



April 24, 2015

Mr. Ricky Thompson  
City Clerk  
City of Starke Firefighters' Retirement System  
P.O. Box C – 209 N. Thompson Street  
Starke, Florida 32091-1278

**Re: Actuarial Valuation – Firefighters**

Dear Ricky:

As requested, we are pleased to enclose fifteen (15) copies of the October 1, 2014 Actuarial Valuation Report for the City of Starke Firefighters' Retirement System.

We appreciate the opportunity to work with the Board on this important project and look forward to presenting the key financial results of our Report at the April 29<sup>th</sup> Board Meeting.

As you are aware, a copy of the Report should be filed with the State at the following address upon approval by the Board.

Mr. Douglas E. Beckendorf, A.S.A.  
Bureau of Local Retirement Services  
Division of Retirement  
Building 8  
Post Office Box 9000  
Tallahassee, Florida 32315-9000

Ms. Sarah Carr  
Office of Municipal Police Officers'  
& Firefighters' Pension Fund  
Building 8  
Post Office Box 3010  
Tallahassee, Florida 32315-3010

If you should have any questions concerning the above, please do not hesitate to contact us.

Sincerest regards,

Lawrence F. Wilson, A.S.A.  
Senior Consultant and Actuary

Enclosures

cc: Ronald Cohen, Esq. (w/ enclosure)  
Mr. David Kelly (w/ enclosure)  
Mr. Brad Million (w/ enclosure)

**CITY OF STARKE FIREFIGHTERS' RETIREMENT SYSTEM**  
*ACTUARIAL VALUATION AS OF OCTOBER 1, 2014*

This Valuation Determines the Annual Contribution for the System Year October 1, 2015 through September 30, 2016 to be Paid in System Year October 1, 2015 to September 30, 2016

April 24, 2015



**City of Starke Firefighters’  
Retirement System**

<b>TABLE OF CONTENTS</b>
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	<u>Page</u>
Commentary	1
I. Summary of Retirement Plan Costs .....	5
II. Comparison of Cost Data of Current and Prior Valuations .....	7
III. Characteristics of Participants in Actuarial Valuation .....	8
IV. Statement of Plan Assets .....	9
V. Reconciliation of Plan Assets .....	10
VI. Development of Smoothed Actuarial Value of Assets .....	11
VII. Actuarial Gains / (Losses) for Plan Year .....	12
VIII. Amortization of Unfunded Actuarial Accrued Liability .....	13
IX. Accounting Disclosure Exhibit .....	14
X. Outline of Principal Provisions of the Retirement System .....	23
XI. Actuarial Assumptions and Actuarial Cost Methods Used .....	27
XII. Distribution of Plan Participants by Attained Age Groups and Service Groups .....	33
XIII. Statistics for Participants Entitled to Deferred Benefits and Participants Receiving Benefits .....	34
XIV. Reconciliation of Employee Data .....	35
XV. Projected Retirement Benefits .....	36
XVI. Summary of Transaction Information .....	37
XVII. Recent Compensation, Termination and Investment Return Experience .....	38
XVIII. Employer Contribution Information .....	39
XIX. State Required Exhibit .....	40



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Mr. Ricky Thompson  
City Clerk  
City of Starke Firefighters' Retirement System  
P.O. Box C – 209 N. Thompson Street  
Starke, Florida 32091-1278

Dear Mr. Thompson:

### **October 1, 2014 Actuarial Valuation**

We are pleased to present our October 1, 2014 Actuarial Valuation Report for the City of Starke Firefighters' Retirement System. The purpose of this report is to indicate appropriate contribution levels, monitor minimum funding requirements, comment on the actuarial stability of the System and to satisfy State and accounting requirements. Gabriel, Roeder, Smith and Company (GRS), as System actuary, is authorized to prepare an annual Actuarial Valuation under Section 78-203 of the System. This Report is prepared for and at the request of the Board of Trustees.

This Report consists of this commentary, detailed Tables I through XVIII, and the State Required Exhibit on Table XIX. The Tables contain basic System cost figures plus significant details on the benefits, liabilities and experience of the System. We suggest you thoroughly review the report at your convenience and contact us with any questions that may arise.

### **Retirement System Costs**

Our Actuarial Valuation develops the required minimum Retirement System payment for fiscal year beginning **October 1, 2015** under the Florida Protection of Public Employee Retirement Benefits Act and Chapter 175. The minimum payment consists of payment of annual normal costs including expenses and amortization of the components of the unfunded actuarial accrued liability over various periods as prescribed by law. The minimum payment is **47.7% of covered payroll (\$185,863)**. The figure in parentheses is the System cost expressed as an estimated dollar amount based on projected covered annual payroll for fiscal year beginning October 1, 2015 (\$389,833).

This total cost is to be met by member, City and State contributions. We anticipate member contributions will be **5.0% of covered payroll** for fiscal year ending September 30, 2016 for full-time Firefighters (**\$16,704**), **6.0% of covered payroll** for fiscal year ending September 30, 2016 for volunteer Firefighters (**\$3,346**), member pick-up contributions will be **5.0% of covered full-time payroll** for fiscal year ending September 30, 2016 (**\$16,704**) and allowable State contributions will be **7.8% of covered payroll** for fiscal year ending September 30, 2016 (**\$30,248**). This leaves a base City requirement of **30.5% of covered total payroll** for fiscal year ending September 30, 2016 (**\$118,861**). The City contribution includes an interest adjustment and must be increased if 2016 State contributions are less than \$30,248.

### **Changes in Actuarial Assumptions, Methods and System Benefits**

System benefit provisions remain unchanged from the October 1, 2013 Actuarial Valuation and are summarized on Table X.

The actuarial assumptions and methods remain unchanged from the October 1, 2013 Actuarial Valuation. The actuarial assumptions and methods are summarized on Table XI.

Government Accounting Standards Board Statement Number 68 (GASB No. 68) expense and projected disclosures are included. Share Plan assets and liabilities are included in System assets and liabilities consistent with GASB No. 67 / 68 requirements.

### **Comparison of October 1, 2013 and October 1, 2014 Valuation Results**

Table II of our report provides information of a comparative nature. The left columns of the Table indicate the costs as calculated for October 1, 2013. The right columns indicate the costs as calculated for October 1, 2014.

Comparing the left and right columns of Table II shows the effect of System experience during the year. The number of active participants increased by approximately 3% while covered payroll increased by approximately 1%. Total System membership increased by approximately 3%. Total normal cost increased both as a percentage of covered payroll and as a dollar amount. The unfunded actuarial accrued liability decreased both as a percentage of covered payroll and as a dollar amount. The net Base City minimum funding requirement decreased both as a percentage of covered payroll and as a dollar amount.

The value of vested accrued benefits continues to exceed System assets, resulting in a Vested Benefit Security Ratio (VBSR) of 100.4% which is an increase from 88.1% as of October 1, 2013. The VBSR is measured on a market value of assets basis.

### **System Experience**

Table VII indicates net System experience resulted in an actuarial gain of \$204,453. This suggests actual overall experience was more favorable than expected.

Table XVII provides figures on recent System experience (salary, turnover and investment yield). Salary experience indicates actual salary increases were approximately 1.2% for full-time Firefighters. This was less than the assumption for salary increases of 5.7% and was generally a source of actuarial gain. There was no turnover this year amongst full-time Firefighters. Full-time Firefighter turnover was generally an offsetting source of actuarial loss.

The smoothed actuarial value investment return of 8.86% was more than the 7.75% assumption for investment return. Smoothed actuarial value investment return was a source of actuarial gain during the year. The three, five and ten-year average annual smoothed actuarial value investment returns are

7.5%, 4.5% and 4.4%, respectively. The one, three, five and ten-year average annual returns based upon market value are 11.83%, 12.9%, 8.8% and 4.8%, respectively.

### **Member Census and Financial Data**

The City submitted Member census data as of October 1, 2014 used for this actuarial valuation to us. This information includes name, Social Security number, date of birth, date of hire, employee contributions and actual salary paid for the previous year. Dates of termination and retirement are provided where applicable. The City updated information on inactive participants including retirees, beneficiaries, DROPs and vested terminations.

We received financial information as of September 30, 2014 concerning fund assets from the City. We do not audit the Member census data and asset information that is provided to us. However, we perform certain reasonableness checks and on this basis we believe that the information that we received is reliable.

