# Jacksonville Police and Fire Pension Fund

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





July 24, 2018

Board of Trustees Jacksonville Police and Fire Pension Fund Jacksonville, Florida

**Dear Board Members:** 

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the Jacksonville Police and Fire Pension Fund (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 Board and is intended for use by the Retirement Board and those designated or approved by the Board. This report may be provided to parties other than the System 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 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 City and the Board 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 Town.

Except as otherwise indicated as required for the disclosures contained herein, this report was prepared using certain assumptions selected by the Board 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 May 22, 2018, for summaries and descriptions of this information.

Board of Trustees Jacksonville Police and Fire Pension Fund July 24, 2018 Page ii

Peter N. Strong and Jeffrey 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

Peter N. Strong, FSA, FCA, MAAA Enrolled Actuary No. 17-6975

Senior Consultant & Actuary

Jeffrey Amrose, MAAA

Enrolled Actuary No. 17-6599

Senior Consultant & Actuary



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## CH. 112.664, FLORIDA STATUTES

**R**ESULTS

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

Fiscal year ending September 30,	2017	
1. Total Pension Liability		
a. Service Cost	\$	45,257,077
b. Interest		233,338,035
c. Benefit Changes		26,818,328
d. Difference between actual & expected experience & Other		24,030,616
e. Assumption Changes		232,927,458
f. Benefit Payments		(170,465,766)
g. Contribution Refunds		(811,383)
h. Net Change in Total Pension Liability		391,094,365
i. Total Pension Liability - Beginning		3,345,515,259
j. Total Pension Liability - Ending	\$	3,736,609,624
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	174,526,198
b. Contributions - Employer (from State)		5,437,384
c. Contributions - Member		13,570,483
d. Net Investment Income		230,866,546
e. Benefit Payments		(170,465,766)
f. Contribution Refunds		(811,383)
g. Administrative Expense		(2,173,617)
h. Other		810,695
i. Net Change in Plan Fiduciary Net Position		251,760,540
j. Plan Fiduciary Net Position - Beginning		1,513,398,466
k. Plan Fiduciary Net Position - Ending	\$	1,765,159,006
3. Net Pension Liability / (Asset)		1,971,450,618
Certain Key Assumptions		
Valuation Date		10/01/2017
Measurement Date		09/30/2017
Investment Return Assumption		7.00%
Mortality Table	FRS M	ortality Rates from
	7/	1/16 FRS Valuation



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

Fiscal year ending September 30,	2017	
1. Total Pension Liability		
a. Service Cost	\$	45,257,077
b. Interest		233,338,035
c. Benefit Changes		26,818,328
d. Difference between actual & expected experience & Other		24,030,616
e. Assumption Changes		232,927,458
f. Benefit Payments		(170,465,766)
g. Contribution Refunds	<u></u>	(811,383)
h. Net Change in Total Pension Liability		391,094,365
i. Total Pension Liability - Beginning		3,345,515,259
j. Total Pension Liability - Ending	\$	3,736,609,624
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	174,526,198
b. Contributions - Employer (from State)		5,437,384
c. Contributions - Member		13,570,483
d. Net Investment Income		230,866,546
e. Benefit Payments		(170,465,766)
f. Contribution Refunds		(811,383)
g. Administrative Expense		(2,173,617)
h. Other		810,695
i. Net Change in Plan Fiduciary Net Position		251,760,540
j. Plan Fiduciary Net Position - Beginning		1,513,398,466
k. Plan Fiduciary Net Position - Ending	\$	1,765,159,006
3. Net Pension Liability / (Asset)		1,971,450,618
Certain Key Assumptions		
Valuation Date		10/01/2017
Measurement Date		09/30/2017
Investment Return Assumption		7.00%
Mortality Table	FRS M	ortality Rates from
	7/	1/16 FRS Valuation



