

City of York  
Officers and Employees Retirement Fund  
Actuarial Valuation  
as of January 1, 2013

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013

**Table of Contents**

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Comments

Actuarial Certification

Summary of Principal Plan Benefit Provisions (SPPB)

Actuarial Assumptions and Methods

Section 1 - Summary of Plan Assets and Summary of Plan Membership

Section 2 - Act 205 Funding Calculations

Section 3 - Supplemental Information for GASB Reporting

Section 4 - Participant Information

Demographic Data for Active Members

Demographic Data for Retired Members and Members Terminated with Vesting

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013

**Comments**

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The purpose of the valuation report is to determine the actuarial status of the Plan and to serve as the basis for satisfying the reporting requirements under Act 205.

The Summary of Principal Plan Benefit Provisions page provides a summary of the basic plan benefit provisions in effect as of January 1, 2013.

The Actuarial Assumptions and Methods page is a summary of actuarial assumptions and methods used in determining the actuarial status of the Plan.

Section 1 of the report provides a summary of plan assets and summary of plan membership.

The market value of the fund as of December 31, 2012, is \$21,132,484. The net dollar-weighted rates of investment return during 2011 and 2012 on a market value basis were -2.27% and 12.23%, respectively.

As of January 1, 2013, there are 179 active members with total annual payroll of \$7,459,574. There are also 79 retired members currently receiving benefits under the Plan totaling \$1,068,563 annually, 8 disabled members currently receiving benefits under the Plan totaling \$103,445 annually, 17 spouse beneficiaries of deceased members currently receiving benefits under the Plan totaling \$96,853 annually and 28 vested former members entitled to deferred benefits under the Plan totaling \$277,774 annually.

Section 2 of the report provides the Act 205 funding calculations.

Page 1 of Section 2 shows the calculation of the actuarial value of assets. As of December 31, 2012, the actuarial value of assets is \$20,996,579. This is equal to 99% of the market value of assets.

As of January 1, 2013, there is an unfunded actuarial accrued liability under the Plan of \$6,531,053. The normal cost of the Plan, which is the cost of benefits being accrued during the current year, is \$587,182, which is 7.9% of annual payroll.

Page 3 of Section 2 shows the analysis of the change in the unfunded actuarial accrued liability from January 1, 2011, to January 1, 2013. There was an actuarial loss during the period of \$3,499,935.

Page 5 of Section 2 illustrates the minimum municipal obligation for the Plan. The financial requirement of the Plan is \$1,314,125. This includes the normal cost, \$587,182, assumed annual administrative expenses, \$84,077, and amortization of the unfunded actuarial accrued liability, \$642,866. The financial requirement is reduced by expected member contributions to the Plan during 2013, \$149,191. This results in a minimum municipal obligation of \$1,164,934. This calculation of the minimum municipal obligation is for illustrative purposes only since the calculation of the minimum municipal obligation for purposes of determining the City's required contribution to the Plan is prepared through the budgeting process by September 30 each year for the upcoming calendar year.

Pages 6 through 12 of Section 2 illustrate calculations of the theoretical plan assets and unfunded actuarial accrued liability excluding bond issue assets. This information will be used for purposes of State aid allocations during 2014 and 2015.

Section 3 of the report provides supplemental information for reporting under Governmental Accounting Standards Board Statement Nos. 67 and 68.

Section 4 of the report provides demographic data for the members of the Plan.

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Actuarial Certification**

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In preparing this report, we have relied upon the data furnished to us. The data with respect to receipts and disbursements and assets of the Plan as well as the data with respect to participants and beneficiaries were furnished by the City of York. The data has been reviewed and has been determined to be reasonable and consistent.

The information as contained in this report is a projection of liabilities based upon stated assumptions and is not an exact statement of the Plan's ultimate benefits and liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as at the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the assignment, an analysis of the potential range of such future measurements was not performed.

I certify that all costs, liabilities, rates of interest, and other factors under the Plan in Section 2 of the report have been determined on the basis of actuarial assumptions and methods, each of which is reasonable (taking into account the experience of the Plan and reasonable expectations) or which, in the aggregate, result in a total contribution equivalent to that which would be determined if each such assumption and method were reasonable, and which, in combination, offer my best estimate of anticipated experience under the Plan.

An approximation technique for the valuation of the disability benefit has been utilized. The approximation technique for the valuation of the disability benefit is a loading factor of 5.0% added to basic pension costs. This same approximation technique has been used in prior actuarial valuations of the Plan. It is my best estimate that the use of the approximation technique will cause little or no distortion in the valuation results.

