

April 8, 2017

Mr. Timothy Johnson  
Executive Director  
Jacksonville Police and Fire Pension Fund  
One West Adams Street, Suite 100  
Jacksonville, FL 32202

**Re: Jacksonville Police and Fire Pension Fund – 30-Year Projections**

Dear Tim:

As requested, we have prepared projections for the Jacksonville Police and Fire Pension Fund (Fund) showing the projected assets, liabilities and contribution requirements over the next 30 years. The enclosed exhibits include deterministic projection results for the Fund under the following six scenarios:

- **Scenario 1 (Current Plan)** – Same plan provisions and actuarial assumptions as used in the October 1, 2016 Actuarial Valuation Report, but adjusted to reflect the precise timing of the Cost of Living Adjustment (in January of each year), the collectively bargained across-the-board salary increases scheduled to be granted in 2017 through 2019 (6.5% in 2017 and 2018 and 7.0% in 2019), and a payroll growth rate assumption of 1.25% for amortizing the unfunded actuarial accrued liability (UAAL). In addition, we have adjusted the results of the October 1, 2016 Actuarial Valuation Report to reflect the precise timing of the annual Cost of Living adjustment (January). In order to create a true “baseline”, the previously scheduled additional UAAL payments (from the Unfunded Actuarial Liability Payment Account (UALPA) and the City) totaling \$460 million are assumed to be made through 2028, and they are assumed to be placed in reserve until they can be used to pay off the remaining amortization bases, as suggested in Pension Board Consultants’ October 1, 2016 Actuarial Valuation Report.
- **Scenario 1A (Current Plan Stress Test)** – Same plan provisions and actuarial assumptions as described in Scenario 1, but assuming the actual return on the market value of assets is -15.0% during fiscal year 2019.
- **Scenario 2 (Pension Reform)** – Reflecting the changes proposed by Ordinance Nos. 2017-257 and 2017-259, including plan changes for both Group I and Group employees, the plan closure, and the pension liability surtax, as described in our Actuarial Impact Statement dated April 7, 2017. The annual proceeds from the pension liability surtax are projected to increase 4.25% per year from calendar year 2016 (the same annual growth rate used by the City of Jacksonville for their modeling purposes). A payroll growth rate assumption of 1.5% is used for amortizing the UAAL (the same rate used by the City for their modeling purposes). The previously scheduled additional UAAL payments totaling \$460 million are no longer assumed to be made.
- **Scenario 2A (Pension Reform Stress Test)** – Same plan provisions and actuarial assumptions as Scenario 2, but assuming the actual return on the market value of assets is -15.0% during fiscal year 2019.

- **Scenario 3 (Pension Reform)** – Same as Scenario 2, except the annual proceeds from the pension liability surtax are projected to increase by 3.34% per year from the calendar year 2016 (the rate recommended by GAPublic Solutions, Inc. - A Registered Municipal Advisor Firm) and a payroll growth rate assumption of 1.25% for amortizing UAAL.
- **Scenario 3A (Pension Reform Stress Test)** – Same plan provisions and actuarial assumptions as Scenario 3, but assuming the actual return on the market value of assets is -15.0% during fiscal year 2019.

## Disclosures

Please refer to the Actuarial Valuation report dated January 18, 2017, as prepared by Pension Board Consultants, Inc.; the Experience Study on the Payroll Growth Assumption dated April 4, 2017; the Replication of the October 1, 2016 Actuarial Valuation Results letter dated April 4, 2017; and the Actuarial Impact Statement for Ordinance Nos. 2017-257 and 2017-259, dated April 7, 2017, for a full description of the plan provisions, actuarial assumptions and methods, and relevant disclosures concerning the assumptions and methods and the treatment of the pension liability surtax.

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

The purpose of this report is to describe the projected long-term financial effects of proposed changes. No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them. This report should not be relied on for any purpose other than the purpose described above.

In the baseline projections (Scenarios 1 and 1A), new members are assumed to be hired each year throughout the projection period at a rate sufficient to maintain a constant active headcount. New employees are assumed to have the same demographic characteristics at their dates of employment as those of members hired during the three-year period ending June 30, 2016. The initial (first year) salaries for new employees are assumed to increase by the negotiated across-the-board salary increases in 2017-2019 (6.5%, 6.5% and 7.0%, respectively), and by the Fund's inflation assumption (2.5%) in 2020 and thereafter. Existing and future employees are assumed to decrement each year based on the current valuation assumptions. Annual expenses and contributions from Chapter Funds Allocation and Court Fines are projected to increase 2.5% annually. DROP accounts are projected forward assuming 10% of the beginning-of-year balances will be distributed each year.

Projections are deterministic, meaning that throughout the projection period, Plan experience is expected to match the actuarial assumptions. In the stress test scenarios, the investment return on the market value of assets each year is assumed to be 7.0% in years 2017-2018, -15% for year 2019, and 7.0% for years 2020 and thereafter throughout the remainder of the projection period.

The results in this report are based on the census data as of July 1, 2016 and asset data as of October 1, 2016, as provided by Pension Board Consultants and as used for the October 1, 2016 Actuarial Valuation. We reviewed this information for reasonability, but did not audit the data. We are not responsible for the accuracy or completeness of this information.

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As with any actuarial valuation, the calculation results shown herein are based upon assumptions regarding future events, which may or may not materialize. They are also based on the assumptions, methods, and plan provisions outlined in this report, in the Actuarial Valuation report dated January 18, 2017, and in the Actuarial Impact Statement for Ordinance Nos. 2017-257 and 2017-259, dated April 7, 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. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the author of the report prior to relying on information in the report.

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 Jacksonville Police and Fire Pension Fund as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

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.

Respectfully submitted,



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Peter N. Strong, FSA, MAAA, FCA  
Enrolled Actuary No. 17-06975



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Jeffrey Amrose, MAAA, FCA  
Enrolled Actuary No. 17-06599

**Jacksonville Police and Fire Pension Fund**  
**30-Year Projection of Required City Contribution**  
**(7.0% Actual Rate of Return on Fund Assets Assumed to be Earned Each Year)**

**Scenario 1: Current Plan - Including All Assumption Changes (with Payroll Growth Rate of 1.25%)**

Fiscal Year Ending	Valuation Date	Covered October 1 Payroll	Actuarial Accrued Liability	Net Market Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio on Valuation Date	Required City Contribution <sup>1</sup>	
							% of Pay	\$ Amount
2018	10/1/2016	135,684,787	3,494,715,420	1,513,398,466	1,981,316,954	43.31%	150.55%	209,177,225
2019	10/1/2017	144,303,214	3,597,034,237	1,607,423,814	1,989,610,422	44.69%	144.11%	212,948,284
2020	10/1/2018	154,313,674	3,702,354,471	1,748,934,652	1,953,419,819	47.24%	135.10%	213,480,155
2021	10/1/2019	166,564,176	3,811,449,823	1,898,666,874	1,912,782,949	49.81%	127.55%	217,551,926
2022	10/1/2020	168,033,062	3,925,513,049	2,054,151,361	1,871,361,688	52.33%	127.31%	219,048,054
2023	10/1/2021	168,984,836	4,039,358,443	2,217,185,539	1,822,172,904	54.89%	127.47%	220,565,679
2024	10/1/2022	170,072,421	4,151,905,840	2,384,814,233	1,767,091,606	57.44%	127.11%	221,355,217
2025	10/1/2023	170,217,209	4,261,864,967	2,556,344,448	1,705,520,519	59.98%	126.94%	221,263,757
2026	10/1/2024	168,849,991	4,367,279,171	2,730,334,481	1,636,944,690	62.52%	127.45%	220,358,541
2027	10/1/2025	168,379,649	4,465,197,777	2,904,122,113	1,561,075,664	65.04%	115.36%	198,902,386
2028	10/1/2026	168,161,690	4,557,818,327	3,079,730,519	1,478,087,808	67.57%	109.89%	189,227,081
2029	10/1/2027	168,747,629	4,643,540,535	3,233,266,572	1,410,273,963	69.63%	108.89%	188,158,580
2030	10/1/2028	168,654,050	4,723,749,971	3,377,901,145	1,345,848,826	71.51%	108.57%	187,507,550
2031	10/1/2029	168,314,244	4,796,555,600	3,520,454,514	1,276,101,086	73.40%	108.18%	186,452,482
2032	10/1/2030	168,798,482	4,859,797,544	3,660,038,502	1,199,759,042	75.31%	106.70%	184,432,811
2033	10/1/2031	171,217,956	4,916,960,178	3,800,189,468	1,116,770,710	77.29%	96.40%	169,005,333
2034	10/1/2032	174,244,567	4,970,751,244	4,890,173,519	80,577,726	98.38%	16.64%	29,690,890
2035	10/1/2033	177,411,142	5,021,777,851	5,085,370,186	(63,592,334)	101.27%	16.10%	29,245,395
2036	10/1/2034	180,683,645	5,068,812,622	5,138,065,982	(69,253,360)	101.37%	15.40%	28,497,666
2037	10/1/2035	184,326,130	5,109,943,030	5,185,558,341	(75,615,311)	101.48%	14.56%	27,488,770
2038	10/1/2036	188,910,783	5,147,631,656	5,230,308,419	(82,676,763)	101.61%	14.05%	27,178,086
2039	10/1/2037	194,108,894	5,183,665,528	5,273,143,173	(89,477,645)	101.73%	13.67%	27,172,165
2040	10/1/2038	199,644,945	5,219,260,758	5,315,689,102	(96,428,344)	101.85%	13.39%	27,382,124
2041	10/1/2039	205,325,445	5,255,279,168	5,358,919,030	(103,639,862)	101.97%	13.24%	27,845,600
2042	10/1/2040	211,035,247	5,292,327,587	5,403,424,123	(111,096,537)	102.10%	13.20%	28,529,774
2043	10/1/2041	216,835,736	5,330,469,062	5,449,325,240	(118,856,178)	102.23%	13.19%	29,277,310
2044	10/1/2042	222,478,673	5,369,770,069	5,496,879,999	(127,109,930)	102.37%	13.19%	30,048,532
2045	10/1/2043	229,203,615	5,409,872,004	5,545,807,431	(135,935,427)	102.51%	13.17%	30,920,138
2046	10/1/2044	236,057,809	5,451,550,623	5,596,843,763	(145,293,139)	102.67%	13.15%	31,796,613
2047	10/1/2045	239,245,146	5,495,252,620	5,650,575,266	(155,322,647)	102.83%	13.21%	32,374,049

