## NORFOLK COUNTY RETIREMENT SYSTEM

SCHEDULES OF EMPLOYER ALLOCATIONS, PENSION AMOUNTS BY EMPLOYER AND AMORTIZATION OF EMPLOYERS' DEFERRED OUTFLOWS/INFLOWS

YEAR ENDED DECEMBER 31, 2016

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#### INDEPENDENT AUDITOR'S REPORT

To the Board of the Norfolk County Retirement System Canton, Massachusetts 02021

Report on Schedules

We have audited the accompanying schedule of employer allocations of the Norfolk County Retirement System (the System) as of and for the year ended December 31, 2016, and the related notes. We have also audited the totals for all entities of the columns titled ending net pension liability, total deferred outflows of resources, total deferred inflows of resources, total pension expense, total pension amounts by employer of the System as of and for the year ended December 31, 2016, and the related notes. We have also audited the column totals) included in the accompanying schedule of pension amounts by employer of the System as of and for the year ended December 31, 2016, and the related notes. We have also audited the column totals included in the accompanying schedule of employers' deferred outflows/inflows for the year ended December 31, 2016, 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 accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer 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 allocations and specified column totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer, 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 allocations and specified column totals included in the schedule of pension amounts by employer 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 allocations and specified column totals included in the schedule of pension.

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

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#### Opinion

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and ending net pension liability, total deferred outflows of resources, total deferred inflows of resources, total pension expense, total pension revenue, total covered payroll and total amortization of deferred outflows/inflows for the total of all participating entities for the Norfolk County Retirement System as of and for the year ended December 31, 2016, in accordance with accounting principles generally accepted in the United States of America.

#### **Report on Supplementary Information**

Our audit was conducted for the purpose of forming an opinion on the schedules referred to above. The schedule of actual employer contributions on page 16 is presented for purposes of additional analysis and is not a required part of the schedules referred to above. Such information is the responsibility of management and was derived from and relates to the underlying accounting and other records used to prepare the schedules referred to above. The information has been subjected to the auditing procedures applied in the audit of the schedules referred to above and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the schedules referred to above or to the schedules themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the schedules referred to above as a whole.

#### **Other Matter**

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, the financial statements of the Norfolk County Retirement System as of and for the years ended December 31, 2016 and 2015, and our report thereon, dated September 28, 2017, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of the System's management, Board, employers and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Respectfully submitted,

**DI PESA & COMPANY** 

Di Pesa & Company

Certified Public Accountants Quincy, Massachusetts September 28, 2017



### SCHEDULE OF EMPLOYER ALLOCATIONS

#### FOR THE YEAR ENDED DECEMBER 31, 2016

Employer

			Employer
		Employer	Allocation
Employer	<u>A</u>	opropriations	<u>Percentage</u>
Town of Avon	\$	1,203,981	1.8844%
Avon Housing Authority		21,023	0.0329%
Town of Bellingham		2,909,083	4.5530%
Bellingham Housing Authority		27,804	0.0435%
Town of Canton		4,888,517	7.6511%
Canton Housing Authority		93,722	0.1467%
Town of Cohasset		2,340,496	3.6631%
Cohasset Housing Authority		15,388	0.0241%
Norfolk County		2,109,905	3.3022%
Charles River Pollution Control		151,157	0.2366%
Town of Dover		1,233,745	1.9310%
Dover-Sherborn Regional High School		724,937	1.1346%
Town of Foxboro		4,088,913	6.3996%
Foxboro Housing Authority		54,419	0.0852%
Town of Franklin		4,863,190	7.6114%
Franklin Housing Authority		81,455	0.1275%
Town of Holbrook		1,929,587	3.0200%
Holbrook Housing Authority		46,729	0.0731%
King Philip Regional School District		714,759	1.1187%
Town of Medfield		2,354,129	3.6845%
Medfield Housing Authority		14,325	0.0224%
Town of Medway		2,282,427	3.5723%
Medway Housing Authority		84,698	0.1326%
Town of Millis		1,608,231	2.5171%
Millis Housing Authority		35,665	0.0558%
Town of Norfolk		1,979,212	3.0977%
Norfolk Housing Authority		29,265	0.0458%
Norfolk Mosquito Control		184,359	0.2885%
Town of Plainville		1,729,722	2.7072%
Town of Randolph		5,288,215	8.2767%
Randolph Housing Authority		61,301	0.0959%
Town of Sharon		3,824,140	5.9852%
Sharon Housing Authority		23,357	0.0366%
Town of Stoughton		5,030,371	7.8731%
Stoughton Housing Authority		67,575	0.1058%
Town of Walpole		4,637,947	7.2589%
Walpole Housing Authority		51,615	0.0808%
Town of Westwood		4,720,301	7.3878%
Town of Wrentham		1,808,835	2.8310%
Wrentham Housing Authority		24,148	0.0378%
Dedham Westwood Water District		554,491	<u>0.8678%</u>
	\$	63,893,139	100.0000%
The Accompanying Notes are an Integ			

The Accompanying Notes are an Integral Part of the Schedule of Employer Allocations.

