

**STATE RETIREMENT & PENSION
SYSTEM OF MARYLAND**

(as of July 1, 2008)

**Actuarial Valuation for
MARYLAND MUNICIPAL CORPORATIONS
including the
CORRECTIONAL OFFICERS' RETIREMENT SYSTEM
and the
LAW ENFORCEMENT OFFICERS PENSION SYSTEM**

Produced by [Cheiron](#)

Table of Contents

Letter of Transmittal	i
Section I – Board Summary	1
Section II – Assets	6
Section III – Liabilities	9
Section IV – Contributions	17
Appendix A – Membership Information.....	A-1
Appendix B – Actuarial Assumptions and Methods	B-1
Appendix C – Summary of Plan Provisions	C-1

December 23, 2008

PERSONAL & CONFIDENTIAL

Board of Trustees for the
State Retirement and Pension System
120 East Baltimore Street
Baltimore, Maryland 21202

Dear Members of the Board:

This summary report presents the results of the July 1, 2008, actuarial valuation of the State Retirement and Pension System of Maryland for participating Municipal Corporations, Correctional Officers' Retirement System (CORS) and the Municipal Law Enforcement Officers Pension System (LEOPS). Consistent with the prior valuations, participating Municipal Corporations which are the responsibility of the State for funding purposes have been excluded, and certain previously withdrawn municipal corporations have been valued as part of the state valuation instead of in this municipal valuation. With respect to the latter, this is because the State acts as guarantor to the extent the present value of their future payments are in excess of or less than the present value of their future liabilities. Municipal employers who withdraw on or after June 30, 1997 will have their employees' benefits guaranteed by this plan.

This is the first year in which Cheiron has prepared the municipal actuarial valuation for the State Retirement and Pension System of Maryland. The numbers displayed in the 2007 column headings are those produced by the Segal Group as contained in their revised report dated June 6, 2008.

The principal results are as follows:

1. The single contribution rate that is applied to the active member payroll of each Municipal Corporation is calculated to be up slightly from the 3.87% calculated in last year's report to 4.05% in FY 2010.
2. The additional contribution on all current Retirement System payroll is 5%.
3. The additional contribution for those municipalities who elected to provide the Contributory Pension Benefit (CPB) is 2.42% of total Retirement and Pension System payroll.
4. The additional contribution for those municipalities who formerly elected the CPB and who have now elected the Alternate Contributory Pension Selection (ACPS) is 1.11% of Pension System payroll only. This contribution is made in addition to the CPB contribution of 2.42%.
5. The additional contribution for those municipalities who did not initially elect the CPB but who subsequently entered the ACPS is 7.44% of Pension System payroll only.
6. In addition to (1) - (5), some municipalities may have a charge or credit applied to the calculation of the FY 2010 contribution. These amounts are identified in Section 3 beginning on page 11 of this report.



Board of Trustees
December 23, 2008
Page Two


The contribution rate for LEOPS decreased from 30.53% to 30.03%. The Local Fire and Police plan has been dissolved since all of the municipalities who formerly participated in that System have voluntarily transferred to the LEOPS plan.

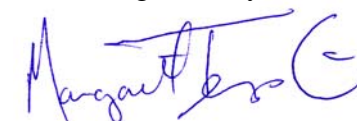
There is a new municipal component to the Correctional Officers' Retirement System. So far, only one municipality is participating. The contribution rate has been established at 8.41%.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the Retirement Agency. This information includes, but is not limited to, plan provisions, employee data and financial information. We found the data and financial information to be reasonably consistent and comparable with data used in the prior valuation. The results contained in this report are only applicable to the 2010 fiscal year. Future years' results may differ significantly.

We hereby certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board, and that as Members of the American Academy of Actuaries, we meet the Qualification Standards to render the opinion contained in this report.

Sincerely,
Cheiron,


Fiona Liston, FSA, EA, MAAA
Consulting Actuary


Margaret Tempkin, FSA, EA, MAAA
Actuary

SECTION I
BOARD SUMMARY

During the 1996 legislative session, legislation was passed which changes the contribution calculations for participating employers in the Municipal Pension Plan. Commencing with the June 30, 1996 actuarial valuation, the ongoing funding requirements for all Municipal Corporations will consist of four components. The first two components are the same for all Corporations. The last two components, which vary by individual Corporation, are based on some characteristics unique to those Corporations.

The shared components are:

- (1) **Normal Cost Rate** based upon Pension System provisions
- (2) **Unfunded Liability Rate** based upon all plan provisions

The varying components are:

- (3) Various **surcharges** on normal cost and unfunded liability, based on plan elections.
- (4) **Special Adjustments** to the final rate reflecting:
 - credits for “over-funded” Corporations as of 6/30/95,
 - charges for “under-funded” Corporations as of 6/30/95,
 - certain “special payments” called for under prior and future entry into the System,
 - any withdrawal liability payments owed to the System for withdrawals after 6/30/96.

The normal cost rate is a single rate determined by the actuary, based upon the valuation year demographics of the participants.

The unfunded liability rate is determined annually by the actuary and is the rate that, when applied to current and future expected payrolls is sufficient to pay for all future benefits of current and prior plan participants not funded by:

- current actuarial value of assets,
- the present value of all future normal costs (employer and employee),
- the present value of all future surcharge contributions,
- the net present value of all future “special adjustment” contributions, and
- the present value of all future withdrawal liability payments on behalf of withdrawn Corporations.

The special adjustments include a dollar amount credit subtracted from, or charge added to, the above three pieces. In no event can the total credits exceed the sum of the otherwise called for contribution.

A charge applies to each Municipal Corporation who as of 6/30/95 was determined to be under-funded on the basis of having less assets in the Retirement System than would be needed to fund the present value of benefits **accrued** as of 6/30/95 for prior and current participants in the Retirement System. Once this “**deficit**” was determined as of 6/30/95, the actuary determined a series of charges

SECTION I
BOARD SUMMARY

increasing by 5% per year to the year 2020 with present value equal to the amount of the deficit. For a few Municipal Corporations, the deficit payment was calculated to be greater than 2% of payroll when using a 25 year amortization payment. These Corporations are amortizing their charges to the year 2036. Individual deficit amounts and December 2009 charges are displayed in Table III-2 (page 11).

A credit applies to each Municipal Corporation who as of 6/30/95 was determined to be over-funded on the basis of having assets which exceed the present value of all future benefits expected to be paid to current and prior participants of that employer. Once this “**surplus**” was determined as of 6/30/95, the actuary determined a series of credits increasing by 5% per year to the year 2020 with present value equal to the amount of the surplus. Individual surplus amounts and December 2009 credits are displayed in Table III-3 (page 12).

SECTION I
 BOARD SUMMARY

Table I-1
Summary of Principal Results
Employees' Combined System

	2008	2007
1. Participant Data		
Number of:		
Active Members	25,664	25,266
Retired Members and Beneficiaries	12,512	12,232
Vested Deferred Members	6,452	6,491
Annual Salaries of Active Members	\$ 1,050,920,493	\$ 993,745,236
Annual Retirement Allowance for Retired Members and Beneficiaries	\$ 131,123,655	\$ 122,516,531
2. Asset and Liabilities		
a. Total Actuarial Accrued Liability	\$ 3,264,427,133	\$ 3,022,315,853
b. Actuarial Value of Assets	<u>2,888,084,075</u>	<u>2,694,056,983</u>
c. Unfunded Actuarial Accrued Liability (a-b)	\$ 376,343,058	\$ 328,258,870
d. Assigned Liabilities	<u>364,148,408</u>	<u>364,540,308</u>
e. Pooled Unfunded Actuarial Accrued Liability (c-d)	\$ 12,194,650	\$ (36,281,438)
3. Basic Contribution Rate*		
Normal Cost Contribution	4.98%	5.07%
Unfunded Actuarial Liability	<u>(0.93%)</u>	<u>(1.20%)</u>
Total Basic Contribution Rate	4.05%	3.87%

* This rate excludes various surcharges.

