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City of York Paid Firefighter's Pension Fund
Actuarial Valuation
as of January 1, 2013

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
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City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013

Comments

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 \$25,872,148. The net dollar-weighted rates of investment return during 2011 and 2012 on a market value basis were -2.45% and 12.17%, respectively.

As of January 1, 2013, there are 59 active members with total annual payroll of \$3,487,640. There are also 52 retired members currently receiving benefits under the Plan totaling \$1,660,441 annually, 5 disabled members currently receiving benefits under the Plan totaling \$123,242 annually, 26 spouse beneficiaries of deceased members currently receiving benefits under the Plan totaling \$573,038 annually, and 1 vested former member entitled to deferred benefits under the Plan totaling \$36,247 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 \$25,983,937.

As of January 1, 2013, there is an unfunded actuarial accrued liability under the Plan of \$18,691,389. The normal cost of the Plan, which is the cost of benefits being accrued during the current year, is \$486,931, which is 14.0% 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 \$1,744,950.

Page 5 of Section 2 illustrates the minimum municipal obligation for the Plan. The financial requirement of the Plan is \$2,185,346. This includes the normal cost, \$486,931, assumed annual administrative expenses, \$97,223, and amortization of the unfunded actuarial accrued liability, \$1,601,192. The financial requirement is reduced by expected member contributions to the Plan during 2013, \$175,090. This results in a minimum municipal obligation of \$2,010,256. 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 the 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 Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Actuarial Certification

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 Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Summary of Principal Plan Benefit Provisions
Members Hired Before January 1, 1988

Eligibility

All full-time members of the City Fire Department hired before January 1, 1988, are eligible for the following benefits.

Normal Retirement

The normal retirement requirement is attainment of age 50 and completion of 20 years of service.

The normal retirement pension is payable 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.

The amount of annual pension is equal to 50% of the yearly salary of the member at the time of retirement or the highest average annual salary which the member received during any five years preceding retirement, if higher. An additional incremental pension is provided equal to 1/40 of the annual pension for each complete year of service in excess of 20 (but not beyond age 65) up to a maximum of \$1,200 additional per year. The calculation of salary includes base salary plus longevity increments.

Postretirement Cost-of-Living Increase

The monthly pension is increased by 50% of the dollar increase granted to active firefighters of the highest pay grade. For certain members who retired between January 1, 2003, and January 15, 2003, the monthly pension is increased by 4.0% per year.

Disability Retirement

A disability benefit is provided under permanent disability after completion of ten years of service. The disability retirement pension is 30% of salary at the time of disability plus 2% of salary for each year of service in excess of ten, up to a maximum pension of 50% of salary.

Such disability pension is reduced by Workers' Compensation benefits received if the disability was not incurred in the line of duty.

Preretirement Death Benefits

If a member dies prior to being eligible to retire, a death benefit is payable to his surviving spouse or, if no surviving spouse, to dependent children under the age of 18 equal to 30% of salary plus 2% of salary for each year of service in excess of ten, up to a maximum pension of 50% of salary.

If a member dies after being eligible to retire, a death benefit is payable to his surviving spouse or, if no surviving spouse, to dependent children under the age of 18 equal to the benefit the member would have been receiving had he been retired on the day of his death.

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Summary of Principal Plan Benefit Provisions
Members Hired Before January 1, 1988

Employee Contributions

Members contribute 5% of salary plus \$1 per month. Employee contributions are not credited with interest. Contributions are refunded on termination before eligibility for retirement or on death if member is not eligible for widow or children's benefits.

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Summary of Principal Plan Benefit Provisions
Members Hired On or After January 1, 1988

Eligibility

All full-time members of the City Fire Department hired on or after January 1, 1988, are eligible for the following benefits.

Normal Retirement

The normal retirement requirement is attainment of age 50 and completion of 20 years and six months of service.

The normal retirement pension is payable 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.

The amount of annual pension is equal to 52% of the yearly salary of the member at the time of retirement or the highest average annual salary, which the member received during any five years preceding retirement, if higher. The calculation of salary includes base salary plus longevity increments.

Disability Retirement

A disability benefit is provided under permanent disability after completion of ten years of service. The disability retirement pension is 30% of salary at the time of disability plus 2% of salary for each year of service in excess of ten, up to a maximum pension of 50% of salary.

Such disability pension is reduced by Workers' Compensation benefits received if the disability was not incurred in the line of duty.

