November 11, 2016

# **Actuarial Valuation Report:**

The City of Newport, Rhode Island Police Pension System as of July 1, 2016





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This report presents the results of our actuarial valuation of the City of Newport, Rhode Island Police Pension System (the Plan) as of July 1, 2016.

The valuation includes a general discussion and comments on the various schedules included in the report. These schedules summarize the underlying calculations, asset information, participant data, plan benefits and actuarial assumptions, and should be considered an integral part of the valuation.

### **Purpose**

The main purposes of this report are to provide to the City of Newport (the City):

- The pension contribution under the City's funding policy for the 2017-2018 plan year;
- The financial condition of the Plan; and
- Information relating to the disclosure and reporting requirements of Statements No. 25, and No. 27 of the Governmental Accounting Standards Board.

#### Certification

To the best of our knowledge, this report is complete and accurate and all costs and liabilities have been determined in conformance with generally accepted actuarial principles and on the basis of actuarial assumptions and methods which are reasonable (taking into account past experience under the Plan and reasonable expectations) and which in combination represent our best estimate of anticipated experience under the Plan.

The actuaries certifying to this valuation are members of the Society of Actuaries or other professional actuarial organizations, and meet the General Qualification Standards of the American Academy of Actuaries for purposes of issuing Prescribed Statements of Actuarial Opinion.

Respectfully submitted,

KORN FERRY HAY GROUP, INC.

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### Comments on the Valuation

This is Korn Ferry Hay Group's fifth valuation of the Plan. This report includes results for prior years based on methods and assumptions developed by the prior actuary.

#### **Plan Contribution**

The Valuation Highlights exhibit shows the development of the Plan's contribution for the 2017-2018 fiscal year, developed in accordance with the City's funding policy. The total contribution is \$4,396,285. This total cost has increased from \$4,063,560, which was developed for the 2016-2017 fiscal year. The main reasons for the increase were the reduction in the assumed interest rate from 7.50% to 7.25% plus the asset losses during the year.

If the City wishes to pay the contribution on a monthly basis, beginning on July 31, the monthly payment would be \$354,719.

### **Funding Policy**

The funding requirement is the sum of two components, an annual normal cost and an amortization payment which will change from year to year in response to evolving plan experience. It is our understanding that beginning with the July 1, 2002 valuation, the amortization period was reduced from 30 to 29 years, and that for each year the amortization period decreases by one year. Thus, the amortization period for the July 1, 2016 valuation is 15 years. The normal cost and amortization is then offset by anticipated employee contributions to the Plan, to arrive at the net City contribution.

### **Plan Assets**

Schedule A contains information about the Plan's assets. As of June 30, 2016, the market value of the Plan's assets is \$58,564,802 and the actuarial value of plan assets is \$62,994,728. The overall rate of return achieved for the 2015-2016 plan year was -1.7 percent on a market value basis.

The asset information used for the valuation was provided by the City. We have not audited such information, but have checked it for reasonableness and consistency.

### **Funding Status**

Schedule B provides the information on pension plans required by Statement Number 25 of the Governmental Accounting Standards Board.

Schedule C provides the information on pension plans required by Statement Number 27 of the Governmental Accounting Standards Board.

Schedule D discloses estimated City contributions and Plan benefits over the next twenty years. This open group projection shows that the Plan emerged from "critical status" (i.e., achieved a market value funding ratio of greater than 60%) on June 30, 2014 but dropped to 59.8% on June 30, 2016 as a result of both the interest rate reduction and asset losses. The Plan should move above 60% next year if the actuarial assumptions are reflective of the actual experience.



### **Participant Data**

Schedule E provides a distribution of the active participants as of July 1, 2016 by age and length of service. It also shows the average salary by age and service brackets. Schedule E also includes a breakdown of the inactive participants, by age and benefit amounts.

Although we have made tests to check for the reasonableness and consistency of the participant data, we have not audited the data but have relied on it as submitted by the City.

### **Actuarial Assumptions and Methods**

Schedule F summarizes the actuarial assumptions and cost methods used for the valuation. Effective with this July 1, 2016 valuation, we lowered the annual investment return assumption from 7.50% to 7.25% and revised the asset valuation method from market value to 5-year smoothed market value. Otherwise, there were no changes in actuarial assumptions or cost methods since the prior valuation.

### **Plan Provisions**

Schedule G contains a summary of the principal provisions of the plan in effect as of July 1, 2016.



