Actuarial Valuation Report as of October 1, 2016

(Determining costs for the Plan Year beginning October 1, 2017)

Prepared by:

Pension Board Consultants, Inc. 195 Fourteenth Street, Suite 2307 Atlanta, Georgia 30309 (404) 702-7802

PENSION BOARD CONSULTANTS, INC.

JARMON WELCH, A.S.A.
PRESIDENT

KELLY SHELTON
ACTUARY
DIRECT: 678-445-3149

195 FOURTEENTH ST. NE
SUITE 2307
ATLANTA, GEORGIA 30309-2677
404-702-7802
EMAIL: PENBRD@AOL.COM

January 18, 2017

Board of Trustees
Jacksonville Police and Fire Pension Fund
One West Adams Street, Suite 100
Jacksonville, Florida 32202-3616

Actuarial Valuation as of October 1, 2016

Gentlemen:

We are pleased to forward our report on the 2016 Actuarial Valuation of the Jacksonville Police and Fire Pension Fund. The minimum required City contribution for the Plan Year beginning October 1, 2017 is 149.74% of covered payroli.

The valuation results were based on participant data as of July 1, 2016, provided by the City. Fund assets and the Plan as of September 30, 2016, were reported by the Plan Administrator. Valuation Pay is the annualized sum of reported rate of pay, upgrade pay and shift pay as of July 1st. All of this data has been reviewed for consistency with prior data and for general reasonableness.

Per Part VII, Chapter 112.64(5)(a) of Florida Statutes, the payroll growth assumption used for amortization of the unfunded liability is not allowed to exceed the average annual payroll growth for the preceding ten years. As a result this was lowered to 0.067% in this valuation (see page 5).

Statement by Actuary:

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

I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

armon Welch, A.S.A. Date

<u> 14 - 1108</u>

Enrollment Number

PENSION BOARD CONSULTANTS, INC.

Actuarial Report for the Plan Year Beginning October 1, 2016

Table of Contents

| | <u>Page</u> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Cost and Liabilities Update Derivation of Minimum Required Contribution Unfunded Actuarial Accrued Liability Amortization Development of UAAL by Components Reconciliation of Accounts | 1 2 3 4 |
| Input Data Actuarial Assumptions and Methods Plan Outline Historical Key Statistics Reconciliation of Number of Participants by Status Age and Service Distribution as of October 1, 2016 | 5 6 8 9 10 |
| Accounting for Pension Costs and Liabilities Accounting for Pension Costs and Liabilities Statement of Changes in Fiduciary Plan Net Position Statement of Fiduciary Plan Net Position Schedule of Changes in Net Pension Liability Schedule of City Contributions Schedule of Investment Returns GASB 68 Pension Expense | 11 15 16 17 18 19 20 |
| State of Florida Information | 21 |

Derivation of City Minimum Required Contribution as of October 1, 2016

| | 10/1/2015 with | <u>10/1/2016</u> with |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| | Asset Revisions | FRS Mortality |
| Covered October 1 Payroll | \$132,735,243 | \$135,599,741 |
| Actuarial Accrued Liabilities a. Active Participants b. Inactive Participants c. Total (a. + b.) | \$732,810,115 <u>\$2,409,418,097</u> \$3,142,228,212 | \$768,461,161 <u>\$2,577,054,098</u> \$3,345,515,259 |
| 2. Market Value of Assets a. Gross Market Value b. Reserve Accounts c. Sr. Staff Plan Assets d. Net Market Value (a b c.) | \$1,437,907,379 \$79,499,720 <u>\$4,002,294</u> \$1,354,405,365 | \$1,613,043,823 \$95,543,156 <u>\$4,102,201</u> \$1,513,398,466 |
| 3. Unfunded Actuarial Accrued Liability (1.c 2.d.) | \$1,787,822,847 | \$1,832,116,793 |
| 4. Costs a. UAAL Amortization Payment b. Normal Cost (Individual EA) c. Annual Expense d. Total Cost BOY (a. + b. + c.) | \$122,360,258 \$44,087,089 \$9,926,208 \$176,373,555 | \$164,417,818 \$45,257,077 <u>\$11,180,135</u> \$220,855,030 |
| 5. Contributions a. Members (including DROPs) b. Chapter Funds Allocation c. Court Fines d. City Minimum (4.d (5.a. + 5.b. + 5.c.)) 1. Dollars on October 1 2. % Covered Payroll on October 1 3. Dollars on December 1 next year = d.1. x payroll growth x 1.07^{2/12} | \$11,410,245 \$5,288,927 \$920,774 \$158,753,609 119.60% \$165,771,919 | \$11,633,724 \$5,340,312 \$832,536 \$203,048,458 149.74% \$205,488,666 |

Reconciliation

The October 1 City minimum contribution increased \$44,294,849 due to:

- 1. Increase of \$3,976,708 for 3.25% increase in prior year amortization payment.
- 2. Expense increase of \$1,073,792.
- 3. Actual earnings (10.0%) were \$45 million higher than expected, decreasing costs \$2,400,156.
- 4. Lowering 3.25% payroll growth assumption to 2.50% based on experience study increased costs \$8,000,000. The current unfunded amortization costs increased \$25,676,758 as a result of State required lowering of 2.50% to 0.067% (actual 10 year average).
- 5. State required use of FRS special risk mortality tables increased costs \$8,517,200.
- 6. The initial base established in 1987 is fully amortized decreasing costs \$494,479.
- 7. Experience deviations (primarily salary) from expected decreased costs \$54,974.

Amortizaton of the Unfunded Actuarial Accrued Liability

| October 1 | UAAL | Amortization Payment | 7% Interest | Supplemental Payments* | Accumulation with 7% Interest |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------|
| 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 | \$1,832,116,793 1,783,908,811 1,732,737,491 1,681,039,261 1,629,118,644 1,573,542,891 1,513,963,194 1,449,515,895 1,380,443,101 1,306,420,950 1,227,102,911 1,162,045,341 1,099,095,362 1,030,856,130 957,742,885 879,414,379 796,356,356 707,387,377 631,988,993 551,229,028 464,732,116 384,559,494 298,699,277 | Payment \$164,912,297 164,527,978 161,672,761 158,498,473 158,517,811 158,624,018 159,275,441 159,382,156 159,488,942 159,595,800 141,079,228 134,853,414 135,678,418 135,769,322 135,860,288 135,156,103 135,246,657 116,743,459 116,821,677 116,899,947 105,330,720 105,401,291 83,137,607 | \$116,704,315 113,356,658 109,974,531 106,577,855 102,942,058 99,044,321 94,828,143 90,309,362 85,466,791 80,277,761 76,021,658 71,903,435 67,439,186 62,656,077 57,531,782 52,098,079 46,277,679 41,345,074 36,061,712 30,403,036 25,158,098 19,541,074 15,089,317 | | |
| 2039 2040 2041 2042 2043 2044 2045 2046 | 230,650,987 157,779,716 79,747,814 47,060,807 37,178,382 23,304,725 3,982,085 | 83,193,309 83,249,048 35,765,752 12,314,655 15,398,266 19,583,150 3,982,085 | 10,322,037 5,217,147 3,078,744 2,432,231 1,524,608 260,510 | | |

As of 2032, the payments enclosed in the box above are covered by the \$886,480,087 accumulation of supplemental payments.

