

**CITY OF STARKE FIREFIGHTERS' RETIREMENT SYSTEM**

*CHAPTER 112.664, F.S. COMPLIANCE REPORT*

In Connection with the October 1, 2014 Funding Actuarial Valuation Report  
and the Plan's Financial Reporting for the Year Ended September 30, 2014





June 26, 2015

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

**Re: October 1, 2014 Chapter 112.664 Compliance Report**

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the Board of Trustees (Board) of the City of Starke Firefighters' Retirement System (System) to prepare a disclosure report to satisfy the requirements set forth in Chapter 112.664, F.S. and as further required pursuant to Chapter 60T-1.0035, F.A.C.

This report was prepared at the request of the Board and is intended for use by the Board and those designated or approved by the Board. This report may be provided to parties other than the Board only in its entirety and only with the permission of the Board.

The purpose of the report is to provide the required information specified in Chapter 112.664, F.S. and to supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above.

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 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. The scope of this engagement does not include an analysis of the potential range of such measurements.

This report was based upon information furnished by the City and the Board concerning System benefits, System provisions and System members as used in the corresponding Actuarial Valuation Reports for the Valuation Dates indicated. Financial information was provided by the City and Board as of September 30, 2014. We reviewed the information provided for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the City and Board.

Except where specific assumptions are required by Chapter 112.664, F.S, this report was prepared using actuarial assumptions adopted by the Board as described in Section C. The

Board's assumptions are based on past and expected future System experience and represent an estimate of future System experience. The investment return assumption of 2% higher than the investment return assumption utilized in the Actuarial Valuation Report does not represent an estimate of future System experience nor observation of the estimates inherent in market data. This assumption is provided as a counterpart to the Chapter 112.664, F.S. requirement to utilize an investment return assumption of 2% lower than the investment return assumption utilized in the Actuarial Valuation Report. Inclusion of an investment return 2% higher than the investment return assumption utilized in the Actuarial Valuation Report shows a more complete assessment of the range of results as opposed to the one-sided range required by statute.

If all actuarial assumptions are met and if all current and 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 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 herein. The signing actuaries are independent of the System sponsor.

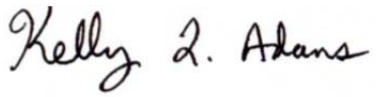
This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and presents the actuarial position of the System as of the valuation date as required by statute. All 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.

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were 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, meet the requirements of Section 112.664(1), F.S., and Section 60T-1.0035, F.A.C.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

By   
Lawrence F. Wilson, M.A.A.A  
Enrolled Actuary No. 14-02802  
Senior Consultant & Actuary  
Date: June 26, 2015

By   
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Enrolled Actuary No. 14-06857  
Consultant & Actuary

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**SECTION A**

**CHAPTER 112.664, F.S. RESULTS**

**Net Pension Liability**  
**Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68**

Measurement Date	9/30/2014
<b>A. <u>Total Pension Liability (TPL)</u></b>	
Service Cost	\$ 83,807
Interest	269,498
Benefit Changes	0
Difference Between Actual and Expected Experience	(90,269)
Assumption Changes	0
Benefit Payments	(86,205)
Contribution Refunds	(375)
Other	0
Net Change in Total Pension Liability	176,456
Total Pension Liability - (beginning of year)	3,464,193
Total Pension Liability - (end of year)	\$ 3,640,649
 <b>B. <u>Plan Fiduciary Net Position</u></b>	
Contributions - Employer	\$ 202,723
Contributions - State	30,248
Contributions - Member	19,703
Net Investment Income	306,638
Benefit Payments	(86,205)
Contribution Refunds	(375)
Administrative Expenses	(29,676)
Other	0
Net Change in Plan Fiduciary Net Position	443,056
Plan Fiduciary Net Position - (beginning of year)	2,524,896
Plan Fiduciary Net Position - (end of year)	\$ 2,967,952
 <b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b>	 \$ 672,697
 Valuation Date	 10/1/2013

**Certain Key Assumptions**

Investment Return Assumption 7.75%

Mortality Table:

Healthy Members: RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females with Blue Collar Adjustment and fully generational mortality improvements projected to each future valuation date with Scale AA. Disabled Members: RP-2000 Disabled Mortality Tables, separate rates for males and females, and fully generational mortality improvements projected to each future payment date with Scale AA.

