b>\$49,547</b>	<b>39.9 yrs.</b>	<b>12.6 yrs.</b>

Also included in the valuation were 685 inactive members eligible for deferred retirement allowances or contribution refunds and 20 members active in the money purchase plan.

### *Retired Members in Valuation December 31, 2005*

Fund / Type of Allowance	Number	Current Monthly Benefits	Actuarial Liabilities
A & PR Fund			
Superannuation Retirement	1,678	\$4,200,147	\$629,211,457
Disability Retirement	1,241	3,071,938	451,826,425
Money Purchase	0	0	0
Total A & PR Fund	2,919	7,272,085	1,081,037,882
Total SBF	265	223,614	28,847,388
Grand Total	3,184	\$7,495,699	\$1,109,885,270

**LAW ENFORCEMENT DIVISION  
EMPLOYER CONTRIBUTIONS TO SUPPORT  
RETIREMENT ALLOWANCES  
EXPRESSED AS PERCENTS OF ACTIVE MEMBER PAYROLL**

---

<b>Valuation Date December 31</b>	<b>2005</b>	<b>2004</b>
<b>Contributions for</b>	<b>2007</b>	<b>2006</b>
<b>Normal Cost</b>		
Age and Service Allowances	11.38 %	11.39 %
Disability Allowances	4.68 %	4.68 %
Survivor's Benefits	0.53 %	0.53 %
Separation Benefits	2.13 %	2.13 %
Total Normal Cost	18.72 %	18.73 %
(Member Contributions)	10.10 %	10.10 %
Employer Normal Cost	8.62 %	8.63 %
<b>Unfunded Actuarial Accrued Liabilities</b>		
Total Available Contribution	3.55 %	3.80 %
Amortization Years	29	30
<b>Total Pension Employer Contribution Rate</b>	<b>12.17 %</b>	<b>12.43 %</b>

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.

**LAW ENFORCEMENT DIVISION  
COMPARATIVE STATEMENT \***

Valuation Date December 31	Contribution Rate Effective January 1	Active Members in Valuation				Computed Employer Contributions as % of Payroll				
		No.	Annual Payroll			Normal Cost	Unfunded Accrued Liability	Pension Total	Retiree Health	Grand Total
			Total	Average	Increase					
			(\$Thousands)							
1991	1993	6,088	\$169,008	\$27,761	3.1 %	9.32 %	1.49 %	10.81 %	5.89 %	16.70 %
1992	1994	5,852	169,337	28,937	4.2 %	9.65 %	1.16 %	10.81 %	5.89 %	16.70 %
1993	1995	6,032	182,576	30,268	4.6 %	9.53 %	1.28 %	10.81 %	5.89 %	16.70 %
1994	1996	6,252	196,467	31,425	3.8 %	9.71 %	1.10 %	10.81 %	5.89 %	16.70 %
1995	1997	6,605	214,273	32,441	3.2 %	9.69 %	1.12 %	10.81 %	5.89 %	16.70 %
1996@	1998	6,742	229,138	33,987	4.8 %	10.50 %	0.74 %	11.24 %	5.46 %	16.70 %
1997	1999	7,256	258,897	35,680	5.0 %	10.49 %	2.01 %	12.50 %	4.20 %	16.70 %
1998	2000	7,507	277,239	36,931	3.5 %	10.48 %	2.02 %	12.50 %	4.20 %	16.70 %
1999#	2001	7,766	299,040	38,506	4.3 %	11.54 %	0.86 %	12.40 %	4.30 %	16.70 %
2000	2002	8,045	324,918	40,387	4.9 %	11.59 %	0.81 %	12.40 %	4.30 %	16.70 %
2001@	2003	7,892	335,432	42,503	5.2 %	8.88 %	2.82 %	11.70 %	5.00 %	16.70 %
2002	2004	8,030	356,694	44,420	4.5 %	8.77 %	3.93 %	12.70 %	4.00 %	16.70 %
2003	2005	8,253	384,388	46,576	4.9 %	8.65 %	4.05 %	12.70 %	4.00 %	16.70 %
2004	2006	8,173	392,672	48,045	3.2 %	8.63 %	3.80 %	12.43 %	4.50 %	16.93 %
2005	2007	7,976	395,189	49,547	N/A	8.62 %	3.55 %	12.17 %	5.00 %	17.17 %

# After benefit changes.

@ Revised actuarial assumptions.

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

**LAW ENFORCEMENT DIVISION**  
**DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES**  
**DECEMBER 31, 2005**

---

<b>Actuarial Present Value</b>	<b>(1) Total Actuarial Present Value</b>	<b>Allocation by Entry Age</b>	
		<b>(2) Portion Covered By Future Normal Cost Contributions</b>	<b>(3) Actuarial Accrued Liabilities (1)-(2)</b>
Allowances currently being paid from the Annuity & Pension Reserve Fund	\$ 1,081,037,882	\$ -	\$ 1,081,037,882
Allowances currently being paid from the Survivors Benefit Fund	28,847,386	-	28,847,386
Age and service allowances based on service rendered before and likely to be rendered after valuation date	1,402,473,283	439,300,749	963,172,534
Disability allowances likely to be paid present active members who become permanently disabled	378,494,813	178,408,682	200,086,131
Survivor benefits likely to be paid to spouses and children of present active members who die before retiring	46,473,449	19,876,961	26,596,488
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	112,288,192	82,373,745	29,914,447
<b>Total</b>	<b>\$3,049,615,005</b>	<b>\$719,960,137</b>	<b>\$2,329,654,868</b>
Actuarial Value of Assets			2,049,881,201
Unfunded Actuarial Accrued Liability			<b>\$ 279,773,667</b>

**LAW ENFORCEMENT DIVISION**  
**DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES**  
**COMPARATIVE STATEMENT \***  
**(\$ IN MILLIONS EXCEPT AVERAGES)**

Dec. 31	Active Payroll		Active and Inactive Member Accrued Liabilities for Retirement Allowances				Unfunded /Payroll
			Computed Total	Valuation Assets	Unfunded	Amort. Years	
	Total	Average					
1991	\$169	\$27,761	\$ 438	\$ 399	\$ 39	19	0.23
1992	169	28,937	467	452	15	8	0.09
1993	183	30,268	533	512	21	10	0.11
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	1,220	940	280	34	0.71

# After benefit changes.

@ Revised actuarial assumptions.

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

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 vice-versa.

**LAW ENFORCEMENT DIVISION**  
**MALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Ages	Years of Service To Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19								
Tot. Pay								
Avg. Pay								
20-24	106	3						109
Tot. Pay	\$3,292,743	\$103,978						\$3,396,721
Avg. Pay	\$31,064	\$34,659						\$31,163
25-29	436	330	7					773
Tot. Pay	\$16,681,124	\$15,086,961	\$351,814					\$32,119,899
Avg. Pay	\$38,259	\$45,718	\$50,259					\$41,552
30-34	296	754	298	6				1,354
Tot. Pay	\$12,114,176	\$36,660,153	\$15,288,776	\$300,161				\$64,363,266
Avg. Pay	\$40,926	\$48,621	\$51,305	\$50,027				\$47,536
35-39	165	429	695	231	2			1,522
Tot. Pay	\$6,447,679	\$20,492,413	\$36,528,886	\$12,662,516	\$164,305			\$76,295,799
Avg. Pay	\$39,077	\$47,768	\$52,560	\$54,816	\$82,153			\$50,129
40-44	74	164	273	415	182	4		1,112
Tot. Pay	\$3,056,780	\$7,801,936	\$13,912,258	\$22,535,284	\$10,456,080	\$232,895		\$57,995,233
Avg. Pay	\$41,308	\$47,573	\$50,961	\$54,302	\$57,451	\$58,224		\$52,154
45-49	39	65	141	211	307	179	3	945
Tot. Pay	\$1,486,253	\$3,156,992	\$6,913,523	\$11,371,362	\$18,005,606	\$10,821,202	\$157,170	\$51,912,108
Avg. Pay	\$38,109	\$48,569	\$49,032	\$53,893	\$58,650	\$60,454	\$52,390	\$54,933
50-54	17	49	68	109	193	193	51	680
Tot. Pay	\$623,071	\$2,137,420	\$3,359,799	\$5,500,468	\$10,712,487	\$11,889,923	\$3,222,743	\$37,445,911
Avg. Pay	\$36,651	\$43,621	\$49,409	\$50,463	\$55,505	\$61,606	\$63,191	\$55,068
55-59	15	21	53	56	77	71	61	354
Tot. Pay	\$503,622	\$787,172	\$2,365,198	\$2,953,397	\$4,002,841	\$4,193,059	\$4,065,842	\$18,871,131
Avg. Pay	\$33,575	\$37,484	\$44,626	\$52,739	\$51,985	\$59,057	\$66,653	\$53,308
60-64	5	12	19	25	28	20	17	126
Tot. Pay	\$214,066	\$645,778	\$812,549	\$1,281,810	\$1,584,813	\$1,212,556	\$853,656	\$6,605,228
Avg. Pay	\$42,813	\$53,815	\$42,766	\$51,272	\$56,600	\$60,628	\$50,215	\$52,422
65-69	4	2	5	4	6	9	5	35
Tot. Pay	\$51,825	\$84,619	\$293,996	\$147,016	\$287,306	\$504,419	\$299,898	\$1,669,079
Avg. Pay	\$12,956	\$42,310	\$58,799	\$36,754	\$47,884	\$56,047	\$59,980	\$47,688
70 & Over	1		1		1		3	6
Tot. Pay	\$8,956		\$43,451		\$48,596		\$192,433	\$293,436
Avg. Pay	\$8,956		\$43,451		\$48,596		\$64,144	\$48,906
<b>Totals</b>	1,158	1,829	1,560	1,057	796	476	140	7,016
<b>Tot. Pay</b>	\$44,480,295	\$86,957,422	\$79,870,250	\$56,752,014	\$45,262,034	\$28,854,054	\$8,791,742	\$350,967,811
<b>Avg. Pay</b>	\$38,411	\$47,544	\$51,199	\$53,692	\$56,862	\$60,618	\$62,798	\$50,024

