

***City of Atlanta Police  
Officers' Pension Fund***

**Actuarial Valuation Report  
as of  
January 1, 2009**



# TABLE OF CONTENTS

	<u>Page Number</u>
<b>Discussion</b> .....	1
 <b><u>Funding Results</u></b>	
Table I           Summary of Valuation Results.....	4
Table II          Historical Contribution Rate.....	5
Table III         Liabilities as of January 1, 2009.....	6
 <b><u>Accounting Results</u></b>	
Table IV          Accounting Disclosures (GASB 25/27).....	7
Table V          Present Value of Accrued Benefits.....	9
 <b><u>Assets</u></b>	
Table VI          Summary of Assets.....	10
Table VII         Historical Asset Information.....	11
Table VIII        Contributions vs. Fund Payouts.....	12
 <b><u>Data</u></b>	
Table IX          Summary of Participant Data.....	13
Table X           Active Data.....	14
Table XI          Retiree Data.....	15
Table XII         Age-Service-Salary Table.....	16
 <b><u>Methods &amp; Assumptions</u></b>	
Table XIII        Actuarial Assumptions.....	17
 <b><u>Plan Provisions</u></b>	
Table XIV         Plan Provisions.....	20



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**September 7, 2009**

Board of Trustees  
City of Atlanta Police Officers' Pension Fund  
c/o Administrative Services, Inc.  
2187 Northlake Parkway, Suite 106  
Tucker, GA 30084

Ladies and Gentlemen:

This report presents the results of the actuarial valuation of the City of Atlanta Police Officers' Pension Fund as of January 1, 2009. The purpose of this report is to provide a summary of the funded status of the plan as of January 1, 2009, to determine the minimum required contribution for the 2009/10 fiscal year, and to determine the annual required contribution and accounting disclosures pursuant to Governmental Accounting Standard Nos. 25 and 27 (GASB 25/27).

### **Recommended Contribution**

Currently, the plan receives contributions from the City of Atlanta and from employees. After June, 2009, employees contribute either 7% or 8% of base salary, depending on whether the employee has any beneficiaries who would be eligible for death benefits under the plan. The City contributes the amount that is actuarially determined as a level percentage of payroll, where the unfunded accrued liability is scheduled to be eliminated as of July 1, 2039 and payroll is assumed to increase at the rate of 4.00% per year. The contribution is based on the actuarial valuation results as of January 1 immediately preceding the fiscal year.

For the 2009/10 fiscal year, the minimum required contribution is 47.33% of payroll after taking into account expected employee contributions of 7.49% of payroll. This amount represents a decrease of 3.30% of payroll from the required contribution developed in the prior valuation.

The minimum required contribution decreases or increases due to experience gains and losses, respectively. The primary source of experience gains and losses is the investment return. During 2008, the market value of assets lost 17.48% as compared with an assumed return of 7.75%. However, rather than reflect the entire amount of the unrealized gains and losses immediately, the actuarial value of assets is based on a five-year phase-in of the unrealized appreciation. On this basis, the actuarial value of assets only lost 5.92% for the year, which was still below the assumed 7.75% return.

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### **Assumption Change**

We have updated the mortality tables used to determine the plan's liability. The mortality basis has been changed from the 1983 Group Annuity Mortality Table to the RP-2000 Mortality Table. Because the updated mortality tables assume longer life expectancy, the liabilities and cost of the plan have increased accordingly. We will continue to monitor the assumptions used to determine the City's contribution and will make changes as necessary to reflect future expectations.

### **Plan Amendments**

Two plan amendments were adopted since the completion of the previous valuation. First, the amortization period for the unfunded accrued liability has been extended to a rolling 30-year period beginning July 1, 2009. Second, the employee contribution rate has been increased by 1% of compensation effective July 9, 2009. We are not aware of any other plan changes during the past year.

### **Deferred Vested Participants**

Information concerning deferred vested participants, if any exist, has not been readily available prior to 2009. It is generally understood that the overwhelming majority of terminated employees choose to withdraw their accumulated contributions from the plan in lieu of receiving a future pension benefit. However, due to the possibility that a few individuals may have left their accumulated contributions in the plan in order to receive a future pension benefit, the plan administrator and the City have jointly conducted research to determine whether any such individuals exist. No potential deferred vested individuals were discovered. Therefore, no deferred vested participants have been included in this valuation since none are known to exist as of January 1, 2009. It is our understanding that two such individuals have terminated their employment during 2009, but have not withdrawn their accumulated contributions to date. These individuals have been included in this valuation as active participants, but will be included in the January 1, 2010 valuation as deferred vested participants if they do not withdraw their accumulated contributions before that date.

### **Contents of the Report**

A summary of the results of the valuation is presented in Table I, while Table II provides a historical record of the City's contribution percentage. A detailed breakdown of the liabilities of the plan by type of benefit is presented in Table III. Information for the auditors can be found in Tables IV and V. Tables VI through VIII provide information about the fund's assets. In



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particular, Table VI provides a breakdown of the fund assets by investment type, and Tables VII and VIII provide a historical record of the growth, expenditures, and annual yields of the fund. Tables IX through XII provide a variety of useful information concerning the participant population. Finally, Table XIII provides a summary of the assumptions and methods used to complete the valuation and Table XIV provides a summary of the plan provisions.

### **Certification**

To the best of our knowledge, this report fairly and accurately represents the liabilities of the plan as of January 1, 2009 based on the participant data and asset information provided by the City of Atlanta and the plan provisions and actuarial assumptions set forth herein. We believe that these assumptions are reasonable in the aggregate and represent our best estimate of anticipated experience. All calculations set forth herein conform to generally accepted actuarial principles and practices and comply with our current understanding of the requirements of the Georgia Code and the Governmental Accounting Standards Board.

