## MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM STATE OF RHODE ISLAND

ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2015



5605 N. MacArthur Blvd. Suite 870 Irving, TX 75038-2631

December 9, 2015

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, 2015

This is the June 30, 2015 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, 2015 actuarial valuation will be applicable for the year beginning July 1, 2017 and ending June 30, 2018.

#### 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 (20 years remaining as of June 30, 2015). The amortization rate is adjusted for the two-year deferral in contribution rates.

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#### 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. The funded ratio of the average unit in MERS is 83.8%, which is a decrease from 84.1% in the prior valuation. The funded status alone is not appropriate for assessing the need for future contributions for a given unit. The funded status is also not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.50% on the actuarial valuation of assets), it is expected that:

- 1. The employer normal cost as a percentage of pay will decrease to the level of the newest tier as the old tier population declines and is replaced by new tier members,
- 2. The amortization payment as a percentage of pay will remain level through fiscal year 2038, and
- 3. In the absence of benefit improvements, the funded ratio should increase over time, until it reaches 100%.

There are currently 113 units participating in MERS, 68 covering general employees and 45 covering police and/or fire employees. Of these 113 units, 81 had their rate decrease, and 23 had their rate increase. Seven units have no required contribution rate, while Westerly and Barrington Fire (20) have fixed dollar contributions. Of the 68 general employee units, 11 had rate increases, while 12 of the 45 continuing police/fire units had rate increases. An analysis of the changes in the employer contribution rates appears on Table 5. Non-salary related liability losses cause by the decrease in normal cost from the lower benefit structure were responsible for most of the increases. In addition, increases in units for police or fire were also driven by payroll losses and the impact of the assumption change.

#### **Benefit provisions**

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2015. Due to the passage of House Bill 5900, SUB A, Article 21 after the mediated settlement of lawsuits related to RIRSA, there have been several material changes to the benefit provisions since the preceding valuation. A summary of these changes is shown on page 5 of this report. 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.

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#### **Assumptions and methods**

The assumptions are unchanged from the last actuarial valuation and were approved by the Board on June 18, 2014. 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 67.

#### Data

The System's staff supplied data for retired, active and inactive members as of June 30, 2015. 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, 2015.

#### 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.

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The undersigned are independent actuaries. All are 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, 2017.

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 (UAAL) is amortized as a level percent of payroll over a closed period. For underfunded units, the period is 25 years as measured from June 30, 2010, or 20 years as of the current valuation date for any existing UAAL. In conjunction with the Article 21 legislation, employers were given the option to extend the amortization period for the UAAL existing as of June 20, 2014 to 25 years as measured from June 30, 2014. All new experience gains and losses for underfunded units are amortized over individual closed periods of 20 years using the process of "laddering". Overfunded plans will have an amortization rate calculated using a single base amortized over an open period of 20 years. 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, 2018. 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 Investment Commission 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 the 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, 2015 was \$1,391 million while the actuarial value was \$1,407 million (101.2% of market). Therefore, a cumulative total of \$16 million in actuarial loss related to the investment experience in 2015 continues to be deferred and will be recognized over the next four valuations. Recognition of this deferred loss 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, 2015. Table 6b shows a historical summary of the return rates. The fund earned 2.2% during the year ending June 30, 2015 on a market value basis and returned 7.5% on an actuarial value basis. The average annual return based on the market value of assets over the last ten years (July 1, 2005 – June 30, 2015) was 6.0%. 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 6.4%. 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.

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, 2015. 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, 2015, 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. Due to the passage of House Bill 5900, SUB A, Article 21, there were several changes in the benefit provisions since the preceding valuation which are described below.

- A one-time 2% COLA was granted to all retirees and beneficiaries that retired on or before June 30, 2012 on the first \$25,000 of their benefit. This does not impact the indexing of the \$25,000 for future years.
- Two one-time \$500 stipends payable to all current retirees/beneficiaries that retired on or before July 1, 2015. One payable 60 days following enactment of this legislation and the final one payable one year later.
- The COLA provided to retired members is contingent on the investment performance, the annual change in the CPI-U, and funded status of the System. The amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.5% and will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%... In the prior valuation, it was based solely on the investment return resulting in an increase in the assumed COLA from 2.0% to 2.2%. This calculation produces a 0.94% COLA for Calendar Year 2016. The COLA will be limited and this limit will be indexed annually to increase in the same manner as COLAs, with the known values of \$25,000 for 2014, \$25,168 for 2015, and \$25,855 for 2016, and \$26,098 for 2017.

Furthermore, the COLA will be suspended for each unit with a funding level below 80% until their funding level exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended rather than every fifth year. The first interim COLA may begin January 1, 2018. Also, for current retirees and beneficiaries retired on or before July 1, 2015 the \$25,000 cap will be increased to \$30,000 (indexed) for any COLA payable based on the every fourth year provision.

• General MERS active members with 20 or more years of service as of June 30, 2012 will receive future accruals (post July 1, 2015) at a rate of 2% per year instead of 1%. They will no longer participate in the DC plan though they will keep the current balance, and their member contribution rate will increase from 3.75% to 11.0% of pay.

- All current and future general MERS active members will be eligible to retire with full benefits at the earlier of their current RIRSA date or upon the attainment of age 65 with 30 years of service, age 64 with 31 years of service, age 63 with 32 years of service, or age 62 with 33 years of service.
- For MERS Police & Fire, current and future members can retire with full benefits at the earlier of their current RIRSA retirement age or at the attainment of age 50 with at least 25 years of service or the attainment of any age and 27 years of service. Members will pay an additional 2.00% member contribution rate beginning July 1, 2015.

For MERS Police & Fire, active members (including future hires), members who retire after July 1, 2015 and after attaining age 57 with 30 years of service will have a benefit equal to the greater of their current benefit and one calculated based on a 2.25% multiplier for all years of service.

• The Early retirement reduction for employees who choose to retire before eligible for unreduced benefits will be based on the following schedule: 9% for year 1, 8% for year 2, 7% for each year thereafter. It had been a flat 9% per year.

## **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.

These assumptions were adopted by the Board on June 18, 2014. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI

## **Other Observations and Comments**

- Westerly (1622/1623) has no active members, but does have retirees/beneficiaries and an inactive member covered by MERS. The actuarial value of assets is less than the actuarial liability; therefore, a special contribution will be made in next few years to amortize the unfunded liability. Based on the June 30, 2012 actuarial valuation, a fixed contribution amount of \$181,261 per year was calculated to amortize the UAAL over a 5-year period. Continued contributions of this amount will amortize the UAAL as of June 30, 2015 in a period of just under 5 years.
- Scituate Police (1464) 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 (1528) 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) (1702) 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, 2018.
- Barrington Fire 20 (1005) still has two active members but contribute a fixed dollar amount for FY2018. Based on the June 30, 2015 valuation, the actuarially determined contribution is \$269,105.
- For Cranston Police (1114) 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 FY2015. As such, we have carried forward the prior methodologies to load the liabilities for the difference between the contribution and the benefit salaries. Salaries were loaded by 13% for longevity pay and 13 days of holiday pay.
- Other changes made between this valuation and July 1, 2017 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.

					Η	Employer Rate	
Old Unit	New Unit				Employer	Amortization	
Number	Number	Unit	Code(s)	Member Rate	Normal Cost	Rate	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
General Empl	oyee Units						
3002	1012 1019	Bristol	В	2.00%	6.41%	8.09%	14.50%
3003	1032 1033	Burrillville	С	2.00%	7.47%	(0.07%)	7.40%
3004	1052	Central Falls		1.00%	4.90%	7.69%	12.59%
3005	1082	Charlestown	С	2.00%	6.82%	0.54%	7.36%
3007	1112 1113	Cranston	В	2.00%	7.75%	1.00%	8.75%
3008	1122 1123	Cumberland		1.00%	6.99%	4.93%	11.92%
3009	1152 1153	East Greenwich	С	2.00%	7.09%	(2.66%)	4.43%
3010	1162 1163	East Providence	В	2.00%	7.07%	16.02%	23.09%
3011	1183	Exeter/West Greenwich	В	2.00%	7.96%	3.68%	11.64%
3012	1192 1193	Foster		1.00%	7.26%	4.48%	11.74%
3013	1212 1213	Glocester	С	2.00%	7.24%	3.16%	10.40%
3014	1262	Hopkinton	С	2.00%	7.03%	(4.81%)	2.22%
3015	1272 1273	Jamestown	С	2.00%	7.09%	3.26%	10.35%
3016	1282 1283	Johnston	С	2.00%	7.25%	8.73%	15.98%
3017	1302 1303	Lincoln		1.00%	8.24%	3.72%	11.96%
3019	1322 1323	Middletown	С	2.00%	6.57%	3.95%	10.52%
3021	1352 1353 1354	Newport	В	2.00%	6.77%	15.97%	22.74%
3022	1342 1343	New Shoreham	В	2.00%	6.97%	(0.15%)	6.82%
3023	1372 1373	North Kingstown	С	2.00%	7.26%	9.82%	17.08%
3024	1382 1383	North Providence		1.00%	7.12%	(1.71%)	5.41%
3025	1392 1393	North Smithfield	В	2.00%	7.07%	(2.49%)	4.58%
3026	1412 1413	Pawtucket	С	2.00%	6.73%	8.10%	14.83%
3027	1515	Union Fire District		1.00%	6.84%	0.45%	7.29%
3029	1452	Richmond		1.00%	7.01%	1.36%	8.37%
3030	1462 1463	Scituate	В	2.00%	7.04%	7.53%	14.57%
3031	1472 1473	Smithfield	С	2.00%	7.26%	(0.05%)	7.21%
3032	1492 1493	South Kingstown	В	2.00%	7.55%	3.67%	11.22%
3033	1532 1533	Tiverton	С	2.00%	7.03%	(5.68%)	1.35%
3034	1562	Warren	С	2.00%	6.14%	5.24%	11.38%
3037	1602	West Greenwich	С	2.00%	6.03%	8.85%	14.88%
3039	1632 1633	Woonsocket	В	2.00%	7.10%	3.01%	10.11%
3040	1073	Chariho School District	С	2.00%	6.71%	3.68%	10.39%
3041	1203	Foster/Glocester	В	2.00%	7.12%	3.56%	10.68%
3042	1528	Tiogue Fire & Lighting	C,5	2.00%	0.00%	0.00%	0.00%
3043	1336	Narragansett Housing	С	2.00%	6.67%	(2.61%)	4.06%
3045	1098	Coventry Lighting District	С	2.00%	5.33%	(130.25%)	0.00%
3046	1242	Hope Valley Fire	С	2.00%	8.79%	(11.19%)	0.00%
3050	1156	East Greenwich Housing	С	2.00%	7.43%	1.52%	8.95%
3051	1116	Cranston Housing	С	2.00%	9.74%	(3.99%)	5.75%
3052	1166	East Providence Housing	В	2.00%	7.76%	3.87%	11.63%
3053	1416	Pawtucket Housing	В	2.00%	6.85%	(10.73%)	0.00%
3056	1126	Cumberland Housing	С	2.00%	7.05%	(0.69%)	6.36%
3057	1306	Lincoln Housing	В	2.00%	5.49%	3.34%	8.83%
3059	1016	Bristol Housing		1.00%	6.64%	(10.54%)	0.00%
3065	1036	Burrillville Housing	В	2.00%	6.00%	1.42%	7.42%
3066	1386	North Providence Housing	В	2.00%	8.46%	20.35%	28.81%

#### Contribution Rates For Fiscal Year Ending June 30, 2018

					Er	nployer Rate	
Old Unit	New Unit				Employer	Amortization	
Number	Number	Unit	Code(s)	Member Rate	Normal Cost	Rate	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3067	1177	East Smithfield Water	С	2.00%	6.84%	(6.21%)	0.63%
3068	1227	Greenville Water	В	2.00%	7.19%	(5.26%)	1.93%
3069	1356	Newport Housing	С	2.00%	7.22%	9.70%	16.92%
3071	1566	Warren Housing	В	2.00%	5.54%	(2.44%)	3.10%
3072	1286	Johnston Housing		1.00%	7.47%	2.50%	9.97%
3077	1538	Tiverton Local 2670A	С	2.00%	6.59%	1.57%	8.16%
3078	1002 1003 1007 1009	Barrington COLA	С	2.00%	7.20%	1.53%	8.73%
3079	1096	Coventry Housing		1.00%	6.96%	0.17%	7.13%
3080	1496	South Kingstown Housing	С	2.00%	7.14%	(6.96%)	0.18%
3081	1403	N. RI Collaborative Adm. Services	С	2.00%	6.33%	4.85%	11.18%
3083	1616	West Warwick Housing	в	2.00%	5.61%	8.54%	14.15%
3084	1476	Smithfield Housing		1.00%	6.74%	(8.28%)	0.00%
3094	1478	Smithfield COLA	С	2.00%	6.82%	1.94%	8.76%
3096	1056	Central Falls Housing	С	2.00%	5.91%	5.71%	11.62%
3098	1293	Lime Rock Administrative Services		1.00%	6.75%	6.91%	13.66%
3099	1063	Central Falls Schools	С	2.00%	6.34%	0.81%	7.15%
3100	1023	Bristol/Warren Schools	в	2.00%	7.28%	7.77%	15.05%
3101	1157 1158	Town of E. Greenwich-COLA-NCE	С	2.00%	7.09%	(2.66%)	4.43%
3102	1712	Harrisville Fire District (ADMIN)	С	2.00%	6.76%	(0.96%)	5.80%
3103	1702	Albion Fire District (ADMIN)	C,5	2.00%	0.00%	0.00%	0.00%
3150	1159	East Greenwich Fire (ADMIN)	С	2.00%	5.89%	4.16%	10.05%
		General Employee Units Averages		1.90%	7.09%	4.74%	11.91%
Police & Fir	e Units						
4016	1285	Johnston Fire	D	9.00%	7.47%	0.01%	7.48%
4029	1454	Richmond Police	6	9.00%	7.09%	2.46%	9.55%
4031	1474	Smithfield Police	C,D	10.00%	7.75%	(0.52%)	7.23%
4042	1555	Valley Falls Fire	D	9.00%	7.60%	8.52%	16.12%
4046		Lime Rock Fire	3	0.00%	0.00%	0.00%	0.00%
4047	1395 1435	North Smithfield Voluntary Fire	B,D	10.00%	9.15%	6.52%	15.67%
4050	1155	East Greenwich Fire	C,D	10.00%	8.03%	20.38%	28.41%
4054	1154	East Greenwich Police	C,D	10.00%	8.64%	19.37%	28.01%
4055	1375	North Kingstown Fire	C,D	10.00%	8.74%	19.97%	28.71%
4056	1374	North Kingstown Police	C,D	10.00%	8.15%	18.42%	26.57%
4057	1235	Harris Fire Department	С	9.00%	0.00%	0.00%	0.00%
4058	1385	North Providence Fire	D	9.00%	8.12%	15.54%	23.66%
4059	1008	Barrington Fire (25)	С	10.00%	7.18%	0.83%	8.01%
4060	1004	Barrington Police	C,D	10.00%	8.12%	22.70%	30.82%
4061	1005	Barrington Fire (20)	C,D	10.00%			
4062	1564 1565	Warren Police & Fire	C,D	10.00%	8.54%	16.00%	24.54%
4063	1494	South Kingstown Police	B,1	10.00%	8.70%	13.99%	22.69%
4064	1435	Primrose Volunteer Fire	3	9.00%	0.00%	0.00%	0.00%
4073	1464	Scituate Police	5	9.00%	0.00%	0.00%	0.00%
4076	1394	North Smithfield Police	C,D	10.00%	7.97%	12.36%	20.33%
4077	1534	Tiverton Fire	C,D	10.00%	8.46%	6.76%	15.22%
4082	1194	Foster Police	C,D	10.00%	9.02%	16.42%	25.44%
4085	1634	Woonsocket Police	C,D	10.00%	8.03%	18.68%	26.71%
4086	1084	Charlestown Police	C,D	10.00%	8.56%	15.90%	24.46%

#### Contribution Rates For Fiscal Year Ending June 30, 2018

					]	Employer Rate	
Old Unit	New Unit				Employer	Amortization	
Number	Number	Unit	Code(s)	Member Rate	Normal Cost	Rate	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4087	1264	Hopkinton Police	C,D,6	10.00%	8.68%	22.33%	31.01%
4088	1214	Glocester Police	C,D	10.00%	8.89%	9.39%	18.28%
4089	1604	West Greenwich Police/Rescue	C,D	10.00%	9.41%	9.18%	18.59%
4090	1034	Burrillville Police	C,D,6	10.00%	10.40%	9.03%	19.43%
4091	1148	Cumberland Rescue	C,D	10.00%	8.63%	(0.65%)	7.98%
4092	1585	Washington Fire	D	9.00%	0.00%	0.00%	0.00%
4093	1635	Woonsocket Fire	C,D	10.00%	8.40%	1.09%	9.49%
4094	1015	Bristol Fire	D	9.00%	12.48%	3.23%	15.71%
4095	1135	Cumberland Hill Fire	C,D	10.00%	8.29%	19.05%	27.34%
4096	1014	Bristol Police	C,D	10.00%	7.75%	(2.62%)	5.13%
4098	1095	Coventry Fire	C,D	10.00%	8.04%	12.31%	20.35%
4099	1505	South Kingstown EMT	C,D	10.00%	8.60%	(5.09%)	3.51%
4100	1525	Tiogue Fire		9.00%	0.00%	0.00%	0.00%
4101	1365	North Cumberland	C,D	10.00%	9.46%	10.40%	19.86%
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	10.00%	8.38%	10.39%	18.77%
4103	1255	Hopkins Hill Fire	C,D	10.00%	10.24%	1.75%	11.99%
4104	1114	Cranston Police	C,D,4	10.00%	8.72%	2.63%	11.35%
4105	1115	Cranston Fire	C,D,4	10.00%	9.12%	(3.48%)	5.64%
4106	1125	Cumberland Fire	B,D	10.00%	9.33%	13.28%	22.61%
4107	1305	Lincoln Rescue	С	10.00%	7.71%	9.83%	17.54%
4108	1344	New Shoreham Police	B,D	10.00%	8.37%	11.74%	20.11%
4109	1324	Middletown Police & Fire	C,D	10.00%	7.62%	(1.12%)	6.50%
4110	1715	Harrisville Fire District	C,D	10.00%	8.82%	(4.66%)	4.16%
4111	1705	Albion Fire District	С	10.00%	8.41%	9.98%	18.39%
1284	1284	Johnston Police		9.00%	7.22%	0.08%	7.30%
1465	1465	Smithfield Fire	С	10.00%	8.29%	(0.41%)	7.88%
		Police & Fire Units Averages		9.88%	8.44%	7.46%	15.90%
		All MERS Units Averages		4.20%	7.48%	5.52%	13.06%

#### Contribution Rates For Fiscal Year Ending June 30, 2018

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 prov 5 - This unit has no active members.