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

Fiscal year ending September 30,		2017
1. Total Pension Liability		
a. Service Cost	\$	97,332,297
b. Interest		241,035,640
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		-
f. Benefit Payments		(170,465,766)
g. Contribution Refunds		(811,383)
h. Net Change in Total Pension Liability		167,090,788
i. Total Pension Liability - Beginning		4,807,974,546
j. Total Pension Liability - Ending	\$	4,975,065,334
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	174,526,198
b. Contributions - Employer (from State)	Ţ	5,437,384
c. Contributions - Member		13,570,483
d. Net Investment Income		230,866,546
e. Benefit Payments		(170,465,766)
f. Contribution Refunds		(811,383)
g. Administrative Expense		(2,173,617)
h. Other		810,695
i. Net Change in Plan Fiduciary Net Position		251,760,540
j. Plan Fiduciary Net Position - Beginning		1,513,398,466
k. Plan Fiduciary Net Position - Ending	\$	1,765,159,006
, <b>,</b>		,,,
3. Net Pension Liability / (Asset)		3,209,906,328
Certain Key Assumptions		
Valuation Date		10/01/2017
Measurement Date		09/30/2017
Investment Return Assumption		5.00%
Mortality Table	FRS M	ortality Rates from
	7/	1/16 FRS Valuation



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

2026       835,392,516       49,840,107       246,781,984       638,4         2027       638,450,639       35,818,919       253,503,604       420,7	
2019       1,704,905,089       112,848,311       185,572,715       1,632,11         2020       1,632,180,685       107,359,956       196,934,044       1,542,66         2021       1,542,606,597       100,715,977       207,613,849       1,435,70         2022       1,435,708,725       92,967,102       215,214,543       1,313,4         2023       1,313,461,284       84,043,123       225,690,475       1,171,8         2024       1,171,813,932       73,858,079       233,397,029       1,012,2         2025       1,012,274,983       62,481,510       239,363,976       835,3         2026       835,392,516       49,840,107       246,781,984       638,4         2027       638,450,639       35,818,919       253,503,604       420,7         2028       420,765,953       20,328,795       260,709,200       180,3         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       275,052,713         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907	Y)
2020       1,632,180,685       107,359,956       196,934,044       1,542,66         2021       1,542,606,597       100,715,977       207,613,849       1,435,70         2022       1,435,708,725       92,967,102       215,214,543       1,313,44         2023       1,313,461,284       84,043,123       225,690,475       1,171,8         2024       1,171,813,932       73,858,079       233,397,029       1,012,2         2025       1,012,274,983       62,481,510       239,363,976       835,3         2026       835,392,516       49,840,107       246,781,984       638,4         2027       638,450,639       35,818,919       253,503,604       420,7         2028       420,765,953       20,328,795       260,709,200       180,3         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       299,944,441         2036	05,089
2021       1,542,606,597       100,715,977       207,613,849       1,435,708,725         2022       1,435,708,725       92,967,102       215,214,543       1,313,44         2023       1,313,461,284       84,043,123       225,690,475       1,171,8         2024       1,171,813,932       73,858,079       233,397,029       1,012,2         2025       1,012,274,983       62,481,510       239,363,976       835,3         2026       835,392,516       49,840,107       246,781,984       638,4         2027       638,450,639       35,818,919       253,503,604       420,7         2028       420,765,953       20,328,795       260,709,200       180,33         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       294,944,441         2036       -       -       295,918,832	30,685
2022       1,435,708,725       92,967,102       215,214,543       1,313,44         2023       1,313,461,284       84,043,123       225,690,475       1,171,8         2024       1,171,813,932       73,858,079       233,397,029       1,012,2         2025       1,012,274,983       62,481,510       239,363,976       835,33         2026       835,392,516       49,840,107       246,781,984       638,4         2027       638,450,639       35,818,919       253,503,604       420,7         2028       420,765,953       20,328,795       260,709,200       180,3         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       295,918,832	06,597
2023       1,313,461,284       84,043,123       225,690,475       1,171,8         2024       1,171,813,932       73,858,079       233,397,029       1,012,2'         2025       1,012,274,983       62,481,510       239,363,976       835,3'         2026       835,392,516       49,840,107       246,781,984       638,4'         2027       638,450,639       35,818,919       253,503,604       420,7'         2028       420,765,953       20,328,795       260,709,200       180,3'         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       294,944,441         2036       -       -       295,918,832	08,725
2024       1,171,813,932       73,858,079       233,397,029       1,012,2         2025       1,012,274,983       62,481,510       239,363,976       835,3         2026       835,392,516       49,840,107       246,781,984       638,4         2027       638,450,639       35,818,919       253,503,604       420,7         2028       420,765,953       20,328,795       260,709,200       180,38         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       294,944,441         2036       -       -       295,918,832	51,284
2025       1,012,274,983       62,481,510       239,363,976       835,33         2026       835,392,516       49,840,107       246,781,984       638,4         2027       638,450,639       35,818,919       253,503,604       420,70         2028       420,765,953       20,328,795       260,709,200       180,38         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       294,944,441         2036       -       -       295,918,832	13,932
2026       835,392,516       49,840,107       246,781,984       638,4         2027       638,450,639       35,818,919       253,503,604       420,7         2028       420,765,953       20,328,795       260,709,200       180,3         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       294,944,441         2036       -       -       295,918,832	74,983
2027       638,450,639       35,818,919       253,503,604       420,70         2028       420,765,953       20,328,795       260,709,200       180,38         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       294,944,441         2036       -       -       295,918,832	92,516
2028       420,765,953       20,328,795       260,709,200       180,38         2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       294,944,441         2036       -       -       295,918,832	50,639
2029       180,385,548       3,270,348       267,332,579         2030       -       -       275,052,713         2031       -       -       279,115,050         2032       -       -       284,522,553         2033       -       -       287,945,063         2034       -       -       291,583,907         2035       -       -       294,944,441         2036       -       -       295,918,832	65,953
2030       -       275,052,713         2031       -       279,115,050         2032       -       284,522,553         2033       -       287,945,063         2034       -       291,583,907         2035       -       294,944,441         2036       -       295,918,832	85,548
2031       -       279,115,050         2032       -       284,522,553         2033       -       287,945,063         2034       -       -       291,583,907         2035       -       -       294,944,441         2036       -       -       295,918,832	-
2032       -       284,522,553         2033       -       287,945,063         2034       -       291,583,907         2035       -       294,944,441         2036       -       295,918,832	-
2033       -       287,945,063         2034       -       291,583,907         2035       -       294,944,441         2036       -       295,918,832	-
2034       -       291,583,907         2035       -       294,944,441         2036       -       295,918,832	-
2035       -       -       294,944,441         2036       -       -       295,918,832	-
2036 - 295,918,832	-
, ,	-
2037 - 295,776,613	-
, -,	-
2038 - 296,066,870	-
2039 - 295,948,025	-
2040 - 295,359,487	-
2041 - 293,821,032	-
2042 - 291,840,941	-
2043 - 289,428,332	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer</u>, <u>Employee</u> or State, contrary to Florida Statutes and Plan provisions:

11.67

7.00%

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

FRS Mortality Rates from 7/1/16 FRS Valuation

Note: As required in Section 112.664(1)(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.

	Market Value of	Expected	Projected Benefit	Market Value of
FYE	Assets (BOY)	<b>Investment Return</b>	Payments	Assets (EOY)
2018	1,765,159,006	117,345,163	177,599,080	1,704,905,089
2019	1,704,905,089	112,848,311	185,572,715	1,632,180,685
2020	1,632,180,685	107,359,956	196,934,044	1,542,606,597
2021	1,542,606,597	100,715,977	207,613,849	1,435,708,725
2022	1,435,708,725	92,967,102	215,214,543	1,313,461,284
2023	1,313,461,284	84,043,123	225,690,475	1,171,813,932
2024	1,171,813,932	73,858,079	233,397,029	1,012,274,983
2025	1,012,274,983	62,481,510	239,363,976	835,392,516
2026	835,392,516	49,840,107	246,781,984	638,450,639
2027	638,450,639	35,818,919	253,503,604	420,765,953
2028	420,765,953	20,328,795	260,709,200	180,385,548
2029	180,385,548	3,270,348	267,332,579	-
2030	-	-	275,052,713	-
2031	-	-	279,115,050	-
2032	-	-	284,522,553	-
2033	-	-	287,945,063	-
2034	-	-	291,583,907	-
2035	-	-	294,944,441	-
2036	-	-	295,918,832	-
2037	-	-	295,776,613	-
2038	-	-	296,066,870	-
2039	-	-	295,948,025	-
2040	-	-	295,359,487	-
2041	-	-	293,821,032	-
2042	-	-	291,840,941	-
2043	-	-	289,428,332	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer</u>, <u>Employee</u> or <u>State</u>, <u>contrary to Florida Statutes and Plan provisions</u>:

11.67

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

7.00% FRS Mortality Rates from 7/1/16 FRS Valuation

Note: As required in Section 112.664(1)(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.