# **Valuation Highlights**

				July 1, 2015	. <u></u>	July 1, 2016	
A.		mbership Data					
	1.	Active Members		<b>5</b> .		<b>-</b> 1	
		a. Number		76		71	
		b. Expected covered payroll for fiscal year	Ф	5 400 042		5 251 641	
		beginning on the valuation date	\$	5,489,942		5,351,641	
		c. Average pay	\$	72,236		75,375	
		d. Average age		41.1		41.1	
	2	e. Average service Retired members and beneficiaries		14.2		14.2	
	2.			124		125	
		<ul><li>a. Number</li><li>b. Aggregate annual pension</li></ul>	¢	5,155,330		5,347,891	
		c. Average annual pension	\$ \$	41,575		42,783	
		d. Average age	Ф	66.9		66.9	
	3.	Deferred vested members		00.9		00.9	
	٦.	a. Number		1		1	
		b. Aggregate annual pension	\$	36,000		36,000	
		c. Average annual pension	\$	36,000		36,000	
		d. Average age	Ψ	49.0		50.0	
В.	Bas	sic Valuation Results		.,		20.0	
ъ.			Ф	1 254 511	(24.70/)	1 410 020	(2 ( 50 ( )
	1.	Normal cost <sup>1</sup>	\$	1,354,511	(24.7%)	1,419,028	(26.5%)
	2.	Actuarial accrued liability a. Active members	ø	24 206 907		24.062.050	
		<ul><li>a. Active members</li><li>b. Retirees and beneficiaries</li></ul>	\$	24,296,897 68,186,712		24,063,959 73,381,733	
		c. Deferred vested		442,687		494,396	
		d. Total	\$	92,926,296	•	97,940,088	-
	2					, ,	
	3.	Valuation assets	\$	60,203,022		62,994,728	
	4.	Unfunded actuarial accrued liability	\$	32,723,274		34,945,360	
				July 1, 2016 to		July 1, 2017 to	
			_	June 30, 2017	•	June 30, 2018	<u>-</u>
C.	Dev	velopment of Contribution					
	1.	Contribution for fiscal year of valuation					
		a. Normal cost with interest	\$	1,507,063		1,575,174	
		b. Amortization of unfunded actuarial accrued		_		_	
		liability		$3,027,802^2$		$3,280,009^3$	
		c. Anticipated employee contributions with		(451.205)		(450,000)	
		interest	_	(471,305)		(458,898)	<u>-</u>
		d. City contribution assumed deposited June 30	\$	4,063,560		4,396,285	
	2.	Monthly City contribution beginning July 31	\$	327,519		354,719	

Percentages in parentheses represent amounts as percentages of covered payroll.
 Amortized over 16 years from the valuation date as a level percentage of payroll.
 Amortized over 15 years from the valuation date as a level percentage of payroll.



# Schedule A: Analysis of Plan Assets

# A.1. Schedule of Receipts and Disbursements

(1) Market Value at July 1, 2015		\$60,203,022
<ul> <li>(2) Receipts <ul> <li>a. City Contributions</li> <li>b. Member Contributions</li> <li>c. Net Investment Income</li> <li>d. Total Receipts</li> </ul> </li> <li>(3) Disbursements <ul> <li>a. Benefit Payments</li> <li>b. Total Disbursements</li> </ul> </li> </ul>	\$ 4,012,174 447,063 (1,022,215) \$ 3,437,022 \$ 5,075,242 \$ 5,075,242	
<ul><li>(4) Market Value at June 30, 2016 [(1) + (2) - (3)]</li><li>A. 2. Trust Investment Yield for 12 Months Ending June 30,</li></ul>	2016	\$58,564,802
1. Asset Market Value at July 1, 2015		\$60,203,022
2. City Contributions during the year (paid 7/1/15)		4,012,174
3. Member Contributions and Benefits paid during the year		(4,628,179)
4. Asset Market Value at June 30, 2016		58,564,802
5. Investment Increment		(1,022,215)
6. Approximate Average Asset Market Value (1) + (2) + [(3) / 2	]	61,901,107
7. Approximate Yield Rate (5) / (6)		-1.7%