Respectfully submitted,

Charles T. Carr  
Consulting Actuary  
Enrolled Actuary No. 08-04927



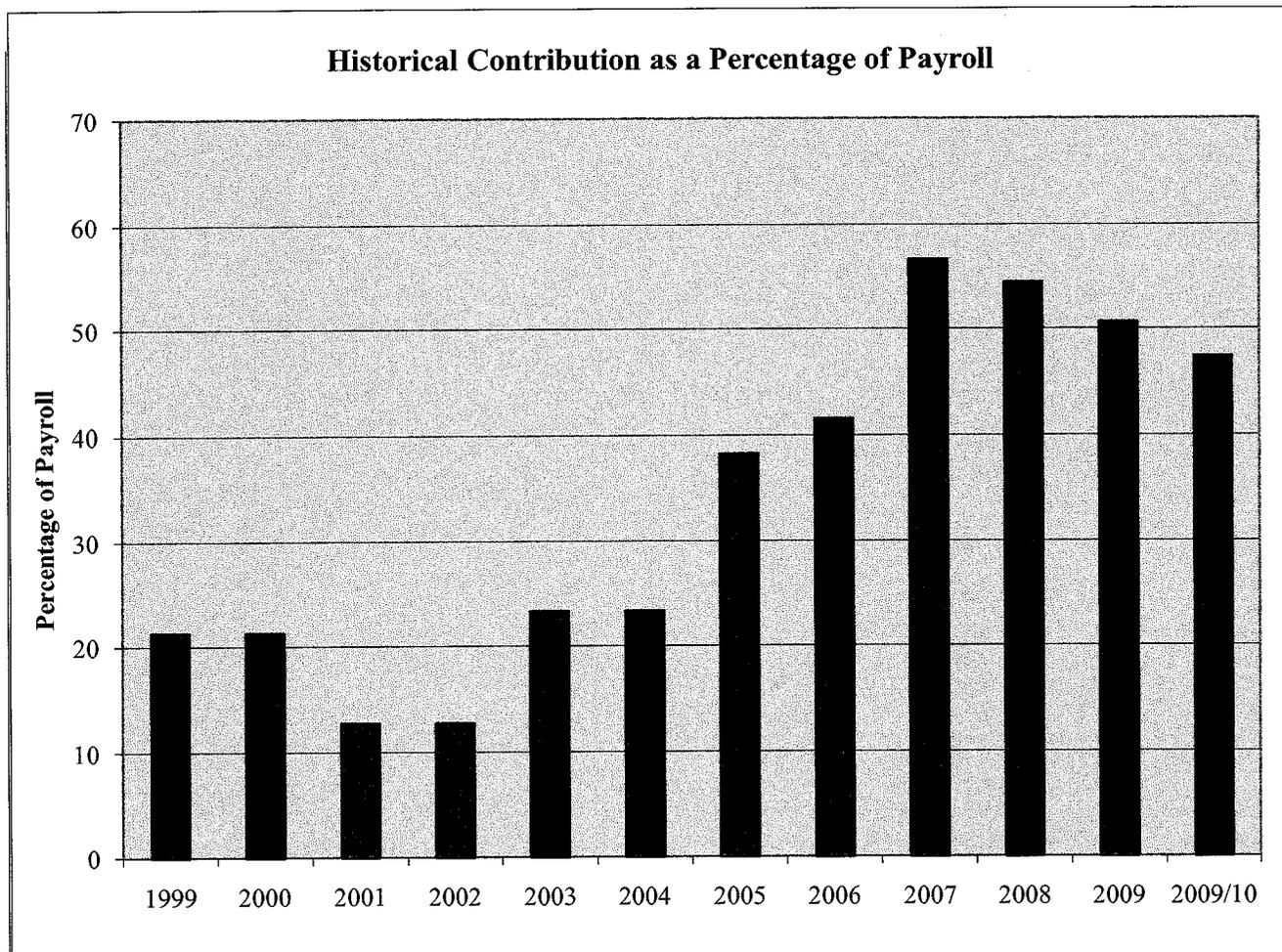
**SUMMARY OF VALUATION RESULTS**

**TABLE I**

	<u>As of January 1, 2008</u>	<u>As of January 1, 2009</u>
<b>1. Number of Participants</b>		
<b>a. Active Participants</b>		
i. Fully Vested	819	787
ii. Partially Vested	270	292
iii. Non-Vested	722	560
iv. Sub-total	<u>1,811</u>	<u>1,639</u>
<b>b. Deferred Vested Participants</b>	<b>0</b>	<b>0</b>
<b>c. Retired Participants</b>		
i. Service Retirement	912	981
ii. Disability Retirement	108	109
iii. Beneficiaries	252	265
iv. Sub-total	<u>1,272</u>	<u>1,355</u>
<b>d. Total Participants</b>	<u>3,083</u>	<u>2,994</u>
<b>2. Expected Annual Compensation *</b>	<b>\$84,016</b>	<b>\$82,030</b>
<b>3. Development of Required Contribution *</b>		
a. Actuarial Accrued Liability	\$909,410	\$986,376
b. Actuarial Value of Assets	(\$596,457)	(\$571,768)
c. Unfunded Actuarial Accrued Liability (UAAL)	<u>\$312,953</u>	<u>\$414,608</u>
d. Amortization Payment Towards UAAL	\$25,901	\$22,215
e. Normal Cost	\$24,079	\$23,643
f. Initial Annual Cost	<u>\$49,980</u>	<u>\$45,858</u>

	<u>For the 2009 Plan Year</u>	<u>For the 2009/10 Fiscal Year</u>
<b>4. Minimum Required Contribution</b>		
a. Level Percent Amortization of UAAL	29.64 %	26.56 %
b. Normal Cost Percentage	27.56 %	28.26 %
c. Total Contribution Percentage	<u>57.20 %</u>	<u>54.82 %</u>
d. Effective Employee Contribution	<u>(6.57)%</u>	<u>(7.49)%</u>
e. Minimum Required Employer Contribution	<u>50.63 %</u>	<u>47.33 %</u>

*\* dollar amounts are shown in 000's*



<u>Plan Year</u>	<u>Employer Contribution Percentage</u>	<u>Plan Year</u>	<u>Employer Contribution Percentage</u>	<u>Plan Year</u>	<u>Employer Contribution Percentage</u>
1999	21.31%	2003	23.33%	2007	56.68%
2000	21.31%	2004	23.33%	2008	54.51%
2001	12.77%	2005	38.27%	2009	50.63%
2002	12.77%	2006	41.55%	2009/10 *	47.33%

*\* fiscal year*

**LIABILITIES AS OF January 1, 2009**

**TABLE III**

	Retirement Benefits	Disability Benefits	Withdrawal Benefits	Pre-Ret. Death Benefits	Return of Employee Contributions	Total
<b>1. Present Value of Future Benefits</b>						
a. Active participants	\$548,828	\$18,027	\$2,500	\$5,694	\$803	\$575,852
b. Def. vested participants	\$0	\$0	\$0	\$0	\$0	\$0
c. Retired participants:						
Retirees	\$494,915	\$48,081	\$0	\$0	\$0	\$542,996
Beneficiaries	\$44,809	\$0	\$0	\$0	\$0	\$44,809
d. Total	<b>\$1,088,552</b>	<b>\$66,108</b>	<b>\$2,500</b>	<b>\$5,694</b>	<b>\$803</b>	<b>\$1,163,657</b>
<b>2. Entry Age Accrued Liability</b>						
a. Active participants	\$380,437	\$12,138	\$1,467	\$4,014	\$515	\$398,571
b. Def. vested participants	\$0	\$0	\$0	\$0	\$0	\$0
c. Retired participants:						
Retirees	\$494,915	\$48,081	\$0	\$0	\$0	\$542,996
Beneficiaries	\$44,809	\$0	\$0	\$0	\$0	\$44,809
d. Total	<b>\$920,161</b>	<b>\$60,219</b>	<b>\$1,467</b>	<b>\$4,014</b>	<b>\$515</b>	<b>\$986,376</b>
<b>3. Entry Age Normal Cost</b>	<b>\$21,291</b>	<b>\$1,145</b>	<b>\$316</b>	<b>\$265</b>	<b>\$167</b>	<b>\$23,184</b>
<b>4. Present Value of Vested Benefits</b>						
a. Active participants	\$254,420	\$12,455	\$737	\$3,364	\$1,036	\$272,012
b. Def. vested participants	\$0	\$0	\$0	\$0	\$0	\$0
c. Retired participants:						
Retirees	\$494,915	\$48,081	\$0	\$0	\$0	\$542,996
Beneficiaries	\$44,809	\$0	\$0	\$0	\$0	\$44,809
d. Total	<b>\$794,144</b>	<b>\$60,536</b>	<b>\$737</b>	<b>\$3,364</b>	<b>\$1,036</b>	<b>\$859,817</b>
<b>5. Present Value of Accrued Benefits</b>						
a. Active participants	\$280,602	\$12,455	\$1,288	\$3,403	\$486	\$298,234
b. Def. vested participants	\$0	\$0	\$0	\$0	\$0	\$0
c. Retired participants:						
Retirees	\$494,915	\$48,081	\$0	\$0	\$0	\$542,996
Beneficiaries	\$44,809	\$0	\$0	\$0	\$0	\$44,809
d. Total	<b>\$820,326</b>	<b>\$60,536</b>	<b>\$1,288</b>	<b>\$3,403</b>	<b>\$486</b>	<b>\$886,039</b>

