



March 27, 2025

Mr. Jay Ravins
Finance Director
City of Clearwater
100 S. Myrtle Avenue
Clearwater, Florida 33756

**Re: City of Clearwater Employees' Pension Plan
Funding Method Projection Study**

Dear Jay:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Clearwater to prepare projections of the below scenarios for the City of Clearwater Employees' Pension Plan (Plan). This letter presents 30-year projections of the cost of the Plan under two alternative funding methods. It also includes a discussion of risks associated with measuring the accrued liability and actuarially determined contribution. The results are based on census and asset data as of January 1, 2025.

The enclosed exhibits present the following:

1. Scenario 1: 30-year projections of the Plan using the current assumptions and methods as described in the January 1, 2024 Actuarial Valuation Report, with the exception of the mortality assumption, as detailed in the Actuarial Assumption and Methods section. The projections were prepared assuming that future Plan experience matches the actuarial assumptions, including an assumed 6.50% return on the market value of assets for every year of the projection period. The current funding method used for the actuarial valuation is the Entry Age Normal method.
2. Scenario 2: Same as Scenario 1 except the projections reflect a change in the funding method to the Aggregate method.
3. Scenario 3: Same as Scenario 1 except that a "stress test" is performed by assuming the actual market return for the year ending December 31, 2025 is -15%. For all future years after 2025, actual market returns are assumed to match the 6.50% investment return assumption.
4. Scenario 4: Same as Scenario 3 incorporating a "stress test" except the projections reflect a change in the funding method to the Aggregate method.

Actuarial Assumptions and Methods

As indicated above, the current funding method used for the actuarial valuation is the Entry Age Normal method. Under this method, there are two components of the actuarially determined contribution. The first component is the net employer Normal Cost, which represents the value of benefits accruing for one year of service for the active members of the Plan. The second component is the amortization payment on the Unfunded Actuarial Accrued Liability (UAAL). When the Plan experiences gains or losses or there are assumption or benefit provision changes, the UAAL can increase or decrease significantly. The Plan sponsor does not pay for this change fully in the year it occurs. Instead the change in the UAAL is amortized over a period of time (experience gains and losses are amortized over a 15-year period).

As of January 1, 2025, the Plan is in a surplus position (i.e. the Plan assets exceed the actuarial accrued liabilities), and therefore, the annual payment to amortize the UAAL is less than \$0. However, under Chapter 112.66 of the Florida Statutes, the annual payment to amortize the UAAL may not reduce the contribution below the amount required to fund the employer Normal Cost. Based on this, the City's required contribution must be set equal to the employer Normal Cost, without the ability to factor in a credit for the Plan's overfunded position. Since the required contribution is greater than the actuarially determined amount, the City is overfunding the Plan, and the Plan's surplus will continue to increase if the actuarial assumptions are met each year.

As an alternative, the Board could consider changing the funding method to the Aggregate method. Under this method, there is one component of the actuarially determined contribution, which is the Normal Cost. The Normal Cost is calculated in aggregate for all members of the Plan as the excess of the total projected liability over the assets, funded over the average projected future service of the active members. The Plan's surplus position is incorporated in the calculation of the Normal Cost, and the Florida Statute mentioned above does not impact the determination of the City's required contribution. Therefore, the City would not be overfunding the Plan and adding to the surplus by contributing the Entry Age Normal Cost each year.

We have shown the projections under both funding methods assuming the actual market value returns match the 6.50% investment return assumption in all years of the projection period (Scenarios 1 and 2). We have also shown the projections under a "stress test" by assuming the actual market value return for 2025 is -15% in order to illustrate the difference in the impact of this investment loss under the two alternative funding methods (Scenarios 3 and 4).

Under Scenario 3, which uses the Entry Age Normal funding method with the "stress test," the Plan's funded ratio is projected to fall below 100% as of the January 1, 2027 valuation date. At that point in the projections, we have performed a fresh-start of the UAAL amortization bases in accordance with the methodology described for combining and offsetting amortization bases under Internal Revenue Code Section 412(b).