Preretirement Death Benefits

If a member dies prior to being eligible to retire, a death benefit is payable to his surviving spouse or, if no surviving spouse, to dependent children under the age of 18 equal to 30% of salary plus 2% of salary for each year of service in excess of ten, up to a maximum pension of 50% of salary.

If a member dies after being eligible to retire, a death benefit is payable to his surviving spouse or, if no surviving spouse, to dependent children under the age of 18 equal to the benefit the member would have been receiving had he been retired on the day of his death.

Employee Contributions

Members hired on or after January 1, 1988, contribute 5% of salary. Members hired on or after January 1, 2007, contribute 6% of salary. Employee contributions are not credited with interest. Contributions are refunded on termination before eligibility for retirement or on death if member is not eligible for widow or children's benefits.

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Actuarial Assumptions and Methods

Interest

8.00%

Salary

5.00% Annual Increase

Withdrawal

Table D-1: 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	5.5000%	35	2.5000%	50	0.0000%
25	5.0000%	40	1.0000%	55	0.0000%
30	4.0000%	45	0.5000%	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

Latest of age 52, age at the completion of 20 years of service if hired before January 1, 1988, age at the completion of 20 years and 6 months of service if hired on or after January 1, 1988, or age at the valuation date.

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 Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Actuarial Assumptions and Methods

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.

Cost-of-Living Increase

5.00% per year. For certain members who retired between January 1, 2003 and January 15, 2003 -
4.00% per year

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 on a 4.0% annual increase in covered payroll assumption and using level percentage of future payroll amortization of the increase in the unfunded actuarial accrued liability as of January 1, 2005, attributable to the change in the postretirement cost-of-living increase benefit based upon a 5.0% annual increase in covered payroll assumption.

City of York Paid Firefighter's Pension Fund
Actuarial Valuation
as of January 1, 2013

Section 1

Summary of Plan Assets and Summary of Plan Membership

City of York Paid Firefighter's Pension Fund
 Actuarial Valuation as of January 1, 2013
Receipts and Disbursements - January 1, 2011 to December 31, 2011

Market Value at 1/1/2011 \$ 24,225,589.00

Receipts

Employer Contributions		
Received	\$ 1,759,952.00	
Receivable at 1/1/2011	(1,713,901.00)	
Receivable at 12/31/2011	<u>1,858,187.00</u>	
Total Employer Contributions		\$ 1,904,238.00
Employee Contributions		
Received	\$ 190,923.00	
Receivable at 1/1/2011	(6,895.00)	
Receivable at 12/31/2011	<u>6,847.00</u>	
Total Employee Contributions		190,875.00
Investment Income Received		225,423.00
Change in Market Value		<u>(793,284.00)</u>
Total Receipts		1,527,252.00

Disbursements

Monthly Benefit Payments	\$ (2,157,484.00)	
Administrative Expenses	<u>(97,617.00)</u>	
Total Disbursements		<u>(2,255,101.00)</u>
Market Value at 12/31/2011		<u><u>\$ 23,497,740.00</u></u>
Approximate Net Dollar-Weighted Rate of Investment Return		<u>(2.45%)</u>

City of York Paid Firefighter's Pension Fund
 Actuarial Valuation as of January 1, 2013
Receipts and Disbursements - January 1, 2012 to December 31, 2012

Market Value at 1/1/2012 \$ 23,497,740.00

Receipts

Employer Contributions		
Received	\$ 1,940,345.00	
Receivable at 1/1/2012	(1,858,187.00)	
Receivable at 12/31/2012	<u>1,929,195.00</u>	
Total Employer Contributions		\$ 2,011,353.00
Employee Contributions		
Received	\$ 184,889.00	
Receivable at 1/1/2012	(6,847.00)	
Receivable at 12/31/2012	<u>0.00</u>	
Total Employee Contributions		178,042.00
Investment Income Received		233,284.00
Change in Market Value		<u>2,380,423.00</u>
Total Receipts		4,803,102.00

Disbursements

Monthly Benefit Payments	\$ (2,331,866.00)	
Administrative Expenses	<u>(96,828.00)</u>	
Total Disbursements		<u>(2,428,694.00)</u>
Market Value at 12/31/2012		<u><u>\$ 25,872,148.00</u></u>