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

				C	omparison (	of Employer	<b>Contribution R</b>	ates						
Contribution Rates Projected Payroll, Projected from Actual FY2015 Payroll										2015 Payroll	Estimated Contributions			
Old Unit Number	New Unit Number	Unit	Code(s)	June 30, 2015 Actuarial Valuation, for FY2018	June 30, 2014 Actuarial Valuation, for FY2017	June 30, 2013 Actuarial Valuation, for FY2016	For FY2018	For FY201	7	For FY2016	June 30, 2015 Actuarial Valuation, for FY2018	June 30, 2014 Actuarial Valuation, for FY2017	June 30, 2013 Actuarial Valuation, for FY2016	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)	(11)	(12)	(13)	
General Emp	lovee Units													
3002	1012 1019	Bristol	В	14.50%	14.80%	14.95%	\$ 5,049,585	\$ 4,890	0,640	\$ 4,736,697	\$ 732,190	\$ 723,815	\$ 708,136	
3003	1032 1033	Burrillville	С	7.40%	8.11%	8.52%	6,628,025	6,41	9,395	6,217,331	490,474	520,613	529,717	
3004	1052	Central Falls		12.59%	13.48%	13.62%	2,017,206	1,95	3,711	1,892,214	253,966	263,360	257,720	
3005	1082	Charlestown	С	7.36%	8.59%	9.86%	2,372,448	2,29	7,771	2,225,444	174,612	197,379	219,429	
3007	1112 1113	Cranston	В	8.75%	9.71%	9.86%	26,604,219	25,76	6,798	24,955,737	2,327,869	2,501,956	2,460,636	
3008	1122 1123	Cumberland		11.92%	12.87%	13.64%	9,812,000	9,503	3,148	9,204,017	1,169,590	1,223,055	1,255,428	
3009	1152 1153	East Greenwich	С	4.43%	5.14%	5.31%	1,257,120	1,21	7,550	1,179,225	55,690	62,554	62,599	
3010	1162 1163	East Providence	в	23.09%	24.43%	25.19%	17,600,457	17,040		16,509,876	4,063,945	4,164,447	4,158,838	
3011	1183	Exeter/West Greenwich	в	11.64%	12.57%	12.36%	2,873,266	2,782		2,695,229	334,448	349,801	333,130	
3012	1192 1193	Foster		11.74%	10.82%	11.83%	1,288,290	1,24		1,208,463	151,245	135,005	142,961	
3013	1212 1213	Glocester	С	10.40%	10.65%	9.77%	2,715,894	2,63		2,547,609	282,453	280,138	248,901	
3014	1262	Hopkinton	С	2.22%	3.56%	4.77%	1,890,935		1,415	1,773,767	41,979	65,198	84,609	
3015	1272 1273	Jamestown	С	10.35%	10.49%	10.69%	4,135,724	4,003		3,879,461	428,047	420,182	414,714	
3016	1282 1283	Johnston	С	15.98%	16.09%	16.09%	8,802,232	8,52		8,256,817	1,406,597	1,371,699	1,328,522	
3017	1302 1303	Lincoln	C	11.96%	12.00%	12.70%	1,087,700	1,053		1,020,303	130,089	126,416	129,578	
3019	1322 1323	Middletown	C B	10.52%	10.59%	10.82%	5,952,406	5,76		5,583,576	626,193	610,518	604,143	
3021	1352 1353 1354	Newport	B	22.74%	23.09%	21.86%	12,887,114	12,48		12,088,587	2,930,530	2,881,971	2,642,565	
3022 3023	1342 1343 1372 1373	New Shoreham North Kingstown	в С	6.82% 17.08%	7.81% 18.18%	8.01% 17.44%	2,331,190 12,104,311	2,25		2,186,742 11,354,289	158,987 2,067,416	176,335 2,131,297	175,158 1,980,188	
3024	1372 1373	North Providence	C	5.41%	5.80%	6.82%	7,515,651	7,279		7,049,958	406,597	422,187	480,807	
3024	1392 1393	North Smithfield	В	4.58%	6.14%	6.44%	3,600,637	3,48		3,377,530	164,909	214,120	217,513	
3025	1412 1413	Pawtucket	C	14.83%	16.29%	16.91%	21,334,719	20,66		20,012,752	3,163,939	3,366,030	3,384,156	
3020	1515	Union Fire District	C	7.29%	7.62%	7.74%	346,209		5,311	324,757	25,239	25,551	25,136	
3029	1452	Richmond		8.37%	9.04%	10.00%	1,117,237	1,082		1,048,009	93,513	97,819	104,801	
3030	1462 1463	Scituate	В	14.57%	14.73%	14.71%	2,893,878	2,80		2,714,564	421,638	412,851	399,312	
3031	1472 1473	Smithfield	С	7.21%	7.69%	8.47%	3,453,272	3,34		3,239,296	248,981	257,198	274,368	
3032	1492 1493	South Kingstown	в	11.22%	11.61%	11.25%	13,502,126	13,07		12,665,491	1,514,938	1,518,254	1,424,868	
3033	1532 1533	Tiverton	С	1.35%	2.82%	3.19%	3,609,778	3,49		3,386,105	48,732	98,592	108,017	
3034	1562	Warren	С	11.38%	11.37%	12.68%	2,098,168	2,032	2,124	1,968,159	238,772	231,052	249,563	
3037	1602	West Greenwich	С	14.88%	15.21%	16.50%	1,087,501	1,05	3,270	1,020,116	161,820	160,202	168,319	
3039	1632 1633	Woonsocket	в	10.11%	11.66%	10.27%	11,690,828	11,322	2,836	10,966,427	1,181,943	1,320,243	1,126,252	
3040	1073	Chariho School District	С	10.39%	11.04%	10.73%	5,933,549	5,74	6,779	5,565,888	616,496	634,444	597,220	
3041	1203	Foster/Glocester	В	10.68%	10.96%	11.75%	1,979,950	1,91	7,627	1,857,266	211,459	210,172	218,229	
3042	1528	Tiogue Fire & Lighting	C,5	0.00%	0.00%	0.00%	-		-	-	-	-	-	
3043	1336	Narragansett Housing	С	4.06%	4.88%	5.71%	196,476	19	0,291	184,301	7,977	9,286	10,524	
3045	1098	Coventry Lighting District	C	0.00%	0.00%	0.00%	39,771	3	8,519	37,306	-	-	-	
3046	1242	Hope Valley Fire	С	0.00%	1.24%	2.83%	154,522		9,658	144,948	-	1,856	4,102	
3050	1156	East Greenwich Housing	С	8.95%	9.02%	10.22%	613,549		4,236	575,532	54,913	53,600	58,819	
3051	1116	Cranston Housing	С	5.75%	7.23%	7.45%	1,255,909	1,210	6,376	1,178,088	72,215	87,944	87,768	

Contribution Bate 0 сr. 



3052

1166

East Providence Housing

В

11.63%

13.10%

11.54%

840,805

814,339

788,706

97,786

106,678

Table 2

12

91,017

				Contribution Rates Projected Payroll, Projected from Actual FY2015 Payroll			Y2015 Payroll	Estimated Contributions					
Old Unit Number	New Unit Number	Unit	Code(s)	June 30, 2015 Actuarial Valuation, for FY2018	June 30, 2014 Actuarial Valuation, for FY2017	June 30, 2013 Actuarial Valuation, for FY2016	For FY2018	-	For FY2017	For FY2016	June 30, 2015 Actuarial Valuation, for FY2018	June 30, 2014 Actuarial Valuation, for FY2017	June 30, 2013 Actuarial Valuation, for FY2016
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)	(12)	(13)
3053	1416	Pawtucket Housing	В	0.00%	0.00%	0.00%	3,133,47	6	3,034,843	2,939,316	-	-	-
3056	1126	Cumberland Housing	С	6.36%	7.43%	7.36%	573,07		555,040	537,569	36,448	41,240	39,565
3057	1306	Lincoln Housing	В	8.83%	6.65%	7.44%	552,85		535,451	518,597	48,817	35,607	38,584
3059	1016	Bristol Housing		0.00%	0.00%	0.00%	457,17	9	442,789	428,851	-	-	-
3065	1036	Burrillville Housing	В	7.42%	8.16%	7.58%	223,15	6	216,132	209,329	16,558	17,636	15,867
3066	1386	North Providence Housing	В	28.81%	27.66%	27.46%	271,43	1	262,887	254,612	78,199	72,715	69,917
3067	1177	East Smithfield Water	С	0.63%	3.34%	2.19%	191,91	3	185,872	180,021	1,209	6,208	3,942
3068	1227	Greenville Water	В	1.93%	1.80%	1.96%	319,90	7	309,837	300,085	6,174	5,577	5,882
3069	1356	Newport Housing	С	16.92%	19.23%	18.33%	1,751,11	1	1,695,991	1,642,606	296,288	326,139	301,090
3071	1566	Warren Housing	В	3.10%	3.12%	6.03%	337,02	8	326,419	316,144	10,448	10,184	19,064
3072	1286	Johnston Housing		9.97%	11.13%	11.52%	424,53	7	411,174	398,231	42,326	45,764	45,876
3077	1538	Tiverton Local 2670A	С	8.16%	10.25%	8.52%	1,103,665	5	1,068,925	1,035,279	90,059	109,565	88,206
3078	.002 1003 1007 100	9 Barrington COLA	С	8.73%	9.07%	8.48%	8,369,77	8	8,106,322	7,851,160	730,682	735,243	665,778
3079	1096	Coventry Housing		7.13%	7.05%	8.09%	682,27	6	660,800	640,000	48,646	46,586	51,776
3080	1496	South Kingstown Housing	С	0.18%	3.51%	2.59%	183,15	9	177,393	171,810	330	6,227	4,450
3081	1403	N. RI Collaborative Adm. Services	С	11.18%	11.52%	8.94%	834,34	2	808,080	782,644	93,279	93,091	69,968
3083	1616	West Warwick Housing	В	14.15%	8.39%	9.42%	306,43	6	296,791	287,448	43,361	24,901	27,078
3084	1476	Smithfield Housing		0.00%	0.00%	2.26%	127,45	1	123,439	119,553	-	-	2,702
3094	1478	Smithfield COLA	С	8.76%	9.53%	9.73%	4,084,60	D	3,956,029	3,831,505	357,811	377,010	372,805
3096	1056	Central Falls Housing	С	11.62%	10.82%	11.14%	953,65	7	923,639	894,566	110,815	99,938	99,655
3098	1293	Lime Rock Administrative Services	s	13.66%	13.65%	13.25%	98,59	D	95,487	92,481	13,467	13,034	12,254
3099	1063	Central Falls Schools	С	7.15%	7.82%	8.00%	4,214,38	3	4,081,727	3,953,247	301,328	319,191	316,260
3100	1023	Bristol/Warren Schools	В	15.05%	15.66%	17.37%	4,658,52	6	4,511,889	4,369,868	701,108	706,562	759,046
3101	1157 1158	Town of E. Greenwich-COLA-NCE	ΕC	4.43%	5.14%	5.31%	6,302,81	5	6,104,421	5,912,272	279,215	313,628	313,853
3102	1712	Harrisville Fire District (ADMIN)	С	5.80%	4.16%	7.62%	284,28	D	275,331	266,665	16,488	11,454	20,320
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)	С	10.05%	9.72%	8.99%	54,30	9	52,600	50,944	5,458	5,113	4,580
		General Employee Units Averag	e	11.91%	12.69%	12.74%	\$ 251,168,59	7 \$	243,262,563	\$ 235,605,388	\$ 29,893,147	\$ 30,864,018	\$ 30,128,091
Police & Fin	re Units												
4016	1285	Johnston Fire	D	7.48%	7.43%	9.24%	\$ 3,799,84	8 \$	3,671,351	\$ 3,547,199	\$ 284,229	\$ 272,758	\$ 327,761
4029	1454	Richmond Police	6	9.55%	10.95%	12.37%	796,62	8	769,689	743,660	76,078	84,281	91,991
4031	1474	Smithfield Police	C,D	7.23%	6.62%	6.93%	3,200,804	4	3,092,564	2,987,985	231,418	204,728	207,067
4042	1555	Valley Falls Fire	D	16.12%	15.95%	16.65%	903,32	8	872,780	843,266	145,616	139,217	140,404
4047	1395 1435	North Smithfield Voluntary Fire	B,D	15.67%	17.09%	17.15%	1,362,98	9	1,316,898	1,272,365	213,580	225,043	218,211
4050	1155	East Greenwich Fire	C,D	28.41%	28.77%	26.48%	2,645,25	D	2,555,797	2,469,369	751,516	735,369	653,889
4054	1154	East Greenwich Police	C,D	28.01%	28.80%	27.93%	2,404,97	5	2,323,648	2,245,070	673,634	669,210	627,048

	Comparison of Employer Contribution Rates												
					Contribution Rates		Projected Payroll	, Projected from Actual FY	2015 Payroll	Es	timated Contributions		
Old Unit Number	New Unit Number	Unit	Code(s)	June 30, 2015 Actuarial Valuation, for FY2018	June 30, 2014 Actuarial Valuation, for FY2017	June 30, 2013 Actuarial Valuation, for FY2016	For FY2018	For FY2017	For FY2016	June 30, 2015 Actuarial Valuation, for FY2018	June 30, 2014 Actuarial Valuation, for FY2017	June 30, 2013 Actuarial Valuation, for FY2016	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
4055	1375	North Kingstown Fire	C,D	28.71%	29.99%	30.04%	4,204,449	4,062,269	3,924,898	1,207,097	1,218,300	1,179,039	
4056	1374	North Kingstown Police	C,D	26.57%	26.48%	25.44%	3,454,530	3,337,710	3,224,841	917,869	883,826	820,400	
4058	1385	North Providence Fire	D	23.66%	21.33%	23.56%	5,417,399	5,234,202	5,057,200	1,281,757	1,116,696	1,191,476	
4059	1008	Barrington Fire (25)	С	8.01%	8.50%	9.02%	1,401,938	1,354,529	1,308,724	112,295	115,110	118,047	
4060	1004	Barrington Police	C,D	30.82%	31.03%	29.80%	1,740,563	1,681,703	1,624,834	536,441	521,832	484,200	
4062	1564 1565	Warren Police & Fire	C,D	24.54%	26.36%	27.86%	1,783,940	1,723,613	1,665,327	437,779	454,367	463,960	
4063	1494	South Kingstown Police	B,1	22.69%	25.15%	24.71%	3,468,310	3,351,024	3,237,705	786,959	842,783	800,037	
4076	1394	North Smithfield Police	C,D	20.33%	20.72%	21.79%	1,752,932	1,693,654	1,636,381	356,371	350,925	356,567	
4077	1534	Tiverton Fire	C,D	15.22%	16.56%	14.13%	1,930,973	1,865,674	1,802,584	293,894	308,948	254,705	
4082	1194	Foster Police	C,D	25.44%	27.05%	32.58%	402,621	389,006	375,851	102,427	105,226	122,452	
4085	1634	Woonsocket Police	C,D	26.71%	28.91%	26.08%	6,123,908	5,916,820	5,716,734	1,635,696	1,710,553	1,490,924	
4086	1084	Charlestown Police	C,D	24.46%	24.34%	23.45%	1,551,047	1,498,596	1,447,919	379,387	364,758	339,537	
4087	1264	Hopkinton Police	C,D,6	31.01%	31.09%	29.40%	1,005,916	971,900	939,034	311,935	302,163	276,076	
4088	1214	Glocester Police	C,D	18.28%	17.35%	17.89%	1,123,939	1,085,931	1,049,209	205,456	188,409	187,703	
4089	1604	West Greenwich Police/Rescue	C,D	18.59%	20.82%	22.45%	989,846	956,373	924,032	184,013	199,117	207,445	
4090	1034	Burrillville Police	C,D,6	19.43%	21.78%	25.65%	1,475,680	1,425,778	1,377,563	286,725	310,535	353,345	
4091	1148	Cumberland Rescue	C,D	7.98%	9.47%	11.12%	1,191,710	1,151,410	1,112,474	95,099	109,041	123,707	
4093	1635	Woonsocket Fire	C,D	9.49%	11.44%	11.28%	7,680,849	7,421,110	7,170,155	728,913	848,932	808,793	
4094	1015	Bristol Fire	D	15.71%	16.16%	24.92%	109,967	106,249	102,656	17,276	17,173	25,582	
4095	1135	Cumberland Hill Fire	C,D	27.34%	28.68%	28.57%	825,495	797,580	770,609	225,691	228,775	220,163	
4096	1014	Bristol Police	C,D	5.13%	5.07%	5.84%	2,533,124	2,447,463	2,364,698	129,949	124,087	138,098	
4098	1095	Coventry Fire	C,D	20.35%	21.07%	21.46%	1,114,433	1,076,747	1,040,336	226,787	226,879	223,256	
4099	1505	South Kingstown EMT	C,D	3.51%	4.93%	5.34%	912,437	881,582	851,770	32,026	43,485	45,485	
4101	1365	North Cumberland	C,D	19.86%	21.73%	21.05%	809,272	781,905	755,464	160,722	169,885	159,025	
4102	.045 1235 1525 158	Central Coventry Fire	C,D	18.77%	17.27%	16.52%	2,419,417	2,337,601	2,258,552	454,125	403,789	373,113	
4103	1255	Hopkins Hill Fire	C,D	11.99%	12.81%	13.92%	787,707	761,069	735,333	94,446	97,496	102,358	
4104	1114	Cranston Police	C,D,4	11.35%	9.57%	9.82%	8,893,991	8,593,228	8,302,636	1,009,468	822,372	815,319	
4105	1115	Cranston Fire	C,D,4	5.64%	7.50%	8.15%	13,027,793	12,587,240	12,161,584	734,768	944,042	991,169	
4106	1125	Cumberland Fire	B,D	22.61%	22.38%	23.37%	810,578	783,167	756,683	183,272	175,234	176,837	
4107	1305	Lincoln Rescue	С	17.54%	18.58%	18.07%	986,287	952,935	920,710	172,995	177,094	166,372	
4108	1344	New Shoreham Police	B,D	20.11%	24.21%	23.45%	322,171	311,276	300,750	64,789	75,360	70,526	
4109	1324	Middletown Police & Fire	C,D	6.50%	6.40%	6.40%	3,815,049	3,686,037	3,561,389	247,978	236,068	227,929	

				Contribution Rates Projected Payroll, Projected from Actual FY2015 Payroll			Estimated Contributions					
Old Unit Number	New Unit Number	Unit	Code(s)	June 30, 2015 Actuarial Valuation, for FY2018	June 30, 2014 Actuarial Valuation, for FY2017	June 30, 2013 Actuarial Valuation, for FY2016	For FY2018	For FY2017	For FY2016	June 30, 2015 Actuarial Valuation, for FY2018	June 30, 2014 Actuarial Valuation, for FY2017	June 30, 2013 Actuarial Valuation, for FY2016
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
4110	1715	Harrisville Fire District	C,D	4.16%	5.26%	7.87%	365,301	352,948	341,013	15,197	18,574	26,838
4111	1705	Albion Fire District	С	18.39%	19.64%	17.45%	245,444	237,144	229,124	45,137	46,577	39,982
1284	1284	Johnston Police		7.30%	8.38%	8.98%	671,420	648,715	626,777	49,014	54,362	56,285
1465	1465	Smithfield Fire	С	7.88%	8.54%	10.31%	603,418	583,013	563,297	47,549	49,815	58,076
		Police & Fire Units Average		15.90%	16.58%	16.73%	\$ 101,067,675	\$ 97,649,927	\$ 94,347,756	\$ 16,147,370	\$ 16,193,195	\$ 15,761,198
		All MERS Units Average		13.06%	13.80%	13.88%	\$ 352,236,272	\$ 340,912,491	\$ 329,953,144	\$ 46,040,517	\$ 47,057,213	\$ 45,889,289

#### **Comparison of Employer Contribution Rates**

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

3 - Closed unit.

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. 5 - This unit has no active members.