Please note that under the Ordinance the minimum required City contribution is 7% of covered payroll. If the Aggregate method is used for the actuarial valuation as of January 1, 2025, the required City contribution for FYE 2026 would be 7% of payroll since the actuarially determined contribution would be below the 7% of payroll minimum, as shown in Scenarios 2 and 4.

The funded ratios shown on the enclosed exhibits were determined excluding the Plan's Credit Balance, which is \$40,184,518 as of January 1, 2025. This Credit Balance is available to use as an offset to future required City contributions.

These projections reflect an update to the mortality tables from those used previously in the January 1, 2024 actuarial valuation report. The mortality assumption for all municipal pension plans in the State of Florida is mandated under Florida State law to be the same mortality assumption used by the Florida Retirement System (FRS) in either its most current or second most current actuarial valuation. The FRS updated its mortality assumption effective in its July 1, 2024 actuarial valuation. This projection study reflects the City's direction to use the new FRS mortality assumption for the actuarial valuation as of January 1, 2025.

Except as indicated above, all other methods, assumptions, and benefit provisions are the same as described in our January 1, 2024 Actuarial Valuation Report. The calculations are based on the census data and financial information provided by the City for the actuarial valuation as of January 1, 2025.

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that results from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: Plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the Plan's funded status); and changes in Plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.



Examples of risk that may reasonably be anticipated to significantly affect the Plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the either assumed or forecasted returns;
2. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the Plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
5. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return is less (or more) than the assumed rate, the cost of the Plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution amounts may be considered as a minimum contribution that complies with the pension Board's funding policy and the State statutes. The timely receipt of the actuarially determined contributions is critical to support the financial health of the Plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

Risk Assessment

Risk assessment was outside the scope of this report. Risk assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability. We are prepared to perform such assessment to aid in the decision-making process.

Disclosures and Qualifications

This report was prepared at the request of the City of Clearwater and is intended for use by the City and those designated or approved by the City or the Board of Trustees. This report may be provided to parties other than the City and Board only in its entirety and only with the permission of the City and Board. GRS is not responsible for unauthorized use of this report.



The purpose of this report is to describe the financial effect of potential changes to the funding method. This report should not be relied on for any purpose other than the purpose described.

The calculations in this report are based upon information furnished by the City for the January 1, 2025 Actuarial Valuation Report concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We reviewed this information for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the City.

Projections are deterministic, meaning that throughout the projection period, Plan experience is expected to exactly match the actuarial assumptions, including the assumed investment return on the market value of assets, except for the assumed market value return in 2025 under Scenarios 3 and 4.

Throughout the projections, new members are assumed to be hired each year at a rate sufficient to maintain a constant active headcount. New members are assumed to have the same average demographic characteristics (age, gender, salary – adjusted each year for inflation) at their dates of employment as those of current members hired between January 1, 2020 and January 1, 2025 (during the five-year period ending on the most recent actuarial valuation / census data collection date).

The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based on the assumptions, methods, and plan provisions outlined in this report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the author of the report prior to relying on information in the report.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and this report. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

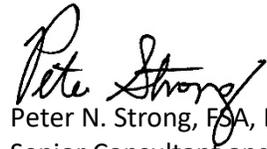
Peter N. Strong and Trisha Amrose are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The undersigned actuaries are independent of the plan sponsor.



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We welcome your questions and comments.

Sincerely yours,
Gabriel, Roeder, Smith & Company



Peter N. Strong, FSA, EA, MAAA
Senior Consultant and Actuary



Trisha Amrose, EA, MAAA
Consultant and Actuary

This communication shall not be construed to provide tax advice, legal advice or investment advice.



