

**EMPLOYEES' RETIREMENT SYSTEM  
OF JERSEY CITY  
REPORT OF THE ACTUARY  
PREPARED AS OF JANUARY 1, 2012**

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May 25, 2012

Pension Commission  
Employees' Retirement System  
of Jersey City  
City Hall  
Jersey City, New Jersey

Members of the Pension Commission:

Section 15 of City Ordinance G-145 governing the operation of the Employees' Retirement System of Jersey City provides for actuarial valuations of the system. The results of the actuarial valuation, prepared as of January 1, 2012, are submitted in this report.

The valuation shows the financial condition of the system as of January 1, 2012 and gives a basis for determining the contributions payable by the City. On the basis of the valuation, it is recommended that the City contribute to the system 5.07% of the salaries of members as well as an accrued liability contribution of \$6,523,974 for 2012 payable as of December 31, 2012. The accrued liability contribution will increase 4% per year.

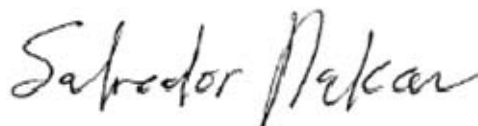
As required under Section 43:13-22.64 of the Jersey City Statutes, experience studies are performed once in every five year period. This valuation was prepared on the basis of the demographic assumptions that were determined from the January 1, 2006 – December 31, 2010 Experience Study which were approved by the Pension Commission during the May 16, 2012 Pension Commission meeting. As mandated by the statute, these assumptions will remain in effect for valuation purposes until such time the Pension Commission adopts revised assumptions.

The report was prepared under the supervision of Edward Quinn and Salvador Nakar, the system's actuaries, are Members of the American Academy of Actuaries, who have met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Edward A. Quinn, E.A., M.A.A.A., F.C.A.  
Director, Retirement Actuary



Salvador Nakar, E.A., M.A.A.A., F.C.A.  
Senior Consultant, Retirement Actuary

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**RETIREMENT SYSTEM  
OF JERSEY CITY  
REPORT OF THE ACTUARY  
PREPARED AS OF JANUARY 1, 2012**

**SECTION I - SUMMARY OF PRINCIPAL RESULTS**

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding valuation results are summarized below:

<b><u>Valuation Date</u></b>	<b>1/1/2012</b>	<b>1/1/2010</b>
Number of active members	686	839
Annual salaries	\$ 30,895,626	\$ 34,444,082
Number of retired members and eligible survivors*	348	334
Annual retirement allowances	\$ 9,188,792	\$ 7,609,144
Number of former members entitled to vested benefits at age 60	27**	23
Annual vested benefits	\$ 304,017	\$ 318,747
Assets for valuation purposes	\$ 77,619,541	\$ 68,971,589
Unfunded accrued liability	\$ 107,343,094	\$ 92,267,919
Funded ratio	42.0%	42.8%
Normal contribution rate	5.07%	4.12%
Accrued liability contribution***	\$ 6,523,974	\$ 5,607,753
Annual Recommended Contribution	\$ 8,090,382	\$ 7,026,849

\* In addition, as of January 1, 2012, there were three minor children receiving temporary pensions of \$25,515. As of January 1, 2010 there were four minor children receiving temporary pensions of \$33,346.

\*\* In addition, as of January 1, 2012, there were 50 former active members whose status is unknown. 8 members are currently vested with an estimated total annual benefit of \$85,126 and 42 are non-vested valued for their accumulated contributions.

\*\*\* The accrued liability contribution amount is to increase 4% per year.

GASB Statement No. 27 only requires a valuation be performed every two years. Therefore, we are providing the Annual Recommended Contributions payable as of December 31, 2012 for the 2012 calendar year and December 31, 2013 for the 2013 calendar year as follows:

	<b>12/31/2012</b>	<b>12/31/2013</b>
Normal Contribution*	\$ 1,566,408	\$ 1,629,065
Accrued Liability Contribution	6,523,974	6,784,933
<b>Total Contribution</b>	<b>\$ 8,090,382</b>	<b>\$ 8,413,998</b>

\* The Normal Contribution amounts are 5.07% of estimated salaries of \$30,895,626 and \$32,131,451 for the 2012 and 2013 calendar years, respectively. The actual normal contribution to the trust should be 5.07% of actual salaries for each year.

2. Comments on the valuation results as of January 1, 2012 are given in Section IV and further discussion of the contribution levels is set out in Section V.
3. A summary of the main benefit and contribution provisions of the system as interpreted for the valuation is given in Schedule C of this report. There have been no changes in plan provisions since the preceding valuation.
4. For the January 1, 2012 valuation, the interest rate and salary scale assumptions have all remained the same as the assumptions used in the prior valuation. As required under Section 43:13-22.64 of the Jersey City Statutes, experience studies are performed once in every five year period. This valuation was prepared on the basis of the following changes to the demographic assumptions that were determined from the January 1, 2006 – December 31, 2010 Experience Study which were approved by the Pension Commission during the May 16, 2012 Pension Commission meeting:
  - Update the pre-retirement mortality table from the RP2000 Combined Healthy mortality tables to the IRS Static Non-Annuitant mortality table. These tables use the RP 2000 Combined Healthy mortality tables as the base mortality tables adjusted for projected mortality improvements to the valuation date and further projected 15 years from each future valuation date.