### **Summary**

In our opinion the benefits provided for under the current System will be sufficiently funded through the payment of the amount as indicated in this and future Actuarial Valuation reports. We will continue to update you on the future payment requirements for the System through our actuarial valuation reports. These reports will also continue to monitor emerging experience of the System.

The actuarial assumptions used in this Actuarial Valuation are as adopted by the Board of Trustees. Each assumption represents an estimate of future System experience.

If all actuarial assumptions are met and if all future minimum required contributions are paid, System assets will be sufficient to pay all System benefits. System minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act and Firefighters Retirement Chapter 175 with normal cost determined as a level percent of covered payroll and a level percent amortization payment using a maximum amortization period of 30 years.

The VBSR may be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations based upon funding assumptions but may not be appropriate for assessing the need for or the amount of future contributions.

The GASB Plan Fiduciary Net Position as a Percentage of Total Pension Liability may not be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from anticipated under 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 the end of an amortization period) and changes in System provisions or applicable law. Due

to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report should not be relied upon for any purpose other than the purpose described in the primary communication. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the System as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

This report may be provided to parties other than the Board only in its entirety and only with the permission of an approved representative of the Board.

The signing actuaries are independent of the System sponsor.

The undersigned are Members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. We are available to respond to any questions with regards to matters covered in this report.

Very truly yours,



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Lawrence F. Wilson, A.S.A.  
Senior Consultant and Actuary



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Jennifer M. Borregard, E.A.  
Consultant and Actuary



Table I

**City of Starke Firefighters'  
Retirement System**

**Summary of Retirement Plan Costs as of October 1, 2014**

	<b><u>Cost Data</u></b>	<b><u>% of Payroll</u></b>
A. Participant Data Summary (Table III)		
1. Active employees	33	N/A
2. Terminated vested	0	N/A
3. Receiving benefits (including DROPs)	6	N/A
4. Annual payroll of active employees	\$ 382,189	100.0%
B. Total Normal Costs		
1. Age retirement benefits	\$ 75,411	19.7%
2. Termination benefits	4,100	1.1%
3. Death benefits	1,667	0.4%
4. Disability benefits	2,778	0.7%
5. Estimated expenses	39,000	10.2%
6. Total annual normal costs	<u>\$ 122,956</u>	32.2%
C. Total Actuarial Accrued Liability		
1. Age retirement benefits active employees	\$ 1,795,246	469.7%
2. Termination benefits active employees	13,929	3.6%
3. Death benefits active employees	31,540	8.3%
4. Disability benefits active employees	17,645	4.6%
5. Retired or terminated vested participants receiving benefits including DROP participants	1,448,142	378.9%
6. Terminated vested participants entitled to future benefits	0	0.0%
7. Deceased participants whose beneficiaries are receiving benefits	86,707	22.7%
8. Disabled participants receiving benefits	0	0.0%
9. Miscellaneous liability	0	0.0%
10. Share Plan liability	78,403	20.5%
11. Total actuarial accrued liability	<u>\$ 3,471,612</u>	908.3%
D. Smoothed Actuarial Value of Assets (Table VI)	\$ 2,827,628	739.9%
E. Unfunded Actuarial Accrued Liability (C-D)	\$ 643,984	168.5%

**City of Starke Firefighters'  
Retirement System**

**Summary of Retirement Plan Costs as of October 1, 2014**

	<b><u>Cost Data</u></b>	<b><u>% of Payroll</u></b>
F. Minimum Required Contribution		
1. Total normal cost	\$ 122,956	32.2%
2. Amortization of unfunded liability	52,166	13.6%
3. Interest adjustment	7,097	1.9%
4. Total required contribution	\$ 182,219	47.7%
G. Expected payroll of active employees for 2015-2016 year (\$382,189 x 1.02)	\$ 389,833	100.0%
H. Contribution Sources (percent of expected 2015-2016 payroll)		
1. Expected City		
a. Base	\$ 118,861	
b. Member pick-up	16,704 <sup>1</sup>	
c. Total expected City	\$ 135,565	34.8%
2. Expected State	30,248	7.8%
3. Expected Member		
a. Full-time member	\$ 16,704 <sup>1</sup>	
b. Volunteer member	3,346 <sup>2</sup>	
c. Total member	20,050	5.1%
4. Total expected minimum required contribution	\$ 185,863	47.7%
I. Actuarial Gains / (Losses) (Table VII)	\$ 204,453	53.5%
J. Actuarial Present Value of Vested Accrued Benefits		
1. Retired, terminated vested, beneficiaries and disabled receiving benefits including DROP participants	\$ 1,534,849	401.6%
2. Terminated vested participants entitled to future benefits and miscellaneous (including Share Plan)	78,403	20.5%
3. Active participants entitled to future benefits	1,342,723	351.3%
4. Total actuarial present value of vested accrued benefits	\$ 2,955,975	773.4%
K. Market Value of Assets (Table V)	\$ 2,967,952	776.6%
L. Unfunded Actuarial Present Value of Vested Accrued Benefits (J. - K., not less than zero)	\$ 0	0.0%
M. Vested Benefit Security Ratio (K. ÷ J.)	100.4%	N/A

<sup>1</sup> 5% of expected 2015-2016 full-time covered payroll (\$334,070)

<sup>2</sup> 6% of expected 2015-2016 volunteer covered payroll (\$55,763)

Table II

**City of Starke Firefighters'  
Retirement System**

**Comparison of Cost Data of October 1, 2013 and October 1, 2014 Valuations**

	October 1, 2013		October 1, 2014	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants				
1. Active employees	32	N/A	33	N/A
2. Terminated vested	0	N/A	0	N/A
3. Receiving benefits (including DROPs)	6	N/A	6	N/A
4. Annual payroll of active employees	\$ 380,115	100.0%	\$ 382,189	100.0%
5. Projected annual payroll of active employees	\$ 389,998	102.6%	\$ 389,833	102.0%
B. Total Normal Costs	\$ 119,807	31.5%	\$ 122,956	32.2%
C. Total Actuarial Accrued Liability	\$ 3,368,877	886.3%	\$ 3,471,612	908.3%
D. Smoothed Actuarial Value of Assets	\$ 2,466,636	648.9%	\$ 2,827,628	739.9%
E. Unfunded Actuarial Accrued Liability	\$ 902,241	237.4%	\$ 643,984	168.5%
F. Net Base City Cost	\$ 130,203	33.4% <sup>1</sup>	\$ 118,861	30.5% <sup>2</sup>
G. Actuarial Gain (Loss)	\$ 80,925	21.3%	\$ 204,453	53.5%
H. Unfunded Actuarial Present Value of Vested Accrued Benefits	\$ 340,484	89.6%	\$ 0	0.0%
I. Vested Benefit Security Ratio	88.1%	N/A	100.4%	N/A

<sup>1</sup> Percent of expected 2014-2015 covered payroll (\$389,998)

<sup>2</sup> Percent of expected 2015-2016 covered payroll (\$389,833)

**Table III**

**City of Starke Firefighters'  
Retirement System**

**Characteristics of Participants in  
Actuarial Valuation as of October 1, 2014**

**A. Active Plan Participants Summary**

1. Active participants fully vested	10
2. Active participants partially vested	0
3. Active participants non-vested	23
4. Total active participants	<u>33</u>
5. Annual rate of pay of active participants	\$ 382,189

**B. Retired and Terminated Vested Participant Summary**

1. Retired or terminated vested participants receiving benefits including DROP participants	3
2. Terminated vested participants entitled to future benefits	0
3. Deceased participants whose beneficiaries are receiving benefits	3
4. Disabled participants receiving benefits	0

**C. Projected Annual Retirement Benefits**

1. Retired or terminated vested receiving benefits including DROP participants	\$ 107,320
2. Terminated vested entitled to future benefits	0
3. Beneficiaries of deceased participants	24,192
4. Disabled participants	0

**Table IV****City of Starke Firefighters'  
Retirement System****Statement of System Assets as of October 1, 2014**

	<u>Market Value</u>
A. <u>Cash</u>	\$ 86,814
B. <u>General Investments</u>	
1. Cash equivalents	\$ 399,242
2. Corporate bonds	\$ 438,596
3. Common stocks	\$ 2,035,300
C. <u>Receivables</u>	
1. City contribution receivable	\$ 0
2. State contribution receivable	\$ 10,327
3. Other receivables	\$ 0
4. Accrued interest	\$ 3,840
D. <u>Accounts Payable</u>	\$ 6,167
E. <u>Total System Assets</u> (A + B + C - D)	\$ 2,967,952