**LAW ENFORCEMENT DIVISION**  
**FEMALE ACTIVE MEMBERS IN VALUATION DECEMBER 31, 2005**  
**BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Ages	Years of Service To Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19								
Tot. Pay								
Avg. Pay								
20-24	26	1						27
Tot. Pay	\$798,670	\$30,884						\$829,554
Avg. Pay	\$30,718	\$30,884						\$30,724
25-29	66	45						111
Tot. Pay	\$2,439,920	\$2,040,839						\$4,480,759
Avg. Pay	\$36,968	\$45,352						\$40,367
30-34	44	99	40					183
Tot. Pay	\$1,682,246	\$4,549,094	\$1,842,833					\$8,074,173
Avg. Pay	\$38,233	\$45,950	\$46,071					\$44,121
35-39	25	57	80	15	2			179
Tot. Pay	\$941,905	\$2,577,721	\$4,123,200	\$729,386	\$106,000			\$8,478,212
Avg. Pay	\$37,676	\$45,223	\$51,540	\$48,626	\$53,000			\$47,364
40-44	15	38	41	51	17	1		163
Tot. Pay	\$640,322	\$1,727,637	\$1,951,334	\$2,619,776	\$928,147	\$44,654		\$7,911,870
Avg. Pay	\$42,688	\$45,464	\$47,594	\$51,368	\$54,597	\$44,654		\$48,539
45-49	11	14	39	25	32	18		139
Tot. Pay	\$292,578	\$582,024	\$1,878,577	\$1,141,408	\$1,848,379	\$962,372		\$6,705,338
Avg. Pay	\$26,598	\$41,573	\$48,169	\$45,656	\$57,762	\$53,465		\$48,240
50-54	3	16	13	15	29	23	1	100
Tot. Pay	\$117,494	\$743,382	\$576,185	\$687,571	\$1,476,353	\$1,274,656	\$88,447	\$4,964,088
Avg. Pay	\$39,165	\$46,461	\$44,322	\$45,838	\$50,909	\$55,420	\$88,447	\$49,641
55-59	1	3	6	10	12	9	4	45
Tot. Pay	\$29,796	\$109,423	\$231,249	\$511,383	\$622,332	\$447,173	\$207,362	\$2,158,718
Avg. Pay	\$29,796	\$36,474	\$38,542	\$51,138	\$51,861	\$49,686	\$51,841	\$47,972
60-64				4	6	1	1	12
Tot. Pay				\$180,135	\$298,063	\$54,914	\$30,354	\$563,466
Avg. Pay				\$45,034	\$49,677	\$54,914	\$30,354	\$46,956
65-69								
Tot. Pay								
Avg. Pay								
70 & Over						1		1
Tot. Pay						\$54,881		\$54,881
Avg. Pay						\$54,881		\$54,881
<b>Totals</b>	191	273	219	120	98	53	6	960
<b>Tot. Pay</b>	\$6,942,931	\$12,361,004	\$10,603,378	\$5,869,659	\$5,279,274	\$2,838,650	\$326,163	\$44,221,059
<b>Avg. Pay</b>	\$36,350	\$45,278	\$48,417	\$48,914	\$53,870	\$53,559	\$54,361	\$46,064

**LAW ENFORCEMENT DIVISION  
INACTIVE MEMBERS IN VALUATION DECEMBER 31, 2005  
BY ATTAINED AGE AND YEARS OF SERVICE**

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Attained Ages	Years of Service to Valuation Date							Total Number
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
15-19								
20-24	7							7
25-29	55	1						56
30-34	103	15						118
35-39	130	23	7	1				161
40-44	53	13	12	4				82
45-49	37	12	14	12	3			78
50-54	43	13	13	9	7	3		88
55-59	40	2	8	4	1			55
60-64	17	2	1	1				21
65-69	12	1		1				14
70 & Over	5							5
<b>Totals</b>	<b>502</b>	<b>82</b>	<b>55</b>	<b>32</b>	<b>11</b>	<b>3</b>		<b>685</b>

## **SECTION IX**

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### **Allowances Being Paid to Retirees & Beneficiaries**

**MONTHLY ALLOWANCES OF RETIRED LIVES  
BY YEAR OF RETIREMENT  
AS OF DECEMBER 31, 2005**

<b>Year of Retirement</b>	<b>No.</b>	<b>Initial</b>	<b>Post-Ret. Increase</b>	<b>Total</b>	<b>Average</b>
2005	8,764	\$ 15,878,830	\$ 68,022	\$ 15,946,852	\$1,820
2004	8,786	15,106,748	504,591	15,611,339	1,777
2003	8,426	14,465,573	913,501	15,379,074	1,825
2002	9,470	15,696,805	1,468,687	17,165,492	1,813
2001	7,862	12,337,147	1,519,285	13,856,432	1,762
2000	7,693	11,144,530	1,653,248	12,797,778	1,664
1999	6,752	9,333,078	1,541,416	10,874,494	1,611
1998	6,747	8,611,241	1,580,346	10,191,587	1,511
1997	6,438	8,361,416	1,752,182	10,113,598	1,571
1996	6,388	7,653,939	1,819,614	9,473,553	1,483
1995	5,810	6,750,611	1,780,412	8,531,023	1,468
1990-1994	23,726	23,251,373	8,235,745	31,487,118	1,327
1985-1989	21,403	17,245,547	9,016,243	26,261,790	1,227
1980-1984	14,346	7,521,949	5,721,995	13,243,944	923
1975-1979	7,892	2,956,731	3,882,656	6,839,387	867
1970-1974	2,457	589,130	1,249,549	1,838,679	748
1965-1969	675	141,554	425,836	567,390	841
1960-1964	238	51,274	164,162	215,436	905
Before 1960	62	12,154	48,192	60,346	973
<b>TOTAL</b>	<b>153,935</b>	<b>\$177,109,630</b>	<b>\$43,345,682</b>	<b>\$220,455,312</b>	<b>\$1,432</b>

