

**MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM  
STATE OF RHODE ISLAND**

ACTUARIAL VALUATION REPORT  
AS OF JUNE 30, 2013

December 17, 2013

Retirement Board  
40 Fountain Street, First Floor  
Providence, RI 02903-1854

Dear Members of the Board:

**Subject: Actuarial Valuation of MERS as of June 30, 2013**

This is the June 30, 2013 actuarial valuation of the Municipal Employees' Retirement System (MERS). This report describes the current actuarial condition of MERS, determines recommended employer contribution rates, and analyzes changes in these contribution rates. Separate liabilities and contribution rates are determined for each of the participating units. Valuations are prepared annually as of June 30, the last day of the plan year.

Under Rhode Island General Laws, the employer contribution rates for the units participating in MERS are certified annually by the State of Rhode Island Retirement Board. These rates are determined actuarially, based on the plan provisions in effect as of the valuation date and the actuarial assumptions and methodology adopted by the Board. Where known, we have also reflected adoption of a COLA provision even if the effective date is after the valuation date. The Board's current policy is that the contribution rates determined by a given actuarial valuation become effective two years after the valuation date. For example, the rates determined by this June 30, 2013 actuarial valuation will be applicable for the year beginning July 1, 2015 and ending June 30, 2016.

**Financing objectives and funding policy**

The actuarial cost method and the amortization periods are set by board policy. Normal cost rate (as a percent of pay) and actuarial accrued liabilities are computed using the Entry Age Normal actuarial cost method. The employer contribution rate is the sum of two pieces: the employer normal cost rate and the amortization rate. The employer normal cost rate is the difference between the normal cost rate and the member contribution rate. The amortization rate, also determined as a level percent of pay, is the amount required to amortize the unfunded actuarial accrued liability over a closed period (22 years remaining as of June 30, 2013). The amortization rate is adjusted for the two-year deferral in contribution rates.

### **Progress toward realization of financing objectives**

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches 100%. The funded ratio of the average unit in MERS is 82.2%, which is a decrease from 82.5% in the prior valuation.

There are currently 113 units participating in MERS, 68 covering general employees and 45 covering police and/or fire employees. Of these 113 units, 63 had their rate decrease, and 46 had their rate increase. Six units have no required contribution rate. Of the 68 general employee units, 28 had rate increases, while 18 of the 45 continuing police/fire units had rate increases. An analysis of the changes in the employer contribution rates appears on Table 5. Actuarial losses on assets were responsible for most of the increases.

### **Benefit provisions**

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2013. We have also reflected the known adoption of COLA B or COLA C, even if the effective date and/or the adoption date occurred after the valuation date. The benefit provisions are summarized in Appendix B, and each unit's individual election is indicated by a code in column 4 on Table 1. Changes in elections are discussed on page 5.

### **Assumptions and methods**

Except as noted below, and with the exception of certain assumption changes that resulted from the enactment of The Rhode Island Retirement Security Act of 2011 (the Act), the actuarial assumptions are consistent with the assumptions approved by the Board on April 13, 2011 based on the last experience study. This valuation reflects the following assumption changes: the marriage assumption was modified to reflect the expected percentage of members that will be eligible for survivor benefits upon their death, the incidence of disability was lowered to incorporate a continued trend of significantly fewer incidents of disability than anticipated by the current assumption, and the missing data assumption was updated to incorporate an assumption for missing beneficiary data. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

All assumptions and methods are described in Appendix A. The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in GASB 25.

## Data

The System's staff supplied data for retired, active and inactive members as of June 30, 2013. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. The System's staff also supplied asset data as of June 30, 2013.

## Certification

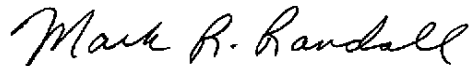
All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Rhode Island state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. All are Enrolled Actuaries and Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries and they are experienced in performing valuations for large public retirement systems.

Respectfully submitted,



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## **Contribution Rates**

The employer contribution rates for MERS are determined actuarially. The rates determined in this valuation become effective two years after the valuation date, in this case as of July 1, 2015.

Each rate consists of two pieces: the employer normal cost rate and the amortization rate. The normal cost and actuarial accrued liability are determined using the Entry Age actuarial cost method. The employer normal cost is the difference between (i) the normal cost rate, determined as a level percent of pay, and (ii) the member contribution rate. The unfunded actuarial accrued liability is amortized as a level percent of payroll over a closed period. The period is 25 years as measured from June 30, 2010, or 22 years as of the current valuation date. The amortization rate is adjusted for the fact that the contribution rate set by this valuation is deferred for two years, and other amortization rates may apply for the next two years.

Table 1 shows the member contribution rate, the employer normal cost rate, the amortization rate and the total employer contribution rate. These rates are applicable to the fiscal year ending June 30, 2016. Table 2 compares the total employer contribution rate with those rates determined in the two prior actuarial valuations. Table 3 shows the components used to determine the employer contribution rate in dollar amounts. Finally, Table 5 shows the major components of the rate change for each unit.

## **Financial Data and Experience**

Assets for MERS are held in trust and are commingled with those of several other plans and programs—including the Employees' Retirement System of Rhode Island—for investment purposes. The State Treasurer is responsible for setting the asset allocation policy and for investing the funds. The System's staff determines a reserve for each unit, reflecting that unit's contributions and benefit payments, and reflecting the unit's share of the earnings, determined on a market-value basis.

Table 6a shows the development of actuarial value of assets in aggregate. The actuarial value of assets is determined by recognizing any difference between actual return and expected return (7.50% of market value) over a five-year period, 20% in each year, where gains and losses are allowed to offset each other immediately. The market value for MERS as of June 30, 2013 was \$1,251 million while the actuarial value was \$1,276 million (102.0% of market). Therefore, a cumulative total of \$25 million in actuarial losses related to the investment experience in 2009 and 2012 continues to be deferred and will be recognized in the next four valuations. Recognition of these deferred losses will, all other things being equal, result in contribution rates slightly increasing over the next four years.

Table 4a shows the market and actuarial values of assets for each unit and Table 4b shows the reconciliation of the market value of assets for each unit for the fiscal year ending June 30, 2013. Table 6b shows a historical summary of the return rates. The fund earned 11.0% during the year ending June 30, 2013 on a market value basis and returned 6.4% on an actuarial value basis. The average annual return based on the market value of assets over the last ten years (July 1, 2003 – June 30, 2013) was 7.3%. This is less than the current 7.50% annual investment return assumption used. The average annual return based on the actuarial value of assets over the same period was 5.1%. The returns above are net of both investment and administrative expenses, so they may differ from other information provided by the General Treasurer's office or the investment managers and advisors.

Some units have pending asset transfers for members who have moved between units or from other statewide systems. For these transfers, we have reflected the values as a receivable or payable in the market value of assets.

The System's staff provided all of the financial information used in this report.

## **Member Data**

The System's staff supplied member data as of June 30, 2013. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall. Information provided for active members includes: name, identification number, sex, a code indicating whether the member was active or inactive, date of birth, service, salary, unit indicator, date of last contribution, accumulated member contributions without interest, accrued benefit multiplier as of June 30, 2013, Final Average Compensation as of June 30, 2012, and the Rhode Island Retirement Security Act Retirement Date. For retired members, data includes: name, an identification number, sex, date of birth, date of retirement, amount of benefit, the amount of adjustment after age 62 for anyone electing the Social Security option, a code indicating the option elected and the type of retiree (service retiree, disabled retiree, beneficiary), and if applicable, the joint pensioner's date of birth and sex. For the special survivor benefit provided to retired police and fire members, we have not been provided demographic information on possible spouses who will be eligible for that benefit. For this valuation, we have assumed 80% of members will be married and 10% of married members will choose option 1 or 2. The 80% was derived from analyzing two other large GRS clients with similar demographics and benefit provisions. One data set showed 84% of retirees with spousal information and the other 77%.

Table 9 shows active member statistics for each unit, and Table 10 shows statistics on retirees and beneficiaries for each unit. Tables 11 and 12 show the distribution of active members by age and service, separately for general employees and for police and fire employees. Tables 13, 14, and 15 show summaries of the total membership data for general employee units (Table 13), for police and fire units (Table 14), and for all MERS units (Table 15).

The total payroll shown on the statistical tables is the amount that was supplied by the System's staff, annualized if necessary. For the cost calculations, the pays were adjusted in accordance with the actuarial assumptions to reflect one year's salary increase.



### **Benefit Provisions**

Appendix B includes a summary of the benefit provisions for MERS. There were no material changes in the benefit provisions since the preceding valuation.

Individual units may elect certain optional provisions, including an annual benefit increase applicable to future retirees only (COLA C), the same increase applicable to both current and future retirees (COLA B). There were no other changes reflected in this valuation.

No units closed, withdrew or subdivided since the prior valuation.

There are no ancillary benefits—e.g., cost of living benefits—that are currently provided by a source independent of MERS but that might be deemed a MERS liability if continued beyond the availability of funding by the current funding source.

### **Actuarial Methods and Assumptions**

Appendix A of this report includes a summary of the actuarial assumptions and methods used in this valuation. Costs are determined using the Entry Age Normal actuarial cost method. This method was initially adopted effective June 30, 1999 and was modified, effective June 30, 2011, to be consistent with the Act and the standards outlined in GASB Statement No. 67 exposure draft, which has now been finalized.

The method used to determine the actuarial value of assets is the five-year smoothed market method. This technique is further described in Section III of Appendix A. The development of the actuarial value of assets utilizing this method is shown in Table 6a of this report.

Except as noted below, and with the exception of certain assumption changes that resulted from the enactment of The Rhode Island Retirement Security Act of 2011 (the Act), the actuarial assumptions are consistent with the assumptions approved by the Board on April 13, 2011 based on the last experience study. This valuation reflects the following assumption changes: the disability rates for general employees are applied to the earlier of age 62 or eligibility for unreduced retirement, and deferred vested benefits for Police and Fire are assumed to begin at SSNRA rather than age 55 with a reduced benefit. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

### **GASB 25 and Funding Progress**

Accounting requirements for MERS are set by Governmental Accounting Standards Board Statement No. 25 (GASB 25). Table 7 shows a summary of the funded ratios and other information for MERS as of June 30, 2013.

GASB 25 requires that plans calculate an Annual Required Contribution (ARC), and, if actual contributions received are less than the ARC, this must be disclosed. The ARC must be calculated in accordance with certain parameters. In particular, it must include a payment to amortize the unfunded actuarial accrued liability. This amortization payment must be computed using a funding period no greater than 30 years. Further, the amortization payment included in the ARC may be computed as a level amount, or it may be computed as an amount that increases with payroll. However, if payments are computed on a level percent of payroll approach, the payroll growth assumption may not anticipate future membership growth.

For MERS, the calculated contribution rate shown in Table 1 is the ARC. The amortization period was 25 years as of June 30, 2010 and there are 22 years remaining as of June 30, 2013. The period and amortization method comply with the requirements of GASB 25. The payroll growth rate used in the amortization calculations does not include any allowance for membership growth.

### **Other Observations and Comments**

- Scituate Police has no active members, but does have retirees/beneficiaries covered by MERS. The actuarial value of assets is larger than the actuarial liability, so no funding is required.
- Tiogue Fire and Lighting has no active members, but it has an inactive member. The unit's liability is less than the actuarial value of its assets, so no funding is required.
- Albion Fire (Admin) has no active employees but it has inactive members. Its assets exceed its liabilities, and thus there is no contribution requirement for the year ending June 30, 2016.
- For Cranston Police (1114) and Cranston Fire (1115), we have estimated, based on information provided by the staff, the amount of longevity and holiday pay received by active members, and we have used these amounts in determining the benefits, liabilities, and the contributions. (Compensation shown in this report for these two units is the compensation that they contribute on, i.e., the base compensation.) Beginning July 1, 2012, these members and the City were scheduled to begin contributing on the pensionable earnings. However, we have been advised that this change did not happen in FY2013. As such, we have carried forward the prior methodologies to load the liabilities for the difference between the contribution and the benefit salaries. For the Police, salaries were loaded by 13% for longevity pay and 13 days of holiday pay. For Fire, only the 13 days of holiday pay were added.
- Other changes made between this valuation and July 1, 2015 such as units adopting new benefits, mergers of units, spin offs from one unit into two units, etc. will also result in revisions of contribution rates.

**Contribution Rates  
 For Fiscal Year Ending June 30, 2016**

Old Unit Number	New Unit Number	Unit	Code(s)	Member Rate	Employer Rate		Total
					Employer Normal Cost	Amortization Rate	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>General Employee Units</b>							
3002	1012 1019	Bristol	B	2.00%	6.89%	8.06%	14.95%
3003	1032 1033	Burrillville	C	2.00%	7.85%	0.67%	8.52%
3004	1052	Central Falls		1.00%	5.86%	7.76%	13.62%
3005	1082	Charlestown	C	2.00%	7.04%	2.82%	9.86%
3007	1112 1113	Cranston	B	2.00%	8.10%	1.76%	9.86%
3008	1122 1123	Cumberland		1.00%	7.68%	5.96%	13.64%
3009	1152 1153	East Greenwich	C	2.00%	7.53%	(2.22%)	5.31%
3010	1162 1163	East Providence	B	2.00%	7.52%	17.67%	25.19%
3011	1183	Exeter/West Greenwich	B	2.00%	8.28%	4.08%	12.36%
3012	1192 1193	Foster		1.00%	8.32%	3.51%	11.83%
3013	1212 1213	Glocester	C	2.00%	7.62%	2.15%	9.77%
3014	1262	Hopkinton	C	2.00%	7.66%	(2.89%)	4.77%
3015	1272 1273	Jamestown	C	2.00%	7.44%	3.25%	10.69%
3016	1282 1283	Johnston	C	2.00%	7.58%	8.51%	16.09%
3017	1302 1303	Lincoln		1.00%	8.06%	4.64%	12.70%
3019	1322 1323	Middletown	C	2.00%	6.83%	3.99%	10.82%
3021	1352 1353 1354	Newport	B	2.00%	7.12%	14.74%	21.86%
3022	1342 1343	New Shoreham	B	2.00%	7.46%	0.55%	8.01%
3023	1372 1373	North Kingstown	C	2.00%	7.67%	9.77%	17.44%
3024	1382 1383	North Providence		1.00%	7.66%	(0.84%)	6.82%
3025	1392 1393	North Smithfield	B	2.00%	7.95%	(1.51%)	6.44%
3026	1412 1413	Pawtucket	C	2.00%	7.28%	9.63%	16.91%
3027	1515	Union Fire District		1.00%	7.05%	0.69%	7.74%
3029	1452	Richmond		1.00%	7.53%	2.47%	10.00%
3030	1462 1463	Scituate	B	2.00%	7.65%	7.06%	14.71%
3031	1472 1473	Smithfield	C	2.00%	7.90%	0.57%	8.47%
3032	1492 1493	South Kingstown	B	2.00%	8.00%	3.25%	11.25%
3033	1532 1533	Tiverton	C	2.00%	7.71%	(4.52%)	3.19%
3034	1562	Warren	C	2.00%	6.29%	6.39%	12.68%
3036	1622 1623	Westerly		1.00%	9.08%	73.78%	82.86%
3037	1602	West Greenwich	C	2.00%	6.52%	9.98%	16.50%
3039	1632 1633	Woonsocket	B	2.00%	7.77%	2.50%	10.27%
3040	1073	Chariho School District	C	2.00%	7.34%	3.39%	10.73%
3041	1203	Foster/Glocester	B	2.00%	8.26%	3.49%	11.75%
3042	1528	Tiogue Fire & Lighting	C,5	2.00%	0.00%	0.00%	0.00%
3043	1336	Narragansett Housing	C	2.00%	7.03%	(1.32%)	5.71%
3045	1098	Coventry Lighting District	C	2.00%	10.64%	(73.10%)	0.00%
3046	1242	Hope Valley Fire	C	2.00%	8.54%	(5.71%)	2.83%
3050	1156	East Greenwich Housing	C	2.00%	7.96%	2.26%	10.22%
3051	1116	Cranston Housing	C	2.00%	9.60%	(2.15%)	7.45%
3052	1166	East Providence Housing	B	2.00%	8.03%	3.51%	11.54%
3053	1416	Pawtucket Housing	B	2.00%	7.41%	(8.50%)	0.00%
3056	1126	Cumberland Housing	C	2.00%	6.77%	0.59%	7.36%
3057	1306	Lincoln Housing	B	2.00%	7.18%	8.72%	15.90%
3059	1016	Bristol Housing		1.00%	7.75%	(8.99%)	0.00%
3065	1036	Burrillville Housing	B	2.00%	6.16%	1.42%	7.58%
3066	1386	North Providence Housing	B	2.00%	7.52%	19.94%	27.46%

**Contribution Rates  
 For Fiscal Year Ending June 30, 2016**

Old Unit Number	New Unit Number	Unit	Code(s)	Member Rate	Employer Rate		Total
					Employer Normal Cost	Amortization Rate	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3067	1177	East Smithfield Water	C	2.00%	6.68%	(4.49%)	2.19%
3068	1227	Greenville Water	B	2.00%	7.57%	(5.61%)	1.96%
3069	1356	Newport Housing	C	2.00%	7.79%	10.54%	18.33%
3071	1566	Warren Housing	B	2.00%	8.01%	(1.98%)	6.03%
3072	1286	Johnston Housing		1.00%	8.20%	3.32%	11.52%
3077	1538	Tiverton Local 2670A	C	2.00%	7.63%	0.89%	8.52%
3078	1002 1003 1007 1009	Barrington COLA	C	2.00%	7.63%	0.85%	8.48%
3079	1096	Coventry Housing		1.00%	7.46%	3.33%	10.79%
3080	1496	South Kingstown Housing	C	2.00%	7.83%	(5.24%)	2.59%
3081	1403	N. RI Collaborative Adm. Services	C	2.00%	7.23%	1.71%	8.94%
3083	1616	West Warwick Housing	B	2.00%	7.22%	2.20%	9.42%
3084	1476	Smithfield Housing		1.00%	6.83%	(4.57%)	2.26%
3094	1478	Smithfield COLA	C	2.00%	7.27%	2.46%	9.73%
3096	1056	Central Falls Housing	C	2.00%	6.02%	5.12%	11.14%
3098	1293	Lime Rock Administrative Services		1.00%	6.55%	6.70%	13.25%
3099	1063	Central Falls Schools	C	2.00%	7.12%	0.88%	8.00%
3100	1023	Bristol/Warren Schools	B	2.00%	7.63%	9.74%	17.37%
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	2.00%	7.53%	(2.22%)	5.31%
3102	1712	Harrisville Fire District (ADMIN)	C	2.00%	7.33%	0.29%	7.62%
3103	1702	Albion Fire District (ADMIN)	C,5	2.00%	0.00%	0.00%	0.00%
3150	1159	East Greenwich Fire (ADMIN)	C	2.00%	6.40%	2.59%	8.99%
<b>General Employee Units Averages</b>				1.90%	7.58%	5.14%	12.74%
<b>Police &amp; Fire Units</b>							
4016	1285	Johnston Fire	D	7.00%	8.63%	0.61%	9.24%
4029	1454	Richmond Police	6	7.00%	8.29%	4.08%	12.37%
4031	1474	Smithfield Police	C,D	8.00%	8.40%	(1.47%)	6.93%
4042	1555	Valley Falls Fire	D	7.00%	8.35%	8.30%	16.65%
4047	1395 1435	North Smithfield Voluntary Fire	B,D	8.00%	9.88%	7.27%	17.15%
4050	1155	East Greenwich Fire	C,D	8.00%	9.04%	17.44%	26.48%
4054	1154	East Greenwich Police	C,D	8.00%	9.88%	18.05%	27.93%
4055	1375	North Kingstown Fire	C,D	8.00%	9.62%	20.42%	30.04%
4056	1374	North Kingstown Police	C,D	8.00%	8.83%	16.61%	25.44%
4058	1385	North Providence Fire	D	7.00%	9.52%	14.04%	23.56%
4059	1008	Barrington Fire (25)	C	8.00%	7.81%	1.21%	9.02%
4060	1004	Barrington Police	C,D	8.00%	8.68%	21.12%	29.80%
4061	1005	Barrington Fire (20)	C,D	8.00%	12.36%	77.23%	89.59%
4062	1564 1565	Warren Police & Fire	C,D	8.00%	9.40%	18.46%	27.86%
4063	1494	South Kingstown Police	B,1	8.00%	9.65%	15.06%	24.71%
4073	1464	Scituate Police	5	7.00%	0.00%	0.00%	0.00%
4076	1394	North Smithfield Police	C,D	8.00%	8.27%	13.52%	21.79%
4077	1534	Tiverton Fire	C,D	8.00%	8.42%	5.71%	14.13%
4082	1194	Foster Police	C,D	8.00%	10.12%	22.46%	32.58%
4085	1634	Woonsocket Police	C,D	8.00%	8.70%	17.38%	26.08%
4086	1084	Charlestown Police	C,D	8.00%	9.00%	14.45%	23.45%

**Contribution Rates  
 For Fiscal Year Ending June 30, 2016**

Old Unit Number	New Unit Number	Unit	Code(s)	Member Rate	Employer Rate		
					Employer Normal Cost	Amortization Rate	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4087	1264	Hopkinton Police	C,D,6	8.00%	8.91%	20.49%	29.40%
4088	1214	Glocester Police	C,D	8.00%	9.70%	8.19%	17.89%
4089	1604	West Greenwich Police/Rescue	C,D	8.00%	10.66%	11.79%	22.45%
4090	1034	Burrillville Police	C,D,6	8.00%	11.31%	14.34%	25.65%
4091	1148	Cumberland Rescue	C,D	8.00%	9.84%	1.28%	11.12%
4093	1635	Woonsocket Fire	C,D	8.00%	9.23%	2.05%	11.28%
4094	1015	Bristol Fire	D	7.00%	14.71%	10.21%	24.92%
4095	1135	Cumberland Hill Fire	C,D	8.00%	8.43%	20.14%	28.57%
4096	1014	Bristol Police	C,D	8.00%	8.25%	(2.41%)	5.84%
4098	1095	Coventry Fire	C,D	7.00%	9.41%	12.05%	21.46%
4099	1505	South Kingstown EMT	C,D	8.00%	9.09%	(3.75%)	5.34%
4101	1365	North Cumberland	C,D	8.00%	10.99%	10.06%	21.05%
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	8.00%	9.61%	6.91%	16.52%
4103	1255	Hopkins Hill Fire	C,D	8.00%	11.52%	2.40%	13.92%
4104	1114	Cranston Police	C,D,4	8.00%	9.00%	0.82%	9.82%
4105	1115	Cranston Fire	C,D,4	8.00%	10.14%	(1.99%)	8.15%
4106	1125	Cumberland Fire	B,D	8.00%	10.48%	12.89%	23.37%
4107	1305	Lincoln Rescue	C	8.00%	8.48%	9.59%	18.07%
4108	1344	New Shoreham Police	B,D	8.00%	10.20%	13.25%	23.45%
4109	1324	Middletown Police & Fire	C,D	8.00%	8.22%	(1.82%)	6.40%
4110	1715	Harrisville Fire District	C,D	8.00%	9.86%	(1.99%)	7.87%
4111	1705	Albion Fire District	C	8.00%	9.05%	8.40%	17.45%
1284	1284	Johnston Police		7.00%	8.49%	0.49%	8.98%
1465	1465	Smithfield Fire	C	8.00%	9.25%	1.06%	10.31%
<b>Police &amp; Fire Units Averages</b>				7.87%	9.27%	7.62%	16.89%
<b>All MERS Units Averages</b>				3.58%	8.05%	5.84%	13.91%

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit in 2013 valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision. 5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.