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

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	В	4,604,695	383,764	22,674,517	16,818,206
3003	1032 1033	Burrillville	C	6,037,677	558,806	27,198,871	27,250,716
3004	1052	Central Falls	C	1,873,295	110,439	6,913,005	4,940,587
3005	1032	Charlestown	С	2,174,717	190,066	6,906,667	6,716,997
3007	1112 1113	Cranston	В	24,200,452	2,301,896	138,171,899	134,582,875
3008	1122 1113	Cumberland	D	8,965,762	710,548	30,851,588	23,764,142
3009	1152 1153	East Greenwich	С	1,154,499	91,076	6,362,531	7,383,407
3010	1162 1163	East Providence	В	16,304,196	1,464,842	102,380,235	61,803,175
3011	1183	Exeter/West Greenwich	B	2,617,626	256,896	10,475,346	9,113,090
3012	1192 1193	Foster		1,155,036	93,767	4,068,668	3,358,369
3013	1212 1213	Glocester	С	2,574,511	234,084	9,446,757	8,355,649
3014	1262	Hopkinton	C	1,693,916	147,472	4,164,294	5,227,891
3015	1272 1273	Jamestown	С	3,852,466	344,817	14,244,585	12,531,199
3016	1282 1283	Johnston	С	7,870,953	724,516	42,047,305	31,136,031
3017	1302 1303	Lincoln		988,187	91,391	2,469,603	1,954,935
3019	1322 1323	Middletown	С	5,318,710	453,043	20,718,115	17,333,544
3021	1352 1353 1354	Newport	В	11,891,861	1,029,805	72,382,148	46,307,046
3022	1342 1343	New Shoreham	В	2,148,383	189,155	6,640,201	6,681,686
3023	1372 1373	North Kingstown	С	11,039,780	1,006,191	61,112,365	45,938,945
3024	1382 1383	North Providence		6,741,106	540,284	27,017,590	28,519,964
3025	1392 1393	North Smithfield	В	3,326,812	298,749	12,981,949	14,032,100
3026	1412 1413	Pawtucket	С	19,571,090	1,698,674	115,732,606	90,452,710
3027	1515	Union Fire District		314,534	23,379	677,690	657,184
3029	1452	Richmond		1,040,743	80,837	2,261,904	2,060,060
3030	1462 1463	Scituate	В	2,692,983	239,262	13,060,491	10,292,452
3031	1472 1473	Smithfield	С	3,093,256	283,909	12,415,965	12,403,519
3032	1492 1493	South Kingstown	В	12,267,056	1,147,901	58,631,991	52,340,889
3033	1532 1533	Tiverton	С	3,346,514	301,150	10,730,220	13,127,125

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	С	1,904,982	154,057	6,702,186	5,105,729
3036	1622 1623	Westerly		-	-	990,337	271,782
3037	1602	West Greenwich	С	996,523	79,991	3,822,496	2,453,412
3039	1632 1633	Woonsocket	В	11,018,234	991,247	65,766,032	61,187,636
3040	1073	Chariho School District	С	5,447,623	474,537	20,130,681	17,332,155
3041	1203	Foster/Glocester	В	1,877,811	168,958	7,457,152	6,572,298
3042	1528	Tiogue Fire & Lighting	C,5	-	-	26,113	48,357
3043	1336	Narragansett Housing	С	178,500	15,828	474,658	534,619
3045	1098	Coventry Lighting District	С	35,000	2,418	598,003	1,203,635
3046	1242	Hope Valley Fire	С	140,385	11,507	415,390	617,548
3050	1156	East Greenwich Housing	С	557,414	51,801	1,426,347	1,307,488
3051	1116	Cranston Housing	С	1,163,067	123,708	4,543,574	5,129,296
3052	1166	East Providence Housing	В	751,355	73,293	3,355,215	2,864,892
3053	1416	Pawtucket Housing	В	2,817,360	246,513	10,039,253	13,969,871
3056	1126	Cumberland Housing	С	559,914	50,112	1,294,179	1,340,307
3057	1306	Lincoln Housing	В	529,223	39,757	1,905,255	1,668,862
3059	1016	Bristol Housing		449,163	32,930	1,511,956	2,075,328
3065	1036	Burrillville Housing	В	202,740	15,935	991,047	942,371
3066	1386	North Providence Housing	В	227,456	22,790	1,646,258	851,244
3067	1177	East Smithfield Water	С	152,819	13,792	826,583	965,938
3068	1227	Greenville Water	В	290,640	27,273	1,009,537	1,206,377
3069	1356	Newport Housing	С	1,672,370	151,019	8,820,343	6,640,761
3071	1566	Warren Housing	В	343,868	26,172	1,172,724	1,268,814
3072	1286	Johnston Housing		434,734	35,561	1,349,596	1,190,144
3077	1538	Tiverton Local 2670A	С	1,017,437	86,120	4,205,634	3,969,247
3078	1002 1003 1007 1009	Barrington COLA	С	7,593,131	689,603	34,842,602	33,213,920
3079	1096	Coventry Housing		597,015	48,139	1,119,523	1,102,853
3080	1496	South Kingstown Housing	С	144,970	12,871	239,852	388,930
3081	1403	N. RI Collaborative Adm. Services	С	957,745	80,619	3,296,431	2,776,713
3083	1616	West Warwick Housing	В	211,163	16,352	2,027,132	1,706,210

Old Unit Number	New Unit Number	Unit	Code(s)	Co	Adjusted ompensation	N	Jormal Cost (Total)	Act	tuarial Accrued Liability	Ac	ctuarial Value of Assets
(1)	(2)	(3)	(4)		(5)		(6)		(7)		(8)
2004	1.174				110 110		0.545		220.070		152.207
3084	1476	Smithfield Housing	G		110,110		8,747		329,969		453,306
3094	1478	Smithfield COLA	C		3,692,416		326,976		15,599,035		14,396,177
3096	1056	Central Falls Housing	С		886,894		70,530		2,869,690		2,091,367
3098	1293	Lime Rock Administrative Services	G		89,570		7,082		380,922		284,608
3099	1063	Central Falls Schools	С		4,175,427		343,682		15,124,704		14,675,315
3100	1023	Bristol/Warren Schools	В		4,297,247		391,398		21,459,673		16,248,020
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C		5,811,994		527,175		20,100,023		21,431,756
3102	1712	Harrisville Fire District (ADMIN)	С		258,271		23,145		658,072		689,826
3103	1702	Albion Fire District (ADMIN)	C,5		-		-		98,945		140,434
3150	1159	East Greenwich Fire (ADMIN)	С		43,783		3,543		354,060		325,908
		General Employee Units Subtotal		\$	230,499,170	\$	20,441,900	\$	1,111,720,282	\$	945,727,947
Police & Fire V											
4016	1285	Johnston Fire	D		3,491,911		603,594		5,814,269		5,809,725
4029	1454	Richmond Police	6		723,676		120,965		1,817,172		1,558,587
4031	1474	Smithfield Police	C,D		2,886,941		526,521		13,056,782		13,256,236
4042	1555	Valley Falls Fire	D		814,750		141,048		4,466,653		3,367,653
4047	1395 1435	North Smithfield Voluntary Fire	B,D		1,229,338		227,741		8,004,802		6,842,884
4050	1155	East Greenwich Fire	C,D		2,402,343		449,175		18,181,063		11,249,329
4054	1154	East Greenwich Police	C,D		2,086,104		402,052		19,881,334		13,889,389
4055	1375	North Kingstown Fire	C,D		3,741,075		695,064		40,429,810		29,576,771
4056	1374	North Kingstown Police	C,D		3,174,132		589,223		27,760,638		19,559,797
4058	1385	North Providence Fire	D		5,629,919		962,478		43,351,192		31,308,574
4059	1008	Barrington Fire (25)	С		1,253,591		227,658		2,441,006		2,287,517
4060	1004	Barrington Police	C,D		1,481,696		270,777		13,437,921		8,355,306
4061	1005	Barrington Fire (20)	C,D		135,786		20,394		9,962,410		6,725,832
4062	1564 1565	Warren Police & Fire	C,D		1,600,903		290,636		13,793,001		9,609,424
4063	1494	South Kingstown Police	B,1		3,054,977		569,226		28,399,168		22,061,689

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	-	-	21,377	206,403
4076	1394	North Smithfield Police	C,D	1,607,310	296,050	11,772,634	8,976,502
4077	1534	Tiverton Fire	C,D	1,669,436	319,459	11,554,465	9,859,642
4082	1194	Foster Police	C,D	390,931	78,273	3,408,660	2,551,744
4085	1634	Woonsocket Police	C,D	5,398,638	1,003,610	49,875,311	35,083,455
4086	1084	Charlestown Police	C,D	1,398,954	259,329	11,698,924	8,513,428
4087	1264	Hopkinton Police	C,D,6	939,222	182,868	8,286,362	5,393,037
4088	1214	Glocester Police	C,D	1,013,729	197,702	7,194,812	5,846,304
4089	1604	West Greenwich Police/Rescue	C,D	892,784	180,307	5,044,129	3,703,518
4090	1034	Burrillville Police	C,D,6	1,332,172	276,301	11,045,980	9,305,955
4091	1148	Cumberland Rescue	C,D	1,068,948	202,790	5,638,560	5,731,161
4093	1635	Woonsocket Fire	C,D	6,917,818	1,280,298	43,651,617	42,461,130
4094	1015	Bristol Fire	D	99,184	22,626	361,933	307,220
4095	1135	Cumberland Hill Fire	C,D	744,549	142,308	6,304,556	4,012,170
4096	1014	Bristol Police	C,D	2,344,256	433,615	5,302,730	6,095,558
4098	1095	Coventry Fire	C,D	954,956	172,849	5,724,412	3,707,864
4099	1505	South Kingstown EMT	C,D	832,274	162,217	3,136,315	3,690,353
4101	1365	North Cumberland	C,D	695,243	137,118	5,855,867	4,611,993
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	2,120,520	395,805	13,077,593	9,459,712
4103	1255	Hopkins Hill Fire	C,D	710,468	141,522	2,500,600	2,288,646
4104	1114	Cranston Police	C,D,4	9,613,265	1,870,657	35,938,526	32,933,187
4105	1115	Cranston Fire	C,D,4	11,750,326	2,279,570	49,236,370	54,640,039
4106	1125	Cumberland Fire	B,D	777,084	152,271	5,346,439	3,801,207
4107	1305	Lincoln Rescue	С	847,585	145,522	4,601,130	3,341,014
4108	1344	New Shoreham Police	B,D	290,580	55,577	1,650,734	1,160,896
4109	1324	Middletown Police & Fire	C,D	3,491,570	645,304	4,778,456	5,287,428
4110	1715	Harrisville Fire District	C,D	343,282	64,806	1,094,190	1,297,321
4111	1705	Albion Fire District	С	221,376	39,371	1,138,025	775,690

Old Unit Number	New Unit Number	Unit	Code(s)	Co	Adjusted ompensation	Ν	Jormal Cost (Total)	Ac	tuarial Accrued Liability	Ac	ctuarial Value of Assets
(1)	(2)	(3)	(4)		(5)		(6)		(7)		(8)
1284	1284	Johnston Police			605,584		105,887		347,486		336,982
1465	1465	Smithfield Fire	С		601,768		116,836		834,450		863,913
		Police & Fire Units Subtotal		\$	93,380,954	\$	17,457,400	\$	567,219,865	\$	461,702,185
		All MERS Units Total		\$	323,880,124	\$	37,899,300	\$	1,678,940,147	\$	1,407,430,132

#### **Components Used in Determining Contribution Rates**

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.

3 - Closed unit.

2 - New unit in 2013 valuation.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan pr5 - This unit has no active members.

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

Table 4a

Old Unit Number	New Unit Number	Unit	Code	Market Value of Assets	Actuarial Value of Assets	
(1)	(2)	(3)	(4)	(5)	(6)	
General Empl	ovee Units					
3002	1012 1019	Bristol	В	\$ 16,622,801	\$ 16,818,206	
3002	1032 1033	Burrillville	C	26,934,099	27,250,716	
3004	1052	Central Falls	e	4,883,184	4,940,587	
3005	1082	Charlestown	С	6,638,954	6,716,997	
3007	1112 1113	Cranston	В	133,019,205	134,582,875	
3008	1122 1123	Cumberland	2	23,488,034	23,764,142	
3009	1152 1153	East Greenwich	С	7,297,622	7,383,407	
3010	1162 1163	East Providence	В	61,085,105	61,803,175	
3011	1183	Exeter/West Greenwich	В	9,007,208	9,113,090	
3012	1192 1193	Foster		3,319,349	3,358,369	
3013	1212 1213	Glocester	С	8,258,568	8,355,649	
3014	1262	Hopkinton	C	5,167,150	5,227,891	
3015	1272 1273	Jamestown	C	12,385,603	12,531,199	
3016	1282 1283	Johnston	C	30,774,272	31,136,031	
3017	1302 1303	Lincoln	-	1,932,221	1,954,935	
3019	1322 1323	Middletown	С	17,132,151	17,333,544	
3021	1352 1353 1354	Newport	В	45,769,020	46,307,046	
3022	1342 1343	New Shoreham	В	6,604,054	6,681,686	
3023	1372 1373	North Kingstown	C	45,405,196	45,938,945	
3024	1382 1383	North Providence		28,188,600	28,519,964	
3025	1392 1393	North Smithfield	В	13,869,066	14,032,100	
3026	1412 1413	Pawtucket	C	89,401,771	90,452,710	
3027	1515	Union Fire District		649,548	657,184	
3029	1452	Richmond		2,036,125	2,060,060	
3030	1462 1463	Scituate	В	10,172,867	10,292,452	
3031	1472 1473	Smithfield	С	12,259,407	12,403,519	
3032	1492 1493	South Kingstown	В	51,732,758	52,340,889	
3033	1532 1533	Tiverton	С	12,974,605	13,127,125	
3034	1562	Warren	С	5,046,407	5,105,729	
3036	1622 1623	Westerly		268,624	271,782	
3037	1602	West Greenwich	С	2,424,907	2,453,412	
3039	1632 1633	Woonsocket	В	60,476,718	61,187,636	
3040	1073	Chariho School District	С	17,130,779	17,332,155	
3041	1203	Foster/Glocester	В	6,495,937	6,572,298	
3042	1528	Tiogue Fire & Lighting	C,5	47,795	48,357	
3043	1336	Narragansett Housing	С	528,407	534,619	
3045	1098	Coventry Lighting District	С	1,189,650	1,203,635	
3046	1242	Hope Valley Fire	С	610,373	617,548	
3050	1156	East Greenwich Housing	C	1,292,297	1,307,488	
3051	1116	Cranston Housing	C	5,069,700	5,129,296	
3052	1166	East Providence Housing	В	2,831,606	2,864,892	
3053	1416	Pawtucket Housing	В	13,807,560	13,969,871	
3056	1126	Cumberland Housing	C	1,324,734	1,340,307	
2.500		B	÷	1,02 1,00 1	1,0 :0,007	

Table 4a

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	В	1,649,472	1,668,862
3059	1016	Bristol Housing		2,051,215	2,075,328
3065	1036	Burrillville Housing	В	931,422	942,371
3066	1386	North Providence Housing	В	841,354	851,244
3067	1177	East Smithfield Water	С	954,715	965,938
3068	1227	Greenville Water	В	1,192,361	1,206,377
3069	1356	Newport Housing	С	6,563,604	6,640,761
3071	1566	Warren Housing	В	1,254,072	1,268,814
3072	1286	Johnston Housing		1,176,316	1,190,144
3077	1538	Tiverton Local 2670A	С	3,923,130	3,969,247
3078	1002 1003 1007 1009	Barrington COLA	С	32,828,019	33,213,920
3079	1096	Coventry Housing		1,090,039	1,102,853
3080	1496	South Kingstown Housing	С	384,411	388,930
3081	1403	N. RI Collaborative Adm. Services	С	2,744,451	2,776,713
3083	1616	West Warwick Housing	В	1,686,386	1,706,210
3084	1476	Smithfield Housing		448,039	453,306
3094	1478	Smithfield COLA	С	14,228,913	14,396,177
3096	1056	Central Falls Housing	С	2,067,068	2,091,367
3098	1293	Lime Rock Administrative Services		281,301	284,608
3099	1063	Central Falls Schools	С	14,504,807	14,675,315
3100	1023	Bristol/Warren Schools	В	16,059,240	16,248,020
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	21,182,748	21,431,756
3102	1712	Harrisville Fire District (ADMIN)	C	681,811	689,826
3103	1702	Albion Fire District (ADMIN)	C,5	138,802	140,434
3150	1159	East Greenwich Fire (ADMIN)	C	322,121	325,908
		General Employee Units Subtotal		\$ 934,739,854	\$ 945,727,947
Police & Fire	e Units				
4016	1285	Johnston Fire	D	\$ 5,742,224	\$ 5,809,725
4029	1454	Richmond Police	6	1,540,478	1,558,587
4031	1474	Smithfield Police	C,D	13,102,216	13,256,236
4042	1555	Valley Falls Fire	D	3,328,525	3,367,653
4047	1395 1435	North Smithfield Voluntary Fire	B,D	6,763,379	6,842,884
4050	1155	East Greenwich Fire	C,D	11,118,627	11,249,329
4054	1154	East Greenwich Police	C,D	13,728,013	13,889,389
4055	1375	North Kingstown Fire	C,D	29,233,129	29,576,771
4056	1374	North Kingstown Police	C,D	19,332,538	19,559,797
4058	1385	North Providence Fire	D	30,944,810	31,308,574
4059	1008	Barrington Fire (25)	С	2,260,939	2,287,517
4060	1004	Barrington Police	C,D	8,258,229	8,355,306
4061	1005	Barrington Fire (20)	C,D	6,647,687	6,725,832
4062	1564 1565	Warren Police & Fire	C,D	9,497,775	9,609,424
4063	1494	South Kingstown Police	B,1	21,805,362	22,061,689

Table 4a

Old Unit	New Unit			Market Value of	Actuarial Value of
Number	Number	Unit	Code	Assets	Assets
(1)	(2)	(3)	(4)	(5)	(6)
4073	1464	Scituate Police	5	204,005	206,403
4076	1394	North Smithfield Police	C,D	8,872,207	8,976,502
4077	1534	Tiverton Fire	C,D	9,745,086	9,859,642
4082	1194	Foster Police	C,D	2,522,096	2,551,744
4085	1634	Woonsocket Police	C,D	34,675,832	35,083,455
4086	1084	Charlestown Police	C,D	8,414,513	8,513,428
4087	1264	Hopkinton Police	C,D,6	5,330,377	5,393,037
4088	1214	Glocester Police	C,D	5,778,378	5,846,304
4089	1604	West Greenwich Police/Rescue	C,D	3,660,488	3,703,518
4090	1034	Burrillville Police	C,D,6	9,197,832	9,305,955
4091	1148	Cumberland Rescue	C,D	5,664,573	5,731,161
4093	1635	Woonsocket Fire	C,D	41,967,789	42,461,130
4094	1015	Bristol Fire	D	303,651	307,220
4095	1135	Cumberland Hill Fire	C,D	3,965,554	4,012,170
4096	1014	Bristol Police	C,D	6,024,736	6,095,558
4098	1095	Coventry Fire	C,D	3,664,784	3,707,864
4099	1505	South Kingstown EMT	C,D	3,647,476	3,690,353
4101	1365	North Cumberland	C,D	4,558,408	4,611,993
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	9,349,803	9,459,712
4103	1255	Hopkins Hill Fire	C,D	2,262,055	2,288,646
4104	1114	Cranston Police	C,D,4	32,550,547	32,933,187
4105	1115	Cranston Fire	C,D,4	54,005,195	54,640,039
4106	1125	Cumberland Fire	B,D	3,757,042	3,801,207
4107	1305	Lincoln Rescue	С	3,302,196	3,341,014
4108	1344	New Shoreham Police	B,D	1,147,408	1,160,896
4109	1324	Middletown Police & Fire	C,D	5,225,995	5,287,428
4110	1715	Harrisville Fire District	C,D	1,282,248	1,297,321
4111	1705	Albion Fire District	С	766,678	775,690
1284	1284	Johnston Police		333,067	336,982
1465	1465	Smithfield Fire	С	853,875	863,913
		Police & Fire Units Subtotal		\$ 456,337,825	\$ 461,702,185
		All MERS Units Total		\$ 1,391,077,679	\$ 1,407,430,132

#### **Asset Values**

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.

3 - Closed unit.

2 - New unit in 2013 valuation.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan prov5 - This unit has no active members.

