185.25 Exemption from tax and execution.
185.30 Depository for retirement fund.
185.31 Municipalities and boards independent of other municipalities and boards and of each other.
185.34 Disability in line of duty.
185.341 Discrimination in benefit formula prohibited; restrictions regarding designation of joint annuitants.
185.35 Municipalities having their own pension plans for police officers.
185.37 Termination of plan and distribution of fund.
185.38 Transfer to another state retirement system; benefits payable.
185.39 Applicability.
185.50 Retiree health insurance subsidy.
185.60 Optional participation.

185.01 Legislative declaration.—

(1) It is hereby found and declared by the Legislature that police officers as hereinafter defined perform both state and municipal functions; that they make arrests for violations of state traffic laws on public highways; that they keep the public peace; that they conserve both life and property; and that their activities are vital to public welfare of this state. Therefore the Legislature declares that it is a proper and legitimate state purpose to provide a uniform retirement system for the benefit of police officers as hereinafter defined and intends, in implementing the provisions of s. 14, Art. X of the State Constitution as they relate to municipal police officers' retirement trust fund systems and plans, that such retirement systems or plans be managed, administered, operated, and funded in such manner as to maximize the protection of police officers' retirement trust funds. Therefore, the Legislature hereby determines and declares that the provisions of this act fulfill an important state interest.

Florida Statute 185.01(2)
Police & Fire Pensions

(2) This chapter hereby establishes, for all municipal pension plans now or hereinafter provided for under this chapter, including chapter plans and local law plans, minimum benefits and minimum standards for the operation and funding of such plans, hereinafter referred to as municipal police officers' retirement trust funds. The minimum benefits and minimum standards set forth in this chapter may not be diminished by local ordinance or by special act of the Legislature, nor may the minimum benefits or minimum standards be reduced or offset by any other local, state, or federal plan that may include police officers in its operation, except as provided under s. 112.65.

History.—s. 1, ch. 28230, 1953; s. 1, ch. 86-42; s. 41, ch. 99-1.

185.015 Short title.—This chapter may be cited as the "Marvin B. Clayton Police Officers Pension Trust Fund Act."

History.—s. 3, ch. 2004-21.

185.02 Definitions.—For any municipality, chapter plan, local law municipality, or local law plan under this chapter, the following words and phrases as used in this chapter shall have the following meanings, unless a different meaning is plainly required by the context:

(1) "Average final compensation" means one-twelfth of the average annual compensation of the 5 best years of the last 10 years of creditable service prior to retirement, termination, or death.

(2) "Casualty insurance" means automobile public liability and property damage insurance to be applied at the place of residence of the owner, or if the subject is a commercial vehicle, to be applied at the place of business of the owner; automobile collision insurance; fidelity bonds; burglary and theft insurance; and plate glass insurance. "Multiple peril" means a combination or package policy that includes both property coverage and casualty coverage for a single premium.

(3) "Chapter plan" means a separate defined benefit pension plan for police officers which

incorporates by reference the provisions of this chapter and has been adopted by the governing body of a municipality as provided in s. 185.08. Except as may be specifically authorized in this chapter, provisions of a chapter plan may not differ from the plan provisions set forth in ss. 185.01-185.341 and 185.37-185.39. Actuarial valuations of chapter plans shall be conducted by the division as provided by s. 185.221(1)(b).

(4) "Compensation" or "salary" means, for noncollectively bargained service earned before July 1, 2011, or for service earned under collective bargaining agreements in place before July 1, 2011, the total cash remuneration including "overtime" paid by the primary employer to a police officer for services rendered, but not including any payments for extra duty or special detail work performed on behalf of a second party employer. A local law plan may limit the amount of overtime payments which can be used for retirement benefit calculation purposes; however, such overtime limit may not be less than 300 hours per officer per calendar year. For noncollectively bargained service earned on or after July 1, 2011, or for service earned under collective bargaining agreements entered into on or after July 1, 2011, the term has the same meaning except that when calculating retirement benefits, up to 300 hours per year in overtime compensation may be included as specified in the plan or collective bargaining agreement, but payments for accrued unused sick or annual leave may not be included.

(a) Any retirement trust fund or plan that meets the requirements of this chapter does not, solely by virtue of this subsection, reduce or diminish the monthly retirement income otherwise payable to each police officer covered by the retirement trust fund or plan.

(b) The member's compensation or salary contributed as employee-elective salary reductions or deferrals to any salary reduction, deferred compensation, or tax-sheltered annuity program authorized under the Internal Revenue Code shall be deemed to be the compensation or salary the member would receive if he or she were not participating in such program and shall be treated as compensation for retirement purposes under this chapter.

(c) For any person who first becomes a member in any plan year beginning on or after January 1, 1996, compensation for that plan year may not include any amounts in excess of the Internal Revenue Code s. 401(a)(17) limitation, as amended by the Omnibus Budget Reconciliation Act of 1993, which limitation of $150,000 shall be adjusted as required by federal law for qualified government plans and shall be further adjusted for changes in the cost of living in the manner provided by Internal Revenue Code s. 401(a)(17)(B). For any person who first became a member before the first plan year beginning on or after January 1, 1996, the limitation on compensation may not be less than the maximum compensation amount that was allowed to be taken into account under the plan as in effect on July 1, 1993, which limitation shall be adjusted for changes in the cost of living since 1989 in the manner provided by Internal Revenue Code s. 401(a)(17)(1991).

(5) "Creditable service" or "credited service" means the aggregate number of years of service and fractional parts of years of service of any police officer, omitting intervening years and fractional parts of years when such police officer may not have been employed by the municipality subject to the following conditions:

(a) No police officer will receive credit for years or fractional parts of years of service if he or she has withdrawn his or her contributions to the fund for those years or fractional parts of years of service, unless the police officer repays into the fund the amount he or she has withdrawn, plus interest as determined by the board. The member shall have at least 90 days after his or her reemployment to make repayment.

