



**The Employees' Retirement System  
for the City of Norfolk**

**Actuarial Valuation  
as of June 30, 2012**

**The Sixty-Ninth Actuarial Valuation**

**Produced by [Cheiron](#)**

**January 2013**

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January 9, 2013

Board of Trustees  
Employees' Retirement System  
City of Norfolk  
Norfolk, Virginia 23510

***Re: The Employees' Retirement System for the City of Norfolk  
Actuarial Valuation as of June 30, 2012***

Dear Members of the Board:

At your request, we have conducted an annual actuarial valuation of the Employees' Retirement System for the City of Norfolk as of June 30, 2012. The results of the valuation are contained in this report. The purpose of the valuation is discussed in the Foreword.

The actuarial assumptions used in performing this valuation have been recommended by the actuary and adopted by the Board of Trustees based on the actuary's most recent review of the System's experience completed in October 2012. We believe the assumptions used, in the aggregate, reflect our best estimate of anticipated future experience of the Plan. The results of this report are only applicable to the contribution for fiscal year ending 2014 and rely on future plan experience conforming to the underlying assumptions. To the extent that actual plan experience deviates from the underlying assumptions, the results would vary accordingly.

The assumptions and methods used in determining the assets, liabilities, and the annual required contributions of the employer as defined by the Governmental Accounting Standards Board (GASB) meet the parameters set by GASB Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*.

The purpose of this report is to present the annual actuarial valuation of the Employees' Retirement System for the City of Norfolk. This report is for the use of the board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.



This actuarial report was prepared exclusively for City of Norfolk for the purpose described herein. This valuation report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely,  
Cheiron



Fiona E. Liston, FSA, EA, MAAA  
Principal Consulting Actuary



Kevin J. Woodrich, FSA, EA, MAAA  
Consulting Actuary

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**FOREWORD**

Cheiron has performed the actuarial valuation of the Employees' Retirement System for the City of Norfolk as of June 30, 2012. The purpose of this report is to:

- 1) **Measure and disclose**, as of the valuation date, the financial condition of the System;
- 2) **Indicate trends** in the financial progress of the System;
- 3) **Determine the contribution rate** to be paid by the City for Fiscal Year 2014; and
- 4) **Provide specific information** and documentation required by the Governmental Accounting Standards Board (GASB).

An actuarial valuation establishes and analyzes System assets and liabilities on a consistent basis, and traces the progress of both from one year to the next. It includes measurement of the System's investment performance as well as an analysis of actuarial liability gains and losses.

**Section I** presents a summary containing our findings and discloses important trends experienced by the System in recent years.

**Section II** contains details on various asset measures, together with pertinent performance measurements.

**Section III** shows similar information on System liabilities, measured for actuarial, accounting, and government reporting purposes.

**Section IV** develops the employer contribution rate to be paid by the City effective July 1, 2013.

**Section V** includes the required disclosures under GASB Statement No. 25.

The appendices to this report contain a summary of the System's membership at the valuation date, a summary of the major provisions of the System, and the actuarial methods and assumptions used in the valuation.

In preparing our report, we relied without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice #23 *Data Quality*.

The actuarial assumptions reflect our understanding of the likely future experience of the System, and the assumptions as a whole represent our best estimate for the future experience of the System. The results of this report are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the System could vary from our results.

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**SECTION I  
BOARD SUMMARY**

**General Comments**

In this section, we will first discuss the trends of the System over the past decade and then show projections of the contribution rate and funding status. Please remember that these projections make certain assumptions about future investment returns, future salary increases, future inflation, and future behavior of plan participants. We cannot know what will actually happen, but these projections should provide the Board with a better understanding of the sensitivity of the System's funding to future market performances.

The City Code states that each year the Board must certify to the City Manager the amount of appropriation required for the ensuing year to meet the normal and accrued liability contributions payable by the City. The results of this valuation determine the contribution rate for the fiscal year beginning July 1, 2013. The contribution rate for General Employees is determined to be 18.58%. The contribution rate for Firefighters and Police is determined to be 32.99%. The composite rate is equal to 23.84% of annual payroll.

Forecasts show that, should all assumptions be realized including the 7.0% assumed annual investment return, the System's funded status would increase from 81% to 92% over the next 15 years. Please note that this projection does **not** recognize the City's tendency to offer ad hoc COLAs. If the assumptions were changed to recognize future COLAs up front, the System's funded ratio would be significantly lower.

**Recent Experience**

The financial markets performed below expectation during the fiscal year ending June 30, 2012. However, the System experienced a gain on the actuarial value of assets. The actual return on a market value basis was approximately 0.4%. On an actuarial value basis, the assets returned 11.2% compared with an assumed rate of return of 7.5% (the assumed investment return for the prior plan year.) The gain recognized for funding purposes was \$31.5 million. In addition, the method for calculating the actuarial value of assets was changed. This change increased the actuarial value of assets by a further \$29.0 million.

On the liability side, the System's experience resulted in an actuarial gain of \$3.9 million (roughly 0.4% of the liabilities). The City granted an ad-hoc COLA of 2.0% effective July 1, 2012 for all retired participants who retired prior to July 1, 2011. The impact of this COLA increased liabilities by \$11.9 million. The City also offered the Voluntary Retirement Incentive Program (VRIP) for a limited time. While the VRIP offered no direct incentive from the retirement plan, it did have the effect of increasing the number of members who retired. This increase in retirement activity created an increase in liabilities of approximately \$7.8 million which the City will begin funding over a 20-year period beginning July 1, 2013. In anticipation of the new accounting standards (GASB No. 67 and 68), the funding method for calculating the liabilities was changed to individual entry age normal. This change resulted in a decrease in liabilities of \$8.1 million. Finally, as a result of the recent experience study, changes to the

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**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION I**  
**BOARD SUMMARY**

actuarial assumptions were made for purposes of this actuarial valuation. These changes resulted in an increase in the liabilities of \$44.1 million.

The combination of liability and investment experience produced an increase in the System's funding ratio (actuarial value of assets over actuarial accrued liability) from 78.2% at June 30, 2011 to 80.7% at June 30, 2012.

### Trends

It is important to take a step back from the latest results and view them in the context of the System's recent history. Here we present a series of graphs which display key factors in the valuations over the last eleven years. After the historical review, we present a few projection graphs showing the possible condition of the System over the next 15 years under various market return scenarios.

#### Growth in Assets

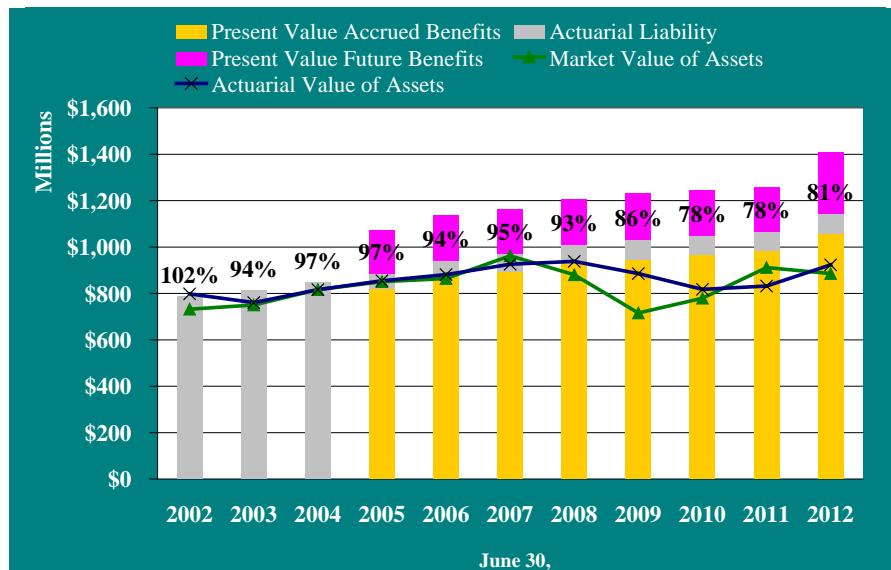


The market value of assets (MVA) experienced a return of 0.4% this year. Due to the asset smoothing method in place, the actuarial value of assets (AVA) increased as a result of the larger market value gain experienced last year counterbalancing the lesser investment return experienced this year. As a result, the return on the AVA was 11.2%. The AVA was further increased by \$29.0

million a result in the change of smoothing method for calculating the AVA.

#### Assets and Liabilities

The three colored bars represent the three different measures of liability mentioned in this report. For funding purposes, the target amount is represented by the top of the gray bar. We compare the actuarial value of assets to this measure of liability in developing the funded percent. These are the percentages shown in the graph labels.

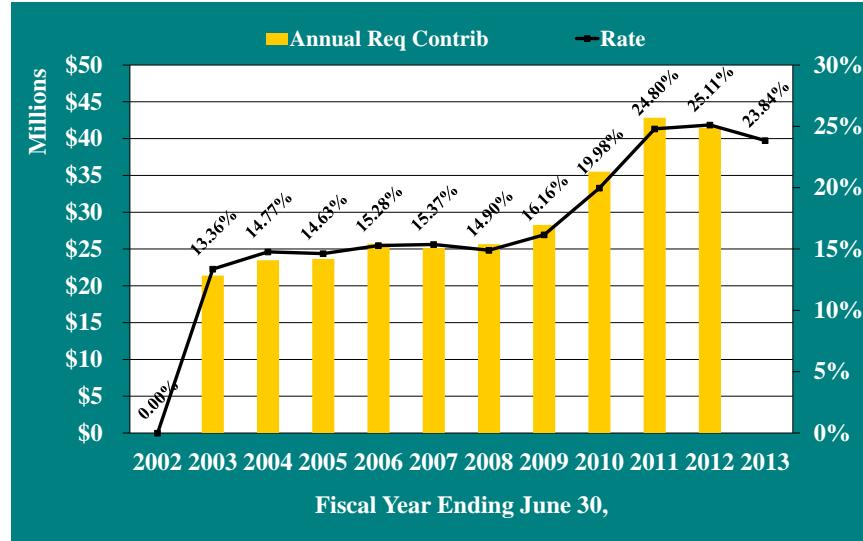


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The amount represented by the top of the pink bars, the present value of future benefits (PVFB), is the amount needed to provide all benefits for the current participants and their beneficiaries. The top of the yellow bars measures the benefits accrued to date.

