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January 27, 2015

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

Re: Re: Jacksonville Police and Fire Pension Fund Cost Projections under proposed 2014 Retirement Reform Agreement with subsequent modifications by the New Pension Reform Financial Proposal, City Council and Jacksonville Police and Fire Pension Board of Trustees.

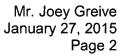
Dear Joey:

Our June 4, 2014 letter analysis summarized the impact of the proposed 2014 Retirement Reform Agreement (RRA) on the Jacksonville Police and Fire Pension Fund (PFPF) prior to Council amendments. Our December 19, 2014 letter updated that analysis, to reflect both the amendments to the proposed RRA passed by the City Council and the pension reform financing proposal made by a former City Council president, and two former Retirement Task Force members. The intent of the pension reform financing proposal was to present a solution to address the City's commitment to accelerate payments towards the Unfunded Actuarial Liability. The purpose of this letter is to update both letters and their related analyses to reflect the PFPF Board of Trustees proposed changes to the proposed RRA as amended by the City Council. (hereafter referred to as the 2015 Retirement Reform Agreement). There are no changes to the proposed pension reform financing proposal. Please refer to our June 4, 2014 and December 19, 2014 letters for more information.

Background

2014-386 was introduced into the City Council during October 2014, setting forth the proposed 2014 Retirement Reform Agreement.

In December 2014, the City Council amended the benefit package in 2014-386 and then passed the amended Legislation. The amended legislation was sent to the PFPF Board of Trustees for their review and approval.





In January 2015, the Police and Fire Pension Fund Board of Trustees accepted most of the City Council amendments but proposed a few revisions to the revised agreement. Those revisions were introduced to the City Council as proposed Ordinance 2015-54.

While neither 2014-386 nor 2015-54 specify a funding source, both require the City to make additional unfunded liability payments of \$40 million/year for 10 years, or the net present value equivalent. In both cases, the agreement will not take effect until the City has implemented a funding source. As the proposed funding source utilizes the net present value equivalent approach of making a single, up-front payment, we have modeled that approach here.

Police and Fire Pension Fund Board of Trustees Modifications to Proposed and Amended RRA

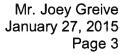
The PFPF Board of Trustees has proposed changes to the proposed RRA as amended by the City Council. The proposed modifications to two provisions originally amended by the City Council included the following changes for current employees who have not yet reached 20 years of service as of the effective date of the Agreement:

- 1. The range on the DROP interest rate would be 2.0% to 14.4%, (rather than a range of 0% to 10%)
- 2. The annual COLA on future benefit accruals would be the actual Social Security COLA with a range of 0% to 6% (rather than a range of 0% to 4%).
- 3. In addition, the PFPF Board proposed that benefits for active employees with less than 5 years of service (rather than 10 years of service) as of the Agreement's effective date be based on Final Average Compensation (FAC) averaged over the last 48 months of service, subject to the FAC not being less than the 24 month averaged FAC as of the Agreement's effective date.

1) COLA

The proposed PFPF Board changes to the proposed RRA, as amended, would modify the COLA on future benefit accruals for current employees from the Council's proposal of a variable rate that would be the lesser of the annual Social Security increase and 4.0% to a variable rate that would be the lesser of the annual Social Security COLA increase and 6.0%. The annual calculation would be independent from year to year.

In our December 19, 2014 analysis, we utilized a COLA assumption of 2.4% per year to reflect the range of 0% to 4.0%. For purposes of these projections, we have increased the assumption by 0.2% to 2.6% per year to reflect the increase in the maximum annual COLA from 4.0% to 6.0%. When compared to the prior range of 0% to 4%, the raising of the maximum COLA reduces the annual savings from the proposed Council amended RRA. Please note that, the proposed change only impacts future benefit accruals for current active employees with less than 20 years as of the effective date, which diminishes the impact on the contribution requirement. We have previously noted that of the \$2.7 billion actuarial liability as of 2013, less





than \$200 million is attributable to the non-accrued benefits of current active participants. This COLA modification still serves to reduce the \$200 million liability value.