- Update the post-retirement mortality table for both healthy and disabled beneficiaries from the RP2000 Combined Healthy mortality tables to the IRS Static Annuitant mortality tables. These tables use the RP 2000 Combined Healthy mortality tables as the base mortality tables adjusted for projected mortality improvements to the valuation date and further projected for 7 years from each future valuation date.
- Update the select and ultimate rates of withdrawal from employment among active members to reflect recent experience.

The following chart presents the effect of these changes to the demographic assumptions on the January 1, 2012 valuation.

Item	Unfunded Accrued Liability	Employer Pension Contribution Amount	Employer Pension Contribution Rate	Funded Ratio
1. Prior assumptions	\$ 100,215,575	\$ 7,499,627	24.27%	43.6%
2. Impact of changes to the demographic assumptions	<u>7,127,919</u>	<u>590,755</u>	<u>1.92%</u>	<u>(1.6)%</u>
3. Revised assumptions (1) + (2)	\$ 107,343,494	\$ 8,090,382	26.19%	42.0%

As mandated by the statute, these assumptions will remain in effect for valuation purposes until such time the Pension Commission adopts revised assumptions. The assumptions are outlined in Schedule B.

Additionally, the valuation liabilities were determined using the Projected Unit Credit Funding Method. Under this method, the City is required to make two contributions to the Retirement System, a normal contribution and, if applicable, an accrued liability contribution. The normal contribution is defined under the Projected Unit Credit Funding Method as the present value of the benefits accruing during the current year. The unfunded accrued liability (surplus) is determined as the difference between the accrued

liability and the actuarial value of assets. If there was no unfunded accrued liability for the valuation period immediately preceding the current valuation period, the current year's accrued liability contribution is determined as a level percentage of pay required to liquidate the unfunded accrued liability in annual payments, increasing at 4% per year, for 30 years. Thereafter, any increase or decrease in the unfunded accrued liability as a result of actuarial losses or gains for subsequent valuation years will increase or decrease the unfunded accrued liability contribution.

## **SECTION II - MEMBERSHIP DATA**

1. Membership data were furnished by the Plan administrator.
2. Schedule D provides tables summarizing the system's membership data used for the January 1, 2012 valuation. Table 1 shows a reconciliation of the system's membership from January 1, 2010 to December 31, 2011. Tables 2 and 3 show the number and annual rates of salary of active members that were included in the valuation, while Tables 4, 5, 6 and 7 show the number and annual pensions of retired members, eligible survivors and members entitled to vested benefits included in the valuation.

## **SECTION III - ASSETS**

1. The amount of the assets taken into account in this valuation is based on information reported in the financial statement.
2. For actuarial purposes, assets are valued at market value, which totaled \$77,619,541 as of January 1, 2012.

#### **SECTION IV - COMMENTS ON VALUATION**

Schedule A of this report contains the valuation balance sheet, which shows the present and prospective assets and liabilities of the Retirement System as of January 1, 2012. The following comments on the valuation are pertinent:

- (1) The Retirement System has a total accrued liability of \$184,962,635 of which \$107,567,012 is for the accrued benefits payable on account of present retired members, members entitled to receive deferred pensions and eligible survivors and \$77,395,623 is for the accrued benefits payable on account of present active members.
- (2) The Retirement System has present assets of \$77,619,541. When this amount is subtracted from \$184,962,635, the total accrued liability of the Retirement System, the balance of \$107,343,094 is the unfunded accrued liability of the Retirement System.
- (3) The Retirement System is supported by the joint contributions of the members and the City. The expected member contributions for 2012 are \$2,192,937. When this amount is brought forward half a year and subtracted from \$3,848,011, the gross normal cost of the Retirement System brought forward one year, the balance of \$1,566,408 is the net normal cost payable as of December 31, 2012 by the City. This amount divided by the total annual compensation of active members of \$30,895,626 determines a net normal cost of 5.07% of salaries.
- (4) As mentioned above, the current valuation indicates that a normal contribution payable by the City at a rate of 5.07% of annual salaries would be required to cover the City's cost of benefit increases in the year following the valuation. This rate multiplied by the annual compensation of \$30,895,626 produces a net normal cost to be paid by the City of



\$1,566,408. The accrued liability contribution is determined by amortizing the unfunded accrued liability of \$107,343,094 over 30 years with an 8.25% interest rate and increasing payments of 4% per year. The accrued liability contribution is \$6,523,974. Therefore, the total annual contribution payable by the City as of December 31, 2012 is \$8,090,382.