Table V

**City of Starke Firefighters'  
Retirement System**

**Reconciliation of System Assets**

A. <u>Total Market Value of Assets as of October 1, 2013</u>		\$	2,524,896
B. <u>Receipts During Period</u>			
1. Contributions			
a. Member	\$	19,703	
b. Member (picked up by City)		16,376	
c. City		175,113	
d. State		41,482	
e. Total	\$	<u>252,674</u>	
2. Investment Income			
a. Interest, dividends and other	\$	44,382	
b. Investment expenses		<u>(26,989)</u>	
c. Net investment income	\$	17,393	
3. Net realized gains / (losses)		58,506	
4. Net unrealized gains / (losses)		<u>230,739</u>	
5. Total receipts during period			\$ 559,312
C. <u>Disbursements During Period</u>			
1. Pension payments	\$	86,205	
2. DROP distributions		0	
3. Share Plan distributions		0	
4. Contribution refunds		375	
5. Administrative expenses		<u>29,676</u>	
6. Total disbursements during period			\$ 116,256
D. <u>Total Market Value of Assets as of September 30, 2014</u>		\$	2,967,952
E. <u>Share Plan</u>			
1. Balance as of October 1, 2013	\$	58,560	
2. Adjustment		0	
3. Increase from State funds received		11,234	
4. Investment gains / (losses) during year		9,809	
5. Administrative fees		(1,200)	
6. Distributions		<u>0</u>	
7. Balance as of September 30, 2014			\$ 78,403
F. <u>Reconciliation of DROP Account Balances</u>			
1. DROP account balances as of October 1, 2013	\$	115,784	
2. Benefit payments into DROP accounts during year		53,032	
3. Investment gains / (losses) during year		6,041	
4. Distributions from DROP accounts during year		<u>0</u>	
5. DROP account balances as of September 30, 2014			\$ 174,857

**City of Starke Firefighters'  
Retirement System**

**Development of Smoothed Actuarial Value of Assets as of September 30**

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
A. Preliminary total smoothed actuarial value from prior year	\$ 2,190,328	\$ 2,466,636	\$ 2,827,628		
B. Market value beginning of year	2,215,397	2,524,896	2,967,952		
C. Market value end of year	2,524,896	2,967,952			
D. Non-investment net cash flow	106,585	136,418			
E. Investment return					
1. Total market value return: C. - B. - D.	202,914	306,638			
2. Amount for immediate recognition (7.75%)	173,881	196,450			
3. Amount for phased-in recognition: E.1. - E.2.	29,033	110,188			
F. Phased-in recognition of investment return					
1. Current year: 25% of E.3.	7,258	27,547			
2. First prior year	43,168	7,258	27,547		
3. Second prior year	(49,851)	43,168	7,258	27,547	
4. Third prior year	(4,733)	(49,849)	43,166	7,259	27,547
5. Total phased-in recognition of investment return	(4,158)	28,124	77,971	34,806	27,547
G. Total smoothed actuarial value end of year					
1. Preliminary total smoothed actuarial value end of year:					
A. + D. + E.2. + F.5.	2,466,636	2,827,628			
2. Upper corridor limit: 120% of C.	3,029,875	3,561,542			
3. Lower corridor limit: 80% of C.	2,019,917	2,374,362			
4. Total smoothed actuarial value end of year:					
G.1., not more than G.2., nor less than G.3.	2,466,636	2,827,628			
H. Difference between total market value and total smoothed actuarial value	58,260	140,324			
I. Smoothed actuarial value rate of return	7.56%	8.86%			
J. Market value rate of return	8.94%	11.83%			

Table VII

**City of Starke Firefighters'  
Retirement System**  
**Actuarial Gains / (Losses) for**  
**System Year Ended September 30, 2014\***

A. Derivation of Actuarial Gain / (Loss)

1. City and State net normal cost previous valuation	\$ 83,147
2. Unfunded actuarial accrued liability previous valuation	902,241
3. City and State net contributions previous year	205,361
4. Interest on:	
(a) City and State net normal cost	\$ 6,444
(b) Unfunded actuarial accrued liability	69,924
(c) City and State net contributions	7,958
(d) Net total: (a) + (b) - (c)	<u>\$ 68,410</u>
5. Expected unfunded actuarial accrued liability current year: (1. + 2. - 3. + 4.)	\$ 848,437
6. Actual unfunded actuarial accrued liability current year	<u>643,984</u>
7. Actuarial gain / (loss): (5. - 6.)	\$ 204,453

B. Approximate Portion of Gain / (Loss)  
due to Investments

1. Smoothed actuarial value of net assets previous year	\$ 2,408,076
2. Net contributions during period	241,440
3. Benefits and admin expenses during period	116,256
4. Expected net appreciation for period	<u>191,477</u>
5. Expected smoothed actuarial value of net assets current year: (1. + 2. - 3. + 4.)	\$ 2,724,737
6. Actual smoothed actuarial value of net assets current year	\$ 2,749,225
7. Approximate investment gain / (loss) due to investments: (6. - 5.)	\$ 24,488

C. Approximate Portion of Gain / (Loss)  
due to Liabilities: A. - B.

	\$ 179,965
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\* Net of Share Plan



**City of Starke Firefighters'  
Retirement System**

**Amortization of Unfunded Actuarial Accrued Liability**

A. Actuarial Accrued Liability Remaining Unfunded

<u>Date</u>	<u>Unfunded Liability</u>	<u>Amortization Payment</u>
October 1, 2014	\$ 643,984	\$ 52,166
October 1, 2015	\$ 637,684	\$ 53,209
October 1, 2016	\$ 629,772	\$ 54,274
October 1, 2017	\$ 620,099	\$ 55,359
October 1, 2018	\$ 608,507	\$ 56,468
...		
...		
October 1, 2044	\$ 0	\$ 0

B. Covered Payroll History

<u>Date</u>	<u>Covered Payroll *</u>	<u>Annual Increase</u>
October 1, 2014	\$ 382,189	0.5%
October 1, 2013	\$ 380,115	1.2%
October 1, 2012	\$ 375,673	(0.1%)
October 1, 2011	\$ 375,911	(15.6%)
October 1, 2010	\$ 445,263	20.7%
October 1, 2009	\$ 368,919	(1.4%)
October 1, 2008	\$ 373,979	29.3%
October 1, 2007	\$ 289,194	4.7%
October 1, 2006	\$ 276,102	5.9%
October 1, 2005	\$ 260,780	(17.2%)
October 1, 2004	\$ 314,817	N/A

Ten-Year Average Annual Increase 2.0%

\* Excludes DROP payroll

**City of Starke Firefighters'  
Retirement System**

**Accounting Disclosure Exhibit**

	<b>10/01/2013</b>	<b>10/01/2014</b>
<b>I. <u>Number of System Members</u></b>		
a. Receiving benefits including DROPs	6	6
b. Terminated due deferred benefits	0	0
c. Active plan members	32	33
d. Total	38	39
<b>II. <u>Financial Accounting Standards Board Allocation</u></b> <b><u>As of October 1, 2014</u></b>		
<b>A. <u>Statement of Accumulated System Benefits</u></b>		
1. Actuarial present value of accumulated vested system benefits		
a. Participants currently receiving benefits including DROP participants	\$ 1,549,546	\$ 1,534,849
b. Other participants (including Share Plan)	1,315,834	1,421,126
c. Total	\$ 2,865,380	\$ 2,955,975
2. Actuarial present value of accumulated non-vested plan benefits	21,292	20,201
3. Total actuarial present value of accumulated system benefits	\$ 2,886,672	\$ 2,976,176
<b>B. <u>Statement of Change in Accumulated System Benefits</u></b>		
1. Actuarial present value of accumulated system benefits as of October 1, 2013		\$ 2,886,672
2. Increase (decrease) during year attributable to:		
a. Plan amendment		\$ 0
b. Change in actuarial assumptions		0
c. Benefits paid including refunds		(86,580)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period		176,084
e. Net increase		\$ 89,504
3. Actuarial present value of accumulated System benefits as of October 1, 2014		\$ 2,976,176
<b>C. <u>Significant Matters Affecting Calculations</u></b>		
1. Assumed rate of return used in determining actuarial present values		7.75%
2. Change in System provisions		None.
3. Change in actuarial assumptions		None.