#### NORFOLK COUNTY RETIREMENT SYSTEM

#### SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

#### AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2016

		Deferred Outflows of Resources								
<u>Employer</u>	ember 31, 2016 Net Pension <u>Liability</u>	B E ar	ifference etween Expected nd Actual sperience		et Difference Between Projected and Actual Investment Earnings	Assumption <u>Changes</u>	ar	Changes in Proportion and Differences Between Employer Contributions ad Proportionate Share of <u>Contributions</u>	С	Total Deferred Jutflows of Resources
Town of Avon	\$ 9,836,994	\$	154,228	\$	898,956	\$-	\$	-	\$	1,053,184
Avon Housing Authority	171,745		2,694		15,695	-		1,305		19,694
Town of Bellingham	23,767,690		372,636		2,172,017	-		418,337		2,962,990
Bellingham Housing Authority	227,080		3,561		20,753	-		-		24,314
Town of Canton	39,940,473		626,197		3,649,972	-		218,977		4,495,146
Canton Housing Authority	765,807		12,006		69,984	-		9,853		91,843
Town of Cohasset	19,122,211		299,802		1,747,490	-		961,685		3,008,977
Cohasset Housing Authority	125,807		1,972		11,497	-		655		14,124
Norfolk County	17,238,231		270,266		1,575,321	-		1,104,933		2,950,520
Charles River Pollution Control	1,235,106		19,364		112,870	-		-		132,234
Town of Dover	10,080,257		158,041		921,187	-		-		1,079,228
Dover-Sherborn Regional High School	5,922,869		92,861		541,263	-		112,440		746,564
Town of Foxboro	33,407,360		523,769		3,052,941	-		-		3,576,710
Foxboro Housing Authority	444,763		6,974		40,646	-		-		47,620
Town of Franklin	39,733,230		622,949		3,631,033	-		-		4,253,982
Franklin Housing Authority	665,579		10,434		60,824	-		16,105		87,363
Town of Holbrook	15,765,083		247,170		1,440,697	-		50,216		1,738,083
Holbrook Housing Authority	381,599		5,983		34,872	-		44,879		85,734
King Philip Regional School District	5,839,867		91,559		533,679	-		79,722		704,960
Town of Medfield	19,233,924		301,554		1,757,697	-		296,574		2,355,825
Medfield Housing Authority	116,933		1,833		10,686	-		4,501		17,020
Town of Medway	18,648,214		292,372		1,704,173	-		790,090		2,786,635
Medway Housing Authority	692,202		10,852		63,257	-		-		74,109
Town of Millis	13,139,831		206,010		1,200,787	-		17,065		1,423,862
Millis Housing Authority	291,289		4,567		26,620	-		61,332		92,519

#### NORFOLK COUNTY RETIREMENT SYSTEM

#### SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

#### AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2016

		Deferred Outflows of Resources								
	mber 31, 2016 et Pension	E	Difference Between Expected Ind Actual	Bet Proj and	fference ween ected Actual stment	Assumpt	ion	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of		Total Deferred utflows of
Employer	<u>Liability</u>	E	xperience	<u>Ear</u>	<u>nings</u>	<u>Change</u>	25	Contributions	<u> </u>	<u>Resources</u>
Town of Norfolk	16,170,695		253,529	1	,477,764		-	36,060		1,767,353
Norfolk Housing Authority	239,086		3,749		21,848		-	36,647		62,244
Norfolk Mosquito Control	1,506,035		23,612		137,630		-	46,583		207,825
Town of Plainville	14,132,196		221,569	1	,291,475		-	654,654		2,167,698
Town of Randolph	43,206,246		677,398	3	,948,416		-	182,250		4,808,064
Randolph Housing Authority	500,620		7,848		45,748		-	19,869		73,465
Town of Sharon	31,244,098		489,853	2	,855,251		-	145,741		3,490,845
Sharon Housing Authority	191,060		2,996		17,461		-	661		21,118
Town of Stoughton	41,099,363		644,366	3	,755,879		-	-		4,400,245
Stoughton Housing Authority	552,300		8,659		50,472		-	14,710		73,841
Town of Walpole	37,893,100		594,097	3	,462,873		-	99,240		4,156,210
Walpole Housing Authority	421,794		6,612		38,546		-	427		45,585
Town of Westwood	38,565,987		604,647	3	,524,365		-	1,500,711		5,629,723
Town of Wrentham	14,778,460		231,701	1	,350,534		-	2,533		1,584,768
Wrentham Housing Authority	197,325		3,094		18,032		-	-		21,126
Dedham Westwood Water District	 4,530,112		71,024		413,985		-	817		485,826
	\$ 522,022,622	\$	8,184,408	\$ 47	,705,196	\$	-	\$ 6,929,572	\$	62,819,176

#### SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

#### AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2016

	Deferred Inflows of Resources				Pension Expense					
<u>Employer</u>	Difference Between Expected and Actual Experience	Assumption <u>Changes</u>	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of <u>Contributions</u>	Total Deferred Inflows of <u>Resources</u>	Shai Pli Pen	tionate re of an sion ense	Net Amortization from Changes in <u>Proportions</u>	Total Pension <u>Expense</u>	(Proportionate Share of Contributions from Nonemployer Entities) Total Pension <u>Revenue</u>	Total Covered <u>Payroll</u>
Town of Avon	\$-	\$ 641,483	\$ 249,095	\$ 890,578	\$ 1,	,067,830	\$ (81,997)	\$ 985,833	\$ 55,396	\$ 5,299,087
Avon Housing Authority	-	11,200	6,876	18,076		18,643	(2,037)	16,606	967	91,746
Town of Bellingham	-	1,549,920	68,075	1,617,995	2,	,580,042	126,799	2,706,841	133,844	12,923,047
Bellingham Housing Authority	-	14,808	60,430	75,238		24,650	(20,734)	3,916	1,279	121,337
Town of Canton	-	2,604,568	67,823	2,672,391	4,	,335,638	58,118	4,393,756	224,919	20,827,226
Canton Housing Authority	-	49,938	81,786	131,724		83,130	(25,676)	57,454	4,313	368,008
Town of Cohasset	-	1,246,983	210,536	1,457,519	2,	,075,764	277,633	2,353,397	107,684	10,142,562
Cohasset Housing Authority	-	8,204	6,884	15,088		13,657	(2,206)	11,451	708	58,663
Norfolk County	-	1,124,127	466,895	1,591,022	1,	,871,253	122,318	1,993,571	97,075	8,788,287
Charles River Pollution Control	-	80,542	20,939	101,481		134,074	(6,808)	127,266	6,955	642,914
Town of Dover	-	657,346	115,206	772,552	1,	,094,237	(39,663)	1,054,574	56,766	5,476,473
Dover-Sherborn Regional High School	-	386,237	36,345	422,582		642,942	29,453	672,395	33,354	3,316,140
Town of Foxboro	-	2,178,535	169,532	2,348,067	3,	,626,452	(52,037)	3,574,415	188,129	17,949,748
Foxboro Housing Authority	-	29,003	54,059	83,062		48,280	(18,096)	30,184	2,505	209,778
Town of Franklin	-	2,591,054	584,144	3,175,198	4,	,313,141	(194,096)	4,119,045	223,752	21,380,359
Franklin Housing Authority	-	43,404	4,479	47,883		72,250	4,405	76,655	3,748	334,415
Town of Holbrook	-	1,028,061	391,269	1,419,330	1,	,711,339	(122,044)	1,589,295	88,779	8,342,746
Holbrook Housing Authority	-	24,885	8,804	33,689		41,423	13,219	54,642	2,149	170,591
King Philip Regional School District	-	380,825	5,712	386,537		633,932	26,025	659,957	32,886	3,355,727
Town of Medfield	-	1,254,268	57,790	1,312,058	2,	,087,890	87,449	2,175,339	108,313	10,548,923
Medfield Housing Authority	-	7,624	40,064	47,688		12,693	(12,661)	32	658	62,514
Town of Medway	-	1,216,074	-	1,216,074	2,	,024,310	271,916	2,296,226	105,015	10,645,915
Medway Housing Authority	-	45,139	14,411	59,550		75,140	(4,895)	70,245	3,898	369,624
Town of Millis	-	856,866	467,734	1,324,600	1,	,426,361	(156,912)	1,269,449	73,995	7,263,859
Millis Housing Authority	-	18,995	4,419	23,414		31,620	20,016	51,636	1,640	138,431

#### SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

#### AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2016

	Deferred Inflows of Resources			Pension Expense					
	Difference Between Expected and Actual	Assumption	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Inflows of	Proportionate Share of Plan Pension	Net Amortization from Changes in	Total Pension	(Proportionate Share of Contributions from Nonemployer Entities) Total Pension	Total Covered
Employer	Experience	<u>Changes</u>	Contributions	<u>Resources</u>	<u>Expense</u>	Proportions	<u>Expense</u>	<u>Revenue</u>	<u>Payroll</u>
Town of Norfolk	-	1,054,512	2,648	1,057,160	1,755,369	11,755	1,767,124	91,063	8,521,080
Norfolk Housing Authority	-	15,591	-	15,591	25,953	12,580	38,533	1,346	127,713
Norfolk Mosquito Control	-	98,211	10,231	108,442	163,484	13,440	176,924	8,481	781,611
Town of Plainville	-	921,579	179,067	1,100,646	1,534,085	179,828	1,713,913	79,583	7,591,280
Town of Randolph	-	2,817,537	74,841	2,892,378	4,690,146	43,654	4,733,800	243,310	22,322,895
Randolph Housing Authority	-	32,646	134,311	166,957	54,344	(41,219)	13,125	2,819	292,869
Town of Sharon	-	2,037,467	1,182,118	3,219,585	3,391,625	(370,257)	3,021,368	175,947	17,142,063
Sharon Housing Authority	-	12,459	5,469	17,928	20,740	(1,717)	19,023	1,076	101,932
Town of Stoughton	-	2,680,142	626,878	3,307,020	4,461,438	(204,118)	4,257,320	231,445	21,676,272
Stoughton Housing Authority	-	36,015	150,340	186,355	59,954	(48,069)	11,885	3,110	281,307
Town of Walpole	-	2,471,058	901,319	3,372,377	4,113,390	(285,354)	3,828,036	213,390	20,389,468
Walpole Housing Authority	-	27,506	59,387	86,893	45,787	(20,368)	25,419	2,375	225,248
Town of Westwood	-	2,514,935	301,279	2,816,214	4,186,434	440,236	4,626,670	217,179	20,770,111
Town of Wrentham	-	963,722	70,303	1,034,025	1,604,239	(17,153)	1,587,086	83,223	8,212,587
Wrentham Housing Authority	-	12,867	18,825	31,692	21,420	(6,073)	15,347	1,111	105,383
Dedham Westwood Water District		295,414	19,249	314,663	491,755	(4,654)	487,101	25,511	2,419,805
	\$-	\$ 34,041,750	\$ 6,929,572	\$ 40,971,322	\$ 56,666,854	<u>\$ -</u>	56,666,854	\$ 2,939,696	\$ 279,789,744