**SECTION I
 BOARD SUMMARY**

**Table I-2
 Summary of Principal Results
 LEOPS**

	2008	2007
1. Participant Data		
Number of:		
Active Members	874	740
Retired Members and Beneficiaries	96	74
Vested Deferred Members	38	27
Annual Salaries of Active Members	\$ 50,212,862	\$ 39,936,323
Annual Retirement Allowance for Retired Members and Beneficiaries	\$ 3,003,107	\$ 2,289,978
2. Asset and Liabilities		
a. Total Actuarial Accrued Liability	\$ 187,524,781	\$ 145,240,531
b. Actuarial Value of Assets	<u>81,037,263</u>	<u>59,788,778</u>
c. Unfunded Actuarial Accrued Liability (a-b)	\$ 106,487,518	\$ 85,451,753
d. Assigned Liabilities	<u>(15,359,127)</u>	<u>(14,124,774)</u>
e. Pooled Unfunded Actuarial Accrued Liability (c-d)	\$ 121,846,645	\$ 99,576,527
3. Basic Contribution Rate		
Normal Cost Contribution	16.09%	16.43%
Unfunded Actuarial Liability	<u>13.94%</u>	<u>14.10%</u>
Total Basic Contribution Rate	30.03%	30.53%

SECTION I
 BOARD SUMMARY

Table I-3
Summary of Principal Results
Correctional Officers' Retirement System

	2008	2007
1. Participant Data		
Number of:		
Active Members	68	N/A
Retired Members and Beneficiaries	0	N/A
Vested Deferred Members	0	N/A
Annual Salaries of Active Members	\$ 4,184,736	N/A
Annual Retirement Allowance for Retired Members and Beneficiaries	\$ 0	N/A
2. Asset and Liabilities		
a. Total Actuarial Accrued Liability	\$ 11,803,238	N/A
b. Actuarial Value of Assets	<u>7,136,007</u>	<u>N/A</u>
c. Unfunded Actuarial Accrued Liability (a-b)	\$ 4,667,231	N/A
d. Assigned Liabilities	<u>4,667,231</u>	<u>N/A</u>
e. Pooled Unfunded Actuarial Accrued Liability (c-d)	\$ 0	N/A
3. Basic Contribution Rate		
Normal Cost Contribution	8.41%	N/A
Unfunded Actuarial Liability	<u>0.00%</u>	<u>N/A</u>
Total Basic Contribution Rate	8.41%	N/A

SECTION II ASSETS

The System uses and discloses two different asset measurements which are presented in this Section of the report: market value and actuarial value of assets. The market value represents, as of the valuation date, the value of the assets if they were liquidated on that date. The actuarial value of assets is a value that attempts to smooth annual investment return performance over five years to reduce annual investment volatility, and is used in determining contribution rates for the three participating employer plans.

On the following pages we present detailed information on System assets:

- Disclosure of assets at June 30, 2008,
- Statement of cash flows during the year,
- Development of the actuarial value of assets,
- Disclosure of investment performance for the year.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION II
ASSETS**

**Table II-1
Market Value and Cashflow**

	Employees (Municipal)	LEOPS (Municipal)	Local Fire & Police (Municipal)	Corrections (Municipal)	Total Municipal
Market Value of Assets as of 6/30/2007	\$ 2,811,102,968	\$ 62,026,594	\$ 4,607,027	\$ 0	\$ 2,877,736,589
Employer Contributions	84,971,658	12,293,290	574,437	0	97,839,385
Member Contributions	32,732,682	1,668,137	0	0	34,400,819
Investment Returns	(148,368,192)	(3,512,736)	(177,426)	0	(152,058,354)
Disbursements from the Trust	<u>(86,240,067)</u>	<u>(2,270,569)</u>	<u>(337,793)</u>	<u>0</u>	<u>(88,848,429)</u>
Market Value of Assets as of 6/30/2008	\$ 2,694,199,049	\$ 70,204,716	\$ 4,666,245	\$ 0	\$ 2,769,070,010
Transfers on a Market Value Basis	<u>(11,346,687)</u>	<u>5,068,588</u>	<u>(350,813)</u>	<u>6,628,912</u>	<u>0</u>
Market Value of Assets as of 7/1/2008	\$ 2,682,852,362	\$ 75,273,304	\$ 4,315,432*	\$ 6,628,912	\$ 2,769,070,010

* Residual assets to be transferred to Employees' Pension System, State "pool" assets.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION II
ASSETS**

**Table II-2
Actuarial Value of Assets**

	Employees (Municipal)	LEOPS (Municipal)	Local Fire & Police (Municipal)	Corrections (Municipal)	Total Municipal
1. Market Value of Assets as of 6/30/2007	\$ 2,811,102,968	\$ 62,026,594	\$ 4,607,027	\$ 0	\$ 2,877,736,589
2. Net of contributions and disbursements	31,464,273	11,690,858	236,644	0	43,391,775
3. Expected interest at 7.75%	<u>219,056,971</u>	<u>5,251,629</u>	<u>366,043</u>	<u>0</u>	<u>224,674,643</u>
4. Expected market value of assets as of 6/30/2008	\$ 3,061,624,212	\$ 78,969,081	\$ 5,209,714	\$ 0	\$ 3,145,803,007
5. Actual market value of assets as of 6/30/2008	<u>2,694,199,049</u>	<u>70,204,716</u>	<u>4,666,245</u>	<u>0</u>	<u>2,769,070,010</u>
6. Investment Gain/(Loss) from FY 2008 (5)-(4)	\$ (367,425,163)	\$ (8,764,365)	\$ (543,469)	\$ 0	(376,732,997)
7. Amount to be excluded in Actuarial Value (6) x 80%	(293,940,130)	(7,011,492)	(434,775)	0	(301,386,397)
8. Investment Gain/(Loss) from FY 2007	146,400,707	2,704,044	414,361	0	149,519,112
9. Amount to be excluded in Actuarial Value (8) x 60%	87,840,424	1,622,426	248,617	0	89,711,467
10. Preliminary Actuarial Value of Assets as of 6/30/2008 (5)-(7)-(9)	\$ 2,900,298,755	\$ 75,593,782	\$ 4,852,403	\$ 0	\$ 2,980,744,940
11. Adjustment to Remain within 80%/120% of Market Value	0	0	0	0	0
12. Final Actuarial Value of Assets as of 6/30/2008	\$ 2,900,298,755	\$ 75,593,782	\$ 4,852,403	\$ 0	\$ 2,980,744,940
13. Transfers on an Actuarial Value Basis	<u>(12,214,680)</u>	<u>5,443,481</u>	<u>(364,808)</u>	<u>7,136,007</u>	<u>0</u>
14. Actuarial Value of Assets as of 7/1/2008 (12+13)	\$ 2,888,084,075	\$ 81,037,263	\$ 4,487,595	\$ 7,136,007	\$ 2,980,744,940

SECTION III LIABILITIES

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. There are several methods currently used in making such a determination.

The method used for this valuation is referred to as the "individual" entry age normal actuarial cost method." Under this method, a level-percent-of-pay employer cost is determined which, along with member contributions, will pay for projected retirement benefits for a new entrant to the plan. The level percent developed is called the "normal cost" rate and the product of that rate and payroll is the "normal cost".

The actuarial liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and funds accumulated as of the same date is referred to as the unfunded actuarial liability. If the employer's contributions exceed the employer's normal cost for the year, after allowing for interest earned on the previous balance of the unfunded actuarial liability, this liability will be reduced. Benefit improvements, actuarial gains and losses, and changes in actuarial procedures will also have an effect on the total liability and on the portion of it that is unfunded.

After the amount of the unfunded actuarial liability has been determined, a schedule of contributions is established to amortize that amount over a given period. Maryland's laws specify a forty year level-percent-of-pay amortization schedule starting June 30, 1980 for the pre-2001 ECS liability. Then individual 25 years layers for each portion of the UAL arising thereafter. The LEOPS forty years started June 30, 1999. Thus, for the July 1, 2008 valuation, the remaining period of amortization is thirty-one years for the LEOPS System.

The following table (Table III-1) displays by System the Individual Entry Age Normal actuarial liabilities and unfunded actuarial liability. Table III-2 shows the portion of unfunded liability (i.e. Deficit Amount) assigned to each of 20 individual participating municipalities. The table also shows the additional charge which will be billed to exhaust this liability starting with the December 2009 billing.

Table III-3 shows 14 municipalities who have credits in this plan. These municipalities may use up to the amount shown to offset their basic December 2009 billing amount. Any unused credit will revert to the pooled plan on an annual basis.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION III
LIABILITIES**

Table III-1 Liabilities				
	Employees' Combined System	LEOPS	Corrections Officers'	Total Municipal
Present Value Benefits for:				
a. Active Members	\$ 2,477,230,451	\$ 218,471,928	\$ 15,576,590	\$ 2,711,278,969
b. Retired Member and Beneficiaries	1,458,705,545	48,339,034	0	1,507,044,579
c. Terminated Vested Members	101,824,701	1,668,073	0	103,492,774
d. Inactives	<u>1,918,058</u>	<u>78,793</u>	<u>0</u>	<u>1,996,851</u>
e. Total	\$ 4,039,678,755	\$ 268,557,828	\$ 15,576,590	\$ 4,323,813,173
Individual Entry Age Actuarial Accrued Liability for:				
a. Active Members	\$ 1,701,978,829	\$ 137,438,881	\$ 11,803,238	\$ 1,851,220,948
b. Retired Member and Beneficiaries	1,458,705,545	48,339,034	0	1,507,044,579
c. Terminated Vested Members	101,824,701	1,668,073	0	103,492,774
d. Inactives	<u>1,918,058</u>	<u>78,793</u>	<u>0</u>	<u>1,996,851</u>
e. Total	\$ 3,264,427,133	\$ 187,524,781	\$ 11,803,238	\$ 3,463,755,152
Actuarial Value of Assets	\$ 2,888,084,075	\$ 81,037,263	\$ 7,136,007	\$ 2,976,257,345
Unfunded Actuarial Liability	\$ 376,343,058	\$ 106,487,518	\$ 4,667,231	\$ 487,497,807
Funded Percent	88.5%	43.2%	60.5%	85.9%
Present Value of Accrued Benefits				
a. Active Members	\$ 1,228,634,338	\$ 112,313,149	\$ 8,768,331	\$ 1,349,715,818
b. Retired Member and Beneficiaries	1,458,705,545	48,339,034	0	1,507,044,579
c. Terminated Vested Members	101,824,701	1,668,073	0	103,492,774
d. Inactives	<u>1,918,058</u>	<u>78,793</u>	<u>0</u>	<u>1,996,851</u>
e. Total	\$ 2,791,082,642	\$ 162,399,049	\$ 8,768,331	\$ 2,962,250,022