(b) A police officer may voluntarily leave his or her contributions in the fund for a period of 5 years after leaving the employ of the police department, pending the possibility of his or her being rehired by the same department, without losing credit for the time he or she has participated actively as a police officer. If he or she is not reemployed as a police officer with the same

(1) The payments to the transferee should be made only from the resources generated by the specific receivables rather than from the transferor's own resources. The transferor should have no obligation to advance amounts to the transferee before it collects equivalent amounts from the underlying accounts.
(2) Cash collected by the transferor on behalf of the transferee should be remitted to the transferee without significant delay. In addition, earnings on invested collections should be passed on to the transferee.
(3) The transferor should consider proceeds received from the transferee as satisfaction of individual accounts. The transferor should indicate in its records which accounts have been transferred and which collections pertain to those accounts. For example, in a transaction involving delinquent taxes, the proceeds from the transferee should be accepted by the taxing body as satisfaction of the delinquent taxes owed by the individual property owners. Accordingly, the tax rolls should indicate that those taxes have been paid (or sold, or otherwise settled) and are no longer delinquent.

c. Provisions in the transfer agreement (or provided elsewhere in statutes, charters, or other governing documents or agreements) should protect the transferee from the claims of the transferor's creditors.

Future Revenues

8. A transaction in which a government receives proceeds in exchange for cash flows from specific future revenues should be reported as a sale if the government's continuing involvement with those revenues meets all of the following criteria:

a. The transferor government will not maintain an active involvement in the future generation of those revenues. Active involvement should be determined based on the provisions in paragraph 9.
b. The transferee's ability (or the ability of the ultimate holder/owner of the future cash flows) to subsequently sell or pledge the future cash flows is not significantly limited by constraints imposed by the transferor, either in the transfer agreement or through other means.
c. The cash resulting from collection of the future revenues has been isolated from the transferor government. Generally, banking arrangements should eliminate access by the transferor and its component units (other than the transferee) to the cash generated by collecting the future revenues. Access is eliminated when the revenues are received directly by the transferee or are deposited directly into a custodial account maintained for the benefit of the transferee. However, if the transferor is required to remain as the recipient, the stipulations in paragraphs 7b(1) and 7b(2) pertaining to receivables also should be applied to future revenues, in determining whether the cash collected is isolated from the transferor.
d. The contract, agreement, or other arrangement between the original resource provider (a grantor organization, for example) and the transferor government does not prohibit the transfer or assignment of those resources.

e. The sale agreement is not cancelable by either party, including cancellation through payment of a lump sum or transfer of other assets or rights.

9. Governments may cease active involvement in the generation of specific future revenues yet remain involved with those revenues in some manner. *Active involvement generally requires a substantive action or performance by the government.* Governments should determine whether the *primary* or *fundamental* activity or process that generates a specific revenue requires continuing active involvement. That is, when considering whether it maintains an active involvement in the generation of specific future revenues, a government should distinguish those activities that *generate* a specific revenue from those that, although associated with that revenue, are tangential, or incidental, or are undertaken to protect the revenue. Manifestations of a government's active involvement in the future generation of revenues include the following:

a. The government produces or provides the goods or services that are exchanged for the revenues.
b. The government levies or assesses taxes, fees, or charges and can directly influence the revenue base or the rate(s) applied to that base to generate the revenues. For example, the revenue bases for property, sales, and income taxes are taxable real estate parcels, taxable retail sales, or taxable income, respectively. The taxing government can directly influence any of those bases by establishing minimum taxable levels, granting exemptions, providing credits, or excluding certain transactions. The taxing government may initiate, activate, or determine tax rates pertaining to each revenue base.
c. The government is required to submit applications[2] for grants or contributions from other governments, organizations, or individuals to obtain the revenues.
d. The government is required to meet grant or contribution performance provisions to qualify for those revenues.

10. Governments may remain associated with specific revenues in ways that do not constitute the primary or fundamental activity that generates the revenues and thus would

[2]This criterion refers to ongoing requirements that qualify the government to continue to receive grants or contributions in future years, rather than an initial application or qualification process that remains effective without further effort by the government.

not be considered to be actively involved in the generation of those revenues. Activities that would not be considered manifestations of active involvement in the generation of specific revenues include the following:

a. Holding title to revenue-producing assets (for leases, rents, or royalty income, for example)
b. Owning a contractual right to a stream of future revenues (rights to tobacco settlement revenues, for example)
c. Satisfying the "required characteristics" eligibility criterion in paragraph 20 of Statement No. 33, *Accounting and Financial Reporting for Nonexchange Transactions*
d. Agreeing to refrain from specified acts or transactions (for example, agreeing to noncompetition restrictions).

Accounting for Transactions That Do Not Qualify as Sales

11. If the criteria required for sale reporting in paragraphs 6–9, as appropriate, are not met, a transaction should be reported as a collateralized borrowing. The receivables or future revenues should be considered for financial statement purposes as pledged rather than sold. Proceeds received by the pledging government should be reported as a liability in its statements of net assets and as an other financing source in its governmental funds statement of revenues, expenditures, and changes in fund balance, if governmental funds receive the proceeds. Similarly, a transferee government should recognize a receivable for the amounts paid to the pledging government.

12. Pledged *receivables* should continue to be recognized as assets in the pledging government's balance sheet or statements of net assets. Pledged *revenues* should continue to be reported as revenue by the pledging government in accordance with recognition and measurement criteria appropriate to the specific type of revenue pledged. Collections of the pledged revenues or receivables that are subsequently paid to the transferee reduce the liability in the pledging government's statements of net assets. Those payments also

should be reported as expenditures, rather than reductions of revenue, in the pledging government's governmental funds statement of revenues, expenditures, and changes in fund balance, if governmental funds are used to report the transaction. Payments received from the pledging government reduce the governmental transferee's receivable. Pledged receivables collected and paid to the transferee after the liability has been liquidated should be reported as expenditures/expenses (by the pledging government) and revenues (by the governmental transferee) when the pledging government becomes obligated to make the payments.

Accounting for Transactions That Meet the Criteria to Be Reported as Sales

13. If the criteria for sale reporting in paragraphs 6–9, as appropriate, are met, a transaction should be reported as a sale. In a sale of receivables, the transferor government should no longer recognize as assets the receivables sold, removing the individual accounts at their carrying values. Except for reporting in governmental funds, the difference between the proceeds (exclusive of amounts that may be refundable) and the carrying value of the receivables sold should be recognized as a gain or loss in the period of the sale. In governmental funds, the difference between the proceeds received and the receivables sold (net of allowances and deferred revenues) should be recognized as revenue. If the transferee is a government outside of the transferor government's financial reporting entity, the transferee government should recognize the receivables acquired at the purchase price. Recognition by transferees within the same financial reporting entity as the transferor is addressed in paragraph 15.

14. In a sale of future revenues, the transferor government should report the proceeds as deferred revenue or revenue, in both the government-wide and fund financial statements.