I am a member of the American Academy of Actuaries, a Fellow of the Society of Actuaries, and an Enrolled Actuary under ERISA, and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

3/20/2014

Date

David H. Killick

David H. Killick, F.S.A.

Consulting Actuary

Enrolled Actuary No. 11-03880

DHK/GGC

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Summary of Principal Plan Benefit Provisions**  
Members Hired Before January 1, 1978

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### **Eligibility**

All officers and full-time employees, other than firemen and policemen, hired before January 1, 1978, are eligible for the following benefits. Persons paid a per diem wage are not compelled to join.

### **Normal Retirement**

The normal retirement requirement is attainment of age 60 and completion of 20 years of service, or completion of 40 years of service, regardless of age.

The normal retirement pension is payable semi-monthly for life with payments ceasing upon death.

The amount of annual pension is equal to 50% of the higher of the final rate of compensation or compensation averaged over the highest consecutive five years of employment. Service increments of 1/40th of the annual pension per year of service in excess of 20, but not beyond age 65, are provided if the member makes extra contributions. The calculation of compensation includes base salary only.

### **Disability Retirement**

A disability benefit is provided upon permanent disability before age 55 after completion of 15 years of service. The disability retirement pension is 50% of compensation at the time of disability.

Such disability pension is reduced by Workers' Compensation benefits received.

### **Death Benefits**

The death benefit for a member who has been married at least one year and is eligible for normal retirement is a survivor pension for his surviving spouse equal to 50% of the pension the member would have been receiving had he retired on the day prior to the date of death and had elected to receive his pension in a joint and 50% survivor benefit option form.

### **Vesting**

A member's benefits vest upon completion of 12 years of service. The vested benefit is a deferred pension beginning at the normal retirement date equal to the benefit accrued to the date of termination.

### **Accrued Benefit**

The benefit accrued at any date prior to normal retirement is equal to the projected normal retirement benefit, multiplied by the ratio, not to exceed one, of the number of years of service completed to date by the member to 20.

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Summary of Principal Plan Benefit Provisions**  
Members Hired Before January 1, 1978

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**Employee Contributions**

Members contribute 2% of compensation. If service increments are to be provided, an additional 1/2% of compensation is contributed.

Contributions are refunded without interest on termination or death prior to becoming eligible for retirement benefits.

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Summary of Principal Plan Benefit Provisions**  
Members Hired On or After January 1, 1978

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### **Eligibility**

All officers and full-time employees, other than firemen and policemen, hired on or after January 1, 1978, are eligible to join the Plan with the following benefits.

### **Normal Retirement**

The normal retirement requirement is attainment of age 60 and completion of five years of service, or completion of 40 years of service, regardless of age.

The normal retirement pension is payable semi-monthly for life with payments continuing after the member's death to the surviving spouse or, if no surviving spouse, to dependent children under the age of 18 equal to 50% of the pension the member was receiving at the time of death.

The amount of annual pension is equal to 2% of average annual compensation, multiplied by the number of complete years of service at retirement, up to a maximum of 40 years. Average annual compensation is based upon compensation for the highest five consecutive years out of the last ten years of employment. The calculation of compensation includes base salary plus longevity payments.

### **Early Retirement**

Members are eligible for early retirement upon attainment of age 55 and completion of five years of service. The early retirement benefit is the benefit accrued to the date of early retirement, reduced 1/3 of 1% for each month early.

### **Disability Retirement**

Members are eligible for disability retirement after completion of ten or more years of service. The disability retirement benefit is the benefit accrued to the date of disability, but not less than 50% of average monthly compensation. However, the amount of benefit shall not exceed such amount as necessary to make all benefits fully or partially financed by the City equal to 80% of compensation at the time of disability.

### **Death Benefits**

The death benefit for a member who has been married at least one year and is eligible for early retirement is a survivor pension for his surviving spouse or, if no surviving spouse, to dependent children under the age of 18 equal to 50% of the pension the member would have been receiving had he been retired on the day of his death.

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Summary of Principal Plan Benefit Provisions**  
Members Hired On or After January 1, 1978

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**Vesting**

A member's benefits vest upon completion of five years of service. The vested benefit is a deferred pension beginning at the normal retirement date equal to the benefit accrued to the date of termination.

**Accrued Benefit**

The benefit accrued at any date prior to normal retirement is equal to the normal retirement benefit formula, but based upon compensation and service to date.

**Employee Contributions**

Members contribute 2% of compensation. If a member terminates employment before completion of five years of service, member contributions are refunded with 5% compound interest.

