Employees' Retirement System of Jersey City

Report of the Actuary

Prepared as of January 1, 2014

August 2014

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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, 2014, are submitted in this report.

The valuation reflects benefit and funding reforms under Chapter 282, P.L. 2013. The legislation amends Section 43:13-22.73 to decrease retirants' Cost of Living Adjustments from 100% to 50% of the percentum of change in the Department of Labor's Consumer Price Index. However, in accordance with the Pension Commission's administrative procedure regarding the implementation funding provision under Section 11 of the legislation, effective with the January 1, 2014 valuation, the City shall pay an additional normal cost and an additional unfunded accrued liability contribution amount which are determined to be the difference assuming the pension adjustment in retirement allowances continue to reflect a Cost of Living Adjustment of 100% of the percentum of change in the Department of Labor's Consumer Price Index and the revised 50% percentum of change in the same Consumer Price Index.

The valuation shows the financial condition of the system as of January 1, 2014 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 4.86% of the salaries of members as well as an accrued liability contribution of $5,981,200 for 2014 payable as of December 31, 2014. The accrued liability contribution will increase 4% per year.

As required under Section 43:13-22.64 of the New Jersey 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.

This valuation was performed using employee and financial data supplied by the City. The census data was received as of January 1, 2014. Buck did not audit this data, although it was reviewed for reasonableness and consistency with the prior year's information. The results of the valuation are dependent on the accuracy of the data. Schedule D provides a summary of the data used in the valuation.

This actuarial valuation was prepared under our direct supervision and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate and, in our opinion, the techniques and assumptions used are reasonable and meet the funding requirements and intent of Section 43:13-22.59 of the New Jersey Statutes. There is no benefit or expense to be provided by the Retirement System and/or paid from the Retirement System's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in Retirement System costs or required contribution rates have been taken into account in the valuation.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. Because of limited scope of this report, Buck performed no analysis of the potential range of such future differences.

This valuation was prepared in accordance with the standards of practice prescribed by the Actuarial Standards Board, based on the current provisions of the Plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plan. We are members of the American Academy of Actuaries and meet the Academy's qualification standards to issue this Statement of Actuarial opinion. We are available to answer questions regarding any of the content within this report.

This report was prepared for the Pension Commission for the purposes described herein and for the use by the Retirement System auditor in completing an audit related to the matters herein. This report is not intended to benefit any third party, and Buck assumes no duty or liability to any such party.

Respectfully submitted,

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Table of Contents

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Report of the Actuary
Prepared as of January 1, 2014

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:

Valuation Date	**1/1/2014**	**1/1/2012**
Number of active members	684	686
Annual salaries	$ 30,901,289	$ 30,895,626
Number of retired members and eligible survivors*	345	348
Annual retirement allowances	$ 10,102,294	$ 9,188,792
Number of former members entitled to vested benefits at age 60**	27	27
Annual vested benefits	$ 291,697	$ 304,017
Assets for valuation purposes	$ 100,289,274	$ 77,619,541
Unfunded accrued liability	$ 80,838,623	$ 107,343,094
Funded ratio	55.4%	42.0%
Normal contribution rate	4.35%	5.07%
Accrued liability contribution***	$ 4,913,116	$ 6,523,974
Annual Recommended Contribution	$ 6,257,322	$ 8,090,382
Chapter 282, P.L. 2013 Additional Contribution	1,225,681	N/A
Total Recommended Contribution	$ 7,483,003	$ 8,090,382

* In addition, as of January 1, 2014, there were five minor children receiving temporary pensions of $40,906. As of January 1, 2012 there were three minor children receiving temporary pensions of $25,515.

** In addition, as of January 1, 2014, there were 87 former active members whose status is unknown and valued for their accumulated contributions. As of January 1, 2012, there were 50 former active members whose status is unknown.