**Total:** **3,666,882,175**  
**Total Present Value at 7%:** **2,188,829,650**

<sup>1</sup>Future contributions are assumed to be equal to the dollar amount of the calculated contribution, payable in December of the fiscal year beginning one year after the valuation date.

**Assumptions**

Mortality Assumption: FRS Special Risk Mortality  
Healthy Lives: RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years using Scale BB; 90% blue collar / 10% white collar adjustment for males; 100% white collar adjustment for females.  
Disabled Lives: 60% of RP-2000 Mortality Table for disabled annuitants with 4-year setback for males and 2-year set-forward for females, and 40% of RP-2000 Mortality Table for healthy annuitants with 100% white collar adjustment. No mortality improvements projected.

Investment Return Assumption: 7.0% per year  
Actual Return on Plan Assets: 7.0% per year  
Salary Increase Assumption: 10.0% for years 2017-2018, 10.5% for year 2019, and 3.5% for years 2020 and thereafter  
Payroll Growth Rate Assumption: 1.25% per year  
DROP Accounts: Projected forward assuming 10% payout per projection year  
Annual Expenses and Contributions from Chapter Funds Allocation and Court Fines are projected to increase by 2.5% per year.  
No future actuarial experience gains or losses are assumed. Extra UAAL payments of \$460 million assumed placed in reserve until equal to UAAL.

## Jacksonville Police and Fire Pension Fund

### 30-Year Projection of Required City Contribution

(Stress Test: -15% Actual Rate of Return on Fund Assets in Year 2019, All Other Years 7.0% Actual Rate of Return)

#### Scenario 1A: Current Plan - Including All Assumption Changes (with Payroll Growth Rate of 1.25%)

Fiscal Year Ending	Valuation Date	Covered October 1 Payroll	Actuarial Accrued Liability	Net Market Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio on Valuation Date	Required City Contribution <sup>1</sup>	
							% of Pay	\$ Amount
2018	10/1/2016	135,684,787	3,494,715,420	1,513,398,466	1,981,316,954	43.31%	150.55%	209,177,225
2019	10/1/2017	144,303,214	3,597,034,237	1,607,423,814	1,989,610,422	44.69%	144.11%	212,948,285
2020	10/1/2018	154,313,674	3,702,354,471	1,748,934,652	1,953,419,819	47.24%	135.10%	213,480,156
2021	10/1/2019	166,564,176	3,811,449,823	1,508,286,770	2,303,163,053	39.57%	143.11%	244,095,015
2022	10/1/2020	168,033,062	3,925,513,049	1,636,444,650	2,289,068,400	41.69%	144.32%	248,325,943
2023	10/1/2021	168,984,836	4,039,358,443	1,798,640,463	2,240,717,980	44.53%	144.73%	250,429,726
2024	10/1/2022	170,072,421	4,151,905,840	1,968,298,344	2,183,607,496	47.41%	144.47%	251,600,039
2025	10/1/2023	170,217,209	4,261,864,967	2,142,626,977	2,119,237,990	50.27%	144.51%	251,878,700
2026	10/1/2024	168,849,991	4,367,279,171	2,320,018,746	2,047,260,425	53.12%	145.38%	251,354,830
2027	10/1/2025	168,379,649	4,465,197,777	2,497,842,265	1,967,355,511	55.94%	133.38%	229,977,670
2028	10/1/2026	168,161,690	4,557,818,327	2,678,177,111	1,879,641,216	58.76%	128.14%	220,651,743
2029	10/1/2027	168,747,629	4,643,540,535	2,836,854,979	1,806,685,556	61.09%	127.34%	220,036,859
2030	10/1/2028	168,654,050	4,723,749,971	2,987,365,129	1,736,384,842	63.24%	127.27%	219,790,724
2031	10/1/2029	168,314,244	4,796,555,600	3,136,690,735	1,659,864,866	65.39%	127.15%	219,140,462
2032	10/1/2030	168,798,482	4,859,797,544	3,283,954,254	1,575,843,290	67.57%	125.85%	217,518,884
2033	10/1/2031	171,217,956	4,916,960,178	3,432,755,462	1,484,204,716	69.81%	124.32%	217,960,568
2034	10/1/2032	174,244,567	4,970,751,244	3,583,887,538	1,386,863,707	72.10%	111.21%	198,426,857
2035	10/1/2033	177,411,142	5,021,777,851	3,740,026,287	1,281,751,564	74.48%	108.28%	196,710,098
2036	10/1/2034	180,683,645	5,068,812,622	3,879,095,495	1,189,717,126	76.53%	15.40%	28,497,666
2037	10/1/2035	184,326,130	5,109,943,030	5,179,641,713	(69,698,683)	101.36%	14.56%	27,488,770
2038	10/1/2036	188,910,783	5,147,631,656	5,223,977,628	(76,345,972)	101.48%	14.05%	27,178,086
2039	10/1/2037	194,108,894	5,183,665,528	5,266,369,226	(82,703,698)	101.60%	13.67%	27,172,165
2040	10/1/2038	199,644,945	5,219,260,758	5,308,440,980	(89,180,221)	101.71%	13.39%	27,382,124
2041	10/1/2039	205,325,445	5,255,279,168	5,351,163,539	(95,884,371)	101.82%	13.24%	27,845,600
2042	10/1/2040	211,035,247	5,292,327,587	5,395,125,748	(102,798,161)	101.94%	13.20%	28,529,774
2043	10/1/2041	216,835,736	5,330,469,062	5,440,445,978	(109,976,916)	102.06%	13.19%	29,277,310
2044	10/1/2042	222,478,673	5,369,770,069	5,487,379,188	(117,609,119)	102.19%	13.19%	30,048,532
2045	10/1/2043	229,203,615	5,409,872,004	5,535,641,564	(125,769,560)	102.32%	13.17%	30,920,138
2046	10/1/2044	236,057,809	5,451,550,623	5,585,966,285	(134,415,661)	102.47%	13.15%	31,796,613
2047	10/1/2045	239,245,146	5,495,252,620	5,638,936,365	(143,683,745)	102.61%	13.21%	32,374,049
<b>Total:</b>								<b>4,422,014,612</b>
<b>Total Present Value at 7%:</b>								<b>2,528,052,236</b>

<sup>1</sup>Future contributions are assumed to be equal to the dollar amount of the calculated contribution, payable in December of the fiscal year beginning one year after the valuation date.

#### Assumptions

Mortality Assumption: FRS Special Risk Mortality  
 Healthy Lives: RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years using Scale BB; 90% blue collar / 10% white collar adjustment for males; 100% white collar adjustment for females.  
 Disabled Lives: 60% of RP-2000 Mortality Table for disabled annuitants with 4-year setback for males and 2-year set-forward for females, and 40% of RP-2000 Mortality Table for healthy annuitants with 100% white collar adjustment. No mortality improvements projected.

