

**CITY OF ATLANTA  
POLICE OFFICERS' PENSION FUND**

**ACTUARIAL VALUATION  
AS OF JANUARY 1, 2010**

**DETERMINES THE CONTRIBUTION  
FOR THE 2010/11 FISCAL YEAR**



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October 4, 2010

## Introduction

This report presents the results of the January 1, 2010 actuarial valuation of the City of Atlanta Police Officers' Pension Fund. This valuation is based upon the participant data provided as of January 1, 2010 by the plan administrator and asset information provided as of December 31, 2009 by the plan auditor. Except for a cursory review for reasonableness, we have not attempted to verify the accuracy of this information.

The primary purpose of this report is to provide a summary of the funded status of the plan as of January 1, 2010 and to determine the minimum required contribution under Georgia Code Section 47-20-10 for the City's 2010/11 fiscal year. In addition, this report provides a projection of the long-term funding requirements of the plan, accounting disclosures pursuant to Governmental Accounting Standards Board Statement Nos. 25 and 27 (GASB 25/27), statistical information concerning the assets held in the trust, statistical information concerning the participant population, and a summary of any recent plan changes.

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an *estimate* of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table V-A. If any of the assumptions is changed, then the cost shown in this report will change accordingly. Likewise, if any of the assumptions is not completely realized, then the cost shown in this report will change in the future.

Certain of the assumptions play a bigger role than others in determining the cost of the post-employment pension benefits. In some cases, relatively small changes in a particular assumption can have a dramatic impact on the anticipated cost of benefits. Although a thorough analysis of the impact of such changes is beyond the scope of this report, Table I-B illustrates the impact that alternative long-term investment returns would have on the minimum required contribution rate.

## Minimum Required Contribution

Table I-A shows the development of the minimum required contribution for the City's 2010/11 fiscal year. The minimum required contribution rate is 48.89% of covered payroll, which represents an increase of 1.56% of payroll from the prior valuation.

Table I-C provides a breakdown of the sources of change in the contribution rate. Significantly, the rate increased by 3.00% of payroll due to investment losses, decreased by 0.61% of payroll due to demographic experience, and decreased by 0.83% due to the net effect of three changes in the assumptions used to determine plan liabilities. The



assumption changes are discussed in more detail below. Although the market value of assets earned 18.40% during the 2009 plan year, the actuarial value of assets earned only 3.02% during the same period because the actuarial value reflects a portion of the accumulated gains and losses that have occurred during the past five years. Since a 7.75% annual investment return on the actuarial value of assets is required to maintain a stable contribution rate, the contribution rate increased due to the shortfall in investment earnings on the actuarial value of assets.

Georgia Code Section 47-20-10 sets forth many of the rules concerning the minimum required contribution for public pension plans within the state. Essentially, the City will meet the minimum funding requirement if the employer contributions are at least equal to the annual required contribution under GASB 25/27. In addition, Georgia Code Section 47-20-13 exempts public plan sponsors from the minimum funding requirements if the plan's actuarial value of assets exceeds 150% of the present value of accumulated retirement system benefits.

Based on the current assets, participant data, and actuarial assumptions and methods that are used to value the plan, the present-day value of the total long-term funding requirement is \$1,150,584,852. As illustrated in Table I-A, current assets are sufficient to cover \$591,980,609 of this amount, the employer's expected contribution for the period January 1, 2010 through June 30, 2010 will cover \$18,581,638 of this amount, the employer's 2010/11 expected contribution will cover \$39,144,951 of this amount, and future employee contributions will cover \$46,144,331 of this amount, leaving \$454,733,323 to be covered by future employer funding. Again, demographic and investment experience that differs from that assumed will either increase or decrease the future employer funding requirement.

### Contents of the Report

Tables I-D through I-G provide a detailed breakdown of various liability amounts by type of benefit and by participant group. Tables II-A through II-C provide information needed by both the plan's and the employer's accountants in order to prepare the relevant financial statements that cover the period July 1, 2010 through June 30, 2011. Tables III-A through III-F provide information concerning the assets of the trust fund. Specifically, Table III-A shows the development of the actuarial value of assets, which is based on the five-year phase-in of the net investment appreciation in order to provide a more stable and predictable contribution rate for the employer. Tables IV-A through IV-F provide statistical information concerning the plan's participant population. In particular, Table IV-F gives a 10-year projection of the cash that is expected to be required from the trust fund in order to pay benefits to the current group of participants. Finally, Tables V-A through VI-B provide a summary of the actuarial assumptions and methods that are used to value the plan's benefits and of the relevant plan provisions as of January 1, 2010, as well as a summary of the changes that have occurred since the previous valuation report was prepared.

### Assumption and Changes

Since the previous valuation report was prepared, three assumptions have been changed. First, the assumed retirement age was changed from a range of rates at ages 45 to 60 to normal retirement age. Second, the assumed disability rates were changed from rates based on the 1974 Social Security disability study to the sex-distinct rates set forth in the Wyatt 1985 Disability Study (Class 4). Finally, the assumed administrative expenses were changed from a



1.00% loading of all costs and liabilities to 1.00% of future payroll. The assumption changes decreased the minimum required contribution by 0.83% of payroll.

## Certification

This actuarial valuation was prepared by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate and, in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Georgia Code Section 47-20-10. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material change in plan costs or required contribution rates have been taken into account in the valuation.

For the firm,



Charles T. Carr  
Consulting Actuary  
Southern Actuarial Services Company, Inc.

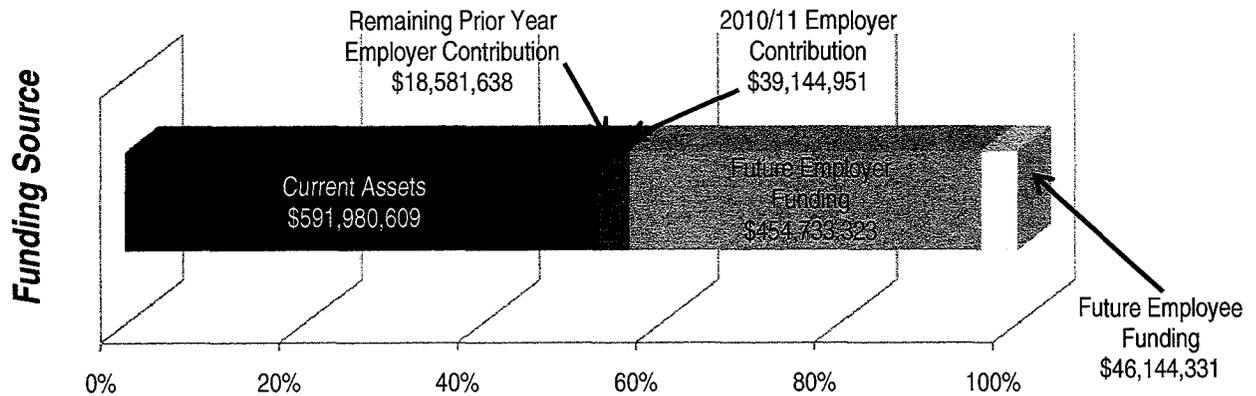
Enrolled Actuary No. 08-04927

*The individual above is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.*



## Minimum Required Contribution

Table I-A



### For the 2010/11 Fiscal Year

Entry Age Normal Cost for the 2010 Plan Year	\$21,543,500
Unfunded Liability Amortization Payment for the 2010 Plan Year	\$21,197,304
Expense Allowance for the 2010 Plan Year	\$785,195
Expected Employee Contribution for the 2010 Plan Year	(\$5,936,074)
Adjustment to Reflect Semi-Monthly Employer Contributions	\$1,481,101
	\$39,071,026
Contribution Requirement for the First Half of the Plan Year	\$19,535,513
Expected Employer Contribution for the First Half of the Plan Year	(\$18,581,638)
Remaining Contribution Due/(Credit) for the First Half of the Plan Year	\$953,875
	x 0.0775
One Year's Interest Charge/(Credit) on the Remaining Contribution	\$73,925
Preliminary Employer Contribution for the 2010/11 Fiscal Year	\$39,144,951
Expected Payroll for the 2010/11 Fiscal Year	÷ \$80,074,487