**Net Pension Liability**  
**Using Assumptions Required Under 112.664(1)(a), F.S.**

Measurement Date	9/30/2014
<b>A. <u>Total Pension Liability (TPL)</u></b>	
Service Cost	\$ 84,738
Interest	272,022
Benefit Changes	0
Difference Between Actual and Expected Experience	(92,033)
Assumption Changes	0
Benefit Payments	(86,205)
Contribution Refunds	(375)
Other	0
Net Change in Total Pension Liability	178,147
Total Pension Liability - (beginning of year)	3,497,584
Total Pension Liability - (end of year)	\$ 3,675,731
 <b>B. <u>Plan Fiduciary Net Position</u></b>	
Contributions - Employer	\$ 202,723
Contributions - State	30,248
Contributions - Member	19,703
Net Investment Income	306,638
Benefit Payments	(86,205)
Contribution Refunds	(375)
Administrative Expenses	(29,676)
Other	0
Net Change in Plan Fiduciary Net Position	443,056
Plan Fiduciary Net Position - (beginning of year)	2,524,896
Plan Fiduciary Net Position - (end of year)	\$ 2,967,952
 <b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b>	 \$ 707,779
 Valuation Date	 10/1/2013

**Certain Key Assumptions**

Investment Return Assumption 7.75%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.



**Net Pension Liability**  
**Using Assumptions Required Under 112.664(1)(b), F.S.**

Measurement Date	9/30/2014
<b>A. <u>Total Pension Liability (TPL)</u></b>	
Service Cost	\$ 140,785
Interest	261,333
Benefit Changes	0
Difference Between Actual and Expected Experience	(112,602)
Assumption Changes	0
Benefit Payments	(86,205)
Contribution Refunds	(375)
Other	0
Net Change in Total Pension Liability	202,936
Total Pension Liability - (beginning of year)	4,455,893
Total Pension Liability - (end of year)	\$ 4,658,829
 <b>B. <u>Plan Fiduciary Net Position</u></b>	
Contributions - Employer	\$ 202,723
Contributions - State	30,248
Contributions - Member	19,703
Net Investment Income	306,638
Benefit Payments	(86,205)
Contribution Refunds	(375)
Administrative Expenses	(29,676)
Other	0
Net Change in Plan Fiduciary Net Position	443,056
Plan Fiduciary Net Position - (beginning of year)	2,524,896
Plan Fiduciary Net Position - (end of year)	\$ 2,967,952
 <b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b>	
	\$ 1,690,877
 Valuation Date	 10/1/2013

**Certain Key Assumptions**

Investment Return Assumption 5.75%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Net Pension Liability**  
**Using Assumptions Required Under 112.664(1)(a), F.S. Plus 2% on Investment Return Assumption**

Measurement Date	9/30/2014
<b>A. <u>Total Pension Liability (TPL)</u></b>	
Service Cost	\$ 52,236
Interest	273,156
Benefit Changes	0
Difference Between Actual and Expected Experience	(81,444)
Assumption Changes	0
Benefit Payments	(86,205)
Contribution Refunds	(375)
Other	0
Net Change in Total Pension Liability	157,368
Total Pension Liability - (beginning of year)	2,834,254
Total Pension Liability - (end of year)	\$ 2,991,622
<b>B. <u>Plan Fiduciary Net Position</u></b>	
Contributions - Employer	\$ 202,723
Contributions - State	30,248
Contributions - Member	19,703
Net Investment Income	306,638
Benefit Payments	(86,205)
Contribution Refunds	(375)
Administrative Expenses	(29,676)
Other	0
Net Change in Plan Fiduciary Net Position	443,056
Plan Fiduciary Net Position - (beginning of year)	2,524,896
Plan Fiduciary Net Position - (end of year)	\$ 2,967,952
<b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b>	<b>\$ 23,670</b>
Valuation Date	10/1/2013

**Certain Key Assumptions**

Investment Return Assumption 9.75%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Asset and Benefit Payment Projection**  
**Not Reflecting Any Future Contributions**  
Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68

