

**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**

Schedule of Employer and Nonemployer Allocations and  
Schedule of Pension Amounts by Employer and Nonemployer

June 30, 2015

(With Independent Auditors' Report Thereon)



KPMG LLP  
Two Financial Center  
60 South Street  
Boston, MA 02111

## **Independent Auditors' Report**

Mr. Thomas G. Shack III, Comptroller  
Commonwealth of Massachusetts:

We have audited the accompanying schedule of employer and nonemployer allocations of the Massachusetts State Employees' Retirement System (MSERS) as of and for the year ended June 30, 2015, and the related notes. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense (specified column totals) included in the accompanying schedule of pension amounts by employer and nonemployer of MSERS as of and for the year ended June 30, 2015, and the related notes.

### ***Management's Responsibility for the Schedules***

Management is responsible for the preparation and fair presentation of these schedules in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedule that are free from material misstatement, whether due to fraud or error.

### ***Auditors' Responsibility***

Our responsibility is to express opinions on the schedule of employer and nonemployer allocations and the specified column totals included in the schedule of pension amounts by employer and nonemployer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer and nonemployer allocations and the specified column totals included in the schedule of pension amounts by employer and nonemployer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer and nonemployer allocations and the specified column totals included in the schedule of pension amounts by employer and nonemployer. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the schedule of employer and nonemployer allocations and the specified column totals included in the schedule of pension amounts by employer and nonemployer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer and nonemployer allocations and the specified column totals included in the schedule of pension amounts by employer and nonemployer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such



opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer and nonemployer allocations and the specified column totals included in the schedule of pension amounts by employer and nonemployer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### ***Opinions***

In our opinion, the schedules and related notes referred to above present fairly, in all material respects, the employer and nonemployer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense for the total of all participating entities for MSERS as of and for the year ended June 30, 2015 in accordance with U.S. generally accepted accounting principles.

### ***Restriction on Use***

Our report is intended solely for information and use of MSERS management and its board, MSERS employers and their auditors and the Commonwealth of Massachusetts, and is not intended to be and should not be used by anyone other than these specified parties.

**KPMG LLP**

Boston, Massachusetts  
October 10, 2016

**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**  
**SCHEDULE OF EMPLOYER AND NONEMPLOYER ALLOCATIONS**  
As of and for the fiscal year ended June 30, 2015

Employer/Nonemployer	Actual Contributions	Employer/ Nonemployer Allocation Percentage
<b><u>Non Special Funding Situations:</u></b>		
9045 - Commonwealth of Massachusetts:		
Employer contributions.....	\$ 572,807,076	
Total Commonwealth of Massachusetts.....	572,807,076	91.49501%
6070 - Massachusetts State College Building Authority:		
Employer contributions.....	-	
Nonemployer contributions.....	180,769	
Total Massachusetts State College Building Authority.....	180,769	0.02887%
6090 - Massachusetts Convention Center Authority:		
Employer contributions.....	540,096	
Nonemployer contributions.....	1,530,522	
Total Massachusetts Convention Center Authority.....	2,070,618	0.33074%
9045 - Massachusetts Department of Transportation:		
Employer contributions.....	29,124,168	
Nonemployer contributions.....	2,647,882	
Total Massachusetts Department of Transportation.....	31,772,050	5.07498%
8060 - Assabet Valley Regional Vocational School District:		
Employer contributions.....	-	
Nonemployer contributions.....	252,967	
Total Assabet Valley Regional Vocational School District.....	252,967	0.04041%
8100 - Blackstone Valley Regional Vocational School District:		
Employer contributions.....	-	
Nonemployer contributions.....	387,882	
Total Blackstone Valley Regional Vocational School District.....	387,882	0.06196%
8080 - Bristol/Plymouth Regional Vocational Technical School District.....		
Employer contributions.....	-	
Nonemployer contributions.....	186,609	
Total Bristol/Plymouth Regional Vocational Technical School District.....	186,609	0.02981%
8160 - Central Massachusetts Regional Planning Commission:		
Employer contributions.....	-	
Nonemployer contributions.....	122,619	
Total Central Massachusetts Regional Planning Commission.....	122,619	0.01959%
8020 - Merrimack Valley Planning Commission:		
Employer contributions.....	-	
Nonemployer contributions.....	121,205	
Total Merrimack Valley Planning Commission.....	121,205	0.01936%

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**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**  
**SCHEDULE OF EMPLOYER AND NONEMPLOYER ALLOCATIONS**  
As of and for the fiscal year ended June 30, 2015