**Minimum Required Contribution Rate** **48.89%**

*(The actual contribution should be based on the minimum required contribution rate multiplied by the actual payroll for the fiscal year.)*

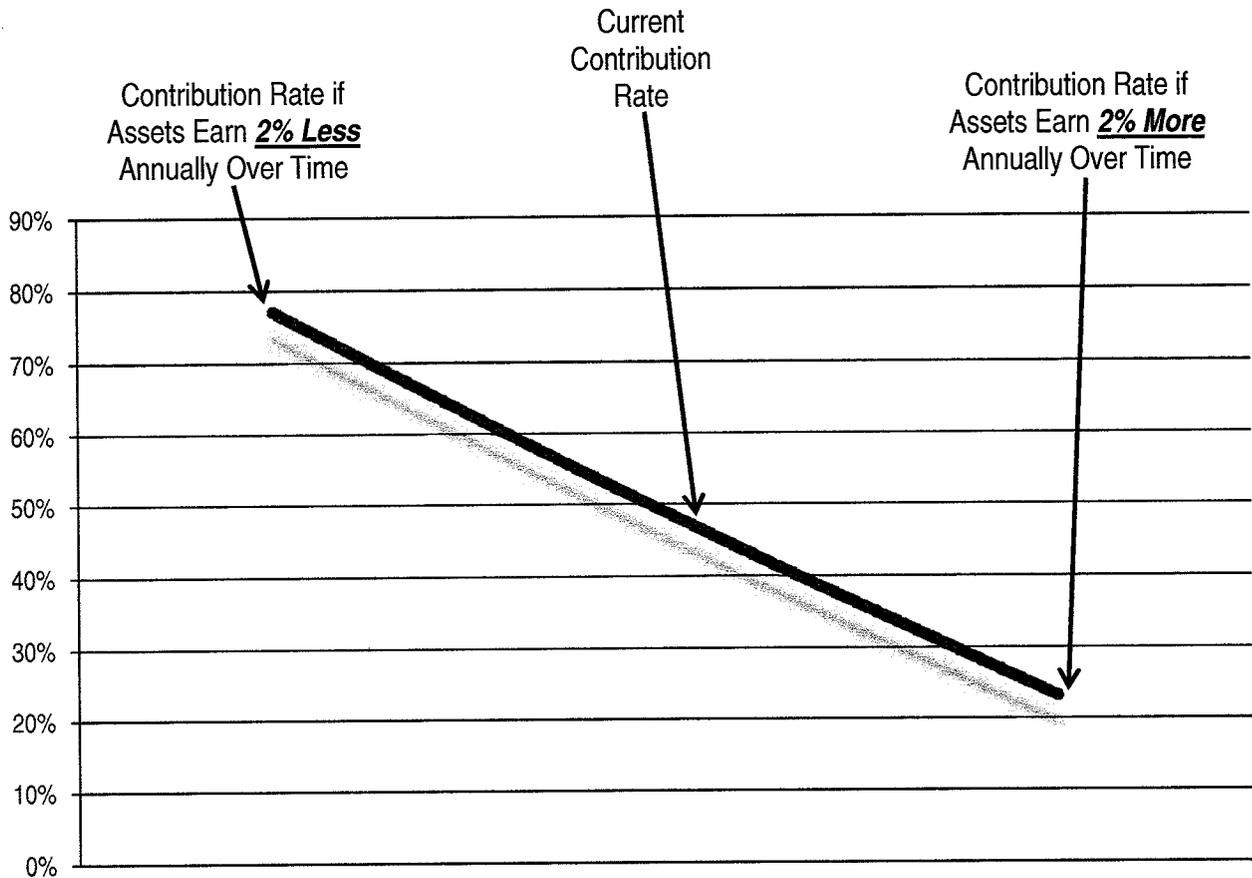
### Additional Disclosures

Present Value of Future Compensation	\$609,149,121
Present Value of Future Employer Contributions	\$512,459,912
Present Value of Future Employee Contributions	\$46,144,331



## Sensitivity Analysis

Table I-B



*The line above illustrates the sensitivity of the contribution rate to changes in the long-term investment return.*



## Gain and Loss Analysis

Table I-C

### Source of Change in the Contribution Rate

Previous minimum required contribution rate	47.33%
Increase (decrease) due to investment gains and losses	3.00% *
Increase (decrease) due to demographic experience	-0.61%
Increase (decrease) due to plan amendments	0.00%
Increase (decrease) due to actuarial assumption changes	-0.83%
Increase (decrease) due to actuarial method changes	0.00%
Current minimum required contribution rate	48.89%

### Source of Change in the Unfunded Liability

Previous unfunded liability	\$414,608,000
Increase due to interest	\$32,132,120
Decrease due to amortization payments	(\$22,047,525)
Increase (decrease) due to plan experience	(\$12,985,325)
Increase (decrease) due to plan amendments	\$0
Increase (decrease) due to actuarial assumption changes	(\$13,087,843)
Increase (decrease) due to actuarial method changes	\$0
Current unfunded liability	\$398,619,427

\* Note: Although the investment return on the market value of assets was 18.40%, the actuarial value of assets only earned 3.02% based on the five-year phase-in of the prior investment losses, which increased the required contribution rate.



## Present Value of Future Benefits

Table I-D

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$541,237,390	\$541,237,390	\$493,690,897
Termination benefits	\$2,550,349	\$2,550,349	\$20,908,370
Disability benefits	\$17,369,024	\$17,369,024	\$24,274,185
Death benefits	\$6,707,418	\$6,707,418	\$6,696,375
Refund of employee contributions	\$714,037	\$714,037	\$710,782
Sub-total	<b>\$568,578,218</b>	<b>\$568,578,218</b>	<b>\$546,280,609</b>
 <i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$1,303,648	\$1,303,648	\$1,303,648
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$1,303,648</b>	<b>\$1,303,648</b>	<b>\$1,303,648</b>
<i><u>Due a Refund of Contributions</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Deferred Beneficiaries</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
 <i><u>Retired Participants</u></i>			
Service retirements	\$510,107,361	\$510,107,361	\$505,006,287
Disability retirements	\$49,479,083	\$49,479,083	\$48,984,292
Beneficiaries receiving	\$43,352,045	\$43,352,045	\$42,918,525
DROPP participants	\$0	\$0	\$0
Sub-total	<b>\$602,938,489</b>	<b>\$602,938,489</b>	<b>\$596,909,104</b>
<i><u>Grand Total</u></i>	<b><u>\$1,172,820,355</u></b>	<b><u>\$1,172,820,355</u></b>	<b><u>\$1,144,493,361</u></b>



