Statistical Section

STATISTICAL SECTION OVERVIEW

The Maryland State Retirement and Pension System (MSRPS) has implemented GASB Statement 44, Economic Condition Reporting: The Statistical Section. This statement establishes standardized reporting requirements relative to the supplementary information provided in this section in an effort to improve the understandability and usefulness of the information presented. GASB Statement 44 further states that the purpose of the Statistical Section is to provide historical perspective, context, and detail to assist readers in using the information in the financial statements and the notes to the financial statements to better understand and assess the System's overall economic condition. The schedules within the Statistical Section are classified into the following four categories: Financial Trends, Revenue Capacity, Demographic and Economic Information, and Operating Information.

The schedules beginning on page 135 show financial trend information to assist users in understanding and assessing how the MSRPS's financial position has changed over the past 10 years. The financial trend schedules presented are:

- Changes in Plan Net Position
- Benefits Expense by Type
- Refund Expense by Type

The schedules beginning on page 136 show demographic and economic information and operating information. The demographic and economic information is intended to assist users in understanding the environment in which MSRPS operates. The operating information is intended to provide contextual information about MSRPS's operations to assist readers in using financial statement information. The demographic and economic information and the operating information presented include:

- Schedule of Average Benefit Payments
- History of Funding Progress
- Contribution Rates by Plan
- Schedule of Retired Members by Type
- Schedule of Active Membership by Plan
- Schedule of Retirees and Beneficiaries by Plan
- Revenues by Source and Expenses by Type
- Revenues vs. Expenses
- Principal Participating Employers

TEN-YEAR HISTORY OF CHANGES IN PLAN NET POSITION

for the Years Ended June 30, (Expressed in thousands)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Additions										
Employer contributions	\$ 1,733,653	\$ 1,858,612	\$ 1,870,655	\$2,036,596	\$ 1,995,017	\$ 2,054,091	\$ 2,144,270	\$ 2,203,524	\$ 2,282,303	\$ 2,438,917
Members contributions	727,726	755,444	764,414	782,686	791,583	807,291	850,298	865,738	894,267	963,702
Net Investment income	5,706,267	1,197,671	497,531	4,473,443	3,899,393	3,288,209	1,866,639	14,315,762	-1,942,133	1,980,277
Total Additions	8,167,646	3,811,727	3,132,600	7,292,725	6,685,993	6,149,591	4,861,207	17,385024	1,234,437	5,382,896
Deductions										
Benefit payments	3,121.823	3,284,550	3,469,493	3,577,123	3,744,132	3,926,220	4,108,492	4,233,047	4,394,350	4,653,163
Refunds	42,922	48,245	58,362	63,441	68,600	67,400	68,752	64,774	91,535	101,737
Administrative expenses	26,130	29,080	28,659	30,904	33,211	39,784	41,346	48,740	42,061	46,014
Total Deductions	3,190,875	3,361,875	3,556,514	3,671,468	3,845,943	4,033,404	4,218,590	4,366,561	4,527,946	4,800,914
Changes in										
Plan Net Positions	\$ 4,976,771	\$ 449,852	\$ (423,914)	\$ 3,621,257	\$ 2,840,050	\$ 2,116,187	\$ 642,617	\$13,018,463	\$(3,293,509)	\$ 581,982

SCHEDULE OF BENEFIT EXPENSE BY TYPE

(Expressed In Thousands)

			Death In					
			Service Pre-	Di	sability Bene	fits		
Fiscal	Age & Serv	vice Benefits	Retirement	Retire	es			
Year	Retirees	Survivors	Benefits	Accidental	Ordinary	Survivors	Total	
2014	\$ 2,633,852	\$ 124,807	\$ 20,514	\$ 120,829	\$ 202,147	\$ 19,672	\$ 3,121,823	
2015	2,777,136	130,215	21,005	124,090	211,373	20,731	3,284,550	
2016	2,937,077	138,467	21,592	128,518	221,849	21,990	3,469,493	
2017	3,028,182	145,322	21,522	130,309	229,143	22,644	3,577,122	
2018	3,175,588	152,066	21,655	133,671	237,539	23,612	3,744,132	
2019	3,334,495	161,203	21,720	138,313	245,429	25,059	3,926,220	
2020	3,496,003	171,010	22,494	141,504	250,956	26,526	4,108,492	
2021	3,622,725	180,283	23,242	144,625	254,621	27,551	4,253,047	
2022	3,748,807	191,749	24,944	146,436	253,859	28,555	4,394,350	
2023	3,974,624	209,238	26,003	153,156	259,732	30,410	4,653,163	