60. *Q*—If the actuarial valuation date is earlier than a single or agent employer's measurement date and the long-term expected rate of return assumption remains the same at the measurement date as it was at the actuarial valuation date, does the discount rate have to be evaluated for significant changes between the actuarial valuation date and the measurement date?

A—Yes. A change in the discount rate can occur due to factors other than a change in the long-term expected rate of return. For example, a change in the municipal bond yield or index rate (if used in the determination of the discount rate) or a change in the projected fiduciary net position of the pension plan that affects the relative weighting of the long-term expected rate of return and the municipal bond yield or index rate can affect the discount rate. Therefore, these and other factors, if applicable, should be considered when evaluating whether changes have occurred that should be reflected in the total pension liability at the measurement date, either through update procedures or through a new actuarial valuation. (See Question 48 for a discussion of update procedures.)

61. *Q*—If, within a single-employer or individual agent-employer pension plan, (a) multiple contribution rates are determined for the employer because different rates are determined for separate classes of employees, (b) each rate is the result of a separate actuarial valuation, and (c) there is separate tracking of the assets held for each employee class, should a separate discount rate be calculated for each employee class or should one discount rate be calculated for the employer?

A—Only one discount rate is required for each employer. However, paragraph 19 of Statement 68 permits separate application of the measurement requirements of the Statement to different classes of employees, provided that the results of the measurements for each class are aggregated for reporting purposes.

Comparing projections of the pension plan's fiduciary net position to projected benefit payments

62. *Q*—An employer has an actuarially determined contribution rate and has a written policy of contributing the actuarially determined rate each period. The employer has consistently adhered to its policy for the past 10 years, and there are no known events or conditions that indicate that the employer will not continue to adhere to its policy in the future. In this circumstance, for purposes of determining the discount rate, how would the amount of projected employer contributions that should be included in the projection of the pension plan's fiduciary net position be determined?

A—In this circumstance, the actuarially determined contribution rate of the employer would be used as the basis for the projection of future employer contributions. Future employer contributions based on the actuarially based funding method should be evaluated to determine the extent to which they are associated with the service costs of future employees. The portion of future contributions that is associated with the service costs of future employees would be excluded from the projection of the pension plan's fiduciary net position, which would be compared to projected future benefit payments for current active and inactive employees to determine whether and, if so, to what extent, the municipal bond yield or index rate should be reflected in the discount rate.

63. *Q*—If the benefit payments in a period are projected to be partially covered by the pension plan's projected fiduciary net position, should the covered portion be discounted using the long-term expected rate of return on pension plan investments, with only the remainder discounted at the required municipal bond yield or index rate?

A—Paragraphs 27 and 30 of Statement 68 require that projected benefit payments for a period be compared to the pension plan's projected fiduciary net position in the period for purposes of determining whether the long-term expected rate of return or the municipal bond yield or index rate should be used to discount the benefit payments of the period when determining the discount rate. The Statement does not require that a specific approach be used to assign the total of the projected benefit payments in each period to the projected "funded"

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February 12, 2016

Mr. Joey Greive, CFA, CFP
Treasurer
City of Jacksonville
117 West Duval Street, Suite 300
Jacksonville, FL 32202

Re: Jacksonville Police and Fire Pension Fund Cost Projections per Ordinance 2015-304-E as modified by the Mayor's Proposal for Funding

Dear Joey:

We have prepared a cost analysis and projections comparing the current Pension Fund benefits and funding schedule under Ordinance 2015-304-E which was signed by then Mayor Brown on June 19, 2015 with its plan design changes and specific financing agreement terms to Mayor Curry's proposal to extend a dedicated sales tax to assist the City in paying down the pension fund's Unfunded Actuarial Liability.

Background

Our letter of July 31, 2015 set forth our actuarial analysis of the Jacksonville Police and Fire Pension Fund subsequent to the enactment of Ordinance 2015-304-E. The analysis was based on data and other information used in the October 1, 2012 valuation and updated to reflect certain demographic and investment experience during the plan year ending September 30, 2013 as well as an assumption change disclosed in the October 1, 2013 valuation report, dated February 11, 2014 and completed by Pension Board Consultants, Inc.

As there are now three subsequent actuarial valuations since the initial data this analysis was based on which reflected numerous changes in demographics, plan provisions and actuarial assumptions, we caution decision makers on solely relying on this analysis. The purpose of this letter is to provide a preliminary analysis of the financing schedule proposed by Mayor Curry by updating the previous analysis contained in our July 31, 2015 letter. The results of our modeling can be used to understand the pattern of emerging costs and liabilities due to the proposed changes, but should not be relied upon as a guarantee of actual costs to be incurred by the City. Future funding and accounting obligations will be determined by actuarial valuations of the Fund prepared on future valuation dates. Actual plan costs will ultimately be determined by the benefits provided by the Fund based on actual experience of its members and not by the actuarial calculations provided in this model.

Ordinance 2015-304-E enacted the following financing provisions:

1) Additional funding to reduce the Actuarially Determined Contribution or ADC (previously termed the Annual Required Contribution or ARC): For Fiscal Years 2016 – 2029, $5 million will be transferred annually from the Enhanced Benefits Account and the City Budget Stabilization Account (Account) to reduce the ADC.

2) Additional Funding by the City and the PFPF to reduce the Plan's Unfunded Actuarial Liability (UAL):

	City Payment[1]	PFPF Payment
FY 16	$5m	$5m
FY 17	$10m	$10m
FY 18	$15m	$15m
FY 19 – FY 28	$32m	$8m
FY 29	$32m (optional)	Any remaining balance in account up to $32m

An option being explored is to continue the above financing plus dedicate proceeds from a proposed extension of a sales tax until the City's three Plans are fully funded. For purposes of this analysis, we are assuming the sales tax will extend from 2030 to and including 2060. Beginning with the October 1, 2016 valuation, the present value of 31 years of anticipated tax payments would be allocated to the three Plans sponsored by the City and then be included as an asset of the Plans for purposes of determining the ADC. Please note there is a possibility the value of the future sales tax proceeds may or may not be considered a Plan asset for financial reporting purposes under GASB 67 and 68. The City provided the following projected tax revenue stream, which is based on an assumed growth rate of 2% per annum.

	Tax Revenues Assumed to Increase 2% Per Annum
October 2030	$ 109,015,335
October 2031	$ 111,195,642
⋮	
October 2060	$ 197,466,190

The City has requested an analysis on PFPF if a portion of the overall tax revenue equal to 35% or 57% is deposited and treated as a Plan asset. We note that 57% is the PFPF's approximate share of the aggregated UAL of the three City Pension Plans.