## Present Value of Accrued Benefits

Table I-E

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$287,094,848	\$287,094,848	\$272,540,411
Termination benefits	\$1,416,699	\$1,416,699	\$11,599,533
Disability benefits	\$12,331,972	\$12,331,972	\$17,875,246
Death benefits	\$4,136,605	\$4,136,605	\$4,366,095
Refund of employee contributions	\$442,553	\$442,553	\$440,791
Sub-total	<b>\$305,422,677</b>	<b>\$305,422,677</b>	<b>\$306,822,076</b>
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$1,303,648	\$1,303,648	\$1,303,648
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$1,303,648</b>	<b>\$1,303,648</b>	<b>\$1,303,648</b>
<i><u>Due a Refund of Contributions</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Deferred Beneficiaries</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Retired Participants</u></i>			
Service retirements	\$510,107,361	\$510,107,361	\$505,006,287
Disability retirements	\$49,479,083	\$49,479,083	\$48,984,292
Beneficiaries receiving	\$43,352,045	\$43,352,045	\$42,918,525
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$602,938,489</b>	<b>\$602,938,489</b>	<b>\$596,909,104</b>
<i><u>Grand Total</u></i>	<b><u>\$909,664,814</u></b>	<b><u>\$909,664,814</u></b>	<b><u>\$905,034,828</u></b>



## Present Value of Vested Benefits

## Table I-F

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$260,748,633	\$260,748,633	\$248,620,000
Termination benefits	\$1,002,875	\$1,002,875	\$10,668,056
Disability benefits	\$12,331,972	\$12,331,972	\$17,875,246
Death benefits	\$4,081,439	\$4,081,439	\$4,320,910
Refund of employee contributions	\$855,425	\$855,425	\$1,081,140
Sub-total	<b>\$279,020,344</b>	<b>\$279,020,344</b>	<b>\$282,565,352</b>
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$1,303,648	\$1,303,648	\$1,303,648
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$1,303,648</b>	<b>\$1,303,648</b>	<b>\$1,303,648</b>
<i><u>Due a Refund of Contributions</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Deferred Beneficiaries</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Retired Participants</u></i>			
Service retirements	\$510,107,361	\$510,107,361	\$505,006,287
Disability retirements	\$49,479,083	\$49,479,083	\$48,984,292
Beneficiaries receiving	\$43,352,045	\$43,352,045	\$42,918,525
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$602,938,489</b>	<b>\$602,938,489</b>	<b>\$596,909,104</b>
<i><u>Grand Total</u></i>	<b><u>\$883,262,481</u></b>	<b><u>\$883,262,481</u></b>	<b><u>\$880,778,104</u></b>



## Entry Age Normal Accrued Liability

Table I-G

	<u>Old Assumptions w/o Amendment</u>	<u>Old Assumptions w/ Amendment</u>	<u>New Assumptions w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$380,703,852	\$380,703,852	\$355,179,677
Termination benefits	\$1,587,740	\$1,587,740	\$14,713,754
Disability benefits	\$11,854,442	\$11,854,442	\$17,061,149
Death benefits	\$4,837,842	\$4,837,842	\$4,972,477
Refund of employee contributions	\$461,866	\$461,866	\$460,227
Sub-total	<b>\$399,445,742</b>	<b>\$399,445,742</b>	<b>\$392,387,284</b>
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$1,303,648	\$1,303,648	\$1,303,648
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$1,303,648</b>	<b>\$1,303,648</b>	<b>\$1,303,648</b>
<i><u>Due a Refund of Contributions</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Deferred Beneficiaries</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Retired Participants</u></i>			
Service retirements	\$510,107,361	\$510,107,361	\$505,006,287
Disability retirements	\$49,479,083	\$49,479,083	\$48,984,292
Beneficiaries receiving	\$43,352,045	\$43,352,045	\$42,918,525
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$602,938,489</b>	<b>\$602,938,489</b>	<b>\$596,909,104</b>
<i><u>Grand Total</u></i>	<b><u>\$1,003,687,879</u></b>	<b><u>\$1,003,687,879</u></b>	<b><u>\$990,600,036</u></b>
<i>less Actuarial Value of Assets</i>	(\$591,980,609)	(\$591,980,609)	(\$591,980,609)
<i><u>Unfunded Accrued Liability</u></i>	<b><u>\$411,707,270</u></b>	<b><u>\$411,707,270</u></b>	<b><u>\$398,619,427</u></b>



## Entry Age Normal Cost

## Table I-H

	Old Assumptions <u>w/o Amendment</u>	Old Assumptions <u>w/ Amendment</u>	New Assumptions <u>w/ Amendment</u>
<i><u>Actively Employed Participants</u></i>			
Retirement benefits	\$20,322,927	\$20,322,927	\$18,287,949
Termination benefits	\$304,585	\$304,585	\$1,208,285
Disability benefits	\$1,069,323	\$1,069,323	\$1,587,195
Death benefits	\$300,472	\$300,472	\$310,290
Refund of employee contributions	\$150,634	\$150,634	\$149,781
Sub-total	<b>\$22,147,941</b>	<b>\$22,147,941</b>	<b>\$21,543,500</b>
<i><u>Deferred Vested Participants</u></i>			
Retirement benefits	\$0	\$0	\$0
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Due a Refund of Contributions</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Deferred Beneficiaries</u></i>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Retired Participants</u></i>			
Service retirements	\$0	\$0	\$0
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<i><u>Grand Total</u></i>	<b><u>\$22,147,941</u></b>	<b><u>\$22,147,941</u></b>	<b><u>\$21,543,500</u></b>



## GASB 25/27 Results

## Table II-A

### Development of the Net Pension Obligation (Asset)

Net Pension Obligation (Asset) as of July 1, 2009		\$0
Annual Pension Cost for the 2009/10 Plan Year		\$41,213,384
Employer Contributions for the 2009/10 Plan Year		(\$41,213,384)
Net Increase (Decrease) in NPO		\$0
<b>Net Pension Obligation (Asset) as of July 1, 2010</b>		<b>\$0</b>

### For the 2010/11 Plan Year

### Development of the Annual Required Contribution (ARC)

Employer Normal Cost		\$15,607,426
Amortization of the UAAL		\$21,197,304
Expense Allowance		\$785,195
Amortization of the Net Pension Obligation (Asset)		\$0
Interest Adjustment		\$1,555,026
<b>Annual Required Contribution (ARC)</b>		<b>\$39,144,951</b>

### Development of the Annual Pension Cost (APC)

Annual Required Contribution (ARC)		\$39,144,951
Interest on the Net Pension Obligation (Asset)		\$0
Adjustment to the ARC		\$0
<b>Annual Pension Cost (APC)</b>		<b>\$39,144,951</b>