Employer/Nonemployer	Actual Contributions	Employer/ Nonemployer Allocation Percentage
8010 - Montachusett Regional Planning Commission:		
Employer contributions.....	-	
Nonemployer contributions.....	94,576	
Total Montachusett Regional Planning Commission.....	94,576	0.01511%
8090 - Montachusett Regional Vocational Technical School District:		
Employer contributions.....	-	
Nonemployer contributions.....	406,031	
Total Montachusett Regional Vocational Technical School District.....	406,031	0.06486%
8070 - Nashoba Associated Boards of Health:		
Employer contributions.....	-	
Nonemployer contributions.....	531,006	
Total Nashoba Associated Boards of Health.....	531,006	0.08482%
8040 - North Middlesex Council of Governments:		
Employer contributions.....	-	
Nonemployer contributions.....	96,614	
Total North Middlesex Council of Governments.....	96,614	0.01543%
8030 - Northeast Metro Regional Vocational Technical School District:		
Employer contributions.....	-	
Nonemployer contributions.....	283,192	
Total Northeast Metro Regional Vocational Technical School District.....	283,192	0.04523%
8170 - Old Colony Planning Council:		
Employer contributions.....	-	
Nonemployer contributions.....	118,626	
Total Old Colony Planning Council.....	118,626	0.01895%
8180 - Old Colony Regional Vocational Technical School District:		
Employer contributions.....	-	
Nonemployer contributions.....	149,939	
Total Old Colony Regional Vocational Technical School District.....	149,939	0.02395%
8110 - Pioneer Valley Planning Commission:		
Employer contributions.....	-	
Nonemployer contributions.....	278,808	
Total Pioneer Valley Planning Commission.....	278,808	0.04453%
8140 - Southeastern Regional Planning & Economic Development District:		
Employer contributions.....	-	
Nonemployer contributions.....	167,823	
Total Southeastern Regional Planning & Economic Development District.....	167,823	0.02681%

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**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**  
**SCHEDULE OF EMPLOYER AND NONEMPLOYER ALLOCATIONS**  
As of and for the fiscal year ended June 30, 2015

Employer/Nonemployer	Actual Contributions	Employer/ Nonemployer Allocation Percentage
<b>8120 - Southeastern Regional School District:</b>		
Employer contributions.....	-	
Nonemployer contributions.....	618,313	
Total Southeastern Regional School District.....	618,313	0.09876%
<b>8200 - Tri-County Regional Vocational Technical School District:</b>		
Employer contributions.....	-	
Nonemployer contributions.....	232,779	
Total Tri-County Regional Vocational Technical School District.....	232,779	0.03718%
<b>8190 - Upper Blackstone Water Pollution Abatement District:</b>		
Employer contributions.....	389,158	
Nonemployer contributions.....	1,328	
Total Upper Blackstone Water Pollution Abatement District.....	390,486	0.06237%
<b>8130 - Upper Cape Cod Regional Vocational Technical School District:</b>		
Employer contributions.....	-	
Nonemployer contributions.....	221,203	
Total Upper Cape Cod Regional Vocational Technical School District.....	221,203	0.03533%
<b><u>Special Funding Situations (Educational Collaboratives):</u></b>		
<b>6013 - ACCEPT Education Collaborative:</b>		
Employer contributions.....	119,441	
Nonemployer contributions.....	124,231	
Total ACCEPT Education Collaborative.....	243,672	0.03892%
<b>6022 - Assabet Valley Collaborative:</b>		
Employer contributions.....	75,568	
Nonemployer contributions.....	78,791	
Total Assabet Valley Collaborative.....	154,359	0.02466%
<b>6004 - Bi-County Education Collaborative:</b>		
Employer contributions.....	142,454	
Nonemployer contributions.....	148,532	
Total Bi-County Education Collaborative.....	290,986	0.04648%
<b>6018 - C.A.S.E. Collaborative:</b>		
Employer contributions.....	315,723	
Nonemployer contributions.....	329,309	
Total C.A.S.E. Collaborative.....	645,032	0.10303%
<b>6016 - Cape Cod Collaborative:</b>		
Employer contributions.....	178,829	
Nonemployer contributions.....	186,458	
Total Cape Cod Collaborative.....	365,288	0.05835%

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**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**  
**SCHEDULE OF EMPLOYER AND NONEMPLOYER ALLOCATIONS**  
As of and for the fiscal year ended June 30, 2015