<b>FYE</b>	<b>Market Value of Assets (BOY)</b>	<b>Expected Investment Return</b>	<b>Projected Benefit Payments</b>	<b>Market Value of Assets (EOY)</b>
2015	2,714,692	204,501	141,857	2,777,336
2016	2,777,336	208,880	153,346	2,832,869
2017	2,832,869	212,781	163,053	2,882,596
2018	2,882,596	216,292	171,311	2,927,577
2019	2,927,577	219,376	180,997	2,965,956
2020	2,965,956	221,904	191,753	2,996,106
2021	2,996,106	223,822	201,844	3,018,083
2022	3,018,083	225,152	210,823	3,032,413
2023	3,032,413	225,944	218,497	3,039,860
2024	3,039,860	226,221	225,736	3,040,345
2025	3,040,345	225,968	232,738	3,033,575
2026	3,033,575	225,244	237,543	3,021,276
2027	3,021,276	224,139	241,207	3,004,207
2028	3,004,207	222,665	244,844	2,982,028
2029	2,982,028	220,810	248,116	2,954,722
2030	2,954,722	218,569	251,129	2,922,163
2031	2,922,163	215,850	255,845	2,882,167
2032	2,882,167	212,517	261,458	2,833,226
2033	2,833,226	208,572	265,125	2,776,673
2034	2,776,673	204,083	267,682	2,713,074
2035	2,713,074	199,057	270,038	2,642,092
2036	2,642,092	193,495	271,506	2,564,081
2037	2,564,081	187,433	271,893	2,479,621
2038	2,479,621	180,940	270,615	2,389,946
2039	2,389,946	174,096	268,058	2,295,983
2040	2,295,983	166,950	264,786	2,198,147
2041	2,198,147	159,473	262,242	2,095,378

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the Employer, Employee or State:

N/A

**Certain Key Assumptions**

Investment return assumption

7.75%

Mortality Table:

Healthy Members: RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females with Blue Collar Adjustment and fully generational mortality improvements projected to each future valuation date with Scale AA. Disabled Members: RP-2000 Disabled Mortality Tables, separate rates for males and females, and fully generational mortality improvements projected to each future payment date with Scale AA.

**Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the System can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the System is expected to be able to pay all future benefit payments.**

**Asset and Benefit Payment Projection**  
**Not Reflecting Any Contributions from the Employer, State or Employee**  
**Using Assumptions Required Under 112.664(1)(a), F.S.**

<b>FYE</b>	<b>Market Value of Assets (BOY)</b>	<b>Expected Investment Return</b>	<b>Projected Benefit Payments</b>	<b>Market Value of Assets (EOY)</b>
2015	2,714,692	204,501	141,873	2,777,320
2016	2,777,320	208,876	153,404	2,832,793
2017	2,832,793	212,771	163,147	2,882,417
2018	2,882,417	216,273	171,428	2,927,262
2019	2,927,262	219,346	181,132	2,965,475
2020	2,965,475	221,860	191,913	2,995,423
2021	2,995,423	223,761	202,025	3,017,159
2022	3,017,159	225,072	211,036	3,031,195
2023	3,031,195	225,839	218,756	3,038,278
2024	3,038,278	226,085	226,055	3,038,309
2025	3,038,309	225,791	233,190	3,030,910
2026	3,030,910	225,010	238,210	3,017,709
2027	3,017,709	223,824	242,119	2,999,415
2028	2,999,415	222,244	246,033	2,975,626
2029	2,975,626	220,252	249,611	2,946,267
2030	2,946,267	217,838	252,954	2,911,152
2031	2,911,152	214,905	258,049	2,868,008
2032	2,868,008	211,311	264,085	2,815,234
2033	2,815,234	207,051	268,179	2,754,106
2034	2,754,106	202,189	271,183	2,685,111
2035	2,685,111	196,724	274,015	2,607,821
2036	2,607,821	190,653	275,968	2,522,506
2037	2,522,506	184,005	276,856	2,429,654
2038	2,429,654	176,840	276,091	2,330,404
2039	2,330,404	169,234	274,038	2,225,599
2040	2,225,599	161,227	271,257	2,115,569
2041	2,115,569	152,784	269,221	1,999,131

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the Employer, Employee or State: N/A

**Certain Key Assumptions**

Investment return assumption 7.75%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the System can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the System is expected to be able to pay all future benefit payments.**

**Asset and Benefit Payment Projection  
Not Reflecting Any Future Contributions  
Using Assumptions Required Under 112.664(1)(b), F.S.**