[1]The discounted value of the expected City Payment assumed to be made each December 1 is held as a receivable for funding purposes as of the prior October 1.

Milliman

In addition, the proposal would make the following changes:

- Close all three of the City's Pension Plans including Police and Fire to those hired on or after October 1, 2018 and provide a new defined benefit or defined contribution plan for these employees. For this analysis the City requested we model a defined contribution plan with a 12% employer contribution. The type of Plan (Defined Benefit or Defined Contribution) and level of benefits and/or employer contribution will be determined through collective bargaining.
- Require all amortization bases to be re-amortized over a 30 year period beginning October 1, 2018
- Allow the salaries of current plan members as well as those hired after September 30, 2018 who are participating in the new plan to be included for the purposes of determining the payroll growth assumption for UAL amortization purposes.

Results

The Table below displays the impact on the City's projected contribution over the 30 year cost projection period assuming the Mayor's proposal has an effective date of October 1, 2018 and the market value of assets earn 7% each year during the projection period:

	Scenario 1	Scenario 2	Scenario 3
Scenario	Ordinance 2015-304-E	Scenario 1 plus 57% of tax revenues allocated to PFPF based on a 2% Revenue Growth Assumption	Scenario 1 plus 35% of tax revenues allocated to PFPF based on a 2% Revenue Growth Assumption
1. Total dollars ($ billions) of Expected City Contributions over the next 30 years excluding Dedicated Sales Tax Revenue and additional City sources used to accelerate the funding of the UAL[2]	$ 4.364	$ 3.269	$ 3.689
2. Additional Funding by the City mandated by Ordinance 2015-304-E	$ 0.350	$ 0.350	$ 0.350
3. Expected Contributions by the City over the next 30 years[2] to the Defined Contribution Plan for Post-September 30, 2018 hires	$ 0	$ 0.402	$ 0.402
4. Total of (1), (2), and (3)	$ 4.714	$ 4.021	$ 4.441
5. Present Value of Tax Payments as of October 1, 2018	$ 0	$ 0.457	$ 0.280
6. Minimum Ratio of Investable Assets as of each valuation date beginning on October 1, 2018 through and including October 1, 2045 to Expected Benefits Payments during the plan year.	9.5	6.3	7.1
7. Projected Funded Value on Invested Market Value Basis as of October 1, 2045	98.0%	57.6%	64.9%

[2]Total dollars exclude expected employee contributions, State Chapter Funds allocation (i.e. premium-tax refunds) and expected court fines and penalties. State laws make the City responsible for funding the difference between the actuarially determined contribution and these amounts. The 30 years are FY 2016 through and including FY 2045.

Attached are the following graphs:

- Projected Unfunded Actuarial Liability (UAL), which includes the present value of the tax as a Plan asset and thus, the UAL is lower than if just invested assets were considered (Graph 1).
- Projected Funded Status based on actual invested assets divided by the actuarial accrued liability (Graph 2).
- Projected liquidity ratio defined as the ratio of invested assets to expected benefit payments (Graph 3).
- Projected City Contribution by component – ADC, DC plan contributions and additional City UAL payments for each scenario (Graphs 4A and 4B).

Each graph compares the Baseline (Ordinance 2016-304-E) with the results under the new proposed funding schedules. Results are shown for the next 30 years (FYE 2016 to FYE 2045) assuming investment returns earn 7.0% each year of the projection. Note, future tax revenue is not reflected in "invested" assets until the year the actual tax revenues are deposited in the Fund.

In reviewing the graphs it is important to remember that assets or liabilities determined as of one date do not impact the ADC until the following fiscal year. For example, if the present value of the tax revenue is allocated to the PFPF as of October 1, 2018, the UAL measured in the October 1, 2018 actuarial valuation is reduced (this shows up in FY 2019 in the UAL graph) but the ADC is not impacted until FY 20 or one year later in the Annual Contribution set of graphs.

It is also important to keep in mind that these projections are based on a deterministic model that assumes market returns will equal 7% each and every year during the projection. In reality, actual returns will vary that are expected to average 7% each year. Before making final decisions, we highly recommend that a stochastic analysis be performed to understand that impact of these changes in a variety of scenarios. A stochastic analysis could review the policy under 10,000 different investment return scenarios during the projection period. Results would then be presented in probabilistic form such as there is 25% chance that the funded ratio would fall below 30% by the end of the projection period.

Fund Liquidity

The liquidity graph (Graph 3) compares the value of the invested plan assets to expected benefit payments for the Baseline and the two alternative scenarios. The inverse of the liquidity ratio measures the percentage of assets that would cover that year's benefit payments excluding any contributions during the year. For example, a liquidity ratio of 4 would indicate that benefit payments represent 25% of the market value of assets. For the purpose of this exhibit, assets exclude the present value of the tax payments, but include the actual tax payments at the point in time they are assumed to be deposited into the PFPF. In addition, benefit payments exclude any administrative expenses.

Note that the lowest liquidity rate occurs at the end of the projection period and is 6.3 under scenario 2. In other words, assets are equal to slightly more than six years of expected benefit payments, or that approximately 16% of assets would be paid out in benefit payments in that year. Under scenario 3, the ratio at the end of the projection period is 7.1 or approximately 14% of assets would be paid out in benefit payments in that year. If volatile asset returns are

incorporated, returns less than 7.0% could pressure liquidity and possibly require additional cash contribution, while returns in excess of 7.0% would improve liquidity. Other unfavorable or favorable actuarial experience could also impact the Plan's liquidity needs. Under the baseline scenario, the liquidity ratio is 9.5 and projected to grow to over 10 once the money in the stabilization accounts are transferred. However, the current situation is expected to require much greater City Contributions in the short-term than the proposed financing alternatives.

Funded Position and Annual City Contribution

Another metric to review is the funded ratio on a market value basis (of "invested" assets) as shown in graph 2. Under this proposal the projected funded ratio at the end of the projection period (2045 valuation) is estimated to be 58% under the 57% allocation option and 65% under the 35% allocation option. The primary reason that the 57% allocation results in a lower funded ratio is that the present value of the projected tax stream is larger resulting in lower Contributions assumed to be paid by the City during the projection period, while the higher tax receipts occur after the end of the projection period. While the funded ratio is less than if the City did nothing, the City defers almost $700 million in ADC and DC payments over the next 30 years, comparing the 57% allocation to the status quo and approximately $270 million in ADC and DC payments if the 35% allocation is compared to the status quo. However, ADC payments beyond the projected period would be larger under the Mayor's proposal then under the status quo because of the deferral.