**City of Clearwater Employees' Pension Plan
30-Year Projection of Actuarially Determined Contributions**

**Scenario 1: Entry Age Normal (Current Funding Method)
with Projected Experience Matching Assumptions**

**Scenario 2: Change to Aggregate Funding Method
with Projected Experience Matching Assumptions**

Fiscal Year	Valuation	Pensionable	Actuarially Determined		Funded Ratio	Pensionable	Actuarially Determined		Funded Ratio	Change in
			Contribution	Contribution	on Valuation		Contribution	Contribution	on Valuation	ADC as
Ending	Date	Payroll	\$ Amount	% of Pay	Date	Payroll	\$ Amount	% of Pay	Date	\$ Amount
2026	1/1/2025	119,120,727	17,348,536	14.56%	107%	119,120,727	8,338,451	7.00%*	107%	(9,010,085)
2027	1/1/2026	122,412,601	17,684,507	14.45%	106%	122,412,601	9,936,687	8.12%	105%	(7,747,820)
2028	1/1/2027	125,737,822	18,031,870	14.34%	104%	125,737,822	14,215,857	11.31%	102%	(3,816,013)
2029	1/1/2028	129,434,549	18,460,944	14.26%	106%	129,434,549	12,131,297	9.37%	104%	(6,329,647)
2030	1/1/2029	132,955,363	18,850,897	14.18%	106%	132,955,363	11,962,069	9.00%	104%	(6,888,828)
2031	1/1/2030	136,800,880	19,313,359	14.12%	107%	136,800,880	12,768,503	9.33%	104%	(6,544,856)
2032	1/1/2031	140,714,540	19,781,155	14.06%	107%	140,714,540	13,539,087	9.62%	104%	(6,242,068)
2033	1/1/2032	144,771,666	20,272,296	14.00%	107%	144,771,666	14,304,566	9.88%	103%	(5,967,730)
2034	1/1/2033	149,085,543	20,797,230	13.95%	108%	149,085,543	15,123,363	10.14%	103%	(5,673,868)
2035	1/1/2034	153,716,373	21,388,823	13.91%	108%	153,716,373	15,975,026	10.39%	103%	(5,413,796)
2036	1/1/2035	158,493,209	22,022,170	13.89%	108%	158,493,209	16,832,006	10.62%	103%	(5,190,165)
2037	1/1/2036	163,433,205	22,673,163	13.87%	109%	163,433,205	17,701,203	10.83%	103%	(4,971,960)
2038	1/1/2037	168,287,827	23,304,851	13.85%	109%	168,287,827	18,556,642	11.03%	102%	(4,748,210)
2039	1/1/2038	173,235,928	23,950,660	13.83%	109%	173,235,928	19,416,258	11.21%	102%	(4,534,402)
2040	1/1/2039	178,313,979	24,623,185	13.81%	110%	178,313,979	20,290,590	11.38%	102%	(4,332,596)
2041	1/1/2040	183,586,788	25,329,856	13.80%	110%	183,586,788	21,181,459	11.54%	102%	(4,148,397)
2042	1/1/2041	188,793,355	26,016,650	13.78%	110%	188,793,355	22,052,594	11.68%	102%	(3,964,056)
2043	1/1/2042	194,171,249	26,727,143	13.76%	111%	194,171,249	22,943,120	11.82%	102%	(3,784,022)
2044	1/1/2043	199,524,429	27,431,858	13.75%	111%	199,524,429	23,824,072	11.94%	101%	(3,607,786)
2045	1/1/2044	204,771,545	28,115,112	13.73%	112%	204,771,545	24,689,707	12.06%	101%	(3,425,405)
2046	1/1/2045	210,054,827	28,802,859	13.71%	112%	210,054,827	25,551,552	12.16%	101%	(3,251,307)
2047	1/1/2046	215,454,273	29,510,913	13.70%	112%	215,454,273	26,427,232	12.27%	101%	(3,083,681)
2048	1/1/2047	221,083,722	30,243,303	13.68%	113%	221,083,722	27,318,893	12.36%	101%	(2,924,410)
2049	1/1/2048	226,617,680	30,959,069	13.66%	113%	226,617,680	28,191,977	12.44%	101%	(2,767,092)
2050	1/1/2049	232,268,853	31,691,485	13.64%	114%	232,268,853	29,076,427	12.52%	101%	(2,615,058)
2051	1/1/2050	238,106,283	32,464,414	13.63%	114%	238,106,283	29,989,595	12.60%	101%	(2,474,819)
2052	1/1/2051	244,010,245	33,241,959	13.62%	115%	244,010,245	30,903,612	12.66%	101%	(2,338,347)
2053	1/1/2052	249,977,203	34,020,338	13.61%	115%	249,977,203	31,815,002	12.73%	101%	(2,205,336)
2054	1/1/2053	255,990,139	34,818,171	13.60%	116%	255,990,139	32,737,942	12.79%	101%	(2,080,229)
2055	1/1/2054	262,103,153	35,635,576	13.60%	116%	262,103,153	33,675,123	12.85%	101%	(1,960,453)
Total			763,512,352				631,469,912			(132,042,440)
Total Present Value at 6.50%			314,784,855				241,569,764			(73,215,091)