	<b>Market Value of</b>	Expected	<b>Projected Benefit</b>	<b>Market Value of</b>
FYE	Assets (BOY)	<b>Investment Return</b>	Payments	Assets (EOY)
2018	1,765,159,006	83,817,973	177,599,080	1,671,377,899
2019	1,671,377,899	78,929,577	185,572,715	1,564,734,761
2020	1,564,734,761	73,313,387	196,934,044	1,441,114,104
2021	1,441,114,104	66,865,359	207,613,849	1,300,365,614
2022	1,300,365,614	59,637,917	215,214,543	1,144,788,988
2023	1,144,788,988	51,597,188	225,690,475	970,695,701
2024	970,695,701	42,699,859	233,397,029	779,998,531
2025	779,998,531	33,015,827	239,363,976	573,650,383
2026	573,650,383	22,512,970	246,781,984	349,381,368
2027	349,381,368	11,131,478	253,503,604	107,009,242
2028	107,009,242	-	260,709,200	-
2029	-	-	267,332,579	-
2030	-	-	275,052,713	-
2031	-	-	279,115,050	-
2032	-	-	284,522,553	-
2033	-	-	287,945,063	-
2034	-	-	291,583,907	-
2035	-	-	294,944,441	-
2036	-	-	295,918,832	-
2037	-	-	295,776,613	-
2038	-	-	296,066,870	-
2039	-	-	295,948,025	-
2040	-	-	295,359,487	-
2041	-	-	293,821,032	-
2042	-	-	291,840,941	-
2043	-	-	289,428,332	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer</u>, Employee or State, contrary to Florida Statutes and Plan provisions:

10.42

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

5.00%

FRS Mortality Rates from 7/1/16 FRS Valuation

Note: As required in Section 112.664(1)(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
A. Valuation Date	October 1, 2017	October 1, 2017	October 1, 2017
B. Actuarial Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2019	9/30/2019	9/30/2019
C. Assumed Date of Employer Contributions	12/1/2018	12/1/2018	12/1/2018
D. Expected Covered Payroll for the Year Beginning on the Valuation Date	\$ 149,489,571	\$ 149,489,571	\$ 149,489,571
E. Annual Payment to Amortize the Unfunded Actuarial Liability	78,162,211	78,162,211	101,274,964
F. Employer Normal Cost	54,693,160	54,693,160	101,678,311
G. ADC if Paid on the Valuation Date	132,855,371	132,855,371	202,953,275
H. Contributions from Court Fines	759,291	759,291	759,291
City Contribution if Paid on the Valuation Date     as % of Covered Payroll	132,096,080 88.36 %	132,096,080 88.36 %	202,193,984 135.26 %
J. Assumed Rate of Increase in Covered Payroll to Contribution Year	1.25 %	1.25 %	1.25 %
K. Covered Payroll for Contribution Year	151,358,191	151,358,191	151,358,191
L. City Contribution for Contribution Year*	135,264,010	135,264,010	206,392,928
M. Expected Member Contribution in Contribution Year	15,832,239	15,832,239	15,832,239
N. Expected Court Fines in Contribution Year	759,291	759,291	759,291
O. Total Contributions (from All Sources) in Contribution Year	151,855,540	151,855,540	222,984,458
P. Total Contributions as % of Covered Payroll in Contribution Year	100.33 %	100.33 %	147.32 %
Q. Certain Key Assumptions Investment Return Assumption Mortality Table	7.00% FRS Mortality Rates from 7/1/16 FRS Valuation	7.00% FRS Mortality Rates from 7/1/16 FRS Valuation	5.00% FRS Mortality Rates from 7/1/16 FRS Valuation

<sup>\*</sup> Adjusted for frequency of payments (from October 1, 2018 to December 1, 2018)