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Actuarial Assumptions and Methods**

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**Interest**

8.00%

**Salary**

5.00% Annual Increase

**Withdrawal**

Table C-3: Rates of withdrawal at selected ages:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	15.0000%	35	10.0000%	50	2.5000%
25	15.0000%	40	7.5000%	55	1.0000%
30	12.5000%	45	5.0000%	60	0.0000%

**Mortality**

UP1984 Table with 5 year postretirement age setback for females  
(This table does not include projected mortality improvements.)

**Disability**

Loading of 5.00% added to basic pension costs.

**Retirement**

Normal Retirement Age, or age on valuation date, if greater.

**Preretirement Death Benefit**

Liabilities computed on the assumption that all participants will have spouses of the same age at the date of eligibility for the benefit.

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Actuarial Assumptions and Methods**

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**Expenses**

Provision for administrative expenses added to normal cost.

**Inflation**

Moderate inflation based on long term historical average rates is a component of the actuarial assumptions used herein. Provision is not made for advance funding of sharply higher rates of inflation experienced in some years. The effects of such higher rates are reflected in the funding after their occurrence.

**Actuarial Value of Assets**

Each year the investment gain (excess of actual investment income including realized and unrealized appreciation over expected investment income) or loss is recognized over a five-year period. In no event is the actuarial value of assets allowed to be greater than 120% or less than 80% of market value.

**Actuarial Cost Method**

Entry Age Normal using level percentage of future payroll amortization of the initial unfunded actuarial accrued liability based upon a 4.0% annual increase in covered payroll assumption.

City of York Officers and Employees Retirement  
Fund  
Actuarial Valuation  
as of January 1, 2013

Section 1

Summary of Plan Assets and Summary of Plan Membership

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Receipts and Disbursements - January 1, 2011 to December 31, 2011**

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Market Value at 1/1/2011 \$ 19,799,155.00

**Receipts**

Employer Contributions

Received	\$ 0.00	
Receivable at 1/1/2011	0.00	
Receivable at 12/31/2011	<u>822,481.00</u>	
Total Employer Contributions		\$ 822,481.00

Employee Contributions

Received	\$ 152,221.00	
Receivable at 1/1/2011	(5,730.00)	
Receivable at 12/31/2011	<u>5,857.00</u>	
Total Employee Contributions		152,348.00

Investment Income Received 236,802.00

Change in Market Value (674,230.00)

Total Receipts 537,401.00

**Disbursements**

Monthly Benefit Payments \$ (1,055,619.00)

Refund of Employee Contributions (17,036.00)

Administrative Expenses (86,021.00)

Total Disbursements (1,158,676.00)

Market Value at 12/31/2011 \$ 19,177,880.00

Approximate Net Dollar-Weighted Rate of Investment Return (2.27%)

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Receipts and Disbursements - January 1, 2012 to December 31, 2012**

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Market Value at 1/1/2012 \$ 19,177,880.00

**Receipts**

Employer Contributions

Received	\$ 854,902.00	
Receivable at 1/1/2012	(822,481.00)	
Receivable at 12/31/2012	841,462.00	
Total Employer Contributions		\$ 873,883.00

Employee Contributions

Received	\$ 156,671.00	
Receivable at 1/1/2012	(5,857.00)	
Receivable at 12/31/2012	0.00	
Total Employee Contributions		150,814.00

Investment Income Received 197,879.00

Change in Market Value 2,017,910.00

Total Receipts 3,240,486.00

**Disbursements**

Monthly Benefit Payments \$ (1,186,365.00)

Refund of Employee Contributions (17,385.00)

Administrative Expenses (82,132.00)

Total Disbursements (1,285,882.00)

Market Value at 12/31/2012 \$ 21,132,484.00

Approximate Net Dollar-Weighted Rate of Investment Return 12.23%

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013

**Assets and Liabilities**

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**Assets**

Cash	\$	0.00
Mutual Funds		<u>20,291,022.00</u>
Total Assets in Fund	\$	20,291,022.00
Employer Contributions Receivable		841,462.00
Employee Contributions Receivable		0.00
Accrued Income		<u>0.00</u>
Total Assets	\$	21,132,484.00

**Liabilities**

Total Liabilities		<u>0.00</u>
Net Assets	\$	<u><u>21,132,484.00</u></u>

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Summary of Plan Membership**