* Set to the 7% of payroll minimum City contribution per the Ordinance (ADC is 6.15% of payroll before applying the minimum)

Assumptions

Investment Return Assumption and Actual Return on Plan Assets 6.50%
 Increase in Administrative Expenses Per Year 2.40%
 No future actuarial experience gains or losses
 Mortality tables are the same as those used in the July 1, 2024 Florida Retirement System Actuarial Valuation
 All other assumptions and methods are the same as those used in the January 1, 2024 Actuarial Valuation Report

**City of Clearwater Employees' Pension Plan
30-Year Projection of Actuarially Determined Contributions**

Scenario 3: Entry Age Normal (Current Funding Method)

Scenario 4: Change to Aggregate Funding Method

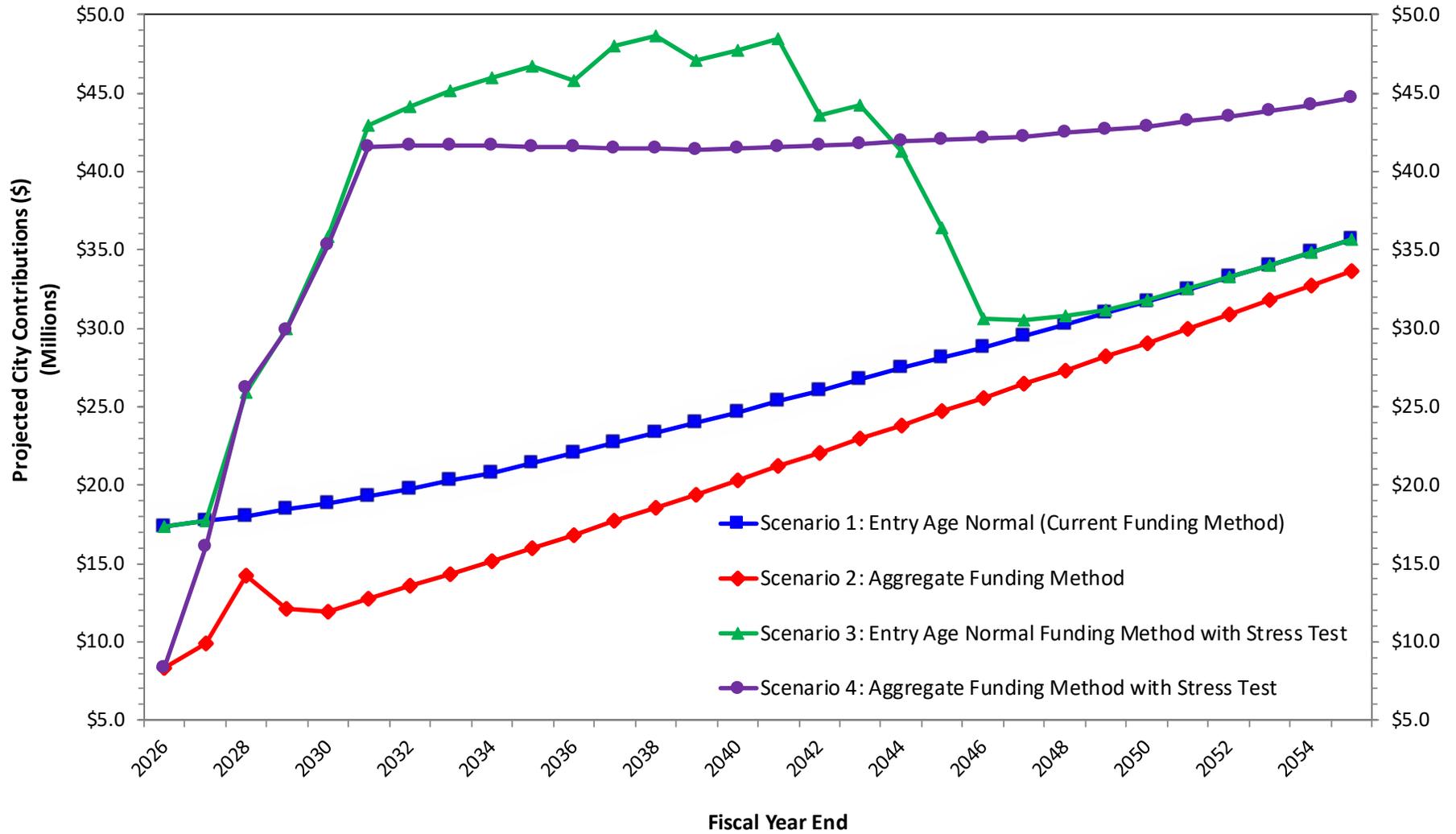
Fiscal Year	Valuation	with Stress Test				with Stress Test				
		Pensionable	Actuarially Determined		Funded Ratio	Pensionable	Actuarially Determined		Funded Ratio	Change in
			Payroll	Contribution			on Valuation	Payroll		
Ending	Date		\$ Amount	% of Pay	Date		\$ Amount	% of Pay	Date	\$ Amount
2026	1/1/2025	119,120,727	17,348,536	14.56%	107%	119,120,727	8,338,451	7.00%*	107%	(9,010,085)
2027	1/1/2026	122,412,601	17,684,507	14.45%	101%	122,412,601	16,051,173	13.11%	101%	(1,633,334)
2028	1/1/2027	125,737,822	25,879,264	20.58%	95%	125,737,822	26,169,415	20.81%	94%	290,151