#### **SECTION V - CONTRIBUTIONS REQUIRED TO SUPPORT THE SYSTEM**

1. The present actuarial valuation of the Retirement System indicates that a normal contribution rate of 5.07% is appropriate. In addition, an accrued liability contribution of \$6,523,974 is also recommended due to the existing unfunded accrued liability.
2. The following table summarizes the contribution recommended for payment by the City on the basis of the salaries of members as of January 1, 2012 of \$30,895,626 and estimated salaries as of January 1, 2013 of \$32,131,451 in order to fund the Retirement System on a sound actuarial basis.

#### **ANNUAL CONTRIBUTION RECOMMENDED FOR PAYMENT BY THE CITY**

	<b>AS PERCENTAGE OF SALARIES</b>	<b>ANNUAL AMOUNT</b>
<b>Payable December 31, 2012 for 2012 Calendar Year</b>		
Normal Contribution	5.07%	\$ 1,566,408
Accrued Liability Contribution	21.12%	\$ 6,523,974
<b>Total Contribution</b>	<b>26.19%</b>	<b>\$ 8,090,382</b>
<b>Payable December 31, 2013 for 2013 Calendar Year</b>		
Normal Contribution	5.07%	\$ 1,629,065
Accrued Liability Contribution	21.12%	\$ 6,784,933
<b>Total Contribution</b>	<b>26.19%</b>	<b>\$ 8,413,998</b>

3. As stated above, the foregoing table shows the annual contribution payable by the City on the basis of the salaries of members as of January 1, 2012 and the estimated salaries as of January 1, 2013. However, it is recommended that the actual normal contribution to be made be determined by applying the normal contribution rate of 5.07% to the actual salaries that will be paid during the period for which the contributions are to be made. In addition, the accrued liability contribution amount is payable over a 30 year period with payments increasing 4% per year.

### **SECTION VI - EXPERIENCE**

Records are being maintained whereby the actual experience of active members, retired members and eligible survivors are compared with that expected on the basis of the tables adopted by the Pension Commission. In this way, deviations in the experience from that anticipated will be noted and any adjustments believed necessary brought to the attention of the Pension Commission.

### **SECTION VII – ACTUARIAL PRESENT VALUE OF ACCRUED BENEFITS**

Presented below is a comparison of the actuarial present value of accrued benefits with the market value of the assets as of the valuation date. The relevant amounts as of January 1, 2012 are:

Actuarial present value of accrued benefits:

Vested benefits		
Members and survivors currently receiving payments	\$ 104,496,000	
Other members	<u>63,926,000</u>	
	\$ 168,422,000	
Non-vested benefits	<u>8,167,000</u>	
Total	\$ 176,589,000	
Assets at market value	\$ 77,620,000	

The actuarial present value of vested and non-vested accrued benefits is based on an assumed interest rate of 8.25%. As of January 1, 2010 the interest rate was 8.25%.

The statement of changes in the present value of accrued benefits is as follows:

Actuarial present value benefits as of January 1, 2010	\$ 156,649,000
Increase (decrease) during the year attributable to:	
Amendments	\$ 0
Change in actuarial assumptions	5,629,000
Benefits accumulated	6,482,000
Interest for 24 months	25,459,000
Benefits paid	<u>(17,630,000)</u>
Net Increase	\$ 19,940,000
Actual present value of accrued benefits as of January 1, 2012	\$ 176,589,000

### **SECTION VIII – ACCOUNTING INFORMATION**

Statement No. 5 of the Governmental Accounting Standards Board, issued November 1986, established standards of disclosure of pension information by public retirement systems. Statement No. 25 of the Governmental Accounting Standards Board, issued November 1994, established financial reporting standards for defined benefit pension plans and for the notes to the financial statements of defined contribution plans of state and local governmental liabilities and superseded Statement No. 5 effective for periods beginning after June 15, 1996. Statement No. 27, Accounting for Pensions by State and Local Governmental Employers superseded Statement 5 for employers participating in pension plans and is effective for periods beginning after June 15, 1997. Statement No. 50, Accounting for Pensions by State and Local Governmental Employers amends the note disclosure and required supplementary information (RSI) standards of Statements No. 25 and No. 27 to conform with applicable changes adopted on Statements No. 43 and No. 45 for Postemployment Benefit Plans other than Pension Plans.

Statement No. 50 is intended to improve the transparency of reported information about pensions by State and Local governmental plans and employers. Statement No. 50 is effective for periods beginning after June 15, 2007.

The information required by Statements No. 25, No. 27 and No. 50 is presented in the following tables. These include the development of the Annual Required Contribution (ARC), the Schedule of Funding Progress and the Schedule of Employer Contributions.