*** 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 (ARC) payable as of December 31, 2014 for the 2014 calendar year and December 31, 2015 for the 2015 calendar year as follows. However, since the reporting requirements of Statements No. 67 and No. 68 will be effective as of the December 31, 2014 and December 31, 2015 reporting dates, respectively, the ARC amounts are provided for informational purposes only.

	12/31/2014	12/31/2015
Normal Contribution*	$ 1,344,206	$ 1,397,974
Accrued Liability Contribution	4,913,116	5,109,641
Total Contribution	$ 6,257,322	$ 6,507,615

* The Normal Contribution amounts are 4.35% of estimated salaries of $30,901,289 and $32,137.341 for the 2014 and 2015 calendar years, respectively. The actual normal contribution to the trust should be 4.35% of actual salaries for each year.

2) Comments on the valuation results as of January 1, 2014 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. The valuation reflects Chapter 282, P.L. 2013, which amended the benefit and contribution provisions of the system:

   a. Provide that persons employed by Jersey City under age 40 will continue membership in the State administered Public Employees' Retirement System (PERS) if they were PERS members at the time they were employed by Jersey City.

   b. Item 10 of the legislation amends Section 11 of P.L.1990, c.20 (C.43:13-22.73) to decrease retirants' Cost of Living Adjustments (COLA) from 100% to 50% of the percentum of change in the Department of Labor's Consumer Price Index (CPI).

   c. Item 11 of the legislation revises the System's funding provisions by requiring the City to contribute an additional pension contribution that is "*equivalent to the cost of the adjustment in retirement allowances or pensions and in survivorship benefits payable to retirants and beneficiaries in the prior year pursuant to sections 7 through 13 of P.L.1990, c.20 (C.43:13-22.69 et seq.), except the initial payment shall be equivalent to the cost of the adjustment beginning on the effective date of"* the legislation. Our interpretation of this provision is, effective with the January 1, 2014 valuation, the City shall contribute an additional pension contribution amount which is determined to be the difference between the total benefits payable to current eligible retirees and beneficiaries assuming pension adjustments reflect 100% percentum of change in the CPI and the actual benefits payable based on the revised 50% percentum of change in the CPI. However, in accordance with the Pension Commission's administrative procedure on the implementation of this section of the legislation, effective with the January 1, 2014 valuation, the City shall pay an additional normal cost and an additional unfunded accrued liability contribution amount which are determined to be the difference assuming the COLA adjustment in retirement allowances continue to be 100% of the percentum of change in the CPI and the revised 50% percentum of change in the CPI.

   d. In addition, the legislation amended the benefit provisions for members hired on or after January 17, 2014, as follows:
      - Increased the averaging period for determining "final compensation" from three years to five years.

- Increased the age and service eligibility for the 55% of final compensation formula from age 60 with 20 years of service to age 65 with 25 years of service.
- Increased the service eligibility for early service retirement from 25 years of service to 30 years of service. A member electing to receive his benefit prior to age 65 will receive a benefit that is reduced by 3% per year such benefit commences prior to age 65.
- If a member has completed 10 years of creditable service and is separated from service either voluntarily or involuntarily prior to age 65, he may elect to receive a deferred pension commencing at age 65. The deferred pension is 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 65, multiplied by one-half of his final compensation at the time he elected the deferred pension. The minimum annual pension is $3,600.

There have been no other changes in benefit and contribution provisions since the preceding valuation.

4) For the January 1, 2014 valuation, the interest rate and salary scale assumptions have all remained the same as the assumptions used in the prior valuation. The valuation was prepared on the basis of the revised demographic assumptions that were determined from the January 1, 2006 – December 31, 2010 Experience Study and were approved by the Pension Commission during the May 16, 2012 Pension Commission meeting, which includes the use of the applicable IRS Static Non-Annuitant mortality tables and IRS Static Annuitant mortality tables for the valuation period. 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. In accordance with the Pension Commission's administrative procedure on the funding provisions of Chapter 282, P.L. 2013, the City shall pay an additional normal cost and an additional unfunded accrued liability contribution amount assuming the COLA adjustment in retirement allowances continued to be 100% of the percentum of change in the Department of Labor's Consumer Price Index.