2029	1/1/2028	129,434,549	29,956,690	23.14%	93%	129,434,549	29,907,052	23.11%	92%	(49,638)
2030	1/1/2029	132,955,363	35,889,409	26.99%	89%	132,955,363	35,288,617	26.54%	89%	(600,791)
2031	1/1/2030	136,800,880	42,901,817	31.36%	86%	136,800,880	41,519,204	30.35%	85%	(1,382,613)
2032	1/1/2031	140,714,540	44,142,919	31.37%	87%	140,714,540	41,689,753	29.63%	86%	(2,453,166)
2033	1/1/2032	144,771,666	45,121,169	31.17%	87%	144,771,666	41,678,780	28.79%	86%	(3,442,389)
2034	1/1/2033	149,085,543	45,943,847	30.82%	88%	149,085,543	41,601,669	27.90%	87%	(4,342,178)
2035	1/1/2034	153,716,373	46,675,067	30.36%	89%	153,716,373	41,568,968	27.04%	88%	(5,106,099)
2036	1/1/2035	158,493,209	45,815,870	28.91%	90%	158,493,209	41,523,081	26.20%	88%	(4,292,790)
2037	1/1/2036	163,433,205	48,022,422	29.38%	92%	163,433,205	41,506,327	25.40%	89%	(6,516,095)
2038	1/1/2037	168,287,827	48,664,197	28.92%	93%	168,287,827	41,451,473	24.63%	90%	(7,212,724)
2039	1/1/2038	173,235,928	47,089,805	27.18%	94%	173,235,928	41,415,271	23.91%	90%	(5,674,534)
2040	1/1/2039	178,313,979	47,763,868	26.79%	95%	178,313,979	41,448,737	23.24%	91%	(6,315,130)
2041	1/1/2040	183,586,788	48,471,111	26.40%	96%	183,586,788	41,562,004	22.64%	92%	(6,909,108)
2042	1/1/2041	188,793,355	43,535,481	23.06%	97%	188,793,355	41,637,031	22.05%	92%	(1,898,450)