**(A) Development of the Annual Required Contribution (ARC) for the Fiscal Year July 1, 2011 to June 30, 2012**

1.	Actuarial Value of Plan Assets as of January 1, 2011	\$ 78,729,093
2.	Actuarial Accrued Liability as of January 1, 2011	\$ 169,584,288
3.	Unfunded Actuarial Accrued Liability/(Surplus) as of January 1, 2011 = (2) - (1)	\$ 90,855,195
4.	Amortization of Unfunded Actuarial Accrued Liability/(Surplus) over 30 years with payments increasing at 4% per year as of January 1, 2011	\$ 5,101,055
5.	Development of Net Normal Cost as of January 1, 2011:	
	(a) Basic Allowance Normal Cost	\$ 3,774,339
	(b) Expected Employee Contributions	<u>2,410,958</u>
	(c) Net Normal Cost as of January 1, 2011 = (a) - (b)	\$ 1,363,381
6.	Annual Required Contribution as of January 1, 2011 = (4) + (5c)	\$ 6,464,436
7.	Interest on Annual Required Contribution to June 30, 2012	\$ 816,253
8.	Annual Required Contribution as of June 30, 2012	\$ 7,280,689

**(B) Development of the Annual Required Contribution (ARC) for the Fiscal Year July 1, 2012 to June 30, 2013**

1.	Actuarial Value of Plan Assets as of January 1, 2012	\$ 77,619,541
2.	Actuarial Accrued Liability as of January 1, 2012	\$ 184,962,635
3.	Unfunded Actuarial Accrued Liability/(Surplus) as of January 1, 2012 = (2) - (1)	\$ 107,343,094
4.	Amortization of Unfunded Actuarial Accrued Liability/(Surplus) over 30 years with payments increasing at 4% per year as of January 1, 2012	\$ 6,026,766
5.	Development of Net Normal Cost as of January 1, 2012:	
	(a) Basic Allowance Normal Cost	\$ 3,553,573
	(b) Expected Employee Contributions	<u>2,107,717</u>
	(c) Net Normal Cost as of January 1, 2012 = (a) - (b)	\$ 1,445,856
6.	Annual Required Contribution as of January 1, 2012 = (4) + (5c)	\$ 7,472,622
7.	Interest on Annual Required Contribution to June 30, 2013	\$ 943,555
8.	Annual Required Contribution as of June 30, 2013	\$ 8,416,177

**(C) Development of the Net Pension Obligation (NPO) as of June 30, 2011,  
June 30, 2012 and June 30, 2013**

<b>Fiscal Year Ending (FYE)</b>	<b><u>June 30, 2011</u></b>	<b><u>June 30, 2012</u></b>	<b><u>June 30, 2013</u></b>
1. Annual Required Contribution as of FYE	\$ 7,309,283	\$ 7,280,689	\$ 8,416,177
2. Interest on Net Pension Obligation	510,346	521,545	444,399
3. Adjustment to Annual Required Contribution	<u>(375,966)</u>	<u>(384,216)</u>	<u>(327,384)</u>
4. Annual Pension Cost = (1) + (2) + (3)	\$ 7,443,663	\$ 7,418,018	\$ 8,533,192
5. Actual Employer Contributions for FYE	\$ 7,307,924	\$ 8,353,114**	\$ 8,252,190**
6. Net Pension Obligation as of prior FYE	\$ 6,186,015	\$ 6,321,754	\$ 5,386,658
7. Increase in Net Pension Obligation = (4) – (5)	\$ 135,739	\$ (935,096)	\$ 281,002
8. Net Pension Obligation at FYE = (6) + (7)	\$ 6,321,754*	\$ 5,386,658	\$ 5,667,660

\* The June 30, 2011 Net Pension Obligation amount has been revised from the amount shown in the prior valuation year's report to reflect the adjustment to the fiscal year 2011 contribution.

\*\* Estimates of 2012 and 2013 fiscal year contributions.

**(D) Schedule of Funding Progress**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability* (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll (b-a)/c
12/31/98	\$ 74,891,384	\$ 71,818,448	\$ (3,072,936)	104.3%	\$ 27,273,116	(11.3)%
06/30/01	\$ 65,681,958	\$ 77,899,103	\$ 12,217,145	84.3%	\$ 23,506,648	52.0%
01/01/06	\$ 69,884,505	\$ 133,378,060	\$ 63,493,555	52.4%	\$ 28,743,034	220.9%
01/01/08	\$ 76,388,275	\$ 147,333,583	\$ 70,945,308	51.8%	\$ 32,926,273	215.5%
01/01/10	\$ 68,971,589	\$ 161,239,508	\$ 92,267,919	42.8%	\$ 34,444,082	267.9%
01/01/12	\$ 77,619,541	\$ 184,962,635	\$ 107,343,094	42.0%	\$ 30,895,626	347.4%

\* The Actuarial Accrued Liability as of 12/31/1998 and 6/30/2001 are determined based on the Entry Age Cost Method.