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION III
LIABILITIES**

Table III-2				
Schedule of Deficit Amounts as of July 1, 2008 and Deficit Payments for December 2009 Billing				
Initial PLD Number	PLD Name	Deficit Amount at 07/01/2008	December 2009 Payment	Year of Last Payment
6504	Allegany Co. Community College	\$ 95,860	\$ 9,342	2020
6526	Cumberland, City of	3,031,686	163,709*	2035
7402	Dorchester Co. Bd. of Education	314,967	30,694	2020
7412	Dorchester Co. Roads Board	639,932	34,556**	2035
7425	Cambridge, City of	542,519	52,870	2020
7602/8	Garrett Co. Bd. of Ed & Bd of Ed Cafe	296,151	28,861	2020
7711	Harford Co. Government	6,204,946	604,687	2020
8030	Takoma Park, City of	1,455,470	78,594**	2035
8102	Prince Georges Co. Bd of Education	11,660,709	1,136,364	2020
8111	Prince Georges Co. Government	29,257,166	2,851,180	2020
8125	Greenbelt, City of	1,655,036	89,371*	2035
8134	Cheverly, City of	344,596	33,582	2020
8135	Prince Georges Co. Crossing Guards	18,162	1,770	2020
8502	Talbot Co. Bd. of Education	492,689	26,604**	2035
8604	Hagerstown Junior College	159,289	15,523	2020
8625	Hagerstown, City of	5,156,799	278,464**	2035
8725	Salisbury, City of	506,661	49,375	2020
8811	Worcester Co. Commission	72,763	7,091	2020
8816	Worcester Co. Liquor Bd.	9,431	919	2020
8827	Berlin, Town of	<u>208,958</u>	<u>20,363</u>	2020
TOTAL		\$ 62,123,790	\$ 5,513,919	

* Denotes 40 year amortization, payments increasing 5% per year.

** Denotes 40 year amortization, payments increase 15% per year for the first 5 years and 5% per year thereafter. All others are amortized over a 25 year period with payments increasing 5% per year.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION III
LIABILITIES**

Table III-3					
Schedule of Surplus Amounts as of July 1, 2008					
& Maximum Credits to December 2009 Billing					
Initial PLD Number	PLD Name	Surplus Amount at 07/01/2008	December 2009 Credit	Year of Last Credit	
6534	Tri-County Council of Western Maryland	\$ (261,270)	\$ (25,461)	2020	
6533	Allegany Co. Housing Authority	(703)	(69)	2020	
6731	Md. Health & Higher Educ. Fac. Auth	(132,615)	(12,924)	2020	
7525	Brunswick, Town of	(515,212)	(50,209)	2020	
7702	Harford Co. Bd. of Education	(240,986)	(23,485)	2020	
7804	Howard Community College	(230,325)	(22,446)	2020	
8004	Montgomery College	(238,287)	(23,222)	2020	
8129	New Carrollton, City of	(353,565)	(34,456)	2020	
8131	Upper Marlboro, Town of	(5,140)	(501)	2020	
8202	Queen Anne Co. Bd. of Education	(60,314)	(5,878)	2020	
8402	Somerset Co. Bd. of Education	(193,739)	(18,880)	2020	
8426	Crisfield, City of	(27,488)	(2,679)	2020	
8610	Washington Co. Library	(396,149)	(38,606)	2020	
8825	Pocomoke City	<u>(182,981)</u>	<u>(17,832)</u>	2020	
TOTAL		\$ (2,838,774)	\$ (276,648)		

Amortized over a 25 year period with payments increasing 5% per year.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION III
LIABILITIES**

**Table III-4
Employees Combined System (Municipal)
Schedule of New Entrant Payments and Credits as of July 1, 2008 for December 2009 Billing
(Unless noted, amounts are amortized over 25 years with payments increasing 5% per year)**

LOC Number	Municipal Corporation	Outstanding Balance as of 7/1/08*	December 2009 Payment	Last Payment Year
6533	Allegany Co Housing Authority	\$ 13,063	\$ 1,362	2019
6536	City of Frostburg	1,065,873	97,005**	2030
6628	AAC Econ Opp Com	290,766	30,324	2019
6925	Town of North Beach	186,973	19,499	2019
7025	Town of Preston	49,108	5,122	2019
7026	Town of Denton	693,289	72,303	2019
7027	Town of Ridgely	263,175	24,365**	2029
7028	Town of Federalsburg	400,319	36,433**	2030
7029	Town of Greensboro	196,900	17,642**	2031
7127	Carroll Soil Conservation District	2,618	273	2019
7128	City of Taneytown	426,349	38,802**	2030
7129	Town of Mt. Airy	240,445	89,624	2010
7206	Cecil County Library	11,895	1,241	2019
7380	So MD Tri-County Comm Action	791,642	82,560	2019
7528	Catoctin & Frederick Soil Conservation	1,119	117	2019
7529	Town of Thurmont	2,368,5655	223,449**	2028
7625	Town of Oakland	325,971	94,285**	2011
7706	Harford Co Library	7,843	818	2019

* The outstanding balance is based on the 7.75% valuation interest rate. Actual payoff amounts will be based on the interest rate in effect when the balance was first established.

** Level dollar payments or credits.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION III
LIABILITIES**

Table III-4, cont.
Employees Combined System (Municipal)
Schedule of New Entrant Payments and Credits as of July 1, 2008 for December 2009 Billing
(Unless noted, amounts are amortized over 25 years with payments increasing 5% per year)

LOC Number	Municipal Corporation	Outstanding Balance as of 7/1/08*	December 2009 Payment	Last Payment Year
7880	Howard Co Comm Action Comm	\$ 170,948	17,828	2019
7902	Kent Co Brd of Education	795,794	82,993	2019
7926	Town of Rock Hall	11,491	1,084**	2028
8138	Town of Landover Hills	3,069	0	2008
8139	Town of Bladensburg	723,861	64,857**	2031
8426	City of Crisfield	141,224	17,820**	2019
8428	Town of Princess Anne	1,066	111	2019
8525	Commissioner of St. Michaels	248,935	25,961	2019
8528	Town of Oxford	99,602	10,388	2019
8618	Washington County Bd of Licenses	112,078	12,230	2019
8780	Shore Up	579,448	60,430	2019
8834	Tri-County Council for the Lower Eastern Shore	(39,443)	(4,113)	2019
8140	Town of Berwyn Heights	<u>131,182</u>	<u>11,587**</u>	2032
	TOTAL	\$ 10,315,258	\$ 1,136,400	

* The outstanding balance is based on the 7.75% valuation interest rate. Actual payoff amounts will be based on the interest rate in effect when the balance was first established.

** Level dollar payments or credits.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION III
LIABILITIES**

**Table III-5
LEOPS (Municipal)
Schedule of New Entrant Payments and Credits as of July 1, 2008 for December 2009 Billing
(Amounts are amortized over 25 years with level annual payments)**

LOC Number	Municipal Corporation	Outstanding Balance as of 7/1/08*	December 2009 Payment	Last Payment Year
7125	Town of Westminster	\$ (696,940)	\$ (167,052)	2012
7128	City of Taneytown	(352,242)	(33,229)	2028
7130	Town of Hampstead	(562,173)	(50,370)	2031
7411	Dorchester County	(449,108)	(68,541)**	2016
7425	City of Cambridge	(382,020)	(39,676)	2024
7625	City of Oakland	(19,954)	(1,816)	2030
7711	Harford County Sheriffs	(5,297,626)	(879,686)	2015
7925A	Town of Chestertown	(565,664)	(51,481)	2030
8125	City of Greenbelt	1,112,096	109,559	2026
8126	City of Hyattsville	(599,011)	(59,012)	2026
8211	Queen Anne Public Safety EEs	(1,965,595)	(185,426)	2028
8428	Town of Princess Anne	(666,962)	(61,748)	2029
8628	Town of Hancock	(73,092)	(7,039)	2027
8725A	Salisbury Police	(964,979)	(92,930)	2027
8725B	Salisbury Fire	(1,554,690)	(146,663)	2028
8811	Worcester County	(2,876,271)	(254,054)	2032
7427	City of Hurlock	(548,888)	(48,482)	2032
6531	City of Cumberland	<u>1,103,992</u>	<u>97,513</u>	2032
TOTAL		\$ (15,359,127)	\$ (1,940,134)	

* The outstanding balance is based on the 7.75% valuations interest rate. Actual payoff amounts will be based on the interest rate in effect when the balance was first established.

** Denotes 10-year amortization.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
 JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION III
 LIABILITIES**

**Table III-6
 Correctional Officers' Retirement System (Municipal)
 Schedule of New Entrant Payments and Credits as of July 1, 2008 for December 2009 Billing
 (Amounts are amortized over 25 years with level annual payments)**

LOC Number	Municipal Corporation	Outstanding Balance as of 7/1/08*	December 2009 Payment	Last Payment Year
8811	Worcester County	\$ 4,667,231	\$ 412,245	2032
	TOTAL	\$ 4,667,231	\$ 412,245	

**SECTION IV
CONTRIBUTIONS**

A. Contribution Results for December 2009 Billings (FY 2010)

In general, each Municipal Corporation's appropriation to the Systems in Fiscal Year 2010 will be determined by applying the contribution rates set forth in this report to the active member payrolls of the Systems as of June 30, 2009.

