

COUNTY OF VOLUSIA VOLUNTEER FIREFIGHTERS' PENSION SYSTEM

Chapter 112.664, F.S. Compliance Report
In Connection with the October 1, 2017 Funding
Actuarial Valuation Report
And the Plan's Financial Reporting for the Year
Ending September 30, 2017



April 9, 2018

County of Volusia Volunteer Firefighters'
Pension System
DeLand, Florida

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the County of Volusia Volunteer Firefighters' Pension System (Plan) to prepare a disclosure report to satisfy the requirements set forth in Ch. 112.664, F.S. and as further required pursuant to Ch. 60T-1.0035, F.A.C.

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

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

The findings in this report are based on data or other information through September 30, 2017. 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 County concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked 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 County.

Except as otherwise indicated as required for the disclosures contained herein, this report was prepared using certain assumptions selected by the County as described in our October 1, 2017 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2017 actuarial valuation report. Please refer to the October 1, 2017 actuarial valuation report, dated December 11, 2017, for summaries and descriptions of this information.

The use of an investment return assumption that is 2% higher than the investment return assumption used to determine the funding requirements does not represent an estimate of future Plan experience nor does it reflect an observation of future return estimates inherent in financial market data. The use of this investment return assumption is provided as a counterpart to the Chapter 112.664, Florida Statutes requirement to utilize an investment return assumption that is 2% lower than the assumption used to

determine the funding requirements. The inclusion of the additional exhibits showing the effect of using a 2% higher investment return assumption shows a more complete assessment of the range of possible results as opposed to showing a one-sided range as required by Florida Statutes.

Jeffrey Amrose and Trisha Amrose 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 plan 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 fairly presents the actuarial position of the Retirement Plan 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.

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 _____
Jeffrey Amrose, MAAA
Enrolled Actuary No. 17-6599
Senior Consultant & Actuary



By _____
Trisha Amrose, MAAA
Enrolled Actuary No. 17-8010
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TABLE OF CONTENTS

<u>Title</u>	<u>Page</u>
Ch. 112.664, F.S. Results	
Schedule of Changes in Net Pension Liability	
1. Using financial reporting assumptions per GASB Statement No. 67	1
2. Using assumptions prescribed in Section 112.664(1)(a), F.S.	2
3. Using assumptions prescribed in Section 112.664(1)(b), F.S.	3
4. Using the mandated mortality and funding interest rate +2%	4
Assets Versus Benefit Payments Projections	
1. Using assumptions from the Plan's latest actuarial valuation	5
2. Using assumptions prescribed in Section 112.664(1)(a), F.S.	6
3. Using assumptions prescribed in Section 112.664(1)(b), F.S.	7
4. Using the mandated mortality and funding interest rate +2%	8
Actuarially Determined Contribution	9

CH. 112.664, Florida Statutes

RESULTS

**Schedule of Changes in the Employers' Net Pension Liability
Using Financial Reporting Assumptions per GASB Statement No. 67**

Fiscal year ending September 30,	<u>2017</u>
1. Total pension liability	
a. Service Cost	\$ 55,908
b. Interest	70,164
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	80,780
e. Assumption Changes	-
f. Benefit Payments	(105,972)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>100,880</u>
i. Total Pension Liability - Beginning	<u>1,647,997</u>
j. Total Pension Liability - Ending	<u>\$ 1,748,877</u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ -
b. Contributions - Non-Employer Contributing Entity	-
c. Contributions - Member	-
d. Net Investment Income	376,510
e. Benefit Payments	(105,972)
f. Contribution Refunds	-
g. Administrative Expense	(3,021)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>267,517</u>
j. Plan Fiduciary Net Position - Beginning	<u>4,380,009</u>
k. Plan Fiduciary Net Position - Ending	<u>\$ 4,647,526</u>
3. Net Pension Liability / (Asset)	(2,898,649)
Certain Key Assumptions	
Valuation Date	09/30/2017
Measurement Date	09/30/2017
Investment Return Assumption	4.25%
Mortality Table	Florida Retirement System - Special Risk