Contribution Rates

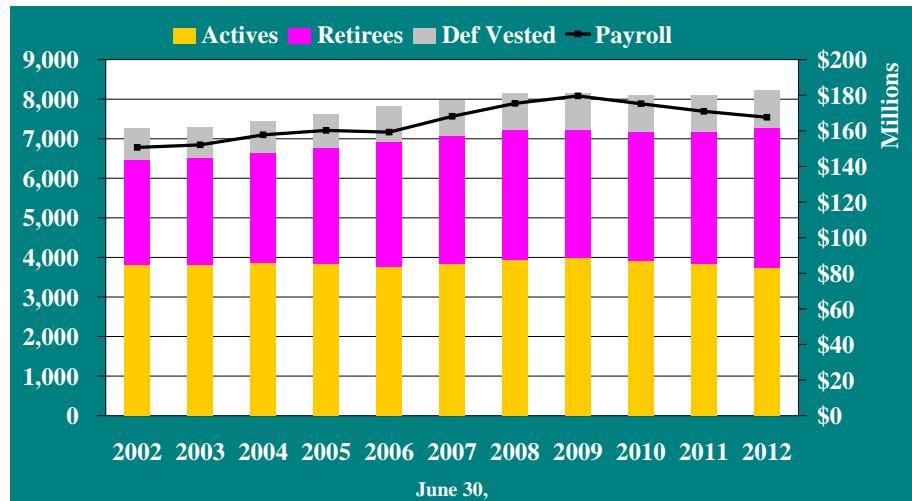


The yellow bars in this graph show the actual contribution amounts that have been booked by the City. The black line shows this contribution as a percent of payroll (right hand scale). The City contribution rate is set by the actuarial process. Please note there is a lag in the rate. For example, the June 30, 2011 valuation determined the annual required contribution for the

period July 1, 2011 to June 30, 2012. While this amount was booked in FY 2012, it is actually being contributed in FY 2013.

Participant Trends

This graph shows the number of actives, retirees and deferred vested members in the System as of each valuation date. The black line shows historic growth in the total covered payroll of the System. Total payroll has gone down in each of the past three fiscal years primarily due to either or both of the decreases in the number of actives and average compensation.



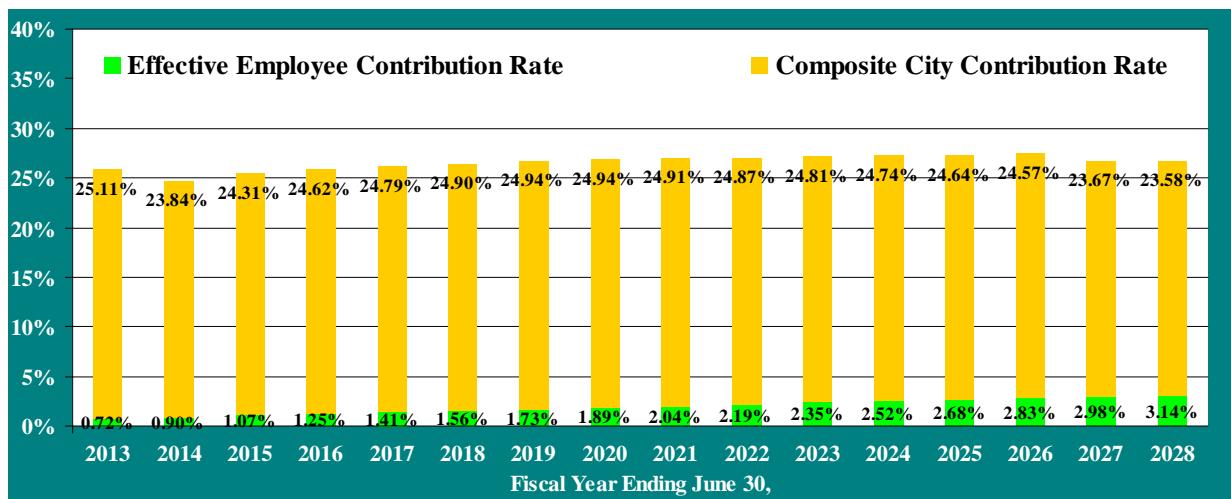
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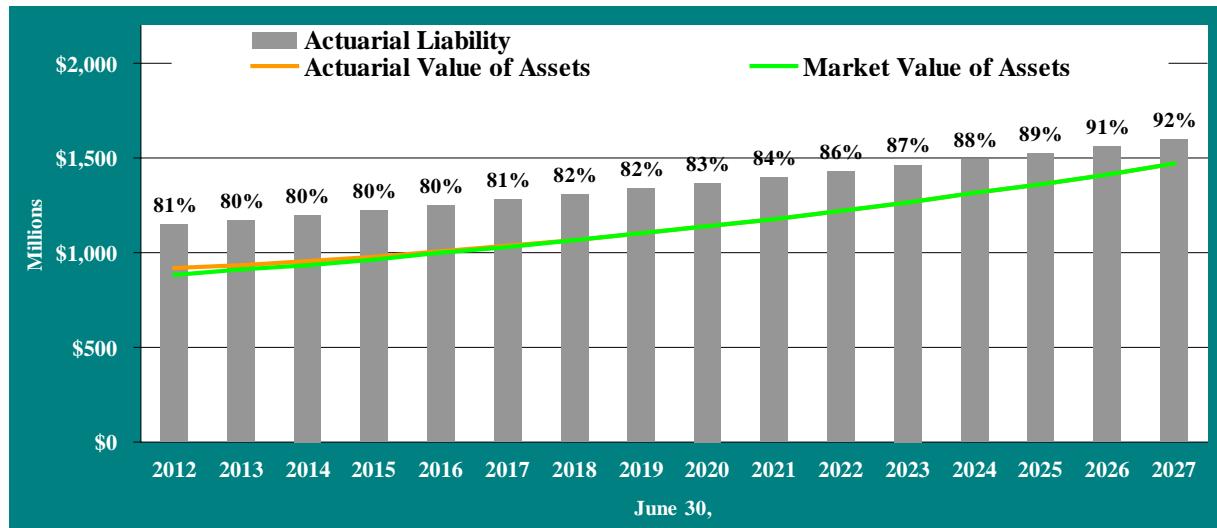
**Future Outlook**

**Base Line Projections**

The two graphs below show the expected progress of the Plan over the next 15 years assuming the System's assets earn 7.0% of their *market value*. The first graph shows that the City contribution rate is projected to slightly increase as a percentage of payroll, if all actuarial assumptions are met, including the 7.0% interest rate. It also shows the anticipated growth in the number of post October 5, 2010 hires who will be paying the 5% member contribution.



The graph below shows the projected funding status over the next 15 years. As you can see, the System's funded status is projected to decrease initially, as stored investment losses are brought into the smoothing equation. Funding then improves to reach 92% by the end of the period shown.

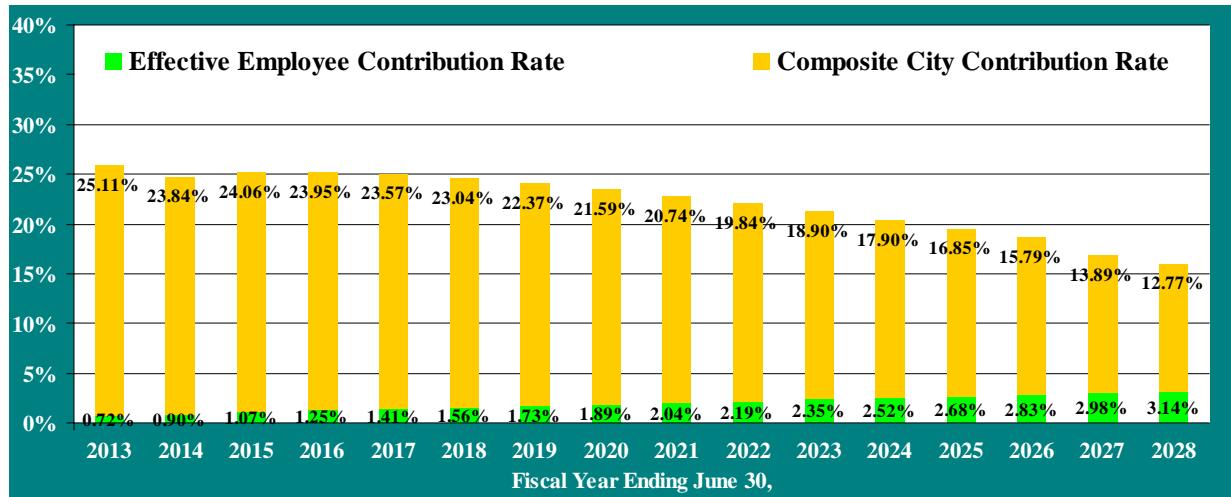


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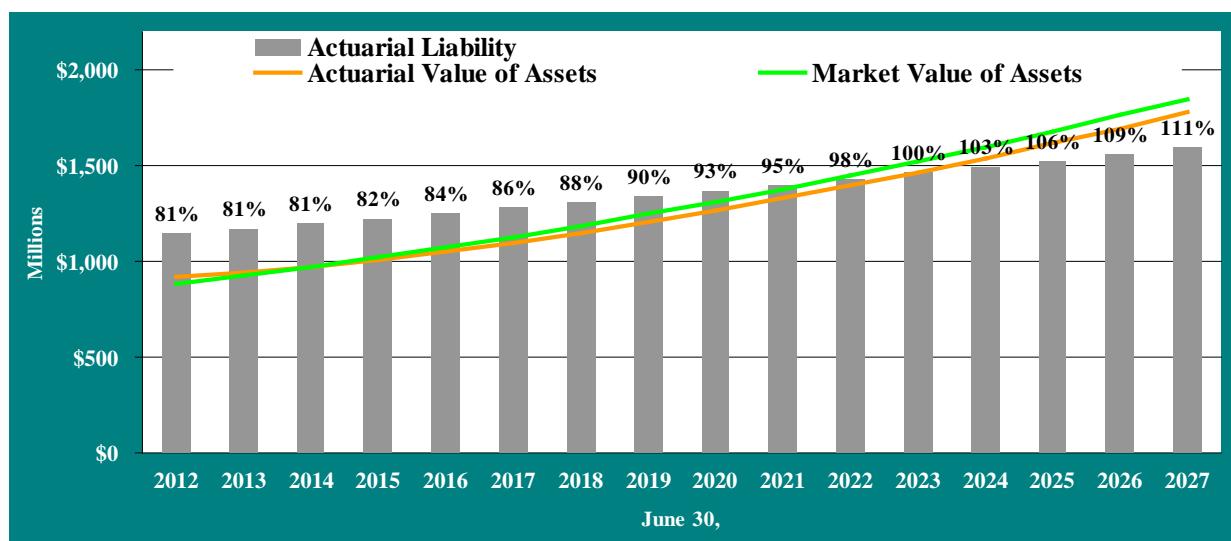
**SECTION I**  
**BOARD SUMMARY**

Projections With Asset Returns of 9.0%

The future funding status of this System will be largely driven by the investment earnings. Due to the relatively well funded status of this plan, the System is in a leveraged position. This means that relatively minor changes in the market returns can have significant effects on the System's status. The next two graphs show what the next 15 years would look like with a 9% annual return.



As you can see, the City's composite contribution rate would drop from its current level of 23.84% of payroll down to 12.77% of payroll. In addition to the positive impact of the favorable assumed returns, the City's contribution rate is also mitigated as new participants are hired and obligated to pay a 5% employee contribution rate. The System would reach a fully funded position by 2023. Again, these projections are absent any additional ad hoc COLAs.