### ***Schedule of Employer Contributions***

Year Ended <u>December 31</u>	Annual Required <u>Contribution</u>	% <u>Contrib.</u>	Annual Pension <u>Cost</u>	% <u>Contrib.</u>
2004	N/A	N/A	N/A	N/A
2005	\$15,687,000	100%	\$15,687,000	100%
2006	\$45,229,000	100%	\$45,229,000	100%
2007	\$44,058,000	100%	\$44,058,000	100%
2008	\$44,810,000	100%	\$44,810,000	100%
2009	\$41,213,384	100%	\$41,213,384	100%

### ***Schedule of Funding Progress***

Actuarial Valuation Date	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL)	(3) Unfunded AAL (UAAL)  (2) - (1)	(4) Funded Ratio  (1) ÷ (2)	(5) Covered Payroll	(6) UAAL as % of Covered Payroll  (3) ÷ (5)
January 1, 2005	N/A	\$658,861,000	N/A	N/A	\$70,973,000	N/A
January 1, 2006	N/A	\$817,255,000	N/A	N/A	\$73,515,000	N/A
January 1, 2007	N/A	\$850,886,000	N/A	N/A	\$77,168,000	N/A
January 1, 2008	\$596,457,000	\$909,410,000	\$312,953,000	65.59%	\$84,016,000	372.49%
January 1, 2009	\$571,768,000	\$986,376,000	\$414,608,000	57.97%	\$82,030,000	505.43%
January 1, 2010	\$591,980,609	\$990,600,036	\$398,619,427	59.76%	\$78,519,495	507.67%

### **Additional Information**

Valuation Date **January 1, 2010**

Actuarial Cost Method **Entry age normal**

Amortization Method **Level percentage, open**

Remaining Amortization Period **30 years**

Asset Valuation Method **Five-year smoothed market**

Discount Rate **7.75%**

Salary Increase Rate **4.00%**



### Actuarial Present Value of Accrued Benefits

	<u>As of January 1, 2009</u>	<u>As of January 1, 2010</u>
<i><u>Vested Benefits</u></i>		
Participants currently receiving benefits	\$587,805,000	\$596,909,104
Other participants	\$272,012,000	\$283,869,000
Sub-total	\$859,817,000	\$880,778,104
 <i><u>Non-Vested Benefits</u></i>	 \$26,222,000	 \$24,256,724
<i><u>Total Benefits</u></i>	<b>\$886,039,000</b>	<b>\$905,034,828</b>
 <i><u>Funded Percentage</u></i>	 58.27%	 67.90%
(based on the market value of assets)		

### Statement of Change in Actuarial Present Value of Accrued Benefits

<u>Actuarial Present Value as of January 1, 2009</u>	\$886,039,000
 <i><u>Increase (Decrease) Due To:</u></i>	
Interest	\$68,668,022
Benefits accumulated	(\$1,017,997)
Benefits paid	(\$44,024,211)
Plan amendments	\$0
Changes in actuarial methods and assumptions	(\$4,629,986)
Net increase (decrease)	\$18,995,828
 <u>Actuarial Present Value as of January 1, 2010</u>	<b>\$905,034,828</b>



Actuarial Value of Assets

Table III-A

	<u>Net Investment Gain (Loss)</u>		<u>Unrecognized Gain (Loss)</u>
For the 2006 plan year	\$31,854,000	x 20%	\$6,370,800
For the 2007 plan year	(\$23,715,000)	x 40%	(\$9,486,000)
For the 2008 plan year	(\$73,068,655)	x 60%	(\$43,841,193)
For the 2009 plan year	\$86,832,237	x 80%	\$69,465,790
			<u>\$22,509,397</u>

Market Value of Assets as of January 1, 2010 \$614,490,006

Minus advance employer contributions \$0

Adjustment for unrecognized gain or loss as shown above,  
but restricted to an amount that keeps the actuarial value  
of assets within an 80%-120% corridor of the market value (\$22,509,397)

**Actuarial Value of Assets as of January 1, 2010 \$591,980,609**

<u>Historical Actuarial Value of Assets</u>	
January 1, 2001	N/A
January 1, 2002	N/A
January 1, 2003	N/A
January 1, 2004	N/A
January 1, 2005	N/A
January 1, 2006	N/A
January 1, 2007	N/A
January 1, 2008	\$596,457,000
January 1, 2009	\$571,768,000
January 1, 2010	\$591,980,609

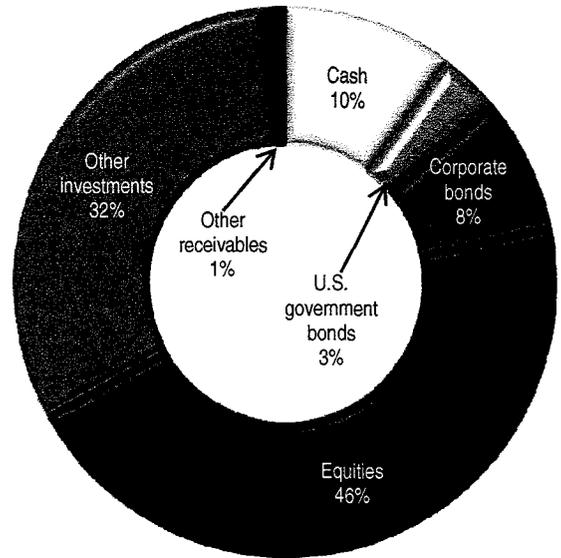


Market Value of Assets

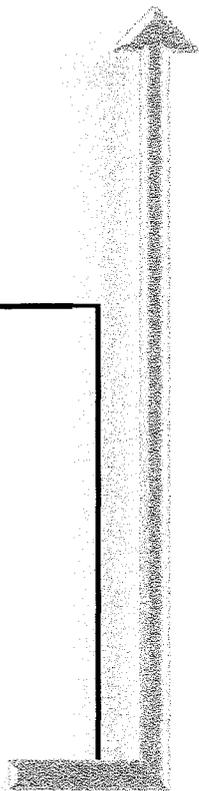
Table III-B

As of January 1, 2010

<b>Market Value of Assets</b>	<b><u>\$614,490,006</u></b>
Cash	\$62,414,969
U.S. government bonds	\$21,494,801
Corporate bonds	\$48,385,237
Equities	\$280,835,246
Other investments	\$194,073,273
Interest receivable	\$1,730,722
Other receivables	\$5,847,182
Due from brokers	\$19,579
Other accounts payable	(\$311,003)