# A. 3. Actuarial Value of Assets as of June 30, 2016

Actualial value of Assets as of June 30, 2010	
1. Development of June 30, 2016 Expected Actuarial Value of Assets:	
(a) Actuarial value of assets July 1, 2015	\$60,203,022
(b) Contributions for the 2015-16 plan year	
(1) Employee Contribution	447,063
(2) Employer Contributions	4,012,174
(c) Benefit payments and expenses for the 2015-16 plan year	5,201,134
(d) Interest on (a), (b) and (c) at 7.5 percent	
$((a + b2) \times 7.5\%) + ((b1 - c) \times (1.075^{0.5} - 1))$	4,641,085
(e) Expected actuarial value of assets June 30, 2016	
(a) + (b) - (c) + (d)	\$64,102,210
2. Development of Amount of Difference to be Amortized	
(a) Difference between expected actuarial value	
and market value as of June 30, 2012	\$0
(b) Unrecognized amount of June 30, 2012	
difference: 20 percent of (2a)	0
(c) Difference between expected actuarial value	
and market value as of June 30, 2013	0
(d) Unrecognized amount of June 30, 2013	
difference: 40 percent of (2c)	0
(e) Difference between expected actuarial value	
and market value as of June 30, 2014	0
(f) Unrecognized amount of June 30, 2014	
difference: 60 percent of (2e)	0
(g) Difference between expected actuarial value	
and market value June 30, 2015	0
(h) Unrecognized amount of June 30, 2015	
difference: 80 percent of (2g)	0
(i) Market value as of June 30, 2016	58,564,802
(j) Difference between expected actuarial value	
and market value as of June 30, 2016:	
(2i) - (1e) - (2b) - (2d) - (2f) - (2h)	\$ (5,537,408)
3. Development of Actuarial Value of Assets June 30, 2016	
(a) 20 percent of June 30, 2012 difference: 20 percent of (2a)	0
(b) 20 percent of June 30, 2013 difference: 20 percent of (2c)	0
(c) 20 percent of June 30, 2014 difference: 20 percent of (2e)	0
(d) 20 percent of June 30, 2015 difference: 20 percent of (2g)	0
(e) 20 percent of June 30, 2016 difference: 20 percent of (2j)	(1,107,482)
(f) Actuarial value of assets June 30, 2016:	
(1e) + (3a) + (3b) + (3c) + (3d) + (3e):	\$62,994,728
4. Unrecognized market value June 30, 2016: (2-i) - (3f)	\$ (4,429,926)
5. Contribution Receivable	\$ 0
6. Actuarial Value of Assets (3f) + (5)	\$62,994,728



## Schedule B: GASB 25 Disclosure Information

## **B.1** Actuarial Accounting Date

Date Used to Compute Benefit and Asset Values — July 1, 2016

## **B.2.** Method and Assumptions

All methods and assumptions used for Plan accounting are summarized in Schedule F.

### **B.3.** Statement of Plan Net Assets

1.	Assets	
	a) Cash and Short Term Investments	\$558,692
	b) Receivables	0
	c) Investments at Fair Value	
	(1) Fixed Income	11,019,927
	(2) Domestic Equities	34,122,140
	(3) Foreign Equities	6,632,574
	(4) Alternative Investments	6,279,487
	d) Total Assets	\$58,612,820
2.	Liabilities	
	a) Payables for Investments Purchased and Other Payables	48,018
3.	Net Assets Held in Trust for Pension Benefits	\$58,564,802



# **B.4.** Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL	Funded Ratio	Covered Payroll	UAAL as % of Covered Payroll
6/30/02	28,060,710	65,986,217	(37,925,507)	42.53%	3,775,389	(1004.55%)
6/30/03	29,217,703	67,277,252	(38,059,549)	43.43%	4,007,324	(949.75%)
6/30/04	33,645,290	58,014,568	(24,369,278)	57.99%	4,383,668	(555.91%)
6/30/05	36,209,737	61,626,704	(25,416,967)	58.76%	4,527,283	(561.42%)
6/30/06	39,118,117	62,635,048	(23,516,931)	62.45%	4,757,611	(494.30%)
6/30/07	44,288,895	70,038,232	(25,749,337)	63.24%	4,752,900	(541.76%)
6/30/08	41,952,553	68,177,847	(26,225,294)	61.53%	5,129,935	(511.22%)
6/30/09	37,852,800	73,443,988	(35,591,188)	51.54%	4,990,094	(713.24%)
6/30/10	42,240,992	74,866,848	(32,625,856)	56.42%	4,972,175	(656.17%)
6/30/11	43,693,248	76,570,775	(32,877,527)	57.06%	5,048,815	(651.19%)
6/30/12	43,320,088	82,684,359	(39,364,271)	52.39%	5,033,625	(782.03%)
6/30/13	48,411,954	82,838,152	(34,426,198)	58.44%	5,147,999	(668.73%)
6/30/14	57,507,986	85,862,792	(28,354,806)	66.98%	5,246,624	(540.44%)
6/30/15	60,203,022	92,926,296	(32,723,274)	64.79%	5,489,942	(596.06%)
6/30/16	62,994,728	97,940,088	(34,945,360)	64.32%	5,351,641	(652.98%)