Approximate Net Dollar-Weighted Rate of Investment Return 12.17%

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Assets and Liabilities

Assets

Cash	\$ 0.00	
Mutual Funds	<u>23,942,953.00</u>	
Total Assets in Fund		\$ 23,942,953.00
Employer Contributions Receivable		1,929,195.00
Employee Contributions Receivable		0.00
Accrued Income		<u>0.00</u>
Total Assets		\$ 25,872,148.00

Liabilities

Total Liabilities		<u>0.00</u>
Net Assets		<u><u>\$ 25,872,148.00</u></u>

City of York Paid Firefighter's Pension 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	67	
New Members During the Period	1	
Returned to Active	0	
Members No Longer Active:		
Retired with Disability Benefit	0	
Retired with Service Retirement Benefit	(7)	
Separated with Deferred Benefit	(1)	
Separated with Refund of Contributions	0	
Separated with Neither Deferred Benefit nor Refund of Contributions	0	
Deceased	(1)	
Total	(9)	
Active Members as of 1/1/2013	59	\$ 3,487,640
Vested Former Members	Number of Members	Annual Benefit
Vested Former Members as of 1/1/2011	0	
Separated with Deferred Benefit	1	
Beneficiary of Deceased Participant	0	
Returned to Active	0	
Retired with Service Retirement Benefit	0	
Deceased or Paid in Full	0	
Vested Former Members as of 1/1/2013	1	\$ 36,247
Retired Members		
Retired Members as of 1/1/2011	51	
Retired with Service Retirement Benefit	7	
Deceased or Paid in Full	(6)	
Retired Members as of 1/1/2013	52	\$ 1,660,441
Disabled Members		
Disabled Members as of 1/1/2011	5	
Retired with Disability Benefit	0	
Deceased	0	
Disabled Members as of 1/1/2013	5	\$ 123,242
Spouse Beneficiaries of Deceased Members		
Spouse Beneficiaries of Deceased Members as of 1/1/2011	21	
Additional Spouse Beneficiaries of Deceased Members	5	
Deceased	0	
Spouse Beneficiaries of Deceased Members as of 1/1/2013	26	\$ 573,038

City of York Paid Firefighter's Pension Fund
Actuarial Valuation
as of January 1, 2013

Section 2

Act 205 Funding Calculations

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Actuarial Value of Assets

	2009	2010	2011	2012
Market Value at 1/1	\$ 17,882,276.00	\$ 21,693,106.00	\$ 24,225,589.00	\$ 23,497,740.00
Contributions	2,211,462.00	2,154,459.00	2,095,113.00	2,189,395.00
Benefit Payments and Expenses	(2,133,108.00)	(2,189,513.00)	(2,255,101.00)	(2,428,694.00)
Expected Investment Income ¹	1,433,716.24	1,734,046.32	1,931,647.60	1,870,247.24
Expected Value at 12/31	\$ 19,394,346.24	\$ 23,392,098.32	\$ 25,997,248.60	\$ 25,128,688.24
Market Value at 12/31	21,693,106.00	24,225,589.00	23,497,740.00	25,872,148.00
Gain/(Loss): (Market Value less Expected Value)	\$ 2,298,759.76	\$ 833,490.68	\$ (2,499,508.60)	\$ 743,459.76
Percentage of Gain/(Loss) to be recognized in the future	20%	40%	60%	80%
Gain/(Loss) to be recognized in the future	\$ 459,751.95	\$ 333,396.27	\$ (1,499,705.16)	\$ 594,767.81
Market Value at 12/31/2012				\$ 25,872,148.00
Total (Gain)/Loss for 2009-2012 to be recognized in the future				<u>111,789.13</u>
Actuarial Value of Assets at 12/31/2012				<u>\$ 25,983,937.13</u>
2011 Approximate Net Dollar-Weighted Rate of Investment Return				0.45%
2012 Approximate Net Dollar-Weighted Rate of Investment Return				0.41%

¹ 8.00% annual interest rate

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

City of York Paid Firefighter's Pension Fund
 Actuarial Valuation as of January 1, 2013
Unfunded Actuarial Accrued Liability and Normal Cost