#### SCHEDULE OF AMORTIZATION OF EMPLOYERS' DEFERRED OUTFLOWS/INFLOWS

#### FOR THE YEAR ENDED DECEMBER 31, 2016

FOR THE YEARS ENDING DECEMBER 31

Employer	2017	2018	<u>2019</u>	2020	Thereafter		<u>Total</u>
Town of Avon	\$ 85,921	\$ 85,921	\$ 29.079	\$ (38,315)	\$ -	Ś	162,606
Avon Housing Authority	895	895	17	(188)	-		1,619
Town of Bellingham	532,515	532,515	363,667	(83,703)	-		1,344,994
Bellingham Housing Authority	(16,857)	(16,857)	(16,288)	(922)	-		(50,924)
Town of Canton	739,906	739,906	472,852	(129,909)	-		1,822,755
Canton Housing Authority	(12,604)	(12,604)	(14,757)	84	-		(39,881)
Town of Cohasset	604,050	604,050	446,647	(103,290)	-		1,551,457
Cohasset Housing Authority	(59)	(59)	(637)	(209)	-		(964)
Norfolk County	416,576	416,576	320,674	205,671	-		1,359,497
Charles River Pollution Control	14,275	14,275	6,811	(4,608)	-		30,753
Town of Dover	132,408	132,408	70,862	(29,003)	-		306,675
Dover-Sherborn Regional High School	130,558	130,558	88,198	(25,332)	-		323,982
Town of Foxboro	518,230	518,230	304,515	(112,331)	-		1,228,644
Foxboro Housing Authority	(10,503)	(10,503)	(11,741)	(2,694)	-		(35,441)
Town of Franklin	484,154	484,154	243,282	(132,806)	-		1,078,784
Franklin Housing Authority	15,766	15,766	10,886	(2,939)	-		39,479
Town of Holbrook	147,067	147,067	58,130	(33,512)	-		318,752
Holbrook Housing Authority	19,732	19,732	15,707	(3,125)	-		52,046
King Philip Regional School District	125,712	125,712	85,022	(18,023)	-		318,423
Town of Medfield	415,774	415,773	280,579	(68,359)	-		1,043,767
Medfield Housing Authority	(10,665)	(10,665)	(10,043)	704	-		(30,669)
Town of Medway	590,242	590,242	442,043	(51,966)	-		1,570,561
Medway Housing Authority	6,921	6,921	2,892	(2,175)	-		14,559
Town of Millis	67,386	67,386	(1,858)	(33,652)	-		99,262
Millis Housing Authority	24,989	24,989	20,980	(1,853)	-		69,105
Town of Norfolk	287,791	287,791	181,482	(46,871)	-		710,193
Norfolk Housing Authority	16,662	16,662	13,865	(536)	-		46,653
Norfolk Mosquito Control	39,148	39,148	27,758	(6,670)	-		99,384
Town of Plainville	421,066	421,066	306,671	(81,750)	-		1,067,053
Town of Randolph	781,186	781,187	494,178	(140,865)	-		1,915,686
Randolph Housing Authority	(32,673)	(32,673)	(31,297)	3,152	-		(93,491)
Town of Sharon	163,082	163,082	845	(55,750)	-		271,259
Sharon Housing Authority	1,545	1,545	493	(393)	-		3,190
Town of Stoughton	497,450	497,450	247,340	(149,016)	-		1,093,224
Stoughton Housing Authority	(38,641)	(38,641)	(37,045)	1,814	-		(112,513)
Town of Walpole	361,484	361,484	146,365	(85,500)	-		783,833
Walpole Housing Authority	(13,169)	(13,169)	(13,860)	(1,110)	-		(41,308)
Town of Westwood	1,098,560	1,098,560	796,241	(179,853)	-		2,813,508
Town of Wrentham	235,117	235,117	139,010	(58,502)	-		550,742
Wrentham Housing Authority	(2,704)	(2,704)	(3,500)	(1,656)	-		(10,564)
Dedham Westwood Water District	72,675	 72,675	 43,214	(17,400)			171,164
	\$ 8,910,968	\$ 8,910,968	\$ 5,519,279	\$ (1,493,361)	<u>\$</u> -	\$	21,847,854

The Accompanying Notes are an Integral Part of the Schedule of Amortization of Employers' Deferred Outflows/Inflows.

## NOTE 1 – DESCRIPTION OF THE ENTITY

The Norfolk County Retirement System (the System) was established to provide retirement benefits to eligible employees of its member employers. The System is governed by a five member Board who establish the policies under which the System operates. Board members also approve all of the System's financial transactions, including the approval of retirement benefits to members. The day-to-day operations of the System are managed by the Executive Director. The legislative body for the System is an Advisory Council consisting of full-time treasurers or other qualified officials of the member units. The Advisory Council meets at least twice annually and is responsible for supervising and certifying the procedures involved in the election of members to the retirement board.

The System issued a publicly available audited financial statement for the year ended December 31, 2016, which is available through the System's website at www.norfolkcountyretirement.org, or a copy may be obtained by submitting a request to the System's Executive Director at 480 Neponset Street, Building #15, Canton, MA 02021.

### Plan Description

The System is a cost-sharing multiple-employer contributory defined benefit governmental pension plan established under Chapter 32 of the Massachusetts General Laws ("MGL") covering all employees of governmental member units deemed eligible by the Board. The System is a member of the Massachusetts Contributory Retirement System and is governed by Chapter 32 of MGL. The Public Employee Retirement Administration Commission (PERAC) is the state agency responsible for oversight of the Commonwealth's public retirement systems.

### **Membership**

Membership in the Plan is mandatory immediately upon the commencement of employment for all non-teaching permanent employees regularly scheduled to work 20 hours or more per week. The pensions of school department employees who serve in a teaching capacity are administered by the Commonwealth of Massachusetts' Teachers Retirement System.