Costs for New Hires

Based on the assumptions used in this analysis, specifically an investment return assumption of 7.0%, the City's normal cost rate for new hires is approximately 10% of pay exclusive of expenses in the existing defined benefit plan. The defined contribution plan benefit used for modeling is 12%, increasing costs for post-September 30, 2018 hires by approximately 2% of pay. However, in return it is important to note that from the City's point of view, a benefit of a DC Plan is a shift of the investment risk from the City to the employees. In other words, if actual investment returns are less than the 7.0% assumption, the cost of the DB plan increases, while the cost of the DC plan would remain unchanged. No additional benefits are assumed to be provided to the future hires such as Social Security or benefits for line-of-duty death or disability. In addition, expenses in the current PFPF are approximately 6% of pay, but we do not know what DC Plan expenses would be. The DC Plan Contribution estimated in the graphs do not including any expenses.

Amortization of Unfunded Actuarial Liability

The amortization payment in the projected 2017 actuarial valuation is $118 million. The effective amortization period is approximately 18 years. By extending the amortization period to 30 years on all existing bases, the payment is reduced to $80 million in the projected 2018 actuarial valuation for a decrease of $38 million. It is further reduced to $56 million once the present value of 57% of the future tax revenue stream is included as an asset. Therefore, the unfunded accrued liability portion of the payment is expected to be reduced by more than 50%, despite a projected funded ratio on an invested market value basis that remains unchanged at 52%. Please note that although re-amortizing liabilities reduces contributions in the short-term, it should not be viewed as savings, but rather contribution deferral. The present value of the obligation owed has not changed, only the financing of that obligation. This method would defer contributions to later years, when additional revenue will exist from the extended surtax some of which occur after the end of the projection period and are not reflected in the graphs and charts included in this analysis. Please note that the deferred contributions are higher than contributions expected to be made under the current methodology, much like refinancing a mortgage. The City may explore using all of this benefit to offset short-term costs or only part of this benefit when considering how to balance short-term and long-term costs.

By reducing contributions to the PFPF as a result of this proposal, the ability of the fund to earn the projected 7% investment return included in the analysis may become more difficult due to liquidity concerns. Strategies to mitigate liquidity concerns include:

1. Using some lesser percentage of the present value of tax revenue as an asset.
2. Do not use the projected tax revenue as a Plan asset until the money is deposited, i.e., it would offset ADCs in a similar manner as court fines and other tax revenues currently do.
3. Maintain current amortization schedule.
4. Make contributions beyond the required ADC, and enacted additional UAL payment.

This analysis is for cost comparisons only among various financial proposals that have been modeled. The goal was not to develop the actual precise annual City contribution but to develop comparable funding cost projections. The actual City Contribution will be determined by the Fund Actuary. Our results are based on the 2012 census data. The Fund Actuary has since completed two valuations, and one draft valuation, the most recent being as of October 1, 2015.

Assumptions

Our analysis and projections are based on the 2012 valuation with updates for the 2013 valuation, as noted on page 1 of this letter. Any subsequent experience or changes in assumptions, including the recent lowering of the salary scale, and adoption of a new mortality table as required by 2015-304-E, are not reflected and therefore will result in differences between our projections and the actual results of the 2015 valuation as modified to reflect this proposal.

Per instructions from the City, post-September 30, 2018 hires are assumed to participate in a defined contribution plan with an average employer contribution of 12%. This is for modeling purposes only, as the type of plan and level of benefits or actual employer contribution percentage will be determined through collective bargaining. No additional benefits are assumed to be provided to the future hires such as Social Security or benefits for line-of-duty death or disability. Also, the DC Plan Contributions do not include any expenses. For purposes of this analysis, we assume all "exits" between October 1, 2017 and September 30, 2018 are hired as of October 1, 2018 and are the first participants in the proposed DC plan. In addition, our analysis and projections do not reflect the recently enacted Florida law, effective January 1, 2016 requiring all local Florida government plans to use the mortality tables used by the Florida Retirement System.

We have modeled the analysis based on information provided by the City. Providing a holistic review on the impact of the proposed financing proposal is an extensive analysis.

Basis for Analysis

This analysis is based on methods and assumptions used in the October 1, 2012 actuarial valuation, the October 1, 2013 actuarial valuation and the additional assumptions or methods noted above. The data was based on the October 1, 2012 proxy actuarial valuation database. The results of our analysis depend on future experience conforming to those actuarial assumptions. It is certain that actuarial experience will not conform exactly to the assumptions used in this analysis. To the extent future experience deviates from those assumptions, the results of this analysis could vary from the results presented here.

Actual costs will be based on actual experience of the Plan. Please note that the cost impact of the Ordinance 2015-304-E may be higher or lower than the projected estimates depending upon rates of retirement actually experienced by the Plan. A realistic estimate of retirement rates is critical to determining the actual future impact on plan costs.

The calculations are based on data and other information provided to us by the City or the Police and Fire Pension Board and/or actuary of for our proxy October 1, 2012 actuarial valuation and supplemented for purposes of this analysis. The supplemental data included a copy of the October 1, 2013 actuarial valuation. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete. As noted previously, the data is now three valuations old and we recommend that this analysis be updated to reflect the 2015 valuations database and then the 2015 valuation results as prepared by Pension Board Incorporated.

Please see our letter of July 31, 2015 for a summary of the Pension Plan design charges attributable to Ordinance 2015-304-E and to that letter and prior letters for additional information on our projected methodology and assumptions.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Actuarial computations presented in this letter are for purposes of projecting the emerging costs and liabilities for the fiscal year beginning October 1, 2015 and the subsequent 29 fiscal years. Actuarial computations under GASB Statements 67 and 68 are for purposes of fulfilling financial accounting requirements and may require different assumptions, methodologies and/or treatment of the present value of the tax revenue statements. Such computation are beyond the scope of this letter.

Milliman's work product was prepared exclusively for the internal business use of the City of Jacksonville for a specific and limited purpose. It is a complex technical analysis that assumes a high level of knowledge concerning the Plan's operations, and uses City's data, which Milliman has not audited. To the extent that Milliman's work product is not subject to disclosure under applicable public record laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

(a) The City may provide a copy of Milliman's work, in its entirety, to the Plan's or the City's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.