2) DROP

The PFPF Board changes to the proposed RRA, as amended, also increases the interest accrual on future DROP participants by raising both the floor and the max from the Council amended range. The City Council amended the DROP interest accrual to be the actual return earned by the Fund after the deduction of all related and direct expenses with a floor of 0% and a max of 10%. The PFPF Board maintained the City Council methodology but raised the floor to 2.0% and the max to 14.4%. We note that the proposed DROP proposal rate corridor of 2.0% to 14.4% allows for a 7.4% higher crediting rate, than the 7% investment return assumption and a 5% lower crediting rate. This skew or bias would tend to partially decrease the estimated savings under the proposed RRA. If the interest credited to DROP accounts is less, the UAL would be lower.

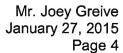
Under the new PFPF proposal, the Fund will pay the actual rates of return the Fund has earned. Only if the assets earn at least 8.4%, would the DROP accounts also earn at least the current guaranteed 8.4%. Similarly, if the assets suffer an unfavorable rate of return like occurring in FYE 2008 or 2009, the return credited to the DROP accounts will be less, thereby offsetting some of the PFPF investment loss.

For valuation purposes we would suggest a slightly higher assumption be used for DROP interest crediting purposes than the valuation assumption. We note that even if the PFPF proposal from the DROP rate produces minimal savings versus the current 8.4% guaranteed rate, it does reduce risk and/or volatility from the Pension Fund. For example during Fiscal years 2008 and 2009, the Fund earned less than its assumed 8.5% rate of return exerting upward pressure on the unfunded liabilities and the associated contribution rate. The upward pressure was exacerbated by the need to credit the DROP accounts with the 8.4% guaranteed rate. Now, the DROP accounts would be credited with the lower actual rates of return subject to a 2% floor.

We have not performed a more refined analysis to estimate the potential impact on the contribution requirements as such would require extensive modeling and scenario testing.

3) FAC Period

The PFPF Board proposal limiting the change in the FAC period to current employees with less than 5 years of service at the Agreement's effective date reduces the annual savings from the original RRA proposal. Under the proposed RRA, the provision would have potentially reduced future benefits for any current employee with less than 10 years of service as of the Agreement's effective date. Essentially, any current employee with between 5 and 10 years of service as of the Agreement's effective dates, would benefit from the PFPF Board's proposed FAC eligibility modification, as they would not be impacted by the change in this provision.





Combined Result (Including Pension Reform Financing Proposal).

The 2015 Retirement Reform Agreement saves \$1.68 billion over 30 years when compared to the Baseline of the current benefit package. This is approximately \$50 million less then the \$1.73 billion estimated in the version previously negotiated and as amended by the City Council in December 2014. Note, of the \$50 million increase over the next 30 years, approximately \$18 million is attributable to the FAC period change, and apparently \$32 million is attributable to the COLA change.

Impact of Delay

This analysis assumes the effective date of the agreement would be July 1, 2015. If the effective date of the Agreement is delayed beyond July 1, 2015, it would have the following impact on the cost estimates contained in this memo:

- Any new hires before the effective date would be eligible for the current, more generous set of benefits leading to higher costs.
- The employee contribution rate would remain at 7% until the effective date, rather than increase to 8% on July 1, 2015 as assumed in this analysis.
- If the effective date is after October 1, 2015, the employee contribution rate would remain at 7% rather than increase to 10% on October 1, 2015, as assumed in this analysis.
- Investment income earned on the additional UAL contributions of \$300 million would be expected to be less.
- Potentially more current employees would attain 20 years of service and be excluded from both PFPF proposed changes to the recent City Council amendments, and the original City Council amendments.
- More current employees would attain 5 years of service and be excluded from the FAC period change.