**Active Members**

	Number of Members	Annual Payroll
Active Members as of 1/1/2011	191	
New Members During the Period	29	
Returned to Active	0	
Members No Longer Active:		
Retired with Disability Benefit	(1)	
Retired with Service Retirement Benefit	(12)	
Separated with Deferred Benefit	(8)	
Separated with Refund of Contributions	(20)	
Separated with Neither Deferred Benefit nor Refund of Contributions	0	
Deceased	0	
Total	<u>(41)</u>	
Active Members as of 1/1/2013	<u>179</u>	<u>\$ 7,459,574</u>

**Vested Former Members**

	Number of Members	Annual Benefit
Vested Former Members as of 1/1/2011	27	
Separated with Deferred Benefit	8	
Beneficiary of Deceased Participant	0	
Returned to Active	0	
Retired with Service Retirement Benefit	(5)	
Deceased or Paid in Full	<u>(2)</u>	
Vested Former Members as of 1/1/2013	<u>28</u>	<u>\$ 277,774</u>

**Retired Members**

Retired Members as of 1/1/2011	65	
Retired with Service Retirement Benefit	17	
Deceased or Paid in Full	<u>(3)</u>	
Retired Members as of 1/1/2013	<u>79</u>	<u>\$ 1,068,563</u>

**Disabled Members**

Disabled Members as of 1/1/2011	7	
Retired with Disability Benefit	1	
Deceased	<u>0</u>	
Disabled Members as of 1/1/2013	<u>8</u>	<u>\$ 103,445</u>

**Spouse Beneficiaries of Deceased Members**

Spouse Beneficiaries of Deceased Members as of 1/1/2011	17	
Additional Spouse Beneficiaries of Deceased Members	1	
Deceased	<u>(1)</u>	
Spouse Beneficiaries of Deceased Members as of 1/1/2013	<u>17</u>	<u>\$ 96,853</u>

City of York Officers and Employees Retirement  
Fund  
Actuarial Valuation  
as of January 1, 2013

Section 2

Act 205 Funding Calculations

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013

**Actuarial Value of Assets**

	2009	2010	2011	2012
Market Value at 1/1	\$ 15,197,595.00	\$ 18,068,773.00	\$ 19,799,155.00	\$ 19,177,880.00
Contributions	497,798.00	526,800.00	974,829.00	1,024,697.00
Benefit Payments and Expenses	(994,885.00)	(1,109,214.00)	(1,158,676.00)	(1,285,882.00)
Expected Investment Income <sup>1</sup>	1,195,924.12	1,422,205.28	1,576,578.52	1,523,783.00
Expected Value at 12/31	\$ 15,896,432.12	\$ 18,908,564.28	\$ 21,191,886.52	\$ 20,440,478.00
Market Value at 12/31	18,068,773.00	19,799,155.00	19,177,880.00	21,132,484.00
Gain/(Loss): (Market Value less Expected Value)	\$ 2,172,340.88	\$ 890,590.72	\$ (2,014,006.52)	\$ 692,006.00
Percentage of Gain/(Loss) to be recognized in the future	20%	40%	60%	80%
Gain/(Loss) to be recognized in the future	\$ 434,468.18	\$ 356,236.29	\$ (1,208,403.91)	\$ 553,604.80
Market Value at 12/31/2012				\$ 21,132,484.00
Total (Gain)/Loss for 2009-2012 to be recognized in the future				<u>(135,905.36)</u>
Actuarial Value of Assets at 12/31/2012				<u><u>\$ 20,996,578.64</u></u> <sup>2</sup>

<sup>1</sup> 8.00% annual interest rate

<sup>2</sup> Actuarial Value of Assets cannot be greater than 120% nor be less than 80% of the Market Value.

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Unfunded Actuarial Accrued Liability and Normal Cost**

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**Unfunded Actuarial Accrued Liability**

Actuarial Present Value of Future Benefits

Active Members Retirement Pension Benefits	\$ 16,777,934
Active Members Vested Withdrawal Benefits	826,150
Active Members Disability Benefits	838,899
Active Members Preretirement Death Benefits	287,414
Active Members Refund of Member Contributions	98,910 <sup>1</sup>
Refund of Employee Contributions to Terminated Members	55,327
Vested Former Members Benefits	1,581,261
Retired Members Benefits	9,196,612
Disabled Members Benefits	1,011,385
Surviving Spouses Benefits	<u>716,117</u>
Total	\$ 31,390,009
Actuarial Present Value of Future Normal Costs	<u>(3,862,377)</u>
Actuarial Accrued Liability	\$ 27,527,632
Actuarial Value of Assets	<u>(20,996,579)</u>
Unfunded Actuarial Accrued Liability	<u><u>\$ 6,531,053</u></u>