^{*} Ordinance 2015-304E Supplemental Payments

| Fiscal Y | ear | CITY | <u>UALPA</u> |
|----------|-------|---------------|---------------|
| 2016 | | \$5,000,000 | \$5,000,000 |
| 2017 | | \$10,000,000 | \$10,000,000 |
| 2018 | | \$15,000,000 | \$15,000,000 |
| 2019-20 | 28 | \$32,000,000 | \$8,000,000 |
| | TOTAL | \$350,000,000 | \$110,000,000 |

JACKSONVILLE POLICE AND FIRE PENSION FUND Development of UAAL by Components as of October 1, 2016

| Date Established | Initial Amount | UAAL as of 10/1/2016 | Remaining Period 10/1/2015 | Remaining Required Period 10/1/2015 Amortization 10/1/2016 | UAAL as of 10/1/2017 |
|---------------------|-------------------|-------------------------|-------------------------------|---------------------------------------------------------------|-------------------------|
| 1-Oct-87 | \$3,868,562 | \$494,479 | 1.00 | \$494,479 | 0\$ |
| 1-Oct-88 | \$17,910,698 | \$5,731,075 | 2.00 | \$2,961,481 | \$2,963,466 |
| 1-Oct-89 | \$19,019,326 | \$9,205,010 | 3.00 | \$3,276,020 | \$6,344,019 |
| 1-Oct-90 | \$508,620 | \$314,247 | 4.00 | \$86,623 | \$243,558 |
| 1-Oct-92 | (\$4,444,031) | (\$2,773,474) | 6.00 | (\$542,959) | (\$2,386,651) |
| 1-Oct-96 | \$126,129,419 | \$139,393,826 | 10.00 | \$18,499,182 | \$129,357,269 |
| 1-Oct-97 | \$44,127,813 | \$50,485,796 | 11.00 | \$6,273,943 | \$47,306,683 |
| 1-Oct-98 | (\$5,280,099) | (\$6,213,142) | . 12.00 | (\$728,771) | (\$5,868,277) |
| 1-Oct-01 | \$6,296,677 | \$7,701,912 | 15.00 | \$787,262 | \$7,398,676 |
| 1-Oct-03 | \$158,527,905 | \$192,871,274 | 17.00 | \$18,383,302 | \$186,702,130 |
| 1-Oct-06 | \$111,179,581 | \$130,915,921 | 20.00 | \$11,492,566 | \$127,782,990 |
| 1-Oct-08 | \$230,168,269 | \$261,850,935 | 22.00 | \$22,007,619 | \$256,632,348 |
| 1-0ct-11 | \$550,672,339 | \$586,326,249 | 25.00 | \$46,749,688 | \$577,346,920 |
| 1-0ct-12 | \$280,879,031 | \$293,659,681 | 26.00 | \$23,069,800 | \$289,531,173 |
| 1-Oct-13 | (\$37,626,922) | (\$38,974,454) | 27.00 | (\$3,020,245) | (\$38,471,004) |
| 1-Oct-14 | (\$52,239,546) | (\$53,540,809) | 28.00 | (\$4,097,008) | (\$52,904,867) |
| 1-Oct-15 | \$199,887,331 | \$202,471,799 | 29.00 | \$15,313,808 | \$200,259,050 |
| 1-0ct-16 | \$52,196,468 | \$52,196,468 | 30.00 | \$3,905,507 | \$51,671,328 |
| | \$1,701,781,441 | \$1,832,116,793 | | \$164,912,297 | \$1,783,908,811 |

Reconciliation of Accounts October 1, 2015 through September 30, 2016

| | CBSA | EBA | <u>UALPA</u> | Supplemental Payments Accumulation |
|-----------------------------------------------|-------------|-----------------------------|------------------------|------------------------------------------|
| Account Value, 10/1/2015 | \$4,623,000 | \$5,118,623 | \$69,758,097 | \$0 |
| Annual Retiree Bonus paid December 2, 2015 | | (\$1,999,747) | | ** |
| Share Plan Contribution paid December 2, 2015 | | (\$3,289,180) | | |
| Account Value, 12/2/2015 | | (\$57,694) 1 | | |
| Annual Earnings (10%) | \$462,300 | (\$4,500) ² | \$6,975,810 | \$0 |
| Transfer on 9/30/16 | | | (\$5,000,000) | \$10,000,000 |
| Account Value, 9/30/16 | \$5,085,300 | (\$62,194) | \$71,733,907 | \$10,000,000 ³ |
| Chapter Funds receivable | | \$5,340,312 | | • |
| Account Value with receivable | | \$5,278,118 | | |
| | | Sr Staff Retirement Plan | Share <u>Plan</u> | |
| Account Value, 10/1/2015 | | \$4,002,294 | \$0 | |
| Contributions paid December 2, 2015 | | \$0 | \$3,289,180 | |
| Annual Earnings (10%) | | \$386,253 ⁴ | \$246,689 ⁵ | |
| Payments | | \$286,346 | \$90,038 | |
| Account Value, 9/30/16 | | \$4,102,201 | \$3,445,831 | |

¹ (\$5,118,623 * 1.022) - (\$1,999,746 + \$3,289,180) ² (10% - 2.2%) * (\$57,694)

³ Includes \$5,000,000 supplemental payment from City

^{4 10.00%}

⁵ 10.00% * (9/12)

Actuarial Assumptions and Methods

The actuarial assumptions were updated after an experience study for the four years ending September 30, 2015.

Economic Assumptions

Investment Yield:

7% annually

Salary Increases:

3.5% annually

Annual COLA:

Group I: 3% annually reduced to 2.5% for future service for

actives with less than 20 years of service on June 19, 2015

Group II: 1.5% annually

DROP Load:

2% on active and DROP liabilities for interest greater

than 7%

Payroll Increase:

0.067% annually, actual 10 year average (2.5% cola increase

when allowed, adopted after the above experience study)

Demographic Assumptions

Mortality:

Pre- and Post-Retirement: All using RP-2000 Generational,

Scale BB, with

Female: 100% Annuitant White Collar

Male: 10% Annuitant White Collar/90% Annuitant Blue collar

Post-Disablement:

Female: 60% RP2000 Disabled Female set forward two years/40% Annuitant White Collar with no setback, no

projection scale

Male: 60% RP2000 Disabled Male setback four years/

40% Annuitant White Collar with no setback, no

projection scale

Turnover:

No vested refunds or disability recoveries

| ۸۵۵ | Withdrawal | Disability Rate |
|------------------|---------------------|-------------------|
| <u>Age</u> 25 | <u>Rate</u> .036 | per 1,000 0.36 |
| 35 | .009 | 0.48 |
| 45 | .000 | 1.20 |

Married:

75% actives, 50% retirees (tax status), wives 3 years younger

Retirement:

Group I: 40% at 20 years, 30% thereafter to 30 years (or age 61). Group II: 15% at 25 years, then 5% per year to 30 years (or age 61).