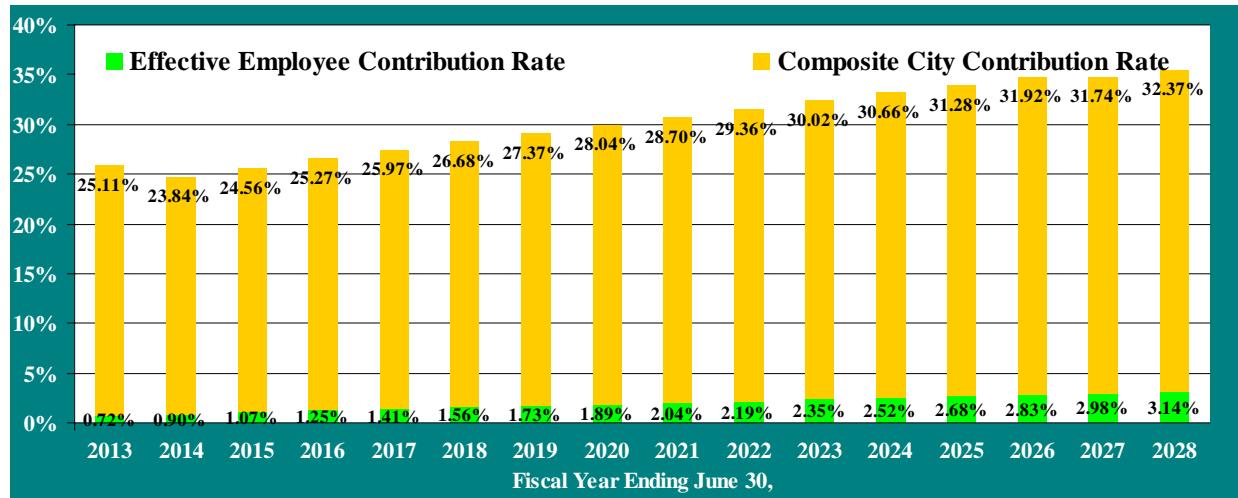
**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
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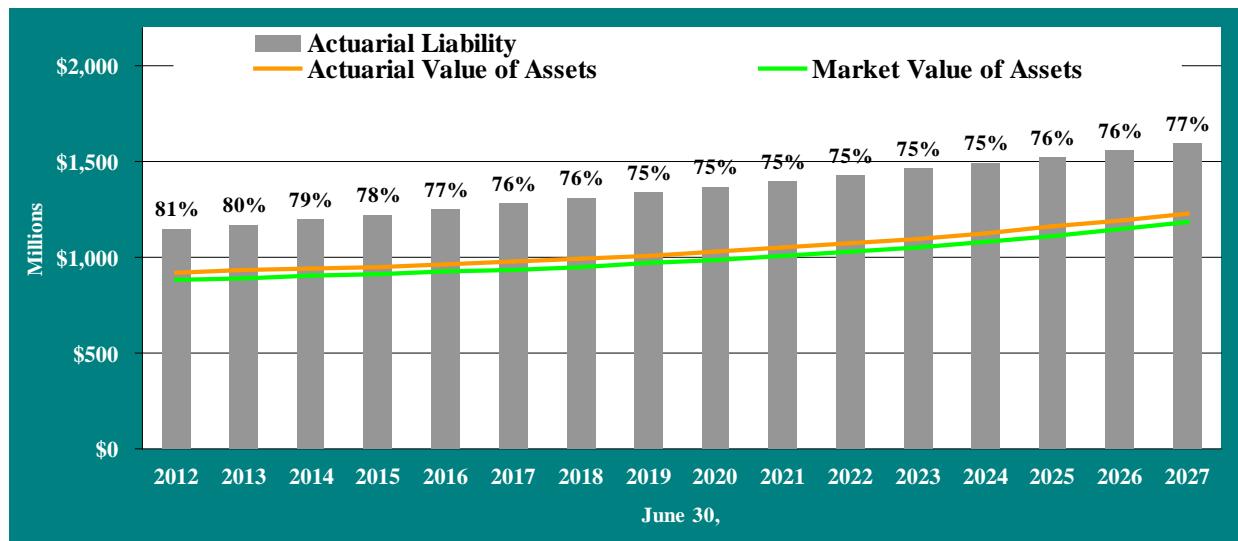
Projections With Asset Returns of 5.0%

The next two graphs show what the next 15 years would look like with a 5% annual return.

As one would expect, the City's composite contribution rate would increase over the period.



The System's funded level would steadily decrease to 77% funded over the long term. There would still be no danger of benefit commitments going unmet as the Fund would have over one billion dollars. Again, these projections are absent any additional ad hoc COLAs.



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**SECTION I**  
**BOARD SUMMARY**

**Employees' Retirement System  
for the City of Norfolk**

**Summary of Principal Plan Results  
Combined**

<b>Valuation as of:</b>	<b>6/30/2011</b>	<b>6/30/2012</b>	<b>% Change</b>
<b><u>Participant Counts</u></b>			
Actives	3,837	3,731	(2.8%)
Leave of Absence	30	27	(10.0%)
Terminated Vesteds	932	957	2.7%
Participants Due Account Balance	0	87	
In Pay Status	<u>3,325</u>	<u>3,547</u>	6.7%
Total	8,124	8,349	2.8%
Annual Salaries of Active Members	\$ 170,921,920	\$ 167,592,964	(1.9%)
Annual Retirement Allowances	\$ 65,346,171	\$ 72,238,155	10.5%
<b><u>Assets and Liabilities</u></b>			
Actuarial Accrued Liability	\$ 1,063,973,994	\$ 1,144,406,630	7.6%
Assets for Valuation Purposes	<u>831,975,004</u>	<u>923,198,558</u>	11.0%
Unfunded Actuarial Liability	\$ 231,998,990	\$ 221,208,072	
Funding Ratio	78.20%	80.67%	
Present Value of Accrued Benefits	\$ 984,526,304	\$ 1,054,819,569	7.1%
Market Value of Assets	<u>911,278,371</u>	<u>885,499,200</u>	(2.8%)
Unfunded FASB Accrued Liability	\$ 73,247,933	\$ 169,320,369	
Accrued Benefit Funding Ratio	92.56%	83.95%	
<b><u>City Contributions as a % of Payroll</u></b>		<b>Fiscal Year 2012</b>	<b>Fiscal Year 2013</b>
Normal Cost Contribution		12.07%	13.72%
Unfunded Actuarial Liability Contribution		<u>13.04%</u>	<u>10.12%</u>
Total Contribution		25.11%	23.84%

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**SECTION I**  
**BOARD SUMMARY**

**Employees' Retirement System  
for the City of Norfolk**

**Summary of Principal Plan Results  
General Employees**

<b>Valuation as of:</b>	<b>6/30/2011</b>	<b>6/30/2012</b>	<b>% Change</b>
<b>Participant Counts</b>			
Actives	2,613	2,517	(3.7%)
Leave of Absence	14	14	0.0%
Terminated Vesteds	750	763	1.7%
Participants Due Account Balance	0	52	
In Pay Status	<u>2,228</u>	<u>2,415</u>	8.4%
Total	5,605	5,761	2.8%
Annual Salaries of Active Members	\$ 109,766,481	\$ 106,447,927	(3.0%)
Annual Retirement Allowances	\$ 34,438,093	\$ 39,498,518	14.7%
<b>Assets and Liabilities</b>			
Actuarial Accrued Liability	\$ 574,699,888	\$ 626,370,068	9.0%
Assets for Valuation Purposes	<u>465,839,301</u>	<u>516,617,553</u>	10.9%
Unfunded Actuarial Liability	\$ 108,860,587	\$ 109,752,515	
Funding Ratio	81.06%	82.48%	
Present Value of Accrued Benefits	\$ 530,138,847	\$ 573,485,710	8.2%
Market Value of Assets	<u>510,242,829</u>	<u>495,521,170</u>	(2.9%)
Unfunded FASB Accrued Liability	\$ 19,896,018	\$ 77,964,540	
Accrued Benefit Funding Ratio	96.25%	86.41%	
<b>City Contributions as a % of Payroll</b>		<b>Fiscal Year 2012</b>	<b>Fiscal Year 2013</b>
Normal Cost Contribution		10.28%	10.84%
Unfunded Actuarial Liability Contribution		<u>9.41%</u>	<u>7.74%</u>
Total Contribution		19.69%	18.58%

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
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**BOARD SUMMARY**

**Employees' Retirement System  
for the City of Norfolk**

**Summary of Principal Plan Results  
Firefighters and Police**

<b>Valuation as of:</b>	<b>6/30/2011</b>	<b>6/30/2012</b>	<b>% Change</b>
<b><u>Participant Counts</u></b>			
Actives	1,224	1,214	(0.8%)
Leave of Absence	16	13	(18.8%)
Terminated Vesteds	182	194	6.6%
Participants Due Account Balance	0	35	
In Pay Status	<u>1,097</u>	<u>1,132</u>	3.2%
Total	2,519	2,588	2.7%
Annual Salaries of Active Members	\$ 61,155,439	\$ 61,145,037	(0.0%)
Annual Retirement Allowances	\$ 30,908,078	\$ 32,739,636	5.9%
<b><u>Assets and Liabilities</u></b>			
Actuarial Accrued Liability	\$ 489,274,106	\$ 518,036,562	5.9%
Assets for Valuation Purposes	<u>366,135,703</u>	<u>406,581,005</u>	11.0%
Unfunded Actuarial Liability	\$ 123,138,403	\$ 111,455,557	
Funding Ratio	74.83%	78.49%	
Present Value of Accrued Benefits	\$ 454,387,457	\$ 481,333,859	5.9%
Market Value of Assets	<u>401,035,542</u>	<u>389,978,030</u>	(2.8%)
Unfunded FASB Accrued Liability	\$ 53,351,915	\$ 91,355,829	
Accrued Benefit Funding Ratio	88.26%	81.02%	
<b><u>City Contributions as a % of Payroll</u></b>		<b>Fiscal Year 2012</b>	<b>Fiscal Year 2013</b>
Normal Cost Contribution		15.28%	18.72%
Unfunded Actuarial Liability Contribution		<u>19.54%</u>	<u>14.27%</u>
Total Contribution		34.82%	32.99%

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**SECTION II**  
**ASSETS**

Pension plan assets play a key role in the financial operation of the System and in the decisions the Trustees may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact upon benefit levels, City contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on System assets including:

- **Disclosure** of system assets at June 30, 2011 and June 30, 2012;
- Statement of the **changes** in market values during the year;
- Development of the **actuarial value of assets**;
- An assessment of **investment performance**; and
- A projection of the System's expected **cashflows** for the next ten years.

### **Disclosure**

The market value of assets represents "snap-shot" or "cash-out" values which provide the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not suitable for long-range planning.