**City of Starke Firefighters'  
Retirement System**

**Accounting Disclosure Exhibit**

**III. Net Pension Liability and Related Ratios (GASB No. 67 & No. 68)**

Measurement date	<u>Actual 9/30/2014</u>	<u>Projected 9/30/2015*</u>
<b>A. <u>Total Pension Liability (TPL)</u></b>		
Service Cost	\$ 83,807	\$ 83,956
Interest	269,498	272,110
Benefit Changes	0	0
Difference Between Actual and Expected Experience	(90,269)	(169,037)
Assumption Changes	0	0
Benefit Payments, including Refunds of Member Contributions	(86,580)	(88,932)
Net Change in Total Pension Liability	<u>\$ 176,456</u>	<u>\$ 98,097</u>
Total Pension Liability (TPL) - (beginning of year)	<u>3,464,193</u>	<u>3,640,649</u>
Total Pension Liability (TPL) - (end of year)	<u><u>\$ 3,640,649</u></u>	<u><u>\$ 3,738,746</u></u>
<b>B. <u>Plan Fiduciary Net Position</u></b>		
Contributions - City and State	\$ 216,595	\$ 157,898
Contributions - Member	19,703	19,492
Contributions - Member (picked up by City)	16,376	16,434
Net Investment Income	306,638	232,570
Benefit Payments, including Refunds of Member Contributions	(86,580)	(88,932)
Administrative Expenses	(29,676)	(39,000)
Other	0	0
Net Change in Plan Fiduciary Net Position	<u>\$ 443,056</u>	<u>\$ 298,462</u>
Plan Fiduciary Net Position - (beginning of year)	<u>2,524,896</u>	<u>2,967,952</u>
Plan Fiduciary Net Position - (end of year)	<u><u>\$ 2,967,952</u></u>	<u><u>\$ 3,266,414</u></u>
<b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b>	<b>\$ 672,697</b>	<b>\$ 472,332</b>
<b>D. <u>Plan Fiduciary Net Position as a Percentage of TPL: (B) / (A)</u></b>	<b>81.52 %</b>	<b>87.37 %</b>
<b>E. <u>Covered Employee Payroll</u></b>	<b>\$ 443,142</b>	<b>\$ 442,363</b>
<b>F. <u>NPL as a Percentage of Covered Employee Payroll: (C) / (E)</u></b>	<b>151.80 %</b>	<b>106.77 %</b>
<b>G. <u>Notes to Schedule:</u></b>		
Valuation Date	10/01/2013	10/01/2014
Update procedures used to roll forward TPL excluding DROP account balances and Share Plan to the measurement dates - actual DROP account balances and Share Plan as of measurement dates included in TPL.		
No benefit or assumption changes during the year.		

\* Projected - actual amounts will be available after fiscal year end

**City of Starke Firefighters'  
Retirement System**

**Accounting Disclosure Exhibit**

**IV. Schedule of Employer Contributions (GASB No. 67 & No. 68)**

<u>Fiscal Year Ended 9/30</u>	<u>Actuarially Determined Contribution</u>	<u>Actual Contribution</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll<sup>1,2</sup></u>	<u>Actual Contribution as a % of Covered Payroll</u>
2005	\$ 116,959	\$ 109,048	\$ 7,911	\$ 314,817	34.64%
2006	99,861	83,007	16,854	260,780	31.83%
2007	107,935	113,799	(5,864)	276,102	41.22%
2008	118,538	150,037	(31,499)	289,194	51.88%
2009	155,024	170,589	(15,565)	373,979	45.61%
2010	167,418	187,301	(19,883)	368,919	50.77%
2011	187,015	187,015	0	445,263	42.00%
2012	162,170	162,170	0	375,911	43.14%
2013	202,879	202,879	0	375,673	54.00%
2014	173,612	216,595	(42,983)	443,142	48.88%
2015 <sup>3</sup>	157,898	157,898	0	442,363	35.69%

<sup>1</sup> Projected prior to fiscal year ended September 30, 2014

<sup>2</sup> As reported for annual valuation - excludes DROP payroll, if any, prior to fiscal year ended September 30, 2014

<sup>3</sup> Projected - actual amounts will be available after fiscal year end

City of Starke Firefighters'  
Retirement System

Accounting Disclosure Exhibit

V. Notes to Schedule of Contributions (GASB No. 67 & No. 68)

**Valuation Date:** Actuarially determined contributions are calculated as of October 1st - two year(s) prior the fiscal year end in which contributions are reported.

**Methods and Assumptions Used to Determine Contribution Rates:**

Actuarial Cost Method	Entry Age
Amortization Method	Level Percentage of Pay, Closed
Amortization Period	30 years
Asset Valuation Method	4-year smoothed market
Inflation	3.5%
Salary Increases	3.5% - 7.5%
Investment Rate of Return	7.75%
Payroll Growth Assumption	5.0% per annum - not greater than historical 10-year average (2.0%).
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition
Mortality	For healthy participants, the RP 2000 Combined Mortality Table was used, with separate rates for males and females with Blue Collar Adjustment and fully generational mortality improvements projected to each future valuation date with Scale AA.  For disabled participants, the RP-2000 Disabled Mortality Table was used, with separate rates for males and females, and fully generational mortality improvements projected to each future payment date with Scale AA.

**Other Information:**

Benefit Changes

2006: One time post-retirement COLA for current retirees and beneficiaries

Assumption Changes

2012: Interest to be earned by Fund updated to 7.75% compounded annually, net of investment expenses, general increase in wage level due to inflation updated to 3.5%, administrative expenses updated to average of the preceding three fiscal years; 2009: mortality assumption for healthy lives updated to RP 2000 Combined Mortality Table with Blue Collar Adjustment with separate rates for males and females and fully generational mortality improvements projected by Scale AA to each future decrement date; mortality assumption for disabled lives updated to the RP 2000 Disabled Mortality Table with separate rates for males and females and fully generational mortality improvements projected by Scale AA to each future decrement date.

**City of Starke Firefighters'  
Retirement System**

**Accounting Disclosure Exhibit**

VI. Discount Rate (GASB No. 67 & No. 68)

A discount rate of 7.75% was used to measure the TPL. This discount rate was based on the expected rate of return on System investments of 7.75%. The projection of cash flows used to determine this discount rate assumed member contributions will be made at the current member contribution rate and employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member contribution rate. Based on these assumptions, the System's fiduciary net position was projected to be available to make all projected future expected benefit payments of current System members. Therefore, the long-term expected rate of return on System investments was applied to all periods of projected benefit payments to determine the TPL.

VII. Sensitivity of the NPL to the Discount Rate Assumption (GASB No. 67 & No. 68)

Measurement date: 9/30/2014

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	6.75%	7.75%	8.75%
NPL	\$ 1,108,363	\$ 672,697	\$ 308,380

Measurement date: 9/30/2015 \*

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	6.75%	7.75%	8.75%
NPL	\$ 912,051	\$ 472,332	\$ 101,474

\* Projected - actual amounts will be available after fiscal year end

**City of Starke Firefighters'  
Retirement System**

**Accounting Disclosure Exhibit**

**VIII. Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (GASB No. 68)**

Pension Expense for Fiscal Year Ending September 30, 2015 \$ 117,638

Summary of Outstanding Deferred Inflows and Outflows of Resources as of September 30, 2015

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between actual and expected experience on liabilities	0	83,105
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	0	84,538
Total	\$ 0	\$ 167,643

Summary of Deferred Outflows and Inflows of Resources that will be Recognized in Pension Expense in Future Years.

Year Ending 30-Sep	Amount
2016	\$ (28,298)
2017	(28,298)
2018	(28,298)
2019	(28,300)
2020	(7,164)
Thereafter	(47,285)

**City of Starke Firefighters'  
Retirement System**

**Accounting Disclosure Exhibit**

The following information is not required to be disclosed but is provided for informational purposes.