Employer/Nonemployer	Actual Contributions	Employer/ Nonemployer Allocation Percentage
6010 - CAPS Education Collaborative:		
Employer contributions.....	113,179	
Nonemployer contributions.....	118,008	
Total CAPS Education Collaborative.....	231,187	0.03693%
6035 - Central Massachusetts Special Education Collaborative:		
Employer contributions.....	122,815	
Nonemployer contributions.....	116,993	
Total Central Massachusetts Special Education Collaborative.....	239,808	0.03830%
6012 - CHARMS Collaborative:		
Employer contributions.....	32,678	
Nonemployer contributions.....	34,034	
Total CHARMS Collaborative.....	66,712	0.01066%
6017 - Collaborative for Educational Services:		
Employer contributions.....	297,233	
Nonemployer contributions.....	309,914	
Total Collaborative for Educational Services.....	607,147	0.09698%
6021 - CREST Collaborative:		
Employer contributions.....	216,013	
Nonemployer contributions.....	225,230	
Total CREST Collaborative.....	441,243	0.07048%
6030 - EDCO Collaborative:		
Employer contributions.....	234,501	
Nonemployer contributions.....	198,886	
Total EDCO Collaborative.....	433,387	0.06923%
6019 - FLLAC Collaborative:		
Employer contributions.....	76,835	
Nonemployer contributions.....	80,288	
Total FLLAC Collaborative.....	157,123	0.02510%
6034 - LABBB Collaborative:		
Employer contributions.....	279,515	
Nonemployer contributions.....	291,249	
Total LABBB Collaborative.....	570,765	0.09117%
6011 - Lower Pioneer Valley Education Collaborative:		
Employer contributions.....	412,554	
Nonemployer contributions.....	430,155	
Total Lower Pioneer Valley Education Collaborative.....	842,709	0.13461%

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**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**  
**SCHEDULE OF EMPLOYER AND NONEMPLOYER ALLOCATIONS**  
As of and for the fiscal year ended June 30, 2015

Employer/Nonemployer	Actual Contributions	Employer/ Nonemployer Allocation Percentage
6014 - North River Collaborative:		
Employer contributions.....	214,900	
Nonemployer contributions.....	239,430	
Total North River Collaborative.....	454,330	0.07257%
6006 - North Shore Education Consortium:		
Employer contributions.....	223,347	
Nonemployer contributions.....	232,876	
Total North Shore Education Consortium.....	456,224	0.07287%
6007 - Pilgrim Area Collaborative:		
Employer contributions.....	85,301	
Nonemployer contributions.....	88,940	
Total Pilgrim Area Collaborative.....	174,241	0.02783%
6031 - READS Collaborative:		
Employer contributions.....	126,311	
Nonemployer contributions.....	131,609	
Total READS Collaborative.....	257,920	0.04120%
6033 - SEEMS Collaborative:		
Employer contributions.....	303,508	
Nonemployer contributions.....	316,457	
Total SEEMS Collaborative.....	619,965	0.09903%
6009 - Shore Education Consortium:		
Employer contributions.....	403,423	
Nonemployer contributions.....	425,232	
Total Shore Education Consortium.....	828,655	0.13236%
6015 - South Coast Education Collaborative:		
Employer contributions.....	236,640	
Nonemployer contributions.....	250,494	
Total South Coast Education Collaborative.....	487,134	0.07781%
6001 - South Shore Education Collaborative:		
Employer contributions.....	245,045	
Nonemployer contributions.....	255,500	
Total South Shore Education Collaborative.....	500,545	0.07995%
6003 - Southeastern Massachusetts Education Collaborative:		
Employer contributions.....	210,599	
Nonemployer contributions.....	211,479	
Total Southeastern Massachusetts Education Collaborative.....	422,079	0.06742%

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**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**  
**SCHEDULE OF EMPLOYER AND NONEMPLOYER ALLOCATIONS**  
As of and for the fiscal year ended June 30, 2015

Employer/Nonemployer	Actual Contributions	Employer/ Nonemployer Allocation Percentage
6002 - Southern Worcester County Education Collaborative:		
Employer contributions.....	187,151	
Nonemployer contributions.....	195,135	
Total Southern Worcester County Education Collaborative.....	382,286	0.06106%
6027 - The Educational Co-Op:		
Employer contributions.....	58,973	
Nonemployer contributions.....	61,489	
Total The Educational Co-Op.....	120,462	0.01924%
6020 - Valley Collaborative:		
Employer contributions.....	240,012	
Nonemployer contributions.....	250,253	
Total Valley Collaborative.....	490,265	0.07831%
<b><u>Special Funding Situations (Other than Educational Collaboratives):</u></b>		
8150 - Berkshire Regional Planning Commission:		
Employer contributions.....	-	
Nonemployer contributions.....	134,504	
Total Berkshire Regional Planning Commission.....	134,504	0.02148%
8250 - Devens Enterprise Commission:		
Employer contributions.....	-	
Nonemployer contributions.....	29,404	
Total Devens Enterprise Commission.....	29,404	0.00470%
6037 - Franklin Regional Council of Governments:		
Employer contributions.....	-	
Nonemployer contributions.....	250,050	
Total Franklin Regional Council of Governments.....	250,050	0.03994%
8210 - Massachusetts Development Finance Agency:		
Employer contributions.....	-	
Nonemployer contributions.....	187,030	
Total Massachusetts Development Finance Agency.....	187,030	0.02987%
6200 - Massachusetts Healthcare Connector Authority:		
Employer contributions.....	-	
Nonemployer contributions.....	653,525	
Total Massachusetts Healthcare Connector Authority.....	653,525	0.10439%
8211 - Massachusetts Life Sciences Center:		
Employer contributions.....	-	
Nonemployer contributions.....	51,030	
Total Massachusetts Life Sciences Center.....	51,030	0.00815%

