



City of Gainesville Retirement Plans – Pension Obligation Bond Analysis

August 20, 2020

PFM

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Summary of Financing Results – 95% Funding Level

SUMMARY OF FINANCING (\$000)				
Financing Plan		% UAAL Funded	Balance 10/1/2020	Deposit
Total Par	\$206,050.000			
Total UAL Funded	\$204,876.539	95.00%	\$215,659.515	\$204,876.539
General Employees	\$158,653.192	95.00%	\$167,003.360	\$158,653.192
Police & Fire Employees	\$46,223.347	95.00%	\$48,656.155	\$46,223.347
Summary Statistics	General	Police & Fire	Total	
Average Life	12.7 years	13.2 years	12.8 years	
All-in TIC	3.020%	3.074%	3.033%	
PV Savings (%)	49.19%	51.76%	49.77%	
PV Savings	\$78,492.254	\$24,060.908	\$102,553.162	
Cumulative Savings	\$100,409.684	\$32,332.354	\$132,742.038	
Maximum Annual Debt Service	\$13,119.106	\$4,229.269	\$17,192.590	
Savings (First 5 Years)	\$22,299.431	\$6,244.091	\$28,543.522	

Note: Preliminary, subject to change; for indicative purposes only; interest rates from Bank of America as of 8/4/20 and assumes use of 10-year par call. Present value figures are discounted at the All In TIC on the bonds.



Summary of Financing Results – 95% Funding Level

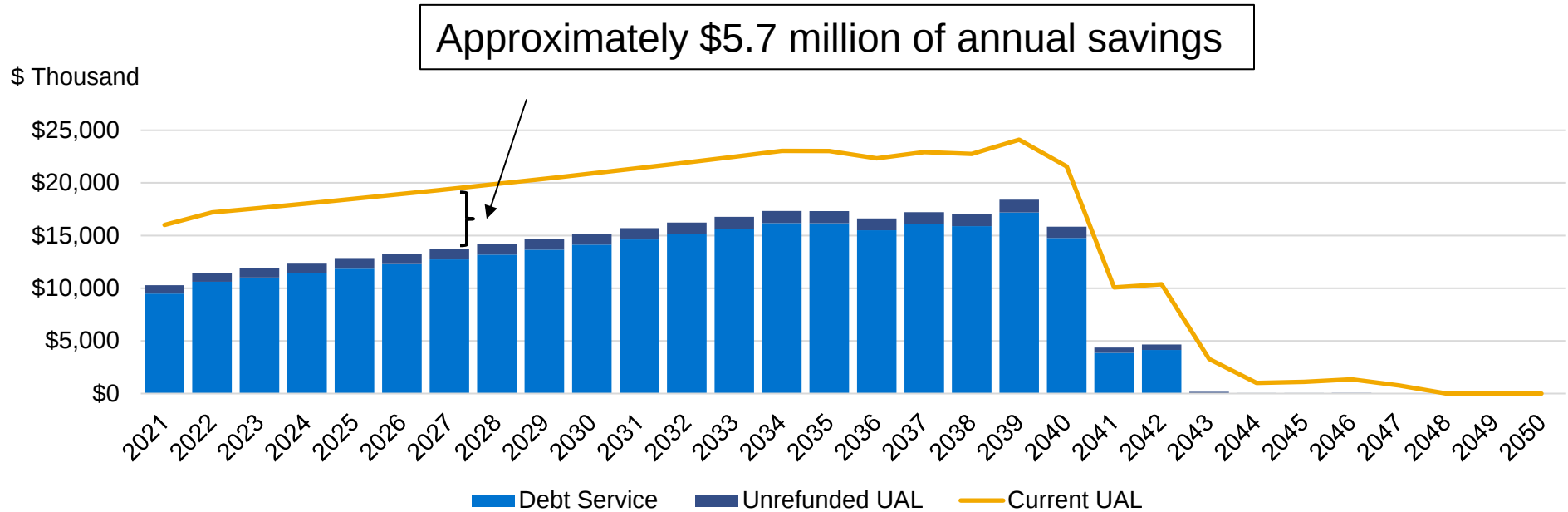
- The table below provides a breakdown of savings including the 59% of the general employee's plan attributable to GRU