# **B.5.** Schedule of Employer Contributions

Actuarial Valuation Date	Annual Required Contribution	Actual Contribution	Percentage Contributed
7/1/93	1,823,577	2,136,173	117.14%
7/1/94	2,103,989	2,226,085	105.80%
7/1/95	2,279,943	2,322,898	101.88%
7/1/96	2,426,242	1,793,369	73.92%
7/1/97	2,547,554	2,759,907	108.34%
7/1/98	2,274,548	3,137,686	137.95%
7/1/99	2,094,752	2,510,675	119.86%
7/1/00	1,696,189	2,703,167	159.37%
7/1/01	1,985,197	2,273,062	114.50%
7/1/02	2,099,345	2,698,300	128.53%
7/1/03	3,247,875	3,247,875	100.00%
7/1/04	3,389,486	3,889,486	114.75%
7/1/05	2,440,649	2,440,649	100.00%
7/1/06	2,385,996	2,440,649	102.29%
7/1/07	2,272,177	2,272,049	100.00%
7/1/08	2,406,091	2,472,177	102.75%
7/1/09	2,470,822	2,670,822	108.09%
7/1/10	3,116,642	3,116,642	100.00%
7/1/11	2,899,579	2,899,579	100.00%
7/1/12	3,461,972	3,461,972	100.00%
7/1/13	3,954,174	3,954,174	100.00%
7/1/14	3,729,898	4,012,174	107.57%
7/1/15	3,327,981	4,012,174	120.56%



# **Schedule C: GASB 27 Disclosure Information**

## **Development of the Net Pension Obligation (Asset)**

Fiscal Year Ending	Val. Interest Rate	Amort. Years	Amort. Factor	NPO at Beginning of Year	Annual Required Contribution	Interest on NPO	Adjustment to NPO	Annual Pension Cost	Actual Contribution	Increase in NPO	NPO at End of Year
6/30/93	8.00%	30	22.7490	(603,644)	1,671,097	(48,292)	26,535	1,649,341	1,930,973	(281,632)	(885,276)
6/30/94	8.00%	30	22.7490	(885,276)	1,823,577	(70,822)	38,015	1,791,670	2,136,173	(344,503)	(1,229,779)
6/30/95	8.25%	30	18.4393	(1,229,779)	2,103,989	(101,457)	66,693	2,069,225	2,226,085	(156,860)	(1,386,639)
6/30/96	8.25%	30	18.4393	(1,386,639)	2,279,943	(114,398)	75,200	2,240,745	2,322,898	(82,153)	(1,468,792)
6/30/97	8.25%	30	18.4393	(1,468,792)	2,426,242	(121,175)	79,656	2,384,722	1,793,369	591,353	(877,439)
6/30/98	8.25%	30	18.4393	(877,439)	2,547,554	(72,389)	47,585	2,522,750	2,759,907	(237,157)	(1,114,596)
6/30/99	8.25%	30	18.4393	(1,114,596)	2,274,548	(91,954)	60,447	2,243,040	3,137,686	(894,646)	(2,009,242)
6/30/00	8.25%	30	18.4393	(2,009,242)	2,094,752	(165,762)	108,965	2,037,954	2,510,675	(472,721)	(2,481,963)
6/30/01	8.25%	30	20.1557	(2,481,963)	1,696,189	(204,762)	123,140	1,614,567	2,703,167	(1,088,600)	(3,570,563)
6/30/02	8.25%	30	20.1557	(3,570,563)	1,985,197	(294,571)	177,149	1,867,775	2,273,062	(405,287)	(3,975,850)
6/30/03	8.25%	30	20.1557	(3,975,850)	2,099,345	(328,008)	197,257	1,968,594	2,698,300	(729,706)	(4,705,556)
6/30/04	8.25%	29	19.6866	(4,705,556)	3,247,875	(388,208)	239,023	3,098,690	3,247,875	(149,185)	(4,854,741)
6/30/05	8.25%	28	19.2064	(4,854,741)	3,389,486	(400,516)	252,767	3,241,737	3,889,486	(647,749)	(5,502,490)
6/30/06	8.25%	27	15.8723	(5,502,490)	2,440,649	(453,955)	346,673	2,333,367	2,440,649	(107,282)	(5,609,772)
6/30/07	8.25%	26	15.5296	(5,609,772)	2,385,996	(462,806)	361,231	2,284,421	2,440,649	(156,228)	(5,766,000)
6/30/08	8.25%	25	14.8848	(5,766,000)	2,272,177	(475,695)	387,375	2,183,857	2,272,049	(88,192)	(5,854,192)
6/30/09	8.25%	24	14.5315	(5,854,192)	2,406,091	(482,971)	402,862	2,325,982	2,472,177	(146,195)	(6,000,387)
6/30/10	8.25%	23	14.1638	(6,000,387)	2,470,822	(495,032)	423,642	2,399,432	2,670,822	(271,390)	(6,271,777)
6/30/11	7.50%	22	14.1447	(6,271,777)	3,116,642	(470,383)	443,401	3,089,660	3,116,642	(26,982)	(6,298,759)
6/30/12	7.50%	21	13.7252	(6,298,759)	2,899,579	(472,407)	458,919	2,886,091	2,899,579	(13,488)	(6,312,247)
6/30/13	7.50%	20	13.2894	(6,312,247)	3,461,972	(473,419)	474,984	3,463,537	3,461,972	1,565	(6,310,682)
6/30/14	7.50%	19	12.8369	(6,310,682)	3,954,174	(473,301)	491,605	3,972,478	3,954,174	18,304	(6,292,378)
6/30/15	7.50%	18	11.8170	(6,292,378)	3,729,898	(471,928)	532,485	3,790,455	4,012,174	(221,719)	(6,514,097)
6/30/16	7.25%	17	11.6044	(6,514,097)	3,327,981	(472,272)	561,347	3,417,056	4,012,174	(595,118)	(7,109,215)