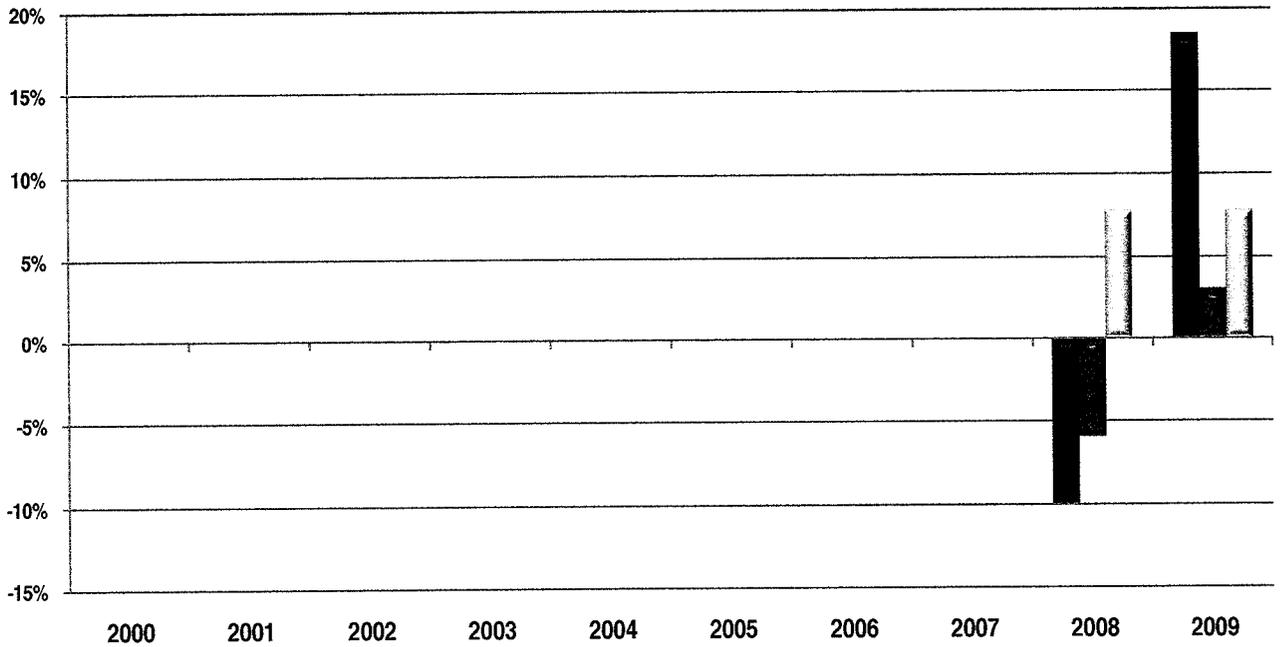


<u>Historical Market Value of Assets</u>		
January 1, 2001		N/A
January 1, 2002		N/A
January 1, 2003		N/A
January 1, 2004		N/A
January 1, 2005		N/A
January 1, 2006		N/A
January 1, 2007		N/A
January 1, 2008	\$561,226,686	
January 1, 2009	\$516,308,590	
January 1, 2010	\$614,490,006	



Investment Return

Table III-C



**Annual Investment Returns**

- Market Value Return
- Actuarial Value Return
- ▨ Assumed Return

Plan Year	Market Value Return	Actuarial Value Return	Assumed Return
2000	N/A	N/A	N/A
2001	N/A	N/A	N/A
2002	N/A	N/A	N/A
2003	N/A	N/A	N/A
2004	N/A	N/A	N/A
2005	N/A	N/A	N/A
2006	N/A	N/A	N/A
2007	N/A	N/A	N/A
2008	-9.85%	-5.92%	7.75%
2009	18.40%	3.02%	7.75%



## Asset Reconciliation

Table III-D

	<u>Market Value</u>	<u>Actuarial Value</u>
As of January 1, 2009	\$516,308,590	\$571,768,000
<i>Increases Due To:</i>		
Employer Contributions	\$41,213,384	\$41,213,384
Employee Contributions	\$7,428,867	\$7,428,867
Total Contributions	<u>\$48,642,251</u>	<u>\$48,642,251</u>
Interest and Dividends	\$10,062,495	
Gains (Losses)	<u>\$86,832,237</u>	
Total Investment Income	\$96,894,732	\$17,286,811
Other Income	\$412,899	
<b>Total Income</b>	<u><b>\$145,949,882</b></u>	<u><b>\$65,929,062</b></u>
<i>Decreases Due To:</i>		
Benefit Payments	(\$44,024,211)	(\$44,024,211)
Total Benefit Payments	<u>(\$44,024,211)</u>	<u>(\$44,024,211)</u>
Investment Expenses	(\$2,052,013)	
Administrative Expenses	(\$1,692,242)	(\$1,692,242)
Advance Employer Contribution		\$0
<b>Total Expenses</b>	<u><b>(\$47,768,466)</b></u>	<u><b>(\$45,716,453)</b></u>
<b>As of January 1, 2010</b>	<u><b>\$614,490,006</b></u>	<u><b>\$591,980,609</b></u>



Historical Trust Fund Detail

Table III-E

**Income**

<u>Plan Year</u>	<u>Employer Contribs.</u>	<u>Employee Contribs.</u>	<u>Interest / Dividends</u>	<u>Gains / Losses</u>	<u>Other Income</u>
2000	N/A	N/A	N/A	N/A	N/A
2001	N/A	N/A	N/A	N/A	N/A
2002	N/A	N/A	N/A	N/A	N/A
2003	N/A	N/A	N/A	N/A	N/A
2004	N/A	N/A	N/A	N/A	N/A
2005	N/A	N/A	N/A	N/A	N/A
2006	N/A	N/A	N/A	N/A	N/A
2007	N/A	N/A	N/A	N/A	N/A
2008	\$44,433,944	\$5,632,058	\$19,659,840	-\$73,068,655	\$306,310
2009	\$41,213,384	\$7,428,867	\$10,062,495	\$86,832,237	\$412,899

**Expenses**

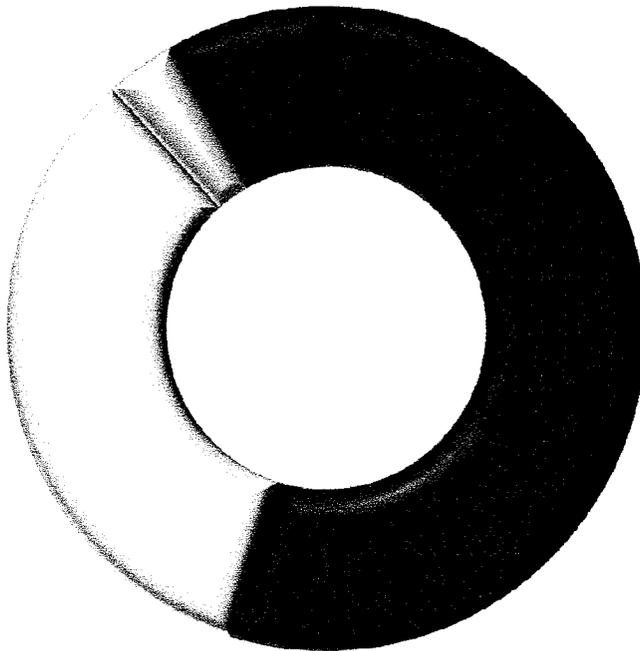
<u>Plan Year</u>	<u>Benefit Payments</u>	<u>Admin. Expenses</u>	<u>Invest. Expenses</u>
2000	N/A	N/A	N/A
2001	N/A	N/A	N/A
2002	N/A	N/A	N/A
2003	N/A	N/A	N/A
2004	N/A	N/A	N/A
2005	N/A	N/A	N/A
2006	N/A	N/A	N/A
2007	N/A	N/A	N/A
2008	\$38,530,904	\$607,811	\$2,742,878
2009	\$44,024,211	\$1,692,242	\$2,052,013