SUMMARY OF FINANCING (\$000)				
	General Employee Fund		Police & Fire Fund	Total
	City of Gainesville (41%)	GRU Contribution (59%)	City of Gainesville	Combined
Total Par Amount	\$65,419.600	\$94,140.400	\$46,490.000	\$206,050.000
Total Pension Contribution	\$65,047.809	\$93,605.383	\$46,223.347	\$204,876.539
Total Debt Service	\$90,367.612	\$130,041.197	\$65,196.886	\$285,605.695
Maximum Annual Debt Service	\$5,378.833	\$7,740.273	\$4,229.269	\$17,192.590
PV Savings (%)	49.19%	49.19%	51.76%	49.77%
PV Savings (\$)	\$32,181.824	\$46,310.430	\$24,060.907	\$102,553.162
Cumulative Savings	\$41,167.970	\$59,241.713	\$32,332.354	\$132,742.038
Savings (First 5 Years)	\$9,142.767	\$13,156.664	\$6,244.091	\$28,543.522

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Summary of Financing Results – 95% Funding Level



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Summary of Cash Flow Savings – 95% Funding Level

SUMMARY OF CASH FLOWS SAVINGS (\$000)					
Fiscal Year	Current UAAL	Unfunded UAAL	POB Debt Service	Annual Cash Flow Savings	GRU Portion of Annual Cash Flow Savings
2021	\$15,999.108	(\$799.955)	(\$9,490.595)	\$5,708.557	\$2,631.653
2022	17,184.205	(859.210)	(10,618.031)	5,706.964	2,631.529
2023	17,608.944	(880.447)	(11,019.374)	5,709.122	2,631.658
2024	18,044.217	(902.211)	(11,433.814)	5,708.192	2,630.400
2025	18,490.287	(924.514)	(11,855.086)	5,710.686	2,631.425
2026	18,947.422	(947.371)	(12,293.020)	5,707.031	2,631.347
2027	19,415.898	(970.795)	(12,737.506)	5,707.598	2,630.334
2028	19,895.998	(994.800)	(13,194.400)	5,706.797	2,630.507
2029	20,388.010	(1,019.400)	(13,660.363)	5,708.247	2,630.586
2030	20,892.230	(1,044.612)	(14,137.955)	5,709.664	2,632.521
2031	21,408.964	(1,070.448)	(14,630.030)	5,708.486	2,631.529
2032	21,938.522	(1,096.926)	(15,129.385)	5,712.211	2,632.416
2033	22,481.223	(1,124.061)	(15,643.986)	5,713.176	2,632.731
2034	23,037.395	(1,151.870)	(16,176.123)	5,709.403	2,630.945
2035	23,024.088	(1,151.204)	(16,162.809)	5,710.075	2,631.574
2036	22,328.827	(1,116.441)	(15,503.530)	5,708.856	2,632.670
2037	22,926.653	(1,146.333)	(16,068.038)	5,712.282	2,632.036
2038	22,738.108	(1,136.905)	(15,892.974)	5,708.228	2,629.932
2039	24,105.478	(1,205.274)	(17,192.590)	5,707.614	2,631.574
2040	21,554.752	(1,077.738)	(14,765.802)	5,711.213	2,632.191
2041	10,074.240	(503.712)	(3,858.686)	5,711.842	2,632.036
2042	10,368.108	(518.405)	(4,141.600)	5,708.103	2,630.583
2043	3,277.741	(163.887)	-	3,113.854	1,349.537
2044	1,002.612	(50.131)	-	952.482	-
2045	1,114.484	(55.724)	-	1,058.759	-
2046	1,347.537	(67.377)	-	1,280.160	-
2047	770.983	(38.549)	-	732.434	-
Total	\$440,366.034	(\$22,018.302)	(\$285,605.695)	\$132,742.038	\$59,241.713

Note: Preliminary, subject to change; for indicative purposes only; interest rates from Bank of America as of 8/4/20 and assumes use of 10-year par call.