**(E) Schedule of Employer Contributions**

Fiscal Year	Annual Required Contribution	Employer Contribution	Percentage Contributed
2006	\$ 3,680,819	\$ 2,490,940	67.7%
2007	\$ 5,039,020	\$ 2,570,955	51.0%
2008	\$ 5,151,443	\$ 4,841,949	94.0%
2009	\$ 5,826,552	\$ 5,230,349	89.8%
2010	\$ 7,838,082	\$ 5,655,937	72.2%
2011	\$ 7,309,283	\$ 7,307,924	100.0%

**(F)** The information presented in the required supplementary schedules was determined as part of the actuarial valuation. Additional information follows:

Valuation Date	January 1, 2012
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level Percent, Open
Remaining Amortization Period	30 years
Asset Valuation Method	Market value
Actuarial Assumptions:	
Investment Rate of Return	8.25%
Projected Salary Increases	4.0%
Cost of Living Adjustments	100% of the assumed CPI increase of 3.0%
Inflation rate	3.00%

**SCHEDULE A**

**VALUATION BALANCE SHEET  
SHOWING THE ASSETS AND LIABILITIES OF THE  
EMPLOYEES' RETIREMENT SYSTEM OF JERSEY CITY  
PREPARED AS OF JANUARY 1, 2012**

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<b>ASSETS</b>		
Present assets of the system		\$ 77,619,541
		<u>107,343,094</u>
Unfunded accrued liability (surplus)		\$ 184,962,635
Total Assets		<u><u>184,962,635</u></u>
 <b>LIABILITIES</b>  		
Present value of prospective benefits payable on account of present retired members, members entitled to receive deferred pensions and eligible survivors		\$ 107,567,012
Present value of accrued benefits payable on account of present active members:		
Service retirement benefits	\$ 66,304,360	
Disability retirement benefits	2,380,165	
Benefits on death in service and after retirement	6,035,491	
Return of members' contributions upon withdrawal before retirement	<u>2,675,607</u>	
Total on account of active members		<u>\$ 77,395,623</u>
Total Accrued Liabilities		<u><u>\$ 184,962,635</u></u>

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**SCHEDULE B****OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS**

**VALUATION INTEREST RATE:** 8.25% per annum, compounded annually.

**SEPARATIONS FROM SERVICE:** Representative values of the assumed annual rates of separation are as follows:

<u>Age</u>	<u>Prior to Eligibility For Benefit*</u>		<u>After Eligibility For Benefit**</u>		<u>After Eligibility for Service Retirement</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
20	9.31%	8.98%			
25	8.82	8.51			
30	7.35	7.09	7.60%	7.33%	
35	4.90	4.73	5.28	5.10	
40	4.41	4.25	4.85	4.67	
45	3.92	3.78	4.42	4.27	0.36%
50	2.94	2.84	3.95	3.81	0.72
55	2.94	2.84	4.45	4.30	6.00
60					24.00
62					8.00
65					21.00
69					15.00

\* Prior to 3 years of service, higher rates of termination are used.

\*\* The differences between the rates of termination after eligibility for a benefit and those prior to eligibility of a refund of contributions are the rates assumed for members electing a deferred benefit instead.

<u>Age</u>	<u>Ordinary Death*</u>		<u>Accidental Death</u>	<u>Ordinary Disability</u>	<u>Accidental Disability</u>
	<u>Male</u>	<u>Female</u>			
20	.02%	.01%	.001%	.010%	.001%
25	.03	.01	.001	.010	.001
30	.04	.02	.001	.020	.001
35	.07	.04	.001	.030	.002
40	.09	.05	.001	.080	.007
45	.11	.07	.002	.090	.007
50	.14	.11	.002	.150	.007
55	.19	.20	.002	.350	.007
60	.32	.34	.002		.008
62	.39	.41	.002		.009
65	.52	.51	.002		.009
69	.65	.64	.002		.010

\* Based on the 2012 IRS Static Non-Annuitant mortality tables. These tables use the RP2000 Combined Healthy mortality tables as the base mortality tables adjusted for projected mortality improvements to the valuation date and further projected 15 years from the valuation date.

**SALARY INCREASES:** Representative values of the assumed annual rates of future salary increases are as follows:

<u>Age</u>	<u>Annual Rate of Salary Increase</u>
20	4.91%
25	5.00
30	4.86
35	4.50
40	4.23
45	3.85
50	3.57
55	3.09
60	2.74
62	2.57
65	2.30
69	1.86

**SERVICE RETIREMENT:** Assumed to occur between the age first eligible and age 70.

**COST-OF-LIVING INCREASES:** The COLA increase is 100% of the cumulative increase in the Consumer Price Index, which is assumed to increase at 3% per year.

**SPOUSES:** 85% of active members assumed to be married.

**DEATHS AFTER RETIREMENT:**

**SERVICE:** According to the 2012 IRS Static Annuitant mortality tables. These tables use the RP2000 Combined Healthy mortality tables as the base mortality tables adjusted for projected mortality improvements to the valuation date and further projected 7 years from the valuation date.

**DISABILITY:** According to the 2012 IRS Static Annuitant mortality tables. These tables use the RP2000 Combined Healthy mortality tables as the base mortality tables adjusted for projected mortality improvements to the valuation date and further projected 7 years from the valuation date.