The Individual Entry Age Normal method was used to develop the contribution rates. Under this funding method, as with most other actuarial funding methods, a total contribution rate is determined which consists of two elements: the normal cost rate and the unfunded actuarial liability rate. In addition each employer with current active participants in the Retirement System must pay 5% on the Retirement System payroll. Municipal Corporations who elected to provide CPB have a 2.42% surcharge applied to total Retirement and Pension System payroll. The surcharge consists of a 1.00% normal cost rate surcharge and a 1.42% UAL rate surcharge. Municipal Corporations who elected to provide CPB and who later elected to participate in the ACPS pay a 1.11% surcharge applied to Pension System payroll. The surcharge is the net result of a negative 0.40% normal cost rate and a positive 1.51% UAL rate surcharge. This is paid in addition to the 2.42% CPB surcharge. Municipalities who did not elect the CPB but did elect the ACPS pay a surcharge of 7.44% applied to Pension System payroll. The surcharge consists of 0.60% normal cost plus a 6.84% UAL rate surcharge.

The 1.42% UAL surcharge for CPB participation will be paid through 2020, while the other two ACPS UAL surcharges are paid through 2031.

Certain participating employers will have to pay special liability amounts calculated at their entry to the System or deficit payments based on the 1996 legislation, and other participating employers will be able to apply credits also based on the 1996 legislation.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION IV
CONTRIBUTIONS**

**TABLE IV-1
Develop Contribution Rate by System
as of June 30, 2008
Employees' Combined System**

	2008	2007
1. Entry Age Actuarial Accrued Liability	\$ 3,264,427,133	\$ 3,022,315,853
2. Actuarial Value of Assets	<u>2,888,084,075</u>	<u>2,694,056,983</u>
3. Unfunded Actuarial Accrued Liability (1-2)	\$ 376,343,058	\$ 328,258,870
4. Assigned Liability		
a. Deficit Balances (Table III-2)	\$ 62,123,790	\$ 62,509,257
b. Surplus Balances (Table III-3)	(2,838,774)	(2,847,115)
c. New Entrant Liability Balances (Table III-4)	10,315,258	11,214,384
d. UAL Portion of CPB surcharge (Table IV-2)	107,226,306	110,971,593
e. UAL Portion of CPB to ACPS surcharge (Table IV-2)	179,000,503	173,783,926
f. UAL Portion of noncontributory to ACPS surcharge (Table IV-2)	<u>8,321,325</u>	<u>8,908,263</u>
g. Total assigned Liability Balances	\$ 364,148,408	\$ 364,540,308
5. Pooled Unfunded Actuarial Accrued Liability (3-4g)	\$ 12,194,650	\$ (36,281,438)
6. Outstanding Balance of Previously Amortized Bases	<u>(26,750,980)</u>	<u>(53,367,832)</u>
7. Current Year Amortization Base (5-6)	\$ 38,945,630	\$ 17,086,394
8. Sum of Pooled Unfunded Amortization Payments	\$ (9,792,564)	\$ (11,890,127)
9. Covered Payroll	\$ 1,050,920,493	\$ 993,745,236
10. UAL Amortization Rate (8/9)	(0.93%)	(1.20%)
11. Employer Normal Cost		
a. Pension System Employer Normal Cost	\$ 56,413,797	\$ 54,498,012
b. Retirement System Normal Cost (Table IV-2)	1,078,936	1,144,224
c. CPB normal cost surcharge (Table IV-2)	8,072,000	7,854,860
d. CPB to ACPS normal cost surcharge (Table IV-2)	(3,215,887)	(3,043,364)
e. Noncontributory to ACPS normal cost surcharge (Table IV-2)	<u>49,505</u>	<u>51,659</u>
f. Employer Normal Cost After Adjustment (a-b-c-d-e)	\$ 50,429,243	\$ 48,490,633
12. Employer Normal Cost Adjusted for Timing	\$ 52,346,915	\$ 50,334,585
13. Employer Normal Cost Rate (12/9)	4.98%	5.07%
14. Basic Employer Cost Rate (10 + 13)	4.05%	3.87%

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION IV
CONTRIBUTIONS**

TABLE IV-2 Surcharges as of June 30, 2008 Employees' Combined System			
		2008	2007
Normal Cost Surcharges			
1.	Retirement System Payroll	\$ 21,578,717	\$ 22,884,477
2.	Retirement System Normal Cost Surcharge Rate	5.00%	5.00%
3.	Retirement System Normal Cost Surcharge Amount	\$ 1,078,936	\$ 1,144,224
4.	Payroll for Municipals Under CPB	\$ 807,199,951	\$ 785,485,954
5.	CPB Normal Cost Surcharge Rate	1.00%	1.00%
6.	CPB normal Cost Surcharge Amount	\$ 8,072,000	\$ 7,854,860
7.	Payroll for Municipals Going From CPB to ACPS	\$ 803,971,631	\$ 760,841,046
8.	CPB to ACPS Normal Cost Surcharge Rate	(0.40%)	(0.40%)
9.	CPB to ACPS Normal Cost Surcharge Amount	\$ (3,215,887)	\$ (3,043,364)
10.	Payroll for Noncontributory ACPS	\$ 8,250,871	\$ 8,609,902
11.	CPB to ACPS Normal Cost Surcharge Rate	0.60%	0.60%
12.	CPB to ACPS Normal Cost Surcharge Amount	\$ 49,505	\$ 51,659
Unfunded Liability Surcharges			
1.	Payroll for Municipals Under CPB	\$ 807,199,951	\$ 785,485,954
2.	CPB UAL Surcharge Rate	1.42%	1.42%
3.	Amortization Factor	9.35474329	9.94912880
4.	CPB UAL Surcharge Amount	\$ 107,226,306	\$ 110,971,593
5.	Payroll for Municipals Going From CPB to ACPS	\$ 803,971,631	\$ 760,841,046
6.	CPB to ACPS UAL Surcharge Rate	1.51%	1.51%
7.	Amortization Factor	14.74472167	15.12650942
8.	CPB to ACPS Normal Cost Surcharge Amount	\$ 179,000,503	\$ 173,783,926
9.	Payroll for Noncontributory ACPS	\$ 8,250,871	\$ 8,609,902
10.	CPB to ACPS UAL Surcharge Rate	6.84%	6.84%
11.	Amortization Factor	14.74472167	15.12650942
12.	CPB to ACPS UAL Surcharge Amount	\$ 8,321,325	\$ 8,908,263

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION IV
CONTRIBUTIONS**

**TABLE IV-3
Develop Contribution Rate by System
as of June 30, 2008
LEOPS**

	2008	2007
1. Entry Age Actuarial Accrued Liability	\$ 187,524,781	\$ 145,240,531
2. Actuarial Value of Assets	<u>81,037,263</u>	<u>59,788,778</u>
3. Unfunded Actuarial Accrued Liability (1-2)	\$ 106,487,518	\$ 85,451,753
4. New Entrant Liability Balances (Table III-5)	<u>(15,359,127)</u>	<u>(14,124,774)</u>
5. Pooled Unfunded Actuarial Accrued Liability (3-4)	\$ 121,846,645	\$ 99,576,527
6. Amortization Factors	17.40904726	17.68574561
7. Unfunded Amortization Payment	\$ 6,999,042	\$ 5,630,327
8. Covered Payroll	\$ 50,212,862	\$ 39,936,323
9. UAL Amortization Rate (7/8)	13.94%	14.10%
10. Employer Normal Cost	\$ 7,783,100	\$ 6,321,159
11. Employer Normal Cost Adjusted for Timing	\$ 8,079,068	\$ 6,561,534
12. Employer Normal Cost Rate (11/8)g	16.09%	16.43%
13. Basic Employer Cost Rate (9 + 12)	30.03%	30.53%

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

**SECTION IV
CONTRIBUTIONS**

**TABLE IV-4
Develop Contribution Rate by System
as of June 30, 2008
Correctional Officers' Retirement System**

	2008	2007
1. Entry Age Actuarial Accrued Liability	\$ 11,803,238	N/A
2. Actuarial Value of Assets	<u>7,136,007</u>	N/A
3. Unfunded Actuarial Accrued Liability (1-2)	\$ 4,667,231	N/A
4. New Entrant Liability Balances (Table III-6)	<u>4,667,231</u>	N/A
5. Pooled Unfunded Actuarial Accrued Liability (3-4)	\$ 0	N/A
6. Amortization Factors	15.49323826	N/A
7. Unfunded Amortization Payment	\$ 0	N/A
8. Covered Payroll	\$ 4,184,736	N/A
9. UAL Amortization Rate (7/8)	0.00%	N/A
10. Employer Normal Cost	\$ 338,844	N/A
11. Employer Normal Cost Adjusted for Timing	\$ 351,729	N/A
12. Employer Normal Cost Rate (11/8)g	8.41%	N/A
13. Basic Employer Cost Rate (9 + 12)	8.41%	N/A

APPENDIX A
MEMBERSHIP INFORMATION

The State Retirement Agency provided the actuary with all necessary membership data. This information was gathered as of June 30, 2008.