Investment Return Assumption: 7.0% per year  
 Actual Return on Plan Assets: 7.0% for years 2017-2018, -15% for year 2019, and 7.0% for years 2020 and thereafter  
 Salary Increase Assumption: 10.0% for years 2017-2018, 10.5% for year 2019, and 3.5% for years 2020 and thereafter  
 Payroll Growth Rate Assumption: 1.25% per year  
 DROP Accounts: Projected forward assuming 10% payout per projection year

Annual Expenses and Contributions from Chapter Funds Allocation and Court Fines are projected to increase by 2.5% per year.  
 No future actuarial experience gains or losses, other than investment losses for the year 2019, are assumed. Extra UAAL payments = \$460 million.

*Prepared by Gabriel, Roeder, Smith and Company*

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**Jacksonville Police and Fire Pension Fund**  
**30-Year Projection of Required City Contribution**  
**(7.0% Actual Rate of Return on Fund Assets Assumed to be Earned Each Year)**

**Scenario 2: Reflecting Plan and Method Changes as a result of Ord. 2017-257 and Ord. 2017-259 with  
Pension Liability Surtax Growth Rate of 4.25% and Payroll Growth Rate of 1.50%**

Fiscal Year Ending	Valuation Date	Covered October 1 Payroll	Actuarial Accrued Liability	Net Market Value of Assets	Net Present Value of Future Pension Liability Surtax Proceeds	Unfunded Actuarial Accrued Liability	Funded Ratio on Valuation Date	Liquidity Ratio	Required City Contribution <sup>1</sup>	
									% of Pay	\$ Amount
2018	10/1/2016	135,684,787	3,518,251,848	1,513,398,466	737,512,896	2,004,853,382	43.02%	7.84 : 1	97.19%	135,368,758
2019	10/1/2017	144,303,214	3,626,011,048	1,604,804,878	789,138,799	2,021,206,170	44.26%	7.71 : 1	92.51%	137,035,240
2020	10/1/2018	149,372,475	3,738,070,177	1,663,867,687	844,378,514	2,074,202,490	44.51%	7.78 : 1	91.39%	140,125,086
2021	10/1/2019	155,975,584	3,853,716,001	1,722,524,317	903,485,010	2,131,191,684	44.70%	7.85 : 1	89.80%	143,781,134
2022	10/1/2020	152,425,187	3,974,071,147	1,782,669,814	966,728,961	2,191,401,333	44.86%	7.87 : 1	92.28%	144,385,053
2023	10/1/2021	147,539,843	4,093,707,741	1,842,493,726	1,034,399,989	2,251,214,015	45.01%	7.86 : 1	95.35%	144,402,063
2024	10/1/2022	142,292,659	4,211,391,364	1,897,908,864	1,106,807,988	2,313,482,499	45.07%	7.80 : 1	98.71%	144,183,891
2025	10/1/2023	134,964,361	4,325,585,334	1,946,787,142	1,184,284,547	2,378,798,193	45.01%	7.67 : 1	103.26%	143,064,669
2026	10/1/2024	125,244,391	4,434,018,529	1,987,321,870	1,267,184,465	2,446,696,659	44.82%	7.45 : 1	109.76%	141,108,542
2027	10/1/2025	114,565,867	4,533,374,605	2,015,857,527	1,355,887,378	2,517,517,077	44.47%	7.30 : 1	117.98%	138,748,799
2028	10/1/2026	106,423,249	4,625,484,701	2,033,481,245	1,450,799,494	2,592,003,456	43.96%	7.05 : 1	125.71%	137,326,993
2029	10/1/2027	97,102,141	4,708,867,408	2,037,014,891	1,552,355,459	2,671,852,517	43.26%	6.83 : 1	136.01%	135,570,624
2030	10/1/2028	88,611,010	4,784,514,039	2,028,514,753	1,661,020,341	2,755,999,286	42.40%	6.53 : 1	147.50%	134,163,522
2031	10/1/2029	78,000,450	4,850,496,446	2,005,001,803	1,777,291,765	2,845,494,643	41.34%	6.18 : 1	165.08%	132,180,569
2032	10/1/2030	66,655,621	4,903,951,001	1,964,246,748	1,901,702,188	2,939,704,253	40.05%	5.88 : 1	189.90%	129,931,993
2033	10/1/2031	60,699,458	4,948,040,792	1,981,652,618	1,961,854,040	2,966,388,174	40.05%	5.82 : 1	207.58%	129,342,682
2034	10/1/2032	56,328,281	4,985,906,269	2,018,333,918	1,997,956,090	2,967,572,351	40.48%	5.83 : 1	223.99%	129,514,365
2035	10/1/2033	51,718,469	5,017,908,254	2,053,634,178	2,032,283,105	2,964,274,076	40.93%	5.81 : 1	244.28%	129,685,273
2036	10/1/2034	45,116,687	5,042,300,202	2,087,201,231	2,064,527,990	2,955,098,971	41.39%	5.76 : 1	279.18%	129,293,820
2037	10/1/2035	36,420,290	5,056,281,813	2,117,416,925	2,094,354,382	2,938,864,888	41.88%	5.72 : 1	342.99%	128,228,608
2038	10/1/2036	28,560,001	5,059,613,437	2,144,752,436	2,121,394,272	2,914,861,001	42.39%	5.68 : 1	434.06%	127,253,029
2039	10/1/2037	21,440,332	5,052,144,843	2,168,880,618	2,145,245,446	2,883,264,224	42.93%	5.64 : 1	574.66%	126,475,377
2040	10/1/2038	14,211,285	5,033,812,770	2,190,354,340	2,165,468,728	2,843,458,430	43.51%	5.63 : 1	861.51%	125,676,822
2041	10/1/2039	9,638,565	5,006,133,228	2,211,709,284	2,181,585,025	2,794,423,944	44.18%	5.63 : 1	1270.43%	125,697,110
2042	10/1/2040	6,766,012	4,970,566,368	2,234,344,663	2,193,072,136	2,736,221,705	44.95%	5.65 : 1	1819.06%	126,340,844
2043	10/1/2041	4,511,937	4,928,396,978	2,260,741,904	2,199,361,331	2,667,655,075	45.87%	5.70 : 1	2746.94%	127,226,065
2044	10/1/2042	3,057,575	4,880,000,366	2,292,721,235	2,199,833,672	2,587,279,131	46.98%	5.76 : 1	4087.40%	128,288,432
2045	10/1/2043	1,923,828	4,825,945,536	2,331,955,025	2,193,816,050	2,493,990,511	48.32%	5.86 : 1	6547.42%	129,300,437
2046	10/1/2044	1,044,173	4,766,420,485	2,379,905,987	2,180,576,941	2,386,514,499	49.93%	5.98 : 1	12123.11%	129,942,069
2047	10/1/2045	586,333	4,701,567,150	2,437,879,274	2,159,321,829	2,263,687,875	51.85%	6.14 : 1	21435.70%	129,016,537

**Total:** **4,002,658,407**  
**Total Present Value at 7%:** **1,810,854,598**

<sup>1</sup>Future contributions are assumed to be equal to the dollar amount of the calculated contribution, payable in December of the fiscal year beginning one year after the valuation date.

**Assumptions**

Mortality Assumption: FRS Special Risk Mortality

Healthy Lives: RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years using Scale BB; 90% blue collar / 10% white collar adjustment for males; 100% white collar adjustment for females.

Disabled Lives: 60% of RP-2000 Mortality Table for disabled annuitants with 4-year setback for males and 2-year set-forward for females, and 40% of RP-2000 Mortality Table for healthy annuitants with 100% white collar adjustment. No mortality improvements projected.

Investment Return Assumption: 7.0% per year

Actual Return on Plan Assets: 7.0% per year

Salary Increase Assumption: 10.0% for years 2017-2018, 10.5% for year 2019, and 3.5% for years 2020 and thereafter

Payroll Growth Rate Assumption: 1.5% per year

Pension Liability Surtax: Projected to increase 4.25% annually

Annual Expenses and Contributions from Court Fines: Projected to increase 2.5% annually

DROP Accounts: Projected forward assuming 10% payout per projection year

No future actuarial experience gains or losses are assumed. Extra UAAL payments = \$0.