*\* all amounts are shown in 000's*

	<u>For the 2008/09 Fiscal Year</u>	<u>For the 2009/10 Fiscal Year</u>
<b>A. Number of Plan Participants as of Preceding January 1</b>		
a. Retirees and beneficiaries receiving benefits	1,272	1,355
b. Terminated plan participants entitled to but not yet receiving benefits	0	0
c. Active plan participants	1,811	1,639
d. Total	<u>3,083</u>	<u>2,994</u>
<b>B. Development of Annual Required Contribution (ARC) *</b>		
a. Employer normal cost:		
i. Total normal cost (EOY)	\$24,511	\$25,473
ii. Expected employee contribution	(\$5,843)	(\$6,751)
iii. Employer normal cost	<u>\$18,668</u>	<u>\$18,722</u>
b. Amortization of UAAL:		
i. PV of future benefits	\$1,088,116	\$1,163,657
ii. PV of future employer normal costs	(\$130,419)	(\$124,404)
iii. PV of future employee contributions	(\$48,287)	(\$52,877)
iv. Actuarial accrued liability (AAL)	\$909,410	\$986,376
v. Actuarial value of assets	(\$596,457)	(\$571,768)
vi. Unfunded AAL (UAAL)	\$312,953	\$414,608
vii. Amortization of UAAL	<u>\$26,142</u>	<u>\$22,991</u>
c. Amortization of NPO	<u>\$0</u>	<u>\$0</u>
d. ARC	<u>\$44,810</u>	<u>\$41,713</u>
	(Item B.a.iii. plus item B.b.vii. plus item B.c.)	
<b>C. Annual Pension Cost and Net Pension Obligation (NPO) *</b>		
a. ARC	\$44,810	\$41,713
b. Interest on NPO	\$0	\$0
c. Adjustment to ARC	\$0	\$0
d. Annual Pension Cost	<u>\$44,810</u>	<u>\$41,713</u>
e. Contributions made (w/ interest to EOY)	(\$44,810)	(\$41,713)
f. Increase(decrease) in NPO	\$0	\$0
g. NPO (beginning of year)	\$0	\$0
h. NPO (end of year)	<u>\$0</u>	<u>\$0</u>

*\* dollar amounts are shown in 000's*

*The City's fiscal year runs from July 1 through June 30.*

**D. Schedule of Employer Contributions \*\***

Year Ended December 31	Annual Required Contribution	Percentage Contributed	Annual Pension Cost	Percentage Contributed
2005	\$25,271	100%	\$25,271	100%
2006 ***	\$15,687	100%	\$15,687	100%
2007 ***	\$45,229	100%	\$45,229	100%
2008 ***	\$44,058	100%	\$44,058	100%
2009 ***	\$44,810	100%	\$44,810	100%
2010 ***	\$41,713	100%	\$41,713	100%

\*\*\* As of July 1, 2006, the City's fiscal year runs from July 1 to June 30.

**E. Schedule of Funding Progress \*\***

	(1)	(2)	(3)	(4)	(5)	(6)
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL) (2) - (1)	Funded Ratio (1) ÷ (2)	Covered Payroll	UAAL as % of Covered Payroll (3) ÷ (5)
1/1/2004	\$440,212	\$617,501	\$177,289	71.3%	\$63,274	280.2%
1/1/2005	\$444,460	\$658,861	\$214,401	67.5%	\$70,973	302.1%
1/1/2006	\$464,368	\$817,255	\$352,887	56.8%	\$73,515	480.0%
1/1/2007	\$512,259	\$850,886	\$338,627	60.2%	\$77,168	438.8%
1/1/2008	\$596,457	\$909,410	\$312,953	65.6%	\$84,016	372.5%
1/1/2009	\$571,768	\$986,376	\$414,608	58.0%	\$82,030	505.4%

**F. Additional Information**

Valuation date	<u>January 1, 2008</u>	<u>January 1, 2009</u>
Actuarial cost method	Individual entry age	Individual entry age
Amortization method	Level percent closed	Level percent open
Remaining amortization period	45 years from 1/1/1979	30 years
Asset valuation method	Five-year smoothed market	Five-year smoothed market
Actuarial assumptions:		
Investment rate of return *	7.75%	7.75%
Projected salary increases *	4.00%	4.00%
* Includes inflation at:	3.00%	3.00%
Cost-of-living adjustments	3.00%	3.00%

\*\* dollar amounts are shown in 000's.

**1. Actuarial Present Value of Accrued Benefits**

	<u>As of January 1, 2008</u>	<u>As of January 1, 2009</u>
a. Vested Benefits:		
i. Participants currently receiving benefits	\$524,713	\$587,805
ii. Other participants	\$265,747	\$272,012
iii. Sub-total	\$790,460	\$859,817
b. Non-Vested Benefits	\$22,183	\$26,222
c. Total Benefits	<u><b>\$812,643</b></u>	<u><b>\$886,039</b></u>
d. Market Value of Assets	\$613,615	\$516,309
e. Funded Ratio	75.51%	58.27%

**2. Statement of Change in Actuarial Present Value of Accrued Benefits**

a. Actuarial Present Value as of January 1, 2008	<b>\$812,643</b>
b. Increase (Decrease) During 2008 Plan Year Due to:	
i. Interest	\$62,980
ii. Benefits accumulated	\$28,985
iii. Benefits paid	(\$38,531)
iv. Plan amendments	\$0
v. Changes in actuarial assumptions or methods	\$19,962
vi. Net increase (decrease)	<u>\$73,396</u>
c. Actuarial Present Value as of January 1, 2009	<b>\$886,039</b>