(b) The City may provide a copy of Milliman's work, in its entirety, to other Governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. We have not explored any legal issues with respect to the Mayor's Funding Proposal. We are not attorneys and cannot give legal advice on such issues. We suggest that you review this proposal with counsel.

I, Robert Dezube, am a consulting actuary for Milliman, Inc. I am a member of the American Academy of Actuaries, and meet their Qualification Standards to render the actuarial opinion contained herein.

Please call if you would like to further discuss the letter.

Sincerely,

Robert

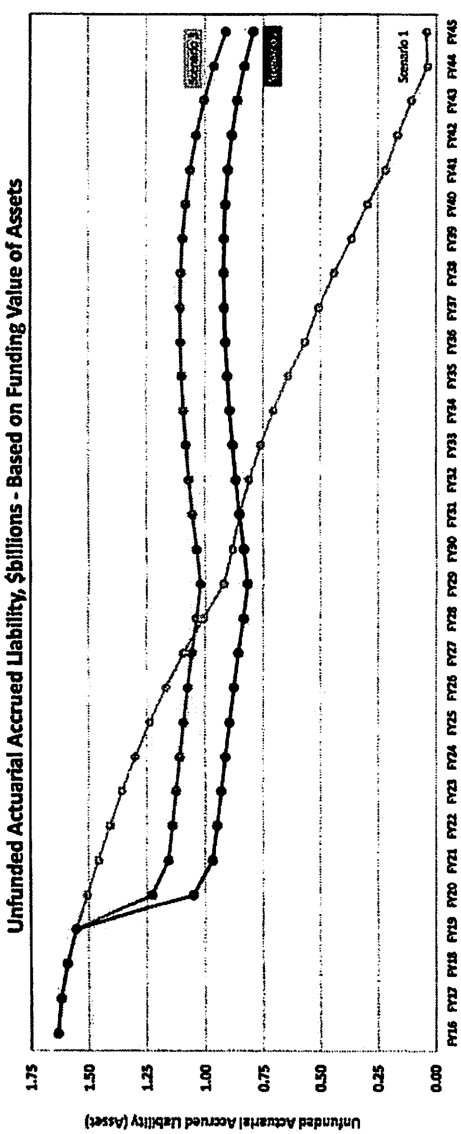
Robert S. Dezube, FSA
Consulting Actuary

Attachments

RSD\BBH\CDJ\52
M:\Jackvill\Update work based on 2013 val and database\Post-Implementation Analysis\February 01.docx

This graph is an attachment to a letter addressed to Joey Grieve dated February 12, 2016.

Unfunded Actuarial Accrued Liability, $billions - Based on Funding Value of Assets



Scenario	Tax Revenue Growth	Allocation	Present Value of Tax Revenue	Amortization
Scenario 1 (Baseline)				
Scenario 2	2%	57%	$456.5 million	Reset to 30 years
Scenario 3	2%	35%	$280.3 million	Reset to 30 years

In reviewing the graphs it is important to remember how assets or liabilities determined as of one date do not impact the ADC until the following fiscal year. For example, if the present value of the tax revenue is allocated to PFPF as of October 1, 2018 (FY19), the UAL measured in the October 1, 2018 actuarial valuation (FY19) is reduced, but the ADC is not impacted until FY20, or one year later.

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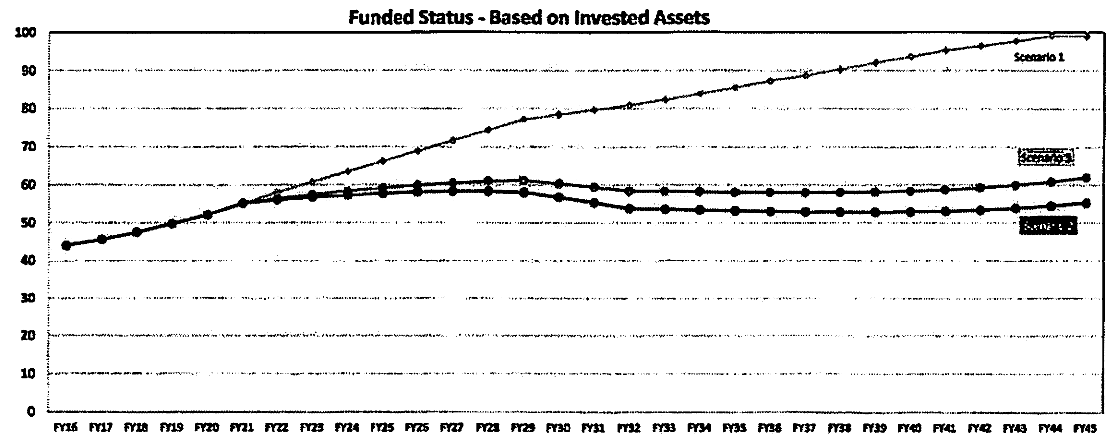

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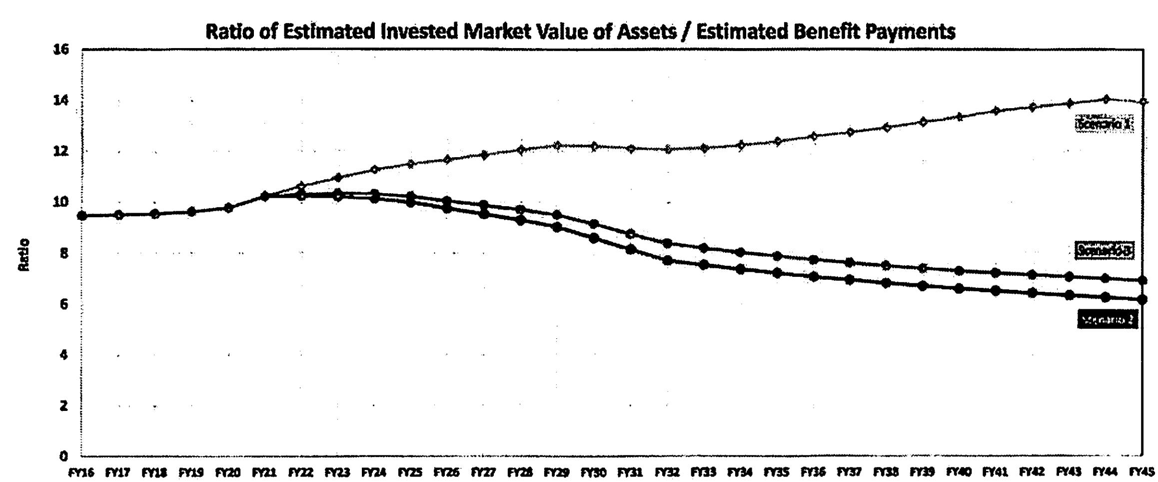