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

						Adjusted			Service				
Old Unit			Code	Beginning of Year	Current year prior	Beginning of Year	Member	Employer	Puchases	Benefit	N	let Investment	End of Year
Number	New Unit Number	Unit	(s)	Account Balance	period adjustments	Account Balance	Contributions	Contributions	and Others*	Payments	Refunds	Return	Account Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
General Emp	lovee Units												
3002	1012 1019	Bristol	В	\$ 16,885,963	s -	\$ 16,885,963	\$ 91,750	\$ 704,196	\$ 20,831 \$	(1,411,367) \$	(28,963) \$	360,391	\$ 16,622,801
3003	1032 1033	Burrillville	С	27,022,990	. 0	27,022,990	120,433	501,237	48,600	(1,340,783)	(10,018)	591,640	26,934,099
3004	1052	Central Falls		4,996,132	0	4,996,132	18,326	266,285	(144)	(499,740)	(3,559)	105,884	4,883,184
3005	1082	Charlestown	С	6,461,099	0	6,461,099	43,108	218,126	í	(227,375)	0	143,995	6,638,954
3007	1112 1113	Cranston	В	135,280,321	0	135,280,321	483,418	2,479,865	181,548	(8,134,894)	(156,805)	2,885,752	133,019,205
3008	1122 1123	Cumberland		23,362,761	0	23,362,761	89,142	1,278,367	(43,003)	(1,708,419)	(213)	509,399	23,488,034
3009	1152 1153	East Green wich	С	7,750,529	0	7,750,529	22,842	78,349	(215,977)	(496,385)	0	158,264	7,297,622
3010	1162 1163	East Providence	В	62,798,173	0	62,798,173	319,729	3,537,324	36,233	(6,903,518)	(25,949)	1,323,113	61,085,105
3011	1183	Exeter/West Greenwich	В	8,872,797	0	8,872,797	52,189	321,897	1	(434,931)	0	195,255	9,007,208
3012	1192 1193	Foster		3,391,081	0	3,391,081	11,704	121,957	(79,739)	(197,635)	0	71,981	3,319,349
3013	1212 1213	Glocester	С	8,241,328	0	8,241,328	49,257	245,541	(19,665)	(437,012)	0	179,119	8,258,568
3014	1262	Hopkinton	C	5,137,891	0	5,137,891	34,358	101,363	1	(218,350)	(182)	112,069	5,167,150
3015	1272 1273	Jamestown	C	12.239.266	0	12.239.266	75,147	426.083	409	(595,344)	(28,588)	268,630	12,385,603
3016	1282 1283	Johnston	C	31,524,902	0	31,524,902	162.213	1,254,378	(110,091)	(2,707,876)	(16,735)	667,481	30,774,272
3017	1302 1303	Lincoln		1,854,733	0	1,854,733	9,882	128,464	0	(102,767)	0	41,909	1,932,221
3019	1322 1323	Middletown	С	17,171,743	0	17,171,743	108,157	615,951	(169,165)	(938,546)	(27,564)	371,575	17,132,151
3021	1352 1353 1354	Newport	В	46,880,482	0	46,880,482	234,269	2,518,304	1,871	(4,752,067)	(106,425)	992,586	45,769,020
3022	1342 1343	New Shoreham	В	6,516,742	0	6,516,742	42,359	170,916	1	(261,235)	(7,964)	143,235	6,604,054
3023	1372 1373	North Kingstown	С	46,189,618	0	46,189,618	219,937	1,669,112	1,645	(3,639,903)	(20,459)	985,246	45,405,196
3024	1382 1383	North Providence		28,596,477	0	28,596,477	68,298	546,023	(36,539)	(1,579,301)	(17,726)	611,368	28,188,600
3025	1392 1393	North Smithfield	В	14,118,088	0	14,118,088	65,426	202,160	13.836	(822,461)	(8,709)	300,726	13,869,066
3026	1412 1413	Pawtucket	c	91,962,298	0	91,962,298	386,890	3,180,541	(28,421)	(7,900,552)	(126,476)	1,927,491	89,401,771
3027	1515	Union Fire District		619,685	0	619.685	3,146	26,012	0	(13,384)	0	14,089	649,548
3029	1452	Richmond		1,983,769	0	1,983,769	10,150	105,664	0	(107,834)	0	44,376	2,036,125
3030	1462 1463	Scituate	В	10,423,065	0	10,423,065	52,586	393,072	(32,509)	(857,321)	(26,551)	220,525	10,172,867
3031	1472 1473	Smithfield	c	12,533,801	0	12,533,801	62,748	267,616	(61,414)	(807,567)	(1,737)	265,960	12,259,407
3032	1492 1493	South Kingstown	В	51,438,896	0	51,438,896	245,490	1,420,102	294,348	(2,735,857)	(52,646)	1,122,425	51,732,758
3033	1532 1533	Tiverton	С	13,005,651	0	13,005,651	65,589	144,299	47,586	(550,903)	(18,679)	281,062	12,974,605
3034	1562	Warren	C	5,044,456	0	5,044,456	40,020	255,456	1	(401,982)	(715)	109,171	5,046,407
3036	1622 1623	Westerly	-	223,229	0	223,229	0	181,261	0	(141,691)	0	5.825	268.624
3037	1602	West Greenwich	С	2,480,792	0	2,480,792	19,759	159,958	0	(253,631)	(34,564)	52,593	2,424,907
3039	1632 1633	Woonsocket	В	62,407,893	0	62,407,893	212,427	1,066,595	9,572	(4,465,934)	(67,369)	1,313,534	60,476,718
3040	1052 1055	Chariho School District	c	16,943,359	0	16,943,359	107,812	595,128	3	(853,973)	(33,097)	371,547	17,130,779
3041	1203	Foster/Glocester	в	6,441,417	0	6,441,417	35,977	223,952	1	(346,298)	0	140,888	6,495,937
3042	1528	Tiogue Fire & Lighting	C.5	48,639	0	48,639	0	0	0	(1,880)	0	1,036	47,795
3043	1336	Narragansett Housing	C	507,888	0	507.888	3,570	10.728	0	(5,240)	0	11.461	528,407
3045	1098	Coventry Lighting District	c	1,220,742	0	1,220,742	694	0	0	(57,587)	0	25,801	1,189,650
3046	1242	Hope Valley Fire	c	587,814	0	587,814	2,808	6,514	0	(1)	0	13,238	610,373
3050	1156	East Greenwich Housing	č	1,267,704	0	1,267,704	11,148	55,442	0	(70,026)	0	28,029	1,292,297
3051	1116	Cranston Housing	č	4,954,944	0	4,954,944	22.816	87,730	1	(105,746)	0	109,955	5,069,700

#### Reconciliation of Market Assets by Unit

Table 4b

						Adjusted			Service				
Old Unit			Code	Beginning of Year	Current year prior	Beginning of Year	Member	Employer	Puchases	Benefit		Net Investment	End of Year
Number	New Unit Number	Unit	(s)	0 0	period adjustments	0 0	Contributions	1 5	and Others*	Payments	Refunds		Account Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
3052	1166	East Providence Housing	В	2,877,571.00	0.00	2,877,571.00	15,026	87,382	0	(209,786)	0	61,413	2,831,606
3053	1416	Pawtucket Housing	В	13,868,809	0	13,868,809	56,931	0	2	(405,915)	(11,705)	299,438	13,807,560
3056	1126	Cumberland Housing	С	1,322,996	0	1,322,996	10,412	37,797	15	(75,218)	0	28,732	1,324,734
3057	1306	Lincoln Housing	В	1,671,469	0	1,671,469	10,045	41,377	0	(109,193)	0	35,774	1,649,472
3059	1016	Bristol Housing		2,080,847	0	2,080,847	4,153	0	0	(78,436)	0	44,651	2,051,215
3065	1036	Burrillville Housing	В	949,292	0	949,292	4,055	15,064	0	(57,190)	0	20,201	931,422
3066	1386	North Providence Housing	В	853,094	0	853,094	4,932	64,288	0	(99,208)	0	18,248	841,354
3067	1177	East Smithfield Water	С	966,717	0	966,717	3,487	5,131	0	(35,875)	(5,452)	20,707	954,715
3068	1227	Greenville Water	В	1,192,810	0	1,192,810	5,813	3,749	0	(35,871)	0	25,860	1,192,361
3069	1356	Newport Housing	С	6,656,191	0	6,656,191	31,816	301,158	1	(567,912)	0	142,350	6,563,604
3071	1566	Warren Housing	В	1,316,456	0	1,316,456	6,124	18,647	0	(114,354)	0	27,199	1,254,072
3072	1286	Johnston Housing		1,170,319	0	1,170,319	3,857	45,744	0	(69,116)	0	25,512	1,176,316
3077	1538	Tiverton Local 2670A	С	3,945,724	0	3,945,724	20,054	103,515	28	(231,277)	0	85,086	3,923,130
3078	1002 1003 1007 1009	Barrington COLA	С	33,203,800	0	33,203,800	152,083	638,675	255	(1,870,047)	(10,198)	713,451	32,828,019
3079	1096	Coventry Housing	~	1,061,188	0	1,061,188	6,199	47,481	0	(48,471)	0	23,642	1,090,039
3080	1496	South Kingstown Housing	С	366,372	0	366,372	3,328	6,373	0	(1)	0	8,339	384,411
3081	1403	N. RI Collaborative Adm. Services	С	2,793,426	0	2,793,426	4,399	63,930	0	(143,557)	(33,272)	59,525	2,744,451
3083	1616	West Warwick Housing	В	1,728,156	0	1,728,156	5,568	26,030	41	(109,985)	0	36,576	1,686,386
3084	1476	Smithfield Housing	~	434,570	0	434,570	1,158	2,594	0	(1)	0	9,718	448,039
3094	1478	Smithfield COLA	C C	14,101,575	0	14,101,575	74,217	372,945	65,664	(694,093)	0	308,605	14,228,913
3096	1056 1293	Central Falls Housing Lime Rock Administrative Services	C	2,098,964 277,148	0	2,098,964	17,328 896	98,943	3,395	(179,856)	(16,537)	44,831	2,067,068
3098 3099	1293	Central Falls Schools	С	277,148 14,529,501	0	277,148 14,529,501	896 76,589	11,698 330,474	147	(14,541) (707,898)	(38,596)	6,100 314,590	281,301 14,504,807
3100	1003	Bristol/Warren Schools	В	16,256,754	0	16,256,754	76,589 84.646	674,632	147	(1,294,529)	(10,541)	348.275	14,304,807
3100	1025	Town of E. Greenwich-COLA-NCE	С	20,988,173	0	20,988,173	114,527	392,668	99.298	(1,294,329) (841,982)	(32,565)	462,629	21,182,748
3101	1712	Harrisville Fire District (ADMIN)	c	20,988,173	0	645,535	5,165	16,323	99,298	(041,982)	(32,303)	402,029	681,811
3102	1702	Albion Fire District (ADMIN)	C.5	128,397	0	128,397	5,105	7,394	0	0	0	3,011	138,802
3150	1159	East Greenwich Fire (ADMIN)	C,J	327.633	0	327.633	987	7,766	0	(21,252)	0	6,987	322,121
5150	1155	General Employee Units Subtotal	C	\$ 947,202,645	0	\$ 947,202,645			0	( ) · )	0	- /	. ,
Police & Fir	e Units												
4016	1285	Johnston Fire	D	\$ 5,118,999	s -	\$ 5,118,999			\$ 12 \$	(71,970) \$	0	\$ 124,551	
4029	1454	Richmond Police	6	1,395,577	0	1,395,577	50,296	87,587	0	(26,394)	0	33,412	1,540,478
4031	1474	Smithfield Police	C,D	12,623,444	0	12,623,444	230,955	204,685	2	(240,722)	0	283,852	13,102,216
4042	1555	Valley Falls Fire	D	3,300,510	0	3,300,510	57,033	146,982	1	(248,191)	0	72,190	3,328,525
4047	1395 1435	North Smithfield Voluntary Fire	B,D	6,596,698	0	6,596,698	98,348	226,600	2,563	(287,905)	(19,966)	147,041	6,763,379
4050	1155	East Greenwich Fire	C,D	11,094,796	0	11,094,796	190,870	623,185	20,188	(1,032,669)	(18,887)	241,144	11,118,627
4054	1154	East Greenwich Police	C,D	13,802,863	0	13,802,863	173,534	565,061	(12,993)	(1,100,046)	0	299,594	13,728,013
4055	1375	North Kingstown Fire	C,D	29,279,549	0	29,279,549	304,253	1,069,831	12,181	(2,065,694)	(1,007)	634,016	29,233,129
4056	1374	North Kingstown Police	C,D	19,194,740	0	19,194,740	249,263	860,582	3	(1,335,896)	(55,445)	419,291	19,332,538

#### Reconciliation of Market Assets by Unit

						Adjusted				Service				
Old Unit			Code	Beginning of Year	Current year prior	Beginning of Y	lear M	ember	Employer	Puchases	Benefit	1	Net Investment	End of Year
Number	New Unit Number	Unit	(s)	Account Balance	period adjustments	Account Bala	nce Cont	ributions	Contributions	and Others*	Payments	Refunds	Return	Account Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)	(10)	(11)	(12)	(13)	(14)
4058	1385	North Providence Fire	D	30,891,114	0	30,891	,114	338,310	1,289,951	3,326	(2,225,423)	(23,691)	671,223	30,944,810
4059	1008	Barrington Fire (25)	С	2,047,301	0	2,047	,301	101,015	118,324	0	(53,326)	(1,416)	49,041	2,260,939
4060	1004	Barrington Police	C,D	8,195,051	0	8,195	,051	125,590	460,023	2,221	(703,764)	0	179,108	8,258,229
4061	1005	Barrington Fire (20)	C,D	7,185,320	0	7,185	,320	10,863	89,279	1	(781,942)	0	144,166	6,647,687
4062	1564 1565	Warren Police & Fire	C,D	9,272,018	0	9,272	,018	129,208	491,829	2	(601,274)	0	205,992	9,497,775
4063	1494	South Kingstown Police	B,1	22,004,925	0	22,004	,925	250,257	712,921	1,852	(1,634,033)	(4,510)	473,950	21,805,362
4073	1464	Scituate Police	5	203,189	0	203	,189	0	0	0	(3,609)	0	4,425	204,005
4076	1394	North Smithfield Police	C,D	8,844,423	0	8,844	,423	126,484	312,414	1	(603,406)	0	192,291	8,872,207
4077	1534	Tiverton Fire	C,D	9,739,601	0	9,739	,601	139,329	266,991	(5,926)	(582,605)	(23,658)	211,354	9,745,086
4082	1194	Foster Police	C,D	2,548,131	0	2,548	,131	29,050	117,553	0	(221,970)	(5,368)	54,700	2,522,096
4085	1634	Woonsocket Police	C,D	34,642,411	0	34,642	,411	441,856	1,288,328	1,429	(2,448,919)	(2,218)	752,945	34,675,832
4086	1084	Charlestown Police	C,D	8,268,107	0	8,268	,107	111,916	341,485	1,082	(490,580)	0	182,503	8,414,513
4087	1264	Hopkinton Police	C,D,6	5,391,830	0	5,391	,830	72,583	219,198	1	(468,843)	0	115,608	5,330,377
4088	1214	Glocester Police	C,D	5,685,081	0	5,685	,081	81,099	184,094	1	(297,222)	0	125,325	5,778,378
4089	1604	West Greenwich Police/Rescue	C,D	3,506,756	0	3,506	,756	71,422	210,965	1	(208,048)	0	79,392	3,660,488
4090	1034	Burrillville Police	C,D,6	9,050,199	0	9,050	,199	106,479	330,750	1	(489,084)	0	199,487	9,197,832
4091	1148	Cumberland Rescue	C,D	5,466,673	0	5,466	,673	85,988	117,481	4,833	(133,416)	0	123,014	5,664,573
4093	1635	Woonsocket Fire	C,D	40,863,988	0	40,863	,988	554,205	757,891	18	(1,100,632)	(17,928)	910,247	41,967,789
4094	1015	Bristol Fire	D	279,011	0	279	,011	6,943	24,717	3,751	(17,357)	0	6,586	303,651
4095	1135	Cumberland Hill Fire	C,D	3,984,097	0	3,984	,097	59,565	198,869	1	(362,951)	0	85,973	3,965,554
4096	1014	Bristol Police	C,D	5,675,244	0	5,675	,244	182,779	130,914	1	(39,969)	(54,909)	130,676	6,024,736
4098	1095	Coventry Fire	C,D	3,506,639	0	3,506	,639	80,413	220,732	1	(222,487)	0	79,486	3,664,784
4099	1505	South Kingstown EMT	C,D	3,591,354	0	3,591	,354	65,837	49,050	1	(59,540)	(78,337)	79,111	3,647,476
4101	1365	North Cumberland	C,D	4,443,208	0	4,443	,208	58,393	154,596	1	(196,658)	0	98,868	4,558,408
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	9,254,807	0	9,254	,807	174,575	385,835	(14,074)	(618,159)	(35,971)	202,790	9,349,803
4103	1255	Hopkins Hill Fire	C,D	2,081,783	0	2,081		56,838	95,203	0	(20,832)	0	49,063	2,262,055
4104	1114	Cranston Police	C,D,4	30,930,926		30,930		641,751	857,531	13,000	(585,771)	(12,901)	706,011	32,550,547
4105	1115	Cranston Fire	C,D,4	51,145,398		51,145		940,029	1,226,727	4,499	(482,813)	0	1,171,355	54,005,195
4106	1125	Cumberland Fire	B,D	3,698,014	0	3,698		58,486	160,842	1	(241,786)	0	81,485	3,757,042
4107	1305	Lincoln Rescue	С	3,136,527	0	3,136		71,166	179,605	(4,763)	(151,960)	0	71,621	3,302,196
4108	1344	New Shoreham Police	B,D	1,101,779		1,101		23,246	73,342	1,501	(77,346)	0	24,886	1,147,408
4109	1324	Middletown Police & Fire	C,D	4,622,437	0	4,622		275,277	222,974	21,081	(12,975)	(16,153)	113,354	5,225,995
4110	1715	Harrisville Fire District	C,D	1,201,195	0	1,201		26,357	26,885	0	(2)	0	27,813	1,282,248
4111	1705	Albion Fire District	С	707,291	0		,291	18,389	47,179	0	(22,810)	0	16,629	766,678
1284	1284	Johnston Police		227,254	0		,254	42,390	56,198	0	0	0	7,225	333,067
1465	1465	Smithfield Fire	С	742,046			,046	43,540	52,630	4,764	(1)	(7,625)	18,521	853,875
		Police & Fire Units Subtotal		\$ 446,542,304	\$ -	\$ 446,542	,304 \$	7,196,084 \$	15,588,547	\$ 60,565 \$	(22,571,000) \$	(379,990) 5	\$ 9,901,315	\$ 456,337,825
		All MERS Units Total		\$ 1,393,744,949	s -	\$ 1,393,744	,949 \$	11,525,453 \$	44,576,293	\$ 89,236 \$	(87,673,881) \$	(1,360,549) \$	\$ 30,176,178	\$ 1,391,077,679

#### **Reconciliation of Market Assets by Unit**

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.

3 - Closed unit.

2 - New unit in 2013 valuation.