Unfunded Actuarial Accrued Liability

Actuarial Present Value of Future Benefits

Active Members Retirement Pension Benefits	\$ 17,560,784	
Active Members Disability Benefits	878,041	
Active Members Preretirement Death Benefits	119,101	
Active Members Refund of Member Contributions	100,093 ¹	
Vested Former Members Benefits	401,952	
Retired Members Benefits	22,938,842	
Disabled Members Benefits	1,686,847	
Surviving Spouses Benefits	<u>4,145,123</u>	
Total	\$ 47,830,783	
Actuarial Present Value of Future Normal Costs		<u>(3,155,457)</u>
Actuarial Accrued Liability	\$ 44,675,326	
Actuarial Value of Assets		<u>(25,983,937)</u>
Unfunded Actuarial Accrued Liability		<u><u>\$ 18,691,389</u></u>

Normal Cost

Normal Cost		<u><u>\$ 486,931</u></u>
Normal Cost as a Percentage of Annual Payroll		<u>14.0%</u>

¹ Accumulated Member Contributions Without Interest as of 1/1/2013 = \$2,020,767

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Analysis of the Change in the Unfunded Actuarial Accrued Liability

Unfunded Actuarial Accrued Liability at 1/1/2011 \$ 17,202,844

Additions

Normal Costs	\$ 1,203,248	
Administrative Expenses	194,445	
Interest on Unfunded Actuarial Accrued Liability, Normal Costs, and Administrative Expenses	<u>3,025,425</u>	
Total		4,423,118

Contributions

Employer Contributions	\$ (3,915,591)	
Employee Contributions	(368,917)	
Interest on Contributions	<u>(126,379)</u>	
Total		(4,410,887)

Adjustment for Funding Deviation (268,636)

Modification in the Benefit Plan 0

Change in Actuarial Assumptions 0

Actuarial Loss

Investment Loss	\$ 3,880,853	
Experience Gain	(2,404,539)	
Funding Deviation	<u>268,636</u>	
Total		<u>1,744,950</u>

Unfunded Actuarial Accrued Liability at 1/1/2013 \$ 18,691,389

City of York Paid Firefighter's Pension 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, 2002	\$ 1,699,746	\$ 1,427,794	\$ 134,651	20 Years	Investment Loss
January 1, 2003	(3,693,442)	(2,524,229)	(348,320)	10 Years	Assumption Chg.
January 1, 2003	4,557,377	3,974,591	374,833	20 Years	Investment Loss
January 1, 2003	675,974	315,332	73,123	5 Years	Other Actuarial Loss
January 1, 2005	9,415,508	11,263,608	677,333	22 Years ¹	COLA Amendment
January 1, 2005	1,981,228	1,000,841	232,101	5 Years	Active Amendment
January 1, 2005	1,105,554	558,493	129,515	5 Years	Actuarial Loss
January 1, 2007	(818,230)	(457,621)	(106,125)	5 Years	Assumption Chg.
January 1, 2007	1,587,217	887,702	205,863	5 Years	Actuarial Loss
January 1, 2009	(5,364,683)	(4,836,432)	(505,930)	16 Years	Assumption Chg.
January 1, 2009	8,087,649	7,291,269	762,727	16 Years	Actuarial Loss
January 1, 2011	(2,047,995)	(1,954,909)	(193,141)	18 Years	Actuarial Gain
January 1, 2013	1,744,950	1,744,950	164,562	20 Years	Actuarial Loss
Total	\$ 18,930,853	\$ 18,691,389	\$ 1,601,192		

Projected plan year in which the unfunded accrued liability is fully amortized is 2034.

Aggregation of Changes in Unfunded Actuarial Accrued Liability

Date of Aggregation	Aggregated Target Date	Outstanding Balance	Amortization Amount	Remaining Amortization
January 1, 2013	2038	\$ 18,691,389	\$ 1,601,192	26 Years

¹ Level Percentage of Future Payroll Amortization

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Illustration of Minimum Municipal Obligation

Financial Requirements

Normal Cost	\$ 486,931	
Administrative Expenses	97,223 ¹	
Amortization of Unfunded Actuarial Accrued Liability	<u>1,601,192</u>	
Total		\$ 2,185,346
Expected Member Contributions		<u>(175,090)</u>
Minimum Municipal Obligation		\$ 2,010,256
Estimated Allocation of General Municipal Pension System State Aid		<u>0</u>
Net Minimum Municipal Obligation		<u><u>\$ 2,010,256</u></u>

¹ Total Administrative Expenses for Plan Year 1/1/2011 to 12/31/2011 - \$ 97,617
Total Administrative Expenses for Plan Year 1/1/2012 to 12/31/2012 - \$ 96,828