In this section we present a thorough review of the current membership statistics. First, we summarize the membership count and payroll by status and sex. Following this summary, membership distributions are examined by age, service, and salary. In addition, pertinent active and retired distributions are exhibited.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
 JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX A
 MEMBERSHIP INFORMATION

State Retirement and Pension System Table A-1							
Summary of Membership Data June 30, 2008 Municipal Corporations							
	<u>Active Members</u>		<u>Retirees & Beneficiaries</u>		<u>Vested Former</u>	<u>Inactive</u>	<u>Total Counts</u>
	<u>Count</u>	<u>Salary*</u>	<u>Count</u>	<u>Benefits</u>	<u>Members</u> <u>Count</u>	<u>Members</u> <u>Count</u>	
Employees' Retirement	372	\$ 21,578,717	4,524	\$ 63,729,540	95	3	4,994
Employees' Pension	25,292	1,029,341,776	7,988	67,394,115	6,357	3,589	43,226
LEOPS	874	50,212,862	96	3,003,107	38	47	1,055
Corrections	<u>68</u>	<u>4,184,736</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>68</u>
Total Municipal Corporations	26,606	\$ 1,105,318,091	12,608	\$ 134,126,762	6,490	3,639	49,343

* Actual FY 08 salaries were increased by 3.5% to approximate FY 09 amounts.

STATE RETIREMENT AND PENSION SYSTEMS OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX A
MEMBERSHIP INFORMATION

Active Membership Statistics		
	Average Age	Average Service
Employees' Retirement	57.9	32.0
Employees' Pension	47.6	10.2
LEOPS	38.1	9.9
Corrections	43.2	11.2

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

Table of Contents

	<u>Page</u>
A. Actuarial Assumptions	B-1
B. Actuarial Methods	B-13

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

	1. Valuation Interest Rate	2. Rate of Increase in Cost of Living	(% at selected years of service)			3. Rates of Salary Increase (% at selected ages with 9+ years of service)					
			0	3	9	25	30	35	40	45	50
			Employees' Retirement Regular	7.75%	3.0%	5.50	5.50	4.50	5.00	5.00	4.50
Employees' Pension	7.75%	3.0%*	5.50	5.50	4.50	5.00	5.00	4.50	4.25	4.00	3.75
LEOPS	7.75%	3.0%**	8.00	6.50	4.50	5.00	5.00	4.75	4.75	4.25	3.50
Correctional Officers' Retirement	7.75%	3.0%	8.25	5.75	4.50	5.75	5.75	4.75	4.75	4.75	4.75

* A 3% simple rate is applicable for municipal members of these Systems, who do not elect to be covered under the improved plan.

** A 3% simple rate is applicable for former EPS members.

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

	4. Annual Rates of Withdrawal (number of withdrawals per 1,000 members) (at selected years of service)			(at selected ages for those with 9+ years)						
	0	3	9	25	30	35	40	45	50	55
Employees' Retirement										
Regular										
Male	200	90	50	50	40	40	30	25	25	20
Female	200	80	45	45	30	30	25	25	20	15
Employees' Pension										
Male	200	90	50	50	40	40	30	25	25	20
Female	200	80	45	45	30	30	25	25	20	15
LEOPS										
Male	120	80	20	15	15	15	15	15	15	15
Female	160	110	30	30	30	30	30	30	30	30
Correctional Officers' Retirement										
Male	180	120	40	40	40	40	40	30	30	25
Female	170	110	100	50	50	50	50	50	50	25

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

	5. Annual Rates of Mortality at Selected Ages (number of deaths per 10,000 members)							
	45	50	55	60	65	70	75	80
Employees' Retirement & Pension Regular								
Healthy Members (RP-2000 Combined Healthy Table with ages set back 2 years for females)								
Male	15	21	36	67	127	222	378	644
Female	9	14	22	39	76	134	230	376
Disabled Members								
Male (RP-2000 Disabled Retiree Table set back 4 years)	226	238	303	367	435	522	658	870
Female (RP-2000 Disabled Retiree Table)	75	115	165	218	280	376	522	723
Employees' Retirement and Correctional Officers' Retirement								
Healthy Members (RP-2000 Combined Healthy Table with ages set back 2 years for females)								
Male	15	21	36	67	127	222	378	644
Female	9	14	22	39	76	134	230	376
Disabled Members								
Male (RP-2000 Disabled Retiree Table set back 4 years)	226	238	303	367	435	522	658	870
Female (RP-2000 Disabled Retiree Table)	75	115	165	218	280	376	522	723
LEOPS								
Healthy Members (RP-2000 Combined Healthy Table set back two years for males)								
Male	17	25	31	54	101	180	305	522
Female	15	23	29	52	98	168	282	460
Disabled Members (RP-2000 Disabled Retiree Table)								
Male	226	290	354	420	502	626	821	1,094
Female	75	115	165	218	280	376	522	723

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

		6. Annual Rates of Disablement at Selected Ages (number becoming disabled per 10,000 members)						
		25	30	35	40	45	50	55
Employees' Retirement								
Ordinary Disability								
Regular								
	Male	4	4	7	13	17	20	27
	Female	4	4	7	12	18	25	35
Accidental Disability								
Regular								
	Male	1	1	1	2	2	1	1
	Female	1	1	1	2	2	2	2
Employees' Pension								
Ordinary Disability								
	Male	12	12	21	40	51	61	81
	Female	9	9	15	27	41	58	81
Accidental Disability								
	Male	3	3	4	6	5	4	4
	Female	2	2	3	4	4	4	4
Correctional Officers' Retirement								
Ordinary Disability								
	Male	30	36	45	57	71	101	131
	Female	46	46	46	51	59	77	117
Accidental Disability								
	Male	5	6	8	10	13	18	23
	Female	8	8	8	9	10	14	21
LEOPS								
Ordinary Disability								
	Male	29	37	46	61	81	116	149
	Female	47	50	51	59	72	95	145
Accidental Disability								
	Male	19	20	25	29	32	44	58
	Female	31	28	27	28	28	36	56

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

		7. Annual Rates of Retirement at Selected Ages (number retiring per 1,000 members)					
		45	50	55	60	65	70
Employees' Retirement							
Early							
First Year Eligible							
	Male	25	25	80	N/A	N/A	N/A
	Female	20	20	90	N/A	N/A	N/A
Subsequent Years							
	Male	20	20	60	N/A	N/A	N/A
	Female	20	20	20	N/A	N/A	N/A
Normal							
First Year Eligible							
	Male	170	170	170	170	170	170
	Female	210	210	210	210	210	210
Subsequent Years							
	Male	50	110	110	110	200	200
	Female	120	120	150	150	300	220
Employees' Pension							
Early							
First Year Eligible							
	Male	0	0	30	80	N/A	N/A
	Female	0	0	35	80	N/A	N/A
Subsequent Years							
	Male	0	0	70	45	N/A	N/A
	Female	0	0	100	55	N/A	N/A
Normal							
First Year Eligible							
	Male	140	140	140	140	50	50
	Female	160	160	170	260	60	60
Subsequent Years							
	Male	70	70	70	110	200	150
	Female	100	100	100	160	230	160
LEOPS*							
Normal							
	First Year Eligible	530	230	230	230	1,000	1,000
	Subsequent Years	150	150	200	300	1,000	1,000
Correctional Officers' Retirement							
Early							
	Normal	N/A	N/A	N/A	N/A	N/A	N/A
Normal							
	First Year Eligible	240	240	240	300	990	1,000
	Subsequent Years	120	120	120	120	210	1,000

* 50% of members eligible to do so are expected to elect DROP.

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

8. Social Security Covered Compensation

Employees' Retirement Not applicable

Employees' Pension Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 3.5% per annum compounded increase in the 2008 Social Security Maximum Wage Base.

LEOPS Future covered compensation levels, used to estimate member contributions and retirement allowances, were calculated using a 3.5% per annum compounded increase in the 2008 Social Security Maximum Wage Base.

Correctional Officers' Retirement Not applicable

9. Retirement Age for Inactive Vested Participants

Employees' Retirement Age 60

Employees' Pension Age 62

LEOPS Age 50

Correctional Officers' Retirement Age 55

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
 JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

	10. Probability of Leaving Contributions in the Plan Upon Withdrawal (number leaving their contributions per 1,000 members)				
	20	25	30	35	40
Employees' Retirement and Pension					
Male	875	768	706	682	1,000
Female	944	869	872	846	1,000
LEOPS	1,000	1,000	1,000	1,000	1,000
Correctional Officers' Retirement	1,000	1,000	1,000	1,000	1,000

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions, cont.

11. Miscellaneous Assumptions Which are Common to All Plans

- | | |
|-----------------------------------|--|
| a. Unknown Data for Participants: | Same as those exhibited by Members with similar known characteristics. If not specified, Members are assumed to be male. |
| b. Percent Married: | 75% |
| c. Age of Spouse: | Females are 4 years younger than males. |
| d. Unused Sick Leave: | Each member is assumed to have an additional 5 months of service at retirement attributable to unused sick leave. |
| e. Aggregate Payroll Growth: | 3.50% per annum |

APPENDIX B
ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Asset Valuation Method

All Systems use a method based on the principle that the difference between actual and expected investment returns should be subject to partial recognition to smooth out fluctuations in the total return achieved by the fund from year to year. Under this method, the actuarial value of the assets reflects annually one-fifth of the market value gains for the five prior years. The resulting value is restricted to be not less than 80% of market value nor greater than 120% of market value. As of June 30, 2007, the calculation of market gains included the difference between market and actuarial assets as of June 30, 2006.

