FUNDING POLICY FOR
The City of Coral Gables Retirement System

INTRODUCTION

The Board of Trustees (Board) of the City of Coral Gables Retirement System (Plan) has established this Funding Policy. The Board recognizes its fiduciary duty to set prudent funding policies that promote benefit security and inter-generational equity in compliance with all federal, state and local statutes, ordinances and regulations. This Funding Policy constitutes the Board's express methodologies and intentions that the Plan's benefit obligations be advance-funded on a systematic and actuarially sound basis in accordance with State Statute 112.60 – 112.67 funding requirements.

This Funding Policy is intended to guide (a) the Board members, (b) the Plan's retained Actuary and (c) the Plan's retained Investment Consultant in the discharge of their respective services to the Plan.

REGULATORY COMPLIANCE

It is the Board's policy that the Plan and all funding-related calculations comply with applicable federal, state and local statutes and ordinances and all administrative and regulatory requirements thereunder.

ACTUARY'S RESPONSIBILITIES

The actuary retained by the Plan for the determination of funding calculations (Actuary) shall comply with the terms of this Funding Policy in all matters specifically addressed herein. For those aspects of actuarial funding calculations not specifically addressed herein, the Actuary may use professional judgment, but include sufficient disclosure thereof in the respective actuarial communications.

In addition to the state-mandated certifications, all actuarial valuation reports and actuarial impact statements prepared by the Actuary shall include the following certification:

> "I hereby certify that the funding-related calculations presented herein comply with the current version of the Board's Funding Policy and with all applicable requirements of federal, state and local rules relating to funding and asset valuation and all applicable actuarial standards of practice."

FUNDING OBJECTIVES

The following Funding Objectives, as more fully described in the companion Reference and Instruction Manual to this Funding Policy have been considered by Board members in their adoption of specific Funding Policy Elements. The Board should give consideration to the following Funding Objectives in the development or amendment of the Funding Policy Elements.

1. Benefit Security
2. Inter-generational Equity
3. Volatility Control
4. Accountability and Transparency
5. Avoid Agency Risk

FUNDING POLICY ELEMENTS

A. Actuarial Cost Method

The Actuarial Cost Method shall be the traditional individual entry age normal cost method, with normal cost developed as a level percent of pensionable compensation. The expected employee contributions, regardless of how determined, shall be applied first to the total normal cost due (leaving the employer or the employer/state normal cost). Any excess of employee contribution above the total normal cost shall be applied to reduce the outstanding amortization bases on a pro-rata basis.

Any excess employer contributions will be applied to reduce the outstanding amortization bases as recommended by the City of Coral Gables funding policy (Resolution No. 2015-271).

B. Asset Smoothing Method

The actuarial value of assets employed in actuarial valuations shall incorporate an algorithm designed to smooth out the year-to-year fluctuations in the plan's fair market value of assets as follows:

- In each current year, calculate the difference between (a) the dollar amount of expected net investment earnings based on: the beginning fair market value of plan assets, the actual cash flow and the expected net investment return rate used in the last actuarial valuation, and (b) the dollar amount of actual net investment earnings for the year on a market value basis.
- For each current year and its following four years, 20% of such current year's difference shall be recognized in the actuarial value of assets.
- Mathematically speaking, as of a given valuation date, the actuarial value of assets is the fair market value of plan assets adjusted by the unrecognized portion from the previous four years (as determined above).

The final actuarial value of plan assets shall be the smoothed value as described above, with upper and lower limits of 120% and 80% of the fair market value of plan assets.

The DROP account balances (and any other reserve amounts, such as excess City contributions, excess state contribution reserves, etc.) shall be included in the total fair market value of plan assets before application of the smoothing algorithm described above.

C. Amortization Policy

The current amortization bases that exist at the initial effective date of this Funding Policy shall remain on schedule, as set forth in the October 1, 2015 actuarial valuation report (the most recently published actuarial valuation report prior to the effective date of this Funding Policy), as to the period remaining to amortize them and as to the pattern of amortization (level dollar amortization). For future changes in the valuation net interest discount assumption, the outstanding balances of all then-existing amortization bases shall be re-amortized using the new interest discount assumption over their remaining periods with the same patterns.