Sensitivity Analysis

- The tables to the right highlight how a successful pension bond financing may still lead to future additional UAAL payments if investment returns do not meet the expected annual return assumption of 7.9%
- In the bottom table to the right, we summarize the simulation and stress test under a 95% UAAL funding, assuming a base case expected return of 7.9% and annual volatility of 12.19% based on AndCo Consulting “Asset Allocation Analysis” report, dated August 2020
- In the event the City’s pension funds miss the target annual return of 7.9% by 100 basis points, the City can expect an additional \$22.2 million of UAAL, but still achieve present value benefit of \$47.4 million from this bond financing
- The General Employee’s Plan 25-year annualized return has been 10.5% and the P&F Plan’s 25-year annualized return has been 9.6%

SIMULATION ANALYSIS (\$000)	
Assumptions	
Expected Annual Return	7.900%
Annual Volatility	12.190%
Results	
Probability of Success	88.50%
Average Present Value Benefit	\$69,423.609
Percentiles	
P5	(\$12,396.826) (5% of outcomes lower than)
P25	\$19,296.040 (25% of outcomes lower than)
P50	\$51,191.784 (Median)
P75	\$97,009.692 (25% of outcomes greater than)
P95	\$214,556.079 (5% of outcomes greater than)

SUMMARY OF STRESS TEST (\$000)					
	Base Case	Stress Test 1	Stress Test 2	Stress Test 3	Stress Test 4
	7.9% Annual Return	-25% Year 1 (7.9% After)	6.9% Annual Return	5.9% Annual Return	3.0% Annual Return
PV Benefit	\$69,651.690	\$8,822.180	\$47,431.528	\$29,967.519	(\$1,372.526)
PV Benefit (% of Par)	33.8%	4.3%	23.0%	14.5%	-0.67%
PV Future UAALs Due to Actuarial Losses	- (\$60,813.570) (\$22,213.767) (\$39,672.744) (\$71,003.727)				

Note: Annual expected return of 7.9% based on City’s projections; annual volatility of 12.19% based on AndCo Consulting “Asset Allocation Analysis,” August 2020.
Source: Bank of America



Sensitivity Analysis

SUMMARY OF SIMULATION RESULTS (\$000)