Results (assuming an July 1, 2015 effective date)

Scenario	Total dollars (\$billions)	Increase/(Reduction) from	Increase/(Reduction) from Proposed RRA as
	Over the next 50 years	next 30 years	Community Leaders' Financial Proposal over
			the next 30 years
1. Baseline	\$6.076	N/A	N/A
Proposed RRA as	\$4.350 ²⁾	(\$1.726)	N/A
amended by the City			
Council and including			
Community Leaders'			
Financial Proposal			
3. Proposed 2015	\$4.400 ²⁾	(\$1.676) ²⁾	\$0.050 ²⁾³⁾
Retirement Reform			
Agreement (including			
Community Leaders'			
Financial Proposal)			

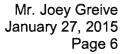
Total dollars exclude expected employee contributions, State Chapter Funds allocation (i.e. premium-tax refunds) and expected court fines and penalties. State laws make the City responsible for funding the difference between the actuarially determined contribution and these amounts. The 30 years are FY 2016 through and 7

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including FY 2045.

Excludes all additional sources of funds used to accelerate the funding of the Unfunded Actuarial Liability.

Of the \$0.05 billion increase over the next 30 years, \$0.018 billion is attributable to the FAC change and \$0.032 billion is attributable to the COLA change.





This analysis reflects a nine month delay in the proposed RRA effective date (from October 1. 2014 to July 1, 2015). Due to the delays, the projections defer the increase in the employee contribution rate to 8% until July 1, 2015, respectively and to 10% until the next budget year beginning on October 1, 2015 for current employees (if pay restorations occur sooner the increase in the contribution rate would be sooner than expected in these projections). This delay reduced the expected amount of employee contributions by approximately \$3.48 million for FY 2015 based on a nine month delay. From a benefits perspective, the delay would impact employees hired between October 1, 2014 and June 30, 2015 and those either reaching 20 years of service between October 1, 2014 and June 30, 2015 or 5 years of service between October 1, 2014 and June 30, 2015. The City has advised us that it is not aware of any major hiring plans during this six or nine month period (October 1, 2014 to June 30, 2015), although normal replacement may occur and these new hires would be eligible for the current set of benefits. If there are no new hires prior to RRA implementation the impact on the liabilities is nil. For purposes of this analysis we have not adjusted the projections to reflect any potential delay in individual salary increases on benefit accruals. Any adjustment would affect both the Baseline and the proposed RRA projections, which we expect would increase the City's future savings.

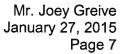
We have modeled the analysis based on information provided by the City. Providing a holistic review on the impact of the proposed financing proposal is an extensive analysis.

Attached are six charts showing the Adjusted City Contribution, the Adjusted City Contribution as a percentage of payroll, the Normal Cost, the Normal Cost as a percentage of payroll, the amount of the Unfunded Actuarial Liability and the Funded Status (Actuarial Value of Assets divided by the Actuarial Liability). Each chart shows the Baseline, the proposed 2014-386 inclusive of the Community Leaders' Financial Proposal, and the PFPF Board proposed changes as contained in 2015-54. Results are shown for the next 30 years (FYE 2016 to FYE 2045).

In addition we have attached two additional charts (Adjusted City Contribution, and Adjusted City Contribution as a percentage of payroll) where in the first set we have added the City's debt service \$14.7 million (\$11.7 million which equals \$14.7 million less the three million Chapter funds for 7 years starting in FY 2016, and then \$14.7 million for three additional years.) to the proposed RRA City Contribution. The debt service amount was provided to us by the City, and is based on a 10 year taxable bond issuance.

Furthermore, based on recent discussions with the City we have used the updated Baseline projections reflecting a slightly lower amount of Chapter 175/185 funds available to reduce the ARC in the baseline scenario as follows:

 The June 4, 2014 baseline projections assumed the City's ARC would be reduced by 4.58% of pay attributable to expected Court Fines and Penalties plus half of the Chapter 175/185 funds.