Note: Amortization factors used for periods prior to FY 2001 did not reflect future longevity or promotion pay increases.



# Schedule D: Forecast of Plan Contributions and Benefit Payments

The following table discloses the estimated City contributions and benefits to be paid from the Plan over the next twenty years, under the current set of actuarial assumptions. Effective July 1, 2014 new police hires are enrolled in the State of Rhode Island Municipal Employees' Retirement System. Since there will be no new entrants to this group, this projection no longer assumes new entrants. This is why the Normal Cost and Expected Employee Contributions are now decreasing in each of the projection years.

FY Ending 6/30	Normal Cost	Amortization of Unfunded AL	Estimated Employee Contributions	Annual Required Contribution	Benefit Payments	Funded %
2018	1,575,174	3,280,009	458,898	4,396,285	5,462,475	59.8%
2019	1,536,280	3,501,987	448,574	4,589,693	5,683,368	61.5%
2020	1,467,360	3,728,942	429,894	4,766,408	5,931,195	63.3%
2021	1,442,803	3,961,305	423,028	4,981,080	6,211,199	65.3%
2022	1,383,448	4,199,280	406,111	5,176,617	6,450,051	67.4%
2023	1,352,354	4,303,123	397,411	5,258,066	6,693,484	69.6%
2024	1,291,653	4,428,038	380,344	5,339,347	6,908,472	72.0%
2025	1,281,461	4,555,699	377,523	5,459,636	7,140,084	74.4%
2026	1,241,727	4,685,513	365,889	5,561,351	7,364,978	77.0%
2027	1,217,924	4,817,108	359,064	5,675,968	7,599,130	79.7%
2028	1,191,170	4,949,437	351,536	5,789,072	7,884,124	82.6%
2029	1,135,303	5,080,711	335,240	5,880,774	8,147,595	85.7%
2030	1,085,593	5,207,792	320,719	5,972,667	8,422,966	88.9%
2031	1,020,929	5,321,975	301,218	6,041,686	8,625,396	92.4%
2032	996,619	5,389,958	294,188	6,092,389	8,857,534	96.1%
2033	943,779	-	279,234	664,545	9,088,558	100.1%
2034	898,805	-	266,021	632,784	9,267,862	100.2%
2035	858,721	-	254,269	604,451	9,608,402	100.2%
2036	749,881	-	221,268	528,613	9,774,286	100.3%
2037	705,877	-	208,220	497,657	9,929,896	100.4%
2038	656,817	-	193,935	462,882	10,144,002	100.5%



# **Schedule E: Profiles of Population**

# E.1. Number of Active Participants by Age and Duration

	ACTIVES													
	MALE													
Age Group	0- 4	5-9	10-14	15-19	20-24	25-29	30+	Total						
0- 19	0	0	0	0	0	0	0	0						
20- 24	0	0	0	0	0	0	0	0						
25- 29	8	1	0	0	0	0	0	9						
30- 34	2	3	5	0	0	0	0	10						
35- 39	2	2	4	2	0	0	0	10						
40- 44	1	1	4	6	0	0	0	12						
45- 49	0	0	0	6	5	1	0	12						
50- 54	0	0	0	0	2	4	1	7						
55- 59	0	0	0	0	1	1	2	4						
60- 64	0	0	0	0	0	0	0	0						
65+	0	0	0	0	0	0	1	1						
TOTAL	13	7	13	14	8	6	4	65						
			AVG AGE	40.94	AVG DUR	14.26								