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**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**  
**SCHEDULE OF EMPLOYER AND NONEMPLOYER ALLOCATIONS**  
As of and for the fiscal year ended June 30, 2015

Employer/Nonemployer	Actual Contributions	Employer/ Nonemployer Allocation Percentage
6100 - Massachusetts PRIM Board:		
Employer contributions.....	-	
Nonemployer contributions.....	397,825	
Total Massachusetts PRIM Board.....	397,825	0.06354%
6060 - Massachusetts School Building Authority:		
Employer contributions.....	-	
Nonemployer contributions.....	595,499	
Total Massachusetts School Building Authority.....	595,499	0.09512%
1080 - Massachusetts Water Resources Authority:		
Employer contributions.....	-	
Nonemployer contributions.....	761,560	
Total Massachusetts Water Resources Authority.....	761,560	0.12164%
8050 - Metropolitan Area Planning Commission:		
Employer contributions.....	-	
Nonemployer contributions.....	1,017,659	
Total Metropolitan Area Planning Commission.....	1,017,659	0.16255%
Total for all entities.....	<u>\$ 626,052,802</u>	100.00000%

See accompanying notes to schedule of employer and nonemployer allocations and schedule of pension amounts by employer and nonemployer.

**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**  
**SCHEDULE OF PENSION AMOUNTS BY EMPLOYER AND NONEMPLOYER**  
As of and for the fiscal year ended June 30, 2015