### **Benefits**

Massachusetts Contributory Retirement System benefits are, with certain exceptions, uniform from system to system. The System provides for retirement allowance benefits up to a maximum of 80% of a member's highest three-year average annual rate of regular compensation. For persons who became members on or after April 2, 2012, average salary is the average annual rate of regular compensation received during the five consecutive years that produce the highest average, or, if greater, during the last five years (whether or not consecutive) preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

### NOTE 1 - DESCRIPTION OF THE ENTITY (Continued)

#### Benefits (Continued)

There are three classes of membership in the retirement system: group 1, group 2, and group 4. Group 1 consists of general employees which includes clerical and administrative positions. Group 2 consists of positions that have been specified as hazardous. Lastly, group 4 consists of police officers, firefighters, and other hazardous positions.

Members become vested after ten years of creditable service. A superannuation retirement allowance may be received upon the completion of 20 years of service or upon reaching the age of 55 with 10 years of service if hired after 1978 and if classified in groups 1 or 2. A person who became a member on or after April 2, 2012 is eligible for a superannuation retirement allowance upon reaching the age of 60 with 10 years of service if in group 1, 55 years of age with 10 years of service if in group 2, and 55 years of age if hired prior to 1978 or if classified in group 4. Normal retirement for most employees occurs at age 65 (except for certain hazardous duty and public safety positions, whose normal retirement is at age 55).

A retirement allowance consists of two parts: an annuity and a pension. A member's accumulated total deductions and the interest they generate constitute the annuity. The differential between the total retirement benefit and the annuity is the pension. The average retirement benefit is approximately 80-85% pension and 15-20% annuity.

Members who become permanently and totally disabled for further duty may be eligible to receive a disability retirement allowance. The amount of benefits to be received in such cases is dependent on several factors, including whether or not the disability is work related, the member's age, years of creditable service, level of compensation, veterans' status and group classification.

Employees who resign from service and who are not eligible to receive a retirement allowance or are under the age of 55 are entitled to request a refund of their accumulated total deductions. In addition, with at least ten years of creditable service, such employees are entitled to receive one hundred (100%) percent of the regular interest which has accrued upon those deductions. Survivor benefits are extended to eligible beneficiaries of members whose death occurs prior to or following retirement.

### **Contributions**

Active members contribute between 5 and 9% of their gross regular compensation. Members joining the System after January 1, 1979 must contribute an additional 2% on regular compensation earned at a rate in excess of \$30,000. The percentage rate is keyed to the date upon which an employee's membership commences. These deductions are deposited in the Annuity Savings Fund and earn interest at a rate determined by the Public Employee Retirement Administration Commission's (PERAC) actuary. When a member's retirement becomes effective, his/her deductions and related interest are transferred to the Annuity Reserve Fund. Any cost-of-living adjustments granted between 1981 and 1997 and any increase in other benefits imposed by

## NOTE 1 – DESCRIPTION OF THE ENTITY (Continued)

## **Contributions** (Continued)

the Commonwealth of Massachusetts' state law during those years are borne by the Commonwealth and are deposited into the Pension Fund. Cost-of-living adjustments granted after 1997 must be approved by the System and all costs are borne by the System. The pension portion of any retirement benefit is paid from the Pension Fund of the System. The governmental unit employing the member must annually appropriate and contribute the amount of current-year pension assessment.

## NOTE 2 – ACTUARIAL ASSUMPTIONS AND METHODS

The total pension liability was determined by an actuarial valuation as of January 1, 2016. The following actuarial assumptions were applied to all periods included in the measurement that was updated to December 31, 2016:

Actuarial cost method:	Entry Age Normal Cost Method
Asset valuation method	Market value
Investment rate of return	8.0%
Projected salary increases	3.5% - 5.5%
Inflation	4.0%
Cost of living increases	3.0% of first \$15,000 of retirement income
Mortality:	The RP-2014 Blue Collar Mortality Table adjusted with Scale with MP-2014

## NOTE 3 - NET PENSION LIABILITY

The components of the net pension liability of the System as of December 31, 2016, is as follows:

Total Pension Liability	\$1,358,050,158
Fiduciary Net Position	<u>836,027,536</u>
System's Net Pension Liability	\$ <u>522,022,622</u>
Fiduciary Net Position as a percentage of total pension liability	61.6%

## NOTE 3 - NET PENSION LIABILITY (Continued)

The total pension liability is calculated by the System's actuary and plan fiduciary net position is reported in the System's financial statements. The net pension liability is disclosed in accordance with the requirements of Governmental Accounting Standards Board (GASB) Statement No. 67 in the System's notes to financial statements and required supplementary information.