• The December 19, 2014 revised projections and these revised projected assume the City's ARC is reduced by 0.58% of pay attributable to expected Court Fines and Penalties plus approximately \$5.236 million per annum starting in FY 2014-2015. The \$5.236 million is the estimate of the Chapter Funds expected to be paid as shown in the 2013 valuation report of the Police and Fire Plan prepared by Pension Benefit Consultants, Inc. and represents approximately 4% of 2013 Valuation payroll.

Please note that for simplicity and comparability, the total dollars are not discounted to reflect the time value of money. In addition in the attached charts that model the City's Adjusted Contribution (with or without the debt service payment), the one-time up front payment of \$300 million was modeled as an additional payment in excess of the City's Adjusted Contribution. We show Adjusted Contribution charts with and without the City's debt service toward their share of the up front payment.

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 proposed changes may be higher or lower than the study 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.

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.



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 proposed plan changes. 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 S. Dezube, FSA Consulting Actuary

Enclosures

C:

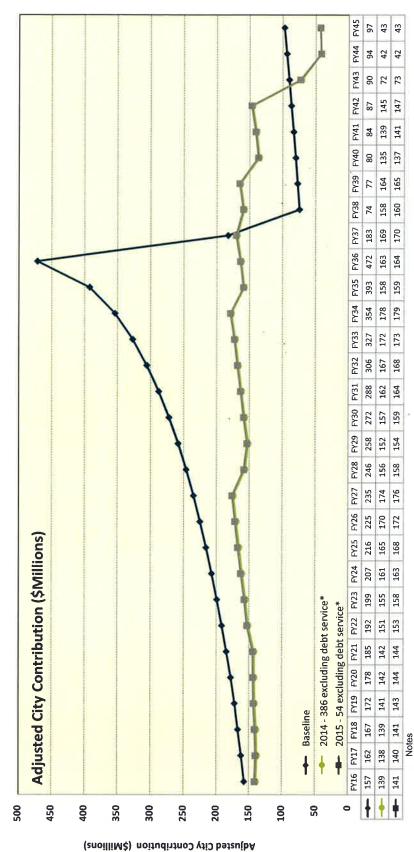
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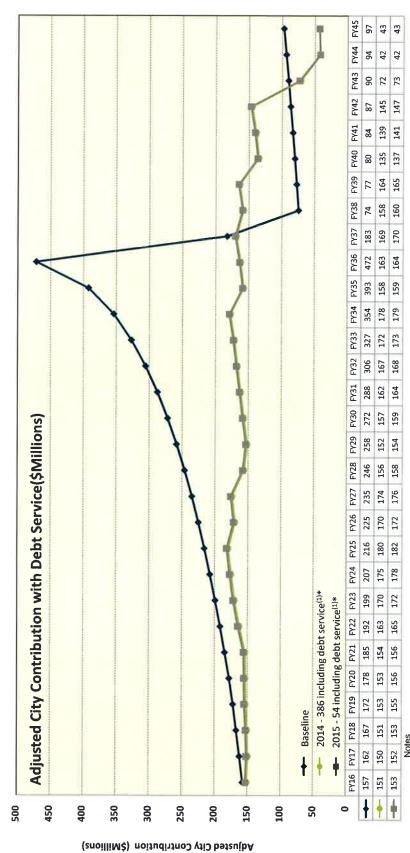
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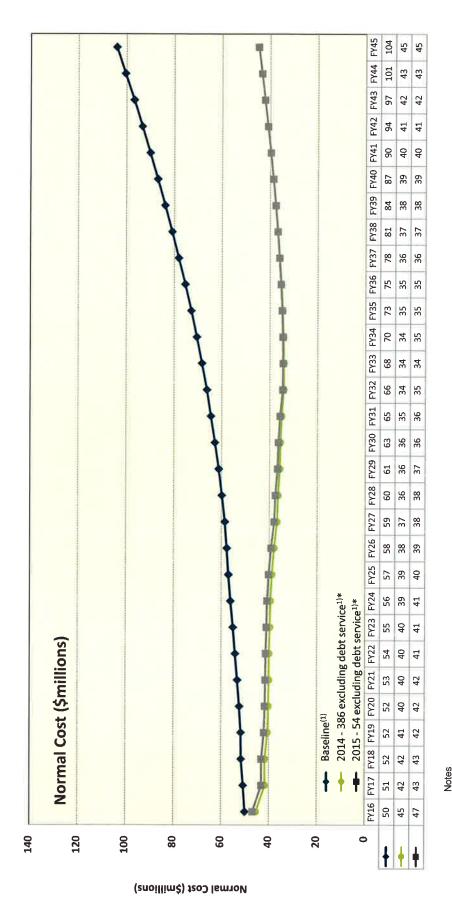
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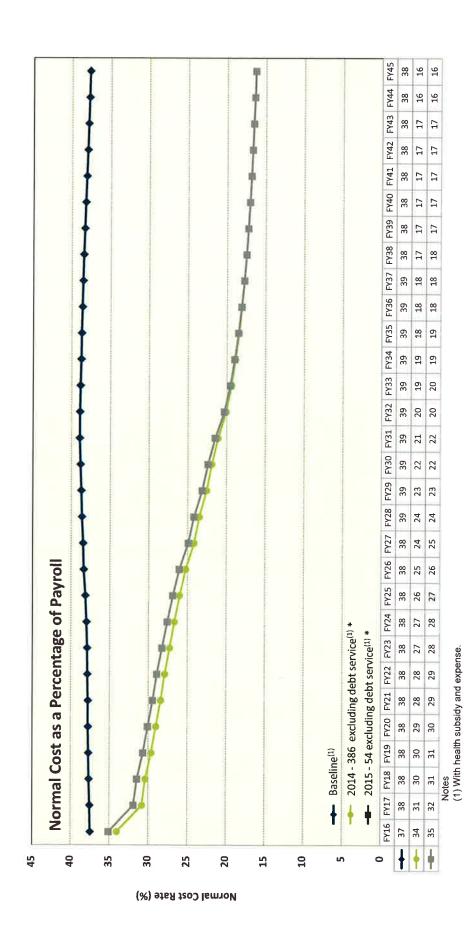
*Please note that three lines are displayed on the chart above. However, 2014 - 386 and 2015 - 54 may appear combined due to their similarity.