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, 2014 valuation. Table 1 shows a reconciliation of the system's membership from January 1, 2012 to January 1, 2014. 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 $100,289,274 as of January 1, 2014.

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, 2014. The following comments on the valuation are pertinent:

(1) The Retirement System has a total accrued liability of $181,127,897 of which $106,713,789 is for the accrued benefits payable on account of present retired members, members entitled to receive deferred pensions and eligible survivors and $74,414,108 is for the accrued benefits payable on account of present active members.

(2) The Retirement System has present assets of $100,289,274. When this amount is subtracted from $181,127,897, the total accrued liability of the Retirement System, the balance of $80,838,623 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 2014 are $2,043,441. When this amount is brought forward half a year with interest and subtracted from $3,470,269, the gross normal cost of the Retirement System brought forward one year with interest, the balance of $1,344,206 is the net normal cost payable as of December 31, 2014 by the City. This amount divided by the total annual compensation of active members of $30,901,289 determines a net normal cost of 4.35% of salaries.

(4) As mentioned above, the current valuation indicates that a normal contribution payable by the City at a rate of 4.35% 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 $30,901,289 produces a net normal cost to be paid by the City of $1,344,206. The accrued liability contribution is determined by amortizing the unfunded accrued liability of $80,838,623 over 30 years with an 8.25% interest rate and increasing payments of 4% per year. The accrued liability contribution is $4,913,116. Therefore, the total annual contribution payable by the City as of December 31, 2014, prior to Chapter 282, P.L. 2013, is $6,257,322.

(5) In accordance with the Pension Commission's administrative procedure on the funding provisions of Chapter 282, P.L. 2013, the Retirement System has a total accrued liability of $202,638,253 and a gross normal cost of $3,545,244 assuming continuation of the 100% COLA adjustment in retirement allowances. The accrued liability contribution is determined by amortizing the unfunded accrued liability of $102,348,979 over 30 years with an 8.25% interest rate and increasing payments of 4% per year. Under Chapter 282, P.L. 2013, an additional net normal cost of $157,597 (0.51% of salaries) and accrued liability

contribution of $1,068,084 (3.46% of salaries) are also payable as of December 31, 2014 by the City. Therefore, the total annual contribution payable by the City as of December 31, 2014 is $7,483,003.

SECTION V - CONTRIBUTIONS REQUIRED TO SUPPORT THE SYSTEM

1. The present actuarial valuation of the Retirement System indicates that a normal contribution rate of 4.35% to cover the City's cost of benefit increases in the year following the valuation and an accrued liability contribution of $4,913,116 due to the existing unfunded accrued liability is recommended. In accordance with the Pension Commission's administrative procedure on the funding provisions under Chapter 282, P.L. 2013, an additional normal contribution rate of 0.51% and accrued liability contribution of $1,068,084 are also payable by the City.

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, 2014 of $30,901,289 and estimated salaries as of January 1, 2015 of $32,137,341 in order to fund the Retirement System on a sound actuarial basis and comply with legislation.

ANNUAL CONTRIBUTION RECOMMENDED FOR PAYMENT BY THE CITY

	Annual Percentage of Salaries			Annual Amount		
	Actual Cost Reflecting 50% CPI for COLA	Additional Amount to Reflect 100% CPI for COLA	Total	Actual Cost Reflecting 50% CPI for COLA	Additional Amount to Reflect 100% CPI for COLA	Total
	Payable December 31, 2014 for 2014 Calendar Year					
Normal Contribution	4.35%	0.51%	4.86%	$1,344,206	$ 157,597	$1,501,803
Accrued Liability Contribution	15.90%	3.46%	19.36%	$4,913,116	$1,068,084	$5,981,200
Total Contribution	20.25%	3.97%	24.22%	$6,257,322	$1,225,681	$7,483,003
	Payable December 31, 2015 for 2015 Calendar Year					
Normal Contribution	4.35%	0.51%	4.86%	$1,397,974	$ 163,901	$1,561,875
Accrued Liability Contribution	15.90%	3.46%	19.36%	$5,109,641	$1,110,807	$6,220,448
Total Contribution	20.25%	3.97%	24.22%	$6,507,615	$1,274,708	$7,782,323