	ACTIVES												
	FEMALE												
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total					
0- 19	0	0	0	0	0	0	0	0					
20- 24	0	0	0	0	0	0	0	0					
25- 29	2	0	0	0	0	0	0	2					
30- 34	0	0	0	0	0	0	0	0					
35- 39	0	0	0	0	0	0	0	0					
40- 44	0	0	0	0	0	0	0	0					
45- 49	0	0	0	2	0	0	0	2					
50- 54	0	0	0	0	0	1	0	1					
55- 59	0	0	1	0	0	0	0	1					
60- 64	0	0	0	0	0	0	0	0					
65+	0	0	0	0	0	0	0	0					
TOTAL:	2	0	1	2	0	1	0	6					
			AVG AGE	43.33	AVG DUR	13.67							



	ACTIVES												
	Total												
Age Group	0- 4	5-9	10-14	15-19	20-24	25-29	30+	Total					
0- 19	0	0	0	0	0	0	0	0					
20- 24	0	0	0	0	0	0	0	0					
25- 29	10	1	0	0	0	0	0	11					
30- 34	2	3	5	0	0	0	0	10					
35- 39	2	2	4	2	0	0	0	10					
40- 44	1	1	4	6	0	0	0	12					
45- 49	0	0	0	8	5	1	0	14					
50- 54	0	0	0	0	2	5	1	8					
55- 59	0	0	1	0	1	1	2	5					
60- 64	0	0	0	0	0	0	0	0					
65+	0	0	0	0	0	0	1	1					
TOTAL:	15	7	14	16	8	7	4	71					
			AVG AGE	41.14	AVG DUR	14.21							



# E. 2. Number of Inactive Participants by Age and Annual Pension

RETIRED						
	MALE		FEMALE		TOTAL	
Age Group	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
40- 44	0	0	0	0	0	0
45- 49	5	223,930	1	35,957	6	259,887
50- 54	7	414,973	1	45,380	8	460,353
55- 59	10	577,535	0	0	10	577,535
60- 64	19	989,504	0	0	19	989,504
65- 69	13	692,766	0	0	13	692,766
70- 74	12	668,900	0	0	12	668,900
75- 79	10	445,045	0	0	10	445,045
80- 84	2	124,444	0	0	2	124,444
85-89	1	48,367	0	0	1	48,367
90- 94	2	109,870	0	0	2	109,870
95- 99	0	0	0	0	0	0
100-104	0	0	0	0	0	0
105-109	0	0	0	0	0	0
110-114	0	0	0	0	0	0
115-119	0	0	0	0	0	0
120+	0	0	0	0	0	0
TOTAL	81	4,295,334	2	81,337	83	4,376,671
	AVG AGE:	65.2	AVG AGE:	48.5	AVG AGE:	64.8
	AVG PENSION:	53,029	AVG PENSION:	40,669	AVG PENSION:	52,731



DISABLED						
	MALE		FEMALE		TOTAL	
Age Group	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
20- 24	0	0	0	0	0	0
25- 29	0	0	0	0	0	0
30- 34	0	0	0	0	0	0
35- 39	0	0	0	0	0	0
40- 44	0	0	0	0	0	0
45- 49	3	147,166	1	49,637	4	196,803
50- 54	2	80,829	0	0	2	80,829
55- 59	0	0	0	0	0	0
60- 64	2	45,343	0	0	2	45,343
65- 69	1	20,622	1	46,161	2	66,783
70- 74	0	0	0	0	0	0
75- 79	0	0	0	0	0	0
80- 84	0	0	0	0	0	0
85- 89	0	0	0	0	0	0
90- 94	0	0	0	0	0	0
95- 99	0	0	0	0	0	0
100-104	0	0	0	0	0	0
105-109	0	0	0	0	0	0
110-114	0	0	0	0	0	0
115-119	0	0	0	0	0	0
120+	0	0	0	0	0	0
TOTAL	8	293,960	2	95,798	10	389,758
	AVG AGE:	54.1	AVG AGE:	57.5	AVG AGE:	54.8
	AVG PENSION:	36,745	AVG PENSION:	47,899	AVG PENSION:	38,976