**3. Items Affecting Calculation of Actuarial Present Value of Accrued Benefits**

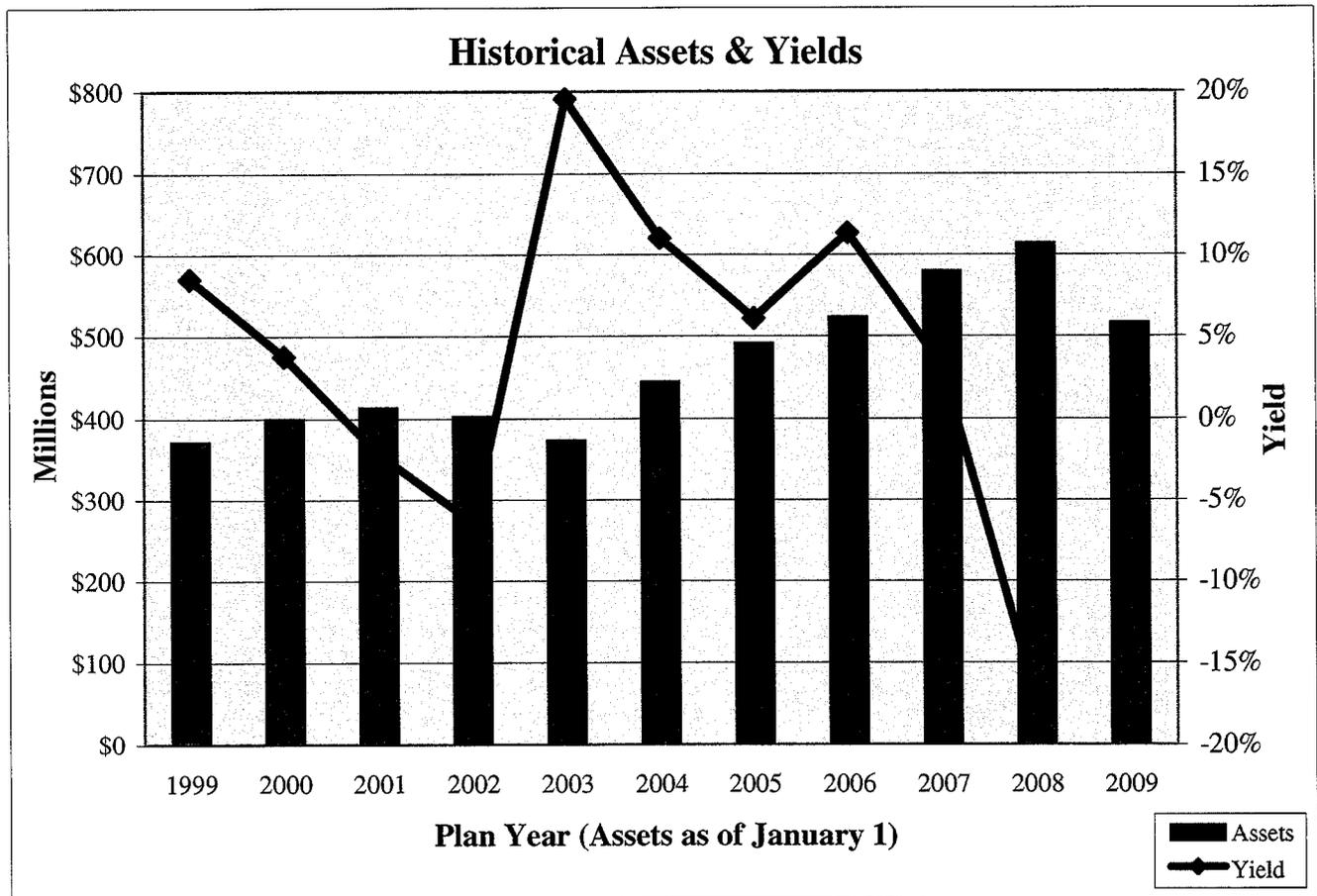
- a. Plan provisions reflected in the accrued benefits (see Table XIV on page 20)
- b. Actuarial assumptions and methods used to determine present values (see Table XIII on page 17)

	<u>As of January 1, 2008</u>	<u>As of January 1, 2009</u>
<b>1. Market Value of Assets (in 000's)</b>		
a. Cash and cash equivalents (9%)		\$45,264
b. Government bonds & notes (18%)	}	\$95,380
c. Corporate bonds (8%)		\$39,901
d. Equities (43%)		\$607,562
e. Repurchase agreements (0%)		\$0
f. Real estate (0%)	\$0	\$0
g. Mortgages (0%)	\$0	\$0
h. Accrued income receivable (1%)	\$0	\$2,718
i. Contributions receivable (1%)	\$6,053	\$3,368
j. Other receivables (23%)	\$0	\$116,768
k. Benefits and accounts payable (-1%)	\$0	(\$7,181)
l. Other payables (0%)	\$0	(\$781)
m. Market value of assets	<b>\$613,615</b>	<b>\$516,309</b>
<b>2. Actuarial Value of Assets (in 000's)</b>		
a. Market value of assets	\$613,615	\$516,309
b. Five-year phase-in of unrealized investment appreciation:		
i. 2004	(\$40,261) x 20% =	(\$8,052)
ii. 2005	(\$22,416) x 40% =	(\$8,966) x 20% = (\$4,483)
iii. 2006	(\$31,854) x 60% =	(\$19,112) x 40% = (\$12,742)
iv. 2007	\$23,715 x 80% =	\$18,972 x 60% = \$14,229
v. 2008	\$73,069	x 80% = \$58,455
vi. Total unrecognized losses(gains)	(\$17,158)	\$55,459
c. Actuarial Value of Assets	<b>\$596,457</b>	<b>\$571,768</b>
(Item a. plus item b., but within an 80-120% corridor of item a.)		

**Note:**

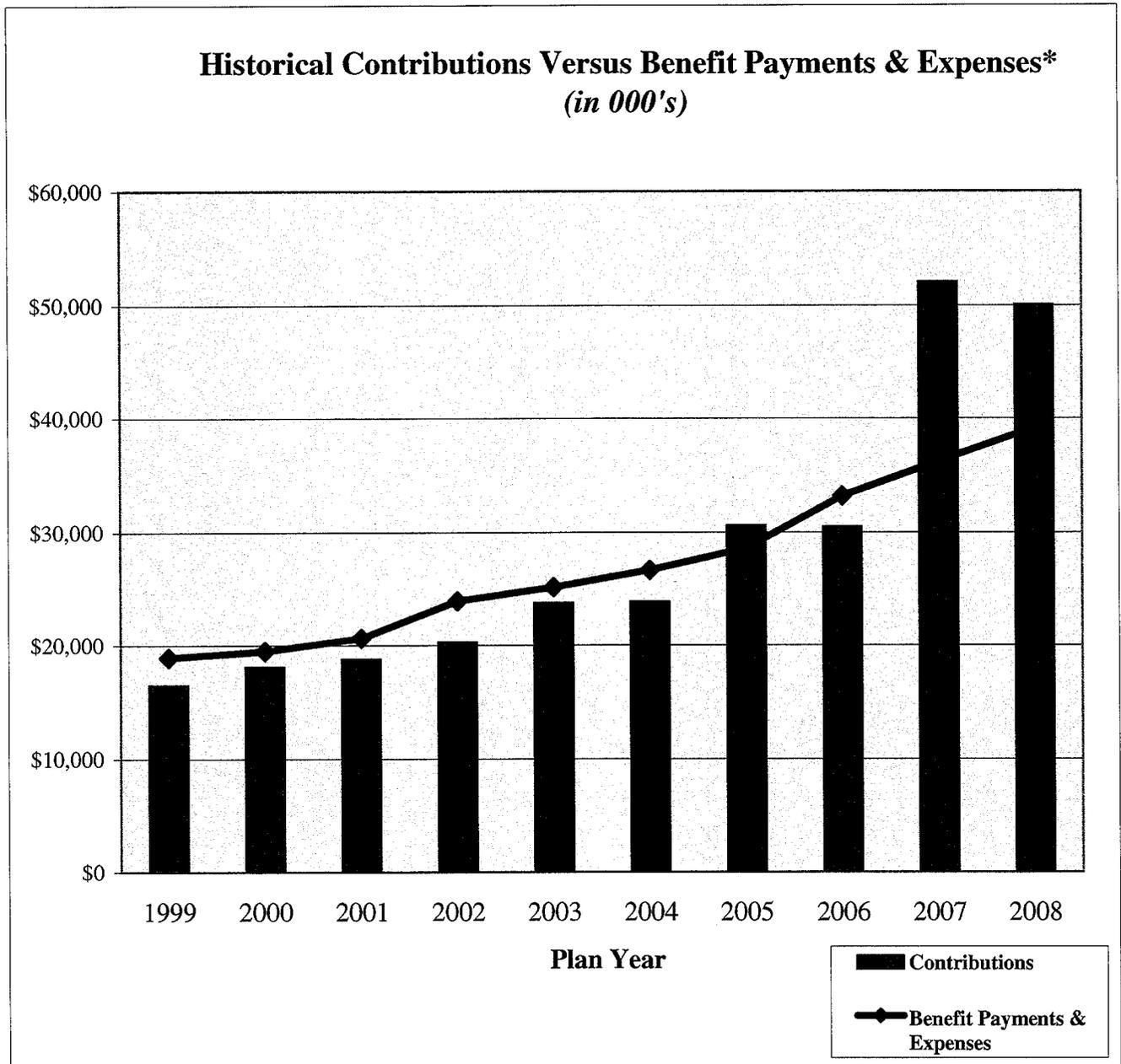
*The percentages in parentheses indicate the proportion of assets committed to each type of investment as of January 1, 2009.*