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, 2014 and the estimated salaries as of January 1, 2015. However, it is recommended that the actual normal contribution to be made be determined by applying the normal contribution rate of 4.86% to the actual salaries that will be paid during the period for which the contributions are to be made.

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, 2014 are:

Actuarial present value of accrued benefits:	
Vested benefits	
Members and survivors currently receiving payments	$ 103,987,000
Other members	61,982,000
	$ 165,969,000
Non-vested benefits	8,559,000
Total	$ 174,528,000
Assets at market value	$ 100,289,000

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, 2012 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, 2012	$ 176,589,000
Increase (decrease) during the year attributable to:	
Amendments	$ (21,342,000)
Change in actuarial assumptions	615,000
Benefits accumulated	10,736,000
Interest for 24 months	28,631,000
Benefits paid	(20,701,000)
Net Increase	$ (2,061,000)
Actual present value of accrued benefits as of January 1, 2014	$ 174,528,000

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. The ARC, NPO and Schedule of Employer Contributions are provided for informational purposes only since the reporting requirements of Statements No. 67 and No. 68 will be effective as of the December 31, 2013 and December 31, 2014 reporting dates, respectively, and supersede the requirements of Statement Nos. 25, 27 and 50.

(A) Development of the Annual Required Contribution (ARC) for the Fiscal Year July 1, 2013 to December 31, 2013

1.	Actuarial Value of Plan Assets as of January 1, 2013	$	87,108,468
2.	Actuarial Accrued Liability as of January 1, 2013	$	193,371,675
3.	Unfunded Actuarial Accrued Liability/(Surplus) as of January 1, 2013 = (2) - (1)	$	106,263,207
4.	Amortization of Unfunded Actuarial Accrued Liability/(Surplus) over 30 years with payments increasing at 4% per year as of January 1, 2013	$	5,966,136
5.	Development of Net Normal Cost as of January 1, 2013:		
	(a) Basic Allowance Normal Cost	$	3,695,716
	(b) Expected Employee Contributions	$	2,190,806
	(c) Net Normal Cost as of January 1, 2013 = (a) - (b)	$	1,504,910
6.	Annual Required Contribution as of January 1, 2013 = (4) + (5c)	$	7,471,046
7.	Interest on Annual Required Contribution to December 31, 2013	$	616,361
8.	Annual Required Contribution as of December 31, 2013	$	8,087,407
9.	Annual Required Contribution for the period July 1, 2013 to December 31, 2013 = 0.50 * (8)	$	4,043,704

(B) Development of the Annual Required Contribution (ARC) for the Fiscal Year January 1, 2014 to December 31, 2014

1.	Actuarial Value of Plan Assets as of January 1, 2014	$	100,289,274
2.	Actuarial Accrued Liability as of January 1, 2014 *	$	181,127,897
3.	Unfunded Actuarial Accrued Liability/(Surplus) as of January 1, 2014 = (2) - (1)	$	80,838,623
4.	Amortization of Unfunded Actuarial Accrued Liability/(Surplus) over 30 years with payments increasing at 4% per year as of January 1, 2014	$	4,538,675
5.	Development of Net Normal Cost as of January 1, 2014:		
	(a) Basic Allowance Normal Cost *	$	3,207,044
	(b) Expected Employee Contributions	$	1,965,283
	(c) Net Normal Cost as of January 1, 2014 = (a) - (b)	$	1,241,761
6.	Annual Required Contribution as of January 1, 2014 = (4) + (5c)	$	5,780,436
7.	Interest on Annual Required Contribution to December 31, 2014	$	476,886
8.	Annual Required Contribution as of December 31, 2014	$	6,257,322

* Reflects retirants' COLA increases of 50% of the change in CPI under Chapter 282, P.L. 2013.