**IX. Components of Pension Expense (GASB No. 68)**

Measurement Date	<u>9/30/2014</u>	<u>Projected 9/30/2015*</u>
Service Cost	\$ 83,807	\$ 83,956
Interest on Total Pension Liability	269,498	272,110
Current-Period Benefit Changes	0	0
Contributions - Member	(36,079)	(35,926)
Projected Earnings on Plan Investments	(200,966)	(232,570)
Administrative Expenses	29,676	39,000
Other Changes in Plan Fiduciary Net Position	0	0
Recognition of Beginning Deferred Outflows / (Inflows) due to Liabilities	(7,164)	(20,370)
Recognition of Beginning Deferred Outflows / (Inflows) due to Assets	<u>(21,134)</u>	<u>(21,134)</u>
Total Pension Expense	<u>\$ 117,638</u>	<u>\$ 85,066</u>

\* Projected - actual amounts will be available after measurement date



**City of Starke Firefighters'  
Retirement System**

**Accounting Disclosure Exhibit**

The following information is not required to be disclosed but is provided for informational purposes.

**X. Recognition of Deferred Outflows and (Inflows) Due to Liabilities (GASB No. 68)**

Recognition of Deferred Outflows due to Differences Between Actual and Expected Experience on Liabilities

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2014	Recognition Amount for 2013 / 2014	Balance as of 9/30/2014
2013 / 2014	\$ 0	12.6	11.6	\$ 0	\$ 0
TOTAL				\$ 0	\$ 0

Recognition of Deferred (Inflows) due to Differences Between Actual and Expected Experience on Liabilities

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2014	Recognition Amount for 2013 / 2014	Balance as of 9/30/2014
2013 / 2014	\$ (90,269)	12.6	11.6	\$ (7,164)	\$ (83,105)
TOTAL				\$ (7,164)	\$ (83,105)

Recognition of Deferred Outflows due to Changes of Assumptions or Other Inputs

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2014	Recognition Amount for 2013 / 2014	Balance as of 9/30/2014
2013 / 2014	\$ 0	12.6	11.6	\$ 0	\$ 0
TOTAL				\$ 0	\$ 0

Recognition of Deferred (Inflows) due to Changes of Assumptions or Other Inputs

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2014	Recognition Amount for 2013 / 2014	Balance as of 9/30/2014
2013 / 2014	\$ 0	12.6	11.6	\$ 0	\$ 0
TOTAL				\$ 0	\$ 0

**City of Starke Firefighters'  
Retirement System**

**Accounting Disclosure Exhibit**

The following information is not required to be disclosed but is provided for informational purposes.

**XI. Recognition of Deferred Outflows and (Inflows) Due to Assets (GASB No. 68)**

Recognition of Deferred Outflows / (Inflows) due to Difference Between Projected and Actual Earnings on Pension Plan Investments

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2014	Recognition Amount for 2013 / 2014	Balance as of 9/30/2014
2013 / 2014	\$ (105,672)	5	4	\$ (21,134)	\$ (84,538)
			TOTAL	\$ (21,134)	\$ (84,538)

**City of Starke Firefighters'  
Retirement System**

**Outline of Principal Provisions of the Retirement System**

A. Normal Retirement:

1. Eligibility:

Earlier of:

- (a) Attainment of age 55 with completion of 10 years of credited service.
- (b) Completion of 25 years of credited service.

2. Mandatory Retirement Age

Age 60. Extensions granted with employer consent.

3. Amount of Pension

Total service times 3.50% of Final Average Salary. Maximum 100% of Final Average Salary.

4. Normal Form

The normal form of pension is a 10 year Certain and Life. Upon his or her death, 100% of the reduced benefit is continued for the remainder of the Certain period, if any. Optional forms are available on an actuarial equivalent basis.

5. Final Average Salary

Highest 3 consecutive years out of last 10. Salary includes base pay plus longevity pay. Lump sum payments paid at the time of retirement are not included in the determination of final average salary.

B. Early Retirement:

1. Eligibility:

Attainment of age 50 with completion of 10 years of credited service.

2. Amount of Pension

Computed as a normal retirement but reduced 3.0% for each year (0.25% for each month) that early retirement precedes the date the member would have been eligible for normal retirement.

City of Starke Firefighters'  
Retirement System

Outline of Principal Provisions of the Retirement System

C. Deferred Retirement:

1. Eligibility:

10 or more years of service. Pension begins at age 55.

2. Benefit:

Computed as a normal retirement pension but based upon service and Final Average Salary at time of termination.

D. Duty Disability Retirement:

1. Eligibility:

No age or service requirement. Must be in receipt of worker's compensation.

2. Benefit:

Computed as a normal retirement pension. Minimum benefit shall be 42% of Final Average Salary. Worker's compensation payments are offset, to the extent permitted by law.

E. Non-Duty Disability Retirement:

1. Eligibility:

10 or more years of service.

2. Benefit:

Computed as a normal retirement pension. Minimum benefit shall be 42% of Final Average Salary. Worker's compensation payments are offset, to the extent permitted by law.

F. Death Before Retirement:

1. Eligibility:

10 or more years of service.

2. Benefit:

Computed as a normal retirement pension but actuarially reduced in accordance with a 100% joint and survivor election.

**City of Starke Firefighters'  
Retirement System**

**Outline of Principal Provisions of the Retirement System**

G. Deferred Retirement Option Plan (DROP):

Members may elect to freeze their retirement benefit at normal retirement eligibility, and continue working for a maximum of 5 years. The retirement benefit will be calculated as of the date the member elects the DROP. This retirement benefit will be accumulated with interest at 4% during the DROP period in a DROP account. At actual termination, the member can rollover the DROP account balance or receive the balance directly with appropriate tax consequences. The retirement benefit calculated as of the date of the DROP election becomes payable directly to the retiree or beneficiary thereafter. Member pick-up contributions will cease at the date of DROP election. Disability and death before retirement provisions will no longer apply to members who enter the DROP.

H. Post-Retirement Cost-of-Living Adjustments:

Effective October 1, 1994 all current retired members and beneficiaries received an increase in their pension of \$75/month. (Effective October 1, 2004, all current retired members and beneficiaries received an increase in their pension of \$100/month.)

I. Annual Holiday Bonus:

\$100

J. Member Contributions:

5.00% of annual salary for full-time firefighters. 6.00% of annual salary for volunteer firefighters. This amount is refunded upon termination. The City currently picks-up the former 5.00% member contribution for full-time firefighters. For all employees hired prior to December 31, 1999, this amount is refunded upon termination of membership with 3 or more years of credited service in the absence of a pension. For all employees hired after December 31, 1999, this amount is refunded upon termination of membership with 10 or more years of credited service in the absence of a pension. Should a member die and no pension becomes or will become available, picked-up member contributions will be refunded even if the required years of service have not been attained.

If you terminate employment and receive a refund of contributions, you forfeit any rights to future benefits from the Retirement System. The taxable portion of any refund you receive is subject to an automatic 20% withholding for Federal income tax purposes, and a possible 10% excise tax. These taxes can be avoided, however, if you roll the taxable portion over to an Individual Retirement Account (IRA) or another qualified employer plan. This rollover will result in no tax being due until you begin withdrawing funds from the IRA or other qualified employer plan. The rollover of the distribution, however, MUST be made directly by the System to your chosen IRA or other qualified employer plan.

**City of Starke Firefighters'  
Retirement System**

**Outline of Principal Provisions of the Retirement System**

K. City Contributions:

Actuarially determined amounts which together with member contributions and premium tax monies are sufficient to at least cover the requirements of the funding objective.

L. Premium Tax Monies:

A distribution of property insurance premium tax monies collected by the State pursuant to Chapter 175, Florida Statutes.

M. Forfeiture of Retirement Benefits:

Retirement benefits granted by the Retirement System are subject to forfeiture if an employee is convicted of an offense specified in Section 112.3173 and 175.195, Florida Statutes, pursuant to the procedures set forth in the cited statutes.

N. Claims Procedure:

Claims for benefits should be filed with the Board of Trustees at the City Clerk's office. If the claim is denied, you will be notified and informed of the procedure to request a hearing before the Board of Trustees. An applicant for benefits must appeal said denial within 60 days of being informed of the denial by filing an appeal with the Board at the City Clerk's office. If no appeal is filed within the time period then the denial shall be final.

O. Disclaimer:

The preceding summary briefly describes the principal benefits of the Retirement System. Detailed benefit conditions and limitations are contained in the Retirement Ordinance which establishes the System. The Internal Revenue Code, Florida Statutes, and the Ordinance all govern the operation of the System, and should be consulted before taking any action concerning your participation or benefits. In the case of any conflict between this summary and the provisions of the Ordinance or other applicable law, the Ordinance or other applicable law will prevail. Copies of the Ordinance are available at the City Clerk's office.