*Audited asset information was not available for the 2006 and 2007 plan years.*



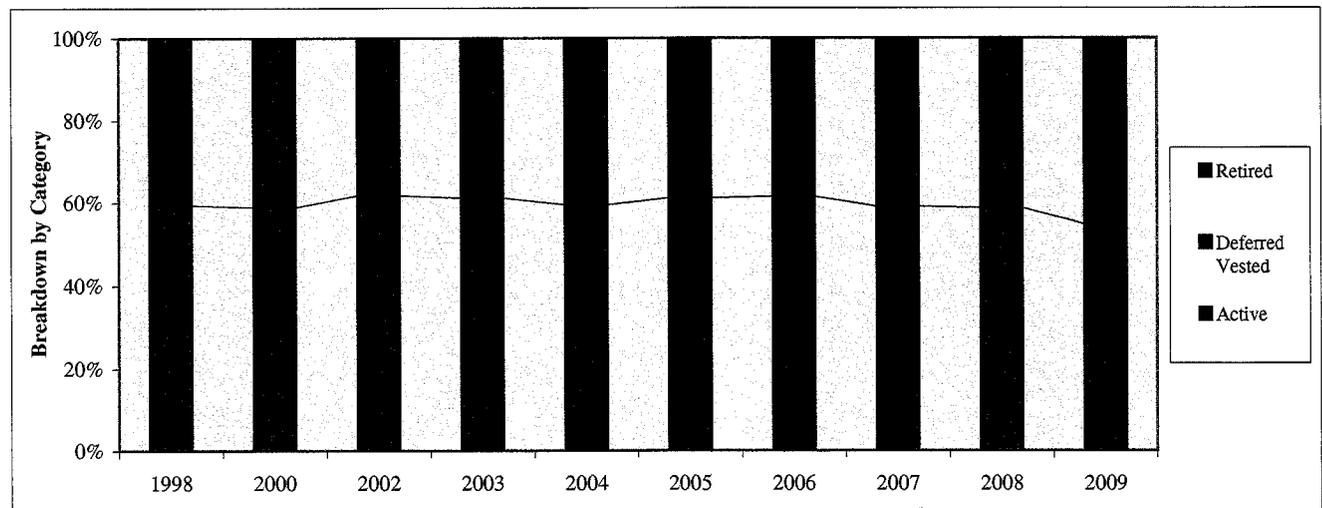
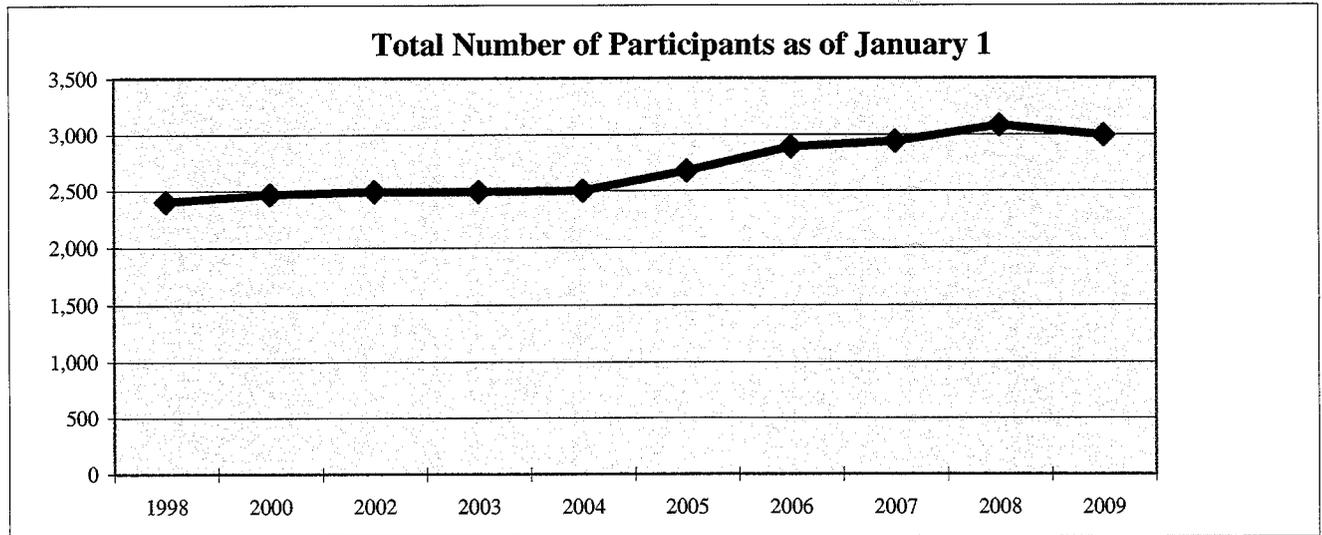
Plan Year	Market	Actuarial				Market	Actuarial
	Value as of January 1	Value as of January 1	Benefit Payments	Expenses	Contributions	Value Yield	Value Yield
1999	\$370,953		\$18,555	\$359	\$16,471	8.49%	
2000	\$399,889	\$384,083	\$18,986	\$496	\$18,108	3.78%	8.51%
2001	\$413,593		\$20,020	\$611	\$18,750	-2.15%	8.51%
2002	\$402,836	\$448,676	\$22,163	\$1,769	\$20,279	-6.42%	-1.73%
2003	\$373,446	\$437,282	\$24,838	\$324	\$23,755	19.56%	0.99%
2004	\$444,943	\$440,212	\$26,453	\$223	\$23,875	11.01%	1.61%
2005	\$490,982	\$444,460	\$28,247	\$360	\$30,576	6.08%	4.03%
2006	\$522,868	\$464,368	\$32,874	\$314	\$30,494	11.34%	10.92%
2007	\$579,340	\$512,259	\$35,663	\$514	\$52,056	3.13%	13.13%
2008	\$613,615	\$596,457	\$38,531	\$608	\$50,066	-17.48%	-5.92%
2009	\$516,309	\$571,768					

\* all dollar amounts are shown in 000's  
 Audited asset information was not available for the 2006 and 2007 plan years.