City of York Paid Firefighter's Pension Fund
 Actuarial Valuation as of January 1, 2013
**Receipts and Disbursements Excluding Bond Issue Assets -
 January 1, 2011 to December 31, 2011**

Market Value at 1/1/2011 \$ 16,856,809.81

Receipts

Employer Contributions Received \$ 2,505,726.00

Employee Contributions

Received	\$ 190,923.00	
Receivable at 1/1/2011	(6,895.00)	
Receivable at 12/31/2011	6,847.00	
Total Employee Contributions Received	190,875.00	

Investment Income 156,855.33

Change in Market Value (551,988.10)

Total Receipts 2,301,468.23

Disbursements

Monthly Benefit Payments \$ (2,157,484.00)

Administrative Expenses (97,617.00)

Total Disbursements (2,255,101.00)

Market Value at 12/31/2011 \$ 16,903,177.04

City of York Paid Firefighter's Pension Fund
 Actuarial Valuation as of January 1, 2013
**Receipts and Disbursements Excluding Bond Issue Assets -
 January 1, 2012 to December 31, 2012**

Market Value at 1/1/2012 \$ 16,903,177.04

Receipts

Employer Contributions Received \$ 2,635,535.00

Employee Contributions

 Received \$ 184,889.00

 Receivable at 1/1/2012 (6,847.00)

 Receivable at 12/31/2012 0.00

 Total Employee Contributions Received 178,042.00

Investment Income 167,813.62

Change in Market Value 1,712,365.16

Total Receipts 4,693,755.78

Disbursements

Monthly Benefit Payments \$ (2,331,866.00)

Administrative Expenses (96,828.00)

Total Disbursements (2,428,694.00)

Market Value at 12/31/2012 \$ 19,168,238.82

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Assets and Liabilities Excluding Bond Issue Assets

Assets

Total Assets \$ 19,168,238.82

Liabilities

Total Liabilities 0.00

Net Assets \$ 19,168,238.82

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Actuarial Value of Assets

	2009	2010	2011	2012
Market Value at 1/1	\$ 11,351,926.52	\$ 14,469,112.07	\$ 16,856,809.81	\$ 16,903,177.04
Contributions	2,880,864.00	2,864,686.00	2,696,601.00	2,813,577.00
Benefit Payments and Expenses	(2,133,108.00)	(2,189,513.00)	(2,255,101.00)	(2,428,694.00)
Expected Investment Income ¹	938,064.36	1,184,535.89	1,366,204.78	1,367,649.48
Expected Value at 12/31	\$ 13,037,746.88	\$ 16,328,820.96	\$ 18,664,514.59	\$ 18,655,709.52
Market Value at 12/31	14,469,112.07	16,856,809.81	16,903,177.04	19,168,238.82
Gain/(Loss): (Market Value less Expected Value)	\$ 1,431,365.19	\$ 527,988.85	\$ (1,761,337.55)	\$ 512,529.30
Percentage of Gain/(Loss) to be recognized in the future	20%	40%	60%	80%
Gain/(Loss) to be recognized in the future	\$ 286,273.04	\$ 211,195.54	\$ (1,056,802.53)	\$ 410,023.44
Market Value at 12/31/2012				\$ 19,168,238.82
Total (Gain)/Loss for 2009-2012 to be recognized in the future				<u>149,310.51</u>
Actuarial Value of Assets at 12/31/2012				<u><u>\$ 19,317,549.33</u></u>
2011 Approximate Net Dollar-Weighted Rate of Investment Return				1.27%
2012 Approximate Net Dollar-Weighted Rate of Investment Return				1.50%

¹ 8.00% annual interest rate

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

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Unfunded Actuarial Accrued Liability Excluding Bond Issue Assets

Actuarial Present Value of Future Benefits	\$ 47,830,783
Actuarial Present Value of Future Normal Costs	<u>(3,155,457)</u>
Actuarial Accrued Liability	\$ 44,675,326
Actuarial Value of Assets	<u>(19,317,549)</u>
Unfunded Actuarial Accrued Liability	<u><u>\$ 25,357,777</u></u>

City of York Paid Firefighter's Pension Fund
 Actuarial Valuation as of January 1, 2013
**Analysis of the Change in the Unfunded Actuarial Accrued Liability
 Excluding Bond Issue Assets**