**MONTHLY ALLOWANCES OF RETIRED LIVES  
BY YEARS OF SERVICE  
AS OF DECEMBER 31, 2005**

<b>Years of Service</b>	<b>No.</b>	<b>Initial</b>	<b>Post-Ret. Increase</b>	<b>Total</b>	<b>Average</b>
<5 or n/a	4,908	\$ 1,307,864	\$ 393,312	\$ 1,701,176	\$347
5	4,187	1,288,838	324,944	1,613,782	385
6	3,230	1,043,975	287,769	1,331,744	412
7	3,073	1,051,753	293,312	1,345,065	438
8	2,773	959,938	286,386	1,246,324	449
9	2,160	813,270	257,885	1,071,155	496
10	8,365	3,200,391	831,451	4,031,842	482
11	4,853	2,027,961	578,472	2,606,433	537
12	4,816	2,130,595	637,231	2,767,826	575
13	4,391	2,174,363	656,846	2,831,209	645
14	4,262	2,233,258	682,190	2,915,448	684
15	4,735	2,745,090	808,198	3,553,288	750
16	4,589	2,862,748	841,310	3,704,058	807
17	4,214	2,951,309	850,912	3,802,221	902
18	4,174	3,086,749	913,051	3,999,800	958
19	4,125	3,214,074	925,806	4,139,880	1,004
20	4,876	4,170,100	1,193,924	5,364,024	1,100
21	4,242	3,948,019	1,113,189	5,061,208	1,193
22	3,895	3,906,770	1,075,263	4,982,033	1,279
23	3,818	4,093,512	1,091,573	5,185,085	1,358
24	3,642	4,210,701	1,097,944	5,308,645	1,458
25	6,845	9,014,068	2,177,351	11,191,419	1,635
26	4,464	6,367,404	1,590,133	7,957,537	1,783
27	4,401	6,880,313	1,650,497	8,530,810	1,938
28	4,613	8,331,832	1,778,775	10,110,607	2,192
29	4,067	7,683,575	1,602,916	9,286,491	2,283
30	15,221	30,870,356	6,046,887	36,917,243	2,425
31	5,145	10,471,364	2,342,085	12,813,449	2,490
32	4,140	8,634,666	2,013,875	10,648,541	2,572
33	3,140	6,753,436	1,603,353	8,356,789	2,661
34	2,632	5,732,198	1,399,702	7,131,900	2,710
35	2,526	5,612,492	1,416,666	7,029,158	2,783
36	1,842	4,102,664	1,013,486	5,116,150	2,777
37	1,423	3,188,674	844,393	4,033,067	2,834
38	1,131	2,571,881	655,088	3,226,969	2,853
39	932	2,109,107	554,815	2,663,922	2,858
40 & Over	2,085	5,364,322	1,514,692	6,879,014	3,299
<b>TOTAL</b>	<b>153,935</b>	<b>\$177,109,630</b>	<b>\$43,345,682</b>	<b>\$220,455,312</b>	<b>\$1,432</b>

**ANNUITY AND PENSION RESERVE FUND**  
**ANNUAL ALLOWANCE, REPORTED ASSETS AND ACTUARIAL LIABILITIES**  
**COMPARATIVE STATEMENT**  
**(\$ MILLIONS)**

Valuation Date	Annual Allowances			Reported Assets*	Actuarial Liabilities	Ratio of Assets to Liabilities	Ratio of DB Active to Retired
	No.	\$ Millions	% of DB Payroll#				
6/30/1977	52,240	\$ 150	5.6 %	\$ 1,513	\$ 1,478	102.3 %	5.2
6/30/1978	55,827	169	5.5 %	1,724	1,698	101.5 %	4.9
6/30/1979	59,303	190	5.9 %	2,007	1,973	101.7 %	4.4
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 % **	26,646	26,646	100.0 %	2.6

- \* Including certain recommended transfers and accrued transfers.
- # Through 1979, June allowances are compared to December payroll.
- @ Revised actuarial assumptions.
- \*\* Excluding health insurance and Medicare payments.
- + Including estimated effect of legislated benefit changes.

**ANNUITY AND PENSION RESERVE FUND  
 RETIREES AND BENEFICIARIES DECEMBER 31, 2005  
 TYPE OF BENEFIT, MONTHLY AMOUNT AND ACTUARIAL LIABILITIES**

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Type of Allowance	Number	Current Total \$	Actuarial Liabilities
Superannuation Retirement			
Plan A - Joint & 50%	18,028	\$ 32,019,316	\$ 4,282,648,408
Plan B - Straight Life	55,346	76,719,634	8,652,182,202
Plan C - Special Joint & Survivor	11,290	21,734,403	3,117,875,892
Plan D - Joint & 100%	16,743	28,278,354	4,418,346,596
Plan E - Life & 0 to 5 Years Guaranteed	322	362,512	37,921,190
- Life & 6 to 10 Years Guaranteed	438	559,852	57,339,435
- Life & 11 to 15 Years Guaranteed	651	767,164	73,453,530
- Life & 16 to 20 Years Guaranteed	22	31,970	4,669,843
Money Purchase	1,095	366,698	35,397,235
Survivor Beneficiary - Life Benefit	14,906	12,481,531	1,156,603,364
Survivor Beneficiary - Temporary Benefit	92	88,661	3,198,200
Total Superannuation	118,933	\$173,410,095	\$21,839,635,895
Disability Retirement	20,063	\$ 35,568,328	\$ 4,806,452,824
<b>Total from A &amp; PR</b>	<b>138,996</b>	<b>\$208,978,423</b>	<b>\$26,646,088,719</b>

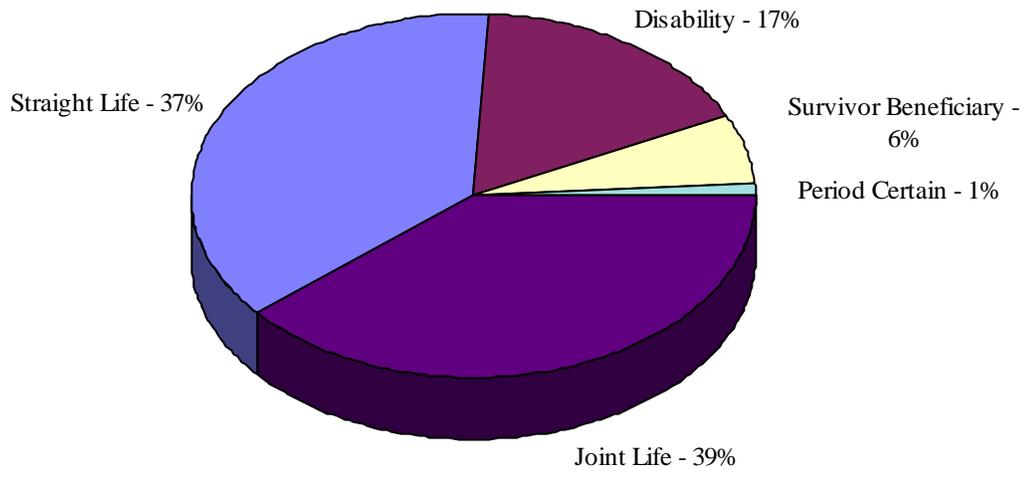
**ANNUITY AND PENSION RESERVE FUND  
 RETIREES AND BENEFICIARIES DECEMBER 31, 2005  
 TYPE OF BENEFIT AND AMOUNT BY GENDER OF RECIPIENT**

Type of Allowance	Men		Women		Total	
	Number	Monthly Allowances	Number	Monthly Allowances	Number	Monthly Allowances
Superannuation Retirement						
Plan A - Joint & 50%	13,269	\$25,112,764	4,759	\$ 6,906,552	18,028	\$ 32,019,316
Plan B - Straight Life	16,964	28,103,508	38,382	48,616,126	55,346	76,719,634
Plan C - Special Joint & Survivor	4,999	11,933,027	6,291	9,801,376	11,290	21,734,403
Plan D - Joint & 100%	14,299	25,249,427	2,444	3,028,927	16,743	28,278,354
Plan E - Life & 0 to 5 Years Guaranteed	151	195,914	171	166,598	322	362,512
- Life & 6 to 10 Years Guaranteed	257	353,056	181	206,796	438	559,852
- Life & 11 to 15 Years Guaranteed	434	552,470	217	214,694	651	767,164
- Life & 16 to 20 Years Guaranteed	14	21,679	8	10,291	22	31,970
Money Purchase	789	305,918	306	60,780	1,095	366,698
Survivor Beneficiary - Life Benefit	1,035	558,796	13,871	11,922,735	14,906	12,481,531
Survivor Beneficiary - Temporary Benefit	27	23,193	65	65,468	92	88,661
Total Superannuation	52,238	\$92,409,752	66,695	\$81,000,343	118,933	\$173,410,095
Disability Retirement	10,462	\$20,500,345	9,601	\$15,067,983	20,063	\$ 35,568,328
<b>Total from A &amp; PR</b>	<b>62,700</b>	<b>\$112,910,097</b>	<b>76,296</b>	<b>\$96,068,326</b>	<b>138,996</b>	<b>\$208,978,423</b>

**ANNUITIES BEING PAID BY TYPE  
DECEMBER 31, 2005**

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**Annuity and Pension Reserve Fund**