BENEFICIARY						
	MALE		Female		Total	
Age Group	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
15- 19	0	0	0	0	0	0
20- 24	0	0	0	0	0	0
25- 29	0	0	0	0	0	0
30- 34	0	0	0	0	0	0
35- 39	0	0	0	0	0	0
40- 44	0	0	0	0	0	0
45- 49	0	0	0	0	0	0
50- 54	0	0	1	10,257	1	10,257
55- 59	0	0	0	0	0	0
60- 64	0	0	4	77,330	4	77,330
65- 69	0	0	4	93,678	4	93,678
70- 74	0	0	5	92,571	5	92,571
75- 79	0	0	5	112,898	5	112,898
80- 84	0	0	4	72,942	4	72,942
85-89	0	0	7	92,303	7	92,303
90- 94	0	0	2	29,484	2	29,484
95- 99	0	0	0	0	0	0
100-104	0	0	0	0	0	0
105-109	0	0	0	0	0	0
110-114	0	0	0	0	0	0
115-119	0	0	0	0	0	0
120+	0	0	0	0	0	0
TOTAL	0	0	32	581,463	32	581,463
	AVG AGE:	0.0	AVG AGE:	76.2	AVG AGE:	76.2
	AVG PENSION:	0	AVG PENSION:	18,171	AVG PENSION:	18,171



VESTED TERMS						
	Ma	LE	FEMAL	Æ	Т	OTAL
Age Group	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension
20- 24	0	0	0	0	0	0
25- 29	0	0	0	0	0	0
30- 34	0	0	0	0	0	0
35- 39	0	0	0	0	0	0
40- 44	0	0	0	0	0	0
45- 49	0	0	0	0	0	0
50- 54	1	36,000	0	0	1	36,000
55- 59	0	0	0	0	0	0
60- 64	0	0	0	0	0	0
65- 69	0	0	0	0	0	0
70- 74	0	0	0	0	0	0
75- 79	0	0	0	0	0	0
80- 84	0	0	0	0	0	0
85-89	0	0	0	0	0	0
90- 94	0	0	0	0	0	0
95- 99	0	0	0	0	0	0
100-104	0	0	0	0	0	0
105-109	0	0	0	0	0	0
110-114	0	0	0	0	0	0
115-119	0	0	0	0	0	0
120+	0	0	0	0	0	0
TOTAL	1	36,000	0	0	1	36,000
	AVG AGE:	50.0	AVG AGE:	0	AVG AGE:	50.0
	AVG PENSION:	36,000	AVG PENSION:	0	AVG PENSION:	36,000



## **Schedule F: Actuarial Methods and Assumptions**

**Actuarial Cost Method:** 

Individual Entry Age Normal Actuarial Cost Method - Under this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit. The normal cost is the portion of the actuarial present value allocated to the valuation year. For inactive members, the actuarial accrued liability is equal to the present value of benefits. Inactive members do not have a normal cost. The portion of this actuarial present value not provided for at the valuation date by the sum of the actuarial value of the assets and actuarial present value of future normal costs is the unfunded actuarial accrued liability. The unfunded actuarial accrued liability over the valuation assets.

**Asset Valuation Method:** 

5-year smoothed market value

**Actuarial Assumptions:** 

1. Interest

7.25% per year, net of investment expenses, became effective June 30, 2016.

2. Salary Increases

2.75% per year through July 1, 2022. Thereafter, 3.00% per year plus longevity increases of 3.00% after seventh year of employment and 0.50% for each year of employment thereafter through the thirty-first year of employment. No longevity increases are assumed after the thirty-first year of employment.

3. Cost of Living Increases

Tied to the general wage increase which is usually assumed to be 3.00% per year. Benefits payable to service related disability retirements on or after July 1, 2014 are assumed to increase 2.75% per year.

4. Mortality

a. Healthy Members

RP-2000 Combined Healthy Mortality Table, applied on a fully generational basis using Mortality Projection Scale AA. This table contains sufficient margin for improvement in life expectancy.

b. Disabled Members

The 1985 Wyatt Pension Disability Table (unisex rates)

5. Disability

Rates of disability are based on an employee's age. Selected ages are listed below. 90% of disabilities are assumed to be service related.

Attained Age	<b>Probability of Disability</b>
25	0.17%
35	0.29%
45	0.72%
55	1.21%

6. Withdrawal

Rates of withdrawal are based on an employee's length of service, as follows:

Years of Service	Probability of Withdrawal
< 1	4.50%
1	3.38%
2	3.00%
3	2.63%
4	2.25%
5	1.88%
6	1.50%
7	1.13%
8	0.75%
9	0.38%
10+	0.00%



#### 7. Retirement

Rates of retirement are based on an employee's length of service, as follows:

Years of Service	Probability of Retirement
20	10%
21	2%
22	2%
23	2%
24	2%
25	40%
26	10%
27	10%
28	10%
29	10%
30	40%
31	20%
32	20%
33	20%
34	20%
35+	100%

The above rates for years of service 21 through 29 have been adjusted since the prior valuation to reflect a somewhat different expected pattern of retirements as a result of negotiated benefit formula changes that became effective July 1, 2014.