For the Employees' Retirement & Pension System and for LEOPS, assets must be allocated between State and Municipal Corporation members. Beginning July 1, 1984, this allocation is based upon actual cash flows and shared investment results.

2. Funding Method

All Systems use the individual entry age normal method to determine costs. Under this funding method, a total contribution rate is determined which consists of two elements, the normal cost rate and the unfunded actuarial liability (UAL) rate.

The Individual Entry Age Normal cost rate is determined as the value, as of age at entry into the plan, of the member's projected future benefits, and divided by the value, also as of the member's entry age, of his expected future salary.

In addition to contributions required to meet the System's normal cost, contributions will be required to fund the System's unfunded actuarial liability. Actuarial liability is defined as the present value of future benefits less the present value of future normal costs. The unfunded actuarial liability is the total of the actuarial liability for all members less the actuarial value of the System's assets.

If the Employees' Combined System's unfunded actuarial liability is increased by plan changes or actuarial losses or decreased by actuarial gains, these amounts will be included as part of the unfunded actuarial liability and funded over a 25-year amortization period.

The UAL for LEOPS is being amortized over a closed 31 year period.

STATE RETIREMENT AND PENSION SYSTEM OF MARYLAND
JULY 1, 2008 MUNICIPAL ACTUARIAL VALUATION

APPENDIX C
SUMMARY OF PLAN PROVISIONS

Table of Contents

	<u>Page</u>
Employees' Retirement	C-1
Employees' Pension	C-7
Law Enforcement Officers' Pension System	C-12
Correctional Officers' Retirement System	C-20

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

1. Membership

Membership ended for employees employed on or after January 1, 1980. Members on December 31, 1979 continue to be members unless they elected to transfer into the Employees' Pension System (established January 1, 1980) prior to January 1, 2005.

Membership includes employees of the State and approximately 115 participating employers.

2. Member Contributions

- Plan A: Generally 7% of earnable compensation to maintain all benefits, including unlimited cost of living adjustments.
- Plan B: Generally 5% of earnable compensation to maintain all benefits, except the cost of living adjustments which are capped at 5%.
- Plan C: (Plan C provides a two-part benefit based on benefits of the Employees' Retirement System and the Employees' Pension System). Employee contributions, if any are based on participation of the employer in one of the three plans under the Employees' Pension System (refer to summary of Employees' Pension System).

Interest earned on all employee contributions is 4% per year.

3. Service Retirement Allowance

Eligibility: 30 years of eligibility service or attainment of age 60.

Allowance: $1/55^{\text{th}}$ of average final compensation for the three highest years as a member for each year of creditable service.

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Employees' Retirement System; for creditable service after election date, the amount determined by the service retirement formula for the Employees' Pension System under which the employer participates.

4. Early Retirement Allowance

Eligibility: 25 years of eligibility service.

Allowance: Service retirement allowance reduced by .005 for each month that date of retirement precedes the earlier of age 60 or the date the member would have completed 30 years of eligibility service. The maximum reduction is 30%.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

Plan C: For creditable service before election date, the amount determined by the service retirement formula for Employees' Retirement System with a maximum reduction of 30%; for creditable service after election date, the amount determined by the service retirement formula for the Employees' Pension System under which the employer participates with a .005 reduction for each month retirement occurs prior to age 62 (maximum reduction of 42%).

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent.

Allowance: The benefit is $1/55^{\text{th}}$ of average final compensation for the three highest years as a member for each year of creditable service. The minimum benefit is 25% of average final compensation; the maximum benefit can be no greater than $1/55^{\text{th}}$ of average final compensation for each year of creditable service the member would have accrued if employment continued to age 60.

Plan C: The benefit is the greater of the Employees' Retirement System allowance noted above, or the ordinary disability benefit of the Employees' Pension System.

Accidental

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty.

Allowance: The benefit is $66 \frac{2}{3}\%$ of average final compensation for the three highest years as a member, plus the annuity provided by accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

7. Death Benefits

Ordinary

Eligibility: one year of eligibility service.

Benefit: one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions. If member dies prior to accruing one year of service, payment is only the return of accumulated contributions.

Spouse Law

Eligibility: surviving spouse designated as the sole primary beneficiary and the deceased member was eligible to retire or was at least age 55 with at least 15 years of eligibility service.

Benefit: surviving spouse may elect a one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions, or a monthly allowance under Option 2 (100% survivor benefit).

Special Death Benefit

Eligibility: killed in line of duty.

Benefit: 66 2/3% of average final compensation for the three highest years as a member payable to a surviving spouse, dependent children or dependent parents. Accumulated contributions are paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death.

8. Vested Retirement Allowance

Eligibility: five years of eligibility service.

Allowance: accrued retirement allowance payable at age 60, provided member does not withdraw accumulated contributions.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

9. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted based on the Consumer Price Index. The adjustments are effective July 1 for all benefits which have been in payment for one year.

- Plan A: Unlimited and compounded.
- Plan B: Capped at 5% and compounded.
- Plan C: Combination of COLA for either Plan A or Plan B (depending on member election prior to electing Plan C) - for benefit calculated under the Employees' Retirement System, plus capped at a maximum of 3% compounded COLA on benefit calculated under the Employees' Pension System under which the employer participates.

10. Optional Forms of Payment

Normal service allowance is a single life annuity.

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions remaining at date of death.

Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Retirees who are to receive a service retirement, early service retirement, disability benefit, or vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

11. Reduction for Benefits Payable Under Workers' Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits payable after retirement from injury occurring during employment by the State, if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

12. Miscellaneous Provisions

For Members of the General Assembly

The retirement allowance is equal to 3.00% of current legislative salary for each year of creditable service (maximum 22 years 3 months) upon attainment of age 60 and at least eight years of eligibility service. Reduced benefits are payable upon attainment of age 50 and completion of 8 years of eligibility service. The benefit is reduced by .005 for each month between ages 50 and 60 that the early retirement date precedes age 60.

A member with eight years of eligibility service who has not attained age 60 may leave contributions in the system and receive a retirement allowance at age 60, or a reduced benefit on or after age 50. If termination occurs before the completion of eight years of eligibility service, the member may make contributions equal to the member's and the State's required contributions until the member would have completed eight years of eligibility service.

A member who is certified as disabled after completing at least 8 years of eligibility service may resign from the General Assembly and immediately receive a retirement allowance based on their eligibility service.

The **member's surviving spouse receives 50% of the member's retirement allowance** if the member i) is retired, ii) is eligible for a deferred vested benefit, or iii) is active and has eight years of eligibility service. The surviving spouse of a member who had accrued less than eight years of eligibility service and dies in office shall receive a lump sum death benefit of accumulated contribution plus an amount equal to the deceased's annual earnable compensation at the time of death.

Members contribute 5% of their earnable compensation during their first 22 years 3 months of service with contributions earning interest at 4% per year.

All retirement allowances are recalculated each time the salary for current members of the General Assembly are increased.

For Correctional Officers

Correctional officers serving in the first six job classifications, maximum security attendants at Clifton T. Perkins Hospital Center, a Correctional Dietary, Maintenance or Supply Officer, Maryland Correctional Enterprise Officers and Trainees, Plant Supervisors, Plant Managers, and Regional Managers; and Laundry Officers participate under this System. In addition, effective July 1, 2006, Maryland counties may elect to participate on behalf of their detention center officers.

An immediate service retirement allowance is payable to a correctional officer if, on or before the retirement, the officer has completed 20 years of eligibility service and served at least five

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

years in one of the positions noted above immediately preceding retirement. The vested retirement allowance of a correctional officer who was in the first six job classifications for at least five years preceding retirement commences at age 55; for the security attendant it commences at age 60.

13. Change in Benefits

Effective June 1, 2008, the Special Death Benefit was added (excluding members of the General Assembly).

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

1. Membership

Membership is a condition of employment for all classified and unclassified regular employees of the State of Maryland hired on or after January 1, 1980, excluding those eligible for the Teachers' Retirement System, Teachers' Pension System, State Police Pension Fund, certain judges, correctional officers, and members of the General Assembly. Certain governmental units also have elected to participate in the System.

There are three plans under the Employees' Pension System.

- Noncontributory Pension System (**NCPS**) - the original pension system established on January 1, 1980 that only applies to certain participating governmental units that did not elect to participate in the Contributory Pension System or the Alternate Contributory Pension Selection.
- Employees' Contributory Pension System (**ECPS**) – The ECPS established July 1, 1998 that only applies to certain participating governmental units that elected the ECPS but did not elect to participate in the Alternate Contributory Pension Selection.
- Alternate Contributory Pension Selection (**ACPS**) - applies to all State employees and those participating governmental units that elected the ACPS effective July 1, 2006.

2. Member Contributions

NCPS: Members are only required to make contributions of 5% on earnable compensation that exceeds the Social Security Taxable Wage Base.

ECPS: Members are required to make contributions of 2% of earnable compensation.