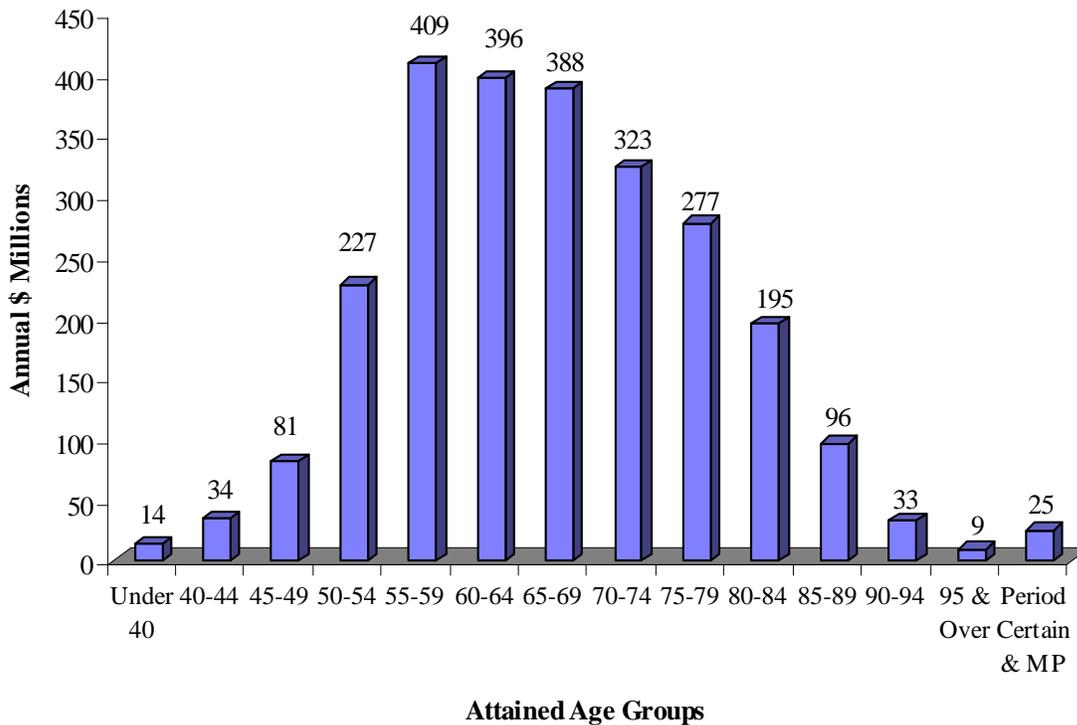
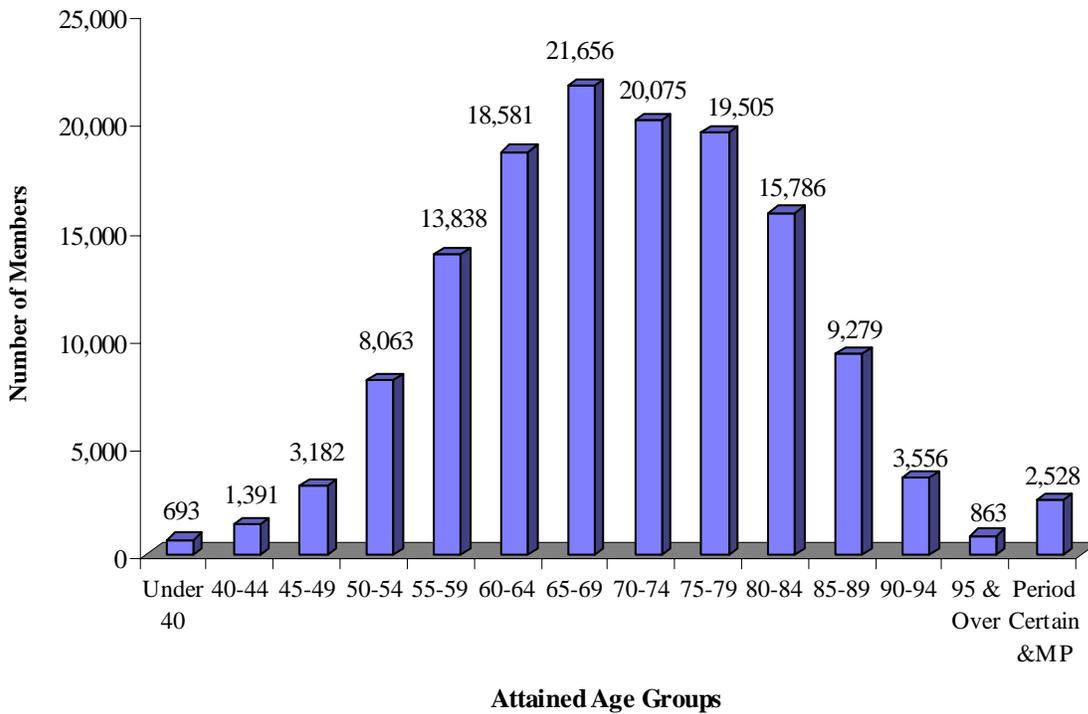


**ANNUITY AND PENSION RESERVE FUND**  
**RETIREES AND BENEFICIARIES DECEMBER 31, 2005**  
**CURRENT MONTHLY TOTAL \$ BY ATTAINED AGES**

Attained Ages	Superannuation		Disability		Totals	
	No.	Monthly Total \$	No.	Monthly Total \$	No.	Monthly Total \$
Under 20	9	\$3,200			9	\$3,200
20-24	5	951	1	\$1,143	6	2,094
25-29	11	7,087	16	19,733	27	26,820
30-34	13	8,822	127	197,763	140	206,585
35-39	26	21,560	485	926,576	511	948,136
40-44	57	33,200	1,334	2,836,468	1,391	2,869,668
45-49	565	1,219,340	2,617	5,499,476	3,182	6,718,816
50-54	4,218	11,112,496	3,845	7,774,796	8,063	18,887,292
55-59	9,512	26,002,415	4,326	8,102,168	13,838	34,104,583
60-64	15,293	27,752,918	3,288	5,220,146	18,581	32,973,064
65-69	19,914	29,863,689	1,742	2,487,550	21,656	32,351,239
70-74	19,098	25,763,416	977	1,186,785	20,075	26,950,201
75-79	18,786	22,346,265	719	764,246	19,505	23,110,511
80-84	15,392	15,876,033	394	385,542	15,786	16,261,575
85-89	9,116	7,880,466	163	144,336	9,279	8,024,802
90-94	3,529	2,719,037	27	20,147	3,556	2,739,184
95 & Over	861	711,004	2	1,453	863	712,457
Period Certain & Money Purchase	2,528	2,088,196			2,528	2,088,196
<b>Totals</b>	<b>118,933</b>	<b>\$173,410,095</b>	<b>20,063</b>	<b>\$35,568,328</b>	<b>138,996</b>	<b>\$208,978,423</b>

**ANNUITY AND PENSION RESERVE FUND  
BENEFITS BEING PAID BY ATTAINED AGES  
DECEMBER 31, 2005**

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**ANNUITY AND PENSION RESERVE FUND  
PERCENT OF RECIPIENTS  
BY AGE GROUPS  
AND YEAR**

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<b>Attained Age Group</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>	<b>1999</b>	<b>1998</b>	<b>1997</b>	<b>1996</b>	<b>1995</b>
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	0.5%	0.5%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.5%
40-49	3.3%	3.4%	3.5%	3.5%	3.3%	3.2%	3.1%	2.9%	2.8%	2.7%	2.4%
50-59	15.8%	14.7%	13.7%	12.9%	11.7%	10.7%	9.8%	9.2%	8.6%	7.9%	7.6%
60-69	28.9%	28.8%	28.6%	28.3%	28.1%	28.2%	28.9%	29.1%	29.4%	29.9%	30.5%
70-79	28.5%	29.4%	30.4%	31.5%	32.7%	34.0%	35.5%	36.3%	37.1%	37.7%	38.2%
80-89	18.0%	18.2%	18.3%	18.4%	18.7%	18.5%	18.7%	18.6%	18.4%	18.2%	17.9%
90 & Over	3.2%	3.2%	3.2%	3.1%	3.1%	3.0%	3.1%	3.0%	2.9%	2.8%	2.7%
Period Certain	1.8%	1.8%	1.8%	1.7%	1.8%	1.8%	0.3%	0.3%	0.2%	0.2%	0.2%
<b>TOTALS</b>	<b>100.0%</b>										
Average Age	70.2	70.4	70.6	70.7	71.0	71.2	71.4	71.5	71.6	71.6	71.8

**STATE DIVISION**  
**SURVIVOR BENEFIT FUND TABULATED BY**  
**TYPE OF BENEFIT BEING PAID AND MONTHLY AMOUNT**  
**DECEMBER 31, 2005**