Municipal Employees' Retirement System  
 State of Rhode Island  
 Actuarial Valuation – June 30, 2013

Table 2

				Comparison of Employer Contribution Rates			Projected Payroll, Projected from Actual FY2013 Payroll			Estimated Contributions		
Old Unit Number	New Unit Number	Unit	Code(s)	June 30, 2013	June 30, 2012	June 30, 2011	Projected Payroll, Projected from Actual FY2013 Payroll			June 30, 2013	June 30, 2012	June 30, 2011
				Actuarial Valuation, for FY2016	Actuarial Valuation, for FY2015	Actuarial Valuation, for FY2014	For FY2016	For FY2015	For FY2014	Actuarial Valuation, for FY2016	Actuarial Valuation, for FY2015	Actuarial Valuation, for FY2014
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<b>General Employee Units</b>												
3002	1012 1019	Bristol	B	14.95%	15.35%	15.27%	\$ 4,991,797	\$ 4,811,371	\$ 4,637,466	\$ 746,274	\$ 738,545	\$ 708,141
3003	1032 1033	Burrillville	C	8.52%	8.27%	7.86%	6,530,371	6,294,333	6,066,827	556,388	520,541	476,853
3004	1052	Central Falls		13.62%	14.53%	10.70%	2,053,516	1,979,293	1,907,752	279,689	287,591	204,129
3005	1082	Charlestown	C	9.86%	10.12%	10.08%	2,230,673	2,150,046	2,072,334	219,944	217,585	208,891
3007	1112 1113	Cranston	B	9.86%	10.26%	9.66%	26,445,230	25,489,378	24,568,075	2,607,500	2,615,210	2,373,276
3008	1122 1123	Cumberland		13.64%	14.34%	13.26%	9,085,050	8,756,674	8,440,168	1,239,201	1,255,707	1,119,166
3009	1152 1153	East Greenwich	C	5.31%	6.86%	5.77%	1,367,520	1,318,092	1,270,450	72,595	90,476	73,353
3010	1162 1163	East Providence	B	25.19%	22.12%	20.45%	17,136,870	16,517,465	15,920,448	4,316,777	3,653,663	3,255,732
3011	1183	Exeter/West Greenwich	B	12.36%	12.34%	11.06%	2,942,747	2,836,383	2,733,863	363,724	350,010	302,365
3012	1192 1193	Foster		11.83%	10.42%	10.91%	1,275,509	1,229,407	1,184,970	150,893	128,104	129,280
3013	1212 1213	Glocester	C	9.77%	9.97%	9.87%	2,698,370	2,600,838	2,506,832	263,631	259,304	247,424
3014	1262	Hopkinton	C	4.77%	5.89%	5.77%	1,785,846	1,721,297	1,659,082	85,185	101,384	95,729
3015	1272 1273	Jamestown	C	10.69%	11.34%	11.13%	4,031,859	3,886,130	3,745,667	431,006	440,687	416,893
3016	1282 1283	Johnston	C	16.09%	15.72%	15.02%	8,956,889	8,633,146	8,321,104	1,441,163	1,357,131	1,249,830
3017	1302 1303	Lincoln		12.70%	13.00%	11.15%	967,908	932,923	899,203	122,924	121,280	100,261
3019	1322 1323	Middletown	C	10.82%	11.39%	11.41%	6,166,838	5,943,940	5,729,099	667,252	677,015	653,690
3021	1352 1353 1354	Newport	B	21.86%	21.50%	19.88%	12,175,733	11,735,646	11,311,466	2,661,615	2,523,164	2,248,719
3022	1342 1343	New Shoreham	B	8.01%	8.07%	8.08%	2,364,428	2,278,967	2,196,594	189,391	183,913	177,485
3023	1372 1373	North Kingstown	C	17.44%	15.15%	15.23%	11,568,915	11,150,762	10,747,722	2,017,619	1,689,340	1,636,878
3024	1382 1383	North Providence		6.82%	7.56%	7.40%	7,857,096	7,573,104	7,299,378	535,854	572,527	540,154
3025	1392 1393	North Smithfield	B	6.44%	6.18%	5.92%	3,768,257	3,632,055	3,500,776	242,676	224,461	207,246
3026	1412 1413	Pawtucket	C	16.91%	16.39%	14.67%	20,930,071	20,173,563	19,444,398	3,539,275	3,306,447	2,852,493
3027	1515	Union Fire District		7.74%	8.27%	7.43%	294,295	283,658	273,405	22,778	23,459	20,314
3029	1452	Richmond		10.00%	10.41%	9.88%	1,083,462	1,044,301	1,006,555	108,346	108,712	99,448
3030	1462 1463	Scituate	B	14.71%	14.95%	14.46%	2,936,156	2,830,029	2,727,739	431,908	423,089	394,431
3031	1472 1473	Smithfield	C	8.47%	8.53%	7.53%	3,478,094	3,352,379	3,231,209	294,595	285,958	243,310
3032	1492 1493	South Kingstown	B	11.25%	11.57%	10.75%	13,466,877	12,980,123	12,510,962	1,515,024	1,501,800	1,344,928
3033	1532 1533	Tiverton	C	3.19%	4.40%	4.00%	3,367,399	3,245,686	3,128,372	107,420	142,810	125,135
3034	1562	Warren	C	12.68%	12.77%	13.41%	2,121,351	2,044,676	1,970,772	268,987	261,105	264,280
3036	1622 1623	Westerly		82.86%	80.36%	76.88%	77,139	74,351	71,663	63,917	59,748	55,095
3037	1602	West Greenwich	C	16.50%	16.19%	13.74%	986,556	950,897	916,527	162,782	153,950	125,931
3039	1632 1633	Woonsocket	B	10.27%	10.02%	9.03%	12,110,350	11,672,627	11,250,725	1,243,733	1,169,597	1,015,940
3040	1073	Chariho School District	C	10.73%	11.04%	10.26%	6,019,530	5,801,957	5,592,248	645,896	640,536	573,765
3041	1203	Foster/Glocester	B	11.75%	12.45%	13.11%	1,874,599	1,806,842	1,741,535	220,265	224,952	228,315
3042	1528	Tiogue Fire & Lighting	C,S	0.00%	0.00%	0.00%	-	-	-	-	-	-
3043	1336	Narragansett Housing	C	5.71%	6.01%	5.81%	199,344	192,139	185,194	11,383	11,548	10,760
3045	1098	Coventry Lighting District	C	0.00%	0.00%	0.00%	40,407	38,947	37,539	-	-	-
3046	1242	Hope Valley Fire	C	2.83%	4.64%	5.73%	153,068	147,535	142,202	4,332	6,846	8,148
3050	1156	East Greenwich Housing	C	10.22%	9.24%	8.91%	443,514	427,483	412,032	45,327	39,499	36,712
3051	1116	Cranston Housing	C	7.45%	7.69%	7.46%	1,209,278	1,165,569	1,123,440	90,091	89,632	83,809
3052	1166	East Providence Housing	B	11.54%	11.63%	9.64%	785,903	757,497	730,118	90,693	88,097	70,383



Municipal Employees' Retirement System  
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Table 2

Comparison of Employer Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Contribution Rates			Projected Payroll, Projected from Actual FY2013 Payroll			Estimated Contributions		
				June 30, 2013 Actuarial Valuation, for FY2016	June 30, 2012 Actuarial Valuation, for FY2015	June 30, 2011 Actuarial Valuation, for FY2014	For FY2016	For FY2015	For FY2014	June 30, 2013 Actuarial Valuation, for FY2016	June 30, 2012 Actuarial Valuation, for FY2015	June 30, 2011 Actuarial Valuation, for FY2014
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
3053	1416	Pawtucket Housing	B	0.00%	0.00%	0.00%	3,210,107	3,094,079	2,982,245	-	-	-
3056	1126	Cumberland Housing	C	7.36%	7.26%	6.71%	602,336	580,564	559,580	44,332	42,149	37,548
3057	1306	Lincoln Housing	B	15.90%	8.23%	11.84%	506,036	487,746	470,117	80,460	40,141	55,662
3059	1016	Bristol Housing		0.00%	0.00%	0.00%	448,063	431,868	416,258	-	-	-
3065	1036	Burrillville Housing	B	7.58%	7.43%	6.29%	215,196	207,418	199,921	16,312	15,411	12,575
3066	1386	North Providence Housing	B	27.46%	26.07%	22.80%	280,508	270,369	260,597	77,028	70,485	59,416
3067	1177	East Smithfield Water	C	2.19%	2.93%	1.66%	197,819	190,669	183,777	4,332	5,587	3,051
3068	1227	Greenville Water	B	1.96%	1.29%	0.78%	290,336	279,842	269,727	5,691	3,610	2,104
3069	1356	Newport Housing	C	18.33%	18.93%	18.94%	1,613,763	1,555,434	1,499,214	295,803	294,444	283,951
3071	1566	Warren Housing	B	6.03%	6.09%	5.83%	324,712	312,975	301,663	19,580	19,060	17,587
3072	1286	Johnston Housing		11.52%	11.86%	10.50%	489,207	471,525	454,482	56,357	55,923	47,721
3077	1538	Tiverton Local 2670A	C	8.52%	9.44%	9.85%	1,074,841	1,035,991	998,546	91,576	97,798	98,357
3078	1002 1003 1007 1009	Barrington COLA	C	8.48%	8.40%	7.92%	8,261,277	7,962,676	7,674,869	700,556	668,865	607,850
3079	1096	Coventry Housing		10.79%	7.66%	6.32%	650,436	626,926	604,266	70,182	48,023	38,190
3080	1496	South Kingstown Housing	C	2.59%	3.83%	3.83%	184,425	177,759	171,334	4,777	6,808	6,562
3081	1403	N. RI Collaborative Adm. Services	C	8.94%	8.35%	7.93%	965,073	930,191	896,570	86,278	77,671	71,098
3083	1616	West Warwick Housing	B	9.42%	9.35%	11.07%	515,120	496,501	478,556	48,524	46,423	52,976
3084	1476	Smithfield Housing		2.26%	2.24%	2.72%	150,902	145,448	140,191	3,410	3,258	3,813
3094	1478	Smithfield COLA	C	9.73%	10.05%	8.67%	3,956,141	3,813,148	3,675,323	384,933	383,221	318,651
3096	1056	Central Falls Housing	C	11.14%	11.42%	9.11%	1,018,266	981,461	945,987	113,435	112,083	86,179
3098	1293	Lime Rock Administrative Services		13.25%	13.06%	10.39%	91,377	88,074	84,891	12,107	11,502	8,820
3099	1063	Central Falls Schools	C	8.00%	8.63%	7.32%	4,865,865	4,689,990	4,520,472	389,269	404,746	330,899
3100	1023	Bristol/Warren Schools	B	17.37%	15.94%	14.58%	4,791,947	4,618,744	4,451,802	832,361	736,228	649,073
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	5.31%	6.86%	5.77%	5,960,655	5,745,209	5,537,551	316,421	394,359	319,727
3102	1712	Harrisville Fire District (ADMIN)	C	7.62%	6.32%	4.90%	231,436	223,071	215,008	17,635	14,098	10,535
3103	1702	Albion Fire District (ADMIN)	C,5	0.00%	0.00%	0.00%	-	-	-	6,445	7,590	11,812
3150	1159	East Greenwich Fire (ADMIN)	C	8.99%	16.05%	19.00%	87,564	84,399	81,349	7,872	13,546	15,456
<b>General Employee Units Average</b>				12.74%	12.63%	11.85%	\$ 248,962,221	\$ 239,963,587	\$ 231,290,204	\$ 31,763,728	\$ 30,118,452	\$ 27,128,305
<b>Police &amp; Fire Units</b>												
4016	1285	Johnston Fire	D	9.24%	9.65%	7.70%	\$ 3,034,569	\$ 2,924,886	\$ 2,819,167	\$ 280,394	\$ 282,251	\$ 217,076
4029	1454	Richmond Police	6	12.37%	12.19%	8.69%	779,305	751,137	723,988	96,400	91,564	62,915
4031	1474	Smithfield Police	C,D	6.93%	7.09%	4.71%	2,983,859	2,876,008	2,772,056	206,781	203,909	130,564
4042	1555	Valley Falls Fire	D	16.65%	18.04%	13.99%	835,940	805,725	776,602	139,184	145,353	108,647
4047	1395 1435	North Smithfield Voluntary Fire	B,D	17.15%	17.99%	13.36%	1,274,116	1,228,064	1,183,676	218,511	220,929	158,139
4050	1155	East Greenwich Fire	C,D	26.48%	26.12%	20.65%	2,599,542	2,505,583	2,415,020	688,359	654,458	498,702
4054	1154	East Greenwich Police	C,D	27.93%	26.05%	20.02%	2,230,105	2,149,498	2,071,806	622,868	559,944	414,775

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Table 2

Comparison of Employer Contribution Rates												
Old Unit Number	New Unit Number	Unit	Code(s)	Contribution Rates			Projected Payroll, Projected from Actual FY2013 Payroll			Estimated Contributions		
				June 30, 2013 Actuarial Valuation, for FY2016	June 30, 2012 Actuarial Valuation, for FY2015	June 30, 2011 Actuarial Valuation, for FY2014	For FY2016	For FY2015	For FY2014	June 30, 2013 Actuarial Valuation, for FY2016	June 30, 2012 Actuarial Valuation, for FY2015	June 30, 2011 Actuarial Valuation, for FY2014
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
4055	1375	North Kingstown Fire	C,D	30.04%	28.13%	21.02%	4,349,203	4,192,003	4,040,485	1,306,501	1,179,210	849,310
4056	1374	North Kingstown Police	C,D	25.44%	27.62%	22.85%	3,253,078	3,135,497	3,022,166	827,583	866,024	690,565
4058	1385	North Providence Fire	D	23.56%	25.06%	19.72%	5,784,718	5,575,632	5,374,103	1,362,880	1,397,253	1,059,773
4059	1008	Barrington Fire (25)	C	9.02%	9.37%	8.88%	1,157,268	1,115,439	1,075,122	104,386	104,517	95,471
4060	1004	Barrington Police	C,D	29.80%	29.46%	26.45%	1,619,284	1,560,756	1,504,343	482,547	459,799	397,899
4061	1005	Barrington Fire (20)	C,D	89.59%	65.75%	32.73%	259,626	250,242	241,197	232,599	164,534	78,944
4062	1564 1565	Warren Police & Fire	C,D	27.86%	30.51%	24.62%	1,682,016	1,621,221	1,562,622	468,610	494,634	384,718
4063	1494	South Kingstown Police	B,1	24.71%	22.79%	15.02%	3,251,196	3,133,683	3,020,418	803,371	714,166	453,667
4073	1464	Scituate Police	5	0.00%	0.00%	0.00%	-	-	-	-	-	-
4076	1394	North Smithfield Police	C,D	21.79%	19.76%	13.96%	1,358,849	1,309,734	1,262,394	296,093	258,803	176,230
4077	1534	Tiverton Fire	C,D	14.13%	15.33%	10.19%	1,919,670	1,850,284	1,783,407	271,249	283,649	181,729
4082	1194	Foster Police	C,D	32.58%	32.90%	11.69%	434,001	418,314	403,194	141,397	137,625	47,133
4085	1634	Woonsocket Police	C,D	26.08%	23.44%	18.35%	5,854,897	5,643,274	5,439,301	1,526,957	1,322,784	998,112
4086	1084	Charlestown Police	C,D	23.45%	24.41%	19.16%	1,486,700	1,432,964	1,381,170	348,631	349,786	264,632
4087	1264	Hopkinton Police	C,D,6	29.40%	24.16%	14.67%	900,049	867,517	836,161	264,615	209,592	122,665
4088	1214	Glocester Police	C,D	17.89%	18.16%	15.60%	1,091,213	1,051,771	1,013,756	195,218	191,002	158,146
4089	1604	West Greenwich Police/Rescue	C,D	22.45%	23.63%	17.90%	844,849	814,312	784,879	189,669	192,422	140,493
4090	1034	Burrillville Police	C,D,6	25.65%	24.90%	12.55%	1,321,423	1,273,661	1,227,625	338,945	317,142	154,067
4091	1148	Cumberland Rescue	C,D	11.12%	10.93%	7.18%	1,147,749	1,106,264	1,066,279	127,630	120,915	76,559
4093	1635	Woonsocket Fire	C,D	11.28%	10.94%	7.50%	7,665,434	7,388,370	7,121,321	864,661	808,288	534,099
4094	1015	Bristol Fire	D	24.92%	24.92%	15.66%	56,466	54,425	52,458	14,071	13,563	8,215
4095	1135	Cumberland Hill Fire	C,D	28.57%	26.71%	10.85%	736,086	709,481	683,837	210,300	189,502	74,196
4096	1014	Bristol Police	C,D	5.84%	5.73%	3.93%	2,338,598	2,254,070	2,172,598	136,574	129,158	85,383
4098	1095	Coventry Fire	C,D	21.46%	21.96%	16.43%	1,122,292	1,081,727	1,042,628	240,844	237,547	171,304
4099	1505	South Kingstown EMT	C,D	5.34%	5.96%	4.16%	864,483	833,237	803,120	46,163	49,661	33,410
4101	1365	North Cumberland	C,D	21.05%	21.18%	15.85%	806,867	777,703	749,593	169,846	164,718	118,811
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	16.52%	17.64%	14.68%	3,015,584	2,906,587	2,801,529	498,174	512,722	411,265
4103	1255	Hopkins Hill Fire	C,D	13.92%	13.40%	10.39%	674,473	650,094	626,597	93,887	87,113	65,103
4104	1114	Cranston Police	C,D,4	9.82%	10.69%	8.89%	9,958,939	9,598,978	9,252,027	977,968	1,026,131	822,505
4105	1115	Cranston Fire	C,D,4	8.15%	10.44%	8.63%	11,570,075	11,151,879	10,748,799	942,961	1,164,256	927,621
4106	1125	Cumberland Fire	B,D	23.37%	22.00%	14.88%	742,440	715,604	689,739	173,508	157,433	102,633
4107	1305	Lincoln Rescue	C	18.07%	20.19%	15.73%	989,693	953,921	919,442	178,837	192,597	144,628
4108	1344	New Shoreham Police	B,D	23.45%	25.24%	18.64%	271,286	261,480	252,029	63,616	65,998	46,978
4109	1324	Middletown Police & Fire	C,D	6.40%	6.48%	3.59%	3,211,234	3,095,166	2,983,292	205,519	200,567	107,100

Municipal Employees' Retirement System  
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Table 2

		<b>Comparison of Employer Contribution Rates</b>										
		Contribution Rates					Projected Payroll, Projected from Actual FY2013 Payroll			Estimated Contributions		
Old Unit Number	New Unit Number	Unit	Code(s)	June 30, 2013 Actuarial Valuation, for FY2016	June 30, 2012 Actuarial Valuation, for FY2015	June 30, 2011 Actuarial Valuation, for FY2014	For FY2016	For FY2015	For FY2014	June 30, 2013 Actuarial Valuation, for FY2016	June 30, 2012 Actuarial Valuation, for FY2015	June 30, 2011 Actuarial Valuation, for FY2014
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
4110	1715	Harrisville Fire District	C,D	7.87%	8.16%	6.74%	320,503	308,919	297,753	25,224	25,208	20,069
4111	1705	Albion Fire District	C	17.45%	20.65%	17.25%	222,517	214,475	206,722	38,829	44,289	35,660
1284	1284	Johnston Police		8.98%	9.28%	7.00%	371,922	358,479	345,522	33,399	33,267	24,187
1465	1465	Smithfield Fire	C	10.31%	9.67%	8.00%	309,326	298,145	287,369	31,891	28,831	22,990
<b>Police &amp; Fire Units Average</b>				16.89%	17.26%	13.27%	\$ 96,701,443	\$ 93,206,210	\$ 89,837,311	\$ 16,487,649	\$ 16,053,112	\$ 11,677,085
<b>All MERS Units Average</b>				13.91%	13.89%	12.21%	\$ 345,663,664	\$ 333,169,797	\$ 321,127,515	\$ 48,251,377	\$ 46,171,564	\$ 38,805,390

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit in 2013 valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.