Employer/Nonemployer	Deferred Outflows of Resources					Deferred Inflows of Resources			Pension Expense		
	Net Pension Liability	Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion	Total Deferred Outflows of Resources	Net Differences Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Change in Proportion	Total Employer Pension Expense
<b>Non Special Funding Situations:</b>											
Employer:											
9045 - Commonwealth of Massachusetts.....	\$ 10,414,720,539	\$ 205,863,773	\$ 1,803,616,188	\$ -	\$ 2,009,479,961	\$ 299,275,787	\$ 7,995,437	\$ 307,271,224	\$ 1,175,702,807	\$ (1,893,062)	\$ 1,173,809,745
6070 - Massachusetts State College Building Authority.....	3,286,731	64,968	569,194	260,104	894,266	94,447	62,384	156,831	371,034	39,977	411,011
6090 - Massachusetts Convention Center Authority.....	37,647,760	744,169	6,519,821	1,036,931	8,300,920	1,081,840	253,743	1,335,583	4,250,001	239,879	4,489,880
9045 - Massachusetts Department of Transportation.....	577,676,203	11,418,703	100,041,681	10,000,420	121,460,805	16,600,013	-	16,600,013	65,213,035	2,415,172	67,628,207
8060 - Assabet Valley Regional Vocational School District.....	4,599,426	90,915	796,526	143,798	1,031,240	132,168	-	132,168	519,223	36,640	555,863
8100 - Blackstone Valley Regional Vocational School District.....	7,052,434	139,403	1,221,337	243,987	1,604,727	202,658	70,480	273,137	796,139	34,082	830,221
8080 - Bristol/Plymouth Regional Vocational Technical School District.....	3,392,904	67,066	587,581	161,368	816,015	97,498	575,296	672,794	383,020	(81,739)	301,281
8160 - Central Massachusetts Regional Planning Commission.....	2,229,439	44,068	386,093	15,813	445,975	64,065	259,494	323,558	251,678	(70,627)	181,051
8020 - Merrimack Valley Planning Commission.....	2,203,734	43,560	381,642	5,205	430,406	63,326	23,838	87,165	248,776	(3,810)	244,966
8010 - Montachusett Regional Planning Commission.....	1,719,576	33,990	297,795	-	331,786	49,413	121,173	170,586	194,120	(28,100)	166,021
8090 - Montachusett Regional Vocational Technical School District.....	7,382,410	145,925	1,278,482	18,974	1,443,381	212,140	213,824	425,964	833,390	(42,095)	791,294
8070 - Nashoba Associated Boards of Health.....	9,654,698	190,841	1,671,996	402,863	2,265,700	277,436	626,220	903,656	1,089,905	(89,395)	1,000,510
8040 - North Middlesex Council of Governments.....	1,756,619	34,722	304,210	41,559	380,492	50,478	71,969	122,446	198,302	(4,119)	194,183
8030 - Northeast Metro Regional Vocational Technical School District.....	5,148,965	101,778	891,695	178,234	1,171,707	147,960	1,335,689	1,483,648	581,259	(245,896)	335,364
8170 - Old Colony Planning Council.....	2,156,850	42,634	373,522	70,063	486,219	61,979	73,660	135,639	243,484	3,649	247,133
8180 - Old Colony Regional Vocational Technical School District.....	2,726,184	53,887	472,119	108,870	634,876	78,339	-	78,339	307,755	25,786	333,541
8110 - Pioneer Valley Planning Commission.....	5,069,261	100,202	877,892	-	978,094	145,669	401,168	546,838	572,262	(99,435)	472,826
8140 - Southeastern Regional Planning & Economic Development District.....	3,051,340	60,315	528,430	17,231	605,975	87,683	176,362	264,044	344,461	(34,268)	310,193
8120 - Southeastern Regional School District.....	11,242,110	222,218	1,946,903	185,311	2,354,432	323,052	1,008,493	1,331,545	1,269,106	(171,164)	1,097,942
8200 - Tri-County Regional Vocational Technical School District.....	4,232,370	83,660	732,960	1,264,628	2,081,247	121,621	199,178	320,799	477,786	224,120	701,907
8190 - Upper Blackstone Water Pollution Abatement District.....	7,099,775	140,339	1,229,536	136,077	1,505,951	204,018	36,821	240,839	801,483	30,697	832,180
8130 - Upper Cape Cod Regional Vocational Technical School District.....	4,021,887	79,499	696,508	65,507	841,514	115,572	30,804	146,376	454,025	5,756	459,781
<b>Special Funding Situations:</b>											
Nonemployer (Commonwealth) attributable to:											
6013 - ACCEPT Education Collaborative.....	4,430,420								500,144	(3,941)	496,203
6022 - Assabet Valley Collaborative.....	2,806,546								316,827	(3,297)	313,530
6004 - Bi-County Education Collaborative.....	5,290,686								597,258	(6,443)	590,815
6018 - C.A.S.E. Collaborative.....	11,727,901								1,323,946	(13,554)	1,310,392
6016 - Cape Cod Collaborative.....	6,641,623								749,763	(7,842)	741,921
6010 - CAPS Education Collaborative.....	4,203,412								474,517	(4,310)	470,207
6035 - Central Massachusetts Special Education Collaborative.....	4,360,172								492,214	(4,157)	488,057
6012 - CHARMS Collaborative.....	1,212,955								136,929	(2,000)	134,929
6017 - Collaborative for Educational Services.....	11,039,081								1,246,186	(13,656)	1,232,530
6021 - CREST Collaborative.....	8,022,632								905,663	(4,863)	900,801
6030 - EDCO Collaborative.....	7,879,793								889,539	(9,052)	880,486
6019 - FLLAC Collaborative.....	2,856,802								322,500	(3,399)	319,101
6034 - LABBB Collaborative.....	10,377,586								1,171,511	(12,322)	1,159,188
6011 - Lower Pioneer Valley Education Collaborative.....	15,322,045								1,729,684	(19,308)	1,710,376
6014 - North River Collaborative.....	8,260,585								932,526	(8,804)	923,722
6006 - North Shore Education Consortium.....	8,295,013								936,412	(10,340)	926,072
6007 - Pilgrim Area Collaborative.....	3,168,039								357,635	(3,537)	354,099
6031 - READS Collaborative.....	4,689,479								529,388	(5,604)	523,785
6033 - SEEMS Collaborative.....	11,272,144								1,272,496	(11,844)	1,260,652
6009 - Shore Education Consortium.....	15,066,520								1,700,838	(15,637)	1,685,201
6015 - South Coast Education Collaborative.....	8,857,025								999,857	(11,520)	988,336
6001 - South Shore Education Collaborative.....	9,100,860								1,027,383	(12,871)	1,014,512
6003 - Southeastern Massachusetts Education Collaborative.....	7,674,190								866,328	(7,034)	859,294
6002 - Southern Worcester County Education Collaborative.....	6,950,685								784,653	(8,834)	775,819
6027 - The Educational Co-Op.....	2,190,232								247,252	(3,387)	243,865
6020 - Valley Collaborative.....	8,913,953								1,006,283	(11,797)	994,486
8150 - Berkshire Regional Planning Commission.....	2,445,529								276,072	(3,103)	272,969
8250 - Devens Enterprise Commission.....	534,624								60,353	(569)	59,783
6037 - Franklin Regional Council of Governments.....	4,546,382								513,234	-	513,234
8210 - Massachusetts Development Finance Agency.....	3,400,569								383,885	(3,700)	380,186
6200 - Massachusetts Healthcare Connector Authority.....	11,882,332								1,341,379	(12,561)	1,328,818
8211 - Massachusetts Life Sciences Center.....	927,814								104,740	(306)	104,433
6100 - Massachusetts PRIM Board.....	7,233,215								816,547	(9,671)	806,876
6060 - Massachusetts School Building Authority.....	10,827,305								1,222,279	(7,784)	1,214,495
1080 - Massachusetts Water Resources Authority.....	13,846,610								1,563,124	(15,763)	1,547,361
8050 - Metropolitan Area Planning Commission.....	18,502,978								2,088,775	(19,237)	2,069,538
Total nonemployer (Commonwealth of Massachusetts).....	264,757,738	5,233,364	45,850,615	905,684	51,989,663	7,608,037	1,726,592	9,334,629	29,888,120	(292,049)	29,596,071
Totals.....	\$ 11,382,828,954	\$ 225,000,000	\$ 1,971,272,727	\$ 15,262,623	\$ 2,211,535,350	\$ 327,095,200	\$ 15,262,623	\$ 342,357,823	\$ 1,284,991,172	\$ -	\$ 1,284,991,172