Group	Number	Current Total	Actuarial Liabilities
<b>S-1 - Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation</b>			
Men	98	\$ 87,647	\$ 8,195,240
Women	770	917,069	92,653,602
Totals	868	\$1,004,716	\$100,848,842
<b>S-2 - Survivor Benefit to Beneficiary of Deceased Member Fixed Rate Amount</b>			
Widower - no child	505	\$ 408,266	\$ 47,568,084
Widower - child	59	51,157	8,205,474
Child's record	115	59,848	4,047,350
Parent	2	1,918	120,220
Other	0	0	0
Child only	177	116,408	5,758,312
Subtotals - male	858	637,597	\$ 65,699,440
Widower - no child	2,246	\$1,949,184	\$233,667,817
Widower - child	176	153,004	27,464,184
Child's record	229	101,983	7,266,347
Parent	3	3,030	248,340
Other	1	612	40,899
Child only	174	115,955	6,431,282
Subtotals - female	2,829	2,323,768	275,118,869
Totals	3,687	\$2,961,365	\$340,818,309
<b>Total Benefits Being Paid from Survivor Benefit Fund</b>			
Men	956	\$725,244	\$73,894,680
Women	3,599	3,240,837	367,772,471
<b>Totals</b>	<b>4,555</b>	<b>\$3,966,081</b>	<b>\$441,667,151</b>

**LOCAL GOVERNMENT DIVISION  
SURVIVOR BENEFIT FUND TABULATED BY  
TYPE OF BENEFIT BEING PAID AND MONTHLY AMOUNT  
DECEMBER 31, 2005**

Group	Number	Current Total	Actuarial Liabilities
<b>S-1 - Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation</b>			
Men	156	\$ 117,131	\$ 10,831,752
Women	1,459	1,448,789	151,158,499
Totals	1,615	\$1,565,920	\$161,990,251
<b>S-2 - Survivor Benefit to Beneficiary of Deceased Member Fixed Rate Amount</b>			
Widower - no child	855	\$ 545,250	\$ 62,629,479
Widower - child	91	53,080	8,781,326
Child's record	232	87,199	6,761,745
Parent	2	1,334	86,267
Other	1	465	58,016
Child only	288	168,121	11,158,835
Subtotals - male	1,469	855,449	89,475,668
Widower - no child	4,987	\$3,631,815	\$424,110,371
Widower - child	374	280,237	50,160,631
Child's record	497	204,410	16,807,163
Parent	4	3,609	242,141
Other	2	1,573	199,463
Child only	295	160,192	8,445,530
Subtotals - female	6,159	4,281,836	499,965,299
Totals	7,628	\$5,137,285	\$589,440,967
<b>Total Benefits Being Paid from Survivor Benefit Fund</b>			
Men	1,625	\$972,580	\$100,307,420
Women	7,618	5,730,625	651,123,798
<b>Totals</b>	<b>9,243</b>	<b>\$6,703,205</b>	<b>\$751,431,218</b>

**PUBLIC SAFETY DIVISION**  
**SURVIVOR BENEFIT FUND TABULATED BY**  
**TYPE OF BENEFIT BEING PAID AND MONTHLY AMOUNT**  
**DECEMBER 31, 2005**

Group	Number	Current	Total	Actuarial Liabilities
<b>S-1 - Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation</b>				
Men	0	\$ 0	0	\$ 0
Women	0		0	0
<b>Totals</b>	<b>0</b>	<b>\$ 0</b>	<b>0</b>	<b>\$ 0</b>
<b>S-2 - Survivor Benefit to Beneficiary of Deceased Member Fixed Rate Amount</b>				
Widower - no child	3	\$ 2,812		\$ 273,443
Widower - child	0		0	0
Child's record	3	1,886		152,312
Other	0		0	0
Child only	5	3,224		248,388
Subtotals - male	11		7,922	674,143
Widower - no child	37	\$ 49,238		\$8,373,547
Widower - child	5	5,340		1,018,474
Child's record	4	2,381		182,562
Other	2	1,518		102,301
Child only	0		0	0
Subtotals - female	48		58,477	9,676,884
<b>Totals</b>	<b>59</b>	<b>\$66,399</b>		<b>\$10,351,027</b>
<b>Total Benefits Being Paid from Survivor Benefit Fund</b>				
Men	11	\$7,922		\$674,143
Women	48	58,477		9,676,884
<b>Totals</b>	<b>59</b>	<b>\$66,399</b>		<b>\$10,351,027</b>

**LAW ENFORCEMENT DIVISION  
SURVIVOR BENEFIT FUND TABULATED BY  
TYPE OF BENEFIT BEING PAID AND MONTHLY AMOUNT  
DECEMBER 31, 2005**

Group	Number	Current Total	Actuarial Liabilities
<b>S-1 - Survivor Benefit to Beneficiary of Deceased Member Joint and Survivor Computation</b>			
Men	0	\$ 0	\$ 0
Women	40	59,100	7,349,767
Totals	40	\$ 59,100	\$ 7,349,767
<b>S-2 - Survivor Benefit to Beneficiary of Deceased Member Fixed Rate Amount</b>			
Widower - no child	3	\$ 2,767	\$ 421,445
Widower - child	2	1,678	311,682
Child's record	17	8,044	618,679
Other	0	0	0
Child only	7	4,124	264,795
Subtotals - male	29	16,613	1,616,601
Widower - no child	113	\$ 92,019	\$13,539,841
Widower - child	26	23,233	4,253,908
Child's record	26	11,367	728,326
Other	17	10,710	396,276
Child only	0	0	0
Subtotals - female	182	137,329	18,918,351
Totals	211	\$153,942	\$20,534,952
<b>Total Benefits Being Paid from Survivor Benefit Fund</b>			
Men	29	\$16,613	\$1,616,601
Women	222	196,429	26,268,118
<b>Totals</b>	<b>251</b>	<b>\$213,042</b>	<b>\$27,884,719</b>

**STATE DIVISION  
DEFERRED SURVIVOR BENEFICIARIES  
TABULATED BY GENDER AND DEFERRED AGE  
DECEMBER 31, 2005**

---

<b>Group</b>	<b>Number</b>	<b>Current Total</b>	<b>Actuarial Liabilities</b>
Widowers			
Deferred to age 50	0	\$ 0	\$ 0
Deferred to age 62	76	49,561	3,714,870
Deferred to age 65	1	171	14,948
Total	77	49,732	3,729,818
Widows			
Deferred to age 50	3	2,522	379,136
Deferred to age 62	168	115,232	10,452,748
Deferred to age 65	1	803	23,522
Total	172	118,557	10,855,406
<b>Totals</b>	<b>249</b>	<b>\$168,289</b>	<b>\$14,585,224</b>

**LOCAL GOVERNMENT DIVISION  
DEFERRED SURVIVOR BENEFICIARIES  
TABULATED BY GENDER AND DEFERRED AGE  
DECEMBER 31, 2005**

---

<b>Group</b>	<b>Number</b>	<b>Current Total</b>	<b>Actuarial Liabilities</b>
Widowers			
Deferred to age 50	0	\$ 0	\$ 0
Deferred to age 62	122	60,945	4,967,297
Deferred to age 65	0	0	0
Total	122	60,945	4,967,297
Widows			
Deferred to age 50	5	4,149	667,534
Deferred to age 62	432	280,268	26,323,039
Deferred to age 65	0	0	0
Total	437	284,417	26,990,573
<b>Totals</b>	<b>559</b>	<b>\$345,362</b>	<b>\$31,957,870</b>

**PUBLIC SAFETY DIVISION  
 DEFERRED SURVIVOR BENEFICIARIES  
 TABULATED BY GENDER AND DEFERRED AGE  
 DECEMBER 31, 2005**

---

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	9	3,939	287,477
Total	9	3,939	287,477
<b>Totals</b>	<b>9</b>	<b>\$3,939</b>	<b>\$287,477</b>

**LAW ENFORCEMENT DIVISION  
 DEFERRED SURVIVOR BENEFICIARIES  
 TABULATED BY GENDER AND DEFERRED AGE  
 DECEMBER 31, 2005**

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Group	Number	Current Total	Actuarial Liabilities
Widowers			
Deferred to age 50	0	\$ 0	\$ 0
Deferred to age 62	1	608	57,247
Total	1	608	57,247
Widows			
Deferred to age 50	0	\$ 0	\$ 0
Deferred to age 62	13	9,964	905,420
Total	13	9,964	905,420
<b>Totals</b>	<b>14</b>	<b>\$10,572</b>	<b>\$962,667</b>

**SURVIVOR BENEFIT FUND**  
**REPORTED ASSETS AND LIABILITIES**  
**DIVISIONS COMBINED**

Valuation Date	Monthly Allowances				\$ Millions		Ratio of Assets to Liabilities
	Current		Deferred		Reported Assets+	Actuarial Liabilities	
	No.	Amount	No.	Amount			
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	1,279.1	1,279.1	100 %

@ Revised actuarial assumptions.