(C) Development of the Net Pension Obligation (NPO) as of June 30, 2013, December 31, 2013 and December 31, 2014

	Fiscal Year Ending (FYE)	June 30, 2013	December 31, 2013	December 31, 2014
1.	Annual Required Contribution as of FYE	$ 8,416,177	$ 4,043,704	$ 6,257,322
2.	Interest on Net Pension Obligation	444,399	230,985	459,401
3.	Adjustment to Annual Required Contribution	(327,384)	(166,858)	(338,435)
4.	Annual Pension Cost = (1) + (2) + (3)	$ 8,533,192	$ 4,107,831	$ 6,378,288
5.	Actual Employer Contributions for FYE	$ 8,206,999	$ 4,252,190	$ 7,483,003**
6.	Net Pension Obligation as of prior FYE	$ 5,386,658	$ 5,712,851	$ 5,568,492
7.	Increase in Net Pension Obligation = (4) – (5)	$ 326,193	$ (144,359)	$ (1,104,715)
8.	Net Pension Obligation at FYE = (6) + (7)	$ 5,712,851*	$ 5,568,492	$ 4,463,777

* The June 30, 2013 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 2013 contribution.

** Estimate of 2014 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
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%
01/01/14	$ 100,289,274	$ 181,127,897**	$ 80,838,623	55.4%	$ 30,901,289	261.6%

* The Actuarial Accrued Liability as of 6/30/2001 is determined based on the Entry Age Cost Method.
** Reflects retirants' COLA increases of 50% of the change in CPI under Chapter 282, P.L. 2013.

(E) Schedule of Employer Contributions

Fiscal Year	Annual Required Contribution	Employer Contribution	Percentage Contributed
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%
2012	$ 8,416,177	$ 8,206,999	97.5%
2013*	$ 4,043,704	$ 4,252,190	105.2%

* Fiscal year July 1, 2013 – December 31, 2013.

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

Valuation Date	January 1, 2014
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	50% 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, 2014

ASSETS

Present assets of the system			$	100,289,274
Unfunded accrued liability (surplus)				80,838,623
Total Assets			$	181,127,897

LIABILITIES

Present value of prospective benefits payable on account of present retired members, members entitled to receive deferred pensions and eligible survivors			$	106,713,789
Present value of accrued benefits payable on account of present active members:				
Service retirement benefits	$	64,841,209		
Disability retirement benefits		1,742,195		
Benefits on death in service and after retirement		5,285,860		
Return of members' contributions upon withdrawal before retirement		2,544,844		
Total on account of active members			$	74,414,108
Total Accrued Liabilities			$	181,127,897

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:

Age	Prior to Eligibility For Benefit*		After Eligibility For Benefit**		After Eligibility for Service Retirement
	Male	Female	Male	Female	
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.

Age	Ordinary Death*		Accidental Death	Ordinary Disability	Accidental Disability
	Male	Female			
20	.02%	.01%	.001%	.010%	.001%
25	.03	.01	.001	.010	.001
30	.04	.02	.001	.020	.001
35	.07	.03	.001	.030	.002
40	.09	.05	.001	.080	.007
45	.10	.07	.002	.090	.007
50	.13	.10	.002	.150	.007
55	.17	.20	.002	.350	.007
60	.31	.34	.002		.008
62	.38	.40	.002		.009
65	.50	.50	.002		.009
69	.63	.63	.002		.010

* Based on the 2014 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:

Age	Annual Rate of Salary Increase
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 50% 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 2014 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 2014 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. In accordance with Chapter 282, P.L. 2013 and the Pension Commission’s administrative procedure, the City shall pay an additional normal cost and an additional unfunded accrued liability contribution amount assuming the cost of the adjustment in retirement allowances assuming 100% (instead of 50%) of the percentum of change in the Department of Labor's Consumer Price Index.