See accompanying notes to schedule of employer and nonemployer allocations and schedule of pension amounts by employer and nonemployer.

**MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**  
Notes to the Schedule of Employer and Nonemployer Allocations and  
the Schedule of Pension Amounts by Employer and Nonemployer  
June 30, 2015

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**NOTE 1 - PLAN DESCRIPTION**

The Massachusetts State Employees' Retirement System (MSERS) is a public employee retirement system (PERS), that administers a cost-sharing multiple employer defined benefit pension plan as defined by Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*, covering substantially all employees of the Commonwealth and certain employees of the independent authorities and agencies. The former Massachusetts Turnpike Authority (MTA) employees and retirees became members of MSERS upon the creation of the Massachusetts Department of Transportation (MassDOT). Other employees who transferred to MassDOT have been, and remain, members of MSERS. The assets and liabilities of the former MTA have been transferred to MSERS. MSERS is part of the Commonwealth's reporting entity and does not issue a stand-alone audited financial report.

Management of MSERS is vested in the Massachusetts State Retirement Board (the MSRB) which consists of five members—two elected by current and active MSERS members, one by the remaining members of the MSRB, one who is appointed by the State Treasurer and the State Treasurer, who serves as ex-officio and is the Chair of the MSRB.

**Benefits provided.** MSERS provides retirement, disability, survivor and death benefits to members and their beneficiaries. Massachusetts General Laws (MGL) establishes uniform benefit and contribution requirements for all contributory PERS. These requirements provide for superannuation retirement allowance benefits up to a maximum of 80% of a member's highest three-year average annual rate of regular compensation. For employees hired after April 1, 2012, retirement allowances are calculated on the basis of the last five years or any five consecutive years, whichever is greater in terms of compensation. Benefit payments are based upon a member's age, length of creditable service, and group creditable service, and group classification. The authority for amending these provisions rests with the Legislature.

Members become vested after ten years of creditable service. A superannuation retirement allowance may be received upon the completion of twenty years of creditable service or upon reaching the age of 55 with ten years of service. Normal retirement for most employees occurs at age 65; for certain hazardous duty and public safety positions, normal retirement is at age 55. Most employees who joined the system after April 1, 2012 cannot retire prior to age 60.

The MSERS' funding policies have been established by Chapter 32 of the MGL. The Legislature has the authority to amend these policies. The annuity portion of the MSERS retirement allowance is funded by employees, who contribute a percentage of their regular compensation. Costs of administering the plan are funded out of plan assets.

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Member contributions for MSERS vary depending on the most recent date of membership:

Hire Date	% of Compensation
Prior to 1975.....	5% of regular compensation
1975 - 1983.....	7% of regular compensation
1984 to 6/30/1996.....	8% of regular compensation
7/1/1996 to present.....	9% of regular compensation except for State Police which is 12% of regular compensation
1979 to present.....	An additional 2% of regular compensation in excess of \$30,000

**NOTE 2 - BASIS OF PRESENTATION**

The schedule of employer and nonemployer allocations and schedule of pension amounts by employer and nonemployer (the Schedules) present amounts that are elements of the financial statements of the MSERS or of its participating employers and nonemployers. Accordingly, they do not purport to be a complete presentation of the financial position or changes in financial position of the MSERS or its participating employers and nonemployers. The amounts presented in the Schedules were prepared in accordance with U.S. generally accepted accounting principles. Such preparation requires management of the MSERS to make a number of estimates and assumptions related to the reported amounts. Actual results could differ from those estimates.