2043	1/1/2042	194,171,249	44,245,767	22.79%	98%	194,171,249	41,772,625	21.51%	93%	(2,473,142)
2044	1/1/2043	199,524,429	41,302,050	20.70%	99%	199,524,429	41,892,993	21.00%	93%	590,943
2045	1/1/2044	204,771,545	36,442,646	17.80%	99%	204,771,545	41,985,135	20.50%	94%	5,542,489
2046	1/1/2045	210,054,827	30,581,282	14.56%	100%	210,054,827	42,089,416	20.04%	94%	11,508,134
2047	1/1/2046	215,454,273	30,515,814	14.16%	100%	215,454,273	42,243,463	19.61%	94%	11,727,648
2048	1/1/2047	221,083,722	30,760,925	13.91%	100%	221,083,722	42,452,822	19.20%	95%	11,691,897
2049	1/1/2048	226,617,680	31,178,876	13.76%	100%	226,617,680	42,645,471	18.82%	95%	11,466,595
2050	1/1/2049	232,268,853	31,771,662	13.68%	100%	232,268,853	42,880,261	18.46%	96%	11,108,599
2051	1/1/2050	238,106,283	32,502,912	13.65%	100%	238,106,283	43,187,537	18.14%	96%	10,684,625
2052	1/1/2051	244,010,245	33,258,751	13.63%	100%	244,010,245	43,511,850	17.83%	96%	10,253,099
2053	1/1/2052	249,977,203	34,026,900	13.61%	100%	249,977,203	43,850,674	17.54%	96%	9,823,774
2054	1/1/2053	255,990,139	34,820,471	13.60%	100%	255,990,139	44,224,812	17.28%	97%	9,404,341
2055	1/1/2054	262,103,153	35,636,291	13.60%	100%	262,103,153	44,637,921	17.03%	97%	9,001,630
Total			1,127,950,326				1,171,731,985			43,781,658
Total Present Value at 6.50%			510,327,653				496,216,359			(14,111,294)