P. Change From Previous Valuation:

None.

**City of Starke Firefighters'  
Retirement System**

**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

A. Mortality

For healthy participants, the RP 2000 Combined Mortality Table was used, with separate rates for males and females with Blue Collar Adjustment and fully generational mortality improvements projected to each future valuation date with Scale AA.

For disabled participants, the RP-2000 Disabled Mortality Table was used, with separate rates for males and females, and fully generational mortality improvements projected to each future payment date with Scale AA.

B. Interest to be Earned by Fund

7.75%, compounded annually, net of investment expenses.

C. Allowances for Expenses or Contingencies

Administrative expenses are projected to continue at the same dollar amount as the average of the preceding three fiscal years.

D. Employee Withdrawal Rates

The rates do not apply to members eligible to retire and do not include separation on account of death or disability. This estimate measures the probabilities of members leaving employment. These rates were first used for the September 30, 1983 valuation.

<u>Sample Ages</u>	<u>Years of Service</u>	<u>Withdrawal Rates Per 100 Employees</u>
ALL	0	12.0
	1	9.0
	2	7.0
	3	5.0
	4	4.5
25	5 & Over	4.5
30		3.9
35		2.3
40		0.9
45		0.5
50		0.5
55		0.5
60	0.5	

**City of Starke Firefighters'  
Retirement System**

**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

E. Disability Rates

These estimates represent the probabilities of active members becoming disabled.

<u>Sample Ages</u>	<u>Percent Becoming Disabled Within Next Year</u>	
	<u>Male</u>	<u>Female</u>
20	0.07%	0.03%
25	0.09%	0.05%
30	0.10%	0.07%
35	0.14%	0.13%
40	0.21%	0.19%
45	0.32%	0.28%
50	0.52%	0.45%
55	0.92%	0.76%
60	1.53%	1.10%

F. Salary Increase Factors

Employee salaries are estimated to increase between the date of hire and date of retirement. Salary increases occur in recognition of (i) individual merit and seniority, (ii) inflation-related depreciation of the purchasing power of salaries, and (iii) competition from other employers for personnel.

<u>Sample Age</u>	<u>Salary Increase</u>
20	7.5%
30	6.3%
40	5.7%
50	4.7%
60	3.7%

General increase in wage level due to inflation is 3.5%.

G. Payroll Growth Assumption

5.0% per annum - not greater than historical 10-year average (2.0%).



**City of Starke Firefighters'  
Retirement System**

**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

H. Retirement Rates

These rates are used to measure the probabilities of an eligible member retiring during the next year.

<b>Normal Retirement <u>Ages</u></b>	<b>Percent <u>Retiring</u></b>	<b>Normal Retirement <u>Ages</u></b>	<b>Percent <u>Retiring</u></b>
45	20%	55	20%
46	20%	56	15%
47	20%	57	10%
48	20%	58	10%
49	20%	59	10%
50	20%	60	10%
51	20%	61	10%
52	20%	62	10%
53	20%	63	10%
54	20%	64	20%
		65	100%

A Firefighter is eligible for retirement after 25 years of service or after attaining age 55 with 10 or more years of service.

Benefits accruing after age 65 are offset by actuarial gains from the deferred retirement.

The above rates for normal retirement were first used for the September 30, 1984 valuation.

<b>Early Retirement <u>Ages</u></b>	<b>Percent <u>Retiring</u></b>
50	20%
51	20%
52	20%
53	20%
54	20%

A Firefighter is eligible for early retirement at age 50 with 10 or more years of service.

The above rates for early retirement were first used for the September 30, 2001 valuation.

City of Starke Firefighters'  
Retirement System

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

I. Asset Valuation Method

The method used for determining the smoothed actuarial value of assets phases in the deviation between the expected and actual return on assets at the rate of 25% per year. The smoothed actuarial value of assets will be further adjusted to the extent necessary to remain within the corridor whose lower and upper limits are 80% and 120%, respectively, of the fair market value of system assets.

J. Cost Method

Normal Retirement, Termination, Disability, and Death Benefits: Entry-Age-Normal Cost Method. Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his entry age to his assumed retirement age to fund his estimated benefits, assuming the system had always been in effect. The normal cost for the system is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the system is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the assets of the system.

K. Change From Previous Valuation

None.

L. Technical Assumptions

1. Pay Increase Timing:

Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

2. Decrement Timing:

Decrements are assumed to occur mid-year.

City of Starke Firefighters'  
Retirement System

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

L. Technical Assumptions (cont'd)

3. Eligibility Testing:

Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

4. Benefit Service:

Exact fractional service is used to determine the amount of benefit payable.

5. Decrement Relativity:

Decrement rates are used directly from tabular rates - no adjustment for multiple decrement table effects.

6. Decrement Operation:

Disability and mortality decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during periods of retirement eligibility.

7. Incidence of Contributions:

Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.

8. Marriage Assumption:

100% of members are assumed to be married. Male spouses are assumed to be three years older than female spouses.

9. Normal Form of Benefit:

The assumed normal form of benefit is a benefit payable for life with 10 years of guaranteed payments. Optional forms are available on an actuarial equivalent basis for normal retirement.

10. Actuarial Equivalence Basis for Optional Forms of Payment:

7.5% interest and the RP 2000 Combined Healthy Male Mortality Table with Blue Collar adjustment projected to the fiscal year that contains the benefit commencement date for participants and the RP 2000 Combined Healthy Female Mortality Table projected to the fiscal year that contains the benefit commencement date for beneficiaries. Disabled lives are set forward 5 years.

City of Starke Firefighters'  
Retirement System

Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation

L. Technical Assumptions (cont'd)

11. Duty and Non-Duty Related Assumption:

50% are assumed in-service and 50% are assumed non-service for pre-retirement death and disability benefits.

12. Vested members:

Vested members who terminate with a benefit worth less than 100% of their accumulated member contribution balance are assumed to withdraw the balance of their accumulated employee contributions and forfeit any vested benefit.

13. Salary:

Salary reported for the actuarial valuation includes all amounts included in the final average compensation for benefit purposes.

Table XII

**City of Starke Firefighters'  
Retirement System  
Distribution by Attained Age Groups  
and Service Groups as of October 1, 2014**

<u>Attained</u> <u>Age Group</u>	-----COMPLETED YEARS OF SERVICE-----							<u>Total</u>
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30 &amp; Over</u>	
Under 25	2	-	-	-	-	-	-	2
25-29	5	3	-	-	-	-	-	8
30-34	2	6	2	-	-	-	-	10
35-39	1	-	-	2	-	-	-	3
40-44	-	1	2	-	1	-	-	4
45-49	-	1	-	-	1	2	-	4
50-54	1	1	-	-	-	-	-	2
55-59	-	-	-	-	-	-	-	0
60-64	-	-	-	-	-	-	-	0
65 & Over	-	-	-	-	-	-	-	0
<b>TOTAL</b>	<b>11</b>	<b>12</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>33</b>
				<u>10/01/2013</u>		<u>10/01/2014</u>		
Average Attained Age				35.55 years		35.02 years		
Average Hire Age				25.70 years		25.45 years		
Average Pay				\$ 11,879		\$ 11,581		
Percent Female				6.3%		6.1%		

**City of Starke Firefighters'  
Retirement System**

**Statistics for Participants Entitled to Deferred Benefits  
and Participants Receiving Benefits**

A. Entitled to Deferred Benefits

<b><u>Current Age Group</u></b>	<b><u>Count</u></b>	<b><u>Total Annual Benefit</u></b>	<b><u>Average Annual Benefit</u></b>
<b>Less than 40</b>	-	\$ -	\$ -
40-44	-	-	-
45-49	-	-	-
50-54	-	-	-
55-59	-	-	-
60-64	-	-	-
65 & Over	-	-	-
<b>TOTAL</b>	<hr style="width: 100%; border: 0.5px solid black; margin: 0;"/> -	<hr style="width: 100%; border: 0.5px solid black; margin: 0;"/> \$ -	\$ -