SCHEDULE OF REFUND EXPENSE BY TYPE

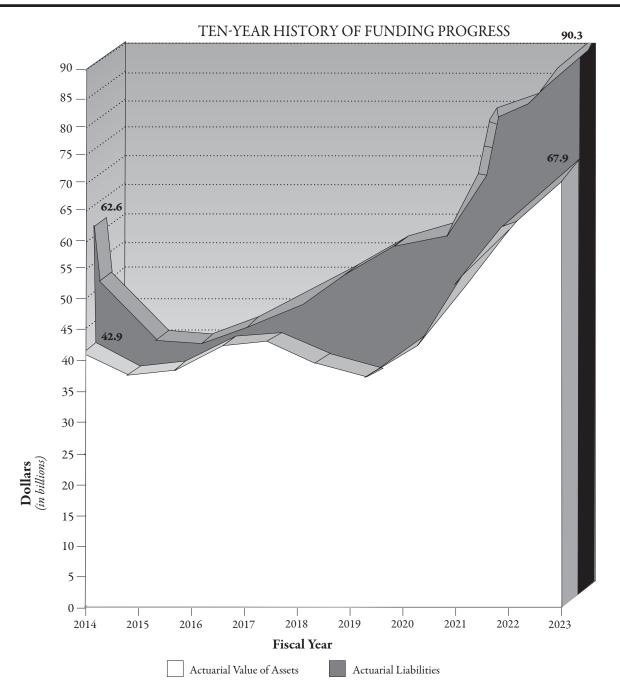
(Expressed in thousands)

Fiscal		- ·	3.61	
Year	Separation	Death	Misc.	Total
2014	\$ 36,835	\$ 5,955	\$ 132	\$ 42,922
2015	40,966	7,126	153	48,245
2016	51,372	6,869	120	58,362
2017	54,671	8,538	238	63,441
2018	59,108	9,315	177	68,600
2019	58,848	8,394	158	67,400
2020	59,871	8,804	77	68,752
2021	53,004	11,665	105	64,774
2022	74,654	16,753	128	91,535
2023	88,143	13,493	101	101,737