**LOADING OR CONTINGENCY RESERVES:** None.

**VALUATION METHOD:** Projected Unit Credit.

**ASSET VALUATION METHOD:** Market value.

**PRESENT VALUE OF ACCRUED VESTED AND NONVESTED BENEFITS:** The calculation of the present value of accrued vested and nonvested benefits has been made on the basis of the same assumptions as used in the valuation except that no salary increases are assumed.

**MISCELLANEOUS:** The valuation was prepared on an on-going plan basis. The valuation was based on members of the Retirement System as of the valuation date and did not take future members into account. No provision has been made for contingent liabilities with respect to non-vested terminated members who may be reemployed. The valuation assumptions anticipate a modest rate of future inflation.

## **SCHEDULE C**

### **SUMMARY OF MAIN SYSTEM PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES**

The Employees' Retirement System of Jersey City, which became effective February 22, 1965, was established under City Ordinance G-145 in accordance with the provisions of Chapter 275 of the Laws of New Jersey 1964. It supersedes any pension system existing in the City pursuant to Article 2, Chapter 13, Title 43 of the Revised Statutes. Legislation signed on August 19, 1996 revised the retirement and survivorship benefits payable to retirants and beneficiaries. Chapter 167, P.L. 2003 increased retirement allowances by 100% of the calculated increase in the CPI instead of the previous 60%. Chapter 247, P.L. 2005 decreased the early retirement factor from 2/12 of 1% to 1/12 of 1% per month for retirees prior to age 60. Chapter 128, P.L. 2003 allowed 39 employees to retire with enhanced benefits.

#### **1 - DEFINITION**

"Final Salary" means the average annual salary received by a member for the three years immediately preceding his death or retirement or it means the average annual salary earned by a member for any 3 fiscal years of membership providing the largest possible benefit to the member or his beneficiary; provided, however, that as to any member employed by the City prior to January 12, 1965, salary received by such member at the time of his death or retirement.

#### **2 - MEMBERSHIP IN PLAN**

Employees who were members of the former pension systems on the effective date automatically became members of the Retirement System. After the effective date membership is a condition of employment for those who become employees prior to the attainment of age 40. Those employees who became such prior to February 22, 1965, who were not members of a former pension system and who had become employees prior to the attainment of age 40,

were allowed to join the Retirement System within 6 months after the effective date and were permitted to purchase credit for prior service. Provision was made in the ordinance for a possible transfer to the Retirement System of certain members of the State Retirement Systems within this same 6 month period. Under the provisions of Chapter 158, P.L. 1966, employees who were not covered under a former pension system and who were employed on or before February 22, 1965 and after attainment of age 40 but prior to the attainment of age 50 were allowed to become members within 6 months after the effective date of the amendment and were permitted to purchase credit for prior service. Members of the police and fire departments and employees of the board of education are not included as employees eligible to become members. All pensions and benefits on account of pensioners and beneficiaries of the former pension systems are continued under the Retirement System.

Effective October 7, 1984 temporary employees with one year's continuous service are required to become members of the Retirement System.

### **3 - BENEFITS**

#### **Retirement for Age and Service With 20 or More Years of Creditable Service**

Conditions for Retirement	Any member who has 20 years of creditable service in the employ of the City and has attained age 60 may retire for age and service upon his application.
Amount of Pension	The pension payable upon retirement is equal to 55% of his final salary plus 1% of such salary for each year of creditable service in excess of 20 years. The minimum annual pension is \$3,600.

### **Retirement for Age and Service With Less Than 20 Years of Creditable Service**

Conditions for Retirement	Any member who has attained age 60 but with less than 20 years of creditable service in the employ of the City may retire under this provision.
Amount of Pension	The pension payable is equal to 2% of his final salary for each year of creditable service. The annual pension, however, is never less than \$3,600.

### **Early Service Retirement**

Conditions for Retirement	If a member resigns prior to age 60 after having completed 25 years of creditable service, he may elect to receive a pension.
Amount of Pension	The pension payable is equal 55% of his final salary plus 1% of such salary for each year of service in excess of 20 years, reduced by 1/12 of 1% for each month he is less than age 60, but not less than \$3,600 per annum.

### **Termination of Service**

Conditions for Pension	If a member has completed 10 years of creditable service and is separated from service either voluntarily or involuntarily prior to age 60, he may elect to receive a deferred pension commencing at age 60.
Amount of Pension	A deferred pension in an amount equal to the proportional relation which his years of service credited in the fund bear to the years of service which he would have had had he continued in service to age 60, multiplied by one-half of his final salary at the time he elected the deferred pension. The minimum annual pension is \$3,600.

### **Retirement for Ordinary Disability**

Conditions for Retirement	Any member who has 5 or more years of creditable service and who has become permanently disabled for the further performance of his duty may be retired on a disability pension.
Amount of Pension	The pension is equal to one-half of his final salary plus 1% for each year of creditable service in excess of 20 years, never less than \$3,600 per annum.

## Retirement for Accidental Disability

Conditions for Retirement	Any member who has become permanently and totally disabled, mentally or physically, for the further performance of his duty as a result of a traumatic event occurring during and as a result of the performance of his regular or assigned duties may be retired on a disability pension. The application to accomplish such retirement must be filed within five years of the original traumatic event.
Amount of Pension	The pension is equal to two-thirds of his final salary, never less than \$3,600 per annum.