** Set to the 7% of payroll minimum City contribution per the Ordinance (ADC is 6.15% of payroll before applying the minimum)*

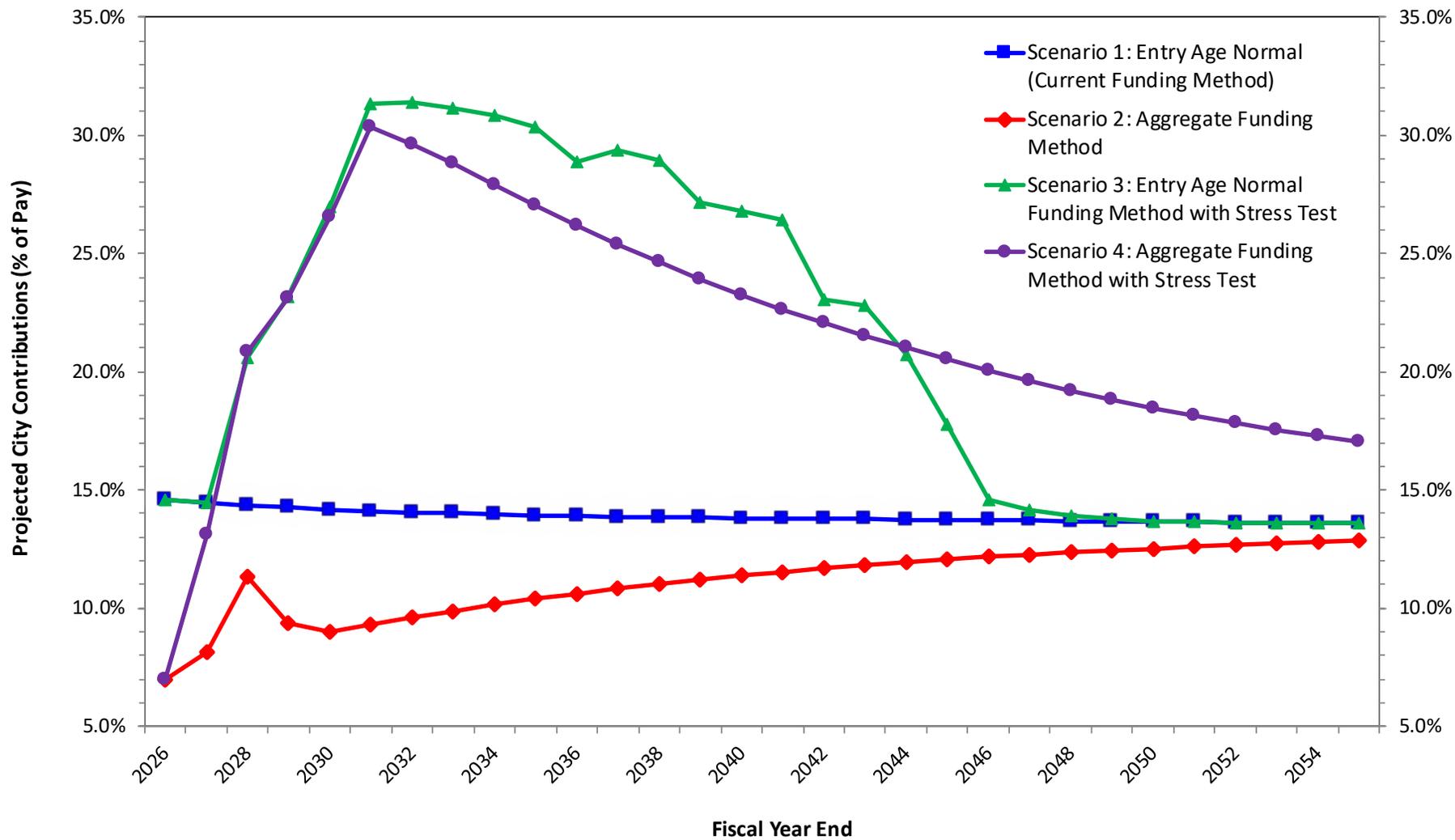
Assumptions

Investment Return Assumption and Actual Return on Plan Assets 6.50% except for a -15% actual return on assets for 2025
 Increase in Administrative Expenses Per Year 2.40%
 No future actuarial experience gains or losses other than the -15% return on assets for 2025 as detailed above
 Mortality tables are the same as those used in the July 1, 2024 Florida Retirement System Actuarial Valuation
 All other assumptions and methods are the same as those used in the January 1, 2024 Actuarial Valuation Report

City of Clearwater Employees' Pension Plan 30-Year Projection of City Contribution Requirement



City of Clearwater Employees' Pension Plan 30-Year Projection of City Contribution Requirement



City of Clearwater Employees' Pension Plan 30-Year Projection of Funded Ratio