Estimated benefit payments ($billions)

	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44	FY45
Scenario 1	0.136	0.143	0.151	0.160	0.169	0.178	0.184	0.192	0.201	0.212	0.223	0.234	0.245	0.255	0.265	0.278	0.288	0.294	0.301	0.307	0.313	0.318	0.323	0.328	0.332	0.337	0.341	0.346	0.351	0.358
Scenarios 2 - 3	0.136	0.143	0.151	0.160	0.169	0.178	0.184	0.192	0.201	0.211	0.223	0.234	0.244	0.254	0.264	0.275	0.285	0.293	0.299	0.306	0.311	0.315	0.320	0.324	0.328	0.331	0.335	0.339	0.343	0.347

Estimated assets ($billions)

	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44	FY45
Scenario 1	1.288	1.360	1.446	1.542	1.645	1.798	1.954	2.110	2.270	2.435	2.604	2.776	2.949	3.121	3.239	3.348	3.463	3.570	3.687	3.810	3.941	4.066	4.178	4.311	4.437	4.573	4.685	4.805	4.934	4.991
Scenario 2	1.288	1.360	1.446	1.542	1.645	1.797	1.885	1.966	2.043	2.113	2.177	2.230	2.274	2.301	2.284	2.252	2.207	2.215	2.218	2.217	2.213	2.206	2.203	2.196	2.194	2.192	2.192	2.194	2.200	2.206
Scenario 3	1.288	1.360	1.446	1.542	1.645	1.797	1.895	1.986	2.077	2.162	2.241	2.312	2.374	2.422	2.427	2.419	2.401	2.413	2.419	2.422	2.422	2.422	2.421	2.422	2.424	2.427	2.434	2.444	2.457	2.474

In reviewing the graphs it is important to remember how assets or liabilities determined as of one date do not impact the ADC until the following fiscal year. For example, if the present value of the tax revenue is allocated to PFPF as of October 1, 2018 (FY19), the UAL measured in the October 1, 2018 actuarial valuation (FY19) is reduced, but the ADC is not impacted until FY20, or one year later.

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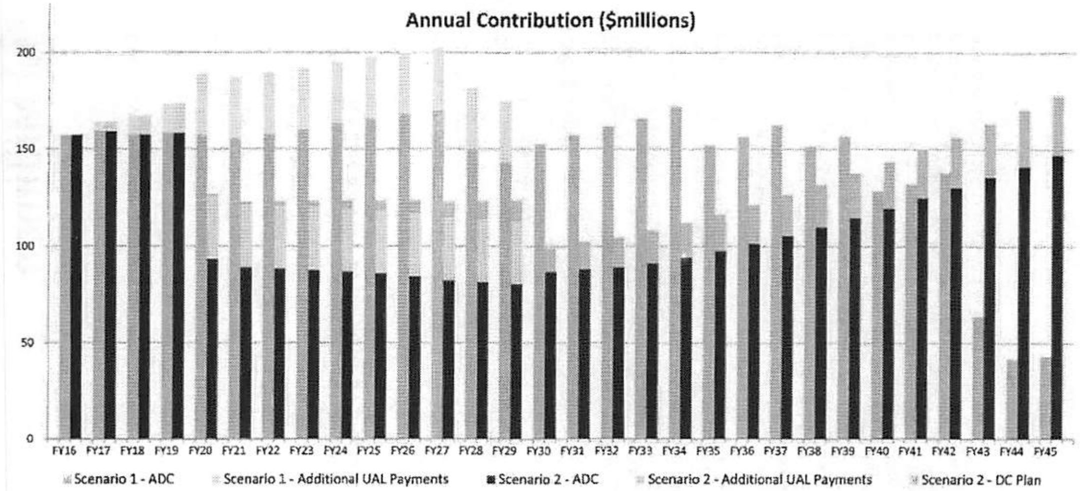

Scenario 1

	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44	FY45
ADC	157	159	157	158	157	156	158	160	163	166	168	170	150	143	153	158	162	166	172	152	157	163	152	157	129	132	138	64	42	43
Additional UAL Pmts	0	5	10	15	32	32	32	32	32	32	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DC Plan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	157	164	167	173	189	188	190	192	195	198	200	202	182	175	153	158	162	166	172	152	157	163	152	157	129	132	138	64	42	43

Scenario 2

	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44	FY45
ADC	157	159	157	158	93	89	88	88	87	86	84	82	81	80	87	88	89	91	94	98	101	105	110	115	120	125	130	136	141	147
Additional UAL Pmts	0	5	10	15	32	32	32	32	32	32	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DC Plan	0	0	0	0	1	2	2	3	4	5	7	8	10	11	13	14	16	17	18	19	20	21	22	23	24	25	27	28	30	31
Total	157	164	167	174	126	123	123	123	123	123	123	123	123	123	99	102	105	108	112	116	121	126	132	138	144	150	157	164	171	178

Notes:

(1) Scenario 1 is legislation as enacted by Ordinance 2015-304-E. The Actuarially Determined Contribution (ADC) includes additional UAL payments of $350 million over fiscal years 2017-2029.

(2) Scenario 2 is legislation as enacted by Ordinance 2015-304-E, but the plan is closed to new hires after 2017. The City will contribute 12% to a defined contribution plan for those hired in 2018 and later. Starting in 2018, all amortization bases reset to 30 years. Scenario 2 assumes 2% tax revenue growth and 57% allocation. The present value of future tax revenue is $456.5 million.

(3) In reviewing the graphs it is important to remember how assets or liabilities determined as of one date do not impact the ADC until the following fiscal year. For example, if the present value of the tax revenue is allocated to PFPF as of October 1, 2018 (FY19), the UAL measured in the October 1, 2018 actuarial valuation (FY19) is reduced, but the ADC is not impacted until FY20, or one year later.