**Components Used in Determining Contribution Rates**

Old Unit Number	New Unit Number	Unit	Code(s)	Adjusted Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3002	1012 1019	Bristol	B	4,518,106	403,582	21,184,138	15,547,343
3003	1032 1033	Burrillville	C	5,673,504	561,329	25,291,674	24,737,551
3004	1052	Central Falls		1,880,142	129,722	7,034,036	4,852,474
3005	1082	Charlestown	C	2,087,839	189,172	6,565,646	5,680,607
3007	1112 1113	Cranston	B	23,746,790	2,383,402	132,243,062	125,732,304
3008	1122 1123	Cumberland		8,033,273	700,631	28,658,045	21,087,232
3009	1152 1153	East Greenwich	C	1,228,697	109,858	6,472,785	7,493,334
3010	1162 1163	East Providence	B	15,027,364	1,446,349	100,281,948	59,293,656
3011	1183	Exeter/West Greenwich	B	2,677,939	278,115	9,575,412	7,937,434
3012	1192 1193	Foster		1,119,602	103,805	3,693,568	3,095,302
3013	1212 1213	Glocester	C	2,475,679	237,102	8,271,444	7,456,814
3014	1262	Hopkinton	C	1,609,922	155,605	3,902,618	4,587,223
3015	1272 1273	Jamestown	C	3,660,206	344,941	12,714,422	10,849,299
3016	1282 1283	Johnston	C	7,998,796	775,662	39,806,322	29,304,056
3017	1302 1303	Lincoln		866,702	80,174	2,032,043	1,417,984
3019	1322 1323	Middletown	C	5,481,800	490,904	18,903,962	15,411,684
3021	1352 1353 1354	Newport	B	10,999,057	1,009,572	68,681,188	43,938,347
3022	1342 1343	New Shoreham	B	2,062,334	192,588	6,005,567	5,821,505
3023	1372 1373	North Kingstown	C	10,271,304	995,835	57,973,140	42,689,264
3024	1382 1383	North Providence		7,014,891	608,718	26,006,440	26,837,749
3025	1392 1393	North Smithfield	B	3,351,169	334,270	12,312,800	13,130,319
3026	1412 1413	Pawtucket	C	18,980,419	1,775,389	114,292,417	86,742,714
3027	1515	Union Fire District		263,522	20,068	566,577	537,739
3029	1452	Richmond		922,885	77,297	2,134,607	1,759,037
3030	1462 1463	Scituate	B	2,745,344	259,195	12,594,492	9,706,047
3031	1472 1473	Smithfield	C	3,216,525	320,887	11,958,720	11,710,139
3032	1492 1493	South Kingstown	B	12,253,273	1,226,509	52,829,436	46,756,665
3033	1532 1533	Tiverton	C	3,024,759	289,209	9,778,577	11,836,958

**Components Used in Determining Contribution Rates**

Old Unit Number	New Unit Number	Unit	Code(s)	Adjusted Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3034	1562	Warren	C	1,922,065	161,012	6,519,244	4,614,647
3036	1622 1623	Westerly		69,073	6,506	942,535	155,650
3037	1602	West Greenwich	C	853,515	73,728	3,661,650	2,317,884
3039	1632 1633	Woonsocket	B	10,878,843	1,070,152	62,910,670	58,855,018
3040	1073	Chariho School District	C	5,395,791	509,919	18,053,702	15,219,447
3041	1203	Foster/Glocester	B	1,673,687	172,564	6,589,022	5,643,558
3042	1528	Tiogue Fire & Lighting	C,5	-	-	24,456	44,997
3043	1336	Narragansett Housing	C	178,500	16,567	407,391	443,240
3045	1098	Coventry Lighting District	C	36,182	4,249	820,720	1,187,671
3046	1242	Hope Valley Fire	C	137,063	11,445	394,800	510,127
3050	1156	East Greenwich Housing	C	453,209	46,017	1,261,720	1,131,282
3051	1116	Cranston Housing	C	1,082,837	117,703	4,028,318	4,387,389
3052	1166	East Providence Housing	B	759,246	76,392	3,050,385	2,678,858
3053	1416	Pawtucket Housing	B	2,945,416	276,244	8,882,712	12,620,608
3056	1126	Cumberland Housing	C	539,355	48,089	1,245,522	1,200,411
3057	1306	Lincoln Housing	B	464,895	42,370	2,088,431	1,525,788
3059	1016	Bristol Housing		380,785	33,532	1,361,868	1,912,961
3065	1036	Burrillville Housing	B	192,696	15,633	922,852	882,957
3066	1386	North Providence Housing	B	261,677	25,172	1,557,483	793,524
3067	1177	East Smithfield Water	C	179,772	15,932	784,891	908,282
3068	1227	Greenville Water	B	259,978	25,491	853,597	1,085,189
3069	1356	Newport Housing	C	1,454,800	143,457	8,518,801	6,132,424
3071	1566	Warren Housing	B	270,795	26,947	1,150,422	1,240,305
3072	1286	Johnston Housing		429,874	39,266	1,313,286	1,090,039
3077	1538	Tiverton Local 2670A	C	978,804	93,801	3,750,566	3,596,462
3078	1002 1003 1007 1009	Barrington COLA	C	7,351,583	710,564	31,277,558	30,344,275
3079	1096	Coventry Housing		582,427	50,256	1,209,136	951,453
3080	1496	South Kingstown Housing	C	163,178	15,061	183,659	314,243
3081	1403	N. RI Collaborative Adm. Services	C	869,890	81,895	2,804,680	2,588,994
3083	1616	West Warwick Housing	B	463,494	42,086	1,708,490	1,543,270

**Components Used in Determining Contribution Rates**

Old Unit Number	New Unit Number	Unit	Code(s)	Adjusted Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3084	1476	Smithfield Housing		135,123	10,935	284,577	380,074
3094	1478	Smithfield COLA	C	3,566,940	334,458	14,156,970	12,827,588
3096	1056	Central Falls Housing	C	890,092	72,543	2,635,812	1,925,139
3098	1293	Lime Rock Administrative Services		81,822	6,347	333,037	250,228
3099	1063	Central Falls Schools	C	4,390,059	404,114	13,945,119	13,350,227
3100	1023	Bristol/Warren Schools	B	4,360,139	422,878	21,403,366	15,080,972
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	5,313,031	514,386	17,885,350	18,999,002
3102	1712	Harrisville Fire District (ADMIN)	C	176,302	16,987	556,142	555,088
3103	1702	Albion Fire District (ADMIN)	C,5	-	-	98,945	106,200
3150	1159	East Greenwich Fire (ADMIN)	C	45,632	3,949	346,484	306,117
<b>General Employee Units Subtotal</b>				<b>\$ 223,380,413</b>	<b>\$ 21,238,537</b>	<b>\$ 1,051,689,455</b>	<b>\$ 875,652,368</b>
<b>Police &amp; Fire Units</b>							
4016	1285	Johnston Fire	D	3,087,880	503,990	4,315,039	4,090,050
4029	1454	Richmond Police	6	697,820	110,100	1,597,053	1,181,152
4031	1474	Smithfield Police	C,D	2,671,861	448,547	10,367,401	11,033,644
4042	1555	Valley Falls Fire	D	762,453	121,371	4,009,615	3,052,781
4047	1395 1435	North Smithfield Voluntary Fire	B,D	1,145,199	196,356	7,127,390	5,871,597
4050	1155	East Greenwich Fire	C,D	2,340,927	411,935	16,426,531	10,254,878
4054	1154	East Greenwich Police	C,D	2,010,459	369,206	18,137,668	12,726,808
4055	1375	North Kingstown Fire	C,D	3,820,152	665,448	38,954,915	27,007,007
4056	1374	North Kingstown Police	C,D	2,883,416	496,476	25,020,741	17,509,579
4058	1385	North Providence Fire	D	5,154,554	858,769	39,379,956	28,189,469
4059	1008	Barrington Fire (25)	C	1,043,000	172,117	1,924,478	1,727,190
4060	1004	Barrington Police	C,D	1,419,457	241,743	12,148,900	7,439,498
4061	1005	Barrington Fire (20)	C,D	194,999	37,314	9,733,843	7,126,855
4062	1564 1565	Warren Police & Fire	C,D	1,506,143	258,450	12,683,807	8,369,835
4063	1494	South Kingstown Police	B,1	2,863,971	504,417	26,901,814	20,416,885

**Components Used in Determining Contribution Rates**

Old Unit Number	New Unit Number	Unit	Code(s)	Adjusted Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4073	1464	Scituate Police	5	-	-	21,896	183,693
4076	1394	North Smithfield Police	C,D	1,352,826	223,252	10,651,041	8,210,731
4077	1534	Tiverton Fire	C,D	1,675,160	285,195	10,470,507	8,991,760
4082	1194	Foster Police	C,D	405,358	77,973	3,753,507	2,476,109
4085	1634	Woonsocket Police	C,D	5,114,655	876,772	45,401,135	31,768,613
4086	1084	Charlestown Police	C,D	1,276,301	219,614	10,300,112	7,353,388
4087	1264	Hopkinton Police	C,D,6	871,497	153,896	7,489,126	5,079,933
4088	1214	Glocester Police	C,D	977,114	176,972	6,289,282	5,064,385
4089	1604	West Greenwich Police/Rescue	C,D	731,700	141,622	4,491,713	3,130,363
4090	1034	Burrillville Police	C,D,6	1,263,243	246,599	10,753,837	8,278,130
4091	1148	Cumberland Rescue	C,D	992,338	180,361	4,971,837	4,809,494
4093	1635	Woonsocket Fire	C,D	6,801,631	1,185,405	38,055,800	36,152,846
4094	1015	Bristol Fire	D	50,562	11,273	318,302	242,702
4095	1135	Cumberland Hill Fire	C,D	666,143	114,501	5,704,213	3,768,383
4096	1014	Bristol Police	C,D	2,142,439	361,423	4,001,300	4,828,703
4098	1095	Coventry Fire	C,D	1,004,942	164,973	4,891,453	3,052,948
4099	1505	South Kingstown EMT	C,D	745,180	132,287	2,700,901	3,157,299
4101	1365	North Cumberland	C,D	722,500	135,342	5,007,387	3,913,853
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	2,596,033	465,978	11,044,506	8,163,101
4103	1255	Hopkins Hill Fire	C,D	603,950	116,239	1,927,452	1,726,632
4104	1114	Cranston Police	C,D,4	8,953,196	1,575,827	27,801,451	26,672,971
4105	1115	Cranston Fire	C,D,4	10,976,612	2,036,960	40,849,169	43,781,859
4106	1125	Cumberland Fire	B,D	648,037	122,750	4,628,458	3,360,815
4107	1305	Lincoln Rescue	C	883,961	139,807	4,030,978	2,711,623
4108	1344	New Shoreham Police	B,D	208,579	39,465	1,462,094	968,964
4109	1324	Middletown Police & Fire	C,D	2,896,437	490,145	2,919,985	3,812,058
4110	1715	Harrisville Fire District	C,D	286,989	51,953	920,227	1,011,464
4111	1705	Albion Fire District	C	190,994	33,576	854,547	588,395

**Components Used in Determining Contribution Rates**

Old Unit Number	New Unit Number	Unit	Code(s)	Adjusted Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1284	1284	Johnston Police		402,190	67,654	101,920	89,704
1465	1465	Smithfield Fire	C	385,166	70,375	590,287	557,308
<b>Police &amp; Fire Units Subtotal</b>				<u>\$ 87,428,024</u>	<u>\$ 15,294,428</u>	<u>\$ 501,133,572</u>	<u>\$ 399,905,455</u>
<b>All MERS Units Total</b>				\$ 310,808,437	\$ 36,532,965	\$ 1,552,823,028	\$ 1,275,557,823

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit in 2013 valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provisio

5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.



Asset Values

Old Unit Number	New Unit Number	Unit	Code	Market Value of Assets	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)
<b>General Employee Units</b>					
3002	1012 1019	Bristol	B	\$ 15,252,780	\$ 15,547,343
3003	1032 1033	Burrillville	C	24,268,869	24,737,551
3004	1052	Central Falls		4,760,539	4,852,474
3005	1082	Charlestown	C	5,572,981	5,680,607
3007	1112 1113	Cranston	B	123,350,155	125,732,304
3008	1122 1123	Cumberland		20,687,710	21,087,232
3009	1152 1153	East Greenwich	C	7,351,364	7,493,334
3010	1162 1163	East Providence	B	58,170,267	59,293,656
3011	1183	Exeter/West Greenwich	B	7,787,050	7,937,434
3012	1192 1193	Foster		3,036,658	3,095,302
3013	1212 1213	Glocester	C	7,315,536	7,456,814
3014	1262	Hopkinton	C	4,500,313	4,587,223
3015	1272 1273	Jamestown	C	10,643,746	10,849,299
3016	1282 1283	Johnston	C	28,748,856	29,304,056
3017	1302 1303	Lincoln		1,391,118	1,417,984
3019	1322 1323	Middletown	C	15,119,691	15,411,684
3021	1352 1353 1354	Newport	B	43,105,883	43,938,347
3022	1342 1343	New Shoreham	B	5,711,209	5,821,505
3023	1372 1373	North Kingstown	C	41,880,465	42,689,264
3024	1382 1383	North Providence		26,329,276	26,837,749
3025	1392 1393	North Smithfield	B	12,881,549	13,130,319
3026	1412 1413	Pawtucket	C	85,099,270	86,742,714
3027	1515	Union Fire District		527,550	537,739
3029	1452	Richmond		1,725,710	1,759,037
3030	1462 1463	Scituate	B	9,522,154	9,706,047
3031	1472 1473	Smithfield	C	11,488,276	11,710,139
3032	1492 1493	South Kingstown	B	45,870,804	46,756,665
3033	1532 1533	Tiverton	C	11,612,693	11,836,958
3034	1562	Warren	C	4,527,217	4,614,647
3036	1622 1623	Westerly		152,701	155,650
3037	1602	West Greenwich	C	2,273,969	2,317,884
3039	1632 1633	Woonsocket	B	57,739,940	58,855,018
3040	1073	Chariho School District	C	14,931,096	15,219,447
3041	1203	Foster/Glocester	B	5,536,634	5,643,558
3042	1528	Tiogue Fire & Lighting	C,5	44,145	44,997
3043	1336	Narragansett Housing	C	434,842	443,240
3045	1098	Coventry Lighting District	C	1,165,169	1,187,671
3046	1242	Hope Valley Fire	C	500,462	510,127
3050	1156	East Greenwich Housing	C	1,109,848	1,131,282
3051	1116	Cranston Housing	C	4,304,264	4,387,389
3052	1166	East Providence Housing	B	2,628,104	2,678,858
3053	1416	Pawtucket Housing	B	12,381,495	12,620,608
3056	1126	Cumberland Housing	C	1,177,668	1,200,411

**Asset Values**

Old Unit Number	New Unit Number	Unit	Code	Market Value of Assets	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)
3057	1306	Lincoln Housing	B	1,496,881	1,525,788
3059	1016	Bristol Housing		1,876,718	1,912,961
3065	1036	Burrillville Housing	B	866,228	882,957
3066	1386	North Providence Housing	B	778,490	793,524
3067	1177	East Smithfield Water	C	891,073	908,282
3068	1227	Greenville Water	B	1,064,629	1,085,189
3069	1356	Newport Housing	C	6,016,238	6,132,424
3071	1566	Warren Housing	B	1,216,806	1,240,305
3072	1286	Johnston Housing		1,069,387	1,090,039
3077	1538	Tiverton Local 2670A	C	3,528,322	3,596,462
3078	1002 1003 1007 1009	Barrington COLA	C	29,769,366	30,344,275
3079	1096	Coventry Housing		933,427	951,453
3080	1496	South Kingstown Housing	C	308,289	314,243
3081	1403	N. RI Collaborative Adm. Services	C	2,539,943	2,588,994
3083	1616	West Warwick Housing	B	1,514,031	1,543,270
3084	1476	Smithfield Housing		372,873	380,074
3094	1478	Smithfield COLA	C	12,584,554	12,827,588
3096	1056	Central Falls Housing	C	1,888,665	1,925,139
3098	1293	Lime Rock Administrative Services		245,487	250,228
3099	1063	Central Falls Schools	C	13,097,291	13,350,227
3100	1023	Bristol/Warren Schools	B	14,795,245	15,080,972
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	18,639,043	18,999,002
3102	1712	Harrisville Fire District (ADMIN)	C	544,571	555,088
3103	1702	Albion Fire District (ADMIN)	C,5	104,188	106,200
3150	1159	East Greenwich Fire (ADMIN)	C	300,317	306,117
<b>General Employee Units Subtotal</b>				<b>\$ 859,062,088</b>	<b>\$ 875,652,368</b>
<b>Police &amp; Fire Units</b>					
4016	1285	Johnston Fire	D	\$ 4,012,559	\$ 4,090,050
4029	1454	Richmond Police	6	1,158,774	1,181,152
4031	1474	Smithfield Police	C,D	10,824,599	11,033,644
4042	1555	Valley Falls Fire	D	2,994,942	3,052,781
4047	1395 1435	North Smithfield Voluntary Fire	B,D	5,760,353	5,871,597
4050	1155	East Greenwich Fire	C,D	10,060,587	10,254,878
4054	1154	East Greenwich Police	C,D	12,485,683	12,726,808
4055	1375	North Kingstown Fire	C,D	26,495,327	27,007,007
4056	1374	North Kingstown Police	C,D	17,177,839	17,509,579
4058	1385	North Providence Fire	D	27,655,386	28,189,469
4059	1008	Barrington Fire (25)	C	1,694,467	1,727,190
4060	1004	Barrington Police	C,D	7,298,548	7,439,498
4061	1005	Barrington Fire (20)	C,D	6,991,828	7,126,855
4062	1564 1565	Warren Police & Fire	C,D	8,211,259	8,369,835
4063	1494	South Kingstown Police	B,1	20,030,062	20,416,885

Municipal Employees' Retirement System  
 State of Rhode Island  
 Actuarial Valuation – June 30, 2013

Table 4a

**Asset Values**

Old Unit Number	New Unit Number	Unit	Code	Market Value of Assets	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)
4073	1464	Scituate Police	5	180,213	183,693
4076	1394	North Smithfield Police	C,D	8,055,169	8,210,731
4077	1534	Tiverton Fire	C,D	8,821,400	8,991,760
4082	1194	Foster Police	C,D	2,429,196	2,476,109
4085	1634	Woonsocket Police	C,D	31,166,718	31,768,613
4086	1084	Charlestown Police	C,D	7,214,069	7,353,388
4087	1264	Hopkinton Police	C,D,6	4,983,688	5,079,933
4088	1214	Glocester Police	C,D	4,968,434	5,064,385
4089	1604	West Greenwich Police/Rescue	C,D	3,071,055	3,130,363
4090	1034	Burrillville Police	C,D,6	8,121,291	8,278,130
4091	1148	Cumberland Rescue	C,D	4,718,372	4,809,494
4093	1635	Woonsocket Fire	C,D	35,467,887	36,152,846
4094	1015	Bristol Fire	D	238,103	242,702
4095	1135	Cumberland Hill Fire	C,D	3,696,987	3,768,383
4096	1014	Bristol Police	C,D	4,737,217	4,828,703
4098	1095	Coventry Fire	C,D	2,995,106	3,052,948
4099	1505	South Kingstown EMT	C,D	3,097,480	3,157,299
4101	1365	North Cumberland	C,D	3,839,700	3,913,853
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	8,008,442	8,163,101
4103	1255	Hopkins Hill Fire	C,D	1,693,919	1,726,632
4104	1114	Cranston Police	C,D,4	26,167,619	26,672,971
4105	1115	Cranston Fire	C,D,4	42,952,359	43,781,859
4106	1125	Cumberland Fire	B,D	3,297,141	3,360,815
4107	1305	Lincoln Rescue	C	2,660,248	2,711,623
4108	1344	New Shoreham Police	B,D	950,606	968,964
4109	1324	Middletown Police & Fire	C,D	3,739,834	3,812,058
4110	1715	Harrisville Fire District	C,D	992,301	1,011,464
4111	1705	Albion Fire District	C	577,247	588,395
1284	1284	Johnston Police		88,004	89,704
1465	1465	Smithfield Fire	C	546,749	557,308
<b>Police &amp; Fire Units Subtotal</b>				<b>\$ 392,328,767</b>	<b>\$ 399,905,455</b>
<b>All MERS Units Total</b>				<b>\$ 1,251,390,855</b>	<b>\$ 1,275,557,823</b>

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit in 2013 valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision. 5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.

Municipal Employees' Retirement System  
 State of Rhode Island  
 Actuarial Valuation – June 30, 2013

Table 4b

Reconciliation of Market Assets by Unit

Old Unit Number	New Unit Number	Unit	Code (s)	Beginning of Year Account Balance	Member Contributions	Employer Contributions	Service Purchases and Others*	Benefit Payments	Refunds	Net Investment Return	End of Year Account Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<b>General Employee Units</b>											
3002	1012 1019	Bristol	B	\$ 14,291,780	\$ 90,918	\$ 645,438	\$ 53,161	\$ (1,369,320)	\$ -	\$ 1,540,803	\$ 15,252,780
3003	1032 1033	Burrillville	C	22,528,090	116,951	419,190	0	(1,246,950)	0	2,451,588	24,268,869
3004	1052	Central Falls		4,626,795	17,648	209,342	(71,632)	(462,141)	(40,372)	480,899	4,760,539
3005	1082	Charlestown	C	4,979,755	39,949	209,531	105	(219,329)	0	562,970	5,572,981
3007	1112 1113	Cranston	B	116,442,985	474,720	2,190,841	276,032	(8,280,084)	(214,903)	12,460,564	123,350,155
3008	1122 1123	Cumberland		19,015,926	84,472	1,064,445	115,760	(1,592,393)	(90,327)	2,089,827	20,687,710
3009	1152 1153	East Greenwich	C	6,999,882	24,490	70,288	(7,272)	(478,644)	0	742,620	7,351,364
3010	1162 1163	East Providence	B	56,857,567	317,376	2,898,250	(288,114)	(7,213,723)	(277,322)	5,876,233	58,170,267
3011	1183	Exeter/West Greenwich	B	7,029,202	52,700	331,491	(35,952)	(377,022)	0	786,631	7,787,050
3012	1192 1193	Foster		2,911,393	11,421	123,808	(129,085)	(187,636)	0	306,757	3,036,658
3013	1212 1213	Glocester	C	6,745,155	48,287	230,803	1,056	(368,313)	(80,453)	739,001	7,315,536
3014	1262	Hopkinton	C	4,117,000	31,982	92,899	0	(196,179)	0	454,611	4,500,313
3015	1272 1273	Jamestown	C	9,647,662	72,699	428,385	16,237	(528,786)	(67,659)	1,075,208	10,643,746
3016	1282 1283	Johnston	C	27,216,320	160,384	1,025,622	258,444	(2,727,632)	(88,429)	2,904,147	28,748,856
3017	1302 1303	Lincoln		1,250,976	10,500	88,981	2,900	(102,767)	0	140,528	1,391,118
3019	1322 1323	Middletown	C	13,812,019	137,330	613,201	1,863	(964,742)	(7,338)	1,527,358	15,119,691
3021	1352 1353 1354	Newport	B	41,760,708	217,803	1,944,252	(138,225)	(4,949,588)	(83,530)	4,354,463	43,105,883
3022	1342 1343	New Shoreham	B	5,132,522	42,695	192,945	16,486	(227,576)	(22,797)	576,934	5,711,209
3023	1372 1373	North Kingstown	C	39,459,400	206,893	1,522,952	65,788	(3,462,156)	(143,085)	4,230,673	41,880,465
3024	1382 1383	North Providence		24,593,747	72,756	452,562	68,644	(1,450,611)	(67,549)	2,659,727	26,329,276
3025	1392 1393	North Smithfield	B	12,101,191	67,486	202,384	(29,198)	(761,581)	0	1,301,267	12,881,549
3026	1412 1413	Pawtucket	C	82,091,085	374,808	2,481,262	83,526	(8,305,191)	(222,763)	8,596,543	85,099,270
3027	1515	Union Fire District		463,469	2,529	21,646	0	(13,385)	0	53,291	527,550
3029	1452	Richmond		1,586,073	11,346	108,064	1,270	(115,597)	(39,773)	174,327	1,725,710
3030	1462 1463	Scituate	B	8,991,499	54,263	360,566	(12,312)	(795,549)	(38,219)	961,906	9,522,154
3031	1472 1473	Smithfield	C	10,735,793	62,293	267,836	7,851	(721,926)	(24,091)	1,160,520	11,488,276
3032	1492 1493	South Kingstown	B	42,370,587	241,194	1,277,467	(81,369)	(2,539,140)	(31,704)	4,633,769	45,870,804
3033	1532 1533	Tiverton	C	10,781,491	60,638	130,197	0	(504,506)	(28,217)	1,173,090	11,612,693
3034	1562	Warren	C	4,195,664	47,015	280,809	0	(438,565)	(15,036)	457,330	4,527,217
3036	1622 1623	Westerly		193,013	691	48,057	0	(104,486)	0	15,426	152,701
3037	1602	West Greenwich	C	2,176,110	17,800	133,730	(11,263)	(258,954)	(13,167)	229,713	2,273,969
3039	1632 1633	Woonsocket	B	55,521,433	226,192	806,970	(92,557)	(4,453,117)	(101,745)	5,832,764	57,739,940
3040	1073	Chariho School District	C	13,563,071	107,787	583,752	1,241	(791,784)	(41,278)	1,508,307	14,931,096
3041	1203	Foster/Glocester	B	4,981,830	39,783	250,787	38,821	(326,464)	(7,422)	559,299	5,536,634
3042	1528	Tiogoe Fire & Lighting	C,5	41,564	0	0	0	(1,879)	0	4,460	44,145
3043	1336	Narragansett Housing	C	383,303	3,570	9,282	0	(5,240)	0	43,927	434,842
3045	1098	Coventry Lighting District	C	1,151,229	724	0	0	(104,486)	0	117,702	1,165,169
3046	1242	Hope Valley Fire	C	437,010	2,741	10,157	0	(1)	0	50,555	500,462
3050	1156	East Greenwich Housing	C	1,018,759	5,216	41,953	0	(68,194)	0	112,114	1,109,848
3051	1116	Cranston Housing	C	3,868,126	21,656	87,059	0	(106,461)	(924)	434,808	4,304,264