(1) Includes annual debt service payments of \$14.7 million from FY 2016 to FY 2025, with those payments reduced by \$3 million per year due to PFPF transfers from FY 2016 to FY 2022.

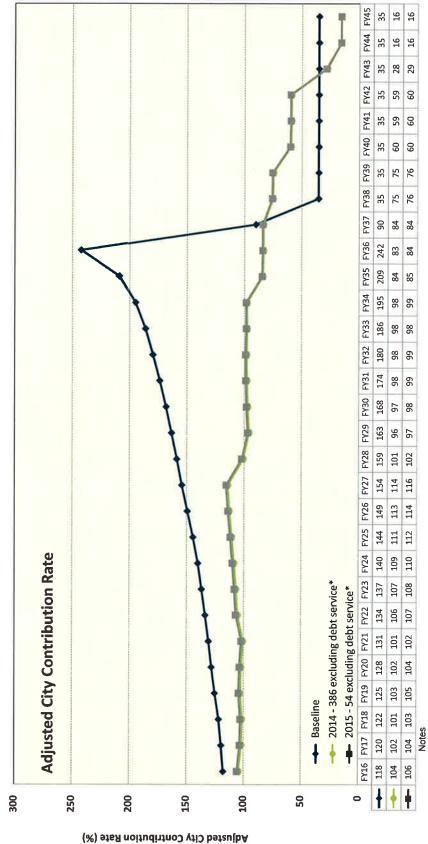


Notes (1) With health subsidy and expense.