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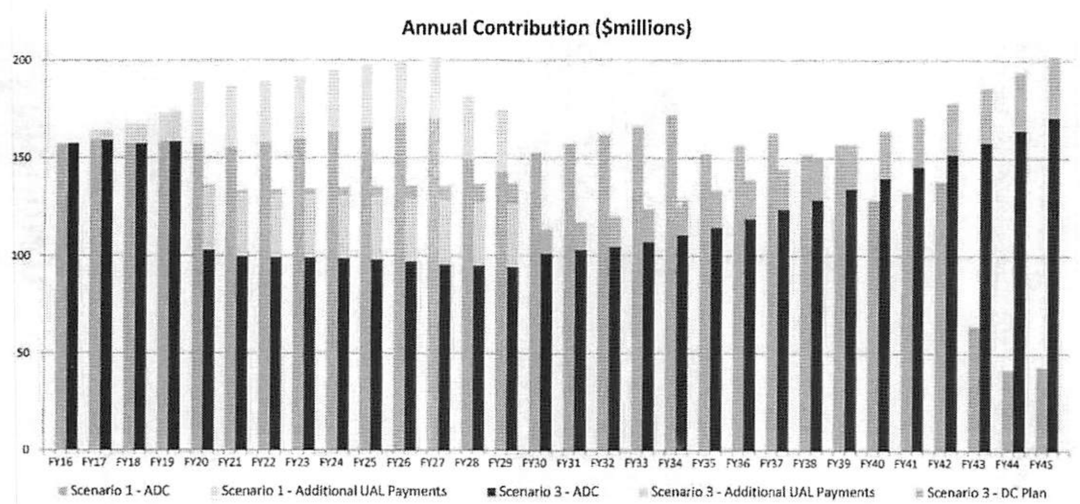

Scenario 1

	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44	FY45
ADC	157	159	157	158	157	156	158	160	163	166	168	170	150	143	153	158	162	166	172	152	157	163	152	157	129	132	138	64	42	43
Additional UAL Pmts	0	5	10	15	32	32	32	32	32	32	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DC Plan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	157	164	167	173	189	188	190	192	195	198	200	202	182	175	153	158	162	166	172	152	157	163	152	157	129	132	138	64	42	43

Scenario 3

	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	FY38	FY39	FY40	FY41	FY42	FY43	FY44	FY45
ADC	157	160	157	158	103	100	99	99	99	98	97	95	95	94	101	103	105	107	111	115	119	124	129	134	140	146	152	158	164	171
Additional UAL Pmts	0	5	10	15	32	32	32	32	32	32	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DC Plan	0	0	0	0	1	2	2	3	4	5	7	8	10	11	13	14	16	17	18	19	20	21	22	23	24	25	27	28	30	31
Total	157	164	167	174	136	133	134	134	135	135	136	136	137	137	114	117	120	124	129	133	139	145	151	157	164	171	178	186	194	202

Notes:

(1) Scenario 1 is legislation as enacted by Ordinance 2015-304-E. The Actuarially Determined Contribution (ADC) includes additional UAL payments of $350 million over fiscal years 2017-2029.

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February 12, 2016

Mr. Joey Greive, CFA, CFP
Treasurer
City of Jacksonville
117 West Duval Street, Suite 300
Jacksonville, FL 32202

Re: Jacksonville Police and Fire Pension Fund Cost Projections per Ordinance 2015-304-E as modified by the Mayor's Proposal for Funding

Dear Joey:

We have prepared a cost analysis and projections comparing the current Pension Fund benefits and funding schedule under Ordinance 2015-304-E which was signed by then Mayor Brown on June 19, 2015 with its plan design changes and specific financing agreement terms to Mayor Curry's proposal to extend a dedicated sales tax to assist the City in paying down the pension fund's Unfunded Actuarial Liability.

Background

Our letter of July 31, 2015 set forth our actuarial analysis of the Jacksonville Police and Fire Pension Fund subsequent to the enactment of Ordinance 2015-304-E. The analysis was based on data and other information used in the October 1, 2012 valuation and updated to reflect certain demographic and investment experience during the plan year ending September 30, 2013 as well as an assumption change disclosed in the October 1, 2013 valuation report, dated February 11, 2014 and completed by Pension Board Consultants, Inc.

As there are now three subsequent actuarial valuations since the initial data this analysis was based on which reflected numerous changes in demographics, plan provisions and actuarial assumptions, we caution decision makers on solely relying on this analysis. The purpose of this letter is to provide a preliminary analysis of the financing schedule proposed by Mayor Curry by updating the previous analysis contained in our July 31, 2015 letter. The results of our modeling can be used to understand the pattern of emerging costs and liabilities due to the proposed changes, but should not be relied upon as a guarantee of actual costs to be incurred by the City. Future funding and accounting obligations will be determined by actuarial valuations of the Fund prepared on future valuation dates. Actual plan costs will ultimately be determined by the benefits provided by the Fund based on actual experience of its members and not by the actuarial calculations provided in this model.

Ordinance 2015-304-E enacted the following financing provisions:

1) Additional funding to reduce the Actuarially Determined Contribution or ADC (previously termed the Annual Required Contribution or ARC): For Fiscal Years 2016 – 2029, $5 million will be transferred annually from the Enhanced Benefits Account and the City Budget Stabilization Account (Account) to reduce the ADC.

2) Additional Funding by the City and the PFPF to reduce the Plan's Unfunded Actuarial Liability (UAL):

	City Payment[1]	PFPF Payment
FY 16	$5m	$5m
FY 17	$10m	$10m
FY 18	$15m	$15m
FY 19 – FY 28	$32m	$8m
FY 29	$32m (optional)	Any remaining balance in account up to $32m

An option being explored is to continue the above financing plus dedicate proceeds from a proposed extension of a sales tax until the City's three Plans are fully funded. For purposes of this analysis, we are assuming the sales tax will extend from 2030 to and including 2060. Beginning with the October 1, 2018 valuation, the present value of 31 years of anticipated tax payments would be allocated to the three Plans sponsored by the City and then be included as an asset of the Plans for purposes of determining the ADC. Please note there is a possibility the value of the future sales tax proceeds may or may not be considered a Plan asset for financial reporting purposes under GASB 67 and 68. The City provided the following projected tax revenue stream, which is based on an assumed growth rate of 2% per annum.

	Tax Revenues Assumed to Increase 2% Per Annum
October 2030	$ 109,015,335
October 2031	$ 111,195,642
⁞	
October 2060	$ 197,466,190

The City has requested an analysis on PFPF if a portion of the overall tax revenue equal to 35% or 57% is deposited and treated as a Plan asset. We note that 57% is the PFPF's approximate share of the aggregated UAL of the three City Pension Plans.

[1]The discounted value of the expected City Payment assumed to be made each December 1 is held as a receivable for funding purposes as of the prior October 1.