Actuarial Methods

Cost:

Individual Entry Age

Assets:

Market Value

Changes Since the October 1, 2015 Valuation:

Changed payroll growth assumption, added Group II assumptions, adopted FRS mortality

Plan Outline

GROUP I active on June 19, 2015

Credited Service full time from date of employment including buybacks

Benefit Percentage 3% for first 20 YOS plus 2% for additional 10 YOS (max 80%)

Final Average Earnings final 2 years (<5 YOS on June 19, 2015, final 4 years)

Normal Retirement Date 20 YOS

Vesting 5 years

Employee Contributions 8% (10% when certain pay raises occur)

Early Retirement N/A

Normal Form Of Payment Joint and 75%

Retiree COLA 3% annually January after retirement if >=20 YOS on

June 19, 2015

If not, 3% annually for service accrued as of June 19, 2015 and SS COLA (min 0%, max 6%) on service accrued after June 19, 2015

Disability Permanent & Total: 60% of FAE, Temporary: available

DROP up to 5 YOS

Interest: >= 20 YOS on June 19, 2015, 8.4% interest for 5 years

and thereafter;

< 20 YOS on June 19, 2015, actual return (min 2%, max 14.4%)

2% employee contributions

Pre Retirement

Death < 20 YOS 75% of (60% of FAE) >20 YOS 75% of normal benefit

In addition: \$200/month per child, (total 75% of normal benefit

if orphan)

Health Supplement \$5.00 / month for each YOS (maximum 30 YOS)

Chapter Funds 50% credited as a City contribution for 15 years, balance to a share

plan and holiday bonus

Plan Outline

GROUP II

Impact on New Hires after June 19, 2015

- 1. Credited Service for retirement increased from 20 to 30 years (steep reductions for early retirement after 25 years).
- 2. Earnings Base computed as average of last 5 years.
- 3. Three year delay in annual Cost of Living increases (reduced from 3% to 1.5% maximum Social Security).
- 4. Disability benefit reduced to 50% of Earnings Base from 60%.
- 5. Vesting changed from NRA&5 to age 62&10 (2% accrual rate).
- 6. Benefit percentage reduced from 3.0% to 2.5%.
- 7. Back-Drop implemented, no DROP.
- 8. Employee contributions are 10% of pay.
- 9. Group II costs 22% of pay.

Changes Since the October 1, 2015 Valuation: None

JACKSONVILLE POLICE AND FIRE PENSION FUND <u>Historical Key Statistics</u>

| | | | Valuation Dat | е | |
|------------------------|--------------|--------------|---------------|----------|-------------|
| Class of Participant | 10/01/12 | 10/01/13 | 10/01/14 | 10/01/15 | 10/1/2016 |
| Continuing Actives | | | | | |
| (excluding DROP) | 2,203 | 2,082 | 2,034 | 2,072 | 2,087 |
| Pay Increase % | 0.4% | 2.9% | 3.0% | 3.8% | 2.2% |
| Active | | | | | |
| Number | 2,213 | 2,150 | 2,237 | 2,202 | 2,294 |
| Average Age | 39.9 | 40.2 | 40.0 | 39.9 | 39.4 |
| Average Annual Pay | \$60,523 | \$61,082 | \$60,276 | \$60,511 | \$59,270 |
| Average Service | 11.2 | 11.5 | 11.2 | 11.1 | 10.6 |
| Retired | | | | | |
| Number | 1,556 | 1,618 | 1,710 | 1,785 | 1,910 |
| Average Age | 65.7 | 65.5 | 65.3 | 65.3 | 65.0 |
| Average Annual Benefit | \$53,042 | ,\$54,461 | \$55,940 | \$57,674 | \$59,056 |
| Disabled | - | | | <u> </u> | |
| Number | 57 | 56 | 55 | 54 | 55 |
| Average Age | 61.4 | 61.4 | 61.5 | 62.1 | 62.3 |
| Average Annual Benefit | \$32,403 | \$33,958 | \$35,600 | \$37,029 | \$37,814 |
| Surviving Spouses | | | | | |
| Number | 401 | 418 | 431 | 425 | 423 |
| Average Age | 72.6 | 72.8 | 73.3 | 73.5 | 74.0 |
| Average Annual Benefit | \$28,075 | \$29,677 | \$31,227 | \$32,843 | \$34,371 |
| Children | | | | <u> </u> | |
| Number | 31 | 31 | 32 | 29 | 23 |
| Average Age | 13.1 | 13.5 | 13.5 | 13.9 | 13.1 |
| Average Annual Benefit | \$3,254 | \$3,267 | \$3,261 | \$3,252 | \$3,183 |
| Terminated Vested | | | | | |
| Number | 52 | 60 | 62 | 72 | 77 |
| Average Age | 44.0 | 43.8 | 43.2 | 43.2 | 43.4 |
| Average Annual Benefit | \$18,072 | \$19,128 | \$18,015 | \$18,540 | \$17,864 |
| DROP | | | | | |
| Number | 550 | 542 | 511 | 541 | 475 |
| Average Age | 50.1 | 50.3 | 50.5 | 50.5 | 50.7 |
| Average Annual Benefit | \$49,221 | \$50,581 | \$51,240 | \$50,478 | \$50,267 |
| | | | | | |

Reconciliation of Number of Participants by Status

| Number on 07/01/15 | Actives | Retirees | Vested Terminations | <u>Disabilities</u> | Surviving Spouses | Children | DROP |
|------------------------------------------------------|---------|----------|------------------------|---------------------|----------------------|----------|-------|
| Used for 10/01/15 Reporting | 2,202 | 1,786 | 71 | 54 | 425 | 29 | 541 |
| New Entrants/Rehire | 225 | | (1) | | | | (5) |
| Transfers from GEPP/Corrections | | | | | | | |
| Non-Vested/Refunded Terminations | (30) | | | | | | |
| Vested Terminations | (10) | | 10 | | | | |
| Retirees | (4) | 153 | (5) | | | | (144) |
| Disabilities | (3) | | | 3 | | | • |
| Deaths with no Survivors | | (12) | (1) | (1) | (19) | | |
| Payments Stopped (Age 18 or Remarried) | | | | | | (7) | |
| Deaths with Survivors | (1) | (16) | | (1) | | | |
| New Beneficiaries | | | | | 17 | 1 | |
| New DROP Retirees | (83) | | | | | | 83 |
| Data Corrections | (2) | (1) | 3 | | | | |
| Number on 07/01/16 Used for 10/01/16 Valuation | 2,294 | 1,910 | 77 - | 55 | 423 | 23 | 475 |

Active Age and Service Distribution as of October 1, 2016

Cell Format: Number In Each Group, Average Age, Average Service, And Average Salary