B. Receiving Benefits (including DROPs)

<b><u>Current Age Group</u></b>	<b><u>Count</u></b>	<b><u>Total Annual Benefit</u></b>	<b><u>Average Annual Benefit</u></b>
<b>Less than 50</b>	1	\$ 2,435	\$ 2,435
50-54	1	53,132	53,132
55-59	1	51,753	51,753
60-64	-	-	-
65-69	-	-	-
70-74	-	-	-
75 & Over	3	24,192	8,064
<b>TOTAL</b>	<hr style="width: 100%; border: 0.5px solid black; margin: 0;"/> 6	<hr style="width: 100%; border: 0.5px solid black; margin: 0;"/> \$ 131,512	\$ 21,919

Table XIV

**City of Starke Firefighters'  
Retirement System**

**Reconciliation of Employee Data**

<b>A. <u>Active Participants</u></b>	
1. Active participants previous year	32
2. Retired during year	(1)
3. Entered DROP	0
4. Died during year	0
5. Disabled during year	0
6. Vested terminated during year	0
7. Non-vested terminated during year	(1)
8. New active participants	3
9. Re-instated during year	0
10. Active participants current year	<u>33</u>
<b>B. <u>Participants Receiving Benefits</u></b>	
1. Participants receiving benefits previous year	5
2. New retired participants	1
3. Former DROPs now receiving benefits	0
4. New terminated vested receiving benefits	0
5. New disabled receiving benefits	0
6. New beneficiaries receiving benefits	0
7. Died or ceased payment during year	(1)
8. Retired or terminated vested receiving benefits current year	<u>5</u>
<b>C. <u>DROP Participants</u></b>	
1. DROP participants previous year	1
2. Died during year	0
3. Became disabled during year	0
4. Employment terminated and retired during year	0
5. Entered DROP during year	0
6. DROP participants current year	<u>1</u>
<b>D. <u>Terminated Vested Participants Entitled to Future Benefits</u></b>	
1. Terminated vested entitled previous year	0
2. Died during year	0
3. Commenced receiving benefits during year	0
4. New terminated vested	0
5. Terminated vested paid lump sum	0
6. Terminated vested entitled current year	<u>0</u>

**City of Starke Firefighters'  
Retirement System**

**Projected Retirement Benefits**

<b><u>Fiscal Year</u></b>	<b><u>Projected Total Annual Payout</u></b>
2015	\$ 141,964
2016	\$ 154,056
2017	\$ 165,082
2018	\$ 175,132
2019	\$ 188,081
2020	\$ 204,089
2021	\$ 220,292
2022	\$ 236,523
2023	\$ 252,258
2024	\$ 269,056

The above projected payout of System benefits during the next ten years is based on assumptions involving all decrements. The actual payouts may differ from the above estimates depending upon the death, salary and retirement experience of the System. However, since the projected payment is recomputed each valuation date, there is an automatic correction to the extent that actual experience varies from expected experience.



**Table XVI**

**City of Starke Firefighters'  
Retirement System**

**Summary of Transaction Information**

<u>Valuation Date</u>	<u>Benefits Paid <sup>1</sup></u>	<u>Administrative Expenses</u>	<u>Employee Contributions</u>	<u>City Contributions</u>	<u>City Contributions (Member Pick-up)</u>	<u>State Contributions</u>	<u>Smoothed Actuarial Value <sup>2,3</sup></u>
10/01/2014	\$ 86,580	\$ 29,676	\$ 19,703	\$ 175,113	\$ 16,376	\$ 41,482	\$ 2,827,628
10/01/2013	89,073	35,105	19,575	161,708	16,156	41,171	2,466,636
10/01/2012	143,356	53,138	19,355	123,399	15,920	38,771	2,085,908
10/01/2011	96,354	19,379	22,012	149,434	19,320	37,581	1,977,744
10/01/2010	91,345	22,418	22,592	149,928	20,619	37,373	1,885,006
10/01/2009	92,398	19,074	19,864	131,351	17,664	39,238	1,754,894
10/01/2008	89,747	28,896	18,893	110,400	17,674	39,637	1,670,448
10/01/2007	111,911	17,188	15,987	76,417	14,188	37,382	1,580,073
10/01/2006	93,620	15,428	13,631	54,040	12,819	28,967	1,467,896
10/01/2005	51,357	21,044	15,475	74,600	14,554	34,448	1,366,942
10/01/2004	39,681	20,699	15,236	65,402	14,330	21,435	1,235,022
10/01/2003	35,013	34,418	4,063	54,773	14,071	23,636	1,137,647
10/01/2002	43,132	22,590	3,890	36,415	13,473	24,101	1,079,544
10/01/2001	34,527	17,937	3,692	28,775	12,787	20,565	1,060,211
10/01/2000	45,283	9,748	4,095	26,827	11,818	25,145	1,021,145
10/01/1999	33,569	3,461	2,349	27,775	11,742	15,385	950,656

<sup>1</sup> Effective for year ending September 30, 2013, includes DROP distributions (previously included DROP benefit payments)

<sup>2</sup> Effective for year ending September 30, 2013, includes DROP account balances

<sup>3</sup> Prior to October 1, 2009 and effective for year ending September 30, 2013, actuarial value included the excess State contribution reserve

Table XVII

**City of Starke Firefighters'  
Retirement System**

**Recent Compensation, Termination and Investment Return Experience**

Valuation Date	Compensation <sup>1</sup>		Termination <sup>1</sup>	Investment Return <sup>2</sup>		
	% Increase (Decrease)	Assumed Increase	Ratio of Actual to Expected	Market Value	Smoothed Value	Assumed
10/01/2014	1.2%	5.7%	0.0	11.83%	8.86%	7.75%
10/01/2013	1.7%	5.8%	0.0	8.94%	7.56%	7.75%
10/01/2012	0.5%	7.4%	0.0	18.1%	6.0%	8.0%
10/01/2011	(4.0%)	7.5%	0.0	(2.2%)	(0.6%)	8.0%
10/01/2010	12.0%	7.4%	0.0	8.2%	1.1%	8.0%
10/01/2009	6.4%	7.5%	2.4	1.4%	0.7%	8.0%
10/01/2008	18.1%	7.7%	N/A	(14.0%)	1.4%	8.0%
10/01/2007	19.9%	7.6%	N/A	6.5%	6.6%	8.0%
10/01/2006	3.4%	7.7%	N/A	7.6%	7.4%	8.0%
10/01/2005	5.0%	7.6%	N/A	4.6%	5.1%	8.0%
Last 3 Periods	1.1%	6.3%	0.0	12.9%	7.5%	7.8%
Last 5 Periods	2.1%	6.8%	0.0	8.8%	4.5%	7.9%
Last 10 Periods	6.2%	7.2%	N/A	4.8%	4.4%	7.9%

<sup>1</sup> For full-time Firefighters only

<sup>2</sup> Computed as  $2I/(A+B-I)$ , where A is beginning value, B is ending value and I is investment return.

**City of Starke Firefighters'  
Retirement System**

**Employer Contribution Information**

Valuation Date	Contribution Fiscal Year End	Minimum Required Employer Contributions		Actual City Contributions		Actual State Contributions		Actual Employer Contributions
10/01/2014	09/30/2016	\$ 149,109	<sup>1</sup>	N/A		N/A		N/A
10/01/2013	09/30/2015	\$ 160,451	<sup>1</sup>	N/A		N/A		N/A
10/01/2012	09/30/2014	\$ 162,378	<sup>2</sup>	\$ 175,113	\$	41,482	\$	216,595
10/01/2011	09/30/2013	\$ 202,879	<sup>2</sup>	\$ 161,708	\$	41,171	\$	202,879
10/01/2010	09/30/2012	\$ 162,170	<sup>2</sup>	\$ 123,399	\$	38,771	\$	162,170
10/01/2009	09/30/2011	\$ 187,015	<sup>2</sup>	\$ 149,434	\$	37,581	\$	187,015
10/01/2008	09/30/2010	\$ 167,418	<sup>2</sup>	\$ 149,928	\$	37,373	\$	187,301
10/01/2007	09/30/2009	\$ 155,024	<sup>2</sup>	\$ 131,351	\$	39,238	\$	170,589