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

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

		Source of Rate Change										
			June 30, 2014	Salary	Payroll	Other Non-	Asset	cate Change			2016 COLA	
Old Unit	N	Unit	Actuarial	(Gains)/	(Gains)/	Asset (Gains)/	(Gains)/	Provision	Assumption	COLA	different than	June 30, 2015
Number (1)	New Unit Number (2)	(3)	Valuation (4)	Losses (5)	Losses (6)	Losses (5)	Losses (6)	Change (7)	Changes (8)	Suspension	Assumed (9)	Actuarial Valuation (10)
	nployee Units			~ /					~~~			
3002	1012 1019	Bristol	14.80%	(0.56%)	0.26%	0.57%	0.00%	0.00%		(0.39%)	(0.18%)	14.50%
3002	1032 1033	Burrillville	6.98%	(0.38%)				1.13%	-	(0.39%)	. ,	7.40%
3003	1052	Central Falls	13.16%	(0.38%)	(0.00%) (0.62%)	(0.18%) (0.14%)	(0.01%) 0.00%	0.32%		0.00%	(0.14%) 0.00%	12.59%
3004	1032	Charlestown	7.86%	(0.13%)	0.00%	(0.14%)	0.00%	0.32%	-	0.00%	(0.07%)	7.36%
	1112 1113		8.39%	. ,	0.00%	. ,	0.00%	1.32%	-	0.00%	. ,	8.75%
3007	1112 1113	Cranston Cumberland	8.39% 13.32%	0.01%	(0.13%)	(0.74%) (0.60%)	0.00%	(0.45%)	-	0.00%	(0.24%) 0.00%	8.75% 11.92%
3008		Cumberland		(0.23%)	. ,	. ,		. ,	-			
3009 3010	1152 1153 1162 1163	East Greenwich East Providence	4.36% 25.17%	0.05%	0.08% 0.28%	(0.70%)	0.00% 0.00%	0.79%	-	0.00%	(5.38%)	(0.81%)
				(0.47%)		(0.22%)		(0.74%)	-	(0.63%)	(0.30%)	23.09%
3011	1183	Exeter/West Greenwich	11.59%	(0.23%)	0.13%	(0.69%)	0.00%	0.98%	-	0.00%	(0.14%)	11.64%
3012	1192 1193	Foster	10.46%	0.48%	0.00%	0.44%	0.00%	0.36%	-	0.00%	0.00%	11.74%
3013	1212 1213	Glocester	9.68%	(0.15%)	0.03%	(0.03%)	0.00%	0.97%	-	0.00%	(0.11%)	10.40%
3014	1262	Hopkinton	3.06%	(0.14%)	(0.02%)	(1.14%)	0.00%	0.50%	-	0.00%	(0.05%)	2.22%
3015	1272 1273	Jamestown	9.66%	(0.18%)	0.03%	0.15%	0.00%	0.83%	-	0.00%	(0.14%)	10.35%
3016	1282 1283	Johnston	15.93%	(0.13%)	0.00%	0.59%	0.00%	0.16%	-	(0.35%)	(0.23%)	15.98%
3017	1302 1303	Lincoln	11.91%	(0.25%)	(0.12%)	0.33%	0.00%	0.09%	-	0.00%	0.00%	11.96%
3019	1322 1323	Middletown	10.32%	(0.28%)	0.20%	0.14%	0.00%	0.27%	-	0.00%	(0.13%)	10.52%
3021	1352 1353 1354	Newport	21.65%	0.05%	(0.09%)	0.61%	0.00%	1.44%	-	(0.63%)	(0.29%)	22.74%
3022	1342 1343	New Shoreham	7.10%	(0.10%)	0.01%	(0.81%)	0.00%	0.71%	-	0.00%	(0.09%)	6.82%
3023	1372 1373	North Kingstown	16.91%	(0.06%)	0.10%	(0.48%)	0.00%	1.27%	-	(0.44%)	(0.22%)	17.08%
3024	1382 1383	North Providence	5.40%	(0.11%)	(0.05%)	(0.23%)	0.00%	0.40%	-	0.00%	0.00%	5.41%
3025	1392 1393	North Smithfield	5.19%	(0.24%)	(0.05%)	(1.11%)	0.00%	0.95%	-	0.00%	(0.17%)	4.58%
3026	1412 1413	Pawtucket	16.13%	(0.05%)	0.09%	(0.76%)	0.01%	0.16%	-	(0.49%)	(0.26%)	14.83%
3027	1515	Union Fire District	7.45%	(0.18%)	(0.07%)	(0.08%)	0.00%	0.17%	-	0.00%	0.00%	7.29%
3029	1452	Richmond	8.67%	(0.32%)	(0.03%)	(0.33%)	0.00%	0.37%	-	0.00%	0.00%	8.37%
3030	1462 1463	Scituate	13.48%	(0.10%)	0.16%	0.35%	0.00%	1.25%	-	(0.34%)	(0.23%)	14.57%
3031	1472 1473	Smithfield	6.86%	(0.29%)	0.02%	(0.13%)	0.00%	0.83%	-	0.00%	(0.08%)	7.21%
3032	1492 1493	South Kingstown	10.57%	0.11%	0.00%	(0.32%)	0.00%	1.04%	-	0.00%	(0.19%)	11.22%
3033	1532 1533	Tiverton	2.06%	(0.28%)	(0.20%)	(0.90%)	0.00%	0.76%	-	0.00%	(0.10%)	1.35%
3034	1562	Warren	11.23%	(0.48%)	0.45%	0.24%	0.00%	0.14%	-	(0.14%)	(0.07%)	11.38%

#### Explanation of Rate Changes All rates are gross: before recognizing 0% minimum contribution rate

		Source of Rate Change										
			June 30, 2014	Salary	Payroll	Other Non-	Asset	Rate Change			2016 COLA	
Old Unit			Actuarial	(Gains)/	(Gains)/	Asset (Gains)/	(Gains)/	Provision	Assumption	COLA	different than	June 30, 2015
Number (1)	New Unit Number (2)	<u>Unit</u> (3)	Valuation (4)	Losses (5)	Losses (6)	Losses (5)	Losses (6)	Change (7)	Changes (8)	Suspension	Assumed (9)	Actuarial Valuation (10)
(1)	(2)	(3)	(4)	(3)	(0)	(3)	(0)	(/)	(8)		(9)	(10)
3037	1602	West Greenwich	15.27%	(0.00%)	(0.37%)	0.59%	0.00%	(0.06%)	-	(0.38%)	(0.16%)	14.88%
3039	1632 1633	Woonsocket	10.05%	(0.28%)	0.06%	(1.04%)	0.00%	1.61%	-	0.00%	(0.29%)	10.11%
3040	1073	Chariho School District	10.26%	(0.39%)	0.15%	(0.32%)	0.00%	0.78%	-	0.00%	(0.10%)	10.39%
3041	1203	Foster/Glocester	10.03%	(0.28%)	0.02%	0.13%	0.00%	0.93%	-	0.00%	(0.15%)	10.68%
3043	1336	Narragansett Housing	4.26%	(0.67%)	(0.06%)	(0.07%)	0.01%	0.62%	-	0.00%	(0.02%)	4.06%
3045	1098	Coventry Lighting District	(57.91%)	0.00%	(6.52%)	(117.09%)	0.01%	57.91%	-	0.00%	(1.32%)	(124.92%)
3046	1242	Hope Valley Fire	0.26%	(0.58%)	(0.26%)	(2.80%)	0.01%	0.98%	-	0.00%	(0.01%)	(2.40%)
3050	1156	East Greenwich Housing	8.56%	0.03%	0.07%	(0.13%)	0.00%	0.46%	-	0.00%	(0.04%)	8.95%
3051	1116	Cranston Housing	6.55%	(0.74%)	(0.05%)	(0.64%)	0.01%	0.68%	-	0.00%	(0.06%)	5.75%
3052	1166	East Providence Housing	12.64%	(0.04%)	(0.05%)	(1.15%)	0.00%	0.46%	-	0.00%	(0.23%)	11.63%
3053	1416	Pawtucket Housing	(3.42%)	0.27%	0.02%	(4.03%)	0.00%	3.42%	-	0.00%	(0.14%)	(3.88%)
3056	1126	Cumberland Housing	6.72%	(0.28%)	0.05%	(0.79%)	0.00%	0.71%	-	0.00%	(0.06%)	6.36%
3057	1306	Lincoln Housing	5.92%	(0.28%)	(0.13%)	2.81%	0.00%	0.73%	-	0.00%	(0.22%)	8.83%
3059	1016	Bristol Housing	(3.16%)	(0.68%)	(0.20%)	(3.02%)	0.00%	3.16%	-	0.00%	(0.00%)	(3.90%)
3065	1036	Burrillville Housing	7.27%	(0.15%)	0.02%	(0.39%)	0.00%	0.89%	-	0.00%	(0.22%)	7.42%
3066	1386	North Providence Housing	28.64%	(1.44%)	2.29%	1.38%	0.00%	(0.98%)	-	(0.72%)	(0.36%)	28.81%
3067	1177	East Smithfield Water	2.07%	(0.18%)	(0.57%)	(1.74%)	0.00%	1.27%	-	0.00%	(0.22%)	0.63%
3068	1227	Greenville Water	0.68%	0.82%	0.36%	(0.95%)	0.00%	1.12%	-	0.00%	(0.10%)	1.93%
3069	1356	Newport Housing	17.91%	0.31%	(0.44%)	(1.35%)	0.00%	1.32%	-	(0.59%)	(0.24%)	16.92%
3071	1566	Warren Housing	1.71%	0.13%	0.17%	(0.06%)	0.00%	1.41%	-	0.00%	(0.26%)	3.10%
3072	1286	Johnston Housing	11.39%	(0.53%)	0.19%	(0.83%)	0.00%	(0.26%)	-	0.00%	0.00%	9.97%
3077	1538	Tiverton Local 2670A	9.16%	(0.38%)	0.05%	(1.57%)	0.00%	1.09%	-	0.00%	(0.20%)	8.16%
3078	1002 1003 1007 1009	Barrington COLA	8.18%	(0.26%)	(0.01%)	0.07%	0.00%	0.89%	-	0.00%	(0.14%)	8.73%
3079	1096	Coventry Housing	6.90%	(0.05%)	(0.01%)	0.13%	0.00%	0.15%	-	0.00%	0.00%	7.13%
3080	1496	South Kingstown Housing	2.81%	(0.22%)	(0.37%)	(2.75%)	0.00%	0.70%	-	0.00%	0.00%	0.18%
3081	1403	N. RI Collaborative Adm. Serv	10.55%	0.30%	0.89%	(1.34%)	0.00%	0.97%	-	0.00%	(0.19%)	11.18%
3083	1616	West Warwick Housing	7.73%	(0.21%)	0.83%	5.41%	0.00%	0.66%	-	0.00%	(0.28%)	14.15%
3084	1476	Smithfield Housing	(1.25%)	0.09%	(0.80%)	(0.83%)	0.01%	1.25%	-	0.00%	(0.00%)	(1.54%)
3094	1478	Smithfield COLA	8.92%	(0.25%)	(0.01%)	(0.34%)	0.00%	0.61%	-	0.00%	(0.17%)	8.76%

#### Explanation of Rate Changes All rates are gross: before recognizing 0% minimum contribution rate

				All rates are	e gross: before r	ecognizing 0% min	imum contributi	on rate				
							Source of	Rate Change				
Old Unit Number	New Unit Number	Unit	June 30, 2014 Actuarial Valuation	Salary (Gains)/ Losses	Payroll (Gains)/ Losses	Other Non- Asset (Gains)/ Losses	Asset (Gains)/ Losses	Provision Change	Assumption Changes	COLA Suspension	2016 COLA different than Assumed	June 30, 2015 Actuarial Valuation
(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)	(7)	(8)		(9)	(10)
3096	1056	Central Falls Housing	10.79%	(0.37%)	1.01%	0.47%	0.00%	0.03%	-	(0.23%)	(0.08%)	11.62%
3098	1293	Lime Rock Administrative Ser	13.93%	(0.37%)	(0.08%)	0.46%	0.00%	(0.28%)	-	0.00%	0.00%	13.66%
3099	1063	Central Falls Schools	6.77%	0.01%	(0.07%)	(0.45%)	0.00%	1.05%	-	0.00%	(0.16%)	7.15%
3100	1023	Bristol/Warren Schools	15.47%	(0.33%)	0.14%	0.16%	0.00%	0.19%	-	(0.35%)	(0.23%)	15.05%
3101	1157 1158	Town of E. Greenwich-COLA-	4.36%	0.01%	0.00%	(0.58%)	0.00%	0.79%	-	0.00%	0.90%	5.46%
3102	1712	Harrisville Fire District (ADM	3.63%	1.69%	0.22%	(0.26%)	0.01%	0.53%	-	0.00%	(0.01%)	5.80%
3150	1159	East Greenwich Fire (ADMIN)	8.24%	1.74%	(0.91%)	(0.02%)	0.00%	1.48%	-	0.00%	(0.48%)	10.05%
		General Employee Units Aver	12.06%	(0.15%)	0.04%	(0.32%)	0.00%	0.63%	-	(0.18%)	(0.18%)	11.91%
Police & F	ire Units											
4016	1285	Johnston Fire	8.36%	(0.11%)	(0.00%)	0.16%	0.01%	(0.93%)	-	0.00%	(0.00%)	7.48%
4029	1454	Richmond Police	10.94%	(0.11%)	(0.26%)	(0.96%)	0.01%	0.01%	-	(0.08%)	(0.00%)	9.55%
4031	1474	Smithfield Police	6.22%	0.02%	0.00%	0.69%	0.01%	0.40%	-	0.00%	(0.11%)	7.23%
4042	1555	Valley Falls Fire	17.20%	0.75%	(0.45%)	0.70%	0.00%	(1.25%)	-	(0.83%)	0.00%	16.12%
4047	1395 1435	North Smithfield Voluntary Fi	16.38%	(0.46%)	0.21%	(0.88%)	0.01%	0.71%	-	0.00%	(0.29%)	15.67%
4050	1155	East Greenwich Fire	27.82%	0.19%	(0.07%)	1.24%	0.00%	0.95%	-	(1.37%)	(0.35%)	28.41%
4054	1154	East Greenwich Police	27.72%	0.25%	(0.10%)	1.29%	0.00%	1.08%	-	(1.85%)	(0.38%)	28.01%
4055	1375	North Kingstown Fire	28.75%	(1.07%)	0.62%	1.04%	0.01%	1.24%	-	(1.52%)	(0.37%)	28.71%
4056	1374	North Kingstown Police	25.28%	(0.46%)	(0.01%)	2.55%	0.01%	1.20%	-	(1.59%)	(0.41%)	26.57%
4058	1385	North Providence Fire	23.82%	0.05%	1.36%	2.04%	0.01%	(2.49%)	-	(1.13%)	(0.00%)	23.66%
4059	1008	Barrington Fire (25)	7.76%	(0.18%)	(0.03%)	(0.24%)	0.01%	0.74%	-	0.00%	(0.05%)	8.01%
4060	1004	Barrington Police	30.25%	(0.27%)	(0.95%)	2.32%	0.01%	0.78%	-	(1.03%)	(0.28%)	30.82%
4062	1564 1565	Warren Police & Fire	27.49%	(0.81%)	(0.66%)	0.90%	0.01%	(1.13%)	-	(0.98%)	(0.28%)	24.54%
4063	1494	South Kingstown Police	23.96%	(0.26%)	0.53%	(0.57%)	0.00%	1.19%	-	(1.74%)	(0.41%)	22.69%
4076	1394	North Smithfield Police	19.56%	0.16%	(0.77%)	1.89%	0.01%	1.16%	-	(1.32%)	(0.37%)	20.33%
4077	1534	Tiverton Fire	14.70%	(0.27%)	(0.06%)	(0.72%)	0.00%	1.86%	-	0.00%	(0.29%)	15.22%
4082	1194	Foster Police	25.33%	(0.62%)	1.64%	(0.31%)	0.00%	1.72%	-	(1.75%)	(0.57%)	25.44%
4085	1634	Woonsocket Police	27.36%	(0.47%)	(0.74%)	1.26%	0.00%	1.55%	-	(1.79%)	(0.47%)	26.71%
4086	1084	Charlestown Police	23.60%	(0.51%)	0.58%	1.61%	0.01%	0.74%	-	(1.30%)	(0.27%)	24.46%

#### Explanation of Rate Changes All rates are gross: before recognizing 0% minimum contribution rate

All rates are gross: before recognizing 0% minimum contribution rate												
Old Unit Number	New Unit Number	Unit	June 30, 2014 Actuarial Valuation	Salary (Gains)/ Losses	Payroll (Gains)/ Losses	Other Non- Asset (Gains)/ Losses	Source of I Asset (Gains)/ Losses	Rate Change Provision Change	Assumption Changes	COLA Suspension	2016 COLA different than Assumed	June 30, 2015 Actuarial Valuation
(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)	(7)	(8)		(9)	(10)
4087	1264	Hopkinton Police	29.61%	(0.33%)	0.11%	2.62%	0.00%	1.48%	-	(2.07%)	(0.43%)	31.01%
4088	1214	Glocester Police	16.51%	(0.07%)	(0.10%)	1.41%	0.01%	0.84%	-	0.00%	(0.31%)	18.28%
4089	1604	West Greenwich Police/Rescu	21.44%	(0.09%)	(0.39%)	(0.64%)	0.01%	(0.62%)	-	(0.88%)	(0.24%)	18.59%
4090	1034	Burrillville Police	20.86%	(0.37%)	(0.44%)	(1.23%)	0.01%	0.92%	-	0.00%	(0.32%)	19.43%
4091	1148	Cumberland Rescue	9.26%	0.46%	(0.02%)	(1.73%)	0.01%	0.21%	-	0.00%	(0.21%)	7.98%
4093	1635	Woonsocket Fire	10.07%	(0.73%)	0.09%	(1.12%)	0.01%	1.37%	-	0.00%	(0.19%)	9.49%
4094	1015	Bristol Fire	18.84%	(0.37%)	0.00%	0.04%	0.01%	(2.68%)	-	(0.13%)	(0.00%)	15.71%
4095	1135	Cumberland Hill Fire	27.72%	(0.14%)	0.05%	0.90%	0.00%	0.96%	-	(1.69%)	(0.46%)	27.34%
4096	1014	Bristol Police	4.69%	0.04%	0.09%	(0.02%)	0.01%	0.38%	-	0.00%	(0.06%)	5.13%
4098	1095	Coventry Fire	21.72%	(0.08%)	0.66%	(0.38%)	0.01%	(0.65%)	-	(0.67%)	(0.26%)	20.35%
4099	1505	South Kingstown EMT	4.17%	(0.30%)	0.03%	(1.01%)	0.01%	0.76%	-	0.00%	(0.15%)	3.51%
4101	1365	North Cumberland	22.43%	(0.67%)	0.03%	(0.28%)	0.01%	(0.70%)	-	(0.61%)	(0.34%)	19.86%
4102	1045 1235 1525 1585	Central Coventry Fire	17.69%	(1.14%)	1.74%	1.85%	0.00%	(0.42%)	-	(0.74%)	(0.21%)	18.77%
4103	1255	Hopkins Hill Fire	13.79%	(0.19%)	(0.00%)	(0.60%)	0.01%	(0.98%)	-	0.00%	(0.04%)	11.99%
4104	1114	Cranston Police	9.40%	(0.91%)	(0.00%)	2.79%	0.01%	0.17%	-	0.00%	(0.10%)	11.35%
4105	1115	Cranston Fire	7.41%	(0.77%)	(0.05%)	(0.98%)	0.01%	0.09%	-	0.00%	(0.07%)	5.64%
4106	1125	Cumberland Fire	23.37%	(0.10%)	(0.03%)	1.80%	0.01%	(0.99%)	-	(1.10%)	(0.33%)	22.61%
4107	1305	Lincoln Rescue	17.72%	(0.40%)	0.49%	(0.59%)	0.01%	0.86%	-	(0.37%)	(0.18%)	17.54%
4108	1344	New Shoreham Police	23.29%	(0.18%)	(1.36%)	(1.09%)	0.01%	0.92%	-	(1.21%)	(0.27%)	20.11%
4109	1324	Middletown Police & Fire	6.03%	(0.11%)	0.16%	0.07%	0.01%	0.37%	-	0.00%	(0.03%)	6.50%
4110	1715	Harrisville Fire District	5.96%	(0.38%)	0.38%	(1.05%)	0.01%	(0.70%)	-	0.00%	(0.06%)	4.16%
4111	1705	Albion Fire District	18.87%	(1.30%)	0.36%	0.06%	0.01%	0.77%	-	(0.22%)	(0.17%)	18.39%
1284	1284	Johnston Police	8.38%	0.02%	(0.03%)	(1.07%)	0.00%	(0.00%)	-	0.00%	0.00%	7.30%
1465	1465	Smithfield Fire	8.89%	(0.20%)	(0.02%)	(0.42%)	0.01%	(0.35%)	-	0.00%	(0.03%)	7.88%
		Police & Fire Units Averages	16.15%	(0.42%)	0.09%	0.44%	0.01%	0.43%	-	(0.61%)	(0.19%)	15.90%
		All MERS Units Averages	13.23%	(0.23%)	0.05%	(0.09%)	0.00%	0.57%	-	(0.30%)	(0.18%)	13.06%

**Explanation of Rate Changes** 

Units with no active members are excluded from this exhibit

# GRS

	Year Ending June 30, 2015
1. Market value of assets at beginning of year (prior to adjustments)	\$ 1,393,744,949
2. Net new investments	
<ul><li>a. Contributions</li><li>b. Benefits and refunds paid</li><li>c. Subtotal</li></ul>	\$ 56,190,982 (89,034,430) (32,843,448)
3. Market value of assets at end of year	\$ 1,391,077,679
4. Net earnings (3-1-2) (includes misc revenues)	\$ 30,176,178
5. Assumed investment return rate for fiscal year	7.50%
6. Expected return	\$ 103,299,242
7. Excess return (4-6)	\$ (73,123,064)

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

8. Development of amounts to be recognized as of June 30, 2015:

Fiscal		aining Deferrals of					<b>X</b> 7	D	. 16	D	· · .
Year	Excess (Shortfall) of		Offsetting of		Net Deferrals		Years	Recognized for		Remaining after	
End	Investment Income*			Gains/(Losses)		Remaining	Remaining	this valuation		this valuation	
	(1)			(2)		(3) = (1) + (2)	(4)	(5) = (3) / (4)		(6) = (3) - (5)	
2011	\$	0	\$	0	\$	0	1	\$	0	\$	0
2012		0		0		0	2		0		0
2013		0		0		0	3		0		0
2014		52,682,498		(52,682,498)		0	4		0		0
2015	_	(73,123,064)		52,682,498		(20,440,566)	5		(4,088,113)		(16,352,453)
Total	\$	(20,440,566)	\$	0	\$	(20,440,566)		\$	(4,088,113)	\$	(16,352,453)
. Actuarial va	lue of a	assets as of June 30	), 20	)15 (Item 3 - Ite	m 8	)				\$ 1	1,407,430,132

10. Ratio of actuarial value to market value

\*Values of \$0 result from the beginning balance being offset by future gains or losses in the opposite direction.