MARYLAND STATE RETIREMENT AND PENSION SYSTEM TEN YEAR HISTORY OF AVERAGE BENEFIT PAYMENTS

Years Credited Service

	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+
Period 7/1/2013 to 6/30/2014 Average monthly benefit Monthly final average salary Number of retired members	\$ 405 \$ 2,475 218	\$ 472 \$ 3,508 918	\$ 832 \$ 4,064 873	\$ 1,324 \$ 4,699 964	\$ 1,794 \$ 5,222 910	\$ 2,234 \$ 5,673 938	\$ 3,383 \$ 6,380 2,304
Period 7/1/2014 to 6/30/2015 Average monthly benefit Monthly final average salary Number of retired members	\$ 454 \$ 2,338 201	\$ 459 \$ 3,515 911	\$ 888 \$ 4,139 972	\$ 1,304 \$ 4,679 1,089	\$ 1,804 \$ 5,124 968	\$ 2,275 \$ 5,571 1,042	\$ 3,246 \$ 6,134 2,621
Period 7/1/2015 to 6/30/2016 Average monthly benefit Monthly final average salary Number of retired members	\$ 501 \$ 2,371 219	\$ 472 \$ 3,407 918	\$ 869 \$ 4,128 934	\$ 1,367 \$ 4,773 1,118	\$ 1,901 \$ 5,427 953	\$ 2,366 \$ 5,786 1,016	\$ 3,377 \$ 6,425 2,423
Period 7/1/2016 to 6/30/2017 Average monthly benefit Monthly final average salary Number of retired members	\$ 576 \$ 2,199 138	\$ 509 \$ 3,626 748	\$ 864 \$ 4,110 873	\$ 1,400 \$ 4,865 1,028	\$ 1,943 \$ 5,389 964	\$ 2,454 \$ 5,855 863	\$ 3,479 \$ 6,563 2,060
Period 7/1/2017 to 6/30/2018 Average monthly benefit Monthly final average salary Number of retired members	\$ 279 \$ 3,012 87	\$ 520 \$ 3,482 704	\$ 938 \$ 4,290 925	\$ 1,476 \$ 4,934 1,200	\$ 1,982 \$ 5,457 1,084	\$ 2,626 \$ 6,046 964	\$ 3,526 \$ 6,584 2,428
Period 7/1/2018 to 6/30/2019 Average monthly benefit Monthly final average salary Number of retired members	\$ 311 \$ 3,082 109	\$ 508 \$ 3,360 816	\$ 950 \$ 4,243 956	\$ 1,510 \$ 4,916 1,213	\$ 2,028 \$ 5,460 1,086	\$ 2,678 \$ 6,034 967	\$ 3,597 \$ 6,580 2,439
Period 7/1/2019 to 6/30/2020 Average monthly benefit Monthly final average salary Number of retired members	\$ 487 \$ 3,400 42	\$ 512 \$ 3,639 531	\$ 940 \$ 4,441 830	\$ 1,549 \$ 5,170 1,023	\$ 2,049 \$ 5,651 962	\$ 2,819 \$ 6,431 840	\$ 3,639 \$ 6,800 2,151
Period 7/1/2020 to 6/30/2021 Average monthly benefit Monthly final average salary Number of retired members	\$ 604 \$ 3,856 45	\$ 489 \$ 3,660 410	\$ 947 \$ 4,428 845	\$ 1,521 \$ 5,181 976	\$ 2,099 \$ 5,699 995	\$ 3,005 \$ 6,626 823	\$ 3,772 \$ 6,987 1,901
Period 7/1/2021 to 6/30/2022 Average monthly benefit Monthly final average salary Number of retired members	\$ 632 \$ 3,992 61	\$ 567 \$ 3,667 480	\$ 1,031 \$ 4,625 890	\$ 1,591 \$ 5,345 1,181	\$ 2,162 \$ 5,795 1,226	\$ 3,039 \$ 6,711 900	\$ 3,954 \$ 7,239 2,066
Period 7/1/2022 to 6/30/2023 Average monthly benefit Monthly final average salary Number of retired members	\$ 494 \$3,373 31	\$ 522 \$ 3,916 489	\$ 1,026 \$ 4,851 784	\$ 1,623 \$ 5,473 1,056	\$ 2,238 \$ 6,000 1,152	\$ 3,177 \$ 6,962 851	\$ 4,237 \$ 7,697 1,922



TEN-YEAR HISTORY OF EMPLOYER CONTRIBUTION RATES BY PLAN

			State				Participati	ng Govern	mental Units (PGU)
Fiscal Year	Combined State Rate	Teachers' Combined Rate	Employees' Combined Rate		State Police Retirement	Law Enforcement Officers' Pension	Law Enforcement Officers' Pension	Employees' Combined Rate	Correctional Officers' Retirement
2014	15.43%	14.71%	14.05%	50.92%	66.71%	52.47%	31.76%	6.47%	9.41%
2015	16.41	15.47	15.53	42.74	83.06	41.37	30.45	6.20	11.43
2016	16.83	15.71	16.38	40.70	78.91	39.77	31.94	5.00	10.43
2017	17.58	15.79	18.28	46.56	81.40	39.60	31.18	4.64	9.81
2018	17.60	15.71	18.56	46.45	80.29	39.69	30.75	5.03	9.53
2019	17.42	15.43	18.58	44.53	78.41	39.78	31.43	5.47	9.85
2020	17.82	15.59	19.56	44.44	79.58	41.37	32.22	5.85	10.26
2021	17.85	14.96	20.71	40.27	78.09	42.96	34.93	6.71	9.67
2022	17.50	14.67	20.50	41.92	75.30	42.28	34.21	7.04	11.06
2023	17.55	14.65	20.68	40.02	76.45	44.73	36.20	7.40	12.19