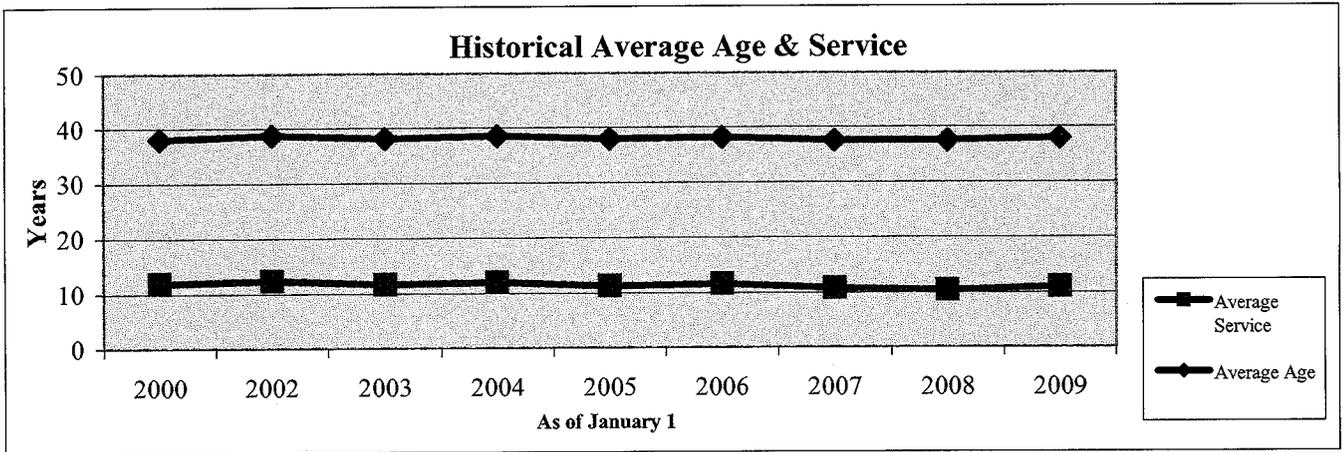


\* Please reference Table VII on page 11 for the historical benefit payments, expenses, and contributions.

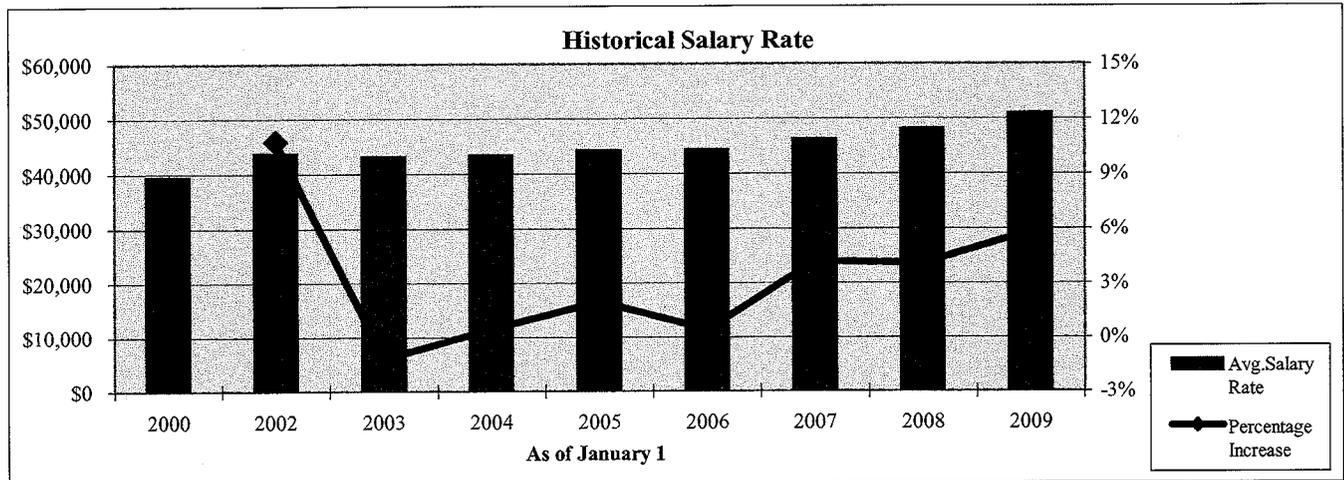
*Audited asset information was not available for the 2006 and 2007 plan years.*



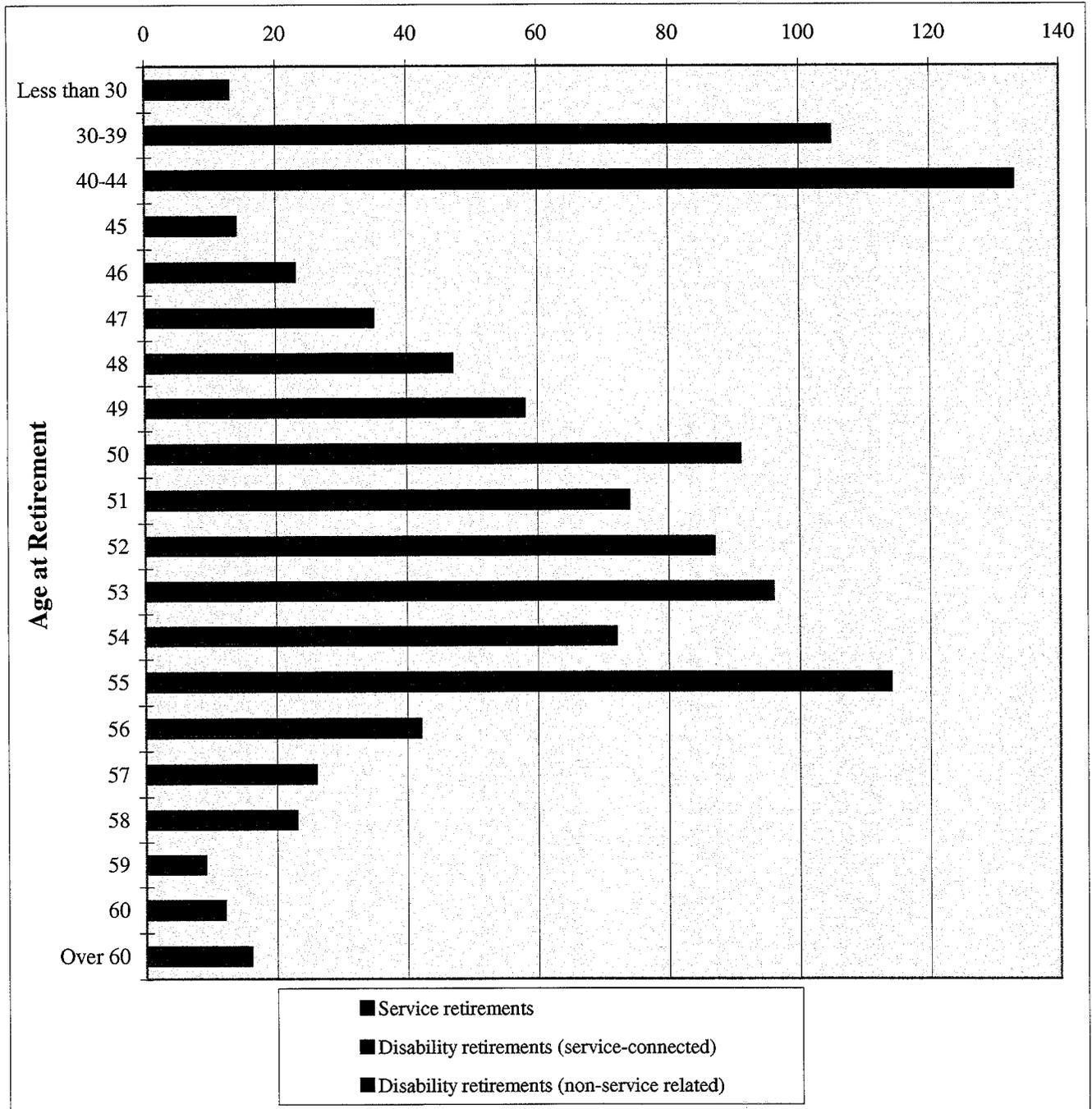
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<b>4. Total Participants</b>	<b>3,083</b>	<b>2,994</b>