Summary of Participant Data

Table IV-A

**As of January 1, 2010**



**Participant Distribution by Status**

<u>Actively Employed Participants</u>		
◆	Active Participants	1,574
◆	DROP Participants	0
<u>Inactive Participants</u>		
◆	Deferred Vested Participants	3
◆	Due a Refund of Contributions	0
◆	Deferred Beneficiaries	0
<u>Participants Receiving a Benefit</u>		
◆	Service Retirements	961
◆	Disability Retirements	102
◆	Beneficiaries Receiving	230
<b>Total Participants</b>		<b>2,870</b>

**Number of Participants Included in Prior Valuations**

	<i>Active</i>	<i>DROP</i>	<i>Inactive</i>	<i>Retired</i>	<i>Total</i>
January 1, 2001	N/A	N/A	N/A	N/A	N/A
January 1, 2002	1,540	0	0	953	2,493
January 1, 2003	1,523	0	0	970	2,493
January 1, 2004	1,488	0	0	1,013	2,501
January 1, 2005	1,638	0	0	1,041	2,679
January 1, 2006	1,775	0	0	1,115	2,890
January 1, 2007	1,735	0	0	1,204	2,939
January 1, 2008	1,811	0	0	1,272	3,083
January 1, 2009	1,639	0	0	1,355	2,994
January 1, 2010	1,574	0	3	1,293	2,870

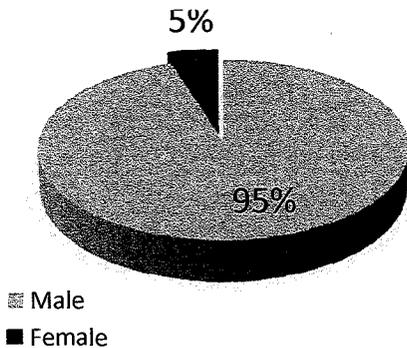


Active Participant Data

Table IV-B

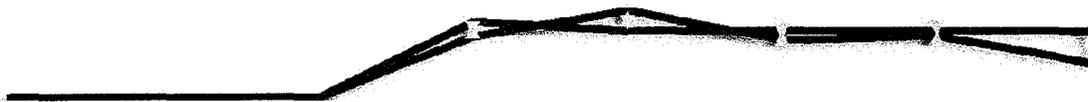
**Gender Mix**

**As of January 1, 2010**



Average Age	38.9 years
Average Service	10.8 years
Total Annualized Compensation for the Prior Year	\$80,044,694
Total Expected Compensation for the Current Year	\$78,519,495
Average Increase in Compensation for the Prior Year	2.06%
Expected Increase in Compensation for the Current Year	4.00%
Accumulated Contributions for Active Employees	\$48,545,083

**Actual vs. Expected Salary Increases**



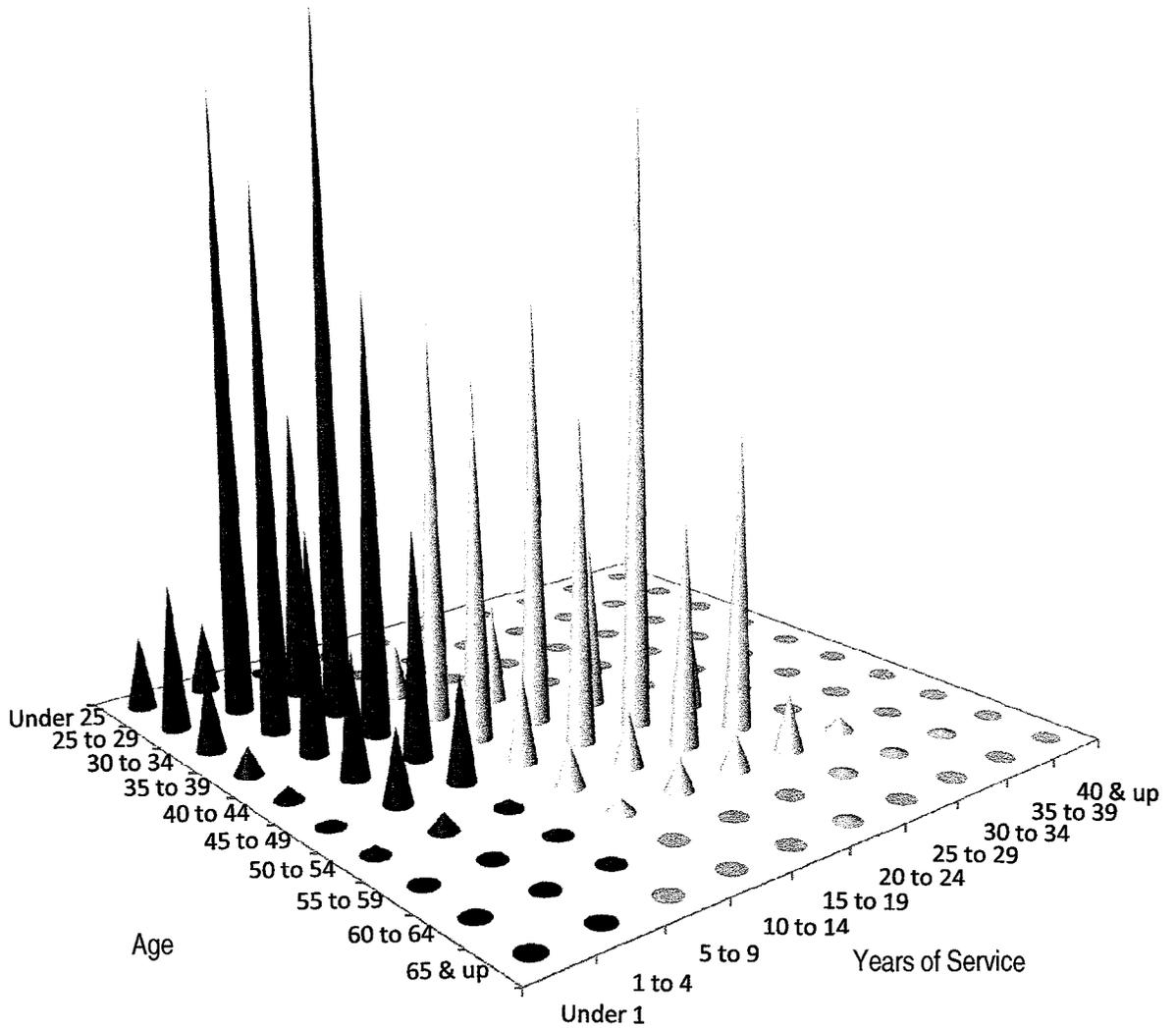
**Active Participant Statistics From Prior Valuations**

	Average Age	Average Service	Average Salary	Average Expected Salary Increase	Average Actual Salary Increase
January 1, 2001	N/A	N/A	N/A	N/A	N/A
January 1, 2002	38.7	12.4	\$43,729	N/A	N/A
January 1, 2003	38.1	11.7	\$43,203	N/A	N/A
January 1, 2004	38.5	12.0	\$43,394	N/A	N/A
January 1, 2005	37.9	11.3	\$44,256	N/A	N/A
January 1, 2006	38.1	11.6	\$44,442	4.50%	3.63%
January 1, 2007	37.5	10.8	\$46,305	4.00%	5.19%
January 1, 2008	37.5	10.4	\$48,199	4.00%	3.44%
January 1, 2009	37.9	11.0	\$51,008	4.00%	3.69%
January 1, 2010	38.9	10.8	\$50,854	4.00%	2.06%