101.2%
Year Ending		
June 30 of	Market	Actuarial
(1)	(2)	(3)
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%
2011	1.5%	4.7%
2012	11.0%	6.3%
2013	14.8%	8.4%
2014	2.2%	7.5%
2013	2.270	1.5%
Average Returns:		
Last 5 Years	9.6%	5.9%
Last 10 Years	6.0%	6.4%

6.8%

# History of Investment Return Rates

Since 1996

7.1%

Old Unit	New Unit		Code	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Annual	UAAL as % of
Number	Number	Unit	(s)	(AVA)	(AAL)	(UAAL) (5) - (4)	(4)/(5)	Covered Payroll	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
General En	nployee Units								
3002	1012 1019	Bristol	В	16,818,206	22,674,517	5,856,311	74.2%	4,604,695	127.2%
3003	1032 1033	Burrillville	С	27,250,716	27,198,871	(51,845)	100.2%	6,037,677	(0.9%)
3004	1052	Central Falls		4,940,587	6,913,005	1,972,418	71.5%	1,873,295	105.3%
3005	1082	Charlestown	С	6,716,997	6,906,667	189,670	97.3%	2,174,717	8.7%
3007	1112 1113	Cranston	В	134,582,875	138,171,899	3,589,024	97.4%	24,200,452	14.8%
3008	1122 1123	Cumberland		23,764,142	30,851,588	7,087,446	77.0%	8,965,762	79.1%
3009	1152 1153	East Greenwich	С	7,383,407	6,362,531	(1,020,876)	116.0%	1,154,499	(88.4%)
3010	1162 1163	East Providence	В	61,803,175	102,380,235	40,577,060	60.4%	16,304,196	248.9%
3011	1183	Exeter/West Greenwich	В	9,113,090	10,475,346	1,362,256	87.0%	2,617,626	52.0%
3012	1192 1193	Foster		3,358,369	4,068,668	710,299	82.5%	1,155,036	61.5%
3013	1212 1213	Glocester	С	8,355,649	9,446,757	1,091,108	88.4%	2,574,511	42.4%
3014	1262	Hopkinton	С	5,227,891	4,164,294	(1,063,597)	125.5%	1,693,916	(62.8%)
3015	1272 1273	Jamestown	С	12,531,199	14,244,585	1,713,386	88.0%	3,852,466	44.5%
3016	1282 1283	Johnston	С	31,136,031	42,047,305	10,911,274	74.1%	7,870,953	138.6%
3017	1302 1303	Lincoln		1,954,935	2,469,603	514,668	79.2%	988,187	52.1%
3019	1322 1323	Middletown	С	17,333,544	20,718,115	3,384,571	83.7%	5,318,710	63.6%
3021	1352 1353 1354	Newport	В	46,307,046	72,382,148	26,075,102	64.0%	11,891,861	219.3%
3022	1342 1343	New Shoreham	В	6,681,686	6,640,201	(41,485)	100.6%	2,148,383	(1.9%)
3023	1372 1373	North Kingstown	С	45,938,945	61,112,365	15,173,420	75.2%	11,039,780	137.4%
3024	1382 1383	North Providence		28,519,964	27,017,590	(1,502,374)	105.6%	6,741,106	(22.3%)
3025	1392 1393	North Smithfield	В	14,032,100	12,981,949	(1,050,151)	108.1%	3,326,812	(31.6%)
3026	1412 1413	Pawtucket	С	90,452,710	115,732,606	25,279,896	78.2%	19,571,090	129.2%
3027	1515	Union Fire District		657,184	677,690	20,506	97.0%	314,534	6.5%
3029	1452	Richmond		2,060,060	2,261,904	201,844	91.1%	1,040,743	19.4%
3030	1462 1463	Scituate	В	10,292,452	13,060,491	2,768,039	78.8%	2,692,983	102.8%
3031	1472 1473	Smithfield	С	12,403,519	12,415,965	12,446	99.9%	3,093,256	0.4%
3032	1492 1493	South Kingstown	В	52,340,889	58,631,991	6,291,102	89.3%	12,267,056	51.3%
3033	1532 1533	Tiverton	С	13,127,125	10,730,220	(2,396,905)	122.3%	3,346,514	(71.6%)
3034	1562	Warren	С	5,105,729	6,702,186	1,596,457	76.2%	1,904,982	83.8%

### Municipal Employees' Retirement System State of Rhode Island Actuarial Valuation – June 30, 2015

Old Unit	New Unit		Code	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Annual	UAAL as % of
Number	Number	Unit	(s)	(AVA)	(AAL)	(UAAL) (5) - (4)	(4)/(5)	Covered Payroll	Payroll (7)/(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3036	1622 1623	Westerly		271,782	990,337	718,555	27.4%	0	) –
3037	1602	West Greenwich	С	2,453,412	3,822,496	1,369,084	64.2%	996,523	137.4%
3039	1632 1633	Woonsocket	В	61,187,636	65,766,032	4,578,396	93.0%	11,018,234	41.6%
3040	1073	Chariho School District	С	17,332,155	20,130,681	2,798,526	86.1%	5,447,623	51.4%
3041	1203	Foster/Glocester	В	6,572,298	7,457,152	884,854	88.1%	1,877,811	47.1%
3042	1528	Tiogue Fire & Lighting	C,5	48,357	26,113	(22,244	) 185.2%	0	-
3043	1336	Narragansett Housing	С	534,619	474,658	(59,961	) 112.6%	178,500	(33.6%)
3045	1098	Coventry Lighting District	С	1,203,635	598,003	(605,632	201.3%	35,000	(1730.4%)
3046	1242	Hope Valley Fire	С	617,548	415,390	(202,158	b) 148.7%	140,385	(144.0%)
3050	1156	East Greenwich Housing	С	1,307,488	1,426,347	118,859	91.7%	557,414	21.3%
3051	1116	Cranston Housing	С	5,129,296	4,543,574	(585,722	.) 112.9%	1,163,067	(50.4%)
3052	1166	East Providence Housing	В	2,864,892	3,355,215	490,323	85.4%	751,355	65.3%
3053	1416	Pawtucket Housing	В	13,969,871	10,039,253	(3,930,618	5) 139.2%	2,817,360	(139.5%)
3056	1126	Cumberland Housing	С	1,340,307	1,294,179	(46,128	5) 103.6%	559,914	(8.2%)
3057	1306	Lincoln Housing	В	1,668,862	1,905,255	236,393	87.6%	529,223	44.7%
3059	1016	Bristol Housing		2,075,328	1,511,956	(563,372	() 137.3%	449,163	(125.4%)
3065	1036	Burrillville Housing	В	942,371	991,047	48,676	95.1%	202,740	24.0%
3066	1386	North Providence Housing	В	851,244	1,646,258	795,014	51.7%	227,456	349.5%
3067	1177	East Smithfield Water	С	965,938	826,583	(139,355	) 116.9%	152,819	(91.2%)
3068	1227	Greenville Water	В	1,206,377	1,009,537	(196,840	) 119.5%	290,640	(67.7%)
3069	1356	Newport Housing	С	6,640,761	8,820,343	2,179,582	75.3%	1,672,370	130.3%
3071	1566	Warren Housing	В	1,268,814	1,172,724	(96,090	) 108.2%	343,868	(27.9%)
3072	1286	Johnston Housing		1,190,144	1,349,596	159,452	88.2%	434,734	36.7%
3077	1538	Tiverton Local 2670A	С	3,969,247	4,205,634	236,387	94.4%	1,017,437	23.2%
3078	02 1003 1007 1009	Barrington COLA	С	33,213,920	34,842,602	1,628,682	95.3%	7,593,131	21.4%
3079	1096	Coventry Housing		1,102,853	1,119,523	16,670	98.5%	597,015	2.8%
3080	1496	South Kingstown Housing	С	388,930	239,852	(149,078	6) 162.2%	144,970	(102.8%)
3081	1403	N. RI Collaborative Adm. Services	С	2,776,713	3,296,431	519,718	84.2%	957,745	54.3%
3083	1616	West Warwick Housing	В	1,706,210	2,027,132	320,922	84.2%	211,163	152.0%
3084	1476	Smithfield Housing		453,306	329,969	(123,337	137.4%	110,110	(112.0%)

Old Unit Number (1)	New Unit Number (2)	<u>Unit</u> (3)	Code (s) (4)	Actuarial Value of Assets (AVA) (5)	Actuarial Accrued Liability (AAL) (6)	Unfunded Actuarial Accrued Liability (UAAL) (5) - (4) (7)	Funded Ratio	Annual <u>Covered Payroll</u> (9)	UAAL as % of Payroll (7)/(9) (10)
3094	1478	Smithfield COLA	С	14,396,177	15,599,035	1,202,858	92.3%	3,692,416	32.6%
3096	1056	Central Falls Housing	С	2,091,367	2,869,690	778,323	72.9%	886,894	87.8%
3098	1293	Lime Rock Administrative Services		284,608	380,922	96,314	74.7%	89,570	107.5%
3099	1063	Central Falls Schools	С	14,675,315	15,124,704	449,389	97.0%	4,175,427	10.8%
3100	1023	Bristol/Warren Schools	В	16,248,020	21,459,673	5,211,653	75.7%	4,297,247	121.3%
3101	1157 1158	Town of E. Greenwich-COLA-NCE	С	21,431,756	20,100,023	(1,331,733)	106.6%	5,811,994	(22.9%)
3102	1712	Harrisville Fire District (ADMIN)	С	689,826	658,072	(31,754)	104.8%	258,271	(12.3%)
3103	1702	Albion Fire District (ADMIN)	C,5	140,434	98,945	(41,489)	141.9%	0	-
3150	1159	East Greenwich Fire (ADMIN)	С	325,908	354,060	28,152	92.0%	43,783	64.3%
		General Employee Units Subtotal		\$ 945,727,947	\$ 1,111,720,282	\$ 165,992,335	85.1%	\$ 230,499,170	72.0%
Police & Fir			_						
4016	1285	Johnston Fire	D	5,809,725	5,814,269	4,544	99.9%	3,491,911	0.1%
4029	1454	Richmond Police	6	1,558,587	1,817,172	258,585	85.8%	723,676	35.7%
4031	1474	Smithfield Police	C,D	13,256,236	13,056,782	(199,454)	101.5%	2,886,941	(6.9%)
4042	1555	Valley Falls Fire	D	3,367,653	4,466,653	1,099,000	75.4%	814,750	134.9%
4047	1395 1435	North Smithfield Voluntary Fire	B,D	6,842,884	8,004,802	1,161,918	85.5%	1,229,338	94.5%
4050	1155	East Greenwich Fire	C,D	11,249,329	18,181,063	6,931,734	61.9%	2,402,343	288.5%
4054	1154	East Greenwich Police	C,D	13,889,389	19,881,334	5,991,945	69.9%	2,086,104	287.2%
4055	1375	North Kingstown Fire	C,D	29,576,771	40,429,810	10,853,039	73.2%	3,741,075	290.1%
4056	1374	North Kingstown Police	C,D	19,559,797	27,760,638	8,200,841	70.5%	3,174,132	258.4%
4058	1385	North Providence Fire	D	31,308,574	43,351,192	12,042,618	72.2%	5,629,919	213.9%
4059	1008	Barrington Fire (25)	С	2,287,517	2,441,006	153,489	93.7%	1,253,591	12.2%
4060	1004	Barrington Police	C,D	8,355,306	13,437,921	5,082,615	62.2%	1,481,696	343.0%
4061	1005	Barrington Fire (20)	C,D	6,725,832	9,962,410	3,236,578	67.5%	135,786	2383.6%
4062	1564 1565	Warren Police & Fire	C,D	9,609,424	13,793,001	4,183,577	69.7%	1,600,903	261.3%
4063	1494	South Kingstown Police	B,1	22,061,689	28,399,168	6,337,479	77.7%	3,054,977	207.4%
4073	1464	Scituate Police	5	206,403	21,377	(185,026)	965.5%	0	-

### Municipal Employees' Retirement System State of Rhode Island Actuarial Valuation – June 30, 2015

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)
4076	1394	North Smithfield Police	C,D	8,976,502	11,772,634	2,796,132	76.2%	1,607,310	174.0%
4077	1534	Tiverton Fire	C,D	9,859,642	11,554,465	1,694,823	85.3%	1,669,436	101.5%
4082	1194	Foster Police	C,D	2,551,744	3,408,660	856,916	74.9%	390,931	219.2%
4085	1634	Woonsocket Police	C,D	35,083,455	49,875,311	14,791,856	70.3%	5,398,638	274.0%
4086	1084	Charlestown Police	C,D	8,513,428	11,698,924	3,185,496	72.8%	1,398,954	227.7%
4087	1264	Hopkinton Police	C,D,6	5,393,037	8,286,362	2,893,325	65.1%	939,222	308.1%
4088	1214	Glocester Police	C,D	5,846,304	7,194,812	1,348,508	81.3%	1,013,729	133.0%
4089	1604	West Greenwich Police/Rescue	C,D	3,703,518	5,044,129	1,340,611	73.4%	892,784	150.2%
4090	1034	Burrillville Police	C,D,6	9,305,955	11,045,980	1,740,025	84.2%	1,332,172	130.6%
4091	1148	Cumberland Rescue	C,D	5,731,161	5,638,560	(92,601)	101.6%	1,068,948	(8.7%)
4093	1635	Woonsocket Fire	C,D	42,461,130	43,651,617	1,190,487	97.3%	6,917,818	17.2%
4094	1015	Bristol Fire	D	307,220	361,933	54,713	84.9%	99,184	55.2%
4095	1135	Cumberland Hill Fire	C,D	4,012,170	6,304,556	2,292,386	63.6%	744,549	307.9%
4096	1014	Bristol Police	C,D	6,095,558	5,302,730	(792,828)	115.0%	2,344,256	(33.8%)
4098	1095	Coventry Fire	C,D	3,707,864	5,724,412	2,016,548	64.8%	954,956	211.2%
4099	1505	South Kingstown EMT	C,D	3,690,353	3,136,315	(554,038)	117.7%	832,274	(66.6%)
4101	1365	North Cumberland	C,D	4,611,993	5,855,867	1,243,874	78.8%	695,243	178.9%
4102	45 1235 1525 1585	Central Coventry Fire	C,D	9,459,712	13,077,593	3,617,881	72.3%	2,120,520	170.6%
4103	1255	Hopkins Hill Fire	C,D	2,288,646	2,500,600	211,954	91.5%	710,468	29.8%
4104	1114	Cranston Police	C,D,4	32,933,187	35,938,526	3,005,339	91.6%	9,613,265	31.3%
4105	1115	Cranston Fire	C,D,4	54,640,039	49,236,370	(5,403,669)	111.0%	11,750,326	(46.0%)
4106	1125	Cumberland Fire	B,D	3,801,207	5,346,439	1,545,232	71.1%	777,084	198.8%
4107	1305	Lincoln Rescue	С	3,341,014	4,601,130	1,260,116	72.6%	847,585	148.7%
4108	1344	New Shoreham Police	B,D	1,160,896	1,650,734	489,838	70.3%	290,580	168.6%
4109	1324	Middletown Police & Fire	C,D	5,287,428	4,778,456	(508,972)	110.7%	3,491,570	(14.6%)

				Actuarial Value	Actuarial	Unfunded Actuarial			
Old Unit	New Unit		Code	of Assets	Accrued Liability	Accrued Liability	Funded Ratio	Annual	UAAL as % of
Number	Number	Unit	(s)	(AVA)	(AAL)	(UAAL) (5) - (4)	(4)/(5)	Covered Payroll	Payroll (7)/(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4110	1715	Harris ville Fire District	C,D	1,297,321	1,094,190	(203,131)	118.6%	343,282	(59.2%)
4111	1705	Albion Fire District	С	775,690	1,138,025	362,335	68.2%	221,376	163.7%
1284	1284	Johnston Police		336,982	347,486	10,504	97.0%	605,584	1.7%
1465	1465	Smithfield Fire	С	863,913	834,450	(29,463)	103.5%	601,768	(4.9%)
		Police & Fire Units Subtotal		\$ 461,702,185	\$ 567,219,865	\$ 105,517,680	81.4%	\$ 93,380,954	113.0%
		All MERS Units Total		1,407,430,132	1,678,940,147	271,510,015	83.8%	323,880,124	83.8%

#### **Schedule of Funding Progress**

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 plat 5 - This unit has no active members.

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

Table	8
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Item	June 30, 2015	June 30, 2014		
(1)	(2)	(3)		
Cash & cash equivalents	3.2%	4.2%		
U.S. government & agency securities	8.2%	11.1%		
Corporate bonds & notes	6.3%	5.4%		
Foreign bonds	3.6%	1.4%		
U.S. equity securities	23.6%	25.1%		
Foreign equity securities	23.2%	24.9%		
Real estate, venture capital, other	31.9%	27.9%		
Total investments	100.0%	100.0%		