**Schedule of Changes in the Employers' Net Pension Liability
Using Assumptions required under 112.664(1)(a), F.S.**

Fiscal year ending September 30,	<u>2017</u>
1. Total pension liability	
a. Service Cost	\$ 55,908
b. Interest	70,164
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	80,780
e. Assumption Changes	-
f. Benefit Payments	(105,972)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>100,880</u>
i. Total Pension Liability - Beginning	<u>1,647,997</u>
j. Total Pension Liability - Ending	<u><u>\$ 1,748,877</u></u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ -
b. Contributions - Non-Employer Contributing Entity	-
c. Contributions - Member	-
d. Net Investment Income	376,510
e. Benefit Payments	(105,972)
f. Contribution Refunds	-
g. Administrative Expense	(3,021)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>267,517</u>
j. Plan Fiduciary Net Position - Beginning	<u>4,380,009</u>
k. Plan Fiduciary Net Position - Ending	<u><u>\$ 4,647,526</u></u>
3. Net Pension Liability / (Asset)	(2,898,649)
Certain Key Assumptions	
Valuation Date	09/30/2017
Measurement Date	09/30/2017
Investment Return Assumption	4.25%
Mortality Table	Florida Retirement System - Special Risk

**Schedule of Changes in the Employers' Net Pension Liability
Using Assumptions required under 112.664(1)(b), F.S.**

Fiscal year ending September 30,	<u>2017</u>
1. Total pension liability	
a. Service Cost	\$ 91,166
b. Interest	48,837
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	78,207
e. Assumption Changes	-
f. Benefit Payments	(105,972)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	<u>112,238</u>
i. Total Pension Liability - Beginning	<u>2,132,345</u>
j. Total Pension Liability - Ending	<u><u>\$ 2,244,583</u></u>
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ -
b. Contributions - Non-Employer Contributing Entity	-
c. Contributions - Member	-
d. Net Investment Income	376,510
e. Benefit Payments	(105,972)
f. Contribution Refunds	-
g. Administrative Expense	(3,021)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	<u>267,517</u>
j. Plan Fiduciary Net Position - Beginning	<u>4,380,009</u>
k. Plan Fiduciary Net Position - Ending	<u><u>\$ 4,647,526</u></u>
3. Net Pension Liability / (Asset)	(2,402,943)
Certain Key Assumptions	
Valuation Date	09/30/2017
Measurement Date	09/30/2017
Investment Return Assumption	2.25%
Mortality Table	Florida Retirement System - Special Risk

Schedule of Changes in the Employers' Net Pension Liability
Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

Fiscal year ending September 30,	2017
1. Total pension liability	
a. Service Cost	\$ 36,367
b. Interest	81,916
c. Benefit Changes	-
d. Difference between actual & expected experience & Other	78,432
e. Assumption Changes	-
f. Benefit Payments	(105,972)
g. Contribution Refunds	-
h. Net Change in Total Pension Liability	90,743
i. Total Pension Liability - Beginning	1,327,283
j. Total Pension Liability - Ending	\$ 1,418,026
2. Plan Fiduciary Net Position	
a. Contributions - Employer	\$ -
b. Contributions - Non-Employer Contributing Entity	-
c. Contributions - Member	-
d. Net Investment Income	376,510
e. Benefit Payments	(105,972)
f. Contribution Refunds	-
g. Administrative Expense	(3,021)
h. Other	-
i. Net Change in Plan Fiduciary Net Position	267,517
j. Plan Fiduciary Net Position - Beginning	4,380,009
k. Plan Fiduciary Net Position - Ending	\$ 4,647,526
3. Net Pension Liability / (Asset)	(3,229,500)
Certain Key Assumptions	
Valuation Date	09/30/2017
Measurement Date	09/30/2017
Investment Return Assumption	6.25%
Mortality Table	Florida Retirement System - Special Risk

Asset and Benefit Payment Projection
Not Reflecting Any Contributions from the Employer, State or Employee
Using Assumptions from the Plan's Latest Actuarial Valuation