| 5 | Service | | | | | | | | -80 00 | ~, Allu Ati | arego can | - | th Sexes I | salisala d |
|------|---------|--------|---------|--------|--------|---------------|----------|----------|--------|-------------|-----------|------|-------------|------------|
| | | >=1 | >=2 | >=3 | >=4 | >=5 | >=10 | >=15 | >=20 | >=25 | >=30 | >=35 | ui Sexes II | iciuded |
| Age | <1 | <2 | <3 | <4 | <5 | <10 | <15 | <20 | <25 | <30 | <35 | <40 | >=40 | ALL |
| | 23 | 29 | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 |
| <25 | 22.93 | 23.78 | 23.86 | 24.02 | 24.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 23.50 |
| | 0.51 | 1.38 | 2.41 | 3.33 | 4.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.31 |
| | 36,187 | 38,556 | 41,503 | 39,719 | 37,266 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38,054 |
| | 44 | 50 | 83 | 28 | 4 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 |
| >=25 | 27.62 | 27.22 | 27.52 | 27.90 | 28.00 | 28.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.67 |
| <30 | 0.60 | 1.49 | 2.50 | 3.45 | 4.31 | 6.87 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.82 |
| | 37,021 | 38,792 | 42,343 | 47,012 | 44,488 | 51,249 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42,714 |
| | 31 | 27 | 53 | 27 | 7 | 175 | 79 | 0 | 0 | 0 | 0 | 0 | 0 | 399 |
| >=30 | 32.05 | 32.36 | 32.05 | 32.26 | 33.11 | 32.66 | 33.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 32.62 |
| <35 | 0.57 | 1.52 | 2.56 | 3.43 | 4.29 | 7.99 | 11.47 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.57 |
| | 37,095 | 39,743 | 42,513 | 46,022 | 42,234 | 57,172 | 64,709 | 0 | 0 | 0 | 0 | 0 | 0 | 52,961 |
| | 12 | 19 | 34 | 13 | 3 | 118 | 219 | 32 | 0 | 0 | 0 | 0 | 0 | 450 |
| >=35 | 36.96 | 36.91 | 37.44 | 37.25 | 36.58 | 37.15 | 37.47 | 38.47 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 37.40 |
| <40 | 0.67 | 1.31 | 2.56 | 3.39 | 4.38 | 8.21 | 12.45 | 16.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.76 |
| | 37,337 | 38,120 | 41,761 | 45,026 | 43,357 | 57,896 | 64,410 | 72,336 | 0 | 0 | 0 | 0 | 0 | 59,022 |
| 40 | 5 | 13 | 7 | 3 | 1 | 65 | 207 | 153 | 31 | 1 1 | 0 | 0 | 0 | 486 |
| >=40 | 42.58 | 42.55 | 42.94 | 41.67 | 42.49 | 42.19 | 42.34 | 42.72 | 43.62 | 44.89 | 0.00 | 0.00 | 0.00 | 42.54 |
| <45 | 0.45 | 1.47 | 2.45 | 3.57 | 4.50 | 8.31 | 12.85 | 17.46 | 20.76 | 25.79 | 0.00 | 0.00 | 0.00 | 13.57 |
| | 36,629 | 38,765 | 42,507 | 44,335 | 45,000 | 56,038 | 63,475 | 69,904 | 71,365 | 147,300 | Q | 0 | 0 | 63,785 |
| >-4E | 0 | 1 1 | 5 | 4 | 0 | 38 | 101 | 139 | 98 | 13 | 0 | 0 | 0 | 399 |
| >=45 | 0.00 | 49.82 | 46.53 | 46.58 | 0.00 | 47.13 | 47.08 | 47.18 | 47.54 | 47.93 | 0.00 | 0.00 | 0.00 | 47.26 |
| <50 | 0.00 | 1.16 | 2.69 | 3.40 | 0.00 | 8.07 | 12.66 | 18.00 | 21.24 | 26.46 | 0.00 | 0.00 | 0.00 | 16.39 |
| | 0 | 36,449 | 38,996 | 43,097 | 0 | 56,287 | 62,034 | 71,365 | 80,691 | 89,201 | 0 | 0 | 0 | 69,662 |
| >=50 | 0.00 | 0 | 0 | 0 | 0 | 23 | 62 | 72 | 28 | 7 | 0 | 0 | 0 | 192 |
| <55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 52.32 | 52.29 | 52.12 | 52.01 | 51.96 | 0.00 | 0.00 | 0.00 | 52.18 |
| ~00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.08 | 12.55 | 18.19 | 20.69 | 26.89 | 0.00 | 0.00 | 0.00 | 15.84 |
| i | 0 | 0 | 0 | 0 | 0 | 57,437 | 60,493 | 69,535 | 73,441 | 83,256 | 0 | 0 | 0 | 66,236 |
| >=55 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 5 | 11 | 21 | 6 | 4 | 0 | 0 | 0 | 47 |
| <60 | 0.00 | 0.00 | 0.00 | | 0.00 | 55.91 | 57.72 | 56.56 | 57.17 | 58.25 | 0.00 | 0.00 | 0.00 | 56.98 |
| 100 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.29 | 13.28 | 17.99 | 20.51 | 27.16 | 0.00 | 0.00 | 0.00 | 16.96 |
| | 0 | 0 | 0 | 0 | 0 | 56,727 | 60,668 | 68,416 | 77,448 | 84,274 | 0 | 0 | 0 | 67,862 |
| >=60 | 0.00 | 0.00 | 0.00 | 0.00 | | 1 00 44 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 8 |
| <65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 62.41 6.74 | 62.18 | 61.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 61.67 |
| -00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 | | 13.31 | 19.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.11 |
| - 1 | 0 | 0 | 0 | 0 | 0 | 56,302 | 60,120 | 63,956 | 0 | 0 | 0 | 0 | 0 | 62,040 |
| >=65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| [| 0 | 0 | 0 | 0 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 115 | 139 | 189 | 78 | 16 | 466 | 0 681 | 0 422 | 0 | 0 | 0 | 0 | 0 | 0 |
| ALL | 29.50 | 30.42 | 31.51 | 32.31 | 32.51 | 37.21 | 41.64 | 46.38 | 163 | 25 | 0 | 0 | 0 | 2,294 |
| | 0.57 | 1.45 | 2.53 | 3.43 | 4.31 | 8.00 | 12.51 | 17.72 | 47.92 | 50.59 | 0.00 | 0.00 | 0.00 | 39.65 |
| - 1 | 36,890 | 38,816 | 42,172 | 45,754 | 42,870 | 56,610 | 63,379 | | 21.03 | 26.66 | 0.00 | 0.00 | 0.00 | 10.86 |
| | 201000 | 20/010 | 120,172 | 40,104 | 72,010 | 30,010 | 03,318 | 70,362 | 77,553 | 89,072 | 0 | 0 | 0 | 59,270 |

Accounting for Pension Costs and Liabilities

GASB Statements 67 and 68

In June 2012, the Governmental Accounting Standards Board (GASB) approved two new statements, Statement No. 67, Financial Reporting for Pension Plans, and Statement No. 68, Accounting and Financial Reporting for Pensions. These statements replaced Statement No. 25, Financial Reporting for Defined Benefit Pension Plans, and Statement No. 27, Accounting for Pensions by State and Local Governmental Employers. These new statements require the addition of plan unfunded liabilities to the employer's balance sheet and also change how the System has to calculate its expense for financial disclosures, but does not change how the System has to calculate its liabilities for its contribution requirements.

GASB No. 67 is effective for Jacksonville Police and Fire Pension Fund ("JPFPF") fiscal years beginning October 1, 2013, and GASB No. 68 is effective for Jacksonville fiscal years beginning October 1, 2014.

Notes to the Financial Statements for the Year Ended September 30, 2016

Plan Description

Plan administration. The Board of Trustees administers the JPFPF – a single-employer defined benefit pension plan that provides pensions for all permanent full-time public safety employees of the City. Applicable State laws and statues as well as local ordinances and Charter provisions grant the authority to establish and amend the benefit terms to the City Council and the State Legislature.

Management of the JPFPF is vested in the Board of Trustees, which consists of five members – two appointed by the City Council, and one an active Police Officer elected by active Police members, and one an active Firefighter elected by active Fire members, and, lastly, a fifth selected by the aforementioned four Board members.

Plan membership. At September 30, 2016, plan membership consisted of the following:

| Inactive plan members or beneficiaries currently receiving benefits | 2,411 |
|---------------------------------------------------------------------|-------|
| Inactive plan members entitled to but not yet receiving benefits | 77 |
| DROP members | 475 |
| Active plan members | 2,294 |
| | |
| Total | 5.257 |

Benefits provided. JPFPF provides retirement, disability, and death benefits. Retirement benefits are calculated as 3 percent of the employee's final 2-year average salary times the employee's years of service up to 20 years and 2 percent thereafter (80 percent maximum). Employees with 5 or more years of continuous service are eligible to retire at 20 years from date of employment.