All new amortization bases created on or after the October 1, 2017 shall be funded as level annual dollar amounts according to the following parameters:

- For changes in actuarial assumptions: Paid over 25 years.
- For benefit changes affecting only retirees (including ad hoc COLA's granted to retirees which had not been advance-funded): Paid over ten (10) years.
- For other benefit changes: Paid over the average expected remaining service period of active members impacted by the change, but not less than 20 years.
- For actuarial experience gains or losses: Paid over 20 years.
- For changes in actuarial methods, software or smoothing methods: Paid over 25 years.

The scheduled amortization payment (as determined in the most recent actuarial valuation report) will be applied to pay down each amortization base each year.

D. Contribution Timing and Use of an Excess Contribution Reserve

The City of Coral Gables intends to contribute the full amount of the employer contribution requirement as of the beginning of the year for which the contribution is determined. If the contribution is made later than the beginning of such year (by more than a de minimis number of days due to ordinary trust deposit transaction delays), then interest shall be added at the Plan's assumed net investment return assumption to adjust the employer contribution requirement from the beginning of the contribution year to the actual date(s) on which the contributions are made.

Each year's employer contribution requirement shall be calculated as of the actuarial valuation date which is one year prior to the beginning of the contribution year. This calculation represents an approximation of the contribution requirement that would be calculated if the actuarial valuation date had been one year later (coincident with the beginning of the contribution year). The "money in the pipeline" principle is applied, such that the employer contribution deposited on the current actuarial valuation date (which was determined in the prior year's actuarial valuation) effectually fulfills the required employer contribution amount determined as of that same date (in the current year's actuarial valuation). Therefore, it is not necessary to add a year of interest to the contribution amount to bring it forward from the actuarial valuation date to the beginning of the contribution year.

For the normal cost component of the employer contribution requirement, the total normal cost is projected from the actuarial valuation date to the contribution year by increasing it by the assumed rate of payroll growth.

For the annual payment to amortize the unfunded actuarial liability, the amortization payment as of the beginning of the contribution year is expected to be the same as it is as of the valuation date. In other words, no gains or losses are assumed to occur during the upcoming year. This amount is not increased by the assumed rate of payroll growth because level dollar amortization is used, such that the dollar amount of the amortization payment is expected to remain the same from one year to the next unless amortization bases expire or new ones are created.

Differences between the scheduled amortization payments and the amount by which the actual employer contribution (deposited at the beginning of the year based on the previous year's actuarial valuation), plus any excess cost-sharing employee contributions, exceeds the employer normal cost as determined in the most recent actuarial valuation, will be adjusted for interest to the current valuation date and added to (or subtracted from, if the difference is a shortfall) the excess contribution reserve. The sum of the outstanding amortization bases and the excess contribution reserve should equal the Plan's total unfunded actuarial liability as of each actuarial valuation date.

If the excess contribution reserve becomes depleted and the actual employer contribution (deposited at the beginning of the year based on the previous year's actuarial valuation), plus any excess cost-sharing employee contributions, are insufficient to cover the employer normal cost plus the updated amortization payments as of the current valuation date, then such difference will be funded, with interest from the current actuarial valuation date to the date of payment.

E. Actuarial Assumption Procedures

An actuarial experience study should be performed every fifth year, but no less than every seventh year, for the purpose of validating or updating other primary demographic actuarial assumptions. Such studies shall rely on actuarially credible historical experience of the plan using accepted actuarial techniques in compliance with actuarial standards of practice, with consideration of the effect of future emerging experience expected in the context of each such demographic assumption. Individual salary scale assumptions shall be developed as part of the experience studies, using both historical and forward-looking considerations.

The mortality assumptions shall be in compliance with state statutes, with preference to the most recent mortality tables specified therein.

Economically based actuarial assumptions, such as general inflation and net investment return, shall be forward-looking based on input from the Plan's Consultants. The time horizon for establishing expected inflation and net return forecasts shall be a medium to long - term horizon (i.e., 10-25 years). Inflation assumptions utilized, should be consistent with those used to derive capital market return assumptions for portfolio investment result probability forecasting.

Recommendations from the Plan's Consultants for a *general inflation assumption* to be used for actuarial funding valuations shall be based on research and input that follows accepted industry "best practices" for the establishment and creation of such forward-looking forecasts.