Reconciliation of Market Assets by Unit

Old Unit Number	New Unit Number	Unit	Code (s)	Beginning of Year Account Balance	Member Contributions	Employer Contributions	Service Purchases and Others*	Benefit Payments	Refunds	Net Investment Return	End of Year Account Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
3052	1166	East Providence Housing	B	2,454,392	13,954	49,251	37,123	(192,102)	0	265,486	2,628,104
3053	1416	Pawtucket Housing	B	11,412,964	57,489	0	7,217	(346,927)	0	1,250,752	12,381,495
3056	1126	Cumberland Housing	C	1,084,414	10,787	37,054	15	(73,569)	0	118,967	1,177,668
3057	1306	Lincoln Housing	B	1,386,843	9,063	46,083	0	(96,320)	0	151,212	1,496,881
3059	1016	Bristol Housing		1,770,616	3,803	0	(23,168)	(64,115)	0	189,582	1,876,718
3065	1036	Burrillville Housing	B	820,341	3,854	11,484	0	(56,956)	0	87,505	866,228
3066	1386	North Providence Housing	B	748,997	5,024	55,787	0	(109,959)	0	78,641	778,490
3067	1177	East Smithfield Water	C	831,963	3,543	1,399	(95)	(35,752)	0	90,015	891,073
3068	1227	Greenville Water	B	987,237	5,549	0	0	(35,704)	0	107,547	1,064,629
3069	1356	Newport Housing	C	5,685,467	28,901	254,761	0	(560,639)	0	607,748	6,016,238
3071	1566	Warren Housing	B	1,135,140	5,815	27,961	0	(75,029)	0	122,919	1,216,806
3072	1286	Johnston Housing		988,516	4,790	37,172	0	(69,117)	0	108,026	1,069,387
3077	1538	Tiverton Local 2670A	C	3,251,648	19,250	88,835	0	(187,834)	0	356,423	3,528,322
3078	1002 1003 1007 1009	Barrington COLA	C	27,759,036	147,950	529,660	28,580	(1,680,192)	(22,905)	3,007,237	29,769,366
3079	1096	Coventry Housing		845,226	5,825	39,936	(506)	(51,347)	0	94,293	933,427
3080	1496	South Kingstown Housing	C	265,356	3,303	8,488	0	(1)	0	31,143	308,289
3081	1403	N. RI Collaborative Adm. Services	C	2,437,305	18,694	90,508	(80,293)	(164,007)	(18,844)	256,580	2,539,943
3083	1616	West Warwick Housing	B	1,366,151	9,225	59,641	0	(73,931)	0	152,945	1,514,031
3084	1476	Smithfield Housing		330,737	1,351	3,119	0	(1)	0	37,667	372,873
3094	1478	Smithfield COLA	C	11,613,476	75,661	310,821	2,618	(689,285)	0	1,271,263	12,584,554
3096	1056	Central Falls Housing	C	1,718,270	18,236	74,767	75,592	(170,784)	(18,205)	190,789	1,888,665
3098	1293	Lime Rock Administrative Services		225,716	909	8,605	0	(14,542)	0	24,799	245,487
3099	1063	Central Falls Schools	C	12,055,137	93,716	398,670	(38,821)	(706,761)	(27,710)	1,323,060	13,097,291
3100	1023	Bristol/Warren Schools	B	13,958,977	93,558	569,700	(13,955)	(1,303,613)	(4,005)	1,494,583	14,795,245
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	17,090,840	106,744	306,365	87,221	(809,878)	(25,124)	1,882,875	18,639,043
3102	1712	Harrisville Fire District (ADMIN)	C	470,413	4,145	15,004	0	(1)	0	55,010	544,571
3103	1702	Albion Fire District (ADMIN)	C,5	78,875	0	14,788	0	0	0	10,525	104,188
3150	1159	East Greenwich Fire (ADMIN)	C	0	1,568	10,428	266,839	(8,856)	0	30,338	300,317
<b>General Employee Units Subtotal</b>				\$ 808,845,237	\$ 4,332,413	\$ 24,907,491	\$ 460,573	\$ (64,399,320)	\$ (1,864,896)	\$ 86,780,590	\$ 859,062,088
<b>Police &amp; Fire Units</b>											
4016	1285	Johnston Fire	D	\$ 3,353,705	\$ 190,210	\$ 200,836	\$ (65,559)	\$ (71,972)	\$ 0	\$ 405,339	\$ 4,012,559
4029	1454	Richmond Police	6	967,786	48,848	55,851	0	(26,395)	(4,372)	117,056	1,158,774
4031	1474	Smithfield Police	C,D	9,518,106	218,097	156,531	1,763	(163,376)	0	1,093,478	10,824,599
4042	1555	Valley Falls Fire	D	2,825,213	55,591	91,950	(23,289)	(257,065)	0	302,542	2,994,942
4047	1395 1435	North Smithfield Voluntary Fire	B,D	5,181,308	91,273	167,026	1,330	(262,483)	0	581,899	5,760,353
4050	1155	East Greenwich Fire	C,D	9,727,824	186,218	442,267	(293,927)	(980,753)	(37,340)	1,016,298	10,060,587
4054	1154	East Greenwich Police	C,D	11,769,690	159,753	348,264	0	(1,037,210)	(16,091)	1,261,277	12,485,683
4055	1375	North Kingstown Fire	C,D	24,761,215	304,045	738,452	48,611	(1,982,138)	(51,360)	2,676,502	26,495,327
4056	1374	North Kingstown Police	C,D	15,986,327	233,059	547,125	5,472	(1,329,412)	0	1,735,268	17,177,839

Reconciliation of Market Assets by Unit

Old Unit Number	New Unit Number	Unit	Code (s)	Beginning of Year Account Balance	Member Contributions	Employer Contributions	Service Purchases and Others*	Benefit Payments	Refunds	Net Investment Return	End of Year Account Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
4058	1385	North Providence Fire	D	25,652,244	359,660	866,198	11,896	(2,028,299)	0	2,793,687	27,655,386
4059	1008	Barrington Fire (25)	C	1,429,358	82,902	102,279	(38,070)	(53,173)	0	171,171	1,694,467
4060	1004	Barrington Police	C,D	6,768,694	115,997	354,518	1,281	(679,224)	0	737,282	7,298,548
4061	1005	Barrington Fire (20)	C,D	6,965,053	18,108	60,353	0	(757,986)	0	706,300	6,991,828
4062	1564 1565	Warren Police & Fire	C,D	7,503,661	125,018	361,060	0	(607,963)	0	829,483	8,211,259
4063	1494	South Kingstown Police	B,1	19,318,576	232,901	430,576	(399,314)	(1,576,071)	0	2,023,394	20,030,062
4073	1464	Scituate Police	5	165,617	0	0	0	(3,609)	0	18,205	180,213
4076	1394	North Smithfield Police	C,D	7,591,585	97,776	141,295	10,100	(599,040)	(264)	813,717	8,055,169
4077	1534	Tiverton Fire	C,D	8,276,731	137,786	124,899	484	(609,619)	0	891,119	8,821,400
4082	1194	Foster Police	C,D	2,032,458	31,089	64,589	301,414	(242,406)	(3,341)	245,393	2,429,196
4085	1634	Woonsocket Police	C,D	29,086,966	419,411	878,692	12,108	(2,304,194)	(74,660)	3,148,395	31,166,718
4086	1084	Charlestown Police	C,D	6,167,649	106,500	256,265	407,575	(452,670)	0	728,750	7,214,069
4087	1264	Hopkinton Police	C,D,6	4,182,157	64,475	114,201	566,417	(447,004)	0	503,442	4,983,688
4088	1214	Glocester Police	C,D	4,524,503	78,169	131,519	0	(246,075)	(21,583)	501,901	4,968,434
4089	1604	West Greenwich Police/Rescue	C,D	2,813,768	60,520	106,895	0	(193,878)	(26,483)	310,233	3,071,055
4090	1034	Burrillville Police	C,D,6	7,588,463	94,661	137,526	0	(519,753)	0	820,394	8,121,291
4091	1148	Cumberland Rescue	C,D	4,234,624	82,220	57,449	4,832	(137,392)	0	476,639	4,718,372
4093	1635	Woonsocket Fire	C,D	31,661,814	549,107	566,965	12,200	(905,088)	0	3,582,889	35,467,887
4094	1015	Bristol Fire	D	224,238	3,539	3,630	0	(17,357)	0	24,053	238,103
4095	1135	Cumberland Hill Fire	C,D	3,527,326	52,730	106,711	2,742	(365,984)	0	373,462	3,696,987
4096	1014	Bristol Police	C,D	4,092,293	168,092	34,371	0	(36,082)	0	478,543	4,737,217
4098	1095	Coventry Fire	C,D	2,603,279	86,935	187,911	0	(185,578)	0	302,559	2,995,106
4099	1505	South Kingstown EMT	C,D	2,784,113	61,926	21,210	(23,594)	(59,075)	0	312,900	3,097,480
4101	1365	North Cumberland	C,D	3,419,724	57,800	116,973	0	(133,976)	(8,699)	387,878	3,839,700
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	7,337,805	216,020	441,221	(378,682)	(416,918)	0	808,996	8,008,442
4103	1255	Hopkins Hill Fire	C,D	1,430,577	48,316	64,743	0	(20,833)	0	171,116	1,693,919
4104	1114	Cranston Police	C,D,4	22,875,041	599,774	580,265	0	(500,237)	(30,620)	2,643,396	26,167,619
4105	1115	Cranston Fire	C,D,4	36,997,855	787,384	995,044	183,200	(350,078)	0	4,338,954	42,952,359
4106	1125	Cumberland Fire	B,D	3,026,120	53,185	117,205	0	(232,440)	0	333,071	3,297,141
4107	1305	Lincoln Rescue	C	2,405,580	77,383	161,426	(85,003)	(127,400)	(40,468)	268,730	2,660,248
4108	1344	New Shoreham Police	B,D	892,234	21,301	46,268	(27,879)	(77,347)	0	96,029	950,606
4109	1324	Middletown Police & Fire	C,D	2,945,176	258,729	155,538	2,610	(9)	0	377,790	3,739,834
4110	1715	Harrisville Fire District	C,D	841,601	22,959	27,504	0	(2)	0	100,239	992,301
4111	1705	Albion Fire District	C	489,024	15,880	36,842	0	(22,811)	0	58,312	577,247

Municipal Employees' Retirement System  
 State of Rhode Island  
 Actuarial Valuation – June 30, 2013

Table 4b

Reconciliation of Market Assets by Unit

Old Unit Number	New Unit Number	Unit	Code (s)	Beginning of Year Account Balance	Member Contributions	Employer Contributions	Service Purchases and Others*	Benefit Payments	Refunds	Net Investment Return	End of Year Account Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1284	1284	Johnston Police		17,846	23,312	23,312	14,644	0	0	8,890	88,004
1465	1465	Smithfield Fire	C	8,520	22,159	22,159	438,680	(1)	0	55,232	546,749
		<b>Police &amp; Fire Units Subtotal</b>		\$ 355,973,447	\$ 6,720,818	\$ 10,645,914	\$ 692,042	\$ (21,020,376)	\$ (315,281)	\$ 39,632,203	\$ 392,328,767
		<b>All MERS Units Total</b>		\$ 1,164,818,684	\$ 11,053,231	\$ 35,553,405	\$ 1,152,615	\$ (85,419,696)	\$ (2,180,177)	\$ 126,412,793	\$ 1,251,390,855

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit in 2013 valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision. 5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.

\* The end of year account balances for Foster Police and Hopkinton Police include pending transfer credits of \$290,326 and \$298,500, respectively, from Employees' Retirement System of Rhode Island.

The end of year account balances for Central Coventry Fire and Smithfield Fire reflect a pending transfer of \$518,325 from Central Coventry Fire to Smithfield Fire.

Municipal Employees' Retirement System  
 State of Rhode Island  
 Actuarial Valuation – June 30, 2013

Table 5

Explanation of Rate Changes												
All rates are gross: before recognizing 0% minimum contribution rate												
Old Unit Number	New Unit Number	Unit	June 30, 2012 Actuarial Valuation	Source of Rate Change								June 30, 2013 Actuarial Valuation
				Salary (Gains)/ Losses	Payroll (Gains)/ Losses	Other Non-Asset (Gains)/ Losses	Asset (Gains)/ Losses	Assumption Change	Provision Changes	2014 COLA less than Assumed		
(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)	(7)	(8)	(9)	(10)	
<b>General Employee Units</b>												
3002	1012 1019	Bristol	15.35%	(0.04%)	0.23%	(0.69%)	0.28%	-	-	(0.18%)	14.95%	
3003	1032 1033	Burrillville	8.27%	(0.17%)	0.00%	0.28%	0.32%	-	-	(0.18%)	8.52%	
3004	1052	Central Falls	14.53%	0.08%	(0.48%)	(0.80%)	0.29%	-	-	0.00%	13.62%	
3005	1082	Charlestown	10.12%	0.25%	(0.07%)	(0.49%)	0.14%	-	-	(0.09%)	9.86%	
3007	1112 1113	Cranston	10.26%	(0.36%)	0.07%	(0.34%)	0.47%	-	-	(0.24%)	9.86%	
3008	1122 1123	Cumberland	14.34%	(0.30%)	0.16%	(0.73%)	0.17%	-	-	0.00%	13.64%	
3009	1152 1153	East Greenwich	6.86%	0.33%	(0.02%)	(2.02%)	0.30%	-	-	(0.15%)	5.31%	
3010	1162 1163	East Providence	22.12%	(0.51%)	2.92%	0.55%	0.44%	-	-	(0.33%)	25.19%	
3011	1183	Exeter/West Greenwich	12.34%	(0.08%)	0.02%	0.04%	0.17%	-	-	(0.13%)	12.36%	
3012	1192 1193	Foster	10.42%	(0.04%)	0.18%	1.01%	0.26%	-	-	0.00%	11.83%	
3013	1212 1213	Glocester	9.97%	(0.47%)	0.02%	0.14%	0.22%	-	-	(0.11%)	9.77%	
3014	1262	Hopkinton	5.89%	(0.32%)	(0.07%)	(0.86%)	0.18%	-	-	(0.05%)	4.77%	
3015	1272 1273	Jamestown	11.34%	(0.13%)	(0.02%)	(0.55%)	0.18%	-	-	(0.13%)	10.69%	
3016	1282 1283	Johnston	15.72%	(0.05%)	0.28%	0.05%	0.33%	-	-	(0.24%)	16.09%	
3017	1302 1303	Lincoln	13.00%	(0.12%)	(0.07%)	(0.20%)	0.09%	-	-	0.00%	12.70%	
3019	1322 1323	Middletown	11.39%	(0.35%)	(0.04%)	(0.25%)	0.18%	-	-	(0.11%)	10.82%	
3021	1352 1353 1354	Newport	21.50%	0.21%	0.09%	(0.04%)	0.43%	-	-	(0.33%)	21.86%	
3022	1342 1343	New Shoreham	8.07%	0.32%	0.01%	(0.46%)	0.15%	-	-	(0.08%)	8.01%	
3023	1372 1373	North Kingstown	15.15%	(0.30%)	1.83%	0.64%	0.36%	-	-	(0.24%)	17.44%	
3024	1382 1383	North Providence	7.56%	(0.18%)	(0.05%)	(0.82%)	0.31%	-	-	0.00%	6.82%	
3025	1392 1393	North Smithfield	6.18%	0.04%	(0.01%)	0.06%	0.33%	-	-	(0.16%)	6.44%	
3026	1412 1413	Pawtucket	16.39%	0.09%	0.51%	(0.27%)	0.48%	-	-	(0.29%)	16.91%	
3027	1515	Union Fire District	8.27%	(0.25%)	0.01%	(0.37%)	0.08%	-	-	0.00%	7.74%	
3029	1452	Richmond	10.41%	0.07%	(0.32%)	(0.28%)	0.12%	-	-	0.00%	10.00%	
3030	1462 1463	Scituate	14.95%	(0.19%)	0.21%	(0.38%)	0.32%	-	-	(0.20%)	14.71%	
3031	1472 1473	Smithfield	8.53%	(0.36%)	0.01%	0.08%	0.30%	-	-	(0.09%)	8.47%	
3032	1492 1493	South Kingstown	11.57%	(0.39%)	0.10%	(0.15%)	0.28%	-	-	(0.16%)	11.25%	
3033	1532 1533	Tiverton	4.40%	(0.34%)	(0.07%)	(1.01%)	0.29%	-	-	(0.08%)	3.19%	
3034	1562	Warren	12.77%	0.22%	(0.43%)	0.03%	0.18%	-	-	(0.09%)	12.68%	
3036	1622 1623	Westerly	80.36%	(0.29%)	0.91%	1.14%	0.74%	-	-	0.00%	82.86%	



Municipal Employees' Retirement System  
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Table 5

<b>Explanation of Rate Changes</b>												
<i>All rates are gross: before recognizing 0% minimum contribution rate</i>												
Old Unit Number	New Unit Number	Unit	June 30, 2012 Actuarial Valuation	Source of Rate Change							2014 COLA less than Assumed	June 30, 2013 Actuarial Valuation
				Salary (Gains)/ Losses	Payroll (Gains)/ Losses	Other Non-Asset (Gains)/ Losses	Asset (Gains)/ Losses	Assumption Change	Provision Changes			
(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)	(7)	(8)	(9)	(10)	
3037	1602	West Greenwich	16.19%	0.44%	(0.51%)	0.31%	0.26%	-	-	(0.19%)	16.50%	
3039	1632 1633	Woonsocket	10.02%	(0.33%)	0.11%	0.24%	0.55%	-	-	(0.32%)	10.27%	
3040	1073	Chariho School District	11.04%	(0.29%)	0.07%	(0.18%)	0.17%	-	-	(0.08%)	10.73%	
3041	1203	Foster/Glocester	12.45%	(0.23%)	(0.15%)	(0.35%)	0.18%	-	-	(0.15%)	11.75%	
3043	1336	Narragansett Housing	6.01%	(0.07%)	(0.01%)	(0.32%)	0.10%	-	-	0.00%	5.71%	
3045	1098	Coventry Lighting District	(64.27%)	(1.59%)	(2.84%)	2.27%	3.97%	-	-	0.00%	(62.46%)	
3046	1242	Hope Valley Fire	4.64%	(0.33%)	(0.12%)	(1.49%)	0.13%	-	-	0.00%	2.83%	
3050	1156	East Greenwich Housing	9.24%	0.12%	0.30%	0.47%	0.20%	-	-	(0.11%)	10.22%	
3051	1116	Cranston Housing	7.69%	(0.07%)	0.02%	(0.35%)	0.21%	-	-	(0.05%)	7.45%	
3052	1166	East Providence Housing	11.63%	0.89%	(0.36%)	(0.69%)	0.30%	-	-	(0.23%)	11.54%	
3053	1416	Pawtucket Housing	(0.50%)	(0.14%)	(0.01%)	(0.75%)	0.31%	-	-	0.00%	(1.09%)	
3056	1126	Cumberland Housing	7.26%	(0.08%)	0.00%	0.09%	0.16%	-	-	(0.07%)	7.36%	
3057	1306	Lincoln Housing	8.23%	(0.56%)	0.60%	7.57%	0.25%	-	-	(0.19%)	15.90%	
3059	1016	Bristol Housing	(2.05%)	(0.08%)	0.53%	(0.05%)	0.41%	-	-	0.00%	(1.24%)	
3065	1036	Burrillville Housing	7.43%	0.50%	(0.11%)	(0.42%)	0.41%	-	-	(0.23%)	7.58%	
3066	1386	North Providence Housing	26.07%	0.60%	0.49%	0.32%	0.32%	-	-	(0.34%)	27.46%	
3067	1177	East Smithfield Water	2.93%	(0.66%)	(0.37%)	0.08%	0.41%	-	-	(0.20%)	2.19%	
3068	1227	Greenville Water	1.29%	(0.01%)	0.46%	0.05%	0.31%	-	-	(0.14%)	1.96%	
3069	1356	Newport Housing	18.93%	0.69%	(0.20%)	(1.12%)	0.37%	-	-	(0.34%)	18.33%	
3071	1566	Warren Housing	6.09%	(0.09%)	0.07%	(0.18%)	0.34%	-	-	(0.20%)	6.03%	
3072	1286	Johnston Housing	11.86%	(0.01%)	(0.21%)	(0.30%)	0.18%	-	-	0.00%	11.52%	
3077	1538	Tiverton Local 2670A	9.44%	(0.49%)	0.02%	(0.55%)	0.27%	-	-	(0.17%)	8.52%	
3078	1002 1003 1007 1009	Barrington COLA	8.40%	(0.01%)	0.01%	(0.11%)	0.32%	-	-	(0.13%)	8.48%	
3079	1096	Coventry Housing	7.66%	0.30%	(0.23%)	2.96%	0.10%	-	-	0.00%	10.79%	
3080	1496	South Kingstown Housing	3.83%	0.07%	(0.36%)	(1.00%)	0.05%	-	-	0.00%	2.59%	
3081	1403	N. RI Collaborative Adm. Services	8.35%	0.07%	0.19%	0.15%	0.30%	-	-	(0.12%)	8.94%	
3083	1616	West Warwick Housing	9.35%	0.25%	0.17%	(0.43%)	0.19%	-	-	(0.11%)	9.42%	
3084	1476	Smithfield Housing	2.24%	(0.10%)	0.10%	(0.11%)	0.13%	-	-	0.00%	2.26%	
3094	1478	Smithfield COLA	10.05%	0.02%	(0.06%)	(0.39%)	0.26%	-	-	(0.15%)	9.73%	