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

Table 9

			Active Employees as of June 30, 2015					Active Employees as of June 30, 2014				
Old Unit	New Unit				Average	Average	Average		Average	Average	Average	
Number	Number	Unit	Code(s)	Number	Age	Service	Salary	Number	Age	Service	Salary	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
General H	Imployee Units											
3002	1012 1019	Bristol	В	96	49.3	14.2	\$ 47,966	95	48.9	14.3	\$48,063	
3003	1032 1033	Burrillville	С	141	53.6	14.0	42,820	136	52.8	13.5	42,481	
3004	1052	Central Falls		39	43.0	10.1	48,033	36	42.4	9.9	47,273	
3005	1082	Charlestown	С	45	51.1	13.0	48,327	43	50.8	12.8	48,134	
3007	1112 1113	Cranston	В	682	53.8	14.3	35,485	688	53.4	13.9	34,157	
3008	1122 1123	Cumberland		243	52.0	12.4	36,896	232	51.7	12.4	36,868	
3009	1152 1153	East Greenwich	С	15	50.3	13.5	76,967	14	49.1	13.7	70,514	
3010	1162 1163	East Providence	В	372	51.9	13.2	43,828	360	52.2	13.4	43,841	
3011	1183	Exeter/West Greenwich	В	65	54.2	13.4	40,271	63	54.4	13.4	39,534	
3012	1192 1193	Foster		34	55.0	12.0	33,972	34	56.3	12.3	32,258	
3012	1212 1213	Glocester	С	68	53.5	11.8	37,860	70	52.6	10.8	36,954	
3013	1262	Hopkinton	c	35	52.7	11.3	48,398	35	53.1	11.2	46,644	
3014	1272 1273	Jamestown	C	82	51.8	12.5	46,981	80	51.2	12.4	45,313	
3015	1272 1273	Johnston	с	229	52.2	12.5	40,981	228	51.6	12.4	33,433	
3017	1302 1303	Lincoln	C	16	54.6	13.6	61,762	16	53.6	12.2	60,575	
3017	1322 1323	Middletown	С	124	51.0	13.0	42,893	132	50.0	12.0	41,408	
3019	1322 1323		В	260	50.9	13.1	42,893	254	51.1	12.2	41,408	
3021	1342 1343	New Shoreham	В	51	50.7	12.5	42,125	51	51.4	10.3	40,902	
3022	1342 1343	North Kingstown	С	300	52.5	10.0	42,123 36,799	307	52.2	11.6	40,902 35,674	
3023	1372 1373	North Providence	C	210	52.5 52.5	12.0	30,799	209	52.2 52.6	11.6	31,805	
			р									
3025	1392 1393	North Smithfield	В	90 105	52.8	10.1	36,965	89	53.8	11.3	35,731	
3026	1412 1413	Pawtucket	С	495 7	50.9	13.8	39,538	496	50.8	13.7	38,432	
3027	1515	Union Fire District			56.7	12.9	44,933	6	56.0	13.9	46,233	
3029	1452	Richmond	_	27	51.1	9.7	38,546	27	49.4	8.8	37,420	
3030	1462 1463	Scituate	В	84	51.7	10.6	32,059	84	51.2	10.6	31,790	
3031	1472 1473	Smithfield	С	83	53.8	11.8	37,268	89	53.4	10.8	36,378	
3032	1492 1493	South Kingstown	В	302	53.4	14.4	40,619	306	53.3	14.2	39,007	
3033	1532 1533	Tiverton	С	93	52.0	10.2	35,984	94	51.5	10.3	34,975	
3034	1562	Warren	С	41	48.0	13.6	46,463	43	47.7	12.7	45,782	
3036	1622 1623	Westerly										
3037	1602	West Greenwich	С	23	48.6	9.1	43,327	24	47.4	8.3	40,945	
3039	1632 1633	Woonsocket	В	336	51.3	11.9	32,792	307	52.1	12.6	33,728	
3040	1073	Chariho School District	С	164	50.8	12.2	33,217	166	50.5	12.0	32,542	
3041	1203	Foster/Glocester	В	53	51.8	11.3	35,430	52	53.0	12.8	34,890	
3043	1336	Narragansett Housing	С	4	52.7	16.2	44,625	4	51.7	15.2	44,625	
3045	1098	Coventry Lighting District	С	1	48.3	0.3	35,000	1	74.7	37.3	38,381	
3046	1242	Hope Valley Fire	С	3	61.8	23.0	46,795	3	60.8	22.2	46,694	
3050	1156	East Greenwich Housing	С	10	52.8	9.8	55,741	10	51.8	8.8	53,708	
3051	1116	Cranston Housing	С	21	59.2	17.7	55,384	20	58.8	17.6	56,163	
3052	1166	East Providence Housing	В	14	53.3	10.7	53,668	14	52.3	9.8	52,411	
3053	1416	Pawtucket Housing	В	51	50.9	13.3	55,242	51	50.8	13.3	51,838	
3056	1126	Cumberland Housing	С	12	52.0	10.4	46,660	12	49.6	10.3	45,657	
3057	1306	Lincoln Housing	В	13	47.5	5.4	40,709	12	48.1	4.8	40,038	
3059	1016	Bristol Housing		10	50.5	12.9	44,916	9	49.2	13.4	46,283	
3065	1036	Burrillville Housing	В	4	45.7	11.3	50,685	4	44.7	10.3	49,523	
3066	1386	North Providence Housing	В	5	61.0	12.6	45,491	6	57.2	10.7	44,446	

#### Active Member Statistics

## Municipal Employees' Retirement System State of Rhode Island Actuarial Valuation – June 30, 2015

Table 9

Old Unit	New Unit			Act	ive Employees Average	as of June 30 Average	0, 2015 Avera		Act	tive Employees Average	as of June 30 Average	,2014 Average
Number	Number	Unit	Code(s)	Number	Age	Service	Salar		Number	Average	Service	Salary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)	(12)
3067	1177	East Smithfield Water	С	3	57.0	14.4	50.	940	4	60.1	10.9	46,986
3068	1227	Greenville Water	В	4	55.8	15.9	72	660	4	54.8	14.8	66,594
3069	1356	Newport Housing	С	32	51.9	13.4	52	262	30	52.7	12.9	49,796
3071	1566	Warren Housing	В	8	51.1	3.5	42	984	7	48.1	3.0	38,955
3072	1286	Johnston Housing		9	52.7	14.7	48	304	8	54.9	15.5	47,702
3077	1538	Tiverton Local 2670A	С	27	50.2	11.8	37.	683	25	51.9	12.2	37,740
	002 1003 1007 1	0 Barrington COLA	С	174	53.5	13.2		639	171	53.0	12.6	42,661
3079	1096	Coventry Housing		14	52.6	9.8		644	15	51.9	8.5	40,987
3080	1496	South Kingstown Housing	С	3	53.3	9.7		323	4	56.2	7.8	42,795
3081	1403	N. RI Collaborative Adm. Services	C	32	50.5	9.1		930	30	50.0	9.8	30,934
3083	1616	West Warwick Housing	В	5	49.8	6.1		233	10	53.4	12.9	46,612
3084	1476	Smithfield Housing	2	2	52.4	16.5		055	3	51.4	17.5	41,042
3094	1478	Smithfield COLA	С	70	50.9	14.4		749	71	50.0	13.4	51,290
3096	1056	Central Falls Housing	C	19	47.6	9.2		679	19	46.5	9.5	46,948
3098	1293	Lime Rock Administrative Services	e	2	55.8	15.7		785	2	54.8	14.7	42,879
3099	1063	Central Falls Schools	С	121	49.2	10.0		508	110	49.6	10.8	34,228
3100	1003	Bristol/Warren Schools	В	118	52.1	12.3		417	116	52.3	12.0	36,309
3100	1157 1158	Town of E. Greenwich-COLA-NCE	C	168	53.0	12.5		595	167	52.6	12.0	33,069
3101	1137 1138	Harrisville Fire District (ADMIN)	c	4	52.2	12.1		568	4	51.2	12.0	57,250
3102	1712	Albion Fire District (ADMIN)	C,5				04	.508				57,250
3103	1702	East Greenwich Fire (ADMIN)	С,5 С		49.8	18.1	12	.783		48.8	17.1	37,371
5150	1159	East Greenwich File (ADMIN)	C	1	49.8	10.1	45.	165	1	40.0	17.1	57,571
		All General Employee Units		5,869	52.1	12.7	\$ 39	274	5,813	51.9	12.6	\$38,489
Police &	Fire Units											
4016	1285	Johnston Fire	D	58	38.2	8.3	\$ 60.	205	58	37.5	7.5	\$57,540
4029	1454	Richmond Police	6	13	36.7	9.9	55	667	11	39.2	11.6	57,877
4031	1474	Smithfield Police	C,D	42	38.5	13.5	68	737	41	37.7	12.9	66,360
4042	1555	Valley Falls Fire	D	13	37.0	9.9	62	673	13	36.0	8.9	58,279
4047	1395 1435	North Smithfield Voluntary Fire	B,D	21	42.8	14.0	58	540	21	41.8	13.0	57,006
4050	1155	East Greenwich Fire	C,D	37	39.6	9.7	64	928	36	38.9	9.0	62,777
4054	1154	East Greenwich Police	C,D	31	43.7	11.9		294	33	42.3	11.1	62,675
4055	1375	North Kingstown Fire	C,D	61	43.3	15.9	61	329	62	43.1	15.7	61,477
4056	1374	North Kingstown Police	C,D	45	39.3	13.0		536	43	39.5	13.1	69,400
4058	1385	North Providence Fire	D	98	39.7	13.1		448	90	41.4	14.6	58,169
4059	1008	Barrington Fire (25)	С	21	34.4	7.6		695	21	33.1	6.7	55,167
4060	1000	Barrington Police	C,D	22	41.5	15.0		350	22	40.6	14.2	66,146
4061	1005	Barrington Fire (20)	C,D	2	54.8	28.9		893	2	53.8	27.5	66,768
4062	1564 1565	Warren Police & Fire	C,D	24	44.3	17.9		704	23	43.7	16.9	65,099
4062	1494	South Kingstown Police	B,1	50	39.8	11.9		100	52	39.0	11.3	59,810
4076	1394	North Smithfield Police	C,D	26	35.4	9.9		820	25	34.8	9.3	58,195
4077	1534	Tiverton Fire	C,D	31	39.5	10.7		853	29	39.8	10.9	54,443
-1077	1004		с, <b>р</b>	51	0,00	10.7	55		27	57.0	10.7	54,445

### Municipal Employees' Retirement System State of Rhode Island Actuarial Valuation – June 30, 2015

Active	Member	Statistics
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			Act	ive Employees	s as of June 30	, 2015	Active Employees as of June 30, 2014				
Old Unit					Average	Average	Average		Average	Average	Average
Number		Unit	Code(s)	Number	Age	Service	Salary	Number	Age	Service	Salary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
4082	1194	Foster Police	C,D	9	37.7	4.6	43,437	8	42.5	4.5	45,595
4085	1634	Woonsocket Police	C,D	88	37.8	10.9	61,348	84	37.4	10.5	60,973
4086	1084	Charlestown Police	C,D	20	42.2	16.5	69,948	20	41.2	15.5	68,011
4087	1264	Hopkinton Police	C,D,6	15	37.6	8.2	62,615	15	35.8	7.3	60,151
4088	1214	Glocester Police	C,D	16	44.1	13.7	63,358	17	43.5	13.6	58,875
4089	1604	West Greenwich Police/Rescue	C,D	15	45.0	11.3	59,519	15	44.0	10.3	55,798
4090	1034	Burrillville Police	C,D,6	22	42.3	13.6	60,553	21	43.3	14.2	59,858
4091	1148	Cumberland Rescue	C,D	18	42.8	13.9	59,386	18	43.1	13.6	56,202
4093	1635	Woonsocket Fire	C,D	106	41.7	16.0	65,262	104	41.4	15.6	64,810
4094	1015	Bristol Fire	D	2	54.6	8.3	49,592	2	53.6	7.3	47,978
4095	1135	Cumberland Hill Fire	C,D	13	39.5	10.7	57,273	13	38.5	9.7	55,474
4096	1014	Bristol Police	C,D	36	36.4	9.8	65,118	34	36.4	9.5	62,488
4098	1095	Coventry Fire	C,D	16	39.0	12.2	59,685	17	37.2	10.7	57,129
4099	1505	South Kingstown EMT	C,D	17	38.9	9.6	48,957	17	38.4	9.3	47,739
4101	1365	North Cumberland	C,D	12	47.8	16.7	57,937	13	47.6	16.8	56,750
4102	045 1235 1525 1	58 Central Coventry Fire	C,D	36	42.5	12.8	58,903	40	41.2	11.0	59,101
4103	1255	Hopkins Hill Fire	C,D	12	51.8	14.0	59,206	12	50.8	13.0	57,100
4104	1114	Cranston Police	C,D,4	143	38.8	12.1	67,226	138	38.0	11.5	66,768
4105	1115	Cranston Fire	C,D,4	159	43.5	14.9	73,901	159	42.5	13.9	72,601
4106	1125	Cumberland Fire	B,D	14	46.8	14.2	55,506	13	47.1	13.9	54,226
4107	1305	Lincoln Rescue	С	16	41.2	13.6	52,974	16	40.2	12.3	53,959
4108	1344	New Shoreham Police	B,D	5	46.6	8.7	58,116	5	45.6	7.6	55,628
4109	1324	Middletown Police & Fire	C,D	58	33.3	6.2	60,199	56	33.4	5.8	58,055
4110	1715	Harrisville Fire District	C,D	6	39.8	11.3	57,214	5	41.6	12.4	57,757
4111	1705	Albion Fire District	С	4	47.7	16.6	55,344	4	46.7	15.6	55,231
1284	1284	Johnston Police		11	33.5	4.0	55,053	11	32.5	3.0	49,609
1465	1465	Smithfield Fire	С	12	31.5	4.6	50,147	11	32.0	4.1	47,483
		All Police & Fire Units		1,476	40.2	12.4	\$ 63,266	1,450	39.9	11.9	\$62,025
		All MERS Units		7,345	49.7	12.7	\$ 44,095	7,263	49.5	12.5	\$43,188

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

3 - Closed unit.

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. 5 - This unit has no active members.

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

					rees and Benefic s of June 30, 20		Retirees and Beneficiaries As of June 30, 2014		
Old Unit	New Unit Number	Unit	Code(s)	Number	Average	Average Monthly Benefit	Number	Average	Average Monthly Benefit
Number (1)	(2)	(3)	(4)	(5)	Age (6)	(7)	(8)	(9)	(10)
	nployee Units	Distal	D	70	75.0	¢ 1.477	70	76.0	¢1 409
3002	1012 1019	Bristol	В	79	75.9	\$ 1,477	78	76.0	\$1,428
3003	1032 1033	Burrillville	С	99	73.9	1,129	98	73.6	1,098
3004	1052	Central Falls	G	34	73.5	1,240	34	72.5	1,225
3005	1082	Charlestown	C	11	74.0	1,670	11	72.6	1,697
3007	1112 1113	Cranston	В	570	73.9	1,204	569	73.6	1,181
3008	1122 1123	Cumberland	G	165	75.4	835	172	75.1	810
3009	1152 1153	East Greenwich	С	56	80.7	724	60	80.1	685
3010	1162 1163	East Providence	В	380	73.2	1,516	383	72.7	1,492
3011	1183	Exeter/West Greenwich	В	31	69.9	1,153	31	69.7	1,125
3012	1192 1193	Foster	_	23	73.1	726	22	72.6	682
3013	1212 1213	Glocester	С	35	71.8	1,054	35	70.8	1,031
3014	1262	Hopkinton	С	14	71.8	1,105	13	73.3	1,023
3015	1272 1273	Jamestown	С	38	69.8	1,356	33	69.8	1,441
3016	1282 1283	Johnston	С	202	73.6	1,112	203	73.9	1,091
3017	1302 1303	Lincoln	_	6	72.2	1,453	6	71.2	1,427
3019	1322 1323	Middletown	С	45	67.4	1,721	43	66.7	1,865
3021	1352 1353 1354	-	В	247	71.8	1,620	242	71.7	1,600
3022	1342 1343	New Shoreham	В	19	74.9	1,168	18	74.3	1,185
3023	1372 1373	North Kingstown	С	234	72.7	1,280	232	71.9	1,297
3024	1382 1383	North Providence		167	74.8	737	163	75.2	736
3025	1392 1393	North Smithfield	В	72	76.3	985	66	76.6	968
3026	1412 1413	Pawtucket	С	498	74.0	1,302	514	73.9	1,279
3027	1515	Union Fire District		1	65.9	1137.6	1	64.9	1115.3
3029	1452	Richmond		13	75.4	704	13	74.4	691
3030	1462 1463	Scituate	В	60	75.0	1,193	61	74.9	1,115
3031	1472 1473	Smithfield	С	77	77.5	875	79	77.1	848
3032	1492 1493	South Kingstown	В	178	71.5	1,321	165	72.0	1,319
3033	1532 1533	Tiverton	С	45	75.1	940	45	76.1	914
3034	1562	Warren	С	33	79.9	977	36	79.8	930
3036	1622 1623	Westerly		8	83.2	1,498	8	82.2	1,476
3037	1602	West Greenwich	С	16	69.9	1,342	16	68.9	1,321
3039	1632 1633	Woonsocket	В	344	75.1	1,072	354	74.8	1,057
3040	1073	Chariho School District	С	58	70.7	1,246	57	70.6	1,219
3041	1203	Foster/Glocester	В	33	72.5	937	28	73.0	909
3042	1528	Tiogue Fire & Lighting	C,5	1	67.3	159.8	1	66.3	155.7
3043	1336	Narragansett Housing	С	1	79.8	445	1	78.8	437
3045	1098	Coventry Lighting District	С	2	74.3	2,512	2	80.1	4,360
3046	1242	Hope Valley Fire	С						
3050	1156	East Greenwich Housing	С	2	68.4	2,939	2	67.4	2,911
3051	1116	Cranston Housing	С	9	80.6	972	9	79.6	949
3052	1166	East Providence Housing	В	12	76.1	1,491	13	76.1	1,383
3053	1416	Pawtucket Housing	В	24	73.7	1,496	23	74.0	1,437
3056	1126	Cumberland Housing	С	4	79.6	1,593	4	78.6	1,563

#### **Retired Member Statistics**

# Municipal Employees' Retirement System State of Rhode Island

### Actuarial Valuation – June 30, 2015

Table 10

**Retired Member Statistics** 

	rees and Benefic s of June 30, 20			ees and Benefic s of June 30, 20						
Average Monthly Benefit	Average Age	Number	Average Monthly Benefit	Average Age	Number	Code(s)	Unit	New Unit Number	Old Unit Number	
(10)	(9)	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)	
1,111	70.4	8	1,235	70.6	9	В	Lincoln Housing	1306	3057	
1,069	79.2	5	1,021	77.5	6		Bristol Housing	1016	3059	
2,373	71.1	2	2,420	72.1	2	В	Burrillville Housing	1036	3065	
1,653	71.2	5	1,683	72.2	5	В	North Providence Housing	1386	3066	
993	74.2	3	1,020	75.2	3	С	East Smithfield Water	1177	3067	
2,975	68.3	1	3,031	69.3	1	В	Greenville Water	1227	3068	
1,693	70.1	27	1,736	70.4	26	С	Newport Housing	1356	3069	
1,584	73.4	6	1,607	74.4	6	В	Warren Housing	1566	3071	
960	82.9	6	979	83.9	6		Johnston Housing	1286	3072	
1,120	70.0	17	1,127	71.0	17	С	Tiverton Local 2670A	1538	3077	
1,175	75.3	126	1,215	75.8	129	С	00 Barrington COLA	002 1003 1007 10	3078	
577	78.8	7	589	79.8	7		Coventry Housing	1096	3079	
						С	South Kingstown Housing	1496	3080	
1,049	67.3	12	900	68.2	14	С	N. RI Collaborative Adm. Services	1403	3081	
1,216	76.4	5	1,717	72.4	8	В	West Warwick Housing	1616	3083	
							Smithfield Housing	1476	3084	
1,634	68.1	35	1,658	68.9	35	С	Smithfield COLA	1478	3094	
1,294	73.5	11	1,291	73.4	12	С	Central Falls Housing	1056	3096	
1211.8	62.0	1	1236.0	63.0	1		Lime Rock Administrative Services	1293	3098	
978	69.4	60	990	70.3	61	С	Central Falls Schools	1063	3099	
1,089	70.5	100	1,055	70.9	104	В	Bristol/Warren Schools	1023	3100	
1,870	67.7	36	1,729	69.0	41	С	Town of E. Greenwich-COLA-NCE	1157 1158	3101	
						С	Harrisville Fire District (ADMIN)	1712	3102	
						C,5	Albion Fire District (ADMIN)	1702	3103	
1771.0	65.1	1	1771.0	66.1	1	С	East Greenwich Fire (ADMIN)	1159	3150	
\$ 1,205	73.5	4,418	1,222	73.7	4,440		All General Employee Units			
								l Fire Units	Police and	
\$2,998	53.7	2	\$ 3,040	54.7	2	D	Johnston Fire	1285	4016	
2,199	53.8	1	2,241	54.8	1	6	Richmond Police	1454	4029	
2,888	51.0	7	3,381	46.0	6	C,D	Smithfield Police	1474	4031	
2,298	57.3	9	2,333	58.3	9	D	Valley Falls Fire	1555	4042	
2,393	60.4	10	2,438	61.4	10	B,D	North Smithfield Voluntary Fire	1395 1435	4047	
2,574	59.9	33	2,554	61.5	34	C,D	East Greenwich Fire	1155	4050	
3,010	61.2	30	2,968	61.5	32	C,D	East Greenwich Police	1154	4054	
2,532	65.3	67	2,598	65.9	69	C,D	North Kingstown Fire	1375	4055	
2,891	58.5	37	2,900	59.1	39	C,D	North Kingstown Police	1374	4056	
2,497	57.8	69	2,550	57.9	74	D	North Providence Fire	1385	4058	
4,431	68.0	1	4,486	69.0	1	С	Barrington Fire (25)	1008	4059	
2,177	69.1	26	2,254	68.5	26	C,D	Barrington Police	1004	4060	
1,833	69.8	36	1,909	70.1	35	C,D	Barrington Fire (20)	1005	4061	
2,396	67.9	21	2,536	67.6	20	C,D	Warren Police & Fire	1564 1565	4062	
2,764	63.6	50	2,812	62.9	48	B,1	South Kingstown Police	1494	4063	
301	83.6	1	307		1	5	Scituate Police	1464	4073	
2,646	62.0	19	2,681	63.0	19	C,D	North Smithfield Police	1394	4076	
	59.9 61.2 65.3 58.5 57.8 68.0 69.1 69.8 67.9 63.6 83.6	33 30 67 37 69 1 26 36 21 50 1	2,554 2,968 2,598 2,900 2,550 4,486 2,254 1,909 2,536 2,812 307	61.5 61.5 65.9 59.1 57.9 69.0 68.5 70.1 67.6 62.9 84.6	34 32 69 39 74 1 26 35 20 48 1	C,D C,D C,D D C C,D C,D C,D C,D B,1 5	East Greenwich Fire East Greenwich Police North Kingstown Fire North Kingstown Police North Providence Fire Barrington Fire (25) Barrington Police Barrington Fire (20) Warren Police & Fire South Kingstown Police Scituate Police	1155 1154 1375 1374 1385 1008 1004 1005 1564 1565 1494 1464	4050 4054 4055 4056 4058 4059 4060 4061 4062 4063 4073	