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2018	4,133,596	173,380	108,111	4,198,865
2019	4,198,865	176,155	108,094	4,266,926
2020	4,266,926	179,028	109,021	4,336,933
2021	4,336,933	181,951	111,455	4,407,429
2022	4,407,429	184,922	112,636	4,479,715
2023	4,479,715	187,980	113,319	4,554,376
2024	4,554,376	191,193	111,416	4,634,154
2025	4,634,154	194,638	108,890	4,719,901
2026	4,719,901	198,311	107,532	4,810,680
2027	4,810,680	202,189	106,582	4,906,287
2028	4,906,287	206,245	106,911	5,005,621
2029	5,005,621	210,529	104,016	5,112,134
2030	5,112,134	215,112	101,339	5,225,907
2031	5,225,907	220,007	98,556	5,347,358
2032	5,347,358	225,239	95,242	5,477,355
2033	5,477,355	230,835	91,863	5,616,327
2034	5,616,327	236,807	88,808	5,764,326
2035	5,764,326	243,164	85,621	5,921,869
2036	5,921,869	249,937	81,988	6,089,819
2037	6,089,819	257,152	78,350	6,268,621
2038	6,268,621	264,829	74,710	6,458,740
2039	6,458,740	272,986	71,068	6,660,658
2040	6,660,658	281,644	67,466	6,874,836
2041	6,874,836	290,822	63,911	7,101,748
2042	7,101,748	300,540	60,416	7,341,872
2043	7,341,872	310,818	57,028	7,595,662

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, contrary to Florida Statutes and Plan provisions:** N/A

Certain Key Assumptions

Valuation Investment Return Assumption 4.25%
 Valuation Mortality Table Florida Retirement System - Special Risk

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.

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.

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2018	4,133,596	173,380	108,111	4,198,865
2019	4,198,865	176,155	108,094	4,266,926
2020	4,266,926	179,028	109,021	4,336,933
2021	4,336,933	181,951	111,455	4,407,429
2022	4,407,429	184,922	112,636	4,479,715
2023	4,479,715	187,980	113,319	4,554,376
2024	4,554,376	191,193	111,416	4,634,154
2025	4,634,154	194,638	108,890	4,719,901
2026	4,719,901	198,311	107,532	4,810,680
2027	4,810,680	202,189	106,582	4,906,287
2028	4,906,287	206,245	106,911	5,005,621
2029	5,005,621	210,529	104,016	5,112,134
2030	5,112,134	215,112	101,339	5,225,907
2031	5,225,907	220,007	98,556	5,347,358
2032	5,347,358	225,239	95,242	5,477,355
2033	5,477,355	230,835	91,863	5,616,327
2034	5,616,327	236,807	88,808	5,764,326
2035	5,764,326	243,164	85,621	5,921,869
2036	5,921,869	249,937	81,988	6,089,819
2037	6,089,819	257,152	78,350	6,268,621
2038	6,268,621	264,829	74,710	6,458,740
2039	6,458,740	272,986	71,068	6,660,658
2040	6,660,658	281,644	67,466	6,874,836
2041	6,874,836	290,822	63,911	7,101,748
2042	7,101,748	300,540	60,416	7,341,872
2043	7,341,872	310,818	57,028	7,595,662

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, contrary to Florida Statutes and Plan provisions:** N/A

Certain Key Assumptions

Valuation Investment Return Assumption 4.25%
 Valuation Mortality Table Florida Retirement System - Special Risk

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.

Asset and Benefit Payment Projection
Not Reflecting Any Contributions from the Employer, State or Employee
Using Assumptions required under 112.664(1)(b), F.S.

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2018	4,133,596	91,790	108,111	4,117,275
2019	4,117,275	91,423	108,094	4,100,603
2020	4,100,603	91,037	109,021	4,082,619
2021	4,082,619	90,605	111,455	4,061,769
2022	4,061,769	90,123	112,636	4,039,256
2023	4,039,256	89,608	113,319	4,015,546
2024	4,015,546	89,096	111,416	3,993,226
2025	3,993,226	88,623	108,890	3,972,958
2026	3,972,958	88,182	107,532	3,953,608
2027	3,953,608	87,757	106,582	3,934,783
2028	3,934,783	87,330	106,911	3,915,202
2029	3,915,202	86,922	104,016	3,898,108
2030	3,898,108	86,567	101,339	3,883,337
2031	3,883,337	86,266	98,556	3,871,047
2032	3,871,047	86,027	95,242	3,861,832
2033	3,861,832	85,858	91,863	3,855,827
2034	3,855,827	85,757	88,808	3,852,776
2035	3,852,776	85,724	85,621	3,852,879
2036	3,852,879	85,767	81,988	3,856,658
2037	3,856,658	85,893	78,350	3,864,202
2038	3,864,202	86,104	74,710	3,875,596
2039	3,875,596	86,401	71,068	3,890,929
2040	3,890,929	86,787	67,466	3,910,250
2041	3,910,250	87,262	63,911	3,933,601
2042	3,933,601	87,826	60,416	3,961,011
2043	3,961,011	88,481	57,028	3,992,464

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, contrary to Florida Statutes and Plan provisions: N/A

Certain Key Assumptions

Valuation Investment Return Assumption 2.25%
 Valuation Mortality Table Florida Retirement System - Special Risk

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.