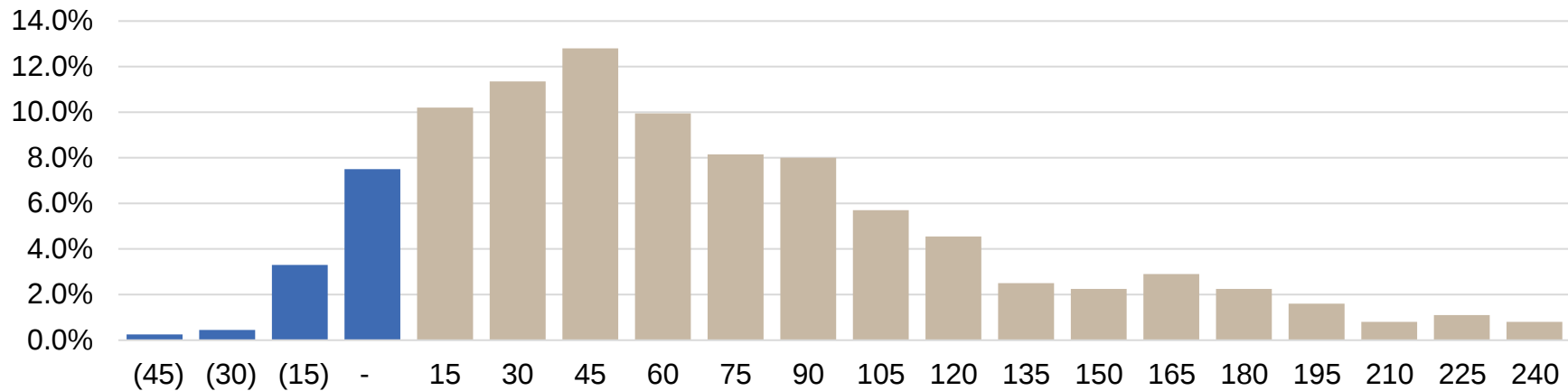
Results

Probability of Success	88.50%
Average Present Value Benefit	\$69,423.609

Percentiles

P5	(\$12,396.826) (5% of outcomes lower than)
P25	\$19,296.040 (25% of outcomes lower than)
P50	\$51,191.784 (Median)
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P95	\$214,556.079 (5% of outcomes greater than)

Histogram of Potential POB Outcomes (PV Benefit, \$ Million)



Note: Annual expected return of 7.9% based on City's projections; annual volatility of 12.19% based on AndCo Consulting "Asset Allocation Analysis," August 2020.
Source: Bank of America



Anti-Dilution Test

- Based on preliminary analysis, the City is expected to meet both Anti-Dilution tests
 - Aggregate Maximum Annual Debt Service is expected to remain below 50% of Fiscal Year 2019 non-ad valorem revenues legally available to pay debt service
 - Aggregate Average Annual Debt Service coverage is expected to exceed 2x

ANTI-DILUTION TEST (\$000)	
MADS Test	
Non-Ad Valorem Revenues Available to Pay Debt Service*	\$101,772.563
Maximum Annual Debt Service	\$28,942.538
Coverage Ratio	3.5x
MADS as % of Revenues (must be less than 50%)	28.4%
AADS Test	
Non-Ad Valorem Revenues Available to Pay Debt Service*	\$101,772.563
Average Annual Debt Service	\$21,284.952
Coverage Ratio (must exceed 2x)	4.8x
AADS as % of Revenues	20.9%

*Revenue estimate based on FY19 Non-Ad Valorem Revenues plus FY21 GRU pro-forma DS payment.

Note: Preliminary, subject to change; for indicative purposes only; interest rates from Bank of America as of 8/4/20 and assumes use of 10-year par call.



Credit Ratings

- The City's outstanding covenant to budget and appropriate non ad valorem revenue debt is rated Aa3 by Moody's Investors Service and AA- by Fitch Ratings
- The City asked PFM to outline what impact, if any, the issuance of the pension obligation bonds (POBs) might have on these rating
- To address this question, we first outline the various factors that contribute to an underlying credit rating. While the factors vary somewhat between the rating agencies, the main factors include: (i) economy/tax base, (ii) finances (particularly fund balance and cash balances) and (iii) long term liabilities (debt and pensions).
- Of these factors, perhaps the most important factor and one that is most likely to impact ratings, higher or lower, is fund balance levels. The rating agencies look favorably on local governments that consistently achieve structurally balanced operations (annual revenues that meet or exceed annual expenses) and maintain sound fund balance levels.
- When reviewing the City's credit rating for the POBs, we expect the rating agencies will focus on the following two areas, in addition to their standard rating factors: (i) fiscal impacts of and responses to the pandemic and (ii) how the POB is expected to reshape the City's pension funding obligations.
- In general, the rating agencies are typically neutral in their view of POBs if structured appropriately. When POB proceeds add to a system's assets, they effectively replace one long-term liability with another and, thus, have a minimal net impact on the total liability burden.
- POBs that spread prospective savings more evenly over the life of the bonds (and the remaining liability amortization schedule) are viewed more favorably.
- Alternatively, using proceeds for budget relief by offsetting an annual pension contribution previously made from budgetary resources (or not made at all) is viewed negatively. Also, extending the final maturity of the bonds materially beyond the expected UAAL amortization date will also be viewed critically.
- Given the above, PFM is of the opinion the issuance of a pension obligation bond, in and of itself, should not have a negative impact on the City's underlying credit rating, if structured appropriately.