Municipal Employees' Retirement System  
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Table 5

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Old Unit Number	New Unit Number	Unit	June 30, 2012 Actuarial Valuation	Source of Rate Change							June 30, 2013 Actuarial Valuation
				Salary (Gains)/ Losses	Payroll (Gains)/ Losses	Other Non-Asset (Gains)/ Losses	Asset (Gains)/ Losses	Assumption Change	Provision Changes	2014 COLA less than Assumed	
(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)	(7)	(8)	(9)	(10)
3096	1056	Central Falls Housing	11.42%	0.11%	(0.01%)	(0.43%)	0.13%	-	-	(0.08%)	11.14%
3098	1293	Lime Rock Administrative Services	13.06%	0.57%	(0.43%)	(0.16%)	0.21%	-	-	0.00%	13.25%
3099	1063	Central Falls Schools	8.63%	(0.45%)	0.03%	(0.28%)	0.21%	-	-	(0.14%)	8.00%
3100	1023	Bristol/Warren Schools	15.94%	(0.50%)	0.28%	1.59%	0.31%	-	-	(0.25%)	17.37%
3101	1157 1158	Town of E. Greenwich-COLA-NCE	6.86%	0.33%	(0.02%)	(2.02%)	0.30%	-	-	(0.15%)	5.31%
3102	1712	Harrisville Fire District (ADMIN)	6.32%	0.13%	0.00%	1.10%	0.07%	-	-	0.00%	7.62%
3150	1159	East Greenwich Fire (ADMIN)	16.05%	0.18%	(1.71%)	(19.84%)	14.31%	-	-	0.00%	8.99%
<b>General Employee Units Averages</b>			12.63%	(0.19%)	0.23%	(0.09%)	0.35%	-	-	(0.19%)	12.74%
<b>Police &amp; Fire Units</b>											
4016	4016	1285 Johnston Fire	9.65%	(0.30%)	(0.01%)	(0.11%)	0.01%	-	-	0.00%	9.24%
4029	4029	1454 Richmond Police	12.19%	0.60%	(0.24%)	(0.19%)	0.01%	-	-	0.00%	12.37%
4031	4031	1474 Smithfield Police	7.09%	(0.03%)	0.03%	(0.25%)	0.16%	-	-	(0.07%)	6.93%
4042	4042	1555 Valley Falls Fire	18.04%	(0.11%)	0.09%	(1.72%)	0.35%	-	-	0.00%	16.65%
4047	4047	1395 1435 North Smithfield Voluntary Fire	17.99%	0.28%	(0.41%)	(0.78%)	0.28%	-	-	(0.21%)	17.15%
4050	4050	1155 East Greenwich Fire	26.12%	(0.05%)	(0.10%)	0.98%	(0.11%)	-	-	(0.36%)	26.48%
4054	4054	1154 East Greenwich Police	26.05%	0.22%	0.07%	1.51%	0.56%	-	-	(0.48%)	27.93%
4055	4055	1375 North Kingstown Fire	28.13%	0.68%	(1.33%)	2.35%	0.56%	-	-	(0.35%)	30.04%
4056	4056	1374 North Kingstown Police	27.62%	(0.23%)	0.07%	(2.04%)	0.47%	-	-	(0.45%)	25.44%
4058	4058	1385 North Providence Fire	25.06%	0.17%	(1.10%)	(0.98%)	0.41%	-	-	0.00%	23.56%
4059	4059	1008 Barrington Fire (25)	9.37%	0.07%	(0.12%)	(0.30%)	0.02%	-	-	(0.02%)	9.02%
4060	4060	1004 Barrington Police	29.46%	(0.23%)	0.66%	(0.22%)	0.39%	-	-	(0.26%)	29.80%
4061	4061	1005 Barrington Fire (20)	65.75%	(0.88%)	21.67%	0.55%	3.89%	-	-	(1.39%)	89.59%
4062	4062	1564 1565 Warren Police & Fire	30.51%	(0.96%)	(0.65%)	(1.14%)	0.36%	-	-	(0.26%)	27.86%
4063	4063	1494 South Kingstown Police	22.79%	(0.29%)	(0.39%)	2.35%	0.72%	-	-	(0.47%)	24.71%
4076	4076	1394 North Smithfield Police	19.76%	(0.46%)	0.34%	2.09%	0.58%	-	-	(0.52%)	21.79%
4077	4077	1534 Tiverton Fire	15.33%	(0.07%)	0.17%	(1.49%)	0.44%	-	-	(0.25%)	14.13%
4082	4082	1194 Foster Police	32.90%	0.02%	1.01%	(1.15%)	0.41%	-	-	(0.61%)	32.58%
4085	4085	1634 Woonsocket Police	23.44%	0.08%	1.59%	1.04%	0.48%	-	-	(0.55%)	26.08%
4086	4086	1084 Charlestown Police	24.41%	0.05%	(0.08%)	(0.74%)	0.12%	-	-	(0.31%)	23.45%

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All rates are gross: before recognizing 0% minimum contribution rate												
Old Unit Number	New Unit Number	Unit	June 30, 2012 Actuarial Valuation	Source of Rate Change							2014 COLA less than Assumed	June 30, 2013 Actuarial Valuation
				Salary (Gains)/ Losses	Payroll (Gains)/ Losses	Other Non-Asset (Gains)/ Losses	Asset (Gains)/ Losses	Assumption Change	Provision Changes			
(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)	(7)	(8)	(9)	(10)	
4087	4087	1264	Hopkinton Police	24.16%	0.49%	2.52%	(0.35%)	3.16%	-	-	(0.58%)	29.40%
4088	4088	1214	Glocester Police	18.16%	0.03%	(0.04%)	(0.28%)	0.32%	-	-	(0.30%)	17.89%
4089	4089	1604	West Greenwich Police/Rescue	23.63%	(0.41%)	(0.87%)	0.04%	0.28%	-	-	(0.22%)	22.45%
4090	4090	1034	Burrillville Police	24.90%	0.66%	0.07%	(0.13%)	0.56%	-	-	(0.41%)	25.65%
4091	4091	1148	Cumberland Rescue	10.93%	(0.76%)	(0.03%)	0.91%	0.24%	-	-	(0.17%)	11.12%
4093	4093	1635	Woonsocket Fire	10.94%	0.47%	0.06%	(0.32%)	0.26%	-	-	(0.13%)	11.28%
4094	4094	1015	Bristol Fire	24.92%	(0.31%)	0.13%	(0.23%)	0.41%	-	-	0.00%	24.92%
4095	4095	1135	Cumberland Hill Fire	26.71%	0.24%	0.37%	1.27%	0.55%	-	-	(0.57%)	28.57%
4096	4096	1014	Bristol Police	5.73%	(0.09%)	0.22%	(0.06%)	0.06%	-	-	(0.02%)	5.84%
4098	4098	1095	Coventry Fire	21.96%	(0.05%)	0.13%	(0.44%)	0.09%	-	-	(0.23%)	21.46%
4099	4099	1505	South Kingstown EMT	5.96%	(0.04%)	(0.17%)	(0.52%)	0.22%	-	-	(0.11%)	5.34%
4101	4101	1365	North Cumberland	21.18%	0.43%	0.23%	(0.82%)	0.26%	-	-	(0.23%)	21.05%
4102	4102	1045 1235 1525 1585	Central Coventry Fire	17.64%	0.15%	(0.08%)	(1.19%)	0.11%	-	-	(0.11%)	16.52%
4103	4103	1255	Hopkins Hill Fire	13.40%	0.88%	(0.02%)	(0.38%)	0.04%	-	-	0.00%	13.92%
4104	4104	1114	Cranston Police	10.69%	(0.56%)	(0.02%)	(0.35%)	0.11%	-	-	(0.05%)	9.82%
4105	4105	1115	Cranston Fire	10.44%	(0.44%)	(0.05%)	(1.88%)	1.71%	(1.60%)	-	(0.03%)	8.15%
4106	4106	1125	Cumberland Fire	22.00%	0.14%	0.53%	0.65%	0.34%	-	-	(0.29%)	23.37%
4107	4107	1305	Lincoln Rescue	20.19%	(0.46%)	(1.20%)	(0.53%)	0.18%	-	-	(0.11%)	18.07%
4108	4108	1344	New Shoreham Police	25.24%	(0.88%)	(0.07%)	(0.88%)	0.33%	-	-	(0.29%)	23.45%
4109	4109	1324	Middletown Police & Fire	6.48%	0.05%	0.16%	(0.25%)	(0.04%)	-	-	0.00%	6.40%
4110	4110	1715	Harrisville Fire District	8.16%	0.24%	0.07%	(0.65%)	0.05%	-	-	0.00%	7.87%
4111	4111	1705	Albion Fire District	20.65%	(0.43%)	(0.27%)	(2.42%)	0.04%	-	-	(0.12%)	17.45%
1284	1284	1284	Johnston Police	9.28%	0.22%	(0.22%)	(0.18%)	(0.12%)	-	-	0.00%	8.98%
1465	1465	1465	Smithfield Fire	9.67%	(1.37%)	(0.36%)	2.68%	(0.31%)	-	-	0.00%	10.31%
			<b>Police &amp; Fire Units Averages</b>	17.26%	(0.26%)	(0.04%)	(0.02%)	0.35%	(0.20%)	-	(0.19%)	16.89%
			<b>All MERS Units Averages</b>	13.89%	(0.21%)	0.20%	(0.08%)	0.35%	(0.05%)	-	(0.19%)	13.91%

Units with no active members are excluded from this exhibit

**Development of Actuarial Value of Assets (All Units in Aggregate)**

	<u>Year Ending June 30, 2013</u>					
1. Market value of assets at beginning of year	\$ 1,164,818,684					
2. Net new investments						
a. Contributions	\$ 47,759,251					
b. Benefits and refunds paid	(87,599,873)					
c. Subtotal	<u>(39,840,622)</u>					
3. Market value of assets at end of year	\$ 1,251,390,855					
4. Net earnings (3-1-2) (includes misc revenues)	\$ 126,412,793					
5. Assumed investment return rate for fiscal year	7.50%					
6. Expected return	\$ 85,867,378					
7. Excess return (4-6)	\$ 40,545,415					
8. Development of amounts to be recognized as of June 30, 2013:						
Fiscal Year End	Deferrals of Excess (Shortfall) of Investment Income	Offsetting of Gains/(Losses)	Net Deferrals Remaining	Years Remainin g	Recognized for this valuation	Remaining after this valuation
	(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)
2009	\$ (17,430,232)	\$ 17,430,232	\$ 0	1	\$ 0	\$ 0
2010	0	0	0	2	0	0
2011	0	0	0	3	0	0
2012	(55,337,808)	23,115,183	(32,222,625)	4	(8,055,656)	(24,166,969)
2013	<u>40,545,415</u>	<u>(40,545,415)</u>	<u>0</u>	5	<u>0</u>	<u>0</u>
Total	\$ (32,222,625)	\$ 0	\$ (32,222,625)		\$ (8,055,656)	\$ (24,166,969)
9. Actuarial value of assets as of June 30, 2013 (Item 3 - Item 8)						\$ 1,275,557,824
10. Ratio of actuarial value to market value						101.9%

### History of Investment Return Rates

Year Ending June 30 of (1)	Market (2)	Actuarial (3)
1995	17.0%	10.2%
1996	13.7%	13.7%
1997	19.1%	19.1%
1998	16.1%	16.5%
1999	10.1%	14.7%
2000	9.1%	8.8%
2001	-11.0%	4.9%
2002	-8.4%	0.9%
2003	2.5%	-0.7%
2004	19.2%	0.7%
2005	11.4%	2.3%
2006	11.7%	7.7%
2007	18.3%	12.9%
2008	-5.8%	10.5%
2009	-19.8%	2.4%
2010	13.7%	1.1%
2011	19.5%	2.7%
2012	1.5%	4.7%
2013	11.0%	6.3%
Average Returns:		
Last 5 Years	4.2%	3.4%
Last 10 Years	7.3%	5.1%
Since 1995	7.2%	7.2%

**Schedule of Funding Progress**

Old Unit Number	New Unit Number	Unit	Code (s)	Actuarial Value of Assets (AVA)	Actuarial Liability (AAL)	Unfunded Actuarial Liability (UAAL) (5) - (4)	Funded Ratio (4)/(5)	Annual Covered Payroll	UAAL as % of Payroll (7)/(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>General Employee Units</b>									
3002	1012 1019	Bristol	B	15,547,343	21,184,138	5,636,795	73.4%	4,518,106	124.8%
3003	1032 1033	Burrillville	C	24,737,551	25,291,674	554,123	97.8%	5,673,504	9.8%
3004	1052	Central Falls		4,852,474	7,034,036	2,181,562	69.0%	1,880,142	116.0%
3005	1082	Charlestown	C	5,680,607	6,565,646	885,039	86.5%	2,087,839	42.4%
3007	1112 1113	Cranston	B	125,732,304	132,243,062	6,510,758	95.1%	23,746,790	27.4%
3008	1122 1123	Cumberland		21,087,232	28,658,045	7,570,813	73.6%	8,033,273	94.2%
3009	1152 1153	East Greenwich	C	7,493,334	6,472,785	(1,020,549)	115.8%	1,228,697	(83.1%)
3010	1162 1163	East Providence	B	59,293,656	100,281,948	40,988,292	59.1%	15,027,364	272.8%
3011	1183	Exeter/West Greenwich	B	7,937,434	9,575,412	1,637,978	82.9%	2,677,939	61.2%
3012	1192 1193	Foster		3,095,302	3,693,568	598,266	83.8%	1,119,602	53.4%
3013	1212 1213	Glocester	C	7,456,814	8,271,444	814,630	90.2%	2,475,679	32.9%
3014	1262	Hopkinton	C	4,587,223	3,902,618	(684,605)	117.5%	1,609,922	(42.5%)
3015	1272 1273	Jamestown	C	10,849,299	12,714,422	1,865,123	85.3%	3,660,206	51.0%
3016	1282 1283	Johnston	C	29,304,056	39,806,322	10,502,266	73.6%	7,998,796	131.3%
3017	1302 1303	Lincoln		1,417,984	2,032,043	614,059	69.8%	866,702	70.9%
3019	1322 1323	Middletown	C	15,411,684	18,903,962	3,492,278	81.5%	5,481,800	63.7%
3021	1352 1353 1354	Newport	B	43,938,347	68,681,188	24,742,841	64.0%	10,999,057	225.0%
3022	1342 1343	New Shoreham	B	5,821,505	6,005,567	184,062	96.9%	2,062,334	8.9%
3023	1372 1373	North Kingstown	C	42,689,264	57,973,140	15,283,876	73.6%	10,271,304	148.8%
3024	1382 1383	North Providence		26,837,749	26,006,440	(831,309)	103.2%	7,014,891	(11.9%)
3025	1392 1393	North Smithfield	B	13,130,319	12,312,800	(817,519)	106.6%	3,351,169	(24.4%)
3026	1412 1413	Pawtucket	C	86,742,714	114,292,417	27,549,703	75.9%	18,980,419	145.1%
3027	1515	Union Fire District		537,739	566,577	28,838	94.9%	263,522	10.9%
3029	1452	Richmond		1,759,037	2,134,607	375,570	82.4%	922,885	40.7%
3030	1462 1463	Scituate	B	9,706,047	12,594,492	2,888,445	77.1%	2,745,344	105.2%
3031	1472 1473	Smithfield	C	11,710,139	11,958,720	248,581	97.9%	3,216,525	7.7%
3032	1492 1493	South Kingstown	B	46,756,665	52,829,436	6,072,771	88.5%	12,253,273	49.6%
3033	1532 1533	Tiverton	C	11,836,958	9,778,577	(2,058,381)	121.0%	3,024,759	(68.1%)
3034	1562	Warren	C	4,614,647	6,519,244	1,904,597	70.8%	1,922,065	99.1%

Schedule of Funding Progress

Old Unit Number	New Unit Number	Unit	Code (s)	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (5) - (4)	Funded Ratio (4)/(5)	Annual Covered Payroll	UAAL as % of Payroll (7)/(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3036	1622 1623	Westerly		155,650	942,535	786,885	16.5%	69,073	1139.2%
3037	1602	West Greenwich	C	2,317,884	3,661,650	1,343,766	63.3%	853,515	157.4%
3039	1632 1633	Woonsocket	B	58,855,018	62,910,670	4,055,652	93.6%	10,878,843	37.3%
3040	1073	Chariho School District	C	15,219,447	18,053,702	2,834,255	84.3%	5,395,791	52.5%
3041	1203	Foster/Glocester	B	5,643,558	6,589,022	945,464	85.7%	1,673,687	56.5%
3042	1528	Tiogue Fire & Lighting	C,5	44,997	24,456	(20,541)	184.0%	0	-
3043	1336	Narragansett Housing	C	443,240	407,391	(35,849)	108.8%	178,500	(20.1%)
3045	1098	Coventry Lighting District	C	1,187,671	820,720	(366,951)	144.7%	36,182	(1014.2%)
3046	1242	Hope Valley Fire	C	510,127	394,800	(115,327)	129.2%	137,063	(84.1%)
3050	1156	East Greenwich Housing	C	1,131,282	1,261,720	130,438	89.7%	453,209	28.8%
3051	1116	Cranston Housing	C	4,387,389	4,028,318	(359,071)	108.9%	1,082,837	(33.2%)
3052	1166	East Providence Housing	B	2,678,858	3,050,385	371,527	87.8%	759,246	48.9%
3053	1416	Pawtucket Housing	B	12,620,608	8,882,712	(3,737,896)	142.1%	2,945,416	(126.9%)
3056	1126	Cumberland Housing	C	1,200,411	1,245,522	45,111	96.4%	539,355	8.4%
3057	1306	Lincoln Housing	B	1,525,788	2,088,431	562,643	73.1%	464,895	121.0%
3059	1016	Bristol Housing		1,912,961	1,361,868	(551,093)	140.5%	380,785	(144.7%)
3065	1036	Burrillville Housing	B	882,957	922,852	39,895	95.7%	192,696	20.7%
3066	1386	North Providence Housing	B	793,524	1,557,483	763,959	50.9%	261,677	291.9%
3067	1177	East Smithfield Water	C	908,282	784,891	(123,391)	115.7%	179,772	(68.6%)
3068	1227	Greenville Water	B	1,085,189	853,597	(231,592)	127.1%	259,978	(89.1%)
3069	1356	Newport Housing	C	6,132,424	8,518,801	2,386,377	72.0%	1,454,800	164.0%
3071	1566	Warren Housing	B	1,240,305	1,150,422	(89,883)	107.8%	270,795	(33.2%)
3072	1286	Johnston Housing		1,090,039	1,313,286	223,247	83.0%	429,874	51.9%
3077	1538	Tiverton Local 2670A	C	3,596,462	3,750,566	154,104	95.9%	978,804	15.7%
3078	002 1003 1007 1009	Barrington COLA	C	30,344,275	31,277,558	933,283	97.0%	7,351,583	12.7%
3079	1096	Coventry Housing		951,453	1,209,136	257,683	78.7%	582,427	44.2%
3080	1496	South Kingstown Housing	C	314,243	183,659	(130,584)	171.1%	163,178	(80.0%)
3081	1403	N. RI Collaborative Adm. Services	C	2,588,994	2,804,680	215,686	92.3%	869,890	24.8%
3083	1616	West Warwick Housing	B	1,543,270	1,708,490	165,220	90.3%	463,494	35.6%
3084	1476	Smithfield Housing		380,074	284,577	(95,497)	133.6%	135,123	(70.7%)

Schedule of Funding Progress

Old Unit Number	New Unit Number	Unit	Code (s)	Actuarial Value of Assets (AVA)	Actuarial Liability (AAL)	Unfunded Actuarial Liability (UAAL) (5) - (4)	Funded Ratio (4)/(5)	Annual Covered Payroll	UAAL as % of Payroll (7)/(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3094	1478	Smithfield COLA	C	12,827,588	14,156,970	1,329,382	90.6%	3,566,940	37.3%
3096	1056	Central Falls Housing	C	1,925,139	2,635,812	710,673	73.0%	890,092	79.8%
3098	1293	Lime Rock Administrative Services		250,228	333,037	82,809	75.1%	81,822	101.2%
3099	1063	Central Falls Schools	C	13,350,227	13,945,119	594,892	95.7%	4,390,059	13.6%
3100	1023	Bristol/Warren Schools	B	15,080,972	21,403,366	6,322,394	70.5%	4,360,139	145.0%
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	18,999,002	17,885,350	(1,113,652)	106.2%	5,313,031	(21.0%)
3102	1712	Harrisville Fire District (ADMIN)	C	555,088	556,142	1,054	99.8%	176,302	0.6%
3103	1702	Albion Fire District (ADMIN)	C,5	106,200	98,945	(7,255)	107.3%	0	-
3150	1159	East Greenwich Fire (ADMIN)	C	306,117	346,484	40,367	88.3%	45,632	88.5%
<b>General Employee Units Subtotal</b>				<b>\$ 875,652,368</b>	<b>\$ 1,051,689,455</b>	<b>\$ 176,037,087</b>	<b>83.3%</b>	<b>\$ 223,380,413</b>	<b>78.8%</b>
<b>Police &amp; Fire Units</b>									
4016	1285	Johnston Fire	D	4,090,050	4,315,039	224,989	94.8%	3,087,880	7.3%
4029	1454	Richmond Police	6	1,181,152	1,597,053	415,901	74.0%	697,820	59.6%
4031	1474	Smithfield Police	C,D	11,033,644	10,367,401	(666,243)	106.4%	2,671,861	(24.9%)
4042	1555	Valley Falls Fire	D	3,052,781	4,009,615	956,834	76.1%	762,453	125.5%
4047	1395 1435	North Smithfield Voluntary Fire	B,D	5,871,597	7,127,390	1,255,793	82.4%	1,145,199	109.7%
4050	1155	East Greenwich Fire	C,D	10,254,878	16,426,531	6,171,653	62.4%	2,340,927	263.6%
4054	1154	East Greenwich Police	C,D	12,726,808	18,137,668	5,410,860	70.2%	2,010,459	269.1%
4055	1375	North Kingstown Fire	C,D	27,007,007	38,954,915	11,947,908	69.3%	3,820,152	312.8%
4056	1374	North Kingstown Police	C,D	17,509,579	25,020,741	7,511,162	70.0%	2,883,416	260.5%
4058	1385	North Providence Fire	D	28,189,469	39,379,956	11,190,487	71.6%	5,154,554	217.1%
4059	1008	Barrington Fire (25)	C	1,727,190	1,924,478	197,288	89.7%	1,043,000	18.9%
4060	1004	Barrington Police	C,D	7,439,498	12,148,900	4,709,402	61.2%	1,419,457	331.8%
4061	1005	Barrington Fire (20)	C,D	7,126,855	9,733,843	2,606,988	73.2%	194,999	1336.9%
4062	1564 1565	Warren Police & Fire	C,D	8,369,835	12,683,807	4,313,972	66.0%	1,506,143	286.4%
4063	1494	South Kingstown Police	B,1	20,416,885	26,901,814	6,484,929	75.9%	2,863,971	226.4%
4073	1464	Scituate Police	5	183,693	21,896	(161,797)	838.9%	0	-