*Prepared by Gabriel, Roeder, Smith and Company*

April 8, 2017

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## Jacksonville Police and Fire Pension Fund

### 30-Year Projection of Required City Contribution

(Stress Test: -15% Actual Rate of Return on Fund Assets in Year 2019, All Other Years 7.0% Actual Rate of Return)

Scenario 2A: Reflecting Plan and Method Changes as a result of Ord. 2017-257 and Ord. 2017-259 with  
Pension Liability Surtax Growth Rate of 4.25% and Payroll Growth Rate of 1.50%

Fiscal Year Ending	Valuation Date	Covered October 1 Payroll	Actuarial Accrued Liability	Net Market Value of Assets	Net Present Value of Future Pension Liability Surtax Proceeds	Unfunded Actuarial Accrued Liability	Funded Ratio on Valuation Date	Liquidity Ratio	Required City Contribution <sup>1</sup>	
									% of Pay	\$ Amount
2018	10/1/2016	135,684,787	3,518,251,848	1,513,398,466	737,512,896	2,004,853,382	43.02%	7.84 : 1	97.19%	135,368,758
2019	10/1/2017	144,303,214	3,626,011,048	1,604,804,878	789,138,799	2,021,206,170	44.26%	7.71 : 1	92.51%	137,035,240
2020	10/1/2018	149,372,475	3,738,070,177	1,663,867,687	844,378,514	2,074,202,490	44.51%	7.78 : 1	91.39%	140,125,086
2021	10/1/2019	155,975,584	3,853,716,001	1,368,360,439	903,485,010	2,485,355,562	35.51%	5.91 : 1	104.49%	167,297,148
2022	10/1/2020	152,425,187	3,974,071,147	1,403,714,464	966,728,961	2,570,356,683	35.32%	5.88 : 1	108.63%	169,968,234
2023	10/1/2021	147,539,843	4,093,707,741	1,462,173,637	1,034,399,989	2,631,534,104	35.72%	5.95 : 1	112.56%	170,478,884
2024	10/1/2022	142,292,659	4,211,391,364	1,518,340,373	1,106,807,988	2,693,050,991	36.05%	5.97 : 1	116.83%	170,641,480
2025	10/1/2023	134,964,361	4,325,585,334	1,568,551,053	1,184,284,547	2,757,034,281	36.26%	5.94 : 1	122.63%	169,899,323
2026	10/1/2024	125,244,391	4,434,018,529	1,610,918,876	1,267,184,465	2,823,099,653	36.33%	5.83 : 1	130.93%	168,325,741
2027	10/1/2025	114,565,867	4,533,374,605	1,641,819,404	1,355,887,378	2,891,555,201	36.22%	5.74 : 1	141.45%	166,354,917
2028	10/1/2026	106,423,249	4,625,484,701	1,662,382,855	1,450,799,494	2,963,101,846	35.94%	5.58 : 1	151.34%	165,328,158
2029	10/1/2027	97,102,141	4,708,867,408	1,669,478,161	1,552,355,459	3,039,389,247	35.45%	5.42 : 1	164.50%	163,971,053
2030	10/1/2028	88,611,010	4,784,514,039	1,665,211,699	1,661,020,341	3,119,302,340	34.80%	5.20 : 1	179.17%	162,969,262
2031	10/1/2029	78,000,450	4,850,496,446	1,646,655,994	1,777,291,765	3,203,840,452	33.95%	4.93 : 1	201.57%	161,396,705
2032	10/1/2030	66,655,621	4,903,951,001	1,611,638,874	1,901,702,188	3,292,312,127	32.86%	4.69 : 1	233.21%	159,565,540
2033	10/1/2031	60,699,458	4,948,040,792	1,635,623,459	1,961,854,040	3,312,417,333	33.06%	4.67 : 1	255.82%	159,400,515
2034	10/1/2032	56,328,281	4,985,906,269	1,679,790,613	1,997,956,090	3,306,115,656	33.69%	4.73 : 1	276.71%	159,998,035
2035	10/1/2033	51,718,469	5,017,908,254	1,723,554,723	2,032,283,105	3,294,353,531	34.35%	4.76 : 1	302.50%	160,597,595
2036	10/1/2034	45,116,687	5,042,300,202	1,766,633,741	2,064,527,990	3,275,666,461	35.04%	4.77 : 1	346.86%	160,640,097
2037	10/1/2035	36,420,290	5,056,281,813	1,807,485,896	2,094,354,382	3,248,795,918	35.75%	4.79 : 1	428.02%	160,017,278
2038	10/1/2036	28,560,001	5,059,613,437	1,846,666,751	2,121,394,272	3,212,946,686	36.50%	4.81 : 1	544.03%	159,494,914
2039	10/1/2037	21,440,332	5,052,144,843	1,883,942,812	2,145,245,446	3,168,202,031	37.29%	4.82 : 1	723.25%	159,178,518
2040	10/1/2038	14,211,285	5,033,812,770	1,919,969,704	2,165,468,728	3,113,843,066	38.14%	4.86 : 1	1088.90%	158,848,906
2041	10/1/2039	9,638,565	5,006,133,228	1,957,390,084	2,181,585,025	3,048,743,144	39.10%	4.92 : 1	1610.55%	159,349,469
2042	10/1/2040	6,766,012	4,970,566,368	1,997,717,248	2,193,072,136	2,972,849,120	40.19%	5.00 : 1	2310.54%	160,475,980
2043	10/1/2041	4,511,937	4,928,396,978	2,043,558,594	2,199,361,331	2,884,838,384	41.46%	5.10 : 1	3494.42%	161,845,835
2044	10/1/2042	3,057,575	4,880,000,366	2,096,859,689	2,199,833,672	2,783,140,677	42.97%	5.23 : 1	5206.25%	163,404,947
2045	10/1/2043	1,923,828	4,825,945,536	2,159,426,325	2,193,816,050	2,666,519,211	44.75%	5.39 : 1	8352.38%	164,945,338
2046	10/1/2044	1,044,173	4,766,420,485	2,232,874,948	2,180,576,941	2,533,545,538	46.85%	5.58 : 1	15509.56%	166,239,881
2047	10/1/2045	586,333	4,701,567,150	2,318,696,106	2,159,321,829	2,382,871,044	49.32%	5.81 : 1	27706.76%	166,760,582

**Total:** **4,829,923,419**  
**Total Present Value at 7%:** **2,113,034,314**

<sup>1</sup>Future contributions are assumed to be equal to the dollar amount of the calculated contribution, payable in December of the fiscal year beginning one year after the valuation date.

#### Assumptions

Mortality Assumption: FRS Special Risk Mortality

Healthy Lives: RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years using Scale BB; 90% blue collar / 10% white collar adjustment for males; 100% white collar adjustment for females.

Disabled Lives: 60% of RP-2000 Mortality Table for disabled annuitants with 4-year setback for males and 2-year set-forward for females, and 40% of RP-2000 Mortality Table for healthy annuitants with 100% white collar adjustment. No mortality improvements projected.

Investment Return Assumption: 7.0% per year

Actual Return on Plan Assets: 7.0% for years 2017-2018, -15% for year 2019, and 7.0% for years 2020 and thereafter

Salary Increase Assumption: 10.0% for years 2017-2018, 10.5% for year 2019, and 3.5% for years 2020 and thereafter

Payroll Growth Rate Assumption: 1.5% per year

Pension Liability Surtax: Projected to increase 4.25% annually

Annual Expenses and Contributions from Court Fines: Projected to increase 2.5% annually

DROP Accounts: Projected forward assuming 10% payout per projection year

No future actuarial experience gains or losses, other than investment losses for the year 2019, are assumed. Extra UAAL payments = \$0.