The actuarial value, or "carrying values," is market values which have been smoothed and are the actuary's best estimate of long-term asset values. They are used for evaluating the System's ongoing liability to meet its obligations.

Current methods employed by this System determine the actuarial value of assets by first calculating the expected actuarial value of assets based on last year's valuation interest rate, last year's actuarial value of assets, and the net cash flow (contributions less benefit payments and administrative expenses) of the System over the year prior to the valuation. One-third of the market value of assets less the expected actuarial value of assets is then added to the expected actuarial value of assets to determine the valuation assets. Since this is the first year this method is being used, the expected actuarial value of assets is based on last year's market value of assets in lieu of the prior year's actuarial value of assets.

The actuarial value of assets is then allocated between the General Employees' portion of the System and that covering Firefighters and Police. The allocation is performed annually based on the actual contribution and benefit payments made on behalf of each type of employee. The investment returns for the year are allocated based on the starting balance and the cashflow of each portion of the Fund.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
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**SECTION II**  
**ASSETS**

<b>Statement of Assets at Market Value</b>			
	<b>June 30, 2011</b>	<b>June 30, 2012</b>	
<b><u>Assets</u></b>			
Cash and Short-Term Investments	\$ 7,362,617	\$ 24,606,872	
Receivables			
Contributions from the City of Norfolk	\$ 42,828,228	\$ 41,466,456	
Accrued Investment Income	1,313,684	839,626	
Accounts Receivable	4,378	198	
Due from Broker for Securities Sold	<u>1,529,938</u>	<u>53,159,922</u>	
Total	\$ 45,676,228	\$ 95,466,202	
Investments, at Fair Value			
United States Treasury Securities	\$ 4,794,384	\$ 17,780,663	
Fixed Income Securities	103,412,599	135,389,701	
Equity Securities	2,866,084	3,062	
Balanced Comingled Funds	752,679,135	710,681,320	
Other	0	69,085	
Total	\$ 863,752,202	\$ 863,923,831	
Total Assets	\$ 916,791,047	\$ 983,996,905	
<b><u>Liabilities</u></b>			
Accounts Payable	\$ 369,131	\$ 631,499	
Due to Broker for Securities Purchased	<u>5,143,545</u>	<u>97,866,206</u>	
Total Liabilities	\$ 5,512,676	\$ 98,497,705	
<b>Net Assets Available for Benefits</b>	<b>\$ 911,278,371</b>	<b>\$ 885,499,200</b>	

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**SECTION II**  
**ASSETS**

<b>Changes in Market Values</b>		
<b>Value of Assets - June 30, 2011</b>	\$	<b>911,278,371</b>
<b>Restated Value of Assets - June 30, 2011</b>	\$	<b>911,768,515</b>
<b><u>Additions</u></b>		
Contributions		
Employer Contributions	\$	41,466,456
Employee Contributions		<u>593,956</u>
Total	\$	42,060,412
Investment Income:		
Net Appreciation (Depreciation) in Fair Value of Investments	\$	(4,850,684)
Interest		6,845,250
Dividends		2,165,807
Other		<u>203,223</u>
Total Investment Income	\$	4,363,596
Investment Expenses	\$	(1,110,803)
Net Income from Investing Activities	\$	<u>3,252,793</u>
Total Additions	\$	45,313,205
<b><u>Deductions</u></b>		
Benefits Paid directly to Participants	\$	(67,290,271)
Return of Contributions		<u>(24,879)</u>
Beneficiary Payments		(3,731,544)
Administrative Fees		<u>(535,826)</u>
Total Deductions	\$	(71,582,520)
<b><u>Total</u></b>		
Net Increase/(Decrease)	\$	(26,269,315)
<b>Value of Assets - June 30, 2012</b>	\$	<b>885,499,200</b>

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
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**SECTION II**  
**ASSETS**

## **Actuarial Value of Assets**

The actuarial value of assets represents a “smoothed” value developed by the actuary to reduce, or eliminate, erratic results which could develop from short-term fluctuations in the market value of assets. For this System, the actuarial value has been calculated by first calculating the expected actuarial value of assets based on last year’s valuation interest rate, last year’s actuarial value of assets, and the net cash flow (contributions less benefit payments and administrative expenses) of the System over the year prior to the valuation. One-third of the market value of assets less the expected actuarial value of assets is then added to the expected actuarial value of assets to determine the valuation assets. Since this is the first year this method is being used, the expected actuarial value of assets is based on last year’s market value of assets in lieu of the prior year’s actuarial value of assets.

<b>Development of the Actuarial Value of Assets</b>		
1. Actuarial Value of Assets - June 30, 2011*		\$ 911,278,371
Employer Contributions		41,466,456
Employee Contributions		593,956
Benefit Payments		(71,046,694)
Expected Return at 7.5%		<u>59,756,148</u>
2. Expected Value at June 30, 2012 (EV)		\$ 942,048,237
3. Actual Market Value at June 30, 2011 (AV)		885,499,200
4. One-Third of AV less EV		<u>(18,849,679)</u>
5. Actuarial Value of Assets - June 30, 2012 [2. + 4.]		\$ <b>923,198,558</b>

\* Since this is first year, Market Value of Assets used in lieu of prior year’s actuarial value of assets.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION II  
ASSETS**

**Allocation of Actuarial Value of Assets  
As of June 30, 2012**

	<b>General Employees</b>	<b>Firefighters and Police</b>	<b>Total</b>
1. Actuarial Value of Assets at June 30, 2011	\$ 465,839,301	\$ 366,135,703	\$ 831,975,004
2. Contributions (per financial statements)	20,736,260	21,324,152	42,060,412
3. Benefit Payments (allocated on the basis of FY 2012-expected payments)	(37,442,327)	(33,604,367)	(71,046,694)
4. Investment Earnings (based on 11.2% return)	<u>67,484,319</u>	<u>52,725,517</u>	<u>120,209,836</u>
5. Actuarial Value of Assets at June 30, 2012	\$ 516,617,553	\$ 406,581,005	\$ 923,198,558
6. Market Value of Assets at June 30, 2012 (used only for disclosure purposes)	\$ 495,521,170	\$ 389,978,030	\$ 885,499,200

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION II**  
**ASSETS**

## **Investment Performance**

The market value of assets (MVA) returned 0.4% during fiscal year 2012, which is less than the expected 7.5% return (assumption in prior year's valuation) by 7.1%.

A return of 11.2% on the actuarial value of assets (AVA) is primarily the result of the asset smoothing method being utilized for the calculation of the actuarial value of assets. Since only a portion of the gain or loss from the performance of the System is recognized in a given year, in periods of very good performance, the AVA can lag significantly behind the MVA. In a period of negative returns, the AVA does not decline as rapidly as the MVA.

<b>Annual Rates of Return</b>		
<b>Year Ending June 30,</b>	<b>Market Value</b>	<b>Actuarial Value</b>
1999	9.9%	14.7%
2000	8.8%	11.9%
2001	-2.3%	5.4%
2002	-7.6%	-0.9%
2003	5.4%	-2.5%
2004	11.1%	9.5%
2005	6.7%	7.2%
2006	4.7%	6.2%
2007	15.1%	8.7%
2008	-5.2%	4.9%
2009	-15.3%	-2.1%
2010	13.1%	-4.6%
2011	20.2%	4.6%
2012	0.4%	11.2%

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION II**  
**ASSETS**

<b>Projection of System's Benefit Payments and Contributions</b>			
<b>Fiscal Year Ending</b>	<b>Expected Benefit Payments</b>	<b>Expected City Contributions*</b>	<b>Expected Employee Contributions*</b>
2013	\$ 75,731,000	\$ 41,466,000	\$ 1,223,000
2014	77,913,000	40,549,000	1,580,000
2015	79,973,000	42,558,000	1,936,000
2016	82,341,000	44,366,000	2,320,000
2017	84,399,000	45,987,000	2,686,000
2018	86,372,000	47,549,000	3,070,000
2019	88,757,000	49,030,000	3,492,000
2020	91,312,000	50,476,000	3,933,000
2021	93,629,000	51,902,000	4,375,000
2022	95,914,000	53,347,000	4,831,000

\* Assumes contributions are made uniformly throughout the year.

Expected benefit payments are projected for the closed group valued at June 30, 2012. Projecting any further than 10 years using a closed-group would not yield reliable predictions due to the omission of new hires. These projections do not include additional ad hoc COLAs which may be granted by the City Council in future years.

Expected City contributions are shown on a cash basis. That is, while the FY 2013 contribution amount was already booked for accounting purposes in FY 2012, it is being contributed in FY 2013. The FY 2014 contribution is based on a 2012 valuation rate of 23.84%. Expected contributions for FY 2014 and beyond are projected based on an employer normal cost rate that starts at 13.72% and grades down over time as those making member contributions become a larger portion of the covered group. The employer contribution also uses a closed 20-year amortization of the 2012 unfunded liability balances as well as a closed 15-year amortizations of both the PSREP and VRIP. Future gains and losses are amortized over 20 years from the valuation in which they are first recognized. In all cases, the amortization assumes that annual payments will increase by 3% per year. Since the plan requires a 5% employee contribution rate for employees hired after October 5, 2010, we have included the anticipated employee contribution amount over the period as well. The projections assume the market value of assets will earn 7.0% per year and that those previous losses not yet recognized in the asset smoothing method through the June 30, 2012 valuation date, will be picked up throughout the period shown. The reduction in contribution anticipated for FY 2014 is primarily due to the changes made in the amortization technique along with assumption and method changes as outlined in the appendices.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION III**  
**LIABILITIES**

In this section, we present detailed information on System liabilities including:

- **Disclosure** of System liabilities at June 30, 2011 and June 30, 2012; and
- Statement of **changes** in these liabilities during the year

### **Disclosure**

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them.

- **Present Value of Benefits:** Used for analyzing the financial outlook of the System, this represents the amount of money needed today to fully pay off all future benefits and expenses of the System, assuming participants continue to accrue benefits.
- **Actuarial Accrued Liability:** Used for funding calculations and GASB disclosures, this liability is calculated taking the Present Value of Benefits above and subtracting the present value of future Employer Normal Costs under an acceptable actuarial funding method. This method is referred to as the **Entry Age Normal** funding method.
- **Present Value of Accrued Benefits:** Used for communicating the current level of liabilities, this liability represents the total amount of money needed today to fully pay off the current accrued obligations of the System, assuming no future accruals of benefits. These liabilities are also required for accounting purposes (FASB ASC Topic No. 960) and used to assess whether the Plan can meet its current benefit commitments.