When selecting a net investment return assumption, the Board should give consideration to the arithmetic and geometric mean of forecasted investment returns, net of investment expenses, as determined using forecasts based on the forward-looking capital market assumptions for each asset class and based on the portfolio's target asset allocation.

F. Enterprise Risk Management Process

The following Enterprise Risk Management Process should be undertaken once every five to seven years. This process shall be conducted with full participation by City representatives.

When the Board considers the fund's asset allocation, whether affirming the current asset allocation or considering changes therein, the Board shall consider the projected effects of the asset allocation on volatility in the three most important risk metrics to the retirement system as a whole: (1) projected actuarially determined contributions, (2) projected unfunded actuarial accrued liabilities and (3) projected funded ratios. The amount of risk inherent in the portfolio's asset allocation determines the amount of volatility (un-predictability) in these three risk metrics of pension funding.

In consideration of the above projections, the Board shall conduct a dialogue periodically with the City addressing:

- The purpose of the investment program and the desired level of contribution from investments as a funding source;
- The inherent conflict, and the impact on sponsor contribution volatility, resulting from short term (actual results by fiscal year) measurement of investment results that are derived from allocations constructed using longer, medium to long - term investment assumption projections;
- Forecast error and actual market events where results may fall outside the statistical projections of expected return and volatility (non-forecastable influences such as "black swan" events).
- Such dialogue may also include exploration of general Sponsor budgeting practices in the management of the Pension liability that may address contribution volatility, and increase the funded status of the Plan.

More risk in the portfolio generally means more volatility (i.e., less predictability) in the net returns and in the three risk metrics of pension funding listed above. However, more risk in the portfolio also generally means higher future net returns over time and lower expected actuarially determined contributions. There is usually a long-term reward for taking more risk; but the downside is that the three pension risk metrics are more unpredictable.

Less risk in the portfolio generally means less volatility (i.e., more predictability) in the net returns and in the three risk metrics of pension funding listed above. However, less risk in the portfolio also generally means lower future net returns over time and higher expected actuarially determined contributions. There is a price to pay for taking less risk; the contributions will be higher but more predictable.

There is a process for the Board and the City sponsor to strike a balance in the trade-offs between (a) more risk and more reward and (b) less risk and higher price. This is the Enterprise Risk Management Process.

Board members should examine actuarial projections of some or all of the three risk metrics of pension funding so they can be more informed about the risk/reward trade-offs for the enterprise inherent in their decisions concerning the asset allocation (or risk profile) of the fund's portfolio.

The Board and City Sponsor shall periodically review actuarial projections of these risk metrics using accepted industry practices.

When setting the portfolio's asset allocation, the Board should weigh the risk/reward trade-offs between (a) lower expected contributions with more risk/volatility, and (b) higher expected contributions with less risk/volatility, as they relate to each of the three pension risk metrics.

ADOPTION AND AMENDMENT OF THE FUNDING POLICY

The Funding Policy shall be adopted by formal action of the Board, voting in the majority at a duly called Board meeting.

Unless deliberately and formally amended, this Funding Policy shall be followed, without exception, by the Board members, the Plan's retained Actuary, and the Plan's retained Investment Consultant.

The Board may amend this Funding Policy (a) solely for good and sufficient reason and (b) with evidence of long-term improvement over the existing Funding Policy, based on an appropriate balance among the Funding Objectives described above. Amendment of the Funding Policy shall be by formal action by the Board voting in the majority at a duly called Board meeting.

RESOLUTION

WHEREAS, the Board desires to adopt the principles and practices set forth in this Funding Policy, be it:

RESOLVED, that the Board adopts this Funding Policy by a majority of its trustee-members, effective October 1, 2016, with the exception of Section C (Amortization Policy), which is effective for new amortization bases created on or after October 1, 2017.

The undersigned hereby certifies that he/she is the duly appointed Secretary of the Board and the custodian of the books and records of the Board, and that the forgoing is a true record of a resolution duly adopted at a meeting of the Board on ______________________________, and that said meeting was held in accordance with state law, and that said resolution is now in full force and effect until modification or rescission.

IN WITNESS WHEREOF, I have executed my name as Secretary this ____________day of __________________________, __________.

Secretary

____

Print Name

____

Signature

____

Date