 $Does \ not \ include \ reduction \ of \$120 \ Million \ in \ contributions \ for \ State \ Systems \ due \ to \ 2011 \ General \ Assembly \ reforms.$

SCHEDULE OF RETIRED MEMBERS BY TYPE

as of June 30, 2023

Amount of				-	Гуре of Retii	rement		
Monthly Benefit	Number of Retirees	NR (1) & ER(2)	SP(3)	SPD(4)	ADR(5)	ODR(6)	SPDR(7)	MAX
1- 300	17,676	16,357	923	12	2	196	186	10,129
301 - 600	15,564	13,304	1,097	30	3	784	346	7,849
601 - 900	13,559	11,057	967	81	15	1,109	330	6,261
901 - 1,200	12,997	10,205	932	79	40	1,456	285	5,823
1,201 - 1,500	11,890	9,456	847	80	105	1,177	225	5,052
1,501 - 1,800	11,561	9,062	874	84	224	1,125	192	4,569
1,801 - 2,100	10,892	8,725	670	64	252	1,055	126	4,195
2,101 - 2,400	9,921	8,043	607	66	293	835	77	3,709
2,401 - 2,700	9,511	7,817	485	49	356	753	51	3,658
2,701 - 3,000	8,401	6,950	400	61	355	593	42	3,214
Over 3,000	52,637	46,136	1,856	297	2,070	2,135	143	22,496
	174,609	147,112	9,658	903	3,715	11,218	2,003	76,955

Type of Retirement:

- 1 Normal retirement for age and service
- 2 Early retirement
- 3 Survivor payment normal or early retirement
- 4 Survivor payment death in service
- 5 Accidental disability retirement
- 6 Ordinary disability retirement
- 7 Survivor payment disability retirement

OF RETIREMENT AND OPTION SELECTED

40	. •	C 1	
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Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 5	Opt. 6	Opt. 7
2 202	1.750	(71	((0	701	440	(
3,292	1,759	671	669	701	449	6
2,441	1,821	1,111	857	759	722	4
1,868	1,660	1,192	1,042	677	856	3
1,479	1,591	1,322	1,141	644	994	3
1,352	1,533	1,238	1,093	712	908	2
1,222	1,774	1,241	1,062	758	933	2
1,294	1,553	1,145	1,114	694	895	2
1,121	1,477	1,066	1,031	602	911	4
1,067	1,402	1,005	951	577	850	1
897	1,204	884	947	508	745	2
4,442	6,835	5,413	6,972	2,257	4,194	28
20,475	22,609	16,288	16,879	8,889	12,457	57

Option Selected:

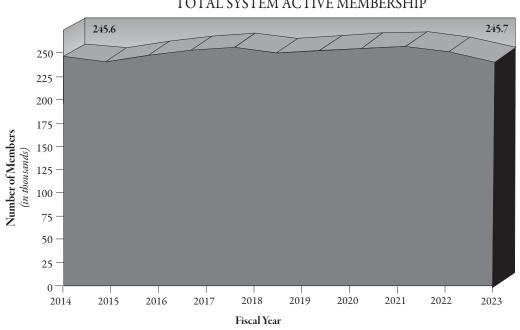
- The standard benefit if no option is selected. Generally, at retiree's death, all payments cease. However, the basic allowance for the State Police, Law Enforcement Offices (LEOPS), Judges and Legislators provides a continuing benefit for spouses or children under 18.
- Opt. 1 Guarantees return of the present value of the retirement benefit less the total payments already paid to
- Opt. 2 Guarantees the same payment to the designated beneficiaries for their lifetime.
- Opt. 3 Guarantees one half the member's payment to the designated beneficiaries for their lifetime.
- Opt. 4 Guarantees return of the member's accumulated contributions and interest less the member's accumulated reserves already paid.
- Opt. 5 Guarantees the same payment to the designated beneficiaries for their lifetime, unless the beneficiaries predecease the respective members. Allowance then increases to the basic.
- Opt. 6 Guarantees one half the member's payment to the designated beneficiaries for their lifetime, unless the beneficiaries predecease the respective members. Allowance then increases to the basic.
- Opt. 7 Special option calculation performed by actuary.