8. Administrative Expenses

Assumed to be paid by the Plan Sponsor outside the trust.

9. Benefit Compensation Limits

Benefit limits under Section 415 and compensation limits under Section 401(a)(17) of the Internal Revenue Code are assumed to have no impact on benefits earned under this Plan.

10. Marriage/Dependents

75% of active police are assumed to be married. For all participants, wives are assumed to be three years younger than their husbands. For the purposes of valuing the death benefit, unmarried members are assumed to have no dependent children at death.

11. Valuation Date

July 1, 2016.



# Schedule G: Summary of Plan Provisions as of July 1, 2016

1. Effective Date

Most recent amendment

July 1, 2014

2. Eligibility

All members of the police department who contribute to the pension fund and who were hired before July 1, 2014 (or enrolled in the Police Academy as of September, 2014). All other police hires on or after July 1, 2014 will be covered by the State of Rhode Island Municipal Employees' Retirement System.

### 3. Retirement

a. Eligibility

b. Benefit Formula

Members who have completed 20 years of service may retire.

The annual benefit at retirement is equal to the percentage of final annual salary specified in the table below, plus \$100 per year for each year of service over 25 (maximum \$1,000). For pension purposes, annual salary includes regular and longevity pay.

	Benefit as a
	Percentage of Final
Years of Service	Annual Salary
20	50.0%
21	52.5%
22	55.0%
23	57.5%
24	60.0%
25	65.0%
26	66.0%
27	67.0%
28	68.0%
29	69.0%
30 or more	70.0%

<u>Note:</u> The benefit levels shown above payable at years of service 25 through 29 were increased (from those shown in the prior valuation report) as a result of negotiated benefit formula changes that became effective July 1, 2014.

c. Commencement Date

Retirement benefits commence as of the first payroll period after retirement



d. Form of Payment

The annual benefit calculated in accordance with the formula in (b) above is payable monthly for the remainder of the retired member's life, with 67.5% of the member's benefit payable for the lifetime of the member's surviving spouse.

#### 4. Vested Termination

a. Eligibility

b. Benefit Formula

c. Commencement Date

d. Form of Payment

## 5. Disability Retirement

a. Eligibility

i. Non-Service Related

ii. Service Related

b. Benefit Formula

i Non-Service Related

ii. Service Related

c. Commencement Date

d. Form of Payment

6. Non-Vested Termination of Employment

7. Death Before Retirement - Survivor Annuity Benefits

a. Eligibility

b. Benefit Formula

Upon termination of employment after 10 years of service, a member is eligible for a benefit deferred to retirement age.

2.5% of final annual salary multiplied by full years of service at termination

20th anniversary of employment.

Same as retirement.

No benefit prior to completion of 7 years of service. A member who is disabled with between 7 and 20 years of service is eligible to receive disability retirement benefits.

Retirement because of a job-related mental or physical incapacity.

50% of final annual salary.

66-2/3% of final annual salary.

Benefits commence as of the first payroll period after disability.

Same as retirement.

A member who leaves employment prior to completing 10 years of service will receive a lump sum payment of accumulated contributions

Death while actively employed.

Surviving spouse (or, if none, dependent children) receives benefit of 67.5% of final annual salary, reduced pro rata if the deceased member had less than 20 years of service.



c. Commencement Date

Benefits commence as of the first payroll period after death.

d. Form of Payment

Monthly life annuity.

8. Retiree Cost of Living Increase

For retirements before July 1, 2014: Pensions for retirees (but not disabled retirees or beneficiaries) are indexed to the negotiated pay increases for active police. Terminated vested members receive 3% annual increases after benefit commencement

For retirements on or after July 1, 2014: Pensions for retirees with at least 20 years of service are indexed to the negotiated pay increases for active police. For retirees with 20 to 25 years of service, the indexing begins when the retiree would have attained 25 years of service. Retirements with less than 20 years of service do not get indexed except for job related disability retirements. Job related disability retirement benefits are indexed using the Bureau of Labor Statistics CPI for Northeast Urban Wage Earners, but will not exceed 3.00% nor be lower than 1.00% per year.

9. Employee Contributions

8% of salary.