The following table discloses each of these liabilities for the current and prior valuations. With respect to each disclosure, a subtraction of the appropriate value of System assets yields, for each respective type, a **net surplus** or an **unfunded liability**.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION III**  
**LIABILITIES**

<b>Liabilities/Net (Surplus)/Unfunded Combined</b>			
	<b>June 30, 2011</b>	<b>June 30, 2012</b>	
Present Value of Benefits			
Active Participant Benefits	\$ 595,233,730	\$ 641,875,220	
Retiree Benefits	623,405,690	727,886,578	
Terminated Vested and Inactive Members	<u>35,426,156</u>	<u>40,621,514</u>	
<b>Present Value of Benefits (PVB)</b>	<b>\$ 1,254,065,576</b>	<b>\$ 1,410,383,312</b>	
Market Value of Assets (MVA)	\$ 911,278,371	\$ 885,499,200	
Future Member contributions	3,580,225	10,124,016	
Future City contributions	<u>339,206,980</u>	<u>514,760,096</u>	
<b>Total Resources</b>	<b>\$ 1,254,065,576</b>	<b>\$ 1,410,383,312</b>	
Employer Normal Cost <sup>1</sup>	\$ 20,627,795	\$ 22,987,161	
Actuarial Accrued Liability			
Active Participant Benefits	\$ 405,142,148	\$ 375,898,538	
Retiree Benefits	623,405,690	727,886,578	
Terminated Vested and Inactive Members	<u>35,426,156</u>	<u>40,621,514</u>	
<b>Actuarial Accrued Liability (AAL)</b>	<b>\$ 1,063,973,994</b>	<b>\$ 1,144,406,630</b>	
Actuarial Value of Assets (AVA)	<u>831,975,004</u>	<u>923,198,558</u>	
<b>Net (Surplus)/Unfunded (AAL – AVA)</b>	<b>\$ 231,998,990</b>	<b>\$ 221,208,072</b>	
Present Value of Accrued Benefits			
<b>Present Value of Accrued Benefits (PVAB)</b>	<b>\$ 984,526,304</b>	<b>\$ 1,054,819,569</b>	
Market Value of Assets (MVA)	<u>911,278,371</u>	<u>885,499,200</u>	
<b>Net (Surplus)/Unfunded (PVAB – MVA)</b>	<b>\$ 73,247,933</b>	<b>\$ 169,320,369</b>	

<sup>1</sup> Net of 5% mandatory employee contributions for new hires on or after October 5, 2010

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION III**  
**LIABILITIES**

<b>Liabilities/Net (Surplus)/Unfunded General Employees</b>		
	<b>June 30, 2011</b>	<b>June 30, 2012</b>
<b>Present Value of Benefits</b>		
Active Participant Benefits	\$ 328,719,970	\$ 327,320,935
Retiree Benefits	316,114,760	384,495,329
Terminated Vested and Inactive Members	<u>26,856,824</u>	<u>29,974,930</u>
<b>Present Value of Benefits (PVB)</b>	<b>\$ 671,691,554</b>	<b>\$ 741,791,194</b>
 Normal Cost <sup>2</sup>	 \$ 11,285,065	 \$ 11,541,454
 Actuarial Accrued Liability	 	 
Active Participant Benefits	\$ 231,728,304	\$ 211,899,809
Retiree Benefits	316,114,760	384,495,329
Terminated Vested and Inactive Members	<u>26,856,824</u>	<u>29,974,930</u>
<b>Actuarial Accrued Liability (AAL)</b>	<b>\$ 574,699,888</b>	<b>\$ 626,370,068</b>
Actuarial Value of Assets (AVA)	<u>465,839,301</u>	<u>516,617,553</u>
<b>Net (Surplus)/Unfunded (AAL – AVA)</b>	<b>\$ 108,860,587</b>	<b>\$ 109,752,515</b>
 Present Value of Accrued Benefits	 	 
<b>Present Value of Accrued Benefits (PVAB)</b>	<b>\$ 530,138,847</b>	<b>\$ 573,485,710</b>

<sup>2</sup> Net of 5% mandatory employee contributions for new hires on or after October 5, 2010

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION III**  
**LIABILITIES**

<b>Liabilities/Net (Surplus)/Unfunded Firefighters and Police</b>		
	<b>June 30, 2011</b>	<b>June 30, 2012</b>
Present Value of Benefits		
Active Participant Benefits	\$ 266,513,760	\$ 314,554,285
Retiree Benefits	307,290,930	343,391,249
Terminated Vested and Inactive Members	<u>8,569,332</u>	<u>10,646,584</u>
<b>Present Value of Benefits (PVB)</b>	<b>\$ 582,374,022</b>	<b>\$ 668,592,118</b>
Normal Cost <sup>1</sup>	\$ 9,342,730	\$ 11,445,707
Actuarial Accrued Liability		
Active Participant Benefits	\$ 173,413,844	\$ 163,998,729
Retiree Benefits	307,290,930	343,391,249
Terminated Vested and Inactive Members	<u>8,569,332</u>	<u>10,646,584</u>
<b>Actuarial Accrued Liability (AAL)</b>	<b>\$ 489,274,106</b>	<b>\$ 518,036,562</b>
Actuarial Value of Assets (AVA)	<u>366,135,703</u>	<u>406,581,005</u>
<b>Net (Surplus)/Unfunded (AAL – AVA)</b>	<b>\$ 123,138,403</b>	<b>\$ 111,455,557</b>
Present Value of Accrued Benefits		
<b>Present Value of Accrued Benefits (PVAB)</b>	<b>\$ 454,387,457</b>	<b>\$ 481,333,859</b>

<sup>1</sup> Net of 5% mandatory employee contributions for new hires on or after October 5, 2010

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION III**  
**LIABILITIES**

## **Changes in Liabilities**

Each of the liabilities disclosed in the prior tables are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above, and also due to changes in System assets resulting from:

- Employer contributions different than expected
- Investment earnings different than expected
- A change in the method used to measure plan assets

In each valuation, we report on those elements of change which are of particular significance, potentially affecting the long-term financial outlook of the System. Below we present key changes in liabilities since the last valuation.

	<b>Present Value of Benefits</b>	<b>Actuarial Accrued Liability</b>	<b>Present Value of Accrued Benefits</b>
Liabilities as of 6/30/2011	\$1,254,065,576	\$1,063,973,994	\$ 984,526,304
Liabilities as of 6/30/2012	\$1,410,383,312	\$1,144,406,630	\$1,054,819,569
Liability Increase/(Decrease)	\$ 156,317,736	\$ 80,432,636	\$ 70,293,265
Change Due to:			
Plan Amendments	\$ 19,717,567	\$ 19,717,567	\$ 19,717,567
Assumption and Method Change	113,123,309	35,988,357	25,798,802
Actuarial (Gain)/Loss	NC*	(3,881,141)	NC*
Benefits Accumulated and Other Sources	23,476,860	28,607,854	24,776,896

\* NC = not calculated

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION IV**  
**CONTRIBUTIONS**

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to properly maintain the funding status of the System. Typically, the actuarial process will use a funding scheme that will result in a pattern of contributions that are both stable and predictable.

For this System, the funding scheme employed is the **Entry Age Actuarial Cost Method**. Under this method, there are two components to the total contribution: the **normal cost rate** and the **unfunded actuarial liability rate** (UAL rate). The normal cost rate is determined by taking the value, as of entry age into the Plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of the member's expected future salary.

The second part is an amortization payment to pay off the unfunded actuarial liability (UAL). The unfunded actuarial liability is the difference between the actuarial assets of the System at the valuation date and the assets the System should hold as determined by the actuarial cost method. This also includes the fixed 20-year amortization of the Public Safety Retirement Enhancement Program (PSREP) beginning June 30, 2005 and the fixed 20-year amortization of the Voluntary Retirement Incentive Program (VRIP) beginning June 30, 2012.

**Actuarially Determined Rate (for GASB Disclosure)**

The employer's normal cost rate for General Employees is 10.84% and 18.72% for Firefighters and Police for the fiscal year beginning July 1, 2012. The composite rate is shown in the table below.

The UAL rate is the level percent of member payroll which, when applied to each year's payroll, is sufficient to amortize the unfunded actuarial liability net of the PSREP and VRIP over 20 years.

The table below presents and compares the actuarially determined contributions for the System for this valuation and the prior one.

<b>Actuarially Determined Rate (For GASB Disclosure)</b>		
	<b>June 30, 2011</b>	<b>June 30, 2012</b>
Normal Cost Rate	12.07%	13.72%
UAL Rate	<u>13.04%</u>	<u>10.12%</u>
Total City Rate	25.11%	23.84%

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION IV**  
**CONTRIBUTIONS**

The net increase in the contribution rate was due to the following:

More employees paying 5% Member Rate	(0.52%)
Change to Level Percent Amortization	(2.54%)
Plan Changes	0.88%
Assumption Changes	1.97%
Funding Method Change	0.52%
Investment return (actuarial basis) more than assumed 7.5%	(1.41%)
Actuarial liability gains or losses	(0.17%)
Total City Rate net change	(1.27%)

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION IV**  
**CONTRIBUTIONS**

**Employees' Retirement System  
for the City of Norfolk**

**Development of Actuarially Determined Contribution Rate  
Composite Rate**

	<b>June 30, 2011  (expensed FY 2012)  (paid FY 2013)</b>	<b>June 30, 2012  (expensed FY 2013)  (paid FY 2014)</b>
<b>1. Actuarial Accrued Liability</b>		
a. Active Employees	\$ 405,142,148	\$ 375,898,538
b. Retired Members	623,405,690	727,886,578
c. Vested Terminated Members	<u>35,426,156</u>	<u>40,621,514</u>
d. Total Present Value	\$1,063,973,994	\$ 1,144,406,630
<b>2. Actuarial Value of Assets</b>	<u>\$ 831,975,004</u>	<u>\$ 923,198,558</u>
<b>3. Unfunded Actuarial Liability (UAL) (1) – (2)</b>	\$ 231,998,990	\$ 221,208,072
<b>4. Remaining UAL for PSREP and VRIP</b>	<u>\$ 13,899,394</u>	<u>\$ 21,126,042</u>
<b>5. Remaining UAL for amortization (3) – (4)</b>	\$ 218,099,596	\$ 200,082,030
<b>6. Active Member Payroll</b>	\$ 170,921,920	\$ 167,592,964
<b>7. Unfunded Liability Amortization Factor</b>	10.5404	13.3317
<b>8. Remaining component of UAL amortization (5) / (7) / (6)</b>	12.11%	8.96%
<b>9. Additional amortization for PSREP and VRIP</b>	0.93%	1.16%
<b>10. Employer Contribution Results (GASB)</b>		
a. Employer Normal Cost Rate	12.07%	13.72%
b. Amortization of UAL and PSREP (8) + (9)	<u>13.04%</u>	<u>10.12%</u>
c. Total Employer Contribution Rate June 30	25.11%	23.84%

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION IV**  
**CONTRIBUTIONS**