**Normal Cost**

Normal Cost	<u><u>\$ 587,182</u></u>
Normal Cost as a Percentage of Annual Payroll	<u>7.9%</u>

<sup>1</sup> Accumulated Member Contributions Without Interest as of 1/1/2013 = \$1,816,567

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Analysis of the Change in the Unfunded Actuarial Accrued Liability**

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Unfunded Actuarial Accrued Liability at 1/1/2011 \$ 3,201,118

**Additions**

Normal Costs	\$ 1,202,069	
Administrative Expenses	168,153	
Interest on Unfunded Actuarial Accrued Liability, Normal Costs, and Administrative Expenses	<u>693,377</u>	
Total		2,063,599

**Contributions**

Employer Contributions	\$ (1,696,364)	
Employee Contributions	(303,162)	
Interest on Contributions	<u>(55,009)</u>	
Total		(2,054,535)
Adjustment for Funding Deviation		(179,064)
Modification in the Benefit Plan		0
Change in Actuarial Assumptions		0

**Actuarial Loss**

Investment Loss	\$ 3,340,554	
Experience Gain	(19,683)	
Funding Deviation	<u>179,064</u>	
Total		<u>3,499,935</u>

Unfunded Actuarial Accrued Liability at 1/1/2013 \$ 6,531,053

City of York Officers and Employees Retirement Fund

Actuarial Valuation as of January 1, 2013

**Amortization of Unfunded Actuarial Accrued Liability**

Initial Date	Initial Amount	Outstanding Balance	Amortization Amount	Remaining Amortization	Nature
January 1, 2009	\$ (4,559,279)	\$ (4,110,333)	\$ (429,975)	16 Years	Assumption Change
January 1, 2009	7,103,800	6,404,302	669,942	16 Years	Actuarial Loss
January 1, 2011	772,250	737,149	72,829	18 Years	Actuarial Loss
January 1, 2013	3,499,935	3,499,935	330,070	20 Years	Actuarial Loss
Total	<u>\$ 6,816,706</u>	<u>\$ 6,531,053</u>	<u>\$ 642,866</u>		

Projected plan year in which the unfunded accrued liability is fully amortized is 2031.

**Aggregation of Changes in Unfunded Actuarial Accrued Liability**

Date of Aggregation	Aggregated Target Date	Outstanding Balance	Amortization Amount	Remaining Amortization
January 1, 2013	2031	<u>\$ 6,531,053</u>	<u>\$ 642,866</u>	19 Years

<sup>1</sup> Level Percentage of Future Payroll Amortization

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Illustration of Minimum Municipal Obligation**

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Financial Requirements

Normal Cost	\$	587,182	
Administrative Expenses		84,077 <sup>1</sup>	
Amortization of Unfunded Actuarial Accrued Liability		<u>642,866</u>	
Total	\$		1,314,125
Expected Member Contributions			<u>(149,191)</u>
Minimum Municipal Obligation	\$		1,164,934
Estimated Allocation of General Municipal Pension System State Aid			<u>0</u>
Net Minimum Municipal Obligation	\$		<u><u>1,164,934</u></u>

<sup>1</sup> Total Administrative Expenses for Plan Year 1/1/2011 to 12/31/2011 - \$ 86,021  
Total Administrative Expenses for Plan Year 1/1/2012 to 12/31/2012 - \$ 82,132

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Receipts and Disbursements Excluding Bond Issue Assets -**  
**January 1, 2011 to December 31, 2011**

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Market Value at 1/1/2011 \$ 15,796,984.24

**Receipts**

Employer Contributions Received \$ 1,031,083.00

Employee Contributions

Received \$ 152,221.00

Receivable at 1/1/2011 (5,730.00)

Receivable at 12/31/2011 5,857.00

Total Employee Contributions Received 152,348.00

Investment Income 188,935.21

Change in Market Value (537,942.18)

Total Receipts 834,424.03

**Disbursements**

Monthly Benefit Payments \$ (1,055,619.00)

Refund of Employee Contributions (17,036.00)

Administrative Expenses (86,021.00)

Total Disbursements (1,158,676.00)

Market Value at 12/31/2011 \$ 15,472,732.27

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Receipts and Disbursements Excluding Bond Issue Assets -**  
**January 1, 2012 to December 31, 2012**

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Market Value at 1/1/2012 \$ 15,472,732.27

**Receipts**

Employer Contributions Received \$ 1,111,052.00

Employee Contributions

Received \$ 156,671.00

Receivable at 1/1/2012 (5,857.00)