## Benefits Upon Death in Service

Conditions for Benefit	<p>Upon the death of a member in service who has paid to the system the full amount of his contributions, a death benefit is payable to the surviving widow, widower, minor children or dependent parents of the member, as the case may be, provided that:</p> <ul style="list-style-type: none"> <li>(a) The member dies as a result of injuries or illness received or incurred in the performance of his duties, or</li> <li>(b) The member has served in the employ of the City for a period of five years and dies from causes other than injuries or illness received or incurred in the performance of his duties.</li> </ul> <p>In order to be eligible for the benefit, a widow or widower must have been married to the member at least 5 years prior to his death or retirement.</p>
Amount of Pension	<p>The death benefit payable to the surviving widow or widower is a pension of 50% of the member's final salary. If there is no surviving widow or widower or the widow or widower dies or remarries, a pension of 20% of such final salary shall be paid to one surviving child, 35% to two surviving children in equal shares and 50% to three or more children in equal shares. If there is no surviving widow, widower or child, a pension of 25% of such final salary shall be paid to one surviving dependent parent or 40% to two surviving dependent parents in equal shares.</p> <p>If there are no eligible survivors, an amount equal to the member's contributions to the system, without interest, is payable to his estate.</p>

## **Benefits upon Death after Retirement**

### **Conditions for Benefit**

Upon the death of a member after his retirement, a death benefit is payable to the surviving widow, widower, minor children or dependent parents of the member, as the case may be. In order to be eligible for the benefit, a widow or widower must have been married to the member at least 5 years prior to his retirement.

### **Amount of Pension**

The death benefit payable to eligible survivors is a pension equal to 50% of the member's pension at retirement, not less than \$3,600 per annum.

## **Form of Benefits**

All benefits under the system are payable for life, except that benefits to widows and widowers and dependent parents are discontinued upon their remarriage and the benefits to minor children are discontinued upon their marriage or attainment of age 18.

If after the payment of all pension and survivorship benefits payable by the retirement system to a decedent member after retirement and his eligible survivors, the total amount paid is less than the amount of the decedent's contributions during membership in the retirement system, the amount of the difference, without interest, shall be payable to the decedent's estate.

## **Refund of Contributions upon Termination of Service**

A member who separates from service without receiving other benefits from the system is entitled to a refund of his contributions to the system, without interest, at the expiration of 90 days plus the period of tendency of any legal proceedings.

## **Cost-of-Living Adjustment**

A retirant or beneficiary who has been in receipt of a pension or survivorship benefit for at least two years will receive a percentage adjustment of his initial pension or survivorship benefit at the beginning of each year starting with the year 1990, or the beginning of his 25th month in receipt of a pension or survivorship benefit, if later, equal to 100% (previously 60%) of the percentum of change in the Department of Labor's Consumer Price Index from the annual average index in 1988 or year his benefits began, if later, to the date of adjustment.



**4 - CONTRIBUTIONS**

**By Members**

Each member on the effective date of the system contributes during the entire period of his service the percentage of his salary applicable to his age at the time of his appointment, as follows:

<b>AGE AT APPOINTMENT</b>	<b>% RATE OF CONTRIBUTION</b>
Not Exceeding 35 years	6%
Between 35 and 36 years	6½
Between 36 and 37 years	7
Between 37 and 38 years	7½
Between 38 and 39 years	8
39 and over	8½

Each employee who becomes a member after the effective date of the system, contributes during the entire period of his service the percentage of his salary applicable to his age at the time of becoming a member. These percentages at quinquennial ages are as follows:

<b>AGE AT BECOMING A MEMBER</b>	<b>% RATE OF CONTRIBUTION</b>
20	6.20%
25	6.60
30	7.25
35	8.15
40	9.50
45	9.70
50 and over	10.15

**By City**

The contributions of the City consist of a normal contribution which is the present value of benefits to be accrued in the year following the valuation converted to a percentage of the annual salaries of all active members and, until the unfunded accrued liability is liquidated, an additional amount known as the accrued liability contribution which is an amount, increasing 4% per year, that will pay off the unfunded accrued liability over a period of 30 years.