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. Chapter 282, P.L. 2013, which was approved January 17, 2014, decreased the percentage of adjustment in the retirement allowances, pensions and survivorship benefits to 50% of the calculated increase in the CPI instead of the previous 100%.

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. Chapter 282, P.L. 2013 changed the definition of final salary for members hired on or after January 17, 2014 to be the average annual compensation for any five fiscal years of membership providing the largest possible benefit.

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. Under the provisions of Chapter 282, P.L. 2013, effective January 17, 2014, persons employed by Jersey City under age 40 will continue membership in the State administered Public Employees’ Retirement System (PERS) if they were PERS members at the time they were employed by Jersey City.

3 – BENEFITS

Retirement for Age and Service With 20 (25 years for members hired on or after January 17, 2014) 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 (25 years of creditable service and age 65 for members hired on or after January 17, 2014) 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 (25 years for members hired on or after January 17, 2014). 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 (age 65 for members hired on or after January 17, 2014) after having completed 25 years (30 years for members hired on or after January 17, 2014) 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 (in excess of 25 years for members hired on or after January 17, 2014), reduced by 1/12 of 1% for each month he is less than age 60 (3/12 of 1% for each month he is less than age 65 for members hired on or after January 17, 2014), 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 (age 65 for members hired on or after January 17, 2014), he may elect to receive a deferred pension commencing at age 60 (age 65 for members hired on or after January 17, 2014).
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 (age 65 for members hired on or after January 17, 2014), 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

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:

(a) The member dies as a result of injuries or illness received or incurred in the performance of his duties, or

(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.

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.

Amount of Pension

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.

If there are no eligible survivors, an amount equal to the member's contributions to the system, without interest, is payable to his estate.

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 50% (previously 100%) 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:

AGE AT APPOINTMENT	% RATE OF CONTRIBUTION
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:

AGE AT BECOMING A MEMBER	% RATE OF CONTRIBUTION
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. In accordance with Chapter 282, P.L. 2013 and the Pension Commission's administrative procedure, effective with the January 1, 2014 valuation, the City shall pay an additional normal cost and an additional unfunded accrued liability contribution amount assuming the cost of the adjustment in retirement allowances assuming 100% (instead of 50%) of the percentum of change in the Department of Labor's Consumer Price Index.

SCHEDULE D

TABLES OF MEMBERSHIP DATA

TABLE 1

RECONCILIATION OF DATA FROM JANUARY 1, 2012 TO JANUARY 1, 2014

	Actives		Deferred	Retirees				
	Contrib.	Noncontrib.	Vested	Service	Disabled	Beneficiaries	Dependents	Total
Members as of January 1, 2012	686	50	27	221	40	87	3	1,114
Status Change:								
To Contributing	4	(4)						
To Noncontributing	(11)	11						
Withdrawal								
- Non-Vested	(26)	(31)						(57)
- Vested Refund			(3)					(3)
- Deferred Vested	(6)	(4)	10					
Service Retirement	(27)			27				
Disabled	(1)	(2)			3			
Deferred Vesteds Now Payable								
Death	(6)		(1)	(19)	(3)	(24)		(53)
Beneficiaries						8	2	10
End of Payments								
New Actives	71	68						139
Rehires								
Data Corrections/Pickups		(1)	(6)	30	(26)	1		(2)
Members as of January 1, 2014	684	87	27	259	14	72	5	1,148

TABLE 2

THE NUMBER AND ANNUAL RATES OF SALARIES OF MEMBERS DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2014

	MEN		WOMEN	
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 23	5	$ 72,937	3	$ 64,500
23 – 27	16	479,434	14	351,877
28 – 32	30	1,087,462	37	1,167,827
33 – 37	37	1,541,915	68	2,352,272
38 – 42	32	1,403,766	50	2,017,370
43 – 47	39	2,076,652	56	2,319,106
48 – 52	58	2,965,997	49	2,116,822
53 – 57	39	2,506,249	60	2,962,997
58 – 62	26	736,285	33	1,836,292
63 – 67	10	548,120	16	1,006,733
Over 67	4	179,011	2	107,665
TOTAL	296	$ 14,597,828	388	$ 16,303,461