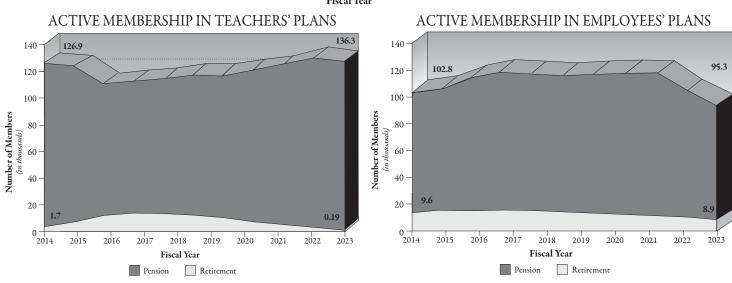
TEN-YEAR HISTORY OF ACTIVE MEMBERSHIP BY PLAN

Fiscal Year	Total	Teachers' Retirement	Teachers' Pension	Employees' Retirement*	Employees' Pension	Judges' Retirement	State Police Retirement	Law Enforcement Officers' Pension	Local Correctional Officers' Retirement
2014	245,655	1,718	126,972	9,572	102,791	309	1,433	2,767	93
2015	246,369	1,372	128,695	9,370	102,270	315	1,475	2,781	91
2016	246,062	1,051	129,794	8,749	101,760	305	1,486	2,823	94
2017	246,370	805	130,990	8,409	101,415	321	1,461	2,869	100
2018	244,732	617	131,417	8,481	99,425	325	1,446	2,922	99
2019	243,704	487	131,769	8,887	97,691	323	1,453	2,994	100
2020	244,753	380	133,243	8,782	97,343	332	1,478	3,054	141
2021	242,362	300	133,391	8,750	95,029	322	1,439	2,990	141
2022	241,713	235	134,357	8,527	93,661	327	1,442	3,031	133
2023	245,734	188	136,287	8,872	95,272	334	1,423	3,190	163

Note: Includes vested former members. *Includes members of the Maryland General Assembly and State correctional officers.