Receivable at 12/31/2012 0.00

Total Employee Contributions Received 150,814.00

Investment Income 159,648.97

Change in Market Value 1,628,051.75

Total Receipts 3,049,566.72

**Disbursements**

Monthly Benefit Payments \$ (1,186,365.00)

Refund of Employee Contributions (17,385.00)

Administrative Expenses (82,132.00)

Total Disbursements (1,285,882.00)

Market Value at 12/31/2012 \$ 17,236,416.99

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Assets and Liabilities Excluding Bond Issue Assets**

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**Assets**

Total Assets	\$ 17,236,416.99
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**Liabilities**

Total Liabilities	<u>0.00</u>
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Net Assets	<u><u>\$ 17,236,416.99</u></u>
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City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Actuarial Value of Assets**

	2009	2010	2011	2012
Market Value at 1/1	\$ 11,656,705.39	\$ 14,147,088.90	\$ 15,796,984.24	\$ 15,472,732.27
Contributions	901,776.00	948,287.00	1,183,431.00	1,261,866.00
Benefit Payments and Expenses	(994,885.00)	(1,109,214.00)	(1,158,676.00)	(1,285,882.00)
Expected Investment Income <sup>1</sup>	928,812.07	1,125,330.03	1,264,748.94	1,236,857.94
Expected Value at 12/31	\$ 12,492,408.46	\$ 15,111,491.93	\$ 17,086,488.18	\$ 16,685,574.21
Market Value at 12/31	14,147,088.90	15,796,984.24	15,472,732.27	17,236,416.99
Gain/(Loss): (Market Value less Expected Value)	\$ 1,654,680.44	\$ 685,492.31	\$ (1,613,755.91)	\$ 550,842.78
Percentage of Gain/(Loss) to be recognized in the future	20%	40%	60%	80%
Gain/(Loss) to be recognized in the future	\$ 330,936.09	\$ 274,196.92	\$ (968,253.55)	\$ 440,674.22
Market Value at 12/31/2012				\$ 17,236,416.99
Total (Gain)/Loss for 2009-2012 to be recognized in the future				<u>(77,553.68)</u>
Actuarial Value of Assets at 12/31/2012				<u><u>\$ 17,158,863.31</u></u>
2011 Approximate Net Dollar-Weighted Rate of Investment Return				0.62%
2012 Approximate Net Dollar-Weighted Rate of Investment Return				0.78%

<sup>1</sup> 8.00% annual interest rate

<sup>2</sup> Actuarial Value of Assets cannot be greater than 120% nor be less than 80% of the Market Value.

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Unfunded Actuarial Accrued Liability Excluding Bond Issue Assets**

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Actuarial Present Value of Future Benefits	\$ 31,390,009
Actuarial Present Value of Future Normal Costs	<u>(3,862,377)</u>
Actuarial Accrued Liability	\$ 27,527,632
Actuarial Value of Assets	<u>(17,158,863)</u>
Unfunded Actuarial Accrued Liability	<u><u>\$ 10,368,769</u></u>

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Analysis of the Change in the Unfunded Actuarial Accrued Liability**  
**Excluding Bond Issue Assets**

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Unfunded Actuarial Accrued Liability at 1/1/2011	\$ 7,646,688
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**Additions**

Normal Costs	\$ 1,202,069	
Administrative Expenses	168,153	
Interest on Unfunded Actuarial Accrued Liability, Normal Costs, and Administrative Expenses	<u>1,433,120</u>	
Total		2,803,342

**Contributions**

Employer Contributions	\$ (2,142,135)	
Employee Contributions	(303,162)	
Interest on Contributions	<u>(63,075)</u>	
Total		(2,508,372)
Adjustment for Funding Deviation		(502,370)
Modification in the Benefit Plan		0
Change in Actuarial Assumptions		0

**Actuarial Loss**

Investment Loss	\$ 2,446,794	
Experience Gain	(19,683)	
Funding Deviation	<u>502,370</u>	
Total		<u>2,929,481</u>

Unfunded Actuarial Accrued Liability at 1/1/2013	<u><u>\$ 10,368,769</u></u>
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City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013