**Employees' Retirement System  
for the City of Norfolk**

**Development of Actuarially Determined Contribution Rate  
General Employees**

	<b>June 30, 2011  (expensed FY 2012)  (paid FY 2013)</b>	<b>June 30, 2012  (expensed FY 2013)  (paid FY 2014)</b>
<b>1. Actuarial Accrued Liability</b>		
a. Active Employees	\$ 231,728,304	\$ 211,899,809
b. Retired Members	316,114,760	384,495,329
c. Vested Terminated Members	<u>26,856,824</u>	<u>29,974,930</u>
d. Total Present Value	\$ 574,699,888	\$ 626,370,068
<b>2. Actuarial Value of Assets</b>	<u>\$ 465,839,301</u>	<u>\$ 516,617,553</u>
<b>3. Unfunded Actuarial Liability (UAL) (1) – (2)</b>	\$ 108,860,587	\$ 109,752,515
<b>4. Remaining UAL for VRIP</b>	<u>NA</u>	<u>\$ 6,333,733</u>
<b>5. Remaining UAL for amortization (3) – (4)</b>	\$ 108,860,587	\$ 103,418,782
<b>6. Active Member Payroll</b>	\$ 109,766,481	\$ 106,447,927
<b>7. Unfunded Liability Amortization Factor</b>	10.5404	13.3317
<b>8. Remaining component of UAL amortization (5) / (7) / (6)</b>	9.41%	7.29%
<b>9. Additional amortization for VRIP</b>	NA	0.45%
<b>10. Employer Contribution Results (GASB)</b>		
a. Employer Normal Cost Rate	10.28%	10.84%
b. Amortization of UAL and PSREP (8) + (9)	<u>9.41%</u>	<u>7.74%</u>
c. Total Employer Contribution Rate June 30	19.69%	18.58%

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION IV**  
**CONTRIBUTIONS**

**Employees' Retirement System  
for the City of Norfolk**  
**Development of Actuarially Determined Contribution Rate**

**Firefighters and Police**

	<b>June 30, 2011  (expensed FY 2012)  (paid FY 2013)</b>	<b>June 30, 2012  (expensed FY 2013)  (paid FY 2014)</b>
<b>1. Actuarial Accrued Liability</b>		
a. Active Employees	\$ 173,413,844	\$ 163,998,729
b. Retired Members	307,290,930	343,391,249
c. Vested Terminated Members	<u>8,569,332</u>	<u>10,646,584</u>
d. Total Present Value	\$ 489,274,106	\$ 518,036,562
<b>2. Actuarial Value of Assets</b>	<u>\$ 366,135,703</u>	<u>\$ 406,581,005</u>
<b>3. Unfunded Actuarial Liability (UAL) (1) – (2)</b>	\$ 123,138,403	\$ 111,455,557
<b>4. Remaining UAL for PSREP and VRIP</b>	<u>\$ 13,899,394</u>	<u>\$ 14,792,309</u>
<b>5. Remaining UAL for amortization (3) – (4)</b>	\$ 109,239,009	\$ 96,663,248
<b>6. Active Member Payroll</b>	\$ 61,155,439	\$ 61,145,037
<b>7. Unfunded Liability Amortization Factor</b>	10.5404	13.3317
<b>8. Remaining component of UAL amortization (5) / (7) / (6)</b>	16.95%	11.86%
<b>9. Additional amortization for PSREP and VRIP</b>	2.59%	2.41%
<b>10. Employer Contribution Results (GASB)</b>		
a. Employer Normal Cost Rate	15.28%	18.72%
b. Amortization of UAL and PSREP (8) + (9)	<u>19.54%</u>	<u>14.27%</u>
c. Total Employer Contribution Rate June 30	34.82%	32.99%

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION V  
ACCOUNTING STATEMENT INFORMATION**

FASB ASC Topic No. 960 of the Financial Accounting Standards Board requires the System to disclose certain information regarding its funded status. Statement No. 25 of the Governmental Accounting Standards Board (GASB) establishes standards for disclosure of pension information by Public Employee Retirement Systems (PERS) and governmental employers in notes to financial statements and supplementary information.

FASB ASC Topic No. 960 disclosures provide a quasi “snap shot” view of how the Plan’s assets compare to its liabilities if contributions stopped and accrued benefit claims had to be satisfied. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if the Plan were to terminate.

The GASB-25 actuarial accrued liability is the same as the actuarial liability amount calculated for funding purposes.

Both the present value of accrued benefits (FASB ASC Topic No. 960) and the actuarial accrued liability (GASB-25) are determined assuming that the Plan is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 7.0% per annum.

FASB ASC Topic No. 960 specifies that a comparison of the present value of accrued (accumulated) benefits with the market value of the assets as of the valuation date must be provided. GASB Statement No. 25 requires the actuarial accrued liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of June 30, 2012 are exhibited in Table V-1. Then, Table V-2 reconciles the FASB ASC Topic No. 960 liabilities determined as of the prior valuation, June 30, 2011, to the liabilities as of June 30, 2012.

Tables V-3 through V-5 are exhibits to be used with the City CAFR report. Table V-3 are the Notes to Required Supplementary Information, Table V-4 is a history of gains and losses in Accrued Liability, and Table V-5 is the Solvency Test which shows the portion of Accrued Liability covered by Assets.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION V  
ACCOUNTING STATEMENT INFORMATION**

**Table V-1  
Accounting Statement Information  
Employees' Retirement System  
for the City of Norfolk**

	<b>June 30, 2011</b>	<b>June 30, 2012</b>
<b>A. FASB ASC Topic No. 960</b>		
1. Present Value of Benefits Accrued and Vested to Date		
a. Members Currently Receiving Payments	\$ 623,405,690	\$ 727,886,578
b. Vested Terminated Members	35,426,156	40,621,514
c. Active Members	<u>308,748,234</u>	<u>272,177,949</u>
d. Total PVVB	<u>\$ 967,580,080</u>	<u>\$ 1,040,686,041</u>
2. Present Value of Non-Vested Accrued Benefits for Active Members	<u>16,946,224</u>	<u>14,133,528</u>
3. Total Present Value of Accrued Benefits	\$ 984,526,304	\$ 1,054,819,569
4. Assets at Market Value	<u>911,278,371</u>	<u>885,499,200</u>
5. Unfunded Present Value of Accrued Benefits, But Not Less Than Zero	\$ 73,247,933	\$ 169,320,369
6. Ratio of Assets to Value of Benefits (4) / (3)	92.6%	83.9%
<b>B. GASB No. 25 Basis</b>		
1. Actuarial Liabilities		
a. Members Currently Receiving Payments	\$ 623,405,690	\$ 727,886,578
b. Vested Terminated Members	35,426,156	40,621,514
c. Active Members	<u>405,142,148</u>	<u>375,898,538</u>
d. Total PVVB	<u>\$ 1,063,973,994</u>	<u>\$ 1,144,406,630</u>
2. Actuarial Value of Assets	831,975,004	923,198,558
3. Unfunded Actuarial Liability	\$ 231,998,990	\$ 221,208,072
4. Ratio of Actuarial Value of Assets to Actuarial Liability	78.2%	80.7%

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION V  
ACCOUNTING STATEMENT INFORMATION**

**Table V-2  
Statement of Changes in Total Actuarial  
Present Value of All Accrued Benefits**

<b>Accumulated Benefit Obligation (FASB ASC Topic No. 960)</b>		
Actuarial Present Value of Accrued Benefits as of June 30, 2011	\$	984,526,304
Increase/(Decrease) During Years Attributable to:		
Passage of Time	\$	71,175,222
Benefit Paid – FY 2011-2012	\$	(71,046,694)
Change in Assumptions	\$	25,798,802
Plan Amendment (Including Ad-Hoc COLA and VRIP)	\$	19,717,567
Benefits Accrued, Other Gains/Losses	\$	24,648,368
Net Increase/(Decrease)	\$	<u>70,293,265</u>
Actuarial Present Value of Accrued Benefits as of June 30, 2012	\$	1,054,819,569

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION V  
ACCOUNTING STATEMENT INFORMATION**

**Table V-3  
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION**

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows.

Valuation date	June 30, 2012
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level Percent Closed, 20 Year Layers, except for PSREP and VRIP which are amortized over a closed 20-year period commencing July 1, 2005 and July 1, 2012 respectively
Amortization period	19.4 Years
Asset valuation method	3-Year Smoothed Value
Actuarial assumptions:	
Investment rate of return*	7.0%
Projected salary increases	Average annual salary increases of 5.64% for General Employees over a 30 year career and 6.68% for Public Safety employees over a 30 year career. Based on rates which vary by year- of-service and are compounded annually.
*Includes inflation at	3.0%

The actuarial assumptions used have been recommended by the actuary and adopted by the System's Board of Trustees based on the most recent review of the System's experience, completed in October of 2012.

The rate of City contributions to the System is composed of the normal cost and amortization of the unfunded actuarial accrued liability. The normal cost is a level percent of payroll cost which will pay for projected benefits at retirement for each active plan participant. The actuarial accrued liability is that portion of the present value of projected benefits that will not be paid for by future employer normal costs. The difference between this liability and the funds accumulated as of the same date is the unfunded actuarial accrued liability.

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012

SECTION V  
ACCOUNTING STATEMENT INFORMATION

**Table V-4**  
**ANALYSIS OF FINANCIAL EXPERIENCE**  
**Gain and Losses in Accrued Liability During Years Ended June 30**  
**Resulting from Differences Between Assumed Experience and Actual Experience**

Type of Activity	Gain (or Loss) for Year ending June 30,					
	2007	2008	2009	2010	2011	2012
Investment Experience	\$11,169,481	\$(22,682,482)	\$(87,432,722)	\$(104,166,163)	\$(21,698,596)	\$ 31,495,079
Combined Liability Experience	<u>2,559,923</u>	<u>8,284,079</u>	<u>14,859,619</u>	<u>18,097,499</u>	<u>12,889,233</u>	<u>3,881,141</u>
Gain (or Loss) During Year from Financial Experience	\$13,729,404	\$(14,398,403)	\$(72,573,103)	\$ (86,068,664)	\$ (8,809,363)	\$ 35,376,220
Non-Recurring Items	<u>(1,450,971)</u>	<u>(10,545,384)</u>	<u>0</u>	<u>0</u>	<u>3,202,603</u>	<u>(26,747,315)</u>
Composite Gain (or Loss) During Year	<b>\$12,278,433</b>	<b>\$(24,943,787)</b>	<b>\$(72,573,103)</b>	<b>\$ (86,068,664)</b>	<b>\$ (5,606,760)</b>	<b>\$ 8,628,905</b>