<b>FYE</b>	<b>Market Value of Assets (BOY)</b>	<b>Expected Investment Return</b>	<b>Projected Benefit Payments</b>	<b>Market Value of Assets (EOY)</b>
2015	2,714,692	151,714	141,873	2,724,533
2016	2,724,533	151,924	153,404	2,723,053
2017	2,723,053	151,538	163,147	2,711,444
2018	2,711,444	150,614	171,428	2,690,631
2019	2,690,631	149,118	181,132	2,658,616
2020	2,658,616	146,944	191,913	2,613,648
2021	2,613,648	144,046	202,025	2,555,669
2022	2,555,669	140,434	211,036	2,485,068
2023	2,485,068	136,136	218,756	2,402,449
2024	2,402,449	131,160	226,055	2,307,554
2025	2,307,554	125,484	233,190	2,199,848
2026	2,199,848	119,135	238,210	2,080,772
2027	2,080,772	112,168	242,119	1,950,821
2028	1,950,821	104,575	246,033	1,809,363
2029	1,809,363	96,330	249,611	1,656,083
2030	1,656,083	87,414	252,954	1,490,543
2031	1,490,543	77,738	258,049	1,310,232
2032	1,310,232	67,183	264,085	1,113,330
2033	1,113,330	55,735	268,179	900,886
2034	900,886	43,427	271,183	673,129
2035	673,129	30,243	274,015	429,357
2036	429,357	16,166	275,968	169,556
2037	169,556	2,576	276,856	-
2038	-	-	276,091	-
2039	-	-	274,038	-
2040	-	-	271,257	-
2041	-	-	269,221	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the Employer, Employee or State: 22.58

**Certain Key Assumptions**

Investment return assumption 5.75%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the System can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the System is expected to be able to pay all future benefit payments.**

**Asset and Benefit Payment Projection**  
**Not Reflecting Any Future Contributions**  
**Using Assumptions Required Under 112.664(1)(a), F.S. Plus 2% on Investment Return Assumption**

<b>FYE</b>	<b>Market Value of Assets (BOY)</b>	<b>Expected Investment Return</b>	<b>Projected Benefit Payments</b>	<b>Market Value of Assets (EOY)</b>
2015	2,714,692	257,296	141,873	2,830,116
2016	2,830,116	267,950	153,404	2,944,662
2017	2,944,662	278,611	163,147	3,060,126
2018	3,060,126	289,437	171,428	3,178,136
2019	3,178,136	300,438	181,132	3,297,442
2020	3,297,442	311,509	191,913	3,417,038
2021	3,417,038	322,643	202,025	3,537,657
2022	3,537,657	333,935	211,036	3,660,556
2023	3,660,556	345,515	218,756	3,787,315
2024	3,787,315	357,494	226,055	3,918,755
2025	3,918,755	369,938	233,190	4,055,503
2026	4,055,503	383,010	238,210	4,200,302
2027	4,200,302	396,924	242,119	4,355,108
2028	4,355,108	411,814	246,033	4,520,889
2029	4,520,889	427,791	249,611	4,699,070
2030	4,699,070	444,990	252,954	4,891,106
2031	4,891,106	463,448	258,049	5,096,506
2032	5,096,506	483,161	264,085	5,315,581
2033	5,315,581	504,307	268,179	5,551,709
2034	5,551,709	527,173	271,183	5,807,699
2035	5,807,699	551,985	274,015	6,085,668
2036	6,085,668	578,985	275,968	6,388,686
2037	6,388,686	608,483	276,856	6,720,313
2038	6,720,313	640,857	276,091	7,085,079
2039	7,085,079	676,528	274,038	7,487,569
2040	7,487,569	715,916	271,257	7,932,227
2041	7,932,227	759,376	269,221	8,422,382

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the Employer, Employee or State: N/A

**Certain Key Assumptions**

Investment return assumption 9.75%

Mortality Table:

RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

**Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the System can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the System is expected to be able to pay all future benefit payments.**