**Amortization of Unfunded Actuarial Accrued Liability Excluding Bond Issue Assets**

Initial Date	Initial Amount	Outstanding Balance	Amortization Amount	Remaining Amortization	Nature
January 1, 1985	\$ 3,626,630	5,035,824	\$ 512,103	12 Years <sup>1</sup>	Initial Unfunded
January 1, 1994	(620,867)	(58,577)	(58,577)	1 Year	Assumption Chg.
January 1, 1999	(440,426)	(47,649)	(47,649)	1 Year	Actuarial Gain
January 1, 2000	(348,242)	(72,559)	(37,671)	2 Years	Actuarial Gain
January 1, 2001	3,943	2,305	372	8 Years	Active Amendment
January 1, 2001	432,407	130,183	46,776	3 Years	Actuarial Loss
January 1, 2002	160,320	102,003	15,119	9 Years	Active Amendment
January 1, 2002	1,356,941	525,068	146,788	4 Years	Actuarial Loss
January 1, 2003	(1,868,133)	(1,276,750)	(176,179)	10 Years	Assumption Chg.
January 1, 2003	1,587,452	740,499	171,723	5 Years	Actuarial Loss
January 1, 2005	97,595	59,369	10,557	7 Years	Actuarial Loss
January 1, 2007	(464,858)	(324,030)	(52,209)	8 Years	Assumption Chg.
January 1, 2007	(128,735)	(89,739)	(14,458)	8 Years	Actuarial Gain
January 1, 2009	(3,497,012)	(3,152,665)	(329,795)	16 Years	Assumption Chg.
January 1, 2009	6,138,433	5,533,991	578,901	16 Years	Actuarial Loss
January 1, 2011	347,825	332,015	32,803	18 Years	Actuarial Loss
January 1, 2013	2,929,481	2,929,481	276,272	20 Years	Actuarial Loss
Total	<u>\$ 9,312,754</u>	<u>\$ 10,368,769</u>	<u>\$ 1,074,876</u>		

Projected plan year in which the unfunded accrued liability is fully amortized is 2030.

**Aggregation of Changes in Unfunded Actuarial Accrued Liability**

Date of Aggregation	Aggregated Target Date	Outstanding Balance	Amortization Amount	Remaining Amortization
January 1, 2013	2028	<u>\$ 5,332,945</u>	<u>\$ 562,773</u>	16 Years

<sup>1</sup> Level Percentage of Future Payroll Amortization

City of York Officers and Employees Retirement  
Fund  
Actuarial Valuation  
as of January 1, 2013

Section 3

Supplemental Information for GASB Reporting

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Supplemental Information for GASB Statement Nos. 67 & 68 Reporting**

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**Schedule of Funding Progress**

Valuation Date	Market Value of Assets (a)	Entry Age Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Net Position as a % of Total Liability (b-a)/b	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
1/1/2011	\$ 19,799,155	\$ 24,567,150	\$ 4,767,995	19.4%	80.6%	\$ 7,600,411	62.7%
1/1/2012	19,177,880						
1/1/2013	21,132,484	27,527,632	6,395,148	23.2%	76.8%	7,459,574	85.7%

**Schedule of Interest Rate Sensitivity Testing**

Interest Rate <sup>1</sup>	Market Value of Assets (a)	Entry Age Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Net Position as a % of Total Liability (b-a)/b	Funded Ratio (a/b)
7.00%	\$ 21,132,484	\$ 30,630,809	\$ 9,498,325	31.0%	69.0%
8.00%	21,132,484	27,527,632	6,395,148	23.2%	76.8%
9.00%	21,132,484	24,899,392	3,766,908	15.1%	84.9%

<sup>1</sup> Valuation interest rate is 8.00%

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Supplemental Information for GASB Statement Nos. 67 & 68 Reporting**

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**Schedule of Changes to Unfunded Actuarial Accrued Liability <sup>1</sup>**

Modification in Plan	\$	0
Changes in Actuarial Assumptions		0
2011 Investment (Gain)/Loss		1,980,746
2012 Investment (Gain)/Loss		(603,703)
Experience (Gain)/Loss		(19,683)

**Schedule of Contributions from the Employer and Other Contributing Entities**

Year	Actuarially <sup>2</sup> Determined Contribution	Contributions <sup>3</sup> From Employer	Contribution Deficiency/ (Surplus)
2003	\$ 86,651	\$ 86,651	\$ 0
2004	295,282	295,282	0
2005	316,290	316,290	0
2006	332,937	336,246	(3,309)
2007	331,360	331,360	0
2008	335,270	335,270	0
2009	344,088	344,088	0
2010	376,684	376,684	0
2011	759,447	822,481	(63,034)
2012	762,020	873,883	(111,863)

<sup>1</sup> Determined on a market value basis

<sup>2</sup> Minimum Municipal Obligation under Act 205 of 1984

<sup>3</sup> Includes general municipal pension system State aid

City of York Officers and Employees Retirement Fund  
Actuarial Valuation as of January 1, 2013  
**Supplemental Information for GASB Statement Nos. 67 & 68 Reporting**

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**Notes and Disclosures:**

**Discount Rate Determination for GASB Nos. 67 & 68 Purposes**

This discount rate is based on the long-term expected rate of return on pension plan investments that are expected to be used to finance the payment of benefits. The plan's fiduciary net position is projected to be sufficient to make projected benefit payments and the plan assets are expected to be invested using a strategy to achieve that return. The employer has always met the funding requirements of Pennsylvania law Act 205 of 1984. Act 205 requires full funding of the entry age normal cost plus plan expenses, as well as amortization of the unfunded liability to ultimately achieve a 100% funded status.