The schedule of employer and nonemployer allocations are based on actual contributions adjusted for any nonemployer contributions.

The MGLs governing employer contribution requirements to MSERS are varied and vary among employers to such an extent that there is no uniform contribution method. Consequently, MSERS developed an effective contribution methodology which allocates total actual contributions amongst the employers in a consistent manner (based on an employer's share of total covered payroll). Any differences between the effective contribution and an employer's actual contributions are considered a nonemployer contribution from the Commonwealth. According to MGL, certain nonemployer contributions are the legal responsibility of the Commonwealth and have accordingly been reflected on the schedule of employer and nonemployer allocations as special funding situations.

The schedule of pension amounts presents each employer in sufficient detail to permit each contributing employer as well as each employer considered to be in special funding situation to derive the necessary information for the preparation of their individual financial statements.

For entities considered to be in a 100% special funding situation there is no net pension liability recognized. However, the notes to the financial statements for these entities must disclose the portion of the nonemployer contributing entity's total proportionate share of the net pension liability as well its portion of pension expense as both a revenue and pension expense.

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The special funding situations created by MGL are described below.

*Educational collaboratives*

Collaboratives contribute amounts equal to the normal cost of employees' benefits at a rate established by the Public Employees' Retirement Administration Commission (PERAC), currently 5.6% of covered payroll. Legally, the collaboratives are only responsible for contributing the annual normal cost of their employees' benefits (i.e., the present value of the benefits earned by those employees in any given year) and are not legally responsible for the past service cost attributable to those employees or previously retired employees of the collaboratives. The Commonwealth as a nonemployer is legally responsible for the entire past service cost related to the collaboratives and therefore has a 100% special funding situation.

*Other Special Funding Situations*

MGLs established certain entities whose employees are members of MSERS. However, MGL does not provide an employer funding mechanism for these entities. Consequently, the Commonwealth is considered the nonemployer contributor and is considered legally responsible to make all actuarially determined employer contributions on behalf of these entities. Therefore these entities are also considered to be in a 100% special funding situation as defined by GASB.

**NOTE 3 - RECONCILIATION TO FINANCIAL STATEMENTS**

*Total Pension Liability*

Subsequent to the issuance of the Commonwealth's 2015 CAFR, the Commonwealth revised its discount rate to 7.50% from 7.75%. Consequently, the Commonwealth has adjusted certain information as previously reported in the Schedule of Changes in the Massachusetts State Employees' Retirement System Net Pension Liability and Related Ratios as contained in the required supplemental section of the Commonwealth's 2015 CAFR. This change resulted in an increase in the total pension liability of approximately \$933,000,000 which is reflected in the net pension liability in the accompanying schedule of pension amounts.

*Employer and nonemployer contributions*

The current year employer and nonemployer contributions used in the schedule of employer and nonemployer allocations is a component of the MSERS' Pension Trust Fund financial statements contained in the Commonwealth's CAFR. The reconciliation of employer and nonemployer contributions is as follows (amounts in thousands):

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Employer and nonemployer contributions reported in the Statement of Changes in Fiduciary Net Position per the audited CAFR:	
Employer and nonemployer contributions - Commonwealth and MassDOT.....	\$ 619,971
Employer and nonemployer contributions - other.....	<u>15,808</u>
Subtotal employer and nonemployer contributions.....	635,779
Less:	
Accrued receivables related to prior fiscal years.....	(9,091)
Other.....	<u>(635)</u>
Total employer and nonemployer contributions per Schedule of Employer and Nonemployer Allocations.....	<u><u>\$ 626,053</u></u>

**NOTE 4 - COLLECTIVE NET PENSION LIABILITY**

Components of the collective net pension liability at June 30, 2015 are as follows (amounts in thousands):

Total pension liability.....	\$ 35,425,414
Less:	
Plan fiduciary net position.....	<u>24,042,585</u>
Employers/nonemployers' net pension liability.....	<u><u>\$ 11,382,829</u></u>
Plan fiduciary net position as a percentage of total pension liability.....	<u><u>67.87%</u></u>

***Actuarial Assumptions***

The total pension liability for the June 30, 2015 measurement date was determined by an actuarial valuation as of January 1, 2015 rolled forward to June 30, 2015. This valuation used the following assumptions:

1. (a) 7.50% investment rate of return, (b) 3.50% interest rate credited to the annuity savings fund and (c) 3.00% cost of living increase per year.
2. Salary increases are based on analyses of past experience but range from 3.50% to 9.00% depending on group and length of service.
3. In May 2015, Chapter 19 of the Acts of 2015 created an Early Retirement Incentive (ERI) for certain members of SERS who upon election of the ERI retired effective June 30, 2015. As a result, the total pension liability of SERS has increased by approximately \$230 million as of June 30, 2015.