\* Benefits increased.

# After benefit changes.

+ Includes certain recommended transfers and accrued transfers.

# SECTION X

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## Actuarial Methods and Assumptions

**SUMMARY OF  
ACTUARIAL METHODS AND ASSUMPTIONS USED FOR OPERS  
ACTUARIAL VALUATIONS  
ASSUMPTIONS ADOPTED BY RETIREMENT BOARD  
AFTER CONSULTING WITH ACTUARY**

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*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. Both the economic and decrement assumptions were established following the December 31, 2000 actuarial valuations.

***ECONOMIC ASSUMPTIONS***

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*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 4.00% recognizes wage inflation, including price inflation, productivity increases, and other macro economic forces.

## ***NON-ECONOMIC ASSUMPTIONS***

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***The post-retirement mortality rates*** used in evaluating age and service and survivor benefit allowances to be paid were 90% of rates in the 1971 Group Annuity Mortality Male and Female Tables, projected to 1984. Related values are shown on page X-9. The mortality rates used in evaluating disability allowances were 300% of rates in the 1983 Group Annuity Mortality Table for males, and 400% of rates in the 1983 Group Annuity Mortality Table 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 value 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 and II-3.

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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.

***Probabilities of Unreduced Age and Service Retirement***

Ages	Percent of Eligible Active Members Retiring Within Next Year					
	State		Local Government		Public Safety	Law Enforcement
	Men	Women	Men	Women		
48						22%
49						22%
50	40%	30%	35%	30%		22%
51	40%	30%	35%	30%		22%
52	40%	30%	35%	30%	22%	22%
53	40%	30%	35%	30%	22%	22%
54	40%	30%	35%	30%	22%	22%
55	25%	30%	30%	30%	15%	15%
56	25%	30%	25%	30%	15%	15%
57	25%	30%	25%	30%	15%	15%
58	25%	30%	25%	30%	18%	18%
59	25%	40%	25%	40%	18%	18%
60	30%	50%	25%	50%	18%	18%
61	25%	35%	25%	30%	18%	18%
62	25%	35%	40%	30%	30%	30%
63	30%	35%	40%	30%	25%	25%
64	40%	35%	30%	30%	15%	15%
65	50%	50%	25%	25%	20%	20%
66	25%	25%	20%	25%	20%	20%
67	25%	25%	20%	15%	15%	15%
68	25%	25%	20%	15%	15%	15%
69	25%	20%	20%	15%	15%	15%
70	25%	20%	20%	15%	100%	100%
71	25%	20%	20%	15%	100%	100%
72	25%	20%	20%	15%	100%	100%
73	25%	20%	20%	15%	100%	100%
74	25%	20%	20%	15%	100%	100%
75	25%	20%	20%	15%	100%	100%
76	25%	20%	20%	15%	100%	100%
77	25%	20%	20%	15%	100%	100%
78	25%	20%	20%	15%	100%	100%
79	25%	20%	20%	15%	100%	100%
80	100%	100%	100%	100%	100%	100%
Ref	751	752	753	754	755	755

***Probabilities of Reduced Retirement***

Ages	Percent of Eligible Active Members Retiring Within Next Year				
	State		Local Government		Public Safety
	Men	Women	Men	Women	
48					3%
49					3%
50					7%
51					7%
52					
53					
54					
55	12%	14%	10%	12%	
56	12%	14%	10%	12%	
57	12%	14%	10%	12%	
58	12%	14%	10%	12%	
59	12%	14%	10%	18%	
60	12%	20%	10%	18%	
61	12%	14%	10%	15%	
62	18%	14%	15%	15%	
63	18%	14%	15%	15%	
64	15%	14%	12%	12%	
Ref	756	757	758	759	515

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

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
		Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
		Men	Women	Men	Women	Men	Women			
	0			38.00%	36.00%					
	1			18.00%	19.00%					
	2			14.00%	15.00%					
	3			10.00%	12.00%					
	4			8.00%	9.00%					
25	5 & Over	0.03%	0.02%	6.00%	7.80%	0.09%	0.07%	4.30%	4.00%	8.30%
30		0.04%	0.02%	5.20%	7.00%	0.13%	0.14%	3.00%	4.00%	7.00%
35		0.05%	0.03%	4.30%	5.60%	0.24%	0.25%	2.20%	4.00%	6.20%
40		0.07%	0.04%	3.50%	4.20%	0.41%	0.36%	1.80%	4.00%	5.80%
45		0.13%	0.06%	2.70%	3.40%	0.61%	0.56%	1.40%	4.00%	5.40%
50		0.23%	0.10%	2.20%	3.10%	0.86%	0.88%	1.20%	4.00%	5.20%
55		0.37%	0.15%	2.10%	2.80%	1.31%	1.30%	0.90%	4.00%	4.90%
60		0.55%	0.25%	2.10%	2.70%	1.86%	1.56%	0.70%	4.00%	4.70%
Ref		#30x0.6sb0	#31x0.6sb0	371 #571x1	372 #572x1	#331x1	#332x1	301		

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

**LOCAL GOVERNMENT  
SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE & SERVICE RETIREMENT  
& INDIVIDUAL PAY INCREASE ASSUMPTIONS**

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
		Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
		Men	Women	Men	Women	Men	Women			
	0			34.00%	32.00%					
	1			17.00%	18.00%					
	2			12.00%	13.00%					
	3			10.00%	10.00%					
	4			9.00%	9.00%					
25	5 & Over	0.03%	0.02%	6.40%	8.00%	0.13%	0.12%	4.30%	4.00%	8.30%
30		0.04%	0.02%	5.40%	6.90%	0.17%	0.13%	3.00%	4.00%	7.00%
35		0.05%	0.03%	4.10%	5.40%	0.28%	0.21%	2.20%	4.00%	6.20%
40		0.07%	0.04%	3.20%	4.20%	0.44%	0.33%	1.80%	4.00%	5.80%
45		0.13%	0.06%	2.70%	3.40%	0.62%	0.45%	1.40%	4.00%	5.40%
50		0.23%	0.10%	2.50%	3.00%	0.90%	0.66%	1.20%	4.00%	5.20%
55		0.37%	0.15%	2.50%	2.90%	1.34%	0.98%	0.90%	4.00%	4.90%
60	0.55%	0.25%	2.50%	2.80%	1.54%	1.35%	0.70%	4.00%	4.70%	
Ref		#30x0.6sb0	#31x0.6sb0	373 #573x1	374 #574x1	#333x1	#334x1	301		

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

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

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
		Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
		Men	Women	Men	Women	Men	Women			
	0			15.00%	15.00%					
	1			9.00%	9.00%					
	2			7.00%	7.00%					
	3			5.00%	5.00%					
	4			5.00%	5.00%					
25	5 & Over	0.03%	0.02%	3.80%	3.80%	0.27%	0.27%	6.30%	4.00%	10.30%
30		0.04%	0.02%	2.90%	2.90%	0.37%	0.37%	4.00%	4.00%	8.00%
35		0.05%	0.03%	2.30%	2.30%	0.67%	0.67%	1.60%	4.00%	5.60%
40		0.07%	0.04%	1.50%	1.50%	0.95%	0.95%	0.85%	4.00%	4.85%
45		0.13%	0.06%	1.30%	1.30%	1.47%	1.47%	0.60%	4.00%	4.60%
50		0.23%	0.10%	1.20%	1.20%	2.03%	2.03%	0.50%	4.00%	4.50%
55		0.37%	0.15%	1.20%	1.20%	2.50%	2.50%	0.50%	4.00%	4.50%
60	0.55%	0.25%	1.20%	1.20%	2.88%	2.88%	0.50%	4.00%	4.50%	
Ref		#30x0.6sb0	#31x0.6sb0	375 #575x1	375 #575x1	#335x1	#335x1	303		