*Prepared by Gabriel, Roeder, Smith and Company*

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**Jacksonville Police and Fire Pension Fund**  
**30-Year Projection of Required City Contribution**  
**(7.0% Actual Rate of Return on Fund Assets Assumed to be Earned Each Year)**

**Scenario 3: Reflecting Plan and Method Changes as a result of Ordinance 2017-257 and Ordinance 2017-259 with  
Pension Liability Surtax Growth Rate of 3.34% and Payroll Growth Rate of 1.25%**

Fiscal Year Ending	Valuation Date	Covered October 1 Payroll	Actuarial Accrued Liability	Net Market Value of Assets	Net Present Value of Future Pension Liability Surtax Proceeds	Unfunded Actuarial Accrued Liability	Funded Ratio on Valuation Date	Liquidity Ratio	Required City Contribution <sup>1</sup>	
									% of Pay	\$ Amount
2018	10/1/2016	135,684,787	3,518,251,848	1,513,398,466	580,767,389	2,004,853,382	43.02%	7.84 : 1	106.46%	147,920,652
2019	10/1/2017	144,303,214	3,626,011,048	1,604,804,878	621,421,107	2,021,206,170	44.26%	7.71 : 1	101.78%	150,399,046
2020	10/1/2018	149,372,475	3,738,070,177	1,677,298,214	664,920,584	2,060,771,963	44.87%	7.86 : 1	100.36%	153,504,174
2021	10/1/2019	155,975,584	3,853,716,001	1,751,194,254	711,465,025	2,102,521,747	45.44%	8.01 : 1	98.37%	157,115,094
2022	10/1/2020	152,425,187	3,974,071,147	1,827,662,270	761,267,577	2,146,408,877	45.99%	8.11 : 1	101.02%	157,674,909
2023	10/1/2021	147,539,843	4,093,707,741	1,904,902,991	814,556,307	2,188,804,750	46.53%	8.18 : 1	104.34%	157,640,354
2024	10/1/2022	142,292,659	4,211,391,364	1,978,906,924	871,575,249	2,232,484,440	46.99%	8.18 : 1	108.00%	157,366,439
2025	10/1/2023	134,964,361	4,325,585,334	2,047,620,036	932,585,516	2,277,965,299	47.34%	8.13 : 1	113.02%	156,189,823
2026	10/1/2024	125,244,391	4,434,018,529	2,109,318,393	997,866,502	2,324,700,136	47.57%	7.98 : 1	120.22%	154,173,397
2027	10/1/2025	114,565,867	4,533,374,605	2,160,437,721	1,067,717,157	2,372,936,883	47.66%	7.90 : 1	129.35%	151,749,379
2028	10/1/2026	106,423,249	4,625,484,701	2,202,161,448	1,142,457,358	2,423,323,253	47.61%	7.72 : 1	137.88%	150,256,683
2029	10/1/2027	97,102,141	4,708,867,408	2,231,413,329	1,222,429,373	2,477,454,079	47.39%	7.57 : 1	149.28%	148,428,074
2030	10/1/2028	88,611,010	4,784,514,039	2,250,355,850	1,307,999,430	2,534,158,189	47.03%	7.34 : 1	161.95%	146,943,734
2031	10/1/2029	78,000,450	4,850,496,446	2,256,129,247	1,399,559,390	2,594,367,199	46.51%	7.06 : 1	181.39%	144,881,630
2032	10/1/2030	66,655,621	4,903,951,001	2,246,627,940	1,497,528,547	2,657,323,060	45.81%	6.84 : 1	208.85%	142,549,767
2033	10/1/2031	60,699,458	4,948,040,792	2,288,398,902	1,538,379,972	2,659,641,891	46.25%	6.84 : 1	228.25%	141,868,533
2034	10/1/2032	56,328,281	4,985,906,269	2,346,997,033	1,557,895,263	2,638,909,236	47.07%	6.90 : 1	246.09%	141,944,601
2035	10/1/2033	51,718,469	5,017,908,254	2,404,292,689	1,575,831,703	2,613,615,565	47.91%	6.92 : 1	268.16%	142,016,839
2036	10/1/2034	45,116,687	5,042,300,202	2,459,850,768	1,591,980,411	2,582,449,434	48.78%	6.90 : 1	306.34%	141,523,664
2037	10/1/2035	36,420,290	5,056,281,813	2,511,960,576	1,606,114,602	2,544,321,237	49.68%	6.90 : 1	376.34%	140,352,877
2038	10/1/2036	28,560,001	5,059,613,437	2,560,989,566	1,617,988,217	2,498,623,871	50.62%	6.90 : 1	476.20%	139,265,558
2039	10/1/2037	21,440,332	5,052,144,843	2,606,493,814	1,627,334,469	2,445,651,029	51.59%	6.89 : 1	630.26%	138,370,462
2040	10/1/2038	14,211,285	5,033,812,770	2,648,893,582	1,633,864,266	2,384,919,188	52.62%	6.92 : 1	944.53%	137,449,189
2041	10/1/2039	9,638,565	5,006,133,228	2,690,577,727	1,637,264,537	2,315,555,501	53.75%	6.97 : 1	1391.52%	137,338,654
2042	10/1/2040	6,766,012	4,970,566,368	2,732,783,122	1,637,196,421	2,237,783,246	54.98%	7.03 : 1	1989.59%	137,844,099
2043	10/1/2041	4,511,937	4,928,396,978	2,777,808,485	1,633,293,337	2,150,588,493	56.36%	7.12 : 1	2999.54%	138,583,170
2044	10/1/2042	3,057,575	4,880,000,366	2,827,272,968	1,625,158,909	2,052,727,397	57.94%	7.22 : 1	4455.24%	139,489,060
2045	10/1/2043	1,923,828	4,825,945,536	2,882,626,795	1,612,364,741	1,943,318,741	59.73%	7.36 : 1	7123.48%	140,330,054
2046	10/1/2044	1,044,173	4,766,420,485	2,945,085,457	1,594,448,035	1,821,335,028	61.79%	7.51 : 1	13166.12%	140,774,006
2047	10/1/2045	586,333	4,701,567,150	3,015,677,865	1,570,909,033	1,685,889,285	64.14%	7.70 : 1	23245.97%	139,567,518

**Total:** **4,373,511,436**  
**Total Present Value at 7%:** **1,980,088,113**

<sup>1</sup>Future contributions are assumed to be equal to the dollar amount of the calculated contribution, payable in December of the fiscal year beginning one year after the valuation date.

**Assumptions**

Mortality Assumption: FRS Special Risk Mortality

Healthy Lives: RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years using Scale BB; 90% blue collar / 10% white collar adjustment for males; 100% white collar adjustment for females.

Disabled Lives: 60% of RP-2000 Mortality Table for disabled annuitants with 4-year setback for males and 2-year set-forward for females, and 40% of RP-2000 Mortality Table for healthy annuitants with 100% white collar adjustment. No mortality improvements projected.

Investment Return Assumption: 7.0% per year

Actual Return on Plan Assets: 7.0% per year

Salary Increase Assumption: 10.0% for years 2017-2018, 10.5% for year 2019, and 3.5% for years 2020 and thereafter

Payroll Growth Rate Assumption: 1.25% per year

Pension Liability Surtax: Projected to increase 3.34% annually

Annual Expenses and Contributions from Court Fines: Projected to increase 2.5% annually

DROP Accounts: Projected forward assuming 10% payout per projection year

No future actuarial experience gains or losses are assumed. Extra UAAL payments = \$0.

*Prepared by Gabriel, Roeder, Smith and Company*

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## Jacksonville Police and Fire Pension Fund

### 30-Year Projection of Required City Contribution

(Stress Test: -15% Actual Rate of Return on Fund Assets in Year 2019, All Other Years 7.0% Actual Rate of Return)

**Scenario 3A: Reflecting Plan and Method Changes as a result of Ordinance 2017-257 and Ordinance 2017-259 with Pension Liability Surtax Growth Rate of 3.34% and Payroll Growth Rate of 1.25%**