Active Age-Service Distribution

Table IV-C



△ Eligible to retire  
▲ May be eligible to retire  
▲ Not eligible to retire



## Active Age-Service-Salary Table

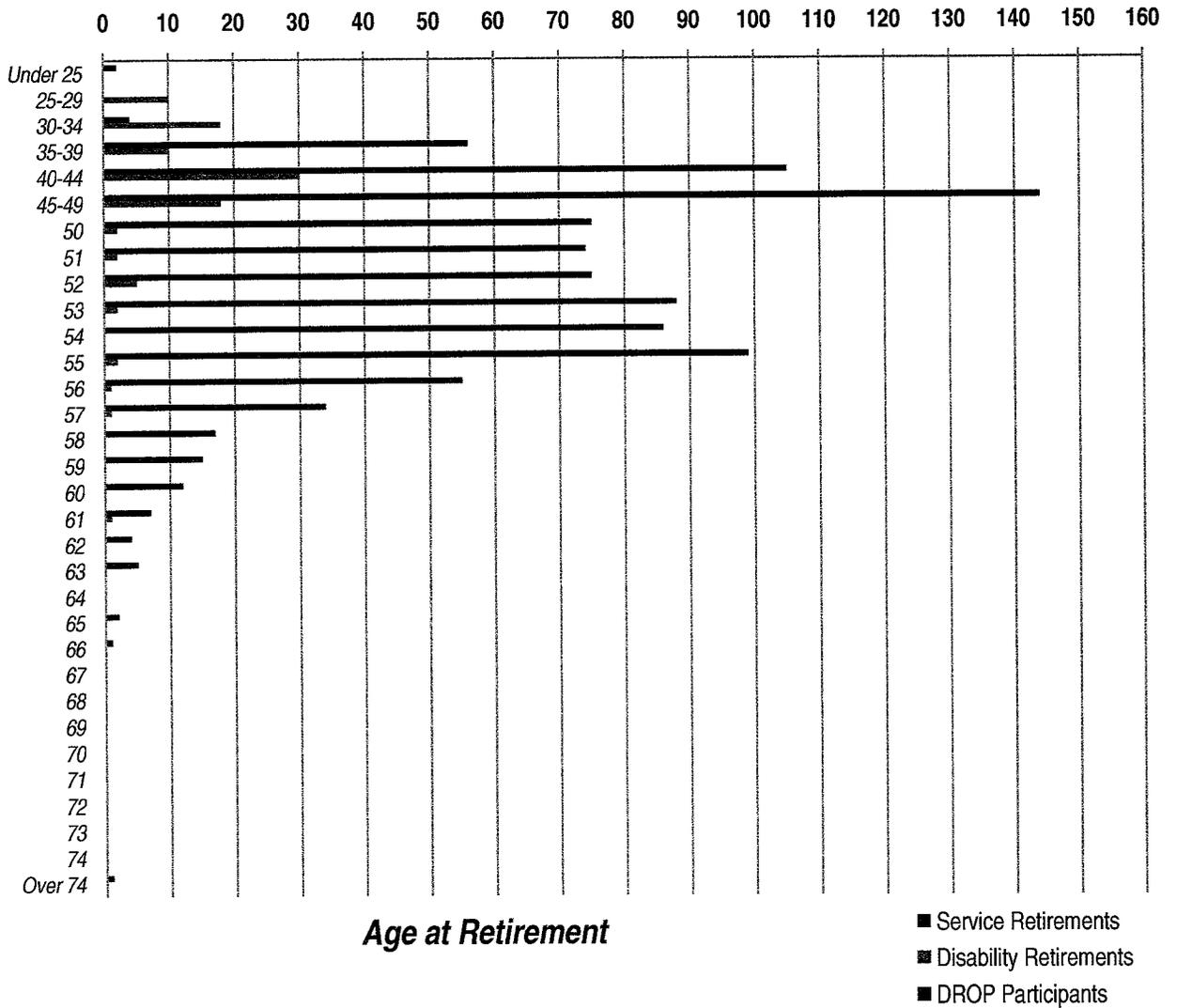
Table IV-D

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>	16	16	0	0	0	0	0	0	0	0	0	<b>32</b>
Avg. Pay	9,131	40,039	0	0	0	0	0	0	0	0	0	24,585
<b>25 to 29</b>	32	133	65	0	0	0	0	0	0	0	0	<b>230</b>
Avg. Pay	14,674	42,123	42,719	0	0	0	0	0	0	0	0	38,472
<b>30 to 34</b>	17	117	151	12	0	0	0	0	0	0	0	<b>297</b>
Avg. Pay	12,861	42,599	45,443	48,707	0	0	0	0	0	0	0	42,589
<b>35 to 39</b>	6	50	95	87	22	0	0	0	0	0	0	<b>260</b>
Avg. Pay	15,497	43,705	46,228	53,761	58,294	0	0	0	0	0	0	48,575
<b>40 to 44</b>	3	27	49	78	96	36	0	0	0	0	0	<b>289</b>
Avg. Pay	16,648	43,860	46,632	53,557	60,193	64,910	0	0	0	0	0	54,712
<b>45 to 49</b>	1	16	23	20	72	133	21	0	0	0	0	<b>286</b>
Avg. Pay	36,110	45,832	46,080	54,529	60,370	66,987	70,025	0	0	0	0	61,700
<b>50 to 54</b>	2	4	2	9	12	49	64	0	0	0	0	<b>142</b>
Avg. Pay	14,887	41,802	46,900	49,735	62,916	65,379	71,703	0	0	0	0	65,394
<b>55 to 59</b>	0	1	0	3	7	8	12	3	0	0	0	<b>34</b>
Avg. Pay	0	32,423	0	50,154	60,787	61,644	65,705	76,531	0	0	0	62,341
<b>60 to 64</b>	0	0	0	0	0	0	1	1	1	0	0	<b>3</b>
Avg. Pay	0	0	0	0	0	0	67,762	59,501	67,158	0	0	64,807
<b>65 &amp; up</b>	0	0	0	0	0	1	0	0	0	0	0	<b>1</b>
Avg. Pay	0	0	0	0	0	72,590	0	0	0	0	0	72,590
<b>Total</b>	<b>77</b>	<b>364</b>	<b>385</b>	<b>209</b>	<b>209</b>	<b>227</b>	<b>98</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1,574</b>
Avg. Pay	13,547	42,663	45,374	53,243	60,230	66,147	70,569	72,274	67,158	0	0	50,854