Table 10

Retired	Member	Statistics
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				Retirees and Beneficiaries As of June 30, 2015			Retirees and Beneficiaries As of June 30, 2014			
Old Unit Number	New Unit Number	Unit	Code(s)	Number	Average Age	Average Monthly Benefit	Number	Average Age	Average Monthly Benefit	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
							1			
4077	1534	Tiverton Fire	C,D	24	62.8	2,065	24	61.8	2,021	
4082	1194	Foster Police	C,D	8	61.0	2,254	8	60.0	2,217	
4085	1634	Woonsocket Police	C,D	73	51.3	2,832	72	50.3	2,833	
4086	1084	Charlestown Police	C,D	13	59.3	3,179	13	58.3	3,145	
4087	1264	Hopkinton Police	C,D,6	14	55.2	2,823	14	54.2	2,791	
4088	1214	Glocester Police	C,D	13	61.9	1,885	11	62.9	1,869	
4089	1604	West Greenwich Police/Rescue	C,D	6	57.1	2,924	6	56.1	2,889	
4090	1034	Burrillville Police	C,D,6	16	61.4	2,589	15	61.6	2,690	
4091	1148	Cumberland Rescue	C,D	6	54.0	1,902	6	53.0	1,848	
4093	1635	Woonsocket Fire	C,D	32	51.6	2,899	31	50.9	2,887	
4094	1015	Bristol Fire	D	2	64.7	738	2	63.7	723	
4095	1135	Cumberland Hill Fire	C,D	11	58.9	2,786	11	57.9	2,750	
4096	1014	Bristol Police	C,D	1	50.4	3,119	1	49.4	3,020	
4098	1095	Coventry Fire	C,D	8	56.2	2,351	8	55.2	2,318	
4099	1505	South Kingstown EMT	C,D	2	48.4	2,543	2	47.4	2,468	
4101	1365	North Cumberland	C,D	9	58.5	2,058	8	57.5	1,831	
4102	045 1235 1525 1	58 Central Coventry Fire	C,D	18	56.4	2,513	16	56.6	2,606	
4103	1255	Hopkins Hill Fire	C,D	1	47.6	1,771	1	46.6	1,736	
4104	1114	Cranston Police	C,D,4	14	50.9	3,720	13	50.0	3,627	
4105	1115	Cranston Fire	C,D,4	13	52.1	3,097	13	51.1	3,090	
4106	1125	Cumberland Fire	B,D	7	66.0	2,913	7	65.0	2,878	
4107	1305	Lincoln Rescue	С	7	57.2	1,837	7	56.2	1,809	
4108	1344	New Shoreham Police	B,D	2	54.2	3,264	2	53.2	3,223	
4109	1324	Middletown Police & Fire	C,D	1	35.7	3,213				
4110	1715	Harrisville Fire District	C,D							
4111	1705	Albion Fire District	C	1	73.1	1,939	1	72.1	1,901	
1284	1284	Johnston Police								
1465	1465	Smithfield Fire	С							
		All Police & Fire Units		728	59.8	\$ 2,621	711	59.5	\$2,584	
		All MERS Units		5,168	71.7	\$ 1,419	5,129	71.5	\$1,396	

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.

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

5 - This unit has no active members.

3 - Closed unit.

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

GRS

### Table 11

### Distribution of Active Members by Age and by Years of Service (General Employees) As of June 30, 2015

						Years of	of Credited	Service					
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
Attained	Count &	Count &	Count &	Count &	Count &	Count &	Count &	Count &					
Age	Avg. Comp.	<u>Avg. Comp.</u>	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.				
Under 25	26	12	4	2	1	2	0	0	0	0	0	0	47
	\$31,932	\$35,301	\$27,772	\$33,817	\$33,127	\$33,723	\$0	\$0	\$0	\$0	\$0	\$0	\$32,620
25-29	53	31	30	12	14	20	1	0	0	0	0	0	161
	\$33,431	\$33,909	\$35,804	\$34,779	\$35,433	\$36,674	\$44,019	\$0	\$0	\$0	\$0	\$0	\$34,708
30-34	46	31	24	18	18	77	30	0	0	0	0	0	244
	\$31,888	\$38,574	\$37,194	\$36,420	\$30,315	\$39,775	\$39,004	\$0	\$0	\$0	\$0	\$0	\$36,841
35-39	42	36	26	20	20	74	74	24	0	0	0	0	316
	\$34,399	\$33,641	\$42,984	\$38,113	\$41,717	\$43,978	\$44,614	\$44,524	\$0	\$0	\$0	\$0	\$41,122
40-44	57	32	28	25	18	105	87	53	20	1	0	0	426
	\$30,324	\$32,359	\$30,700	\$39,344	\$32,989	\$40,556	\$44,983	\$43,568	\$46,904	\$48,667	\$0	\$0	\$39,129
45-49	58	60	35	36	36	180	171	97	62	56	2	0	793
	\$31,785	\$29,322	\$35,612	\$33,545	\$34,657	\$38,620	\$41,168	\$47,188	\$52,074	\$49,866	\$48,515	\$0	\$40,342
50-54	56	50	42	33	42	223	311	189	102	111	17	1	1,177
	\$34,152	\$30,888	\$34,086	\$31,130	\$33,691	\$35,233	\$37,072	\$43,476	\$48,812	\$50,068	\$54,827	\$53,772	\$39,470
55-59	38	35	35	29	19	175	374	296	160	116	35	11	1,323
	\$36,636	\$27,217	\$40,183	\$35,189	\$44,517	\$36,456	\$35,969	\$39,204	\$43,675	\$47,787	\$52,060	\$53,738	\$39,303
60-64	18	24	12	18	21	121	192	205	161	102	30	19	923
	\$34,797	\$42,590	\$32,821	\$38,784	\$25,218	\$39,025	\$37,041	\$37,074	\$41,145	\$41,824	\$52,232	\$57,502	\$39,278
65-69	4	8	11	12	8	42	87	103	74	76	19	15	459
	\$41,688	\$32,552	\$37,724	\$27,816	\$26,429	\$35,449	\$39,077	\$36,755	\$38,171	\$44,734	\$50,369	\$52,158	\$39,271
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	398	319	247	205	197	1,019	1,327	967	579	462	103	46	5,869
	\$33,124	\$32,778	\$36,228	\$34,994	\$34,277	\$38,053	\$38,404	\$40,499	\$44,184	\$46,770	\$52,186	\$54,778	\$39,274

### Distribution of Active Members by Age and by Years of Service (Police & Fire) As of June 30, 2015

						Years of	of Credited	Service					
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
Attained	Count &	Count &	Count &	Count &	Count &	Count &	Count &						
Age	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.	Avg. Comp.						
Under 25	21	7	9	3	0	0	0	0	0	0	0	0	40
	\$42,085	\$43,257	\$48,358	\$50,548	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44,336
25-29	28	17	40	43	27	28	0	0	0	0	0	0	183
	\$42,133	\$45,575	\$51,598	\$55,767	\$56,593	\$60,925	\$0	\$0	\$0	\$0	\$0	\$0	\$52,734
30-34	8	13	21	24	19	122	35	0	0	0	0	0	242
	\$41,871	\$45,138	\$54,013	\$56,994	\$54,702	\$62,134	\$64,642	\$0	\$0	\$0	\$0	\$0	\$59,116
35-39	2	3	6	10	8	70	112	25	0	0	0	0	236
	\$43,399	\$48,306	\$54,012	\$53,234	\$57,668	\$61,547	\$64,729	\$66,974	\$0	\$0	\$0	\$0	\$62,635
40-44	1	0	3	2	1	41	74	108	15	0	0	0	245
	\$51,514	\$0	\$61,338	\$53,227	\$55,530	\$61,097	\$65,406	\$69,620	\$69,859	\$0	\$0	\$0	\$66,569
45-49	0	0	4	3	5	24	59	79	58	30	0	0	262
	\$0	\$0	\$55,968	\$54,747	\$65,519	\$61,982	\$64,984	\$67,731	\$72,064	\$71,947	\$0	\$0	\$67,657
50-54	0	3	4	4	2	10	20	28	47	53	5	0	176
	\$0	\$51,302	\$56,296	\$44,563	\$67,350	\$70,508	\$62,451	\$68,359	\$71,479	\$75,650	\$75,712	\$0	\$69,930
55-59	0	0	2	0	1	2	10	8	23	17	10	1	74
	\$0	\$0	\$70,100	\$0	\$61,854	\$75,439	\$64,019	\$62,913	\$70,710	\$73,278	\$74,289	\$67,512	\$69,985
60-64	0	0	0	0	0	2	0	1	3	3	2	1	12
	\$0	\$0	\$0	\$0	\$0	\$70,222	\$0	\$74,856	\$79,346	\$72,631	\$74,646	\$62,075	\$73,550
65-69	0	0	0	0	0	0	0	2	0	0	3	1	6
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65,097	\$0	\$0	\$84,393	\$81,138	\$77,419
70 & Over	0	0	0		0	0						0	
	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	60		89		63	299	310		146				,
	\$42,280	\$45,656	\$53,155	\$55,042	\$57,276	\$62,152	\$64,759	\$68,392	\$71,585	\$74,092	\$76,196	\$70,242	\$63,266

## Membership Data (General Employee Units)

		June 30, 2015	June 30, 2014
		(1)	(2)
1.	Active members		
1.	a. Number	5,869	5,813
	b. Number vested	4,503	4,593
	c. Total payroll supplied by ERSRI	\$230,499,170	\$223,736,632
	d. Average salary	\$39,274	\$38,489
	e. Average age	52.1	51.9
	f. Average service	12.7	12.6
2.	Inactive members		
	a. Number	2,719	2,662
3.	Service retirees		
	a. Number	3,744	3,731
	b. Total annual benefits	\$57,449,277	\$56,472,840
	c. Average annual benefit	\$15,344	\$15,136
	d. Average age	73.9	73.7
4.	Disabled retirees		
	a. Number	249	251
	b. Total annual benefits	\$3,606,868	\$3,516,904
	c. Average annual benefit	\$14,485	\$14,012
	d. Average age	65.4	65.0
5.	Beneficiaries and spouses		
	a. Number	447	436
	b. Total annual benefits	\$4,059,524	\$3,906,574
	c. Average annual benefit	\$9,082	\$8,960
	d. Average age	76.6	76.4

### Membership Data (Police & Fire Units)

			June 30, 2015 (1)	June 30, 2014 (2)
1.	Active men	nbers		
	a. Numb		1,476	1,450
	b. Numb	er vested	1,132	1,110
	c. Total	payroll supplied by ERSRI	\$93,380,954	\$89,936,969
	d. Avera	ge salary	\$63,266	\$62,025
	e. Avera	ge age	40.2	39.9
	f. Avera	ge service	12.4	11.9
2.	Inactive me	mbers		
	a. Numb	er	163	162
3.	Service reti	rees		
	a. Numb	er	500	496
	b. Total	annual benefits	\$17,092,304	\$16,530,694
	c. Avera	ge annual benefit	\$34,185	\$33,328
	d. Avera	ge age	60.4	60.1
4.	Disabled re	tirees		
	a. Numb	er	131	128
	b. Total	annual benefits	\$4,487,743	\$4,322,409
	c. Avera	ge annual benefit	\$34,258	\$33,769
	d. Avera	ge age	55.2	54.6
5.	Beneficiarie	s and spouses		
	a. Numb	er	97	87
	b. Total	annual benefits	\$1,321,327	\$1,190,746
	c. Avera	ge annual benefit	\$13,622	\$13,687
	d. Avera	ge age	63.0	63.0

### Membership Data (All MERS Units)

			June 30, 2015	June 30, 2014
			(1)	(2)
1.	Acti	ive members		
1.	a.	Number	7,345	7,263
	u. b.	Number vested	5,635	5,703
	с.	Total payroll supplied by ERSRI	\$323,880,124	\$313,673,601
	d.	Average salary	\$44,095	\$43,188
	е.	Average age	49.7	49.5
	f.	Average service	12.7	12.5
2.	Inac	tive members		
	a.	Number	2,882	2,824
3.	Ser	vice retirees		
5.	a.	Number	4,244	4,227
	b.	Total annual benefits	\$74,541,581	\$73,003,534
	с.	Average annual benefit	\$17,564	\$17,271
	d.	Average age	72.3	72.1
4.	Dise	abled retirees		
	a.	Number	380	379
	b.	Total annual benefits	\$8,094,611	\$7,839,313
	c.	Average annual benefit	\$21,302	\$20,684
	d.	Average age	61.9	61.5
5.	Ben	eficiaries and spouses		
	a.	Number	544	523
	b.	Total annual benefits	\$5,380,851	\$5,097,320
	с.	Average annual benefit	\$9,891	\$9,746
	d.	Average age	74.1	74.2

## **Summary of Assumptions and Methods**

#### I. <u>Valuation Date</u>

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. <u>Actuarial Cost Method</u>

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 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 amortization payment for the applicable fiscal year is first determined based on the individual amortization bases. The covered payroll is projected forward for two years, and we then determine the amortization rate by dividing the amortization payment by the projected payroll. Contributions are assumed to be made monthly throughout the year.

For underfunded units, the amortization period is 25 years as measured from June 30, 2010, or 20 years as of the current valuation date for the existing UAAL. In conjunction with the Article 21 legislation, employers were given the option to reset the amortization period for the UAAL existing as of June 30, 2014 to 25 years from June 30, 2014. All new gains and losses each year will be amortized over individual 20 year periods. At any time that a unit is in an overfunded status, the amortization schedule will be a rolling 20 year amortization of any surplus.

### III. <u>Actuarial Value of Assets</u>

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 3.50% wage inflation assumption (composed of a 2.75% price inflation assumption and a 0.75% additional general increase), and (ii) a service-related component as shown below:

	General Employees								
Years of Service	Service-Related Component	Total Increase							
1	4.00%	7.50%							
2	3.00	6.50							
3	2.75	6.25							
4	2.50	6.00							
5	2.25	5.75							
6	2.00	5.50							
7	1.25	4.75							
8	0.75	4.25							
9-10	0.50	4.00							
11-15	0.25	3.75							
16 or more	0.00	3.50							

For police/fire 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:

	Police/Fire Employees								
Years of Service	Service-Related Component	Total Increase							
1	10.00%	14.00%							
2	9.00	13.00							
3	7.00	11.00							
4	4.00	8.00							
5	2.50	6.50							
6	3.00	7.00							
7	0.50	4.50							
8	0.50	4.50							
9 or more	0.00	4.00							

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 3.25% for MERS General Employees and 3.50% for MERS P&F 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 2014 and 2015 will be 0.67% and 2.73% respectively, and this has been reflected in the valuation.

### B. <u>Demographic Assumptions</u>

- 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.

	Number of Disabilities per 1,000					
Age	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	0.59	0.18	0.27	0.06	0.26	1.70
30	0.72	0.22	0.33	0.08	0.33	2.20
35	0.98	0.30	0.45	0.11	0.44	2.90
40	1.43	0.44	0.66	0.15	0.66	4.40
45	2.34	0.72	1.08	0.25	1.08	7.20
50	3.97	1.22	1.83	0.43	1.82	12.10
55	6.57	2.02	3.03	0.71	1.82	12.10
60	9.17	2.82	4.23	0.99	1.82	12.10
65	15.02	4.62	6.93	1.62	1.82	12.10

Service	General Employees, Males & Females	Police & Fire, Males & Females
1	0.175000	0.100000
2	0.118774	0.047300
3	0.101396	0.036903
4	0.086148	0.030821
5	0.072887	0.026506
6	0.061471	0.023158
7	0.051757	0.020424
8	0.043604	0.018111
9	0.036868	0.016108
10	0.031408	0.014342
11	0.027082	0.012761
12	0.023746	0.011332
13	0.021259	0.010026
14	0.019479	0.008826
15	0.018263	0.007714
16	0.017470	0.006679
17	0.016956	0.005711
18	0.016579	0.004802
19	0.016198	0.003944
20	0.015669	0.000000
21	0.014851	0.000000
22	0.013602	0.000000
23	0.011778	0.000000
24	0.009239	0.000000
25	0.005841	0.000000

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:

5. Retirement Rates (unreduced):

For MERS General Employees: a flat 25% per year retirement probability for members eligible for unreduced retirement. A 50% retirement probability at first eligibility will be only applied if they have reached age 65 or with at least 25 years of service.

For MERS P&F: Unisex, service based rates are used depend on whether the unit had elected the optional 20-year retirement provisions. All members are assumed to retire upon reaching age 65 with at least ten years of service. 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.

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.

5. Retirement Rates (unreduced, continued):

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. <u>Participant Data</u>

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, 2014, 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. <u>Authority</u>: 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. <u>Plan Year</u>: A twelve-month period ending June 30th.
- 3. <u>Administration</u>: MERS is administered by the State of Rhode Island Retirement Board. However, the State Investment Commission is responsible for the investment of the trust assets, including the establishment of the asset allocation policy.
- 4. <u>Type of Plan</u>: 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. <u>Eligibility</u>: 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%. General MERS active members with 20 years of service as of June 30, 2012 will contribute 8.25% beginning July 1, 2015. Also, beginning July 1, 2015, MERS Police and Fire active members will contribute 9.00%. 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. <u>Salary</u>: 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. <u>Employer Contributions</u>: 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. <u>Service</u>: 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. <u>Final Average Compensation (FAC)</u>: 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. Effective July 1, 2015, members will be eligible to retire with full benefits at the earlier of their current RIRSA date described in sections (a) (c) above or upon the attainment of age 65 with 30 years of service, age 64 with 31 years of service, age 63 with 32 years of service, or age 62 with 33 years of service.
  - e. 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.
  - f. 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 from July 1, 2012 through June 30, 2105. 1.0% per year for all service after June 30, 2015 unless the member had 20 or more years of service as of June 30, 2012 in which case the benefit accrual is 2.0% per year for service after June 30, 2015. 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 50 years old and have a minimum of 25 years of contributing service or if they have 27 years of contributing service at any age. 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.
  - c. Active members (including future hires), members who retire after July 1, 2015 and after attaining age 57 with 30 years of service will have a benefit equal to the greater of their current benefit described in (a) and (b) above and one calculated based on a 2.25% multiplier for all years of service.
- 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. <u>Optional Forms of Payment</u>: 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. <u>Post-retirement Benefit Increase</u>: 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 may be granted in four-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2018.
  - b. Effective July 1, 2015, the COLA is determined based on 50% of the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%, plus 50% of the lesser of 3.0% or last year's CPI-U increase for a total maximum increase of 3.50%. Previously, it was the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%

- c. The COLA will be limited to the first \$25,000 of the member's annual pension benefit. For retirees and beneficiaries who retired on or before July 1, 2015, years in which a COLA is payable based on the every fourth year provision described in (i) above will be limited to the first \$30,000. These limits will be indexed annually to increase in the same manner as COLAs, with the known values of \$25,000 for 2013, \$25,000 for 2014, \$25,168 for 2015, \$25,855 for 2016, and \$26,098 for 2017.
- 18. <u>Special Provisions Applying to Specific Units</u>: 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% x Final Average Compensation (FAC), plus 1.50% x FAC x 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% x Final Average Compensation (FAC), plus 2.2727% x FAC x 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.

*Funding Period* or *Amortization Period*: The term "Funding Period" is used it 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 67* and *GASB 68*: Governmental Accounting Standards Board Statements No. 67 and No. 68. 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. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 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.