<sup>1</sup> Projected

<sup>2</sup> Based upon percentage of payroll

**City of Starke Firefighters'  
Retirement System**

**Actuarial Valuation as of October 1, 2014**

**State Required Exhibit**

	<u>10/01/2013</u>	<u>10/01/2014</u>
<b>A. <u>Participant Data</u></b>		
1. Active participants	32	33
2. Retired participants and beneficiaries receiving benefits (including DROPs)	6	6
3. Disabled participants receiving benefits	0	0
4. Terminated vested participants	0	0
5. Annual payroll of active participants	\$ 380,115	\$ 382,189
6. Projected payroll of active participants	\$ 389,998	\$ 389,833
7. Annual benefits payable to those currently receiving benefits including DROP participants	\$ 142,205	\$ 131,512
<b>B. <u>Value of Assets</u></b>		
1. Smoothed Actuarial Value of Assets	\$ 2,466,636	\$ 2,827,628
2. Market Value of Assets	\$ 2,524,896	\$ 2,967,952
<b>C. <u>Liabilities</u></b>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 2,488,348	\$ 2,561,832
b. Vesting benefits	55,905	54,440
c. Death benefits	47,486	48,484
d. Disability benefits	46,808	46,057
e. Total	<u>\$ 2,638,547</u>	<u>\$ 2,710,813</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 0	\$ 0
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired including DROP participants	\$ 1,369,942	\$ 1,448,142
b. Disability retired	0	0
c. Beneficiaries	179,604	86,707
d. Miscellaneous	0	0
e. Total	<u>\$ 1,549,546</u>	<u>\$ 1,534,849</u>

**Table XIX  
(Cont'd)**

**City of Starke Firefighters'  
Retirement System**

**Actuarial Valuation as of October 1, 2014**

**State Required Exhibit**

	<u>10/01/2013</u>	<u>10/01/2014</u>
4. Share Plan liability	\$ 58,560	\$ 78,403
5. Total actuarial present value of future expected benefit payments	\$ 4,246,653	\$ 4,324,065
6. Actuarial accrued liabilities	\$ 3,368,877	\$ 3,471,612
7. Unfunded actuarial accrued liabilities	\$ 902,241	\$ 643,984

**D. Statement of Accumulated System Benefits**

1. Actuarial present value of accumulated vested benefits		
a. Participants currently receiving benefits including DROP participants	\$ 1,549,546	\$ 1,534,849
b. Other participants (including Share Plan)	1,315,834	1,421,126
c. Total	<u>\$ 2,865,380</u>	<u>\$ 2,955,975</u>
2. Actuarial present value of accumulated non-vested plan benefits	<u>21,292</u>	<u>20,201</u>
3. Total actuarial present value of accumulated system benefits	\$ 2,886,672	\$ 2,976,176

**E. Statement of Change in Accumulated Plan Benefits**

1. Actuarial present value of accumulated system benefits as of October 1, 2013	\$ 2,886,672
2. Increase (decrease) during year attributable to:	
a. System amendment	\$ 0
b. Change in actuarial assumptions	0
c. Benefits paid including refunds	(86,580)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period	<u>176,084</u>
e. Net increase	\$ 89,504
3. Actuarial present value of accumulated system benefits as of October 1, 2014	\$ 2,976,176

**City of Starke Firefighters'  
Retirement System**

**Actuarial Valuation as of October 1, 2014**

**State Required Exhibit**

	<u>10/01/2013</u>	<u>10/01/2014</u>
<b>F. <u>Pension Cost</u></b>		
1. Total normal cost	\$ 119,807	\$ 122,956
2. Payment required to amortize unfunded liability	64,857	52,166
3. Interest adjustment	7,452	7,097
4. Total required contribution	<u>\$ 192,116</u>	<u>\$ 182,219</u>
5. Item 4 as a percentage of payroll	50.5%	47.7%
6. Estimated employee contributions	\$ 20,084	\$ 20,050
7. Item 6 as a percentage of projected payroll	5.1%	5.1%
8. Estimated State contributions	\$ 30,248	\$ 30,248
9. Item 8 as a percentage of projected payroll	7.8%	7.8%
10. Estimated pick-up employee contributions by City	\$ 16,576	\$ 16,704
11. Item 10 as a percentage of projected payroll	4.3%	4.3%
12. Net amount payable by City	\$ 130,203	\$ 118,861
13. Item 12 as a percentage of projected payroll	33.4%	30.5%
<b>G. <u>Past Contributions</u></b>		
1. Total contribution required (prior valuation % of pay)	\$ 197,994	\$ 197,111
2. Actual contributions made:		
a. Employees	\$ 19,703	N/A
b. State (net)	30,248	N/A
c. City (Member Pick-Up)	16,376	N/A
d. City	175,113	N/A
e. Total	<u>\$ 241,440</u>	N/A
<b>H. <u>Net Actuarial Gain (Loss)</u></b>	\$ 80,925	\$ 204,453
<b>I. <u>Disclosure of Following Items:</u></b>		
1. Actuarial present value of future salaries - attained age	\$ 3,896,652	\$ 3,791,168
2. Actuarial present value of future employee contributions - attained age	\$ 360,110	\$ 350,672
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 406,632	\$ 450,175
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A

City of Starke Firefighters'  
Retirement System

State Required Exhibit

	<u>Unfunded Actuarial Accrued Liabilities</u>	Current Unfunded <u>Liabilities</u>	Amortization <u>Payment</u>	Remaining Funding <u>Period</u>
10/01/1989	Excess of Assets over AAL	\$ (2,735)	\$ (609)	5 years
10/01/1990	Actuarial Loss (Gain)	(40)	(8)	6 years
10/01/1991	Actuarial Loss (Gain)	(535)	(90)	7 years
10/01/1992	Actuarial Loss (Gain)	(388)	(58)	8 years
10/01/1993	Actuarial Loss (Gain)	(2,354)	(322)	9 years
10/01/1994	Actuarial Loss (Gain)	5,944	751	10 years
10/01/1994	System Amendment	5,119	647	10 years
10/01/1995	Actuarial Loss (Gain)	(3,287)	(387)	11 years
10/01/1995	Assumption and Method Change	11,058	1,303	11 years
10/01/1996	Actuarial Loss (Gain)	561	62	12 years
10/01/1997	Actuarial Loss (Gain)	(13,519)	(1,415)	13 years
10/01/1997	Assumption and Method Change	13,856	1,450	13 years
10/01/1998	Actuarial Loss (Gain)	8,142	811	14 years
10/01/1999	Actuarial Loss (Gain)	9,951	947	15 years
10/01/2000	Actuarial Loss (Gain)	(1,332)	(122)	16 years
10/01/2001	Actuarial Loss (Gain)	101,043	8,893	17 years
10/01/2001	System Amendment	17,080	1,503	17 years
10/01/2002	Actuarial Loss (Gain)	73,591	6,260	18 years
10/01/2002	System Amendment	90,322	7,683	18 years
10/01/2003	Actuarial Loss (Gain)	(68,773)	(5,670)	19 years
10/01/2003	System Amendment	5,319	439	19 years
10/01/2004	Actuarial Loss (Gain)	7,659	614	20 years
10/01/2005	Actuarial Loss (Gain)	97,126	7,579	21 years
10/01/2006	Actuarial Loss (Gain)	(14,906)	(1,135)	22 years
10/01/2006	System Amendment	13,163	1,002	22 years
10/01/2007	Actuarial Loss (Gain)	(29,842)	(2,222)	23 years
10/01/2008	Actuarial Loss (Gain)	98,560	7,187	24 years
10/01/2009	Actuarial Loss (Gain)	192,218	13,747	25 years
10/01/2009	Assumption Change	56,462	4,038	25 years
10/01/2010	Actuarial Loss (Gain)	196,932	13,833	26 years
10/01/2011	Actuarial Loss (Gain)	110,977	7,666	27 years
10/01/2012	Actuarial Loss (Gain)	(41,822)	(2,844)	28 years
10/01/2012	Assumption Change	(9,500)	(646)	28 years
10/01/2013	Actuarial Loss (Gain)	(77,613)	(5,202)	29 years
10/01/2014	Actuarial Loss (Gain)	(204,453)	(13,519)	30 years
	TOTAL	\$ 643,984	\$ 52,166	

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the system and / or paid from the system's assets for which liabilities or current costs have not been established or other wise provided for in the valuation. All known events or trends which may require material increase in system costs or required contribution rates have been taken into account in the valuation.

Enrollment Number: 14-02802

Dated: April 24, 2015



Lawrence F. Wilson, A.S.A.