Asset and Benefit Payment Projection
Not Reflecting Any Contributions from the Employer, State or Employee
Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2018	4,133,596	254,971	108,111	4,280,456
2019	4,280,456	264,151	108,094	4,436,513
2020	4,436,513	273,875	109,021	4,601,367
2021	4,601,367	284,102	111,455	4,774,014
2022	4,774,014	294,856	112,636	4,956,235
2023	4,956,235	306,223	113,319	5,149,139
2024	5,149,139	318,339	111,416	5,356,062
2025	5,356,062	331,351	108,890	5,578,523
2026	5,578,523	345,297	107,532	5,816,289
2027	5,816,289	360,187	106,582	6,069,894
2028	6,069,894	376,027	106,911	6,339,011
2029	6,339,011	392,938	104,016	6,627,932
2030	6,627,932	411,079	101,339	6,937,672
2031	6,937,672	430,525	98,556	7,269,641
2032	7,269,641	451,376	95,242	7,625,775
2033	7,625,775	473,740	91,863	8,007,652
2034	8,007,652	497,703	88,808	8,416,547
2035	8,416,547	523,359	85,621	8,854,285
2036	8,854,285	550,831	81,988	9,323,128
2037	9,323,128	580,247	78,350	9,825,025
2038	9,825,025	611,729	74,710	10,362,044
2039	10,362,044	645,407	71,068	10,936,383
2040	10,936,383	681,416	67,466	11,550,332
2041	11,550,332	719,899	63,911	12,206,320
2042	12,206,320	761,007	60,416	12,906,911
2043	12,906,911	804,900	57,028	13,654,783

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, contrary to Florida Statutes and Plan provisions:** N/A

Certain Key Assumptions

Valuation Investment Return Assumption	6.25%
Valuation Mortality Table	Florida Retirement System - Special Risk

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of the Fund assets do not include contributions from the Employer, Employee or State, which is contrary to Florida Statutes and Plan provisions. For this reason, these projections should not be viewed as a representation of the amount of time the Fund can sustain benefit payments. Under the GASB standards which DO include contributions from the employer, employee and State, the Fund is expected to be able to sustain the benefit payment demands in the near-term and long-term future.

ACTUARIALLY DETERMINED CONTRIBUTION

	Plan's Latest Actuarial Valuation	112.664(1)(a) F.S. Assumptions	112.664(1)(b) F.S. Assumptions	112.664(1)(b) F.S. Except 2% Higher Investment Return Assumption
A. Valuation Date	October 1, 2017	October 1, 2017	October 1, 2017	October 1, 2017
B. Actuarial Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2018	9/30/2018	9/30/2018	9/30/2018
C. Assumed Dates of Employer Contributions	10/1/2018	10/1/2018	10/1/2018	10/1/2018
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 0 *	\$ 0 *	\$ 0 *	\$ 0 *
E. Employer Normal Cost	(781,391)	(781,391)	(641,303)	(896,732)
F. ADC if Paid on Valuation Date: D + E	(781,391)	(781,391)	(641,303)	(896,732)
G. ADC Adjusted for Frequency of Payments	(814,600) **	(814,600) **	(655,732) **	(952,778) **
H. Adjusted for Frequency of as % of Covered Payroll	N/A %	N/A %	N/A %	N/A %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	0.00 %	0.00 %	0.00 %	0.00 %
J. Covered Payroll for Contribution Year	N/A	N/A	N/A	N/A
K. ADC for Contribution Year: H x J	0	0	0	0
L. Allowable Credit for State Revenue in Contribution Year	0	0	0	0
M. Employer ADC in Contribution Year	0	0	0	0
N. Employer ADC as % of Covered Payroll in Contribution Year: M ÷ J	N/A %	N/A %	N/A %	N/A %
O. Certain Key Assumptions				
Investment Return Assumption	4.25%	4.25%	2.25%	6.25%
Mortality Table	Florida Retirement System - Special Risk			

*The amortization of unfunded payment amount is not less than \$0 under Florida Statutes.

**There is no current contribution requirement.