Fiscal Year Ending	Valuation Date	Covered October 1 Payroll	Actuarial Accrued Liability	Net Market Value of Assets	Net Present Value of Future Pension Liability Surtax Proceeds	Unfunded Actuarial Accrued Liability	Funded Ratio on Valuation Date	Liquidity Ratio	Required City Contribution <sup>1</sup>	
									% of Pay	\$ Amount
2018	10/1/2016	135,684,787	3,518,251,848	1,513,398,466	580,767,389	2,004,853,382	43.02%	7.84 : 1	106.46%	147,920,652
2019	10/1/2017	144,303,214	3,626,011,048	1,604,804,878	621,421,107	2,021,206,170	44.26%	7.71 : 1	101.78%	150,399,046
2020	10/1/2018	149,372,475	3,738,070,177	1,677,298,214	664,920,584	2,060,771,963	44.87%	7.86 : 1	100.36%	153,504,174
2021	10/1/2019	155,975,584	3,853,716,001	1,391,135,622	711,465,025	2,462,580,379	36.10%	6.03 : 1	113.70%	181,596,536
2022	10/1/2020	152,425,187	3,974,071,147	1,442,399,534	761,267,577	2,531,671,613	36.30%	6.08 : 1	118.07%	184,292,077
2023	10/1/2021	147,539,843	4,093,707,741	1,518,867,007	814,556,307	2,574,840,734	37.10%	6.23 : 1	122.26%	184,710,462
2024	10/1/2022	142,292,659	4,211,391,364	1,594,328,790	871,575,249	2,617,062,573	37.86%	6.34 : 1	126.81%	184,763,807
2025	10/1/2023	134,964,361	4,325,585,334	1,665,086,449	932,585,516	2,660,498,886	38.49%	6.38 : 1	133.07%	183,908,016
2026	10/1/2024	125,244,391	4,434,018,529	1,729,322,639	997,866,502	2,704,695,890	39.00%	6.34 : 1	142.08%	182,216,040
2027	10/1/2025	114,565,867	4,533,374,605	1,783,500,731	1,067,717,157	2,749,873,874	39.34%	6.33 : 1	153.54%	180,121,036
2028	10/1/2026	106,423,249	4,625,484,701	1,828,844,495	1,142,457,358	2,796,640,205	39.54%	6.24 : 1	164.22%	178,961,678
2029	10/1/2027	97,102,141	4,708,867,408	1,862,321,862	1,222,429,373	2,846,545,546	39.55%	6.16 : 1	178.48%	177,468,967
2030	10/1/2028	88,611,010	4,784,514,039	1,886,142,326	1,307,999,430	2,898,371,713	39.42%	6.01 : 1	194.33%	176,324,705
2031	10/1/2029	78,000,450	4,850,496,446	1,897,494,532	1,399,559,390	2,953,001,914	39.12%	5.80 : 1	218.61%	174,605,954
2032	10/1/2030	66,655,621	4,903,951,001	1,894,326,435	1,497,528,547	3,009,624,566	38.63%	5.65 : 1	252.91%	172,622,432
2033	10/1/2031	60,699,458	4,948,040,792	1,943,241,318	1,538,379,972	3,004,799,474	39.27%	5.69 : 1	277.20%	172,294,370
2034	10/1/2032	56,328,281	4,985,906,269	2,009,856,171	1,557,895,263	2,976,050,099	40.31%	5.80 : 1	299.46%	172,723,550
2035	10/1/2033	51,718,469	5,017,908,254	2,076,107,612	1,575,831,703	2,941,800,643	41.37%	5.88 : 1	326.95%	173,149,923
2036	10/1/2034	45,116,687	5,042,300,202	2,141,626,210	1,591,980,411	2,900,673,992	42.47%	5.92 : 1	374.50%	173,014,126
2037	10/1/2035	36,420,290	5,056,281,813	2,204,772,699	1,606,114,602	2,851,509,114	43.60%	5.98 : 1	461.76%	172,206,774
2038	10/1/2036	28,560,001	5,059,613,437	2,265,993,332	1,617,988,217	2,793,620,105	44.79%	6.04 : 1	586.40%	171,491,082
2039	10/1/2037	21,440,332	5,052,144,843	2,324,931,513	1,627,334,469	2,727,213,330	46.02%	6.09 : 1	778.76%	170,973,214
2040	10/1/2038	14,211,285	5,033,812,770	2,382,103,231	1,633,864,266	2,651,709,539	47.32%	6.17 : 1	1171.20%	170,434,374
2041	10/1/2039	9,638,565	5,006,133,228	2,439,996,996	1,637,264,537	2,566,136,232	48.74%	6.27 : 1	1729.68%	170,714,750
2042	10/1/2040	6,766,012	4,970,566,368	2,499,955,888	1,637,196,421	2,470,610,480	50.30%	6.39 : 1	2476.97%	171,611,441
2043	10/1/2041	4,511,937	4,928,396,978	2,564,395,768	1,633,293,337	2,364,001,210	52.03%	6.53 : 1	3738.88%	172,741,428
2044	10/1/2042	3,057,575	4,880,000,366	2,635,052,417	1,625,158,909	2,244,947,949	54.00%	6.70 : 1	5559.02%	174,047,418
2045	10/1/2043	1,923,828	4,825,945,536	2,713,500,141	1,612,364,741	2,112,445,395	56.23%	6.90 : 1	8899.47%	175,316,450
2046	10/1/2044	1,044,173	4,766,420,485	2,801,097,381	1,594,448,035	1,965,323,104	58.77%	7.12 : 1	16489.36%	176,306,636
2047	10/1/2045	586,333	4,701,567,150	2,899,046,067	1,570,909,033	1,802,521,082	61.66%	7.39 : 1	29385.41%	176,428,353

**Total:** **5,206,869,471**  
**Total Present Value at 7%:** **2,287,561,035**

<sup>1</sup>Future contributions are assumed to be equal to the dollar amount of the calculated contribution, payable in December of the fiscal year beginning one year after the valuation date.

#### Assumptions

Mortality Assumption: FRS Special Risk Mortality

Healthy Lives: RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years using Scale BB; 90% blue collar / 10% white collar adjustment for males; 100% white collar adjustment for females.

Disabled Lives: 60% of RP-2000 Mortality Table for disabled annuitants with 4-year setback for males and 2-year set-forward for females, and 40% of RP-2000 Mortality Table for healthy annuitants with 100% white collar adjustment. No mortality improvements projected.

Investment Return Assumption: 7.0% per year

Actual Return on Plan Assets: 7.0% for years 2017-2018, -15% for year 2019, and 7.0% for years 2020 and thereafter

Salary Increase Assumption: 10.0% for years 2017-2018, 10.5% for year 2019, and 3.5% for years 2020 and thereafter

Payroll Growth Rate Assumption: 1.25% per year

Pension Liability Surtax: Projected to increase 3.34% annually

Annual Expenses and Contributions from Court Fines: Projected to increase 2.5% annually

DROP Accounts: Projected forward assuming 10% payout per projection year

No future actuarial experience gains or losses, other than investment losses for the year 2019, are assumed. Extra UAAL payments = \$0.

*Prepared by Gabriel, Roeder, Smith and Company*

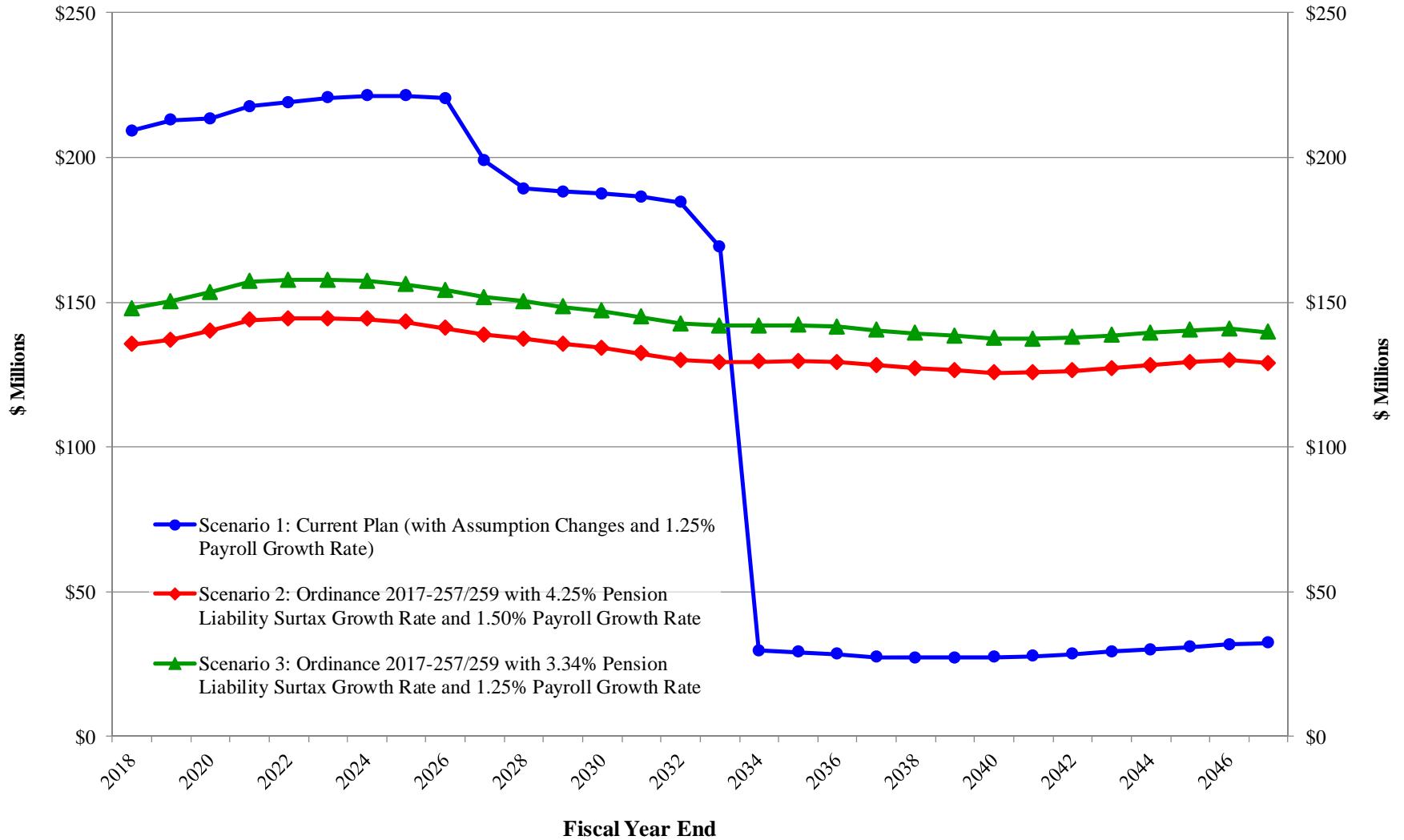
April 8, 2017

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## Jacksonville Police and Fire Pension Fund