Date	Average Service Earned	Average Attained Age	Date	Average Service Earned	Average Attained Age
1/1/2000	11.9	38.0	1/1/2006	11.6	38.1
1/1/2002	12.4	38.7	1/1/2007	10.8	37.5
1/1/2003	11.7	38.1	1/1/2008	10.4	37.5
1/1/2004	12.0	38.5	1/1/2009	11.0	37.9
1/1/2005	11.3	37.9			



Date	Average Salary Rate	Increase from Prior Year	Date	Average Salary Rate	Increase from Prior Year
1/1/2000	\$39,478	-	1/1/2006	\$44,442	0.42%
1/1/2002	\$43,729	10.77%	1/1/2007	\$46,305	4.19%
1/1/2003	\$43,203	-1.20%	1/1/2008	\$48,199	4.09%
1/1/2004	\$43,394	0.44%	1/1/2009	\$51,008	5.83%
1/1/2005	\$44,256	1.99%			



**Note:** Results are based on retiree data as of January 1, 2009.

Average benefit being paid to members on service retirement is \$2,887.15 per month.

Average benefit being paid to members on disability retirement is \$2,418.69 per month.

Average benefit being paid to beneficiaries is \$1,285.14 per month.

**AGE-SERVICE-SALARY TABLE**

**TABLE XII**

Attained Age	Completed Years of Service										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up		
<b>Under 25</b>	28	44	0	0	0	0	0	0	0	0	0	72
Avg.Pay	30,054	37,030	0	0	0	0	0	0	0	0	0	34,317
<b>25 to 29</b>	40	195	71	1	0	0	0	0	0	0	0	307
Avg.Pay	30,536	40,214	41,331	42,129	0	0	0	0	0	0	0	39,218
<b>30 to 34</b>	13	114	117	30	0	0	0	0	0	0	0	274
Avg.Pay	33,347	41,716	44,437	49,417	0	0	0	0	0	0	0	43,324
<b>35 to 39</b>	11	66	62	114	50	1	0	0	0	0	0	304
Avg.Pay	31,231	43,025	43,928	55,084	57,584	53,600	0	0	0	0	0	49,734
<b>40 to 44</b>	2	29	31	48	132	65	0	0	0	0	0	307
Avg.Pay	40,745	39,744	43,116	54,843	61,125	69,340	0	0	0	0	0	57,911
<b>45 to 49</b>	5	12	8	14	54	99	40	0	0	0	0	232
Avg.Pay	30,352	40,659	48,422	48,072	61,657	66,171	72,228	0	0	0	0	62,369
<b>50 to 54</b>	0	1	1	10	18	25	63	2	0	0	0	120
Avg.Pay	0	31,199	45,130	55,384	63,741	67,948	71,450	70,691	0	0	0	67,658
<b>55 to 59</b>	0	0	1	2	3	4	7	2	1	0	0	20
Avg.Pay	0	0	140,499	55,885	59,202	68,310	62,059	60,938	107,983	0	0	68,369
<b>60 to 64</b>	0	0	1	0	0	0	0	0	1	0	0	2
Avg.Pay	0	0	200,983	0	0	0	0	0	78,219	0	0	139,601
<b>65 to 69</b>	0	0	0	0	0	1	0	0	0	0	0	1
Avg.Pay	0	0	0	0	0	88,371	0	0	0	0	0	88,371
<b>70 &amp; up</b>	0	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	99	461	292	219	257	195	110	4	2	0	0	1,639
Avg.Pay	31,043	40,646	44,410	53,768	60,709	67,548	71,135	65,815	93,101	0	0	51,008

1. Actuarial Cost Method

Individual entry age normal cost method

2. Decrements

- **Mortality**

Sex-distinct mortality rates set forth in the RP-2000 Mortality Table for annuitants and non-annuitants

- **Disability**

50% of the sex-distinct disability rates derived from the 1974 study of disability experience under the Social Security system; 75% of disabilities are assumed to be service-connected. A sample of disability rates is set forth in the following tables:

Male Rates

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	0.0600%	30	0.095%	40	0.198%	50	0.522%
25	0.0745%	35	0.132%	45	0.308%	55	0.909%

Female Rates

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	0.0300%	30	0.077%	40	0.191%	50	0.457%
25	0.0445%	35	0.131%	45	0.290%	55	0.766%

- **Permanent Withdrawal from Active Status**

Withdrawal rates were derived from a study of actual plan experience covering the period 1982 through 1986. A sample of withdrawal rates is set forth in the following table:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	15.0%	30	7.8%	40	2.30%	50	0.956%
25	11.4%	35	4.9%	45	1.35%	55	0.000%

- **Retirement**

Retirement is assumed to occur in accordance with the rates set forth in the following table, except that 100% retirement is assumed to occur upon the attainment of 30 years of service:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
45	2%	49	2%	53	10%	57	20%
46	2%	50	2%	54	15%	58	20%
47	2%	51	5%	55	50%	59	20%
48	2%	52	5%	56	50%	60	100%

**3. Interest Rate**

- **Used for Calculating All Liabilities (including GASB 25/27 liabilities)**

7.75% per annum

**4. Cost-of-Living Adjustment for Retirement Benefits**

For purposes of determining the annual cost-of-living adjustment for retirees, the Consumer Price Index is assumed to increase at the rate of 3.00% per year.

**5. Salary Increases**

Individual salaries have been assumed to increase at the rate of 4.00% compounded annually.

**6. Unused Vacation**

All participants are assumed to have accumulated 30 days of unused vacation upon termination employment, retirement, or death.

**7. Payroll Increase and Amortization Period**

Total payroll has been assumed to grow at the rate of 4.00% per year for purposes of amortizing the unfunded actuarial accrued liability as a level percentage of payroll; the amortization period is established by City ordinance as a rolling 30-year period beginning July 1, 2009.

**8. Surviving Beneficiaries**

Those active participants who are making the additional 1% employee contribution to provide a survivor benefit to their eligible beneficiaries are assumed to have only one surviving beneficiary of the opposite sex of the employee. Males are assumed to be three years older than females for this purpose.

**9. Expenses**

All costs and liabilities have been loaded by 1.00% to cover anticipated administrative expenses. In addition, the interest rate set forth in item 3. above is assumed to be net of investment expenses and commissions.

**10. Assets**

The actuarial value of assets is equal to the market value of assets adjusted to reflect a five-year phase-in of the net investment appreciation (or depreciation).