TOTAL SYSTEM ACTIVE MEMBERSHIP



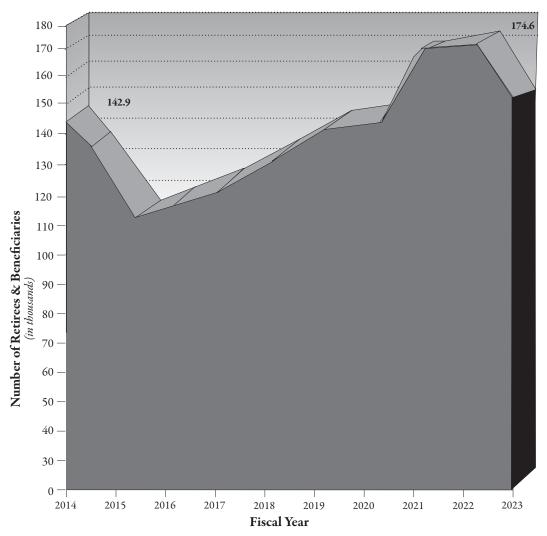


TEN-YEAR HISTORY OF RETIREES AND BENEFICIARIES BY PLAN

Fiscal Year	Total	Teachers' Retirement	Teachers' Pension	Employees' Retirement*	Employees' Pension	Judges' Retirement	State Police Retirement	Law Enforcement Officers' Pension	Correctional Officers' Retirement System
2014	142,887	28,762	40,167	22,013	47,446	395	2,468	1,613	23
2015	147,850	28,131	43,045	21,571	50,460	397	2,508	1,711	27
2016	152,566	27,552	46,030	21,172	53,039	407	2,536	1,801	29
2017	156,366	26,762	48,747	20,734	55,206	417	2,572	1,896	32
2018	160,374	25,764	51,437	20,340	57,947	421	2,477	1,954	34
2019	164,892	24,822	54,329	19,955	60,757	431	2,505	2,053	40
2020	167,644	23,858	56,581	19,464	62,583	441	2,517	2,153	47
2021	169,368	22,790	58,725	18,832	63,705	442	2,559	2,264	51
2022	172,235	21,904	60,980	18,382	65,463	463	2,597	2,393	53
2023	174,609	20,960	63,217	17,994	66,789	468	2,606	2,512	63

 $[\]ensuremath{^*}$ Includes members of the Maryland General Assembly and correctional officers.





TEN-YEAR HISTORY OF REVENUES BY SOURCE AND EXPENSES BY TYPE

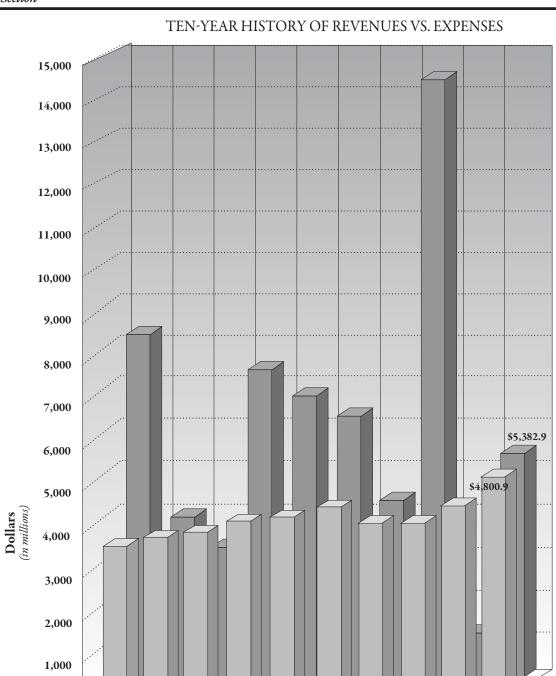
(Expressed in Thousands)

REVENUES

Fiscal Year	Members' Contributions	Employers' and Other Contributions	Annual Covered Payroll	Employers' and Other Contributions as a Percent of Covered Payroll	Net Investment Income/Loss	Total Revenues
2014	\$ 727,726	\$ 1,733,653	\$ 10,803,631	16.05 %	\$ 5,706,267	\$ 8,167,646
2015	755,444	1,858,612	11,063,961	16.80	1,197,671	3,811,727
2016	764,414	1,870,655	11,155,924	16.77	497,531	3,132,600
2017	782,686	2,036,596	11,418,973	17.83	4,473,443	7,292,725
2018	791,583	1,995,017	11,566,220	17.24	3,899,393	6,685,993
2019	807,291	2,054,091	11,905,463	17.25	3,288,209	6,149,591
2020	850,298	2,144,270	12,501,422	17.15	1,866,639	4,861,207
2021	865,738	2,203,524	12,749,247	17.28	14,315,762	17,385,024
2022	894,267	2,282,303	13,201,816	17.29	(1,942,133)	1,234,437
2023	963,702	2,438,917	14,384,589	16.96	1,980,277	5,382,896

EXPENSES

Fiscal		Administrative		
Year	Benefits	Expenses	Refunds	Total
2014	\$ 3,121,823	\$ 26,130	\$ 42,922	\$ 3,190,875
2015	3,284,550	29,080	48,245	3,361,875
2016	3,469,493	28,659	58,362	3,556,514
2017	3,577,123	30,904	63,441	3,671,468
2018	3,744,132	33,211	68,600	3,845,943
2019	3,926,220	39,784	67,400	4,033,404
2020	4,108,492	41,346	68,752	4,218,590
2021	4,253,047	48,740	64,774	4,366,561
2022	4,394,350	42,061	91,535	4,527,946
2023	4,653,163	46,014	101,737	4,800,914