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**SECTION V**  
**ACCOUNTING STATEMENT INFORMATION**

**Table V-5**  
**SOLVENCY TEST**  
**Aggregate Accrued Liabilities For**

<b>Valuation Date</b> <b>July 1,</b>	<b>(1)</b> <b>Active Member Contributions</b>	<b>(2)</b> <b>Retirees Vested Terms, Beneficiaries</b>	<b>(3)</b> <b>Active Members (Employer Financed Portion)</b>	<b>Reported Assets</b>	<b>Portion of Accrued Liabilities Covered by Reported Assets</b>		
					<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
2001	N/A	\$ 351,458,128	\$ 391,145,346	\$ 838,073,790	100%	100%	100%
2002	N/A	372,747,805	411,904,507	798,070,877	100%	100%	100%
2003	N/A	397,310,521	415,925,946	760,502,908	100%	100%	94%
2004	\$ 215,208	421,470,962	423,984,074	816,120,329	100%	100%	93%
2005	198,018	469,436,407	414,295,992	854,146,038	100%	100%	93%
2006	84,360	566,232,610	372,779,959	881,035,790	100%	100%	84%
2007	83,376	585,584,308	386,563,802	925,821,257	100%	100%	88%
2008	78,685	605,567,032	403,409,400	937,766,796	100%	100%	82%
2009	72,008	617,813,260	411,732,258	885,609,003	100%	100%	65%
2010	54,808	637,488,648	409,218,088	817,698,124	100%	100%	44%
2011	196,733	658,831,846	404,945,415	831,975,004	100%	100%	43%
2012	629,200	768,508,092	375,269,338	923,198,558	100%	100%	41%

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012

APPENDIX A  
MEMBERSHIP INFORMATION

Summary of Membership Data as of June 30, 2012

Plan	Active Members (excluding those on Leave of Absence)			
	Count	Average Age	Average Service	Average Salary
General	2,517	47.4	11.9	\$ 42,292
Firefighters and Police	<u>1,214</u>	<u>39.8</u>	<u>12.0</u>	<u>50,367</u>
<b>Total System</b>	<b>3,731</b>	<b>44.9</b>	<b>11.9</b>	<b>\$ 44,919</b>
Inactive Members (Excludes Participants Due Account Balance)				
	Count	Annual Benefit	Average Annual Benefit	
Service Retirements				
General	1,862	\$ 33,870,763	\$ 18,191	
Firefighters and Police	<u>824</u>	<u>27,939,517</u>	<u>33,907</u>	
Total	2,686	\$ 61,810,280	\$ 23,012	
Contingent Annuitants				
General	339	\$ 2,720,271	\$ 8,024	
Firefighters and Police	<u>173</u>	<u>1,855,369</u>	<u>10,725</u>	
Total	512	\$ 4,575,640	\$ 8,937	
Disableds				
General	214	\$ 2,907,485	\$ 13,586	
Firefighters and Police	<u>135</u>	<u>2,944,750</u>	<u>21,813</u>	
Total	349	\$ 5,852,235	\$ 16,769	
Vested Former Members <sup>1</sup>				
General	763	\$ 4,217,807	\$ 5,528	
Firefighters and Police	<u>194</u>	<u>1,678,914</u>	<u>8,654</u>	
Total	957	\$ 5,896,721	\$ 6,162	

<sup>1</sup> Benefits are payable at age 60 for General Employees and age 55 for Firefighters and Police.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**APPENDIX A**  
**MEMBERSHIP INFORMATION**

**The Employees' Retirement System for the City of Norfolk**  
**Distribution of Active Participants - General Employees**

**COUNTS BY AGE/SERVICE**

Age	Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	23	33	4	0	0	0	0	0	0	0	60
25 to 29	49	92	35	2	0	0	0	0	0	0	178
30 to 34	31	69	81	22	0	0	0	0	0	0	203
35 to 39	30	67	75	51	4	1	0	0	0	0	228
40 to 44	33	58	89	68	31	13	1	0	0	0	293
45 to 49	15	67	92	71	54	33	34	1	0	0	367
50 to 54	13	56	99	84	61	47	76	26	0	0	462
55 to 59	14	32	66	55	64	36	70	55	33	5	430
60 to 64	3	22	36	31	31	20	20	33	19	9	224
65 to 69	4	2	9	7	14	7	10	3	2	3	61
70 & up	0	0	2	2	1	0	3	1	0	2	11
Total	215	498	588	393	260	157	214	119	54	19	2,517

**TOTAL SALARY BY AGE/SERVICE**

Age	Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	660,129	872,250	101,736	0	0	0	0	0	0	0	1,634,115
25 to 29	1,557,487	2,948,946	1,095,917	63,423	0	0	0	0	0	0	5,665,773
30 to 34	1,066,959	2,247,881	2,985,561	726,388	0	0	0	0	0	0	7,026,789
35 to 39	1,146,861	2,729,456	2,878,975	2,082,057	131,089	45,535	0	0	0	0	9,013,973
40 to 44	1,186,184	2,278,120	3,740,070	2,819,408	1,502,941	529,167	44,521	0	0	0	12,100,411
45 to 49	510,048	2,777,037	3,496,162	2,993,679	2,392,543	1,704,025	1,507,347	49,840	0	0	15,430,681
50 to 54	414,942	2,208,934	3,718,535	3,541,802	2,663,427	2,174,337	3,816,617	1,415,284	0	0	19,953,878
55 to 59	792,582	1,290,107	2,723,316	2,564,444	3,009,292	1,793,858	3,748,409	2,960,182	1,714,779	329,379	20,926,348
60 to 64	144,958	949,368	1,620,688	1,351,929	1,464,210	1,262,551	1,075,264	1,733,664	1,192,859	563,061	11,358,552
65 to 69	121,146	69,179	285,119	316,383	791,614	398,839	497,556	151,785	106,368	143,573	2,881,562
70 & up	0	0	61,340	47,162	28,764	0	105,256	88,970	0	124,353	455,845
Total	7,601,296	18,371,278	22,707,419	16,506,675	11,983,880	7,908,312	10,794,970	6,399,725	3,014,006	1,160,366	106,447,927

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**APPENDIX A**  
**MEMBERSHIP INFORMATION**

**The Employees' Retirement System for the City of Norfolk**  
**Distribution of Active Participants - Firefighters & Police Employees**

**COUNTS BY AGE/SERVICE**

Age	Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	24	28	2	0	0	0	0	0	0	0	54
25 to 29	21	118	46	0	0	0	0	0	0	0	185
30 to 34	5	59	98	21	0	0	0	0	0	0	183
35 to 39	2	28	69	57	30	0	0	0	0	0	186
40 to 44	4	30	34	50	84	15	1	0	0	0	218
45 to 49	0	9	22	23	38	65	32	3	0	0	192
50 to 54	0	1	7	7	15	27	39	25	1	0	122
55 to 59	0	0	0	2	4	6	19	17	7	0	55
60 to 64	0	0	0	1	1	1	2	3	9	1	18
65 to 69	0	0	1	0	0	0	0	0	0	0	1
70 & up	0	0	0	0	0	0	0	0	0	0	0
Total	56	273	279	161	172	114	93	48	17	1	1,214

**TOTAL SALARY BY AGE/SERVICE**

Age	Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	913,613	1,112,094	87,283	0	0	0	0	0	0	0	2,112,990
25 to 29	793,859	4,731,110	1,994,734	0	0	0	0	0	0	0	7,519,703
30 to 34	186,436	2,389,582	4,441,334	1,104,703	0	0	0	0	0	0	8,122,055
35 to 39	80,505	1,134,554	3,146,686	2,916,629	1,623,352	0	0	0	0	0	8,901,726
40 to 44	133,831	1,170,941	1,473,475	2,563,640	4,767,704	913,479	86,697	0	0	0	11,109,767
45 to 49	0	369,491	986,768	1,178,168	2,003,874	4,199,102	2,095,905	240,318	0	0	11,073,626
50 to 54	0	40,178	312,725	342,858	764,648	1,665,453	2,468,173	1,761,761	95,911	0	7,451,707
55 to 59	0	0	0	104,764	222,219	383,292	1,173,691	1,199,134	569,541	0	3,652,641
60 to 64	0	0	0	25,000	56,837	25,000	77,407	222,434	693,094	76,050	1,175,822
65 to 69	0	0	25,000	0	0	0	0	0	0	0	25,000
70 & up	0	0	0	0	0	0	0	0	0	0	0
Total	2,108,244	10,947,950	12,468,005	8,235,762	9,438,634	7,186,326	5,901,873	3,423,647	1,358,546	76,050	61,145,037

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**A. Actuarial Assumptions**

**Interest Rate**

7.0% per annum, compounded annually (adopted as of June 30, 2012).

**Mortality**

*Pre-Retirement:* RP-2000 Combined Health Mortality projected to 2010 by Scale AA\*

*Health Annuitants:* RP-2000 Combined Health Mortality projected to 2010 by Scale AA

*Disableds:* RP-2000 Disability Mortality projected to 2010 by Scale AA

\* *5% of deaths are assumed to be accidental for general employees;  
50% of deaths are assumed to be accidental for firefighters and police.*

Margin for Future Mortality Improvement – Mortality experience for the period 2006-2012 was most closely approximated by the RP-2000 table without projection, therefore the projection to 2010 should provide for improvement through the 2018 valuation date.

**Salary Increase**

Representative values are as follows:

Service	Annual Rate of Salary Increase	
	General	Firefighters and Police
0	7.12 %	11.24%
1	6.97	8.15
2	6.81	7.63
3	6.66	7.63
4	6.50	7.63
5	6.35	7.63
10	5.85	7.63
15	5.70	7.33
20	5.26	5.78
25	4.74	4.55
30	4.23	4.55

The table above includes an annual inflation rate of 3.00%.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**Withdrawal**

<b>Service</b>	<b>General</b>	<b>Firefighters and Police</b>
0	15.00 %	10.00 %
1	13.00	9.00
2	11.00	8.00
3	9.00	7.00
4	9.00	6.00
5	7.50	5.00
10	2.50	2.80
15	2.50	1.00
20	2.50	1.00
25	1.00	1.00
30	1.00	1.00

**Disability**

<b>Age</b>	<b>General*</b>		<b>Firefighters and Police**</b>
	<b>Male</b>	<b>Female</b>	<b>Unisex</b>
20	0.07%	0.05%	0.04%
25	0.08	0.05	0.06
30	0.09	0.06	0.08
35	0.14	0.10	0.11
40	0.22	0.15	0.22
45	0.34	0.23	0.40
50	0.51	0.35	0.67
54	0.66	0.45	0.90
55	0.70	0.48	0.96
59	1.02	0.70	1.26

\* 20% of General disabilities are assumed to be accidental

\*\*70% of Police & Fire disabilities are assumed to be accidental

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012

APPENDIX B  
ACTUARIAL ASSUMPTIONS AND METHODS

**Retirement**

*General:*

Age	Early Retirement	Normal Service Retirement
45	5.00 %	7.50 %
50	7.50	7.50
51	5.00	7.50
52	5.00	7.50
53	5.00	7.50
54	5.00	7.50
55	5.00	7.50
56	5.00	7.50
57	5.00	7.50
58	5.00	7.50
59	5.00	7.50
60		12.50
61		12.50
62		12.50
63		12.50
64		12.50
65		25.00
66		15.00
67		15.00
68		15.00
69		15.00
70		100.00

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

*Firefighters and Police:*

Service	Rate of Retirement*
20	2.50 %
21	3.00
22	3.50
23	4.00
24	5.00
25	10.00
26	25.00
27 and up	10.00

\*In lieu of the rates above, any active participant at least age 65 are assumed to retire immediately.