### 30-Year Projection of Required City Contribution

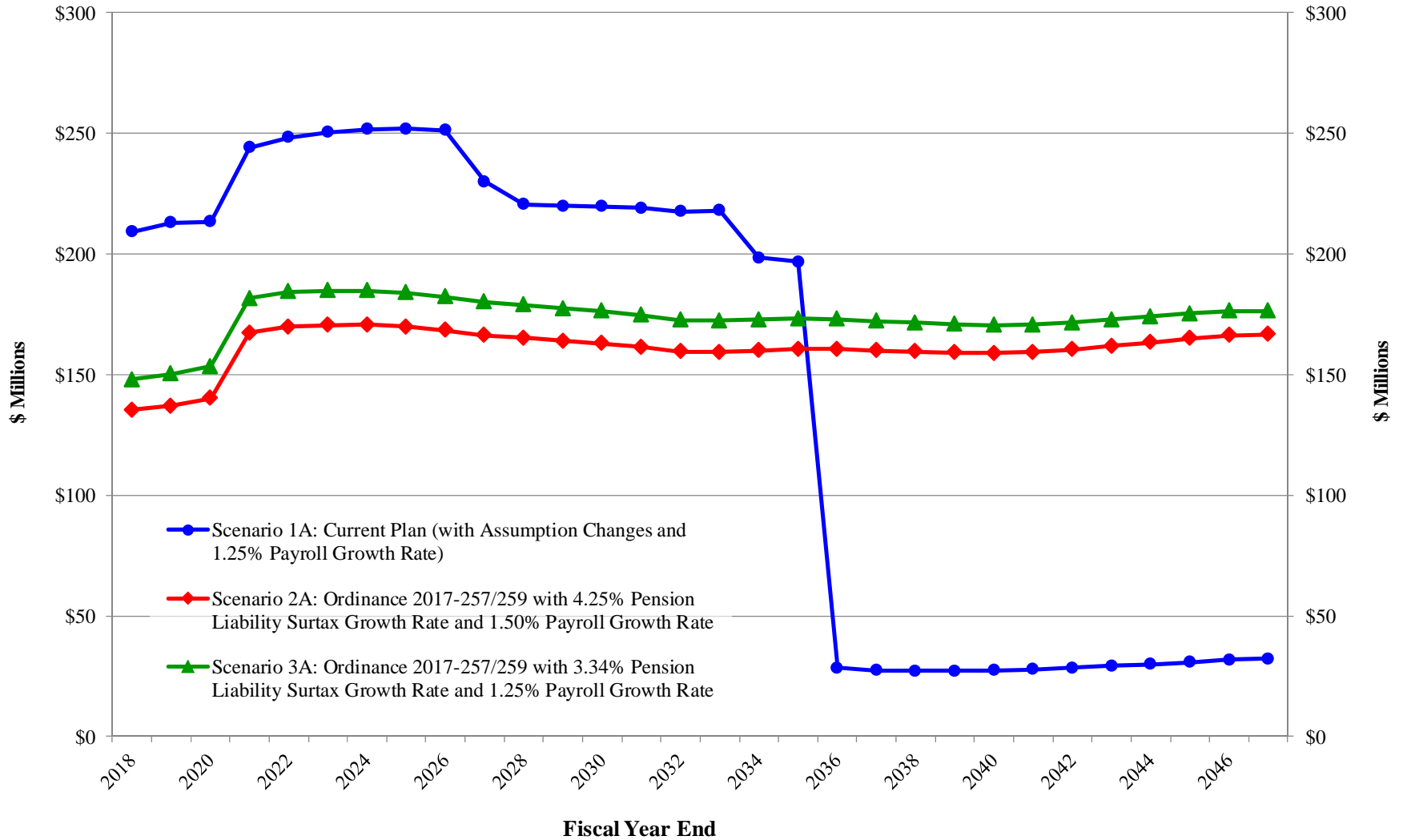
(7.0% Actual Rate of Return on Fund Assets Assumed to be Earned Each Year)



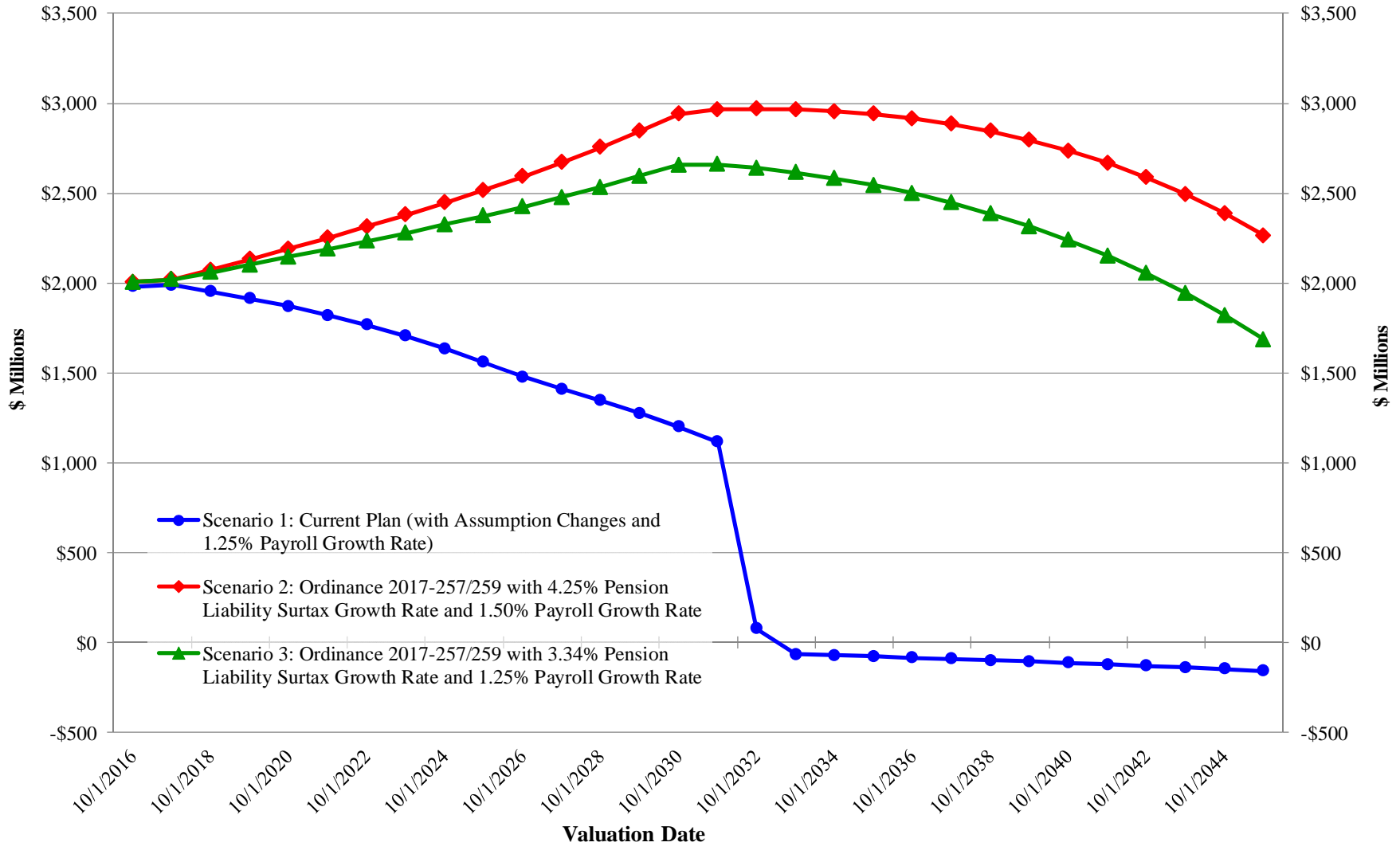
# Jacksonville Police and Fire Pension Fund

## 30-Year Projection of Required City Contribution

(Stress Test: -15% Actual Rate of Return on Fund Assets in Year 2019, All Other Years 7.0% Actual Rate of Return)