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

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

Sample Ages	Years of Service	Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions For An Individual Employee		
		Death		Withdrawal		Disability		Merit & Seniority	Base (Economy)	Increase Next Year
		Men	Women	Men	Women	Men	Women			
	0			15.00%	15.00%					
	1			9.00%	9.00%					
	2			7.00%	7.00%					
	3			5.00%	5.00%					
	4			5.00%	5.00%					
25	5 & Over	0.03%	0.02%	3.80%	3.80%	0.27%	0.27%	6.30%	4.00%	10.30%
30		0.04%	0.02%	2.90%	2.90%	0.37%	0.37%	4.00%	4.00%	8.00%
35		0.05%	0.03%	2.30%	2.30%	0.67%	0.67%	1.60%	4.00%	5.60%
40		0.07%	0.04%	1.50%	1.50%	0.95%	0.95%	0.85%	4.00%	4.85%
45		0.13%	0.06%	1.30%	1.30%	1.47%	1.47%	0.60%	4.00%	4.60%
50		0.23%	0.10%	1.20%	1.20%	2.03%	2.03%	0.50%	4.00%	4.50%
55		0.37%	0.15%	1.20%	1.20%	2.50%	2.50%	0.50%	4.00%	4.50%
60		0.55%	0.25%	1.20%	1.20%	2.88%	2.88%	0.50%	4.00%	4.50%
Ref		#30x0.6sb0	#31x0.6sb0	375 #575x1	375 #575x1	#335x1	#335x1	303		

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

## *Single Life Retirement Values*

<b>Sample Attained Ages</b>	<b>Present Value of \$1 Monthly for Life Increasing 3.0% Annually (First Increase After 1 Year)</b>		<b>Future Life Expectancy (years)</b>	
	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
50	\$165.46	\$181.30	28.55	34.58
55	152.90	171.13	24.26	29.89
60	138.21	158.37	20.19	25.31
65	121.58	142.99	16.40	20.92
70	104.05	124.89	13.02	16.76
75	87.04	105.31	10.17	13.03
80	70.51	86.11	7.75	9.89
Ref:	#68x0.9sb0	#69x0.9sb0		

## MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

### DECEMBER 31, 2005

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Marriage Assumption:	80% of males and 80% 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 AND TECHNICAL ASSUMPTIONS**  
**DECEMBER 31, 2005 (CONCLUDED)**

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Miscellaneous Loads:	A 0.85% factor is applied to unreduced retirement and reduced retirement liabilities 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**

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## **Financial Principles**

## FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES OF OPERS

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***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<sup>rd</sup> and largest contributor*** for benefits to employees, and is interlocked with the contribution amounts required from employees and employers.

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

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 ACTUARIAL VALUATION PROCESS

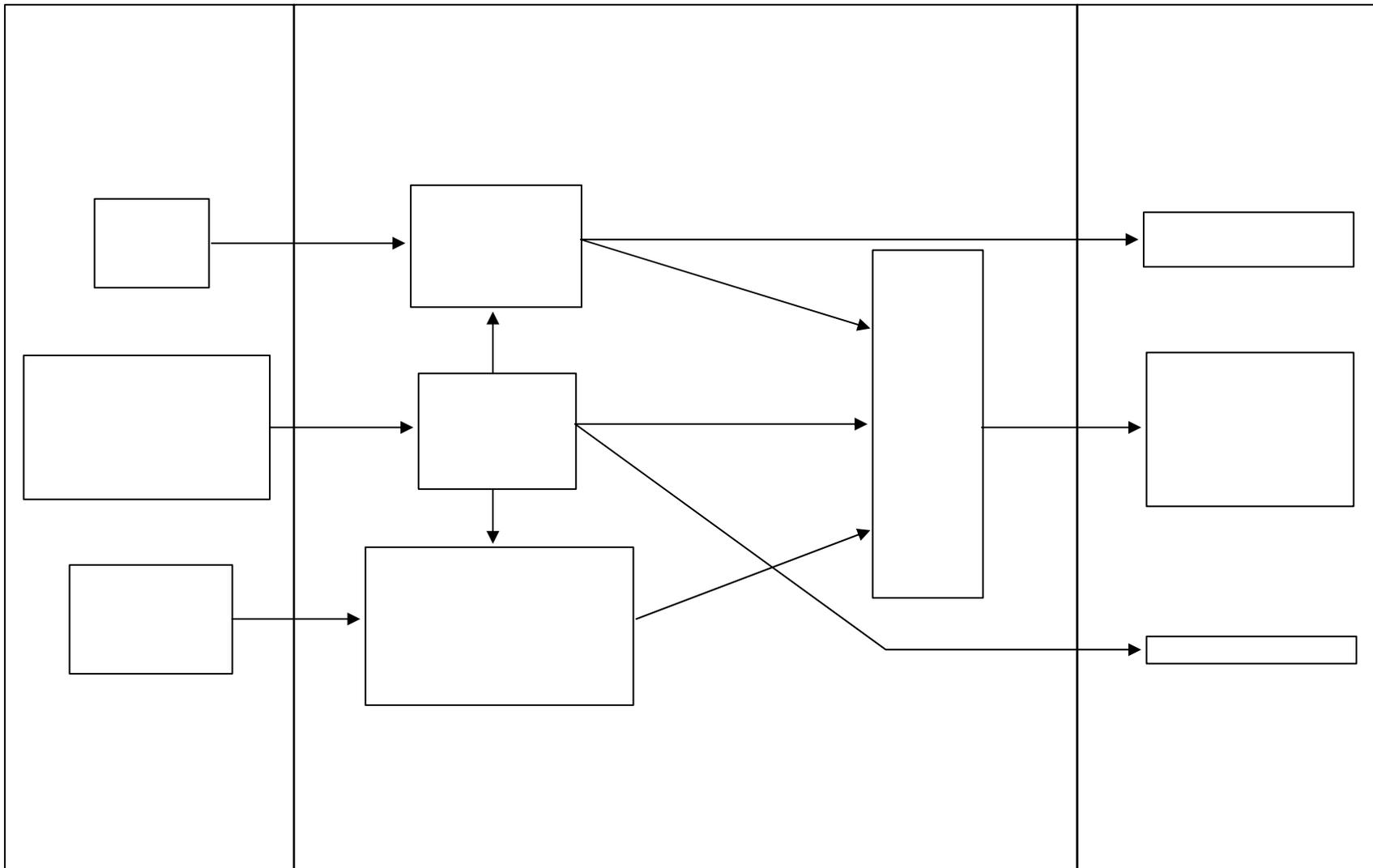
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*The financing diagram* on the opposite page shows the relationship between *the two fundamentally different philosophies of paying* for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit 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.

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*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



## GLOSSARY

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***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.

**Actuary.** A person who is trained in the applications of probability and compound interest to 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.”

## MEANING OF “UNFUNDED ACTUARIAL ACCRUED LIABILITIES”

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“*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.

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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.

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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

**SCHEDULE OF DEFINED BENEFIT FUNDING PROGRESS  
FOR COMPLIANCE WITH GASB STATEMENT NO. 25  
(\$ AMOUNTS IN MILLIONS)  
TRADITIONAL AND COMBINED PLANS**

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The schedule below measures the funding progress with respect to the *retirement allowance* portion of OPERS benefits for compliance with GASB Statement No. 25. Assets and liabilities related to post-employment health care benefits are specifically excluded from the schedule. Assets do, however, include market value adjustments.

<b>Valuation Year</b>	<b>Actuarial Accrued Liabilities (AAL)</b>	<b>Valuation Assets</b>	<b>Unfunded Actuarial Accrued Liabilities (UAAL)</b>	<b>Ratio of Assets to AAL</b>	<b>Active Member Payroll</b>	<b>UAAL as a % of Active Member Payroll</b>
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 %

\* Revised actuarial assumptions.

**SCHEDULE OF DEFINED BENEFIT FUNDING PROGRESS  
FOR COMPLIANCE WITH GASB STATEMENT NO. 25  
(\$ AMOUNTS IN MILLIONS)  
TRADITIONAL PLAN**

---

The schedule below measures the funding progress with respect to the *retirement allowance* portion of OPERS benefits for compliance with GASB Statement No. 25. Assets and liabilities related to post-employment health care benefits are specifically excluded from the schedule. Assets do, however, include market value adjustments.

<b>Valuation Year</b>	<b>Actuarial Accrued Liabilities (AAL)</b>	<b>Valuation Assets</b>	<b>Unfunded Actuarial Accrued Liabilities (UAAL)</b>	<b>Ratio of Assets to AAL</b>	<b>Active Member Payroll</b>	<b>UAAL as a % of Active Member Payroll</b>
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 %

\* Revised actuarial assumptions.