TABLE 3

THE NUMBER AND ANNUAL RATES OF SALARIES OF MEMBERS DISTRIBUTED BY FIFTH-YEAR SERVICE AS OF JANUARY 1, 2014

	MEN		WOMEN	
SERVICE	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 3	38	$ 1,248,612	34	$ 676,126
3 – 7	28	954,854	44	1,501,454
8 – 12	70	3,334,816	103	3,828,456
13 – 17	37	1,730,723	54	1,969,247
18 – 22	24	1,278,113	39	1,654,183
23 – 27	54	3,347,142	55	3,032,073
28 – 32	24	1,476,658	36	2,102,117
33 – 37	17	990,378	13	738,026
38 – 42	3	188,623	8	609,854
Over 42	1	47,909	2	191,925
TOTAL	296	$ 14,597,828	388	$ 16,303,461

TABLE 4

THE NUMBER AND ANNUAL PENSIONS OF RETIRED MEMBERS DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2014

SERVICE RETIREMENTS				
	MEN		WOMEN	
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 53	1	$ 85,924	2	$ 48,844
53 – 57	7	273,959	10	299,741
58 – 62	18	710,831	11	387,017
63 – 67	48	2,030,737	39	1,135,055
68 – 72	23	860,831	20	543,671
73 – 77	8	272,346	19	554,002
78 – 82	10	394,747	14	447,193
83 – 87	7	178,512	10	312,306
88 – 92	5	78,551	5	161,589
Over 92	1	11,349	1	28,506
TOTAL	128	$ 4,897,787	131	$ 3,917,924

TABLE 5

THE NUMBER AND ANNUAL PENSIONS OF RETIRED MEMBERS DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2014

DISABILITY RETIREMENTS				
	MEN		WOMEN	
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 43	1	$ 17,685		
43 – 47				
48 – 52			1	$ 7,384
53 – 57			4	91,534
58 – 62	2	46,397	6	204,506
63 – 67				
68 – 72				
73 – 77				
78 – 82				
83 – 87				
88 - 92				
Over 92				
TOTAL	3	$ 64,082	11	$ 303,424

TABLE 6

THE NUMBER AND ANNUAL PENSIONS OF SURVIVORS OF DECEASED ACTIVE AND RETIRED MEMBERS DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2014

	MEN		WOMEN	
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 53			1	$ 25,253
53 – 57			2	23,836
58 – 62	1	$ 22,384	5	99,910
63 – 67	2	38,176	2	29,228
68 – 72	1	21,478	4	66,482
73 – 77			10	173,754
78 – 82	1	5,349	15	159,711
83 – 87			8	100,684
88 – 92			15	116,525
Over 92			5	36,307
TOTAL	5	$ 87,387	67	$ 831,690

In addition, there are five minor children receiving temporary pensions of $40,906.

TABLE 7

THE NUMBER AND ANNUAL DEFERRED PENSIONS OF MEMBERS ENTITLED TO VESTED BENEFITS DISTRIBUTED BY FIFTH-YEAR AGE AS OF JANUARY 1, 2014

	MEN		WOMEN	
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
Under 33			1	$ 4,516
33 – 37	1	$ 5,889	1	8,640
38 – 42	1	3,600	1	6,088
43 – 47	3	10,800	2	12,577
48 – 52	1	6,724	3	40,405
53 – 57	4	71,473	6	69,600
Over 57	3	51,385		
TOTAL	13	$ 149,871	14	$ 141,826

In addition, there were 87 former active members who have terminated employment and have not yet received a refund of contributions. 39 members are currently vested with an estimated annual benefit of $315,013. 48 members are non-vested and valued for their accumulated contributions.