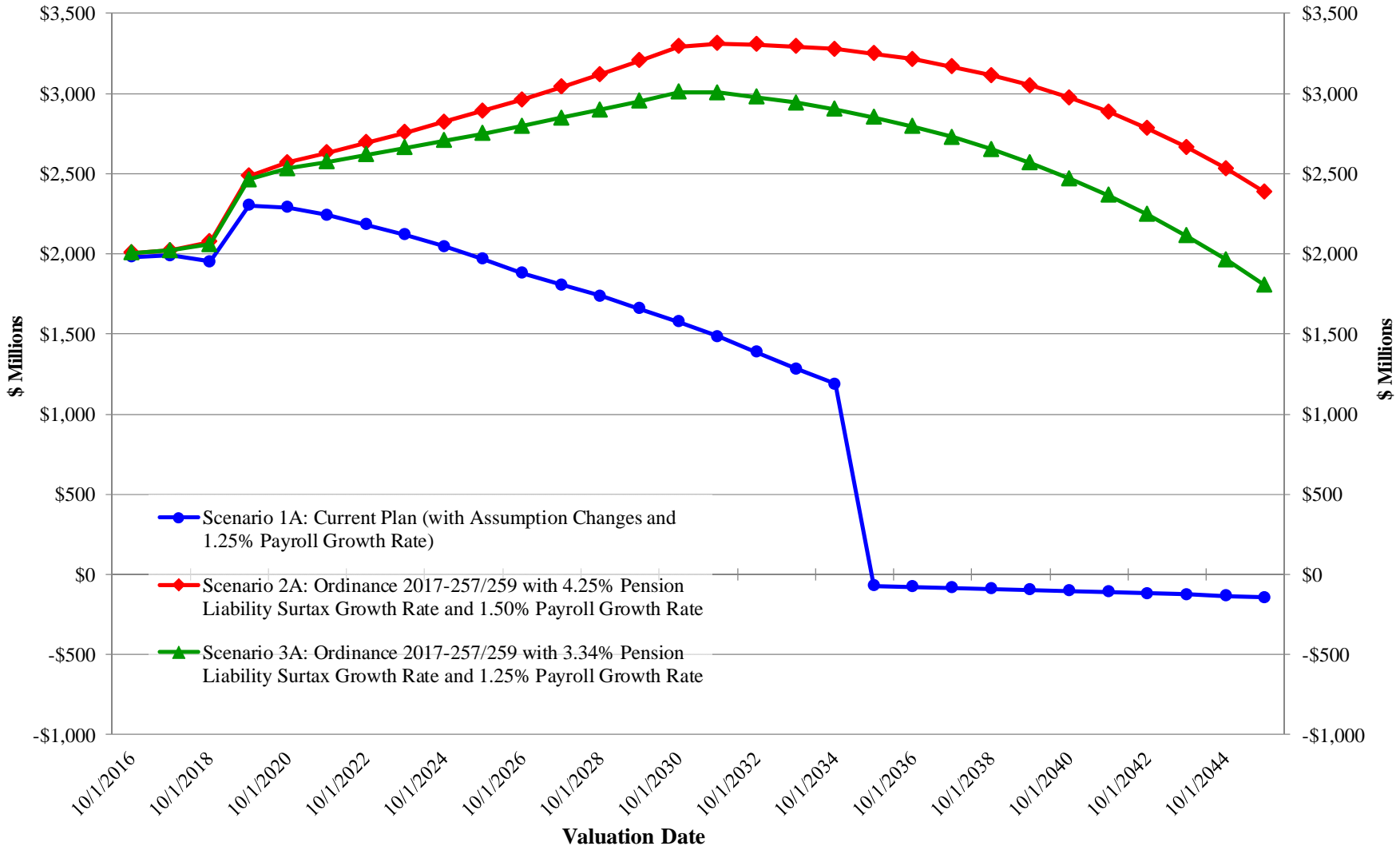
**Jacksonville Police and Fire Pension Fund**  
**30-Year Projection of Unfunded Actuarial Accrued Liability**  
**(7.0% Actual Rate of Return on Fund Assets Assumed to be Earned Each Year)**



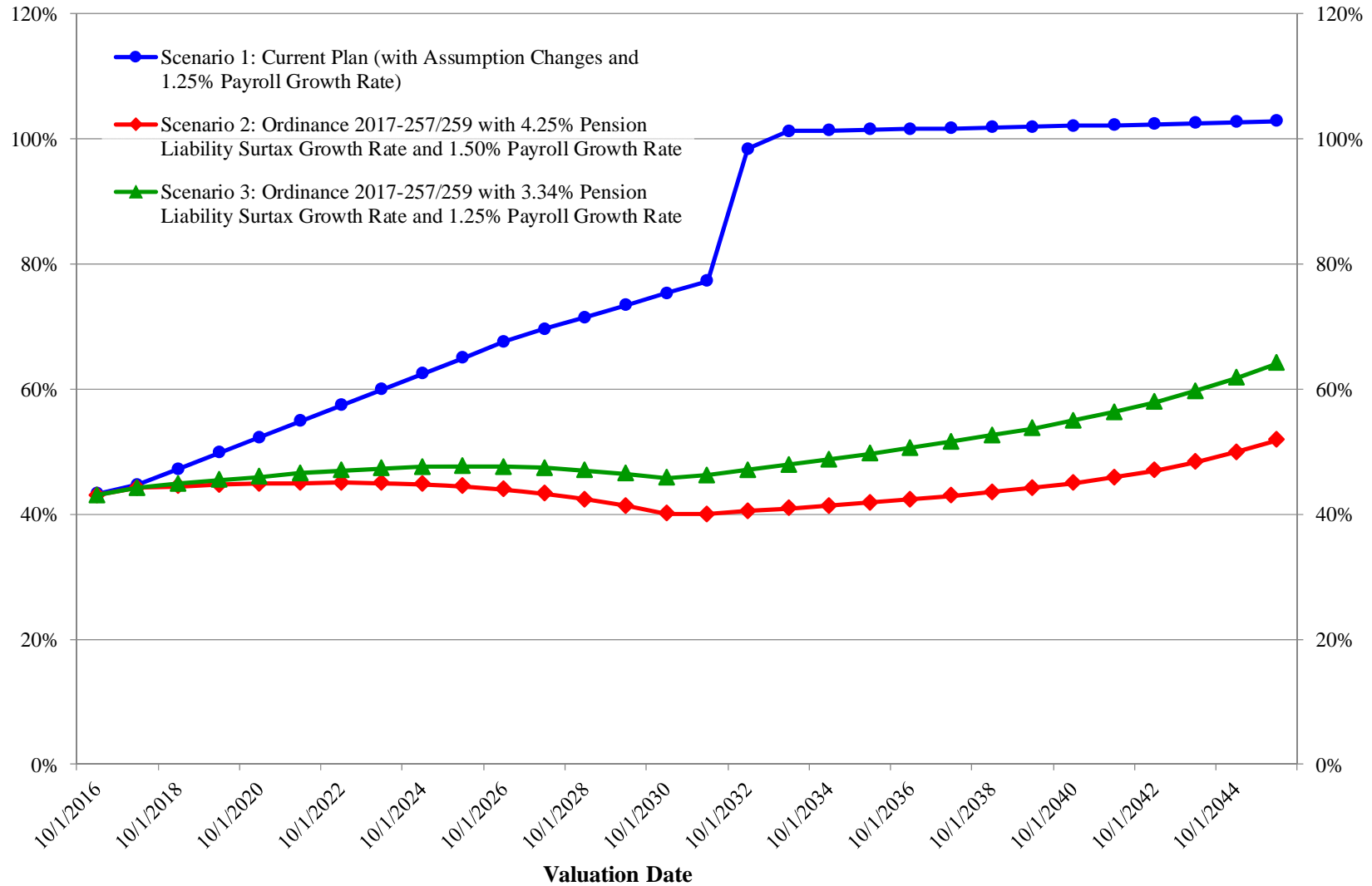
# Jacksonville Police and Fire Pension Fund

## 30-Year Projection of Unfunded Actuarial Accrued Liability

(Stress Test: -15% Actual Rate of Return on Fund Assets in Year 2019, All Other Years 7.0% Actual Rate of Return)



**Jacksonville Police and Fire Pension Fund**  
**30-Year Projection of Funded Ratio**  
**(7.0% Actual Rate of Return on Fund Assets Assumed to be Earned Each Year)**



# Jacksonville Police and Fire Pension Fund

## 30-Year Projection of Funded Ratio

(Stress Test: -15% Actual Rate of Return on Fund Assets in Year 2019, All Other Years 7.0% Actual Rate of Return)