ACPS: Effective for the period July 1, 2007 – June 30, 2008, members were required to make contributions of 4% of earnable compensation.

Effective July 1, 2008, ACPS members are required to make contributions of 5% of earnable compensation.

Contributions earn interest at 5% per year.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

3. Service Retirement Allowance

Eligibility - 30 years of eligibility service or attainment of one of the following:

- Age 62 with 5 years of eligibility service
- Age 63 with 4 years of eligibility service
- Age 64 with 3 years of eligibility service
- Age 65 or older with 2 years of eligibility service

NCPS Allowance:

0.8% of average final compensation up to the SSIL for the three highest consecutive years as a member plus 1.5% of average final compensation over the SSIL for each year of creditable service;

ECPS Allowance: The greater of (i) or (ii), plus (iii), as described below:

- (i) 1.2% of average final compensation for the three highest consecutive years as an employee for each year of creditable service on or before June 30, 1998;
- (ii) 0.8% of average final compensation up to the SSIL for the three highest consecutive years as a member plus 1.5% of average final compensation over the SSIL for each year of creditable service on or before June 30, 1998;
- (iii) 1.4% of average final compensation for the three highest consecutive years as an employee for each year of creditable service after June 30, 1998.

ACPS Allowance: The greater of (i) or (ii), plus (iii), as described below:

- (i) 1.2% of average final compensation for the three highest consecutive years as an employee for each year of creditable service on or before June 30, 1998;
- (ii) 0.8% of average final compensation up to the SSIL for the three highest consecutive years as a member plus 1.5% of average final compensation over the SSIL for each year of creditable service on or before June 30, 1998;
- (iii) 1.8% of average final compensation for the three highest consecutive years as an employee for each year of creditable service after June 30, 1998.

The SSIL is the average annual earnings for which Social Security benefits are provided to an employee attaining age 65 in the year of termination of employment, who earned the maximum Social Security covered earnings in each year.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

Note: Members who transferred into the Employees' Pension System, on or after April 1, 1998, receive benefits based on the provisions of the NCPS as in effect of January 1, 1980 except for COLA benefits. The COLAs are capped at a maximum of 3% compounded annually.

4. Early Retirement Allowance

Eligibility: Attainment of age 55 and at least 15 years of eligibility service.

Allowance: Service retirement allowance computed as of early retirement date, reduced by .005 for each month that early retirement date precedes age 62 (maximum reduction is 42%).

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent.

Allowance: The benefit is the service retirement allowance computed on the basis that service continues until age 62 without any change in the rate of earnable compensation. If disability occurs on or after age 62, the benefit is based on creditable service at time of retirement.

Accidental

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty.

Allowance: The benefit is 66 2/3% of average final compensation for the three highest consecutive years as a member, plus the annuity provided by accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

6. Death Benefits

Ordinary

Eligibility: one year of eligibility service.

Benefit: one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions. If member dies prior to accruing one year of service, payment is only the return of accumulated contributions.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

Spouse Law

Eligibility: surviving spouse designated as the sole primary beneficiary and the deceased member was eligible to retire or was at least age 55 with at least 15 years of eligibility service.

Benefit: surviving spouse may elect one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions or a monthly allowance under Option 2 (100% survivor benefit).

Special Death Benefit

Eligibility: killed in line of duty.

Benefit: 66 2/3% of average final compensation for the three highest consecutive years as a member payable to a surviving spouse, dependent children or dependent parents. Accumulated contributions are paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death.

7. Vested Retirement Allowance

Eligibility: Five years of eligibility service.

Allowance: Accrued retirement allowance payable at age 62. A member who has completed 15 years of eligibility service may begin to receive benefit payments at any time on or after attainment of age 55, reduced by .005 for each month that benefit commencement date precedes age 62.

If member does not commence to receive benefit payments, and dies before attaining age 62, only accumulated contributions are returned.

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. Effective July 1, 1998, the annual adjustment is capped at a maximum of 3% compounded COLA, and is applied to all benefits which have been in payment for one year. All increases are effective July 1.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

EMPLOYEES' PENSION SYSTEM OF THE STATE OF MARYLAND

However, retirement allowances of NCPS retirees (retirees of participating employers who did not elect the ECPS or ACPS) have an annual COLA that is capped at a maximum of 3% of the initial benefit. The COLA is applied to all benefits which have been in payment for one year. All increases are effective July 1.

9. Optional Forms of Payment

Normal service allowance is in a single life annuity.

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions remaining at date of death.

Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Retirees who are to receive a service retirement, early service retirement, disability benefit, or vested allowance of less than \$50 a month may elect to receive a lump-sum payment equal to the present value in lieu of a monthly benefit.

10. Reduction for Benefits Payable Under Workers' Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workers' compensation benefits payable after retirement from injury occurring during employment by the State, if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

11. Change in Benefits

Effective June 1, 2008, the Special Death Benefit was added.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

**LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND
(RETIREMENT PLAN)**

A. Retirement System Provisions

1. Membership

The retirement tier was closed to new participants effective January 1, 2005.

2. Member Contributions

Members who transferred from Employees' Retirement System (Plan A) are required to contribute 7% of earnable compensation. Members who transferred from the Employees' Retirement System (Plan B) contribute 5% of earnable compensation.

Contributions earn interest at 4% per year.

3. Service Retirement Allowance

Eligibility: 25 years of eligibility service or attainment of age 50.

Allowance: 2.3% of average final compensation for the three highest years as a member for each of the first 30 years of creditable service, plus 1.0% of average final compensation for each additional year.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility: Certification of the medical board designated by the Board of Trustees that member is incapacitated for the performance of duty, and that incapacity is permanent.

Allowance: Service retirement allowance with a minimum of 25% of average final compensation.

Accidental

Eligibility: Total and permanent disability as certified by the medical board arising out of or in the course of the actual performance of duty.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

**LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND
(RETIREMENT PLAN)**

Allowance: The benefit is 66 2/3% of average final compensation plus an annuity provided by accumulated contributions with a maximum of average final compensation.

6. Death Benefits

Ordinary

Eligibility: 1 through 2 years of eligibility service and not eligible for special death benefit.

Benefit: Member's annual earnable compensation at time of death plus accumulated contributions.

Regardless of length of service, members' accumulated contributions are paid.

Special Benefit

Eligibility: Two or more years of eligibility service

Benefit: Accumulated contributions paid to designated beneficiary plus an allowance of 50% of the ordinary disability benefit. Payment is made to the surviving spouse; however if there is no surviving spouse or spouse dies before youngest child reaches age 18, one-half of average final compensation continues until the youngest child reaches age 18. If none of the above conditions are met, the ordinary death benefit is paid to the designated beneficiary(ies).

Eligibility: Death arises out of or in the course of the actual performance of duty

Benefit: Accumulated contributions paid to designated beneficiary plus an allowance of 66 2/3% of the member's average final compensation. Payment is made to the surviving spouse; however if there is no surviving spouse or spouse dies before youngest child reaches age 18, one-half of average final compensation continues until the youngest child reaches age 18. If none of the above conditions are met, the ordinary death benefit is paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death, unless benefit payment has commenced.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

**LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND
(RETIREMENT PLAN)**

7. Vested Retirement Allowance

Eligibility: Five years of eligibility service.

Allowance: Accrued retirement allowance payable at age 50 if the member does not withdraw the member's accumulated contributions.

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. COLAs are effective July 1 and are applied to all benefits which have been in payment for one year. For members contributing 7% of earnable compensation, unlimited COLA is compounded annually. For members contributing 5% of earnable compensation, the cost-of-living adjustment is capped at a maximum 5% compounded annually.

9. Optional Forms of Payment

The normal service allowance is a 50% joint and survivor annuity with spouse, if any; or if there is no surviving spouse or upon the death of the surviving spouse, to any children of the deceased under the age of 18 years, until every child dies or becomes 18 years.

Other forms of payment may be elected if there is no spouse at time of retirement.

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions remaining at date of death.

Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

**LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND
(RETIREMENT PLAN)**

10. Reduction for Benefits Payable under Workers' Compensation

Disability retirement allowances, excluding the annuity reserves, are reduced for workers' compensation benefits payable after retirement from injury occurring during employment with the State, if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

11. Deferred Retirement Option Program (DROP)

Members with 25 years of eligibility service, but less than 30 years of eligibility service, may elect to enter the DROP program for no more than five years. Members who enter DROP are retired and cease making member contributions, and cease accruing service credit and additional benefits. The service retirement allowance, with annual COLA adjustments, is credited to an account earning interest at the rate of 6% per year, compounded monthly. When the DROP period ends, members terminate employment and begin receiving their monthly allowance plus the lump sum payment from their DROP account. During the DROP period, members remain eligible for Accidental Disability benefits if incapacitated while in DROP.

12. Change in Benefit

Effective July 1, 2008, members entering DROP may only be considered for Accidental Disability based on incapacity that occurs on or after participation in DROP.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND

B. Pension System Provisions

1. Membership

Membership is a condition of employment for all law enforcement officers who are employees of the State as provided in the Annotated Code of Maryland, State Personnel and Pensions Article, Title 26, Section 26-201. This includes participating governmental units who elect to have their law enforcement officers or firefighters/paramedics participate in the System.

2. Member Contributions

Members are required to contribute 4% of earnable compensation.

Contributions earn interest at 5% per year.