NOTE: Rates apply to each member based on eligibility requirements as defined in the Summary of Benefit and Contribution Provisions.

### **Future Expenses**

The assumed interest rate is net of the anticipated future administrative expenses of the Fund.

### **Loading or Contingency Reserves**

A load of 0.85% for General Employees and 1.05% for Firefighters and Police is applied to retirement benefits for active employees to account for unused sick leave balances at time of retirement.

### **Marital Status**

65% of the General Employees and 75% of the Firefighters and Police are assumed to be married, with males three years older than females.

### **Changes in Assumptions**

These assumptions were recently adopted by the Board of Trustees and were first effective for the June 30, 2012 actuarial valuation. The assumptions that were changed included the interest rate, mortality, salary increases, withdrawal, disability, retirement, load for unused sick leave and marital status. Please refer to Appendix B of the 2011 valuation report for the specifics of these assumptions previously used. The most recent study of the System's experience, used in developing the current assumptions, was based on the period from July 2006 to June 2012.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**B. Actuarial Methods**

**Actuarial Cost Method:** Entry Age Normal Cost Method. The unfunded actuarial liability (UAL) that arose from the offering of the Public Safety Retirement Enhancement Program is being amortized over a closed 20-year period commencing as of July 1, 2005. The unfunded actuarial liability (UAL) that arose from the offering of the Voluntary Retirement Incentive Program is being amortized over a closed 20-year period commencing as of July 1, 2012. The remaining UAL as of June 30, 2012 is being amortized over a closed period of 20 years. Future annual changes in the UAL will be amortized over a closed period of 20 years as well. All rates are developed using a level-percent of pay amortization method with a 3% per annum increase in the payments.

**Asset Valuation Method:** The actuarial value of assets are determined by first calculating the expected actuarial value of assets based on last year's valuation interest rate, last year's actuarial value of assets, and the net cash flow (contributions less benefit payments and administrative expenses) of the System over the year prior to the valuation. One-third of the market value of assets less the expected actuarial value of assets is then added to the expected actuarial value of assets to determine the valuation assets. Since this is the first year this method is being used, the expected actuarial value of assets is based on last year's market value of assets in lieu of the prior year's actuarial value of assets.

**Changes in Actuarial Methods**

Both the funding policy and asset valuation method were changed concurrently with performing the June 30, 2012 actuarial valuation. Please refer to Appendix B of the 2011 valuation report for the methods used in previous years.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**

The following is intended to summarize the key benefits valued in this valuation. Members of the System and other parties should not rely on this summary as a substitute for or interpretation of the laws and ordinances of the Norfolk City Code covering this retirement plan.

**1. Membership**

Any permanent regular full-time employee entering the service of the City of Norfolk is required to become a member of the Retirement System. Upon entering the System, members are classified according to their occupational group, either as General Employees, firefighters, police officers, or paramedics.

Paramedics, formerly members of the General Employees Group, were reclassified as members of firefighters and police effective June 9, 1992. City Council members on or after July 1, 2001 are classified as members of firefighters and police.

For each full calendar year beginning on or after January 1, 1997, any permanent part-time employees shall be members of and entitled to benefits in proportion to which their annual hours bear to that of full-time employees.

**2. Normal Service Retirement Allowance**

**Eligibility**

The earlier of age 60 or 30 years of creditable service for General Employees. The earlier of age 55 or 25 years of creditable service for Firefighters, Police Officers, and Paramedics. Mandatory retirement is age 65 for Firefighters and Police Officers.

**Amount**

**Employees Hired Before July 1, 1980**

For General Employees, the pension earned is 2% of average final compensation for each year of creditable service.

Effective January 1, 1997 for General Employees, the maximum number of years of creditable service is the greater of 35 years or the number of years of service as of December 31, 1996.

For Firefighters, Police Officers, and Paramedics, the pension earned is 2.5% of average final compensation for each year of creditable service up to a maximum of 65% of average final compensation.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2012**

**APPENDIX C  
SUMMARY OF PLAN PROVISIONS**

**Employees Hired on or After July 1, 1980**

For General Employees, the pension earned is 1.75% of average final compensation for each year of creditable service up to a maximum of 35 years.

For Firefighters, Police Officers, and Paramedics, the pension earned is 2.5% of average final compensation for each year of creditable service up to a maximum of 65% of average final compensation.

“Average Final Compensation” means the average annual earnable compensation for the three years of creditable service which produces the highest average. Creditable service consists of membership service plus 100% of accumulated unused sick leave for all employees except Firefighters. For Firefighters, 46% of unused sick leave accumulated prior to July 1, 1985 and 100% of unused sick leave accumulated on and after July 1, 1985 is included.

**3. Early Service Retirement Allowance**

**Eligibility**

Within five years of eligibility for normal service retirement.

**Amount**

Accrued service retirement allowance deferred to normal service retirement age. A member may elect to receive an immediate benefit equal to the accrued service retirement allowance reduced by  $\frac{1}{4}$  of 1% for each month commencement date precedes the normal retirement date for General Employees, and  $\frac{1}{2}$  of 1% for each month commencement date precedes the normal retirement date for firefighters, police officers, and paramedics.

**4. Vested Allowance**

**Eligibility**

Five years of creditable service.

**Amount**

Accrued service retirement allowance deferred to normal retirement age. If not eligible for retirement, a member may elect to leave their contributions made prior to July 1, 1972 with interest, if any, in the System until normal service retirement date.

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**5. Ordinary Disability Retirement Allowance**

**Eligibility**

Five years of creditable service and total and permanent disability not due to an accident in the performance of duty.

**Amount**

Accrued service retirement allowance with a minimum of 25% of average final compensation. The minimum cannot exceed the normal service retirement allowance based on average final compensation and creditable service projected to normal service retirement date.

**6. Accidental Disability Retirement Allowance**

**Eligibility**

Total and permanent disability as a result of an accident in the performance of duty, regardless of length of service. Applications must be filed within six years from date of accident.

The disability of a firefighter, police officer, sheriff, or deputy sheriff caused by hypertension, heart disease, or respiratory disease is presumed to have been suffered in the line of duty unless the contrary is shown by medical evidence.

**Amount**

The amount payable is 66 $\frac{2}{3}$ % of average final compensation.

**7. Ordinary Death Benefit**

**Eligibility**

Death in active service due to causes not the result of an accident in the performance of duty. Benefits are paid to a designated beneficiary or estate.

**Amount**

All contributions, if any, made by the member with not less than one-half of the interest credited are paid. In addition, if the member had one year of creditable service if he became a member prior to July 1, 1979 and five years of creditable service if he became a member on or after July 1, 1979, an additional lump-sum benefit equal to 50% of their earnable compensation during the year immediately preceding their death is payable. If a member

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dies in service after the earlier of completion of 10 years of service or early service retirement eligibility and if the designated beneficiary for the lump-sum death benefit is the spouse, the spouse may elect to receive, in lieu of the lump sum death benefit, a monthly pension payable until death or remarriage. If the member was eligible for early or normal service retirement, the spouse's benefit is equal to one-half of the retirement allowance that would have been payable to the member had the member retired and immediately commenced payment. If the member was not eligible for early or normal service retirement, the spouse's benefit is equal to one-half of the normal service retirement allowance, which would have been payable to the member if he or she had been vested, such benefit to commence at the same time as the vested benefit would have been paid to the member. If the spouse dies or remarries before the youngest unmarried child attains age 18, the pension shall continue to the date that all the children have died, married, or attained age 18, whichever occurs first. If the spouse was receiving benefits on or before June 30, 1978, payments shall continue after remarriage with no further payments after death.

**8. Accidental Death Benefit**

**Eligibility**

Death in active service resulting from an accident in the performance of duty within six years from the date of the accident. The death of a firefighter, police officer, sheriff, or deputy sheriff caused by hypertension, heart disease, or respiratory disease in the case of firefighters is presumed to have been suffered in the line of duty, unless the contrary is shown by medical evidence.

**Amount**

Fifty percent of average final compensation is payable to spouse until death or remarriage. If there is no spouse or if spouse dies or remarries, benefit is payable to children under age 18 or dependent parents. In addition, all contributions, if any, made by the member with not less than one-half of the interest credited are paid to their designated recipient or estate. If there is no spouse, a lump-sum benefit equal to 50% of their earnable compensation during the year immediately preceding their death is payable.

**Offset on Account of Workers' Compensation**

All benefits paid under the provisions of any workers' compensation act or any similar law to any member or beneficiary, or to the dependents of any member or beneficiary on account of any disability or death are in such manner as the Board determines, offset against any benefits provided from City contributions to the Employees' Retirement System.

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**9. Death Benefit After Retirement**

**Eligibility**

Death of a retired member receiving retirement allowance payments and who completed five years of creditable service if they became a member after July 1, 1979 or of a spouse receiving an accidental death benefit.

**Amount**

Lump sum equal to one-half of the average final compensation on which the retirement allowance of the deceased retired member or spouse was based. The lump sum is payable to the surviving spouse, to unmarried children under age 18, or unmarried children over age 18 who are physically or mentally unable to make a living.

In the case of a retired member who dies and leaves a surviving spouse, the spouse may elect to receive, in lieu of the lump-sum death benefit, a monthly benefit payable until death or remarriage, which is equal to one-half of the retirement allowance, which the deceased member was receiving at the time of their death, provided the member had not made an optional election. If the spouse dies or remarries before the youngest unmarried child attains age 18, the pension will continue to the date that all the children have died, married, or attained age 18, whichever occurs first. If the spouse was receiving payments on or before June 30, 1978, payments shall continue after remarriage with no further payments after death.

**10. Return of Contributions**

**Eligibility**

Termination of membership prior to death.

**Amount**

If not eligible for a retirement allowance, all contributions with not less than one-half of interest credited. If eligible for normal or early service, ordinary disability, accidental disability, or vested retirement allowance, their contributions, if any, with not less than one-half of the interest credited. The member may elect, prior to the commencement of their retirement allowance, to receive an annuity which is the actuarial equivalent of their accumulated contributions.

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**11. Normal and Optional Forms of Benefits**

**Normal Life**

**Life Annuity**

- |          |  |
|----------|--|
| Option A | A reduced pension with the provision that at death the reduced pension will be continued throughout the life of the designated beneficiary.              |
| Option B | A reduced pension with the provision that at death, one-half of the reduced pension will be continued throughout the life of the designated beneficiary. |
| Option C | A reduced pension with the provision that at death some other benefit approved by the Board of Trustees will be payable.                                 |

**12. Contributions**

**By Members**

5% of pay for anyone hired on or after October 5, 2010

**By City**

Annual contributions actuarially computed to be required to cover the cost of benefits of the System.

**13. Changes in Plan Provisions**

Retirees and beneficiaries as of June 30, 2011 were granted a permanent 2.0% supplemental benefit increase effective July 2012.

150 members retired under the Voluntary Retirement Incentive Program (VRIP) between July 1, 2011 and June 30, 2012.