**Actuarial Determinations and Disclosures**

The Actuarial Accrued Liability information provided in Section 3 was determined using the same actuarial methods and assumptions as listed at the beginning of this actuarial valuation report.

City of York Officers and Employees Retirement  
Fund  
Actuarial Valuation  
as of January 1, 2013

Section 4

Participant Information

## CITY OF YORK OFFICERS AND EMPLOYEES RETIREMENT FUND

## DEMOGRAPHIC DATA FOR ACTIVE MEMBERS

01/01/2013

## Years of Service

Age	0-1	2	3	4-5	6-10	11-15	16-20	21-25	26-30	30+	Total
Under No. of 20 Payroll (\$000)	0	0	0	0	0	0	0	0	0	0	0
20-24 No. of Payroll (\$000)	2	1	0	0	1	0	0	0	0	0	4
	67	38	0	0	40	0	0	0	0	0	145
25-29 No. of Payroll (\$000)	4	1	4	4	0	0	0	0	0	0	13
	202	35	136	158	0	0	0	0	0	0	531
30-34 No. of Payroll (\$000)	3	1	1	5	2	3	0	0	0	0	15
	86	31	36	207	122	147	0	0	0	0	629
35-39 No. of Payroll (\$000)	2	3	0	7	4	1	1	0	0	0	18
	91	108	0	317	153	30	61	0	0	0	760
40-44 No. of Payroll (\$000)	2	3	0	3	1	1	0	5	0	0	15
	51	131	0	99	39	50	0	204	0	0	574
45-49 No. of Payroll (\$000)	4	3	1	2	3	4	2	1	6	0	26
	126	170	33	72	100	171	94	41	269	0	1,076
50-54 No. of Payroll (\$000)	5	1	2	5	3	5	2	7	3	2	35
	217	30	81	208	106	165	82	289	140	61	1,379
55-59 No. of Payroll (\$000)	1	0	0	3	3	4	3	3	4	9	30
	66	0	0	109	130	193	142	128	163	383	1,314
60-64 No. of Payroll (\$000)	3	2	0	2	1	3	2	3	1	1	18
	122	82	0	46	44	199	86	141	42	39	801
65 & No. of Over Payroll (\$000)	0	0	0	1	1	0	0	1	1	1	5
	0	0	0	37	33	0	0	101	43	36	250

Total Members

Total Annual Payroll

26  
1,02815  
6258  
28632  
1,25319  
76721  
95510  
46520  
90415  
65713  
519179  
7,459

Average Age: 47.2 Years

Average Service to Date: 11.8 Years

Average Salary: \$41,674

Number of Males: 92

Number of Females: 87

Number Inactive: 0

CITY OF YORK OFFICERS AND EMPLOYEES RETIREMENT FUND

DEMOGRAPHIC DATA FOR RETIRED MEMBERS AND MEMBERS TERMINATED WITH VESTING

01/01/2013

RETIRED MEMBERS

AGE	NUMBER	ANNUAL PENSIONS PAYABLE (\$)
Under 30	0	0
30 - 34	0	0
35 - 39	0	0
40 - 44	1	18,478
45 - 49	0	0
50 - 54	0	0
55 - 59	10	151,141
60 - 64	26	385,672
65 - 69	25	379,648
70 - 74	13	119,466
75 - 79	13	90,668
80 - 84	10	80,788
Over 84	6	43,000
<b>TOTALS</b>	<b>104</b>	<b>1,268,861</b>

MEMBERS TERMINATED WITH VESTING

AGE	NUMBER	ANNUAL PENSIONS PAYABLE (\$)
Under 25	0	0
25 - 29	1	4,020
30 - 34	1	5,390
35 - 39	1	5,021
40 - 44	3	23,064
45 - 49	5	42,826
50 - 54	8	91,777
55 - 59	8	102,310
60 - 64	1	3,366
65 - 69	0	0
Over 69	0	0
<b>TOTALS</b>	<b>28</b>	<b>277,774</b>