Accounting for Pension Costs and Liabilities

Employees are eligible for non-duty related death and disability benefits after 10 years of service and for duty-related death and disability benefits upon hire. Terminated vested employees may withdraw their contributions. Terminated non-vested employees must withdraw their contributions.

Benefits are generally increased 3 percent annually after retirement (see page 6).

Contributions. The JPFPF Board establishes contributions based on an actuarially determined rate recommended by an independent actuary. This rate is the estimated costs of benefits earned by employees during the year, with an additional amount to finance the unfunded accrued liability. The City is required to contribute the difference between the actuarially determined rate, the contribution rate of employees, Chapter 175/185 funds applied, court fines and miscellaneous revenue. For the year ended September 30, 2016, the contributions paid were City \$149,499,492, supplemental \$5,000,000, employees \$11,633,724, Chapter \$5,340,312 and court fines \$832,536.

Investments

Investment policy. The pension plan's policy for the allocation of invested assets is established by a majority vote of the Board. The Board pursues an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The selection of asset classes is limited by statute and each asset class is further diversified by style, and the use of both active and passive management. The policy discourages the use of cash equivalents, except for liquidity purposes, and refrains from dramatically shifting asset class allocations over short time spans. The following is the Board's asset allocation policy:

| Asset Class | Target Allocation | Guidelines as of 8/2016 |
|----------------------|-------------------|-------------------------|
| Domestic equity | 39.0% | 34.0-44.0% |
| International equity | 20.0 | 15.0-25,0 |
| Fixed income | 19.5 | 14.5-24.5 |
| Real estate | 15.0 | 10.0-20.0 |
| Cash | 1.0 | 0.0- 5.0 |
| MLPs/Energy | <u>5.5</u> | <u>0.0-10.0</u> |
| Total | 100.0% | 100.0% |

Method used to value investments. Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. The real estate portfolio is valued at fair value independent appraisal of every property in the portfolio at least annually. In addition, each month, the money managers calculate an internal appraisal using a combination of discounted cash flow and comparison to similar properties. Investments in local real estate are valued each year on September 30 by an independent appraiser to determine the investment fair value.

Rate of return. For the year ended September 30, 2016, the annual money-weighted rate of return on pension plan investments was 10.00%. This reflects the changing amounts actually invested.

Accounting for Pension Costs and Liabilities

Reserve Accounts

Ordinance 2015-304E maintains certain reserve accounts. These are, as of September 30. 2016, City Budget Stabilization Account of \$5,085,300, Enhanced Benefit Account of \$5,278,118, Unfunded Actuarial Liability Payment Account of \$71,733,907, Supplemental Payments Accumulation of \$10,000,000, Sr. Staff Retirement Plan of \$4,102,201 and the Share Plan of \$3,445,831. The City Budget Stabilization Account and the Unfunded Actuarial Liability Payment Account provide additional City contributions. The Enhanced Benefit Account is used by the Board to pay a retiree holiday bonus and for other enhancements, including a share plan.

Deferred Retirement Option Program (DROP)

DROP after 20 Years of Service. Maximum period 5 years. 8.4% annual interest credited. The DROP balance as of September 30, 2016 is \$310,283,837.

Actuarial assumptions. The actuarial assumptions used in the October 1, 2016 valuation were based on the results of an actuarial experience study for the period October 1, 2011 -September 30, 2015.

| Inflation | 2.5 percent |
|----------------------------|-----------------------------------------------------------|
| Salary increases | 3.5 percent, including inflation |
| Investment (discount rate) | 7.0 percent, including inflation |
| COLA | 3.0 percent, compounded annually |
| Mortality: | Pre- and Post-Retirement: All using RP-2000 Generational, |
| | Scale BB, with |
| | Female: 100% Annuitant White Collar |

Male: 10% Annuitant White Collar/90% Annuitant Blue Collar

Post-Disablement:

Female: 60% RP-2000 Disabled Female set forward two years/40% Annuitant White Collar with no setback, no projection scale

Male: 60% RP-2000 Disabled Male setback four years/ 40% Annuitant White Collar with no setback, no

projection scale

The expected arithmetic real rate of return was determined for each major asset class. These are combined to produce the 7.0 percent expected rate of return, or discount rate, by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation (diversification and volatility also impact this).

| | Long-Term Expected Real Rate of Return |
|----------------------|----------------------------------------|
| Asset Class | (gross less 2.5% inflation) |
| Domestic equity | 5.4% |
| International equity | 5.5 |
| Fixed income | 1.3 |
| Real estate | 4.5 |
| Cash | 1.4 |
| MLPs/Energy | 5.5 |

Accounting for Pension Costs and Liabilities

Net Pension Liability of the City of Jacksonville as of September 30, 2016

Total pension liability Plan fiduciary net position

\$3,345,515,259 \$1,513,398,466

City's net pension liability

\$1,832,116,793

Plan fiduciary net position as a percentage of the total pension liability

45.24%

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the City of Jacksonville, calculated using the discount rate of 7.0%, as well as what the City of Jacksonville's net pension liability would be if it were calculated using a discount rate that is 1% lower (6%) or 1% higher (8%) than the current rate:

> 1% Decrease (6%)

Current Discount (7%)

1% Increase (8%)

City of Jacksonville's net pension liability \$2,270,273,985 \$1,832,116,793 \$1,479,775,059

Changes

1. Ordinance 2015-304E made several small cutbacks in the current Plan provisions (Group I), increased employee contributions, added supplemental employer contributions above the ARC and added a more moderate Pension Plan for new hires after June 19, 2015 (Group II). The provisions of Groups I and II are shown on pages 6 and 7 of this report.

Statement of Changes in Fiduciary Plan Net Position as of September 30, 2015 and 2016

| | | 40 |
|---------------------------------------------|--------------------------|------------------------|
| Additions | <u>2015</u> | <u>2016</u> |
| Contributions | | |
| | 0454.004.500 | |
| Employer | \$154,664,523 | \$152,494,371 |
| Plan Members | <u>12.061,321</u> | <u>12,830,861</u> |
| 0.1. | 166,725,844 | 165,325,232 |
| Other Additions | | |
| Chapter 175/185 | 10,577,853 | 10,680,624 |
| Court fines and penalties | 920,774 | 832,536 |
| Supplemental Payment | . 0 | 5,000,000 |
| Miscellaneous | 327,418 | 122,888 |
| | 11,826,045 | 16,636,048 |
| Investment income | 11,020,040 | 10,000,040 |
| Parking and rental revenue | 636,085 | 704 526 |
| Investment income & realized gains | 69,740,178 | 704,536 |
| Unrealized Gains (Losses) | | 55,618,519 |
| Officialized Callis (2055e5) | <u>(125,978,848)</u> | 105,143,061 |
| l acc investment conserv | (55,602,585) | 161,466,116 |
| Less investment expense | 7,697,756 | 7,297,110 |
| Less parking and rental expense | <u>230,952</u> | <u>289,357</u> |
| Net investment income | (63,531,293) | 153,879,649 |
| Securities Lending | | |
| Revenues | 862,008 | 577,398 |
| Expenses | (215,349) | (143,905) |
| | 646,659 | 433,493 |
| - | , | 100,100 |
| Total additions | 115,667,255 | 336,274,422 |
| Deductions | | |
| peddctions | | |
| Pension benefit payments | 119,548,310 | 400 004 475 |
| DROP payments and RLA interest ³ | | 129,091,475 |
| Refund of contributions | 28,675,706 | 30,249,696 |
| | 404,460 | 384,838 |
| Administrative expense | <u>2,228,452</u> | <u>3,519,224</u> |
| Total deductions | 150,856,928 | 163,245,233 |
| Net increase (Decrease) | (35,189,673) | 173,029,189 |
| Cummulative effect of change in | | |
| accounting principle | | 0.000.000 |
| accommiss himcibis | | 2,238,000 |
| Net assets held in trust for | | |
| pension benefits | A4 400 000 000 | |
| housion nettering | <u>\$1,437,907,379</u> * | <u>\$1,613,043,823</u> |
| | | |

^{*} This value has been adjusted to \$1,437,776,634 after the prior report was published.