**SCHEDULE OF DEFINED BENEFIT FUNDING PROGRESS  
FOR COMPLIANCE WITH GASB STATEMENT NO. 25  
(\$ AMOUNTS IN MILLIONS)  
COMBINED PLAN**

---

The schedule below measures the funding progress with respect to the *retirement allowance* portion of OPERS benefits for compliance with GASB Statement No. 25. Assets and liabilities related to post-employment health care benefits are specifically excluded from the schedule. Assets do, however, include market value adjustments.

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 %

**SCHEDULE OF EMPLOYER CONTRIBUTIONS\***  
**FOR COMPLIANCE WITH GASB STATEMENT NO. 25**

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**Traditional Plan**

Year Ended December 31	Annual Required Contributions	Percentage Contributed
1991	\$607,811,880	100%
1992	646,170,989	100%
1993	663,680,518	100%
1994	693,802,578	100%
1995	725,893,573	100%
1996	777,781,045	100%
1997	811,485,028	100%
1998	886,684,171	100%
1999	935,429,955	100%
2000	718,807,713	100%
2001	977,289,238	100%
2002	1,109,983,204	100%
2003	1,026,594,836	100%
2004	1,113,946,023	100%
2005	1,157,407,274	100%

**Combined Plan**

Year Ended December 31	Annual Required Contributions	Percentage Contributed
2003	\$8,451,494	100%
2004	\$12,166,934	100%
2005	\$15,635,373	100%

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

**SCHEDULE OF UNFUNDED ACTUARIAL ACCRUED LIABILITY@  
FOR COMPLIANCE WITH GASB STATEMENT NO. 25  
TRADITIONAL AND COMBINED PLANS**

	December 31, 2005				
	State Group	Local Group	Public Safety Group	Law Enforcement Group	Total
<b>Accrued Liabilities</b>					
Active and Inactive Members	\$ 13,010,014,167	\$ 18,976,469,685	\$ 14,564,647	\$ 1,219,769,600	\$ 33,220,818,099
Retirees and Beneficiaries	11,310,209,402	15,484,391,357	20,730,045	1,109,885,268	27,925,216,072
<b>Total Accrued Liabilities</b>	<b>\$ 24,320,223,569</b>	<b>\$ 34,460,861,042</b>	<b>\$ 35,294,692</b>	<b>\$ 2,329,654,868</b>	<b>\$ 61,146,034,171</b>
<b>Assets</b>					
Active and Inactive Members					
EAF*	\$ 7,535,827,875	\$ 10,706,148,260	\$ (49,158,443)	\$ 674,898,935	\$ 18,867,716,627
ESF	3,778,246,862	5,682,203,096	4,491,904	345,240,909	9,810,182,771
TP EAF Unallocated	439,372,567	618,981,299	(464,856)	41,365,932	1,099,254,942
Market Value Adjustment	(1,290,629,492)	(1,818,218,931)	1,365,486	(121,509,844)	(3,228,992,781)
<b>Total Active and Inactive Assets</b>	<b>10,462,817,812</b>	<b>15,189,113,724</b>	<b>(43,765,909)</b>	<b>939,995,932</b>	<b>26,548,161,559</b>
Retirees and Beneficiaries					
A & PR Fund*	10,853,957,025	14,701,002,269	10,091,541	1,081,037,883	26,646,088,718
SBF Fund*	456,252,376	783,389,089	10,638,504	28,847,386	1,279,127,355
<b>Total R&amp;B Assets</b>	<b>11,310,209,401</b>	<b>15,484,391,358</b>	<b>20,730,045</b>	<b>1,109,885,269</b>	<b>27,925,216,073</b>
<b>Total Assets</b>	<b>\$ 21,773,027,213</b>	<b>\$ 30,673,505,082</b>	<b>\$ (23,035,864)</b>	<b>\$ 2,049,881,201</b>	<b>\$ 54,473,377,632</b>
<b>Unfunded Actuarial Accrued Liability</b>	<b>\$ 2,547,196,356</b>	<b>\$ 3,787,355,960</b>	<b>\$ 58,330,556</b>	<b>\$ 279,773,667</b>	<b>\$ 6,672,656,539</b>

@ 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  
TRADITIONAL PLAN**

	December 31, 2005				
	State Group	Local Group	Public Safety Group	Law Enforcement Group	Total
<b>Accrued Liabilities</b>					
Active and Inactive Members	\$ 12,993,621,507	\$ 18,945,523,961	\$ 14,564,647	\$ 1,219,769,600	\$ 33,173,479,715
Retirees and Beneficiaries	11,310,209,402	15,484,391,357	20,730,045	1,109,885,268	27,925,216,072
Total Accrued Liabilities	\$ 24,303,830,909	\$ 34,429,915,318	\$ 35,294,692	\$ 2,329,654,868	\$ 61,098,695,787
<b>Assets</b>					
Active and Inactive Members					
EAF*	\$ 7,522,440,752	\$ 10,679,379,714	\$ (49,158,443)	\$ 674,898,935	\$ 18,827,560,958
ESF	3,778,246,862	5,682,203,096	4,491,904	345,240,909	9,810,182,771
TP EAF Unallocated	439,372,567	618,981,299	(464,856)	41,365,932	1,099,254,942
Market Value Adjustment	(1,290,663,778)	(1,818,287,488)	1,365,486	(121,509,844)	(3,229,095,624)
Total Active and Inactive Assets	10,449,396,403	15,162,276,621	(43,765,909)	939,995,932	26,507,903,047
Retirees and Beneficiaries					
A & PR Fund*	10,853,957,025	14,701,002,269	10,091,541	1,081,037,883	26,646,088,718
SBF Fund*	456,252,376	783,389,089	10,638,504	28,847,386	1,279,127,355
Total R&B Assets	11,310,209,401	15,484,391,358	20,730,045	1,109,885,269	27,925,216,073
Total Assets	\$ 21,759,605,804	\$ 30,646,667,979	\$ (23,035,864)	\$ 2,049,881,201	\$ 54,433,119,120
Unfunded Actuarial Accrued Liability	\$ 2,544,225,105	\$ 3,783,247,339	\$ 58,330,556	\$ 279,773,667	\$ 6,665,576,667

@ 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**

	December 31, 2005				
	State Group	Local Group	Public Safety Group	Law Enforcement Group	Total
<b>Accrued Liabilities</b>					
Active and Inactive Members	\$ 16,392,660	\$ 30,945,724			\$ 47,338,384
Retirees and Beneficiaries	0	0			0
Total Accrued Liabilities	\$ 16,392,660	\$ 30,945,724			\$ 47,338,384
<b>Assets</b>					
Active and Inactive Members					
EAF*	\$ 13,387,123	\$ 26,768,546			\$ 40,155,669
ESF	0	0			0
TP EAF Unallocated	0	0			0
Market Value Adjustment	34,286	68,557			102,843
Total Active and Inactive Assets	13,421,409	26,837,103			40,258,512
Retirees and Beneficiaries					
A & PR Fund*	0	0			0
SBF Fund*	0	0			0
Total R&B Assets	0	0			0
Total Assets	\$ 13,421,409	\$ 26,837,103			\$ 40,258,512
Unfunded Actuarial Accrued Liability	\$ 2,971,251	\$ 4,108,621			\$ 7,079,872

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

\* After reserve transfers.

**REQUIRED SUPPLEMENTARY INFORMATION  
FOR COMPLIANCE WITH GASB STATEMENT NO. 25**

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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, 2005
Actuarial cost method	Individual entry age
Amortization method for unfunded actuarial accrued liabilities	Level percent open
Equivalent Single Amortization Period	
Traditional Plan	21 years
Combined Plan	1 year
Total	21 years
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, 2005, the date of the latest actuarial valuation:

	<u>Traditional</u>	<u>Combined</u>	<u>Total</u>
Retirees and beneficiaries receiving benefits	153,935	0	153,935
Terminated plan members entitled to but not yet receiving benefits	294,527	172	294,699
Active plan members	<u>353,708</u>	<u>5,096</u>	<u>358,804</u>
Total	802,170	5,268	807,438

The amortization periods for GASB purposes were determined by reflecting scheduled employer and member contribution rates through 2007. Increasing contribution rates scheduled for years 2008 and later were not reflected in these calculations.

December 11, 2006

Ms. Karen E. Carraher  
Chief Financial Officer  
Ohio Public Employees Retirement System  
277 East Town Street  
Columbus, Ohio 43215

**Re: Report of December 31, 2005 Actuarial Valuation**

Dear Karen:

Enclosed are 25 bound copies of the final report.

Sincerely,

A handwritten signature in cursive script that reads "Norman L. Jones".

Norman L. Jones

NLJ/bd  
Enclosures

cc:

Sean

Keenan

(KPMG)