3. Service Retirement Allowance

Eligibility: 25 years of eligibility service or attainment of age 50.

Allowance: 2.0% of average final compensation for the three highest consecutive years as an employee for each of the first 30 years of creditable service. Maximum benefit is 60% of average final compensation.

4. Early Retirement Allowance

Not applicable to this System.

5. Disability Retirement Allowance

Ordinary

Eligibility: Certification of the medical board designated by the Board of Trustees that member is incapacitated for the performance of duty, and that incapacity is permanent.

Allowance: Service retirement allowance computed on the basis that service continues until age 50 without any change in rate of earnable compensation. If disability occurs after age 50, the benefit is based on creditable service at time of retirement.

Accidental

Eligibility: Total and permanent disability as certified by the medical board arising out of or in the course of the actual performance of duty.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND

Allowance: The benefit is 66 2/3% of average final compensation plus an annuity provided by accumulated contributions with a maximum of average final compensation.

6. Death Benefits

Ordinary

Eligibility: 1 through 2 years of eligibility service and not eligible for special death benefit as noted below.

Benefit: Member's annual earnable compensation at time of death plus accumulated contributions.

Regardless of length of service, members' accumulated contributions are paid.

Accidental

Eligibility: Two or more years of eligibility service.

Benefit: Accumulated contributions paid to designated beneficiary plus an allowance of 50% of the ordinary disability benefit. Payment is made to the surviving spouse; however if there is no surviving spouse or spouse dies before youngest child reaches age 18, one-half of average final compensation continues until the youngest child reaches age 18. If none of the above conditions are met, the ordinary death benefit is paid to the designated beneficiary(ies).

Eligibility: Death arises out of or in the course of the actual performance of duty.

Benefit: Accumulated contributions paid to designated beneficiary plus an allowance of 66 2/3% of the member's average final compensation. Payment is made to the surviving spouse; however if there is no surviving spouse or spouse dies before youngest child reaches age 18, one-half of average final compensation continues until the youngest child reaches age 18. If none of the above conditions are met, the ordinary death benefit is paid to the designated beneficiary(ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death, unless benefit payment has commenced.

APPENDIX C
SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND

7. Vested Retirement Allowance

Eligibility: Five years of eligibility service.

Allowance: Accrued retirement allowance payable at age 50 if the member does not withdraw the member's accumulated contributions.

8. Cost-of-Living Adjustments (COLA)

All retirement allowances are adjusted each year based on the Consumer Price Index. Effective July 1, 2000, the annual adjustment is capped at a maximum 3% compounded and is applied to all benefits which have been in payment for one year. All increases are effective July 1.

9. Optional Forms of Payment

The normal service allowance is a 50% joint and survivor annuity with spouse, if any; or if there is no surviving spouse or upon the death of the surviving spouse, to any children of the deceased under the age of 18 years, until every child attains 18 years of age .

Other forms of payment may be elected if there is no spouse at time of retirement.

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions remaining at date of death.

Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

10. Reduction for Benefits Payable under Workers' Compensation

Disability retirement allowances, excluding the annuity reserves, are reduced for workers' compensation benefits payable after retirement from injury occurring during employment with the State if the workers' compensation benefits are for the same injury for which

APPENDIX C
SUMMARY OF PLAN PROVISIONS

LAW ENFORCEMENT OFFICERS PENSION SYSTEM OF THE STATE OF MARYLAND

disability retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

11. Deferred Retirement Option Plan (DROP)

Members with 25 years of eligibility service, but less than 30 years of eligibility service, may elect to enter the DROP program for no more than five years. Members who enter DROP are retired and cease making member contributions, and cease accruing service credit and additional benefits. The service retirement allowance, with annual COLA adjustments, is credited to an account earning interest at the rate of 6% per year, compounded monthly. When the DROP period ends, members terminate employment and begin receiving their monthly allowance plus the lump sum payment from their DROP account. During the DROP period, members remain eligible for Accidental Disability benefits if incapacitated while in DROP.

12. Changes in Benefits

Effective July 1, 2008, members entering DROP may only be considered for Accidental Disability based on incapacity that occurs on or after participation in DROP.

Effective July 2008, police officers of the Baltimore City Community College participate in the Pension Plan portion of this System.

**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

CORRECTIONAL OFFICERS' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

1. Membership

Membership in the Correctional Officers' Retirement System (CORS) includes correctional officers serving in the first six job classifications; maximum security attendants at Clifton T. Perkins Hospital Center; a Correctional Dietary, Maintenance, or Supply Officer; Maryland Correctional Enterprise Officers and Trainees, Plant Supervisors, Plant Managers and Regional Managers; and Laundry Officers. In addition, effective July 1, 2006 Maryland Counties may elect to participate in CORS on behalf of their detention center officers.

2. Member Contributions

Members are required to contribute 5% of earnable compensation.

Contributions earn interest at 4% per year.

3. Service Retirement Allowance

Eligibility: 20 years of eligibility service, with at least the last five years served in any of the positions noted above under Membership.

Allowance: $1/55^{\text{th}}$ of average final compensation for the three highest years as a member for each year of creditable service.

Note: Members are eligible to receive a deferred vested benefit at age 55 (age 60 for maximum security attendants). Therefore, most members may receive an immediate retirement allowance at age 55 if they have accrued at least five years of eligibility service.

4. Early Retirement Allowance

Not applicable to this System

Note: Baltimore City Jail employees who were employed by the Baltimore City Jail on or before June 30, 1991 and who became members of the Correctional Officers Retirement System on or after June 30, 2006 may retire early with a minimum of ten years of eligibility service and receive a service retirement allowance.

5. Disability Retirement Allowance

Ordinary

Eligibility: Five years of eligibility service and certification of the medical board designated by the Board of Trustees that member is mentally or physically incapacitated from the performance of the normal duties of the member's position, and that incapacity is permanent.

**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

CORRECTIONAL OFFICERS' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

Allowance: The benefit is $1/55^{\text{th}}$ of average final compensation for the three highest years as a member for each year of creditable service. The minimum benefit is 25% of average final compensation; the maximum benefit can be no greater than $1/55^{\text{th}}$ of average final compensation for each year of creditable service the member would have accrued if employment continued to age 60.

Accidental

Eligibility: Certification of the medical board designated by the Board of Trustees that member is totally and permanently incapacitated from the performance of the normal duties of the member's position as the natural and proximate result of an accident that occurred in the actual performance of duty.

Allowance: The benefit is $66 \frac{2}{3}\%$ of average final compensation for the three highest years as a member, plus the annuity provided by accumulated contributions. The maximum benefit cannot be greater than the average final compensation.

6. Death Benefits

Ordinary

Eligibility: one year of eligibility service.

Benefit: one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions. If member dies prior to accruing one year of service, payment is only the return of accumulated contributions.

Spouse Law

Eligibility: surviving spouse designated as the sole primary beneficiary and the deceased member was eligible to retire or was at least age 55 with at least 15 years of eligibility service.

Benefit: surviving spouse may elect a one time lump sum payment of member's annual earnable compensation at time of death plus accumulated contributions or a monthly allowance under Option 2 (100% survivor benefit).

Special Death Benefit

Eligibility: death in line of duty.

Benefit: $66 \frac{2}{3}\%$ of average final compensation for the three highest years as a member

**APPENDIX C
SUMMARY OF PLAN PROVISIONS**

CORRECTIONAL OFFICERS' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

payable to a surviving spouse or if no surviving spouse to dependent children until age 18 .
Accumulated contributions are paid to the designated beneficiary (ies).

Note: Death benefits outlined above are payable upon death of an active member. If member is not active, only member accumulated contributions and interest are payable at time of death.

7. Vested Retirement Allowance

Eligibility: five years of eligibility service

Allowance: deferred vested benefit payable at age 55 (age 60 for maximum security attendants) provided member does not withdraw contributions.

8. Cost-of-Living Allowance (COLA)

All retirement allowances are adjusted based on the Consumer Price Index. The unlimited compounded COLAs are effective July 1 for all benefits which have been in payment for one year.

9. Optional Forms of Payment

Normal service allowance is a single life annuity.

Option 1: Cash refund equal to excess of present value of retirement allowance at date of retirement over total amount of payments made to date of death.

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: This option guarantees a return of accumulated member contributions remaining at date of death.

Option 5: 100% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

Option 6: 50% "pop-up" joint and survivor annuity with adjustment to maximum benefit if beneficiary predeceases retiree.

10. Reduction for Benefits Payable Under Workers' Compensation

Disability retirement allowances, excluding annuity reserves, are reduced for workers'

APPENDIX C
SUMMARY OF PLAN PROVISIONS

CORRECTIONAL OFFICERS' RETIREMENT SYSTEM OF THE STATE OF MARYLAND

compensation benefits payable after retirement from injury occurring during employment by the State, if the workers' compensation benefits are for the same injury for which disability retirement was granted and are paid for the same period of time for which the retirement benefits are paid.

11. Change in Benefits

Effective July 1, 2008, the coverage of the Correctional Officers provisions was expanded to include Maryland Correctional Enterprise Officers and Trainees, Plant Supervisors, Plant Managers and Regional Managers, and Laundry Officers.

Effective July 1, 2006 CORS was opened to Counties that elect to participate in the System on behalf of their detention center officers.