Statement of Fiduciary Plan Net Position as of September 30, 2015 and 2016

| Assets | <u>2015</u> | <u>2016</u> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Cash and short-term investments | \$6,960,201 | \$3,263,098 |
| Due from City of Jacksonville Recoverable taxes Prepaid items | 4,746,215 91 113,770 | 5,651,397 78 81,675 |
| Investments, at fair value Cash and Cash Equivalents Fixed Income Securities Domestic and International Equities Real Estate Accrued Interest Dividends receivable | 0 314,236,566 936,723,452 172,947,380 1,186,646 1,046,428 | 28,252,353 326,147,367 1,053,394,238 195,943,522 1,539,334 243,194 |
| Property, Plant and Equipment Furniture and equipment Accumulated depreciation Building Accumulated depreciation | 295,130 (277,448) 7,368,742 (3,248,742) | 311,510 (304,760) 0 0 |
| Securities Lending Collateral | 150,693,674 | 92,760,152 |
| Other receivables | <u>155,038</u> | 10,761,896 |
| Total assets | 1,592,947,143 | 1,718,045,054 |
| Deferred Outflow | | 204,810 |
| Liabilities | | |
| Due to City of Jacksonville Accounts payable Accrued pension and wages payable Current portion long term liabilities Other long term liabilities OPEB GASB #45 GASB #68 Net Pension Liability Securities Lending Obligations Other liabilities | \$0 1,767,515 2,249,618 141,153 35,324 50,965 150,693,673 101,516 | \$7,000,000 1,533,688 3,045,699 21,278 45,174 60,348 582,196 92,760,152 64,806 |
| Total liabilities | 155,039,764 | 105,113,341 |
| Deferred Inflow | 0 | 92,700 |
| Net assets held in trust for pension benefits | \$1,437,907,379 | \$1,613,043,823 ² |

 $^{^{1}\,}$ This value has been adjusted to \$1,437,776,634 after the prior report was published.

² Includes employee contributions of \$92,763,275 on September 30, 2016.

Schedule of Changes in Net Pension Liability and Related Ratios

| | 2016 | 2015 | 2014 | 2013 | 2012 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|-----------------|-----------------------------------|-----------------|
| Control pension itability | | | | | |
| between cost (port) | \$44,087,089 | \$46,662,780 | \$47,915,012 | \$46,109,290 | \$47,569,761 |
| Interest on total pension liability | \$217,546,212 | \$210,942,612 | \$203,577,435 | \$195,519,742 | \$190,343,631 |
| Changes of benefit terms | \$0 | (\$28,684,960) | 0\$ | 20 | 20 |
| Experience deviations including buybacks | \$3,566,449 | \$24,831,339 | \$22,671,112 | (\$4,675,994) | (\$12,512,641) |
| Changes due to assumptions (reallocation in FY2015) | \$97,813,304 | \$24,514,349 | \$0 | \$5,332,605 | \$227,333,255 |
| Benefit payments, including refunds of member contributions | (\$159,726,007) | (\$148,628,476) | (\$138,179,183) | (\$128,655,957) | (\$116,955,126) |
| Net change in total pension liability | \$203,287,047 | \$129,637,644 | \$135,984,376 | \$113,629,686 | \$335,778,880 |
| Total pension liability - beginning | \$3,142,228,212 | \$3,012,590,568 | \$2,876,606,192 | \$2,762,976,506 | \$2,427,197,626 |
| Total pension liability ending(a) | \$3,345,515,259 | \$3,142,228,212 | \$3,012,590,568 | \$2,876,606,192 | \$2,762,976,506 |
| Plan fiduciary net position | | | | | |
| Contributions-employer | \$154,499,492 | \$153,014,791 | \$148,277,368 | \$121,822,333 | \$69,828,557 |
| Contributionsmember | \$11,633,724 | \$10,469,643 | \$10,067,765 | \$9,682,998 | \$11,204,317 |
| Buybacks and transfers-employer | \$2,994,879 | \$1,649,732 | \$2,242,902 | 0\$ | \$2,814,296 |
| Buybacks and transfers-member | \$1,197,137 | \$1,591,678 | \$1,515,800 | \$1,070,503 | \$406,553 |
| Net investment income | \$153,879,649 | (\$63,531,293) | \$146,950,776 | \$169,202,439 | \$181,653,432 |
| Securities Lending | - \$433,493 | \$646,659 | \$382,022 | | |
| Benefit payments, including refunds of member contributions | (\$159,726,007) | (\$148,628,476) | (\$138,179,183) | (\$128,655,957) | (\$116,955,126) |
| Administrative expense | (\$3,519,224) | (\$2,228,452) | (\$2,224,248) | (\$2,505,985) | (\$2,351,598) |
| Chapter 175/185 | \$10,680,624 | \$10,577,853 | \$10,110,493 | \$9,667,185 | \$9,275,728 |
| Court Fines | \$832,536 | \$920,774 | \$881,291 | \$757,984 | \$770,125 |
| Other | \$122,886 | \$327,418 | \$141,855 | \$1,187,289 | \$55,383 |
| Net change in plan fiduciary net position | \$173,029,189 | (\$35,189,673) | \$180,166,841 | \$182,228,789 | \$156,701,667 |
| Cummulative effect of change in accounting principle | \$2,238,000 | | | | |
| Plan fiduciary net position - beginning (adjusted) | - 1 | \$1,473,097,052 | \$1,292,930,211 | \$1,110,737,208 | \$954,035,541 |
| riall nauciary net position enaing | \$1,613,043,823 | \$1,437,907,379 | \$1,473,097,052 | \$1,292,965,997 | \$1,110,737,208 |
| less Reserve Accounts and Sr. Staff Assets Total Plan fiduciary net position ending(b) | (\$99,645,357) \$1,513,398,466 | (\$83,502,014) \$1,354,405,365 | (\$83,349,437) | (\$64,834,813) \$1,228,131,184 | \$1 078 906 587 |
| Otto de 100 de 1 | | | | | |
| City's net pension liability-ending(a)-(b) | \$1,832,116,793 | \$1,787,822,847 | \$1,622,842,953 | \$1,648,475,008 | \$1,684,069,919 |
| Plan fiduciary net position as a percentage of the total pension liability | 45.24% | 43.10% | 46.13% | 42.69% | 39.05% |
| | | | | | |
| Covered-employee payroll City's net pension liability as a percentage of covered- | \$135,599,741 | \$132,735,243 | \$134,521,216 | \$130,972,174 | \$133,611,459 |
| employee payroll | 1351.12% | 1346.91% | 1206.38% | 1258,65% | 1260.42% |