### **Discount Rate**

The discount rate used to measure the total pension liability as of December 31, 2016 was 8.0%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at contractually required rates, actuarially determined. Under Chapter 32 of the MGL, employers are required to make the necessary contributions such that the Plan reaches full funding status by 2040. Based on those assumptions, the Plan's fiduciary 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 Plan investments was applied to all periods of projected benefit payments to determine total pension liability.

#### Long-Term Expected Rate of Return

The long term expected rate of return on Plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of plan investment expense and inflation) 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 real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized as follows:

Asset Class	Target <u>Allocation</u>	Long-term Expected Real <u>Rate of Return</u>
Domestic Equity	32.0%	8.6%
International Equities	17.5	8.6%
Fixed Income	19.0	4.5%
Real Estate	9.0	5.1%
Private Equity	8.5	10.3%
Hedge Funds	9.0	13.1%
Real Assets	5.0	7.5%
Total	<u>100.0</u> %	

The System's policy in regard to the allocation of invested Plan assets is established and may be amended by the Board. Plan assets are managed with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the Plan.

The annual money-weighted rate of return on investments, net of investment expense was 8.59% for the year ended December 31, 2016. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

### NOTE 3 – <u>NET PENSION LIABILITY</u> (Continued)

#### Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the System as of December 31, 2016, calculated using the discount rate of 8.0%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is one-percentage point lower (7.0%) or one-percentage point higher (9.0%) than the current rate:

	<u>1% Decrease (7.0%)</u>	Current Discount <u>Rate (8.0%)</u>	<u>1% Increase (9.0%)</u>
System's Net Pension Liability	\$660,490,285	\$522,022,622	\$403,327,015

#### NOTE 4 – BASIS OF PRESENTATION

The Schedule of Employer Allocations, Schedule of Pension Amounts by Employer, and Schedule of Amortization of Employers' Deferred Outflows/Inflows present amounts that are elements of the financial statements of the System or of its participating employers. Accordingly, they do not purport to be a complete presentation of the financial position or changes in financial position of either the System or its participating employers. The amounts presented in the schedules were prepared in accordance with U.S. generally accepted accounting principles. Such preparation requires management of the System to make a number of estimates and assumptions relating to the reported amounts. Due to inherent nature of these estimates, actual results may differ from those estimates.

### NOTE 5 – PENSION EXPENSE

System pension expense for the year ended December 31, 2016 is as follows:

Service Cost	\$ 33,401,927
Interest Cost	103,990,120
Expected Return on Assets	(61,381,261)
Member Contributions	(29,448,483)
Current Year Amortization of Difference Between	
Expected and Actual Experience	2,822,209
Current Year Amortization of Assumption Changes	(11,738,535)
Current Year Amortization of Difference Between	
Projected and Actual Investment Earnings	17,827,294
Administrative Expenses	<u>1,193,583</u>
Total	\$ <u>56,666,854</u>

The System pension expense is based on the January 1, 2016 valuation. The employers' allocation of the pension expense is shown in the Schedule of Pension Amounts by Employer. The difference between expected and actual experience and the effect of assumption changes are amortized over the average expected remaining service lives of active and inactive members as of January 1, 2016 (4.9 years). The difference between projected and actual investment earnings is amortized over 5 years.

### NOTE 6 – DEFERRED INFLOWS OF RESOURCES AND DEFERRED OUTFLOWS OF RESOURCES

Annual changes to the net pension liability resulting from differences between expected and actual experience and from changes in assumptions are deferred and amortized over a closed period equal to the average of the expected service lives of all members determined for the period during which the changes occurred. Differences between projected and actual earnings are amortized over a closed 5 year period. The following presents a summary of the changes in the collective deferred outflows of resources and deferred inflows of resources for the year ended December 31, 2016:

Year	Amortization Period	Original <u>Amount</u>	Accumulated Amortization	Beginning Of year Balance	Current Year <u>Deferrals</u>	Current Year <u>Amortizations</u>	End Of Year <u>Balance</u>		
Deferred Outflows of Resources									
Different Between Expected and Actual Experience									
2015	4.9	\$ 13,828,826	\$ 2,822,209	\$ 11,006,617	\$-	\$ 2,822,209	\$ 8,814,408		
Differe 2014 2015 2016	nce Between P 5 5 5	rojected and Actu 21,416,618 75,186,656 -	ual Investment E: 8,566,648 15,037,331 -	arnings 12,849,970 60,149,325 -	- - (7,466,805)	4,283,324 15,037,331 ( 1,493,361)	8,566,646 45,111,994 ( 5,973,444)		
Deferred Inflows of Resources Difference from Assumption Changes									
2015	4.9	(57,518,820)	(11,738,535)	(45,780,285)	-	(11,738,535)	( <u>34,041,750</u> )		
Total Deferred Outflows/Inflows of Resources									

The following schedule reflects the amortization of the balance of deferred outflows of resources and deferred inflows of resources at December 31, 2016:

Measurement Period Ending December 31:	Amount
2017	\$ 8,910,968
2018	8,910,968
2019	5,519,279
2020	(1,493,361)
Thereafter	<u> </u>
Total	\$ <u>21,847,854</u>

## NOTE 7 – <u>PROPORTIONATE SHARE ALLOCATION METHODOLOGY AND</u> <u>EMPLOYER ALLOCATIONS</u>

GASB Statement No. 68 requires employers in the Plan to recognize their proportionate share of the collective net pension liability. The System has determined that utilizing a recent statutorily required employer contributions is an appropriate allocation methodology and fiscal year 2018 has been used. The Schedule of Employer Allocations display the proportionate allocation used to allocate the Difference Between Expected and Actual Experience; Net Difference Between Projected and Actual Investment Earnings; Proportionate Share of Plan Pension Expense; and Proportionate Share of Contributions from Nonemployer Entities. The Schedule of Actual Employer Contributions for the year ended December 31, 2016 is presented as supplementary information.

## NOTE 8 – ADDITIONAL FINANCIAL AND ACTUARIAL INFORMATION

Information contained in these Notes to Schedules of Employer Allocations and Pension Amounts by Employer (the Schedules) was extracted from the audited financial statements of the System for the years ended December 31, 2016 and 2015. Additional financial information supporting the preparation of the Schedules (including the unqualified audit opinion on the financial statements and required supplementary information) is located in the audited financial statements of the System for the years ended December 31, 2016 and 2015. A copy may be obtained by submitting a request to the System's Executive Director at 480 Neponset Street, Building #15, Canton, MA 02021.

# SUPPLEMENTARY INFORMATION

#### SCHEDULE OF ACTUAL EMPLOYER CONTRIBUTIONS

#### FOR THE YEAR ENDED DECEMBER 31, 2016

Employer	Employer <u>Contributions</u>		
Tours of Augus	4	4 0 47 572	
Town of Avon	\$	1,047,572	
Avon Housing Authority		20,915	
Town of Bellingham		2,579,977	
Bellingham Housing Authority		24,060	
Town of Canton		4,393,622	
Canton Housing Authority		98,192	
Town of Cohasset		1,880,030	
Cohasset Housing Authority		14,854	
Norfolk County		3,321,523	
Charles River Pollution Control		132,554	
Town of Dover		1,129,266	
Dover-Sherborn Regional High School		618,563	
Town of Foxboro		3,655,092	
Foxboro Housing Authority		42,007	
Town of Franklin		4,351,658	
Franklin Housing Authority		68,948	
Town of Holbrook		1,831,085	
Holbrook Housing Authority		31,899	
King Philip Regional School District		647,605	
Town of Medfield		2,084,180	
Medfield Housing Authority		18,860	
Town of Medway		2,098,530	
Medway Housing Authority		76,395	
Town of Millis		1,494,769	
Millis Housing Authority		27,202	
Town of Norfolk		1,810,010	
Norfolk Housing Authority		27,633	
Norfolk Mosquito Control		156,229	
Town of Plainville		1,359,848	
Town of Randolph		4,750,895	
Randolph Housing Authority		81,299	
Town of Sharon		3,686,874	
Sharon Housing Authority		22,058	
Town of Stoughton		4,437,692	
Stoughton Housing Authority		80,248	
Town of Walpole		4,374,064	
Walpole Housing Authority		47,760	
Town of Westwood		3,946,275	
Town of Wrentham		1,569,071	
Wrentham Housing Authority		16,155	
Dedham Westwood Water District		484,009	
The Accomposition Notes are an Integral Dar	\$ + of	58,539,478	

The Accompanying Notes are an Integral Part of the Schedule of Actual Employer Contributions.