**ACTUARIAL DETERMINED CONTRIBUTION**

	<u>Valuation Assumptions</u>	<u>112.664(1)(a), F.S. Assumptions</u>	<u>112.664(1)(b), F.S. Assumptions</u>	<u>112.664(1)(a), F.S. Assumptions Plus 2% on Investment Return Assumption</u>
A. Valuation Date	October 1, 2014	October 1, 2014	October 1, 2014	October 1, 2014
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	9/30/2016	9/30/2016	9/30/2016	9/30/2016
C. Annual payroll of Active Employees	\$ 382,189	\$ 382,189	\$ 382,189	\$ 382,189
D. Total Minimum Funding Requirement				
1. Total Normal Cost	\$ 122,956	\$ 123,876	\$ 180,555	\$ 91,084
2. Annual Payment to Amortize Unfunded Actuarial Liability	52,166	54,244	97,539	9,673
3. Interest Adjustment	7,097	7,209	8,194	5,387
4. Total Minimum Funding Requirement	<u>\$ 182,219</u>	<u>\$ 185,329</u>	<u>\$ 286,288</u>	<u>\$ 106,144</u>
E. Expected Payroll of Active Employees for Following Plan Year (\$ / % of pay) (C x 1.020)	\$ 389,833 102.00%	\$ 389,833 102.00%	\$ 389,833 102.00%	\$ 389,833 102.00%
F. Expected Contribution Sources (\$ / % of pay)				
1. City	\$ 135,565 34.78%	\$ 138,738 35.59%	\$ 241,716 62.01%	\$ 57,969 14.87%
2. Member	20,050 5.14%	20,050 5.14%	20,050 5.14%	20,050 5.14%
3. State	30,248 7.76%	30,248 7.76%	30,248 7.76%	30,248 7.76%
4. Total	<u>\$ 185,863 47.68%</u>	<u>\$ 189,036 48.49%</u>	<u>\$ 292,014 74.91%</u>	<u>\$ 108,267 27.77%</u>

**Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments**

Amortization Base	Amortization Payment					Remaining Funding Period
	Current Unfunded Liabilities	Valuation Assumptions	112.664(1)(a), F.S. Assumptions	112.664(1)(b), F.S. Assumptions	112.664(1)(a), F.S. Assumptions Plus 2%	
10/01/1989 Excess of Assets over AAL	\$ (2,735)	\$ (609)	\$ (609)	\$ (587)	\$ (630)	5 years
10/01/1990 Actuarial Loss (Gain)	(40)	(8)	(8)	(7)	(8)	6 years
10/01/1991 Actuarial Loss (Gain)	(535)	(90)	(90)	(85)	(94)	7 years
10/01/1992 Actuarial Loss (Gain)	(388)	(58)	(58)	(55)	(62)	8 years
10/01/1993 Actuarial Loss (Gain)	(2,354)	(322)	(322)	(301)	(344)	9 years
10/01/1994 Actuarial Loss (Gain)	5,944	751	751	696	808	10 years
10/01/1994 System Amendment	5,119	647	647	599	696	10 years
10/01/1995 Actuarial Loss (Gain)	(3,287)	(387)	(387)	(356)	(420)	11 years
10/01/1995 Assumption and Method Change	11,058	1,303	1,303	1,196	1,412	11 years
10/01/1996 Actuarial Loss (Gain)	561	62	62	57	68	12 years
10/01/1997 Actuarial Loss (Gain)	(13,519)	(1,415)	(1,415)	(1,280)	(1,555)	13 years
10/01/1997 Assumption and Method Change	13,856	1,450	1,450	1,312	1,593	13 years
10/01/1998 Actuarial Loss (Gain)	8,142	811	811	728	897	14 years
10/01/1999 Actuarial Loss (Gain)	9,951	947	947	844	1,054	15 years
10/01/2000 Actuarial Loss (Gain)	(1,332)	(122)	(122)	(108)	(136)	16 years
10/01/2001 Actuarial Loss (Gain)	101,043	8,893	8,893	7,811	10,021	17 years
10/01/2001 System Amendment	17,080	1,503	1,503	1,320	1,694	17 years
10/01/2002 Actuarial Loss (Gain)	73,591	6,260	6,260	5,461	7,096	18 years
10/01/2002 System Amendment	90,322	7,683	7,683	6,702	8,709	18 years
10/01/2003 Actuarial Loss (Gain)	(68,773)	(5,670)	(5,670)	(4,913)	(6,464)	19 years
10/01/2003 System Amendment	5,319	439	439	380	500	19 years
10/01/2004 Actuarial Loss (Gain)	7,659	614	614	528	703	20 years
10/01/2005 Actuarial Loss (Gain)	97,126	7,579	7,579	6,480	8,735	21 years
10/01/2006 Actuarial Loss (Gain)	(14,906)	(1,135)	(1,135)	(964)	(1,315)	22 years
10/01/2006 System Amendment	13,163	1,002	1,002	852	1,161	22 years
10/01/2007 Actuarial Loss (Gain)	(29,842)	(2,222)	(2,222)	(1,876)	(2,587)	23 years
10/01/2008 Actuarial Loss (Gain)	98,560	7,187	7,187	6,030	8,410	24 years
10/01/2009 Actuarial Loss (Gain)	192,218	13,747	13,747	11,466	16,164	25 years
10/01/2009 Assumption Change	56,462	4,038	4,038	3,368	4,748	25 years
10/01/2010 Actuarial Loss (Gain)	196,932	13,833	13,833	11,469	16,341	26 years
10/01/2011 Actuarial Loss (Gain)	110,977	7,666	7,666	6,319	9,096	27 years
10/01/2012 Actuarial Loss (Gain)	(41,822)	(2,844)	(2,844)	(2,331)	(3,389)	28 years
10/01/2012 Assumption Change	(9,500)	(646)	(646)	(530)	(770)	28 years
10/01/2013 Actuarial Loss (Gain)	(77,613)	(5,202)	(5,202)	(4,241)	(6,225)	29 years
10/01/2014 Actuarial Loss (Gain)	(204,453)	(13,519)	(13,519)	(10,961)	(16,243)	30 years
10/01/2014 Assumption Change - 112.664(1)(a), F.S. Assumptions	31,423	N/A	2,078	N/A	N/A	30 years
10/01/2014 Assumption Change - 112.664(1)(b), F.S. Assumptions	979,615	N/A	N/A	52,516	N/A	30 years
10/01/2014 Assumption Change - 112.664(1)(a), F.S. Assumptions Plus 2%	(629,255)	N/A	N/A	N/A	(49,991)	30 years