Schedule of City Contributions

| | Contribution as a | nercentade of covered | employee payroll | entropies payron | 110.25% | 115.97% | 110 88% | 8/20:01 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10:00 10 10 10 10 10 10 10 10 10 10 10 10 1 | 83.08% | 52.84% | 70 0x | 30.3370 | 52.01% | 32.29% | 30 62% | 02.02 /0 | 30.91% | 26 82% | 20.02 | 20.84% |
|-----------------|-------------------|------------------------|-------------------------|------------------|-------------|-------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|-------------|----------------------------------------|----------------|---------------|----------------|----------|---------------|--------------|------------|---------------|
| | Covered | emplovee | navroll | 10 10 10 TO | 135,589,741 | 132,735,243 | 134 521 216 | 120 020 174 | 130,372,174 | 133,611,459 | 148 967 906 | יייייייייייייייייייייייייייייייייייייי | 158,046,680 | 155.557.729 | 148 276 743 | 01101 | 143,006,154 | 134 694 392 | 1001 | 130,392,284 |
| | | | | • | A | 69 | 69 | 9 | 9 | ₩ | ₩. | • (| (4) | w | 6 | • | () | G | - | s) |
| | | Contribution | deficiciency (excess) 1 | | • | (331,569) | (6.726.082) | (22 583 482) | (44,505,406) | 3,130,318 | 1.162.380 | | (5,014,820) | 329,448 | 442,776 | | (4,358,257) | 2.105.596 | | 8,753,301 |
| | | | de | 6 | 7 | ₩ | H | ₩. | > | () | ю | • • | A | ₩ | H | . (| /) | H | • | s) |
| Contribution in | relation to the | actuarially determined | contribution | 140 400 402 2 | 701,001,01 | 153,935,565 | 149,158,659 | 122 580 317 | 1000111 | 70,598,682 | 75,902,934 | 00 000 | 979,130,678 | 50,234,759 | 48,364,103 | 000 100 | 44,207,870 | 36,124,465 | 0.00 | 27,175,819 |
| | | act | | ď | → | ↔ | ₩ | 67 | H | 5 | 49 | 6 | } | 6) | ₩ | • | A | ₩ | € | A |
| | Actuarially | required City | contribution | 149 499 492 | 30100101 | 153,603,996 | 142,432,577 | 99.996.835 | | 73,729,000 | 77,065,314 | 77 102 050 | 00,701,77 | 50,564,207 | 48,806,879 | 200000 | 01/640/60 | 38,230,061 | 25 000 400 | 021'828'CC |
| | | | | U : |) | 5 3 | () | H | | A | ₩ | ď |) (| A | ()) | 6 | 9 | H | ŧ | 9 |
| | | | FYE | 2016 | | 2015 | 2014 | 2013 | 0700 | Z102 | 2011 | 2010 | 2000 | 2009 | 2008 | 2007 | 2007 | 2006 | 2006 | 2002 |

¹ Contribution deficiency (excess) is assigned to the City Budget Stabilization Account

Notes to Schedule

Valuation date: Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods used to determine contributions rates:

Constant percentage of payroll increasing 2.50% annually; Closed 7.0%, including inflation 3.5%, including inflation Individual entry age averaging 19 years Market Value Remaining amortization period: investment rate of return; Asset valuation method: Actuarial cost method: Amortization method: Salary increases: Inflation:

Females are assumed to be 3 years younger than males 3.0%, compounded annually see page 13 Age differences for spouses: Mortality Table in use

Cost of living adjustments:

Percent married

Assume 75% of active employees are married, use tax reported status for inactives

² Plus \$5,000,000 Supplemental Payment

Schedule of Investment Returns Annual Money-Weighted Rate of Return, Net of Investment Expenses

| <u>FYE</u> | <u>%</u> |
|------------|----------|
| 2016 | 10.00% |
| 2015 | -3.95% |
| 2014 | 10.73% |
| 2013 | 14.29% |
| 2012 | 18.25% |
| 2011 | 0.64% |
| 2010 | 8.45% |
| 2009 | 1.70% |
| 2008 | -13.07% |
| 2007 | 15.05% |
| 2006 | 8.18% |

GASB 68 Pension Expense

| | FYE2015 |
|------------------------------------------------------------------|---------------------------|
| Service Cost (BOY) | \$46,662,780 |
| Employee Contributions | (\$10,469,643) |
| Chapter Funds | (\$5,288,927) |
| Court Fines | (\$920,774) |
| 7% Interest on TPL and Service Cost | \$207,025,771 |
| Expected 7% Interest on Net Assets | (\$101,358,359) |
| 1.4% Excess DROP Interest | (\$3,916,841) |
| Non Investment Expense | \$2,228,452 |
| Investment Expense | \$7,697,756 |
| Current period recognition of deferred outliflow/(inflows |) |
| Change of benefit terms | (\$28,684,960) |
| Non-investment actuarial experience | \$10,973,082 |
| established 2014 \$5,211,750 | |
| established 2015 \$5,761,332 | |
| Actual investment experience | \$21,839,775 |
| established 2014 (\$10,035,724) established 2015 \$31,875,499 | |
| Assumption changes reallocation | <u>\$5,687,784</u> |
| established 2014 \$0 | Ψ <u>σ,σση,πσ</u> μ |
| established 2015 \$5,687,784 | |
| TOTAL | \$151,475,896 |
| IVIAL | ψ101, 4 10,030 |

Future fiscal years outflows(inflows) to be recognized

| | Non-investment Actuarial <u>Experience</u> | Actual Investment <u>Experience</u> | Assumption Changes | TOTAL |
|------|--------------------------------------------------|-------------------------------------------|-----------------------|---------------|
| 2016 | \$10,973,082 | \$21,839,775 | \$5,687,784 | \$38,500,641 |
| 2017 | \$10,973,082 | \$21,839,775 | \$5,687,784 | \$38,500,641 |
| 2018 | \$7,585,444 | \$21,839,775 | \$5,687,784 | \$35,113,003 |
| 2019 | <u>\$1,786,011</u> | <u>\$31,875,497</u> | \$1,763,213 | \$35,424,721 |
| | \$31,317,619 | \$97,394,822 | \$18,826,565 | \$147,539,006 |

State of Florida Information

- A. Participant Data See pages 8-10.
- B. Assets See pages 15 and 16.
- C. <u>Liabilities</u>

| | 10/01/2015 with Asset Revisions | 10/01/2016 before Assumption Changes | 10/01/2016 with Assumption Changes |
|------------------------------------------------|------------------------------------------|-----------------------------------------------|---------------------------------------------|
| Present Value of Future Benefits for: | | | |
| Retirement Benefits Death Benefits | \$1,048,845,058 | \$1,062,454,049 | \$1,088,591,672 |
| Disability Benefits | \$21,051,900 | \$21,479,405 | \$22,474,373 |
| Withdrawal Benefits Return of Contributions | \$21,628,941 \$594,094 | \$20,193,712 \$791,103 | \$20,845,482 \$832,869 |
| Total Active | \$1,103,911,638 | \$1,116,665,987 | \$1,146,037,062 |
| Terminated Vested | \$19,207,665 | \$20,107,170 | \$20,666,463 |
| Retirees and Beneficiaries Disabled | \$1,568,585,051 \$27,520,962 | \$1,704,704,056 \$28,486,483 | \$1,766,276,044 \$30,754,657 |
| DROPs | \$794,104,419 | \$745,801,630 | \$759,356,934 |
| Total Inactive | \$2,409,418,097 | \$2,499,099,339 | \$2,577,054,098 |
| Total Present Value of Future Benefits | \$3,513,329,735 | \$3,615,765,326 | \$3,723,091,160 |