**SCHEDULE D**

**TABLES OF MEMBERSHIP DATA**

**TABLE 1**  
**RECONCILIATION OF DATA FROM JANUARY 1, 2010 TO DECEMBER 31, 2011**

	Actives		Deferred Vested	Retirees		Beneficiaries	Dependents	Total
	Contrib.	Noncontrib.		Service	Disabled			
Members as of January 1, 2010	831	8	23	191	44	99	4	1,200
Status Change:								
To Contributing	1	(1)						
To Noncontributing	(43)	43						
Withdrawal								
- Non-Vested	(43)							(43)
- Vested Refund	(7)							(7)
- Deferred Vested	(8)		8					
Service Retirement	(51)			51				
Disabled	(1)				1			
Deferred Vesteds Now Payable			(5)	5				
Death	(6)			(26)	(5)	(23)		(60)
Beneficiaries						11		11
End of Payments							(1)	(1)
New Actives	13							13
Rehires								
Data Corrections/Pickups			1					1
Members as of January 1, 2012	686	50	27	221	40	87	3	1,114

**THE NUMBER AND ANNUAL RATES OF SALARIES OF MEMBERS  
DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2012**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 23			1	\$ 29,489
23 - 27	11	\$ 344,560	16	472,213
28 - 32	32	1,221,812	57	1,945,614
33 - 37	33	1,176,249	56	2,039,873
38 - 42	33	1,712,956	53	1,881,718
43 - 47	48	2,332,056	47	2,018,398
48 - 52	51	2,663,929	67	3,069,688
53 - 57	43	2,807,851	52	2,431,753
58 - 62	28	1,685,426	36	2,145,241
63 - 67	6	274,890	10	386,696
Over 67	3	119,423	3	135,791
<b>TOTAL</b>	<b>288</b>	<b>\$ 14,339,152</b>	<b>398</b>	<b>\$ 16,556,474</b>

**THE NUMBER AND ANNUAL RATES OF SALARIES OF MEMBERS  
DISTRIBUTED BY FIFTH-YEAR SERVICE AS OF JANUARY 1, 2012**

SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 3	6	\$ 117,938	7	\$ 118,204
3 - 7	70	2,870,824	114	3,533,772
8 - 12	53	2,550,174	70	2,687,186
13 - 17	33	1,594,951	52	2,095,562
18 - 22	33	1,872,882	45	1,991,497
23 - 27	56	2,989,612	59	3,008,352
28 - 32	22	1,357,984	28	1,609,013
33 - 37	11	779,574	14	808,014
38 - 42	3	161,040	9	704,874
Over 42	1	44,173		
<b>TOTAL</b>	<b>288</b>	<b>\$ 14,339,152</b>	<b>398</b>	<b>\$ 16,556,474</b>

**THE NUMBER AND ANNUAL PENSIONS OF RETIRED MEMBERS  
DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2012**

**SERVICE RETIREMENTS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 53	2	\$ 120,046	2	\$ 46,487
53 - 57	5	197,111	7	150,366
58 - 62	24	1,020,798	14	490,042
63 - 67	41	1,638,139	27	780,849
68 - 72	11	448,501	21	594,834
73 - 77	7	239,045	14	412,718
78 - 82	10	345,472	10	254,861
83 - 87	4	109,603	10	335,238
88 - 92	2	23,862	5	149,805
Over 92	1	19,736	4	75,475
<b>TOTAL</b>	107	\$ 4,162,313	114	\$ 3,290,675

**THE NUMBER AND ANNUAL PENSIONS OF RETIRED MEMBERS  
DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2012**

**DISABILITY RETIREMENTS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 43	1	\$ 16,718		
43 - 47				
48 - 52			3	\$ 47,943
53 - 57	2	48,868	3	78,511
58 - 62	1	20,004	7	144,239
63 - 67	4	79,750	3	56,291
68 - 72	2	41,713	1	11,078
73 - 77	1	18,748	3	72,222
78 - 82	3	68,778	1	18,346
83 - 87	2	34,413	1	15,395
88 - 92	1	13,980		
Over 92	1	10,728		
<b>TOTAL</b>	<b>18</b>	<b>\$ 353,700</b>	<b>22</b>	<b>\$ 444,025</b>

**THE NUMBER AND ANNUAL PENSIONS OF SURVIVORS  
OF DECEASED ACTIVE AND RETIRED MEMBERS  
DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2012**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 53			1	\$ 20,096
53 - 57	1	\$ 21,570	1	3,600
58 - 62	2	36,789	5	96,216
63 - 67	1	20,697		
68 - 72			7	84,116
73 - 77	1	5,155	9	154,059
78 - 82			18	190,608
83 - 87			12	95,021
88 - 92	1	11,944	19	145,673
Over 92			9	52,535
<b>TOTAL</b>	<b>6</b>	<b>\$ 96,155</b>	<b>81</b>	<b>\$ 841,924</b>

In addition, there are three minor children receiving temporary pensions of \$25,515.



**THE NUMBER AND ANNUAL DEFERRED PENSIONS  
OF MEMBERS ENTITLED TO VESTED BENEFITS  
DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2012**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 33				
33- 37	1	\$ 3,600		
38 - 42			3	\$ 19,798
43 - 47	3	20,561		
48 - 52	3	51,765	6	47,423
53 - 57	3	51,498	5	68,149
Over 57	2	14,728	1	26,496
<b>TOTAL</b>	<b>12</b>	<b>\$ 142,152</b>	<b>15</b>	<b>\$ 161,866</b>

In addition, there were 50 former active members whose status is not known. 8 members are currently vested with an estimated total annual benefit of \$85,126 and 42 are non-vested valued for their accumulated contributions.