Schedule of Funding Progress

Old Unit Number	New Unit Number	Unit	Code (s)	Actuarial Value of Assets (AVA)	Actuarial Liability (AAL)	Unfunded Actuarial Liability (UAAL) (5) - (4)	Funded Ratio (4)/(5)	Annual Covered Payroll	UAAL as % of Payroll (7)/(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4076	1394	North Smithfield Police	C,D	8,210,731	10,651,041	2,440,310	77.1%	1,352,826	180.4%
4077	1534	Tiverton Fire	C,D	8,991,760	10,470,507	1,478,747	85.9%	1,675,160	88.3%
4082	1194	Foster Police	C,D	2,476,109	3,753,507	1,277,398	66.0%	405,358	315.1%
4085	1634	Woonsocket Police	C,D	31,768,613	45,401,135	13,632,522	70.0%	5,114,655	266.5%
4086	1084	Charlestown Police	C,D	7,353,388	10,300,112	2,946,724	71.4%	1,276,301	230.9%
4087	1264	Hopkinton Police	C,D,6	5,079,933	7,489,126	2,409,193	67.8%	871,497	276.4%
4088	1214	Glocester Police	C,D	5,064,385	6,289,282	1,224,897	80.5%	977,114	125.4%
4089	1604	West Greenwich Police/Rescue	C,D	3,130,363	4,491,713	1,361,350	69.7%	731,700	186.1%
4090	1034	Burrillville Police	C,D,6	8,278,130	10,753,837	2,475,707	77.0%	1,263,243	196.0%
4091	1148	Cumberland Rescue	C,D	4,809,494	4,971,837	162,343	96.7%	992,338	16.4%
4093	1635	Woonsocket Fire	C,D	36,152,846	38,055,800	1,902,954	95.0%	6,801,631	28.0%
4094	1015	Bristol Fire	D	242,702	318,302	75,600	76.2%	50,562	149.5%
4095	1135	Cumberland Hill Fire	C,D	3,768,383	5,704,213	1,935,830	66.1%	666,143	290.6%
4096	1014	Bristol Police	C,D	4,828,703	4,001,300	(827,403)	120.7%	2,142,439	(38.6%)
4098	1095	Coventry Fire	C,D	3,052,948	4,891,453	1,838,505	62.4%	1,004,942	182.9%
4099	1505	South Kingstown EMT	C,D	3,157,299	2,700,901	(456,398)	116.9%	745,180	(61.2%)
4101	1365	North Cumberland	C,D	3,913,853	5,007,387	1,093,534	78.2%	722,500	151.4%
4102	045 1235 1525 1585	Central Coventry Fire	C,D	8,163,101	11,044,506	2,881,405	73.9%	2,596,033	111.0%
4103	1255	Hopkins Hill Fire	C,D	1,726,632	1,927,452	200,820	89.6%	603,950	33.3%
4104	1114	Cranston Police	C,D,4	26,672,971	27,801,451	1,128,480	95.9%	8,953,196	12.6%
4105	1115	Cranston Fire	C,D,4	43,781,859	40,849,169	(2,932,690)	107.2%	10,976,612	(26.7%)
4106	1125	Cumberland Fire	B,D	3,360,815	4,628,458	1,267,643	72.6%	648,037	195.6%
4107	1305	Lincoln Rescue	C	2,711,623	4,030,978	1,319,355	67.3%	883,961	149.3%
4108	1344	New Shoreham Police	B,D	968,964	1,462,094	493,130	66.3%	208,579	236.4%
4109	1324	Middletown Police & Fire	C,D	3,812,058	2,919,985	(892,073)	130.6%	2,896,437	(30.8%)

**Schedule of Funding Progress**

Old Unit Number	New Unit Number	Unit	Code (s)	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (5) - (4)	Funded Ratio (4)/(5)	Annual Covered Payroll	UAAL as % of Payroll (7)/(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	1715	Harrisville Fire District	C,D	1,011,464	920,227	(91,237)	109.9%	286,989	(31.8%)
4111	1705	Albion Fire District	C	588,395	854,547	266,152	68.9%	190,994	139.4%
1284	1284	Johnston Police		89,704	101,920	12,216	88.0%	402,190	3.0%
1465	1465	Smithfield Fire	C	557,308	590,287	32,979	94.4%	385,166	8.6%
<b>Police &amp; Fire Units Subtotal</b>				<u>\$ 399,905,455</u>	<u>\$ 501,133,572</u>	<u>\$ 101,228,117</u>	79.8%	<u>\$ 87,428,024</u>	115.8%
<b>All MERS Units Total</b>				1,275,557,823	1,552,823,028	277,265,205	82.1%	310,808,437	89.2%

B - Municipality has adopted COLA Plan B

D - Municipality has adopted the "20-year" optional Police & Fire Plan

C - Municipality has adopted COLA Plan C

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit in 2013 valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision. 5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.

**Distribution of Assets at Market Value  
 (Percentage of Total Investments)**

Item (1)	June 30, 2013 (2)	June 30, 2012 (3)
Cash & cash equivalents	5.1%	2.3%
U.S. government & agency securities	11.3%	11.3%
Corporate bonds & notes	5.7%	12.3%
Foreign bonds	1.8%	0.0%
U.S. equity securities	24.4%	32.1%
Foreign equity securities	22.9%	15.8%
Real estate, venture capital, other	28.8%	26.2%
Total investments	100.0%	100.0%

Municipal Employees' Retirement System  
 State of Rhode Island  
 Actuarial Valuation – June 30, 2013

Table 9

Active Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Active Employees as of June 30, 2013				Active Employees as of June 30, 2012			
				Number	Average Age	Average Service	Average Salary	Number	Average Age	Average Service	Average Salary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<b>General Employee Units</b>											
3002	1012 1019	Bristol	B	100	47.8	13.4	\$ 45,181	100	48.5	13.7	\$44,854
3003	1032 1033	Burrillville	C	137	52.6	13.3	41,412	142	52.6	13.5	40,087
3004	1052	Central Falls		42	45.2	10.0	44,765	41	45.3	10.3	42,238
3005	1082	Charlestown	C	43	50.5	12.8	48,554	41	49.3	12.7	46,119
3007	1112 1113	Cranston	B	697	52.7	13.6	34,070	697	52.2	13.1	33,891
3008	1122 1123	Cumberland		227	52.1	12.6	35,389	237	52.0	12.1	34,167
3009	1152 1153	East Greenwich	C	16	50.0	14.3	76,794	16	49.7	13.6	74,066
3010	1162 1163	East Providence	B	356	51.7	13.0	42,212	384	51.2	12.6	42,890
3011	1183	Exeter/West Greenwich	B	70	53.4	12.7	38,256	70	52.4	11.9	37,058
3012	1192 1193	Foster		34	56.4	11.8	32,929	34	54.3	11.1	31,200
3013	1212 1213	Glocester	C	67	52.6	10.9	36,950	67	51.3	10.7	36,418
3014	1262	Hopkinton	C	36	52.6	10.0	44,720	34	52.4	9.9	45,471
3015	1272 1273	Jamestown	C	84	50.4	11.7	43,574	81	50.0	11.7	42,580
3016	1282 1283	Johnston	C	239	51.6	11.5	33,468	245	51.1	10.8	32,578
3017	1302 1303	Lincoln		15	52.1	11.4	57,780	15	51.1	10.4	56,431
3019	1322 1323	Middletown	C	136	49.5	11.4	40,307	139	49.5	11.7	40,173
3021	1352 1353 1354	Newport	B	250	50.3	12.3	43,996	252	50.6	12.7	42,387
3022	1342 1343	New Shoreham	B	50	51.4	10.0	41,247	53	52.6	10.3	39,614
3023	1372 1373	North Kingstown	C	291	52.0	12.0	35,297	330	52.4	12.1	35,333
3024	1382 1383	North Providence		229	51.6	11.8	30,633	230	51.2	11.4	30,635
3025	1392 1393	North Smithfield	B	95	52.6	10.6	35,275	97	51.8	10.2	34,584
3026	1412 1413	Pawtucket	C	496	50.6	13.3	38,267	515	50.6	13.2	36,556
3027	1515	Union Fire District		6	55.1	12.9	43,920	6	54.1	11.9	42,622
3029	1452	Richmond		25	51.4	8.9	36,915	22	52.0	9.1	36,406
3030	1462 1463	Scituate	B	87	52.1	10.7	31,556	87	52.7	10.8	30,998
3031	1472 1473	Smithfield	C	87	52.9	12.0	36,972	85	52.2	11.6	36,160
3032	1492 1493	South Kingstown	B	322	52.7	13.5	38,054	321	52.2	13.1	37,020
3033	1532 1533	Tiverton	C	86	53.0	10.9	35,172	85	52.4	10.0	34,514
3034	1562	Warren	C	44	46.5	12.2	43,683	41	46.1	12.5	41,660
3036	1622 1623	Westerly		1	62.3	31.0	69,073	1	61.3	29.9	67,306
3037	1602	West Greenwich	C	21	47.1	8.5	40,644	18	48.9	10.3	39,579
3039	1632 1633	Woonsocket	B	326	51.9	12.6	33,371	337	51.9	12.1	32,776
3040	1073	Chariho School District	C	164	49.9	11.9	32,901	168	49.5	11.4	31,759
3041	1203	Foster/Glocester	B	50	52.1	12.0	33,474	51	51.6	11.3	33,033
3043	1336	Narragansett Housing	C	4	50.7	14.2	44,625	4	49.7	13.2	43,053
3045	1098	Coventry Lighting District	C	1	73.7	36.3	36,182	1	72.7	35.3	36,182
3046	1242	Hope Valley Fire	C	3	59.8	21.2	45,688	3	58.8	20.2	44,867
3050	1156	East Greenwich Housing	C	9	52.3	8.6	50,357	9	52.0	9.7	48,583
3051	1116	Cranston Housing	C	20	57.8	16.6	54,142	20	56.8	15.6	51,876
3052	1166	East Providence Housing	B	15	51.7	9.6	50,616	14	53.0	9.4	45,599
3053	1416	Pawtucket Housing	B	58	50.4	12.2	50,783	55	50.0	11.8	49,526
3056	1126	Cumberland Housing	C	12	48.6	9.3	44,946	12	47.6	8.3	43,185
3057	1306	Lincoln Housing	B	11	47.2	5.9	42,263	10	53.1	7.5	46,601
3059	1016	Bristol Housing		9	50.6	14.1	42,309	9	49.6	13.1	40,204
3065	1036	Burrillville Housing	B	4	43.7	9.3	48,174	4	42.7	8.3	42,355
3066	1386	North Providence Housing	B	6	56.2	9.7	43,613	5	52.7	10.6	45,584

Municipal Employees' Retirement System  
 State of Rhode Island  
 Actuarial Valuation – June 30, 2013

Table 9

Active Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Active Employees as of June 30, 2013				Active Employees as of June 30, 2012			
				Number	Average Age	Average Service	Average Salary	Number	Average Age	Average Service	Average Salary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
3067	1177	East Smithfield Water	C	4	59.1	9.9	44,943	5	55.0	7.7	43,775
3068	1227	Greenville Water	B	4	53.8	13.8	64,995	4	52.8	12.8	62,361
3069	1356	Newport Housing	C	30	52.0	12.7	48,493	30	51.6	11.3	46,206
3071	1566	Warren Housing	B	6	52.7	8.3	45,133	6	59.6	12.3	45,404
3072	1286	Johnston Housing		9	53.8	13.3	47,764	9	52.8	12.4	45,839
3077	1538	Tiverton Local 2670A	C	26	53.0	12.5	37,646	26	51.4	11.8	37,141
3078	1002 1003 1007 1009	Barrington COLA	C	175	52.0	12.3	42,009	177	51.9	12.2	41,026
3079	1096	Coventry Housing		14	51.9	8.1	41,602	14	50.9	7.1	38,846
3080	1496	South Kingstown Housing	C	4	55.2	6.8	40,795	5	55.4	5.3	33,891
3081	1403	N. RI Collaborative Adm. Services	C	28	50.4	9.8	31,068	29	49.2	8.4	30,418
3083	1616	West Warwick Housing	B	10	52.4	11.9	46,349	11	54.4	13.7	44,669
3084	1476	Smithfield Housing		3	50.4	16.5	45,041	3	49.4	15.5	42,597
3094	1478	Smithfield COLA	C	70	50.0	13.7	50,956	71	49.3	12.7	48,834
3096	1056	Central Falls Housing	C	21	45.2	8.1	42,385	21	43.7	7.0	41,355
3098	1293	Lime Rock Administrative Services		2	53.8	13.7	40,911	2	52.8	12.7	36,094
3099	1063	Central Falls Schools	C	129	49.4	10.3	34,031	129	49.2	9.9	34,374
3100	1023	Bristol/Warren Schools	B	120	51.8	11.8	36,334	116	53.4	13.4	36,437
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	161	51.6	11.7	33,000	160	50.9	11.0	32,764
3102	1712	Harrisville Fire District (ADMIN)	C	3	51.6	17.3	58,767	4	49.2	14.7	54,306
3103	1702	Albion Fire District (ADMIN)	C,5	---	---	---	---	---	---	---	---
3150	1159	East Greenwich Fire (ADMIN)	C	1	47.8	16.2	45,632	2	54.9	18.5	45,137
<b>All General Employee Units</b>				5,901	51.5	12.3	\$ 37,855	6,012	51.3	12.1	\$37,103
<b>Police &amp; Fire Units</b>											
4016	1285	Johnston Fire	D	55	36.5	6.6	\$ 56,143	46	37.9	7.1	\$57,394
4029	1454	Richmond Police	6	12	38.4	10.3	58,152	12	37.4	9.3	53,165
4031	1474	Smithfield Police	C,D	41	37.7	12.9	65,167	41	36.7	11.9	62,979
4042	1555	Valley Falls Fire	D	13	35.1	8.6	58,650	13	36.7	10.1	59,014
4047	1395 1435	North Smithfield Voluntary Fire	B,D	21	40.8	12.0	54,533	21	41.7	12.5	52,571
4050	1155	East Greenwich Fire	C,D	39	38.2	8.1	60,024	38	37.6	7.7	58,743
4054	1154	East Greenwich Police	C,D	33	42.1	10.9	60,923	31	42.6	12.1	59,877
4055	1375	North Kingstown Fire	C,D	60	42.6	15.7	63,669	60	41.6	15.1	57,878
4056	1374	North Kingstown Police	C,D	44	38.5	12.0	65,532	45	37.9	11.7	63,637
4058	1385	North Providence Fire	D	93	40.5	13.5	55,425	91	40.7	13.2	52,537
4059	1008	Barrington Fire (25)	C	19	34.7	6.9	54,895	16	35.4	7.7	56,824
4060	1004	Barrington Police	C,D	22	39.6	13.2	64,521	23	38.9	12.5	62,515
4061	1005	Barrington Fire (20)	C,D	3	52.7	27.3	65,000	5	52.5	27.5	66,453
4062	1564 1565	Warren Police & Fire	C,D	24	42.8	15.9	62,756	23	41.9	15.6	61,509
4063	1494	South Kingstown Police	B,1	49	39.3	11.3	58,448	47	39.5	11.5	58,342
4076	1394	North Smithfield Police	C,D	25	34.4	8.8	54,113	23	37.8	11.8	56,989
4077	1534	Tiverton Fire	C,D	32	36.9	9.6	52,349	32	36.5	8.9	50,519

Municipal Employees' Retirement System  
 State of Rhode Island  
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Table 9

Active Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Active Employees as of June 30, 2013				Active Employees as of June 30, 2012			
				Number	Average Age	Average Service	Average Salary	Number	Average Age	Average Service	Average Salary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
4082	1194	Foster Police	C,D	9	39.3	4.7	45,040	8	44.0	4.2	47,818
4085	1634	Woonsocket Police	C,D	87	36.8	10.1	58,789	94	36.2	9.8	56,284
4086	1084	Charlestown Police	C,D	19	40.9	15.3	67,174	20	40.5	15.2	65,246
4087	1264	Hopkinton Police	C,D,6	15	35.3	6.5	58,100	16	37.7	8.6	56,002
4088	1214	Glocester Police	C,D	16	42.6	13.6	61,070	16	41.6	12.6	57,349
4089	1604	West Greenwich Police/Rescue	C,D	13	44.8	10.7	56,285	13	45.8	12.1	54,254
4090	1034	Burrillville Police	C,D,6	21	42.4	13.2	60,154	18	42.1	14.6	57,477
4091	1148	Cumberland Rescue	C,D	18	42.1	12.6	55,130	18	41.2	11.6	54,862
4093	1635	Woonsocket Fire	C,D	109	40.8	14.9	62,400	111	39.7	13.8	58,320
4094	1015	Bristol Fire	D	1	56.5	12.5	50,562	1	55.5	11.5	49,330
4095	1135	Cumberland Hill Fire	C,D	13	37.5	8.7	51,242	13	38.2	9.7	48,131
4096	1014	Bristol Police	C,D	35	35.6	8.7	61,213	34	34.7	8.0	57,812
4098	1095	Coventry Fire	C,D	18	37.1	10.3	55,830	18	36.1	9.3	53,596
4099	1505	South Kingstown EMT	C,D	16	37.6	9.4	46,574	17	38.9	9.0	45,777
4101	1365	North Cumberland	C,D	13	48.3	17.6	55,577	13	47.3	16.6	52,161
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	46	40.6	10.2	56,436	48	39.1	9.2	51,768
4103	1255	Hopkins Hill Fire	C,D	12	49.8	12.0	50,329	12	48.8	11.0	48,139
4104	1114	Cranston Police	C,D,4	134	37.7	11.0	66,815	126	37.4	10.6	67,394
4105	1115	Cranston Fire	C,D,4	163	41.8	13.1	67,341	143	42.1	13.6	73,789
4106	1125	Cumberland Fire	B,D	13	46.1	12.9	49,849	14	45.5	12.6	46,841
4107	1305	Lincoln Rescue	C	17	40.7	12.5	51,998	18	39.3	11.7	49,746
4108	1344	New Shoreham Police	B,D	4	45.8	7.5	52,145	4	43.7	8.1	56,819
4109	1324	Middletown Police & Fire	C,D	51	33.2	5.6	56,793	50	32.2	4.7	53,153
4110	1715	Harrisville Fire District	C,D	5	40.6	11.4	57,398	5	39.6	10.4	53,789
4111	1705	Albion Fire District	C	4	45.7	14.6	47,749	4	44.7	13.6	46,721
1284	1284	Johnston Police		9	32.2	1.7	44,688	5	31.5	1.5	41,488
1465	1465	Smithfield Fire	C	9	32.4	3.5	42,796	4	36.5	6.4	50,996
<b>All Police &amp; Fire Units</b>				1,455	39.4	11.4	\$ 60,088	1,410	39.2	11.3	\$56,944
<b>All MERS Units</b>				7,356	49.1	12.2	\$ 42,252	7,422	49.0	12.0	\$41,260

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit in 2013 valuation.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

6 - Historically, Special plan provisions apply to this unit.

D - Municipality has adopted the "20-year" optional Police & Fire Plan

3 - Closed unit.

5 - This unit has no active members.