State of Florida Information

D. Actuarial Present Value of Accumulated Plan Benefits

| | | tion Assumption | | | | | | 1,110 \$3,190,315,271 |
|------------|-------|-----------------|-----------|--------|---------------|--------------|-----------------|-----------------------|
| 10/01/2016 | befor | Assumb | Chang | | \$579,61 | \$16,95 | \$2,499,09 | \$3,095,661,110 |
| 10/01/2015 | with | Asset | Revisions | | \$550,539,923 | \$14,843,924 | \$2,409,418,097 | \$2,974,801,944 |
| | | | | Active | Vested | Nonvested | Inactive | Total |

Change in Actuarial Present Value of Accumulated Plan Benefits

| \$2,974,801,944 | \$159,726,009 | \$202,740,277 | \$94,654,161 | \$77,844,898 | \$3,190,315,271 |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Actuarial Present Value of Accumulated Plan Benefits as of October 1, 2015. | Less benefit payments and refunds for the period 10/1/2015-9/30/2016 | 3. Increase due to 7.0% yield assumption. | 4. Increase due to assumption changes. | Plus additional benefit accruals for the period 10/1/2015-9/30/2016, including experience deviations | Actuarial Present Value of Accumulated Plan Benefits as of October 1, 2016. |
| ← | 2 | က | 4. | က် | Ö |

State of Florida Information

E. Entry Age Normal Actuarial Accrued Liability

| 10/01/2016 with Assumption <u>Changes</u> | \$750,332,948 \$4,411,009 \$9,717,432 \$4,868,875 -\$869,103 \$768,461,161 | \$2,577,054,098 | \$3,345,515,259 | | 10/01/2016 with Assumption <u>Changes</u> | \$40,480,555 \$1,055,636 \$1,467,897 \$2,059,147 \$193,842 \$45,257,077 |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------|-----------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 10/01/2016 before Assumption <u>Changes</u> | \$731,571,952 \$4,015,268 \$9,185,645 \$4,709,440 -\$879,689 \$748,602,616 | \$2,499,099,339 | \$3,247,701,955 | | 10/01/2016 before Assumption Changes | \$39,548,767 \$917,347 \$1,409,853 \$1,992,116 \$190,479 \$44,058,562 |
| 10/01/2015 with Asset <u>Revisions</u> | \$715,438,203 \$4,065,258 \$9,145,244 \$4,965,203 -\$803,793 \$732,810,115 | \$2,409,418,097 | \$3,142,228,212 | | 10/01/2015 with Asset Revisions | \$39,586,664 \$930,836 \$1,406,975 \$1,994,893 \$167,721 \$44,087,089 |
| | Actives Retirement Benefits Death Benefits Disability Benefits Withdrawal Benefits Return of Contributions Total Actives | Total Inactives | Total Entry Age Normal Actuarial Accrued Liability | Entry Age Normal Cost | | Actives Only Retirement Benefits Death Benefits Disability Benefits Withdrawal Benefits Return of Contributions |
| | | | | щ | | |

State of Florida Information

G. Pension Cost

| | 10/01/2015 with Asset Revisions | 10/01/2016 before Assumption <u>Changes</u> | 10/01/2016 with Assumption <u>Changes</u> |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------|----------------------------------------------------|
| Normal Actuarial Cost | \$54,013,297 | \$55,238,697 | \$56,437,212 |
| Minimum Payment to Amortize UAAL | \$122,360,258 | \$123,409,431 | \$164,417,818 |
| Expected Contributions From Active Employees* Dollar Amount % of Covered Payroll | ve Employees* \$10,618,819 8.00% | \$11,000,606 8.11% | \$11,000,606 |
| Expected Contributions From City (includes interest adjustment) Dollar Amount % of Covered Payroll 119.58% 118.57 | (includes interest \$158,723,705 119.58% | \$160,779,523 118.57% | \$202,986,425 149.70% |
| Expected DROP Contributions Dollar Amount % of Covered Payroll | \$791,426 0.52% | \$695,151 0.51% | \$695,151 0.051% |
| Expected Contributions From Other Sources** Dollar Amount % of Covered Payroll | er Sources** \$6,239,605 4.70% | \$6,172,848 4.55% | \$6,172,848 4.55% |

^{*}Employee contributions of 8% from Group I and 10% from Group II **The sources include Chapter 175/185 monies, court fines and penalties.

H. Past Contributions

Expected contributions for Plan Year ending September 30, 2016. See G. above. Actual contributions for Plan Year ending September 30, 2015 - See page 15.

State of Florida Information

l. Net Actuarial Gain (Loss)

For period ended 09/30/2015 - (\$52,196,468)

Present Value of

| | 10/01/2015 | 10/01/2016 | 10/01/2016 |
|---------------------------------------------------------------------------------------------|-------------------------------|-----------------|------------------|
| | with | before | with |
| | Asset | Assumption | Assumption |
| | Revisions | Changes | Changes |
| Future Salaries | \$1,115,730,900 | \$1,168,485,700 | \$1,167,123,500 |
| Future City Contributions | \$2,010,290,639 | \$1,949,165,009 | \$2,056,669,443* |
| Future Active Employee Contributions | \$89,258,472 | \$93,478,856 | \$93,369,880 |
| Future DROP Contributions | \$6,927,093 | \$6,530,529 | \$6,522,916 |
| Future Contributions from Other \$52,448,1 ** reduced by UALPA and other City account funds | \$52,448,166 account funds | \$53,192,466 | \$53,130,455 |

K. Derivation of Costs on Current Plan Basis

See page 1.

Statement by Enrolled Actuary

See Cover Letter.

M. Age/Service Distribution of Active Employees

See page 10.

State of Florida Information

N. (i) <u>Three-Year Comparison of Actual and Assumed Salary Increases</u>

| Year Ended | <u>Actual</u> | <u>Assumed</u> |
|------------|---------------|----------------|
| 09/30/16 | 2.2% | 3.5% |
| 09/30/15 | 3.8% | 3.5% |
| 09/30/14 | 3.0% | 4.0% |

(ii) Three-Year Comparison of Net Investment Returns

| | Market | |
|------------|--------------|----------------|
| Year Ended | <u>Value</u> | <u>Assumed</u> |
| 09/30/16 | 10.00% | 7.00% |
| 09/30/15 | -3.95% | 7.00% |
| 09/30/14 | 10.73% | 7.00% |

(ii) Average Annual Growth in Payroll, last 10 Years

| Valuation Date | Covered Valuation Payroll |
|------------------------------------|---------------------------|
| 10/01/2006 | \$134,694,392 |
| 10/01/2007 | \$143,006,154 |
| 10/01/2008 | \$148,276,743 |
| 10/01/2009 | \$155,557,729 |
| 10/01/2010 | \$158,046,680 |
| 10/01/2011 | \$148,967,906 |
| 10/01/2012 | \$133,611,459 |
| 10/01/2013 | \$130,972,174 |
| 10/01/2014 | \$134,521,216 |
| 10/01/2015 | \$132,735,243 |
| 10/01/2016 | \$135,599,741 |
| Total % Increase | 0.67% |
| Annual % Increase (10 year average | 9) 0.067% |

- O. <u>Benefits and Expenses of Plans not Explicitly or Implicitly Provided for in Valuation</u>
 None.
- P. <u>Trends Not Taken Into Account But Which Are Likely to Result in Future Cost Increases</u>

None.