Inactive Participant Data

Table IV-E



**Age at Retirement**

- Service Retirements
- Disability Retirements
- DROP Participants

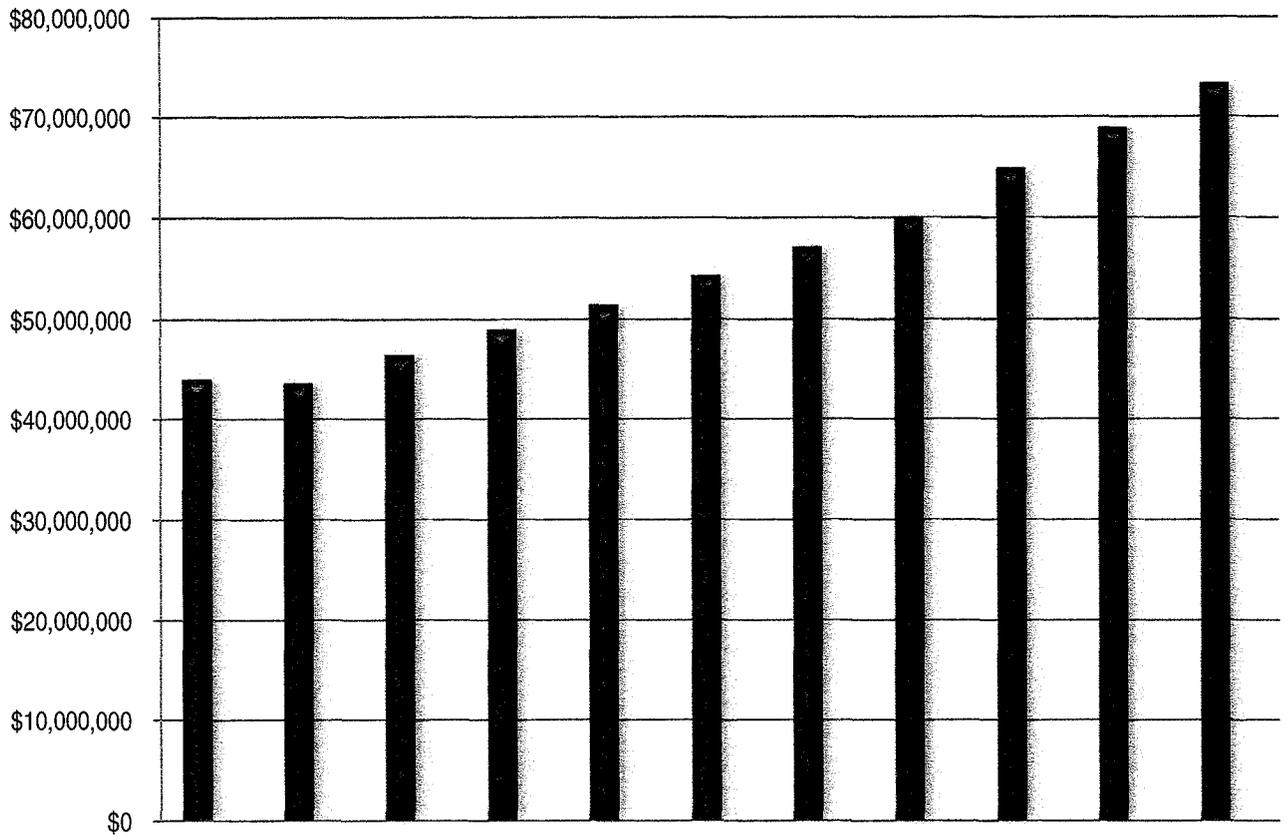
Average Monthly Benefit

Service Retirements	\$3,036.88
Disability Retirements	\$2,630.40
Beneficiaries Receiving	\$1,409.20
DROP Participants	Not applicable
Deferred Vested Participants	\$3,243.88
Deferred Beneficiaries	Not applicable



Projected Benefit Payments

Table IV-F



Actual

For the period January 1, 2009 through December 31, 2009

\$44,024,211

Projected

For the period January 1, 2010 through December 31, 2010

\$43,617,159

For the period January 1, 2011 through December 31, 2011

\$46,398,747

For the period January 1, 2012 through December 31, 2012

\$49,035,117

For the period January 1, 2013 through December 31, 2013

\$51,383,347

For the period January 1, 2014 through December 31, 2014

\$54,329,347

For the period January 1, 2015 through December 31, 2015

\$57,068,550

For the period January 1, 2016 through December 31, 2016

\$60,043,658

For the period January 1, 2017 through December 31, 2017

\$64,794,001

For the period January 1, 2018 through December 31, 2018

\$68,891,720

For the period January 1, 2019 through December 31, 2019

\$73,289,133



**Summary of Actuarial Methods and Assumptions**

**Table V-A**

**1. Actuarial Cost Method**

Individual entry age normal cost method. Under this actuarial cost method, a level funding cost is developed with respect to each benefit for each participant. The level funding cost for each benefit applies to the period beginning when the participant's service commences and ending when the participant is assumed to cease active participation due to each respective decrement. The actuarial accrued liability is equal to the accumulated level funding cost to the valuation date for all participants. The normal cost is equal to the level funding cost for the year immediately following the valuation date for all active participants.

**2. Asset Method**

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.

**3. Interest (or Discount) Rate**

7.75% per annum

**4. Salary Increases**

Plan compensation is assumed to increase at the rate of 4.00% per annum, unless actual plan compensation is known for a prior plan year.

**5. Decrements**

- Pre-retirement mortality: Sex-distinct rates set forth in the RP-2000 Mortality Table for non-annuitants; deaths prior to retirement are assumed not to be service-connected.
- Post-retirement mortality: Sex-distinct rates set forth in the RP-2000 Mortality Table for annuitants
- Disability: Sex-distinct rates set forth in the Wyatt 1985 Disability Study (Class 4); 75% of disabilities are assumed to be service-connected.
- Termination: Withdrawal rates were derived from a study of actual plan experience covering the period 1982 through 1986. A sample of the 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 at normal retirement age.



**Summary of Actuarial Methods and Assumptions**

Table V-A

(continued)

**6. Unused Vacation**

All participants are assumed to have accumulated 30 days of unused vacation upon termination of 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. Expenses**

Administrative expenses are assumed to be 0.50% of future payroll. In addition, the interest rate set forth in item 3. above is assumed to be net of investment expenses and commissions.

**9. Cost-of-Living Adjustment**

We have assumed that all eligible retirees will receive an automatic cost-of-living adjustment equal to 3.00% per annum.

**10. 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 gender of the employee. Males are assumed to be three years older than females for this purpose.



## Changes in Actuarial Methods and Assumptions

Table V-B

The following assumptions have been changed from those used to complete the previous valuation:

1. The assumed incidence of disability was changed from rates based on the 1974 Social Security disability study to the sex-distinct rates set forth in the Wyatt 1985 Disability Study (Class 4).
2. The assumed retirement age was changed from a range of rates at ages 45 through 60 to normal retirement age.
3. Administrative expenses were changed from a 1.00% loading of all costs and liabilities to 1.00% of future payroll.



Summary of Plan Provisions

Table VI-A

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**

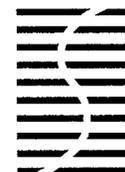
Monthly Accrued Benefit (*payable at age 55*); or

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



Summary of Plan Provisions

Table VI-A

(continued)

**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*)



Summary of Plan Provisions

Table VI-A

(continued)

**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



**Summary of Plan Provisions**

**Table VI-A**

(continued)

**8. Vested Percentage**

Retirement benefits become vested in accordance with the following schedule:

<b>Years of Creditable Service</b>	<b>Vested Percentage</b>
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 June, 2009, the required contribution was 1% lower for all participants; prior to March, 1994, the contribution was made on an after-tax basis.)*



**Summary of Plan Provisions**

**Table VI-A**

(continued)

**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



Summary of Plan Amendments

Table VI-B

Since the completion of the previous valuation, no significant plan changes have been adopted.