Retired Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Retirees and Beneficiaries As of June 30, 2013			Retirees and Beneficiaries As of June 30, 2012		
				Number	Average Age	Average Monthly Benefit	Number	Average Age	Average Monthly Benefit
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>General Employee Units</b>									
3002	1012 1019	Bristol	B	77	75.9	\$ 1,464	75	76.0	\$1,367
3003	1032 1033	Burrillville	C	97	73.3	1,131	89	72.9	1,085
3004	1052	Central Falls		36	72.9	1,194	31	73.5	1,101
3005	1082	Charlestown	C	11	73.2	1,661	11	72.3	1,661
3007	1112 1113	Cranston	B	568	73.5	1,189	556	73.8	1,186
3008	1122 1123	Cumberland		165	75.0	792	162	75.0	791
3009	1152 1153	East Greenwich	C	60	79.4	614	63	78.7	625
3010	1162 1163	East Providence	B	394	72.4	1,508	385	72.1	1,514
3011	1183	Exeter/West Greenwich	B	30	70.5	1,057	29	69.9	1,063
3012	1192 1193	Foster		23	71.8	678	21	73.3	693
3013	1212 1213	Glocester	C	32	70.6	967	31	69.7	954
3014	1262	Hopkinton	C	14	71.8	1,047	14	70.8	1,163
3015	1272 1273	Jamestown	C	33	69.4	1,333	32	67.9	1,351
3016	1282 1283	Johnston	C	201	74.0	1,111	201	73.5	1,101
3017	1302 1303	Lincoln		6	70.2	1,427	6	69.2	1,427
3019	1322 1323	Middletown	C	41	66.1	1,928	36	64.7	1,969
3021	1352 1353 1354	Newport	B	242	71.0	1,658	236	70.8	1,678
3022	1342 1343	New Shoreham	B	16	74.0	1,201	14	75.3	930
3023	1372 1373	North Kingstown	C	228	71.6	1,292	204	72.1	1,289
3024	1382 1383	North Providence		168	75.3	718	163	75.3	698
3025	1392 1393	North Smithfield	B	65	76.0	960	63	76.1	970
3026	1412 1413	Pawtucket	C	523	73.6	1,282	521	73.4	1,253
3027	1515	Union Fire District		1	63.9	1115.3	1	62.9	1115.3
3029	1452	Richmond		13	73.4	691	12	73.7	672
3030	1462 1463	Scituate	B	58	74.9	1,145	60	74.6	1,067
3031	1472 1473	Smithfield	C	79	77.7	757	79	77.0	737
3032	1492 1493	South Kingstown	B	161	72.1	1,311	156	71.9	1,324
3033	1532 1533	Tiverton	C	46	76.5	877	50	76.5	838
3034	1562	Warren	C	40	80.1	832	40	80.2	856
3036	1622 1623	Westerly		7	83.9	1,244	7	82.9	1,244
3037	1602	West Greenwich	C	16	67.9	1,427	15	67.3	1,353
3039	1632 1633	Woonsocket	B	347	74.7	1,050	344	74.7	1,052
3040	1073	Chariho School District	C	56	69.9	1,171	53	69.3	1,185
3041	1203	Foster/Glocester	B	29	73.1	945	28	72.5	933
3042	1528	Tiogue Fire & Lighting	C,5	1	65.3	155.7	---	---	---
3043	1336	Narragansett Housing	C	1	77.8	437	1	76.8	437
3045	1098	Coventry Lighting District	C	2	79.1	4,353	2	78.1	4,353
3046	1242	Hope Valley Fire	C	---	---	---	---	---	---
3050	1156	East Greenwich Housing	C	2	66.4	2,911	1	69.8	4,371
3051	1116	Cranston Housing	C	9	78.6	949	9	77.6	949
3052	1166	East Providence Housing	B	12	75.9	1,334	12	74.9	1,334
3053	1416	Pawtucket Housing	B	20	74.0	1,418	22	74.3	1,357
3056	1126	Cumberland Housing	C	4	77.6	1,563	4	76.6	1,442

Municipal Employees' Retirement System  
State of Rhode Island

Actuarial Valuation – June 30, 2013

Table 10

Retired Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Retirees and Beneficiaries As of June 30, 2013			Retirees and Beneficiaries As of June 30, 2012		
				Number	Average Age	Average Monthly Benefit	Number	Average Age	Average Monthly Benefit
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3057	1306	Lincoln Housing	B	7	69.8	1,598	6	78.3	1,105
3059	1016	Bristol Housing		5	79.1	1,069	5	78.1	1,069
3065	1036	Burrillville Housing	B	2	70.1	2,373	2	69.1	2,373
3066	1386	North Providence Housing	B	5	70.2	1,653	5	69.2	2,012
3067	1177	East Smithfield Water	C	3	73.2	993	3	72.2	993
3068	1227	Greenville Water	B	1	67.3	2,975	1	66.3	2,975
3069	1356	Newport Housing	C	27	69.2	1,693	28	68.1	1,735
3071	1566	Warren Housing	B	5	72.1	1,270	3	73.9	2,003
3072	1286	Johnston Housing		6	81.9	960	6	80.9	960
3077	1538	Tiverton Local 2670A	C	14	71.8	1,087	15	71.2	1,054
3078	1002 1003 1007 1009	Barrington COLA	C	124	74.9	1,140	117	75.4	1,097
3079	1096	Coventry Housing		8	79.6	535	8	78.6	535
3080	1496	South Kingstown Housing	C	---	---	---	---	---	---
3081	1403	N. RI Collaborative Adm. Services	C	11	66.9	1,242	11	65.9	1,242
3083	1616	West Warwick Housing	B	5	75.4	1,215	4	80.6	997
3084	1476	Smithfield Housing		---	---	---	---	---	---
3094	1478	Smithfield COLA	C	33	67.8	1,616	32	66.6	1,800
3096	1056	Central Falls Housing	C	11	72.5	1,294	11	71.5	1,294
3098	1293	Lime Rock Administrative Services		1	61.0	1211.8	1	60.0	1211.8
3099	1063	Central Falls Schools	C	56	68.8	1,020	55	68.7	1,027
3100	1023	Bristol/Warren Schools	B	99	70.3	1,173	89	70.4	1,051
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	35	67.1	1,860	36	66.3	1,884
3102	1712	Harrisville Fire District (ADMIN)	C	---	---	---	---	---	---
3103	1702	Albion Fire District (ADMIN)	C,5	---	---	---	---	---	---
3150	1159	East Greenwich Fire (ADMIN)	C	1	64.1	1771.0	---	---	---
<b>All General Employee Units</b>				<b>4,393</b>	<b>73.3</b>	<b>1,207</b>	<b>4,277</b>	<b>73.2</b>	<b>\$ 1,196</b>
<b>Police and Fire Units</b>									
4016	1285	Johnston Fire	D	2	52.7	\$ 2,998	2	51.7	\$2,998
4029	1454	Richmond Police	6	1	52.8	2,199	1	51.8	2,199
4031	1474	Smithfield Police	C,D	5	52.2	2,723	5	51.2	2,723
4042	1555	Valley Falls Fire	D	8	57.3	2,495	8	58.6	2,300
4047	1395 1435	North Smithfield Voluntary Fire	B,D	9	62.1	2,663	8	60.8	2,464
4050	1155	East Greenwich Fire	C,D	32	60.6	2,558	32	59.6	2,546
4054	1154	East Greenwich Police	C,D	28	61.0	3,064	26	60.9	3,025
4055	1375	North Kingstown Fire	C,D	67	65.4	2,472	64	65.6	2,411
4056	1374	North Kingstown Police	C,D	35	57.6	2,995	36	57.1	3,129
4058	1385	North Providence Fire	D	67	56.6	2,491	67	56.1	2,472
4059	1008	Barrington Fire (25)	C	1	67.0	4,431	1	66.0	4,431
4060	1004	Barrington Police	C,D	26	68.1	2,177	26	67.1	2,177
4061	1005	Barrington Fire (20)	C,D	35	69.3	1,817	33	69.5	1,728
4062	1564 1565	Warren Police & Fire	C,D	21	66.9	2,396	24	66.6	2,141
4063	1494	South Kingstown Police	B,1	48	62.9	2,825	46	63.1	2,821
4073	1464	Scituate Police	5	1	82.6	301	1	81.6	301
4076	1394	North Smithfield Police	C,D	19	61.0	2,646	16	61.9	2,548



**Retired Member Statistics**

Old Unit Number	New Unit Number	Unit	Code(s)	Retirees and Beneficiaries As of June 30, 2013			Retirees and Beneficiaries As of June 30, 2012		
				Number	Average Age	Average Monthly Benefit	Number	Average Age	Average Monthly Benefit
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4077	1534	Tiverton Fire	C,D	24	60.8	2,021	25	59.1	1,998
4082	1194	Foster Police	C,D	9	57.6	2,244	9	56.6	2,244
4085	1634	Woonsocket Police	C,D	68	49.5	2,837	62	48.8	2,882
4086	1084	Charlestown Police	C,D	12	57.6	3,080	10	56.9	3,097
4087	1264	Hopkinton Police	C,D,6	13	53.3	2,935	9	55.9	3,178
4088	1214	Glocester Police	C,D	11	61.9	1,864	11	60.9	1,864
4089	1604	West Greenwich Police/Rescue	C,D	6	55.1	2,889	5	54.2	2,765
4090	1034	Burrillville Police	C,D,6	16	60.9	2,707	16	59.9	2,707
4091	1148	Cumberland Rescue	C,D	6	52.0	1,908	5	51.7	2,290
4093	1635	Woonsocket Fire	C,D	28	50.2	2,733	27	49.3	2,730
4094	1015	Bristol Fire	D	2	62.7	723	2	61.7	723
4095	1135	Cumberland Hill Fire	C,D	11	56.9	2,750	10	56.6	2,722
4096	1014	Bristol Police	C,D	1	48.4	3,006	1	47.4	3,006
4098	1095	Coventry Fire	C,D	7	54.6	2,209	7	53.6	2,209
4099	1505	South Kingstown EMT	C,D	2	46.4	2,461	2	45.4	2,461
4101	1365	North Cumberland	C,D	6	57.4	1,861	6	56.4	1,861
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	13	57.7	2,575	13	56.7	2,575
4103	1255	Hopkins Hill Fire	C,D	1	45.6	1,736	1	44.6	1,736
4104	1114	Cranston Police	C,D,4	12	49.2	3,419	13	48.0	3,458
4105	1115	Cranston Fire	C,D,4	9	49.2	3,241	9	48.2	3,241
4106	1125	Cumberland Fire	B,D	7	64.0	2,878	6	65.0	2,839
4107	1305	Lincoln Rescue	C	6	53.5	1,769	6	52.5	1,769
4108	1344	New Shoreham Police	B,D	2	52.2	3,223	2	51.2	3,223
4109	1324	Middletown Police & Fire	C,D	---	---	---	---	---	---
4110	1715	Harrisville Fire District	C,D	---	---	---	---	---	---
4111	1705	Albion Fire District	C	1	71.1	1,901	1	70.1	1,901
1284	1284	Johnston Police		---	---	---	---	---	---
1465	1465	Smithfield Fire	C	---	---	---	---	---	---
<b>All Police &amp; Fire Units</b>				678	59.0	\$ 2,579	654	58.7	\$2,557
<b>All MERS Units</b>				5,071	71.4	\$ 1,391	4,931	71.3	\$1,376

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit in 2013 valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.

**Distribution of Active Members by Age and by Years of Service (General Employees)  
 As of June 30, 2013**

Attained Age	Years of Credited Service												Total Count & Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	16 \$28,370	12 \$26,918	7 \$32,151	4 \$21,151	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	39 \$27,861
25-29	37 \$32,953	19 \$33,101	25 \$33,316	14 \$33,848	10 \$35,052	38 \$35,735	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	143 \$34,010
30-34	26 \$37,315	29 \$33,232	24 \$31,492	17 \$37,857	16 \$35,188	93 \$40,007	40 \$39,758	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	245 \$37,581
35-39	26 \$34,603	28 \$38,225	17 \$36,352	19 \$42,163	17 \$40,993	80 \$40,521	73 \$43,679	14 \$46,246	0 \$0	0 \$0	0 \$0	0 \$0	274 \$40,743
40-44	42 \$29,742	31 \$35,123	22 \$27,840	29 \$30,901	30 \$37,497	149 \$39,466	126 \$42,082	54 \$43,155	36 \$45,597	0 \$0	0 \$0	0 \$0	519 \$38,779
45-49	42 \$34,709	55 \$31,469	45 \$31,203	48 \$34,664	35 \$36,275	231 \$34,957	237 \$39,807	95 \$48,794	124 \$49,789	40 \$47,944	2 \$58,152	0 \$0	954 \$39,705
50-54	45 \$30,718	41 \$24,715	42 \$36,352	36 \$30,304	45 \$32,187	274 \$33,068	359 \$35,302	182 \$39,876	119 \$42,425	64 \$49,850	20 \$47,794	2 \$52,392	1,229 \$36,414
55-59	33 \$39,411	25 \$36,199	29 \$31,522	25 \$33,736	32 \$36,080	224 \$33,871	383 \$33,889	242 \$39,247	170 \$40,481	82 \$47,928	29 \$51,311	9 \$54,925	1,283 \$37,394
60-64	14 \$32,904	18 \$29,022	14 \$26,185	23 \$37,632	17 \$40,722	113 \$37,190	181 \$36,118	168 \$35,765	147 \$38,199	83 \$43,364	19 \$50,597	19 \$55,754	816 \$37,856
65-69	5 \$36,261	12 \$26,231	9 \$23,992	5 \$42,958	14 \$37,817	55 \$35,413	91 \$38,871	69 \$36,892	75 \$37,208	35 \$44,945	18 \$56,200	11 \$52,054	399 \$38,683
70 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
<b>Total</b>	<b>286</b> \$33,478	<b>270</b> \$31,708	<b>234</b> \$31,931	<b>220</b> \$34,445	<b>216</b> \$36,248	<b>1,257</b> \$35,858	<b>1,490</b> \$37,076	<b>824</b> \$39,955	<b>671</b> \$41,955	<b>304</b> \$46,745	<b>88</b> \$51,513	<b>41</b> \$54,415	<b>5,901</b> \$37,854

**Distribution of Active Members by Age and by Years of Service (Police & Fire)  
 As of June 30, 2013**

Attained Age	Years of Credited Service												Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	24 \$41,626	17 \$43,160	7 \$50,836	2 \$55,251	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	50 \$43,982
25-29	29 \$42,025	41 \$45,546	39 \$48,589	21 \$52,230	29 \$58,081	36 \$59,124	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	195 \$50,722
30-34	18 \$42,814	21 \$44,737	9 \$50,818	10 \$53,649	18 \$57,764	128 \$59,289	36 \$61,946	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	240 \$56,511
35-39	3 \$47,168	5 \$40,602	9 \$48,223	9 \$52,936	11 \$56,795	73 \$58,681	107 \$62,528	18 \$67,044	0 \$0	0 \$0	0 \$0	0 \$0	235 \$59,833
40-44	6 \$42,033	3 \$41,186	2 \$54,506	1 \$54,029	1 \$54,381	53 \$57,122	97 \$63,033	90 \$67,671	26 \$69,077	0 \$0	0 \$0	0 \$0	279 \$63,158
45-49	1 \$44,997	3 \$45,476	5 \$45,630	1 \$71,452	5 \$58,588	22 \$59,409	48 \$61,541	59 \$66,337	72 \$68,286	29 \$73,762	0 \$0	0 \$0	245 \$65,324
50-54	4 \$58,637	3 \$46,997	3 \$61,232	3 \$62,823	0 \$0	7 \$63,150	19 \$60,915	31 \$65,659	49 \$67,221	35 \$70,993	2 \$98,395	0 \$0	156 \$66,397
55-59	0 \$0	0 \$0	0 \$0	1 \$64,832	0 \$0	2 \$67,362	5 \$60,607	5 \$64,734	10 \$65,664	10 \$71,987	4 \$83,472	1 \$55,709	38 \$68,220
60-64	0 \$0	0 \$0	0 \$0	1 \$52,786	3 \$64,347	0 \$0	1 \$39,152	1 \$70,399	3 \$71,534	0 \$0	0 \$0	2 \$71,650	11 \$64,844
65-69	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	2 \$64,145	0 \$0	1 \$53,295	1 \$73,843	2 \$85,051	0 \$0	6 \$70,922
70 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
Total	85 \$43,078	93 \$44,565	74 \$49,501	49 \$54,119	67 \$58,048	321 \$58,917	315 \$62,275	204 \$66,866	161 \$67,894	75 \$72,234	8 \$87,598	3 \$66,336	1,455 \$60,088

**Membership Data (General Employee Units)**

	<u>June 30, 2013</u>	<u>June 30, 2012</u>
	(1)	(2)
1. Active members		
a. Number	5,901	6,012
b. Number vested	3,418	3,376
c. Total payroll supplied by ERSRI	\$223,380,413	\$223,065,778
d. Average salary	\$37,855	\$37,103
e. Average age	51.5	51.3
f. Average service	12.3	12.1
2. Inactive members		
a. Number	2,545	2,506
3. Service retirees		
a. Number	3,718	3,611
b. Total annual benefits	\$56,265,599	\$54,308,004
c. Average annual benefit	\$15,133	\$15,040
d. Average age	73.6	73.6
4. Disabled retirees		
a. Number	252	255
b. Total annual benefits	\$3,610,551	\$3,505,284
c. Average annual benefit	\$14,328	\$13,746
d. Average age	64.5	64.7
5. Beneficiaries and spouses		
a. Number	423	411
b. Total annual benefits	\$3,772,797	\$3,552,522
c. Average annual benefit	\$8,919	\$8,644
d. Average age	75.6	75.3

**Membership Data (Police & Fire Units)**

	<u>June 30, 2013</u>	<u>June 30, 2012</u>
	(1)	(2)
1. Active members		
a. Number	1,455	1,410
b. Number vested	766	710
c. Total payroll supplied by ERSRI	\$87,428,024	\$83,164,238
d. Average salary	\$60,088	\$58,982
e. Average age	39.4	39.2
f. Average service	11.4	11.3
2. Inactive members		
a. Number	148	129
3. Service retirees		
a. Number	485	471
b. Total annual benefits	\$15,984,731	\$15,262,493
c. Average annual benefit	\$32,958	\$32,404
d. Average age	59.8	59.7
4. Disabled retirees		
a. Number	122	121
b. Total annual benefits	\$4,028,540	\$3,982,149
c. Average annual benefit	\$33,021	\$32,910
d. Average age	53.6	52.7
5. Beneficiaries and spouses		
a. Number	71	62
b. Total annual benefits	\$968,747	\$826,401
c. Average annual benefit	\$13,644	\$13,329
d. Average age	62.9	62.7

**Membership Data (All MERS Units)**

	<u>June 30, 2013</u>	<u>June 30, 2012</u>
	(1)	(2)
1. Active members		
a. Number	7,356	7,422
b. Number vested	4,184	4,086
c. Total payroll supplied by ERSRI	\$310,808,437	\$306,230,016
d. Average salary	\$42,252	\$41,260
e. Average age	49.1	49.0
f. Average service	12.1	12.0
2. Inactive members		
a. Number	2,693	2,635
3. Service retirees		
a. Number	4,203	4,082
b. Total annual benefits	\$72,250,330	\$69,570,497
c. Average annual benefit	\$17,190	\$17,043
d. Average age	72.0	72.0
4. Disabled retirees		
a. Number	374	376
b. Total annual benefits	\$7,639,091	\$7,487,433
c. Average annual benefit	\$20,425	\$19,913
d. Average age	61.0	60.8
5. Beneficiaries and spouses		
a. Number	494	473
b. Total annual benefits	\$4,741,544	\$4,378,923
c. Average annual benefit	\$9,598	\$9,258
d. Average age	73.8	73.7

## Summary of Assumptions and Methods

### I. Valuation Date

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

### II. Actuarial Cost Method

The actuarial valuation uses the Entry Age actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial accrued liability (UAAL).

The employer normal cost rate is the total normal cost rate, less the member contribution rate. The total normal cost rate is the level percentage-of-pay contribution which would theoretically pay for all benefits if it had been made each year from the inception of the plan and if there had never been any changes of benefits, any changes of assumptions or methods, or any experience gains or losses. The normal costs are determined on an individual basis.

The actuarial accrued liability is the difference between the actuarial present value of all future benefits and the actuarial present value of future normal costs. It is the amount to which the normal costs would have accumulated under the assumptions described in the preceding paragraph. The unfunded actuarial accrued liability (UAAL) is the difference between the actuarial accrued liability and the actuarial value of assets.

The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. The UAAL is being amortized over the remainder of a closed 25-year period from June 30, 2010. The employer contribution rate determined by this valuation will not be effective until two years after the valuation date. The determination of the contribution rate reflects this deferral. The UAAL and covered payroll are projected forward for two years, and we then determine the amortization charge required to amortize the UAAL over the remaining amortization period from that point. In projecting the UAAL, we increase the UAAL for interest at the assumed rate and we decrease it for the amortization payments. The amortization payments for these two years are determined by subtracting the current employer normal cost from the known contribution rates for these years, based on the two prior actuarial valuations. Contributions are assumed to be made monthly throughout the year.

III. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continue to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses. The actuarial value is calculated in the aggregate for all units combined, and then it is allocated to each unit in proportion to that unit's market value.

IV. Actuarial Assumptions

A. Economic Assumptions

1. Investment return: 7.50% per year, compounded annually, composed of an assumed 2.75% inflation rate and a 4.75% net real rate of return. This rate represents the assumed return, net of all investment and administrative expenses.
2. Salary increase rate: For general employees, the sum of (i) a 4.00% wage inflation assumption (composed of a 2.75% price inflation assumption and a 1.25% additional general increase), and (ii) a service-related component as shown below:

General Employees		
Years of Service	Service-Related Component	Total Increase
0	4.00%	8.00%
1	3.00	7.00
2	2.75	6.75
3	2.50	6.50
4	2.25	6.25
5	2.00	6.00
6	1.25	5.25
7	0.75	4.75
8-9	0.50	4.50
10-14	0.25	4.25
15 or more	0.00	4.00



For police/fire employees, the sum of (i) a 4.25% wage inflation assumption (composed of a 2.75% price inflation assumption and a 1.50% additional general increase), and (ii) a service-related component as shown below:

Police/Fire Employees		
Years of Service	Service-Related Component	Total Increase
0	10.00%	14.25%
1	9.00	13.25
2	6.00	10.25
3	3.00	7.25
4	2.50	6.75
5	2.00	6.25
6	0.50	4.75
7	0.50	4.75
8	0.25	4.50
9	0.25	4.50
10 or more	0.00	4.25

Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period year following the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption. For employees with less than one year of service, the reported rate of pay is used rather than the fiscal year salary paid.

3. Payroll growth rate: In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 3.75% per year. This increase rate is solely due to the effect of wage inflation on salaries, with no allowance for future membership growth.
4. Post-retirement Benefit Increase: Post-retirement benefit increases are assumed to be 2%, per annum for all units. The actual COLA will be determined based on the plan's five-year average investment rate of return minus 5.5% and will range from zero to 4.0%. It is known that the COLA for calendar years 2013 and 2014 will be 0.0% and 0.67% respectively, and this has been reflected in the valuation.

B. Demographic Assumptions

1. Post-retirement mortality rates:
  - a. Male employees: 115% of the RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA from 2000.
  - b. Female employees: 95% of the RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA from 2000.
  - c. Disabled males – 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits.
  - d. Disabled females – 60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits.
2. Pre-retirement mortality (combined ordinary and duty):
  - a. Male employees: 75% of RP-2000 Combined Healthy for Males with White Collar adjustments.
  - b. Female employees: 75% of RP-2000 Combined Healthy for Females with White Collar adjustments.

Sample rates are shown below:

Number of Deaths per 100		
Age	Males	Females
25	0.03	0.02
30	0.03	0.02
35	0.04	0.03
40	0.07	0.05
45	0.10	0.08
50	0.15	0.12
55	0.25	0.19
60	0.42	0.35
65	0.83	0.65
70	1.45	1.14

3. Disability rates: Sample rates per 1,000 active members are shown below. Ordinary disability rates are not applied to members eligible for unreduced retirement.

Age	Number of Disabilities per 1,000					
	General Employees, Ordinary, Males	General Employees, Accidental, Males	General Employees, Ordinary, Females	General Employees, Accidental, Females	Police & Fire, Ordinary, Males and Females	Police & Fire, Accidental, Males and Females
25	0.63	0.23	0.27	0.08	0.43	1.70
30	0.77	0.28	0.33	0.09	0.55	2.20
35	1.05	0.38	0.45	0.12	0.73	2.90
40	1.54	0.55	0.66	0.18	1.10	4.40
45	2.52	0.90	1.08	0.29	1.80	7.20
50	4.27	1.53	1.83	0.49	3.03	12.10
55	7.07	2.53	3.03	0.81	3.03	12.10
60	9.87	3.53	4.23	1.13	3.03	12.10
65	0.00	0.00	0.00	0.00	3.03	12.10

4. Termination rates (for causes other than death, disability, or retirement) are a function of the member's service. Termination rates are not applied to members eligible for retirement. Rates are shown below:

Service	Male General Employees	Female General Employees	Police & Fire, Males & Females
0	0.1750	0.1800	0.1000
1	0.1087	0.1143	0.0528
2	0.0922	0.0973	0.0481
3	0.0778	0.0824	0.0436
4	0.0655	0.0695	0.0394
5	0.0552	0.0584	0.0354
6	0.0465	0.0491	0.0316
7	0.0394	0.0412	0.0281
8	0.0337	0.0348	0.0249
9	0.0293	0.0296	0.0219
10	0.0260	0.0255	0.0191
11	0.0236	0.0223	0.0166
12	0.0220	0.0199	0.0143
13	0.0209	0.0181	0.0123
14	0.0204	0.0169	0.0105
15	0.0201	0.0159	0.0090
16	0.0200	0.0152	0.0077
17	0.0198	0.0145	0.0067
18	0.0195	0.0137	0.0059
19	0.0187	0.0127	0.0000
20	0.0175	0.0112	0.0000
21	0.0156	0.0092	0.0000
22	0.0129	0.0065	0.0000
23	0.0092	0.0030	0.0000
24	0.0044	0.0000	0.0000

5. Retirement Rates: Separate male and female rates for general employees. For members who reach 30 years of service before age 58, service-based rates are used. For other members, age-based rates are used.