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4. Mortality rates were as follows:

- Pre-retirement - reflects RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct)
- Post-retirement - reflects RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct)
- Disability - the mortality rate is assumed to be in accordance with the RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2015 (gender distinct)

Investment assets of MSERS are with the Pension Reserves Investment Trust (PRIT) Fund. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage. Best estimates of geometric rates of return for each major asset class included in the PRIT Fund's target asset allocation as of June 30, 2015 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity.....	40.0%	6.9%
Core Fixed Income.....	13.0%	2.4%
Private Equity.....	10.0%	8.5%
Real Estate.....	10.0%	6.5%
Value Added Fixed Income.....	10.0%	5.8%
Hedge Funds.....	9.0%	5.8%
Portfolio Completion Strategies.....	4.0%	5.5%
Timber/Natural Resources.....	4.0%	6.6%
Total.....	<u>100.0%</u>	

**Discount Rate**

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Commonwealth's contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rates. Based on those assumptions, the net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

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***Sensitivity Analysis***

The following illustrates the sensitivity of the collective net pension liability to changes in the discount rate as of June 30, 2015. In particular, the table presents the MSERS collective net pension liability assuming it was calculated using a single discount rate that is one-percentage-point lower or one-percentage-point higher than the current discount rate (amounts in thousands):

1% Decrease to 6.50%	Current Discount Rate 7.50%	1% Increase to 8.50%
\$ 15,473,000	\$ 11,382,829	\$ 7,855,000

**NOTE 5 - DEFERRED OUTFLOW AND INFLOW OF RESOURCES**

The following table summarizes the changes in both deferred outflows and deferred inflows of resources excluding employer specific amounts (change in proportion) (amounts in thousands):

	Year of Deferral	Amortization Period	Balance July, 2014	Additions	Deletions	Balance June 30, 2015
<b>Deferred Outflows of Resources:</b>						
Change of assumptions.....	2014	5.5 years	\$ 83,455	\$ -	\$ (18,546)	\$ 64,909
	2015	5.5 years	-	2,330,000	(423,636)	1,906,364
Subtotal.....			83,455	2,330,000	(442,182)	1,971,273
Difference between expected and actual experience.....	2015	5.5 years	-	275,000	(50,000)	225,000
Total deferred outflows of resources.....			\$ 83,455	\$ 2,605,000	\$ (492,182)	\$ 2,196,273
<b>Deferred Inflows of Resources:</b>						
Net difference between projected and actual earnings on plan investments.....	2014	5 years	\$ (1,523,789)	\$ -	\$ 380,948	\$ (1,142,841)
	2015	5 years	-	1,019,683	(203,937)	815,746
Total inflows of resources.....			\$ (1,523,789)	\$ 1,019,683	\$ 177,011	\$ (327,095)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in the collective pension expense as follows (amounts in thousands):

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Fiscal Year Ending June 30	
2016.....	\$ 315,171
2017.....	315,171
2018.....	315,171
2019.....	686,846
2020.....	<u>236,819</u>
Total.....	<u>\$ 1,869,178</u>

**NOTE 6 - COLLECTIVE PENSION EXPENSE**

The following table shows the components of pension expense, excluding employer specific pension expense for changes in proportion, as of June 30, 2015 (amounts in thousands):

Service cost at end of year.....	\$ 700,012
Interest of the total pension liability and cash flow.....	2,411,551
Employee contributions.....	(549,493)
Projected earnings on plan investments.....	(1,820,569)
Recognition of deferred outflows and inflows of resources:	
Differences between expected and actual experience.....	50,000
Differences between projected and actual earnings on plan investments.....	(177,011)
Changes of assumptions.....	442,182
Change in benefit terms.....	230,302
Transfers and reimbursements from other systems.....	(59,075)
Member make up, redeposits and payments from rollovers.....	(9,461)
Cost of living adjustment reimbursements.....	(23,214)
Other reimbursements.....	(755)
Administrative expense.....	15,966
Other expenses that do not reduce the total pension liability.....	<u>74,556</u>
Pension expense.....	<u>\$ 1,284,991</u>

The employer/nonemployer proportionate share of the collective pension expense is equal to the collective pension expense multiplied by the employer/nonemployer proportionate share percentage for the fiscal year ending June 30, 2015 as shown in the schedule of employer and nonemployer allocations.