Unfunded Actuarial Accrued Liability at 1/1/2011		\$ 25,385,414
Additions		
Normal Cost	\$ 1,203,248	
Administrative Expenses	194,445	
Interest on Unfunded Actuarial Accrued Liability, Normal Costs, and Administrative Expenses	<u>4,387,005</u>	
Total		5,784,698
Contributions		
Employer Contributions	\$ (5,141,261)	
Employee Contributions	(368,917)	
Interest on Contributions	<u>(156,527)</u>	
Total		(5,666,705)
Adjustment for Funding Deviation		(320,608)
Modification in the Benefit Plan		0
Change in Actuarial Assumptions		0
Actuarial Loss		
Investment Loss	\$ 2,258,909	
Experience Gain	(2,404,539)	
Funding Deviation	<u>320,608</u>	
Total		<u>174,978</u>
Unfunded Actuarial Accrued Liability at 1/1/2013		<u><u>\$ 25,357,777</u></u>

City of York Paid Firefighter's Pension 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	\$ 8,455,560	\$ 11,741,136	\$ 1,193,979	12 Years ¹	Initial Unfunded
January 1, 1994	(589,503)	(55,579)	(55,579)	1 Year	Assumption Chg.
January 1, 1999	124,515	13,486	13,486	1 Year	Actuarial Loss
January 1, 2000	(221,882)	(46,225)	(24,002)	2 Years	Actuarial Gain
January 1, 2001	1,321,160	397,778	142,917	3 Years	Actuarial Loss
January 1, 2002	1,252,468	1,052,073	99,219	20 Years	Investment Loss
January 1, 2002	(265,548)	(102,763)	(28,725)	4 Years	Other Actuarial Gain
January 1, 2003	(1,998,283)	(1,365,703)	(188,453)	10 Years	Assumption Chg.
January 1, 2003	2,450,287	2,136,950	201,530	20 Years	Investment Loss
January 1, 2003	541,290	252,502	58,554	5 Years	Other Actuarial Loss
January 1, 2005	9,415,508	11,263,608	677,332	22 Years ¹	COLA Amendment
January 1, 2005	1,981,228	1,000,840	232,101	5 Years	Active Amendment
January 1, 2005	791,902	400,042	92,771	5 Years	Actuarial Loss
January 1, 2007	(422,381)	(236,231)	(54,783)	5 Years	Assumption Chg.
January 1, 2007	1,036,271	579,568	134,405	5 Years	Actuarial Loss
January 1, 2009	(3,405,577)	(3,070,234)	(321,172)	16 Years	Assumption Chg.
January 1, 2009	4,099,113	3,695,478	386,578	16 Years	Actuarial Loss
January 1, 2011	(2,591,728)	(2,473,927)	(244,420)	18 Years	Actuarial Gain
January 1, 2013	174,978	174,978	16,502	20 Years	Actuarial Loss
Total	\$ 22,149,378	\$ 25,357,777	\$ 2,332,240		

Projected plan year in which the unfunded accrued liability is fully amortized is 2034

Aggregation of Changes in Unfunded Actuarial Accrued Liability

Date of Aggregation	Aggregated Target Date	Outstanding Balance	Amortization Amount	Remaining Amortization
January 1, 2013	2041	\$ 13,616,641	\$ 1,138,261	29 Years

¹ Level Percentage of Future Payroll Amortization

City of York Paid Firefighter's Pension Fund
Actuarial Valuation
as of January 1, 2013

Section 3

Supplemental Information for GASB Reporting

City of York Paid Firefighter's Pension Fund
 Actuarial Valuation as of January 1, 2013
 Supplemental Information for GASB Statement Nos. 67 & 68 Reporting

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	\$ 24,225,589	\$ 43,362,544	\$ 19,136,955	44.1%	55.9%	\$ 3,869,316	494.6%
1/1/2012	23,497,740						
1/1/2013	25,872,148	44,675,326	18,803,178	42.1%	57.9%	3,487,640	539.1%

Schedule of Interest Rate Sensitivity Testing

Interest Rate ¹	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%	\$ 25,872,148	\$ 49,584,880	\$ 23,712,732	47.8%	52.2%
8.00%	25,872,148	44,675,326	18,803,178	42.1%	57.9%
9.00%	25,872,148	40,521,340	14,649,192	36.2%	63.8%

¹ Valuation interest rate is 8.00%

City of York Paid Firefighter's Pension Fund
 Actuarial Valuation as of January 1, 2013
Supplemental Information for GASB Statement Nos. 67 & 68 Reporting