**SECTION B**  
**SUMMARY OF PLAN PROVISIONS**

**City of Starke Firefighters' Retirement System**

**Outline of Principal Provisions of the Retirement System**  
**(as of October 1, 2014)**

**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**  
**(as of October 1, 2014)**

**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**  
**(as of October 1, 2014)**

**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**  
**(as of October 1, 2014)**

**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.

**SECTION C**  
**ACTUARIAL ASSUMPTIONS AND COST METHODS**  
**USED FOR FUNDING**

**City of Starke Firefighters' Retirement System**

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation**  
**(as of October 1, 2014)**

**A. Mortality**

For healthy participants, the RP-2000 Combined Healthy Participant Mortality Tables, 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 Tables, 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**  
**(as of October 1, 2014)**

**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 (as of October 1, 2014)

#### H. Retirement Rates

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

Normal Retirement		Normal Retirement	
<u>Ages</u>	<u>Percent Retiring</u>	<u>Ages</u>	<u>Percent Retiring</u>
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.

Early Retirement	
<u>Ages</u>	<u>Percent Retiring</u>
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 (as of October 1, 2014)

#### **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 (as of October 1, 2014)

#### 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 Participant 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 Participant 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**  
**(as of October 1, 2014)**

**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.

## GLOSSARY

<i>Actuarial Accrued Liability</i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i>Actuarial Assumptions</i>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members and other items.
<i>Actuarial Cost Method</i>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.
<i>Actuarial Equivalent</i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i>Actuarial Present Value</i>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<i>Actuarial Present Value of Future Benefits</i>	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits and inactive, non-retired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<i>Actuarial Valuation</i>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 67.
<i>Actuarial Value of Assets</i>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution.

<b><i>Amortization Method</i></b>	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
<b><i>Amortization Payment</i></b>	That portion of the plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<b><i>Amortization Period</i></b>	The period used in calculating the Amortization Payment.
<b><i>Annual Required Contribution</i></b>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The annual required contribution consists of the Employer Normal Cost and Amortization Payment plus interest adjustment.
<b><i>Closed Amortization Period</i></b>	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
<b><i>Employer Normal Cost</i></b>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<b><i>Equivalent Single Amortization Period</i></b>	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
<b><i>Experience Gain/Loss</i></b>	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. Losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.
<b><i>Funded Ratio</i></b>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<b><i>GASB</i></b>	Governmental Accounting Standards Board.

***GASB No. 67 and  
GASB No. 68***

These are the governmental accounting standards that set the accounting rules for public retirement plans and the employers that sponsor or contribute to them. Statement No. 67 sets the accounting rules for the plans themselves, while Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement plans.

***Normal Cost***

The annual cost assigned, under the Actuarial Cost Method, to the current plan year.

***Open Amortization Period***

An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

***Unfunded Actuarial Accrued Liability***

The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.

***Valuation Date***

The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.