**1. Monthly Accrued Benefit**

3% of Average Monthly Earnings multiplied by up to 26.667 years of Creditable Service

**2. Normal Retirement Age and Benefit**

- **Age**

Any age with at least 30 years of Creditable Service (*only for participants covered by the '05 Amendment*); or

Age 55 with at least 10 years of Creditable Service; or

Age 65 with at least 5 years of Creditable Service

- **Amount**

Monthly Accrued Benefit

- **Form of Payment**

Life annuity (*for those participants without an eligible beneficiary*); or

75% joint and contingent annuity (*for those participants with an eligible beneficiary; benefits continue in equal shares to the participant's dependent children upon the death of the participant's spouse or domestic partner or, for participants not covered by the '86 Amendment, upon the remarriage of the participant's spouse or domestic partner*)

Note: All annuity forms of payment include an automatic cost-of-living adjustment effective each January 1 based on the increase in the Consumer Price Index as of the preceding November 1 and limited to 3%. All annuity forms of payment also provide a minimum payout equal to the employee's accumulated contributions, with interest credited after 1985 at the rate of 5% per year (or less than 5% with respect to any year during which the trust fund earns less than 5% on its investments).

**3. Early Retirement Age and Benefit**

- **Age**

Any age with at least 10 years of Creditable Service

- **Amount**

Monthly Accrued Benefit (*payable at age 55*); or

Monthly Accrued Benefit reduced by ½% for each of the first 60 months and by ¼% for each additional month by which the participant's Early Retirement Age precedes age 55 (*payable at Early Retirement Age*); or

Monthly Accrued Benefit reduced by ¼% for each month by which the participant's Early Retirement Age precedes age 55 (*payable at Early Retirement Age and only applicable if the participant was hired prior to April 1, 1978 and has earned at least 25 years of Creditable Service*)

- **Form of Payment**

Same as for Normal Retirement

**4. Delayed Retirement Age and Benefit**

- **Age**  
After Normal Retirement Age
- **Amount**  
Monthly Accrued Benefit
- **Form of Payment**  
Same as for Normal Retirement

**5. Disability Retirement Eligibility and Benefit**

- **Eligibility**  
All active participants are eligible if the disability is service-connected;  
At least five years of Creditable Service is required otherwise.
- **Condition**  
The participant must become “totally and permanently disabled” and must remain so disabled until age 55. “Totally and permanently disabled” means the participant is in a continuous state of incapacity due to illness or injury, is prevented from performing his regular assigned or comparable duties during the first 12 months of his disability, and is thereafter prevented from engaging in any occupation for which he is or becomes reasonably qualified by education, training, or experience. With respect to participants who are not covered by the ’86 Amendment, the participant must only be prevented from performing his regular assigned or comparable duties during the entire period of his disability.
- **Amount**  
*For participants who incur a catastrophic injury in the line of duty:*  
100% of the top salary for the grade and position occupied by the participant at the time of disability  
*For all other participants who are covered by the ’86 Amendment:*  
Greater of 50% of Average Monthly Earnings at the time of disability or Monthly Accrued Benefit, offset by worker’s compensation payments such that the combination of payments does not exceed 75% of the participant’s salary at the time of disability (*payable until the earlier of recovery from disability or age 55*); and  
Monthly Accrued Benefit based on Average Monthly Earnings at the time of disability and Creditable Service including the period during which the participant was disabled, but excluding any cost-of-living adjustments that were previously applied to the participant’s disability payments (*payable at age 55*)

**Disability Retirement Eligibility and Benefit *(continued)***

*For all other participants with a service-connected disability:*

Greater of 70% of the top salary for the grade and position occupied by the participant at the time of disability or Monthly Accrued Benefit, offset by worker's compensation payments such that the combination of payments does not exceed 100% of the participant's salary at the time of disability

*For all other participants:*

Monthly Accrued Benefit, offset by worker's compensation payments such that the combination of payments does not exceed 100% of the participant's salary at the time of disability

- **Form of Payment**  
Same as for Normal Retirement

**6. Deferred Vested Benefit**

- **Age**  
Any age with at least five years of Creditable Service
- **Amount**  
Monthly Accrued Benefit multiplied by the participant's Vested Percentage and payable at age 60
- **Form of Payment**  
Same as for Normal Retirement

**7. Pre-Retirement Death Benefit**

*For participants who die in the line of duty and who are covered by the '86 Amendment:*

100% of the participant's base salary at the time of his death, offset by worker's compensation or other payments received for line of duty injuries prior to the participant's death *(payable for the first two years after the participant's death)*; and

75% of the Monthly Accrued Benefit *(payable thereafter)*

*For all other participants who die in the line of duty:*

100% of the participant's base salary at the time of his death, offset by worker's compensation or other payments received for line of duty injuries prior to the participant's death *(payable for the first two years after the participant's death)*; and

75% of the greater of: (a) the Monthly Accrued Benefit, or (b) 70% of the top salary for the grade and position occupied by the participant at his death *(payable thereafter)*

*For all other participants:*

75% of the Monthly Accrued Benefit

**8. Vested Percentage**

Retirement benefits become vested in accordance with the following schedule:

Years of Creditable Service	Vested Percentage
Less than five	0%
At least five, but less than six	25%
At least six, but less than seven	30%
At least seven, but less than eight	35%
At least eight, but less than nine	40%
At least nine, but less than 10	45%
At least 10	100%

**9. Average Monthly Earnings**

The participant's Average Monthly Earnings is equal to: (a) the average of the participant's Base Salary for the highest 36 consecutive months during his period of Creditable Service; plus (b) the difference between the highest and lowest daily rate of pay during such 36-month period multiplied by the days of unused sick leave and divided by 36; plus (c) a credit based on accumulated unused vacation.

**10. Base Salary**

The employee's basic salary excluding overtime pay and other special compensation; pursuant to IRC section 401(a)(17), total annual plan compensation is limited to \$200,000 as indexed.

**11. Employee Contribution**

All participating employees must make the required pre-tax contribution to the plan. The required contribution is 8% of basic salary for those participants who have an eligible beneficiary for death benefits and 7% of basic salary for all other participants. An eligible beneficiary is the participant's legal spouse, registered domestic partner, or unmarried child under the age of 18 (or under age 23 if a full-time student). The participant must have been married or registered to his legal spouse or domestic partner for at least one year prior to his death in order for such individual to be an eligible beneficiary. *(During the period March, 1994 through July 8, 2009, the required contribution was 1% lower for all participants; prior to March, 1994, the contribution was made on an after-tax basis.)*

**12. Creditable Service**

Creditable Service includes “base creditable service” and an “unused sick leave service credit,” plus military service as required by federal law. Base creditable service is granted for all periods of full-time employment as a police officer with the City of Atlanta provided that the employee has made the required contribution for such period of service. An unused sick leave service credit is granted by dividing the participant’s days of unused sick leave by the number of work days set forth in the following chart:

Years of Base Creditable Service	Work Days
Less than five	239
At least five, but less than 10	236
At least 10, but less than 15	233
At least 15, but less than 20	230
At least 20	226

Creditable Service also includes other service with the City of Atlanta if the relevant contributions are transferred into this plan and may include prior service with the State of Georgia, Fulton County, Dekalb County, or as a teacher in a public school system or private college or university within the State of Georgia if the required contribution is made to the plan.

**13. Participation Requirement**

All full-time police officers employed by the City of Atlanta are eligible to participate in the plan.

**14. Plan Effective Date**

April 1, 1978