Schedule of Changes to Unfunded Actuarial Accrued Liability ¹

Modification in Plan	\$	0
Changes in Actuarial Assumptions		0
2011 Investment (Gain)/Loss		2,285,332
2012 Investment (Gain)/Loss		(548,637)
Experience (Gain)/Loss		(2,404,539)

Schedule of Contributions from the Employer and Other Contributing Entities

Year	Actuarially ² Determined Contribution	Contributions ³ From Employer	Contribution Deficiency/ (Surplus)
2003	\$ 293,896	\$ 293,896	\$ 0
2004	509,242	509,242	0
2005	545,584	545,584	0
2006	1,621,527	1,621,527	0
2007	1,641,164	1,641,164	0
2008	1,681,386	1,681,387	(1)
2009	1,785,031	2,018,478	(233,447)
2010	1,805,385	1,960,365	(154,980)
2011	1,715,778	1,904,238	(188,460)
2012	1,756,473	2,011,353	(254,880)

¹ Determined on a market value basis

² Minimum Municipal Obligation under Act 205 of 1984

³ Includes general municipal pension system State aid

City of York Paid Firefighter's Pension Fund
Actuarial Valuation as of January 1, 2013
Supplemental Information for GASB Statement Nos. 67 & 68 Reporting

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 Paid Firefighter's Pension Fund
Actuarial Valuation
as of January 1, 2013

Section 4

Participant Information

CITY OF YORK PAID FIREFIGHTER'S PENSION FUND

DEMOGRAPHIC DATA FOR ACTIVE MEMBERS

01/01/2013

Age	Years of Service										Total	
	0-1	2	3	4-5	6-10	11-15	16-20	21-25	26-30	30+		
Under No. of 20 Payroll (\$000)	0	0	0	0	0	0	0	0	0	0	0	0
20-24 No. of Payroll (\$000)	0	2	0	0	0	0	0	0	0	0	0	2
25-29 No. of Payroll (\$000)	1	104	0	0	0	0	0	0	0	0	0	104
30-34 No. of Payroll (\$000)	41	1	0	0	0	0	0	0	0	0	0	2
35-39 No. of Payroll (\$000)	0	52	0	0	0	0	0	0	0	0	0	52
40-44 No. of Payroll (\$000)	0	0	0	0	1	0	0	0	0	0	0	1
45-49 No. of Payroll (\$000)	0	0	0	0	57	3	1	0	0	0	0	6
50-54 No. of Payroll (\$000)	0	0	0	0	114	173	62	0	0	0	0	349
55-59 No. of Payroll (\$000)	0	0	0	0	0	6	7	0	0	0	0	13
60-64 No. of Payroll (\$000)	0	0	0	0	0	347	417	0	0	0	0	764
65 & Over Payroll (\$000)	0	0	0	0	0	6	3	2	0	0	0	12
	0	0	0	0	57	348	177	143	0	0	0	725
	0	0	0	0	0	5	6	2	0	0	1	14
	0	0	0	0	0	290	361	127	0	0	72	850
	0	0	0	0	0	0	3	59	1	1	2	7
	0	0	0	0	0	0	117	0	0	60	130	428
	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	0	0	0	0	0	0	0	0	0	117
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0

Total Members	1	3	0	0	4	20	22	5	1	3	59
Total Annual Payroll	41	156	0	0	228	1,158	1,313	329	60	202	3,487
Average Age: 45.8 Years Average Service to Date: 15.8 Years Average Salary: \$59,110											
Number of Males: 59 Number of Females: 0 Number Inactive: 0											

CITY OF YORK PAID FIREFIGHTER'S PENSION 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	0	0
45 - 49	1	31,191
50 - 54	8	242,089
55 - 59	6	213,525
60 - 64	9	284,736
65 - 69	19	600,622
70 - 74	13	379,728
75 - 79	5	102,864
80 - 84	12	353,833
Over 84	10	148,133
TOTALS	83	2,356,721

MEMBERS TERMINATED WITH VESTING

AGE	NUMBER	ANNUAL PENSIONS PAYABLE (\$)
Under 25	0	0
25 - 29	0	0
30 - 34	0	0
35 - 39	0	0
40 - 44	0	0
45 - 49	1	36,247
50 - 54	0	0
55 - 59	0	0
60 - 64	0	0
65 - 69	0	0
Over 69	0	0
TOTALS	1	36,247