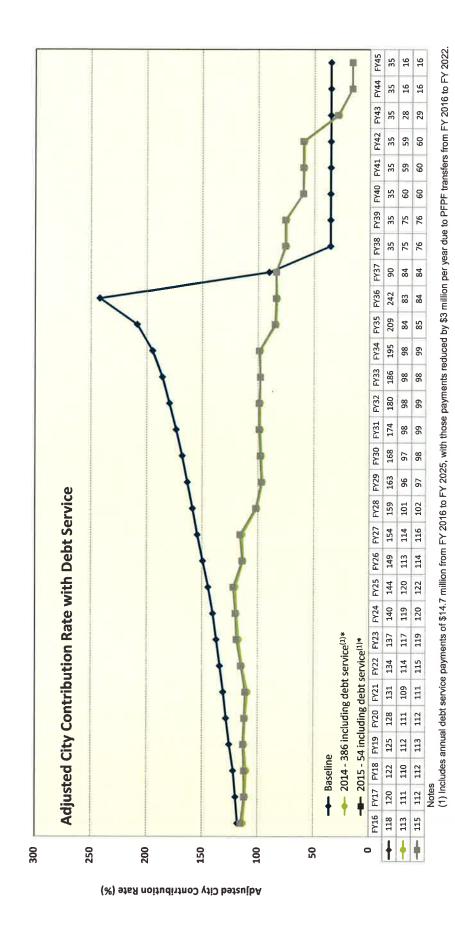


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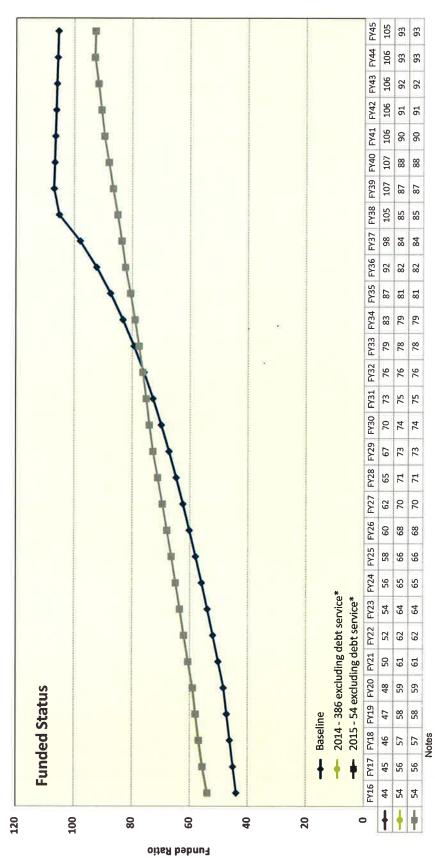
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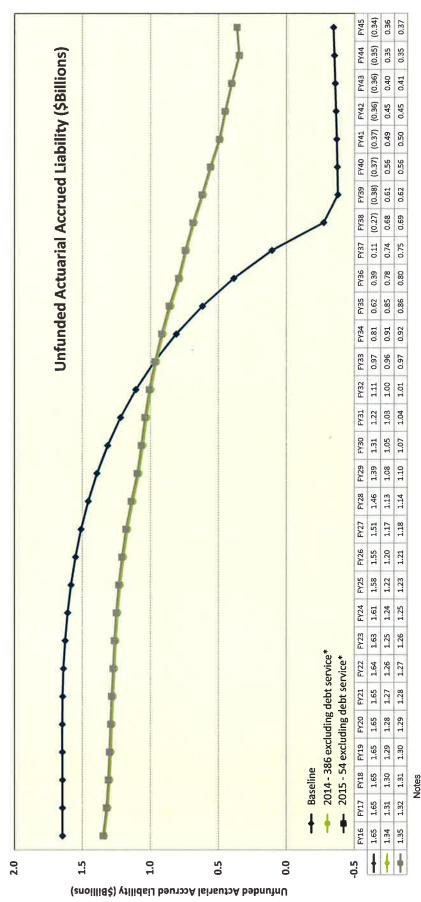
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