PRINCIPAL PARTICIPATING EMPLOYERS CURRENT YEAR AND TEN YEARS AGO

Fiscal Year

Expenses

Revenues

	2023			2013		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Participating Government						
State of Maryland	367,223	1	87%	334,363	1	87%
All other (Participating Municipalities)	53,120	2	13%	47,924	2	13%
Total System	420,343			382,287		

Governmental Units Participating in the Systems

as of June 30, 2023

Allegany Community College Allegany County Board of Education Allegany County Government Allegany County Library Allegany County Transit Authority

Annapolis, City of

Anne Arundel Community College Anne Arundel County Board of Education

Baltimore Metropolitan Council

Berlin, Town of Berwyn Heights, Town of Bladensburg, Town of Bowie, City of Brentwood, Town of Brunswick, City of

Calvert County Board of Education

Cambridge, City of

Cambridge Housing Authority
Caroline County Board of Education
Caroline County Sheriff Deputies
Carroll County Board of Education
Carroll County Public Library
Carroll Soil Conservation District

Catoctin & Frederick County Soil Conservation

District

Cecil County Board of Education Cecil County Government Cecil County Library Centreville, Town of Chesapeake Bay Commission Chestertown, Town of Cheverly, Town of

College of Southern Maryland College Park, City of Crisfield, City of Crisfield Housing Authority

Cumberland, City of

Denton, Town of District Heights, City of

Dorchester County Board of Education Dorchester County Government Dorchester County Roads Board Dorchester County Sanitary Commission

Cumberland, City of -Police Department

Eastern Shore Regional Library Edmonston, Town of Elkton, Town of Emmitsburg, Town of Federalsburg, Town of

Frederick County Board of Education

Frostburg, City of Fruitland, City of

Garrett County Board of Education Garrett County/Western Maryland Health

Planning Council

Garrett County Community Action Committee

Garrett County Roads Board

Greenbelt, City of Greensboro, Town of Hagerstown, City of

Hagerstown Community College

Hampstead, Town of

Harford County Board of Education
Harford County Community College
Harford County Government
Harford County Library
Harford County Liquor Board
Howard Community College
Howard County Board of Education

Howard County Community Action Committee

Hurlock, Town of Hyattsville, City of

Kent County Board of Education Kent County Government

Kent Soil And Water Conservation District

Landover Hills, Town of LaPlata, Town of Manchester, Town of

Maryland Health & Higher Educational Facilities

Authority
Middletown, Town of
Montgomery College
Morningside, Town of
Mount Airy, Town of
Mount Rainier, City of
New Carrollton, City of
North Beach, Town of

Northeast Maryland Waste Disposal Authority

Oakland, Town of Oxford, Town of Pocomoke, City of Preston, Town of

Prince Georges Community College

Prince Georges County Board of Education Prince Georges County Crossing Guards Prince Georges County Government Prince Georges County Memorial Library Princess Anne, Town of

Queen Anne's County Board of Education Queen Anne's County Government

Queenstown, Town of Ridgely, Town of Rockhall, Town of Salisbury, City of Shore Up! Snow Hill, Town of

Somerset County Board of Education Somerset County Government

Somerset County Economic Development

Commission

Somerset County Sanitary District, Inc. Southern MD Tri-County Community Action Committee

St. Mary's County Board of Education St. Mary's County Government St. Mary's County Housing Authority St. Mary's County Metropolitan Commission

St. Michaels, Town of Sykesville, Town of Takoma Park, City of

Talbot County Board of Education Talbot County Government Taneytown, Town of Thurmont, City of

Tri-County Council For Lower Eastern Shore Tri-County Council For Western Maryland

University Park, Town of Upper Marlboro, Town of Walkersville, Town of

Washington County Board of Education Washington County Liquor Board Washington County Library Westminster, City of

Worcester County Board of Education Worcester County Government Worcester County Liquor Control Board

Wor-Wic Community College

*Withdrawn Governmental Units

Anne Arundel County Economic Opportunity Commission

Housing Authority of Cumberland

*List reflects withdrawn governmental units with a withdrawal liability balance.