Because of the enactment of the RIRSA in 2011, the retirement assumption was modified for members not eligible for retirement by July 1, 2012. Members who would have been assumed to retire at an earlier age under the rules in effect before the enactment of the provision changes are assumed to retire when first eligible for an unreduced benefit. This demand is recognized by adding a 10% probability for every year the member has been deferred.

General Employees							
Males				Females			
Service (00/30)		Age (58/10)		Service (00/30)		Age (58/10)	
Service	Ret. Rate	Age	Ret. Rate	Service	Ret. Rate	Age	Ret. Rate
30	30.0%	58	12.0%	30	30.0%	58	12.0%
31	30.0%	59	10.0%	31	25.0%	59	10.0%
32	25.0%	60	10.0%	32	10.0%	60	10.0%
33	25.0%	61	10.0%	33	10.0%	61	10.0%
34	25.0%	62	30.0%	34	10.0%	62	20.0%
35	25.0%	63	20.0%	35	15.0%	63	15.0%
36	25.0%	64	20.0%	36	20.0%	64	15.0%
37	25.0%	65	20.0%	37	25.0%	65	20.0%
38	35.0%	66	25.0%	38	25.0%	66	25.0%
39	50.0%	67	25.0%	39	25.0%	67	25.0%
40	100.0%	68	25.0%	40	100.0%	68	25.0%
		69	30.0%			69	25.0%
		70	30.0%			70	20.0%
		71	30.0%			71	20.0%
		72	30.0%			72	20.0%
		73	30.0%			73	20.0%
		74	30.0%			74	20.0%
		75	100.0%			75	100.0%

5. Retirement Rates (continued): Unisex, service based rates are used for police and fire. Rates depend on whether the unit has elected the optional 20-year retirement provisions. All members are assumed to retire upon reaching age 65 with at least ten years of service.

Police and Fire		
Service	Units with the Optional 20-year retirement election	Units without the Optional 20-year retirement election
20	12.0%	
21	10.0%	
22	10.0%	
23	10.0%	
24	12.0%	
25	14.0%	50.0%
26	16.0%	16.0%
27	18.0%	18.0%
28	20.0%	20.0%
29	20.0%	20.0%
30+	35.0%	35.0%

100% of members eligible to retire as of June 30, 2012 are assumed to retire once they reach 35 years of service. All members not eligible to retire as of June 30, 2012 are assumed retire at SSNRA, if eligible.

For members with 10 or more years of contributory service on June 30, 2012 and that reach their original retirement date within three years of June 30, 2012, 5% are assumed to retire upon first attainment of their original retirement date and receive their benefits accrued as of June 30, 2012.

6. Reduced retirement rates: No early retirements are assumed for police and fire. Rates for general employees are based on the years from Retirement Eligibility for unreduced benefits, as shown below:

Years from Normal Retirement Age	Ret. Rate
5	2%
4	2%
3	2%
2	3%
1	4%

C. Other Assumptions

1. Valuation payroll (used for determining the amortization contribution rate): Prior aggregate fiscal year payroll projected forward one year using the overall payroll growth rate.
2. Percent married: 80% of employees are assumed to be married.
3. For the special post-retirement police and fire survivor benefit, we have assumed 80% of members will have a spouse at the time of retirement and 10% of those members would choose option 1 or option 2.
4. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.
5. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity. The spousal annuity death benefit for vested married participants is valued using optional form conversion factors based on a unisex mortality table.
6. For active death benefits, the liability is initially calculated based on the ordinary death benefit provisions, and then a 7.5% load is applied to account for duty related benefits.
7. Percent electing deferred termination benefit: Vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.
8. Recovery from disability: None assumed.
9. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.
10. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at the first age at which unreduced benefits are available.
11. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.
12. Inactive members: Liabilities for inactive members are approximated as a multiple of their member contribution account balances. For nonvested inactive members, the multiple is 1.0. For vested inactive members, the multiple is 8.0 for members with 25 or more years of service, 3.0 for vested inactive members age



45 or older with less than 25 years of service, and 1.0 for other vested inactive members younger than age 45.

13. Decrement timing: For all members, decrements are assumed to occur at the middle of the year.
14. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
15. Decrement relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
16. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
17. Benefit Service: All members are assumed to accrue one year of eligibility service each year.
18. All calculations were performed without regard to the compensation limit in IRC Section 401(a)(17) and the benefit limit under IRC Section 415.

#### V. Participant Data

Participant data was supplied on electronic files. There were separate files for (i) active and inactive members, and (ii) members and beneficiaries receiving benefits.

The data for active members included name, identification number, sex, a code indicating whether the member was active or inactive, date of birth, service, salary, unit indicator, date of last contribution, accumulated member contributions without interest, accrued benefit multiplier as of June 30, 2012, Final Average Compensation as of June 30, 2012, and the Rhode Island Retirement Security Act Retirement Date. For retired members and beneficiaries, the data included date of birth, sex, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

Salary supplied for the current year was based on the earnings for the year preceding the valuation date. This salary was adjusted by the salary increase rate for one year. However, for members with less than one year of service, the current rate of salary was used. This salary was adjusted by the salary increase rate for one year.

In defining who was an active member, members with a date of last contribution in the final quarter of the fiscal year were considered active. Otherwise, the member was defined as inactive.

Beneficiary data for police and fire employees was completed, based on the Age Difference stated above, if the information was not originally supplied on the electronic files.

To correct for incomplete and inconsistent data, we first attempted to pull data from prior valuation files and then made general assumptions to complete the rest. These had no material impact on the results presented.

## **Summary of Benefit Provisions**

1. Authority: The Municipal Employees' Retirement System (MERS) covers employees of certain participating Rhode Island municipalities and other local governmental units, such as housing authorities, water districts, etc. Benefits are described in Rhode Island General Laws, Title 45, Chapters 19, 19.1, 21, 21.1, 21.2, and 21.3.
2. Plan Year: A twelve-month period ending June 30th.
3. Administration: MERS is administered by the State of Rhode Island Retirement Board. However, the State Treasurer is responsible for the investment of the trust assets, including the establishment of the asset allocation policy.
4. Type of Plan: MERS is a qualified governmental defined benefit retirement plan. Separate contribution rates are determined for each participating governmental unit. For Governmental Accounting Standards Board purposes, it is an agent multiple-employer plan.
5. Eligibility: General employees, police officers and firefighters employed by electing municipalities participate in MERS. Teachers and administrators are covered by the separate Employees' Retirement System of Rhode Island, but other school employees may be covered by MERS. Eligible employees become members at their date of employment. Anyone employed by a municipality at the time the municipality joins MERS may elect not to be covered. Elected officials may opt to be covered by MERS. Employees covered under another plan maintained by the municipality may not become members of MERS. Police officers and/or firefighters may be designated as such by the municipality, in which case the special contribution and benefit provisions described below will apply to them, or they may be designated as general employees with no special benefits. Members designated as police officers and/or firefighters are treated as belonging to a unit separate from the general employees, with separate contribution rates applicable.

6. Employee Contributions: Effective July 1, 2012, General employees contribute 1.00% of their salary per year, and police officers and firefighters contribute 7.00%. In addition, if the municipality has elected one of the optional cost-of-living provisions, an additional member contribution of 1.00% of salary is required. The municipality, at its election, may choose to “pick up” the members’ contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h).
7. Salary: Salary includes the member's base earnings plus any payments under a regular longevity or incentive plan. Salary excludes overtime, unused sick and vacation leave, severance pay, and other extraordinary compensation. Certain amounts that are excluded from taxable wages, such as amounts sheltered under a Section 125 plan or amounts picked up by the employer under IRC Section 414(h), are not excluded from salary.
8. Employer Contributions: Each participating unit’s contribution rate is determined actuarially. Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation.
9. Service: Employees receive credit for service while a member. In addition, a member may purchase credit for certain periods by making an additional contribution to purchase the additional service. Special rules and limits govern the purchase of additional service and the contribution required.
10. Final Average Compensation (FAC): Prior to July 1, 2012 and for general employee members eligible to retire as of June 30, 2012, the average was based on the member’s highest three consecutive annual salaries. Effective July 1, 2012, the average was based on the member's highest five consecutive annual salaries. Once a member retires or is terminated, the applicable FAC will be the greater of the member’s highest three year FAC as of July 1, 2012 or the five year FAC as of the retirement/termination date. Monthly benefits are based on one-twelfth of this amount.

11. Retirement:

I. General employees: Eligibility

- a. Members with less than five years of contributory service as of June 30, 2012 and members hired on or after that date are eligible for retirement on or after their Social Security normal retirement age.
- b. Members who had at least five years of contributory service as of June 30, 2012 will be eligible for retirement at an individually determined age. This age is the result of interpolating between the member's prior Retirement Date, described in Section (e) below, and the retirement age applicable to members hired after June 30, 2012 in (a) above. The interpolation is based on service as of June 30, 2012 divided by projected service at the member's prior Retirement Date. The minimum retirement age is 59.
- c. Members with 10 or more years of contributory service on June 30, 2012 may choose to retire at their prior Retirement Date if they continue to work and contribute until that date. If option is elected, the retirement benefit will be calculated using the benefits accrued as of June 30, 2012, i.e., the member will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.
- d. A member who is within five years of reaching their retirement eligibility date, as described in this section, and has 20 or more years of service, may elect to retire at any time with an actuarially reduced benefit.
- e. Prior to July 1, 2012, members were eligible for retirement on or after age 58 if they had credit for 10 or more years of service, or at any age if they had credit for at least 30 years of service. Members eligible to retire before July 1, 2012 were not impacted by the changes to retirement eligibility above.

II. General employees: Monthly Benefit:

- a. 2.00% of the member's monthly FAC for each year of service prior to July 1, 2012 and 1.00% of the member's monthly FAC for each year of service after July 1, 2012. The benefit cannot exceed 75% of the member's monthly FAC.

III. Police and Fire employees: Eligibility

- a. Members are eligible to retire when they are at least 55 years old and have a minimum of 25 years of contributing service. Members with less than 25 years of contributing service are eligible for retirement on or after their Social Security normal retirement age.
- b. Members who, as of June 30, 2012, had at least 10 years of contributing service, had attained age 45, and had a prior Retirement Date (described in Section (e)) before age 52 may retire at age 52.
- c. Active members on June 30, 2012 may choose to retire at their prior Retirement Date if they continue to work and contribute until that date. If option is elected, the retirement benefit will be calculated using the benefits accrued as of June 30, 2012, i.e., the member will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.
- d. A member who is within five years of reaching their retirement eligibility date, as described in this section, and has 20 or more years of service, may elect to retire at any time with an actuarially reduced benefit.
- e. Prior to July 1, 2012, members designated as police officers or firefighters were eligible for retirement at or after age 55 with credit for at least 10 years of service or at any age with credit for 25 or more years of service. Members were also eligible to retire and receive a reduced benefit if they are at least age 50 and have at least 20 years of service. If the municipality elected to adopt the 20-year retirement provisions for police officers and/or firefighters, then such a member was eligible to retire at any age with 20 or more years of service. Members eligible to retire before July 1, 2012 were not impacted by the changes to retirement eligibility above.

- IV. Police and Fire employees: Monthly Benefit
- a. 2.00% of the member's monthly FAC for each year of service, up to 37.5 years (75% of FAC maximum).
  - b. If the optional 20-year retirement provisions were adopted by the municipality prior to July 1, 2012: 2.50% of the member's monthly FAC for each year of service prior to July 1, 2012 and 2.00% of the member's monthly FAC for each year of service after July 1, 2012. The benefit cannot exceed 75% of the member's monthly FAC.
- V. Payment Form: Benefits are paid as a monthly life annuity. Optional forms of payment are available; see below.
- VI. Death benefit:
- a. After retirement, death benefits are based on the form of annuity elected. If no option is elected, i.e., if payments are made as a life annuity, there is a minimum death benefit equal to the sum of the member's contributions without interest, less the sum of the monthly benefit payments made before the member's death. In addition, a lump-sum death benefit is payable upon the death of any retired member, regardless of option elected. This lump sum is equal to a percentage of the lump-sum death benefit that was available to the member at the time of retirement. The percentage is 100% in the first year of retirement, 75% in the second year, 50% in the third year, and 25% in the fourth and subsequent years of retirement. However, in no event will the lump sum death benefit be less than \$4,000.
  - b. Special Police/Fire Death Benefit: A member that does not elect an optional form of payment at retirement will be eligible the active member death benefit, which is an annuity of 30% of the member's salary that will be paid to the member's spouse upon death, for life or until remarriage. Children's benefits may also be payable.

12. Disability Retirement

- a. Eligibility: A member is eligible for a disability retirement provided he/she has credit for at least five years of service or if the disability is work-related. Members are not eligible for an ordinary disability benefit if they are eligible for unreduced retirement.
- b. Ordinary Disability Benefit: The benefit payable under the retirement formula, using FAC and service at the time of disability, but not less than 10 years of service.
- c. Occupational Disability Benefit: An annual annuity equal to two-thirds of salary at the time of disability.
- d. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump-sum to the member's beneficiary. All alternative forms of payment except for the Social Security Option are permitted in the case of disability retirement.

13. Deferred Termination Benefit

- a. Eligibility: A member with at least ten years of service is vested. Effective July 1, 2012, a member with at least 5 years of service is vested. A vested member who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.
- b. Monthly Benefit: The monthly benefit is based on the retirement formula described above. Both FAC and service are determined at the time the member leaves active employment. Benefits may commence at Social Security normal retirement age provided that the member has met the requirements for a retirement benefit.
- c. Payment Form: The same as for Retirement above.
- d. Death Benefit before Retirement: A member who dies after leaving active service but before retiring is entitled to receive a benefit as described below in Item 15.
- e. Death Benefit after Retirement: The same as for Retirement above.



14. Withdrawal (Refund) Benefit

- a. Eligibility: All members leaving covered employment with less than ten years (5 years, effective July 1, 2012) of service are eligible. Optionally, vested members (described in Item 13, above) may withdraw their accumulated contributions in lieu of the deferred benefits otherwise due.
- b. Benefit: The member who withdraws receives a lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

15. Death Benefit of Active or Inactive Members

- a. Eligibility: Death must have occurred while an active member or while an inactive, non-retired member. The basic benefit plus the lump-sum benefit are paid on behalf of an active, general employee, and the special police/fire benefit and the lump-sum benefit are paid on behalf of an active police officer or firefighter. If the death was due to accidental, duty-related causes, the accidental death benefit is paid regardless of whether the employee is a general employee, a police officer, or a firefighter. Inactive members receive a refund of their accumulated contributions without interest.
- b. Basic Benefit: Upon the death of a non-vested member, or upon the death of a vested, inactive member, or upon the death of an active, unmarried member, a refund of the member's contributions (without interest) is paid. Upon the death of a vested, married, active member, the spouse may elect (i) the refund benefit described above, or (ii) a life annuity paid to the spouse or beneficiary. The amount of the annuity is equal to the amount which would have been paid had the member retired at the time of his death and elected the Joint and 100% Survivor option. If the member was not eligible for retirement, the annuity benefit is reduced 9% per year from the date at which the member would have been eligible had he or she remained in service.
- c. Lump-sum Benefit: \$800 per year of service, with a maximum benefit of \$16,000 and a minimum of \$4,000.
- d. Special Police/Fire Death Benefit: In lieu of the basic benefit above, if a police officer or firefighter dies while an active member, an annuity of 30% of the member's salary will be paid to the member's spouse, for life or until remarriage. Children's benefits may also be payable.

- e. **Accidental Duty-related Death Benefit:** If a member dies as the result of an accident while in the course of his or her duties, in lieu of the above benefits the member's spouse may elect to receive (i) a refund of all contributions made (including interest), and (ii) an annual life annuity equal to 50% of the member's salary at the time of death. The annuity benefit stops when the spouse remarries or dies, although it may be continued to any children under age 18 or to any dependent parents.

16. **Optional Forms of Payment:** In addition to a life annuity, MERS offers members these optional forms of payment on an actuarially equivalent basis:

- a. **Option 1 (Joint and 100% Survivor)** - A life annuity payable while either the participant or his beneficiary is alive.
- b. **Option 2 (Joint and 50% Survivor)** - A life annuity payable to the member while both the member and beneficiary are alive, reducing to 50% of this amount if the member predeceases the beneficiary.
- c. **Social Security Option** – An annuity paid at one amount prior to age 62, and at a reduced amount after age 62, designed to provide a level total income when combined with the member's age 62 Social Security benefit. Benefits cease upon the member's death.

Actuarial equivalence is based on tables adopted by the Employees' Retirement Board.

17. **Post-retirement Benefit Increase:** For members who retire after June 30, 2012: members will be eligible to receive cost of living increases at the later of the member's third anniversary of retirement and the month following their SSNRA (age 55 for members designated as police officers and/or firefighters). When a municipality elects coverage, it may elect either COLA C (covering only current and future active members and excluding members already retired) or COLA B (covering current retired members as well as current and future active members).

- a. The COLA will be suspended for any unit whose funding level is less than 80%; however, an interim COLA will be granted in five-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2018.
- b. The COLA will be determined based on the plan's five-year average investment rate of return minus 5.5% and will range from zero to 4.0%.
- c. The COLA will be limited to the first \$25,000 of the member's annual pension benefit. This limit will be indexed annually to increase in the same manner as COLAs.

18. Special Provisions Applying to Specific Units: Prior to July 1, 2012, some units had specific provisions that apply only to that unit. The transition rules outlined in Item 11, above, apply to these units in a similar manner. The following summarizes those provisions:
- a. Rhode Island General Law §45-21.2-22.1 contains special provisions that apply to employees of Burrillville Police, but only if adopted by the Town of Burrillville. The Town adopted these provisions effective July 1, 2006. Under these special provisions, the retirement benefit for a member with 20 or more years of service is improved. The new formula is  $60.00\% \times \text{Final Average Compensation (FAC)}$ , plus  $1.50\% \times \text{FAC} \times \text{Years of Service in Excess of 20}$ , with a maximum benefit equal to 75% of FAC. In addition to this benefit change, the member contribution rate increased from 9.00% to 10.20%.
  - b. Rhode Island General Law § 45-21.2-6.1, § 45-21.2-5(5), and § 45-21.2-14(d) contain special provisions that apply to members of the South Kingstown police department. Under these special provisions, the member receives a retirement allowance which is a life annuity terminable at the death of the annuitant, and is an amount equal to the sum of two and one-half percent (2.5%) of final compensation multiplied by the years of service accrued after July 1, 1993 and two percent (2%) of final compensation multiplied by the years of service accrued prior to July 1, 1993. The annual retirement allowance in no event shall exceed seventy-five percent (75%) of final compensation. The member contribution rate is 8.00%, plus 1.00% for the adoption of the optional COLA, for a total of 9.00%.
  - c. Rhode Island General Law § 45-21.2-5 (9) contains special provisions that apply to members of the Hopkinton police department. Under these special provisions, the final compensation for benefit computation is based on the members' highest year of earnings. In addition, the members shall receive a three percent (3%) escalation of their pension payment compounded each year on January 1st following the year of retirement and continuing on an annual basis on that date. The member contribution rate is 9.00%. Compensation for benefit purposes includes base, longevity, and holiday pay.
  - d. Rhode Island General Law § 45-21.2-5 (7) and § 45-21.2-14 contain special provisions that apply to members of the Cranston fire department hired after July 1, 1995 or with less than 5 years of service at that date. Under these special provisions, the final compensation for benefit computation is based on the members' highest year of earnings. In addition, the members shall receive a three percent (3%) escalation of their pension payment compounded each year on January 1st following the year of retirement and continuing on an annual basis

on that date. The member contribution rate is 10.00%. Compensation for benefit purposes includes base, longevity, and holiday pay.

- e. Rhode Island General Law §§ 45-21.2-5 (8) and § 45-21.2-14 contain special provisions that apply to members of the Cranston police department hired after July 1, 1995 or with less than 5 years of service at that date. Under these special provisions, the final compensation for benefit computation is based on the members' highest year of earnings. In addition, the members shall receive a three percent (3%) escalation of their pension payment compounded each year on January 1st following the year of retirement and continuing on an annual basis on that date. The member contribution rate is 10.00%. Compensation for benefit purposes includes base, longevity, and holiday pay.
- f. Rhode Island General Law §§ 45-21.2-6.3 contains special provisions that apply to employees of Richmond Police. The Town adopted these provisions on April 3, 2008, effective July 1, 2008. Under these special provisions, members are eligible to retire after attaining 22 years of service. The retirement benefit for a member with 22 or more years of service was improved to  $50.00\% \times \text{Final Average Compensation (FAC)}$ , plus  $2.2727\% \times \text{FAC} \times \text{Years of Service in Excess of 22}$ , with a maximum benefit equal to 75% of FAC.

## Glossary

**Actuarial Accrued Liability (AAL):** That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

**Actuarial Assumptions:** Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

**Actuarial Cost Method or Funding Method:** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ARC.

**Actuarial Gain or Actuarial Loss:** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

**Actuarially Equivalent:** Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

**Actuarial Present Value (APV):** The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

- a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)
- b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

**Actuarial Present Value of Future Plan Benefits:** The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.

**Actuarial Valuation:** The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB 25, such as the funded ratio and the ARC.

**Actuarial Value of Assets or Valuation Assets:** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ARC.

**Actuarially Determined:** Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

**Amortization Method:** A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under

the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

**Amortization Payment:** That portion of the pension plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

**Annual Required Contribution (ARC):** The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB 25. The ARC consists of the Employer Normal Cost and the Amortization Payment

**Closed Amortization Period:** A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

**Decrements:** Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

**Defined Benefit Plan:** A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

**Defined Contribution Plan:** A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

**Employer Normal Cost:** The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

**Experience Study:** A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

**Funded Ratio:** The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA, although GASB 25 reporting requires the use of the AVA.

**Funding Period or Amortization Period:** The term "Funding Period" is used in two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ARC. This funding period is chosen by the Board of Trustees. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off

or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.

**GASB:** Governmental Accounting Standards Board.

**GASB 25** and **GASB 27:** Governmental Accounting Standards Board Statements No. 25 and No. 27. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 25 sets the rules for the systems themselves.

**Normal Cost:** That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

**Open Amortization Period:** An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

**Unfunded Actuarial Accrued Liability:** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

**Valuation Date or Actuarial Valuation Date:** The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.